



City of Avondale
City Council Meeting
Monday, November 21, 2022

Mayor and Council

Kenneth Weise, Mayor

Veronica Malone, Vice Mayor

Tina Conde, Council Member | Bryan Kilgore, Council Member
Curtis Nielson, Council Member | Mike Pineda, Council Member
Gloria Solorio, Council Member

Administration

Ron Corbin, City Manager

Cherlene Penilla, Assistant City Manager | Tracy Stevens, Deputy City Manager
Nicholle Harris, City Attorney | Marcella Carrillo, City Clerk

City Council Chambers

11465 West Civic Center Drive
Avondale, AZ 85323



City Council Meeting
Notice & Agenda
Monday, November 21, 2022

CITY COUNCIL CHAMBERS | 11465 WEST CIVIC CENTER DRIVE | AVONDALE, AZ 85323

**SPECIAL MEETING
5:30 PM**

CALL TO ORDER BY MAYOR

1. ROLL CALL BY THE CITY CLERK

2. EMPLOYEE ANNOUNCEMENT (DISCUSSION ONLY)

Human Resources - Employee Announcement

- Rachel Brito, Human Resources Specialist, IPMA-HR Certification

3. YOUTH ADVISORY COMMISSION UPDATE

City staff will provide an update regarding the Avondale Youth Advisory Commission and introduce the members of the youth commission. This item is for discussion only.

4. SCHEDULED PUBLIC APPEARANCE - HELPING ONE WOMAN

City Council will receive a presentation from Nicole Fischer regarding the Helping One Woman organization. This item is for discussion only.

5. ADJOURNMENT

REGULAR MEETING

6:00 PM

CALL TO ORDER BY MAYOR PLEDGE OF ALLEGIANCE & MOMENT OF REFLECTION

1. ROLL CALL AND STATEMENT OF PARTICIPATION BY THE CITY CLERK

2. UNSCHEDULED PUBLIC APPEARANCES (Time is limited per person. Please state your name.)

3. PRESENTATION ITEMS

a. SWEARING-IN-CEREMONY

Mr. Ron Corbin will be sworn in as the new City Manager of the City of Avondale. This item is for discussion only.

b. AWARD RECOGNITIONS FOR AVONDALE PARKS AND RECREATION

City staff will present three awards that the Parks and Recreation Department received recently, to include an award from the Arizona Landscape Contractors Association and two awards from the Arizona Parks and Recreation Association. This item is for discussion only.

4. CONSENT AGENDA

Items on the consent agenda are of a routine nature or have been previously studied by the City Council at a work session. They are intended to be acted upon in one motion. Council members may pull items from consent if they would like them considered separately.

a. SERIES 6 (BAR) LIQUOR LICENSE - MAIN EVENT - ACQUISITION OF CONTROL

City Council will consider a request to recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 6 (Bar) Liquor License submitted by Andrea Lewkowicz for the sale of alcohol at Main Event located at 10315 West McDowell Road in Avondale and authorize the City Clerk to execute the necessary documents. The Council will take appropriate action.

b. SERIES 10 (BEER AND WINE STORE) LIQUOR LICENSE - FESTIVAL OUTFITTER

City Council will consider a request to recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 10 (Beer and Wine Store) Liquor License submitted by Kyle Mason for the sale of alcohol at Festival Outfitter located at 7602 South Avondale Boulevard in Avondale and authorize the City Clerk to execute the necessary documents. The Council will take appropriate action.

c. SERIES 12 (RESTAURANT) LIQUOR LICENSE - SUSHI LOVE

City Council will consider a request to recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 12 (Restaurant) Liquor License submitted by Jeom Ju Hawks for the sale of alcohol at Sushi Love located at 1721 North Dysart Road in Avondale and authorize the City Clerk to execute the necessary documents. The Council will take appropriate action.

d. ORDINANCE 2062-1122 – ABANDONMENT OF A PUBLIC DRAINAGE EASEMENT

City Council will consider a request to adopt Ordinance 2062-1122 authorizing the abandonment of a public drainage easement located generally north of McDowell Road, and west of Avondale Boulevard, and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents. Council will take appropriate action.

e. ORDINANCE 2063-1122 – ACQUISITION OF REAL PROPERTY LOCATED SOUTH OF I-10, EAST OF AGUA FRIA RIVER CHANNEL, AND WEST OF 127TH AVENUE - WELL 26 PROJECT

City Council will consider a request to adopt Ordinance 2063-1122 authorizing the acquisition, by purchase, dedication or condemnation of real property for public use located south of I-10, east of the Agua Fria River Channel, and west of 127th Avenue, and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents. The Council will take appropriate action.

f. RESOLUTION 1077-1122 - AUTHORIZING BANKING & INVESTING AUTHORITY

City Council will consider a request to adopt Resolution 1077-1122, authorizing certain city officials and staff to execute and endorse checks and other items for and on behalf of the City, authorizing certain city staff to authorize certain electronic payments and transfers of funds, authorizing certain city staff to open investment and safekeeping accounts, invest city funds, and execute contracts, agreements or transactions in connection with such investment accounts, and declaring an emergency; and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents. The Council will take the appropriate action.

5. REGULAR AGENDA

a. PUBLIC HEARING AND RESOLUTION 1076-1122 – THREE RIVERS RANCH MAJOR GENERAL PLAN AMENDMENT – APPLICATION PL-22-0050

City Council will hold a public hearing and consider a request to continue the item to December 5, 2022. The item is a request to adopt Resolution 1076-1122, approving a request by Alex Hayes of Withey Morris PLC for a Major Amendment to the Avondale General Plan 2030 Land Use Map for Three Rivers Ranch, a proposed 193.98 gross acre planned development west of the intersection of Broadway Road and Dysart Road. The proposed Major General Plan Amendment, if approved, will amend the General Plan 2030 Land Use Map designations for the property from Estate/Low Density Residential and Mixed-Use to Medium Density Residential and Medium/High Density Residential. The Council will take appropriate action.

b. PUBLIC HEARING AND ORDINANCE 2064-1122 – THREE RIVERS RANCH ANNEXATION – APPLICATION PL-22-0111

City Council will hold a public hearing and consider a request to continue the item to December 5, 2022. The item is a request to adopt Ordinance 2064-1122, approving a request by Mr. Alex Hayes of Withey Morris PLC to begin the annexation process of approximately 196.89 acres located west of the intersection of Broadway Road and Dysart Road. The Council will take appropriate action.

c. PUBLIC HEARING AND ORDINANCE 2065-1122 – THREE RIVERS RANCH REZONING TO PLANNED AREA DEVELOPMENT (PAD) – APPLICATION PL-22-0110

City Council will hold a public hearing and consider a request to continue the item to December 5, 2022. The item is a request to adopt Ordinance 2065-1122, approving a request by Alex Hayes of Withey Morris PLC to rezone approximately 193.98 acres located west of the intersection of Broadway Road and Dysart Road from Rural Residential (RR-43) to Planned Area Development (PAD). The proposed Three Rivers Ranch PAD is planned for the development of 530 single-family residential detached home lots, 120 townhomes (attached single-family residential homes), and 311 multi-family residential apartment units (1- and 2-story individual casita style apartment units). The Council will take appropriate action.

d. PUBLIC HEARING - PROPOSED LAND USE ASSUMPTIONS AND INFRASTRUCTURE IMPROVEMENT PLAN

The City Council will conduct a public hearing on the City's proposed land use assumptions (LUA) and infrastructure improvement plan (IIP) that will be used as the basis for the development impact fees assessed on new development. This item is for public hearing and discussion only, no action will be taken.

e. PRESENTATION OF THE DRAFT ACTIVE TRANSPORTATION PLAN

Staff will provide an update regarding the DRAFT Active Transportation Plan (ATP). This item is for discussion only, input and feedback is requested from City Council.

6. ADJOURNMENT

Council Members of the City of Avondale will attend either in person or by telephone or video conference call. Individuals with special accessibility needs, including sight or hearing impaired, large print, or interpreter, should contact the City Clerk at 623-333-1200 or TDD 623-333-0010 at least two business days prior to the Council Meeting.

Los miembros del Concejo de la Ciudad de Avondale participaran ya sea en persona o por medio de llamada telefonica o por video. Personas con necesidades especiales de accesibilidad, incluyendo personas con impedimentos de vista u oido, o con necesidad de impresion grande o interprete, deben comunicarse con la Secretaria de la Ciudad at 623-333-1200 o TDD 623-333-0010 cuando menos dos dias habiles antes de la junta del Concejo.

CITY COUNCIL REPORT

SUBJECT: Youth Advisory Commission Update

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Christopher Lopez, Neighborhood and Family Service Director, (623) 333-2711

THROUGH: Cherlene Penilla, Assistant City Manager, (623) 333-1015

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

- Community-Oriented Lifelong Learning Opportunities

Avondale will continue to foster an environment where education is a defining value and learning opportunities abound for residents of all ages.

- Connected Community

Avondale will work directly and closely with our communities to develop programs and infrastructure that connect residents to the city's resources, the region, and each other.

PURPOSE:

City staff will provide an update regarding the Avondale Youth Advisory Commission and introduce the members of the youth commission. This item is for discussion only.

BACKGROUND:

The City Council established the Avondale Youth Advisory Commission on January 7, 2002 to serve as an advisory body to City Council, City Manager and city departments. In addition, the youth commission was created to offer a unique opportunity for young people ages 13-18 to develop valuable life and leadership skills. Members of the Avondale Youth Advisory Commission enjoy the opportunity to serve the community alongside other students from high schools across Avondale. Members gain an understanding of volunteerism and public service by working closely with City staff and community stakeholders as they design and implement service-learning projects. Youth Commission members appreciate the opportunity to participate in a variety of leadership training sessions and conferences each year. Perhaps the most important benefits of service on the youth commission are the meaningful relationships formed with mentors, peers and city leaders.

DISCUSSION:

Avondale Youth Advisory Commission will be introduced and will provide an overview of the goals and activities they have planned for the year.

BUDGET IMPACT:

None.

RECOMMENDATION:

This item is for information and discussion only.

Contact person for document distribution: n/a

CITY COUNCIL REPORT

SUBJECT: Award Recognitions for Avondale Parks and Recreation

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Bryan Hughes, Parks and Recreation Director, (623) 333-2411

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Innovative Program and Service Delivery - Avondale will continue to serve as a model of innovative, efficient, and responsive government.

These awards acknowledge the city's commitment to strong cross-departmental collaboration, professional development, and creative thinking in efforts to provide the best services and spaces for Avondale visitors and residents.

PURPOSE:

City staff will present three awards that the Parks and Recreation Department received recently, to include an award from the Arizona Landscape Contractors Association and two awards from the Arizona Parks and Recreation Association. This item is for discussion only.

BACKGROUND:

On Saturday, November 19th, the Avondale Civic Center Landscape Improvement Project was recognized with an Arizona Excellence in Landscaping Award at the Sheraton Wild Horse Pass Resort. This project was planned and managed by Park Supervisor, Tom Street, and completed by H.M.I. Commercial Landscaping. The Arizona Landscape Contractor Association awards program is the largest and most prestigious event in the Arizona landscape industry. It helps the association promote excellence and professionalism to those inside and outside of the industry.

On Tuesday, November 8th, the City of Avondale received two awards at the annual Arizona Parks and Recreation Association awards presentation held at Peoria Sports Complex.

The 2021 Creepin' Cruise was recognized as the Outstanding Special Event (Population 10,000-100,000). The event concept was a direct result of the COVID-19 pandemic and was a huge success, growing from an idea for a drive-thru Halloween event at the Civic Center in 2020 to a major event at the Phoenix Raceway in 2021. This award is particularly special thanks to the support of all the City Departments and the Phoenix Raceway.

Stacy Swainston was recognized with the 2022 Young Professional Award. Stacy has been with Avondale Parks and Recreation for over five years, beginning her career as a Recreation Programmer overseeing youth and adult sports. She was promoted to Recreation Supervisor, overseeing the Recreation Division, in November 2020. Stacy has been actively involved in both the Arizona Parks and Recreation Association and the National Recreation and Parks Association. This award acknowledges Stacy as an “up-and-coming leader” in the field of parks and recreation.

DISCUSSION:

Congratulations to Stacy Swainston and the City of Avondale!

BUDGET IMPACT:

Not applicable

RECOMMENDATION:

Not applicable

Contact person for document distribution:

CITY COUNCIL REPORT

SUBJECT: Series 6 (Bar) Liquor License - Main Event - Acquisition of Control

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Marcella Carrillo, City Clerk, (623) 333-1214

THROUGH: Cherlene Penilla, Assistant City Manager, (623) 333-1015

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Diverse Recreation and Entertainment Opportunities – Avondale provides residents with the ability to connect with amenities, businesses, and their community, enhancing the opportunity to live, work, and enjoy a healthy, active, and affordable lifestyle.

The approval of this agenda item will promote Avondale community's social connectivity by providing a new social environment for family and friends. This item will increase visitor traffic to Avondale's local businesses.

PURPOSE:

City Council will consider a request to recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 6 (Bar) Liquor License submitted by Andrea Lewkowicz for the sale of alcohol at Main Event located at 10315 West McDowell Road in Avondale and authorize the City Clerk to execute the necessary documents. The Council will take appropriate action.

BACKGROUND:

Main Event is an existing establishment located at 10315 West McDowell Road in Avondale. Issuance of a Series 6 (Bar) liquor license is required to allow alcohol sales on the premises. The establishment is outside of the state-mandated 300-foot separation requirement from schools.

DISCUSSION:

Main Event is an existing establishment located at 10315 West McDowell Road in Avondale. The business is submitting an application as a result of new ownership (multi-license acquisition of control).

As required by state law and city ordinance, the application was posted for the required period of time. The Police, Fire & Medical, Development & Engineering Services and Finance Departments have reviewed the application and are recommending approval.

BUDGET IMPACT:

The liquor license application fee of \$250 has been paid in full.

RECOMMENDATION:

Staff is recommending City Council recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 6 (Bar) Liquor License submitted by Andrea Lewkowitz for the sale of alcohol at Main Event located at 10315 West McDowell Road in Avondale and authorize the City Clerk to execute the necessary documents.

Contact person for document distribution: Maria James

State of Arizona
Department of Liquor Licenses and Control

Created 10/20/2022 @ 11:16:15 AM

Local Governing Body Report

LICENSE

Number:	06077001	Type:	006 BAR
Name:	MAIN EVENT		
State:	Pending		
Issue Date:		Expiration Date:	01/31/2023
Original Issue Date:	06/08/2011		
Location:	10315 W MCDOWELL ROAD AVONDALE, AZ 85392 USA		
Mailing Address:	2600 N CENTRAL AVENUE #1775 PHOENIX, AZ 85004 USA		
Phone:	(623)936-5300		
Alt. Phone:	(480)730-2675		
Email:	ANDREA@LEWKLaw.COM		

Currently, this license has pending applications.

AGENT

Name:	ANDREA DAHLMAN LEWKOWITZ
Gender:	Female
Correspondence Address:	2600 N CENTRAL AVENUE #1775 PHOENIX, AZ 85004 USA
Phone:	(602)200-7222
Alt. Phone:	
Email:	ANDREA@LEWKLaw.COM

OWNER

Name: MAIN EVENT ENTERTAINMENT INC
Contact Name: ANDREA LEWKOWITZ
Type: CORPORATION
AZ CC File Number: 1973218 State of Incorporation: FL
Incorporation Date: 04/10/2019
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)200-7222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

Officers / Stockholders

Name:	Title:	% Interest:
ME HOLDCO INC		100.00
BRYAN DOUGLAS MCCRORY	Pres/TREAS	
SCOTT ADAM ROSUCK	VP/SEC	

ARDENT LEISURE US HOLDING INC -

Name: DAVE & BUSTERS INC
Contact Name: ANDREA LEWKOWITZ
Type: CORPORATION
AZ CC File Number: F13090935 State of Incorporation: MO
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)200-7222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

DAVE & BUSTERS INC - Stockholder

Name: DAVE & BUSTER'S HOLDINGS INC
Contact Name: ANDREA LEWKOWITZ
Type: CORPORATION
AZ CC File Number: State of Incorporation:
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)200-7222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

ME HOLDCO INC -

Name: ARDENT LEISURE US HOLDING INC
Contact Name: ANDREA LEWKOWITZ
Type: CORPORATION
AZ CC File Number: State of Incorporation:
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)200-7222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

ARDENT LEISURE US HOLDING INC - Stockholder

Name: ARDENT LEISURE LTD
Contact Name: ANDREA LEWKOWITZ
Type: CORPORATION
AZ CC File Number: State of Incorporation:
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)200-7222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

DAVE & BUSTER'S HOLDINGS INC - Stockholder

Name: DAVE & BUSTER'S ENTERTAINMENT INC
Contact Name: ANDREA LEWKOWITZ
Type: CORPORATION
AZ CC File Number: State of Incorporation:
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)200-7222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

DAVE & BUSTERS INC - Multi- See Case Note

Name: EDWARD JAMES CHILDS
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (480)369-6916
Alt. Phone:
Email: ED_CHILDS@YMAIL.COM

**ARDENT LEISURE US HOLDING INC -
Pres/TREAS
DAVE & BUSTER'S ENTERTAINMENT INC -
VP/GC
DAVE & BUSTER'S HOLDINGS INC - VP/GC
DAVE & BUSTERS INC - VP/GC
MAIN EVENT ENTERTAINMENT INC -
Pres/TREAS
ME HOLDCO INC - Pres/TREAS**

Name: BRYAN DOUGLAS MCCRORY
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (214)357-9588
Alt. Phone:
Email:

MAIN EVENT ENTERTAINMENT INC -

Name: ME HOLDCO INC
Contact Name: ANDREA DAHLMAN LEWKOWITZ
Type: CORPORATION
AZ CC File Number: State of Incorporation:
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)700-2222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

ARDENT LEISURE US HOLDING INC -

Name: RB ME LP
Contact Name: ANDREA DAHLMAN LEWKOWITZ
Type: PARTNERSHIP
AZ CC File Number: State of Incorporation:
Incorporation Date:
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)700-2222
Alt. Phone:
Email: ANDREA@LEWKLAW.COM

**ARDENT LEISURE US HOLDING INC - VP/SEC
MAIN EVENT ENTERTAINMENT INC - VP/SEC
ME HOLDCO INC - VP/SEC**

Name: SCOTT ADAM ROSUCK
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
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USA
Phone: (214)904-2576
Alt. Phone:
Email: SCOTT.ROSUCK@DAVEANDBUSTERS.COM

**DAVE & BUSTER'S ENTERTAINMENT INC - Asst.
Sec.**

**DAVE & BUSTER'S HOLDINGS INC - Asst. Sec.
DAVE & BUSTERS INC - Asst. Sec.**

Name: SCOTT ADAM ROSUCK
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
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Phone: (214)904-2576
Alt. Phone:
Email: SCOTT.ROSUCK@DAVEANDBUSTERS.COM

MANAGERS

Name: CHARLES RICHARD GOOD
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
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Phone: (281)900-0778
Alt. Phone:
Email:

Name: SPENCER KYLE MCDONALD
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (480)489-0313
Alt. Phone:
Email:

Name: JOHN ERICK JOHNSON
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (480)753-1200
Alt. Phone:
Email:

Name: CASEY JEFFREY ST PIERRE
Gender: Female
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (480)721-2240
Alt. Phone:
Email:

Name: DEMI JON MERLINA
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (602)363-2906
Alt. Phone:
Email: DJ.MERLINA@MAINEVENT.COM

Name: STEPHEN ANDREW BLACKSTONE
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (480)440-3509
Alt. Phone:
Email: SABBLACKSTONE@YAHOO.COM

Name: MICHAEL FRANCIS MONACO
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (480)262-8678
Alt. Phone:
Email: MICHAEL.MONACO@MAINEVENT.COM

Name: ANTHONY PAUL CYR
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
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Phone: (386)717-8766
Alt. Phone:
Email: ANTHONYCYR@YMAIL.COM

Name: KENNITH GORDON CAMERON
Gender: Male
Correspondence Address: 2600 N CENTRAL AVENUE
#1775
PHOENIX, AZ 85004
USA
Phone: (615)838-5187
Alt. Phone:
Email: KENNITH.CAMERON@MAINEVENT.COM

APPLICATION INFORMATION

Application Number: 213911
Application Type: Multi-License Acquisition of Control
Created Date: 10/18/2022

Clar

COMPLIANCE ACTIONS

000592-18

10/26/2018 - Incident Date

12/13/2018 - Fine

01/11/2019 - Fine Payment (\$375.00)

01/11/2019 - Case Closed

Violations

Statute	Counts	Description
4-244.11	1	On-sale licensee hires person under age 19

10/12/2018 Incident date

12/13/2018 Mail In Consent issued/mailed, \$375.00 Penalty fine assessed

1/11/2018 Signed Mail In Consent received

1/11/2018 \$375.00 Fine paid, Receipt #R15030

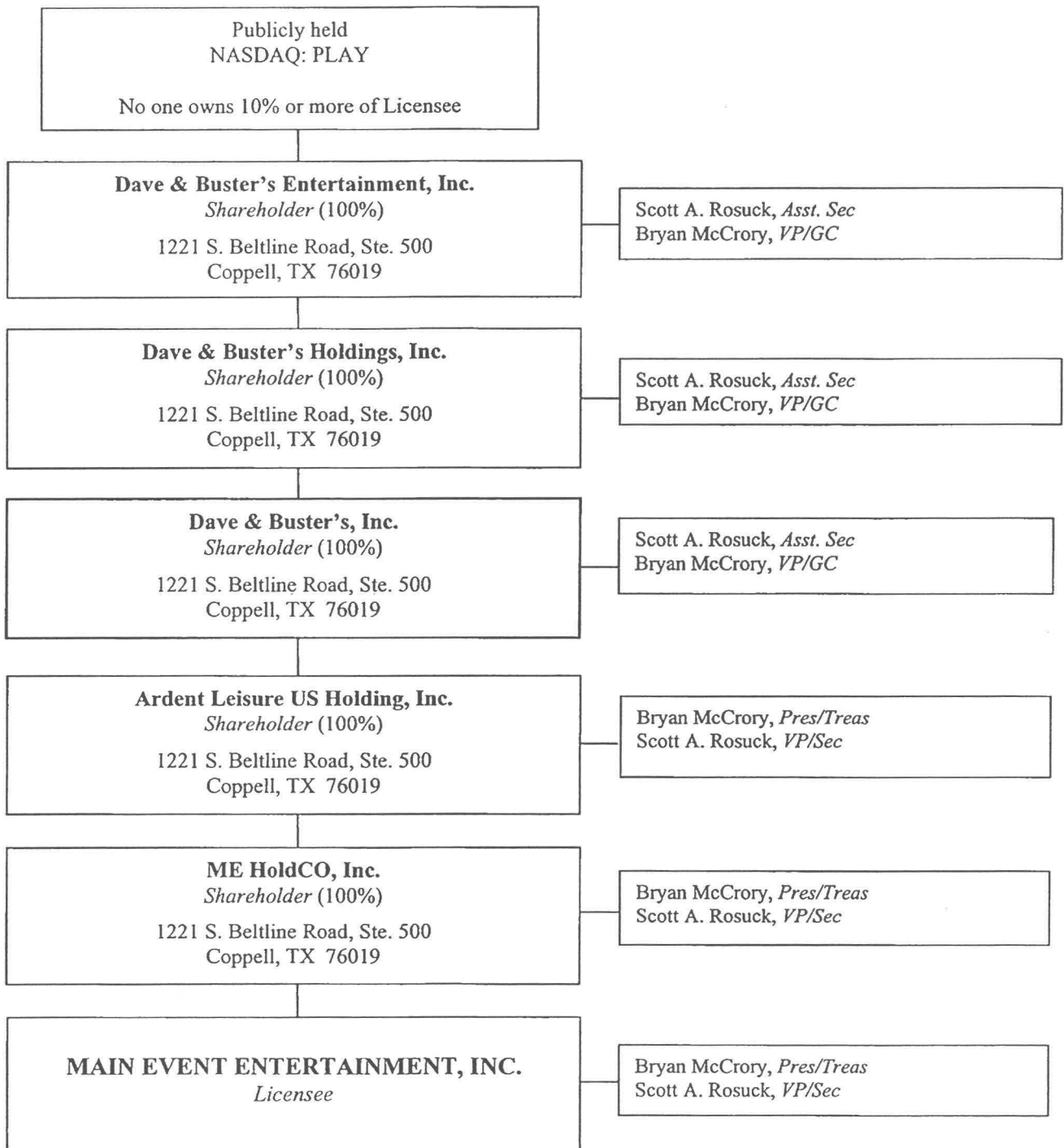
MAIN EVENT AZ LIQUOR LICENSES | 10/12/2022

AOC Attachment

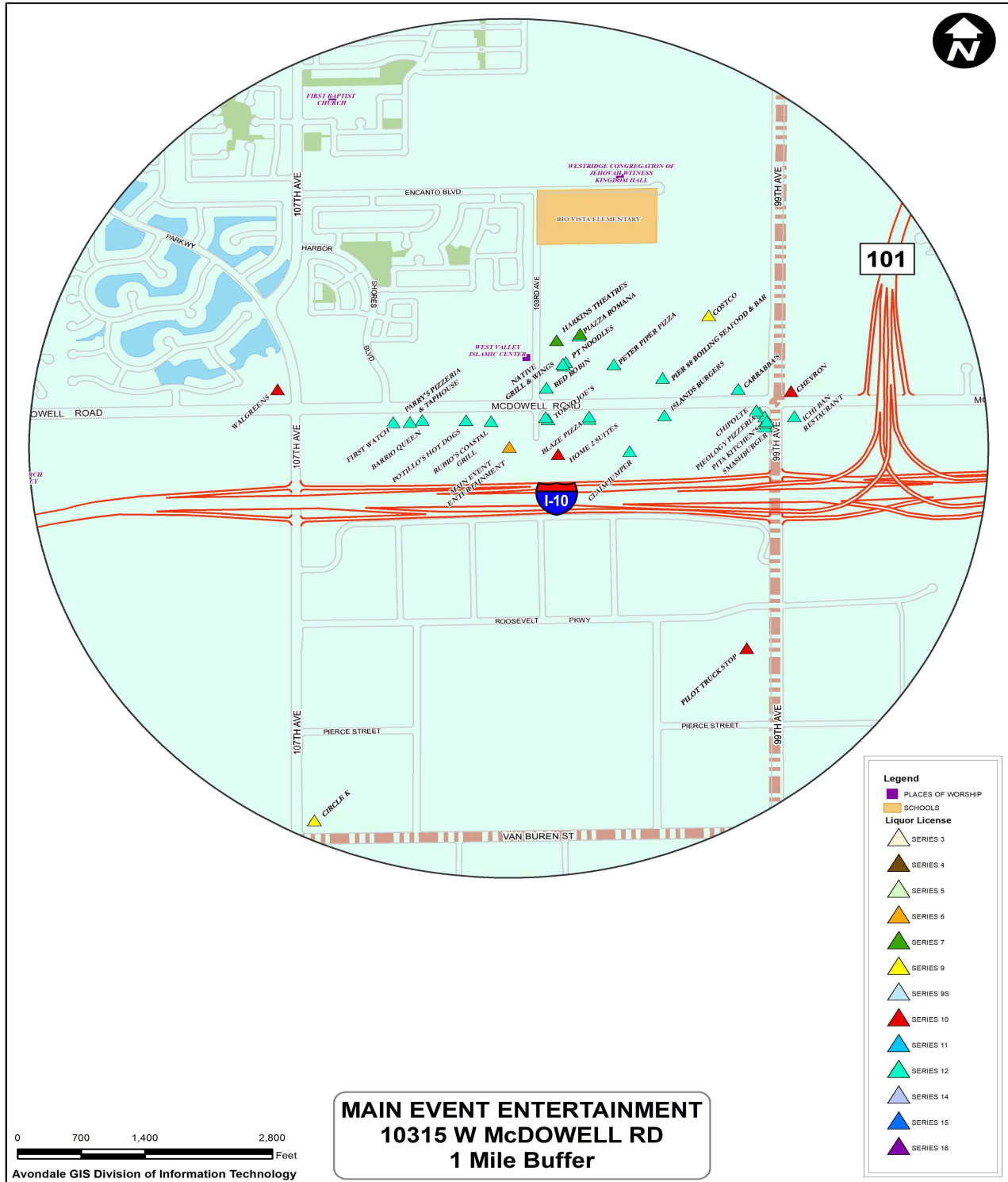
License No.	Business Name	Address	Phone No.	Manager
06070302	Main Event	8545 S. Emerald Dr. Tempe, AZ 85284	(480) 753-1200	Anthony Paul Cyr <i>(documents included)</i>
06070117	Main Event	1735 S. Santan Village Parkway Gilbert, AZ 85295	(480) 462-2200	Kennith Gordon Cameron <i>(documents included)</i>
06077001	Main Event	10315 W. McDowell Rd. Avondale, AZ 85392	(623) 936-5300	Stephen Blackstone <i>(current training included)</i>

06070117 06070302 06077001

Main Event Entertainment, Inc.
Ownership Char | 10/3/2022 - FINAL



GIS MAP



LICENSE REVIEW FORM

Type of License	Series 6 - Bar
Applicant's Name	Andrea Lewkowitz
Business Name	Main Event
Business Address	10315 W. McDowell Road, Avondale, AZ 85392
Department Comments	
The General Plan Designates the property as Freeway Commercial. The Current Zoning of the property is Planned Area Development (PAD) known as Park 10. The use of a bar is consistent with the Park 10 Planned Area Development and is subject to the conditions stated in the PAD.	
☐ Police Department ☒ Development Services ☐ Fire Department ☐ Finance Department	
☒ Approved ☐ Denied	
 E-Signature Augustus Gerletti Name	Associate Planner Title Nov 10, 2022 Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022

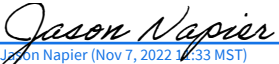
LICENSE REVIEW FORM

Type of License	Series 6 - Bar
Applicant's Name	Andrea Lewkowitz
Business Name	Main Event
Business Address	10315 W. McDowell Road, Avondale, AZ 85392
Department Comments	
Business License has no concerns.	
☐ Police Department ☐ Fire Department ☐ Development Services ☒ Finance Department	
☒ Approved ☐ Denied	
<u>Audrey Tijerina</u> Audrey Tijerina (Nov 8, 2022 08:11 MST) E-Signature	Accounting Clerk Title
Audrey Tijerina Name	Nov 8, 2022 Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022

LICENSE REVIEW FORM

Type of License	Series 6 - Bar
Applicant's Name	Andrea Lewkowitz
Business Name	Main Event
Business Address	10315 W. McDowell Road, Avondale, AZ 85392
Department Comments	
No comments	
☐ Police Department ☒ Fire Department	
☐ Development Services ☐ Finance Department	
☒ Approved ☐ Denied	
 Jason Napier (Nov 7, 2022 10:33 MST)	Fire Marshal
E-Signature	Title
Jason Napier	Nov 7, 2022
Name	Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022



LICENSE REVIEW FORM

Type of License	Series 6 - Bar
Applicant's Name	Andrea Lewkowicz
Business Name	Main Event
Business Address	10315 W. McDowell Road, Avondale, AZ 85392
Department Comments	
☒ Police Department ☐ Fire Department ☐ Development Services ☐ Finance Department	
☒ Approved ☐ Denied	
<u>Mathew Hintz</u> Mathew Hintz (Nov 7, 2022 11:18 MST)	Police Lieutenant
E-Signature	Title
Mathew Hintz	Nov 7, 2022
Name	Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: **10/31/2022**

CITY COUNCIL REPORT

SUBJECT: Series 10 (Beer and Wine Store) Liquor License - Festival Outfitter

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Marcella Carrillo, City Clerk, (623) 333-1214

THROUGH: Cherlene Penilla, Assistant City Manager, (623) 333-1015

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Diverse Recreation and Entertainment Opportunities – Avondale provides residents with the ability to connect with amenities, businesses, and their community, enhancing the opportunity to live, work, and enjoy a healthy, active, and affordable lifestyle.

The approval of this agenda item will promote Avondale community's social connectivity by providing a new social environment for family and friends. This item will increase visitor traffic to Avondale's local businesses.

PURPOSE:

City Council will consider a request to recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 10 (Beer and Wine Store) Liquor License submitted by Kyle Mason for the sale of alcohol at Festival Outfitter located at 7602 South Avondale Boulevard in Avondale and authorize the City Clerk to execute the necessary documents. The Council will take appropriate action.

BACKGROUND:

Festival Outfitter is a new establishment to be located at Phoenix Raceway at 7602 South Avondale Boulevard, Suite B in Avondale. Issuance of a Series 10 (Beer and Wine Store) liquor license is required to allow alcohol sales on the premises. The establishment is outside of the state-mandated 300-foot separation requirement from schools.

DISCUSSION:

As required by state law and city ordinance, the application was posted for the required period of time. The Police, Fire & Medical, Development & Engineering Services and Finance Departments have reviewed the application and are recommending approval.

BUDGET IMPACT:

The liquor license application fee of \$250 has been paid in full.

RECOMMENDATION:

Staff is recommending City Council recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 10 (Beer and Wine Store) Liquor License submitted by Kyle Mason for the sale of alcohol at Festival Outfitter located at 7602 South Avondale Boulevard in Avondale and authorize the City Clerk to execute the necessary documents.

Contact person for document distribution: Maria James

State of Arizona
Department of Liquor Licenses and Control

Created 10/24/2022 @ 10:12:24 AM

Local Governing Body Report

LICENSE

Number:	Type:	010 BEER AND WINE STORE
Name:	FESTIVAL OUTFITTER	
State:	Pending	
Issue Date:	Expiration Date:	
Original Issue Date:		
Location:	7602 S AVONDALE BOULEVARD STE B AVONDALE, AZ 85323 USA	
Mailing Address:	756 S WEST STREET PETERSBURG, VA 23803 USA	
Phone:	(888)846-4356	
Alt. Phone:	[REDACTED]	
Email:	KMASON@MILLAVEMGT.COM	

AGENT

Name:	KYLE PATRICK MASON
Gender:	Male
Correspondence Address:	756 S WEST STREET PETERSBURG, VA 23803 USA
Phone:	[REDACTED]
Alt. Phone:	
Email:	KMASON@MILLAVEMGT.COM

OWNER

Name:	FESTIVAL OUTFITTER LLC	
Contact Name:	KYLE PATRICK MASON	
Type:	LIMITED LIABILITY COMPANY	
AZ CC File Number:	PENDING	State of Incorporation: DE
Incorporation Date:		
Correspondence Address:	756 S WEST STREET PETERSBURG, VA 23803 USA	
Phone:	[REDACTED]	
Alt. Phone:		
Email:	KMASON@MILLAVEMGT.COM	

Officers / Stockholders

Name:
NICOLAS JOHN STELMACK

Title:
Manager

% Interest:
100.00

FESTIVAL OUTFITTER LLC - Manager

Name: NICOLAS JOHN STELMACK
Gender: Male
Correspondence Address: 756 S WEST STREET
PETERSBURG, VA 23803
USA
Phone: (614)580-5387
Alt. Phone:
Email: NICK@FESTIVALOUTFITTER.CO

MANAGERS

Name: NICOLAS JOHN STELMACK
Gender: Male
Correspondence Address: 756 S WEST STREET
PETERSBURG, VA 23803
USA
Phone: (614)580-5387
Alt. Phone:
Email: NICK@FESTIVALOUTFITTER.CO

APPLICATION INFORMATION

Application Number: 214323
Application Type: New Application
Created Date: 10/21/2022

QUESTIONS & ANSWERS

010 Beer and Wine Store

- 1) Are you applying for an Interim Permit (INP)?
Yes
A Document of type INTERIM PERMIT (INP) NOTARY PAGE is required.
- 2) Provide name, address, and distance of nearest school.
(If less than one (1) mile note footage)
LA JOYA COMMUNITY HS 11650 W WHYMAN AVE AVONDALE, AZ 85323
- 3) Are you one of the following? Please indicate below.
Property Tenant
Subtenant
Property Owner
Property Purchaser
Property Management Company
PROPERTY TENANT
- 4) Is there a penalty if lease is not fulfilled?
No
- 5) Is the Business located within the incorporated limits of the city or town of which it is located?
Yes
- 6) What is the total money borrowed for the business not including the lease?
Please list each amount owed to lenders/individuals.
SBA 400 N 8TH ST #116 RICHMOND, VA 23219 \$130,000
- 7) Are there walk-up or drive-through windows on the premises?
No
- 8) Does the establishment have a patio?
No
- 9) Is your licensed premises now closed due to construction, renovation or redesign or rebuild?
No

State of Arizona
Department of Liquor Licenses and Control

Created 10/24/2022 @ 10:12:41 AM

Local Governing Body Report

LICENSE

Number:	INP070020745	Type:	INP INTERIM PERMIT
Name:	FESTIVAL OUTFITTER		
State:	Active		
Issue Date:	10/24/2022	Expiration Date:	02/06/2023
Original Issue Date:	10/24/2022		
Location:	7602 S AVONDALE BOULEVARD STE B AVONDALE, AZ 85323 USA		
Mailing Address:	756 S WEST STREET PETERSBURG, VA 23803 USA		
Phone:	(888)846-4356		
Alt. Phone:	[REDACTED]		
Email:	KMASON@MILLAVEMGT.COM		

AGENT

Name:	KYLE PATRICK MASON
Gender:	Male
Correspondence Address:	756 S WEST STREET PETERSBURG, VA 23803 USA
Phone:	[REDACTED]
Alt. Phone:	
Email:	KMASON@MILLAVEMGT.COM

OWNER

Name:	FESTIVAL OUTFITTER LLC		
Contact Name:	KYLE PATRICK MASON		
Type:	LIMITED LIABILITY COMPANY		
AZ CC File Number:	PENDING	State of Incorporation:	DE
Incorporation Date:			
Correspondence Address:	756 S WEST STREET PETERSBURG, VA 23803 USA		
Phone:	[REDACTED]		
Alt. Phone:			
Email:	KMASON@MILLAVEMGT.COM		

Officers / Stockholders

Name:
NICOLAS JOHN STELMACK

Title:
Manager

% Interest:
100.00

FESTIVAL OUTFITTER LLC - Manager

Name: NICOLAS JOHN STELMACK
Gender: Male
Correspondence Address: 756 S WEST STREET
PETERSBURG, VA 23803
USA
Phone: [REDACTED]
Alt. Phone:
Email: NICK@FESTIVALOUTFITTER.CO

MANAGERS

Name: NICOLAS JOHN STELMACK
Gender: Male
Correspondence Address: 756 S WEST STREET
PETERSBURG, VA 23803
USA
Phone: [REDACTED]
Alt. Phone:
Email: NICK@FESTIVALOUTFITTER.CO

APPLICATION INFORMATION

Application Number: 214324
Application Type: New Application
Created Date: 10/21/2022

QUESTIONS & ANSWERS

INP Interim Permit

- 1) Enter License Number currently at location
10076922
- 2) Is the license currently in use?
Yes
- 3) Will you please submit section 5, page 6, of the license application when you reach the upload page?
Yes
A Document of type INTERIM NOTARY PAGE is required.

*22 OCT 21 147. Lic. AM1118



Interim Permit (INP) Notary Page

FOR DLIC USE ONLY

INP number:	10070020745
Date Approved:	10-24-2022
Expiration:	02-06-2023
CSR:	SS
Fee:	\$100.00

SECTION 5 page 2 of the license application

For approval of an interim permit:

- There **must** be a valid license of the same series issued to the current location you are applying for, **OR**
- A Hotel/Motel license is being replaced with a restaurant license pursuant to A.R.S. § 4-203.01 (A)

1. Enter license number currently at the location: 10076922

2. Is the license currently in use? ☒ Yes ☐ No If no, how long has it been out of use? _____

I, (Print Full Name) Rob Ellis hereby declare that I am the Individual, Owner, Agent, or Controlling Person on the stated license and location.

Signature: [Signature]

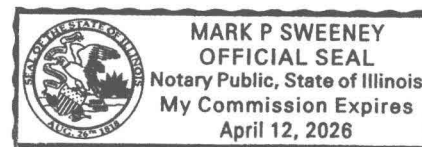
State of Illinois

County of Will

Signed before me on this 29 day of September, 20 22.

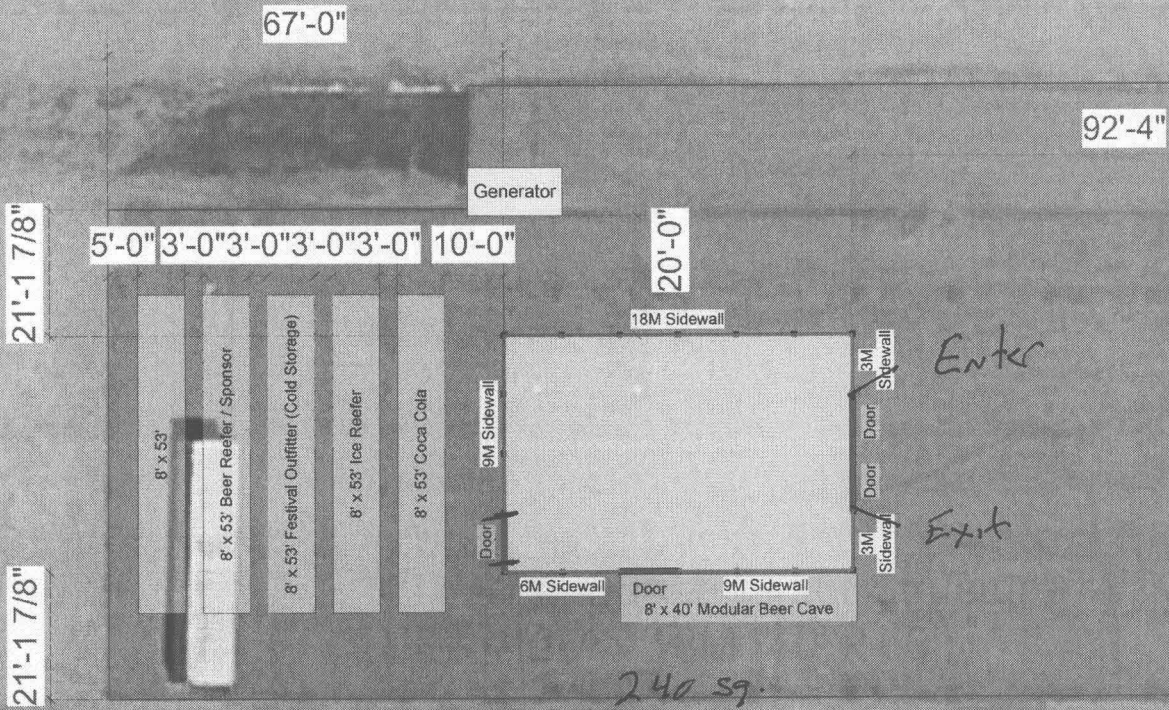
Notary Signature: [Signature]

My commission expires on 4 / 12 / 2026



Notary Seal

PR Supermarket Structure
12M x 18M (40' x 60')



240 sq.

22 OCT 21 14:14:14 PM 11/18

CSR:

Amount:



AGENT/CONTROLLING PERSON QUESTIONNAIRE

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

DLIC USE ONLY

Job #:	214323
Date Accepted:	10-21-2022
CSR:	SK

Type or Print with **Black Ink**

Fp current

06-17-2022

License Number:

ATTENTION APPLICANT: This is a legally binding document. An investigation of your background will be conducted. Incomplete applications will not be accepted. False or misleading answers may result in the denial or revocation of a license or permit and could result in criminal prosecution.

Attention local governments: Social security and birth date information is confidential. This information will be given to law enforcement agencies for background checks only.

QUESTIONNAIRE IS TO BE COMPLETED ACCORDINGLY AND SUBMITTED TO THE DEPARTMENT WITH A **BLUE OR BLACK LINED FINGERPRINT CARD AND \$22 FEE. FINGERPRINTS MUST BE DONE BY A LAW ENFORCEMENT AGENCY OR BONA FIDE FINGERPRINT SERVICE.**

1. Check the
Appropriate
Box →



Agent



Controlling Person

2. Name: Mason Kyle Patrick Birth Date: [REDACTED]

Last

First

Middle

3. Social Security #: [REDACTED] Drivers License #: [REDACTED] State Issued: AZ

4. Place of birth: [REDACTED] Height: [REDACTED] Weight: [REDACTED] Eyes: [REDACTED] Hair: [REDACTED]

City

State

COUNTRY

5. Name of current/most recent spouse: _____ Birth Date: ____/____/____

Last

First

Middle

(NOT a public record)

6. Are you a bonafide resident of Arizona? Yes ☒ No ☐ If yes, what is your date of residency? 06-01-1985

7. Daytime telephone number: 480-201-1571 Email address: modernhospitalitymgmt@gmail.com

8. Premises Name: Festivals/ Outfitter Business Phone: ____/____/____

9. Premises Address: 7602 S Avondale St B Blvd Avondale AZ 85323

Street (do not use PO Box)

City

State

County

Zip

MARICOPA

'22 OCT 21 11:47 AM 1118

10. List your employment or type of business during the past five (5) years, if unemployed, retired, or student, list place of residence address.

FROM Month/Year	TO Month/Year	DESCRIBE POSITION OR BUSINESS	EMPLOYERS NAME OR NAME OF BUSINESS (Street Address, City, State & Zip)
10/2016	CURRENT	VP of Operations	Mill Avenue Management Group

(ATTACH ADDITIONAL SHEET IF NECESSARY)

11. Provide your residence address information for the last five (5) years A.R.S. §4-202(D)

FROM Month/Year	To Month/Year	Street	City	State	Zip
01/2019	CURRENT		Phoenix	AZ	85032
01/2017	08/2018		Scottsdale	AZ	85255

(ATTACH ADDITIONAL SHEET IF NECESSARY)

12. As a Controlling Person or Agent, will you be physically present and operating the licensed premises? If you answered YES, then answer #13 below. If NO, skip to #14 Yes ☐ No ☒
13. Have you attended a DLLC approved Basic and Management Liquor Law Training Course within the past 3 years? If yes, attach certificate(s) Yes ☐ No ☐
14. Have you been cited, arrested, indicted, convicted, or summoned into court for violation of ANY criminal law or ordinance, regardless of the disposition, even if dismissed or expunged, within the past five (5) years? Yes ☐ No ☒
15. Are there ANY administrative law citations, compliance actions or consents, criminal arrests, indictments or summons pending against you? (Do not include civil traffic tickets) A.R.S. §4-202, 4-210 Yes ☐ No ☒
16. Has anyone EVER obtained a judgement against you the subject of which involved fraud or misrepresentation? Yes ☐ No ☒
17. Have you had a liquor application or license rejected, denied, revoked or suspended in or outside of Arizona within the last five years? A.R.S. §4-202(D) Yes ☐ No ☒
18. Has an entity in which you are or have been a controlling person had an application or license rejected, denied, revoked, or suspended in or outside of Arizona within the last five years? A.R.S. §4-202(D) Yes ☐ No ☒

If you answered "YES" to any Question 14 through 18 YOU MUST attach a signed statement. Give complete details including dates, agencies involved and dispositions.

CHANGES TO QUESTIONS 14-18 MAY NOT BE ACCEPTED

I, (Print Full Name) Kyle Mason hereby swear under penalty of perjury and in compliance with A.R.S. § 4-210(A)(2) and (3) that I have read and understand the foregoing and verify that the information and statements that I have made herein are true and correct to the best of my knowledge.

Signature: [Signature]

Date: 10/17/2022



ALIEN STATUS

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with **Black Ink**

Title IV of the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (the "Act"), 8 U.S.C. § 1621, provides that, with certain exceptions, only United States citizens, United States non-citizen nationals, non-exempt "qualified aliens" (and sometimes only particular categories of qualified aliens), nonimmigrant, and certain aliens paroled into the United States are eligible to receive state, or local public benefits. With certain exceptions, a professional license and commercial license issued by a State agency is a State public benefit.

Arizona Revised Statutes § 41-1080 requires, in general, that a person applying for a license must submit documentation to the license agency that satisfactorily demonstrates the applicant's presence in the United States is authorized under federal law.

Directions: All applicants must complete Sections I, II, and IV. Applicants who are not U.S. citizens or nationals must also complete Section III.

Submit this completed form and a copy of one or more document(s) from the attached "Evidence of U.S. Citizenship, U.S. National Status, or Alien Status" with your application for license or renewal. If the document you submit does not contain a photograph, you must also provide a government issued document that contains your photograph. You must submit supporting legal documentation (i.e. marriage certificate) if the name on your evidence is not the same as your current legal name.

SECTION I – APPLICANT INFORMATION

APPLICANT NAME (Print or type) Kyle Mason

SECTION II – CITIZENSHIP OR NATIONAL STATUS DECLARATION

Are you a citizen or national of the United States? ☒ Yes ☐ No - If **yes**, indicate place of birth:

City North Platte State Nebraska COUNTRY Lincoln

If you answered **Yes, 1)** Attach a legible copy of a document from the list below.

2) Name of document: Arizona Drivers License

If you answered **No**, you must complete Sections III.

EVIDENCE OF U.S. CITIZENSHIP, U.S. NATIONAL STATUS, OR ALIEN STATUS

You must submit supporting legal documentation (i.e. marriage certificate) if the name on your evidence is not the same as your current legal name.

Evidence showing authorized presence in the United State includes the following:

1. An Arizona driver license issued after 1996 or an Arizona non-operating identification card.
2. A driver license issued by a state that verifies lawful presence in the United States.
3. A birth certificate or delayed birth certificate showing birth in one of the 50 states, the District of Columbia, Puerto Rico (on or after Jan. 13, 1941), Guam, the U.S. Virgin Islands (on or after January 17, 1917), American Samoa, or the Northern Mariana Islands (on or after November 4, 1986, Northern Mariana Islands local time)
4. A United States certificate of birth abroad.
5. A United States passport. ***Passport must be signed***
6. A foreign passport with a United States visa.
7. An I-94 form with a photograph.
8. A United States citizenship and immigration services employment authorization document or refugee travel document.
9. A United States certificate of naturalization.
10. A United States certificate of citizenship.
11. A tribal certificate of Indian blood.
12. A tribal or bureau of Indian affairs affidavit of birth.
13. Any other license that is issued by the federal government, any other state government, an agency of this state or a political subdivision of this state that requires proof of citizenship or lawful alien status before issuing the license.

SECTION III – QUALIFIED ALIEN DECLARATION

Applicants who are not citizens or nationals of the United States. Please indicate alien status by checking the appropriate box. Attach a legible copy of a document from the attached list or other document as evidence of your status.

Name of document provided

Qualified Alien Status (8 U.S.C. §§ 1621(a)(1), -1641(b) and (c))

- ☐ 1. An alien lawfully admitted for permanent residence under the Immigration and Nationality Act (INA)
- ☐ 2. An alien who is granted asylum under Section 208 of the INA.
- ☐ 3. A refugee admitted to the United States under Section 207 of the INA.
- ☐ 4. An alien paroled into the United States for at least one year under Section 212(d)(5) of the INA.
- ☐ 5. An alien whose deportation is being withheld under Section 243(h) of the INA.
- ☐ 6. An alien granted conditional entry under Section 203(a)(7) of the INA as in effect prior to April 1, 1980.
- ☐ 7. An alien who is a Cuban/Haitian entrant.
- ☐ 8. An alien who has, or whose child or child's parent is a "battered alien" or an alien subject to extreme cruelty in the United States

Nonimmigrant Status (8 U.S.C. § 1621(a)(2))

- 9. A nonimmigrant under the Immigration and Nationality Act [8 U.S.C § 1101 et seq.] Non-immigrants are persons who have temporary status for a specific purpose. See 8 U.S.C § 1101(a)(15).

Alien Paroled into the United States for Less Than One Year (8 U.S.C. § 1621(a)(3))

- 10. An alien paroled into the United States for less than one year under Section 212(d)(5) of the INA

Other Persons (8 U.S.C § 1621(c)(2)(A) and (C))

- 11. A nonimmigrant whose visa for entry is related to employment in the United States, or
- 12. A citizen of a freely associated state, if section 141 of the applicable compact of free association approved in Public Law 99-239 or 99-658 (or a successor provision) is in effect [Freely Associated States include the Republic of the Marshall Islands, Republic of Palau and the Federate States of Micronesia, 48 U.S.C. § 1901 et seq.];
- 13. A foreign national not physically present in the United States.
- 14. **Otherwise Lawfully Present**
- 15. A person not described in categories 1-13 who is otherwise lawfully present in the United States.

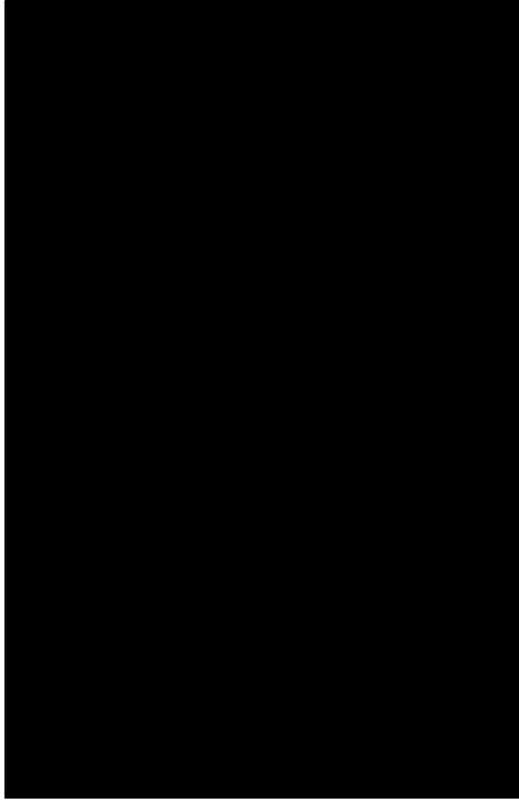
PLEASE NOTE: The federal Personal Responsibility and Work Opportunity Reconciliation Act may make persons who fall into this category ineligible for licensure. See 8 U.S.C. §

Kyle Mason
Print Name


Signature

10/17/22
Date

*22 OCT 21 147. Lic. AM11:18



CSR:

Amount:

'22 OCT 21 11:47 AM

DLLC USE ONLY

Job #: 214323

Date Accepted: 10-21-2022

CSR: SC



AGENT/CONTROLLING PERSON QUESTIONNAIRE

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with **Black Ink**

805-258

License Number:

ATTENTION APPLICANT: This is a legally binding document. An investigation of your background will be conducted. Incomplete applications will not be accepted. False or misleading answers may result in the denial or revocation of a license or permit and could result in criminal prosecution.

Attention local governments: Social security and birth date information is confidential. This information will be given to law enforcement agencies for background checks only.

QUESTIONNAIRE IS TO BE COMPLETED ACCORDINGLY AND SUBMITTED TO THE DEPARTMENT WITH A **BLUE OR BLACK LINED** FINGERPRINT CARD AND \$22 FEE. FINGERPRINTS MUST BE DONE BY A LAW ENFORCEMENT AGENCY OR BONA FIDE FINGERPRINT SERVICE.

1. Check the
Appropriate
Box →



Agent



Controlling Person

2. Name: Stelmack Nicolas John Birth Date: [REDACTED]

3. Social Security # [REDACTED] Drivers License # [REDACTED] State Issued: Virginia

4. Place of birth: [REDACTED] Height: [REDACTED] Weight: [REDACTED] Eyes: [REDACTED] Hair: [REDACTED]

5. Name of current/most recent spouse: [REDACTED] Birth Date: [REDACTED] (NOT a public record)

6. Are you a bonafide resident of Arizona? Yes ☐ No ☒ If yes, what is your date of residency? [REDACTED]

7. Daytime telephone number: [REDACTED] Email address: nick@festivaloutfitter.co

8. Premises Name: Phoenix Raceway Business Phone: 623 463 5400

9. Premises Address: 7602 S. Avondale Blvd Ste B Avondale AZ Maricopa 85323

Street (do not use PO Box)

City

State

County

Zip

10. List your employment or type of business during the past five (5) years, if unemployed, retired, or student, list place of residence address.

FROM Month/Year	TO Month/Year	DESCRIBE POSITION OR BUSINESS	EMPLOYERS NAME OR NAME OF BUSINESS (Street Address, City, State & Zip)
08/2018	CURRENT	Managing Member	Festival Outfitter LLC (756 S West ST, BLDG 21, Petersburg, VA 23803)
02/2012	11/2018	Managing Member	Sustainable Outfitter LLC (11204 Chivalry Chase Ln, Spotsylvania, VA 22551)

(ATTACH ADDITIONAL SHEET IF NECESSARY)

11. Provide your residence address information for the last five (5) years A.R.S. §4-202(D)

FROM Month/Year	To Month/Year	Street	City	State	Zip
06/2016	CURRENT	[REDACTED]	Spotsylvania	VA	2255

(ATTACH ADDITIONAL SHEET IF NECESSARY)

12. As a Controlling Person or Agent, will you be physically present and operating the licensed premises? If you answered YES, then answer #13 below. If NO, skip to #14 Yes ☒ No ☐
13. Have you attended a DLLC approved Basic and Management Liquor Law Training Course within the past 3 years? If yes, attach certificate(s) Yes ☒ No ☐
Have you been cited, arrested, indicted, convicted, or summoned into court for violation of ANY criminal law or ordinance, regardless of the disposition, even if dismissed or expunged, within the past five (5) years? Yes ☐ No ☒
14. Are there ANY administrative law citations, compliance actions or consents, criminal arrests, indictments or summons pending against you? (Do not include civil traffic tickets) A.R.S. §4-202,4-210 Yes ☐ No ☒
15. Has anyone EVER obtained a judgement against you the subject of which involved fraud or misrepresentation? Yes ☐ No ☒
16. Have you had a liquor application or license rejected, denied, revoked or suspended in or outside of Arizona within the last five years? A.R.S. §4-202(D) Yes ☐ No ☒
17. Has an entity in which you are or have been a controlling person had an application or license rejected, denied, revoked, or suspended in or outside of Arizona within the last five years? A.R.S. §4-202(D) Yes ☐ No ☒
- 18.

If you answered "YES" to any Question 14 through 18 **YOU MUST** attach a signed statement.
Give complete details including dates, agencies involved and dispositions.

CHANGES TO QUESTIONS 14-18 MAY NOT BE ACCEPTED

I, (Print Full Name) **Nicolas Stelmack** hereby swear under penalty of perjury and in compliance with A.R.S. § 4-210(A)(2) and (3) that I have read and understand the foregoing and verify that the information and statements that I have made herein are true and correct to the best of my knowledge.

Signature: _____

Date: **10/13/2022**

Certificate # AZB-OFF-01206373

'22 OCT 21 LIQ. LIC. #M1118

Certificate of Completion
For
Title 4 **BASIC** Liquor Law Training

☐ On-sale
☒ Off-sale
☐ On- and off-sale

A Certificate of Completion must be on a form provided by the Arizona Department of Liquor. Certificates are completed by a state-approved training provider and, when issued, the Certificate is signed by the course participant.

The State requires BASIC Title 4 training only as a prerequisite for MANAGEMENT Title 4 training or as a result of a liquor law violation. Persons required to have BASIC Title 4 training are listed at the base of this Certificate. Licensees sometimes require BASIC Title 4 Training a condition of employment.

A replacement Certificate of Completion for Title 4 training must be available through the training provider for two years after the training completion date.

Student Information

Nicolas Stelmack

Full Name (please print)

[Signature]

Signature

10/11/2022

Training Completion Date

10/10/2025

Certificate Expiration Date
(three years from completion date)

Training Provider Information

360training.com Inc.

Company Name

5000 Plaza on the Lake, Suite 305, Austin, TX 78746

Mailing Address

(877) 881-2235

Daytime Contact Phone Number

I, Samantha Montalbano, certify that the above named individual did successfully complete
Instructor Name (please print)

Title 4 BASIC Training in accordance with A.R.S. §4-112(G)(2) and Arizona Administrative Code (A.A.C.)R19-1-103 using training course content and materials approved by the Arizona Department of Liquor Licenses and Control. I understand that misuse of this Certificate of Completion can result in the revocation of State-approval for the Title 4 Training Provider named in this section as provided by A.A.C. R19-1-103(E) and (F).

[Signature]

Instructor Signature

10/11/2022

Day Mo Year

Persons required to complete BASIC & MANAGEMENT Title 4 training: 1) owner(s) actively involved in the daily business operations of a liquor-licensed business of a series listed below
2) licensees, agents and managers actively involved in the daily business operations of a liquor-licensed business of a series listed below

In-state Microbrewery (series 3)
Conveyance (series 8)
Restaurant (series 12)

Government (series 5)
Liquor Store (series 9)
In-state Farm Winery (series 13)

Bar (series 6)
Private Club (series 14)

Beer & Wine Bar (series 7)
Hotel/Motel w/restaurant (series 11)
Beer & Wine Store (series 10)

Liquor license applications (initial and renewal) are not complete until valid Certificates of Completion for all required persons have been submitted to the Department of Liquor.

The questionnaire (which designates a manager to a location) and the agent change form (which assigns a new agent to active liquor licenses) are not complete until valid Certificates of Completion for all required persons have been submitted to the Department of Liquor.

Certificate # AZM-OFF-0120279

22 OCT 21 14:18 Lic. #M11118

Certificate of Completion
For
Title 4 **MANAGEMENT** Liquor Law Training

A Certificate of Completion must be on a form provided by the Arizona Department of Liquor. Certificates are completed by a state-approved training provider and, when issued, the Certificate is signed by the course participant.

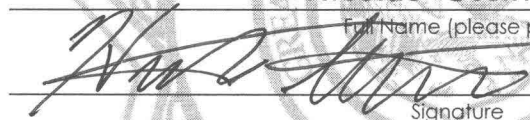
Basic Title 4 training is a prerequisite for MANAGEMENT Title 4 training. A valid Certificate of Completion for BASIC Title 4 training must be on file at the Department of Liquor and satisfactory completion of a State-approved BASIC Title 4 course must be verified by the training provider prior to issuing a Certificate of Completion for MANAGEMENT Title 4 training.

A replacement Certificate of Completion for Title 4 training must be available through the training provider for two years after the training completion date.

Student Information

Nicolas Stelmack

Full Name (please print)



Signature

10/11/2022

Training Completion Date

10/10/2025

Certificate Expiration Date
(three years from completion date)

Training Provider Information

360training.com Inc.

Company Name

5000 Plaza on the Lake, Suite 305, Austin, TX 78746

Mailing Address

(877) 881-2235

Daytime Contact Phone Number

I, Samantha Montalbano, certify that the above named individual did successfully complete
Instructor Name (please print)

Title 4 MANAGEMENT Training in accordance with A.R.S. §4-112(G)(2) and Arizona Administrative Code (A.A.C.)R19-1-103 using training course content and materials approved by the Arizona Department of Liquor Licenses and Control. I understand that misuse of this Certificate of Completion can result in the revocation of State-approval for the Title 4 Training Provider named in this section as provided by A.A.C. R19-1-103(E) and (F).



Instructor Signature

10/11/2022

Day Mo Year

Persons required to complete BASIC & MANAGEMENT Title 4 training: 1) owner(s) actively involved in the daily business operations of a liquor-licensed business of a series listed below
2) licensees, agents and managers actively involved in the daily business operations of a liquor-licensed business of a series listed below

In-state Microbrewery (series 3)
Conveyance (series 8)
Restaurant (series 12)

Government (series 5)
Liquor Store (series 9)
In-state Farm Winery (series 13)

Bar (series 6)
Private Club (series 14)

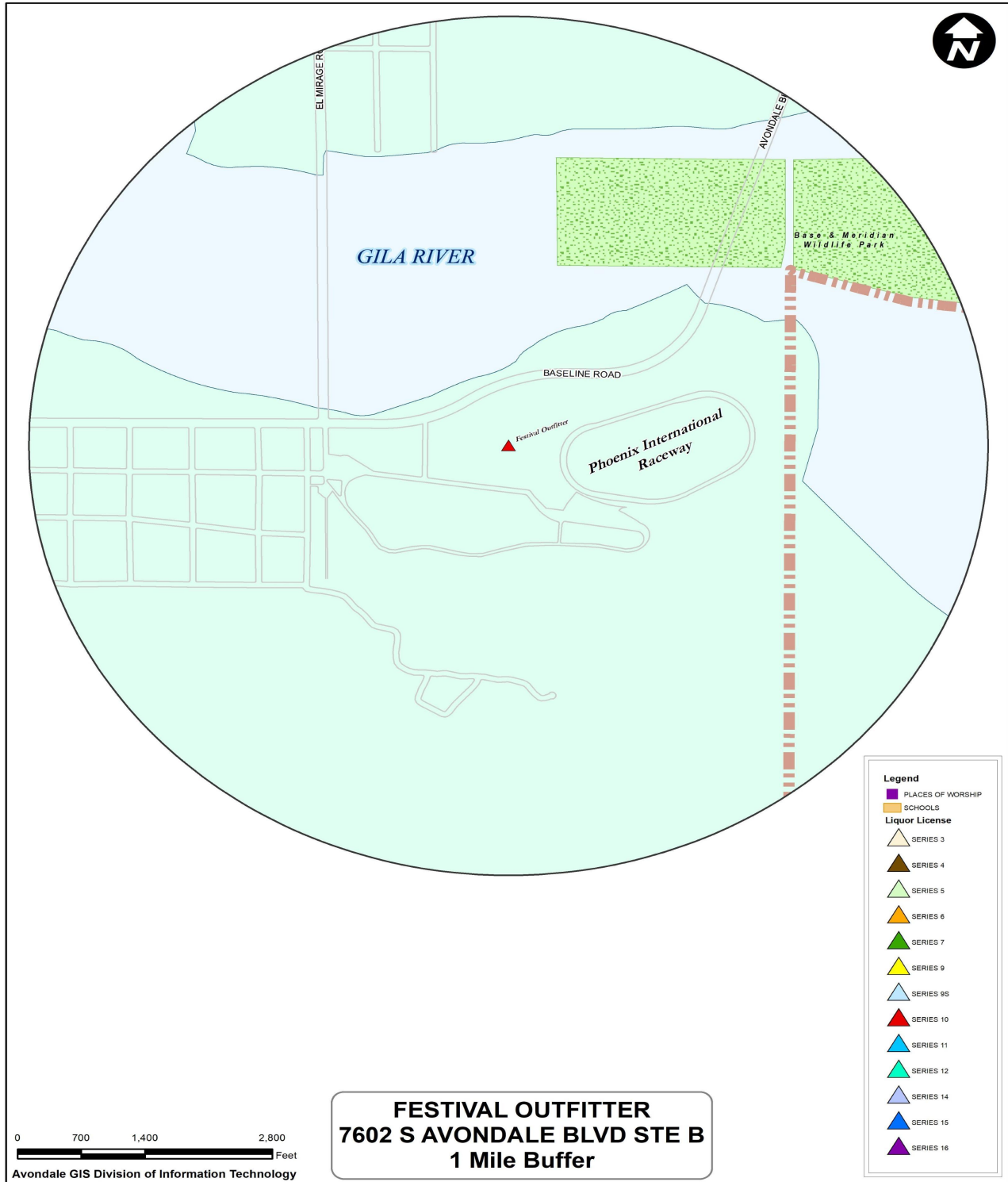
Beer & Wine Bar (series 7)
Hotel/Motel w/restaurant (series 11)
Beer & Wine Store (series 10)

Liquor license applications (initial and renewal) are not complete until valid Certificates of Completion for all required persons have been submitted to the Department of Liquor.

The questionnaire (which designates a manager to a location) and the agent change form (which assigns a new agent to active liquor licenses) are not complete until valid Certificates of Completion for all required persons have been submitted to the Department of Liquor.

July 11, 2013

GIS MAP



LICENSE REVIEW FORM

Type of License	10 BEER AND WINE STORE
Applicant's Name	Kyle Patrick Mason
Business Name	Festival Outfitter
Business Address	7602 S. Avondale Blvd, Ste B, Avondale AZ 85323
Department Comments	
The General Plan designates the property as Sports and Entertainment. The use of the property as a Major Sports and Entertainment District known as Phoenix International Raceway is consistent with the City of Avondale Zoning Ordinance.	
☐ Police Department	☐ Fire Department
☒ Development Services	☐ Finance Department
☒ Approved	☐ Denied
 _____ E-Signature	Associate Planner _____ Title
Augustus Gerletti _____ Name	Nov 3, 2022 _____ Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022

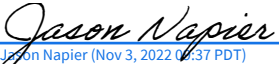
LICENSE REVIEW FORM

Type of License	10 BEER AND WINE STORE
Applicant's Name	Kyle Patrick Mason
Business Name	Festival Outfitter
Business Address	7602 S. Avondale Blvd, Ste B, Avondale AZ 85323
Department Comments	
Business License has no concerns.	
☐ Police Department ☐ Fire Department ☐ Development Services ☒ Finance Department	
☒ Approved ☐ Denied	
<u>Audrey Tijerina</u> Audrey Tijerina (Nov 3, 2022 17:09 PDT) E-Signature	Accounting Clerk Title
Audrey Tijerina Name	Nov 3, 2022 Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022

LICENSE REVIEW FORM

Type of License	10 BEER AND WINE STORE
Applicant's Name	Kyle Patrick Mason
Business Name	Festival Outfitter
Business Address	7602 S. Avondale Blvd, Ste B, Avondale AZ 85323
Department Comments	
No comments	
☐ Police Department	☒ Fire Department
☐ Development Services	☐ Finance Department
☒ Approved	☐ Denied
 Jason Napier (Nov 3, 2022 10:37 PDT) _____ E-Signature	Fire Marshal _____ Title
Jason Napier _____ Name	Nov 3, 2022 _____ Date

This license is scheduled for the City Council Meeting on: **11/21/2022**

Please complete form by: **10/31/2022**



LICENSE REVIEW FORM

Type of License	10 BEER AND WINE STORE		
Applicant's Name	Kyle Patrick Mason		
Business Name	Festival Outfitter		
Business Address	7602 S. Avondale Blvd, Ste B, Avondale AZ 85323		
Department Comments			
☒ Police Department ☐ Development Services		☐ Fire Department ☐ Finance Department	
☒ Approved		☐ Denied	
<u>Mathew Hintz</u> Mathew Hintz (Nov 3, 2022 09:02 PDT)		Police Lieutenant	
Mathew Hintz		Nov 3, 2022	
E-Signature Name		Title Date	

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: **10/31/2022**

CITY COUNCIL REPORT

SUBJECT: Series 12 (Restaurant) Liquor License - Sushi Love

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Marcella Carrillo, City Clerk, (623) 333-1214

THROUGH: Cherlene Penilla, Assistant City Manager, (623) 333-1015

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Diverse Recreation and Entertainment Opportunities – Avondale provides residents with the ability to connect with amenities, businesses, and their community, enhancing the opportunity to live, work, and enjoy a healthy, active, and affordable lifestyle.

The approval of this agenda item will promote Avondale community's social connectivity by providing a new social environment for family and friends. This item will increase visitor traffic to Avondale's local businesses.

PURPOSE:

City Council will consider a request to recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 12 (Restaurant) Liquor License submitted by Jeom Ju Hawks for the sale of alcohol at Sushi Love located at 1721 North Dysart Road in Avondale and authorize the City Clerk to execute the necessary documents. The Council will take appropriate action.

BACKGROUND:

Sushi Love is a new establishment to be located at 1721 North Dysart Road, #A101 in Avondale. Issuance of a Series 12 (Restaurant) liquor license is required to allow alcohol sales on the premises. Series 12 restaurant liquor licenses are exempt from the state-mandated 300-foot separation requirement from churches, schools, or fenced school recreational areas.

DISCUSSION:

As required by state law and city ordinance, the application was posted for the required period of time. The Police, Fire & Medical, Development & Engineering Services and Finance Departments have reviewed the application and are recommending approval.

BUDGET IMPACT:

The liquor license application fee of \$250 has been paid in full.

RECOMMENDATION:

Staff is recommending City Council recommend approval to the Arizona Department of Liquor License and Control of an application for a Series 12 (Restaurant) Liquor License Submitted by Jeom Ju Hawks for the sale of alcohol at Sushi Love located at 1721 North Dysart Road, #A101 in Avondale.

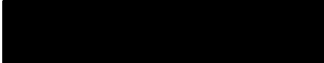
Contact person for document distribution: Maria James

State of Arizona
Department of Liquor Licenses and Control

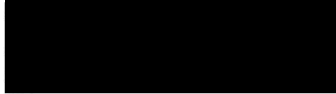
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Local Governing Body Report

LICENSE

Number:		Type:	012 RESTAURANT
Name:	SUSHI LOVE		
State:	Pending		
Issue Date:		Expiration Date:	
Original Issue Date:			
Location:	1721 N DYSART ROAD # A101 CA #101 AVONDALE, AZ 85392 USA		
Mailing Address:	 GOODYEAR, AZ 85395 USA		
Phone:	(602)531-2484		
Alt. Phone:			
Email:	JINNY924@YAHOO.COM		

AGENT

Name:	JEOM JU HAWKS
Gender:	Female
Correspondence Address:	 USA
Phone:	(602)531-2484
Alt. Phone:	
Email:	JINNY924@YAHOO.COM

OWNER

Name: HAEUN ENTERPRISE LLC
Contact Name: JEOM HAWKS
Type: LIMITED LIABILITY COMPANY
AZ CC File Number: L19138648 State of Incorporation: AZ
Incorporation Date: 03/26/2014
Correspondence Address: [REDACTED]

USA

Phone: (602)531-2484
Alt. Phone:
Email: JINNY924@YAHOO.COM

Officers / Stockholders

Name:	Title:	% Interest:
JEOM JU HAWKS	Member, Stockholder	100.00

HAEUN ENTERPRISE LLC - Member, Stockholder

Name: JEOM JU HAWKS
Gender: Female
Correspondence Address: [REDACTED]

Phone: (602)531-2484
Alt. Phone:
Email: JINNY924@YAHOO.COM

APPLICATION INFORMATION

Application Number: 209854
Application Type: New Application
Created Date: 09/13/2022

QUESTIONS & ANSWERS

012 Restaurant

- 1) Are you applying for an Interim Permit (INP)?
No
- 2) Are you one of the following? Please indicate below.
Property Tenant
Subtenant
Property Owner
Property Purchaser
Property Management Company
Property Tenant
- 3) Is there a penalty if lease is not fulfilled?
Yes
What is the penalty?
\$46,397.50
- 4) Is the Business located within the incorporated limits of the city or town of which it is located?
Yes
- 5) What is the total money borrowed for the business not including the lease?
Please list each amount owed to lenders/individuals.
0
- 6) Are there walk-up or drive-through windows on the premises?
No
- 7) Does the establishment have a patio?
No
- 8) Is your licensed premises now closed due to construction, renovation or redesign or rebuild?
No
- 9) What type of business will this license be used for?
RESTAURANT

* 1635 total
 504

121X22 OCT 3 1971
 100P

AMENDMENT

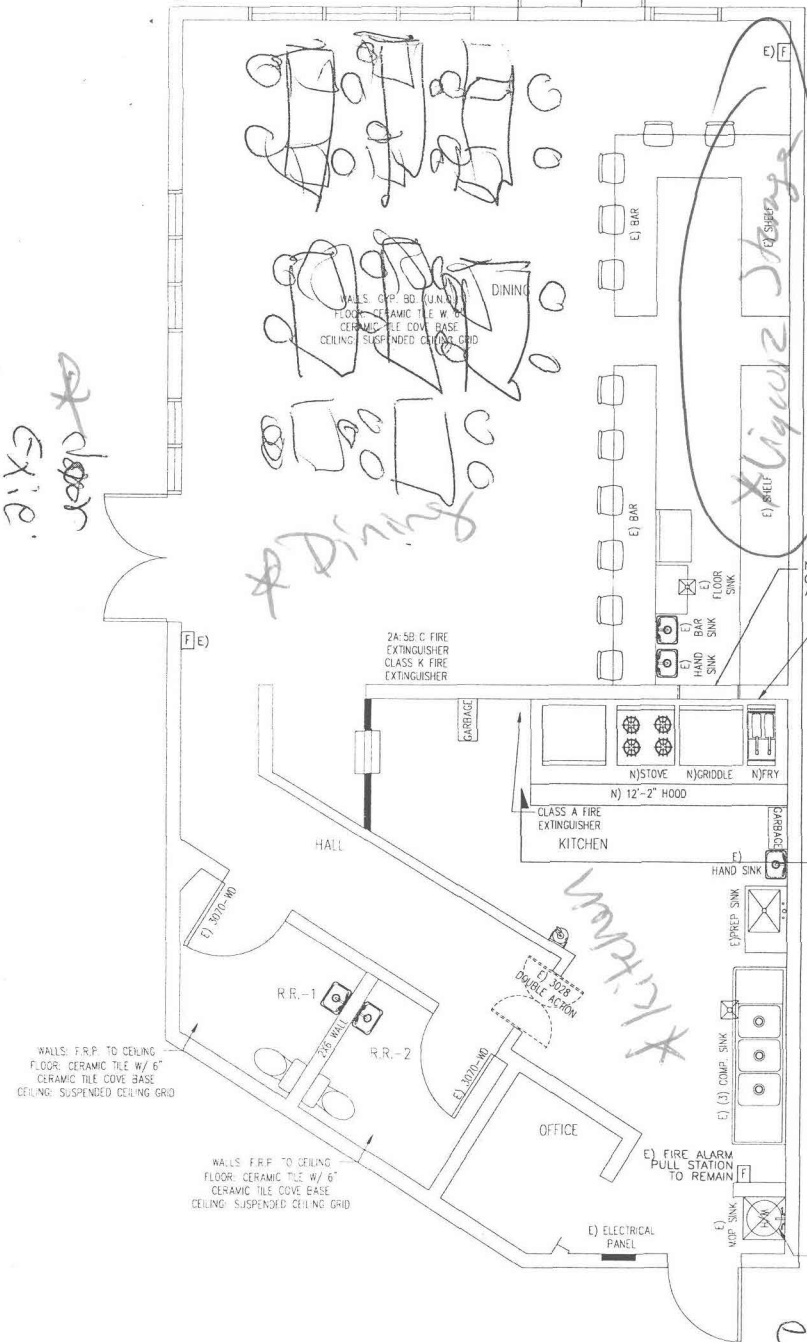
* closer
 exit

* Dining

* Dining

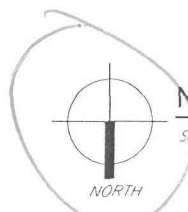
* Dining

* liquor storage



KEYNOTES

- ① NEW LOCATION OF PLATE PASS THRU WINDOW
- ② NEW TYPE I KITCHEN HOOD
- ③ NEW GAS COOKING APPLIANCE



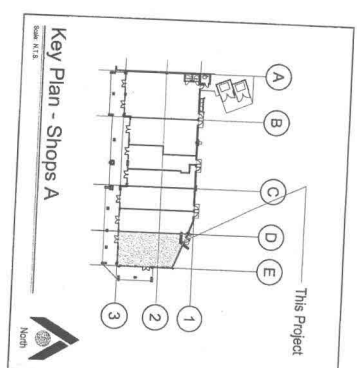
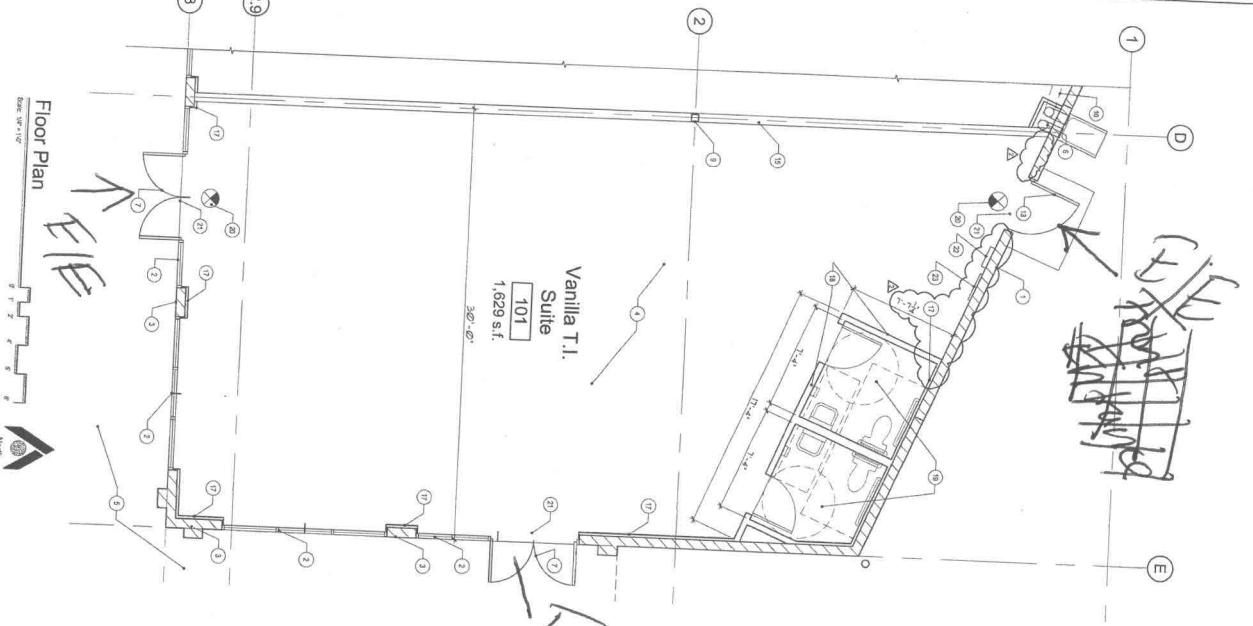
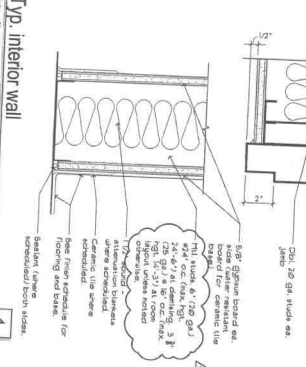
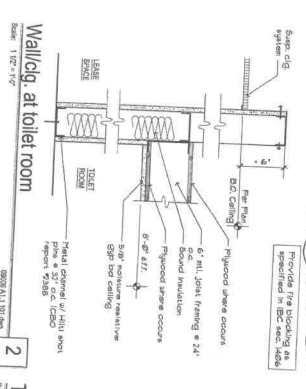
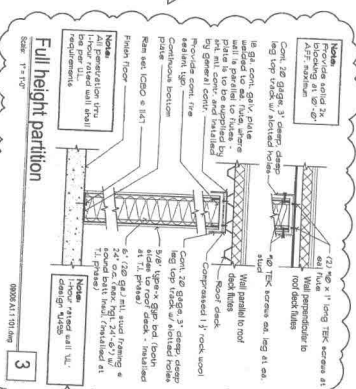
NEW FLOOR PLAN

SCALE: 1/4" = 1'-0"

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Suite 101 BUILD-OUT, VANILLA

1. Follow these specifications unless noted otherwise on plans.
2. Floors: Concrete slab finished per owner.
3. Walls: All exterior walls (except rear wall) shall be steel framing over 2x4 studs with 5/8" gypsum, taped to 1/2" dense rigid insulation, and prepared for paint. Dinning framed wall shall be 6" steel framing with 5/8" gypsum, taped to underside of roof deck, and prepared for paint. Restaurant framed wall shall be 6" steel framing with 5/8" gypsum, taped to underside of roof deck, and prepared for paint. 5/8" gypsum, taped, finished to 6" above highest adjacent ceiling.
4. Ceilings: Interior ceiling shall be 2' x 4' drywall suspended from 10' x 6" A.F.F. with an exposed steel system with fluorescent recessed light fixtures. Restaurant ceiling shall be moisture resistant gyp. bk. at 6' x 6' A.F.F. Fire sprinkler throughout the premises (as needed by code).
5. Facilities: Restrooms shall be furnished by licensed pro fees. Experiments, see floor plan & detail room details.



Floor Plan Keynotes

1. Check and confirm grid and framing.
2. Check 1/2" o.c. framing (except footing).
3. Check exterior wall and framing.
4. Check interior wall and framing.
5. Check exterior wall and framing.
6. Check exterior wall and framing.
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18. Check exterior wall and framing.
19. Check exterior wall and framing.
20. Check exterior wall and framing.
21. Check exterior wall and framing.
22. Check exterior wall and framing.
23. Check exterior wall and framing.

Shops A (Suite 101)
Alameda Crossing
1721 North Dysart Road
Avondale, Arizona 85323

SYNCR

LAVA Architecture, Inc.
3009 E. Shea Blvd., Suite 101
Avondale, Arizona 85323
602-354-0765 602-462-4410 fax

APPROVED
DATE: 8/7/2009

Building Department

Project Information:
Project Name: Shops A (Suite 101)
Project Number: 00008
Date: 27 May 09
Revision: 1
City/County: 30 June 09

Notes:
1. Check and confirm grid and framing.
2. Check 1/2" o.c. framing (except footing).
3. Check exterior wall and framing.
4. Check interior wall and framing.
5. Check exterior wall and framing.
6. Check exterior wall and framing.
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17. Check exterior wall and framing.
18. Check exterior wall and framing.
19. Check exterior wall and framing.
20. Check exterior wall and framing.
21. Check exterior wall and framing.
22. Check exterior wall and framing.
23. Check exterior wall and framing.

A1.1

Floor Plan



RESTAURANT/HOTEL/MOTEL OPERATION PLAN

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with Black Ink

1. Name of restaurant (Please print): Sushi Love

2. Must indicate the equipment below by Make, Model, and Capacity:

LIST ONLY THE FOLLOWING - NO ATTACHMENTS

Grill	1	COOK Rite MODEL # ATM G-29 / ATM G-36 / ATM 48
Oven and stove	1	COOK Rite MODEL # AGR-68
Freezer	2	ATOSI MODEL # MIBF 8001GR
Refrigerator	1	DUKERS MODEL # DG 852
Sink / prep sink	1	sink SEE 17183D / prep sink / SCE 17181R
Dish Washing Facilities	1	ESJ 000 / ECO LAB
Food Preparation Counter (Dimensions) and Refrig		MODEL # RUE MODEL # ISSU-48-18M-E
Other		garage

3. Attach a copy of your FULL menu with pricing **INCLUDING NON-ALCOHOLIC BEVERAGES**

4. What percentage of your public premises is used primarily for restaurant dining?

(Do not include kitchen, bar, hi-top tables, or game area.) _____ %

5. Does your restaurant have a bar area that is distinct and separate from the dining area? ☐ YES ☐ No

(If yes, what percentage of the public floor space does this area cover?) _____ %

6. List the **seating capacity** for:

a) Restaurant dining area of your premises: []

(DO NOT INCLUDE PATIO SEATING)

b) Bar area [+]

TOTAL [=]

AMENDMENT



RESTAURANT/HOTEL/MOTEL OPERATION PLAN

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with **Black Ink**

1. Name of restaurant (Please print): SUSHI LOVE
2. Must indicate the equipment below by Make, Model, and Capacity:

LIST ONLY THE FOLLOWING - NO ATTACHMENTS

Grill	1
Oven	1
Freezer	1
Refrigerator	3
Sink	2
Dish Washing Facilities	1
Food Preparation Counter (Dimensions)	1
Other	

3. Attach a copy of your FULL menu with pricing **INCLUDING ALCOHOLIC BEVERAGES**

4. What percentage of your public premises is used primarily for restaurant dining?

(Do not include kitchen, bar, hi-top tables, or game area.) 40 %

5. Does your restaurant have a bar area that is distinct and separate from the dining area? ☐ YES ☒ No

(If yes, what percentage of the public floor space does this area cover?) _____ %

6. List the **seating capacity** for:

a) Restaurant dining area of your premises:

[27]

(DO NOT INCLUDE PATIO SEATING)

b) Bar area

[+ 6]

TOTAL [= 33]

7. What type of dinnerware is primarily used in your restaurant?

☒ Reusable

☒ Disposable

☒ Both

8. Does your restaurant contain any **games, televisions, or any other entertainment**? ☒ YES

☐ No

If yes, specify what types and how many (examples: 4-TV's, 2-Pool Tables, 1-Video Game, etc.)

2 TV

9. Do you have live entertainment or dancing? ☐ YES ☒ No

If yes, what type and how often (example: DJ-2 x a week, Karaoke-2 x a month, Live Band-1 x a month, etc.)

10. List number of employees for each position:

Position	How many
Cooks	3
Bartenders	
Hostesses	
Managers	1
Servers	4 to 5
Other (dishwasher)	1
Other (Busser)	1
Other ()	

I, (Print Full Name) JEANIE HAWKS hereby swear under penalty of perjury and in compliance with A.R.S. § 4-210(A)(2) and (3) that I have read and understand the foregoing and verify that the information and statements that I have made herein are true and correct to the best of my knowledge.

Applicant Signature: Jeannie Hawks



**RECORDS REQUIRED
FOR AUDIT
RESTAURANT/HOTEL/MOTEL**

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with Black Ink

In the event of an audit, you will be asked to provide to the Department any documents necessary to determine Compliance with A.R.S. §4-205.02(G). Such documents requested may include however, are not limited to:

1. Name of restaurant (Please print): SUSHI LOVE
2. All invoices and receipts for the purchase of food and spirituous liquor for the licensed premises.
3. A list of **all** food and liquor vendors
4. The restaurant menu used during the audit period
5. A price list for alcoholic beverages during the audit period
6. Mark-up figures on food and alcoholic products during the audit period
7. A recent, **accurate** inventory of food and liquor (taken within two weeks of the Audit Interview Appointment)
8. Monthly Inventory Figures - beginning and ending figures for food and liquor
9. Chart of accounts (copy)
10. Financial Statements-Income Statements-Balance Sheets

11. General Ledger

A. Sales Journals/Monthly Sales Schedules

- 1) Daily sales Reports (to include the name of each waitress/waiter, bartender, etc. with sales for that day)
- 2) Daily Cash Register Tapes - Journal Tapes and Z-tapes
- 3) Dated Guest Checks
- 4) Coupons/Specials/Discounts
- 5) Any other evidence to support income from food and liquor sales

B. Cash Receipts/Disbursement Journals

- 1) Daily Bank Deposit Slips
- 2) Bank Statements and canceled checks

12. Tax Records

- A. Transaction Privilege Sales, Use and Severance Tax Return (copies)
- B. Income Tax Return - city, state and federal (copies)
- C. Any supporting books, records, schedules or documents used in preparation of tax returns

13. **Payroll Records**

'22 SEP 13 11:47. Lic. PM 4 47

- A. Copies of all reports required by the State and Federal Government
- B. Employee Log (A.R.S. §4-119)
- C. Employee time cards (actual document used to sign in and out each work day)
- D. Payroll records for all employees showing hours worked each week and hourly wages

14. **Off-site Catering Records** (must be complete and separate from restaurant records)

- A. All documents which support the income derived from the sale of food off the license premises.
- B. All documents which support purchases made for food to be sold off the licensed premises.
- C. All coupons/specials/discounts

The sophistication of record keeping varies from establishment to establishment. Regardless of each licensee's accounting methods, the amount of gross revenue derived from the sale of food and liquor must be substantially documented.

**REVOCATION OF YOUR LIQUOR LICENSE MAY OCCUR IF YOU FAIL TO COMPLY WITH
A.R.S. §4-210(A)7 AND A.R.S. §4-205.02(G).**

A.R.S. §4-210(A)7

The licensee fails to keep for two years and make available to the department upon reasonable request all invoices, records, bills or other papers and documents relating to the purchase, sale and delivery of spirituous liquors and, in the case of a restaurant or hotel-motel licensee, all invoices, records, bills or other papers and documents relating to the purchase, sale and delivery of food.

A.R.S. §4-205.02(G)

For the purpose of this section:

- 1. "Restaurant" means an establishment which derives **at least forty percent (40%)** of its gross revenue from the sale of food
- 2. "Gross revenue" means the revenue derived from all sales of food and spirituous liquor on the licensed premises regardless of whether the sales of spirituous liquor are made under a restaurant license issued pursuant to this section or under any under any other license that has been issued for the premises pursuant to this article.

I, (Print Full Name) JEOMI HAWKS hereby swear under penalty of perjury and in compliance with A.R.S. § 4-210(A)(2) and (3) that I have read and understand the foregoing and verify that the information and statements that I have made herein are true and correct to the best of my knowledge.

Applicant Signature: 

MAKE A COPY OF THIS DOCUMENT AND KEEP IT WITH RECORDS REQUIRED BY THE STATE

22 SEP 30 Lic. Lic. PM 4 04

*SUSHI

LOVE

AMENDMENT

'22 SEP 13 Lir. Lic. PM 4 46

Blu

Sushi Lounge & Grill

APPETIZERS

*22 SEP 30 Lic. Lic. PM 4 04

AGADASHI TOFU	7	MIXED TEMPURA	8
BAKED GREEN MUSSEL	9	MONKEY BRAIN	8
CALAMARI TEMPURA	8	SCALLOP DYNAMITE	9
COCONUT SHRIMP	9	MISO SOUP	2
CRAB PUFFS	7	SHRIMP TEMPURA	9
DEEP FRIED RED SNAPPER	10	SHRIMP SHUMAI	7
EDAMAME	4	SOFT SHELL CRAB	12
GARLIC EDAMAME	6	GYOZA	7
SPICY GARLIC EDAMAME	6	TEARS OF NINJA	9
EGG ROLLS	6	YELLOWTAIL KAMA	9

SALADS

AMENDMENT

AVOCADO SALAD	10	*SASHIMI SALAD	15
CRISPY CALAMARI SALAD	10	SEAWEED SALAD	7
GRILLED CHICKEN SALAD	12	*SPICY TUNA SALAD	11
GRILLED SALMON SALAD	13	SQUID SALAD	8
HOUSE SALAD	4	SUNOMONO SALAD	4
*POKE' HAWAIIAN STYLE	14	TAKO SALAD	9
		*TUNA ahi TATAKI SALAD	14

FRIED RICE

VEGETABLE FRIED RICE	10
CHICKEN FRIED RICE	12
BEEF FRIED RICE	13
SHRIMP FRIED RICE	12
COMBO FRIED RICE	15

SIDE ORDERS

RICE	2.50
KIZAMI fresh wasabi	2

*Disclosure: These items may be served raw or undercooked. Consuming raw or undercooked meats, seafood, shellfish, and eggs may increase your risk of food borne illness.

APPETIZERS

'22 SEP 13 11:47. Lic. PM 4 46

AGADASHI TOFU	7	MIXED TEMPURA	8
BAKED GREEN MUSSEL	9	MONKEY BRAIN	8
CALAMARI TEMPURA	8	SCALLOP DYNAMITE	9
COCONUT SHRIMP	9	MISO SOUP	2
CRAB PUFFS	7	SHRIMP TEMPURA	9
DEEP FRIED RED SNAPPER	10	SHRIMP SHUMAI	7
EDAMAME	4	SOFT SHELL CRAB	12
GARLIC EDAMAME	6	GYOZA	7
SPICY GARLIC EDAMAME	6	TEARS OF NINJA	9
EGG ROLLS	6	YELLOWTAIL KAMA	9

SALADS

AVOCADO SALAD	10	*SASHIMI SALAD	15
CRISPY CALAMARI SALAD	10	SEAWEED SALAD	7
GRILLED CHICKEN SALAD	12	*SPICY TUNA SALAD	11
GRILLED SALMON SALAD	13	SQUID SALAD	8
HOUSE SALAD	4	SUNOMONO SALAD	4
*POKE' HAWAIIAN STYLE	14	TAKO SALAD	9
		*TUNA ahi TATAKI SALAD	14

FRIED RICE

VEGETABLE FRIED RICE	10
CHICKEN FRIED RICE	12
BEEF FRIED RICE	13
SHRIMP FRIED RICE	12
COMBO FRIED RICE	15

SIDE ORDERS

RICE	2.50
KIZAMI fresh wasabi	2

NIGIRI SUSHI

22 SEP 30 Ltr. Lic. PM 4 04

*Albacore (<i>Shiro Maguro</i>)	6	*Scallop (<i>Kaibashira</i>)	6
Crab (<i>Kani</i>)	4	*Sea Urchin (<i>Uni</i>)	MP
Japanese sweet egg (<i>Tamago</i>)	4	Shrimp (<i>Ebi</i>)	5
*Flying Fish Roe (<i>Tobiko</i>)	5	*Smelt Roe (<i>Masago</i>)	4
Fresh Water Eel (<i>Unagi</i>)	7	Smoked Salmon	7
*Halibut (<i>Hirame</i>)	MP	*Squid (<i>Ika</i>)	5
*Hawaiian White Tuna (<i>Ono</i>)	7	*Surf Clam (<i>Hokkigai</i>)	5
*Mackerel (<i>Saba</i>)	6	*Sweet Shrimp (<i>Ama Ebi</i>)	9
*Octopus (<i>Tako</i>)	6	*Blue fin tuna belly (<i>Otoro</i>)	MP
*Quail Egg (<i>Uzura</i>)	4	*Tuna (<i>Ahi Maguro</i>)	8
*Salmon (<i>Sake</i>)	6	*Red Snapper (<i>Izumi Dai</i>)	5
*Salmon Roe (<i>Ikura</i>)	6	*Yellowtail (<i>Hamachi</i>)	7

NIGIRI SUSHI COMBO

*6pcs & Choice of California Roll or Spicy Tuna Roll	20
*8pcs & Choice of California Roll or Spicy Tuna Roll	25
*10pcs & Choice of California Roll or Spicy Tuna Roll	30

AMENDMENT

NIGIRI SUSHI DELUXE

-Chefs Freshest Choice of the Day-

*BLU DELUXE 20PCS	50
*RED DELUXE 30PCS	65
*Chirashi Bowl	27
*Una Ju (Eel on sushi rice)	22

SASHIMI COMBO

*Blu Deluxe 12pcs	25
*Red Deluxe 20pcs	40
*Silver Deluxe 30pcs	60

SASHIMI

*Albacore (<i>Shiro Maguro</i>)	12	*Salmon (<i>Sake</i>)	12
*Blu Fin Tuna Belly (<i>O'toro</i>)	MP	*Sea Urchin (<i>Uni</i>)	MP
*Halibut (<i>Hirame</i>)	MP	*Squid (<i>Ika</i>)	10
*Hawaiian Tuna (<i>Ono</i>)	14	*Tuna (<i>Ahi Maguro</i>)	14
*Mackerel (<i>Saba</i>)	10	*Red Snapper (<i>Izumi Dai</i>)	11
*Octopus (<i>Tako</i>)	10	*Yellowtail (<i>Hamachi</i>)	13

*Disclosure: These items may be served raw or undercooked. Consuming raw or undercooked meats, seafood, shellfish, and eggs may increase your risk of food borne illness.

NIGIRI SUSHI

*22 SEP 13 LIT. LIC. PM 4 47

*Albacore (<i>Shiro Maguro</i>)	6	*Scallop (<i>Kaibashira</i>)	6
Crab (<i>Kani</i>)	4	*Sea Urchin (<i>Uni</i>)	MP
Japanese sweet egg (<i>Tamago</i>)	4	Shrimp (<i>Ebi</i>)	5
*Flying Fish Roe (<i>Tobiko</i>)	5	*Smelt Roe (<i>Masago</i>)	4
Fresh Water Eel (<i>Unagi</i>)	7	Smoked Salmon	7
*Halibut (<i>Hirame</i>)	MP	*Squid (<i>Ika</i>)	5
*Hawaiian White Tuna (<i>Ono</i>)	7	*Surf Clam (<i>Hokkigai</i>)	5
*Mackerel (<i>Saba</i>)	6	*Sweet Shrimp (<i>Ama Ebi</i>)	9
*Octopus (<i>Tako</i>)	6	*Blue fin tuna belly (<i>Otoro</i>)	MP
*Quail Egg (<i>Uzura</i>)	4	*Tuna (<i>Ahi Maguro</i>)	8
*Salmon (<i>Sake</i>)	6	*Red Snapper (<i>Izumi Dai</i>)	5
*Salmon Roe (<i>Ikura</i>)	6	*Yellowtail (<i>Hamachi</i>)	7

NIGIRI SUSHI COMBO

*6pcs & Choice of California Roll or Spicy Tuna Roll	20
*8pcs & Choice of California Roll or Spicy Tuna Roll	25
*10pcs & Choice of California Roll or Spicy Tuna Roll	30

NIGIRI SUSHI DELUXE

-Chefs Freshest Choice of the Day-

*BLU DELUXE 20PCS	50
*RED DELUXE 30PCS	65
*Chirashi Bowl	27
*Una Ju (Eel on sushi rice)	22

SASHIMI COMBO

*Blu Deluxe 12pcs	25
*Red Deluxe 20pcs	40
*Silver Deluxe 30pcs	60

SASHIMI

*Albacore (Shiro Maguro)	12	*Salmon (Sake)	12
*Blue Fin Tuna Belly (Otoro)	MP	*Sea Urchin (Uni)	MP

FRESH ROLLS

22 SEP 30 Lic. Lic. PM 4 104

*ALASKA: Smoked Salmon, Cucumber, Avocado	10
*ALBACORE: Albacore Tuna	7
*ALOHA: Spicy Albacore, Spicy Tuna, Cucumber  	12
*ARIZONA: Spicy Crab, Salmon, Cucumber, Jalapeno  	12
AVOCADO: Avocado	6
CALIFORNIA: Crab, Avocado, Cucumber	6
CATERPILLAR: Eel, Cucumber, Avocado	13
*CHERRY BLOSSOM: Salmon, Tuna, Avocado	12
CHICKEN TERIYAKI: Teriyaki Chicken, Cucumber, Avocado	10
CUCUMBER: Cucumber	6
EEL CUCUMBER: Eel, Cucumber	11
*GEISHA: Crab, Spicy Tuna, Avocado, Cucumber, crunches 	10
*HAWAIIAN: Spicy Albacore, Fresh Tuna, Cucumber, Avocado 	12
*IGUANA: Spicy Tuna, Cucumber, Avocado 	11
*INFERNO: Spicy Crab, Spicy Tuna, Jalapeno, Cucumber   	12
*JACKSON: Crab, Fresh Salmon, Cucumber, Avocado	12
*NEGI HAMA: Yellowtail, Fine Chopped Scallion	8
*PHILADELPHIA: Salmon, Cream Cheese, Cucumber, Avocado	9
*3 rd STREET: Tuna, Spicy Tuna, Cream Cheese, Cucumber, Avocado 	13
*RAINBOW: Assorted Fresh Fish, Crab, Cucumber, Avocado	13
*SALMON: Salmon	8
*SALMON SPICY SCALLOP: Salmon, Spicy Scallop, Cucumber 	12
SAN FRANCISCO: Shredded Kani, Crab, Ebi, Lemon	13
SPICY CRAB: Spicy Crab, Cucumber 	6
*SPICY TUNA: Spicy Tuna, Cucumber 	8
*SPICY YELLOWTAIL: Spicy Yellowtail, Cucumber 	7
*SPICY SALMON: Spicy Salmon, Cucumber 	7
*SUNSET: Tuna, White Tuna, Seared Salmon, Avocado, Lemon	14
TIGER: Sushi Shrimp, Crab, Cucumber, Avocado	10
*TUNA ROLL: Tuna	8
VEGGIE ROLL: Assorted Vegetables	7
*YELLOWTAIL ROLL: Yellowtail	7

AMENDMENT

*Disclosure: These items may be served raw or undercooked. Consuming raw or undercooked meats, seafood, shellfish, and eggs may increase your risk of food borne illness.

FRESH ROLLS

*22 SEP 13 Uq. Lic. PM 4:47

*ALASKA: Smoked Salmon, Cucumber, Avocado	10
*ALBACORE: Albacore Tuna	7
*ALOHA: Spicy Albacore, Spicy Tuna, Cucumber  	12
*ARIZONA: Spicy Crab, Salmon, Cucumber, Jalapeno  	12
AVOCADO: Avocado	6
CALIFORNIA: Crab, Avocado, Cucumber	6
CATERPILLAR: Eel, Cucumber, Avocado	13
*CHERRY BLOSSOM: Salmon, Tuna, Avocado	12
CHICKEN TERIYAKI: Teriyaki Chicken, Cucumber, Avocado	10
CUCUMBER: Cucumber	6
EEL CUCUMBER: Eel, Cucumber	11
*GEISHA: Crab, Spicy Tuna, Avocado, Cucumber, crunches 	10
*HAWAIIAN: Spicy Albacore, Fresh Tuna, Cucumber, Avocado 	12
*IGUANA: Spicy Tuna, Cucumber, Avocado 	11
*INFERNO: Spicy Crab, Spicy Tuna, Jalapeno, Cucumber   	12
*JACKSON: Crab, Fresh Salmon, Cucumber, Avocado	12
*NEGI HAMA: Yellowtail, Fine Chopped Scallion	8
*PHILADELPHIA: Salmon, Cream Cheese, Cucumber, Avocado	9
*3 rd STREET: Tuna, Spicy Tuna, Cream Cheese, Cucumber, Avocado 	13
*RAINBOW: Assorted Fresh Fish, Crab, Cucumber, Avocado	13
*SALMON: Salmon	8
*SALMON SPICY SCALLOP: Salmon, Spicy Scallop, Cucumber 	12
SAN FRANCISCO: Shredded Kani, Crab, Ebi, Lemon	13
SPICY CRAB: Spicy Crab, Cucumber 	6
*SPICY TUNA: Spicy Tuna, Cucumber 	8
*SPICY YELLOWTAIL: Spicy Yellowtail, Cucumber 	7
*SPICY SALMON: Spicy Salmon, Cucumber 	7
*SUNSET: Tuna, White Tuna, Seared Salmon, Avocado, Lemon	14
TIGER: Sushi Shrimp, Crab, Cucumber, Avocado	10
*TIINA ROLL: Tuna	8

TEMPURA ROLLS

*22 SEP 30 Liq. Lic. PM 4 04

*ALADIN: Spicy Albacore, Shrimp Tempura, Cucumber, crunches	12
AMIGO: Spicy Crab, Cream Cheese, Jalapeno	10
*BLAZING SHRIMP: Shrimp Tempura, Spicy Crab, Spicy Tuna, Cream Cheese, Avocado, Tempura Jalapeno	15
CRUNCHY: Crab, Cucumber, Avocado, Crunches	8
D-BACK: Shrimp, Calamari, Crab Tempura, Crunches	10
DRAGON ROLL: Eel, Crab, Shrimp Tempura, Cucumber, Avocado	15
DYNAMITE LOBSTER: Popcorn Lobster, Crab, Cucumber, Avocado	15
GOLDEN CALIFORNIA: Crab, Avocado	8
*HOT NIGHT: Spicy Tuna, Shrimp Tempura, Crab, Cucumber, Avocado, crunches	13
LAS VEGAS: Crab, Eel, Cream Cheese, Avocado	10
*VIVA LAS VEGAS: Crab, Eel, Spicy Tuna, Shredded Kani, Cream Cheese, Avocado	15
*PINACLE PEAK: Shrimp Tempura, Salmon, Crab, Cucumber, Avocado, crunches	14
*MARILYN MONROLL: Shrimp Tempura, Spicy Tuna, Cucumber, Avocado, crunches	13
*NEW YORK: Shrimp Tempura, Spicy Tuna, Crab, Tobiko, Cream Cheese, Jalapeno	14
*SALMON LOVER: Salmon, Salmon Tempura, Crab, Cucumber, Avocado, crunches	11
SALMON TEMPURA: Salmon Tempura, Cucumber, Avocado	10
SAPPORO: Shrimp Tempura, Spicy Crab, Cucumber, Avocado, crunches	12
*SEARED AHI: Seared Ahi, Shrimp Tempura, Crab, Cucumber, Avocado	13
SEATTLE: Salmon Tempura, Crab, Cucumber, crunches	10
SHRIMP POPCORN: Popcorn Shrimp, Crab, Cucumber, Avocado	12
SHRIMP KILLER: Shrimp Tempura, Crab, Ebi, Cucumber, Avocado	13
SHRIMP TEMPURA: Shrimp Tempura, Crab, Cucumber, Avocado, crunches	10
SWEET HEART: Tempura Sweet Potato, Crab, Cucumber, Avocado	10
SPIDER: Soft Shell Crab Tempura, Crab, Cucumber, Avocado	12

AMENDMENT

*Disclosure: These items may be served raw or undercooked. Consuming raw or undercooked meats, seafood, shellfish, and eggs may increase your risk of food borne illness.

TEMPURA ROLLS

*22 SEP 13 Ltg. Lic. PM 4:47

*ALADIN: Spicy Albacore, Shrimp Tempura, Cucumber, crunches	12
AMIGO: Spicy Crab, Cream Cheese, Jalapeno	10
*BLAZING SHRIMP: Shrimp Tempura, Spicy Crab, Spicy Tuna, Cream Cheese, Avocado, Tempura Jalapeno	15
CRUNCHY: Crab, Cucumber, Avocado, Crunches	8
D-BACK: Shrimp, Calamari, Crab Tempura, Crunches	10
DRAGON ROLL: Eel, Crab, Shrimp Tempura, Cucumber, Avocado	15
DYNAMITE LOBSTER: Popcorn Lobster, Crab, Cucumber, Avocado	15
GOLDEN CALIFORNIA: Crab, Avocado	8
*HOT NIGHT: Spicy Tuna, Shrimp Tempura, Crab, Cucumber, Avocado, crunches	13
LAS VEGAS: Crab, Eel, Cream Cheese, Avocado	10
*VIVA LAS VEGAS: Crab, Eel, Spicy Tuna, Shredded Kani, Cream Cheese, Avocado	15
*PINACLE PEAK: Shrimp Tempura, Salmon, Crab, Cucumber, Avocado, crunches	14
*MARILYN MONROLL: Shrimp Tempura, Spicy Tuna, Cucumber, Avocado, crunches	13
*NEW YORK: Shrimp Tempura, Spicy Tuna, Crab, Tobiko, Cream Cheese, Jalapeno	14
*SALMON LOVER: Salmon, Salmon Tempura, Crab, Cucumber, Avocado, crunches	11
SALMON TEMPURA: Salmon Tempura, Cucumber, Avocado	10
SAPPORO: Shrimp Tempura, Spicy Crab, Cucumber, Avocado, crunches	12
*SEARED AHI: Seared Ahi, Shrimp Tempura, Crab, Cucumber, Avocado	13
SEATTLE: Salmon Tempura, Crab, Cucumber, crunches	10
SHRIMP POPCORN: Popcorn Shrimp, Crab, Cucumber, Avocado	12
SHRIMP KILLER: Shrimp Tempura, Crab, Ebi, Cucumber, Avocado	13
SHRIMP TEMPURA: Shrimp Tempura, Crab, Cucumber, Avocado, crunches	10
SWEET HEART: Tempura Sweet Potato, Crab, Cucumber, Avocado	10
SPIDER: Soft Shell Crab Tempura, Crab, Cucumber, Avocado	12

BLU SPECIAL ROLLS

22 SEP 30 Ltr. Lic. PM 4 05

*BEAUTIFUL BLU: Tuna, Spicy Tuna, Cucumber, crunches	13
*BLU STAR: Assorted Sashimi Salad, Eel, Cream Cheese, Avocado, crunches	18
*BUTTERFLY: Spicy Tuna, White Tuna, Salmon, Cucumber, Jalapeno, Tobiko	15
*CRAZY: Shrimp Tempura, Crab, Albacore, Cucumber, Avocado, Fried Onions	15
*ELIJAH BLU: Shrimp Tempura, Crab, Spicy Tuna, Yellowtail, Cucumber, Avocado	16
*FIRE: Shrimp Tempura, Spicy Tuna, Crab, Ebi, Cucumber, Avocado	16
*JAPANESE BURRITO: Shrimp Tempura, Spicy Tuna, Crab, Avocado. Wrapped In Lettuce & Soy Paper	14
*RAINBOW DRAGON: Shrimp Tempura, Crab, Tuna, Albacore, Snapper, Yellowtail, Salmon, Ebi, Cucumber, Avocado, crunches	16
*ROCK & ROLL: Tuna, Salmon, Snapper, Avocado, Kani. Wrapped in Cucumber	16
*SLICK: Spicy Tuna, Crab, Yellowtail, Tobiko, Cucumber, Avocado, Jalapeno, Garlic	16
*SOY SEXY: Shrimp Tempura, Spicy Tuna, Crab, Avocado. Wrapped in Soy Paper	14

BAKED ROLLS

B.S.C.R.: Sautéed Scallops, Crab Inside & Out, Cucumber, Avocado	14
BAKED LOBSTER TAIL: Sautéed Lobster Tail, Crab, Cucumber, Avocado, Mushrooms, and Onion, Garlic	16
BAKED SALMON: Salmon, Crab, Cucumber, Avocado	12
DYNAMITE VOLCANO: Sautéed Scallops, Crab, Cucumber, Avocado, Mushrooms, Onion, Garlic	14
HAWAIIAN VOLCANO: Crab, Spicy Tuna, Cucumber, Avocado	13
SNOW WHITE: Crab, Red Snapper, Cucumber, Avocado	12

FRESH FISH TAPAS

YELLOWTAIL CARPACCIO: Seared Albacore, Masago, Jalapeno, Onions, Micro Greens, Sriracha	15
SALMON CARPACCIO: Salmon, Masago, Jalapeno, Onion, Micro Green, Sriracha	15
TUNACADO: Seared Tuna, Dicon, Avocado, Micro Green	15

*Disclosure: These items may be served raw or undercooked. Consuming raw or undercooked meats, seafood, shellfish, and eggs may increase your risk of food borne illness.

BLU SPECIAL ROLLS

*22 SEP 13 147. Lic. PM 4 47

* BEAUTIFUL BLU: Tuna, Spicy Tuna, Cucumber, crunches	13
* BLU STAR: Assorted Sashimi Salad, Eel, Cream Cheese, Avocado, crunches	18
* BUTTERFLY: Spicy Tuna, White Tuna, Salmon, Cucumber, Jalapeno, Tobiko	15
* CRAZY: Shrimp Tempura, Crab, Albacore, Cucumber, Avocado, Fried Onions	15
* ELIJAH BLU: Shrimp Tempura, Crab, Spicy Tuna, Yellowtail, Cucumber, Avocado	16
* FIRE: Shrimp Tempura, Spicy Tuna, Crab, Ebi, Cucumber, Avocado	16
* JAPANESE BURRITO: Shrimp Tempura, Spicy Tuna, Crab, Avocado. Wrapped In Lettuce & Soy Paper	14
* RAINBOW DRAGON: Shrimp Tempura, Crab, Tuna, Albacore, Snapper, Yellowtail, Salmon, Ebi, Cucumber, Avocado, crunches	16
* ROCK & ROLL: Tuna, Salmon, Snapper, Avocado, Kani. Wrapped in Cucumber	16
* SLICK: Spicy Tuna, Crab, Yellowtail, Tobiko, Cucumber, Avocado, Jalapeno, Garlic	16
* SOY SEXY: Shrimp Tempura, Spicy Tuna, Crab, Avocado. Wrapped in Soy Paper	14

BAKED ROLLS

B.S.C.R.: Sautéed Scallops, Crab Inside & Out, Cucumber, Avocado	14
BAKED LOBSTER TAIL: Sautéed Lobster Tail, Crab, Cucumber, Avocado, Mushrooms, and Onion, Garlic	16
BAKED SALMON: Salmon, Crab, Cucumber, Avocado	12
DYNAMITE VOLCANO: Sautéed Scallops, Crab, Cucumber, Avocado, Mushrooms, Onion, Garlic	14
HAWAIIAN VOLCANO: Crab, Spicy Tuna, Cucumber, Avocado	13
SNOW WHITE: Crab, Red Snapper, Cucumber, Avocado	12

FRESH FISH TAPAS

YELLOWTAIL CARPACCIO: Seared Albacore, Masago, Jalapeno, Onions, Micro Greens, Sriracha	15
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ENTREES

(Includes: miso soup)

TERIYAKI (BEEF, CHICKEN OR SALMON): compliment with sautéed vegies, rice, salad.	17
(ALSO CAN SUB SPICY TERIYAKI)	17
CHICKEN OR PORK KATSU: Japanese panko crusted tempura, compliment with rice, salad.	17
BULGOGI: Korean BBQ, compliment with salad, rice.	19

BLU ENTRÉE COMBO

(Includes miso soup)

AMENDMENT

*BLU: teriyaki chicken, 4pc sashimi, 4pc sushi, choice of (Cali or spicy tuna roll), rice, salad	35
*SAMURAI: Korean Bulgogi BBQ, 4pc sashimi, 4pc sushi, choice of (Cali or spicy tuna roll), Rice, salad.	35
*GEISHA: salmon teriyaki, 4pc sashimi, 4pc sushi, choice of (Cali or spicy tuna roll), rice salad	35

TEPPAN YAKI

(With miso soup, salad, and rice)

*TENDERLOIN STEAK: 8oz. USDA Tenderloin 23, Add scallop +5, Add shrimp +5	
*CHICKEN: 8oz boneless breast 20, Add scallop +5, Add shrimp +5	
*STEAK & CHICKEN: 4oz tender loin & 4oz boneless breast	27

NOODLES

DON KATSU RAMEN: Japanese BBQ Chashu Pork, Kamaboko, Naruto, Memma, Green Onions	12
TSUYU RAMEN: 2pc pot sticker, kamaboko, Naruto, memma, green Onions	12
SEA FOOD UDON: assorted seafood (substitute beef udon or chicken udon)	15
SPICY YAKI UDON: Choice of (beef, chicken, shrimp) sautéed, with vegetables	15
TEMPURA UDON: 2pc tempura shrimp, kamaboko, Naruto, tempura flakes, green onions	12
YAKISOBA: (Beef, chicken or shrimp) compliment with sautéed vegies.	15

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ENTREES

(Includes: miso soup)

TERIYAKI (BEEF, CHICKEN OR SALMON): compliment with sautéed vegies, rice, salad.	17
(ALSO CAN SUB SPICY TERIYAKI)	17
CHICKEN OR PORK KATSU: Japanese panko crusted tempura, compliment with rice, salad.	17
BULGOGI: Korean BBQ, compliment with salad, rice.	19

BLU ENTRÉE COMBO

(Includes miso soup)

*BLU: teriyaki chicken, 4pc sashimi, 4pc sushi, choice of (Cali or spicy tuna roll), rice, salad	35
*SAMURAI: Korean Bulgogi BBQ, 4pc sashimi, 4pc sushi, choice of (Cali or spicy tuna roll), Rice, salad.	35
*GEISHA: salmon teriyaki, 4pc sashimi, 4pc sushi, choice of (Cali or spicy tuna roll), rice salad.	35

TEPPAN YAKI

(With miso soup, salad, and rice)

*TENDERLOIN STEAK: 8oz. USDA Tenderloin 23, Add scallop +5, Add shrimp +5	
*CHICKEN: 8oz boneless breast 20, Add scallop +5, Add shrimp +5	
*STEAK & CHICKEN: 4oz tender loin & 4oz boneless breast	27

NOODLES

DON KATSU RAMEN: Japanese BBQ Chashu Pork, Kamaboko, Naruto, Memma, Green Onions	12
TSUYU RAMEN: 2pc pot sticker, kamaboko, Naruto, memma, green Onions	12

DESSERT

*22 SEP 30 Lique. Lic. PM 4 05

VANILLA ICE CREAM	5
GREEN TEA ICE CREAM	5
RED BEAN ICE CREAM	5
MOCHI ICE CREAM (Strawberry, Green Tea, Vanilla, Mango, Red Bean, Coffee)	5
TEMPURA CHEESECAKE	8
TEMPURA ICE CREAM (Green Tea, Vanilla, Plum wine)	8
OREO COOKIE CHEESECAKE	8

AMENDMENT

BEVERAGE

COKE / DIET COKE	3.50	SHIRLEY TEMPLE	3.50
SPRITE	3.50	ICE TEA	3.50
LEMONADE	3.50	GREEN TEA	3.50
ARNOLD PALMER	3.50	DR. PEPPER	3.50
GENMAI HOT TEA	3.50	HOT GREEN TEA	3.50

DESSERT

*22 SEP 13 Lic. Lic. PM 4 47

VANILLA ICE CREAM	5
GREEN TEA ICE CREAM	5
RED BEAN ICE CREAM	5
MOCHI ICE CREAM (Strawberry, Green Tea, Vanilla, Mango, Red Bean, Coffee)	5
TEMPURA CHEESECAKE	8
TEMPURA ICE CREAM (Green Tea, Vanilla, Plum wine)	8
OREO COOKIE CHEESECAKE	8

BEVERAGE

COKE / DIET COKE	3.50	SHIRLEY TEMPLE	3.50
SPRITE	3.50	ICE TEA	3.50
LEMONADE	3.50	GREEN TEA	3.50
ARNOLD PALMER	3.50	DR. PEPPER	3.50
GENMAI HOT TEA	3.50	HOT GREEN TEA	3.50

CSR:

Amount:

22 SEP 13 14:11 PM 447



AGENT/CONTROLLING PERSON QUESTIONNAIRE

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with Black Ink

DLLC USE ONLY

Job #:	209854
Date Accepted:	10/11/18
CSR:	TALCA

License Number:

805-752

ATTENTION APPLICANT: This is a legally binding document. An investigation of your background will be conducted. Incomplete applications will not be accepted. False or misleading answers may result in the denial or revocation of a license or permit and could result in criminal prosecution.

Attention local governments: Social security and birth date information is confidential. This information will be given to law enforcement agencies for background checks only.

QUESTIONNAIRE IS TO BE COMPLETED ACCORDINGLY AND SUBMITTED TO THE DEPARTMENT WITH A BLUE OR BLACK LINED FINGERPRINT CARD AND \$22 FEE. FINGERPRINTS MUST BE DONE BY A LAW ENFORCEMENT AGENCY OR BONA FIDE FINGERPRINT SERVICE.

1. Check the
Appropriate
Box →



Agent



Controlling Person

2. Name: HAWKS JEOM JU Birth Date: [REDACTED] (NOT a public record)

3. Social Security # [REDACTED] Drivers License # [REDACTED] State Issued: AZ

4. Place of birth: [REDACTED] City: [REDACTED] State: [REDACTED] COUNTRY: [REDACTED] Height: [REDACTED] Weight: [REDACTED] Eyes: [REDACTED] Hair: [REDACTED]

5. Name of current/most recent spouse: HAWKS DENNIS LEE Birth Date: [REDACTED]
Last First Middle

6. Are you a bonafide resident of Arizona? Yes ☒ No ☐ If yes, what is your date of residency? 2/2000

7. Daytime telephone number: 602-531-7484 Email address: jimmy924@yahoo.com

8. Premises Name: SUSHI LOVE Business Phone: 623/2392002

9. Premises Address: 1721 N DYSART RD, #101 AVONDALE, AZ USA 85392
Street (do not use PO Box) City State County Zip

Manoquin

10. List your employment or type of business during the past five (5) years, if unemployed, retired, or student, list place of residence address.

22 SEP 13 LIT. Lic. #447

FROM Month/Year	TO Month/Year	DESCRIBE POSITION OR BUSINESS	EMPLOYERS NAME OR NAME OF BUSINESS (Street Address, City, State & Zip)
4/2013	CURRENT		
3/2015	4/2015 Current	sushi restaurant	BIU Sushi 23233 N Pima Rd Glendale Scottsdale AZ 85255

(ATTACH ADDITIONAL SHEET IF NECESSARY)

11. Provide your residence address information for the last five (5) years A.R.S. §4-202(D)

FROM Month/Year	To Month/Year	Street	City	State	Zip
	CURRENT				
01/2000	2/2000				
11/2015	6/19				
7/19	8/21				
9/22	9/22				

(ATTACH ADDITIONAL SHEET IF NECESSARY)

12. As a Controlling Person or Agent, will you be physically present and operating the licensed premises? If you answered YES, then answer #13 below. If NO, skip to #14 Yes ☒ No ☐
13. Have you attended a DLLC approved Basic Liquor Law Training Course within the past 3 years? Yes ☒ No ☒ *not*
14. Have you been cited, arrested, indicted, convicted, or summoned into court for violation of ANY criminal law or ordinance, regardless of the disposition, even if dismissed or expunged, within the past five (5) years? Yes ☐ No ☒
15. Are there ANY administrative law citations, compliance actions or consents, criminal arrests, indictments or summons pending against you? (Do not include civil traffic tickets) A.R.S. §4-202, 4-210 Yes ☐ No ☒
16. Has anyone EVER obtained a judgement against you the subject of which involved fraud or misrepresentation? Yes ☐ No ☒
17. Have you had a liquor application or license rejected, denied, revoked or suspended in or outside of Arizona within the last five years? A.R.S. §4-202(D) Yes ☐ No ☒
18. Has an entity in which you are or have been a controlling person had an application or license rejected, denied, revoked, or suspended in or outside of Arizona within the last five years? A.R.S. §4-202(D) Yes ☐ No ☒

If you answered "YES" to any Question 14 through 18 YOU MUST attach a signed statement.
Give complete details including dates, agencies involved and dispositions.

CHANGES TO QUESTIONS 14-18 MAY NOT BE ACCEPTED

I, (Print Full Name) Jeanette Hawk hereby swear under penalty of perjury and in compliance with A.R.S. § 4-210(A)(2) and (3) that I have read and understand the foregoing and verify that the information and statements that I have made herein are true and correct to the best of my knowledge.

Signature: Jeanette Hawk Date: 9/8/22

22 SEP 13 11:47 AM 447



ALIEN STATUS

Arizona Dept. of Liquor Licenses and Control
800 W. Washington St. 5th Floor Phoenix, AZ 85007
(602) 542-5141

Type or Print with Black Ink

Title IV of the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (the "Act"), 8 U.S.C. § 1621, provides that, with certain exceptions, only United States citizens, United States non-citizen nationals, non-exempt "qualified aliens" (and sometimes only particular categories of qualified aliens), nonimmigrant, and certain aliens paroled into the United States are eligible to receive state, or local public benefits. With certain exceptions, a professional license and commercial license issued by a State agency is a State public benefit.

Arizona Revised Statutes § 41-1080 requires, in general, that a person applying for a license must submit documentation to the license agency that satisfactorily demonstrates the applicant's presence in the United States is authorized under federal law.

Directions: All applicants must complete Sections I, II, and IV. Applicants who are not U.S. citizens or nationals must also complete Section III.

Submit this completed form and a copy of one or more document(s) from the attached "Evidence of U.S. Citizenship, U.S. National Status, or Alien Status" with your application for license or renewal. If the document you submit does not contain a photograph, you must also provide a government issued document that contains your photograph. You must submit supporting legal documentation (i.e. marriage certificate) if the name on your evidence is not the same as your current legal name.

SECTION I – APPLICANT INFORMATION

APPLICANT NAME (Print or type)

JEOMY HAWKS

SECTION II – CITIZENSHIP OR NATIONAL STATUS DECLARATION

Are you a citizen or national of the United States? ☐ Yes ☒ No - If yes, indicate place of birth:

City _____ State _____ COUNTRY _____

If you answered **Yes, 1)** Attach a legible copy of a document from the list below.

2) Name of document: _____

If you answered **No**, you must complete Sections III.

EVIDENCE OF U.S. CITIZENSHIP, U.S. NATIONAL STATUS, OR ALIEN STATUS

22 SEP 13 11:47 AM '47

You must submit supporting legal documentation (i.e. marriage certificate) if the name on your evidence is not the same as your current legal name.

Evidence showing authorized presence in the United State includes the following:

1. An Arizona driver license issued after 1996 or an Arizona non-operating identification card.
2. A driver license issued by a state that verifies lawful presence in the United States.
3. A birth certificate or delayed birth certificate showing birth in one of the 50 states, the District of Columbia, Puerto Rico (on or after Jan. 13, 1941), Guam, the U.S. Virgin Islands (on or after January 17, 1917), American Samoa, or the Northern Mariana Islands (on or after November 4, 1986, Northern Mariana Islands local time)
4. A United States certificate of birth abroad.
5. A United States passport. ***Passport must be signed***
6. A foreign passport with a United States visa.
7. An I-94 form with a photograph.
8. A United States citizenship and immigration services employment authorization document or refugee travel document.
9. A United States certificate of naturalization.
10. A United States certificate of citizenship.
11. A tribal certificate of Indian blood.
12. A tribal or bureau of Indian affairs affidavit of birth.
13. Any other license that is issued by the federal government, any other state government, an agency of this state or a political subdivision of this state that requires proof of citizenship or lawful alien status before issuing the license.

SECTION III – QUALIFIED ALIEN DECLARATION

Applicants who are not citizens or nationals of the United States. Please indicate alien status by checking the appropriate box. Attach a legible copy of a document from the attached list or other document as evidence of your status.

DL
Name of document provided

Qualified Alien Status (8 U.S.C. §§ 1621(a)(1), -1641(b) and (c))

- ☒ 1. An alien lawfully admitted for permanent residence under the Immigration and Nationality Act (INA)
- ☐ 2. An alien who is granted asylum under Section 208 of the INA.
- ☐ 3. A refugee admitted to the United States under Section 207 of the INA.
- ☐ 4. An alien paroled into the United States for at least one year under Section 212(d)(5) of the INA.
- ☐ 5. An alien whose deportation is being withheld under Section 243(h) of the INA.
- ☐ 6. An alien granted conditional entry under Section 203(a)(7) of the INA as in effect prior to April 1, 1980.
- ☐ 7. An alien who is a Cuban/Haitian entrant.
- ☐ 8. An alien who has, or whose child or child's parent is a "battered alien" or an alien subject to extreme cruelty in the United States

Nonimmigrant Status (8 U.S.C. § 1621(a)(2))

9. A nonimmigrant under the Immigration and Nationality Act [8 U.S.C § 1101 et seq.] Non-immigrants are persons who have temporary status for a specific purpose. See 8 U.S.C § 1101(a)(15).

Alien Paroled into the United States for Less Than One Year (8 U.S.C. § 1621(a)(3))

10. An alien paroled into the United States for less than one year under Section 212(d)(5) of the INA

Other Persons (8 U.S.C § 1621(c)(2)(A) and (C))

11. A nonimmigrant whose visa for entry is related to employment in the United States, or
12. A citizen of a freely associated state, if section 141 of the applicable compact of free association approved in Public Law 99-239 or 99-658 (or a successor provision) is in effect [Freely Associated States include the Republic of the Marshall Islands, Republic of Palau and the Federate States of Micronesia, 48 U.S.C. § 1901 et seq.];
13. A foreign national not physically present in the United States.
14. **Otherwise Lawfully Present**
15. A person not described in categories 1-13 who is otherwise lawfully present in the United States.

PLEASE NOTE: The federal Personal Responsibility and Work Opportunity Reconciliation Act may make persons who fall into this category ineligible for licensure. See 8 U.S.C. §

JEOM HAWKS

Print Name

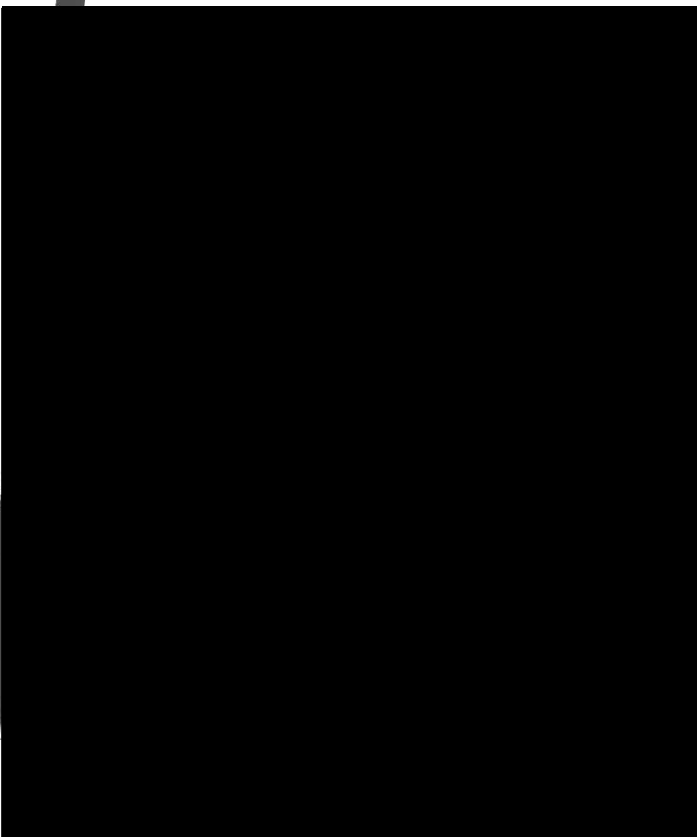
jeom hawks

Signature

9/13/22

Date

'22 SEP 13 Lir. Lic. PM 4 47



LICENSE REVIEW FORM

Type of License	SERIES 012 RESTAURANT
Applicant's Name	JEOM JU HAWKS
Business Name	SUSHI LOVE
Business Address	1721 N DYSART ROAD #A101, AVONDALE AZ 85392
Department Comments	
The General Plan designates the property as Local Commercial, the current zoning is Planned Area Development (PAD) known as Palm Valley. The use of the property as a restaurant is consistent with the City of Avondale Zoning Ordinance and the Palm Valley development plan.	
☐ Police Department	☐ Fire Department
☒ Development Services	☐ Finance Department
☒ Approved	☐ Denied
 _____ E-Signature	Associate Planner _____ Title
Augustus Gerletti _____ Name	Oct 25, 2022 _____ Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022

LICENSE REVIEW FORM

Type of License	SERIES 012 RESTAURANT
Applicant's Name	JEOM JU HAWKS
Business Name	SUSHI LOVE
Business Address	1721 N DYSART ROAD #A101, AVONDALE AZ 85392
Department Comments	
No concerns.	
☐ Police Department ☐ Fire Department ☐ Development Services ☒ Finance Department	
☒ Approved ☐ Denied	
 Daniel Vazquez (Oct 25, 2022 09:46 PDT) E-Signature Daniel Vazquez Name	Accountant/Tax Auditor Title Oct 25, 2022 Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022



LICENSE REVIEW FORM

Type of License	SERIES 012 RESTAURANT
Applicant's Name	JEOM JU HAWKS
Business Name	SUSHI LOVE
Business Address	1721 N DYSART ROAD #A101, AVONDALE AZ 85392
Department Comments	
☐ Police Department ☐ Development Services	☒ Fire Department ☐ Finance Department
☒ Approved	☐ Denied
<u>Jason Napier</u> Jason Napier (Oct 25, 2022 07:17 PDT) E-Signature	Fire Marshal Title
Jason Napier Name	Oct 25, 2022 Date

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: 10/31/2022

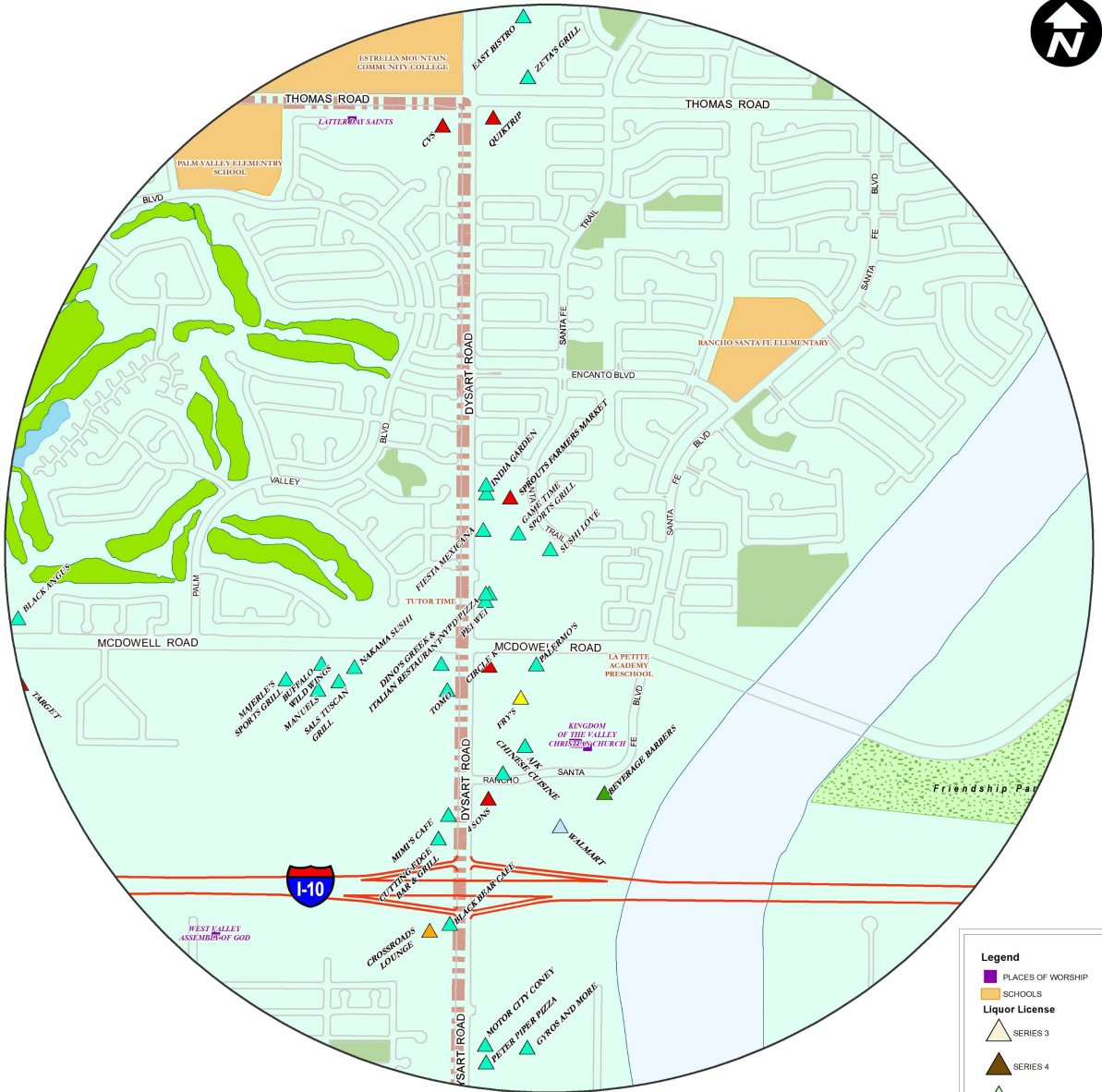


LICENSE REVIEW FORM

Type of License	SERIES 012 RESTAURANT		
Applicant's Name	JEOM JU HAWKS		
Business Name	SUSHI LOVE		
Business Address	1721 N DYSART ROAD #A101, AVONDALE AZ 85392		
Department Comments			
☒ Police Department		☐ Fire Department	
☐ Development Services		☐ Finance Department	
☒ Approved		☐ Denied	
 Mathew Hintz (Oct 24, 2022 17:07 PDT) E-Signature		Police Lieutenant Title	
Mathew Hintz Name		Oct 24, 2022 Date	

This license is scheduled for the City Council Meeting on: 11/21/2022

Please complete form by: **10/31/2022**



SUSHI LOVE
1721 N DYSART #A101
1 Mile Buffer

- Legend**
- PLACES OF WORSHIP
 - SCHOOLS
 - Liquor License**
 - SERIES 3
 - SERIES 4
 - SERIES 5
 - SERIES 6
 - SERIES 7
 - SERIES 9
 - SERIES 9S
 - SERIES 10
 - SERIES 11
 - SERIES 12
 - SERIES 14
 - SERIES 15
 - SERIES 16

0 700 1,400 2,800
Feet
Avondale GIS Division of Information Technology

CITY COUNCIL REPORT

SUBJECT: Ordinance 2062-1122 – Abandonment of a Public Drainage Easement

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Aric Stewart, Director/City Engineer, Engineering Department, (623) 333-4241

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Creative and Sustainable Community Development - Avondale is committed to creating a sense of place, a community of residents and local businesses unified by pride and common values.

The approval of this agenda item will help maintain quality infrastructure within the City.

PURPOSE:

City Council will consider a request to adopt Ordinance 2062-1122 authorizing the abandonment of a public drainage easement located generally north of McDowell Road, and west of Avondale Boulevard, and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents. Council will take appropriate action.

BACKGROUND:

In 2006, a drainage easement containing 12,427 square feet was granted to the City through Document Number 2006-0034434, as recorded in the Maricopa County Recorder's Office. This easement was acquired to retain increased storm runoff caused by street improvements along McDowell Road. The City constructed a retention basin as part of the Avondale Boulevard Improvements, I-10 to McDowell Road Project in 2006, and was to maintain this basin until the real property under the easement area was developed.

DISCUSSION:

Staff, along with the Avondale Commons developer, Overland Development Corporation, has agreed to abandon the existing drainage easement as part of the development of Avondale Commons. The developer, at their expense, will retain and manage the storm runoff on its site as part of its proposed development.

BUDGET IMPACT:

There is no impact to the budget for this action.

RECOMMENDATION:

Staff recommends City Council adopt Ordinance 2062-1122 authorizing the abandonment of a public drainage easement located generally north of McDowell Road, and west of Avondale Boulevard, and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents.

Contact person for document distribution: Yulonda Moore



SCALE 1" = 50'	AVONDALE COMMONS	
EXHIBIT		
4550 North 12th Street Phoenix, Arizona 85014 Phone 602-264-6831 http://www.cvlci.com	DRAINAGE EASEMENT ABANDONMENT AERIAL EXHIBIT	1 OF 1

ORDINANCE NO. 2062-1122

AN ORDINANCE OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, PROVIDING FOR THE ABANDONMENT OF A DRAINAGE EASEMENT GENERALLY LOCATED ALONG THE WEST SIDE OF AVONDALE BOULEVARD AND NORTH OF MCDOWELL ROAD.

WHEREAS, Article I, Section 3 of the Avondale City Charter authorizes the City of Avondale (the “City”) to dispose of its acquired property as the City’s interests may require; and

WHEREAS, through Ordinance No. 1152-05, passed and adopted on November 21, 2005 and the Drainage Easement Agreement recorded at Document No. 2006-0034434 in the Office of the Maricopa County Recorder, the City acquired a drainage easement, approximately $\pm$ 2.85 acres, generally located along the west side of Avondale Boulevard, and north of McDowell Road (the “Drainage Easement”); and

WHEREAS, the Council of the City of Avondale (the “City Council”) has determined that the Drainage Easement is no longer needed for public use and therefore, it is necessary and appropriate to abandon said easement.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF AVONDALE as follows:

SECTION 1. The recitals above are hereby incorporated as if fully set forth herein.

SECTION 2. The Drainage Easement, as more particularly described and depicted in Exhibit A, attached hereto and incorporated herein by reference, is hereby declared to be no longer necessary for public use and is hereby abandoned.

SECTION 3. Upon recordation of this Ordinance in the office of the Maricopa County Recorder, the Drainage Easement shall be forever extinguished and all right and title to the real property described therein shall vest in the owner of Maricopa County Assessor Parcel No. 501-74-886.

SECTION 4. The Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized and directed to take all steps and execute all documents necessary to carry out the purpose and intent of this Ordinance.

[SIGNATURES ON FOLLOWING PAGE]

PASSED AND ADOPTED by the Council of the City of Avondale, Arizona,
November 21, 2022.

Kenneth Weise, Mayor

ATTEST:

Marcella Carrillo, City Clerk

APPROVED AS TO FORM:

Nicholle Harris, City Attorney

EXHIBIT A
TO
ORDINANCE NO. 2062-1122

[Legal Description and Map]

See following pages.

September 22, 2022

LEGAL DESCRIPTION FOR
AVONDALE COMMONS
DRAINAGE EASEMENT ABANDONMENT

An abandonment of that Drainage Easement as recorded in Document No. 2006-034434, Records of Maricopa County, Arizona, being a portion part of Lot 1 and Lot 2 of Midfirst at Avondale Marketplace, as recorded in Book 1007 of Maps, Page 9, Records of Maricopa County, Arizona, being situated in the Southeast Quarter of Section 36, Township 2 North, Range 1 West, of the Gila and Salt River Meridian, Maricopa County, Arizona, more particularly described as follows:

Commencing at the Brass Cap in a hand hole marking the Southeast Corner of said Section 36, from which the Brass Cap in a hand hole marking the South Quarter Corner of said Section 36 bears South 89°15'46" West, a distance of 2,654.28 feet;

Thence North 00°00'00" West, along the East line of said Southeast Quarter, a distance of 104.16 feet;

Thence North 90°00'00" West, departing said East line, a distance of 65.00 feet to the Northerly most Southeast Corner of said Midfirst at Avondale Marketplace, being the True Point of Beginning;

Thence South 44°37'51" West, along the Southeast line of said Midfirst at Avondale Marketplace, a distance of 56.93 feet;

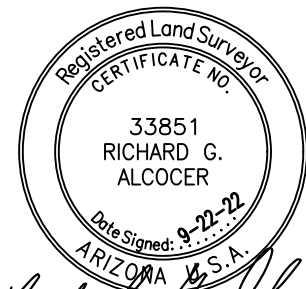
Thence South 89°15'46" West, departing said Southeast line and along the South line of said Midfirst at Avondale Marketplace, a distance of 75.02 feet to a point on a line which is parallel with and 180.01 feet Westerly, as measured at right angles, from said East line;

Thence North 00°00'00" West, departing said South line and along said parallel line, a distance of 115.01 feet to a point on a line which is parallel with and 115.00 feet Northerly, as measured at right angles, from said North line;

Thence North 89°15'46" East, along said parallel line, a distance of 115.02 feet to a point on the East line of said Midfirst at Avondale Marketplace;

Thence South 00°00'00" East, along said East line, a distance of 75.01 feet to the True Point of Beginning.

Containing 12,427 Square Feet or 0.285 Acres, more or less.



Richard G. Alcocer

CITY COUNCIL REPORT

SUBJECT: Ordinance 2063-1122 – Acquisition of Real Property located South of I-10, East of Agua Fria River Channel, and West of 127th Avenue - Well 26 Project

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Aric Stewart, Director/City Engineer, Engineering Department, (623) 333-4241

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Creative and Sustainable Community Development - Avondale is committed to creating a sense of place, a community of residents and local businesses unified by pride and common values.

The approval of this agenda item will maintain and expand quality infrastructure and improve connectivity to City amenities.

PURPOSE:

City Council will consider a request to adopt Ordinance 2063-1122 authorizing the acquisition, by purchase, dedication or condemnation of real property for public use located south of I-10, east of the Agua Fria River Channel, and west of 127th Avenue, and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents. The Council will take appropriate action.

BACKGROUND:

City Well Site #26 is located along the east bank of the Agua Fria River channel, immediately south of I-10. The existing well site is located near the northwest corner of the Coldwater Depot Logistics Center facility. The existing well site has an adjoining well transmission line extending south to the Coldwater Water Storage Facility. Well #26 is currently out of service due to a considerable decrease in water production capability. Operational and maintenance strategies to increase the water production capability of the existing well have not been successful. Contracted consultants along with professional groundwater hydrologists recommend the drilling of a replacement well to increase production.

The City acquired the property for the existing well site via Document Numbers 2013-0755674 and 2012-0561301, Maricopa County Recorder's Office.

DISCUSSION:

The City intends to purchase a portion of property containing 3,426 square feet owned by Lake Washington

Partners which is located contiguous to and immediately south of the existing well site to accommodate the expansion of the existing well site and the construction of a new well.

BUDGET IMPACT:

Funding for purchase of the property and design & construction of a new well in the amount of \$3,000,000 is included in the FY2023 CIP program under Project U0218 which has been approved by City Council. The purchase price will be dependent on the appraisal scheduled for December 2022. If the appraisal is above the amount in the project budget, then the project budget may need to be adjusted.

RECOMMENDATION:

Staff recommends City Council adopt an Ordinance authorizing the acquisition, by purchase, dedication or condemnation of real property for public use located south of I-10, east of the Agua Fria River Channel, and west of 127th Avenue, and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents.

Contact person for document distribution: Yulonda Moore

Aerial of Proposed Acquisition



ORDINANCE NO. 2063-1122

AN ORDINANCE OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, AUTHORIZING THE ACQUISITION, BY DEDICATION, PURCHASE OR CONDEMNATION, OF REAL PROPERTY FOR PUBLIC USE.

WHEREAS, Article I, Section 3 of the Avondale City Charter authorizes the City of Avondale (the “City”) to acquire real property in fee simple or any lesser interest, inside or outside its corporate limits for any City purpose, when the public convenience requires it and in accordance with the provisions of State law; and

WHEREAS, the City acquired real property for an existing well site through Special Warranty Deed dated July 10, 2013 and recorded at Document No. 2013-0755674 in the Office of the Maricopa County Recorder; and

WHEREAS, the City Council desires to expand the existing well site and authorize the acquisition of approximately ± 0.0787 acre of real property generally located along the east bank of the Agua Fria River channel immediately south of Interstate 10, and assigned Assessor’s Parcel Number 500-02-096 (the “Property”), for public use.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF AVONDALE as follows:

SECTION 1. The recitals above are hereby incorporated as if fully set forth herein.

SECTION 2. The acquisition by purchase, dedication or condemnation of real property totaling ± 0.0787 acre generally located along the east bank of the Agua Fria River channel immediately south of Interstate 10, and assigned Assessor’s Parcel Number 500-02-096, as more particularly described and depicted on Exhibit A attached hereto and incorporated herein by reference, is hereby authorized.

SECTION 3. If any provision of this Ordinance is for any reason held by any court of competent jurisdiction to be unenforceable, such provision or portion hereof shall be deemed separate, distinct and independent of all other provisions and such holding shall not affect the validity of the remaining portions of this Ordinance.

SECTION 4. It is necessary for the preservation of the peace, health and safety of the City of Avondale that an emergency is hereby declared to exist and this Ordinance shall be effective immediately upon its passage and adoption.

SECTION 5. The Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized and directed to take all steps and to execute all documents necessary to carry out the purpose and intent of this Ordinance.

PASSED AND ADOPTED by the Council of the City of Avondale, Arizona, November 21, 2022.

Kenneth N. Weise, Mayor

ATTEST:

Marcella Carrillo, City Clerk

APPROVED AS TO FORM:

Nicholle Harris, City Attorney

EXHIBIT A
TO
ORDINANCE NO. 2063-1122

[Legal Description and Map of Real Property]

See following pages.

EXHIBIT A

LEGAL DESCRIPTION

A PARCEL OF LAND BEING A PORTION OF LOT 1 ACCORDING TO THE FINAL PLAT OF COLDWATER DEPOT LOGISTICS CENTER AS SHOWN IN BOOK 1118, PAGE 14, MARICOPA COUNTY RECORDS ALL LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE GILA AND SALT RIVER MERIDIAN, CITY OF AVONDALE, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 2 (3" CITY OF AVONDALE BRASS CAP IN HAND HOLE STAMPED LS 34558 2021) FROM WHICH POINT THE WEST QUARTER CORNER THEREOF (3" CITY OF AVONDALE BRASS CAP IN HAND HOLE) BEARS N88°55'07"W A DISTANCE OF 5,249.15 FEET;

THENCE N88°55'07" W, ALONG SAID EAST-WEST MID SECTION LINE, A DISTANCE OF 2,173.14 FEET;

THENCE S01°04'53" W A DISTANCE OF 56.92 FEET TO A POINT ON THE SOUTH LINE OF TRACT "A" AS SHOWN ON SAID FINAL PLAT, THE POINT OF BEGINNING;

THENCE S00°39'18"E, ACROSS SAID LOT 1, A DISTANCE OF 60.00;

THENCE N89°20'36"W, CONTINUING ACROSS SAID LOT 1, A DISTANCE OF 60.23 FEET TO A POINT ON AN EAST LINE OF SAID TRACT "A" THEREOF;

THENCE N06°35'07"E, ALONG SAID EAST LINE, A DISTANCE OF 60.32 FEET;

THENCE S89°20'36"E, CONTINUING ALONG SAID TRACT "A", A DISTANCE OF 54.00 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 0.0787 ACRE OF LAND (3,426.97 S.F.), MORE OR LESS, INCLUDING ANY EASEMENTS OF RECORD.

BASIS OF BEARING FOR THIS PROJECT IS N88°55'07"W FOR THE EAST-WEST MIDSECTION LINE OF SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE GILA & SALT RIVER MERIDIAN AS CALCULATED FROM A PLSS SUBDIVISION RECORD OF SURVEY MARICOPA COUNTY GEODETIC DENSIFICATION AND CADASTRAL SURVEY RECORDED IN BOOK 688, PAGE 40 & BOOK 699, PAGE 26, MARICOPA COUNTY RECORDS.

Page 2 of 2

Preparing Firm:



Title:

**CITY OF AVONDALE
WELL 26 REPLACEMENT
PROJECT No.: 222225
LEGAL DESCRIPTION**

DSN:PHK

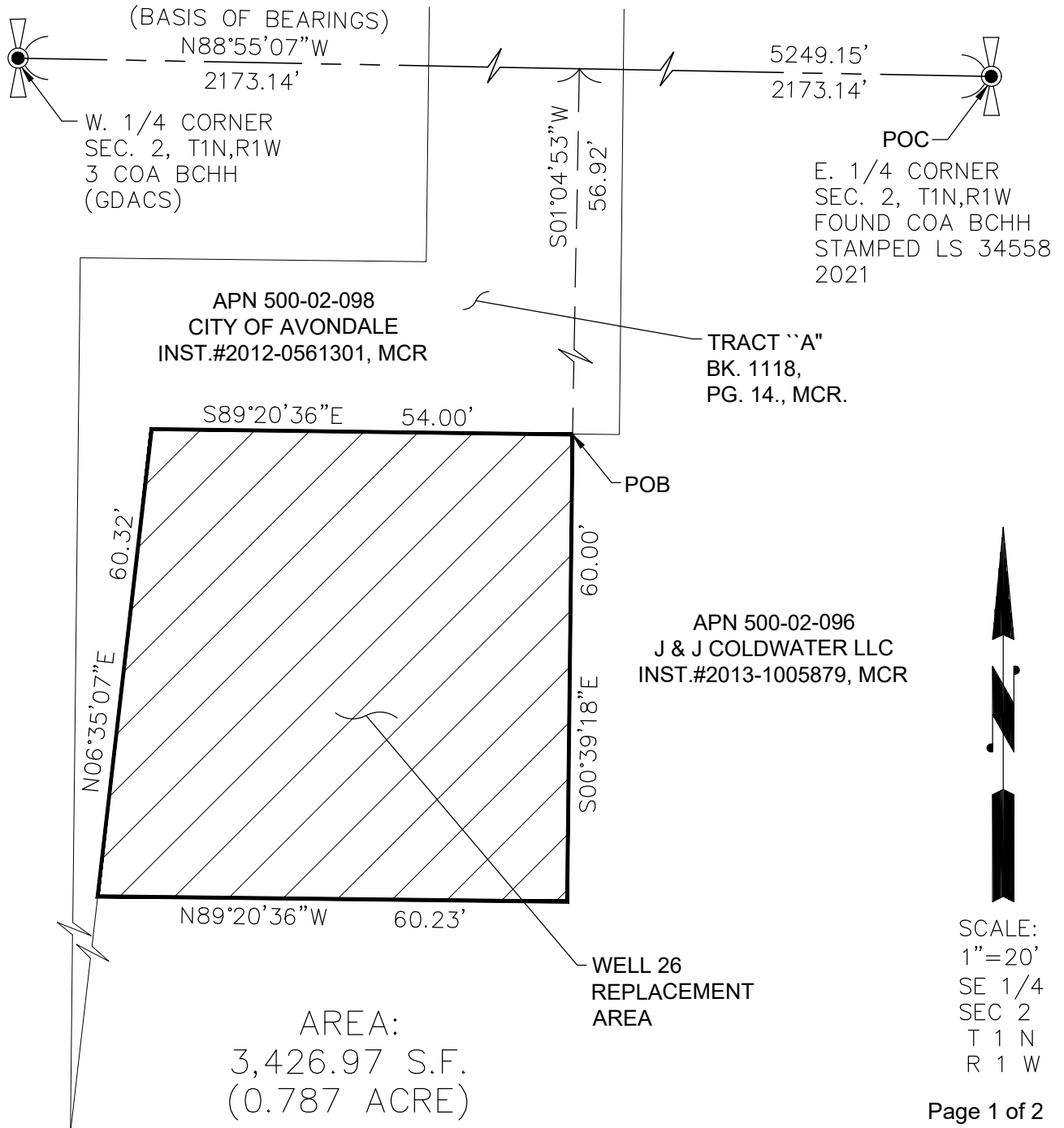
DRN:PHK

CHK:MRS

DATE: 10/10/22



EXHIBIT A



Page 1 of 2

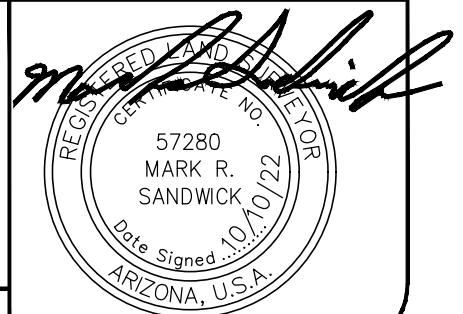
Preparing Firm:



Title:

**CITY OF AVONDALE
WELL 26 REPLACEMENT
PROJECT No.: 222225
LEGAL DESCRIPTION**

DSN:PHK DRN:PHK CHK:MRS DATE: 10/10/22



CITY COUNCIL REPORT

SUBJECT: Resolution 1077-1122 - Authorizing Banking & Investing Authority

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Renee Weatherless, Finance and Budget Director, (623) 333-2011

THROUGH: Cherlene Penilla, Assistant City Manager, (623) 333-1015

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Area:

- Innovative Program and Service Delivery - Avondale will continue to serve as a model of innovative, efficient, and responsive government.

This change will allow Avondale to continue paying its obligations on-time and protect the City's resources.

PURPOSE:

City Council will consider a request to adopt Resolution 1077-1122, authorizing certain city officials and staff to execute and endorse checks and other items for and on behalf of the City, authorizing certain city staff to authorize certain electronic payments and transfers of funds, authorizing certain city staff to open investment and safekeeping accounts, invest city funds, and execute contracts, agreements or transactions in connection with such investment accounts, and declaring an emergency; and authorize the Mayor or City Manager, City Attorney and City Clerk to execute the necessary documents. The Council will take the appropriate action.

BACKGROUND:

With recent changes to City officials and staff, updates to City-assigned authorizations are needed.

DISCUSSION:

When there are changes in certain city officials and city staff, City Council should authorize replacements to, execute and endorse checks and other items for and on behalf of the City, authorize certain electronic payments and transfers of funds as necessary, and open investment and safekeeping custodial accounts, invest city funds, and execute contracts, agreements or transactions in connection with such investment accounts. These actions help to ensure compliance with the City Charter, Article IV, Section 3, and the effective and efficient administration of the City's finances and related operations.

BUDGET IMPACT:

This action does not have a budget impact.

RECOMMENDATION:

Staff recommends City Council adopt a resolution authorizing certain city officials and staff to execute and endorse checks and other items for and on behalf of the City, authorizing certain city staff to authorize certain electronic payments and transfers of funds, authorizing certain city staff to open investment and safekeeping accounts, invest city funds, and execute contracts, agreements or transactions in connection with such investment accounts, and declaring an emergency; and authorize the Mayor and City Manager and City Clerk to execute the necessary documents.

Contact person for document distribution: Keith Fallstrom; Renee Weatherless

RESOLUTION NO. 1077-1122

A RESOLUTION OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, AUTHORIZING THE MAYOR, THE CITY MANAGER, AND THE FINANCE AND BUDGET DIRECTOR TO EXECUTE CHECKS AND OTHER ITEMS FOR AND ON BEHALF OF THE CITY OF AVONDALE; AUTHORIZING THE CITY MANAGER AND THE FINANCE AND BUDGET DIRECTOR TO AUTHORIZE CERTAIN ELECTRONIC PAYMENTS AND TRANSFERS OF FUNDS; AUTHORIZING THE CITY MANAGER AND THE FINANCE AND BUDGET DIRECTOR TO OPEN INVESTMENT AND SAFEKEEPING ACCOUNTS, INVEST CITY FUNDS, AND EXECUTE CONTRACTS, AGREEMENTS OR TRANSACTIONS IN CONNECTION WITH SUCH INVESTMENT ACCOUNTS; AND DECLARING AN EMERGENCY.

WHEREAS, it is necessary that officers of the City of Avondale (the “City”) be duly authorized to execute checks, electronic payments, transfers and other items relating to certain bank accounts of the City; and

WHEREAS, by Resolution 1035-0522, adopted May 16, 2022, the Council of the City of Avondale (the “City Council”) authorized the Mayor, the Acting City Manager, and the Finance and Budget Director to execute and endorse checks on behalf of the City; and

WHEREAS, it is necessary that officers of the City be duly authorized to open investment and safekeeping accounts, invest City funds, and execute contracts, agreements or transactions in connection with such investment accounts; and

WHEREAS, by Resolution 1035-0522, adopted May 16, 2022, the City Council authorized the Acting City Manager and the Finance and Budget Director to open a safekeeping account, invest City funds in securities and execute contracts, agreements or transactions in connection with such investment accounts; and

WHEREAS, on November 14, 2022, Ron Corbin began serving as the City Manager for the City; and

WHEREAS, the City Council desires to repeal its prior authorization and to adopt this Resolution to reflect the current City officers.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF AVONDALE, as follows:

SECTION 1. The recitals above are hereby incorporated as if fully set forth herein.

SECTION 2. Effective November 21, 2022, the Mayor of the City, Kenneth N. Weise, is hereby authorized to execute checks and other items for and on behalf of the City and is further authorized to endorse checks and other items payable to the City for deposit.

SECTION 3. Effective November 21, 2022, the City Manager of the City, Ron Corbin, is hereby authorized to: (i) execute checks and other items for and on behalf of the City and is further authorized to endorse checks and other items payable to the City for deposit; (ii) execute ACH (or other electronic means) and wire transfers for and on behalf of the City; (iii) execute transfers from the City operating account to (a) the City's payroll, the City's investments and other City accounts or (b) any other account as directed by the City Council; (iv) to direct, orally, in writing, electronically, or through any other medium agreed to by said officer(s) and the financial institutions selected by the City to provide investment and safekeeping accounts (the "Institutions"), the opening of investment accounts and the investment of municipal funds in securities and/or time deposits with and/or through the Institutions through such accounts; (v) to execute, on behalf of the City, contracts or agreements in connection with such investment accounts in the usual form provided by the Institutions for such accounts generally; (vi) to receive in respect of said investment accounts, confirmations, receipts, notices, demands, reports, and communications of any kind; (vii) to receive in respect of said investment accounts, money, securities, time deposits, and property of every kind, and to dispose of same; (viii) to endorse and deliver for deposit, negotiation, transfer, pledge, or sale, and to identify or guarantee signatures or endorsements on, notes, certificates of deposit, checks, and securities of all kinds, either belonging to or coming into the possession of the City; and (ix) to authorize, orally or in writing or through any other medium agreed to by said officer(s) and the Institutions, the debiting and/or crediting by the Institutions of the City's deposit account(s) at any other financial institution for the purpose of effecting such transaction.

SECTION 4. Effective November 21, 2022, the Finance and Budget Director of the City, Renee Weatherless, is hereby authorized to: (i) execute checks and other items for and on behalf of the City and is further authorized to endorse checks and other items payable to the City for deposit; (ii) execute ACH (or other electronic means) and wire transfers for and on behalf of the City; (iii) execute transfers from the City operating account to (a) the City's payroll, the City's investments and other City accounts or (b) any other account as directed by the City Council; (iv) to direct, orally, in writing, electronically, or through any other medium agreed to by said officer(s) and the Institutions, the opening of investment accounts and the investment of municipal funds in securities and/or time deposits with and/or through the Institutions through such accounts; (v) to execute, on behalf of the City, contracts or agreements in connection with such investment accounts in the usual form provided by the Institutions for such accounts generally; (vi) to receive in respect of said investment accounts, confirmations, receipts, notices, demands, reports, and communications of any kind; (vii) to receive in respect of said investment accounts, money, securities, time deposits, and property of every kind, and to dispose of same; (viii) to endorse and deliver for deposit, negotiation, transfer, pledge, or sale, and to identify or guarantee signatures or endorsements on, notes, certificates of deposit, checks, and securities of all kinds, either belonging to or coming into the possession of the City; and (ix) to authorize, orally or in writing or through any other medium agreed to by said officer(s) and the Institutions, the debiting and/or crediting by the Institutions of the City's deposit account(s) at any other financial institution for the purpose of effecting such transaction.

SECTION 5. This Resolution applies to all City bank and investment accounts held in any bank or other financial institution.

SECTION 6. Checks drawn upon the City accounts for amounts less than \$1,000.00 shall bear one signature of the Mayor, the City Manager, or the Finance and Budget Director. Checks drawn upon said accounts for the amounts of \$1,000.00 or more shall bear: (i) one signature from the Mayor; and (ii) one signature from any of the following: the City Manager or the Finance and Budget Director.

SECTION 7. The immediate operation of this Resolution is necessary for the preservation of the public peace and welfare by ensuring City operations continue uninterrupted. An emergency is hereby declared to exist, and this Resolution shall be in full force and effect from and after passage by the City Council; upon operation of this Resolution, Resolution 1035-0522 shall be repealed.

SECTION 8. The Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized and directed to execute all documents and take all steps necessary to carry out the purpose and intent of this Resolution.

PASSED AND ADOPTED by the Council of the City of Avondale, Arizona, November 21, 2022.

Kenneth N. Weise, Mayor

ATTEST:

Marcella Carrillo, City Clerk

APPROVED AS TO FORM:

Nicholle Harris, City Attorney

CITY COUNCIL REPORT

SUBJECT: Public Hearing and Resolution 1076-1122 – Three Rivers Ranch Major General Plan Amendment – Application PL-22-0050

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Jodie Novak, Director, Development Services, (623) 333-4015

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

Strategic Area: Creative and Sustainable Community Development

Strategy: Develop diverse housing options, to include housing that is affordable to workers and close to their jobs. And, maintain and expand quality infrastructure and improve connectivity to city amenities.

PURPOSE:

City Council will hold a public hearing and consider a request to continue the item to December 5, 2022. The item is a request to adopt Resolution 1076-1122, approving a request by Alex Hayes of Withey Morris PLC for a Major Amendment to the Avondale General Plan 2030 Land Use Map for Three Rivers Ranch, a proposed 193.98 gross acre planned development west of the intersection of Broadway Road and Dysart Road. The proposed Major General Plan Amendment, if approved, will amend the General Plan 2030 Land Use Map designations for the property from Estate/Low Density Residential and Mixed-Use to Medium Density Residential and Medium/High Density Residential. The Council will take appropriate action.

BACKGROUND:

The 193.98-acre subject property (Exhibits A and B) is located west of the intersection of Broadway Road and Dysart Road, in the jurisdiction of Maricopa County. Due to the proximity of the site to the Agua Fria River and the Avondale Wastewater Treatment Facility, the majority of the site falls within the 100-year flood plain, a small portion to the northwest falling within the regulatory floodway, as well as encroaches into the 1,000-foot Odor Control Easement to the south. Additionally, Western Area Power Authority (WAPA) has a powerline easement with active powerlines bisecting the site.

The property is currently in the jurisdiction of Maricopa County and carries a zoning designation of Rural (RU-43). The RU-43 zoning allows for development of 1-acre single-family residential lots. Approval of this Major General Plan Amendment request will revise the land use designation on the property as described later in this report. Presently, the property's Avondale General Plan 2030 land use category designation is Estate Low Density Residential (ELDR) and Mixed Use (Exhibit C). The ELDR category allows for development of detached single-family residential homes at a density of 1 to 2.5 dwelling units per acre. The target density in ELDR is 1 unit per acre. The Mixed Use category allows for a mixture of residential and commercial and does not have a density range or target density.

The existing uses and zoning of surrounding properties include:

- **North:** Agua Fria River, zoned General Industrial (A-1).
- **East of Dysart:** Vacant school site owned by Tolleson Union High School District, located in unincorporated Maricopa County. Phase 5 of Brookfield Alamar, a master planned community zoned Planned Area Development and approved for 3,695 total single-family dwellings, 1,145 of which are to be located in Phase 5. The phase near this property (Phase 5) is currently undeveloped, and the construction timeline is unknown.
- **Northeast of Site:** Harvest HOC of Avondale Dispensary and single-family residential, zoned General Industrial (A-1). Vacant land, zoned Agricultural (AG).
- **South:** Avondale Wastewater Treatment Facility, zoned Agricultural (AG).
- **West:** Agua Fria River, zoned General Industrial (A-1).

Separate applications to annex the subject property into the City of Avondale and rezone the site to Planned Area Development (PAD) have been filed and are in process. Because the General Plan Land Use Map encompasses all property within the City's Municipal Planning Boundary regardless of current jurisdiction, the proposed Major General Plan Amendment can be approved prior to annexation. The proposed rezoning, however, may not be approved until the annexation has been finalized.

SUMMARY OF REQUEST:

The applicant is requesting approval of a Major General Plan Amendment (GPA) to the General Plan 2030 Land Use Map in order to facilitate development, upon approval of the rezoning case, of 530 single-family residential detached home lots, 120 townhomes (attached single-family residential homes), and 311 multi-family residential apartment units (1- and 2-story individual casita style apartment units).

As previously noted, the property has a General Plan land use designation of Estate/Low Density Residential (ELDR) and Mixed Use. The Mixed Use designation currently covers the northern two-thirds of the site, approximately 118.43 acres, while the Estate/Low Density Residential (ELDR) designation covers the southern third of the site, approximately 75.56 acres.

This request for a Major GPA (Exhibit D) will revise the General Plan Land Use Map from Estate/Low Density Residential (ELDR) and Mixed Use to Medium Density Residential (MDR) and Medium/High Density Residential (MHDR). The Medium/High Density Residential (MHDR) designation will cover a strip along Dysart Road, approximately 37.15 acres, while the Medium Density Residential (MDR) designation will cover the remainder of the site, approximately 156.84 acres.

The MDR category accommodates development of suburban detached single-family residential homes within a density range of 2.5 to 4.0 dwelling units per acre, with a target density of 2.5. The MHDR category accommodates development of a variety of housing choices in a planned and clustered setting unique to Avondale, within a density range of 4.0 to 12.0 dwelling units per acre, with a target density of 8.

This proposed GPA is the first step in the development process for the site. There is a statutory requirement that Major General Plan Amendments be heard by the City Council during the same calendar year the application request is filed. The purpose of the first Planning Commission meeting on September 21, 2022 was to conduct a public hearing for discussion on the project only. At the Planning Commission meeting held on October 19, 2022, the Planning Commission conducted a second public hearing and forwarded a recommendation to the Council. The PAD rezone is a separate agenda item on the November 21, 2022 Council meeting. The proposed annexation went before the City Council on October 17, 2022 for authorization to begin the annexation process. The Council public hearing was held November 7, 2022, and the public hearing and vote on the adoption of the ordinance approving the annexation is a separate item on the

November 21, 2022 Council agenda.

Process:

The General Plan 2030 outlines criteria for what constitutes Minor and Major GPAs. The proposed request is being considered a Major Amendment because it is necessary for the establishment of a Planned Area Development (PAD) encompassing over 80 gross acres and impacts over 10 percent of the total land area of the PAD being established. Major GPAs vary from the more common Minor GPAs in a few ways, as follows:

60-Day Review: For major GPAs, the statute requires cities to identify a 60-day period in which notice is provided to potentially impacted adjoining jurisdictions and public agencies and comments are solicited from those jurisdictions and agencies. Though notice is often provided out of courtesy, no such formal interagency review is required for Minor GPAs.

Planning Commission Process: To encourage greater citizen participation, major GPAs require two Planning Commission public hearings, one of which must be held at an off-site location. The first hearing is for public comment, and the second hearing is when the Commission will take action on the request. Minor GPAs require a single Planning Commission public hearing.

Approval by City Council: Major GPAs require approval by a two-thirds majority vote of the City Council.

PUBLIC PARTICIPATION:

The required 60-day notification of potentially impacted adjoining jurisdictions and public agencies, as required by Arizona Statute, was transmitted on June 15, 2022. Sixteen cities, school districts, and other public entities were provided with a short summary of the proposal and a copy of the proposed amendment and asked to provide comments, if any, by August 15, 2022. Staff has not received comments from the agencies, jurisdictions, or districts on the proposal.

A neighborhood meeting (Exhibit E) to discuss the proposal with neighboring property owners and other interested parties was held on August 29, 2022. An overview of the discussion topics is outlined in the Neighborhood Meeting Summary, attached as Exhibit E. In addition to City Staff and the applicant's team, four (4) people attended the virtual meeting, two (2) of which were Planning Commissioners.

The neighborhood meeting attendees had general questions regarding: (1) traffic; (2) adequate school capacity; and (3) adequate water and sewer facilities. The applicant responded to attendee questions, stating that a traffic impact analysis demonstrates that with the requested improvements, the surrounding roadway network can adequately handle the increased trips, certificates of adequate school facilities have been acquired from the Tolleson and Littleton School Districts, and that sufficient water and sewer facilities exist with connections to the site. The applicant also offered to provide attendees with copies of the Traffic Impact Analysis and the Certificates of Adequate School Facilities.

All required notifications for the Planning Commission and City Council public hearings have been completed. To date, no public comments regarding this project have been received.

CERTIFICATE OF ADEQUATE SCHOOL FACILITIES:

The property is located in the service areas of the Littleton Elementary School District (LESD) and the Tolleson Union High School District (TUHSD).

LESD has provided the City with a Certificate of Adequate School Facilities signed by Superintendent Roger Freeman (Exhibit F) which states that the district does not have adequate capacity to accommodate the estimated enrollment from the proposed Three Rivers Ranch development and that the anticipated classroom impact will be addressed by the developer agreement in place.

TUHSD has provided the City with a Certificate of Adequate School Facilities signed by Superintendent Nora Gutierrez (Exhibit F) stating that the district has adequate capacity and no school site within the development is needed.

PLANNING COMMISSION ACTION:

On October 19, 2022, the Planning Commission conducted a public hearing on the General Plan Amendment alongside a public hearing on the Rezone. The Commission had a number of questions regarding future growth of the City, environmental impacts, traffic, infrastructure improvements, and availability of public services. The Commission opened the meeting for public comment and received none. The Commission voted 4-2 to recommend approval of the proposed Major General Plan Amendment.

ANALYSIS:

The City Council must determine that the proposed amendment meets four (4) findings prior to recommending approval. Staff's analysis of each of the required findings is presented below.

1. The development pattern contained on the Land Use Plan inadequately provides sufficient sites for the use or change proposed in the amendment.

- Most of the City's inventory of undeveloped Medium Density Residential (MDR) land has been planned over the past two (2) to four (4) years, with Alamar (formerly Lakin Ranch), Verde Trails, and Del Rio Ranch III all under construction or moving towards construction. Even with these planned communities, there is significant additional demand for development of single-family residences at a suburban density in Avondale. Because there are no remaining large assemblages of land designated MDR, development of new homes at a suburban density would be limited to these already approved communities.

The General Plan notes that as of 2010, only 4.41 percent of land uses in Avondale were developed as Medium High Density Residential, most of which are developed. The proposed amendment will allow the property to be rezoned to accommodate a combination of single-family (townhomes) and multi-family development (single-family detached, for-rent), which will further the goal of the General Plan to attract a diverse range of housing types that not currently available in the City to allow for a variety of socio-economic levels.

Approval of the proposed GPA would accommodate additional new residential development in southern Avondale.

2. The amendment constitutes an overall improvement in the 2030 Plan and is not solely for the good or benefit of a particular landowner or owners.

- This site has numerous development constraints. Due to the proximity of the site to the Agua Fria river and the Avondale Wastewater Treatment Facility, the majority of the site falls within the 100-year flood plain, a small portion to the northwest falling within the regulatory flood way, as well as encroaches into the 1,000-foot Odor Control Easement to the south. Additionally, Western Area Power Authority (WAPA) has a powerline easement with active powerlines bisecting the site.

Compared to Mixed Use and Estate/Low Density Residential (ELDR) designations, the MDR and MHDR designations are more viable use for the site and can be developed upon entitlement approval.

This amendment is an opportunity to bring this land use in alignment with the current needs and growth of the City, benefitting the community by allowing a development that will provide residents with greater housing options. Development of this site will also mean greater protection from lateral movement of the Agua Fria River, additional tax revenue, and additional spending power to support local businesses.

3. The amendment will not adversely impact the community as a whole and/or a portion of the community by: (1) significantly altering acceptable land use patterns; (2) requiring large and more expensive public infrastructure improvements including, but not limited to roads, water, wastewater, and public safety facilities than would otherwise be needed without the proposed change, or (3) adversely impacting the existing land use.

- The proposal will not adversely impact the existing land uses in the area. The amendment will allow development of a compatible residential planned community that will enhance the area, as well as promote an active and healthy lifestyle by and community connection among residents.

The proposed amendment will not significantly alter acceptable land use patterns in the area or impact nearby existing uses. Therefore, the amendment will not require larger or more expensive public infrastructure improvements beyond what would be expected for this property if it was developed under the existing land use designations.

4. The amendment is consistent with the overall intent of General Plan 2030 and other adopted plans, codes, and ordinances. The proposed amendment furthers several goals of the General Plan 2030 and other adopted plans, code, and ordinances, including, but not limited to:

- General Plan Land Use Housing Element Goal 2: “Champion the development of housing types not currently available in the City to allow for a variety of socio-economic levels.”
- The PAD does this by offering a variety of housing types to accommodate a wide range of market segments and life stages. This includes single-family homes to provide more traditional housing opportunities for first time, move up, and empty nester buyers, townhomes to provide young professionals with the opportunity to live within a master planned community at a lower price point, as well as a apartments with private backyards to attract renters who are looking for a housing option that supports a “lock and leave” lifestyle. The overall development provides a sense of place and creates new housing options for the area.
- General Plan Land Use Open Space Element Goal 1: “Identify, protect, and preserve the natural amenities and environmental attributes that are unique to Avondale and contribute to a healthy lifestyle.”

Three Rivers Ranch will embrace the natural beauty of the surrounding area, including the Agua Fria River and the Estrella Mountains. Ample open space will be provided with parks and common areas that incorporate natural vegetation consistent with surrounding developments. The common open space areas will be linked with pedestrian connection to support a healthy lifestyle.

- General Plan Land Use Recreational Element Goal 1: “Ensure every person has convenient access to safe public parks and affordable recreation opportunities.”

Primary circulation routes are planned from homes and courtyards to parks, common open spaces, and the trails in the surrounding area.

The apartment community will include fitness amenities available to residents and feature landscaped walking paths wind through the development. Creative play opportunities will include both manufactured playground elements as well as site specific design components. Small ramadas, picnic shelters and shade structures will also be incorporated into the design. A significant amount of open space is provided (including active areas for games (Bag Toss, etc.), barbecue stations, fire pits, dog park, and more. The community will be professionally managed and will provide amenities and recreation activities to the residents, furthering the City’s recreational goals.

Thoughtfully located parks provide a robust system of paths and trails that provide safe and convenient alternative access.

DISCUSSION:

The proposal meets the four (4) required findings for General Plan Amendments as detailed in the Analysis section above.

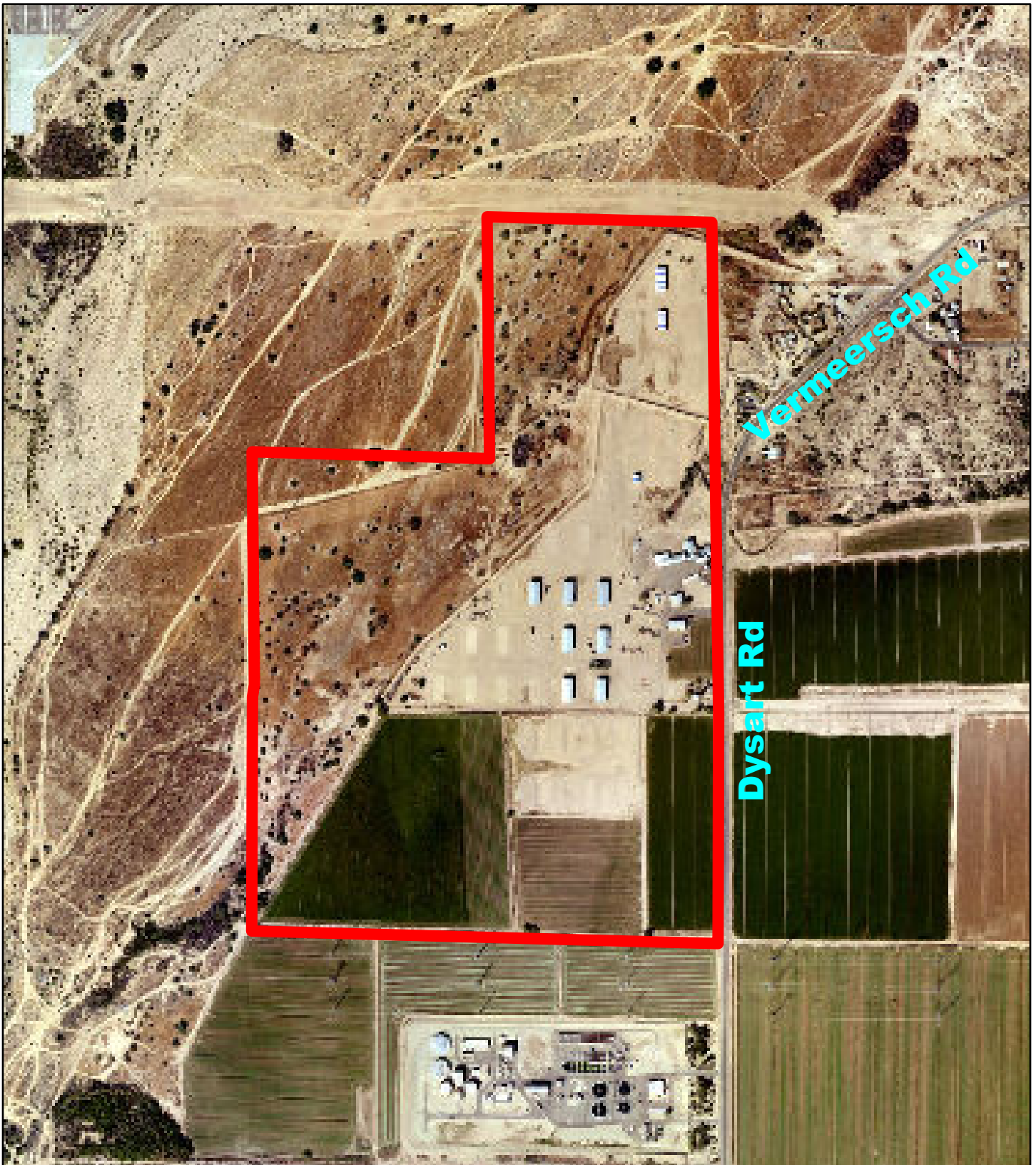
BUDGET IMPACT:

No budget impacts.

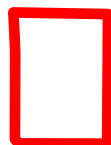
RECOMMENDATION:

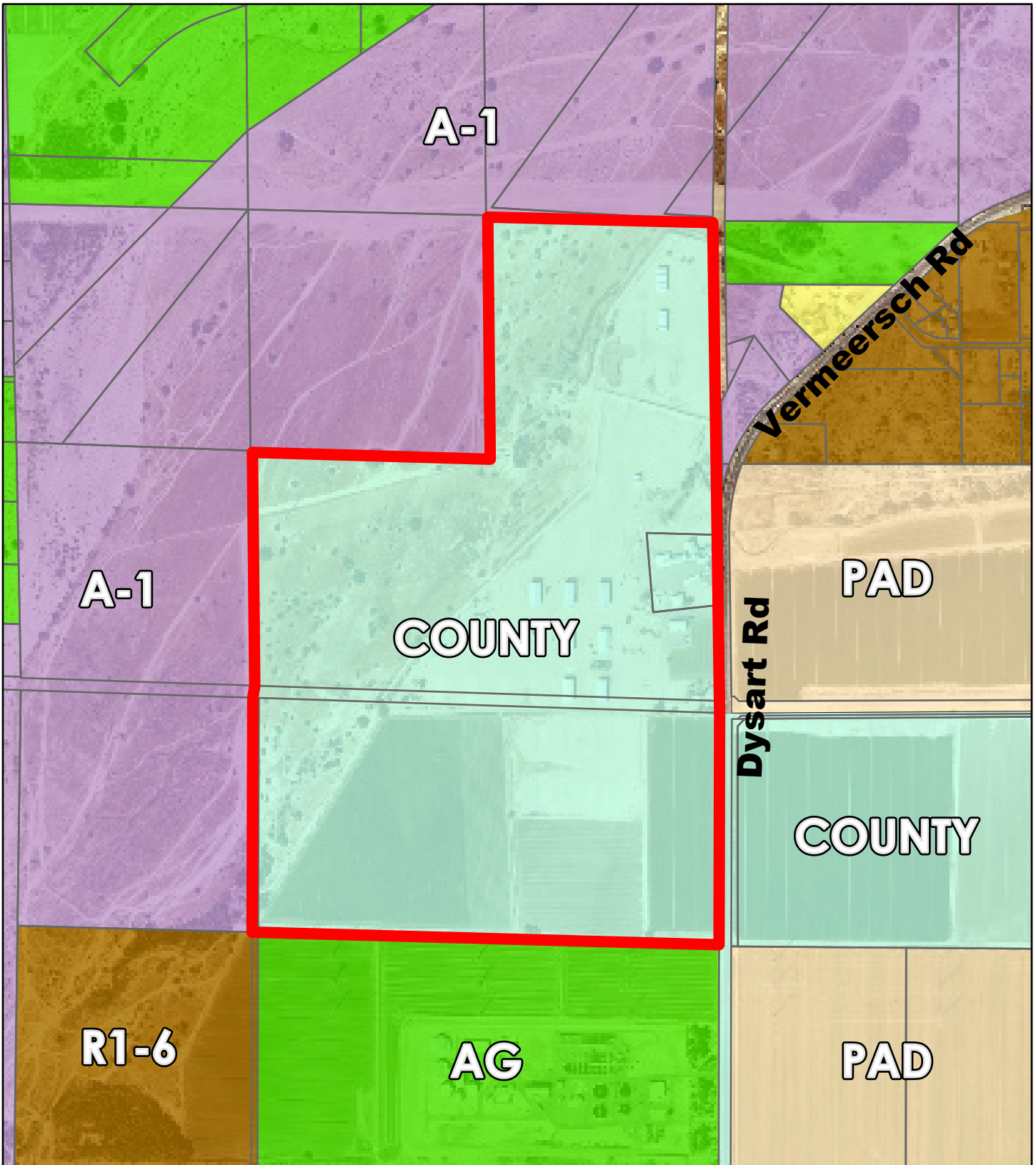
City Council will conduct a public hearing and **ADOPT** Resolution 1076-1122 approving Application PL-22-0050 Three Rivers Ranch, a request for a Major Amendment to the General Plan 2030 Land Use Map changing the Land Use designation of the subject property from Estate/Low Density Residential (ELDR) and Mixed-Use to Medium Density Residential (MDR) and Medium/High Density Residential (MHDR).

Contact person for document distribution: Jani Wertin, Jodie Novak

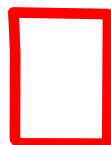


Aerial Photograph



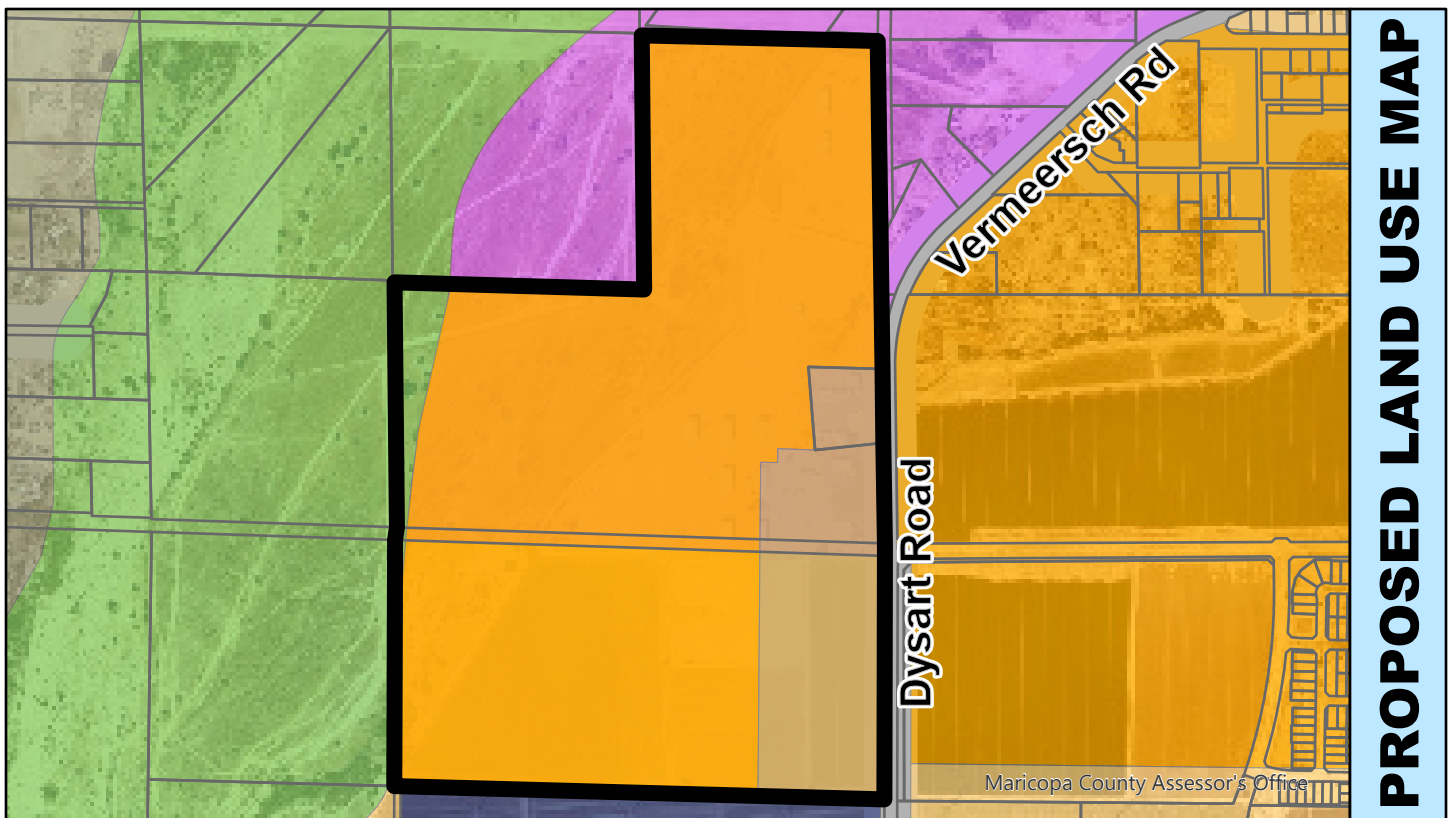
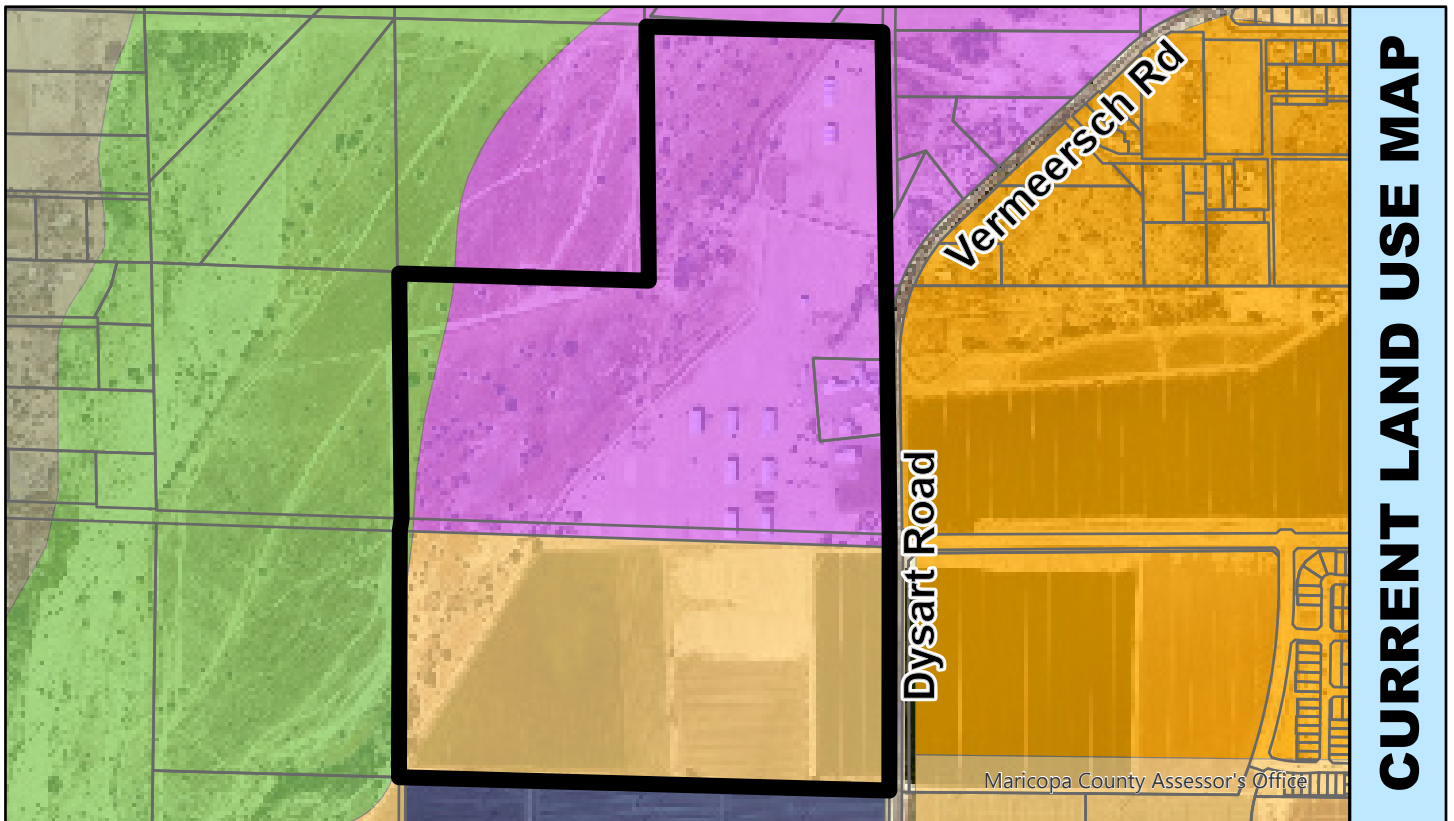


Zoning Vicinity



Subject Property

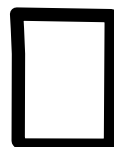




General Plan Land Use



- Low Density Residential
- Medium Density Residential
- Medium/High Density Residential
- Mixed Use
- Open Space / Parks



Subject Property





Three Rivers Ranch

Major General Plan Amendment Narrative

1st Submittal: February 28, 2022

2nd Submittal: June 6, 2022

3rd Submittal: August 24, 2022

Development Team

Applicant



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TABLE OF EXHIBITS

EXHIBIT A – SITE AERIAL
EXHIBIT B – EXISTING GENERAL PLAN LAND USE MAP
EXHIBIT C – PROPOSED GENERAL PLAN LAND USE MAP

Location

The Property is approximately 193.98 gross acres located west of the intersection of Dysart Road and Broadway Road, as shown on the attached aerial map (**Exhibit A**). The Property is currently in unincorporated Maricopa County, but within the Avondale planning area.

The property is surrounded by the Agua Fria River to the west and north, vacant and residential land (Brookfield Alamar) to the east and an Avondale wastewater treatment facility to the south.

Request

This is a proposal to amend the Avondale General Plan 2030 Land Use Map for approximately 193.98 net acres. The proposed amendment would change the following:

- 25.70 acres *from* Estate/Low Density Residential *to* Medium/High Density Residential (Parcel 7)
- 11.45 acres *from* Mixed-Use *to* Medium/High Density Residential (Parcel 6)
- 49.86 acres *from* Estate/Low Density Residential *to* Medium Density Residential (Parcels 4 and 5)
- 106.98 acres *from* Mixed-Use *to* Medium Density Residential (Parcels 1, 2, and 3)

See **Exhibit B, Existing General Plan Land Use Map** and **Exhibit C, Proposed General Plan Land Use Map**.

The Medium Density Residential category contemplates residential density ranging from 2.5 dwelling units per acre to 4 dwelling units per acre with a target density of 2.5 dwelling units per acre.

The Medium/High Density Residential category contemplates residential density ranging from 4 dwelling units per acre to 12 dwelling units per acre with a target density of 8 dwelling units per acre.

The residential portion of the proposed development provides for an overall net density of approximately 5.05 dwelling units per acre.

Major GPA Review and Analysis

1. Availability of Current and Future Water Supplies

The Project is proposed to tie into the existing City of Avondale water system. A 16-inch water main is proposed in Dysart Road and is being constructed as part of the Alamar subdivision improvements. The Three Rivers Ranch subdivision will loop a 12-inch water main and connect to the proposed 16-inch water main in Dysart Road. An existing 12-inch water main continues in Dysart Road north into Vermeersch Road where it transitions to an existing 6-inch water line.

It is the Applicant's understanding that the Project will not create any issues for current or future water supplies. The companion zoning case includes further information related to water infrastructure and

supports that the existing or planned water infrastructure will be adequate for the Project.

2. Impact on and potential support of the City's transportation system

A Traffic Impact Analysis is being provided with the companion zoning case. The project is expected to widen Dysart Road to meet the City's half-street improvement requirements. Dysart Road will result in a four-lane cross section along the project frontage. The proposed cross section will be striped to provide one through lane in the northbound direction and two through lanes in the southbound direction, separated by a two-way center left turn lane. Additionally the project will construct the Collector Road system from the Broadway Road alignment for internal access to the single family home portions of the development. The collector road will be renamed Three Rivers Parkway and will provide one through lane in each direction of travel separated by a two-way center left turn lane that will serve as a number of primary access points directly into the neighborhood. The intersection at Broadway Road/Dysart Road will offer westbound vehicles entering the site an exclusive left turn lane and a dedicated right turn lane. Secondary access will be provided both north and south of the Collector Road alignment to provide access to Dysart Road. It is not anticipated that the change of land use will have any negative impact on the City transportation system. The project Traffic Impact Analysis addresses the proposed project demands as well as future traffic operations for the project.

The Broadway Road alignment is currently 33' of existing right-of-way internal to the property and under the jurisdiction of Maricopa County. It is not anticipated to extend access west of the property and crossing the Agua Fria River. This project proposes abandonment of the existing Maricopa County right-of-way in coordination with the new Collector Road and City right-of-way dedications to serve the development.

The applicant will comply with the City's current engineering policies and standards and work to provide solutions that will enhance the City's transportation networks as applicable for the development.

3. Impact on the natural environment, including, but not limited to, hillsides, riparian areas, and floodways

The property is currently impacted by existing Agua Fria Floodway easements known as the Floodway Flowage and Floodway Fringe easements. The project intends to relinquish the existing fringe easements with the Flood Control District of Maricopa County (FCDMC) by elevating the site above the Standard Project Flood elevations of the Agua Fria River. These easements are being addressed concurrently with the proposed General Plan Amendment and accompanying zoning cases for the project with the FCDMC right-of-way department. Additionally, an existing Zone AE floodplain encumbers the site. Through the site fill and embankment protection, the project proposes a Conditional Letter of Map Revision (CLOMR) with FEMA and the City to re-map the floodplain and protect the site for development. Improvements to the property will remove a significant portion of the property from flood hazard. Overall, the Project will provide significant improvements to the Property with quality and aesthetically pleasing features, including a meaningful amount of private open space, furthering several goals of the General Plan.

4. Extent to which the proposal contributes to achieving the (i) job to population ratio, (ii) square foot per capita ratio; and (iii) multi-family housing ratio identified within the GP2030

The proposed General Plan Amendment will not have an overall negative impact on the City's current job-to-population ratio as over half of the Property's designation is already Mixed Use, which has a target density of 20 du/ac. Because the proposed land use categories have a lower target du/ac, the total du/ac

available in the GP2030 will likely decrease.

Additionally, it is anticipated that with the addition of new residential options, support for existing and future employment and commercial uses will occur. The re-designation of the Property will be in accordance with the City's goals and policies and will be aimed at furthering additional diverse residential housing opportunities in Avondale, which are currently limited.

5. *Impact on City services and facilities including, but not limited to, police, fire, water, and wastewater*

The proposed General Plan Amendment will not have a negative impact on the City's services. It is our understanding there are adequate facilities and/or connections to serve the Project, which will be improved by the developer, as required. Exact infrastructure improvements for the Property will be determined during the platting and/or site plan and design review application phase.

6. *Extent to which the goals of the GP2030 are accomplished*

The proposed development furthers several goals and policies of the General Plan 2030, as further detailed below.

Housing Element

GOAL 2: Champion the development of housing types not currently available in the City to allow for a variety of socio-economic levels.

Three Rivers Ranch will offer a variety of housing types that will accommodate a wide range of market segments and life stages. The single-family homes will provide more traditional housing opportunities for first time, move up, and empty nester buyers. The townhome product will offer the young professional the opportunity to live within a master planned community but with the ability to enter at a lower price point. The proposed single-family rental product provides homes with private backyards and lots, allowing for a "lock and leave" lifestyle which requires less maintenance and promotes the use of the neighborhood common and amenity areas. This increases a sense of place within the neighborhood and ultimately encourages more community interaction. This product type also creates optimal density to support surrounding employment, educational and commercial uses.

GOAL 4: Require excellence and innovation in residential design and construction.

Policies:

B. Support creatively designed subdivision layouts, particularly layouts in which open space and recreation areas containing amenities are thoughtfully integrated throughout.

C. Utilize the City's Design Manuals to promote quality development and attractive residential communities, updating these documents when necessary to reflect changing preferences and styles.

E. Endorse the use of Crime Prevention through Environmental design (CPTED) principles when designing residential communities.

Three Rivers Ranch will incorporate a number of the City's Design Manual policies to create a layout with ample open space and recreation areas that contain amenities throughout the project. It also ensures quality architecture and will endorse CPTED design.

Open Space Element

GOAL 1: Identify, protect, and preserve the natural amenities and environmental attributes that are unique to Avondale and contribute to a healthy lifestyle.

Three Rivers Ranch will embrace the natural beauty of the surrounding area, including the Agua Fria River and the Estrella Mountains. Ample open space will be provided with parks and common areas that incorporate natural vegetation consistent with surrounding developments. The common open space areas will be linked with pedestrian connection to support a healthy lifestyle.

Recreational Element

GOAL 1: Ensure every person has convenient access to safe public parks and affordable recreation opportunities.

Policies:

A. Continue to ensure that private development provides local, accessible neighborhood parks and tot lots under the management of a Home Owners Association.

Three Rivers Ranch is designed to cater to active lifestyles. The community incorporates some pocket park/courtyard planning techniques into its site plan which will contribute to a more livable environment. Primary circulation routes are planned from homes and courtyards to parks, common open spaces, and the trails in the surrounding area. The rental home community will include fitness amenities available to residents and feature landscaped walking paths wind through the development.

Creative play opportunities will include both manufactured playground elements as well as site specific design components. Small ramadas, picnic shelters and shade structures will also be incorporated into the design. A significant amount of open space is provided (including active areas for games (Bag Toss, etc.), barbecue stations, fire pits, dog park, and more. The community will be professionally managed and will provide amenities and recreation activities to the residents, furthering the City's recreational goals.

Thoughtfully located parks provide a robust system of paths and trails that provide safe and convenient alternative access. Each trail has been carefully considered within the context of the community. Trees and planting will be incorporated to provide shade, visual appeal, and character, in a manner that does not block views to and from the parks.

Avondale Strategic Five-Year Plan

The Avondale Strategic Five-Year Plan was designed with the vision and guidance from the Avondale City Council, and crafted with input from engaged residents, local businesses, and key personnel across the

City's organization. The Plan represents a cohesive and intelligent approach to continuing on the path to Avondale's vision to create a community that is both family friendly and economically robust. A city that is Aspiring, Achieving and Accelerating.

Three Rivers Ranch provides the opportunity to develop a challenged site along Dysart Road that is compatible with existing development and supports housing diversity opportunities for the area. With the increase of employment, commercial and educational opportunities that are anticipated in the area in the near future, this site will provide a prime location for new residences which will support other land uses. This will complement and support the economic vision of the Strategic Five-Year Plan.

Additionally, the following goals of the Strategic Five-Year Plan will be met with Three Rivers Ranch:

Initiative #1, Strategic Goal: *Encourage build-out in residential housing opportunities that support diverse housing options.*

With its variety of housing offerings, ranging from townhomes with a modern design focused on an urban living experience and high-quality amenities to traditional single-family homes, the Project will provide a unique and diverse housing opportunity for a wide spectrum of prospective residents. From young, single professionals to families to empty nesters, Three Rivers Ranch will offer a desirable and accommodating product. Three Rivers Ranch contributes to the diversity of housing that the Strategic Five-Year Plan envisions.

Initiative #2, Strategic Goal, Action Item: *Establish relationships with potential partners for the development of trail and river corridors.*

Three Rivers Ranch will provide connectivity and pedestrian access to the surrounding area with trail linkages and enhanced open spaces. The Developer will ensure access to the surrounding sidewalks and promote connectivity to the larger trails master plan for Avondale, as well as the Tres Rios Specific Plan.

Major GPA Findings Analysis

This request for a Major General Plan Amendment meets or exceeds the required findings established by the City of Avondale, as detailed below.

1. *The development pattern contained on the Land Use Plan inadequately provides the appropriate optional sites for the use and/or change proposed in the amendment.*

Three Rivers Ranch offers a development and land use plan that is generally holistically consistent with the overall designation for the Property in the GP2030. However, the Land Use Plan does not provide the appropriate flexibility to allow the proper variety of housing products proposed in the proper locations. The proposed development will not increase the overall targeted residential density for the Property, but rather will provide the highest density where it is most appropriate. In this case, that is in the southwest corner of the Property adjacent to the Avondale Wastewater Treatment Facility. By changing the land use map to Medium/High Density Residential at this location, it provides the perfect opportunity to address the site challenges and provide a unique housing development with a variety of offerings and price points that would otherwise not generally be available here. Additional changes will accommodate the integrated master plan and best allocate appropriate densities and uses.

2. *The amendment constitutes an overall improvement to the GP2030 and is not solely for the good or benefit of a particular landowner or owners*

Three Rivers Ranch will provide a variety of housing that attracts new residents ranging from young professionals to families to empty nesters who are looking for a “lock and leave” lifestyle. The Applicant is excited to provide this array of products, especially those that are underrepresented in the City of Avondale.

This GPA will allow the Applicant to efficiently allocate the proposed densities to their most appropriate locations.

3. *The amendment will not adversely impact the community as a whole and/or a portion of the community by:*
 - a. *Significantly altering the acceptable land use patterns;*
 - b. *Requiring larger and more expensive public infrastructure improvements including, but not limited to, roads, water, wastewater, and public safety facilities than would otherwise be needed without the proposed change; or*
 - c. *Adversely impacting the existing land uses.*

The amendment will not significantly alter acceptable land use patterns in the area or impact nearby existing uses. The residential community will be developed with lot sizes, product types, and densities that are compatible with and complementary to the Brookfield Alamar master planned community immediately east of Dysart Road. Over half the Property was already designated Mixed-Use, for which the target density of 20 du/ac exceeds the densities of the proposed designations. The proposed land use pattern does not significantly alter the existing land use plan. Rather, it enables the Applicant to respond to market demands in Avondale by providing a greater variety of housing options.

Public infrastructure exists for this development and it will not be a significant burden on the existing systems that are in place.

Lastly, the proposed amendment does not adversely impact existing land uses. With adequate existing infrastructure and additional improvements, the proposed development will be complementary to existing uses and will positively contribute to the economic dynamism of the area.

4. *That the amendment is consistent with the overall intent of the GP2030 and other adopted plans, code and ordinances*

The proposed land use pattern is compatible with the existing land use plan for the Property and is consistent with the overall intent of the GP2030. The amendment does not significantly alter the designated residential densities for the Property but allows for greater flexibility and the ability to offer more variety to prospective residents.

Overall, the amendment consists of an improvement to the General Plan with the overall enhancements as outlined below:

- The Project will create a dynamic and vibrant community that will attract additional investment.

- The Project will provide a variety of quality housing options to accommodate the demographics and market demands of Avondale.
- The Project will foster economic vitality and support future employment uses.
- The Project provides for abundant open space, pedestrian connectivity, and trail linkages and enhancements in furtherance of the Tres Rios Specific Plan, which will positively impact the mental and physical well-being of Three Rivers Ranch residents.

Conclusion

Three Rivers Ranch will provide diverse, high quality housing products that are needed and in high demand within the City of Avondale. This Major General Plan Amendment is intended to provide a framework for development of a complementary land use in this evolving area that is compatible with existing uses and will drive further investment in this corner of Avondale. The proposed amendment is consistent with the overall goals and objectives of the General Plan and will be a positive addition to the area.

EXHIBIT A

Aerial Map

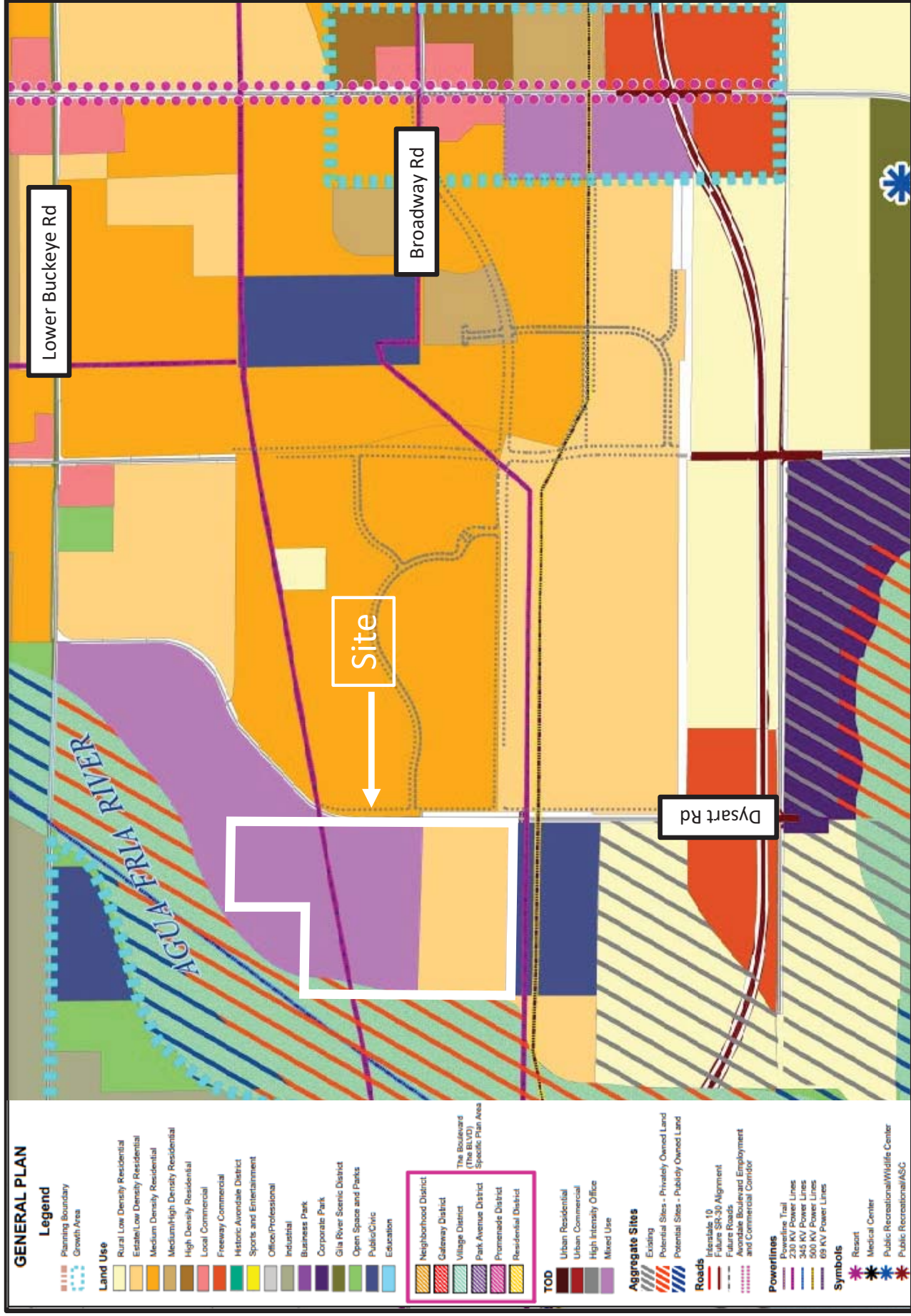


West of Intersection of Dysart Road and Broadway Road, Maricopa County



EXHIBIT B

Avondale General Plan Map

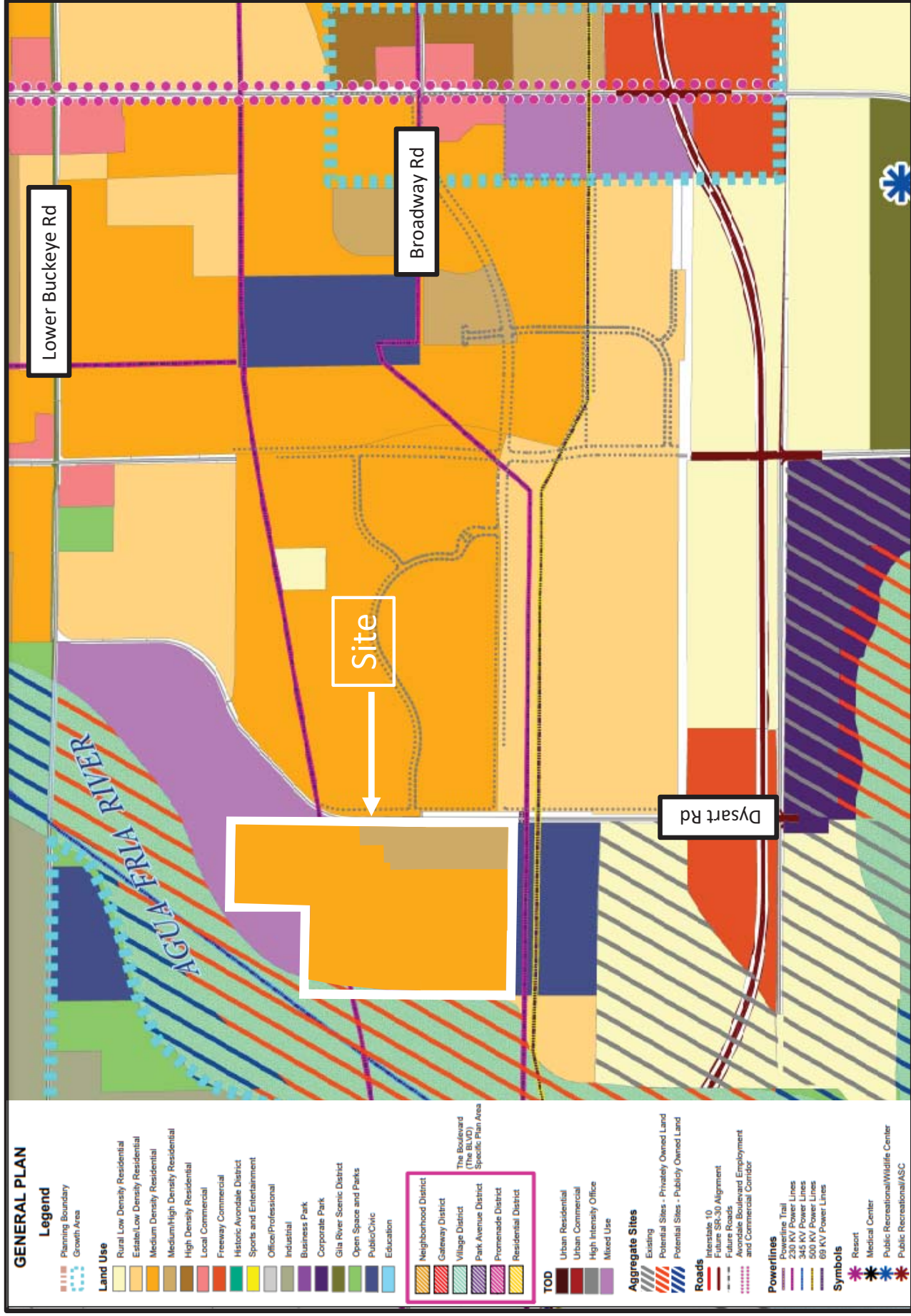


West of Intersection of Dysart Road and Broadway Road, Maricopa County



EXHIBIT C

Avondale Proposed General Plan Map



West of Intersection of Dysart Road and Broadway Road, Maricopa County



Three Rivers Ranch

**Neighborhood Meeting Summary
PL-22-0050/PL-22-0110**

Submitted August 30, 2022

A. Date, Time, and Location of the Meeting

The required neighborhood meeting for Case No. PL-22-0050/PL-22-0110 was held on Monday, August 29, 2022 at 6:00 PM. Due to the COVID-19 pandemic, the meeting was held virtually via Zoom.

The neighborhood meeting notification was noticed in accordance with the City's Zoning Ordinance Requirements. The applicant completed the legal newspaper advertisement with a publishing in the August 10, 2022 edition of the Southwest Valley Arizona Republic newspaper. Additionally, the applicant posted a public notice sign on August 10, 2022 and mailed notice letters to property owners within 1,000 feet. The affidavits are enclosed at **Tab A**.

B. Number of Participants

The applicant, along with the project development team, and a City of Avondale Planning representative attended the virtual neighborhood meeting. Commissioners Arnette and Castillo also attended the meeting in addition to two (2) interested neighbor.

C. Summary of Presentation, Questions and Applicant Responses

The applicant commenced the neighborhood meeting with introductions of the development team followed by an overview of the application request. The applicant provided a description of the surrounding area context, existing land use designations, site challenges and constraints, and specifics regarding the proposed community. The applicant also shared the proposed community plans. The applicant then offered an opportunity for questions and comments.

The neighborhood meeting attendees had general questions regarding: (1) traffic; (2) adequate school capacity; and (3) adequate water and sewer facilities. The applicant responded to attendee questions, stating that a traffic impact analysis demonstrates that with the requested improvements the surrounding roadway network can adequately handle the increased trips, certificates of adequate school facilities have been acquired from the Tolleson and Littleton School Districts, and that sufficient water and sewer facilities exist with connections to the site. The applicant also offered to provide attendees with copies of the Traffic Impact Analysis and the Certificates of Adequate School Facilities.

The Applicant will continue to be available to discuss the proposal with interested parties throughout the application process.

D. Summary

The feedback received regarding the proposed project was generally neutral with no significant concerns raised. The applicant will continue to be available to discuss the proposal with interested parties throughout the process.



CERTIFICATE OF ADEQUATE SCHOOL FACILITIES

An application for Rezoning and General Plan Amendment has been submitted to the City of Avondale, Development & Engineering Services Department, for review.

Project: Three Rivers Ranch
 Request: Rezone to PAD
 Current Density Allowed: 1 du/ac
 Total number of residential units proposed: 961

Project Manager: Jani Werlin
 Acreage/Parcel Size: 194 +/-
 Density Proposed: 5.05 du ac

As an authorized representative of the District, please complete the questionnaire below.

Does the District have adequate capacity to accommodate the estimated enrollment from the proposed development?

Yes No ☒

If answered no, please summarize the needs of the district as they relate to serving the students generated by the proposed development.

One times capital cost of adding estimated students is \$4.5M. Additional ongoing operational costs to adding estimated students is \$824K.

Is a school site within the proposed development needed?

Yes No ☒

If answered yes, how many acres is needed for the school site?

Is the district currently working with the developer to provide or help meet the needs identified above through a developer assistance or impact agreement? Yes ☒ No

If answered yes, please explain below:

The developer has signed the standard impact agreement.

****If additional writing space is needed, please attach pages to this form****

Date Reviewed: 09.06.2022

School District: Littleton Elementary School District #65

District Superintendent: Dr. Roger Freeman

Phone #: (623)759-2628

E-mail: freeman.roger@littletonaz.org

Signature: 

It is the developer's responsibility to ensure that this form is completed by an authorized representative of the District noted above and returned to the Development & Engineering Services Department prior to the scheduling of any City Council meetings

Development & Engineering Services Department

11465 W. Civic Center Drive, #110, Avondale, AZ 85323 • Phone (623) 333-4000 • Fax (623) 333-0400 • TDD (623) 333-0010
<https://www.avondaleaz.gov/government/departments/development-engineering-services>



CERTIFICATE OF ADEQUATE SCHOOL FACILITIES

An application for Annexation/Rezone/General Plan Amendment has been submitted to the City of Avondale, Development & Engineering Services Department, for review.

Project: Three Rivers Ranch Project Manager: Jani Wertin
Request: Rezone to PAD Acreage/Parcel Size: 224.41
Current Density Allowed: 194 +/- Density Proposed: 4.43
Total number of residential units proposed: 961

As an authorized representative of the District, please complete the questionnaire below.

Does the District have adequate capacity to accommodate the estimated enrollment from the proposed development?

Yes ☒ No ☐

If answered no, please summarize the needs of the district as they relate to serving the students generated by the proposed development.

Is a school site within the proposed development needed? Yes ☐ No ☒
If answered yes, how many acres is needed for the school site?

Is the district currently working with the developer to provide or help meet the needs identified above through a developer assistance or impact agreement? Yes ☐ No ☐

If answered yes, please explain below:

****If additional writing space is needed, please attach pages to this form****

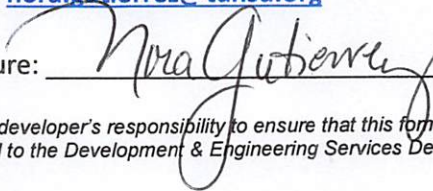
Date Reviewed: July 12, 2022

School District: Tolleson Union High School District #214

District Superintendent: Nora Gutierrez

Phone #: 623-478-4000

E-mail: nora.gutierrez@tuhsd.org

Signature: 

It is the developer's responsibility to ensure that this form is completed by an authorized representative of the District noted above and returned to the Development & Engineering Services Department prior to the scheduling of any City Council meetings

Development & Engineering Services Department

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www.avondale.org/developmentandservices

RESOLUTION NO. 1076-1122

A RESOLUTION OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, AMENDING THE CITY OF AVONDALE GENERAL PLAN REGARDING THE LAND-USE DESIGNATION OF APPROXIMATELY $\pm$ 196.89 ACRES GENERALLY LOCATED ALONG DYSART ROAD, WEST OF THE INTERSECTION WITH BROADWAY ROAD, AS SHOWN IN APPLICATION PL-22-0050 FROM MIXED USE AND ESTATE/LOW DENSITY RESIDENTIAL TO MEDIUM/HIGH DENSITY RESIDENTIAL AND MEDIUM DENSITY RESIDENTIAL.

WHEREAS, the City of Avondale General Plan (the “General Plan”) was adopted by the Mayor and Council of the City of Avondale (the “City Council”) on April 2, 2012, and ratified by the qualified electors of the City of Avondale on August 28, 2012; and

WHEREAS, the General Plan was readopted by the City Council on May 2, 2022, and ratified by the qualified electors of the City of Avondale on August 2, 2022; and

WHEREAS, the City Council desires to amend the General Plan to change the land-use designation for approximately $\pm$ 196.89 acres generally located along Dysart Road, west of the intersection with Broadway Road, from Mixed Use and Estate/Low Density to Medium/High Density Residential and Medium Density Residential, as shown in Application PL-22-0050 (the “General Plan Amendment”); and

WHEREAS, the General Plan establishes the authority and procedures for amendments to the General Plan land-use designations; and

WHEREAS, pursuant to ARIZ. REV. STAT. § 9-461.06 and the General Plan, the City of Avondale (the “City”) has consulted with, advised and provided the opportunity for public comment on the General Plan Amendment; and

WHEREAS, all due and proper notice of the public hearings on the General Plan Amendment held before the City of Avondale Planning Commission (the “Commission”) and the City Council was given in the time, form and substance provided by ARIZ. REV. STAT. § 9-461.06; and

WHEREAS, pursuant to the General Plan, the Commission held (i) the first public hearing on the proposed General Plan Amendment on September 21, 2022, and (ii) the second public hearing on October 21, 2022, after which the Commission recommended approval; and

WHEREAS, pursuant to the General Plan, the City Council held a public hearing on the proposed General Plan Amendment on November 21, 2022.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF AVONDALE, as follows:

SECTION 1. The recitals above are hereby incorporated as if fully set forth herein.

SECTION 2. The General Plan is hereby amended to change the land-use designation for approximately $\pm$ 196.89 acres generally located along Dysart Road, west of the intersection with Broadway Road, as shown in Application PL-22-0050, as more particularly described and depicted on Exhibit A, attached hereto and incorporated herein by reference, from Mixed Use and Estate/Low Density to Medium/High Density Residential and Medium Density Residential.

SECTION 3. The Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized and directed to take all steps necessary to carry out the purpose and intent of this Resolution.

PASSED AND ADOPTED by the Council of the City of Avondale, Arizona, November 21, 2022.

Kenneth N. Weise, Mayor

ATTEST:

Marcella Carrillo, City Clerk

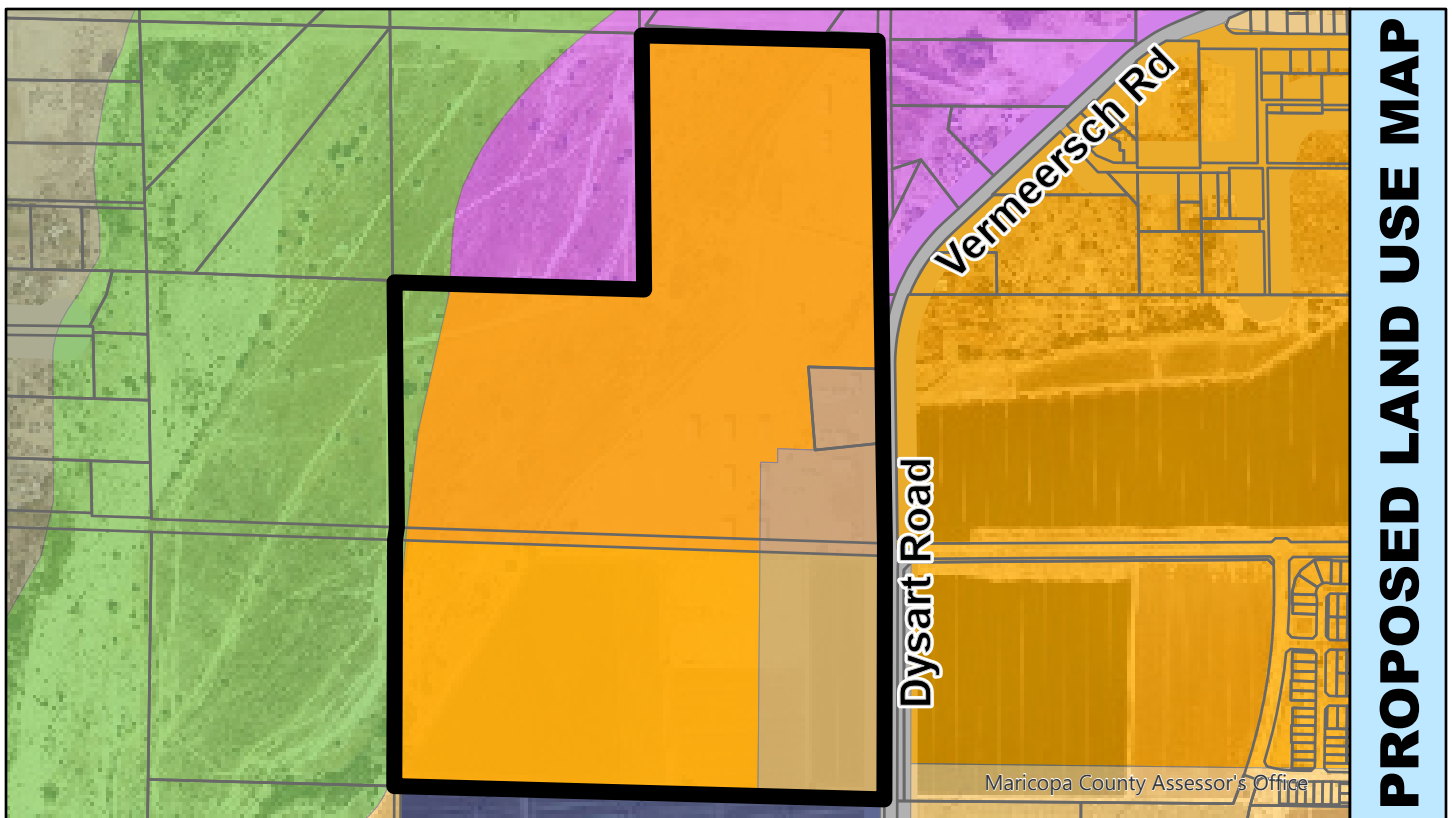
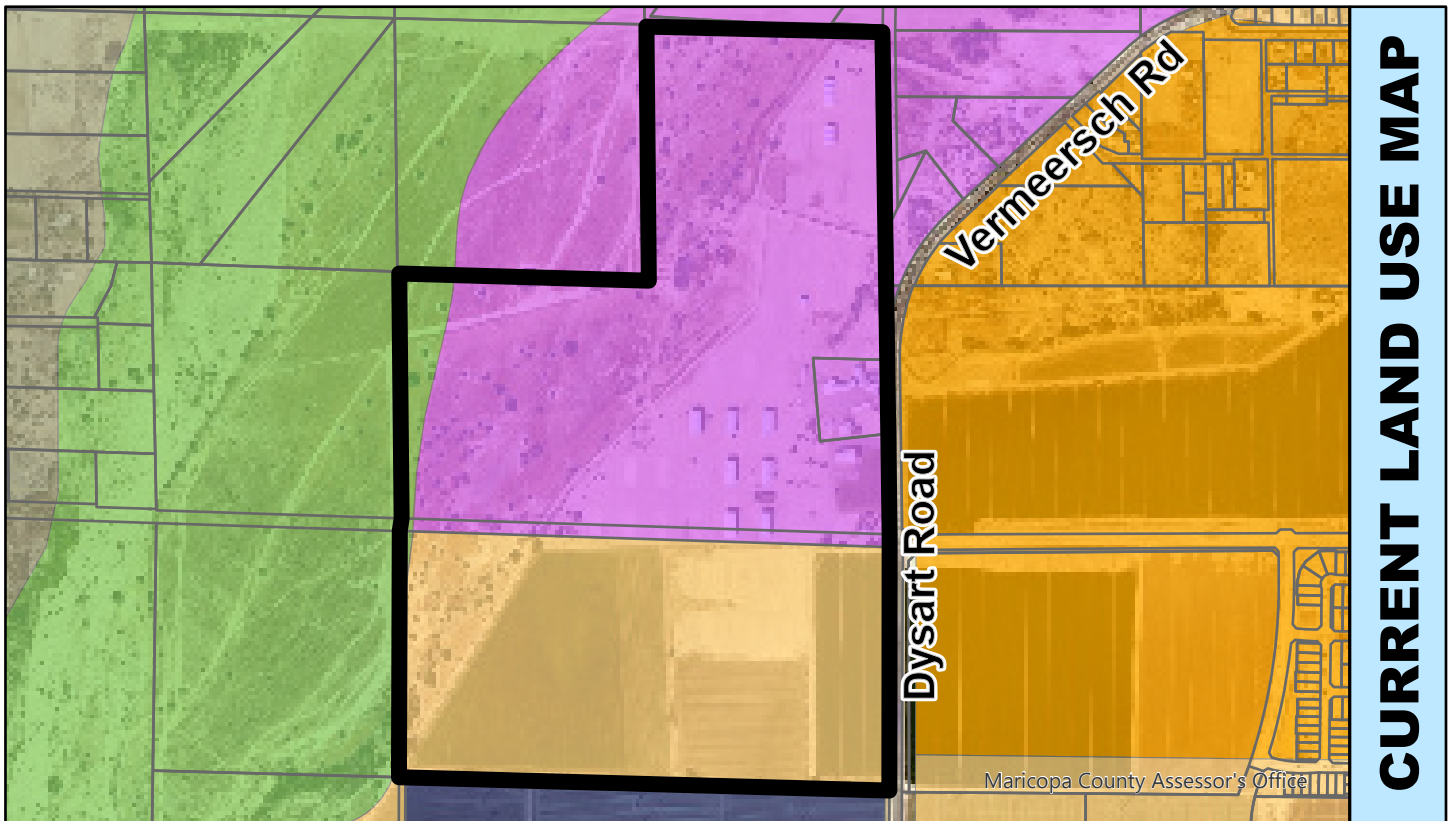
APPROVED AS TO FORM:

Nicholle Harris, City Attorney

EXHIBIT A
TO
RESOLUTION NO. 1076-1122

[General Plan Amendment Legal Description and Map]

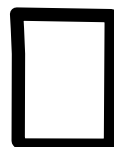
See following pages.



General Plan Land Use



- Low Density Residential
- Medium Density Residential
- Medium/High Density Residential
- Mixed Use
- Open Space / Parks



Subject Property



CITY COUNCIL REPORT

SUBJECT: Public Hearing and Ordinance 2064-1122 – Three Rivers Ranch Annexation – Application PL-22-0111

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Jodie Novak, Director, Development Services, (623) 333-4015

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

STRATEGIC OUTCOME: Creative and Sustainable Community Development

STRATEGY: Maintain and expand quality infrastructure and improve connectivity to City amenities.

PURPOSE:

City Council will hold a public hearing and consider a request to continue the item to December 5, 2022. The item is a request to adopt Ordinance 2064-1122, approving a request by Mr. Alex Hayes of Withey Morris PLC to begin the annexation process of approximately 196.89 acres located west of the intersection of Broadway Road and Dysart Road. The Council will take appropriate action.

BACKGROUND:

The proposed annexation request includes approximately 196.89 acres located west of the intersection of Broadway Road and Dysart Road (Exhibit A). Currently in the jurisdiction of Maricopa County, the 196.89-acre property is comprised of three parcels and an approximately 2.91-acre strip of adjoining Dysart Road right-of-way. The two larger parcels are owned by Three Rivers Ranch LLC and are 109.02 acres and 76.05 acres in size. The third smaller parcel is owned by Lakin Estrella Ranch Limited Partnership and is 3.50 acres in size.

The impetus for the proposed annexation and rezoning is to accommodate development facilitate development of the property with 530 single-family residential detached home lots, 120 townhomes (attached single-family residential homes), and 311 multi-family residential apartment units (referred to as build-to-rent single-family; however, these are 1-story and 2-story individual apartment units). Annexation into the City of Avondale is required in order for the City to provide water and sewer service to the planned facility.

Due to the proximity of the site to the Agua Fria river and the Avondale Wastewater Treatment Facility, the majority of the site falls within the 100-year flood plain, a small portion to the northwest falling within the regulatory floodway, as well as encroaches into the 1,000 foot Odor Control Easement to the south. Additionally, Western Area Power Authority (WAPA) has a powerline easement with active powerlines bisecting the site.

The property is presently zoned Rural (RU-43) in Maricopa County, which accommodates development of 1-

acre single-family residential lots (Exhibit B). As required by Arizona statute, upon annexation, the property will be assigned City zoning equivalent to the existing Maricopa County Zoning. The City-equivalent zoning to Maricopa County's RU-43 district is Avondale's Rural Residential (RR-43) district, which allows development of 1-acre single-family residential lots similar to what is presently permitted in the County.

The property's City General Plan 2030 land use category designation is Estate Low Density Residential (ELDR) and Mixed Use (Exhibit C). The Mixed Use designation currently covers the northern two-thirds of the site, approximately 118.43 acres, while the Estate/Low Density Residential (ELDR) designation covers the southern third of the site, approximately 75.56 acres. The ELDR category allows for development of detached single-family residential homes at a density of 1 to 2.5 dwelling units per acre. The target density in ELDR is 1 unit per acre. The Mixed Use category allows for a mixture of residential and commercial and does not have a density range or target density.

A concurrent request for a Major GPA to revise the General Plan Land Use Map from Estate/Low Density Residential (ELDR) and Mixed Use to Medium Density Residential (MDR) and Medium/High Density Residential (MHDR) has been submitted alongside this application. The Medium/High Density Residential (MHDR) designation will cover a strip along Dysart Road, approximately 37.15 acres, while the Medium Density Residential (MDR) designation will cover the remainder of the site, approximately 156.84 acres. The MDR category accommodates development of suburban detached single-family residential within a density range of 2.5 to 4.0 dwelling units per acre, with a target density of 2.5. The MHDR category accommodates development of a variety of housing choices in a planned and clustered setting unique to Avondale within a density range of 4.0 to 12.0 dwelling units per acre, with a target density of 8.

Though upon annexation the property will be initially assigned RR-43 zoning as discussed above, a concurrent application to rezone the site to Three Rivers Ranch PAD. The rezoning will be scheduled to be acted upon by City Council on the same agenda as approval of the annexation request.

The existing uses and zoning of adjacent properties include:

NORTH: Agua Fria River, zoned General Industrial (A-1).

EAST: East of Dysart Road- Vacant school site owned by Tolleson Union High School District, located in unincorporated Maricopa County. Phase 5 of Brookfield Alamar, a master planned community zoned Planned Area Development and approved for 3,695 total single-family dwellings, 1,145 of which are to be located in Phase 5. The phase near this property (Phase 5) is currently undeveloped, and the construction timeline is unknown.

Northeast of site- Harvest HOC of Avondale Dispensary and single-family residential, zoned General Industrial (A-1). Vacant land, zoned Agricultural (AG).

SOUTH: Avondale Wastewater Treatment Facility, zoned Agricultural (AG).

WEST: Agua Fria River, zoned General Industrial (A-1).

SUMMARY OF REQUEST:

At its meeting on October 17, 2022, Council provided Staff with authorization to proceed with the proposed Three Rivers Ranch annexation. A concurrent rezoning request for this site is scheduled to be heard before Planning Commission on October 19, 2022 and for a public hearing at the City Council on November 21, 2022. This request includes rezoning 193.98 acres from Rural Residential (RR-43) to Three Rivers Ranch Planned Area Development (PAD). Staff and the project applicant, Mr. Alex Hayes, Withey Morris PLC, have subsequently completed all statutorily required steps leading up to the public hearing scheduled for tonight's meeting, including:

- **October 17, 2022:** Filing of the blank annexation petition with the Maricopa County Recorder (Exhibit E).

- **October 19, 2022:** Publication of a display ad in the Southwest Valley Republic giving notice of tonight's public hearing.
- **On or before October 23, 2022:** Posting of three signs on the land to be annexed giving notice of tonight's public hearing.
- **On or before October 23, 2022:** Notice of tonight's public hearing mailed to all property owners within the proposed annexation boundary, all utility companies with facilities located on or adjacent to the annexation boundary, and the Chairman of the Maricopa County Board of Supervisors.

DISCUSSION:

As required by Arizona statute, notice of the annexation has been provided to all owners within the annexation boundary. The applicant is expected to bring the executed petition, signed by one-half or more of the persons owning real and personal property that would be subject to taxation by the City in the event of annexation, in both assessed valuation and ownership, to the meeting on November 21, 2022.

At tonight's meeting, Council will consider adoption of the Ordinance approving the requested annexation. To date, no comments on the request have been received by Staff.

BUDGET IMPACT:

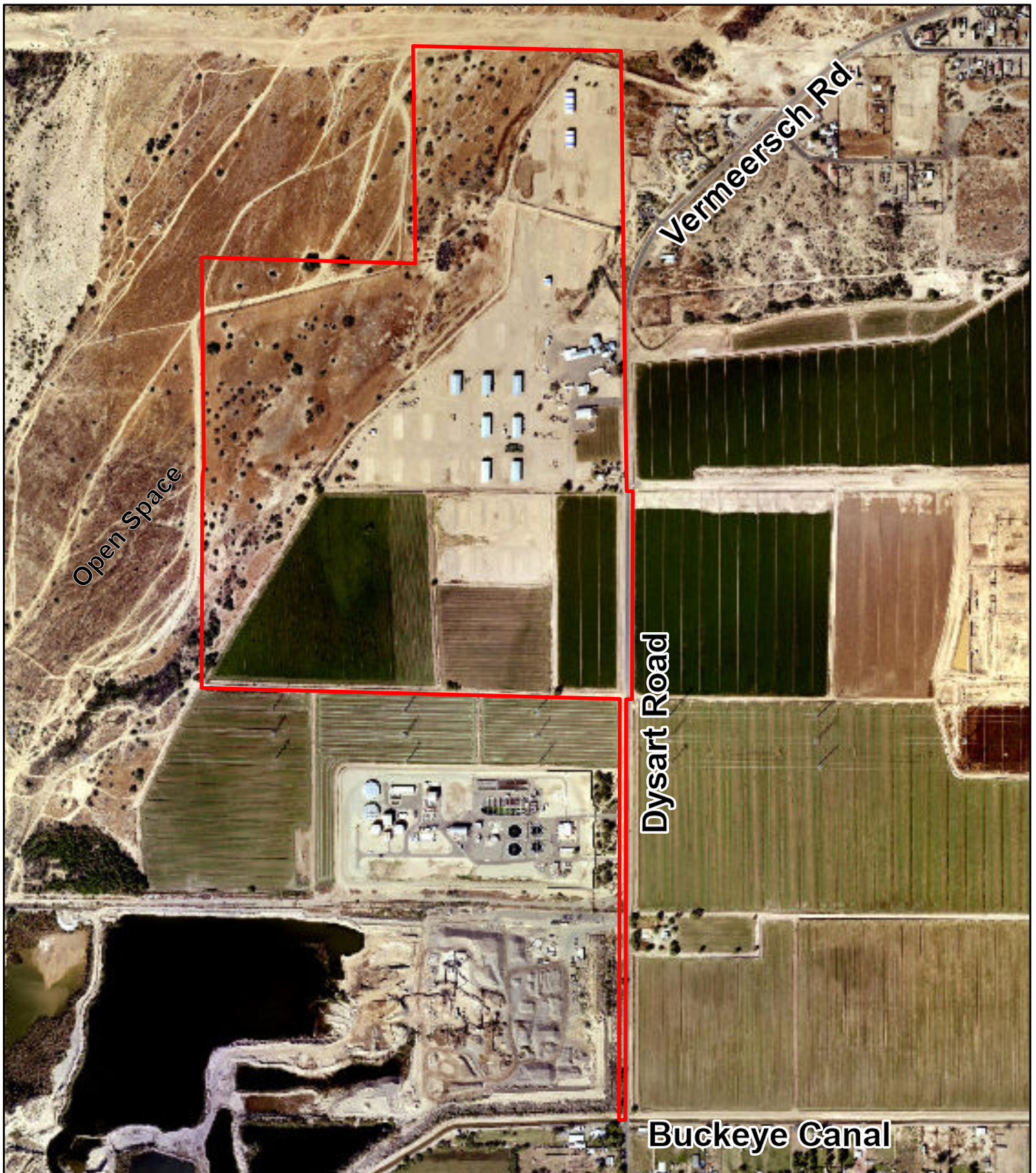
The annexation application included the required \$6,000.00 fee that will be used towards costs related to the processing of the annexation. As noted previously, providing authorization to proceed does not obligate the City Council to approve the proposed annexation at a future meeting.

If the proposed annexation is approved at a future meeting and the property is developed within the City, revenue from construction sales tax, property tax, water and sewer fees, and development impact fees can be expected. Conversely, the City will incur costs of serving the property with Avondale services, including, but not limited to, water, sewer, sanitation, police, fire, and street services.

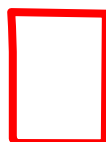
RECOMMENDATION:

City Council will conduct a public hearing and **ADOPT** Ordinance 2064-1122 annexing approximately 196.89 acres generally located west of the intersection of Broadway Road and Dysart Road, PL-22-0111 Three Rivers Ranch.

Contact person for document distribution: Jani Wertin, Jodie Novak

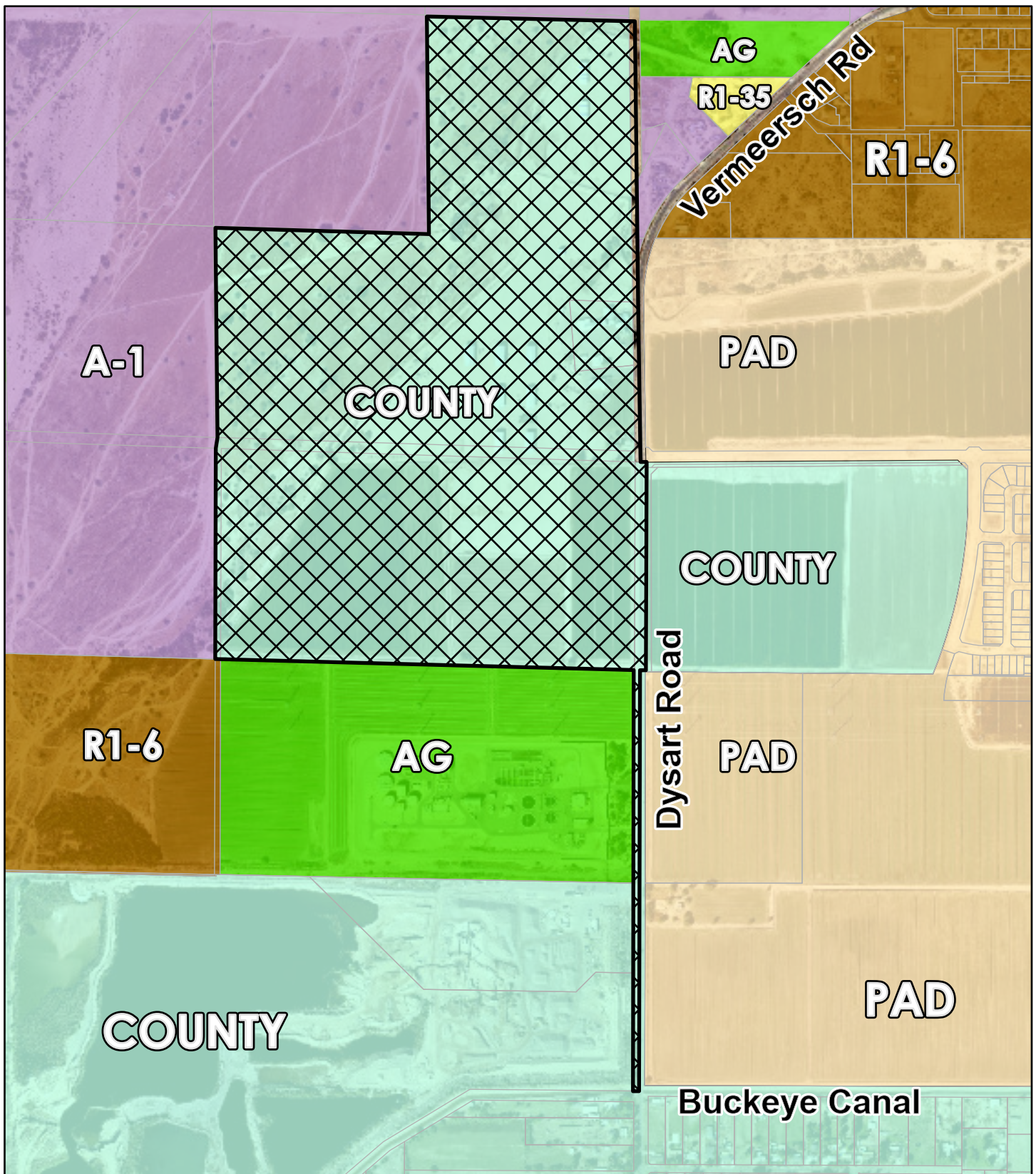


Aerial Photograph

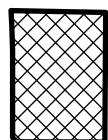


Subject Property



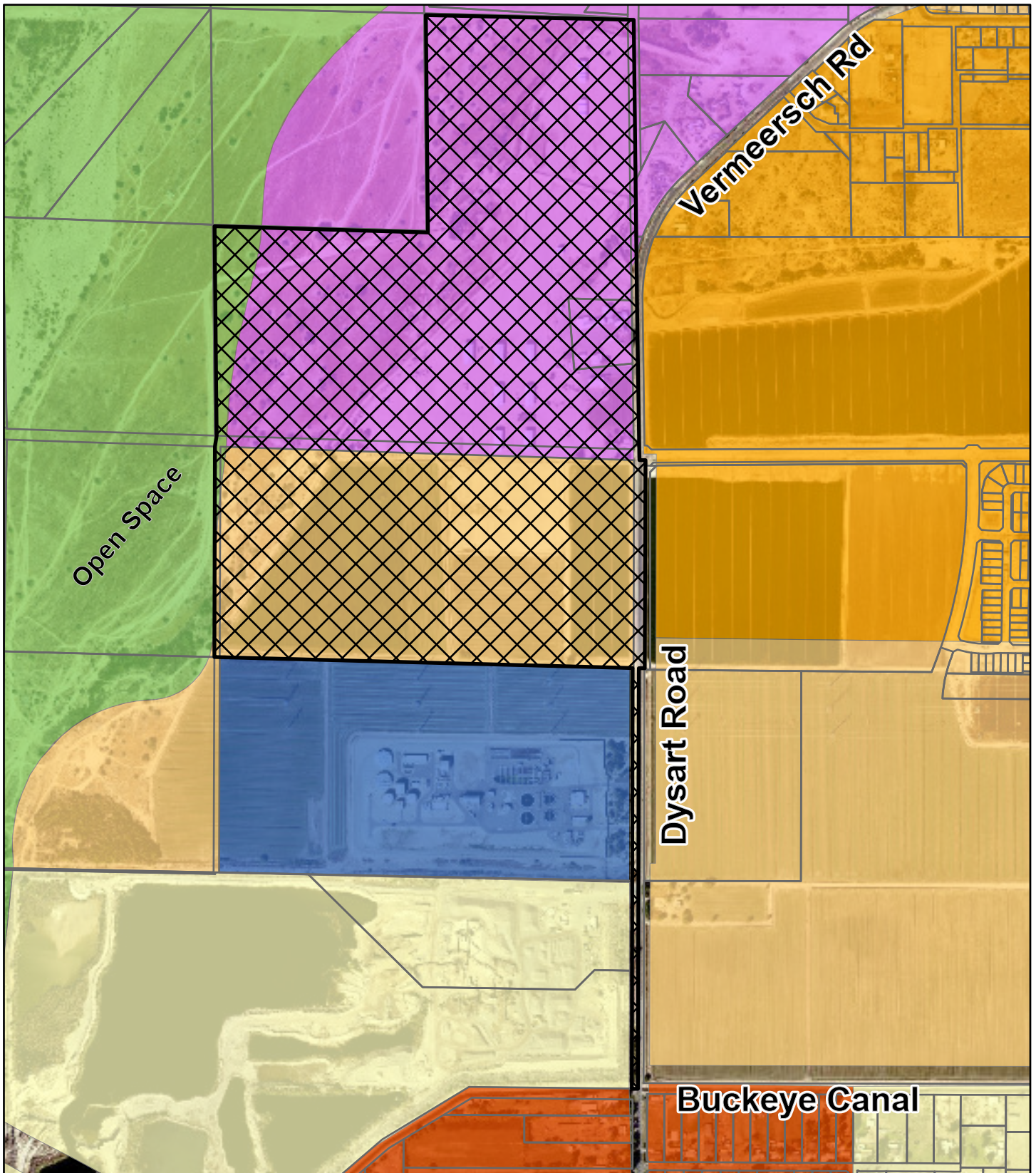


Zoning Vicinity



Subject Property

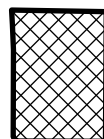




General Plan Land Use



- Low Density Residential
- Medium Density Residential
- Public / Civic
- Mixed Use
- Freeway / Commercial



Subject Property



ANNXPETAFFTHRERR-6-1-1--
yorkm

When recorded mail to:

Attn: Development and Engineering Services Department
City of Avondale
11465 W. Civic Center Drive, Suite 110
Avondale, Arizona 85323

BLANK ANNEXATION PETITION AND AFFIDAVIT

THREE RIVERS RANCH - ANNEXATION

Parcel Number or Legal Description:	Name of Property Owner:	Phone Number:
Mailing Address:	Signature	Date

Parcel Number or Legal Description:	Name of Property Owner:	Phone Number:
Mailing Address:	Signature	Date

Parcel Number or Legal Description:	Name of Property Owner:	Phone Number:
Mailing Address:	Signature	Date

Parcel Number or Legal Description:	Name of Property Owner:	Phone Number:
Mailing Address:	Signature	Date

Parcel Number or Legal Description:	Name of Property Owner:	Phone Number:
Mailing Address:	Signature	Date

Parcel Number or Legal Description:	Name of Property Owner:	Phone Number:
Mailing Address:	Signature	Date

Thence departing said South line, North 00°10'41" East, along said West line, a distance of 1,313.42 feet to the South Quarter corner of said Section 22;

Thence departing said West line, North 00°34'13" West, along the West line of the Southwest Quarter of said Section 22, a distance of 33.03 feet;

Thence departing said West line, South 88°07'16" East, parallel with and 33.00 feet Northerly, as measured at right angles to the South line of the Southeast Quarter of said Section 22, a distance of 10.01 feet;

Thence departing said parallel line, North 00°34'13" West, parallel with and 10.00 feet Easterly, as measured at right angles to the West line of said Southeast Quarter of Section 22, a distance of 1,275.57 feet;

Thence departing said parallel line, South 88°21'57" East, parallel with and 10.00 feet Southerly, as measured at right angles to the North line of the Southwest Quarter of the Southeast Quarter of said Section 22, a distance of 1,290.10 feet;

Thence departing said parallel line, North 00°41'20" West, parallel with and 10.00 feet Easterly, as measured at right angles to the West line of the Northeast Quarter of the Southeast Quarter of said Section 22, a distance of 1,324.26 feet;

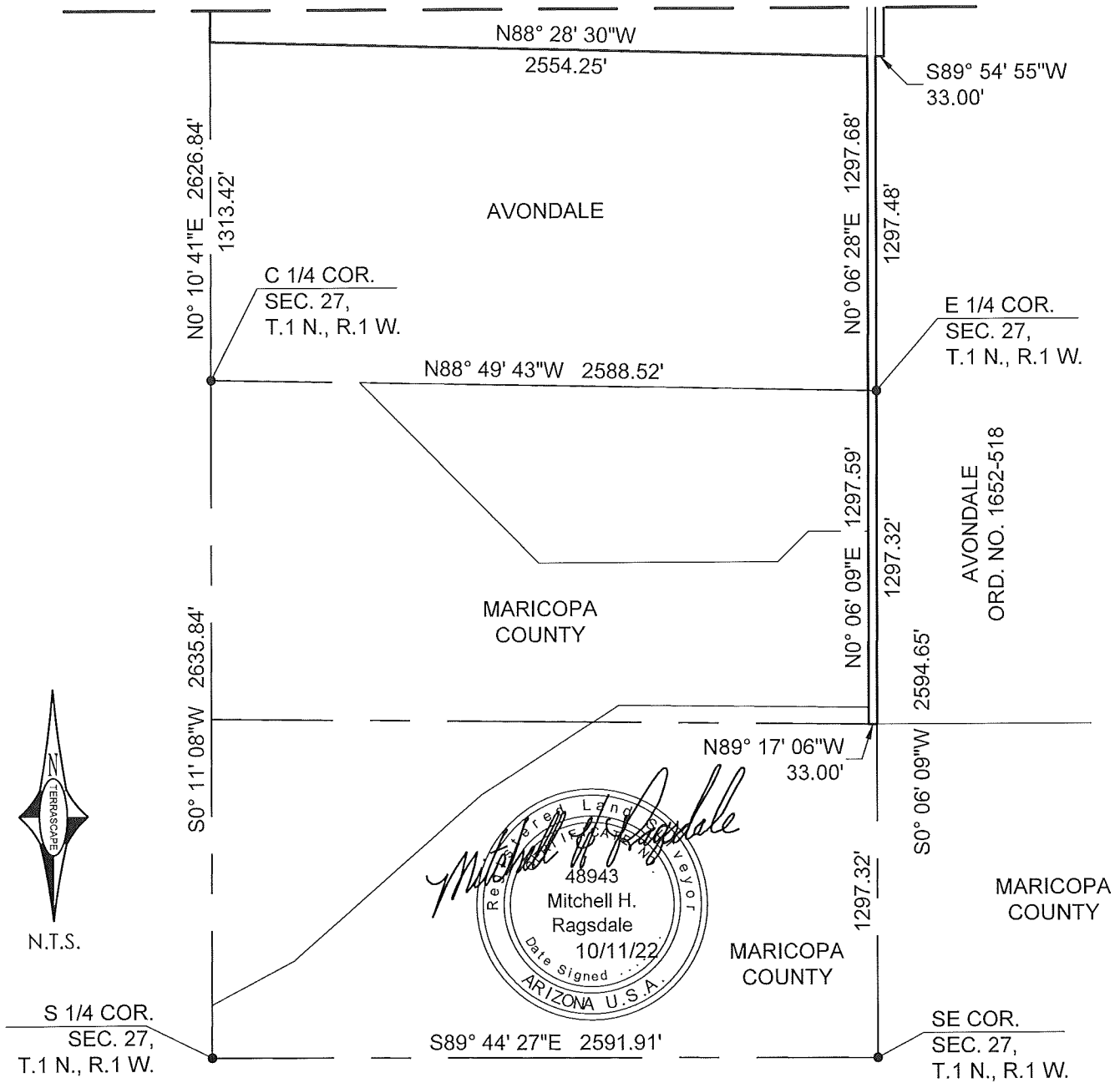
Thence departing said parallel line, South 88°36'43" East, parallel with and 10.00 feet Southerly, as measured at right angles to the North line of the Southeast Quarter of said Section 22, a distance of 1,277.15 feet to the East line of the Southeast Quarter of said Section 22;

Thence departing said parallel line, South 00°48'24" East, along said East line, a distance of 2,649.70 feet to the Point of Beginning.

Containing 8,576,207.55 square feet or 196.88 acres, more or less.



SEE SHEET 1



645 E. MISSOURI AVE., STE. 420
PHOENIX, ARIZONA 85012

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EXHIBIT

ANNEXATION LEGAL DESCRIPTION

THREE RIVERS RANCH
AVONDALE

Project No. 1273
Sheet 2 of 3

Date : 10/11/22


Development & Engineering Services Department

11465 W. Civic Center Drive, Suite #110

Avondale, Arizona 85323-6804

Phone: (623) 333-4000 Fax: (623) 333-0420

Annexation Affidavit

Personally appears before me, Michelle Simerdla, who, first being duly sworn, deposes and says as follows:

1. I make this affidavit of my own personal knowledge.
2. I am a Planner of the City of Avondale, Arizona, and I am qualified to make this affidavit on behalf of and for the City.
3. I have made a diligent search of the records of the Office of the Clerk of the City of Avondale and of the Office of the Maricopa County Recorder for any annexation filing which might involve territory sought to be annexed in the City Annexation Petition, which is filed herewith with exhibits, in the Office of the Maricopa County Recorder.
4. I hereby affirm, pursuant to A.R.S. §9-471 (A) (6), that no part of the territory for which the attached Annexation Petition is filed is already subject to an earlier filing for annexation.

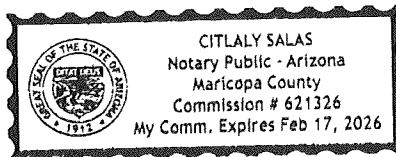
Michelle Simerdla
Michelle Simerdla, Senior Planner

SWORN TO AND SUBSCRIBED before me

This 17 day of October, 2022

[Signature]
Notary Public for the State of Arizona

My commission expires: February 17, 2026



ORDINANCE NO. 2064-1122

AN ORDINANCE OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, EXTENDING AND INCREASING THE CORPORATE LIMITS OF THE CITY OF AVONDALE BY ANNEXING THERETO CERTAIN TERRITORY CONTIGUOUS TO THE EXISTING CITY LIMITS.

WHEREAS, the City of Avondale (the “City”) has received a petition in writing (the “Annexation Petition”), accompanied by a map of certain territory hereinafter more particularly described and depicted (the “Annexation Area”), asking that the Annexation Area be annexed into the City by extending and increasing the corporate limits of the City so as to embrace the Annexation Area; and

WHEREAS, the Annexation Petition has been filed and presented to the Council of the City of Avondale (the “City Council”), signed by the owners of more than one-half in value of the real and personal property and more than one-half of the persons owning real and personal property as would be subject to taxation by the City in the event of annexation within the Annexation Area, as shown by the last assessment of said Annexation Area; and

WHEREAS, the City Council has determined the Annexation Area is contiguous to the City’s corporate limits in accordance with ARIZ. REV. STAT. § 9-471; and

WHEREAS, the City Council desires to grant the request set forth in the Annexation Petition and extend and increase the City’s corporate limits to include the Annexation Area; and

WHEREAS, said Annexation Petition sets forth a true and correct legal description of all the exterior boundaries of the entire Annexation Area and had attached thereto at all times an accurate map of the Annexation Area; and

WHEREAS, no alterations increasing or reducing the Annexation Area have been made after the Annexation Petition was signed by any owner of real and personal property in such Annexation Area; and

WHEREAS, pursuant to ARIZ. REV. STAT. § 9-471(L), the City is required to adopt a zoning classification for the Annexation Area that permits densities and uses no greater than that permitted by Maricopa County immediately before the annexation; and

WHEREAS, the Annexation Area is currently zoned by Maricopa County as Maricopa County Rural RU-43 zoning classification; and

WHEREAS, the provisions of ARIZ. REV. STAT. § 9-471, and amendments thereto, have been fully observed; and

WHEREAS, proper and sufficient certification and proof of the foregoing facts are now on file in the office of the City Clerk together with a true and correct copy of the original Annexation Petition, which original Annexation Petition is on file in the office of the Maricopa County Recorder.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF AVONDALE as follows:

SECTION 1. The recitals above are hereby incorporated as if fully set forth herein.

SECTION 2. The Annexation Area, as more fully described and depicted in Exhibit A, attached hereto and incorporated herein by reference, is hereby annexed to the City and the present corporate limits are hereby extended and increased to include the Annexation Area.

SECTION 3. The land-use classification for the Annexation Area is hereby designated as Rural Residential (RR-43) under the City of Avondale Zoning Ordinance.

SECTION 4. The City Clerk is hereby authorized and directed to file with the Maricopa County Recorder's Office a fully executed copy of this Ordinance, together with an accurate map of the Annexation Area.

SECTION 5. If any provision of this Ordinance is for any reason held by any court of competent jurisdiction to be unenforceable, such provision or portion hereof shall be deemed separate, distinct and independent of all other provisions and such holding shall not affect the validity of the remaining portions of this Ordinance.

SECTION 6. For purposes of elections there are no residences located in the Annexation Area.

[SIGNATURES ON FOLLOWING PAGE]

PASSED AND ADOPTED by the Council of the City of Avondale, Arizona,
November 21, 2022.

Kenneth N. Weise, Mayor

ATTEST:

Marcella Carrillo, City Clerk

APPROVED:

Nicholle Harris, City Attorney

EXHIBIT A
TO
ORDINANCE 2064-1122

[Legal description and map of Annexation Area]

See following pages.

**Annexation Legal Description
For
Three Rivers Ranch**

Located in the Southeast Quarter of Section 22, the Northeast Quarter of Section 27, and the Northwest Quarter of Section 26, Township 1 North, Range 1 West, Gila and Salt River Meridian, Maricopa County, Arizona. Described as follows:

Commencing at the Southeast corner of said Section 22, from which the East Quarter corner of said Section 22 bears North 00°48'24" West, a distance of 2659.71 feet;

Thence South 00°06'28" West, along the East line of the Northeast Quarter of said Section 27, a distance of 65.00 feet,

Thence departing said East line, North 89°48'16" East, a distance of 33.00 feet;

Thence South 00°06'28" West, parallel with and 33.00 feet Easterly, as measured at right angles to said East line, a distance of 1,232.54 feet, to the South line of the Northwest Quarter of the Northwest Quarter of said Section 26;

Thence departing said parallel line, South 89°54'55" West, along said South line, a distance of 33.00 feet to the East line of the Northeast Quarter of said Section 27;

Thence South 00°06'28" West, along said East line, a distance of 1,297.48 feet to the East Quarter corner of said Section 27;

Thence departing said East line, South 00°06'09" West, along the East line of the Southeast Quarter of said Section 27, a distance of 1,297.32 feet to the South line of the Northeast Quarter of the Southeast Quarter of said section 27;

Thence departing said East line, North 89°17'06" West, along said South line, a distance of 33.00 feet;

Thence departing said South line, North 00°06'09" East, parallel with and 33.00 feet Westerly, as measured at right angles to last said East line, a distance of 1,297.59 feet to the South line of the Northeast Quarter of said Section 27;

Thence departing said parallel line, North 00°06'28" East, parallel with and 33.00 feet Westerly, as measured at right angles to the East line of said Northeast Quarter, a distance of 1,297.68 feet to the South line of the North half of said Northeast Quarter;

Thence departing said parallel line, North 88°28'30" West, along said South line, a distance of 2,554.25 feet to the West line of said Northeast Quarter;

Thence departing said South line, North 00°10'41" East, along said West line, a distance of 1,313.42 feet to the South Quarter corner of said Section 22;

Thence departing said West line, North 00°34'13" West, along the West line of the Southwest Quarter of said Section 22, a distance of 33.03 feet;

Thence departing said West line, South 88°07'16" East, parallel with and 33.00 feet Northerly, as measured at right angles to the South line of the Southeast Quarter of said Section 22, a distance of 10.01 feet;

Thence departing said parallel line, North 00°34'13" West, parallel with and 10.00 feet Easterly, as measured at right angles to the West line of said Southeast Quarter of Section 22, a distance of 1,275.57 feet;

Thence departing said parallel line, South 88°21'57" East, parallel with and 10.00 feet Southerly, as measured at right angles to the North line of the Southwest Quarter of the Southeast Quarter of said Section 22, a distance of 1,290.10 feet;

Thence departing said parallel line, North 00°41'20" West, parallel with and 10.00 feet Easterly, as measured at right angles to the West line of the Northeast Quarter of the Southeast Quarter of said Section 22, a distance of 1,324.26 feet;

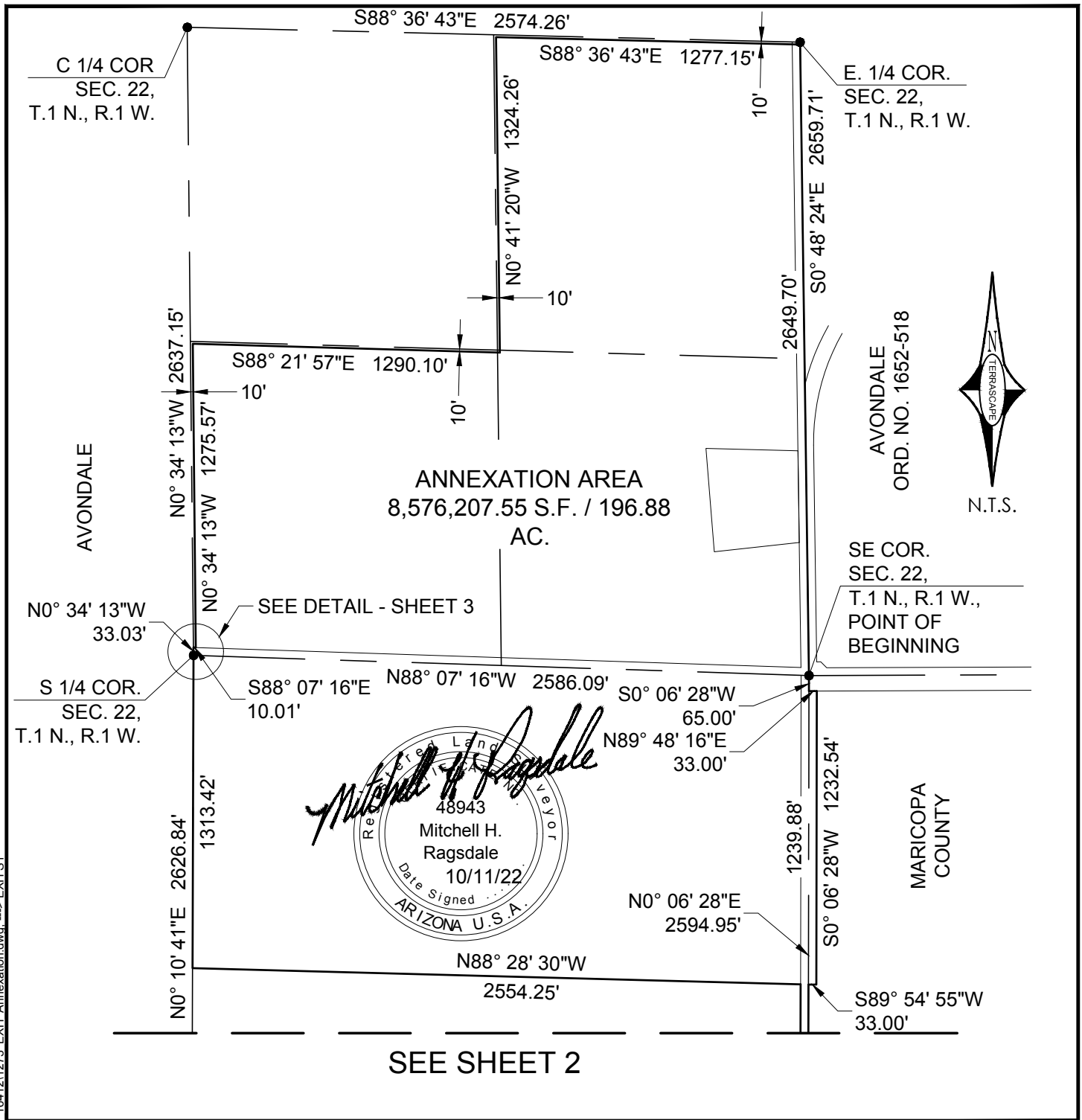
Thence departing said parallel line, South 88°36'43" East, parallel with and 10.00 feet Southerly, as measured at right angles to the North line of the Southeast Quarter of said Section 22, a distance of 1,277.15 feet to the East line of the Southeast Quarter of said Section 22;

Thence departing said parallel line, South 00°48'24" East, along said East line, a distance of 2,649.70 feet to the Point of Beginning.

Containing 8,576,207.55 square feet or 196.88 acres, more or less.



Plotted: 10/11/22 - 1:37 PM, By: mragdale
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EXHIBIT

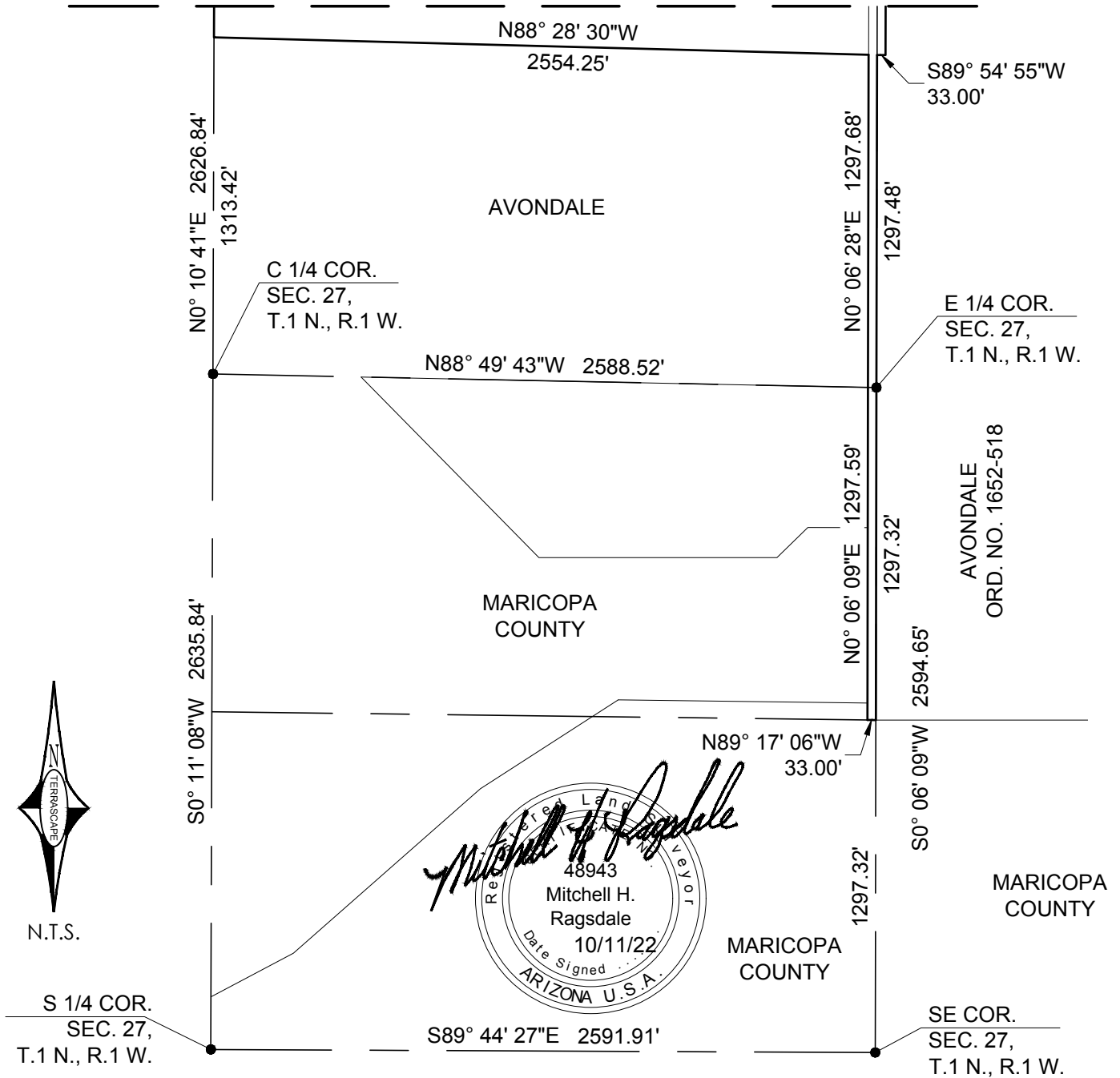
ANNEXATION LEGAL DESCRIPTION

THREE RIVERS RANCH
AVONDALE

Project No. 1273
Sheet 1 of 3

Date : 10/11/22

SEE SHEET 1



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EXHIBIT

ANNEXATION LEGAL DESCRIPTION

THREE RIVERS RANCH

AVONDALE

Project No. 1273
Sheet 2 of 3

Date : 10/11/22

C 1/4 COR.
SEC. 22,
T.1 N., R.1 W.

DETAIL

N0° 34' 13"W 2637.15'
2604.11'
N0° 34' 13"W
1275.57'

S88° 07' 16"E
10.01'

SE COR.
SEC. 22,
T.1 N., R.1 W.,
POINT OF
BEGINNING

N88° 07' 16"W
2586.09'

S 1/4 COR.
SEC. 22,
T.1 N., R.1 W.

N0° 10' 41"E 2626.84'
1313.42'

C 1/4 COR.
SEC. 27,
T.1 N., R.1 W.



N.T.S.



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EXHIBIT

ANNEXATION LEGAL DESCRIPTION

THREE RIVERS RANCH

AVONDALE

Project No. 1273
Sheet 3 of 3

Date : 10/11/22

CITY COUNCIL REPORT

SUBJECT: Public Hearing and Ordinance 2065-1122 – Three Rivers Ranch Rezoning to Planned Area Development (PAD) – Application PL-22-0110

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Jodie Novak, Director, Development Services, (623) 333-4015

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

Strategic Area: Creative and Sustainable Community Development

Strategy: Develop diverse housing options, to include housing that is affordable to workers and close to their jobs. And, maintain and expand quality infrastructure and improve connectivity to city amenities.

PURPOSE:

City Council will hold a public hearing and consider a request to continue the item to December 5, 2022. The item is a request to adopt Ordinance 2065-1122, approving a request by Alex Hayes of Withey Morris PLC to rezone approximately 193.98 acres located west of the intersection of Broadway Road and Dysart Road from Rural Residential (RR-43) to Planned Area Development (PAD). The proposed Three Rivers Ranch PAD is planned for the development of 530 single-family residential detached home lots, 120 townhomes (attached single-family residential homes), and 311 multi-family residential apartment units (1- and 2-story individual casita style apartment units). The Council will take appropriate action.

BACKGROUND:

The 193.98-acre subject property (Exhibits A and B) is located west of the intersection of Broadway Road and Dysart Road, in the jurisdiction of Maricopa County. Due to the proximity of the site, adjacent to the Agua Fria River and the Avondale Wastewater Treatment Facility, the majority of the site falls within the 100-year flood plain and a small portion to the northwest falls within the regulatory floodway. It also encroaches into the 1,000-foot Odor Control Easement to the south. Additionally, Western Area Power Authority (WAPA) has a powerline easement with active powerlines bisecting the site.

The property is currently in the jurisdiction of Maricopa County and has a zoning designation of Rural (RU-43). The RU-43 zoning allows for development of 1-acre single-family residential lots. A separate application to annex the subject property into the City of Avondale is in process. If the proposed annexation is approved, the property will be assigned City of Avondale zoning that is equivalent to the site's current Maricopa County zoning, which is Rural Residential (RR-43). Approval of the annexation is required in order for the Council to consider approval of this rezoning request.

The property's Avondale General Plan 2030 land use category designation is Estate Low Density Residential

(ELDR) and Mixed Use (Exhibit C). The Mixed Use designation currently covers the northern two-thirds of the site, approximately 118.43 acres, while the Estate/Low Density Residential (ELDR) designation covers the southern third of the site, approximately 75.56 acres. The ELDR category allows for development of detached single-family residential homes at a density of 1 to 2.5 dwelling units per acre. The target density in ELDR is 1 unit per acre. There is a separate application to amend these designations of Estate Low Density Residential (ELDR) and Mixed Use to Medium Density Residential (MDR) and Medium/High Density Residential (MHDR). The Medium/High Density Residential (MHDR) designation would cover a strip along Dysart Road, approximately 37.15 acres, while the Medium Density Residential (MDR) designation would cover the remainder of the site, approximately 156.84 acres.

The existing uses and zoning of surrounding properties include:

- **North:** Agua Fria River, zoned General Industrial (A-1).
- **East of Dysart:** Vacant school site owned by Tolleson Union High School District, located in unincorporated Maricopa County. Phase 5 of Brookfield Alamar, a master-planned community zoned Planned Area Development is approved for 3,695 total single-family dwellings, 1,145 of which are to be located in Phase 5. The phase near this property (Phase 5) is currently undeveloped, and the construction timeline is unknown.
- **Northeast of Site:** Harvest HOC of Avondale Dispensary and single-family residential, zoned General Industrial (A-1). Vacant land, zoned Agricultural (AG).
- **South:** Avondale Wastewater Treatment Facility, zoned Agricultural (AG).
- **West:** Agua Fria River, zoned General Industrial (A-1).

SUMMARY OF REQUEST:

Subject to City Council approval of the concurrent Annexation and General Plan Amendment application briefly discussed above, the applicant is requesting to rezone the 193.98-acre property from Rural Residential (RR-43) to Planned Area Development (PAD) for single-family and multi-family residential.

The proposed Three Rivers Ranch PAD Narrative, included as Exhibit D, details permitted uses, development standards, open space, conceptual landscape plan, conceptual hardscape details, conceptual wall plan, and other requirements that will guide future development of the site.

A total of 961 units are being proposed. Of these units, 530 are to be platted single-family residential home lots, 311 are individual casita style apartment units, and 120 are townhomes, resulting in a density of 5.05 net dwelling units per acre for the overall site.

The development is partitioned into seven (7) parcels (Parcels 1-7). Parcels 1-5 are the 530 single-family residential platted lots developing to R1-6 zoning development standards with deviations to the lot width, lot depth, building coverage, and setbacks, which is further explained in the analysis section of this report. The requested deviations would result in lots with a dimension of 50 feet wide by 120 feet deep.

Parcel 6 is the 120 townhomes developing to R-3 zoning development standards with deviations to the lot width, lot depth, building coverage, and setbacks, which is further explained in the analysis section of this report. The requested deviations would result in lots with a dimension of 22 feet by 52 feet.

Parcel 7 is the 311 multi-family residential apartment units developing to R-3 zoning development standards with deviations to the setbacks and open space requirements, which are further explained in the analysis section of this report.

Access to the site will be provided from two (2) entry points off of Dysart Road, currently planned via Three Rivers Ranch Parkway and an unnamed road. Emergency access will be provided through two (2) easements

on the site, one to the north via Parcel 2 and one to the south via Parcel 5.

The design theme of the proposed Three Rivers Ranch community takes inspiration from the history and geography of the site, providing offerings that create the look and feel of being in a rural river basin or agricultural community. This theme will be reflected throughout the development's trail system and open space, landscaping, walls, and hardscapes.

The Three Rivers Ranch PAD proposes an extensive trail system with connections between each parcel, as well as the Agua Fria River corridor. In addition to the trail system, the development includes a multi-generational park, pocket parks spread throughout the development, and private open space in the apartment community. A stipulation has been added to include the development of a multi-use trail along the Agua Fria River Corridor as required by the City's Open Space and Trails Plan and the General Engineering Requirements.

PUBLIC PARTICIPATION:

A neighborhood meeting (Exhibit E) was held on August 29, 2022. An overview of the discussion topics is outlined in the Neighborhood Meeting Summary, attached as Exhibit E. In addition to City Staff and the applicant's team, four (4) people attended the virtual meeting, two (2) of which were Planning Commissioners.

General questions asked were regarding (1) traffic; (2) adequate school capacity; and (3) adequate water and sewer facilities. The applicant responded to attendee questions stating that a Traffic Impact Analysis demonstrates the surrounding roadway network can adequately handle the increased trips, certificates of adequate school facilities have been acquired from the Tolleson and Littleton School Districts, and that sufficient water and sewer facilities exist with connections to the site. The applicant also offered to provide attendees with copies of the Traffic Impact Analysis and the Certificates of Adequate School Facilities.

All required notifications for the Planning Commission and City Council public hearings have been completed. To date, no public comments regarding this project have been received.

CERTIFICATE OF ADEQUATE SCHOOL FACILITIES:

The property is located in the service areas of the Littleton Elementary School District (LESD) and the Tolleson Union High School District (TUHSD).

LESD has provided the City with a Certificate of Adequate School Facilities signed by Superintendent Roger Freeman (Exhibit F) which states that the district does not have adequate capacity to accommodate the estimated enrollment from the proposed Three Rivers Ranch development and that the anticipated classroom impact will be addressed by the developer agreement in place.

TUHSD has provided the City with a Certificate of Adequate School Facilities signed by Superintendent Nora Gutierrez (Exhibit F) stating that the district has adequate capacity and no school site within the development is needed.

PLANNING COMMISSION ACTION:

On October 19, 2022, the Planning Commission conducted a public hearing on this request and the application was recommended for denial. The Commission had a number of questions regarding future growth of the City, environmental impacts, traffic, infrastructure improvements, and availability of public services. No public comment was received at the meeting. The Commission voted 3-3, which is a recommendation of denial. The three dissenting Commissioners did not convey reasons for not voting in favor of the rezoning during the meeting.

Following the Commission meeting, staff spoke with the Chairman, who conveyed a concern about traffic that could impact Dysart Road (Vermeersch Road) going north to Lower Buckeye Road and would like to see more low density subdivisions. The developer and their zoning attorney spoke with the Chairman, who shared the same comments. Staff has not been made aware of any project changes by the applicant and developer following the Commission's action.

ANALYSIS:

Section 603 of the Zoning Ordinance establishes five (5) criteria that any request for PAD zoning must meet.

Listed below are each of the five (5) criteria followed by an analysis of each:

1. The proposed PAD is in conformance with the General Plan and applicable specific plan(s).

The proposed Three Rivers Ranch PAD is in conformance with the requested Medium/High Density Residential (MHDR) and Medium Density Residential (MDR) designations.

A General Plan Amendment request to change the land use designation of the site Medium/High Density Residential (MHDR) and Medium Density Residential (MDR) is being considered concurrently with this Rezoning request. The Medium/High Density Residential (MHDR) designation will cover a strip along Dysart Road, approximately 37.15 acres, while the Medium Density Residential (MDR) designation will cover the remainder of the site, approximately 156.84 acres. The MDR category accommodates development of suburban detached single-family residential within a density range of 2.5 to 4.0 dwelling units per acre, with a target density of 2.5. The MHDR category accommodates development of a variety of housing choices in a planned and clustered setting unique to Avondale within a density range of 4.0 to 12.0 dwelling units per acre, with a target density of 8. The applicant is proposing a density of 11.99 dwelling units per acre within the section of the development proposed for Medium/High Density Residential (MHDR) (37.15 acre strip along Dysart Road), as well as a density of 3.43 dwelling units per acre within the rest of the development (remaining 154.84 acres). Over the total 193.98 acres, the proposed density for the entire site is 5.05 dwelling units per acre. The proposed densities are within the ranges of the requested land use designations.

The PAD furthers several goals of the General Plan, most notably:

1. General Plan Land Use Housing Element Goal 2: "Champion the development of housing types not currently available in the City to allow for a variety of socio-economic levels."
2. General Plan Land Use Open Space Element Goal 1: "Identify, protect, and preserve the natural amenities and environmental attributes that are unique to Avondale and contribute to a healthy lifestyle."
3. General Plan Land Use Recreational Element Goal 1: "Ensure every person has convenient access to safe public parks and affordable recreation opportunities." The PAD does this by offering a variety of housing types to accommodate a wide range of market segments and life stages. This includes single-family homes to provide more traditional housing opportunities for first time, move up, and empty nester buyers, townhomes to provide young professionals with the opportunity to live within a master-planned community at a lower price point, as well as apartments with private backyards to attract renters who are looking for a housing option that supports a "lock and leave" lifestyle.

The Three Rivers Ranch PAD embraces the natural beauty of the surrounding area, including the Agua Fria River and the Estrella Mountains, by providing ample open space through the utilization of parks and common areas that incorporate natural vegetation consistent with surrounding developments. The common open space areas will be linked with pedestrian connections to support a healthy lifestyle. Primary circulation routes are planned from homes and courtyards to parks, common open spaces, and the trails in the surrounding area. The apartment community will include fitness amenities available to residents and feature landscaped walking paths that wind through the development. Thoughtfully located parks will provide a robust system of paths and trails that provide safe and convenient alternative access.

2. The proposed PAD meets the PAD requirements of the Zoning Ordinance, Subdivision Regulations, Design Manuals and other applicable regulations and requirements, unless otherwise modified by the PAD Narrative.

The City's R1-6 and R-3 zoning districts are used as the basis for the PAD's development standards, R1-6 being utilized for the single-family residential detached homes and R-3 being utilized for both the townhomes and multi-family residential apartment units. The uses proposed by the PAD zoning are consistent with these zoning districts, no additional uses or deviations of these uses are being requested at this time.

The developer is, however, requesting modifications to these base zoning development standards as they relate to lot dimensions, building coverage, setbacks, and open space as requested within the Development Standards in Exhibit D:

1. R1-6 (Single-family Residential; Parcels 1-5) - Reduce the minimum lot width from 65 feet to 50 feet, Increase the maximum building coverage from 45 percent to 57 percent, and Reduce the minimum side yard setbacks from 8 feet to 5 feet and the minimum total side yard setbacks from 18 feet to 10 feet.
2. R-3 (Townhomes; Parcel 6) - Reduce the minimum lot width from 50 feet to 22 feet, Reduce the minimum lot depth from 100 feet to 52 feet, Increase the maximum building coverage from 45 percent to 100 percent, Reduce the minimum front yard setback from 25 feet to 0 feet, Reduce the minimum side yard setback from 15 feet to 0 feet, Reduce the minimum street side yard setback from 20 feet to 0 feet, and Reduce the minimum rear yard setback from 20 feet to 2 feet.
3. R-3 (Multi-family Residential Apartment Units; Parcel 7) - Reduce the minimum front yard setback from 25 feet to 10 feet, Reduce the minimum side yard setback from 15 feet to 10 feet, Reduce the minimum street side yard setback from 20 feet to 0 feet, and Reduce the minimum rear yard setback from 15 feet to 10 feet. The lot sizes proposed by the PAD are in character with the proposed and existing suburban developments in the surrounding area and have been designed as such to provide a diverse lot mix throughout the proposed community.

The PAD meets all applicable planning, zoning, and engineering requirements and regulations or provides for alternate standards that achieve the City's goals for quality development.

3. That adequate public infrastructure and services exist to serve the proposed development or all necessary public infrastructure and services to serve the proposed development will be completed in connection with development within the PAD.

As noted previously, primary access to Three Rivers Ranch will be from two (2) entrances off Dysart Road. Both driveways will be full access. The developer will also construct a southbound right-turn deceleration lane with a minimum of 50 feet of storage, as well as contribute fifty (50) percent of the design and construction costs for a future traffic signal at Dysart Road and Three Rivers Ranch Parkway. In addition to street improvements, the developer will construct the water and sewer system improvements necessary to serve the future residents of Three Rivers Ranch.

As the requested land use is proposing an allowable density that is less than the current designation, additional water rights will not be required.

4. The proposed PAD will result in compatible land use relationships within the proposed development and with adjacent properties.

Located east of Dysart Road is the vacant school site owned by Tolleson Union High School District, as well as Phase 5 of Brookfield Alamar, a master planned community zoned Planned Area Development. Phase 5 proposes 1,145 single-family dwellings with a variety of lot configurations. The majority of lots within proximity to Three Rivers Ranch and along Dysart Road being 45-foot by 120-foot lots and 50-foot by 120-foot lots. The proposed Three Rivers PAD and lot configurations are consistent with the Alamar master planned community located to the east of the site.

5. The development standards of the proposed PAD are consistent with or exceed the desired character of development for the area.

As noted in the analysis of Finding #2, the City's R1-6 and R-3 zoning districts are used as the basis for the PAD's development standards. Where modifications are proposed, they are consistent with previously approved developments in proximity to the Three Rivers Ranch site, such as Alamar. By developing in accordance with the design and development standards contained within the PAD, the proposed Three Rivers Ranch community will help to further Avondale's goals and objectives as they relate to development in the southeastern portion of the City.

DISCUSSION:

The proposal meets the five (5) required findings for PAD Rezoning requests as detailed in the Analysis section above.

BUDGET IMPACT:

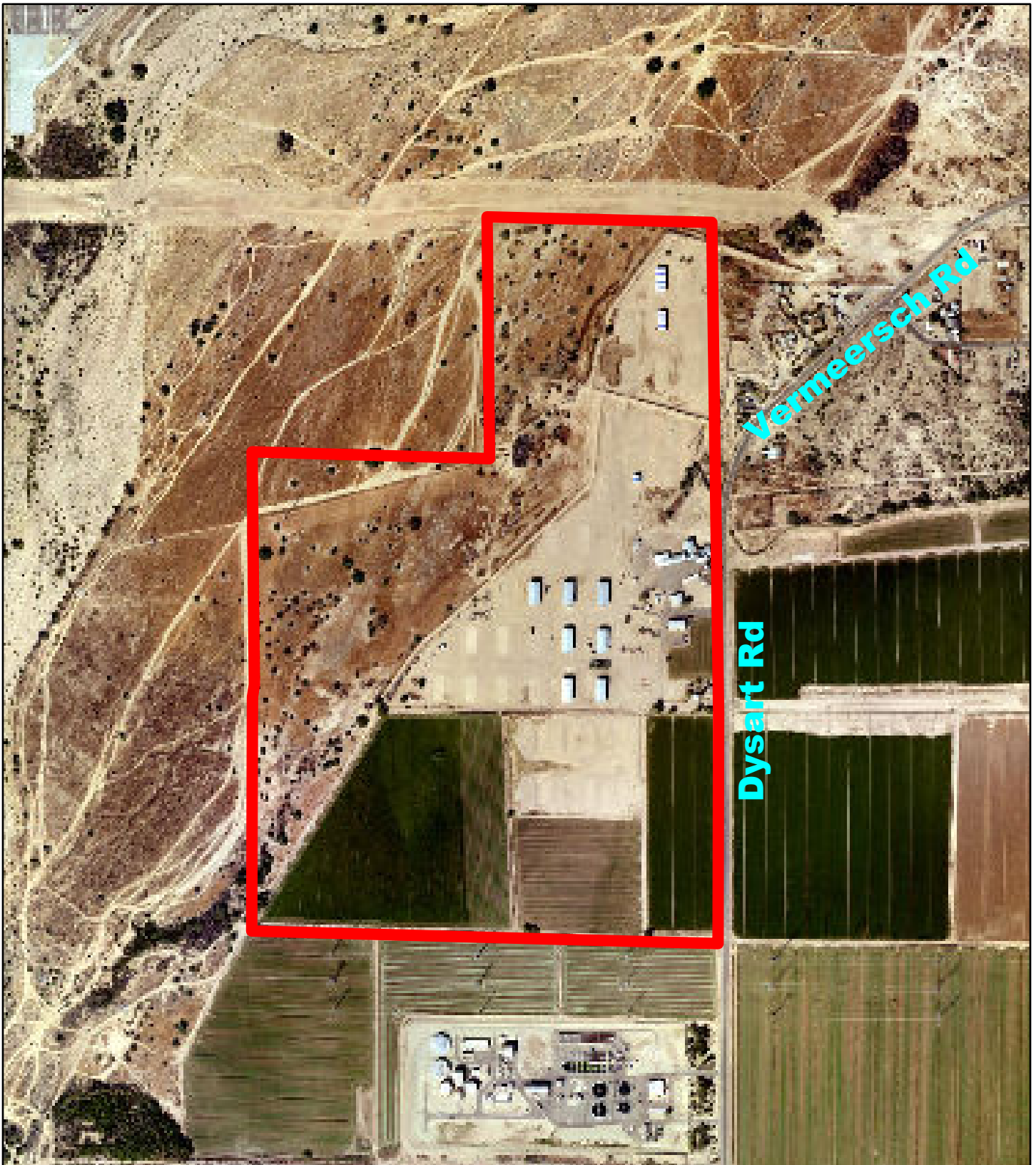
No budget impacts.

RECOMMENDATION:

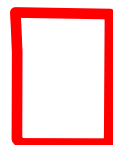
City Council will conduct a public hearing and **ADOPT** Ordinance 2065-1122 approving Application PL-22-0110 Three Rivers Ranch, a request to rezone approximately 193.98 acres from Rural Residential (RR-43) to Planned Area Development (PAD), subject to the following six (6) conditions of approval:

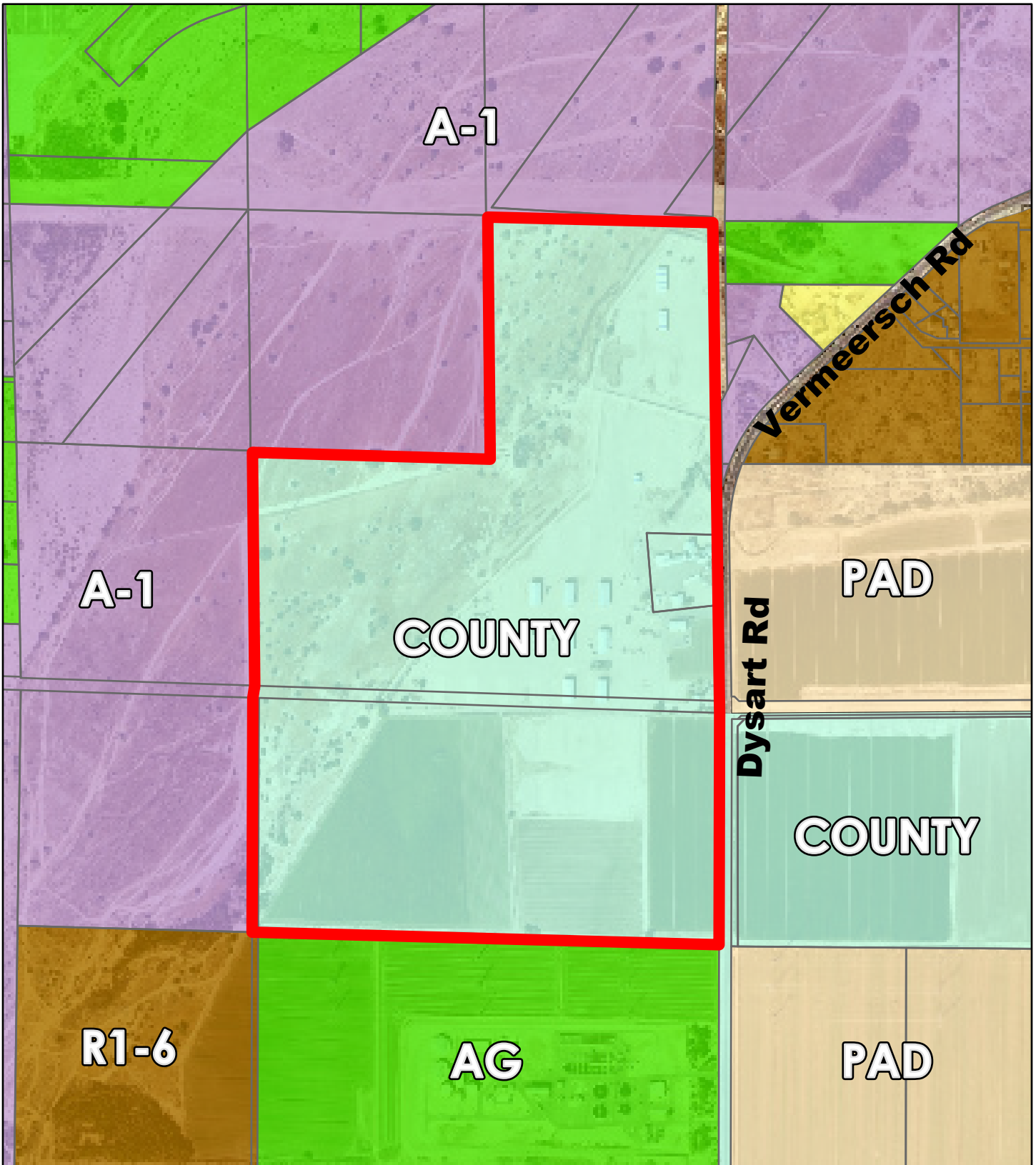
1. Development shall conform to the Three Rivers Ranch Planned Area Development Narrative date stamped September 7, 2022, except as modified by these conditions.
2. All development shall be completed in accordance with the City of Avondale General Engineering Requirements (GER) Manual and the City of Avondale Supplement to MAG Uniform Specifications and Details unless a standards deviation has been approved.
3. All required off-site improvements shall be completed in the first phase of development prior to issuance of the first Certificate of Occupancy for the project.
4. Developer shall contribute fifty (50) percent of the design and construction costs for a future traffic signal at Dysart Road and Three Rivers Ranch Parkway.
5. Approval of a Final Plat will be required prior to the City issuing any permit for construction of the proposed Three Rivers Ranch development.
6. The developer shall work with the City, and any other applicable agencies, on the design of the Agua Fria River 12' multi-use path adjacent to the project. The multi-use path design shall comply with the City's General Engineering Requirements Manual and any other applicable City requirements necessary for the improvements. The multi-use path shall be constructed and completed in its entirety with the first phase of development that directly abuts the river. The developer has the option to designate a multi-use path easement and contribute funding for the City to develop later in lieu of constructing the trail.

Contact person for document distribution: Jani Wertin, Jodie Novak

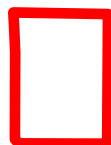


Aerial Photograph



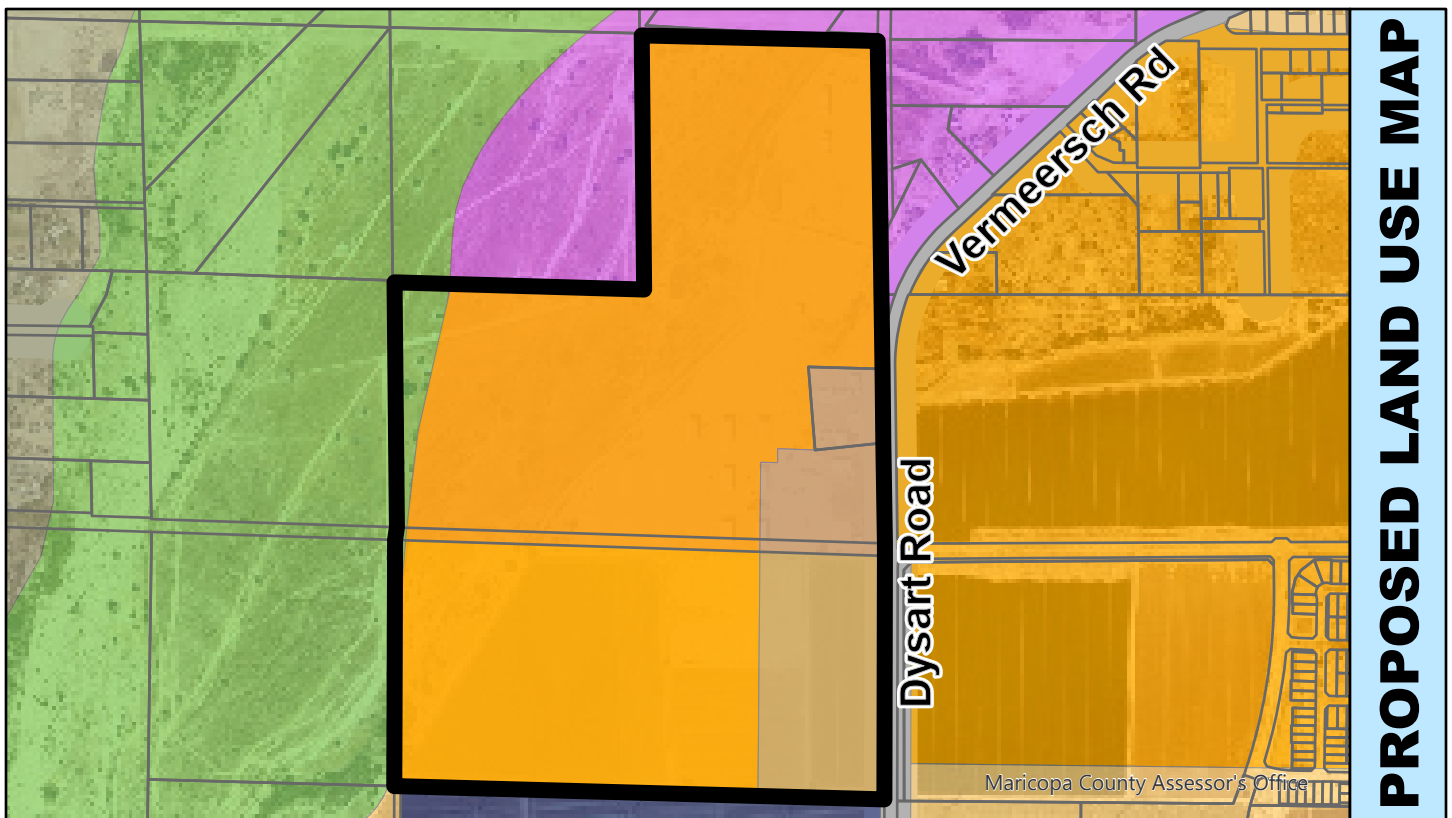
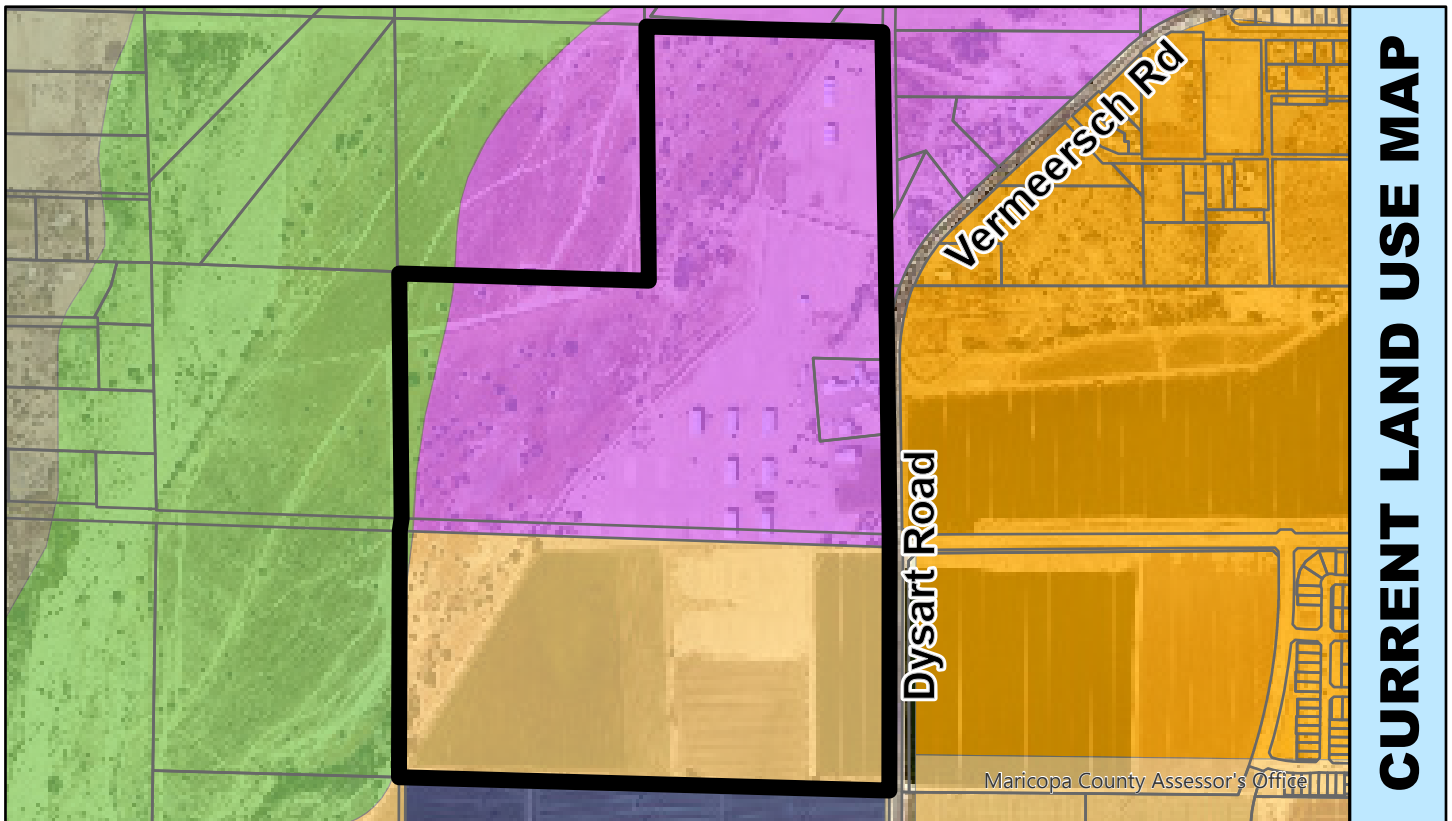


Zoning Vicinity



Subject Property

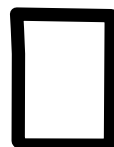




General Plan Land Use



- Low Density Residential
- Medium Density Residential
- Medium/High Density Residential
- Mixed Use
- Open Space / Parks



Subject Property





Three Rivers Ranch

PAD Narrative

Submitted: April 13, 2022

2nd Submittal: July 7, 2022

3rd Submittal: August 1, 2022

4th Submittal: August 24, 2022

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Property Overview

Three Rivers Ranch is envisioned as an integrated, thoughtfully designed master plan community that will provide a strong sense of place and identity. Drawing inspiration from the natural beauty of the surrounding area, including the Estrella Mountains and the river corridors and confluence for which the development is named, Three Rivers Ranch proposes a community with an emphasis on health, wellness, and connection. Bounded by the Agua Fria River to the west and north and additional constraints to the south, the Property requires carefully crafted design and orientation. However, with additional land use flexibility it is well positioned to be a regional destination within the City of Avondale.

The Property is approximately 193.98 gross acres (190.24 net acres) located west of the intersection of Dysart Road and Broadway Road, as shown on the attached aerial map. See **Exhibit A, Aerial Map**. The Property is located in unincorporated Maricopa County, but within the Avondale planning area. It is surrounded by the Agua Fria River to the west and north, commercial land zoned A-1 and AG and residential land zoned PAD (Brookfield Alamar) to the east, and an Avondale wastewater treatment facility zoned AG to the south.

The existing zoning for the Property is County RU-43. See **Exhibit B, Zoning Map**. The Property is within the Avondale planning area and is currently designated as Mixed Use and Estate/Low Density in the Avondale General Plan. An application for a Major General Plan Amendment requesting designations of Medium Density Residential and Medium/High Density Residential has been filed under separate cover. See **Exhibit C, Existing and Proposed Avondale General Plan Map**. For comparative purposes, the property directly east has a general plan designation of Estate/Low Density, Medium Density Residential, Medium/High Density Residential, and Commercial. This proposed development will align well with the adjacent land use designations and proposed surrounding development to the east.

The site is currently utilized for agricultural uses or is otherwise vacant. Though this corner of Avondale has historically been designated for low density residential uses, the proposed development and corresponding Zoning and General Plan Land Use Map changes are more reflective of the changing dynamics and development pattern of the area. With State Route 30 planned less than one mile south featuring a full compact diamond interchange at Dysart Road, this is an area with an evolving character that is in need of more vibrant development.

At the same time, the property has some significant constraints that have limited its development potential, including its proximity to the Agua Fria River floodplain and the Avondale wastewater treatment facility as well as a major power line corridor that bisects the Property. Fortunately, Three Rivers Ranch is able to address these items through creative planning and design and new land use entitlements that will position this property for a high-quality residential development along Dysart Road.

To this end, the applicant is requesting to rezone the subject property to Planned Area Development ("PAD") with underlying Urban Residential (R1-6) and Multi-Family Residential (R-3) uses to allow for a new residential master plan community. The Applicant seeks to develop the Property in accordance with the R1-6 and R-3 zoning districts with modified development standards to create a superior level of expectation along this corridor. The property will be annexed into the City.

The requirements of the Zoning Ordinance, as amended, and Avondale Subdivision Regulations, as amended, shall apply except where explicitly stated otherwise herein by this PAD.

Request

This is a proposal to rezone the Property from County RU-43 to PAD with Urban Residential (R1-6) and Multi-Family Residential (R-3).

As described below, this PAD narrative demonstrates with sufficient, objective information that the proposed development complies with the following:

1. This proposed PAD is in conformance with the General Plan and applicable specific plans.
2. This proposed PAD meets the PAD requirements of the Zoning Ordinance, Subdivision Regulations, Design Manuals and other applicable regulations and requirements, unless otherwise modified by this PAD narrative.
3. Adequate public infrastructure and services exist to serve the proposed development or all necessary public infrastructure and services to serve the proposed development will be completed in connection with development with the PAD.
4. This proposed PAD will result in compatible land use relationships with the proposed development and with adjacent properties.
5. The development standards proposed herein are consistent with or exceed the desired character of development for the area.

Project Description

Three Rivers Ranch features approximately 193.98 gross acres of Residential land use categories offering a wide variety of quality housing options. The proposed development has been thoughtfully organized to create a cohesive, interconnected community that will allow residents to live, play, and connect in an area that encourages outdoor activity and promotes health and wellness.

Companion Annexation and Major General Plan Amendment requests have been filed with the City of Avondale under separate cover. This PAD establishes site-specific permitted uses, as well as development standards and design criteria. Development standards will be based on the City's R1-6 and R-3 Zoning Districts.

Three Rivers Ranch will be developed with lot sizes, product types, and densities that are comparable and complementary to the Brookfield Alamar master planned community immediately east of Dysart Road. This will create consistency in design and feel to this area of Avondale, while also providing housing solutions for a wider range of demographics. The proposed PAD is necessary to bring these housing products to market, enabling creative solutions to the Property's development challenges, which include proximity to the Avondale wastewater treatment facility, the Agua Fria River floodplain, and the WAPA electric transmission line that bisects the property. With quality and originality, Three Rivers Ranch will bring tremendous value and energy to this corner of Avondale.

Proposed PAD Areas:	Gross Acreage	Net Acreage	Total Units Proposed	Density
R1-6 (Parcels 1-5)	154.84	154.32	530	3.43 du/ac
R-3 (Parcels 6 and 7)	39.14	35.92	431	11.99 du/ac
TOTAL:	193.98	190.24	961	5.05 du/ac

Three Rivers Ranch will offer a total of 961 units. This will include 530 platted lots, 311 rental homes, and 120 townhomes with an overall masterplan density of 5.05 net du/ac. See ***Exhibit D, Conceptual Development Plan***. The residential community is designed with abundant open space, park amenities and pedestrian linkages within the site and surrounding area. An integrated path and trail system will provide connectivity throughout the community.

Urban Residential (R1-6)

Traditional single-family homes will be a major component of the housing options within the community. This area is anticipated to include a mix of one story and two-story homes and will likely be geared to first time homebuyers, move-up buyers, empty nesters and young families. Each of these considerations are included in the associated development standards.

Lot sizes will be 50'x120' and 55'x120' and development parcels are inter-connected by internal pedestrian linkages that bring together the residential development parcels via open space and park connections. A series of neighborhood parks and open space areas will be integrated into the overall community design.

Multi-Family Residential (R-3)

The build-to-rent homes and townhomes will be limited to a certain area of the community that is most conducive to higher density. This includes the area in close proximity to an arterial intersection, the Avondale wastewater treatment plant, and overheard transmission lines to the south.

The build-to-rent community will offer residences in 1-bedroom small, 1-bedroom large, 2-bedroom, 2-bedroom carriage, and 3-bedroom configurations. Each rental home will have a private rear yard. A large community park (3.0 acres) is located near the primary entrance to the community and is intended to be a key amenity and identity feature for not only the rental community but the overall masterplan.

The homes will be arranged around several active and inactive space areas, which may include a dog park, barbecue station, fire pit, pool, and indoor amenity areas, creating a gathering place for residents and cultivating a sense of community. Garages, covered, and uncovered parking for residents and guests will be provided for convenient access to each residential home. The proposed project will feature a lush, drought-tolerant landscape palette consistent with the area. See ***Exhibit E, The Residences at Three Rivers Ranch Concept Plan***.

All homes will provide a modern, open floor plan design with high ceilings, abundant natural light, and a private outdoor patio and backyard. Private rear yards throughout the development create a significant

amount of private open space. Each home will incorporate energy efficient design, full smart home automation, and will feature high-end finishes and appliances.

Each floor plan will have 2-3 elevation types to provide diversity of design and improve aesthetics. The Residence Club building will provide a central gathering area for residents and their guests. The Leasing Office will provide a central location for residents and potential residents to view available residences.

The townhome community will provide high quality, yet attainable housing for people who live and work in the area. This is an underrepresented housing type and offers a steppingstone for young professionals or a downsizing opportunity for individuals seeking lower operational overhead than traditional single-family options. The townhomes will be highly stylized with enhanced architectural elements and will be thematically consistent with the rest of Three Rivers Ranch. The community will feature ample shared amenities, including play structures, ramadas, barbecue facilities, and thoughtfully designed landscaped areas. Moreover, the townhome community will benefit from the parks, open spaces, and pedestrian connectivity throughout Three Rivers Ranch.

Access and Circulation

A Traffic Impact Analysis is included with this PAD under separate cover. Primary access to Three Rivers Ranch will be from Dysart Road. See ***Exhibit F, Circulation Plan***

Three Rivers Ranch is requesting a modified local cross-section to address existing site constraints and allow for the creation of a more sensitive development with respect to the Agua Fria River, existing fringe easements and grading limitations that the site offers. Consistent with previous and recent approvals, including adjacent Alamar PAD, Three Rivers Ranch is asking to maintain a 50' ROW in lieu of the current 54' ROW width (A1100). The City's standard notes for A1100 does indicate the City has the right to modify ROW requirements. As proposed the full section can still be achieved within the 50' section and Three Rivers Ranch looks to maintain the required 38' (BOC) roadway width/improvements with attached 5' sidewalk.

The project is expected to widen a portion of Dysart to meet the City's half-street improvement requirements. Dysart Road will result in a four-lane cross section along the project frontage. The proposed cross section will be striped to provide one through lane in the northbound direction and two through lanes in the southbound direction, separated by a two-way center left turn lane. Additionally, the project will construct the Collector Road system from the Broadway Road alignment for internal access to the single-family home portions of the development. See ***Exhibit G, Street Sections***.

The collector road will be renamed Three Rivers Ranch Parkway and will provide one through lane in each direction of travel separated by a two-way center left turn lane that will serve as a number of primary access points directly into the neighborhood. The intersection at Broadway Road/Dysart Road will offer westbound vehicles entering the site an exclusive left turn lane and a dedicated right turn lane. Secondary access will be provided both north and south of the Collector Road alignment to provide access to Dysart Road. It is not anticipated that the change of land use will have any negative impact on the City transportation system. The project Traffic Impact Analysis addresses the proposed project demands as well as future traffic operations for the project.

Streetscape

Building setbacks along each street frontage meet the City's requirements. The streetscape will be

consistent with the established streetscape for the area and will feature meandering detached sidewalks with complementary landscaping. The streetscape will be in conformance with the City's Street Tree Master Plan.

PAD Permitted Uses

The requirements of the Zoning Ordinance and Avondale Subdivision Regulations shall apply except where explicitly stated otherwise herein by this PAD. The approved PAD sets forth the development standards for Three Rivers Ranch. Should a conflict exist between any provision in this PAD and the Avondale Zoning Ordinance and Avondale Subdivision Regulations, the Zoning Ordinance and Subdivision Regulations shall apply. All uses not specifically addressed herein are prohibited unless a subsequent determination by the Zoning Administrator finds a specific use to be an analogous use to a permitted use.

Development Standards

Table A: R1-6 Residential Development Standards Table (Parcels 1-5)

	R-1-6	PAD Proposal
Density	1 unit for every 6,000 sf net site area	1 unit for every 6,000 sf net site area
Min. Lot Width	65'	50'
Min. Lot Depth	100'	120'
Max. Height	30'	30'
Max. building coverage	45%	57%
Min. Setbacks		
Front	20' ¹	20' ¹
Total Both Sides	18'	10'
Min. Side Yard	8'	5'
Rear	15'	15'
Open Space	15%	15%
Parking	An enclosed garage with two (2) interior spaces per unit	An enclosed garage with two (2) interior spaces per unit

¹ Minimum front yard setbacks may be reduced five (5) feet when providing a side-entry garage.

Deviations and Justifications (Parcels 1-5)

- A. **Lot Width, Building Coverage, and Setbacks:** The Property has a number of constraints, including the Agua Fria River and a Western Area Power Authority (WAPA) powerline easement that limit its developable area. Engineering solutions will allow for greater protection from lateral movement of the Agua Fria river and expand opportunities for development, however, a portion of the property is within the floodway and is not suitable for residential development. Similarly, structures are prohibited within the 100' WAPA easement. Nevertheless, these constraints present an opportunity for open spaces and outdoor activity, which will provide significant value for residents. With this in mind, Three Rivers Ranch proposes lot sizes of 50' x 120' and 55' x 120', maximum building coverage of 57%, and reduced side yard setbacks. Though lot widths are

reduced by 15' for approximately 56% of the lots, additional depth of 20' is provided for all lots. These deviations enable a quality development that maintains appropriate residential densities while placing a greater emphasis on common open space activation. This efficient utilization of the site will encourage more community interaction and connection.

Lot Dimensions	Lot Area	Number of lots	Percentage of Total
55' x 120'	6,600 sq ft	234	44%
50' x 120'	6,000 sq ft	296	56%

Table B: R-3 Residential Development Standards Table (Parcel 6)

	R-3	PAD Proposal
Density	1 unit for every 3,630 sf net site area	1 unit for every 3,630 sf net site area
Min. Lot Width	50'	22'
Min. Lot Depth	100'	52'
Max. Height	30'	30'
Max. building coverage	45%	100%
Min. Setbacks		
Front	25'	0'
Side	15'	0'
Rear	15'	2'
Street Side	20'	0'
Open Space	20%	Usable common OS: 20%
Parking		
1 bedroom	1.5 spaces per unit	1.5 spaces per unit
2 bedroom	1.75 spaces per unit	1.75 spaces per unit
3 bedroom	2 spaces per unit	2 spaces per unit
Visitor spaces	1 space per 5 units	1 space per 5 units
Garage	Enclosed garage with 2 interior spaces per unit	Enclosed garage with 2 interior spaces per unit

Deviations & Justification (Parcel 6)

- A. **Lot Size, Building Coverage, and Setbacks:** The townhome offering within Three Rivers Ranch will provide a unique and desirable housing product that is currently underrepresented in the Avondale market. The proposed development standards for lot size, building coverage, and setbacks are typical for this type of product and will allow residents to reap the benefits of home ownership at a more affordable entry point.

Table B: R-3 Residential Development Standards Table (Parcel 7)

	R-3	PAD Proposal
Density	1 unit for every 3,630 sf net site area	311 units; 1 unit for every 3,630 sf net site area
Min. Lot Width	50'	50'
Min. Lot Depth	100'	100'
Max. Height	30'	30'
Max. building coverage	45%	45%
Min. Setbacks		
Front	25'	10'
Side	15'*	10'
Rear	15'	10'
Street Side	20'	N/A
Open Space	20%	Usable common OS: 17% Private OS: 9% Other: 26% Total: 52%
Private outdoor space	80 sq ft	80 sq ft (312 sq ft provided per unit)
Parking		
1 bedroom	1.5 spaces per unit	1.5 spaces per unit
2 bedroom	1.75 spaces per unit	1.75 spaces per unit
3 bedroom	2 spaces per unit	2 spaces per unit
Covered parking	At least 1 space per unit and assigned	At least 1 space per unit and assigned
Visitor spaces	1 space per 5 units	1 space per 5 units
Garage	Min 20% of required parking, excluding visitor spaces	Min 20% of required parking, excluding visitor spaces

*Zero (0) feet for lots with common walls; fifteen (10) feet for lots with no common walls.

Deviations & Justification (Parcel 7)

- A. Open Space: The applicant requests a deviation to count the private rear spaces, which totals 9% of the overall Parcel 7 lot coverage, as part of its open space calculations. The required 80 square feet of open space would only amount to 2.3% of overall lot coverage. Typically, multi-family communities do not provide private rear yard spaces and so the 20% requirement should be reconsidered with this unique type of development. The applicant provides a private amenity not normally seen and therefore should be considered as part of the overall amenity calculations. The common open space combined with the private open space provided above and beyond the requirement totals 23.7%. Additionally, residents will have access to the parks and trail systems provided throughout Three Rivers Ranch, which provide ample opportunity for outdoor

recreation and enjoyment.

- B. Setbacks: To make development feasible, the development seeks reduced setbacks. This minor deviation helps achieve the superior characteristics of the community—including private backyard open space—and will not be detrimental to community residents or surrounding property values.

Landscaping & Open Space

The landscaping for the project will consist of a low water use mix of native plant material and desert adapted plant material. The theme for the landscape will be to provide shade and interest along the main open space walks and street frontages, while filling in the less focal landscape areas with lower maintenance plantings. The extensive trail network and connections between each parcel are a major amenity for the project that will be supplemented with strategic landscape design to promote inter project circulation and exploration. This also includes connections to the Agua Fria River corridor where the disturbed land will be replanted to reflect the native plant material along the corridor giving residents a unique ‘out of town’ experience while still being close to home. See ***Exhibit H, Preliminary Landscape Plan***.

In addition to the trails and connections, the project will have a large central park amenity that serves as the communities primary gathering area for larger groups. The park will be designed as a multi-generational park, targeting all ages and groups of all abilities. Each parcel will also have smaller pocket park and open space areas as an alternative to the larger, busy community park. The pocket parks will be designed to target smaller groups of residents and provide a more personal, passive outdoor experience. The combination of trails, large parks and pocket parks will provide something for every resident within the community and become a network for resident interaction and a strong sense of community.

Entrance Design, Perimeter Walls, and Signs

The theme for the community is closely tied to the history and geographic location of the site. The site has historically been dominated by farming and agriculture, while being located adjacent to the flood plain of the Agua Fria River. By embracing both ideas, a unique identity has been established for the community. The materials and colors of the hardscapes, walls and signs are intended to convey a higher end agricultural, or upscale rural feel. The monuments and walls will be elegantly designed to create a warm and timeless aesthetic, while not targeting the farmhouse modern trend that is so commonly mimicked. Subtle details will be used to portray the ideas of being in a rural river basin or agricultural community, so residents feel more in touch with the history of the site and the natural surroundings. See ***Exhibit I, Hardscape Details***. All signage shall comply with Section 9 of the Avondale Zoning Ordinance.

Lighting

Site lighting shall comply with Section 707 of the Avondale Zoning Ordinance.

Architectural Design

Traditional Single-Family Homes

Elevation options provided by home builders shall comply with the requirements of the City of Avondale's single-family residential design manual.

Single Family Rental Homes

The Residences at Three Rivers Ranch will offer attainable single-family rental home living complete with individual private yards, front covered patios, a courtyard concept land plan and resort-like amenities all within a lush landscape palette (still low water tolerant) and detailed architectural vernacular like patio homes for lease under twenty-four-hour professional management.

The homes will be arranged around several active and inactive space areas, with a dog park, multiple barbecue stations, fire pits, pool and indoor amenity areas, creating a gathering place for residents and cultivating a sense of community. Covered, uncovered and garage parking for residents and guests will be provided within a looped private drive for convenient access to each residential unit. The proposed project will feature a lush, drought-tolerant landscape palette consistent with the area.

Every home in the single-family home rental community will feature a modern, open floor plan design with high ceilings, abundant natural light, and a private outdoor patio and backyard except for a small number of two-bedroom carriage units (15) located over the garages. Private rear yards throughout the development create a significant amount of private open space. Each home will incorporate energy efficient design, full smart home automation and will feature high-end finishes and appliances. The homes will be designed in cottage and desert contemporary style, utilizing pitched roofs and clustered architectural themes to create a unique residential environment.

Each floor plan will have a minimum of 2 elevation types to provide diversity of design and improve aesthetics. The Residence Club / leasing office building will provide a central gathering area for residents and their guests. The Leasing Office will provide a central location for residents and potential residents to view available residences. Garage and resident storage buildings are available to residents only. All buildings are single story other than the few (15) aforementioned two bedroom carriage units. Homes will meander back and forth through the community streets to create a sense of depth and architectural interest while avoiding the feel of an entry level production home subdivision where all homes are lined up in a straight line on each street.

The unique open space areas, scattered throughout the project, deep backyards and significant front porches are signature elements of this concept. Homes are being designed to include oversized rear sliding glass doors, large marble or natural stone kitchen islands and backsplashes, a great room, larger livable interior space, upgraded stainless steel appliances, technology packages, valet-trash, onsite storage and enclosed garages.

Townhomes

The townhomes will be highly stylized with enhanced architectural elements and will be thematically

consistent with the rest of Three Rivers Ranch. The community will feature ample shared amenities, including play structures, ramadas, barbecue facilities, and thoughtfully designed landscaped areas. Moreover, the townhome community will benefit from the parks, open spaces, and pedestrian connectivity throughout Three Rivers Ranch.

Infrastructure

Roadway Improvements

The Broadway Road alignment is currently 33' of existing right-of-way internal to the property and under the jurisdiction of Maricopa County. It is not anticipated to extend access west of the property and crossing the Agua Fria River. This project proposes abandonment of the existing Maricopa County right-of-way in coordination with the new Collector Road and City right-of-way dedications to serve the development.

The Applicant will comply with the City's current engineering policies and standards and work to provide solutions that will enhance the City's transportation networks as applicable for Three Rivers Ranch.

Utilities

A. Water

A Preliminary Water System Design Report is included with this PAD submittal under separate cover. Three Rivers Ranch is proposed to be served by two independent water distribution systems, which will tie into the existing City of Avondale water system. A 16-inch water main is proposed in Dysart Road and is being constructed as part of the Alamar subdivision improvements. The Three Rivers Ranch residential subdivision will loop a 12-inch water main and connect to the proposed 16-inch water main in Dysart Road.

It is the Applicant's understanding that the Project will not create any issues for current or future water supplies.

B. Sewer

A Preliminary Sewer Design Report is included with this PAD submittal under separate cover. The preliminary report establishes sewer design parameters and criteria that will be used for the engineering design to support the development of the Property and also establishes a general plan for sewer collection and conveyance and defines sewer system demands.

C. Grading and Drainage

A Conceptual Grading and Drainage report is included with this PAD submittal under separate cover. Grading and drainage will adhere to City of Avondale land development standards and retain the 100-year 2-hour storm event. The site generally drains in a southwesterly direction to the Agua Fria. A series of storm drains will capture and convey storm water runoff to both underground chambers and surface retention basins. A series of drywells will be installed to dissipate storm water within 36 hours.

Ownership and Maintenance

Three Rivers Ranch will form a homeowner's association which will be professionally managed to ensure that the community remains well run and appearances are well maintained.

Landscaping in adjacent right-of-way areas shall be maintained by the Owner's Association.

General Plan Conformance

Three Rivers Ranch offers a development and land use plan that is generally holistically consistent with the overall existing designation for the Property in the Avondale General Plan 2030. However, the Land Use Plan does not provide the appropriate flexibility to allow the proper variety of housing products proposed in the proper locations. Accordingly, a General Plan Amendment has been filed under separate cover to amend the Land Use Map, designating the property Medium Density Residential and Medium/High Density Residential.

Three River Ranch has been carefully conceived and designed to achieve the goals, objectives, and policies of the General Plan. Specifically, the proposed development supports the following:

LAND USE ELEMENT

Goal 1: Establish an Avondale identity based on a healthy lifestyle that promotes land uses which foster an economically sustainable and socially dynamic community.

Three Rivers Ranch will offer a variety of housing products that will appeal to prospective residents from a wide range of demographics and market segments and will provide a productive employment base for this developing area of Avondale. This will attract additional economic investment and promote economic sustainability. Additionally, parks, trails, and open space will encourage an active and healthy lifestyle and community connection among residents.

Goal 4: Ensure all land use decisions meet the long-term social and economic goals of the community.

With State Route 30 planned less than one mile south featuring a full compact diamond interchange at Dysart Road, Three Rivers Ranch is in an area with an evolving character that is in need of more vibrant development. The proposed development will create a dynamic community that offers a variety of housing options to support the growth of employment opportunities in Avondale.

Goal 5: Promote land uses that are respectful of the natural environment and which conserve valuable natural resources such as open space, clean air, water, and energy.

Three Rivers Ranch will embrace the natural beauty of the surrounding area, including the Agua Fria River and the Estrella Mountains. Ample open space will be provided with parks and common areas that incorporate natural vegetation consistent with surrounding developments. The common open space areas will be linked with pedestrian connection to support a healthy lifestyle.

ECONOMIC ELEMENT

Goal 6: Implement revitalization activities to enhance the City's economy and sense of place.

Three Rivers Ranch will provide new opportunities to leverage regional assets, particularly the planned State Route 30. The high-quality housing opportunities will help bring greater economic activity and vitality to this corner of Avondale.

HOUSING ELEMENT

Goal 2: Champion the development of housing types not currently available in the City to allow for a variety of socio-economic levels.

Three Rivers Ranch will offer a variety of housing types that will accommodate a wide range of market segments and life stages. The single-family homes will provide more traditional housing opportunities for first time, move up, and empty nester buyers. The townhome product will offer the young professional the opportunity to live within a master planned community but with the ability to enter at a lower price point. The proposed single-family rental product provides homes with private backyards and lots, allowing for a "lock and leave" lifestyle which requires less maintenance and promotes the use of the neighborhood common and amenity areas. This increases a sense of place within the neighborhood and ultimately encourages more community interaction. This product type also creates optimal density to support surrounding employment, educational and commercial uses.

ENERGY ELEMENT

Goal 5: Integrate electric power line corridors, electric substations, and other energy infrastructure into future development.

The Property includes a linear electrical corridor and associated easement. Three Rivers Ranch plans to utilize the easement as part of the overall trail system, informal open space, and for detention design requirements.

ENVIRONMENTAL PLANNING AND CONSERVATION ELEMENT

Goal 1: Protect floodways, floodplains, hillsides, and other environmentally sensitive areas from inappropriate development.

Three Rivers Ranch proposes creative solutions to appropriately develop along the Agua Fria River in a manner that protects the community from possible lateral movement of the River in a major storm event. The development team is working closely with the Maricopa County Flood Control District and Avondale Engineering staff to safely and effectively develop the site while embracing its natural surroundings.

OPEN SPACE ELEMENT

Goal 1: Identify, protect, and preserve the natural amenities and environmental attributes that are unique to Avondale and contribute to a healthy lifestyle.

Three Rivers Ranch will embrace the natural beauty of the surrounding area, including the Agua Fria River

and the Estrella Mountains. Ample open space will be provided with parks and common areas that incorporate natural vegetation consistent with surrounding developments. The common open space areas will be linked with pedestrian connection to support a healthy lifestyle.

Goal 2: Create linkages to parks, trails, rivers, and mountains.

Three Rivers Ranch will provide connectivity and pedestrian access to the surrounding area with trail linkages and enhanced open spaces. The Developer will ensure access to the surrounding sidewalks and promote connectivity to the larger trails master plan for Avondale, as well as the Tres Rios Specific Plan.

Goal 3: Make Avondale's unique natural setting central to its identity as a Healthy Lifestyle City.

Three Rivers Ranch will embrace the natural beauty of the surrounding area, including the Agua Fria River and the Estrella Mountains. Ample open space will be provided with parks and common areas that incorporate natural vegetation consistent with surrounding developments. The common open space areas will be linked with pedestrian connection to support a healthy lifestyle.

RECREATIONAL ELEMENT

Goal 1: Ensure every person has convenient access to safe public parks and affordable recreation opportunities.

Three Rivers Ranch is designed to cater to active lifestyles. The community incorporates some pocket park/courtyard planning techniques into its site plan which will contribute to a more livable environment.

Primary circulation routes are planned from homes and courtyards to parks, common open spaces, and the trails in the surrounding area. The rental home community will include fitness amenities available to residents and feature landscaped walking paths wind through the development.

Creative play opportunities will include both manufactured playground elements as well as site specific design components. Small ramadas, picnic shelters and shade structures will also be incorporated into the design. A significant amount of open space is provided (including active areas for games (Bag Toss, etc.), barbecue stations, fire pits, dog park, and more. The community will be professionally managed and will provide amenities and recreation activities to the residents, furthering the City's recreational goals.

Thoughtfully located parks provide a robust system of paths and trails that provide safe and convenient alternative access. Each trail has been carefully considered within the context of the community. Trees and planting will be incorporated to provide shade, visual appeal, and character, in a manner that does not block views to and from the parks.

CIRCULATION ELEMENT

Goal 1: Provide a transportation system that is complementary to the existing and planned land uses.

The unique location of Three Rivers Ranch along the Agua Fria River limits transportation circulation west of the Property. However, it will provide circulation and connectivity around the Property and will improve the existing and planned roadways along the Property.

BICYCLING ELEMENT

Goal 1: Develop a safe bicycle transportation system that provides connectivity throughout the city including major public and private facilities, and to transit.

Three Rivers Ranch will provide an extensive network of trails and paths that will contribute to bicycle connectivity in Avondale.

WATER RESOURCE ELEMENT

Goal 4: Encourage Efficient water use and conservation throughout the community.

Landscaping throughout Three Rivers Ranch will be considerate of water resources and the palette will be appropriate for the desert environment.

Conclusion

Three Rivers Ranch offers diverse, high quality housing products that are needed and in high demand within the City of Avondale. This PAD is intended to provide a framework for development of a complementary land use in this evolving area that is compatible with existing uses and will drive further investment in this corner of Avondale. The PAD is consistent with the overall goals and objectives of the General Plan and will be a positive addition to the area.

EXHIBIT A

Aerial Map

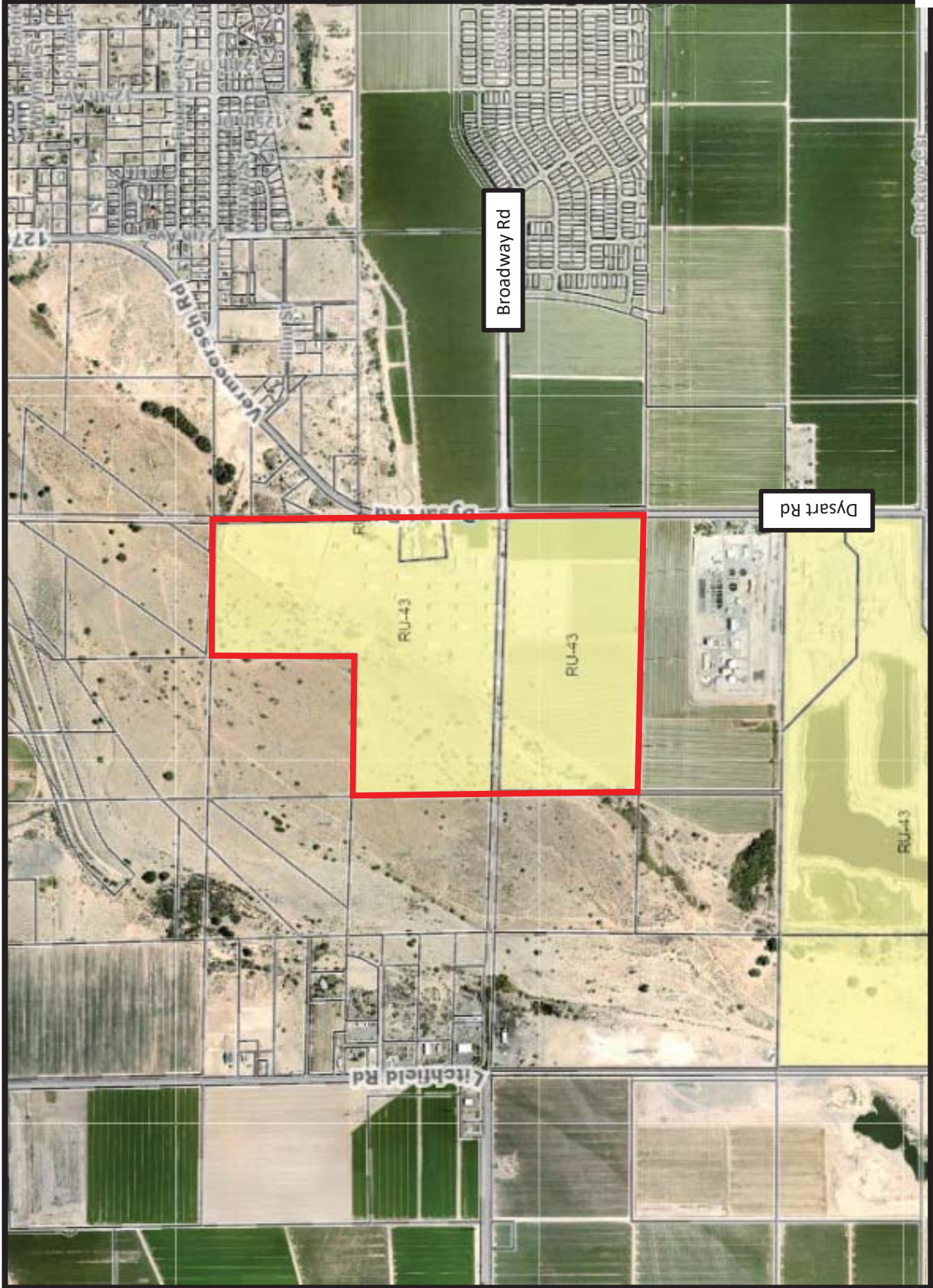


West of Intersection of Dysart Road and Broadway Road, Maricopa County



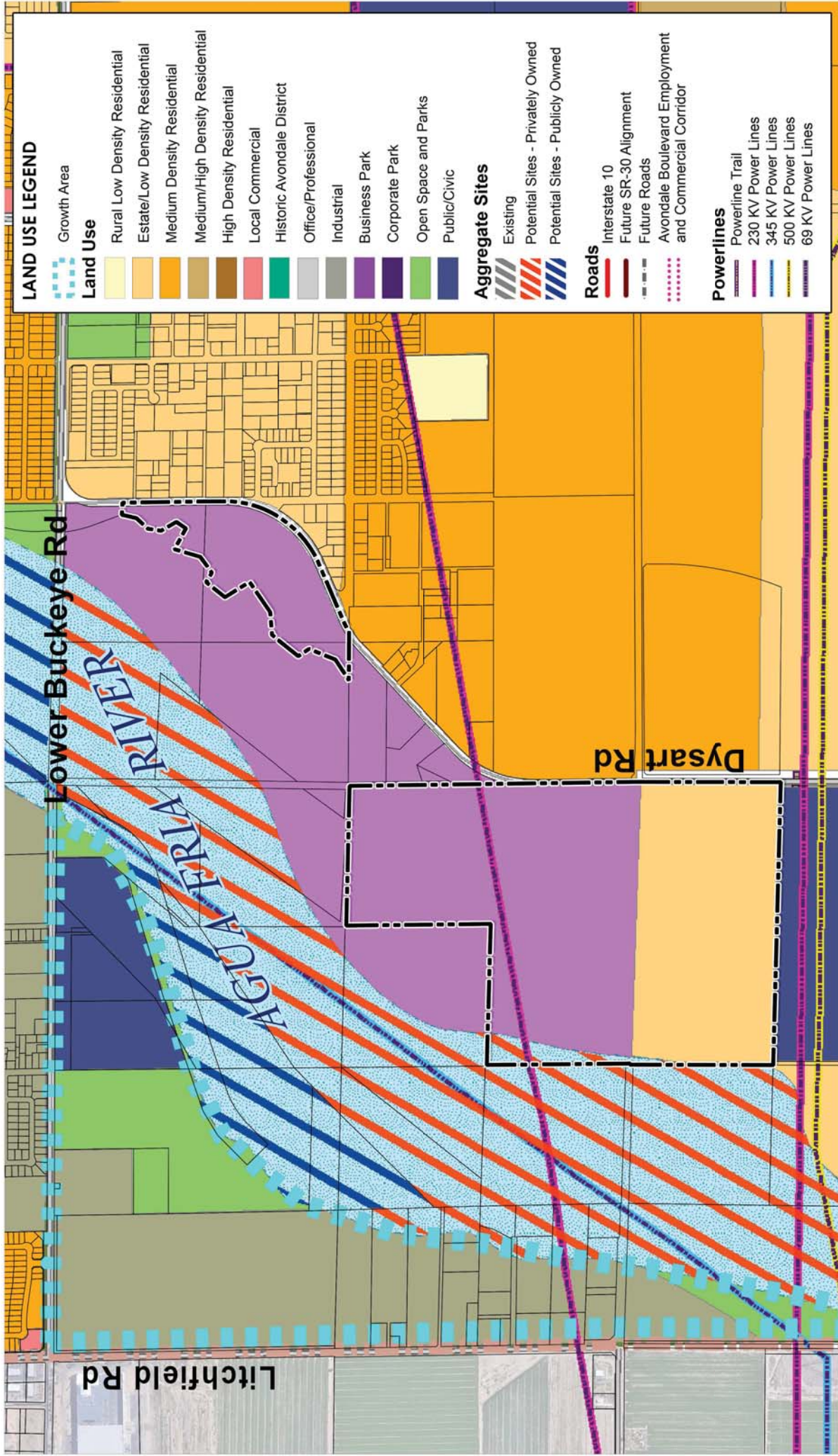
EXHIBIT B

Zoning Map



West of Intersection of Dysart Road and Broadway Road, Maricopa County

EXHIBIT C



Three Rivers Ranch

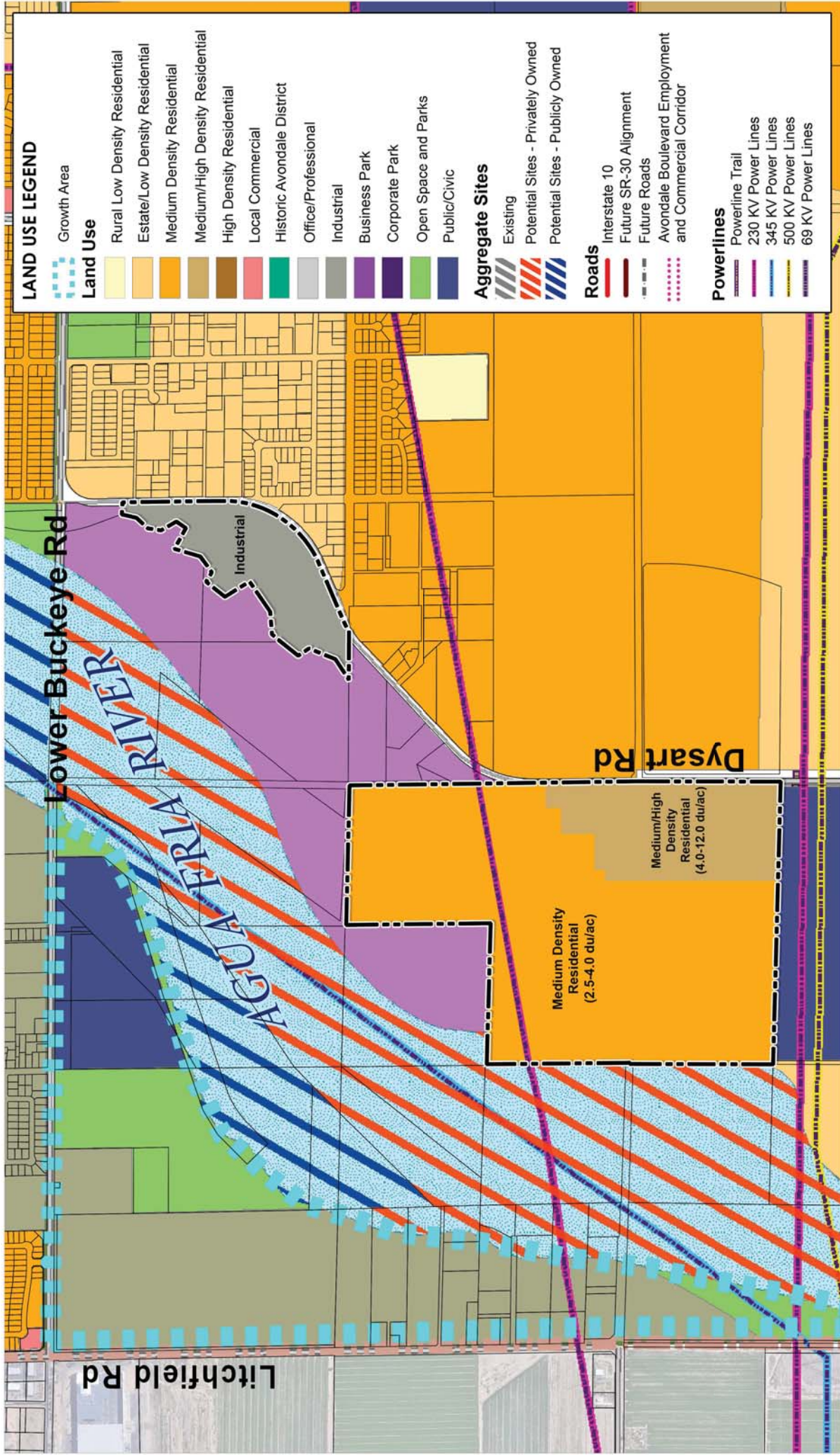
AVONDALE, AZ



Kimley»Horn

EXISTING GENERAL PLAN LAND USE MAP

DATE: MAR. 16, 2022 | BY: JBK | SCALE: APPROX.



Three Rivers Ranch

AVONDALE, AZ



Kimley»Horn

PROPOSED GENERAL PLAN LAND USE MAP

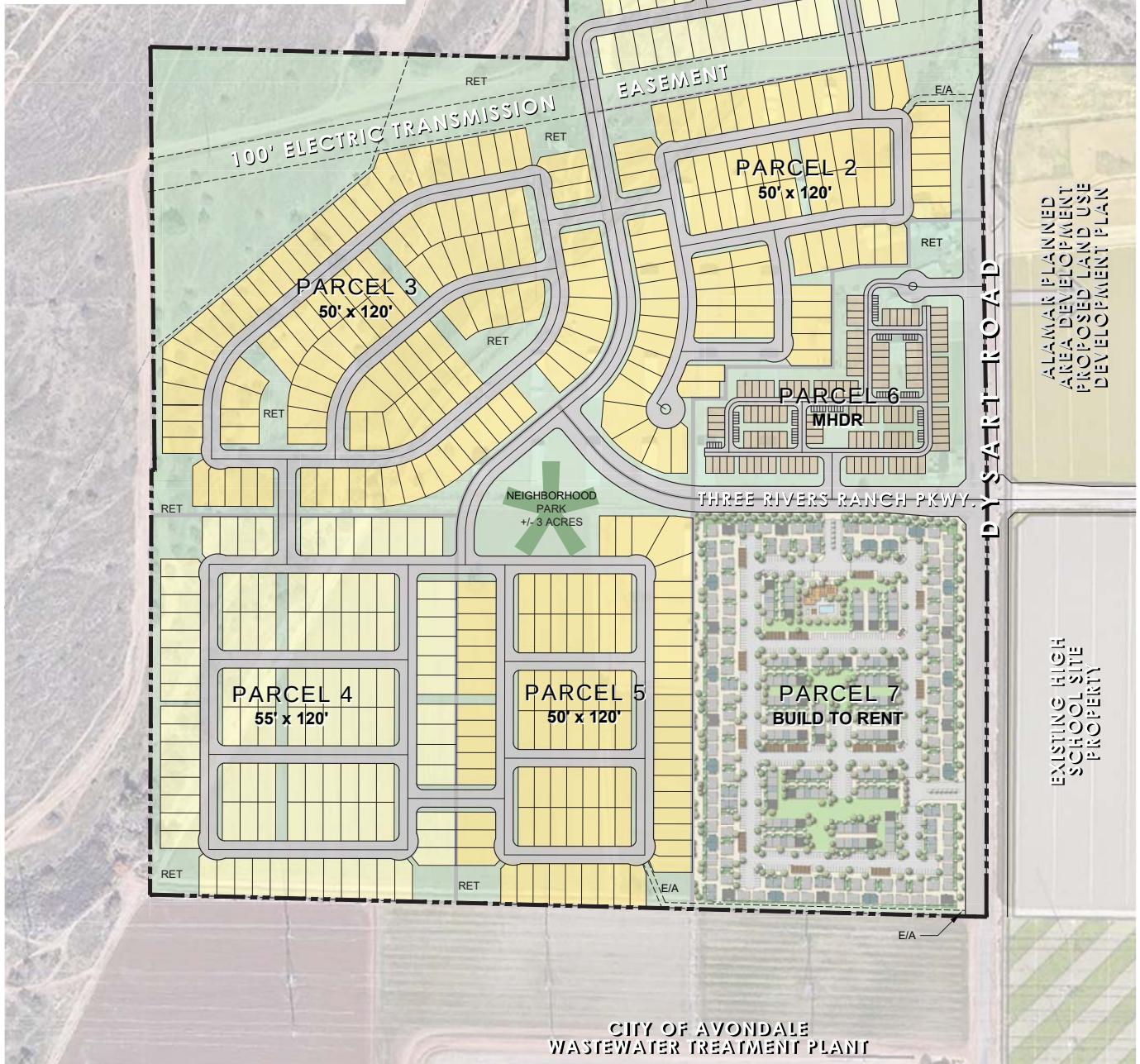
DATE: MAR. 16, 2022 | BY: JBK | SCALE: APPROX.

EXHIBIT D

RESIDENTIAL SITE PLAN SUMMARY		
TOTAL GROSS AREA	± 193.98 ac.	
TOTAL NET AREA	± 190.24 ac.	
NET DENSITY (du./ac.)	5.05	
FLOODWAY AREA	± 11.58 ac.	6%
O.S./DRAINAGE	± 36.50 ac.	19%
TOTAL OPEN SPACE	± 48.08 ac.	25%
UNIT TYPE	UNIT COUNT	MIX
BUILD TO RENT UNITS	311	32%
ATTACHED UNITS	120	12%
50' x 120'	296	31%
55' x 120'	234	24%
TOTAL	961	100%

NOTE: THIS YIELD STUDY IS FOR CONCEPTUAL PURPOSES ONLY AND REQUIRES DETAILED SITE PLANNING, ENGINEERING, AND CITY APPROVALS. ACREAGE IS ESTIMATED. PLAN IS SUBJECT TO CHANGE.

PARCEL DATA	UNIT TOTAL	NET AREA
PARCEL 1 - MDR (R1-6)	127	± 40.15 ac.
PARCEL 2 - MDR (R1-6)	87	± 22.53 ac.
PARCEL 3 - MDR (R1-6)	120	± 42.73 ac.
PARCEL 4 - MDR (R1-6)	107	± 25.73 ac.
PARCEL 5 - MDR (R1-6)	89	± 23.18 ac.
PARCEL 6 - MHDR (R-3)	120	± 11.13 ac.
PARCEL 7 - MHDR (BTR) (R-3)	311	± 24.79 ac.



Three Rivers Ranch
AVONDALE, AZ

CONCEPTUAL SITE PLAN

08.23.2022

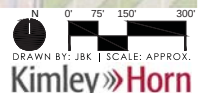


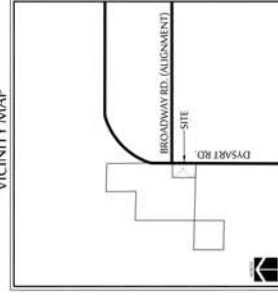
EXHIBIT E



LAND PLAN SUMMARY

SITE AREA = 23.0 ACRES (NET) ≈ 25.7 ACRES (GROSS)		SINGLE STORY LEGEND	
UNITS: 311 (13.5 DU/ACRE - NET) - 1 BEDROOM (SMALL) - 42 (13.5%) - 1 BEDROOM (LARGE): 53 (17.0%) - 2 BEDROOM UNITS: 178 (57.2%) - 3 BEDROOM UNITS: 38 (12.2%) TOTAL: 311 UNITS		1-BEDROOM (SMALL) 1-BEDROOM (LARGE) 2-BEDROOM UNIT 3-BEDROOM UNIT 4 BAY GARAGES	
* SINGLE STORY UNITS TO HAVE A MAX. BUILDING HEIGHT = 25' * DOUBLE STORY UNITS TO HAVE A MAX. BUILDING HEIGHT = 30'		PARKING SPACES REQUIRED: 596 (9' X 19' MIN) PARKING SPACES PROVIDED: 600 (193 / UNIT) - 492 SURFACE SPACES (311 COVERED) - 108 GARAGES (W/ 45 STORAGE UNITS)	
LOT COVERAGE (NET): 1,000,682 SQ. FT. - BUILDING: 272,725 SQ. FT. = 24.4% - PAVING: 243,778 SQ. FT. = 21.8% - USABLE O.S.: 63,051 SQ. FT. = 5.6% - PRIVATE O.S.: 97,165 SQ. FT. = 8.7% - OTHER O.S.: 442,675 SQ. FT. = 39.5%		DOUBLE STORY LEGEND 5-PACK UNITS GARAGES W/ 200 STORAGE UNITS (TYP) CARRIAGE HOUSE	
* RESIDENT AMENITIES MAY INCLUDE A POOL AREA, DOG PARK, TURF AREA, BBQ DINING AREA, FIRE PITS, SHARED SEATING AREAS AND A RESIDENT CLUBHOUSE		GARAGE ENTRY GARAGE UNIT (TYP)	

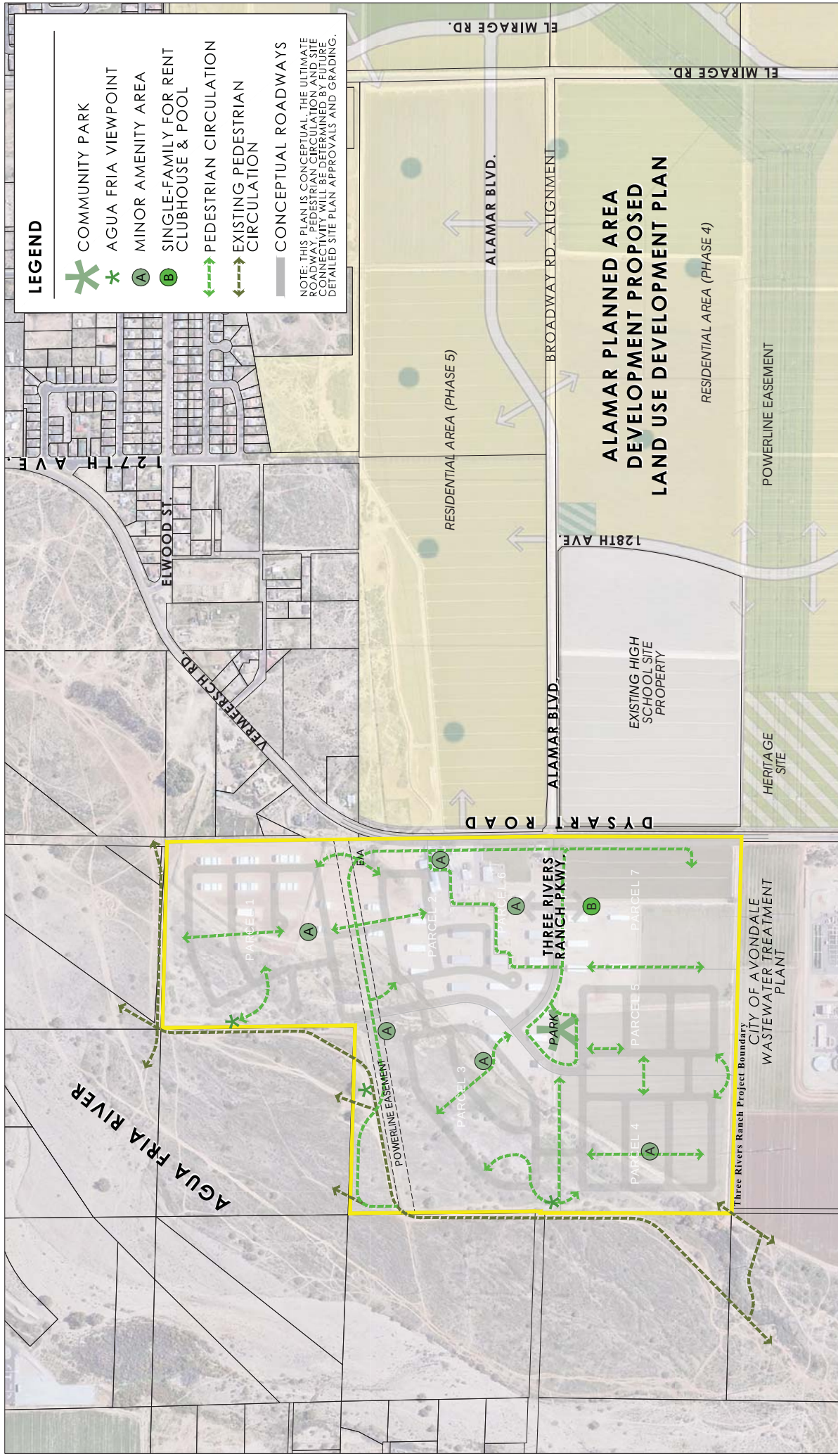
VICINITY MAP



THREE RIVERS RANCH CONCEPTUAL LAND PLAN - 2.1

SWC OF DYSART RD. AND BROADWAY RD. (ALIGNMENT) - AVONDALE, AZ
JULY 21, 2022

EXHIBIT F



Three Rivers Ranch

AVONDALE, AZ

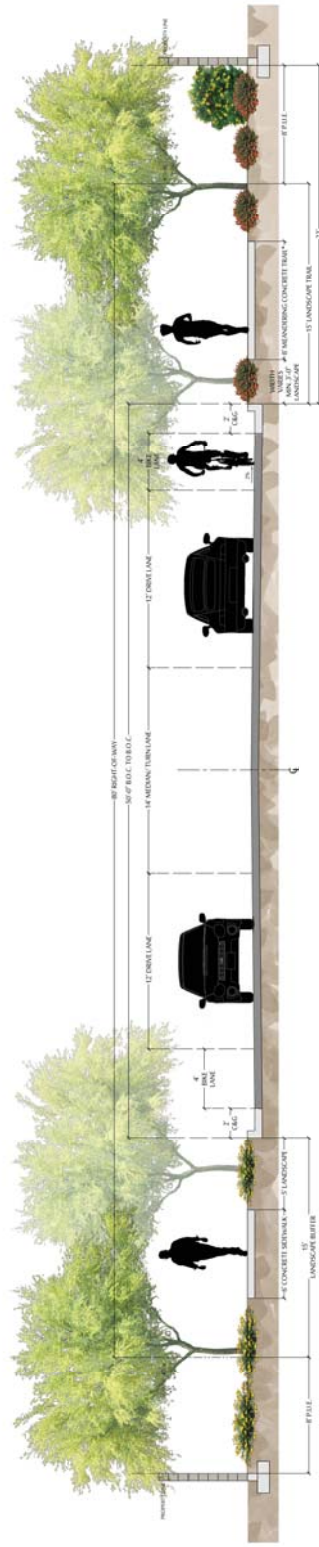
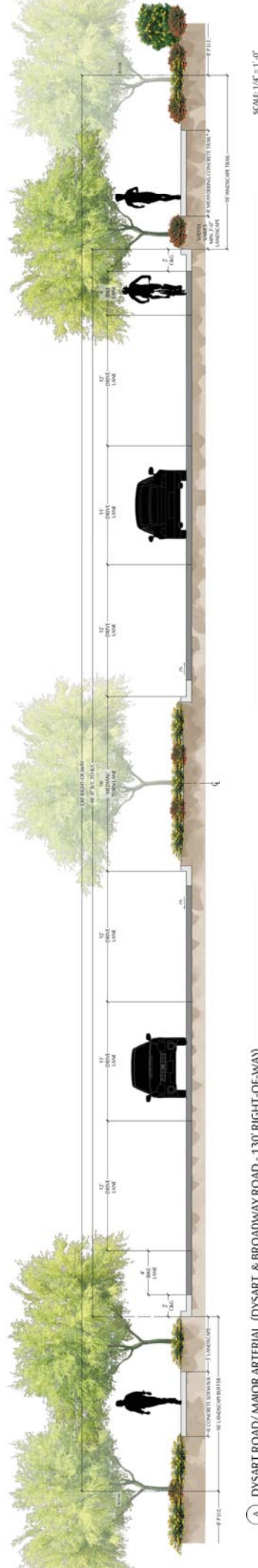


Kimley»Horn

CONCEPTUAL CIRCULATION PLAN

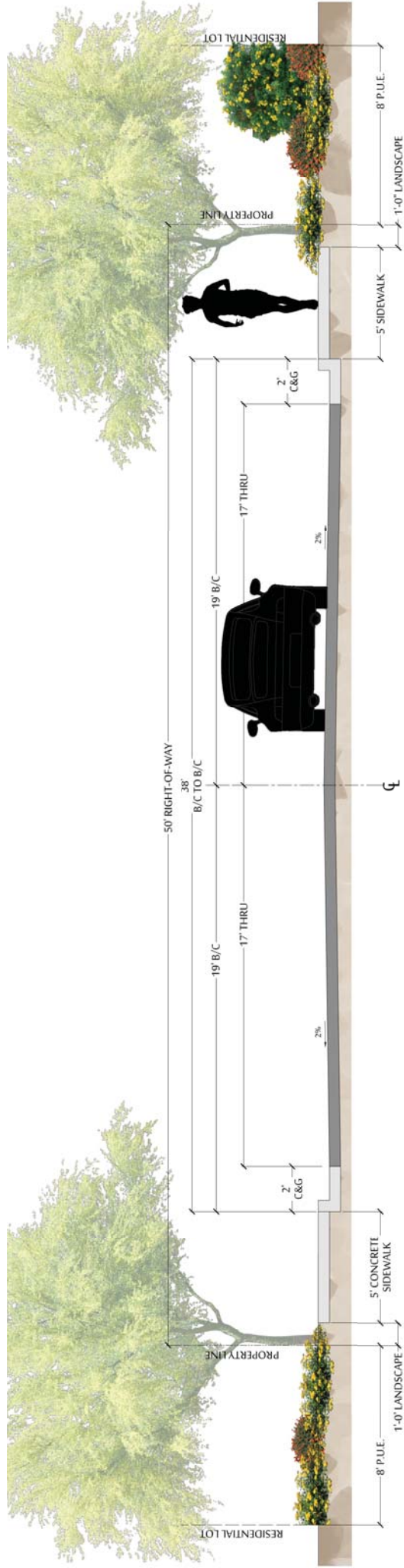
DATE: JUNE 10, 2022 | BY: JBK | SCALE: APPROX.

EXHIBIT G

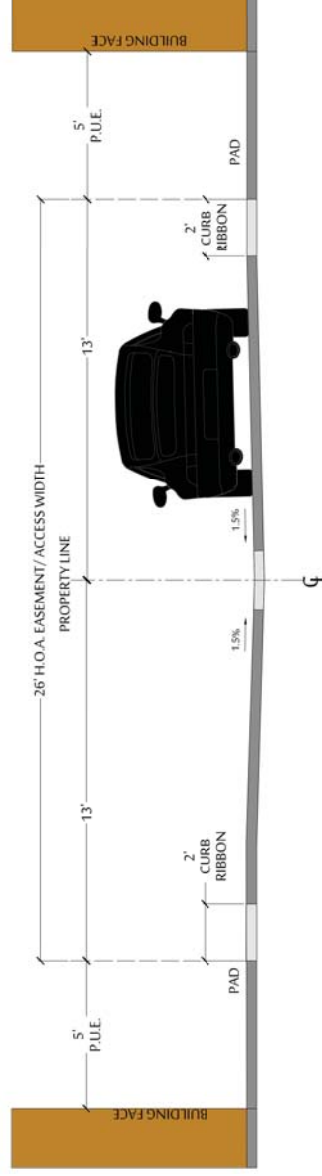


THREE RIVERS RANCH
STREET SECTIONS
SWC OF DYSART RD. AND BROADWAY RD. (ALIGNMENT) - AVONDALE, AZ
AUGUST 1, 2022





(A) NEIGHBORHOOD STREETS/ MODIFIED PUBLIC LOCAL STREET - 50' RIGHT-OF-WAY)



(B) PRIVATE STREETS - 26" B/C TO B/C

THREE RIVERS RANCH

STREET SECTIONS

SWC OF DYSART RD. AND BROADWAY RD. (ALIGNMENT) - AVONDALE, AZ
AUGUST 1, 2022



EXHIBIT H

EXHIBIT I



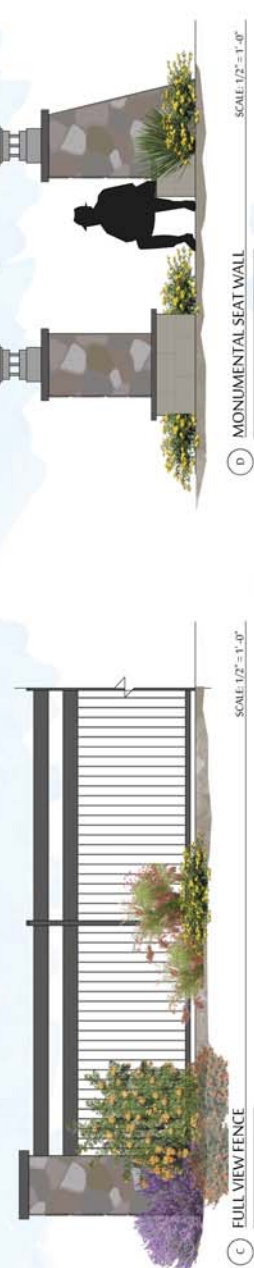
A PRIMARY ENTRY MONUMENT

SCALE 1/4\"/>



B THEME WALL

SCALE 1/2\"/>



C FULL VIEW FENCE

SCALE 1/2\"/>



D MONUMENTAL SEAT WALL

SCALE 1/2\"/>



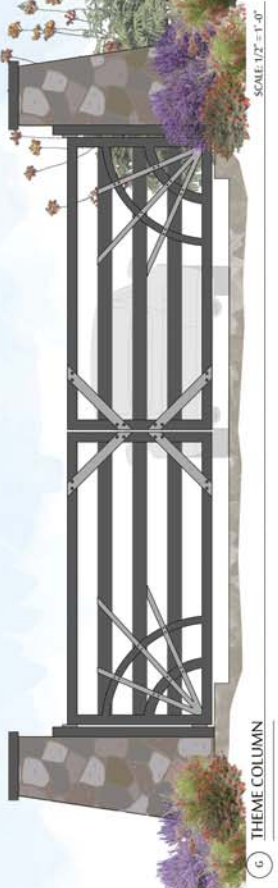
E THEME COLUMN

SCALE 1/2\"/>



F PEDESTRIAN GATE

SCALE 1/2\"/>



G THEME COLUMN

SCALE 1/2\"/>



THREE RIVERS RANCH CONCEPTUAL HARDSCAPE PLAN

SWC OF DYSART RD. AND BROADWAY RD. (ALIGNMENT) - AVONDALE, AZ
May 31, 2022



Three Rivers Ranch

Neighborhood Meeting Summary
PL-22-0050/PL-22-0110

Submitted August 30, 2022

A. Date, Time, and Location of the Meeting

The required neighborhood meeting for Case No. PL-22-0050/PL-22-0110 was held on Monday, August 29, 2022 at 6:00 PM. Due to the COVID-19 pandemic, the meeting was held virtually via Zoom.

The neighborhood meeting notification was noticed in accordance with the City's Zoning Ordinance Requirements. The applicant completed the legal newspaper advertisement with a publishing in the August 10, 2022 edition of the Southwest Valley Arizona Republic newspaper. Additionally, the applicant posted a public notice sign on August 10, 2022 and mailed notice letters to property owners within 1,000 feet. The affidavits are enclosed at **Tab A**.

B. Number of Participants

The applicant, along with the project development team, and a City of Avondale Planning representative attended the virtual neighborhood meeting. Commissioners Arnette and Castillo also attended the meeting in addition to two (2) interested neighbor.

C. Summary of Presentation, Questions and Applicant Responses

The applicant commenced the neighborhood meeting with introductions of the development team followed by an overview of the application request. The applicant provided a description of the surrounding area context, existing land use designations, site challenges and constraints, and specifics regarding the proposed community. The applicant also shared the proposed community plans. The applicant then offered an opportunity for questions and comments.

The neighborhood meeting attendees had general questions regarding: (1) traffic; (2) adequate school capacity; and (3) adequate water and sewer facilities. The applicant responded to attendee questions, stating that a traffic impact analysis demonstrates that with the requested improvements the surrounding roadway network can adequately handle the increased trips, certificates of adequate school facilities have been acquired from the Tolleson and Littleton School Districts, and that sufficient water and sewer facilities exist with connections to the site. The applicant also offered to provide attendees with copies of the Traffic Impact Analysis and the Certificates of Adequate School Facilities.

The Applicant will continue to be available to discuss the proposal with interested parties throughout the application process.

D. Summary

The feedback received regarding the proposed project was generally neutral with no significant concerns raised. The applicant will continue to be available to discuss the proposal with interested parties throughout the process.



CERTIFICATE OF ADEQUATE SCHOOL FACILITIES

An application for Rezoning and General Plan Amendment has been submitted to the City of Avondale, Development & Engineering Services Department, for review.

Project: Three Rivers Ranch
 Request: Rezone to PAD
 Current Density Allowed: 1 du/ac
 Total number of residential units proposed: 961

Project Manager: Jani Werlin
 Acreage/Parcel Size: 194 +/-
 Density Proposed: 5.05 du ac

As an authorized representative of the District, please complete the questionnaire below.

Does the District have adequate capacity to accommodate the estimated enrollment from the proposed development?

Yes No ☒

If answered no, please summarize the needs of the district as they relate to serving the students generated by the proposed development.

One times capital cost of adding estimated students is \$4.5M. Additional ongoing operational costs to adding estimated students is \$824K.

Is a school site within the proposed development needed?

Yes No ☒

If answered yes, how many acres is needed for the school site?

Is the district currently working with the developer to provide or help meet the needs identified above through a developer assistance or impact agreement? Yes ☒ No

If answered yes, please explain below:

The developer has signed the standard impact agreement.

****If additional writing space is needed, please attach pages to this form****

Date Reviewed: 09.06.2022

School District: Littleton Elementary School District #65

District Superintendent: Dr. Roger Freeman

Phone #: (623)759-2628

E-mail: freeman.roger@littletonaz.org

Signature: 

It is the developer's responsibility to ensure that this form is completed by an authorized representative of the District noted above and returned to the Development & Engineering Services Department prior to the scheduling of any City Council meetings

Development & Engineering Services Department

11465 W. Civic Center Drive, #110, Avondale, AZ 85323 • Phone (623) 333-4000 • Fax (623) 333-0400 • TDD (623) 333-0010
<https://www.avondaleaz.gov/government/departments/development-engineering-services>



CERTIFICATE OF ADEQUATE SCHOOL FACILITIES

An application for Annexation/Rezone/General Plan Amendment has been submitted to the City of Avondale, Development & Engineering Services Department, for review.

Project: Three Rivers Ranch Project Manager: Jani Wertin
Request: Rezone to PAD Acreage/Parcel Size: 224.41
Current Density Allowed: 194 +/- Density Proposed: 4.43
Total number of residential units proposed: 961

As an authorized representative of the District, please complete the questionnaire below.

Does the District have adequate capacity to accommodate the estimated enrollment from the proposed development?

Yes ☒ No ☐

If answered no, please summarize the needs of the district as they relate to serving the students generated by the proposed development.

Is a school site within the proposed development needed? Yes ☐ No ☒
If answered yes, how many acres is needed for the school site?

Is the district currently working with the developer to provide or help meet the needs identified above through a developer assistance or impact agreement? Yes ☐ No ☐

If answered yes, please explain below:

If additional writing space is needed, please attach pages to this form

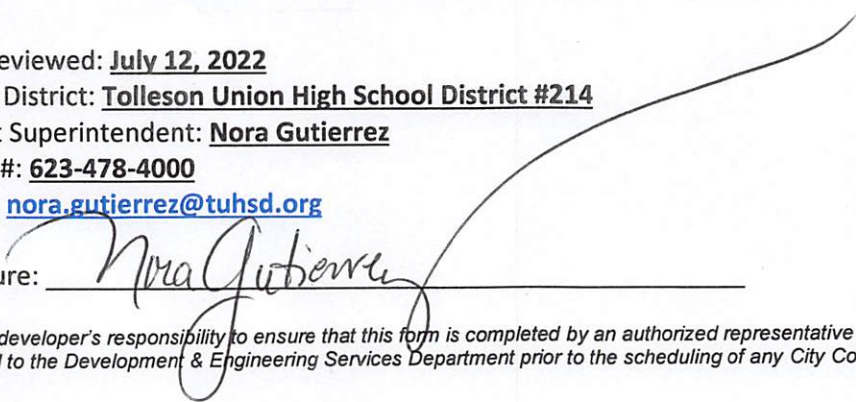
Date Reviewed: July 12, 2022

School District: Tolleson Union High School District #214

District Superintendent: Nora Gutierrez

Phone #: 623-478-4000

E-mail: nora.gutierrez@tuhisd.org

Signature: 

It is the developer's responsibility to ensure that this form is completed by an authorized representative of the District noted above and returned to the Development & Engineering Services Department prior to the scheduling of any City Council meetings

Development & Engineering Services Department

11465 W. Civic Center Drive, #110, Avondale, AZ 85323 • Phone (623) 333-4000 • Fax (623) 333-0400 • TDD (623) 333-0010
www.avondale.org/developmentandservices

ORDINANCE NO. 2065-1122

AN ORDINANCE OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, AMENDING THE OFFICIAL ZONING ATLAS OF THE CITY OF AVONDALE FOR APPROXIMATELY 193.98 ACRES GENERALLY LOCATED ALONG DYSART ROAD, WEST OF THE INTERSECTION WITH BROADWAY ROAD, AS SHOWN IN APPLICATION PL-22-0110, AND REZONING SUCH PROPERTY FROM RURAL RESIDENTIAL (RR-43) TO PLANNED AREA DEVELOPMENT (PAD).

WHEREAS, the Council of the City of Avondale (the “City Council”) desires to amend the City of Avondale Zoning Atlas (the “Zoning Atlas”), pursuant to ARIZ. REV. STAT. § 9-462.04, to change the zoning description for ± 193.98 acres generally located along Dysart Road, west of the intersection with Broadway Road, as shown in application PL-22-0110, from Rural Residential (RR-43) to Planned Area Development (PAD) (the “Zoning Atlas Amendment”); and

WHEREAS, all due and proper notices of the public hearings on the Zoning Atlas Amendment held by the City of Avondale Planning Commission (the “Commission”) and by the City Council were given in the time, form and substance provided by ARIZ. REV. STAT. § 9-462.04; and

WHEREAS, on October 19, 2022, the Commission held a public hearing on the Zoning Atlas Amendment, after which hearing the Commission recommended denial with a 3-3 vote; and

WHEREAS, the City Council held an additional public hearing regarding the Zoning Atlas Amendment on November 21, 2022; and

WHEREAS, in accordance with Article II, Sections 1 and 2 of the Arizona Constitution, the City Council has considered the individual property rights and personal liberties of the residents of the City before adopting this Ordinance; and

WHEREAS, the City Council has considered the probable impact of the Zoning Atlas Amendment on the cost to construct housing for sale or rent and finds that the proposed Zoning Atlas Amendment will have no probable impact on the cost to construct housing for sale or rent.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF AVONDALE as follows:

SECTION 1. The recitals above are hereby incorporated as if fully set forth herein.

SECTION 2. The Zoning Atlas Amendment, is hereby approved, for $\pm$ 193.98 acres generally located along Dysart Road, west of the intersection with Broadway Road, as more particularly described and depicted on Exhibit A attached hereto and incorporated herein by reference, subject to the City of Avondale adopted codes, requirements, standards and regulations, and the following stipulations:

1. Development shall conform to the Three Rivers Ranch PAD Narrative date stamped, 09/07/2022, except as modified by these conditions.

2. Developer shall contribute 50% of the design and construction costs for a future traffic signal at Dysart Road and Three Rivers Ranch Parkway.

SECTION 3. If any provision of this Ordinance is for any reason held by any court of competent jurisdiction to be unenforceable, such provision or portion hereof shall be deemed separate, distinct and independent of all other provisions and such holding shall not affect the validity of the remaining portions of this Ordinance.

SECTION 4. The Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized and directed to execute all documents and take all steps necessary to carry out the purpose and intent of this Ordinance.

PASSED AND ADOPTED by the Council of the City of Avondale, Arizona, November 21, 2022.

Kenneth N. Weise, Mayor

ATTEST:

Marcella Carrillo, City Clerk

APPROVED:

Nicholle Harris, City Attorney

EXHIBIT A
TO
ORDINANCE NO. 2065-1122

[Legal Description and Map]

See following pages.

**Rezone Legal Description
For
Three Rivers Ranch**

Located in the Southeast Quarter of Section 22, and the Northeast Quarter of Section 27, Township 1 North, Range 1 West, Gila and Salt River Meridian, Maricopa County, Arizona. Described as follows:

Commencing at the Southeast corner of said Section 22, from which the East Quarter corner of said Section 22 bears North 00°48'24" West, a distance of 2659.71 feet;

Thence South 00°06'28" West, along the East line of the Northeast Quarter of said Section 27, a distance of 1,297.48 feet, to the South line of the North half of the Northeast Quarter of said Section 27;

Thence departing said East line, North 88°28'30" West, along said South line, a distance of 2,587.26 feet to the West line of the Northeast Quarter of said Section 27;

Thence departing said South line, North 00°10'41" East, along said West line, a distance of 1,313.42 feet to the North Quarter corner of said Section 27, being coincident with the South Quarter corner of said Section 22;

Thence North 00°34'13" West, along the West line of the Southeast Quarter of said Section 22, a distance of 33.03 feet;

Thence departing said West line, South 88°07'16" East, parallel with and 33.00 feet Northerly, as measured at right angles to the South line of the Southeast Quarter of said Section 22, a distance of 10.01 feet;

Thence departing said parallel line, North 00°34'13" West, parallel with and 10.00 feet Easterly, as measured at right angles to the West line of said Southeast Quarter of Section 22, a distance of 1,275.57 feet;

Thence departing said parallel line, South 88°21'57" East, parallel with and 10.00 feet Southerly, as measured at right angles to the North line of the Southwest Quarter of the Southeast Quarter of said Section 22, a distance of 1,290.10 feet;

Thence departing said parallel line, North 00°41'20" West, parallel with and 10.00 feet Easterly, as measured at right angles to the West line of the Northeast Quarter of the Southeast Quarter of said Section 22, a distance of 1,324.26 feet;

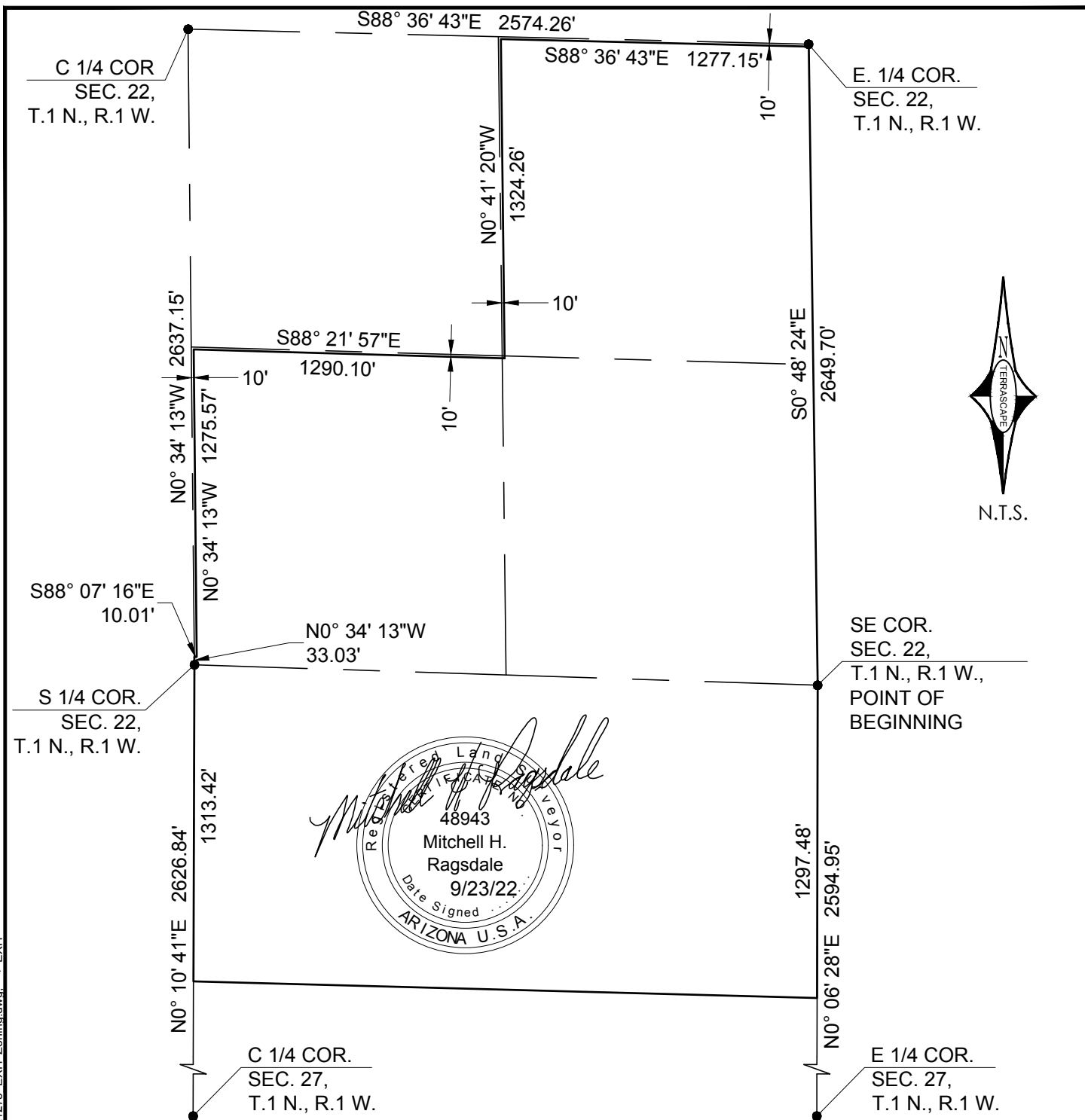
Thence departing said parallel line, South 88°36'43" East, parallel with and 10.00 feet Southerly, as measured at right angles to the North line of the Southeast Quarter of said Section 22, a distance of 1,277.15 feet to the East line of the Southeast Quarter of said Section 22;

Thence departing said parallel line, South 00°48'24" East, along said East line, a distance of 2,649.70 feet to the Point of Beginning.

Containing 8,449,898.59 square feet or 193.98 acres, more or less.



Plotted: 09/23/22 - 10:30 AM. By: mragdale
File: M:\1273 Sonoma Dyeart & Broadway Avondale\Survey\1273 EXH Zoning.dwg, --> EXH



645 E. MISSOURI AVE., STE. 420
PHOENIX, ARIZONA 85012

P:602.297.8732 • F:602.230.8458

EXHIBIT

ZONING BOUNDARY

THREE RIVERS RANCH

AVONDALE

Project No. 1273
Sheet 1 of 1

Date : 09/23/22

CITY COUNCIL REPORT

SUBJECT: Public Hearing - Proposed Land Use Assumptions and Infrastructure Improvement Plan

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Renee Weatherless, Director of Finance and Budget, (623) 333-2011

THROUGH: Cherlene Penilla, Assistant City Manager, (623) 333-1015

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

STRATEGIC OUTCOME: Creative and Sustainable Community Development

STRATEGY: Maintain and expand quality infrastructure and improve connectivity to city amenities.

PURPOSE:

The City Council will conduct a public hearing on the City's proposed land use assumptions (LUA) and infrastructure improvement plan (IIP) that will be used as the basis for the development impact fees assessed on new development. This item is for public hearing and discussion only, no action will be taken.

BACKGROUND:

On August 22, 2022, City Council was presented with a status and timeline update on the City's project to develop land use assumptions (LUA), an infrastructure improvement plan (IIP) and update development fees in order to comply with the mandates of A.R.S. §9-463.05.

On August 25, 2022, a notice of public hearing on the City's proposed LUA and IIP was posted on the City's website. Copies of the LUA and IIP documents were released and posted on the City's website for inspection by interested parties.

The notice of public hearing has been prominently posted on the City's main webpage and the documents have been available for review for the required sixty days. The City's Public Information Office also released notification of the public hearing on August 25, 2022.

DISCUSSION:

The City held three Stakeholder meetings to present the draft LUA and IIP on August 29, September 7, and September 21, 2022. Representatives from home developers, homebuilders, and school districts attended.

To date, no inquiries or concerns regarding the LUA have been received. There were items of clarification from the Home Builders Association of Central Arizona with our IIP regarding Parks, Streets, Water and Wastewater. Staff have addressed these items and made the appropriate adjustments to the IIP. The draft changes will reduce the proposed development impact fee for a single family residential home by \$632.

Any input from this public hearing will be evaluated and considered for incorporation or amendment to the documents as released. Adoption of the LUA and IIP is the next step required before the City can adopt new or modified development fees. The finalized LUA and IIP will be presented for adoption on January 9, 2023.

Public hearing on the resulting development fees is scheduled for February 21, 2023. Adoption of the final development fees will be scheduled April 3, 2023, which will not be effective for a minimum of seventy-five (75) days.

BUDGET IMPACT:

Approving the updated development fees enables the city to collect funds necessary to build the infrastructure associated with growth.

RECOMMENDATION:

Staff requests that Council hold a public hearing on the land use assumptions and infrastructure improvement plan.

Contact person for document distribution: Rob Baer, Ron Vestman

City of **AVONDALE**

Development Impact Fees for
Parks/Recreation, Fire, Police, Streets,
Water and Wastewater Facilities

Final Report

November 10, 2022

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FINDINGS AND CONCLUSIONS.....	4
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Executive Summary

The City of Avondale (City) retained Raftelis to conduct a comprehensive update to the non-utility and utility system development impact fees (SDFs or fees). Fees were last updated in 2019, including a fee for library facilities being used for debt service. Since the library debt will be paid off this fiscal year, Raftelis recommends suspension of the impact fee for libraries. This report documents the service units and the calculation of the proposed fees. A companion report documents land use assumptions (LUA) and Avondale's infrastructure improvement plan (IIP). The 2022 development impact fees include:

- Park/Recreation Facilities
- Fire Facilities
- Police Facilities
- Streets Facilities
- Water Facilities
- Wastewater Facilities

Impact Fee Definition

Development fees are one-time payments used to construct system improvements needed to accommodate new development. The fees represent future development's proportionate share of infrastructure capacity. Development fees may only be used for capital improvements or debt service for growth-related infrastructure. In contrast to general taxes, development fees may not be used for operations, maintenance, replacement or correcting existing deficiencies. Arizona Revised Statute §9-463.05 (Statute) identifies the specific requirements for municipalities to assess system development fees.

Findings and Conclusions

Figure 1 summarizes the methods and cost components for each type of infrastructure included in Avondale's 2022 DIF update. Arizona's enabling legislation also requires a determination of service areas, within which a substantial nexus exists between public facilities and the development being served. A citywide service area is appropriate for Avondale's parks/recreation, police, fire, and streets facilities. The City-Wide service area is considered north of the Estrella Mountains.

Figure 1 – Development Fee Methods and Cost Components

Type of Infrastructure	Service Area	Cost Recovery (past improvements)	Incremental Expansion (current standards)	Plan-Based (future improvements)	Cost Allocation
<i>Parks and Recreation</i>	Citywide N. of Estrella Mtns.	Recoupment of General Fund Loan	Improved Parks Acreage		Daytime Population (Persons and Jobs)
<i>Fire</i>	Citywide N. of Estrella Mtns.		Fire Buildings and Apparatus		Functional Population (Persons and Vehicle Trips)
<i>Police</i>	Citywide N. of Estrella Mtns.		Police Vehicles	Police Buildings	Functional Population (Persons and Vehicle Trips)
<i>Streets</i>	Citywide N. of Estrella Mtns.		Intersection Improvements	Growth Share of Arterial Capacity Expansion	Inbound, Primary, Average Daily Vehicle Miles of Travel
<i>Water</i>	Citywide N. of Estrella Mtns.	North Avondale Water Supply		Growth Share of Backbone Facility Expansion	Average and Peak Water Demand [1]
<i>Wastewater</i>	Citywide N. of Estrella Mtns.			Growth Share of Backbone Facility Expansion	Peak Wastewater Flow

[1] Water DIF is comprised of a water resources fee and an infrastructure fee. The water resources fee is calculated using average day demand the the infrastructure fee is calculated on peak day demand.

Proposed fees per residential dwelling are summarized in Figure 2. Residential fees per dwelling unit are provided for two types of housing. Fees for nonresidential development are listed per square foot of floor area. Proposed fees are provided for three general types of nonresidential development. Industrial includes all goods production and warehouse development. Office/Services includes business service and personal services, such as health care. Commercial (e.g., retail and restaurants) includes the uses found in a typical shopping center, plus eating/drinking places.

Figure 2 – Proposed Non-Utility Development Impact Fees

Citywide Service Area	Parks and Recreation	Fire	Police	Streets	Maximum Supportable	Current Total with Library	Increase or Decrease
<u>Residential (per dwelling)</u>							
Multifamily	\$1,207	\$1,553	\$1,485	\$1,279	\$5,524	\$3,807	\$1,717
Single Family	\$1,697	\$2,184	\$2,089	\$1,790	\$7,760	\$6,394	\$1,366
<u>Nonresidential (per square foot of floor area)</u>							
Industrial	\$0.07	\$0.04	\$0.04	\$0.21	\$0.36	\$0.45	(\$0.09)
Commercial	\$0.11	\$0.65	\$0.62	\$2.50	\$3.88	\$5.55	(\$1.67)
Office/Services	\$0.16	\$0.29	\$0.27	\$1.33	\$2.05	\$2.85	(\$0.80)

Figure 3 - Proposed Water Utility Development Impact Fees

<i>Meter Size</i>	<i>Meter Capacity Ratio [1]</i>	<i>Current Fees</i>	<i>Maximum Supportable</i>	<i>Change - \$</i>
<i>inches</i>				
0.75	1.00	\$3,822	\$3,519	(\$303)
1.00	1.67	6,383	5,865	(518)
1.50	3.33	12,728	11,730	(998)
2.00	5.33	20,372	18,768	(1,604)
3.00	10.67	40,782	37,536	(3,246)
4.00	16.67	63,715	58,650	(5,065)
6.00	33.33	127,392	117,300	(10,092)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Figure 4 - Proposed Wastewater Utility Development Impact Fees

<i>Meter Size (inches)</i>	<i>Meter Capacity Ratio [1]</i>	<i>Current Fees</i>	<i>Maximum Supportable</i>	<i>Change - \$</i>
0.75	1.00	\$5,808	\$3,153	(\$2,655)
1.00	1.67	9,700	5,255	(4,445)
1.50	3.33	19,342	10,510	(8,832)
2.00	5.33	30,959	16,816	(14,143)
3.00	10.67	61,976	33,632	(28,344)
4.00	16.67	96,826	52,550	(44,276)
6.00	33.33	193,595	105,100	(88,495)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Introduction

Arizona Development Impact Fees

Arizona Revised Statute §9-463.05 (Statute) identifies the specific requirements for municipalities to assess system development fees. DIFs can only be calculated and assessed for expansion-related existing or proposed improvements included in an approved IIP. The IIP must be tied to the LUA or growth projections that is tied to the service area in which fees will be enacted. The Statute also provides for strict notification, public hearing, and implementation schedules, among other provisions. This report provides an IIP and LUA for the various necessary public infrastructure to meet the demands of growth over the next 10-year period, FY 2022 – FY 2031 (LUA period).

Arizona's enabling legislation for development fees (ARS § 9-463.05) calls for three integrated products: 1) Land Use Assumptions (LUA) for at least 10 years, 2) Infrastructure Improvements Plan (IIP), and 3) Development Fees (DIF). Given the State's two-phase adoption process, the LUA and IIP are being reviewed, refined, and approved before focusing on the development fees.

In contrast to many General Plans and Master Plans for specific types of infrastructure, the IIP is limited to 10 years. Another important feature in Arizona's impact fee enabling legislation is the requirement that fees must be based on the same Level-Of-Service (LOS) provided to existing development. LOS to existing development may increase, but not by means of development fees. A final highlight of the enabling legislation is specific limitations on necessary public services. For example, only 10,000 square feet of a new library may be funded with development fees.

Arizona Development Fee Enabling Legislation

Arizona Revised Statutes § 9-463.05 governs how development fees are calculated for municipalities in Arizona. During the state legislative session of 2011, Senate Bill 1525 (SB 1525) was introduced which significantly amended the development fee enabling legislation. The changes included:

- Amending existing development fee programs by January 1, 2012.
- Abandoning existing development fee programs by August 1, 2014.
- New development fee program structure revolving around Land Use Assumptions and Infrastructure Improvements Plan.
- New adoption procedures for the Land Use Assumptions, Infrastructure Improvements Plan, and development fees.
- New definitions, including "necessary public services" which specify what categories and types of infrastructure may be funded with development fees.
- Time limitations in development fee collections and expenditures.
- New requirements for credits, "grandfathering" rules, and refunds.

As documented in this report, the City of Avondale (City) has complied with Arizona's development fee enabling legislation and applicable legal precedents. Development fees are proportionate and reasonably related to the capital improvement demands of new development. Specific costs have been identified using local data and current dollars. With input from City staff, Raftelis determined demand indicators for each type of infrastructure and calculated proportionate share factors to allocate costs by type of development. This report documents the formulas and input variables used to calculate the development fees for each type of public facility. Development fee methodologies also identify the extent to which new development is entitled to various types of credits to avoid potential double payment of growth-related capital costs.

Necessary Public Services

Consistent with Arizona's development fee enabling legislation, development fees may be only used for construction, acquisition or expansion of public facilities that are necessary public services. Necessary public facilities must have a life expectancy of three or more years and be owned or operated on behalf of the municipality.

Evaluation of Credits

New development should not be required to pay twice for the cost of new facilities – once through development fees and again through other taxes or fees that are used to fund the same facilities. To avoid potential double-payment, development fees may be reduced, and such a reduction is referred to as an offset or revenue credit that is incorporated into the development fee calculation. In general, offsets are only required for funding that is dedicated for capacity-expanding improvements of the type addressed by the development fee. A municipality is not required to use general fund revenue to pay for growth-related improvements.

SB 1525 amended the "offset" provision in the state enabling act to add a mandate regarding construction contracting excise tax, as highlighted in the following provision ARS § 9-463.05(B)(12)):

The municipality shall forecast the contribution to be made in the future in cash or by taxes, fees, assessments or other sources of revenue derived from the property owner towards the capital costs of the necessary public service covered by the development fee and shall include these contributions in determining the extent of the burden imposed by the development. Beginning August 1, 2014, for purposes of calculating the required offset to development fees pursuant to this subsection, if a municipality imposes a construction contracting or similar excise tax rate in excess of the percentage amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications, the entire excess portion of the construction contracting or similar excise tax shall be treated as a contribution to the capital costs of necessary public services provided to development for which development fees are assessed, unless the excess portion was already taken into account for such purpose pursuant to this subsection.

Because Avondale does not charge a construction excise tax at a rate higher than for other types of business activities, no such offset is required.

Qualified Professionals

Qualified professionals must prepare the IIP, using generally accepted engineering and planning practices. A qualified professional is defined as "a professional engineer, surveyor, financial analyst or planner providing services within the scope of the person's license, education, or experience." Raftelis is a financial consulting firm specializing in the cost of growth services and user charges for utilities. Our services include development fees, infrastructure funding, user fees and cost of service studies. Since 1993, Raftelis has provided consulting services for local governments and utilities across the United States. The total cost of professional services for the 2022 update of impact fees, including all meetings with staff and elected officials, was \$149,426. The cost of professional services was allocated 10% to

parks/recreation, 9% each to police and fire, 15% to streets, 28% to water, and 29% to wastewater facilities.

Methods

In contrast to project-level improvements, development fees fund growth-related infrastructure that will benefit multiple development projects, or the entire jurisdiction (usually referred to as system improvements). There are three general methods for calculating development fees. The choice of a particular method depends primarily on the timing of infrastructure construction (past, concurrent, or future) and service characteristics of the facility type being addressed. Each method has advantages and disadvantages in a particular situation and can be used simultaneously for different cost components.

The process of calculating development impact fees involves two main steps: (1) determining the cost of development-related capital improvements and (2) allocating those costs equitably to various types of development. In practice, the calculation of development fees can become complicated due to many variables involved in defining the relationship between development and the need for facilities within the designated service area. The following paragraphs discuss three basic methods for calculating development fees and how those methods can be applied.

- The rationale for recoupment, often called cost recovery, is that new development is paying for its share of the useful life and remaining capacity of facilities already built, or land already purchased, from which new growth will benefit. This methodology is often used for utility systems that must provide adequate capacity before new development can take place.
- The incremental expansion method documents current infrastructure standards for each type of public facility, using both quantitative and qualitative measures. With de facto standards, there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share to maintain current standards for growth-related infrastructure. Fee revenue will be used to expand or provide additional facilities, as needed to keep pace with new development.
- The plan-based method allocates costs for a specified set of improvements to a specified amount of service units. Improvements are typically identified in a facility master plan and development potential is identified by the land use assumptions. There are two options for determining the cost per service unit: 1) total cost of a public facility can be divided by total demand units (average cost approach), or 2) the growth-share of the public facility cost can be divided by the net increase in demand units over the planning timeframe (marginal cost approach).

Reliance on City Provided Data

During the course of this project, the City provided Raftelis with a variety of information including financial reports, planning documents, and projected capital expenditures for each fee area. Raftelis has reviewed the data for reasonableness and general representation of cost and related activities. Raftelis did not independently assess or verify the accuracy of such data – historic or projected. We have relied on this data in the formulation of our findings and recommendations, as well as in the preparation of this report. There will be differences between actual and projected data, and these differences may be significant. Therefore, we take no responsibility for the accuracy of data or projections provided by or prepared on behalf of the City, nor does Raftelis have any responsibility for updating this report for

events occurring after the date of this report. Below is a list of the major source documents used for this study:

- Maricopa Association of Government 2022 Economic Data
- Institute of Transportation Engineers Trip Generation Manual
- City of Avondale 2018 Integrated Utility Master Plan
- City of Avondale debt documents
- Infrastructure Improvement Plans by type of public facility

Legal Disclaimer

The City of Avondale retained Raftelis to conduct the DIF study. During the technical review and analysis, Raftelis relied on City data and discussions with City staff to develop the SDFs. In addition, Raftelis used industry-standard resources including data from the Maricopa Association of Governments (MAG) and the Institute of Transportation Engineers (ITE) in the development of growth projections, levels of service, and fees.

These fees have been developed in accordance with the Statute. In calculating the fees for the City, the analysis shows that the proposed fees for each service area provide the additional necessary funding needed for the indicated public services and that the fees bear a reasonable relationship to the burden imposed. If a fee-payer believes the development has a non-standard impact on the City, the fee-payer is responsible to provide written documentation to the City describing the anticipated impact and why application of the standard DIF would not bear a reasonable relationship to the burden imposed.

Parks/Recreation Facilities

ARS § 9-463.05(T)(7)(g) defines the parks and recreation facilities eligible for development fee funding.

“Neighborhood parks and recreational facilities on real property up to thirty acres in area, or parks and recreational facilities larger than thirty acres if the facilities provide a direct benefit to the development. Park and recreational facilities do not include vehicles, equipment or that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools.”

Input variables for parks/recreation facilities, documented in the IIP, are summarized in the upper portion of Figure PR1. The conversion of costs per service unit into a cost per development unit is also shown in the figure below. For residential development, average number of persons per housing unit provides the necessary conversion. For nonresidential development, average jobs per square foot of floor area are derived from trip generation rates by type of development, published by the Institute of Transportation Engineers (ITE 2022). Additional details on nonresidential prototypes are provided in the LUA report. Proposed development fees for parks/recreation facilities are shown in the column with light green shading.

Figure PR1 – Parks/Recreation Service Units and Fees per Development Unit**Input Variables**

<i>Infrastructure Type</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Cost Factor per Unit</i>	<i>IIP Cost (rounded)</i>
Parks and Recreation Facilities	improved acres	9.8	\$431,000	\$4,224,000
Recoupment of General Fund Loan				\$2,500,000
Professional Services for LUA, IIP, and DIF				\$14,943
Total =>				\$6,738,943

Cost Allocation

Residential	92%			
Nonresidential	8%			
<i>Growth 2022 to 2032</i>		<i>Cost per Service Unit</i>	<i>Credit per Service Unit</i>	<i>Net Cost per Service Unit</i>
Residential (persons)	11,992	\$516	\$0	\$516
Nonresidential (jobs)	6,948	\$77	\$0	\$77

Residential Impact Fees (per housing unit) for Parks and Recreation

<i>Type</i>	<i>Persons per Housing Unit</i>	<i>Maximum Parks and Recreation Impact Fees</i>	<i>Current Fees</i>	<i>Increase or Decrease</i>
Multifamily	2.34	\$1,207	\$1,002	\$205
Single Family	3.29	\$1,697	\$1,497	\$200

Nonresidential Impact Fees (per square foot of building floor area) for Parks and Recreation

<i>Type</i>	<i>Jobs per 1,000 Square Feet</i>	<i>Maximum Parks and Recreation Impact Fees</i>	<i>Current Fees</i>	<i>Increase or Decrease</i>
Industrial	0.93	\$0.07	\$0.08	(\$0.01)
Commercial	1.51	\$0.11	\$0.54	(\$0.43)
Office/Services	2.19	\$0.16	\$0.68	(\$0.52)

Projected Revenue for Parks/Recreation Facilities

Parks/recreation development fee revenue is expected to match the growth cost of infrastructure, which has a ten-year total cost of approximately \$6.7 million (see the upper portion of Figure PR2). The figure below indicates Avondale should receive approximately \$6.7 million in development fee revenue over the next ten years, if actual development matches the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the need for infrastructure and development fee revenue.

Figure PR2 – Parks/Recreation Development Fee Revenue

Parks and Recreation Growth Cost Over 10 Years **\$6,738,943**

Parks and Recreation Impact Fee Revenue

		Average Residential \$1,584 per housing unit	Industrial \$70 per 1000 Sq Ft	Commercial \$110 per 1000 Sq Ft	Office/Services \$160 per 1000 Sq Ft
Year		Housing Units	KSF	KSF	KSF
Base	2022	29,911	2,900	7,800	4,600
Year 1	2023	30,318	3,000	8,000	4,800
Year 2	2024	30,724	3,000	8,300	4,900
Year 3	2025	31,130	3,100	8,500	5,000
Year 4	2026	31,536	3,200	8,700	5,200
Year 5	2027	31,942	3,300	8,900	5,300
Year 6	2028	32,349	3,400	9,200	5,400
Year 7	2029	32,755	3,500	9,400	5,600
Year 8	2030	33,160	3,500	9,600	5,700
Year 9	2031	33,489	3,600	9,800	5,800
Year 10	2032	33,818	3,700	10,000	5,900
Ten-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$6,189,000	\$56,000	\$242,000	\$208,000
Total Revenue Over 10 Years (rounded) =>					\$6,695,000

Fire Facilities

Input variables for fire facilities, documented in the IIP, are summarized in the upper portion of Figure F1. The conversion of costs per service unit into a cost per development unit is also shown in the figure below. For residential development, average number of persons per housing unit provides the necessary conversion. For nonresidential development, average weekday, inbound, primary, vehicle trips per square foot of floor area are derived from trip generation rates by type of development, published by the Institute of Transportation Engineers (ITE 2022). Additional details on nonresidential prototypes are provided in the LUA report. Proposed development fees for fire facilities are shown in the column with light orange shading.

Figure F1 – Fire Service Units and Fees per Development Unit

Input Variables

Infrastructure Type	Infrastructure Units	Growth Quantity Over Ten Years	Cost Factor per Unit	IIP Cost (rounded)
Fire Buildings	square feet	11,240	\$668	\$7,508,000
Fire Vehicles (3+ years of useful life)	count	6	\$386,800	\$2,321,000
Professional Services for LUA, IIP, and DIF				\$13,448
Total =>				\$9,842,448

Cost Allocation

Residential	81%			
Nonresidential	19%			
Growth 2022 to 2032		Cost per Service Unit	Revenue Credit per Service Unit	Net Cost per Service Unit
Residential (persons)	11,992	\$664	\$0	\$664
Nonresidential (vehicle trips)	34,599	\$54	\$0	\$54

Residential Impact Fees (per housing unit) for Fire

Type	Persons per Housing Unit	Maximum Supportable Fire Impact Fees	Current Fees	Increase or Decrease
Multifamily	2.34	\$1,553	\$519	\$1,034
Single Family	3.29	\$2,184	\$775	\$1,409

Nonresidential Impact Fees (per square foot of floor area) for Fire

Type	Avg Wkdy Veh Trip Ends per 1,000 Sq Ft	Trip Adjustment Factors	Maximum Supportable Fire Impact Fees	Current Fees	Increase or Decrease
Industrial	1.71	50%	\$0.04	\$0.05	(\$0.01)
Commercial	37.01	33%	\$0.65	\$0.78	(\$0.13)
Office/Services	10.84	50%	\$0.29	\$0.31	(\$0.02)

Projected Revenue for Fire Facilities

Fire development fee revenue is expected to match the growth cost of fire infrastructure, which has a ten-year total cost of approximately \$9.8 million (see the upper portion of Figure F2). The figure below indicates Avondale should receive approximately \$9.8 million in fire development fee revenue over the next ten years, if actual development matches the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the need for infrastructure and development fee revenue.

Figure F2 – Fire Development Fee Revenue

Fire Facilities Growth Cost Over 10 Years => **\$9,842,448**

Fire Facilities Impact Fee Revenue

		Average Residential \$2,038 per housing unit	Industrial \$40 per 1000 Sq Ft	Commercial \$650 per 1000 Sq Ft	Office/Services \$290 per 1000 Sq Ft
Year		Housing Units	KSF	KSF	KSF
Base	2022	29,911	2,900	7,800	4,600
Year 1	2023	30,318	3,000	8,000	4,800
Year 2	2024	30,724	3,000	8,300	4,900
Year 3	2025	31,130	3,100	8,500	5,000
Year 4	2026	31,536	3,200	8,700	5,200
Year 5	2027	31,942	3,300	8,900	5,300
Year 6	2028	32,349	3,400	9,200	5,400
Year 7	2029	32,755	3,500	9,400	5,600
Year 8	2030	33,160	3,500	9,600	5,700
Year 9	2031	33,489	3,600	9,800	5,800
Year 10	2032	33,818	3,700	10,000	5,900
Ten-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$7,962,000	\$32,000	\$1,430,000	\$377,000
Total Revenue Over 10 Years (rounded) =>					\$9,801,000

Police Facilities

ARS § 9-463.05(T)(7)(f) defines the police and fire facilities eligible for development fee funding.

“Fire and Police facilities, including all appurtenances, equipment and vehicles. Fire and Police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.”

Input variables for police, as documented in the IIP, are summarized in the upper portion of Figure P1. The conversion of infrastructure costs per service unit into a cost per development unit is also shown in the figure below. For residential development, average number of persons per dwelling provides the necessary conversion. For nonresidential development, trip generation rates by type of development are from the Institute of Transportation Engineers (ITE 2022). To ensure the analysis is based on travel demand associated with nonresidential development in Avondale, trip ends (entering and exiting) are converted to inbound, primary trips, using trip adjustment factors. For Industrial and Office/Services, a basic adjustment of 50% is applied. Because commercial development attracts “pass-by” trips, the adjustment factor for commercial is only 33%, based on the average pass-by factor for shopping centers. Maximum supportable development fees for police facilities are shown in the column with blue shading.

Figure P1 – Police Service Units and Fees per Development Unit**Input Variables**

Infrastructure Type	Infrastructure Units	Growth Quantity Over Ten Years	Cost Factor per Unit	IIP Cost (rounded)
Police Buildings	square feet	8,000	\$998	\$7,984,000
Police Vehicles (3+ years of useful life)	count	23	\$61,200	\$1,408,000
Professional Services for LUA, IIP, and DIF				\$13,448
Total =>				\$9,405,448

Cost Allocation

Residential	81%			
Nonresidential	19%			
Growth 2022 to 2032		Cost per Service Unit	Revenue Credit per Service Unit	Net Cost per Service Unit
Residential (persons)	11,992	\$635	\$0	\$635
Nonresidential (vehicle trips)	34,599	\$51	\$0	\$51

Residential Impact Fees (per housing unit) for Police

Type	Persons per Housing Unit	Maximum Supportable Police Impact Fees	Current Fees	Increase or Decrease
Multifamily	2.34	\$1,485	\$557	\$928
Single Family	3.29	\$2,089	\$832	\$1,257

Nonresidential Impact Fees (per square foot of floor area) for Police

Type	Avg Wkdy Veh Trip Ends per KSF	Trip Adjustment Factors	Maximum Supportable Police Impact Fees	Current Fees	Increase or Decrease
Industrial	1.71	50%	\$0.04	\$0.06	(\$0.02)
Commercial	37.01	33%	\$0.62	\$0.83	(\$0.21)
Office/Services	10.84	50%	\$0.27	\$0.32	(\$0.05)

Projected Revenue from Police Fees

The revenue projection shown below assumes implementation of the maximum supportable police fees and that development in the service area over the next ten years is consistent with the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the impact fee revenue. The police fee revenue projection in Figure P2 (\$9.4 million over ten years) approximates the growth cost of planned system improvements to be funded with development fees.

Figure P2 – Police Fee Revenue Projection

Ten-Year Need for Growth-Related Police Facilities => **\$9,405,448**

Police Impact Fee Revenue

		Average Residential \$1,949 per housing unit	Industrial \$40 per 1000 Sq Ft	Commercial \$620 per 1000 Sq Ft	Office/ Services \$270 per 1000 Sq Ft
		Housing Units	KSF	KSF	KSF
Base	2022	29,911	2,900	7,800	4,600
Year 1	2023	30,318	3,000	8,000	4,800
Year 2	2024	30,724	3,000	8,300	4,900
Year 3	2025	31,130	3,100	8,500	5,000
Year 4	2026	31,536	3,200	8,700	5,200
Year 5	2027	31,942	3,300	8,900	5,300
Year 6	2028	32,349	3,400	9,200	5,400
Year 7	2029	32,755	3,500	9,400	5,600
Year 8	2030	33,160	3,500	9,600	5,700
Year 9	2031	33,489	3,600	9,800	5,800
Year 10	2032	33,818	3,700	10,000	5,900
Ten-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$7,615,000	\$32,000	\$1,364,000	\$351,000
Total Projected Revenues (rounded) =>		\$9,362,000			

Street Facilities

ARS § 9-463.05(T)(7)(e) defines the facilities and assets which can be included in the Street Facilities IIP.

“Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon.”

Development Fees for Streets

Figure S1 indicates key input variables at the top, which are documented in Avondale’s LUA and IIP report. Proposed fees are equal to the Vehicle Miles of Travel (VMT) by development category multiplied by the cost factor of \$1,011 per VMT. For example, the DIF for an average single family residential unit is derived from the formula below.

$$9.43 \times 0.61 \times 1.14 \times 0.27 \times \$1011 = \$1,790 \text{ (truncated)}$$

Figure S1 – Streets Development Fee Schedule for Avondale

Input Variables	Arterial Lane Miles	Cost per Lane Mile	IIP Costs
Growth Cost of Capacity Expansion	3.0	\$2,500,000	\$7,500,000
	Improved Intersections	Avg Cost per Intersection	
	3	\$2,295,000	\$6,885,000
	Professional services for LUA, IIP, and DIF		\$22,414
	Total IIP Cost Over Ten Years		\$14,407,414
VMT Increase Over 10 Years	14,237		
Average Miles per Trip	0.27		
Growth Cost per VMT	\$1,011		

Residential (per dwelling unit) for Streets

ITE Code	Type	Avg Wkdy Veh Trip Ends per Dwelling	Trip Rate Adjustment	Trip Length Adjustment	Maximum Supportable Streets Impact Fees	Current Fees	Increase or Decrease
220	Multifamily	6.74	61%	114%	\$1,279	\$1,649	(\$370)
210	Single Family	9.43	61%	114%	\$1,790	\$3,171	(\$1,381)

Nonresidential (per square foot of floor area) for Streets

ITE Code	Type	Avg Wkdy Veh Trip Ends per 1,000 Sq Ft	Trip Rate Adjustment	Trip Length Adjustment	Maximum Supportable Streets Impact Fees	Current Fees	Increase or Decrease
150	Industrial	1.71	50%	90%	\$0.21	\$0.25	(\$0.04)
820	Commercial	37.01	33%	75%	\$2.50	\$3.31	(\$0.81)
710	Office/Services	10.84	50%	90%	\$1.33	\$1.43	(\$0.10)

Projected Revenue from Street Fees

The revenue projection shown below assumes implementation of the maximum supportable street fees and that development in the service area over the next ten years is consistent with the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the impact fee revenue. The street fee revenue projection in Figure S2 of almost \$14 million over ten years, approximates the growth cost of planned system improvements to be funded with development fees.

Figure S2 – Projected Street Fee Revenue

Ten-Year Cost of Street Facilities

Growth Cost => **\$14,407,414**

Streets Impact Fee Revenue

		<i>Average-Size Residential</i>	<i>Industrial</i>	<i>Commercial</i>	<i>Office/Services</i>
		\$1,680 per housing unit	\$210 per 1000 Sq Ft	\$2,500 per 1000 Sq Ft	\$1,330 per 1000 Sq Ft
	<i>Year</i>	<i>Hsg Units</i>	<i>KSF</i>	<i>KSF</i>	<i>KSF</i>
Base	2020	29,911	2,900	7,800	4,600
Year 1	2021	30,318	3,000	8,000	4,800
Year 2	2022	30,724	3,000	8,300	4,900
Year 3	2023	31,130	3,100	8,500	5,000
Year 4	2024	31,536	3,200	8,700	5,200
Year 5	2025	31,942	3,300	8,900	5,300
Year 6	2026	32,349	3,400	9,200	5,400
Year 7	2027	32,755	3,500	9,400	5,600
Year 8	2028	33,160	3,500	9,600	5,700
Year 9	2029	33,489	3,600	9,800	5,800
Year 10	2030	33,818	3,700	10,000	5,900
<i>10-Yr Increase</i>		3,907	800	2,200	1,300
Projected Revenue =>		\$6,564,000	\$168,000	\$5,500,000	\$1,729,000
Total Revenue (rounded) =>					\$13,961,000

Water Facilities

ARS §9-463.05.T.7(a) defines the facilities and assets which can be included in the Water Facilities IIP:

“Water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities”

The City provides potable water with water supply consisting of a combination of ground water sources. The entire water system infrastructure includes water resources, wells, transmission, distribution, storage, administrative facilities, vehicles, and equipment including meters. The City’s water system serves the land areas north of the Estrella Mountains, excluding a small area in the northwest corner of the City limits. This area is served by a private water utility. The following provides an analysis of the resource and facility costs included in the IIP and DIF calculations.

The calculation of the water facilities DIF was based on information provided by staff in addition to the City’s 2018 Integrated Utility Master Plan Report (IUMP).

Projected Service Units

ARS §9-463.05 (E)(5) requires:

“The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.”

ARS §9-463.05 (E)(6) requires:

“The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.”

It is projected that there will be an additional 3,907 dwelling units added within the City by 2032. Using the maximum day water demand per DU of 743 gpd, the projected residential peak demand will increase 2.9 mgd ($743 \times 3,907 = 2,902,901$ gpd). It is estimated that the 6.92 mgd added capacity will serve approximately 9,314 DU ($6,900,000$ gpd / 743 gpd per DU = $9,314$ DU).

Figure W1 shows the development of the current demand projection, projected demands and the total DU added during the study period. It also shows the DU that will be served by existing available capacity and the capacity added by the IIP. The current system operates above the firm capacity of 17.7 mgd so there is no existing available capacity to serve growth.

Figure W1 – Projected Added Dwelling Units and Water Demand Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per EDU, gpd	450
3	Current Ave Day Demand, gpd	13,459,950
4	Maximum Day Peak Factor	1.41
5	Avg Day of Maximum Month, gpd (Line 3 x Line 4)	18,960,633
6	Current Firm Capacity, gpd	17,700,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	0
Added Capacity		
8	Added DU, 2022 - 2032	3,907
9	Average Day Demand	450
10	Planning Maximum Day Factor	1.65
11	Maximum Day Demand per DU, gpd	743
12	Added System Maximum Day Demand, gpd (Line 8 x Line 11)	2,902,901
13	Additional Capacity Needed for Growth (Line 12 - Line 7)	2,902,901
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	0
15	DU Served by 10-Year IIP (Line 13 / Line 11)	3,907
16	Total Added DU	3,907
17	DU Served by Full 6.92 mgd Capacity Addition	9,314

Development Fees for Water Facilities

The proposed water development impact fee (DIF) consists of an infrastructure component and a resources component. The only difference between these two components is the measurement of capacity. Infrastructure projects are stated in peak day gallons per day while the resource projects are stated in terms of annual demand or acre-feet. The two fees are calculated separately but are combined into one fee. The equations below illustrate the differences.

$$\frac{\text{Infrastructure Projects}}{\text{Added Well Capacity (gpd)}} \times 3/4" \text{ Equiv Peak Demand (gpd)} = \text{Infrastructure DIF}$$

$$\frac{\text{Water Resource Projects}}{\text{Added Supply (Acre - Feet)}} \times 3/4" \text{ Equiv. Average Day Demand (AF)} = \text{Resources DIF}$$

$$\text{Infrastructure DIF} + \text{Resources DIF} = \text{Total Water DIF}$$

Total added well capacity was used as the basis for determining the unit cost of capacity. The ¾" equivalent demands are analyzed using the same unit measurements as the unit cost of capacity calculation. This is to maintain the rational nexus between the cost of facilities and the cost to serve a new customer. For example, if the unit cost of treatment facilities is measured using design peak day demand parameter in gallons per day (gpd), then the new customer demands should also be measured in peak day gpd to calculate the fee.

Infrastructure project costs total approximately \$27.0 million. Included in this total is the DIF-related costs associated North Avondale Water Supply Project (NAWS) of \$4,419,000. The \$4,419,000 is the sum of the total principal and interest costs of the project. This project has a capacity of 6 million gallons per day (mgd) with 1 mgd currently in use. Therefore, the principal and interest payments included in the fee are reduced to 5/6 of the total value. This represents the remaining value of capacity for growth. The infrastructure costs are decreased by the FY21 beginning balance of \$1.1 million. Net infrastructure costs total \$25.9 million. The City will be securing an additional 6,882 acre-feet of water resources to meet future demand. This includes additional storage/recharge capacity at the New River-Agua Fria River Underground Storage Project (NAUSP) operated by Salt River Project (SRP) from the City of Chandler. This provides Avondale additional recharge capability and will alleviate the need for a water surface treatment plant. The water resource projects total \$10.0 million. Figure W2 details the water DIF calculation.

Figure W2 – Calculation of Water Development Impact Fee

Description	Total Cost	Capacity Added (mgd)	Percent Growth-Related	Growth-Related Costs
Growth-Related Infrastructure Projects				
Well #33 The BLVD Well & Transmission	\$2,880,000	1.73	100.0%	\$2,880,000
Well at 107th & Encanto - SRP Shared Well Cost in Design	455,000	1.73	100.0%	455,000
McDowell Rd 16-inch Waterline - Avondale to 99th Ave	2,650,000		25%	662,500
99th Ave Waterline - Thomas to Encanto	956,000		100%	956,000
Garden Lakes Site - 2nd Reservoir & Booster Improvements	8,358,000		100.0%	8,358,000
Future Well	2,700,000	1.73	100.0%	2,700,000
Nitrate Removal System for Coldwater Booster Station	5,545,000		100.0%	5,545,000
16-inch WL Dysart Road – Illini to Roeser	1,000,000		52.0%	520,000
16-inch WL El Mirage, Elwood to Lower Buckeye	900,000		25.0%	225,000
16-inch WL 107th – Jones to Superior	500,000		25.0%	125,000
16-inch WL 107th Ave, Superior to Lower Buckeye	700,000		25.0%	175,000
Dysart Rd. Waterline - Roeser Alignment to Southern	1,000,000		63.0%	630,000
Northside Booster Well Site - Land Purchase & DCR	75,000	1.73	100.0%	75,000
NAWS Project (Impact Fee Portion, P&I) [1]	3,682,500		100.0%	3,682,500
Total Growth-Related Projects/Expansion Capacity Share	\$31,401,500			\$26,989,000
Less: FY21 Ending Fund Balance	(\$1,134,326)			(\$1,134,326)
Net Growth-Related Projects/Expansion Capacity Share	\$30,267,174			\$25,854,674
10-Year Capacity Added, mgd		6.92		
Unit Cost of Capacity, \$ per gpd				\$3.74
Average Day Water Demand 3/4" Meter, gpd [2]		450.00		
Maximum Day Peaking Factor [3]		1.65		
Peak Demand, gpd		743		
Water Infrastructure Development Fee				\$2,776
Growth-Related Resource Projects				
		Acre-Feet		
New River-Agua Fria River Underground Storage Project (NAUSP)	\$7,200,000	6,000	100.0%	7,200,000
White Mountain Apache Tribe Water Settlement	2,800,000	882	100.0%	2,800,000
Total Growth-Related Projects/Expansion Capacity Share	\$10,000,000			\$10,000,000
10-Year Capacity Added, Acre-Feet		6,882		
10-Year Capacity Added, thousand gallons		2,242,507		
Unit Cost of Capacity, \$ per 1,000 gallons				\$4.46
Annual Water Demand, 1,000 gallons		164.3		
Water Resources Development Fee				\$732
Plus: Cost of Professional Services, \$ per 3/4" Equivalent				\$11
Water Development Fee, \$ per 3/4" Equivalent				\$3,519
Existing Fee				\$3,822
Difference - %				(\$303)

[1] Total P&I of project reimbursed from impact fees portion of \$4,419,000 multiplied by remaining 5 mgd of the 6 mgd capacity

[2] From 2018 Utility Master Plan, page 2-10. Represents metered demand from all 3/4" meters regardless of customer class.

[3] From 2018 Utility Master Plan, page 2-13.

Water DIFs are assessed by meter size and increase based on the AWWA 3/4-inch meter capacity relationships. One DU is equated to a 3/4-inch meter, which is the smallest and most common meter size available. Figure W3 shows the calculated fees by meter size using AWWA equivalent ratios and are the same as the City's existing equivalent ratios.

Table W3 – Comparison of Current and Maximum Supportable Water DIFs

Meter Size <i>inches</i>	Meter Capacity Ratio [1]	Current Fees	Maximum Supportable	Change - \$
0.75	1.00	\$3,822	\$3,519	(\$303)
1.00	1.67	6,383	5,865	(518)
1.50	3.33	12,728	11,730	(998)
2.00	5.33	20,372	18,768	(1,604)
3.00	10.67	40,782	37,536	(3,246)
4.00	16.67	63,715	58,650	(5,065)
6.00	33.33	127,392	117,300	(10,092)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.

Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Projected Revenue from Water Facilities Fees

The revenue projection shown below assumes implementation of the maximum supportable water facility fees and that development in the service area over the next ten years is consistent with the land use assumptions. Figure W4 shows the maximum daily demand based on the increase in DU per year for the 10-year planning period. The water facility fee revenue projection in Figure W4 (\$13.7 million) approximates the growth cost of planned system improvements to be funded with development fees. Because the capacity added will serve development beyond the 10-year time frame, fee revenue will continue to be collected commensurate with the additional growth.

Table W4 - Projected Water Facilities Fees Revenue

10-Year Cost of Water Utility Facilities

Growth Cost => \$35,854,674

Water Utility Impact Fee Revenue

		Added Annual Demand	Added Maximum Day Demand	3/4" Eq. Meters \$3,519 Dwelling Units
Year		1,000 gal	gpd	
Base	2022	4,912,882	18,960,633	29,911
Year 1	2023	4,979,732	19,263,034	30,318
Year 2	2024	5,046,417	19,564,692	30,724
Year 3	2025	5,113,103	19,866,350	31,130
Year 4	2026	5,179,788	20,168,008	31,536
Year 5	2027	5,246,474	20,469,666	31,942
Year 6	2028	5,313,323	20,772,067	32,349
Year 7	2029	5,380,009	21,073,725	32,755
Year 8	2030	5,446,530	21,374,640	33,160
Year 9	2031	5,500,568	21,619,087	33,489
Year 10	2032	5,554,607	21,863,534	33,818
10-Yr Increase		641,725	2,902,901	3,907
Projected Revenue (Rounded)=>				\$13,748,733

[1] $641,725 \text{ kgal} \times \$4.46 + 2,902,901 \text{ gpd} \times \$3.74 + \$11 \times 3,907 = \$13,749,370$

Variance due to rounding.

Wastewater Utility Fees

ARS §9-463.05.T.7(b) defines the facilities and assets which can be included in the Wastewater Facilities IIP:

“Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities”

The City provides central wastewater collection, treatment, and disposal service throughout the service area limits. The wastewater service area includes the northern municipal planning area down to the Estrella Mountains. The service area includes sections that are served by septic systems.

The calculation of the wastewater facilities DIF was based on information provided by staff in addition to the City’s 2018 Integrated Utility Master Plan Report (IUMP).

The current fee includes two components; a collection system fee and a wastewater treatment fee. Raftelis recommends eliminating the existing collection system DIF. The City’s collection system currently has capacity to serve new development and there is no outstanding costs recoverable from DIFs associated with those facilities.

Projected Service Units

ARS §9-463.05 (E)(5) requires:

“The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.”

ARS §9-463.05 (E)(6) requires:

“The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.”

It is projected that there will be an additional 3,907 residential dwelling units built within the City by 2037. Using the MMADF per dwelling unit of 207 gpd, it is estimated that there will be an increase in projected contributed peak wastewater flow of 0.85 mgd ($218 \times 3,907 = 1,210,000$ gpd).

Figure WW1 shows the development of the current annual average daily flow projections, projected average daily and MMADF flow, and the total DU added during the study period. It also shows the DU that will be served by existing available capacity and the capacity added by the IIP.

Figure WW1 – Projected Added Dwelling Units and Wastewater Flows Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per DU, gpd	218.00
3	Current Ave Day Demand, gpd	6,520,598
4	MMADF Peak Factor	1.04
5	Avg Day of Maximum Month, gpd (Rounded) (Line 4 x Line 3)	6,751,000
6	Current Firm Capacity, gpd	7,200,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	449,000
Added Demand [1]		
8	Added DU, 2023 - 2032	3,907
9	Average Day Demand	207
10	Planning MMADF factor	1.05
11	MMADF per DU, gpd (Line 9 x Line 10)	218
12	Added MMADF, gpd	851,726
13	Additional Capacity Needed for Growth, gpd (Line 12 - Line 7)	402,726
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	2,060
15	DU Served by 10-Year IIP (Line 13 / Line 11)	1,847
16	Total Added DU	3,907
17	DU Served by Full 2.4 mgd Capacity Addition	11,009

[1] The new WWTP adds a total of 2.4 mgd of capacity.

Development Fees for Wastewater Facilities

ARS §9-463.05 (E)(3) requires:

A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.

The City's existing treatment capacity is a maximum month average daily flow (MMADF) of 9.0 mgd. As shown on Figure WW1, the 2016 average annual daily flow to the WRF is 5.6 mgd. In 2021, the average annual daily flow increased from 5.6 mgd to 6.5 mgd. The MMADF in 2021 was 6.75 mgd.

Under existing Arizona law, only 80% of the total capacity can be used, or 7.2 MGD. The remaining capacity of 0.45 mgd of additional capacity available for growth. The City has plans for a 3.0 mgd expansion to the Avondale Water Reclaimed Facility (WRF). Also under existing Arizona law, only 80% of the total capacity can be used, giving an additional planned capacity of 2.40 MGD.

Including both the additional capacity available from the existing facility of 0.45 mgd and the planned expansion of 2.40 MGD, the City's wastewater treatment has 2.85 mgd of available wastewater capacity

to serve growth. Of that 2.85 mgd capacity, 0.85 mgd will be required to serve growth over the 15-year period. The estimated cost of the additional capacity is approximately \$79.6 million.

Like water, unit cost of capacity in gallons per day based on the design capacity of the plant (Maximum Month Average Day Flow MMADF). The MMADF for a ¾" equivalent serves as a proxy for its potential capacity. This value is based on the average water demands multiplied by a return factor and the MMADF peak flow factor. The return factor represents the portion of water usage that returns to the WWTP. The equation below summarizes the calculation of the wastewater DIF. Figure WW2 details the wastewater DIF calculation.

$$\frac{\text{Infrastructure Projects}}{\text{Added Well Capacity (gpd)}} \times 3/4" \text{ Equiv Peak Return Flow (gpd)} = \text{Infrastructure DIF}$$

Figure WW2 – Calculation of Wastewater Development Fee

Description				Cost of Capacity
WWTP Phase 2				\$79,590,000
Less: FY21 Ending Fund Balance				(6,438,870)
Total Existing and Growth-Related WWTP Costs				\$73,151,130
WWTP Capacity, MMADF, mgd [1,2]				
Phase 2 Capacity Addition	80.0%	3.00		2.40
Total WWTP Capacity, mgd				2.40
Unit Cost of Capacity, \$ per mgd				\$30.48
Average Day Water Demand, gpd [3]				450
Return Factor [3]				46%
MMADF Peaking Factor [3]				1.05
MMADF Flow per DU, gpd [4]				218.00
Wastewater Development Fee, \$ per ¾" Equivalent				\$6,645
Plus: Cost of Professional Services, \$ per ¾" Equivalent				\$11
Wastewater Development Fee, \$ per ¾" Equivalent				\$6,656
Existing Fee				\$5,808
Difference - %				\$848

[1] MMADF: Maximum Month average day flow

[2] mgd: million gallons per day

[3] From Table 2-10 of Carollo 2018 Integrated Utility Master Plan

[4] A dwelling unit is assumed to be demands through a ¾" equivalent meter

As stated above, the City's wastewater treatment plant has existing capacity (0.45 mgd) to serve growth. This existing capacity has been funded through previous DIF revenues and other sources. As a result, future capacity should not be responsible for that portion of costs. Raftelis adjusted the fee in Figure WW2 to account for this difference which is shown in Figure WW3.

Figure WW3 – Calculation of Adjusted Wastewater DIF

<i>Line No</i>	<i>Description</i>	<i>Units</i>
1	Current Firm Capacity, gpd	7,200,000
2	Avg Day of Maximum Month, gpd	6,751,000
3	Capacity Available in Existing Facilities	449,000
4	Capacity Needed for 10-Year Growth (2023 - 2032), gpd	851,726
5	<i>Net New Capacity Needed for 10-Year Growth, gpd (Line 4 - Line 3)</i>	402,726
6	Unit Cost of Facilities, \$ per gpd	\$30.48
7	Total Value of Net New Capacity Required	\$12,274,942
8	Total Added DU, 2023 - 2032	3,907
9	Wastewater DIF, \$ DU (Line 7/Line 8)	\$3,142
10	Plus: Cost of Study per DU	\$11
11	Adjusted Wastewater DIF, \$ per DU	\$3,153
12	Calculated Development Fee, \$ per DU	\$6,656
13	Variance - \$	(\$3,503)

Wastewater DIFs are assessed by water meter size and increase based on the AWWA 3/4-inch meter capacity relationships. One DU is equated to a 3/4-inch meter, which is the smallest and most common meter size available. Figure WW4 shows the calculated fees by meter size using AWWA equivalent ratios and are the same as the City's existing equivalent ratios. Figure WW4 compares the current DIFs to the calculated maximum supportable DIFs

Figure WW4 – Comparison of Current and Maximum Supportable Wastewater DIFs

<i>Meter Size (inches)</i>	<i>Meter Capacity Ratio [1]</i>	<i>Current Fees</i>	<i>Maximum Supportable</i>	<i>Change - \$</i>
0.75	1.00	\$5,808	\$3,153	(\$2,655)
1.00	1.67	9,700	5,255	(4,445)
1.50	3.33	19,342	10,510	(8,832)
2.00	5.33	30,959	16,816	(14,143)
3.00	10.67	61,976	33,632	(28,344)
4.00	16.67	96,826	52,550	(44,276)
6.00	33.33	193,595	105,100	(88,495)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Projected Revenue from Wastewater Facilities Fees

The revenue projection shown below assumes implementation of the maximum supportable wastewater facility fees and that development in the service area over the next ten years is consistent with the land use assumptions. Figure WW4 shows the average daily flow based on the increase in DU per year for the 10-year planning period. The wastewater facility fee revenue projection in Figure WW5 (\$12.3 million) approximates the growth cost of planned system improvements to be funded with development fees. Because the capacity added will serve development beyond the 10-year time frame, fee revenue will continue to be collected commensurate with the additional growth.

Figure WW5 – Projected Wastewater Facilities Fees Revenue

10-Year Cost of Wastewater Utility Facilities

Total Growth Cost => **\$73,151,130**

Wastewater Utility Impact Fee Revenue

		Added MMADF Flow	3/4" Eq. Meters \$3,153 Dwelling Units
Year		<i>gpd</i>	
Base	2022	6,751,000	29,911
Year 1	2023	6,839,726	30,318
Year 2	2024	6,928,234	30,724
Year 3	2025	7,016,742	31,130
Year 4	2026	7,105,250	31,536
Year 5	2027	7,193,758	31,942
Year 6	2028	7,282,484	32,349
Year 7	2029	7,370,992	32,755
Year 8	2030	7,459,282	33,160
Year 9	2031	7,531,004	33,489
Year 10	2032	7,602,726	33,818
Less Available Capacity		(449,000)	
10-Yr Increase [1]		402,726	3,907
Projected Revenue (Rounded)=>			\$12,318,771

[1] 402,726 MMADF gpd x \$30.48 per gpd + \$11 * 3,907 DU = \$12,317,920

Variance due to rounding

City of **AVONDALE**

Land Use Assumptions and Infrastructure
Improvements Plan for Parks/Recreation,
Fire, Police, Streets, Water, and Wastewater
Facilities

Final Report

November 10, 2022

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Introduction

Arizona Revised Statutes (ARS) §9-463.05 governs how Development Impact Fees (DIF) are calculated for municipalities in Arizona. The enabling legislation calls for three integrated products: 1) Land Use Assumptions (LUA) for at least 10 years, 2) Infrastructure Improvements Plan (IIP), and 3) Development Impact Fees (DIF). Because Arizona requires a two-phase adoption process, the LUA and IIP will be reviewed, refined, and approved before focusing on impact fees.

According to requirements of Arizona's enabling legislation, DIF may be only used for construction, acquisition or expansion of public facilities that are necessary public services. "Necessary public service" means any of the following categories of facilities that have a life expectancy of three or more years and that are owned and operated by or on behalf of the municipality.

- Water Facilities
- Wastewater Facilities
- Storm Water, Drainage, and Flood Control Facilities
- Library Facilities
- Streets Facilities
- Fire and Police Facilities
- Parks and Recreational Facilities
- Any facility that was financed before June 1, 2011 and that meets the following requirements:
 1. impact fees were pledged to repay debt service obligations related to the construction of the facility.
 2. After August 1, 2014, any impact fees collected are used solely for the payment of principal and interest on the portion of the bonds, notes, or other debt service obligations issued before June 1, 2011 to finance construction of the facility.

Infrastructure Improvements Plan

Development fees must be calculated pursuant to an Infrastructure Improvements Plan (IIP). For each necessary public service that is the subject of a development fee, Subsection 9-463.05(E) requires the following.

- 1. A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.*
- 2. An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.*
- 3. A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.*
- 4. A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility*

expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial.

5. The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.

6. The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.

7. A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved land use assumptions, and a plan to include these contributions in determining the extent of the burden imposed by the development as required in subsection B, paragraph 12 of this section.

Qualified Professionals

Qualified professionals must prepare the LUA, IIP and DIF, using generally accepted engineering, planning, and financial practices. A qualified professional is defined as “a professional engineer, surveyor, financial analyst or planner providing services within the scope of the person’s license, education, or experience.” Raftelis is a financial consulting firm specializing in impact fees, infrastructure funding, user fees, cost of service studies, capital improvement plans, and utility rate studies. Raftelis has over 100 professionals located in major urban areas across America. Avondale’s LUA and IIP were prepared by qualified professionals in Denver, CO.

Land Use Assumptions

The City of Avondale will use the same land use assumptions for all types of infrastructure. In addition to population and housing unit projections, the IIP and impact fees also require demographic data on nonresidential development, such as jobs and floor area. This document contains the land use assumptions for Avondale's 2022 DIF update. The LUA and IIP must be updated every five years, making short-range projections the critical time frame. The IIP is limited to ten years, thus a very long-range "build-out" analysis may not be used to derive impact fees in Arizona.

ARS §9-463.05(T)(7) defines land use assumptions as:

"Projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the General Plan of the municipality."

Raftelis prepared current demographic **estimates** and future development **projections** for both residential and nonresidential development that are used in the IIP and calculation of impact fees. Current conditions in Fiscal Year (FY) 21-22 are used to document levels-of-service provided to existing development in Avondale. Although long-range projections are necessary for planning infrastructure systems, a ten-year timeframe is critical for the LUA and IIP.

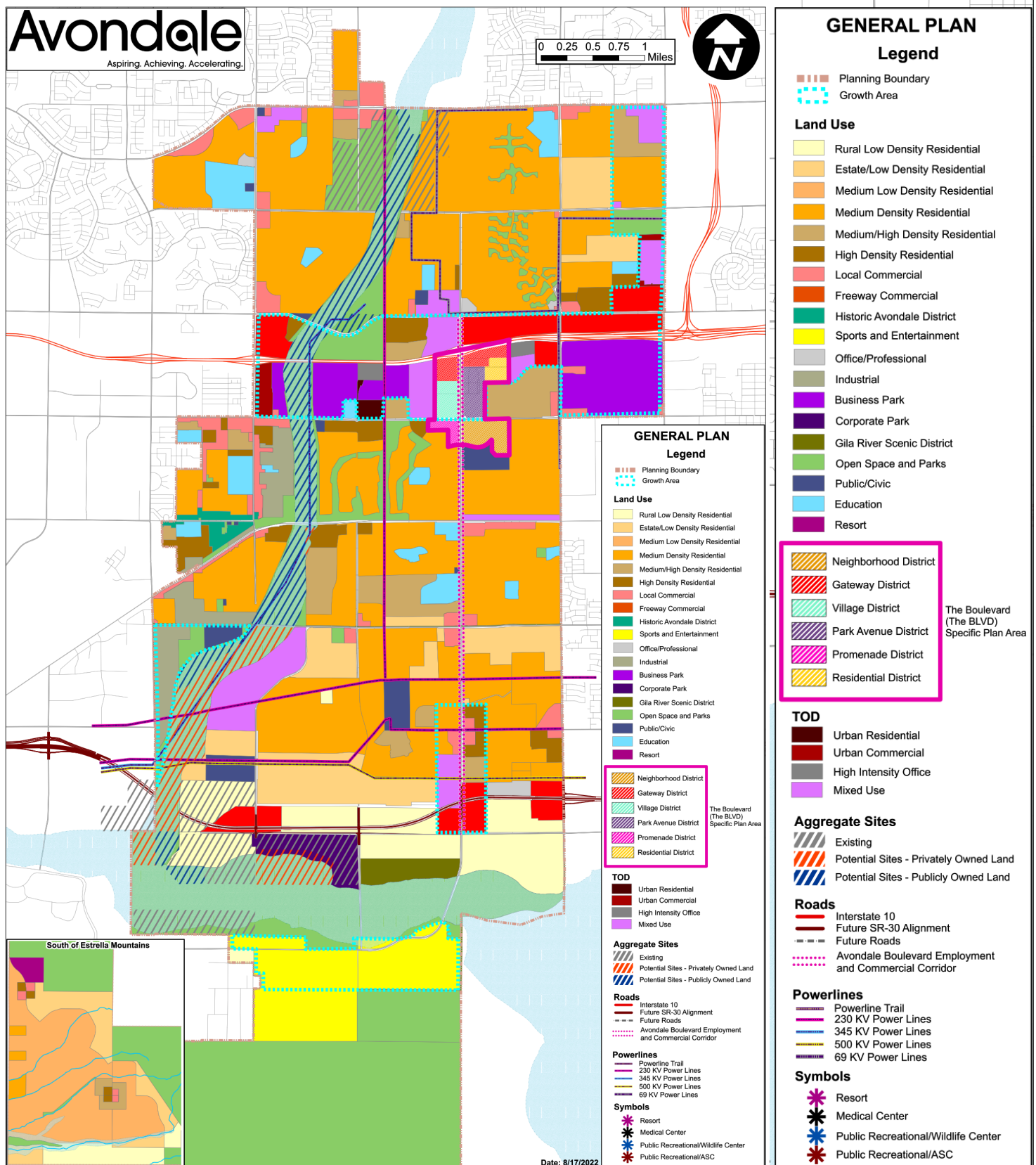
Service Area

ARS §9-463.05(T)(9) defines "service area" as:

"...Any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan. "

The service area covered in this LUA report is north of the Estrella Mountains. Figure 1 indicates land uses, densities, and intensities of development as specified in the General Plan. The service area is defined as all land within the city limits of Avondale, as modified over time.

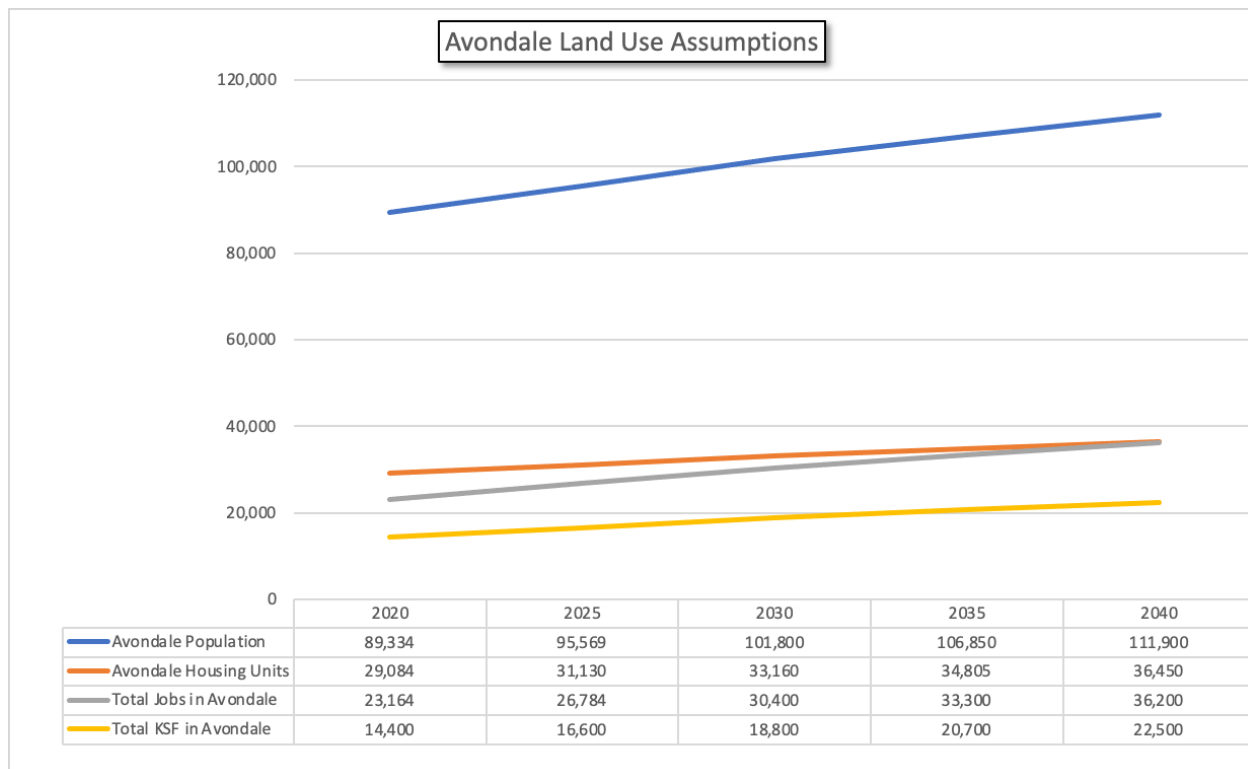
Figure 1 – Service Area Map



Summary of Growth Indicators

Service units (i.e., residents and jobs) and development units (i.e., dwellings and square feet of nonresidential floor area expressed in thousands) for 2020 through 2040 are summarized in Figure 2. These land use assumptions will be used to estimate DIF revenue and to indicate the anticipated need for growth-related infrastructure. However, DIF methodologies are designed to reduce sensitivity to accurate development projections in the determination of the proportionate-share fee amounts. If actual development is slower than projected, DIF revenues will also decline, but so will the need for growth-related infrastructure. In contrast, if development is faster than anticipated, Avondale will receive an increase in DIF revenue and will also accelerate capital improvements to keep pace with development.

Figure 2 – Chart of Projected Development



Service Units by Type of Residential Development

The U.S. Census Bureau no longer obtains detailed information using “long-form” questionnaires. Demographic data is currently collected using a continuous monthly mailing of surveys, known as the American Community Survey (ACS), which is limited by sample-size constraints. For example, data on Single Family detached housing units are now combined with attached single units (commonly known as townhouses). According to the U.S. Census Bureau, a household is a housing unit that is occupied by year-round residents. Development fees often use per capita standards and persons per housing unit, or persons per household, to derive proportionate-share fee amounts. Raftelis recommends that fees for residential development in the City of Avondale be imposed according to the number of year-round residents per housing unit. Figure 3 documents Avondale’s most recent multipliers by type of housing.

Figure 3 – Persons per Housing Unit by Units in Structure*City of Avondale*

<i>Units in Structure</i>	<i>Persons</i>	<i>Housing Units</i>	<i>Persons per Housing Unit</i>	<i>Housing Mix</i>
Single Unit (detached and attached)	70,590	21,442	3.29	77%
2+ Unit (all other residential)	15,332	6,543	2.34	23%
Subtotal	85,922	27,985	3.07	

Source: 2016-2020 ACS Tables B25024 and B25033, U.S. Census Bureau.

Service Units by Type of Nonresidential Development

In addition to data on residential development, the calculation of impact fees requires data on nonresidential development. Raftelis uses the term “jobs” to refer to employment by place of work. In Figure 4, gold shading indicates nonresidential development prototypes that will be used to allocate costs. Nonresidential development categories represent general groups of land uses that share similar average weekday vehicle trip generation rates and employment densities (i.e., jobs per thousand square feet of floor area). The prototype for future Industrial development is Warehousing (ITE land use 150). For Office/Services, General Office (ITE 710) is the prototype for future development in Avondale. The prototype for Commercial (e.g., retail and restaurants) is a Shopping Center (ITE code 820).

Figure 4 – Nonresidential Trip Rates and Jobs by Type of Development

<i>ITE Code</i>	<i>Land Use / Size</i>	<i>Demand Unit</i>	<i>Weekday Trip Ends Per Demand Unit*</i>	<i>Weekday Trip Ends Per Employee*</i>	<i>Employees Per Demand Unit</i>	<i>Square Feet Per Employee</i>
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
310	Hotel	room	7.99	14.34	0.56	N/A
320	Motel	room	3.35	25.17	0.13	N/A
520	Elementary School**	1,000 Sq Ft	19.52	21.00	0.93	1,076
530	High School**	1,000 Sq Ft	14.07	22.25	0.63	1,581
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
620	Nursing Home	1,000 Sq Ft	6.75	3.31	2.04	490
710	General Office	1,000 Sq Ft	10.84	3.33	3.26	307
720	Medical/Dental Office	1,000 Sq Ft	36.00	8.71	4.13	242
820	Shopping Center	1,000 Sq Ft	37.01	17.42	2.12	471
850	Grocery/Supermarket	1,000 Sq Ft	93.84	43.86	2.14	467

* *Trip Generation*, Institute of Transportation Engineers, 11th Edition (2022).

** *Trip Generation*, Institute of Transportation Engineers, 10th Edition (2017).

Latest data on jobs in Avondale (see Figure 5) are from the Census Bureau. Each row is an industry sector, as reported by the North American Industry Classification System. Subtotals and percentages for Avondale's three types of nonresidential development are shown at the bottom of the figure.

Figure 5 – Work Area Profile

Avondale AZ

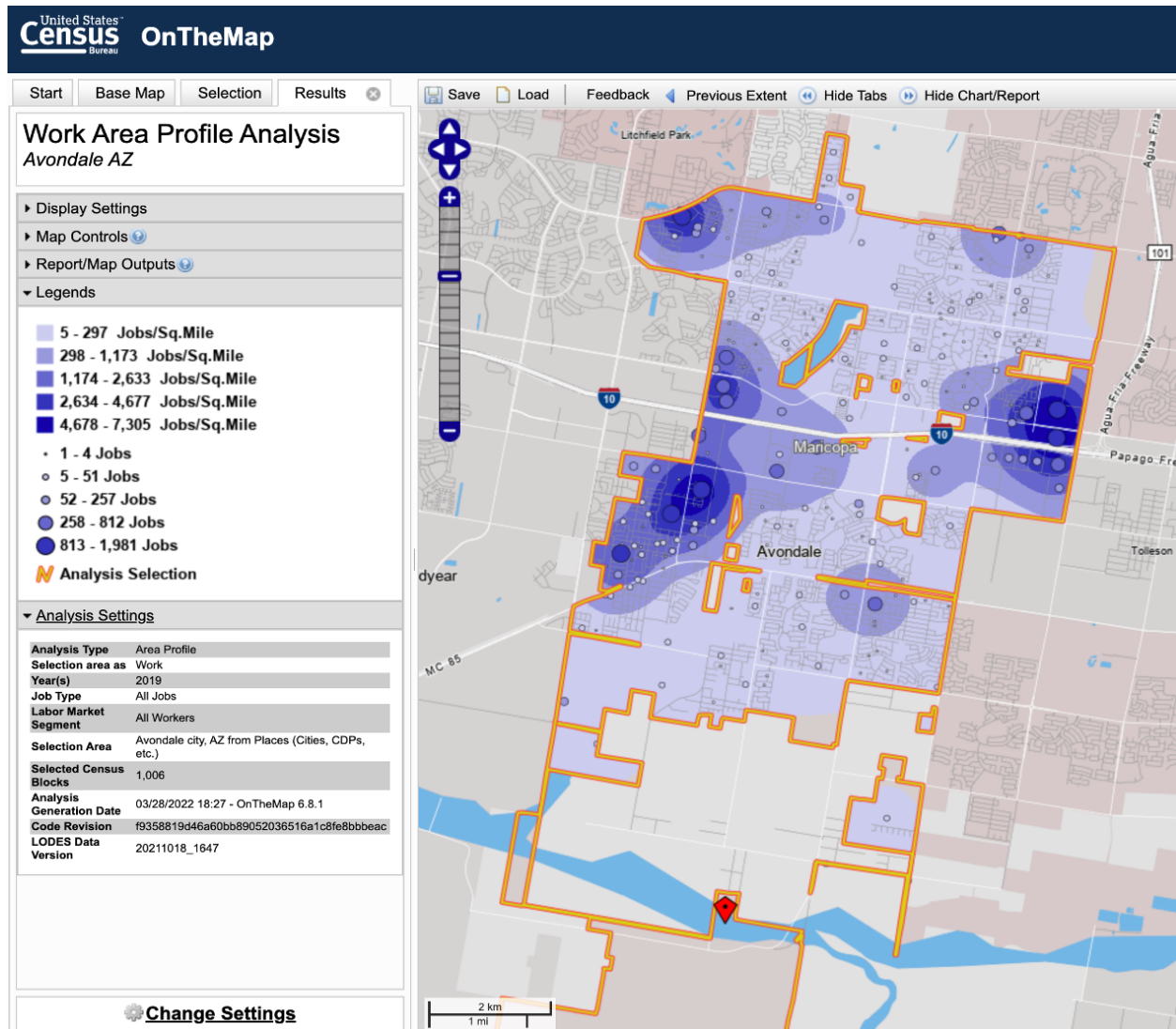
<i>Industry Classification</i>	<i>2019 Jobs</i>	<i>General Type</i>
Agriculture, Forestry, Fishing and Hunting	16	Industrial
Mining, Quarrying, and Oil and Gas Extraction	0	Industrial
Utilities	127	Industrial
Construction	871	Industrial
Manufacturing	68	Industrial
Wholesale Trade	460	Industrial
Retail Trade	5,440	Commercial
Transportation and Warehousing	235	Industrial
Information	380	Office / Institutional
Finance and Insurance	203	Office / Institutional
Real Estate and Rental and Leasing	208	Office / Institutional
Professional, Scientific, and Technical Services	272	Office / Institutional
Management of Companies and Enterprises	16	Office / Institutional
Administration & Support, Waste Management and Remediation Services	536	Office / Institutional
Educational Services	3,399	Office / Institutional
Health Care and Social Assistance	1,285	Office / Institutional
Arts, Entertainment, and Recreation	349	Office / Institutional
Accommodation and Food Services	2,565	Commercial
Other Services (excluding Public Administration)	173	Office / Institutional
Public Administration	1	Office / Institutional

Total Jobs 16,604

Subtotals by Type of Nonresidential Development

Industrial	1,777	11%
Commercial	8,005	48%
Office / Institutional	6,822	41%
Total Jobs	16,604	100%

The map below indicates the general location and concentration of jobs within Avondale (dark blue indicates more jobs per square mile).



Detailed land use assumptions are shown in Figure 6. Population and housing units in 2020 are from the U.S. Census Bureau. Projected 2030, 2040, and 2050 population in the Avondale Municipal Planning Area (MPA) are from Maricopa Association of Governments (MAG). Jobs in the Avondale MPA for 2020, 2030, 2040, and 2050 are also from MAG. Raftelis converted jobs to nonresidential floor area using average square feet per job multipliers documented in pages 23-25 of the MAG 2019 Socioeconomic Projections. Industrial average of 1,060 square feet per job is based on manufacturing and warehousing. Commercial average of 660 square feet per job is based on retail, restaurants, and hotels. Office/Services average of 459 square feet per job is based on information, finance/insurance, and real estate. See Appendix B for supporting documentation from MAG.

Figure 6 – Detailed Land Use Assumptions

2022 LUA	<i>FY21-22</i>	<i>FY22-23</i>	<i>FY23-24</i>	<i>FY24-25</i>	<i>FY25-26</i>	<i>FY26-27</i>	<i>FY31-32</i>	<i>FY41-42</i>	<i>FY49-50</i>
Avondale AZ	<i>Base Yr</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>10</i>	<i>20</i>	<i>28</i>
	2022	2023	2024	2025	2026	2027	2032	2042	2050
Population									
Avondale Population	91,828	93,075	94,322	95,569	96,816	98,063	103,820	113,320	119,000
Housing Units									
Persons per Housing Unit	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07
Avondale Housing Units	29,911	30,318	30,724	31,130	31,536	31,942	33,818	36,912	38,762
Jobs (place of work)									
Industrial Jobs	2,707	2,787	2,867	2,946	3,026	3,106	3,472	4,127	4,708
Commercial Jobs	11,814	12,161	12,509	12,856	13,204	13,551	15,149	18,010	20,544
Office/Services Jobs	10,091	10,388	10,685	10,981	11,278	11,575	12,940	15,383	17,548
Total Jobs in Avondale	24,612	25,336	26,060	26,784	27,508	28,232	31,560	37,520	42,800
Jobs-Housing Ratio	0.82	0.84	0.85	0.86	0.87	0.88	0.93	1.02	1.10
Nonresidential Floor Area (square feet in thousands = KSF)									
Industrial KSF	2,900	3,000	3,000	3,100	3,200	3,300	3,700	4,400	5,000
Commercial KSF	7,800	8,000	8,300	8,500	8,700	8,900	10,000	11,900	13,600
Office/Services KSF	4,600	4,800	4,900	5,000	5,200	5,300	5,900	7,100	8,000
Total KSF in Avondale	15,300	15,800	16,200	16,600	17,100	17,500	19,600	23,400	26,600
Average Square Feet per Job	622	624	622	620	622	620	621	624	621
Annual Increases in Avondale									
	22to23	23to24	24to25	25to26	26to27	31to32	41to42	49to50	
Population	1,247	1,247	1,247	1,247	1,247	1,010	710	710	
Housing Units	407	406	406	406	406	329	231	231	
Jobs	724	724	724	724	724	580	660	660	
Industrial KSF	100	0	100	100	100	100	100	100	
Commercial KSF	200	300	200	200	200	200	200	300	
Office/Services KSF	200	100	100	200	100	100	200	100	
Total Nonresidential KSF	500	400	400	500	400	400	500	500	

Parks/Recreation Facilities IIP

ARS § 9-463.05(T)(7)(g) defines parks and recreation facilities eligible for development fee funding.

“Neighborhood parks and recreational facilities on real property up to thirty acres in area, or parks and recreational facilities larger than thirty acres if the facilities provide a direct benefit to the development. Park and recreational facilities do not include vehicles, equipment or that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools.”

In the 2022 update, the City of Avondale is using the incremental expansion cost method to derive development impact fees for park improvements. Parks/recreation development fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage. Avondale fees also exclude stricter safety, efficiency, environmental or regulatory standards.

Service Area

The service area for parks/recreation development fees includes the area north of the Estrella Mountains.

Proportionate Share

ARS § 9-463.05(B)(3) states the development fee shall not exceed a proportionate share of the cost of necessary public services needed to serve new development. In Avondale, parks/recreation infrastructure standards, projected needs, and development fees are based on both residential and nonresidential development. As shown in Figure PR1, Raftelis used daytime population to allocate costs. Daytime population includes estimated residents and inflow commuters in 2019 (latest year available). Potential demand days per year assume residents might use parks every day of the year, but inflow commuters will only use parks four days per week over 48 weeks per year (i.e., two weeks of vacation and two weeks of holidays). Based on cumulative demand days, residential development accounts for 92% of the demand for parks/recreation facilities, with 8% assigned to nonresidential development.

Figure PR1 – Daytime Population

Cost Allocation Factors for Parks	Residential	Nonresidential	
2019 Daytime Population	85,595	14,888	
	Residents	Inflow Commuters	
Potential Demand Days per Year	365	192	Total
Cumulative Demand Days	31,242,175	2,858,496	34,100,671
Proportionate Share	92%	8%	

Source of inflow commuters is U.S. Census Bureau, Inflow/Outflow report from OnTheMap website.

Current Use and Standards for Parks/Recreation Facilities

In Avondale, parks/recreation facilities are fully utilized and there is no surplus capacity for future development. Avondale has determined that additional parks are necessary to accommodate future development. As shown in Figure PR2, the City's current standard is approximately 1.10 acres of improved parks per 1,000 residents and approximately 0.36 acres per 1,000 jobs. These standards exclude parks less than 1.5 acres that might not provide citywide benefit. To accommodate new development over the next ten years, Avondale will improve an parks, with expenditures estimated to cost approximately \$6.72 million. According to Avondale staff, the cost factor of \$431,000 per acre for park improvements is based on recent construction of Alamar Park.

Figure PR2 – Existing Park Improvements Standards and Growth Needs

Location	Improved Acres*			
Friendship Park	30.0			
Festival Fields	30.0			
Alamar Park**	24.2			
Las Ligas Park	8.1			
Donnie Hale Park	5.3			
Dessie Lorenz Park	4.6			
Mountain View Park	3.6			
Dennis DeConcini Park	2.0			
Fred Campbell Park	1.5			
Total =>	109.3			
Average Size (acres)	12.1			
2022 Service Units	91,828 Persons			
	24,612 Jobs			
Acres per 1,000 Service Units	1.10			
	0.36			
Projected Need for Park Improvements				
	Year	Population	Jobs	Improved Acres
Base	2022	91,828	24,612	109.3
Year 1	2023	93,075	25,336	110.9
Year 2	2024	94,322	26,060	112.5
Year 3	2025	95,569	26,784	114.2
Year 4	2026	96,816	27,508	115.8
Year 5	2027	98,063	28,232	117.4
Year 10	2032	103,820	31,560	124.9
Ten-Yr Increase		11,992	6,948	15.6
Total Project Cost per Acre =>				\$431,000
Growth Cost of Parks =>				\$6,724,000

**Source: Avondale staff (excludes parks less than 1.5 acres that might not provide citywide benefit).*

*** Impact fee eligible area (30 acres) reduced to account for area constructed using loan from General Fund).*

**Source: Avondale staff (excludes parks less than 1.5 acres that might not provide citywide benefit).*

*** Impact fee eligible area (30 acres) reduced to account for area constructed using loan from General Fund).*

Parks/Recreation Improvements

Figure PR3 lists planned parks/recreation improvements over the next ten years. Based on projected needs to accommodate growth, Avondale expects to spend approximately \$6.72 million on parks improvements over the next ten years. Improved acres may include expansion of existing parks or an additional park site. Also, the City used General Fund revenue to front-end recent, growth-related park improvements. Based on projects under construction in FY22, the Park impact fee fund has a negative balance of approximately \$2.5 million, to account for the General Fund loan.

Figure PR3 – Parks/Recreation Projects Over Ten Years

Planned Infrastructure Improvements

<i>Name/Description</i>	<i>Acreage</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Future Park Expansion	9.8	\$6,724,000	100%	\$4,224,000
General Fund Loan Repayment		\$2,500,000	100%	\$2,500,000
Total	9.8	\$9,224,000		\$6,724,000

Fire Facilities IIP

ARS § 9-463.05(T)(7)(f) defines the fire facilities eligible for development fee funding.

“Fire and Police facilities, including all appurtenances, equipment and vehicles. Fire and Police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.”

Fee Calculation Methodology

In the 2022 update, the City of Avondale is using the incremental expansion cost method to derive development impact fees for fire facilities. Fire impact fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage and stricter safety, efficiency, environmental or regulatory standards. Fire vehicles and equipment used to provide administrative services are also excluded.

Service Area

To hasten response times, public safety responders are typically dispatched from the closest facility, with multiple locations responding as warranted. Avondale has five existing fire stations, with a dispatch system that assigns calls to secondary responders, if needed. Therefore, all developed areas within the City of Avondale are served by an integrated public safety system. Avondale’s service area for fire impact fees includes the area North of the Estrella Mountains, as discussed previously in the section on Land Use Assumptions.

Proportionate Share

ARS § 9-463.05(B)(3) states the development fee shall not exceed a proportionate share of the cost of necessary public services needed to serve new development. In Avondale, fire infrastructure standards, projected needs, and development fees are based on both residential and nonresidential development. As stated in ARS §9.463.05(E)(4), impact fees must be proportionate to various types of land uses.

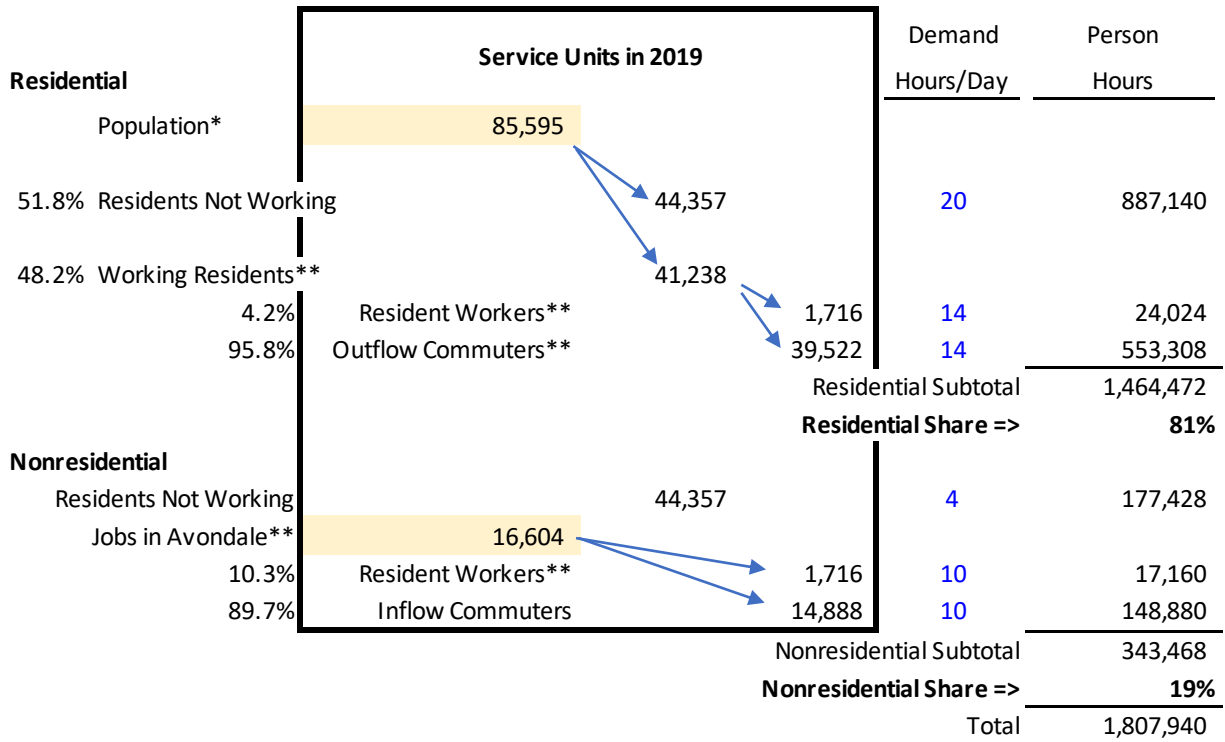
“A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial.”

Given these requirements, Raftelis recommends using functional population to allocate capital costs of public safety facilities to residential and nonresidential development. In 2019, the U.S. Census Bureau’s commuting data indicates 1,716 persons lived and worked in Avondale, 39,522 outflow commuters went to work outside Avondale and 14,888 inflow commuters travel to jobs within Avondale. Functional population is like the U.S. Census Bureau’s definition of daytime population (based on people living and working in a jurisdiction), with the addition of journey-to-work data and weighting factors (i.e., demand hours per day) to account for time spent at residential and nonresidential locations. Residents who do not work are assigned 20 hours per day to residential development and 4 hours per day to nonresidential development (annualized averages for assumed time spent shopping, dining, obtaining personal services, going to school/church, etc.). Residents who work in Avondale are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents who work outside Avondale are

assigned 14 hours to residential development. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2019 population and job data for Avondale, the cost allocation for residential development is 81%, while nonresidential development accounts for 19% of the demand for infrastructure.

Figure F1 – Functional Population

Avondale AZ



* 2019 Avondale population estimate from Maricopa Association of Governments.

** 2019 Avondale Inflow/Outflow, from OnTheMap web application, U.S. Census Bureau data for all jobs.

Current Use and Available Capacity

In Avondale, fire facilities are fully utilized and there is no surplus capacity for future development. Avondale has determined that fire building space will require expansion to accommodate future development. Figure F2 inventories current fire buildings in Avondale. For residential development, population is used as the best indicator of the demand for service. For nonresidential development, Avondale will use inbound, primary vehicle trips, on an average weekday, as the service units. Figure F2 also indicates the allocation of fire building space to residential and nonresidential development. The percentages for stations 172, 174 and the Emergency Operations Center are based on approximate floor area used by fire and police personnel respectively. Current standards are 0.62 square feet of fire buildings per Avondale resident and 0.11 square feet of fire buildings per inbound, primary vehicle trip on an average weekday, to nonresidential development in Avondale.

Figure F2 – Existing Fire Buildings and Standards

<i>Building Space for Fire Functions</i>	<i>Square Feet</i>
Station 175	17,084
Station 173	16,000
Station 172 (73%)	12,391
Station 174 (60%)	10,951
Station 171	8,600
Fire Headquarters	3,000
Emergency Operations Center (50%)	2,500
Total	70,526

Data Source: Avondale Fire Department and Facilities Director.

<i>Fire Buildings Standards</i>	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average Weekday, Inbound, Primary Vehicle Trips to Nonres Development</i>
2022 Service Units	91,828	122,675
Square Feet per Service Unit	0.62	0.11

Development fees will be used to expand the fleet of fire vehicles and purchase additional equipment that has a useful life of at least three years. Figure F3 lists fire vehicles and equipment currently used by the Avondale Fire Department that has an initial purchase price of at least \$23,500. Avondale currently has 37 fire vehicles, with a total value of approximately \$14.31 million. The weighted average cost factor is \$386,800 per fire vehicle.

Following the same methodology used for fire buildings, the total count of fire vehicles and equipment was allocated to residential and nonresidential development in Avondale. As shown at the bottom of Figure F3, every 1,000 persons will require Avondale to purchase 0.33 additional fire vehicles. Every 1,000 inbound, primary vehicle trips to nonresidential development, on an average weekday, requires 0.06 additional fire vehicles.

Figure F3 – Existing Fire Vehicles and Standards

<i>Fire Vehicle</i>	<i>Units</i>	<i>Unit Cost</i>	<i>Total Value</i>
FIRE TRUCK	12	\$950,000	\$11,400,000
LADDER	1	\$1,846,600	\$1,846,600
SEDAN / SUV	6	\$41,300	\$247,800
SAFETY TRAILER	1	\$101,500	\$101,500
LIGHT TRUCK	9	\$42,000	\$378,000
LARGE VAN	2	\$39,200	\$78,400
MEDIUM PICKUP	3	\$62,500	\$187,500
ATV	3	\$23,500	\$70,500
TOTAL	37		\$14,310,300
Weighted Average Cost per Vehicle =>			\$386,800

Data Source: Avondale staff.

Fire Vehicle Standards

	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average-Weekday, Inbound, Primary Vehicle Trips to Nonres Development</i>
2022 Service Units	91,828	122,675
Vehicles per thousand Service Units	0.33	0.06

Projected Need for Fire Facilities

To accommodate new development over the next ten years, Avondale will need to add 11,240 square feet of fire buildings, at an estimated cost of approximately \$7.5 million. As shown in Figure F4, the cost factor of \$668 per square foot is based on the recent total project cost of Van Buren fire station.

Also, Avondale Fire Department will need six additional vehicles to accommodate new development over the next ten years. The expected cost of additional fire vehicles is approximately \$2.3 million.

Figure F4 – Fire Facilities Needed to Accommodate Growth**Fire Building Standards and Capital Costs**

		Buildings - Residential	0.62	Sq Ft per person
		Buildings - Nonresidential	0.11	Sq Ft per trip
		Building Cost Factor	\$668	per square foot
				Infrastructure Needed
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Fire Buildings (sq ft)</i>
Base	2022	91,828	122,675	70,526
Year 1	2023	93,075	126,287	71,697
Year 2	2024	94,322	130,493	72,932
Year 3	2025	95,569	133,564	74,043
Year 4	2026	96,816	137,176	75,213
Year 5	2027	98,063	140,246	76,324
Year 10	2032	103,820	157,275	81,766
<i>Ten-Yr Increase</i>		11,992	34,599	11,240
Growth Cost of Fire Buildings =>				\$7,508,000

Fire Vehicle Standards and Capital Costs

		Vehicles - Residential	0.33	per 1,000 persons
		Vehicles - Nonresidential	0.06	per 1,000 vehicle trips
		Average Cost	\$386,800	per vehicle
				Infrastructure Needed
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Fire Vehicles</i>
Base	2022	91,828	122,675	37
Year 1	2023	93,075	126,287	38
Year 2	2024	94,322	130,493	38
Year 3	2025	95,569	133,564	39
Year 4	2026	96,816	137,176	39
Year 5	2027	98,063	140,246	40
Year 10	2032	103,820	157,275	43
<i>Ten-Yr Increase</i>		11,992	34,599	6
Growth Cost of Fire Vehicles =>				\$2,321,000

Fire Infrastructure Improvements

Fire impact fees in Avondale are based on the same level of service provided to existing development. Using impact fee funding over the next ten years, Figure F5 indicates that Avondale will construct Alamar station. This public safety building will be used for fire and police functions. The total floor area of the new building will be approximately 27,000 square feet, with approximately 19,000 square feet used by the Fire Department. The planned floor area of Alamar Station is larger than the need for additional square feet to maintain existing standards. Therefore, impact fee revenue will only fund 59% of the expected cost.

Because fire vehicles require large garages, the total project cost per square foot for fire functions is less than the cost factor for police functions. Avondale will also purchase additional fire vehicles, expected to cost approximately \$2.3 million.

Figure F5 – Ten-Year Plan for Fire Facilities

<i>Infrastructure Type</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Cost Factor per Unit</i>	<i>IIP Cost (rounded)</i>
Fire Buildings	square feet	11,240	\$668	\$7,508,000
Fire Vehicles (3+ years of useful life)	count	6	\$386,800	\$2,321,000

Planned Infrastructure Improvements

<i>Name/Description</i>	<i>Units</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Alamar Fire Station	19,000	\$12,692,000	59%	\$7,508,000
Alamar Station Vehicle	1	\$1,000,000	100%	\$1,000,000
Additional Fire Vehicles			100%	\$1,321,000
Total		\$13,692,000		\$9,829,000

Police Facilities IIP

ARS § 9-463.05(T)(7)(f) defines the police facilities eligible for development fee funding.

“Fire and Police facilities, including all appurtenances, equipment and vehicles. Fire and Police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.”

Police development fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage, and stricter safety, efficiency, environmental or regulatory standards. Also excluded from the Avondale development fees are police vehicles and equipment used to provide administrative services.

Service Area

All developed areas within the City of Avondale are served by an integrated public safety system. Avondale’s service area for police development fees includes the area north of the Estrella Mountains.

Proportionate Share

Based on the rationale discussed in the Fire section above, Raftelis recommends using functional population to allocate capital costs of police facilities to residential and nonresidential development. According to 2019 population and job data for Avondale, the cost allocation for residential development is 81%, while nonresidential development accounts for 19% of the demand for infrastructure.

Current Use and Available Capacity

The top of Figure P1 indicates police building space allocated to residential and nonresidential development, along with 2022 service units in Avondale. The percentages for stations 172, 174 and the Emergency Operations Center are based on approximate floor area used by fire and police personnel respectively. The standard in Avondale is 0.62 square feet of police building per resident. For nonresidential development, Avondale’s standard is 0.11 square feet of police building per inbound, primary vehicle trip on an average weekday, to nonresidential development.

Development fees will also be used to expand the fleet of police vehicles that have a useful life of at least three years. The bottom of Figure P1 lists the City’s current police vehicles and infrastructure standards. The current number of police vehicles were allocated to residential and nonresidential development in Avondale. Adding 1,000 residents will require Avondale to purchase 1.26 additional police vehicles. Every 1,000 inbound, primary, average weekday, vehicle trips to nonresidential development will require Avondale to purchase 0.22 additional police vehicles.

Figure P1 – Existing Police Infrastructure Standards

<i>Building Space for Police Functions</i>	<i>Square Feet</i>
Police Headquarters	41,100
Public Safety 174 (40%)	7,301
Public Safety 172 (27%)	4,583
Substation on Western	6,480
Jail	4,640
Brinker Substation	4,224
Emergency Operations Center (50%)	2,500
Total	70,828

Data Source: Avondale Police Department and Facilities Director.

Buildings Standards

	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average-Weekday, Inbound, Primary Vehicle Trips to Nonres Dev</i>
2022 Service Units	91,828	122,675
Square Feet per Service Unit	0.62	0.11

<i>Police Vehicles</i>	<i>Units</i>	<i>Unit Cost</i>	<i>Total Value</i>
PATROL UNITS	82	\$70,000	\$5,740,000
NON- PATROL	47	\$38,000	\$1,786,000
MOTORCYCLES	6	\$45,000	\$270,000
TRUCKS	2	\$55,000	\$110,000
VANS	4	\$38,000	\$152,000
ARMORED TRUCKS	2	\$350,000	\$700,000
TOTAL	143		\$8,758,000

Weighted Average Cost per Vehicle => \$61,200

Data Source: Avondale Police Department.

Police Vehicle Standards

	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average-Weekday, Inbound, Primary Vehicle Trips to Nonres Development</i>
2022 Service Units	91,828	122,675
Vehicles per thousand Service Units	1.26	0.22

To maintain existing standards over the next ten years, Avondale could justify adding 11,287 square feet of police building space. However, the planned construction of the Alamar public safety building will likely complete the Police Department's need for building space to accommodate buildout of Avondale. Therefore, the 2022 update of police impact fees caps the need for building space at 8,000 square feet.

As shown in Figure P2, the cost factor of \$998 per square foot is based on the expected cost of Police Department's portion of the Alamar public safety building. The cost factor per square foot of building space is higher for police than fire functions due to lack of large garages and the extra cost for security measures.

To maintain the current infrastructure standard over the next ten years, Avondale will need to expand the police fleet by 23 vehicles, at an estimated cost of approximately \$1.41 million. The Avondale Police Department has estimated that a new fully equipped police vehicle costs approximately \$61,200, including information technology, communications, and safety equipment.

Figure P2 – Projected Need for Police Infrastructure**Police Building Standards and Capital Costs**

		Buildings - Residential	0.62	Sq Ft per person
		Buildings - Nonresidential	0.11	Sq Ft per trip
		Building Cost Factor	\$998	per square foot
		Infrastructure Needed		
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Police Buildings (sq ft)</i>
Base	2022	91,828	122,675	70,828
Year 1	2023	93,075	126,287	72,003
Year 2	2024	94,322	130,493	73,244
Year 3	2025	95,569	133,564	74,359
Year 4	2026	96,816	137,176	75,535
Year 5	2027	98,063	140,246	76,651
Year 10	2032	103,820	157,275	82,115
<i>Ten-Yr Increase</i>		11,992	34,599	11,287
Growth Cost of Police Buildings =>				\$11,264,000

Police Vehicle Standards and Capital Costs

		Vehicles - Residential	1.26	per 1,000 persons
		Vehicles - Nonresidential	0.22	per 1,000 vehicle trips
		Average Cost	\$61,200	per vehicle
		Infrastructure Needed		
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Police Vehicles</i>
Base	2022	91,828	122,675	143
Year 1	2023	93,075	126,287	145
Year 2	2024	94,322	130,493	148
Year 3	2025	95,569	133,564	150
Year 4	2026	96,816	137,176	153
Year 5	2027	98,063	140,246	155
Year 10	2032	103,820	157,275	166
<i>Ten-Yr Increase</i>		11,992	34,599	23
Growth Cost of Police Vehicles =>				\$1,408,000

Police Infrastructure Improvements

Police impact fees in Avondale are based on the incremental expansion cost of police vehicles (i.e., maintenance of current standards) and the plan-based need for police buildings. Using impact fee funding over the next ten years, Figure P3 indicates that Avondale will expand police buildings by 8,000 square feet, which is based on the planned floor area of the combined Alamar public safety building (i.e., 27,000 total square feet) less the Fire Department's space (i.e., 19,000 square feet). Avondale will also purchase an additional 23 police vehicles over the next ten years, expected to cost approximately \$1.4 million.

Figure P3 – Ten-Year Plan for Police Facilities

<i>Infrastructure Type</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Cost Factor per Unit</i>	<i>IIP Cost (rounded)</i>
Police Buildings	square feet	8,000	\$998	\$7,984,000
Police Vehicles (3+ years of useful life)	count	23	\$61,200	\$1,408,000

Planned Infrastructure Improvements

<i>Name/Description</i>	<i>Units</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Alamar Police Substation	8,000	\$7,984,000	100%	\$7,984,000
Police Vehicles & Equipment			100%	\$1,408,000
Total	8,000	\$7,984,000		\$9,392,000

Street Facilities IIP

ARS § 9-463.05(T)(7)(e) defines the facilities and assets that can be included in the Street Facilities IIP.

“Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon.”

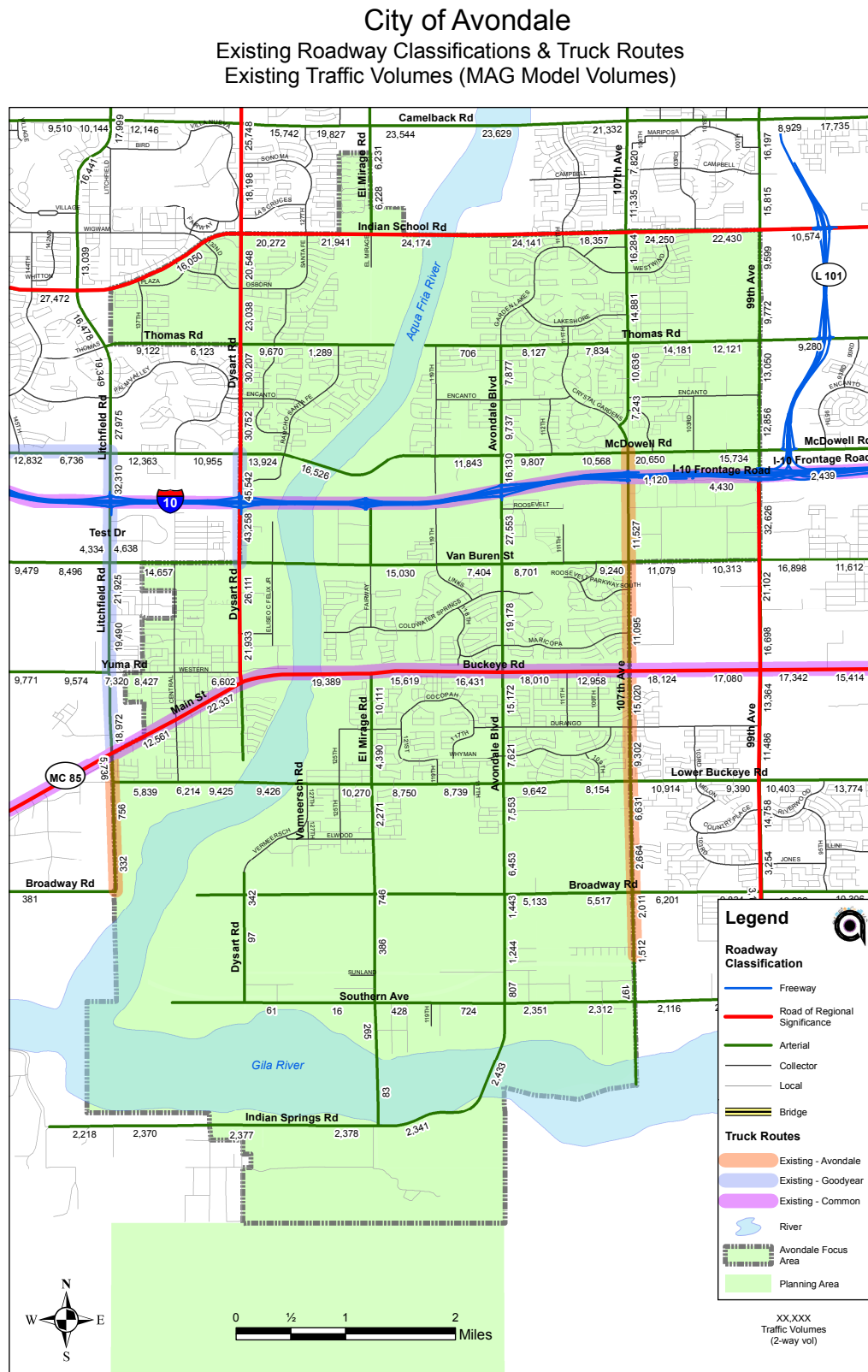
Avondale’s IIP is based on improvements to arterial streets needed to accommodate additional vehicular travel, plus the cost of preparing the LUA/IIP/DIF study required by the State of Arizona. The streets impact fee is derived from trip generation rates, trip rate adjustment factors, average trip length weighting factors, and lane capacity. Each component is described below.

Development fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage and stricter safety, efficiency, environmental or regulatory standards. The service area for streets development fees includes the area north of the Estrella Mountains.

Existing Infrastructure

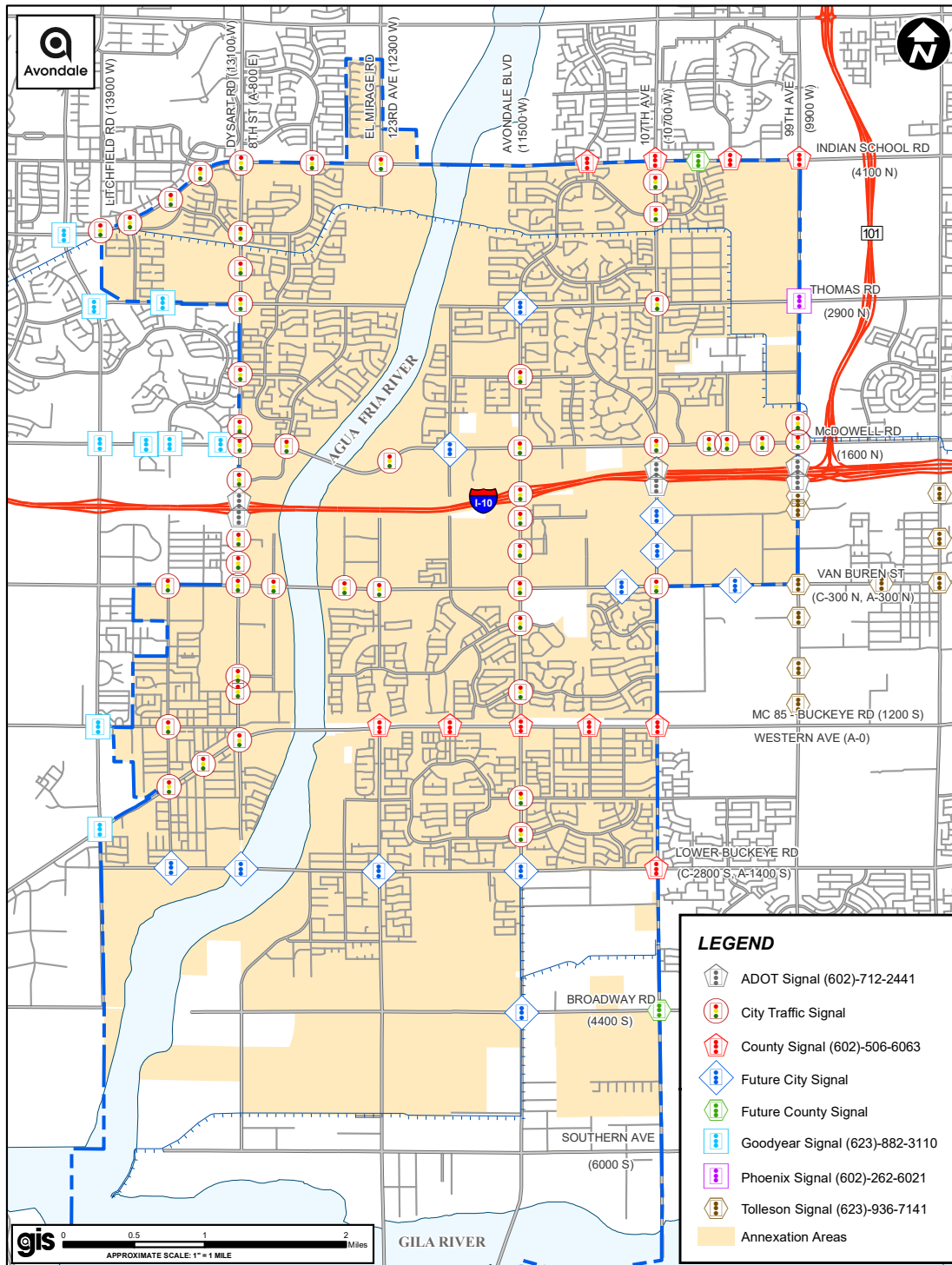
Lane miles of arterials in Avondale are mapped in Figure S1. A lane mile is a rectangular area that is one travel lane wide and a mile long. According to staff, Avondale currently has 295 arterial lane miles on streets with four or more travel lanes. All local and collector streets are project-level improvements excluded from the impact fee calculations. The City will continue to require project level improvements, such as turn lanes and signals for ingress/egress, during the development review and approval process.

Figure S1 – Arterials in Avondale



In addition to arterial lanes miles, transportation system improvements include City traffic signals and turn lanes at the intersection of an arterial with another arterial. As shown in Figure S2, there are currently 14 improved intersections (see City traffic signals in legend below) that meet the locational criteria for system improvements.

Figure S2 – Traffic Signals in Avondale



Forecast of Service Units

Avondale will use average weekday Vehicle Miles of Travel (VMT) as the service units for allocating the cost of future improvements. Raftelis created an aggregate travel model to convert development units within Avondale to vehicle trips and vehicle miles of travel. The top portion of Figure S3 summarizes the input variables for the travel model. Trip generation rates, expressed as average weekday Vehicle Trip Ends (VTE), are from the Institute of Transportation Engineers (ITE 2022). HU is an abbreviation for housing unit. KSF is an abbreviation for square feet of nonresidential floor area, expressed in thousands. Each input variable is described further below.

A typical vehicle trip, such as a person leaving their home and traveling to work, generally begins on a local street that connects to a collector street, which connects to an arterial and eventually to a state or interstate highway. This progression of travel up and down the functional classification chain limits the average trip length determination, for the purpose of development fees, to the following question, "What is the average vehicle trip length on system improvements (i.e., facilities funded by development fees)?"

As shown near the bottom of Figure S3, development in Avondale currently attracts 294,732 average weekday vehicle trips. According to the land use assumptions (shaded gold), new development over the next ten years is expected to account for 16% of total vehicle trips in 2032. In contrast, Avondale is only planning to expand arterial lane miles by three lane miles, which represents a conservative 1% expansion of arterial lane miles (i.e., $[298/295]-1$ rounded).

Figure S3 – Travel Demand Model

Input Variables by Development Type	ITE Code	Weekday VTE	Development Unit	Trip Rate Adjustment	Trip Length Wtg Factor			
Residential	210	9.43	HU	61%	1.14			
Industrial	150	1.71	KSF	50%	0.90			
Commercial	820	37.01	KSF	33%	0.75			
Office/Services	710	10.84	KSF	50%	0.90			
Average Trip Length (miles)		0.27	<= travel on system improvements to be constructed over the next ten years					
Vehicles per Lane per Day		4,600	<= existing traffic volume per lane on Avondale Blvd south of I-10					
Year->	Base	1	2	3	4	5	10	10-Year Increase
Avondale LUA	2022	2023	2024	2025	2026	2027	2032	
Residential Housing Units	29,911	30,318	30,724	31,130	31,536	31,942	33,818	3,907
Industrial KSF	2,900	3,000	3,000	3,100	3,200	3,300	3,700	800
Commercial KSF	7,800	8,000	8,300	8,500	8,700	8,900	10,000	2,200
Office/Services KSF	4,600	4,800	4,900	5,000	5,200	5,300	5,900	1,300
Residential Trips	172,057	174,398	176,734	179,069	181,405	183,740	194,531	
Industrial Trips	2,480	2,565	2,565	2,651	2,736	2,822	3,164	
Commercial Trips	95,264	97,706	101,370	103,813	106,256	108,698	122,133	
Office/Services Trips	24,932	26,016	26,558	27,100	28,184	28,726	31,978	
Total Inbound Vehicle Trips	294,732	300,686	307,227	312,633	318,580	323,986	351,806	57,073
Vehicle Miles of Travel (VMT)	78,911	80,411	82,003	83,369	84,867	86,233	93,148	14,237
Arterial-Arterial City Traffic Signals	14	14	15	15	15	15	17	3
Improved Intersections per 10,000 VMT	1.77	1.77	1.77	1.77	1.77	1.77	1.77	
Planned Arterial Lane Miles								3.0
Growth Share of 2032 Vehicle Trips =>								16%
Growth Cost per Lane Mile =>								\$2,500,000
Growth Cost of System Improvements Over Ten Years =>								\$7,500,000

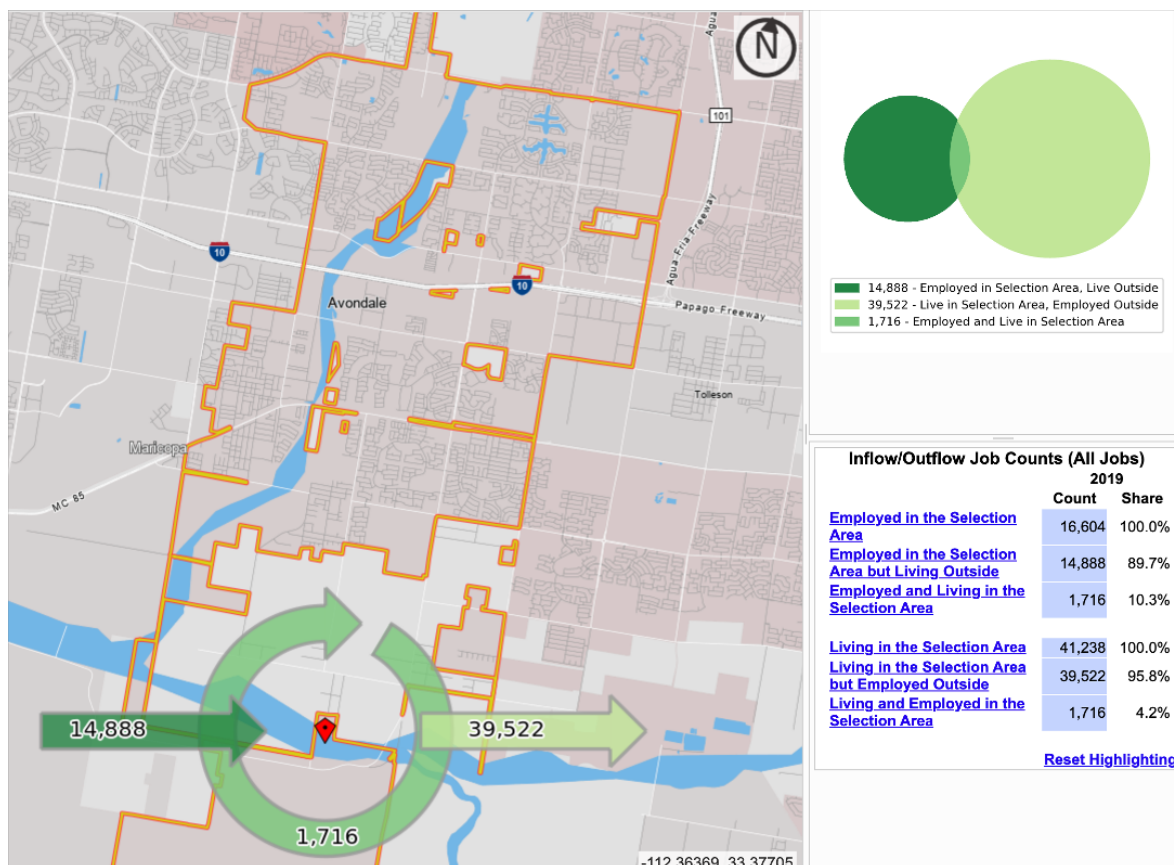
Trip Generation Rates

Avondale development fees for streets are derived using average weekday VTE. Trip generation rates are published by the Institute of Transportation Engineers (ITE 2022). A VTE represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). To calculate street impact fees, trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50%. As discussed further below, the fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for a particular type of development.

Adjustments for Commuting Patterns and Pass-By Trips

Residential development has a larger trip adjustment factor of 61% to account for commuters leaving Avondale for work. In other words, residential development is assigned all inbound trips plus 11% of outbound trips to account for job locations outside of Avondale. According to the National Household Travel Survey weekday work trips are typically 22.8% of production trips (i.e., all out-bound trips). As shown in Figure S4, the Census Bureau's website (<https://onthemap.ces.census.gov/>) indicates that approximately 95.8% of resident workers traveled outside Avondale for work in 2019. In combination, these factors ($0.50 \times 0.228 \times 0.958 = 0.11$ rounded) support the additional 11% allocation of trips to residential development.

Figure S4 – Inflow/Outflow Analysis



For commercial development, the trip adjustment factor is less than 50% because retail development attracts vehicles as they pass by on arterial roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For an average shopping center, ITE data indicate 34% of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66% of attraction trips have the shopping center as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor for an average size shopping center is 66% multiplied by 50%, or approximately 33% of the trip ends.

Trip Length Weighting Factor by Type of Land Use

The transportation impact fee methodology includes a percentage adjustment, or weighting factor, to account for trip length variation by type of land use. As shown in Figure S5, vehicle trips from residential development are approximately 114% of the average trip length. The residential trip length adjustment factor includes trips to work, social and recreational purposes, and home. Conversely, shopping trips associated with commercial development are roughly 75% of the average trip length, while other nonresidential development typically accounts for trips that are 90% of the average for all trips.

Figure S5 – Average Trip Length Weighting Factors

Trip purpose summary	Travel Day Vehicle Trip Length		Percent of Trips	Average Trip Length	Weighting Factor
	Trips	Mean Miles			
Home	205,743	9.93	Residential		
Work	92,392	11.98	Residential		
Social/Recreational	52,877	12.60	Residential		
Subtotal	351,012		Subtotal	57%	10.87
Shopping/Errands	134,048	7.08	Commercial		
Meals	43,347	7.49	Commercial		
Subtotal	177,395		Subtotal	29%	7.18
School/Daycare/Religious activity	16,288	9.11	Other		
Medical/Dental services	11,568	10.14	Other		
Transport someone	44,991	7.25	Other		
Something else	10,045	11.95	Other		
Subtotal	82,892		Subtotal	14%	8.59
All	611,299	9.55			

Source: Federal Highway Administration, 2017 National Household Travel Survey
 Tabulation created on the NHTS website at <http://nhts.oml.gov>

Lane Capacity

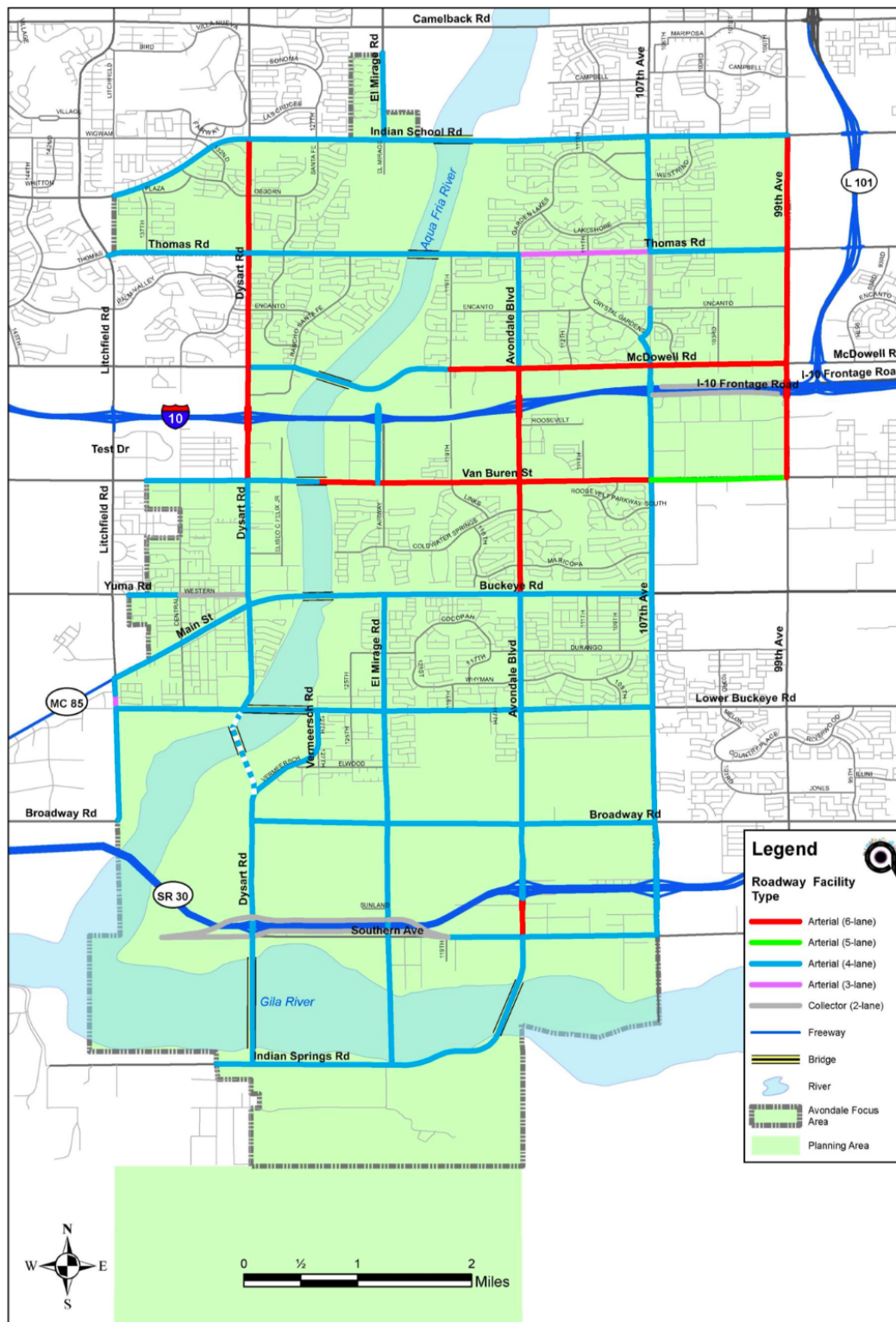
As shown in Figure S1 above, existing traffic volumes vary significantly on arterials in Avondale. For the 2022 impact fee update, the existing volume on Avondale Blvd south of I-10 (i.e., 27,553 ADT) was divided by six travel lanes to yield an average of 4,600 vehicles per lane per day (rounded).

Infrastructure Improvements Plan for Streets

The latest adopted transportation plan for Avondale is shown in Figure S6. Comparing the existing transportation network to the planned system reveals the arterial street grid is substantially complete.

Figure S6 – Avondale Transportation Plan

Figure ES-1 Recommended Street Plan



Note: Dashed Lines Indicate alternative roadway alignments subject to future studies.

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Avondale staff provided the list of improvements and planning-level cost estimates in Figure S7. The ten-year plan for street improvements will benefit citywide development because vehicles flow from larger travel sheds to congested areas where improvements are planned to eliminate bottlenecks. In the area north of I-10, Avondale will improve one arterial-arterial intersection. In the area south of I-10, Avondale will improve two intersections. To accommodate new development, Avondale will add three lane miles of arterial capacity over the next ten years. The total ten-year growth cost of system improvements is approximately \$14.39 million.

Figure S7 – Ten-Year Plan for Street Improvements

Transportation System Improvements

<i>Arterial Lane Miles</i>	<i>Cost per Lane Mile</i>	<i>IIP Costs</i>
3.0	\$2,500,000	\$7,500,000
<i>Improved Intersections</i>	<i>Avg Cost per Intersection</i>	
3	\$2,295,000	\$6,885,000

Planned Infrastructure Improvements

<i>Location/Description</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Intersection Improvements @ Thomas & Avondale Blvd	\$800,000	100%	\$800,000
Intersection Improvements @ Lower Buckeye & Avondale Blvd	\$4,949,000	100%	\$4,949,000
Intersection Improvements @ Lower Buckeye & El Mirage	\$1,136,000	100%	\$1,136,000
Future Arterial Capacity Expansion	\$7,500,000	100%	\$7,500,000
Total	\$14,385,000		\$14,385,000

Water Utility Fees

ARS §9-463.05.T.7(a) defines the facilities and assets which can be included in the Water Facilities IIP:

“Water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities”

The City provides potable water with water supply consisting of a combination of ground water sources. The entire water system infrastructure includes water resources, wells, transmission, distribution, storage, administrative facilities, vehicles, and equipment including meters.

The calculation of the water facilities DIF was based on information provided by staff in addition to the City’s 2018 Integrated Utility Master Plan Report (IUMP). The findings presented in this section are based on a 10-year forecast, 2023 to 2032.

Fee Calculation Methodology

For this 2022 update, Raftelis used the plan-based approach. This approach is based on a forward-looking infrastructure improvements plan which considers the future projects needed to meet the future demands of the utility. The water development impact fee was calculated using the growth-share component of costs and the incremental capacity added from those facilities. Assumptions on included in the development of this fee were provided by Staff and the IUMP.

Service Area

The City’s water system serves the land areas north of the Estrella Mountains, excluding a small area in the northwest corner of the City limits. This area is served by a private water utility. The following provides an analysis of the resource and facility costs included in the IIP and DIF calculations.

Proportionate Share

ARS §9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development. Page 2-8, Table 2-4 from the 2018 Integrated Utility Master Plan (IUMP) shows in 2016, the City had a total of 24,561 water meters (accounts). Of these accounts, 88% of the City’s water meters were classified as residential and made up 57% of the City’s annual average water use. The City’s landscape meters made up 2% of the total number of water meters but accounted for 23% of the City’s average annual water use. The remaining water meters and annual usage is spread across several other account types.

For the purposes of this impact fee analysis, the fees are calculated on a dwelling unit basis which is defined as a residential has a demand of 450 gallons per day. The dwelling unit demand for a $\frac{3}{4}$ ” meter is the total residential and nonresidential demand divided by the total residential dwelling units. Page 2-10 in the 2018 IUMP indicates the City had 27,913 dwelling units in 2016.

Figure W1 shows the distribution of residential and nonresidential account types. Please note that these are aggregated in Figure W1 (e.g. residential rural and residential urban are classified under the category of residential below). The totals shown in the *Service Units and Demand by Land Use* are projected values and vary slightly from the values in Figure W1.

Figure W1 – 2016 Distribution of the Number of Meters and Demand by Land Use Type

Account Type	Number of Meters	Percent of Total	2016 Consumption <i>mg</i>	Percent of Total
Residential	21,582	87.9%	6,444,937	56.9%
Multi-Family/Apartment/Hotel	140	0.6%	609,252	5.4%
Commercial	534	2.2%	1,180,512	10.4%
Schools	59	0.2%	182,868	1.6%
Churches	42	0.2%	12,296	0.1%
Industrial	3	0.0%	9,184	0.1%
Laundromat	3	0.0%	12,556	0.1%
Mobile Home Park	19	0.1%	155,074	1.4%
Hydrant Meter	1	0.0%	7,822	0.1%
Car Wash	9	0.0%	64,088	0.6%
Sewer Only	1	0.0%	663	0.0%
Landscape Meter	554	2.3%	2,550,748	22.5%
Unclassified	1,614	6.6%	88,819	0.8%
Total	24,561	100.0%	11,318,819	100.0%

[1] 2018 IUMP, Page 2-9, Table 2.4

Existing Facilities

ARS §9-463.05 (E)(1) requires:

“A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.”

ARS §9-463.05 (E)(2) requires:

“An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.”

The City’s integrated water system consists of major facilities to collect, treat, and distribute water to customers. Major backbone water system facilities include:

- Water production wells
- Booster pump stations
- Storage tanks
- Transmission and distribution lines

Water Production Wells (Water Sources)

Water production wells should have sufficient capacity to meet maximum day demands. In 2018, maximum day demands were be supplied by operating wells more than 18 hours per day. Figure W2

shows that the firm water supply is 17.7 mgd which is 3.2 mgd less than the 2018 maximum daily demand of 20.9 mgd.¹.

Figure W2 – 2018 Existing Wells and Production Capacities

<i>Well Water Delivery System</i>	<i>Well Supply Name</i>	<i>Production Capacity mgd</i>	<i>Firm Capacity mgd</i>
Distribution System	Wells #23	1.2	1.2
Coldwater	Wells 15, 16, 25	5.3	5.3
Garden Lakes	Well 17	1.7	1.7
Gateway	Wells 8A, 24	4.0	4.0
Northside	Wells 6, 7, 20	6.3	6.3
Rancho Santa Fe	Wells 10, 11, 12, 18 and 19	12.2	12.2
Total, gpm		30.6	30.6
Resilient Supply, mgd (18 hours/day)			23.0
Firm Supply [2]			17.7
Maximum Day Demand (2018)			20.9
Surplus/(Deficiency), mgd			(3.2)

[1] A composite of tables from the 2018 IUMP, Page 4-25, Table 4.15; Page 4-7, Table 4.6

[2] If Well #16 is out, Well #15 and Well #25 will also be out of service due to blending requirements . The firm supply represents the supply with all of the Coldwater wells out of service.

Booster Pump Stations

The City has five booster pump stations and one well that pumps directly into the distribution system as shown in Figure W3. Firm pumping capacity is the design flowrate with the largest pump out of service.

Figure W3 – Existing Booster Pump Stations and Capacities

<i>Facility</i>	<i>Number of Pumps</i>	<i>Total Pumping Capacity (gpm)</i>	<i>Firm Pumping Capacity (gpm)</i>
Well 23	1	800	800
Rancho Santa Fe	4	8,400	6,200
Coldwater Springs	4	16,000	12,000
Northside	4	7,200	5,400
Gateway	4	8,000	6,000
Del Rio	3	10,000	6,000
Garden Lakes	4	6,500	4,500
Total	24	56,900	40,900
Total, mgd		82.00	59.00

[1] 2018 IUMP, Page 4.9, Table 4.7

¹ This paragraph is summarized from 2018 IUMP text on Page 4-24. The IUMP text references a firm capacity 18.6 mgd and a deficiency of 2.3 mgd. However, Table 4.15 referenced in the text indicates a firm supply of 17.7 mgd and a deficiency of 3.2 mgd.

Storage

While water production facilities are typically designed to operate at a steady rate over an extended period of time, storage reservoirs are planned to accommodate fluctuating demands. The City's water system has five active reservoir sites and one inactive reservoir site (Del Rio). The total capacity of the storage facilities including Del Rio is 15.5 mg.

The City's water system operates within three pressure zones. According to the 2018 IUMP, capacity additions will be required during the study period. However, many of the facilities have available capacity to serve near term growth. The current well production capacities are the limiting factor in meeting near and long-term growth in water demands.

Figure W4 – Existing Storage

Facility	Number of Tanks	Total Volume	Available Volume
		mg	mg
Northside	2	1.2	1.1
Gateway	1	1.0	0.8
Garden Lakes	1	2.0	1.3
Rancho Santa Fe	2	2.8	2.1
Coldwater	2	5.0	3.2
Del Rio (inactive)	1	3.5	0.0
Total	9	15.5	8.5

[1] 2018 IUMP Page 4-10, Table 4.8

Distribution System

The City maintains 320 miles of transmission and distribution lines as well as 8 pressure reducing valves (PRVs). Figure W5 shows the length of mains by pipe diameter.

Figure W5 – Existing Transmission and Distribution Lines

Diameter	Length
inches	miles
6	48.2
8	170.5
10	3.3
12	57.7
16	31.5
18	0.1
20	5.1
24	2.7
30	0.1
36	1.3
48	0.1
Total	320.60

[1] 2018 IUMP Page 4-11, Table 4.10

The 2018 IUMP provides a detailed analysis of the available system capacities based on facilities and pressure zones. The 2018 IUMP also indicates the need for additional facilities over the 10-year study to accommodate new growth. New wells with a capacity of 6.92 mgd will be required over the study period to meet these demands. In addition, new transmission and distribution mains, and upsizing of existing mains will be required.

The existing water production wells, storage, pump stations, and transmission and distribution mains have an estimated value of \$734 million. Accounting for accumulated depreciation reduces this value to approximately \$410 million. In other words, the water system's assets are about 55% depreciated in aggregate based on accounting life. This is based on the City's most recent asset records and estimating a replacement cost of facilities using the Engineering News Record Construction Cost Index (ENR-CCI).

Expansion Facility Costs

ARS §9-463.05 (E)(3) requires:

"A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable."

New infrastructure-related facilities to serve growth over the study period include water production wells, transmission and distribution mains, booster pump stations, and reservoirs. The new wells will approximately 6.92 mgd of capacity. For the purposes of DIF calculations, the added well capacity represents the total increase in capacity to the system. In other words, the unit cost of expansion facilities (wells, reservoirs, pump stations, etc.) will be based on the added well capacity. The total cost of infrastructure facilities is approximately \$25.9 million. The City is also acquiring new water resources to meet the increase in demand due to growth. New water resources total 6,882 acre-feet at a cost of approximately \$10.0 million. Figure W6 details the proposed facilities needed for growth and their anticipated costs. The project listing and costs were provided by City Staff.

Figure W6 – Expansion Facility Project Costs

Description	Total Cost	Capacity Added (mgd)	Percent Growth-Related	Growth-Related Costs
Growth-Related Infrastructure Projects				
Well #33 The BLVD Well & Transmission	\$2,880,000	1.73	100.0%	\$2,880,000
Well at 107th & Encanto - SRP Shared Well Cost in Design	455,000	1.73	100.0%	455,000
McDowell Rd 16-inch Waterline - Avondale to 99th Ave	2,650,000		25%	662,500
99th Ave Waterline - Thomas to Encanto	956,000		100%	956,000
Garden Lakes Site - 2nd Reservoir & Booster Improvements	8,358,000		100.0%	8,358,000
Future Well	2,700,000	1.73	100.0%	2,700,000
Nitrate Removal System for Coldwater Booster Station	5,545,000		100.0%	5,545,000
16-inch WL Dysart Road – Illini to Roeser	1,000,000		52.0%	520,000
16-inch WL El Mirage, Elwood to Lower Buckeye	900,000		25.0%	225,000
16-inch WL 107th – Jones to Superior	500,000		25.0%	125,000
16-inch WL 107th Ave, Superior to Lower Buckeye	700,000		25.0%	175,000
Dysart Rd. Waterline - Roeser Alignment to Southern	1,000,000		63.0%	630,000
Northside Booster Well Site - Land Purchase & DCR	75,000	1.73	100.0%	75,000
NAWS Project (Impact Fee Portion, P&I) [1]	3,682,500		100.0%	3,682,500
Total Growth-Related Projects/Expansion Capacity Share	\$31,401,500			\$26,989,000
Less: FY21 Ending Fund Balance	(\$1,134,326)			(\$1,134,326)
Net Growth-Related Projects/Expansion Capacity Share	\$30,267,174	6.92		\$25,854,674
Growth-Related Resource Projects				
		Acre-Feet		
New River-Agua Fria River Underground Storage Project (NAUSP)	\$7,200,000	6,000	100.0%	7,200,000
White Mountain Apache Tribe Water Settlement	2,800,000	882	100.0%	2,800,000
Total Growth-Related Water Resource Costs	\$10,000,000	6,882.00		\$10,000,000
Total Expansion Costs				\$35,854,674

[1] Total P&I of project reimbursed from impact fees portion of \$4,419,000 multiplied by remaining 5 mgd of the 6 mgd capacity

[2] From 2018 Utility Master Plan, page 2-10. Represents metered demand from all 3/4" meters regardless of customer class.

[3] From 2018 Utility Master Plan, page 2-13.

Service Units and Demand by Land Use

ARS §9-463.05 (E)(4) requires:

“A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial.”

The development of a dwelling unit service demand incorporates historical water production data and peak day demand data. A dwelling unit represents the smallest service capacity in the system. For the purposes of this DIF, a dwelling unit demand is equivalent to the average day and maximum day demand for the City's 3/4" meters.²

Water production from 2012 through 2016 averaged 12.0 mgd and maximum day demands averaged 17.2 mgd. The 5-year peaking factor averaged 1.4. The 2018 IUMP recommends a peaking factor of 1.65 for planning purposes.³

Figure W7 – Historical Average Day and Maximum Day Demands

Year	(a) Average Day Demand mgd	(b) Maximum Day Demand mgd	(c)=(b)/(a) Maximum Day Peak Factor
2012	12.60	17.20	1.37
2013	12.20	17.10	1.40
2014	11.60	16.80	1.45
2015	12.10	16.20	1.34
2016	12.60	18.30	1.45
Average	12.22	17.12	1.40

[1] 2018 IUMP, Page 2-14, Table 2.9

Billed water consumption is based on data from the billing and water production records. The 2018 IUMP uses 2016 data as the baseline for developing their future demand projections.

Residential water DIFs are based on average day gallons per connection and assessed on a per dwelling unit basis. As shown on Figure W3, water production in 2016 was 12.6 MGD with 27,913 connections. This gives an existing allocated water demand of 450 gallons per day for a residential connection served by a 3/4" meter. From the 2018 IUMP, Page 2-3:

“The City’s TAZ data was used to estimate the number of dwelling units for each of the 2018 IUMP planning years. ...The 450 gpd/DU value is based on the number of dwelling units, which is calculated using the residential land use categories, and the total annual average production. However, because it is a composite unit water demand it includes both the residential and non-residential component of water use (including non-revenue water).”

² Dwelling unit and 3/4" equivalent unit or 3/4" meter are used synonymously throughout the water and wastewater section.

³ 2018 IUMP, Page 2-13

Figure W8 – Water Demand Unit

<i>Description</i>	<i>Values</i>
Total 2016 Water Demand , mgd [1]	12,600,000
Total 2016 Dwelling Units	27,913
Average Day Demand per Dwelling Unit, gpd	450
Maximum Day Peaking Factor	1.65
Maximum Day Demand per Dwelling Unit, gpd [2]	743

[1] 2018 IUMP, Page 2-10

[2] Rounded to nearest whole number

For residential and nonresidential connections, the water development fees are assessed by meter size. Development fees for meters greater than ¾" are multiplied by their corresponding meter capacity ratio. The meter capacity ratio represents the maximum safe allowable flow in gallons per minute for a given meter size as shown in Figure W9.

Figure W9 – Average and Maximum Day Demand by Water Meter Size

<i>Meter Size</i>	<i>Meter Capacity Ratio [1]</i>	<i>Average Day Demand</i>	<i>Maximum Day Demand</i>
<i>inches</i>		<i>gpd</i>	<i>gpd</i>
0.75	1.00	450	743
1.00	1.67	750	1,238
1.50	3.33	1,500	2,475
2.00	5.33	2,400	3,960
3.00	10.67	4,800	7,920
4.00	16.67	7,500	12,375
6.00	33.33	15,000	24,750

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.

Projected Service Units

ARS §9-463.05 (E)(5) requires:

"The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria."

ARS §9-463.05 (E)(6) requires:

"The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years."

It is projected that there will be an additional 3,907 dwelling units added within the City by 2032. Using the maximum day water demand per DU of 743 gpd, the projected residential peak demand will increase 2.9 mgd (743 x 3,907 = 2,902,901 gpd). It is estimated that the 6.92 mgd added capacity will serve approximately 9,314 DU (6,900,000 gpd / 743 gpd per DU = 9,314 DU).

Figure W10 shows the development of the current demand projection, projected demands and the total DU added during the study period. It also shows the DU that will be served by existing available capacity

and the capacity added by the IIP. The current system operates above the firm capacity of 17.7 mgd so there is no existing available capacity to serve growth.

Figure W10 – Projected Added Dwelling Units and Water Demand Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per EDU, gpd	450
3	Current Ave Day Demand, gpd	13,459,950
4	Maximum Day Peak Factor	1.41
5	Avg Day of Maximum Month, gpd (Line 3 x Line 4)	18,960,633
6	Current Firm Capacity, gpd	17,700,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	0
Added Capacity		
8	Added DU, 2022 - 2032	3,907
9	Average Day Demand	450
10	Planning Maximum Day Factor	1.65
11	Maximum Day Demand per DU, gpd	743
12	Added System Maximum Day Demand, gpd (Line 8 x Line 11)	2,902,901
13	Additional Capacity Needed for Growth (Line 12 - Line 7)	2,902,901
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	0
15	DU Served by 10-Year IIP (Line 13 / Line 11)	3,907
16	Total Added DU	3,907
17	DU Served by Full 6.92 mgd Capacity Addition	9,314

Facility Improvements

The City has plans to expand the existing supply system by 6.92 mgd through the addition of wells and distribution projects meet the future demands on the service area. The City is also securing additional 6,882 acre-feet water resources to meet future demands. This includes additional storage/recharge capacity at the New River-Agua Fria River Underground Storage Project (NAUSP) operated by Salt River Project (SRP) from the City of Chandler. This provides Avondale additional recharge capability and will alleviate the need for a water surface treatment plant. The cost of water infrastructure projects totals approximately \$27.0 million. This value is reduced by the FY 21 outstanding fund balance of \$1.1 million resulting in a net cost of \$25.9 million. The cost of the water infrastructure and water resources growth-related projects is \$35.85 million.

As discussed previously, the maximum day demand per DU is 743 gpd. The \$3.74 unit cost of capacity is multiplied by 743 gpd which totals \$2,776 for the infrastructure portion of the fee. The water resource fee is equal to the annual DU demand of 164,300 gallons multiplied by \$4.46 per gallon for a total of \$732. The total water DIF is \$3,519 which also includes the cost of the study of \$11.

Wastewater Utility Fees

ARS §9-463.05.T.7(b) defines the facilities and assets which can be included in the Wastewater Facilities IIP:

“Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities”

The City provides central wastewater collection, treatment, and disposal service throughout the City limits. The following provides an analysis of the resource and facility costs included in the IIP and DIF calculations.

The calculation of the water facilities DIF was based on information provided by staff in addition to the City's 2018 Integrated Utility Master Plan Update Report (IUMP).

Fee Calculation Methodology

For this 2022 update, Raftelis used the plan-based approach. This approach is based on a forward-looking infrastructure improvements plan which considers the future projects needed to meet the future wastewater demands of the utility. The wastewater development impact fee was calculated using the growth-share component of costs and the incremental capacity added from those facilities. Assumptions on included in the development of this fee were provided by Staff and the IUMP.

Service Area

The wastewater service area includes the northern municipal planning area down to the Estrella Mountains. The service area includes sections that are served by septic systems.

Proportionate Share

ARS §9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development. Page 2-8, Table 2.4 from the 2018 Integrated Utility Master Plan (IUMP) shows in 2016, the City had a total of 24,561 water meters (accounts).

Raftelis assumes that the number of wastewater account types are for the most part the same as water except for landscape meters and customers with septic tanks. Raftelis estimates the 2016 account type counts was approximately 24,000 (excluding irrigation and customers on septic systems) with a total contributed wastewater flow of 5.4 mgd. Based on a water demand of 12.6 mgd, the 2016 return to sewer factor was 44%. The 2018 IUMP indicates that 46% is an appropriate return to sewer factor for planning purposes. Figure WW1 shows the return to sewer percentages for each land use type and their respective contributed wastewater volume.

Figure WW1 – 2016 Account Type Return to Sewer Factors and Contributed Volume

<i>Description</i>	<i>Return to Sewer Factor</i>	<i>Average Daily WW Flow (gpd)</i>
Rural Low Density Residential	35.0%	0
Estate/Low Density Residential	35.0%	11,000
Sports & Entertainment	45.0%	0
Medium Density Residential	40.0%	1,774,000
City Center	60.0%	93,000
Historic Avondale	50.0%	163,000
Medium – High Density Residential	50.0%	165,000
High Density Residential	60.0%	1,138,000
Urban Commercial	60.0%	144,000
Mixed Use	60.0%	351,000
Urban Residential	0.0%	0
Local Commercial	60.0%	343,000
Open Space & Parks	0.0%	0
Open Space – Irrigation	0.0%	0
Freeway Commercial	75.0%	209,000
Business Park	60.0%	263,000
Education	60.0%	244,000
Industrial	60.0%	63,000
Public / Civic	60.0%	34,000
Corporate Park	60.0%	0
Gila River Scenic District	60.0%	0
High Intensity Office	60.0%	166
Office / Professional	60.0%	13,000
Total		5,008,166
Basin No. 2 Adjustment		432,000
Net Wastewater Flow (gpd)		5,440,000
2016 Actual Average Daily WastewaterFlow at WRF		5,600,000
<i>Variance (%)</i>		<i>-3.0%</i>

[1] 2018 IUMP, Page 2.18, Table 2.13; Page 2.20, Table 2.14

Existing Facilities

ARS §9-463.05 (E)(1) requires:

“A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.”

ARS §9-463.05 (E)(2) requires:

“An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.”

Water Reclamation Facility

The City’s Water Reclamation Facility (WRF) is named the Charles M. Wolf Water Resource Center and is located on Dysart Road south of Broadway Road alignment. Wastewater is conveyed to the facility

through two interceptors (36-inch and 48-inch) that enter the facility from the east. The current treatment capacity is a maximum month average daily flow (MMADF) of 9.0 million gallons per day (mgd). State regulations require the expansion of a facility when the facility reaches 80% of rated design capacity. The functional capacity under this regulation is 7.2 MGD. The 2021 average annual daily flow to the Avondale WRF was 6.5 mgd.

Lift Stations and Force Mains

The City currently has 10 lift stations. There are nearly 6.5 miles of force mains associated with the City's lift stations, which range in size from 2 to 16 inches in diameter. Figure WW2 lists the lift stations and their firm capacity.

Figure WW2 – Existing Lift Stations and Firm Capacity

<i>Lift Station</i>	<i>Firm Capacity (gpd)</i>
4th Street	3,200
10th Street	1,150
Central	200
Donatela	350
Friendship Park	350
Fulton	140
Littleton	210
PIR	30
Riley	2,200
Whyman	200

[1] 2018 IUMP Page 5-4, Table 5.1

Gravity Sewer Mains

The City's collection system contains 235 miles of mains ranging in size from 4 to 48 inches. Both the gravity sewer lines and lift stations have sufficient capacity to meet demands over the study period.

The existing wastewater treatment plant, lift stations, and gravity sewer mains have an estimated value of \$692 million. Accounting for accumulated depreciation reduces this value to approximately \$386 million. In other words, the water system's assets are about 55% depreciated in aggregate based on accounting life. This is based on the City's most recent asset records and estimating a replacement cost of facilities using the Engineering News Record Construction Cost Index (ENR-CCI).

Expansion Facility Costs

ARS §9-463.05 (E)(3) requires:

A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.

The City's existing treatment capacity is a maximum month average daily flow (MMADF) of 9.0 mgd. As shown on Figure WW1, the 2016 average annual daily flow to the WRF is 5.6 mgd. From 2016 to 2021, the average annual daily flow increased from 5.6 mgd to 6.5 mgd. The MMADF in 2021 was 6.75 mgd.

Under existing Arizona law, only 80% of the total capacity can be used, or 7.2 MGD. The remaining capacity of 0.45 mgd of additional capacity available for growth. The City has plans for a 3.0 mgd expansion to the Avondale Water Reclaimed Facility (WRF). Also under existing Arizona law, only 80% of the total capacity can be used, giving an additional planned capacity of 2.40 MGD.

Including both the additional capacity available from the existing facility of 0.45 mgd and the planned expansion of 2.40 MGD, the City's wastewater treatment has 2.85 mgd of available wastewater capacity to serve growth. Of that 2.85 mgd capacity, 0.85 mgd will be required to serve growth over the 10-year period. The estimated cost of the additional capacity is approximately \$79.6 million.

Service Units and Demand by Land Use

ARS §9-463.05 (E)(4) requires:

"A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial."

The development of a dwelling unit wastewater service demand incorporates historical wastewater contributed flow data and system peak flow data. A dwelling unit represents the smallest service capacity in the system. For the purposes of this DIF, a dwelling unit demand is equivalent to the average daily flow and peak flow for the City's 3/4" meters.

Residential wastewater DIFs are based on average day gallons per dwelling unit and assessed by meter size. The existing allocated water capacity is 450 gallons per day for a residential DU served by a 3/4" meter. Contributed wastewater flow is estimated to be 46% of water usage based on the planning criteria in the 2018 IUMP. The product of the 450 gpd and 46% equals the average day flow per DU of 207 gpd. The MMADF factor of 1.05 is applied to account for maximum month flows which results in a MMADF of 218 gpd. Figure WW3 shows the calculation of the DU average ad MMADF flows.

Figure WW3 – Wastewater Demand Unit

<i>Description</i>	<i>Amount</i>
Avg Day Water Demand per DU, gpd	450
Return Factor	46%
MMADF Peaking Factor	105%
MMADF Flow per DU, gpd	218

For residential and nonresidential connections, the wastewater DIFs are assessed by water meter size. and are allocated the appropriate meter capacity for wastewater by multiplying the DU MMADF of 218 gpd by the corresponding capacity ratios provided in Figure WW4.

Figure WW4 – Meter Capacity Ratios

Meter Size	Meter Capacity Ratio [1]	MMADF
<i>inches</i>		<i>gpd</i>
0.75	1.00	218
1.00	1.67	363
1.50	3.33	727
2.00	5.33	1,163
3.00	10.67	2,325
4.00	16.67	3,633
6.00	33.33	7,267

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.

Projected Service Units

ARS §9-463.05 (E)(5) requires:

“The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.”

ARS §9-463.05 (E)(6) requires:

“The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.”

It is projected that there will be an additional 5,552 dwelling units built within the City by 2037. Using the MMADF per dwelling unit of 207 gpd, it is estimated that there will be an increase in projected contributed peak wastewater flow of 1.2 mgd ($218 \times 5,552 = 1,210,000$ gpd).

Figure WW5 shows the development of the current annual average daily flow projections, projected average daily and MMADF flow, and the total DU added during the study period. It also shows the DU that will be served by existing available capacity and the capacity added by the IIP. It is estimated that the 2.4 mgd capacity addition will serve approximately 11,009 DU ($2,400,000$ gpd / 218 gpd).

Figure WW5 – Projected Added Dwelling Units and Wastewater Flows Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per DU, gpd	218.00
3	Current Ave Day Demand, gpd	6,520,598
4	MMADF Peak Factor	1.04
5	Avg Day of Maximum Month, gpd (Rounded) (Line 4 x Line 3)	6,751,000
6	Current Firm Capacity, gpd	7,200,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	449,000
Added Demand [1]		
8	Added DU, 2023 - 2032	3,907
9	Average Day Demand	207
10	Planning MMADF factor	1.05
11	MMADF per DU, gpd (Line 9 x Line 10)	218
12	Added MMADF, gpd	851,726
13	Additional Capacity Needed for Growth, gpd (Line 12 - Line 7)	402,726
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	2,060
15	DU Served by 10-Year IIP (Line 13 / Line 11)	1,847
16	Total Added DU	3,907
17	DU Served by Full 2.4 mgd Capacity Addition	11,009

[1] The new WWTP adds a total of 2.4 mgd of capacity.

Facility Improvements

The City has plans to expand the existing wastewater treatment plant by 3.0 mgd of which 80% (2.4 mgd) can be used under Arizona law. The total cost of the wastewater treatment plant phase 2 expansion is \$79,590,000. The existing wastewater development fund has \$6,438,870 as of the end of fiscal year 2021. The total cost of the wastewater treatment plant expansion less the existing development fund balance can be recovered through wastewater DIFs. This value divided by the additional capacity added of 2.4 mgd results in a unit cost of \$30.48 per mgd.

As discussed previously, the maximum month average daily flow per demand unit is 218 for wastewater. The \$30.48 unit cost of capacity is multiplied by the MMADF per demand unit of 218 to get a wastewater DIF per 0.75-inch meter equivalent of \$6,656. This includes \$11 for the cost of this impact fee study.

The proposed wastewater DIF is the product of the dwelling unit's maximum month average daily flow (MMADF) and the unit cost of capacity (218 gpd x \$30.48 per gpd) plus a charge of \$11 per dwelling unit for professional services. The proposed DIF totals \$6,656.

Appendix A – Forecast of Revenues

Arizona’s enabling legislation mandates a “required offset” for “excess” construction contracting excise taxes, as stated in ARS § 9-463.05(B)(12)).

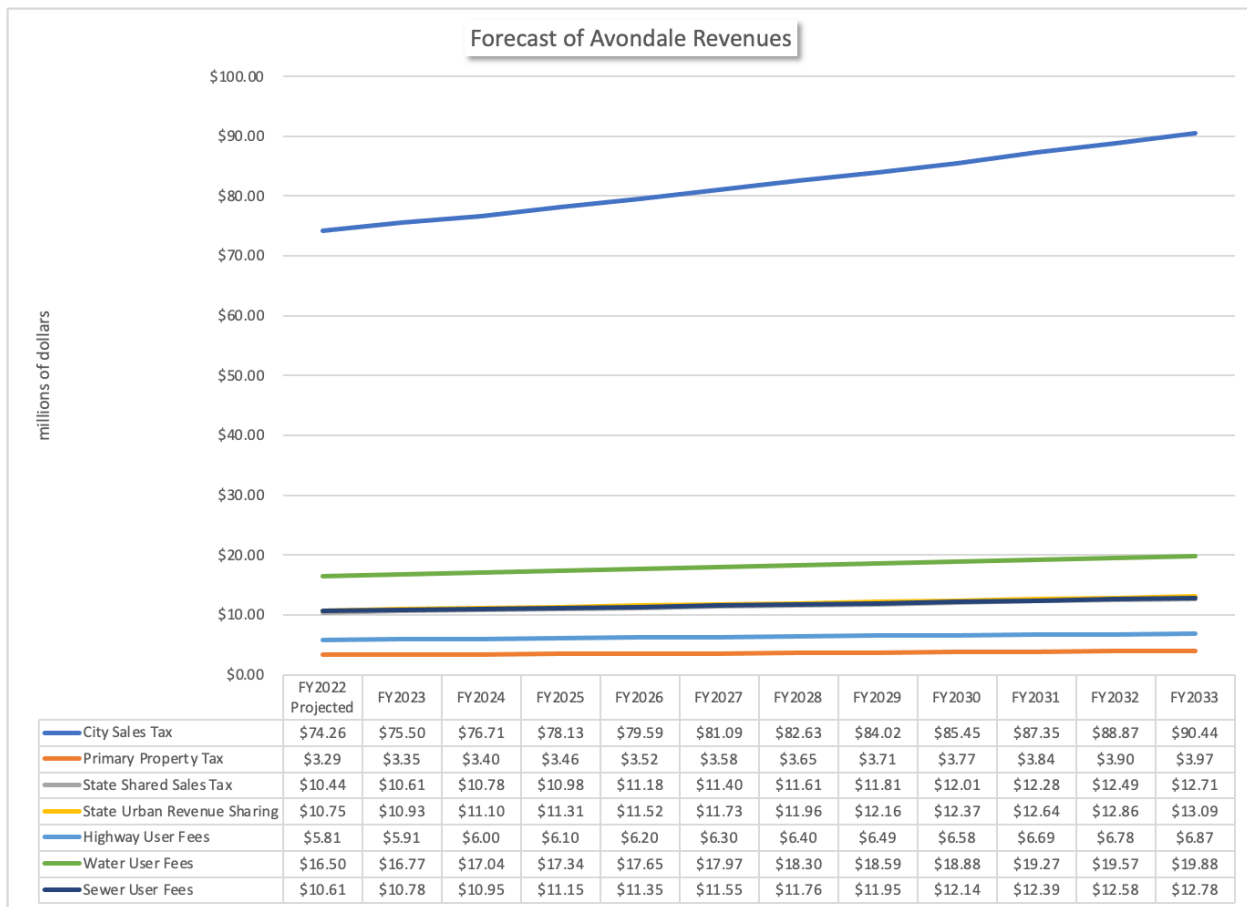
The municipality shall forecast the contribution to be made in the future in cash or by taxes, fees, assessments or other sources of revenue derived from the property owner towards the capital costs of the necessary public service covered by the development fee and shall include these contributions in determining the extent of the burden imposed by the development. Beginning August 1, 2014, for purposes of calculating the required offset to development fees pursuant to this subsection, if a municipality imposes a construction contracting or similar excise tax rate in excess of the percentage amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications, the entire excess portion of the construction contracting or similar excise tax shall be treated as a contribution to the capital costs of necessary public services provided to development for which development fees are assessed, unless the excess portion was already taken into account for such purpose pursuant to this subsection.

Avondale does not charge a construction excise tax at a rate higher than the rate applicable for other types of business activities. Therefore, no such offset is required.

ARS § 9-463.05(E)(7) requires:

“A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved land use assumptions, and a plan to include these contributions in determining the extent of the burden imposed by the development as required in subsection B, paragraph 12 of this section.”

The required forecast of non-development fee revenue that might be used for growth-related improvements is shown in Figure A1. The forecast of revenues was provided by staff.

Figure A1 – Ten-Year Revenue Projections

Appendix B – MAG Socioeconomic Documentation

Pages 23-25 from MAG Socioeconomic Projections 2019 Documentation are shown below.

Industrial is based on Manufacturing and Warehousing.

INDUSTRIAL EMPLOYMENT AND DEVELOPMENT BY INDUSTRY

		FAR	Sq.Ft. per Employee
Manufacturing			
311	Food Manufacturing	0.26	460
312	Beverage and Tobacco Product Manufacturing	0.37	761
314-			
323	Textiles/Wood Products/Printing	0.31	717
324-			
326	Petroleum/Pharmaceuticals/Plastics	0.28	596
327	Concrete/Concrete Products/Stone	0.08	580
331-			
332	Steel/Fabricated Metals/Machine Shops	0.30	549
333	Machinery Manufacturing	0.37	308
334	Computer and Electronic Product Manufacturing Electrical Equipment, Appliance, and Component	0.33	428
335	Manufacturing	0.35	697
336	Transportation Equipment Manufacturing	0.13	363
337	Furniture and Related Product Manufacturing	0.37	789
339	Miscellaneous Manufacturing	0.26	520
	Total	0.25	495
Warehouse			
423	Merchant Wholesalers, Durable Goods	0.29	514
424	Merchant Wholesalers, Nondurable Goods	0.32	735
484	General Freight Trucking	0.11	191
493	Warehousing and Storage	0.33	1,625

Commercial is based on Retail, Restaurants, and Hotels.

RETAIL EMPLOYMENT AND DEVELOPMENT BY INDUSTRY

		FAR	Sq.Ft. per Employee
Retail			
441	Motor Vehicle and Parts Dealers	0.18	379
441	Recreational Vehicle Dealers	0.10	754
441	Automotive Parts and Accessories Stores	0.26	724
442	Furniture and Home Furnishings Stores	0.31	674
443	Electronics and Appliance Stores	0.31	532
444	Building Material and Garden Equipment and Supplies Dealers	0.24	637
445	Supermarkets and Grocery Stores	0.24	454
445	Other Food and Beverage Stores	0.26	498
446	Health and Personal Care Stores	0.28	562
447	Gasoline Stations	0.10	340
448	Clothing and Clothing Accessories Stores	0.38	615
451	Sporting Goods, Hobby, Book, and Music Stores	0.27	583
452	General Merchandise Stores	0.30	741
452	Warehouse Clubs and Supercenters	0.23	566
452	All Other General Merchandise Stores	0.18	702
453	Miscellaneous Store Retailers	0.32	548
454	Nonstore Retailers	0.22	506
	Retail Total	0.25	561
Restaurants			
722	Food Service Contractors and Caterers	0.23	326
722	Drinking Places (Alcoholic Beverages)	0.27	485
722	Full-Service Restaurants	0.27	471
722	Limited-Service Restaurants	0.24	464
722	Snack and Nonalcoholic Beverage Bars	0.26	485
	Restaurant Total	0.26	463
Hotels		0.37	956

Office/Institutional is based on Information, Finance/Insurance, and Real Estate.

OFFICE EMPLOYMENT AND DEVELOPMENT BY INDUSTRY

		FAR	Sq.Ft. per Employee
Information			
511	Publishing Industries (except Internet)	0.57	390
512	Motion Picture and Sound Recording Industries	0.37	574
515	Broadcasting (except Internet)	0.36	376
517	Telecommunications	0.30	500
518	Data Processing, Hosting and Related Services	0.34	349
519	Other Information Services	0.08	478
	51 Total	0.29	463
Finance & Insurance			
522	Banking	0.33	429
522	Consumer Lending	0.46	441
522	Other Lending	0.25	388
523	Investments	0.53	588
524	Insurance Carriers and Related Activities	0.55	423
	52 Total	0.42	445
Real Estate and Rental and Leasing			
531	Real Estate Leasing	0.25	520
531	Real Estate Agents	0.37	390
532	Car & Truck Rental	0.08	590
532	Consular Rentals	0.33	623
532	Machinery and Equipment Rental and Leasing	0.13	485
	53 Total	0.19	468

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City of **AVONDALE**

Development Impact Fees for
Parks/Recreation, Fire, Police, Streets,
Water and Wastewater Facilities

Draft Report

August 17, 2022

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Executive Summary

The City of Avondale (City) retained Raftelis to conduct a comprehensive update to the non-utility and utility system development impact fees (SDFs or fees). Fees were last updated in 2019, including a fee for library facilities being used for debt service. Since the library debt will be paid off this fiscal year, Raftelis recommends suspension of the impact fee for libraries. This report documents the service units and the calculation of the proposed fees. A companion report documents land use assumptions (LUA) and Avondale's infrastructure improvement plan (IIP). The 2022 development impact fees include:

- Park/Recreation Facilities
- Fire Facilities
- Police Facilities
- Streets Facilities
- Water Facilities
- Wastewater Facilities

Impact Fee Definition

Development fees are one-time payments used to construct system improvements needed to accommodate new development. The fees represent future development's proportionate share of infrastructure capacity. Development fees may only be used for capital improvements or debt service for growth-related infrastructure. In contrast to general taxes, development fees may not be used for operations, maintenance, replacement or correcting existing deficiencies. Arizona Revised Statute §9-463.05 (Statute) identifies the specific requirements for municipalities to assess system development fees.

Findings and Conclusions

Figure 1 summarizes the methods and cost components for each type of infrastructure included in Avondale's 2022 DIF update. Arizona's enabling legislation also requires a determination of service areas, within which a substantial nexus exists between public facilities and the development being served. A citywide service area is appropriate for Avondale's parks/recreation, police, fire, and streets facilities.

Figure 1 – Development Fee Methods and Cost Components

Type of Infrastructure	Service Area	Cost Recovery (past improvements)	Incremental Expansion (current standards)	Plan-Based (future improvements)	Cost Allocation
<i>Parks and Recreation</i>	Citywide	Recoupment of General Fund Loan	Improved Parks Acreage		Daytime Population (Persons and Jobs)
<i>Fire</i>	Citywide		Fire Buildings and Apparatus		Functional Population (Persons and Vehicle Trips)
<i>Police</i>	Citywide		Police Vehicles	Police Buildings	Functional Population (Persons and Vehicle Trips)
<i>Streets</i>	Citywide		Intersection Improvements	Growth Share of Arterial Capacity Expansion	Inbound, Primary, Average Daily Vehicle Miles of Travel
<i>Water</i>	Citywide	North Avondale Water Supply		Growth Share of Backbone Facility Expansion	Average and Peak Water Demand [1]
<i>Wastewater</i>	Citywide			Growth Share of Backbone Facility Expansion	Peak Wastewater Flow
[1] Water DIF is comprised of a water resources fee and an infrastructure fee. The water resources fee is calculated using average day demand and the infrastructure fee is calculated on peak day demand.					

Proposed fees per residential dwelling are summarized in Figure 2. Residential fees per dwelling unit are provided for two types of housing. Fees for nonresidential development are listed per square foot of floor area. Proposed fees are provided for three general types of nonresidential development. Industrial includes all goods production and warehouse development. Office/Services includes business service and personal services, such as health care. Commercial (e.g., retail and restaurants) includes the uses found in a typical shopping center, plus eating/drinking places.

Figure 2 – Proposed Non-Utility Development Impact Fees

Citywide Service Area	Parks and Recreation	Fire	Police	Streets	Maximum Supportable	Current Total with Library	Increase or Decrease
<i>Residential (per dwelling)</i>							
Multifamily	\$1,656	\$1,553	\$1,485	\$1,279	\$5,973	\$3,807	\$2,166
Single Family	\$2,329	\$2,184	\$2,089	\$1,790	\$8,392	\$6,394	\$1,998
<i>Nonresidential (per square foot of floor area)</i>							
Industrial	\$0.09	\$0.04	\$0.04	\$0.21	\$0.38	\$0.45	(\$0.07)
Commercial	\$0.16	\$0.65	\$0.62	\$2.50	\$3.93	\$5.55	(\$1.62)
Office/Services	\$0.23	\$0.29	\$0.27	\$1.33	\$2.12	\$2.85	(\$0.73)

Figure 3 - Proposed Water Utility Development Impact Fees

<i>Meter Size</i>	<i>Meter Capacity Ratio [1]</i>	<i>Current Fees</i>	<i>Maximum Supportable</i>	<i>Change - \$</i>
<i>inches</i>				
0.75	1.00	\$3,822	\$3,519	(\$303)
1.00	1.67	6,383	5,865	(518)
1.50	3.33	12,728	11,730	(998)
2.00	5.33	20,372	18,768	(1,604)
3.00	10.67	40,782	37,536	(3,246)
4.00	16.67	63,715	58,650	(5,065)
6.00	33.33	127,392	117,300	(10,092)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Figure 4 - Proposed Wastewater Utility Development Impact Fees

<i>Meter Size (inches)</i>	<i>Meter Capacity Ratio [1]</i>	<i>Current Fees</i>	<i>Maximum Supportable</i>	<i>Change - \$</i>
0.75	1.00	\$5,808	\$3,153	(\$2,655)
1.00	1.67	9,700	5,255	(4,445)
1.50	3.33	19,342	10,510	(8,832)
2.00	5.33	30,959	16,816	(14,143)
3.00	10.67	61,976	33,632	(28,344)
4.00	16.67	96,826	52,550	(44,276)
6.00	33.33	193,595	105,100	(88,495)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Introduction

Arizona Development Impact Fees

Arizona Revised Statute §9-463.05 (Statute) identifies the specific requirements for municipalities to assess system development fees. DIFs can only be calculated and assessed for expansion-related existing or proposed improvements included in an approved IIP. The IIP must be tied to the LUA or growth projections that is tied to the service area in which fees will be enacted. The Statute also provides for strict notification, public hearing, and implementation schedules, among other provisions. This report provides an IIP and LUA for the various necessary public infrastructure to meet the demands of growth over the next 10-year period, FY 2022 – FY 2031 (LUA period).

Arizona's enabling legislation for development fees (ARS § 9-463.05) calls for three integrated products: 1) Land Use Assumptions (LUA) for at least 10 years, 2) Infrastructure Improvements Plan (IIP), and 3) Development Fees (DIF). Given the State's two-phase adoption process, the LUA and IIP are being reviewed, refined, and approved before focusing on the development fees.

In contrast to many General Plans and Master Plans for specific types of infrastructure, the IIP is limited to 10 years. Another important feature in Arizona's impact fee enabling legislation is the requirement that fees must be based on the same Level-Of-Service (LOS) provided to existing development. LOS to existing development may increase, but not by means of development fees. A final highlight of the enabling legislation is specific limitations on necessary public services. For example, only 10,000 square feet of a new library may be funded with development fees.

Arizona Development Fee Enabling Legislation

Arizona Revised Statutes § 9-463.05 governs how development fees are calculated for municipalities in Arizona. During the state legislative session of 2011, Senate Bill 1525 (SB 1525) was introduced which significantly amended the development fee enabling legislation. The changes included:

- Amending existing development fee programs by January 1, 2012.
- Abandoning existing development fee programs by August 1, 2014.
- New development fee program structure revolving around Land Use Assumptions and Infrastructure Improvements Plan.
- New adoption procedures for the Land Use Assumptions, Infrastructure Improvements Plan, and development fees.
- New definitions, including "necessary public services" which specify what categories and types of infrastructure may be funded with development fees.
- Time limitations in development fee collections and expenditures.
- New requirements for credits, "grandfathering" rules, and refunds.

As documented in this report, the City of Avondale (City) has complied with Arizona's development fee enabling legislation and applicable legal precedents. Development fees are proportionate and reasonably related to the capital improvement demands of new development. Specific costs have been identified using local data and current dollars. With input from City staff, Raftelis determined demand indicators for each type of infrastructure and calculated proportionate share factors to allocate costs by type of development. This report documents the formulas and input variables used to calculate the development fees for each type of public facility. Development fee methodologies also identify the extent to which new development is entitled to various types of credits to avoid potential double payment of growth-related capital costs.

Necessary Public Services

Consistent with Arizona's development fee enabling legislation, development fees may be only used for construction, acquisition or expansion of public facilities that are necessary public services. Necessary public facilities must have a life expectancy of three or more years and be owned or operated on behalf of the municipality.

Evaluation of Credits

New development should not be required to pay twice for the cost of new facilities – once through development fees and again through other taxes or fees that are used to fund the same facilities. To avoid potential double-payment, development fees may be reduced, and such a reduction is referred to as an offset or revenue credit that is incorporated into the development fee calculation. In general, offsets are only required for funding that is dedicated for capacity-expanding improvements of the type addressed by the development fee. A municipality is not required to use general fund revenue to pay for growth-related improvements.

SB 1525 amended the "offset" provision in the state enabling act to add a mandate regarding construction contracting excise tax, as highlighted in the following provision ARS § 9-463.05(B)(12)):

The municipality shall forecast the contribution to be made in the future in cash or by taxes, fees, assessments or other sources of revenue derived from the property owner towards the capital costs of the necessary public service covered by the development fee and shall include these contributions in determining the extent of the burden imposed by the development. Beginning August 1, 2014, for purposes of calculating the required offset to development fees pursuant to this subsection, if a municipality imposes a construction contracting or similar excise tax rate in excess of the percentage amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications, the entire excess portion of the construction contracting or similar excise tax shall be treated as a contribution to the capital costs of necessary public services provided to development for which development fees are assessed, unless the excess portion was already taken into account for such purpose pursuant to this subsection.

Because Avondale does not charge a construction excise tax at a rate higher than for other types of business activities, no such offset is required.

Qualified Professionals

Qualified professionals must prepare the IIP, using generally accepted engineering and planning practices. A qualified professional is defined as "a professional engineer, surveyor, financial analyst or planner providing services within the scope of the person's license, education, or experience." Raftelis is a financial consulting firm specializing in the cost of growth services and user charges for utilities. Our services include development fees, infrastructure funding, user fees and cost of service studies. Since 1993, Raftelis has provided consulting services for local governments and utilities across the United States. The total cost of professional services for the 2022 update of impact fees, including all meetings with staff and elected officials, was \$149,426. The cost of professional services was allocated 10% to

parks/recreation, 9% each to police and fire, 15% to streets, 28% to water, and 29% to wastewater facilities.

Methods

In contrast to project-level improvements, development fees fund growth-related infrastructure that will benefit multiple development projects, or the entire jurisdiction (usually referred to as system improvements). There are three general methods for calculating development fees. The choice of a particular method depends primarily on the timing of infrastructure construction (past, concurrent, or future) and service characteristics of the facility type being addressed. Each method has advantages and disadvantages in a particular situation and can be used simultaneously for different cost components.

The process of calculating development impact fees involves two main steps: (1) determining the cost of development-related capital improvements and (2) allocating those costs equitably to various types of development. In practice, the calculation of development fees can become complicated due to many variables involved in defining the relationship between development and the need for facilities within the designated service area. The following paragraphs discuss three basic methods for calculating development fees and how those methods can be applied.

- The rationale for recoupment, often called cost recovery, is that new development is paying for its share of the useful life and remaining capacity of facilities already built, or land already purchased, from which new growth will benefit. This methodology is often used for utility systems that must provide adequate capacity before new development can take place.
- The incremental expansion method documents current infrastructure standards for each type of public facility, using both quantitative and qualitative measures. With de facto standards, there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share to maintain current standards for growth-related infrastructure. Fee revenue will be used to expand or provide additional facilities, as needed to keep pace with new development.
- The plan-based method allocates costs for a specified set of improvements to a specified amount of service units. Improvements are typically identified in a facility master plan and development potential is identified by the land use assumptions. There are two options for determining the cost per service unit: 1) total cost of a public facility can be divided by total demand units (average cost approach), or 2) the growth-share of the public facility cost can be divided by the net increase in demand units over the planning timeframe (marginal cost approach).

Reliance on City Provided Data

During the course of this project, the City provided Raftelis with a variety of information including financial reports, planning documents, and projected capital expenditures for each fee area. Raftelis has reviewed the data for reasonableness and general representation of cost and related activities. Raftelis did not independently assess or verify the accuracy of such data – historic or projected. We have relied on this data in the formulation of our findings and recommendations, as well as in the preparation of this report. There will be differences between actual and projected data, and these differences may be significant. Therefore, we take no responsibility for the accuracy of data or projections provided by or prepared on behalf of the City, nor does Raftelis have any responsibility for updating this report for

events occurring after the date of this report. Below is a list of the major source documents used for this study:

- Maricopa Association of Government 2022 Economic Data
- Institute of Transportation Engineers Trip Generation Manual
- City of Avondale 2018 Integrated Utility Master Plan
- City of Avondale debt documents
- Infrastructure Improvement Plans by type of public facility

Legal Disclaimer

The City of Avondale retained Raftelis to conduct the DIF study. During the technical review and analysis, Raftelis relied on City data and discussions with City staff to develop the SDFs. In addition, Raftelis used industry-standard resources including data from the Maricopa Association of Governments (MAG) and the Institute of Transportation Engineers (ITE) in the development of growth projections, levels of service, and fees.

These fees have been developed in accordance with the Statute. In calculating the fees for the City, the analysis shows that the proposed fees for each service area provide the additional necessary funding needed for the indicated public services and that the fees bear a reasonable relationship to the burden imposed. If a fee-payer believes the development has a non-standard impact on the City, the fee-payer is responsible to provide written documentation to the City describing the anticipated impact and why application of the standard DIF would not bear a reasonable relationship to the burden imposed.

Parks/Recreation Facilities

ARS § 9-463.05(T)(7)(g) defines the parks and recreation facilities eligible for development fee funding.

“Neighborhood parks and recreational facilities on real property up to thirty acres in area, or parks and recreational facilities larger than thirty acres if the facilities provide a direct benefit to the development. Park and recreational facilities do not include vehicles, equipment or that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools.”

Input variables for parks/recreation facilities, documented in the IIP, are summarized in the upper portion of Figure PR1. The conversion of costs per service unit into a cost per development unit is also shown in the figure below. For residential development, average number of persons per housing unit provides the necessary conversion. For nonresidential development, average jobs per square foot of floor area are derived from trip generation rates by type of development, published by the Institute of Transportation Engineers (ITE 2022). Additional details on nonresidential prototypes are provided in the LUA report. Proposed development fees for parks/recreation facilities are shown in the column with light green shading.

Figure PR1 – Parks/Recreation Service Units and Fees per Development Unit**Input Variables**

Infrastructure Type	Infrastructure Units	Growth Quantity Over Ten Years	Cost Factor per Unit	IIP Cost (rounded)
Parks and Recreation Facilities	improved acres	15.6	\$431,000	\$6,724,000
Recoupment of General Fund Loan				\$2,500,000
Professional Services for LUA, IIP, and DIF				\$14,943
Total =>				\$9,238,943

Cost Allocation

Residential	92%			
Nonresidential	8%			
Growth 2022 to 2032		Cost per Service Unit	Credit per Service Unit	Net Cost per Service Unit
Residential (persons)	11,992	\$708	\$0	\$708
Nonresidential (jobs)	6,948	\$106	\$0	\$106

Residential Impact Fees (per housing unit) for Parks and Recreation

Type	Persons per Housing Unit	Maximum Parks and Recreation Impact Fees	Current Fees	Increase or Decrease
Multifamily	2.34	\$1,656	\$1,002	\$654
Single Family	3.29	\$2,329	\$1,497	\$832

Nonresidential Impact Fees (per square foot of building floor area) for Parks and Recreation

Type	Jobs per 1,000 Square Feet	Maximum Parks and Recreation Impact Fees	Current Fees	Increase or Decrease
Industrial	0.93	\$0.09	\$0.08	\$0.01
Commercial	1.51	\$0.16	\$0.54	(\$0.38)
Office/Services	2.19	\$0.23	\$0.68	(\$0.45)

Projected Revenue for Parks/Recreation Facilities

Parks/recreation development fee revenue is expected to match the growth cost of infrastructure, which has a ten-year total cost of approximately \$9.2 million (see the upper portion of Figure PR2). The figure below indicates Avondale should receive approximately \$9.2 million in development fee revenue over the next ten years, if actual development matches the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the need for infrastructure and development fee revenue.

Figure PR2 – Parks/Recreation Development Fee Revenue

Parks and Recreation Growth Cost Over 10 Years **\$9,238,943**

Parks and Recreation Impact Fee Revenue

		Average Residential \$2,173 per housing unit	Industrial \$90 per 1000 Sq Ft	Commercial \$160 per 1000 Sq Ft	Office/Services \$230 per 1000 Sq Ft
Year		Housing Units	KSF	KSF	KSF
Base	2022	29,911	2,900	7,800	4,600
Year 1	2023	30,318	3,000	8,000	4,800
Year 2	2024	30,724	3,000	8,300	4,900
Year 3	2025	31,130	3,100	8,500	5,000
Year 4	2026	31,536	3,200	8,700	5,200
Year 5	2027	31,942	3,300	8,900	5,300
Year 6	2028	32,349	3,400	9,200	5,400
Year 7	2029	32,755	3,500	9,400	5,600
Year 8	2030	33,160	3,500	9,600	5,700
Year 9	2031	33,489	3,600	9,800	5,800
Year 10	2032	33,818	3,700	10,000	5,900
Ten-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$8,490,000	\$72,000	\$352,000	\$299,000
Total Revenue Over 10 Years (rounded) =>					\$9,213,000

Fire Facilities

Input variables for fire facilities, documented in the IIP, are summarized in the upper portion of Figure F1. The conversion of costs per service unit into a cost per development unit is also shown in the figure below. For residential development, average number of persons per housing unit provides the necessary conversion. For nonresidential development, average weekday, inbound, primary, vehicle trips per square foot of floor area are derived from trip generation rates by type of development, published by the Institute of Transportation Engineers (ITE 2022). Additional details on nonresidential prototypes are provided in the LUA report. Proposed development fees for fire facilities are shown in the column with light orange shading.

Figure F1 – Fire Service Units and Fees per Development Unit

Input Variables

Infrastructure Type	Infrastructure Units	Growth Quantity Over Ten Years	Cost Factor per Unit	IIP Cost (rounded)
Fire Buildings	square feet	11,240	\$668	\$7,508,000
Fire Vehicles (3+ years of useful life)	count	6	\$386,800	\$2,321,000
Professional Services for LUA, IIP, and DIF				\$13,448
Total =>				\$9,842,448

Cost Allocation

Residential	81%			
Nonresidential	19%			
Growth 2022 to 2032		Cost per Service Unit	Revenue Credit per Service Unit	Net Cost per Service Unit
Residential (persons)	11,992	\$664	\$0	\$664
Nonresidential (vehicle trips)	34,599	\$54	\$0	\$54

Residential Impact Fees (per housing unit) for Fire

Type	Persons per Housing Unit	Maximum Supportable Fire Impact Fees	Current Fees	Increase or Decrease
Multifamily	2.34	\$1,553	\$519	\$1,034
Single Family	3.29	\$2,184	\$775	\$1,409

Nonresidential Impact Fees (per square foot of floor area) for Fire

Type	Avg Wkdy Veh Trip Ends per 1,000 Sq Ft	Trip Adjustment Factors	Maximum Supportable Fire Impact Fees	Current Fees	Increase or Decrease
Industrial	1.71	50%	\$0.04	\$0.05	(\$0.01)
Commercial	37.01	33%	\$0.65	\$0.78	(\$0.13)
Office/Services	10.84	50%	\$0.29	\$0.31	(\$0.02)

Projected Revenue for Fire Facilities

Fire development fee revenue is expected to match the growth cost of fire infrastructure, which has a ten-year total cost of approximately \$9.8 million (see the upper portion of Figure F2). The figure below indicates Avondale should receive approximately \$9.8 million in fire development fee revenue over the next ten years, if actual development matches the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the need for infrastructure and development fee revenue.

Figure F2 – Fire Development Fee Revenue

Fire Facilities Growth Cost Over 10 Years => **\$9,842,448**

Fire Facilities Impact Fee Revenue

		Average Residential \$2,038 per housing unit	Industrial \$40 per 1000 Sq Ft	Commercial \$650 per 1000 Sq Ft	Office/Services \$290 per 1000 Sq Ft
		<i>Housing Units</i>	<i>KSF</i>	<i>KSF</i>	<i>KSF</i>
Base	2022	29,911	2,900	7,800	4,600
Year 1	2023	30,318	3,000	8,000	4,800
Year 2	2024	30,724	3,000	8,300	4,900
Year 3	2025	31,130	3,100	8,500	5,000
Year 4	2026	31,536	3,200	8,700	5,200
Year 5	2027	31,942	3,300	8,900	5,300
Year 6	2028	32,349	3,400	9,200	5,400
Year 7	2029	32,755	3,500	9,400	5,600
Year 8	2030	33,160	3,500	9,600	5,700
Year 9	2031	33,489	3,600	9,800	5,800
Year 10	2032	33,818	3,700	10,000	5,900
Ten-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$7,962,000	\$32,000	\$1,430,000	\$377,000
Total Revenue Over 10 Years (rounded) =>					\$9,801,000

Police Facilities

ARS § 9-463.05(T)(7)(f) defines the police and fire facilities eligible for development fee funding.

“Fire and Police facilities, including all appurtenances, equipment and vehicles. Fire and Police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.”

Input variables for police, as documented in the IIP, are summarized in the upper portion of Figure P1. The conversion of infrastructure costs per service unit into a cost per development unit is also shown in the figure below. For residential development, average number of persons per dwelling provides the necessary conversion. For nonresidential development, trip generation rates by type of development are from the Institute of Transportation Engineers (ITE 2022). To ensure the analysis is based on travel demand associated with nonresidential development in Avondale, trip ends (entering and exiting) are converted to inbound, primary trips, using trip adjustment factors. For Industrial and Office/Services, a basic adjustment of 50% is applied. Because commercial development attracts “pass-by” trips, the adjustment factor for commercial is only 33%, based on the average pass-by factor for shopping centers. Maximum supportable development fees for police facilities are shown in the column with blue shading.

Figure P1 – Police Service Units and Fees per Development Unit**Input Variables**

Infrastructure Type	Infrastructure Units	Growth Quantity Over Ten Years	Cost Factor per Unit	IIP Cost (rounded)
Police Buildings	square feet	8,000	\$998	\$7,984,000
Police Vehicles (3+ years of useful life)	count	23	\$61,200	\$1,408,000
Professional Services for LUA, IIP, and DIF				\$13,448
Total =>				\$9,405,448

Cost Allocation

Residential	81%			
Nonresidential	19%			
Growth 2022 to 2032		Cost per Service Unit	Revenue Credit per Service Unit	Net Cost per Service Unit
Residential (persons)	11,992	\$635	\$0	\$635
Nonresidential (vehicle trips)	34,599	\$51	\$0	\$51

Residential Impact Fees (per housing unit) for Police

Type	Persons per Housing Unit	Maximum Supportable Police Impact Fees	Current Fees	Increase or Decrease
Multifamily	2.34	\$1,485	\$557	\$928
Single Family	3.29	\$2,089	\$832	\$1,257

Nonresidential Impact Fees (per square foot of floor area) for Police

Type	Avg Wkdy Veh Trip Ends per KSF	Trip Adjustment Factors	Maximum Supportable Police Impact Fees	Current Fees	Increase or Decrease
Industrial	1.71	50%	\$0.04	\$0.06	(\$0.02)
Commercial	37.01	33%	\$0.62	\$0.83	(\$0.21)
Office/Services	10.84	50%	\$0.27	\$0.32	(\$0.05)

Projected Revenue from Police Fees

The revenue projection shown below assumes implementation of the maximum supportable police fees and that development in the service area over the next ten years is consistent with the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the impact fee revenue. The police fee revenue projection in Figure P2 (\$9.4 million over ten years) approximates the growth cost of planned system improvements to be funded with development fees.

Figure P2 – Police Fee Revenue Projection

Ten-Year Need for Growth-Related Police Facilities => **\$9,405,448**

Police Impact Fee Revenue

		Average Residential \$1,949 per housing unit	Industrial \$40 per 1000 Sq Ft	Commercial \$620 per 1000 Sq Ft	Office/ Services \$270 per 1000 Sq Ft
	Year	Housing Units	KSF	KSF	KSF
Base	2022	29,911	2,900	7,800	4,600
Year 1	2023	30,318	3,000	8,000	4,800
Year 2	2024	30,724	3,000	8,300	4,900
Year 3	2025	31,130	3,100	8,500	5,000
Year 4	2026	31,536	3,200	8,700	5,200
Year 5	2027	31,942	3,300	8,900	5,300
Year 6	2028	32,349	3,400	9,200	5,400
Year 7	2029	32,755	3,500	9,400	5,600
Year 8	2030	33,160	3,500	9,600	5,700
Year 9	2031	33,489	3,600	9,800	5,800
Year 10	2032	33,818	3,700	10,000	5,900
Ten-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$7,615,000	\$32,000	\$1,364,000	\$351,000
Total Projected Revenues (rounded) =>		\$9,362,000			

Street Facilities

ARS § 9-463.05(T)(7)(e) defines the facilities and assets which can be included in the Street Facilities IIP.

“Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon.”

Development Fees for Streets

Figure S1 indicates key input variables at the top, which are documented in Avondale’s LUA and IIP report. Proposed fees are equal to the Vehicle Miles of Travel (VMT) by development category multiplied by the cost factor of \$1,011 per VMT. For example, the DIF for an average single family residential unit is derived from the formula below.

$$9.43 \times 0.61 \times 1.14 \times 0.27 \times \$1011 = \$1,790 \text{ (truncated)}$$

Figure S1 – Streets Development Fee Schedule for Avondale

Input Variables		Arterial Lane Miles	Cost per Lane Mile	IIP Costs			
Growth Cost of Capacity Expansion		3.0	\$2,500,000	\$7,500,000			
		Improved Intersections	Avg Cost per Intersection				
		3	\$2,295,000	\$6,885,000			
		Professional services for LUA, IIP, and DIF		\$22,414			
		Total IIP Cost Over Ten Years		\$14,407,414			
VMT Increase Over 10 Years		14,237					
Average Miles per Trip		0.27					
Growth Cost per VMT		\$1,011					
Residential (per dwelling unit) for Streets							
ITE Code	Type	Avg Wkdy Veh Trip Ends per Dwelling	Trip Rate Adjustment	Trip Length Adjustment	Maximum Supportable Streets Impact Fees	Current Fees	Increase or Decrease
220	Multifamily	6.74	61%	114%	\$1,279	\$1,649	(\$370)
210	Single Family	9.43	61%	114%	\$1,790	\$3,171	(\$1,381)
Nonresidential (per square foot of floor area) for Streets							
ITE Code	Type	Avg Wkdy Veh Trip Ends per 1,000 Sq Ft	Trip Rate Adjustment	Trip Length Adjustment	Maximum Supportable Streets Impact Fees	Current Fees	Increase or Decrease
150	Industrial	1.71	50%	90%	\$0.21	\$0.25	(\$0.04)
820	Commercial	37.01	33%	75%	\$2.50	\$3.31	(\$0.81)
710	Office/Services	10.84	50%	90%	\$1.33	\$1.43	(\$0.10)

Projected Revenue from Street Fees

The revenue projection shown below assumes implementation of the maximum supportable street fees and that development in the service area over the next ten years is consistent with the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the impact fee revenue. The street fee revenue projection in Figure S2 of almost \$14 million over ten years, approximates the growth cost of planned system improvements to be funded with development fees.

Figure S2 – Projected Street Fee Revenue

Ten-Year Cost of Street Facilities

Growth Cost => **\$14,407,414**

Streets Impact Fee Revenue

		<i>Average-Size Residential</i>	<i>Industrial</i>	<i>Commercial</i>	<i>Office/Services</i>
		\$1,680 per housing unit	\$210 per 1000 Sq Ft	\$2,500 per 1000 Sq Ft	\$1,330 per 1000 Sq Ft
		<i>Hsg Units</i>	<i>KSF</i>	<i>KSF</i>	<i>KSF</i>
Base	2020	29,911	2,900	7,800	4,600
Year 1	2021	30,318	3,000	8,000	4,800
Year 2	2022	30,724	3,000	8,300	4,900
Year 3	2023	31,130	3,100	8,500	5,000
Year 4	2024	31,536	3,200	8,700	5,200
Year 5	2025	31,942	3,300	8,900	5,300
Year 6	2026	32,349	3,400	9,200	5,400
Year 7	2027	32,755	3,500	9,400	5,600
Year 8	2028	33,160	3,500	9,600	5,700
Year 9	2029	33,489	3,600	9,800	5,800
Year 10	2030	33,818	3,700	10,000	5,900
10-Yr Increase		3,907	800	2,200	1,300
Projected Revenue =>		\$6,564,000	\$168,000	\$5,500,000	\$1,729,000
		Total Revenue (rounded) =>			\$13,961,000

Water Facilities

ARS §9-463.05.T.7(a) defines the facilities and assets which can be included in the Water Facilities IIP:

“Water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities”

The City provides potable water with water supply consisting of a combination of ground water sources. The entire water system infrastructure includes water resources, wells, transmission, distribution, storage, administrative facilities, vehicles, and equipment including meters. The City’s water system serves the land areas north of the Estrella Mountains, excluding a small area in the northwest corner of the City limits. This area is served by a private water utility. The following provides an analysis of the resource and facility costs included in the IIP and DIF calculations.

The calculation of the water facilities DIF was based on information provided by staff in addition to the City’s 2018 Integrated Utility Master Plan Report (IUMP).

Projected Service Units

ARS §9-463.05 (E)(5) requires:

“The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.”

ARS §9-463.05 (E)(6) requires:

“The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.”

It is projected that there will be an additional 3,907 dwelling units added within the City by 2032. Using the maximum day water demand per DU of 743 gpd, the projected residential peak demand will increase 2.9 mgd ($743 \times 3,907 = 2,902,901$ gpd). It is estimated that the 6.92 mgd added capacity will serve approximately 9,314 DU ($6,900,000$ gpd / 743 gpd per DU = $9,314$ DU).

Figure W1 shows the development of the current demand projection, projected demands and the total DU added during the study period. It also shows the DU that will be served by existing available capacity and the capacity added by the IIP. The current system operates above the firm capacity of 17.7 mgd so there is no existing available capacity to serve growth.

Figure W1 – Projected Added Dwelling Units and Water Demand Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per EDU, gpd	450
3	Current Ave Day Demand, gpd	13,459,950
4	Maximum Day Peak Factor	1.41
5	Avg Day of Maximum Month, gpd (Line 3 x Line 4)	18,960,633
6	Current Firm Capacity, gpd	17,700,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	0
Added Capacity		
8	Added DU, 2022 - 2032	3,907
9	Average Day Demand	450
10	Planning Maximum Day Factor	1.65
11	Maximum Day Demand per DU, gpd	743
12	Added System Maximum Day Demand, gpd (Line 8 x Line 11)	2,902,901
13	Additional Capacity Needed for Growth (Line 12 - Line 7)	2,902,901
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	0
15	DU Served by 10-Year IIP (Line 13 / Line 11)	3,907
16	Total Added DU	3,907
17	DU Served by Full 6.92 mgd Capacity Addition	9,314

Development Fees for Water Facilities

The proposed water development impact fee (DIF) consists of an infrastructure component and a resources component. The only difference between these two components is the measurement of capacity. Infrastructure projects are stated in peak day gallons per day while the resource projects are stated in terms of annual demand or acre-feet. The two fees are calculated separately but are combined into one fee. The equations below illustrate the differences.

$$\frac{\text{Infrastructure Projects}}{\text{Added Well Capacity (gpd)}} \times 3/4" \text{ Equiv Peak Demand (gpd)} = \text{Infrastructure DIF}$$

$$\frac{\text{Water Resource Projects}}{\text{Added Supply (Acre - Feet)}} \times 3/4" \text{ Equiv. Average Day Demand (AF)} = \text{Resources DIF}$$

$$\text{Infrastructure DIF} + \text{Resources DIF} = \text{Total Water DIF}$$

Total added well capacity was used as the basis for determining the unit cost of capacity. The ¾" equivalent demands are analyzed using the same unit measurements as the unit cost of capacity calculation. This is to maintain the rational nexus between the cost of facilities and the cost to serve a new customer. For example, if the unit cost of treatment facilities is measured using design peak day demand parameter in gallons per day (gpd), then the new customer demands should also be measured in peak day gpd to calculate the fee.

Infrastructure project costs total approximately \$27.0 million. Included in this total is the DIF-related costs associated North Avondale Water Supply Project (NAWS) of \$4,419,000. The \$4,419,000 is the sum of the total principal and interest costs of the project. This project has a capacity of 6 million gallons per day (mgd) with 1 mgd currently in use. Therefore, the principal and interest payments included in the fee are reduced to 5/6 of the total value. This represents the remaining value of capacity for growth. The infrastructure costs are decreased by the FY21 beginning balance of \$1.1 million. Net infrastructure costs total \$25.9 million. The City will be securing an additional 6,882 acre-feet of water resources to meet future demand. This includes additional storage/recharge capacity at the New River-Agua Fria River Underground Storage Project (NAUSP) operated by Salt River Project (SRP) from the City of Chandler. This provides Avondale additional recharge capability and will alleviate the need for a water surface treatment plant. The water resource projects total \$10.0 million. Figure W2 details the water DIF calculation.

Figure W2 – Calculation of Water Development Impact Fee

Description	Total Cost	Capacity Added (mgd)	Percent Growth-Related	Growth-Related Costs
Growth-Related Infrastructure Projects				
Well #33 The BLVD Well & Transmission	\$2,880,000	1.73	100.0%	\$2,880,000
Well at 107th & Encanto - SRP Shared Well Cost in Design	455,000	1.73	100.0%	455,000
McDowell Rd 16-inch Waterline - Avondale to 99th Ave	2,650,000		25%	662,500
99th Ave Waterline - Thomas to Encanto	956,000		100%	956,000
Garden Lakes Site - 2nd Reservoir & Booster Improvements	8,358,000		100.0%	8,358,000
Future Well	2,700,000	1.73	100.0%	2,700,000
Nitrate Removal System for Coldwater Booster Station	5,545,000		100.0%	5,545,000
16-inch WL Dysart Road – Illini to Roeser	1,000,000		52.0%	520,000
16-inch WL El Mirage, Elwood to Lower Buckeye	900,000		25.0%	225,000
16-inch WL 107th – Jones to Superior	500,000		25.0%	125,000
16-inch WL 107th Ave, Superior to Lower Buckeye	700,000		25.0%	175,000
Dysart Rd. Waterline - Roeser Alignment to Southern	1,000,000		63.0%	630,000
Northside Booster Well Site - Land Purchase & DCR	75,000	1.73	100.0%	75,000
NAWS Project (Impact Fee Portion, P&I) [1]	3,682,500		100.0%	3,682,500
Total Growth-Related Projects/Expansion Capacity Share	\$31,401,500			\$26,989,000
Less: FY21 Ending Fund Balance	(\$1,134,326)			(\$1,134,326)
Net Growth-Related Projects/Expansion Capacity Share	\$30,267,174			\$25,854,674
10-Year Capacity Added, mgd		6.92		
Unit Cost of Capacity, \$ per gpd				\$3.74
Average Day Water Demand 3/4" Meter, gpd [2]		450.00		
Maximum Day Peaking Factor [3]		1.65		
Peak Demand, gpd		743		
Water Infrastructure Development Fee				\$2,776
Growth-Related Resource Projects				
		Acre-Feet		
New River-Agua Fria River Underground Storage Project (NAUSP)	\$7,200,000	6,000	100.0%	7,200,000
White Mountain Apache Tribe Water Settlement	2,800,000	882	100.0%	2,800,000
Total Growth-Related Projects/Expansion Capacity Share	\$10,000,000			\$10,000,000
10-Year Capacity Added, Acre-Feet		6,882		
10-Year Capacity Added, thousand gallons		2,242,507		
Unit Cost of Capacity, \$ per 1,000 gallons				\$4.46
Annual Water Demand, 1,000 gallons		164.3		
Water Resources Development Fee				\$732
Plus: Cost of Professional Services, \$ per 3/4" Equivalent				\$11
Water Development Fee, \$ per 3/4" Equivalent				\$3,519
Existing Fee				\$3,822
Difference - %				(\$303)

[1] Total P&I of project reimbursed from impact fees portion of \$4,419,000 multiplied by remaining 5 mgd of the 6 mgd capacity

[2] From 2018 Utility Master Plan, page 2-10. Represents metered demand from all 3/4" meters regardless of customer class.

[3] From 2018 Utility Master Plan, page 2-13.

Water DIFs are assessed by meter size and increase based on the AWWA 3/4-inch meter capacity relationships. One DU is equated to a 3/4-inch meter, which is the smallest and most common meter size available. Figure W3 shows the calculated fees by meter size using AWWA equivalent ratios and are the same as the City's existing equivalent ratios.

Table W3 – Comparison of Current and Maximum Supportable Water DIFs

Meter Size <i>inches</i>	Meter Capacity Ratio [1]	Current Fees	Maximum Supportable	Change - \$
0.75	1.00	\$3,822	\$3,519	(\$303)
1.00	1.67	6,383	5,865	(518)
1.50	3.33	12,728	11,730	(998)
2.00	5.33	20,372	18,768	(1,604)
3.00	10.67	40,782	37,536	(3,246)
4.00	16.67	63,715	58,650	(5,065)
6.00	33.33	127,392	117,300	(10,092)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Projected Revenue from Water Facilities Fees

The revenue projection shown below assumes implementation of the maximum supportable water facility fees and that development in the service area over the next ten years is consistent with the land use assumptions. Figure W4 shows the maximum daily demand based on the increase in DU per year for the 10-year planning period. The water facility fee revenue projection in Figure W4 (\$13.7 million) approximates the growth cost of planned system improvements to be funded with development fees. Because the capacity added will serve development beyond the 10-year time frame, fee revenue will continue to be collected commensurate with the additional growth.

Table W4 - Projected Water Facilities Fees Revenue

10-Year Cost of Water Utility Facilities

Growth Cost => \$35,854,674

Water Utility Impact Fee Revenue

		Added Annual Demand <i>1,000 gal</i>	Added Maximum Day Demand <i>gpd</i>	3/4" Eq. Meters \$3,519 Dwelling Units
Year				
Base	2022	4,912,882	18,960,633	29,911
Year 1	2023	4,979,732	19,263,034	30,318
Year 2	2024	5,046,417	19,564,692	30,724
Year 3	2025	5,113,103	19,866,350	31,130
Year 4	2026	5,179,788	20,168,008	31,536
Year 5	2027	5,246,474	20,469,666	31,942
Year 6	2028	5,313,323	20,772,067	32,349
Year 7	2029	5,380,009	21,073,725	32,755
Year 8	2030	5,446,530	21,374,640	33,160
Year 9	2031	5,500,568	21,619,087	33,489
Year 10	2032	5,554,607	21,863,534	33,818
10-Yr Increase		641,725	2,902,901	3,907

Projected Revenue (Rounded)=>

\$13,748,733

[1] $641,725 \text{ kgal} \times \$4.46 + 2,902,901 \text{ gpd} \times \$3.74 + \$11 \times 3,907 = \$13,749,370$

Variance due to rounding.

Wastewater Utility Fees

ARS §9-463.05.T.7(b) defines the facilities and assets which can be included in the Wastewater Facilities IIP:

“Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities”

The City provides central wastewater collection, treatment, and disposal service throughout the service area limits. The wastewater service area includes the northern municipal planning area down to the Estrella Mountains. The service area includes sections that are served by septic systems.

The calculation of the wastewater facilities DIF was based on information provided by staff in addition to the City’s 2018 Integrated Utility Master Plan Report (IUMP).

The current fee includes two components; a collection system fee and a wastewater treatment fee. Raftelis recommends eliminating the existing collection system DIF. The City’s collection system currently has capacity to serve new development and there is no outstanding costs recoverable from DIFs associated with those facilities.

Projected Service Units

ARS §9-463.05 (E)(5) requires:

“The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.”

ARS §9-463.05 (E)(6) requires:

“The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.”

It is projected that there will be an additional 3,907 residential dwelling units built within the City by 2037. Using the MMADF per dwelling unit of 207 gpd, it is estimated that there will be an increase in projected contributed peak wastewater flow of 0.85 mgd ($218 \times 3,907 = 1,210,000$ gpd).

Figure WW1 shows the development of the current annual average daily flow projections, projected average daily and MMADF flow, and the total DU added during the study period. It also shows the DU that will be served by existing available capacity and the capacity added by the IIP.

Figure WW1 – Projected Added Dwelling Units and Wastewater Flows Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per DU, gpd	218.00
3	Current Ave Day Demand, gpd	6,520,598
4	MMADF Peak Factor	1.04
5	Avg Day of Maximum Month, gpd (Rounded) (Line 4 x Line 3)	6,751,000
6	Current Firm Capacity, gpd	7,200,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	449,000
Added Demand [1]		
8	Added DU, 2023 - 2032	3,907
9	Average Day Demand	207
10	Planning MMADF factor	1.05
11	MMADF per DU, gpd (Line 9 x Line 10)	218
12	Added MMADF, gpd	851,726
13	Additional Capacity Needed for Growth, gpd (Line 12 - Line 7)	402,726
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	2,060
15	DU Served by 10-Year IIP (Line 13 / Line 11)	1,847
16	Total Added DU	3,907
17	DU Served by Full 2.4 mgd Capacity Addition	11,009

[1] The new WWTP adds a total of 2.4 mgd of capacity.

Development Fees for Wastewater Facilities

ARS §9-463.05 (E)(3) requires:

A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.

The City's existing treatment capacity is a maximum month average daily flow (MMADF) of 9.0 mgd. As shown on Figure WW1, the 2016 average annual daily flow to the WRF is 5.6 mgd. In 2021, the average annual daily flow increased from 5.6 mgd to 6.5 mgd. The MMADF in 2021 was 6.75 mgd.

Under existing Arizona law, only 80% of the total capacity can be used, or 7.2 MGD. The remaining capacity of 0.45 mgd of additional capacity available for growth. The City has plans for a 3.0 mgd expansion to the Avondale Water Reclaimed Facility (WRF). Also under existing Arizona law, only 80% of the total capacity can be used, giving an additional planned capacity of 2.40 MGD.

Including both the additional capacity available from the existing facility of 0.45 mgd and the planned expansion of 2.40 MGD, the City's wastewater treatment has 2.85 mgd of available wastewater capacity

to serve growth. Of that 2.85 mgd capacity, 0.85 mgd will be required to serve growth over the 15-year period. The estimated cost of the additional capacity is approximately \$79.6 million.

Like water, unit cost of capacity in gallons per day based on the design capacity of the plant (Maximum Month Average Day Flow MMADF). The MMADF for a ¾" equivalent serves as a proxy for its potential capacity. This value is based on the average water demands multiplied by a return factor and the MMADF peak flow factor. The return factor represents the portion of water usage that returns to the WWTP. The equation below summarizes the calculation of the wastewater DIF. Figure WW2 details the wastewater DIF calculation.

$$\frac{\text{Infrastructure Projects}}{\text{Added Well Capacity (gpd)}} \times 3/4" \text{ Equiv Peak Return Flow (gpd)} = \text{Infrastructure DIF}$$

Figure WW2 – Calculation of Wastewater Development Fee

Description				Cost of Capacity
WWTP Phase 2				\$79,590,000
Less: FY21 Ending Fund Balance				(6,438,870)
Total Existing and Growth-Related WWTP Costs				\$73,151,130
WWTP Capacity, MMADF, mgd [1,2]				
Phase 2 Capacity Addition	80.0%	3.00	2.40	
Total WWTP Capacity, mgd				2.40
Unit Cost of Capacity, \$ per mgd				\$30.48
Average Day Water Demand, gpd [3]				450
Return Factor [3]				46%
MMADF Peaking Factor [3]				1.05
MMADF Flow per DU, gpd [4]				218.00
Wastewater Development Fee, \$ per 3/4" Equivalent				\$6,645
Plus: Cost of Professional Services, \$ per 3/4" Equivalent				\$11
Wastewater Development Fee, \$ per 3/4" Equivalent				\$6,656
Existing Fee				\$5,808
Difference - %				\$848

[1] MMADF: Maximum Month average day flow

[2] mgd: million gallons per day

[3] From Table 2-10 of Carollo 2018 Integrated Utility Master Plan

[4] A dwelling unit is assumed to be demands through a 3/4" equivalent meter

As stated above, the City's wastewater treatment plant has existing capacity (0.45 mgd) to serve growth. This existing capacity has been funded through previous DIF revenues and other sources. As a result, future capacity should not be responsible for that portion of costs. Raftelis adjusted the fee in Figure WW2 to account for this difference which is shown in Figure WW3.

Figure WW3 – Calculation of Adjusted Wastewater DIF

Line No	Description	Units
1	Current Firm Capacity, gpd	7,200,000
2	Avg Day of Maximum Month, gpd	6,751,000
3	Capacity Available in Existing Facilities	449,000
4	Capacity Needed for 10-Year Growth (2023 - 2032), gpd	851,726
5	<i>Net New Capacity Needed for 10-Year Growth, gpd (Line 4 - Line 3)</i>	402,726
6	Unit Cost of Facilities, \$ per gpd	\$30.48
7	Total Value of Net New Capacity Required	\$12,274,942
8	Total Added DU, 2023 - 2032	3,907
9	Wastewater DIF, \$ DU (Line 7/Line 8)	\$3,142
10	Plus: Cost of Study per DU	\$11
11	Adjusted Wastewater DIF, \$ per DU	\$3,153
12	Calculated Development Fee, \$ per DU	\$6,656
13	Variance - \$	(\$3,503)

Wastewater DIFs are assessed by water meter size and increase based on the AWWA 3/4-inch meter capacity relationships. One DU is equated to a 3/4-inch meter, which is the smallest and most common meter size available. Figure WW4 shows the calculated fees by meter size using AWWA equivalent ratios and are the same as the City's existing equivalent ratios. Figure WW4 compares the current DIFs to the calculated maximum supportable DIFs

Figure WW4 – Comparison of Current and Maximum Supportable Wastewater DIFs

Meter Size (inches)	Meter Capacity Ratio [1]	Current Fees	Maximum Supportable	Change - \$
0.75	1.00	\$5,808	\$3,153	(\$2,655)
1.00	1.67	9,700	5,255	(4,445)
1.50	3.33	19,342	10,510	(8,832)
2.00	5.33	30,959	16,816	(14,143)
3.00	10.67	61,976	33,632	(28,344)
4.00	16.67	96,826	52,550	(44,276)
6.00	33.33	193,595	105,100	(88,495)

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.
Based on the meter's maximum allowable safe operating capacity to that of a 3/4" meter.

Projected Revenue from Wastewater Facilities Fees

The revenue projection shown below assumes implementation of the maximum supportable wastewater facility fees and that development in the service area over the next ten years is consistent with the land use assumptions. Figure WW4 shows the average daily flow based on the increase in DU per year for the 10-year planning period. The wastewater facility fee revenue projection in Figure WW5 (\$12.3 million) approximates the growth cost of planned system improvements to be funded with development fees. Because the capacity added will serve development beyond the 10-year time frame, fee revenue will continue to be collected commensurate with the additional growth.

Figure WW5 – Projected Wastewater Facilities Fees Revenue

10-Year Cost of Wastewater Utility Facilities

Total Growth Cost => \$73,151,130

Wastewater Utility Impact Fee Revenue

		Added MMADF Flow	3/4" Eq. Meters \$3,153 Dwelling Units
Year		gpd	
Base	2022	6,751,000	29,911
Year 1	2023	6,839,726	30,318
Year 2	2024	6,928,234	30,724
Year 3	2025	7,016,742	31,130
Year 4	2026	7,105,250	31,536
Year 5	2027	7,193,758	31,942
Year 6	2028	7,282,484	32,349
Year 7	2029	7,370,992	32,755
Year 8	2030	7,459,282	33,160
Year 9	2031	7,531,004	33,489
Year 10	2032	7,602,726	33,818
Less Available Capacity		(449,000)	
10-Yr Increase [1]		402,726	3,907
Projected Revenue (Rounded)=>			\$12,318,771
[1] 402,726 MMADF gpd x \$30.48 per gpd + \$11 * 3,907 DU = \$12,317,920			
Variance due to rounding			

City of **AVONDALE**

Land Use Assumptions and Infrastructure
Improvements Plan for Parks/Recreation,
Fire, Police, Streets, Water, and Wastewater
Facilities

Draft Report

August 17, 2022

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DRAFT

Introduction

Arizona Revised Statutes (ARS) §9-463.05 governs how Development Impact Fees (DIF) are calculated for municipalities in Arizona. The enabling legislation calls for three integrated products: 1) Land Use Assumptions (LUA) for at least 10 years, 2) Infrastructure Improvements Plan (IIP), and 3) Development Impact Fees (DIF). Because Arizona requires a two-phase adoption process, the LUA and IIP will be reviewed, refined, and approved before focusing on impact fees.

According to requirements of Arizona's enabling legislation, DIF may be only used for construction, acquisition or expansion of public facilities that are necessary public services. "Necessary public service" means any of the following categories of facilities that have a life expectancy of three or more years and that are owned and operated by or on behalf of the municipality.

- Water Facilities
- Wastewater Facilities
- Storm Water, Drainage, and Flood Control Facilities
- Library Facilities
- Streets Facilities
- Fire and Police Facilities
- Parks and Recreational Facilities
- Any facility that was financed before June 1, 2011 and that meets the following requirements:
 1. impact fees were pledged to repay debt service obligations related to the construction of the facility.
 2. After August 1, 2014, any impact fees collected are used solely for the payment of principal and interest on the portion of the bonds, notes, or other debt service obligations issued before June 1, 2011 to finance construction of the facility.

Infrastructure Improvements Plan

Development fees must be calculated pursuant to an Infrastructure Improvements Plan (IIP). For each necessary public service that is the subject of a development fee, Subsection 9-463.05(E) requires the following.

- 1. A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.*
- 2. An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.*
- 3. A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.*
- 4. A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility*

expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial.

5. The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.

6. The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.

7. A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved land use assumptions, and a plan to include these contributions in determining the extent of the burden imposed by the development as required in subsection B, paragraph 12 of this section.

Qualified Professionals

Qualified professionals must prepare the LUA, IIP and DIF, using generally accepted engineering, planning, and financial practices. A qualified professional is defined as “a professional engineer, surveyor, financial analyst or planner providing services within the scope of the person’s license, education, or experience.” Raftelis is a financial consulting firm specializing in impact fees, infrastructure funding, user fees, cost of service studies, capital improvement plans, and utility rate studies. Raftelis has over 100 professionals located in major urban areas across America. Avondale’s LUA and IIP were prepared by qualified professionals in Denver, CO.

Land Use Assumptions

The City of Avondale will use the same land use assumptions for all types of infrastructure. In addition to population and housing unit projections, the IIP and impact fees also require demographic data on nonresidential development, such as jobs and floor area. This document contains the land use assumptions for Avondale's 2022 DIF update. The LUA and IIP must be updated every five years, making short-range projections the critical time frame. The IIP is limited to ten years, thus a very long-range "build-out" analysis may not be used to derive impact fees in Arizona.

ARS §9-463.05(T)(7) defines land use assumptions as:

"Projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the General Plan of the municipality."

Raftelis prepared current demographic **estimates** and future development **projections** for both residential and nonresidential development that are used in the IIP and calculation of impact fees. Current conditions in Fiscal Year (FY) 21-22 are used to document levels-of-service provided to existing development in Avondale. Although long-range projections are necessary for planning infrastructure systems, a ten-year timeframe is critical for the LUA and IIP.

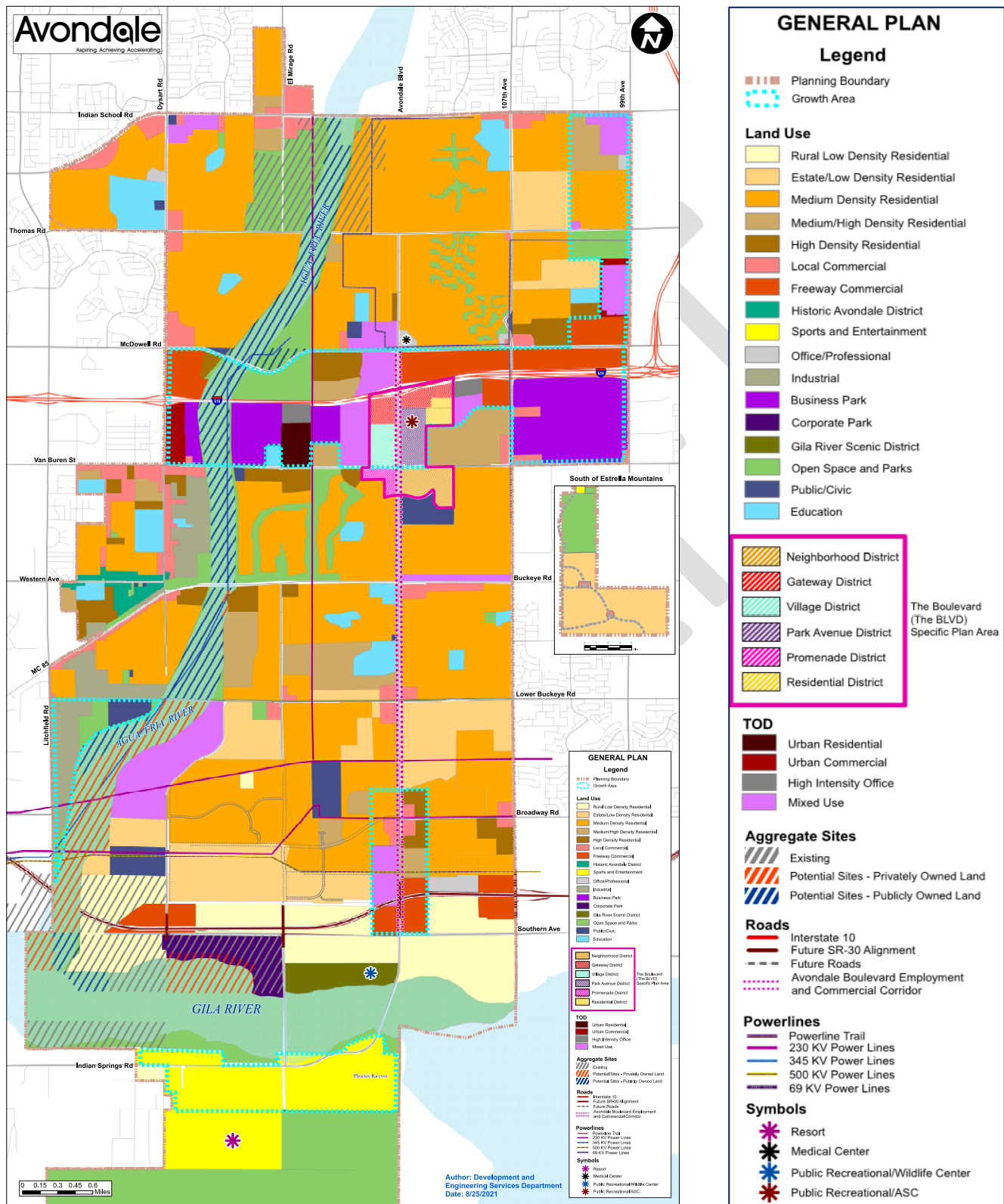
Service Area

ARS §9-463.05(T)(9) defines "service area" as:

"...Any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan. "

The service area covered in this LUA report is north of the Estrella Mountains. Figure 1 indicates land uses, densities, and intensities of development as specified in the General Plan. The service area is defined as all land within the city limits of Avondale, as modified over time.

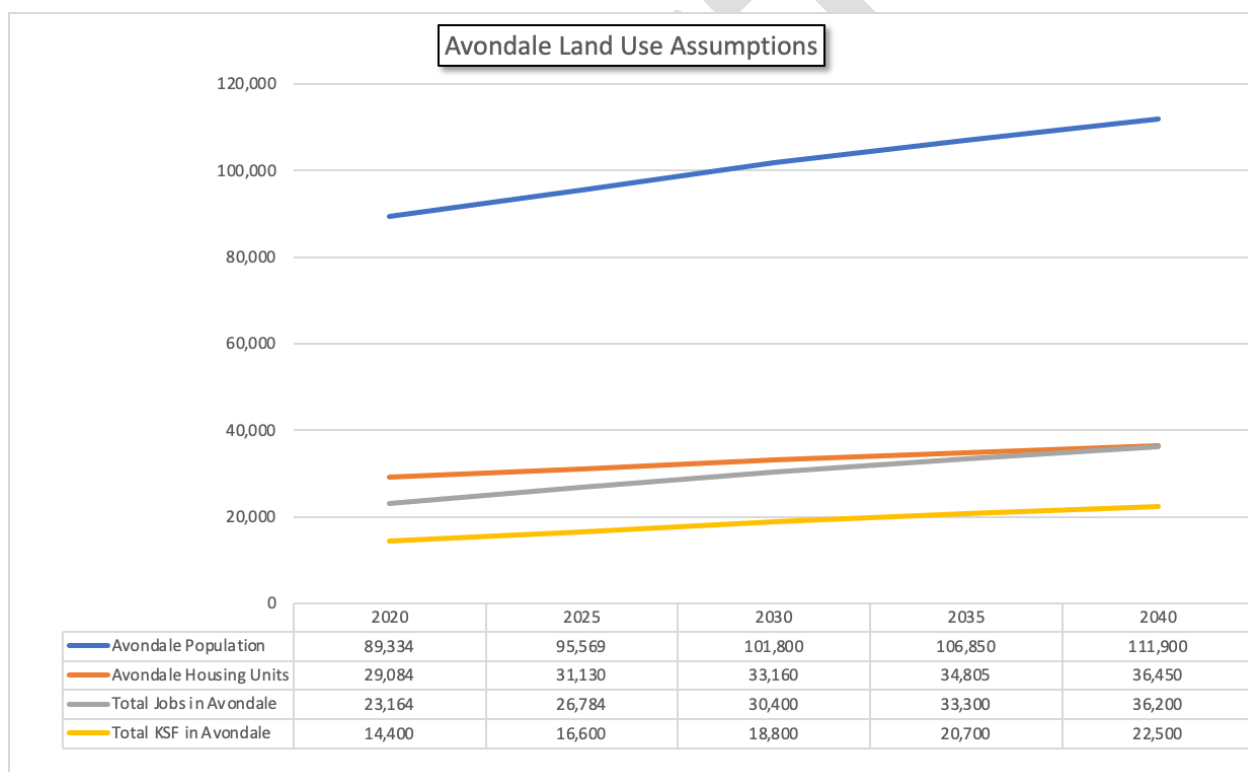
Figure 1 - Service Area Map



Summary of Growth Indicators

Service units (i.e., residents and jobs) and development units (i.e., dwellings and square feet of nonresidential floor area expressed in thousands) for 2020 through 2040 are summarized in Figure 2. These land use assumptions will be used to estimate DIF revenue and to indicate the anticipated need for growth-related infrastructure. However, DIF methodologies are designed to reduce sensitivity to accurate development projections in the determination of the proportionate-share fee amounts. If actual development is slower than projected, DIF revenues will also decline, but so will the need for growth-related infrastructure. In contrast, if development is faster than anticipated, Avondale will receive an increase in DIF revenue and will also accelerate capital improvements to keep pace with development.

Figure 2 – Chart of Projected Development



Service Units by Type of Residential Development

The U.S. Census Bureau no longer obtains detailed information using “long-form” questionnaires. Demographic data is currently collected using a continuous monthly mailing of surveys, known as the American Community Survey (ACS), which is limited by sample-size constraints. For example, data on Single Family detached housing units are now combined with attached single units (commonly known as townhouses). According to the U.S. Census Bureau, a household is a housing unit that is occupied by year-round residents. Development fees often use per capita standards and persons per housing unit, or persons per household, to derive proportionate-share fee amounts. Raftelis recommends that fees for

residential development in the City of Avondale be imposed according to the number of year-round residents per housing unit. Figure 3 documents Avondale's most recent multipliers by type of housing.

Figure 3 – Persons per Housing Unit by Units in Structure

City of Avondale

<i>Units in Structure</i>	<i>Persons</i>	<i>Housing Units</i>	<i>Persons per Housing Unit</i>	<i>Housing Mix</i>
Single Unit (detached and attached)	70,590	21,442	3.29	77%
2+ Unit (all other residential)	15,332	6,543	2.34	23%
Subtotal	85,922	27,985	3.07	

Source: 2016-2020 ACS Tables B25024 and B25033, U.S. Census Bureau.

Service Units by Type of Nonresidential Development

In addition to data on residential development, the calculation of impact fees requires data on nonresidential development. Raftelis uses the term “jobs” to refer to employment by place of work. In Figure 4, gold shading indicates nonresidential development prototypes that will be used to allocate costs. Nonresidential development categories represent general groups of land uses that share similar average weekday vehicle trip generation rates and employment densities (i.e., jobs per thousand square feet of floor area). The prototype for future Industrial development is Warehousing (ITE land use 150). For Office/Services, General Office (ITE 710) is the prototype for future development in Avondale. The prototype for Commercial (e.g., retail and restaurants) is a Shopping Center (ITE code 820).

Figure 4 – Nonresidential Trip Rates and Jobs by Type of Development

<i>ITE Code</i>	<i>Land Use / Size</i>	<i>Demand Unit</i>	<i>Weekday Trip Ends Per Demand Unit*</i>	<i>Weekday Trip Ends Per Employee*</i>	<i>Employees Per Demand Unit</i>	<i>Square Feet Per Employee</i>
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
310	Hotel	room	7.99	14.34	0.56	N/A
320	Motel	room	3.35	25.17	0.13	N/A
520	Elementary School**	1,000 Sq Ft	19.52	21.00	0.93	1,076
530	High School**	1,000 Sq Ft	14.07	22.25	0.63	1,581
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
620	Nursing Home	1,000 Sq Ft	6.75	3.31	2.04	490
710	General Office	1,000 Sq Ft	10.84	3.33	3.26	307
720	Medical/Dental Office	1,000 Sq Ft	36.00	8.71	4.13	242
820	Shopping Center	1,000 Sq Ft	37.01	17.42	2.12	471
850	Grocery/Supermarket	1,000 Sq Ft	93.84	43.86	2.14	467

* *Trip Generation*, Institute of Transportation Engineers, 11th Edition (2022).

** *Trip Generation*, Institute of Transportation Engineers, 10th Edition (2017).

Latest data on jobs in Avondale (see Figure 5) are from the Census Bureau. Each row is an industry sector, as reported by the North American Industry Classification System. Subtotals and percentages for Avondale's three types of nonresidential development are shown at the bottom of the figure.

Figure 5 – Work Area Profile

Avondale AZ

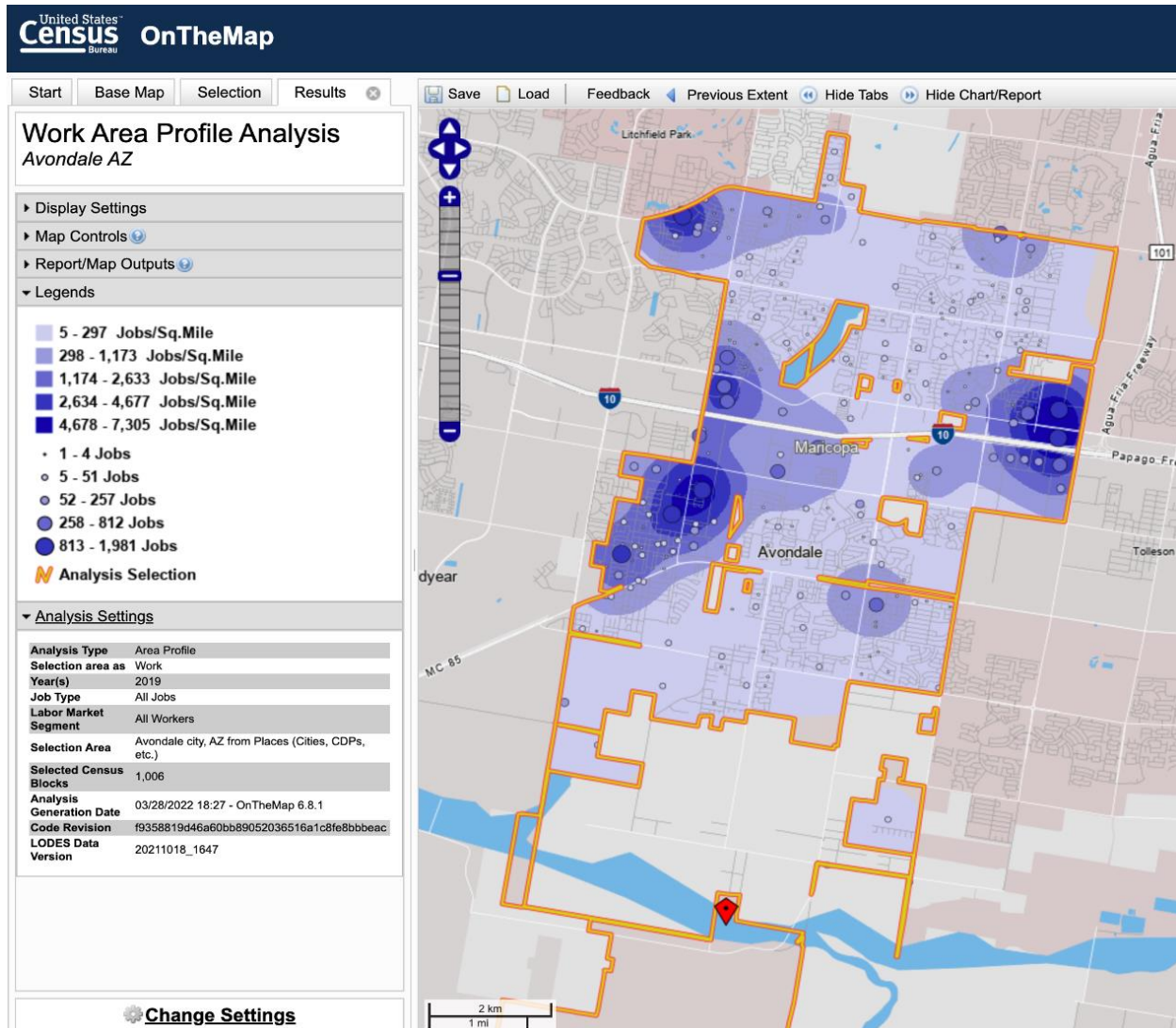
<i>Industry Classification</i>	<i>2019 Jobs</i>	<i>General Type</i>
Agriculture, Forestry, Fishing and Hunting	16	Industrial
Mining, Quarrying, and Oil and Gas Extraction	0	Industrial
Utilities	127	Industrial
Construction	871	Industrial
Manufacturing	68	Industrial
Wholesale Trade	460	Industrial
Retail Trade	5,440	Commercial
Transportation and Warehousing	235	Industrial
Information	380	Office / Institutional
Finance and Insurance	203	Office / Institutional
Real Estate and Rental and Leasing	208	Office / Institutional
Professional, Scientific, and Technical Services	272	Office / Institutional
Management of Companies and Enterprises	16	Office / Institutional
Administration & Support, Waste Management and Remediation Services	536	Office / Institutional
Educational Services	3,399	Office / Institutional
Health Care and Social Assistance	1,285	Office / Institutional
Arts, Entertainment, and Recreation	349	Office / Institutional
Accommodation and Food Services	2,565	Commercial
Other Services (excluding Public Administration)	173	Office / Institutional
Public Administration	1	Office / Institutional

Total Jobs 16,604

Subtotals by Type of Nonresidential Development

Industrial	1,777	11%
Commercial	8,005	48%
Office / Institutional	6,822	41%
Total Jobs	16,604	100%

The map below indicates the general location and concentration of jobs within Avondale (dark blue indicates more jobs per square mile).



Detailed land use assumptions are shown in Figure 6. Population and housing units in 2020 are from the U.S. Census Bureau. Projected 2030, 2040, and 2050 population in the Avondale Municipal Planning Area (MPA) are from Maricopa Association of Governments (MAG). Jobs in the Avondale MPA for 2020, 2030, 2040, and 2050 are also from MAG. Raftelis converted jobs to nonresidential floor area using average square feet per job multipliers documented in pages 23-25 of the MAG 2019 Socioeconomic Projections. Industrial average of 1,060 square feet per job is based on manufacturing and warehousing. Commercial average of 660 square feet per job is based on retail, restaurants, and hotels. Office/Services average of 459 square feet per job is based on information, finance/insurance, and real estate. See Appendix B for supporting documentation from MAG.

Figure 6 – Detailed Land Use Assumptions

2022 LUA	<i>FY21-22</i>	<i>FY22-23</i>	<i>FY23-24</i>	<i>FY24-25</i>	<i>FY25-26</i>	<i>FY26-27</i>	<i>FY31-32</i>	<i>FY41-42</i>	<i>FY49-50</i>
Avondale AZ	<i>Base Yr</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>10</i>	<i>20</i>	<i>28</i>
	2022	2023	2024	2025	2026	2027	2032	2042	2050
Population									
Avondale Population	91,828	93,075	94,322	95,569	96,816	98,063	103,820	113,320	119,000
Housing Units									
Persons per Housing Unit	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07
Avondale Housing Units	29,911	30,318	30,724	31,130	31,536	31,942	33,818	36,912	38,762
Jobs (place of work)									
Industrial Jobs	2,707	2,787	2,867	2,946	3,026	3,106	3,472	4,127	4,708
Commercial Jobs	11,814	12,161	12,509	12,856	13,204	13,551	15,149	18,010	20,544
Office/Services Jobs	10,091	10,388	10,685	10,981	11,278	11,575	12,940	15,383	17,548
Total Jobs in Avondale	24,612	25,336	26,060	26,784	27,508	28,232	31,560	37,520	42,800
Jobs-Housing Ratio	0.82	0.84	0.85	0.86	0.87	0.88	0.93	1.02	1.10
Nonresidential Floor Area (square feet in thousands = KSF)									
Industrial KSF	2,900	3,000	3,000	3,100	3,200	3,300	3,700	4,400	5,000
Commercial KSF	7,800	8,000	8,300	8,500	8,700	8,900	10,000	11,900	13,600
Office/Services KSF	4,600	4,800	4,900	5,000	5,200	5,300	5,900	7,100	8,000
Total KSF in Avondale	15,300	15,800	16,200	16,600	17,100	17,500	19,600	23,400	26,600
Average Square Feet per Job	622	624	622	620	622	620	621	624	621
Annual Increases in Avondale	22to23	23to24	24to25	25to26	26to27	31to32	41to42	49to50	
Population	1,247	1,247	1,247	1,247	1,247	1,010	710	710	
Housing Units	407	406	406	406	406	329	231	231	
Jobs	724	724	724	724	724	580	660	660	
Industrial KSF	100	0	100	100	100	100	100	100	
Commercial KSF	200	300	200	200	200	200	200	300	
Office/Services KSF	200	100	100	200	100	100	200	100	
Total Nonresidential KSF	500	400	400	500	400	400	500	500	

Parks/Recreation Facilities IIP

ARS § 9-463.05(T)(7)(g) defines parks and recreation facilities eligible for development fee funding.

“Neighborhood parks and recreational facilities on real property up to thirty acres in area, or parks and recreational facilities larger than thirty acres if the facilities provide a direct benefit to the development. Park and recreational facilities do not include vehicles, equipment or that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools.”

In the 2022 update, the City of Avondale is using the incremental expansion cost method to derive development impact fees for park improvements. Parks/recreation development fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage. Avondale fees also exclude stricter safety, efficiency, environmental or regulatory standards.

Service Area

The service area for parks/recreation development fees includes the area north of the Estrella Mountains.

Proportionate Share

ARS § 9-463.05(B)(3) states the development fee shall not exceed a proportionate share of the cost of necessary public services needed to serve new development. In Avondale, parks/recreation infrastructure standards, projected needs, and development fees are based on both residential and nonresidential development. As shown in Figure PR1, Raftelis used daytime population to allocate costs. Daytime population includes estimated residents and inflow commuters in 2019 (latest year available). Potential demand days per year assume residents might use parks every day of the year, but inflow commuters will only use parks four days per week over 48 weeks per year (i.e., two weeks of vacation and two weeks of holidays). Based on cumulative demand days, residential development accounts for 92% of the demand for parks/recreation facilities, with 8% assigned to nonresidential development.

Figure PR1 – Daytime Population

Cost Allocation Factors for Parks		<i>Residential</i>	<i>Nonresidential</i>	
2019 Daytime Population		85,595	14,888	
		Residents	Inflow Commuters	
Potential Demand Days per Year		365	192	<i>Total</i>
Cumulative Demand Days		31,242,175	2,858,496	34,100,671
Proportionate Share		92%	8%	

Source of inflow commuters is U.S. Census Bureau, Inflow/Outflow report from OnTheMap website.

Current Use and Standards for Parks/Recreation Facilities

In Avondale, parks/recreation facilities are fully utilized and there is no surplus capacity for future development. Avondale has determined that additional parks are necessary to accommodate future development. As shown in Figure PR2, the City's current standard is approximately 1.10 acres of improved parks per 1,000 residents and approximately 0.36 acres per 1,000 jobs. These standards exclude parks less than 1.5 acres that might not provide citywide benefit. To accommodate new development over the next ten years, Avondale will improve an additional 15.6 acres of parks at an estimated cost of approximately \$6.72 million. According to Avondale staff, the cost factor of \$431,000 per acre for park improvements is based on recent construction of Alamar Park.

Figure PR2 – Existing Park Improvements Standards and Growth Needs

Location	Improved Acres*			
Friendship Park	30.0			
Festival Fields	30.0			
Alamar Park**	24.2			
Las Ligas Park	8.1			
Donnie Hale Park	5.3			
Dessie Lorenz Park	4.6			
Mountain View Park	3.6			
Dennis DeConcini Park	2.0			
Fred Campbell Park	1.5			
Total =>	109.3			
Average Size (acres)	12.1			
2022 Service Units	91,828 Persons			
	24,612 Jobs			
Acres per 1,000 Service Units	1.10			
	0.36			
Projected Need for Park Improvements				
	Year	Population	Jobs	Improved Acres
Base	2022	91,828	24,612	109.3
Year 1	2023	93,075	25,336	110.9
Year 2	2024	94,322	26,060	112.5
Year 3	2025	95,569	26,784	114.2
Year 4	2026	96,816	27,508	115.8
Year 5	2027	98,063	28,232	117.4
Year 10	2032	103,820	31,560	124.9
Ten-Yr Increase		11,992	6,948	15.6
Total Project Cost per Acre =>		\$431,000		
Growth Cost of Parks =>		\$6,724,000		

**Source: Avondale staff (excludes parks less than 1.5 acres that might not provide citywide benefit).*

*** Impact fee eligible area (30 acres) reduced to account for area constructed using loan from General Fund).*

**Source: Avondale staff (excludes parks less than 1.5 acres that might not provide citywide benefit).*

*** Impact fee eligible area (30 acres) reduced to account for area constructed using loan from General Fund).*

Parks/Recreation Improvements

Figure PR3 lists planned parks/recreation improvements over the next ten years. Based on projected needs to accommodate growth, Avondale expects to spend approximately \$6.72 million to expand parks (i.e., additional improved acres) over the next ten years. Improved acres may include expansion of existing parks or an additional park site. Also, the City used General Fund revenue to front-end recent, growth-related park improvements. Based on projects under construction in FY22, the Park impact fee fund has a negative balance of approximately \$2.5 million, to account for the General Fund loan.

Figure PR3 – Parks/Recreation Projects Over Ten Years

<i>Infrastructure Needs</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Cost Factor per Unit</i>	<i>IIP Cost (rounded)</i>
Parks and Recreation Facilities	improved acres	15.6	\$431,000	\$6,724,000

Planned Infrastructure Improvements

<i>Name/Description</i>	<i>Acreage</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Future Park Expansion	15.6	\$6,724,000	100%	\$6,724,000
General Fund Loan Repayment		\$2,500,000	100%	\$2,500,000
Total	15.6	\$9,224,000		\$9,224,000

Fire Facilities IIP

ARS § 9-463.05(T)(7)(f) defines the fire facilities eligible for development fee funding.

“Fire and Police facilities, including all appurtenances, equipment and vehicles. Fire and Police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.”

Fee Calculation Methodology

In the 2022 update, the City of Avondale is using the incremental expansion cost method to derive development impact fees for fire facilities. Fire impact fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage and stricter safety, efficiency, environmental or regulatory standards. Fire vehicles and equipment used to provide administrative services are also excluded.

Service Area

To hasten response times, public safety responders are typically dispatched from the closest facility, with multiple locations responding as warranted. Avondale has five existing fire stations, with a dispatch system that assigns calls to secondary responders, if needed. Therefore, all developed areas within the City of Avondale are served by an integrated public safety system. Avondale’s service area for fire impact fees includes the area North of the Estrella Mountains, as discussed previously in the section on Land Use Assumptions.

Proportionate Share

ARS § 9-463.05(B)(3) states the development fee shall not exceed a proportionate share of the cost of necessary public services needed to serve new development. In Avondale, fire infrastructure standards, projected needs, and development fees are based on both residential and nonresidential development. As stated in ARS §9.463.05(E)(4), impact fees must be proportionate to various types of land uses.

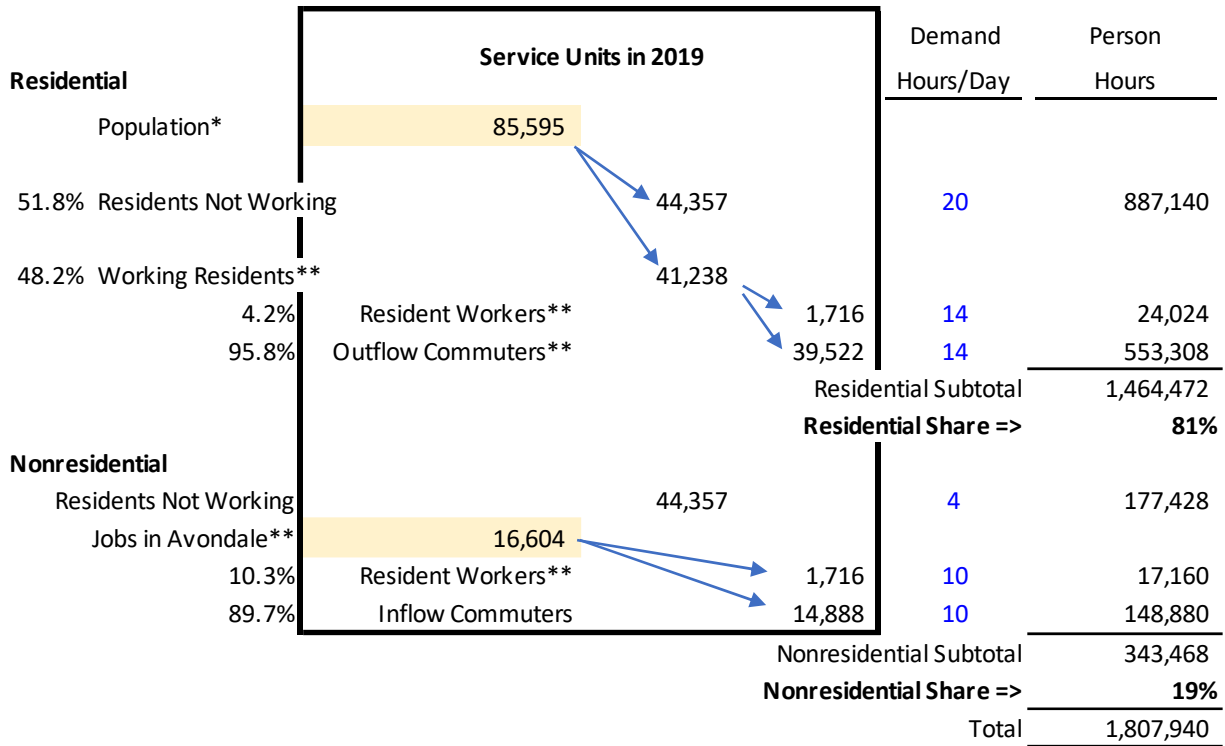
“A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial.”

Given these requirements, Raftelis recommends using functional population to allocate capital costs of public safety facilities to residential and nonresidential development. In 2019, the U.S. Census Bureau’s commuting data indicates 1,716 persons lived and worked in Avondale, 39,522 outflow commuters went to work outside Avondale and 14,888 inflow commuters travel to jobs within Avondale. Functional population is like the U.S. Census Bureau’s definition of daytime population (based on people living and working in a jurisdiction), with the addition of journey-to-work data and weighting factors (i.e., demand hours per day) to account for time spent at residential and nonresidential locations. Residents who do not work are assigned 20 hours per day to residential development and 4 hours per day to nonresidential development (annualized averages for assumed time spent shopping, dining, obtaining personal services, going to school/church, etc.). Residents who work in Avondale are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents who work outside Avondale are

assigned 14 hours to residential development. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2019 population and job data for Avondale, the cost allocation for residential development is 81%, while nonresidential development accounts for 19% of the demand for infrastructure.

Figure F1 – Functional Population

Avondale AZ



* 2019 Avondale population estimate from Maricopa Association of Governments.

** 2019 Avondale Inflow/Outflow, from OnTheMap web application, U.S. Census Bureau data for all jobs.

Current Use and Available Capacity

In Avondale, fire facilities are fully utilized and there is no surplus capacity for future development. Avondale has determined that fire building space will require expansion to accommodate future development. Figure F2 inventories current fire buildings in Avondale. For residential development, population is used as the best indicator of the demand for service. For nonresidential development, Avondale will use inbound, primary vehicle trips, on an average weekday, as the service units. Figure F2 also indicates the allocation of fire building space to residential and nonresidential development. The percentages for stations 172, 174 and the Emergency Operations Center are based on approximate floor area used by fire and police personnel respectively. Current standards are 0.62 square feet of fire buildings per Avondale resident and 0.11 square feet of fire buildings per inbound, primary vehicle trip on an average weekday, to nonresidential development in Avondale.

Figure F2 – Existing Fire Buildings and Standards

<i>Building Space for Fire Functions</i>	<i>Square Feet</i>
Station 175	17,084
Station 173	16,000
Station 172 (73%)	12,391
Station 174 (60%)	10,951
Station 171	8,600
Fire Headquarters	3,000
Emergency Operations Center (50%)	2,500
Total	70,526

Data Source: Avondale Fire Department and Facilities Director.

<i>Fire Buildings Standards</i>	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average Weekday, Inbound, Primary Vehicle Trips to Nonres Development</i>
2022 Service Units	91,828	122,675
Square Feet per Service Unit	0.62	0.11

Development fees will be used to expand the fleet of fire vehicles and purchase additional equipment that has a useful life of at least three years. Figure F3 lists fire vehicles and equipment currently used by the Avondale Fire Department that has an initial purchase price of at least \$23,500. Avondale currently has 37 fire vehicles, with a total value of approximately \$14.31 million. The weighted average cost factor is \$386,800 per fire vehicle.

Following the same methodology used for fire buildings, the total count of fire vehicles and equipment was allocated to residential and nonresidential development in Avondale. As shown at the bottom of Figure F3, every 1,000 persons will require Avondale to purchase 0.33 additional fire vehicles. Every 1,000 inbound, primary vehicle trips to nonresidential development, on an average weekday, requires 0.06 additional fire vehicles.

Figure F3 – Existing Fire Vehicles and Standards

<i>Fire Vehicle</i>	<i>Units</i>	<i>Unit Cost</i>	<i>Total Value</i>
FIRE TRUCK	12	\$950,000	\$11,400,000
LADDER	1	\$1,846,600	\$1,846,600
SEDAN / SUV	6	\$41,300	\$247,800
SAFETY TRAILER	1	\$101,500	\$101,500
LIGHT TRUCK	9	\$42,000	\$378,000
LARGE VAN	2	\$39,200	\$78,400
MEDIUM PICKUP	3	\$62,500	\$187,500
ATV	3	\$23,500	\$70,500
TOTAL		37	\$14,310,300
Weighted Average Cost per Vehicle =>			\$386,800

Data Source: Avondale staff.

Fire Vehicle Standards

	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average-Weekday, Inbound, Primary Vehicle Trips to Nonres Development</i>
2022 Service Units	91,828	122,675
Vehicles per thousand Service Units	0.33	0.06

Projected Need for Fire Facilities

To accommodate new development over the next ten years, Avondale will need to add 11,240 square feet of fire buildings, at an estimated cost of approximately \$7.5 million. As shown in Figure F4, the cost factor of \$668 per square foot is based on the recent total project cost of Van Buren fire station.

Also, Avondale Fire Department will need six additional vehicles to accommodate new development over the next ten years. The expected cost of additional fire vehicles is approximately \$2.3 million.

Figure F4 – Fire Facilities Needed to Accommodate Growth**Fire Building Standards and Capital Costs**

Buildings - Residential	0.62	Sq Ft per person
Buildings - Nonresidential	0.11	Sq Ft per trip
Building Cost Factor	\$668	per square foot

		Infrastructure Needed		
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Fire Buildings (sq ft)</i>
Base	2022	91,828	122,675	70,526
Year 1	2023	93,075	126,287	71,697
Year 2	2024	94,322	130,493	72,932
Year 3	2025	95,569	133,564	74,043
Year 4	2026	96,816	137,176	75,213
Year 5	2027	98,063	140,246	76,324
Year 10	2032	103,820	157,275	81,766
Ten-Yr Increase		11,992	34,599	11,240

Growth Cost of Fire Buildings => **\$7,508,000**

Fire Vehicle Standards and Capital Costs

Vehicles - Residential	0.33	per 1,000 persons
Vehicles - Nonresidential	0.06	per 1,000 vehicle trips
Average Cost	\$386,800	per vehicle

		Infrastructure Needed		
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Fire Vehicles</i>
Base	2022	91,828	122,675	37
Year 1	2023	93,075	126,287	38
Year 2	2024	94,322	130,493	38
Year 3	2025	95,569	133,564	39
Year 4	2026	96,816	137,176	39
Year 5	2027	98,063	140,246	40
Year 10	2032	103,820	157,275	43
Ten-Yr Increase		11,992	34,599	6

Growth Cost of Fire Vehicles => **\$2,321,000**

Fire Infrastructure Improvements

Fire impact fees in Avondale are based on the same level of service provided to existing development. Using impact fee funding over the next ten years, Figure F5 indicates that Avondale will construct Alamar station. This public safety building will be used for fire and police functions. The total floor area of the new building will be approximately 27,000 square feet, with approximately 19,000 square feet used by the Fire Department. The planned floor area of Alamar Station is larger than the need for additional square feet to maintain existing standards. Therefore, impact fee revenue will only fund 59% of the expected cost.

Because fire vehicles require large garages, the total project cost per square foot for fire functions is less than the cost factor for police functions. Avondale will also purchase additional fire vehicles, expected to cost approximately \$2.3 million.

Figure F5 – Ten-Year Plan for Fire Facilities

<i>Infrastructure Type</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Cost Factor per Unit</i>	<i>IIP Cost (rounded)</i>
Fire Buildings	square feet	11,240	\$668	\$7,508,000
Fire Vehicles (3+ years of useful life)	count	6	\$386,800	\$2,321,000

Planned Infrastructure Improvements

<i>Name/Description</i>	<i>Units</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Alamar Fire Station	19,000	\$12,692,000	59%	\$7,508,000
Alamar Station Vehicle	1	\$1,000,000	100%	\$1,000,000
Additional Fire Vehicles			100%	\$1,321,000
Total		\$13,692,000		\$9,829,000

Police Facilities IIP

ARS § 9-463.05(T)(7)(f) defines the police facilities eligible for development fee funding.

“Fire and Police facilities, including all appurtenances, equipment and vehicles. Fire and Police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.”

Police development fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage, and stricter safety, efficiency, environmental or regulatory standards. Also excluded from the Avondale development fees are police vehicles and equipment used to provide administrative services.

Service Area

All developed areas within the City of Avondale are served by an integrated public safety system. Avondale’s service area for police development fees includes the area north of the Estrella Mountains.

Proportionate Share

Based on the rationale discussed in the Fire section above, Raftelis recommends using functional population to allocate capital costs of police facilities to residential and nonresidential development. According to 2019 population and job data for Avondale, the cost allocation for residential development is 81%, while nonresidential development accounts for 19% of the demand for infrastructure.

Current Use and Available Capacity

The top of Figure P1 indicates police building space allocated to residential and nonresidential development, along with 2022 service units in Avondale. The percentages for stations 172, 174 and the Emergency Operations Center are based on approximate floor area used by fire and police personnel respectively. The standard in Avondale is 0.62 square feet of police building per resident. For nonresidential development, Avondale’s standard is 0.11 square feet of police building per inbound, primary vehicle trip on an average weekday, to nonresidential development.

Development fees will also be used to expand the fleet of police vehicles that have a useful life of at least three years. The bottom of Figure P1 lists the City’s current police vehicles and infrastructure standards. The current number of police vehicles were allocated to residential and nonresidential development in Avondale. Adding 1,000 residents will require Avondale to purchase 1.26 additional police vehicles. Every 1,000 inbound, primary, average weekday, vehicle trips to nonresidential development will require Avondale to purchase 0.22 additional police vehicles.

Figure P1 – Existing Police Infrastructure Standards

<i>Building Space for Police Functions</i>	<i>Square Feet</i>
Police Headquarters	41,100
Public Safety 174 (40%)	7,301
Public Safety 172 (27%)	4,583
Substation on Western	6,480
Jail	4,640
Brinker Substation	4,224
Emergency Operations Center (50%)	2,500
Total	70,828

Data Source: Avondale Police Department and Facilities Director.

Buildings Standards

	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average-Weekday, Inbound, Primary Vehicle Trips to Nonres Dev</i>
2022 Service Units	91,828	122,675
Square Feet per Service Unit	0.62	0.11

<i>Police Vehicles</i>	<i>Units</i>	<i>Unit Cost</i>	<i>Total Value</i>
PATROL UNITS	82	\$70,000	\$5,740,000
NON- PATROL	47	\$38,000	\$1,786,000
MOTORCYCLES	6	\$45,000	\$270,000
TRUCKS	2	\$55,000	\$110,000
VANS	4	\$38,000	\$152,000
ARMORED TRUCKS	2	\$350,000	\$700,000
TOTAL	143		\$8,758,000
		Weighted Average Cost per Vehicle =>	\$61,200

Data Source: Avondale Police Department.

Police Vehicle Standards

	<i>Residential</i>	<i>Nonresidential</i>
Proportionate Share	81%	19%
Growth Indicator	<i>Population</i>	<i>Average-Weekday, Inbound, Primary Vehicle Trips to Nonres Development</i>
2022 Service Units	91,828	122,675
Vehicles per thousand Service Units	1.26	0.22

To maintain existing standards over the next ten years, Avondale could justify adding 11,287 square feet of police building space. However, the planned construction of the Alamar public safety building will likely complete the Police Department's need for building space to accommodate buildout of Avondale. Therefore, the 2022 update of police impact fees caps the need for building space at 8,000 square feet.

As shown in Figure P2, the cost factor of \$998 per square foot is based on the expected cost of Police Department's portion of the Alamar public safety building. The cost factor per square foot of building space is higher for police than fire functions due to lack of large garages and the extra cost for security measures.

To maintain the current infrastructure standard over the next ten years, Avondale will need to expand the police fleet by 23 vehicles, at an estimated cost of approximately \$1.41 million. The Avondale Police Department has estimated that a new fully equipped police vehicle costs approximately \$61,200, including information technology, communications, and safety equipment.

Figure P2 – Projected Need for Police Infrastructure**Police Building Standards and Capital Costs**

Buildings - Residential	0.62	Sq Ft per person
Buildings - Nonresidential	0.11	Sq Ft per trip
Building Cost Factor	\$998	per square foot

		Infrastructure Needed		
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Police Buildings (sq ft)</i>
Base	2022	91,828	122,675	70,828
Year 1	2023	93,075	126,287	72,003
Year 2	2024	94,322	130,493	73,244
Year 3	2025	95,569	133,564	74,359
Year 4	2026	96,816	137,176	75,535
Year 5	2027	98,063	140,246	76,651
Year 10	2032	103,820	157,275	82,115
<i>Ten-Yr Increase</i>		11,992	34,599	11,287

Growth Cost of Police Buildings => **\$11,264,000**

Police Vehicle Standards and Capital Costs

Vehicles - Residential	1.26	per 1,000 persons
Vehicles - Nonresidential	0.22	per 1,000 vehicle trips
Average Cost	\$61,200	per vehicle

		Infrastructure Needed		
	<i>Year</i>	<i>Population</i>	<i>Vehicle Trips to Nonresidential Dev</i>	<i>Police Vehicles</i>
Base	2022	91,828	122,675	143
Year 1	2023	93,075	126,287	145
Year 2	2024	94,322	130,493	148
Year 3	2025	95,569	133,564	150
Year 4	2026	96,816	137,176	153
Year 5	2027	98,063	140,246	155
Year 10	2032	103,820	157,275	166
<i>Ten-Yr Increase</i>		11,992	34,599	23

Growth Cost of Police Vehicles => **\$1,408,000**

Police Infrastructure Improvements

Police impact fees in Avondale are based on the incremental expansion cost of police vehicles (i.e., maintenance of current standards) and the plan-based need for police buildings. Using impact fee funding over the next ten years, Figure P3 indicates that Avondale will expand police buildings by 8,000 square feet, which is based on the planned floor area of the combined Alamar public safety building (i.e., 27,000 total square feet) less the Fire Department's space (i.e., 19,000 square feet). Avondale will also purchase an additional 23 police vehicles over the next ten years, expected to cost approximately \$1.4 million.

Figure P3 – Ten-Year Plan for Police Facilities

<i>Infrastructure Type</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Cost Factor per Unit</i>	<i>IIP Cost (rounded)</i>
Police Buildings	square feet	8,000	\$998	\$7,984,000
Police Vehicles (3+ years of useful life)	count	23	\$61,200	\$1,408,000

Planned Infrastructure Improvements

<i>Name/Description</i>	<i>Units</i>	<i>Estimated Cost</i>	<i>Growth Share</i>	<i>Growth Cost</i>
Alamar Police Substation	8,000	\$7,984,000	100%	\$7,984,000
Police Vehicles & Equipment			100%	\$1,408,000
Total	8,000	\$7,984,000		\$9,392,000

Street Facilities IIP

ARS § 9-463.05(T)(7)(e) defines the facilities and assets that can be included in the Street Facilities IIP.

“Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon.”

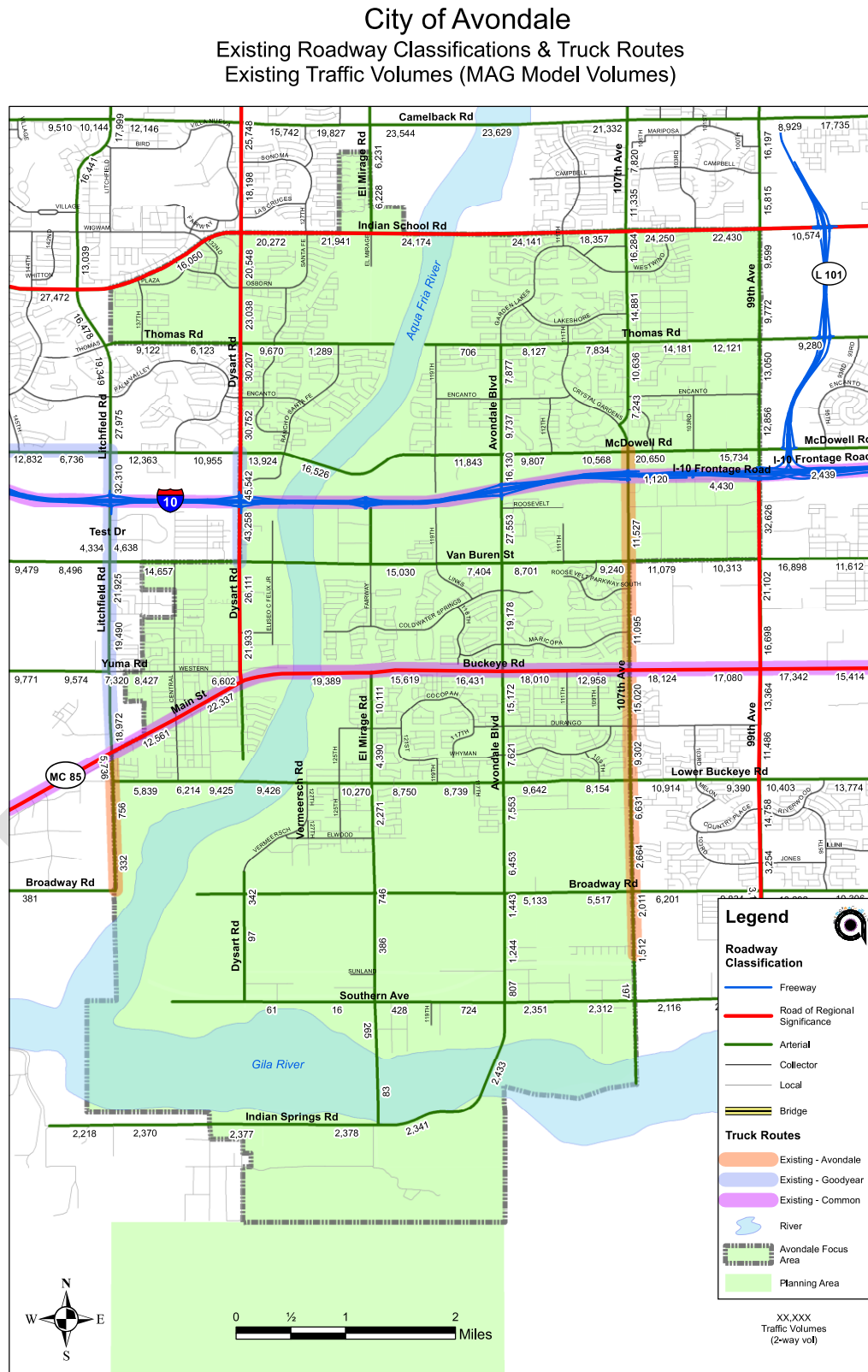
Avondale’s IIP is based on improvements to arterial streets needed to accommodate additional vehicular travel, plus the cost of preparing the LUA/IIP/DIF study required by the State of Arizona. The streets impact fee is derived from trip generation rates, trip rate adjustment factors, average trip length weighting factors, and lane capacity. Each component is described below.

Development fees in Avondale exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs/usage and stricter safety, efficiency, environmental or regulatory standards. The service area for streets development fees includes the area north of the Estrella Mountains.

Existing Infrastructure

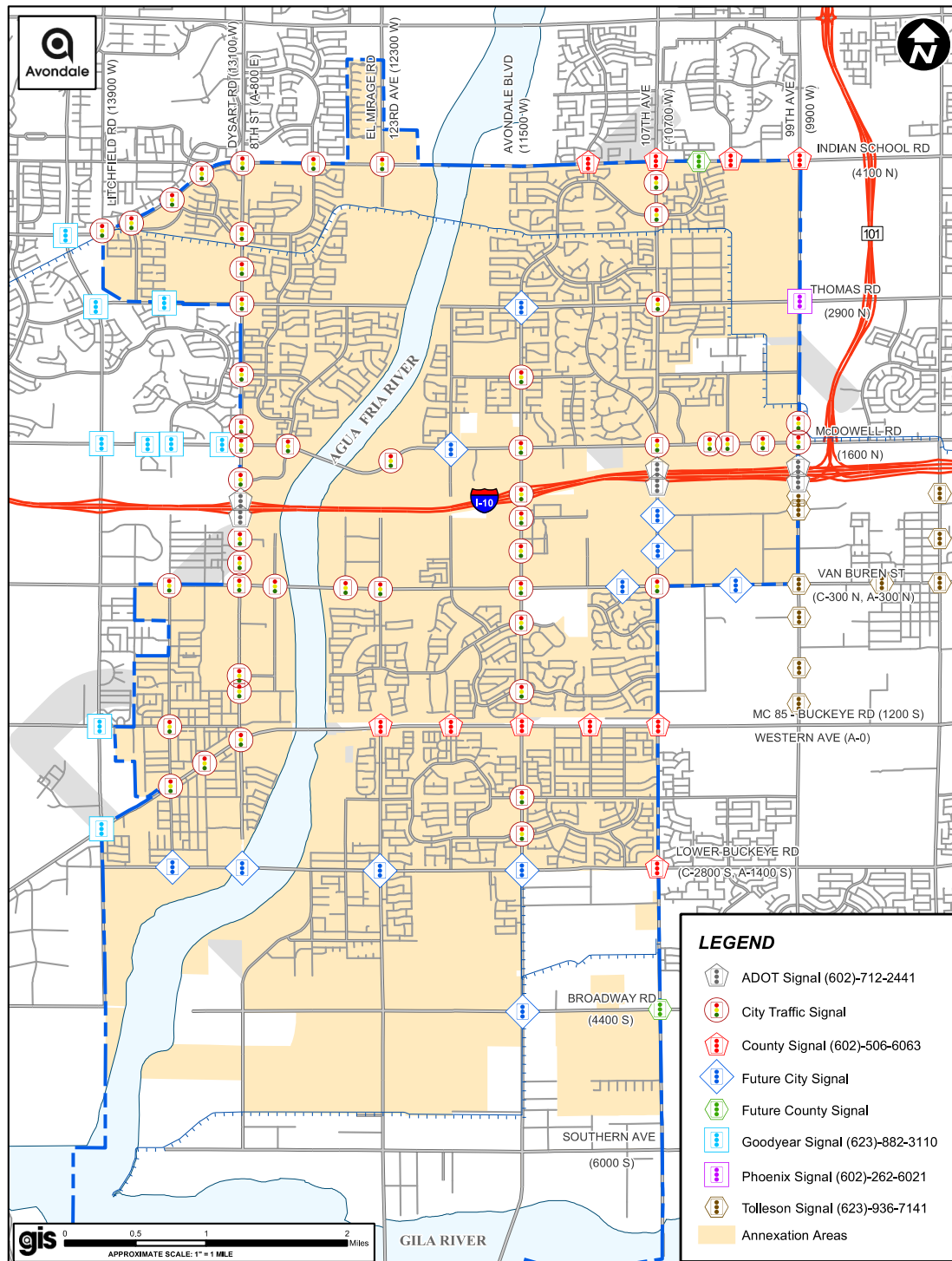
Lane miles of arterials in Avondale are mapped in Figure S1. A lane mile is a rectangular area that is one travel lane wide and a mile long. According to staff, Avondale currently has 295 arterial lane miles on streets with four or more travel lanes. All local and collector streets are project-level improvements excluded from the impact fee calculations. The City will continue to require project level improvements, such as turn lanes and signals for ingress/egress, during the development review and approval process.

Figure S1 – Arterials in Avondale



In addition to arterial lanes miles, transportation system improvements include City traffic signals and turn lanes at the intersection of an arterial with another arterial. As shown in Figure S2, there are currently 14 improved intersections (see City traffic signals in legend below) that meet the locational criteria for system improvements.

Figure S2 – Traffic Signals in Avondale



Forecast of Service Units

Avondale will use average weekday Vehicle Miles of Travel (VMT) as the service units for allocating the cost of future improvements. Raftelis created an aggregate travel model to convert development units within Avondale to vehicle trips and vehicle miles of travel. The top portion of Figure S3 summarizes the input variables for the travel model. Trip generation rates, expressed as average weekday Vehicle Trip Ends (VTE), are from the Institute of Transportation Engineers (ITE 2022). HU is an abbreviation for housing unit. KSF is an abbreviation for square feet of nonresidential floor area, expressed in thousands. Each input variable is described further below.

A typical vehicle trip, such as a person leaving their home and traveling to work, generally begins on a local street that connects to a collector street, which connects to an arterial and eventually to a state or interstate highway. This progression of travel up and down the functional classification chain limits the average trip length determination, for the purpose of development fees, to the following question, "What is the average vehicle trip length on system improvements (i.e., facilities funded by development fees)?"

As shown near the bottom of Figure S3, development in Avondale currently attracts 294,732 average weekday vehicle trips. According to the land use assumptions (shaded gold), new development over the next ten years is expected to account for 16% of total vehicle trips in 2032. In contrast, Avondale is only planning to expand arterial lane miles by three lane miles, which represents a conservative 1% expansion of arterial lane miles (i.e., $[298/295]-1$ rounded).

Figure S3 – Travel Demand Model

<i>Input Variables by Development Type</i>	<i>ITE Code</i>	<i>Weekday VTE</i>	<i>Development Unit</i>	<i>Trip Rate Adjustment</i>	<i>Trip Length Wtg Factor</i>			
Residential	210	9.43	HU	61%	1.14			
Industrial	150	1.71	KSF	50%	0.90			
Commercial	820	37.01	KSF	33%	0.75			
Office/Services	710	10.84	KSF	50%	0.90			
Average Trip Length (miles)		0.27	<= travel on system improvements to be constructed over the next ten years					
Vehicles per Lane per Day		4,600	<= existing traffic volume per lane on Avondale Blvd south of I-10					
Year->	Base	1	2	3	4	5	10	10-Year Increase
Avondale LUA	2022	2023	2024	2025	2026	2027	2032	
Residential Housing Units	29,911	30,318	30,724	31,130	31,536	31,942	33,818	3,907
Industrial KSF	2,900	3,000	3,000	3,100	3,200	3,300	3,700	800
Commercial KSF	7,800	8,000	8,300	8,500	8,700	8,900	10,000	2,200
Office/Services KSF	4,600	4,800	4,900	5,000	5,200	5,300	5,900	1,300
<i>Residential Trips</i>	172,057	174,398	176,734	179,069	181,405	183,740	194,531	
<i>Industrial Trips</i>	2,480	2,565	2,565	2,651	2,736	2,822	3,164	
<i>Commercial Trips</i>	95,264	97,706	101,370	103,813	106,256	108,698	122,133	
<i>Office/Services Trips</i>	24,932	26,016	26,558	27,100	28,184	28,726	31,978	
Total Inbound Vehicle Trips	294,732	300,686	307,227	312,633	318,580	323,986	351,806	57,073
<i>Vehicle Miles of Travel (VMT)</i>	78,911	80,411	82,003	83,369	84,867	86,233	93,148	14,237
Arterial-Arterial City Traffic Signals	14	14	15	15	15	15	17	3
Improved Intersections per 10,000 VMT	1.77	1.77	1.77	1.77	1.77	1.77	1.77	
Planned Arterial Lane Miles								3.0
Growth Share of 2032 Vehicle Trips =>								16%
Growth Cost per Lane Mile =>								\$2,500,000
Growth Cost of System Improvements Over Ten Years =>								\$7,500,000

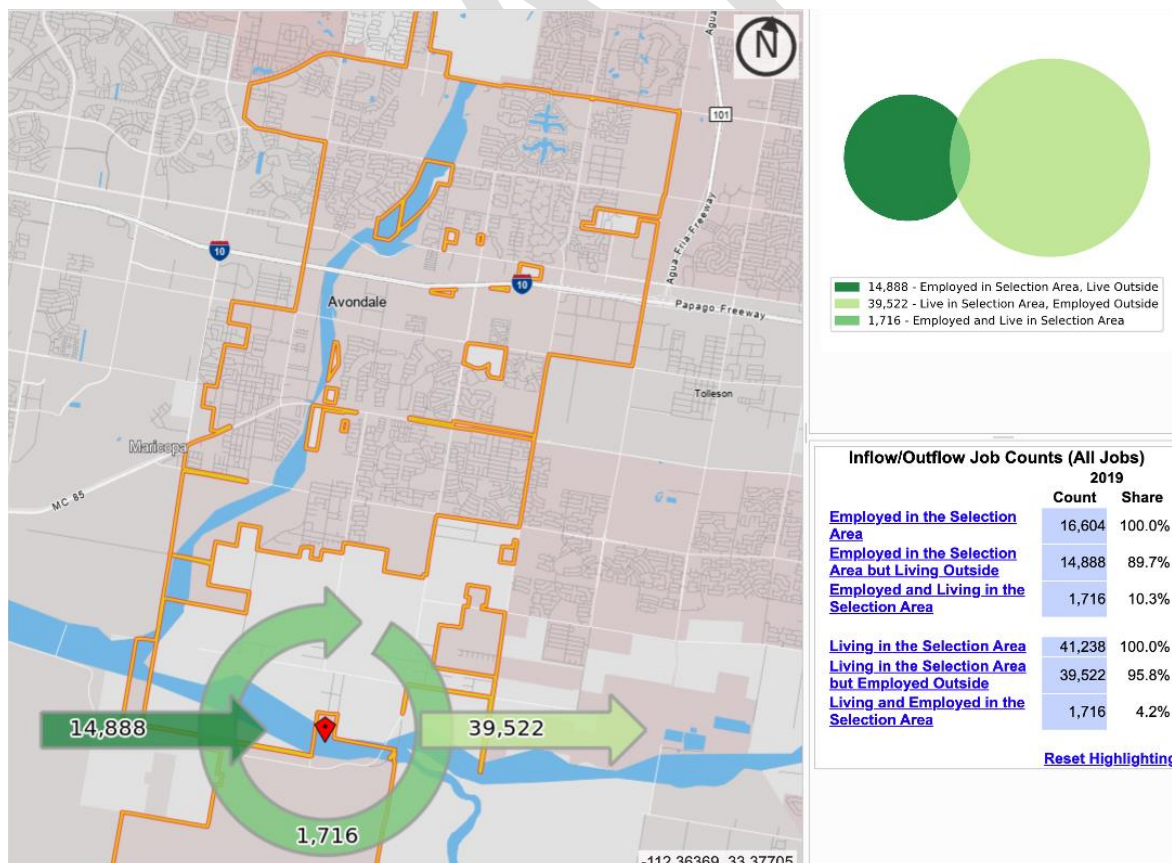
Trip Generation Rates

Avondale development fees for streets are derived using average weekday VTE. Trip generation rates are published by the Institute of Transportation Engineers (ITE 2022). A VTE represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). To calculate street impact fees, trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50%. As discussed further below, the fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for a particular type of development.

Adjustments for Commuting Patterns and Pass-By Trips

Residential development has a larger trip adjustment factor of 61% to account for commuters leaving Avondale for work. In other words, residential development is assigned all inbound trips plus 11% of outbound trips to account for job locations outside of Avondale. According to the National Household Travel Survey weekday work trips are typically 22.8% of production trips (i.e., all out-bound trips). As shown in Figure S4, the Census Bureau's website (<https://onthemap.ces.census.gov/>) indicates that approximately 95.8% of resident workers traveled outside Avondale for work in 2019. In combination, these factors ($0.50 \times 0.228 \times 0.958 = 0.11$ rounded) support the additional 11% allocation of trips to residential development.

Figure S4 – Inflow/Outflow Analysis



For commercial development, the trip adjustment factor is less than 50% because retail development attracts vehicles as they pass by on arterial roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For an average shopping center, ITE data indicate 34% of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66% of attraction trips have the shopping center as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor for an average size shopping center is 66% multiplied by 50%, or approximately 33% of the trip ends.

Trip Length Weighting Factor by Type of Land Use

The transportation impact fee methodology includes a percentage adjustment, or weighting factor, to account for trip length variation by type of land use. As shown in Figure S5, vehicle trips from residential development are approximately 114% of the average trip length. The residential trip length adjustment factor includes trips to work, social and recreational purposes, and home. Conversely, shopping trips associated with commercial development are roughly 75% of the average trip length, while other nonresidential development typically accounts for trips that are 90% of the average for all trips.

Figure S5 – Average Trip Length Weighting Factors

Trip purpose summary	Travel Day Vehicle Trip Length		Percent of Trips	Average Trip Length	Weighting Factor
	Trips	Mean Miles			
Home	205,743	9.93	Residential		
Work	92,392	11.98	Residential		
Social/Recreational	52,877	12.60	Residential		
Subtotal	351,012		Subtotal	57%	1.14
Shopping/Errands	134,048	7.08	Commercial		
Meals	43,347	7.49	Commercial		
Subtotal	177,395		Subtotal	29%	0.75
School/Daycare/Religious activity	16,288	9.11	Other		
Medical/Dental services	11,568	10.14	Other		
Transport someone	44,991	7.25	Other		
Something else	10,045	11.95	Other		
Subtotal	82,892		Subtotal	14%	0.90
All	611,299	9.55			

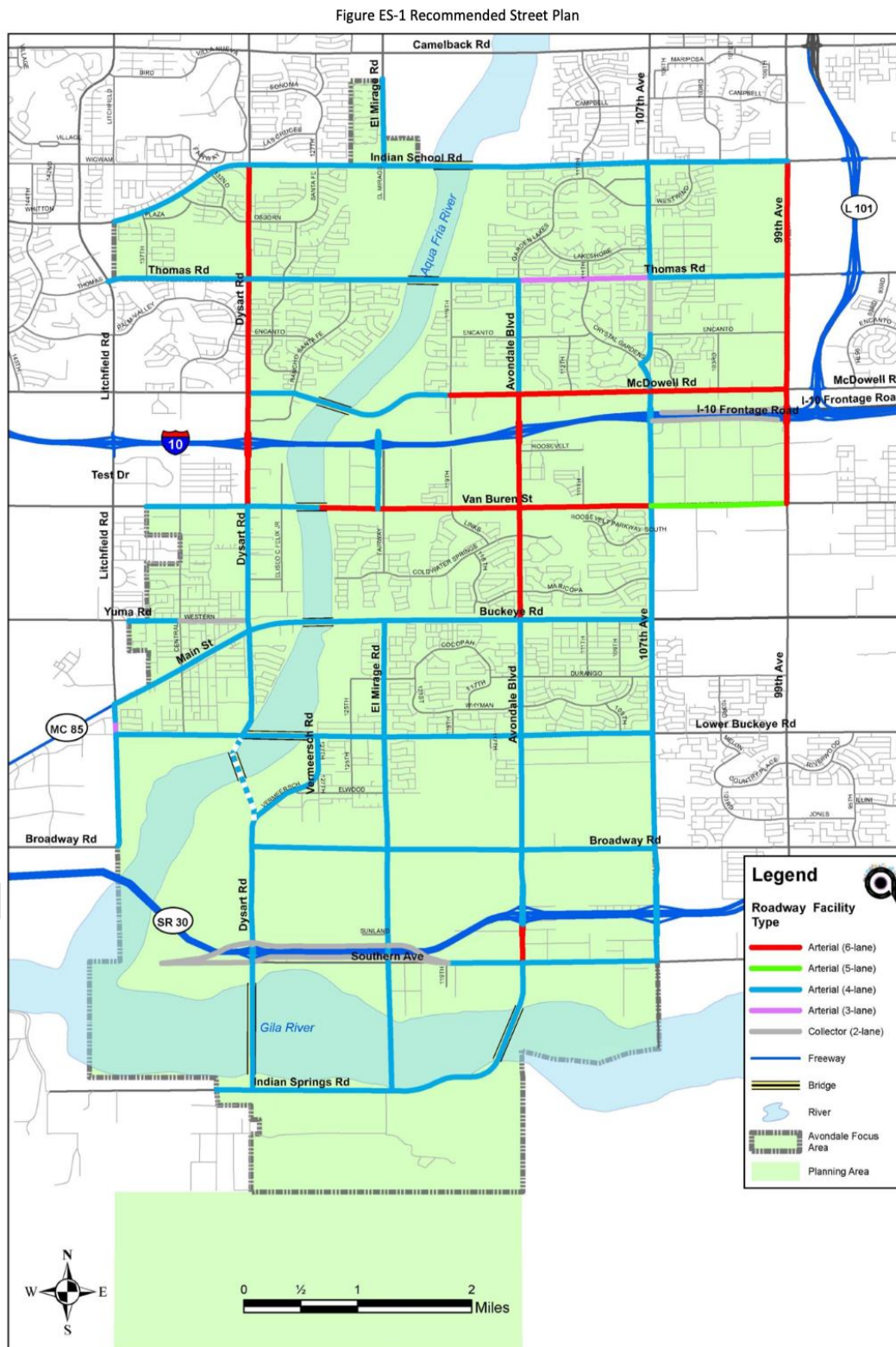
Source: Federal Highway Administration, 2017 National Household Travel Survey
Tabulation created on the NHTS website at <http://nhts.oml.gov>

Lane Capacity

As shown in Figure S1 above, existing traffic volumes vary significantly on arterials in Avondale. For the 2022 impact fee update, the existing volume on Avondale Blvd south of I-10 (i.e., 27,553 ADT) was divided by six travel lanes to yield an average of 4,600 vehicles per lane per day (rounded).

Infrastructure Improvements Plan for Streets

The latest adopted transportation plan for Avondale is shown in Figure S6. Comparing the existing transportation network to the planned system reveals the arterial street grid is substantially complete.

Figure S6 – Avondale Transportation Plan

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Avondale staff provided the list of improvements and planning-level cost estimates in Figure S7. The ten-year plan for street improvements will benefit citywide development because vehicles flow from larger travel sheds to congested areas where improvements are planned to eliminate bottlenecks. In the area north of I-10, Avondale will improve one arterial-arterial intersection. In the area south of I-10, Avondale will improve two intersections. To accommodate new development, Avondale will add three lane miles of arterial capacity over the next ten years. The total ten-year growth cost of system improvements is approximately \$14.39 million.

Figure S7 – Ten-Year Plan for Street Improvements

Transportation System Improvements

Arterial Lane Miles	Cost per Lane Mile	IIP Costs
3.0	\$2,500,000	\$7,500,000
Improved Intersections	Avg Cost per Intersection	
3	\$2,295,000	\$6,885,000

Planned Infrastructure Improvements

Location/Description	Estimated Cost	Growth Share	Growth Cost
Intersection Improvements @ Thomas & Avondale Blvd	\$800,000	100%	\$800,000
Intersection Improvements @ Lower Buckeye & Avondale Blvd	\$4,949,000	100%	\$4,949,000
Intersection Improvements @ Lower Buckeye & El Mirage	\$1,136,000	100%	\$1,136,000
Future Arterial Capacity Expansion	\$7,500,000	100%	\$7,500,000
Total	\$14,385,000		\$14,385,000

Water Utility Fees

ARS §9-463.05.T.7(a) defines the facilities and assets which can be included in the Water Facilities IIP:

“Water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities”

The City provides potable water with water supply consisting of a combination of ground water sources. The entire water system infrastructure includes water resources, wells, transmission, distribution, storage, administrative facilities, vehicles, and equipment including meters.

The calculation of the water facilities DIF was based on information provided by staff in addition to the City’s 2018 Integrated Utility Master Plan Report (IUMP). The findings presented in this section are based on a 10-year forecast, 2023 to 2032.

Fee Calculation Methodology

For this 2022 update, Raftelis used the plan-based approach. This approach is based on a forward-looking infrastructure improvements plan which considers the future projects needed to meet the future demands of the utility. The water development impact fee was calculated using the growth-share component of costs and the incremental capacity added from those facilities. Assumptions on included in the development of this fee were provided by Staff and the IUMP.

Service Area

The City’s water system serves the land areas north of the Estrella Mountains, excluding a small area in the northwest corner of the City limits. This area is served by a private water utility. The following provides an analysis of the resource and facility costs included in the IIP and DIF calculations.

Proportionate Share

ARS §9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development. Page 2-8, Table 2-4 from the 2018 Integrated Utility Master Plan (IUMP) shows in 2016, the City had a total of 24,561 water meters (accounts). Of these accounts, 88% of the City’s water meters were classified as residential and made up 57% of the City’s annual average water use. The City’s landscape meters made up 2% of the total number of water meters but accounted for 23% of the City’s average annual water use. The remaining water meters and annual usage is spread across several other account types.

For the purposes of this impact fee analysis, the fees are calculated on a dwelling unit basis which is defined as a residential has a demand of 450 gallons per day. The dwelling unit demand for a ¾” meter is the total residential and nonresidential demand divided by the total residential dwelling units. Page 2-10 in the 2018 IUMP indicates the City had 27,913 dwelling units in 2016.

Figure W1 shows the distribution of residential and nonresidential account types. Please note that these are aggregated in Figure W1 (e.g. residential rural and residential urban are classified under the category of residential below). The totals shown in the *Service Units and Demand by Land Use* are projected values and vary slightly from the values in Figure W1.

Figure W1 – 2016 Distribution of the Number of Meters and Demand by Land Use Type

Account Type	Number of Meters	Percent of Total	2016 Consumption <i>mg</i>	Percent of Total
Residential	21,582	87.9%	6,444,937	56.9%
Multi-Family/Apartment/Hotel	140	0.6%	609,252	5.4%
Commercial	534	2.2%	1,180,512	10.4%
Schools	59	0.2%	182,868	1.6%
Churches	42	0.2%	12,296	0.1%
Industrial	3	0.0%	9,184	0.1%
Laundromat	3	0.0%	12,556	0.1%
Mobile Home Park	19	0.1%	155,074	1.4%
Hydrant Meter	1	0.0%	7,822	0.1%
Car Wash	9	0.0%	64,088	0.6%
Sewer Only	1	0.0%	663	0.0%
Landscape Meter	554	2.3%	2,550,748	22.5%
Unclassified	1,614	6.6%	88,819	0.8%
Total	24,561	100.0%	11,318,819	100.0%

[1] 2018 IUMP, Page 2-9, Table 2.4

Existing Facilities

ARS §9-463.05 (E)(1) requires:

“A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.”

ARS §9-463.05 (E)(2) requires:

“An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.”

The City’s integrated water system consists of major facilities to collect, treat, and distribute water to customers. Major backbone water system facilities include:

- Water production wells
- Booster pump stations
- Storage tanks
- Transmission and distribution lines

Water Production Wells (Water Sources)

Water production wells should have sufficient capacity to meet maximum day demands. In 2018, maximum day demands were supplied by operating wells more than 18 hours per day. Figure W2

shows that the firm water supply is 17.7 mgd which is 3.2 mgd less than the 2018 maximum daily demand of 20.9 mgd.¹

Figure W2 – 2018 Existing Wells and Production Capacities

<i>Well Water Delivery System</i>	<i>Well Supply Name</i>	<i>Production Capacity mgd</i>	<i>Firm Capacity mgd</i>
Distribution System	Wells #23	1.2	1.2
Coldwater	Wells 15, 16, 25	5.3	5.3
Garden Lakes	Well 17	1.7	1.7
Gateway	Wells 8A, 24	4.0	4.0
Northside	Wells 6, 7, 20	6.3	6.3
Rancho Santa Fe	Wells 10, 11, 12, 18 and 19	12.2	12.2
Total, gpm		30.6	30.6
Resilient Supply, mgd (18 hours/day)			23.0
Firm Supply [2]			17.7
Maximum Day Demand (2018)			20.9
Surplus/(Deficiency), mgd			(3.2)

[1] A composite of tables from the 2018 IUMP, Page 4-25, Table 4.15; Page 4-7, Table 4.6

[2] If Well #16 is out, Well #15 and Well #25 will also be out of service due to blending requirements. The firm supply represents the supply with all of the Coldwater wells out of service.

Booster Pump Stations

The City has five booster pump stations and one well that pumps directly into the distribution system as shown in Figure W3. Firm pumping capacity is the design flowrate with the largest pump out of service.

Figure W3 – Existing Booster Pump Stations and Capacities

<i>Facility</i>	<i>Number of Pumps</i>	<i>Total Pumping Capacity (gpm)</i>	<i>Firm Pumping Capacity (gpm)</i>
Well 23	1	800	800
Rancho Santa Fe	4	8,400	6,200
Coldwater Springs	4	16,000	12,000
Northside	4	7,200	5,400
Gateway	4	8,000	6,000
Del Rio	3	10,000	6,000
Garden Lakes	4	6,500	4,500
Total	24	56,900	40,900
Total, mgd		82.00	59.00

[1] 2018 IUMP, Page 4.9, Table 4.7

¹ This paragraph is summarized from 2018 IUMP text on Page 4-24. The IUMP text references a firm capacity 18.6 mgd and a deficiency of 2.3 mgd. However, Table 4.15 referenced in the text indicates a firm supply of 17.7 mgd and a deficiency of 3.2 mgd.

Storage

While water production facilities are typically designed to operate at a steady rate over an extended period of time, storage reservoirs are planned to accommodate fluctuating demands. The City's water system has five active reservoir sites and one inactive reservoir site (Del Rio). The total capacity of the storage facilities including Del Rio is 15.5 mg.

The City's water system operates within three pressure zones. According to the 2018 IUMP, capacity additions will be required during the study period. However, many of the facilities have available capacity to serve near term growth. The current well production capacities are the limiting factor in meeting near and long-term growth in water demands.

Figure W4 – Existing Storage

Facility	Number of Tanks	Total Volume	Available Volume
		mg	mg
Northside	2	1.2	1.1
Gateway	1	1.0	0.8
Garden Lakes	1	2.0	1.3
Rancho Santa Fe	2	2.8	2.1
Coldwater	2	5.0	3.2
Del Rio (inactive)	1	3.5	0.0
Total	9	15.5	8.5

[1] 2018 IUMP Page 4-10, Table 4.8

Distribution System

The City maintains 320 miles of transmission and distribution lines as well as 8 pressure reducing valves (PRVs). Figure W5 shows the length of mains by pipe diameter.

Figure W5 – Existing Transmission and Distribution Lines

Diameter	Length
inches	miles
6	48.2
8	170.5
10	3.3
12	57.7
16	31.5
18	0.1
20	5.1
24	2.7
30	0.1
36	1.3
48	0.1
Total	320.60

[1] 2018 IUMP Page 4-11, Table 4.10

The 2018 IUMP provides a detailed analysis of the available system capacities based on facilities and pressure zones. The 2018 IUMP also indicates the need for additional facilities over the 10-year study to accommodate new growth. New wells with a capacity of 6.92 mgd will be required over the study period to meet these demands. In addition, new transmission and distribution mains, and upsizing of existing mains will be required.

The existing water production wells, storage, pump stations, and transmission and distribution mains have an estimated value of \$734 million. Accounting for accumulated depreciation reduces this value to approximately \$410 million. In other words, the water system's assets are about 55% depreciated in aggregate based on accounting life. This is based on the City's most recent asset records and estimating a replacement cost of facilities using the Engineering News Record Construction Cost Index (ENR-CCI).

Expansion Facility Costs

ARS §9-463.05 (E)(3) requires:

"A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable."

New infrastructure-related facilities to serve growth over the study period include water production wells, transmission and distribution mains, booster pump stations, and reservoirs. The new wells will approximately 6.92 mgd of capacity. For the purposes of DIF calculations, the added well capacity represents the total increase in capacity to the system. In other words, the unit cost of expansion facilities (wells, reservoirs, pump stations, etc.) will be based on the added well capacity. The total cost of infrastructure facilities is approximately \$25.9 million. The City is also acquiring new water resources to meet the increase in demand due to growth. New water resources total 6,882 acre-feet at a cost of approximately \$10.0 million. Figure W6 details the proposed facilities needed for growth and their anticipated costs. The project listing and costs were provided by City Staff.

Figure W6 – Expansion Facility Project Costs

Description	Total Cost	Capacity Added (mgd)	Percent Growth-Related	Growth-Related Costs
Growth-Related Infrastructure Projects				
Well #33 The BLVD Well & Transmission	\$2,880,000	1.73	100.0%	\$2,880,000
Well at 107th & Encanto - SRP Shared Well Cost in Design	455,000	1.73	100.0%	455,000
McDowell Rd 16-inch Waterline - Avondale to 99th Ave	2,650,000		25%	662,500
99th Ave Waterline - Thomas to Encanto	956,000		100%	956,000
Garden Lakes Site - 2nd Reservoir & Booster Improvements	8,358,000		100.0%	8,358,000
Future Well	2,700,000	1.73	100.0%	2,700,000
Nitrate Removal System for Coldwater Booster Station	5,545,000		100.0%	5,545,000
16-inch WL Dysart Road – Illini to Roeser	1,000,000		52.0%	520,000
16-inch WL El Mirage, Elwood to Lower Buckeye	900,000		25.0%	225,000
16-inch WL 107th – Jones to Superior	500,000		25.0%	125,000
16-inch WL 107th Ave, Superior to Lower Buckeye	700,000		25.0%	175,000
Dysart Rd. Waterline - Roeser Alignment to Southern	1,000,000		63.0%	630,000
Northside Booster Well Site - Land Purchase & DCR	75,000	1.73	100.0%	75,000
NAWS Project (Impact Fee Portion, P&I) [1]	3,682,500		100.0%	3,682,500
Total Growth-Related Projects/Expansion Capacity Share	\$31,401,500			\$26,989,000
Less: FY21 Ending Fund Balance	(\$1,134,326)			(\$1,134,326)
Net Growth-Related Projects/Expansion Capacity Share	\$30,267,174	6.92		\$25,854,674
Growth-Related Resource Projects				
		Acre-Feet		
New River-Agua Fria River Underground Storage Project (NAUSP)	\$7,200,000	6,000	100.0%	7,200,000
White Mountain Apache Tribe Water Settlement	2,800,000	882	100.0%	2,800,000
Total Growth-Related Water Resource Costs	\$10,000,000	6,882.00		\$10,000,000
Total Expansion Costs				\$35,854,674

[1] Total P&I of project reimbursed from impact fees portion of \$4,419,000 multiplied by remaining 5 mgd of the 6 mgd capacity

[2] From 2018 Utility Master Plan, page 2-10. Represents metered demand from all 3/4" meters regardless of customer class.

[3] From 2018 Utility Master Plan, page 2-13.

Service Units and Demand by Land Use

ARS §9-463.05 (E)(4) requires:

“A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial.”

The development of a dwelling unit service demand incorporates historical water production data and peak day demand data. A dwelling unit represents the smallest service capacity in the system. For the purposes of this DIF, a dwelling unit demand is equivalent to the average day and maximum day demand for the City's 3/4" meters².

Water production from 2012 through 2016 averaged 12.0 mgd and maximum day demands averaged 17.2 mgd. The 5-year peaking factor averaged 1.4. The 2018 IUMP recommends a peaking factor of 1.65 for planning purposes³.

Figure W7 – Historical Average Day and Maximum Day Demands

Year	(a) Average Day Demand mgd	(b) Maximum Day Demand mgd	(c)=(b)/(a) Maximum Day Peak Factor
2012	12.60	17.20	1.37
2013	12.20	17.10	1.40
2014	11.60	16.80	1.45
2015	12.10	16.20	1.34
2016	12.60	18.30	1.45
Average	12.22	17.12	1.40

[1] 2018 IUMP, Page 2-14, Table 2.9

Billed water consumption is based on data from the billing and water production records. The 2018 IUMP uses 2016 data as the baseline for developing their future demand projections.

Residential water DIFs are based on average day gallons per connection and assessed on a per dwelling unit basis. As shown on Figure W3, water production in 2016 was 12.6 MGD with 27,913 connections. This gives an existing allocated water demand of 450 gallons per day for a residential connection served by a 3/4" meter. From the 2018 IUMP, Page 2-3:

“The City’s TAZ data was used to estimate the number of dwelling units for each of the 2018 IUMP planning years. ...The 450 gpd/DU value is based on the number of dwelling units, which is calculated using the residential land use categories, and the total annual average production. However, because it is a composite unit water demand it includes both the residential and non-residential component of water use (including non-revenue water).”

² Dwelling unit and 3/4" equivalent unit or 3/4" meter are used synonymously throughout the water and wastewater section.

³ 2018 IUMP, Page 2-13

Figure W8 – Water Demand Unit

<i>Description</i>	<i>Values</i>
Total 2016 Water Demand , mgd [1]	12,600,000
Total 2016 Dwelling Units	27,913
Average Day Demand per Dwelling Unit, gpd	450
Maximum Day Peaking Factor	1.65
Maximum Day Demand per Dwelling Unit, gpd [2]	743

[1] 2018 IUMP, Page 2-10

[2] Rounded to nearest whole number

For residential and nonresidential connections, the water development fees are assessed by meter size. Development fees for meters greater than ¾" are multiplied by their corresponding meter capacity ratio. The meter capacity ratio represents the maximum safe allowable flow in gallons per minute for a given meter size as shown in Figure W9.

Figure W9 – Average and Maximum Day Demand by Water Meter Size

<i>Meter Size</i>	<i>Meter Capacity Ratio [1]</i>	<i>Average Day Demand</i>	<i>Maximum Day Demand</i>
<i>inches</i>		<i>gpd</i>	<i>gpd</i>
0.75	1.00	450	743
1.00	1.67	750	1,238
1.50	3.33	1,500	2,475
2.00	5.33	2,400	3,960
3.00	10.67	4,800	7,920
4.00	16.67	7,500	12,375
6.00	33.33	15,000	24,750

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.

Projected Service Units

ARS §9-463.05 (E)(5) requires:

"The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria."

ARS §9-463.05 (E)(6) requires:

"The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years."

It is projected that there will be an additional 3,907 dwelling units added within the City by 2032. Using the maximum day water demand per DU of 743 gpd, the projected residential peak demand will increase 2.9 mgd (743 x 3,907 = 2,902,901 gpd). It is estimated that the 6.92 mgd added capacity will serve approximately 9,314 DU (6,900,000 gpd / 743 gpd per DU = 9,314 DU).

Figure W10 shows the development of the current demand projection, projected demands and the total DU added during the study period. It also shows the DU that will be served by existing available capacity

and the capacity added by the IIP. The current system operates above the firm capacity of 17.7 mgd so there is no existing available capacity to serve growth.

Figure W10 – Projected Added Dwelling Units and Water Demand Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per EDU, gpd	450
3	Current Ave Day Demand, gpd	13,459,950
4	Maximum Day Peak Factor	1.41
5	Avg Day of Maximum Month, gpd (Line 3 x Line 4)	18,960,633
6	Current Firm Capacity, gpd	17,700,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	0
Added Capacity		
8	Added DU, 2022 - 2032	3,907
9	Average Day Demand	450
10	Planning Maximum Day Factor	1.65
11	Maximum Day Demand per DU, gpd	743
12	Added System Maximum Day Demand, gpd (Line 8 x Line 11)	2,902,901
13	Additional Capacity Needed for Growth (Line 12 - Line 7)	2,902,901
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	0
15	DU Served by 10-Year IIP (Line 13 / Line 11)	3,907
16	Total Added DU	3,907
17	DU Served by Full 6.92 mgd Capacity Addition	9,314

Facility Improvements

The City has plans to expand the existing supply system by 6.92 mgd through the addition of wells and distribution projects meet the future demands on the service area. The City is also securing additional 6,882 acre-feet water resources to meet future demands. This includes additional storage/recharge capacity at the New River-Agua Fria River Underground Storage Project (NAUSP) operated by Salt River Project (SRP) from the City of Chandler. This provides Avondale additional recharge capability and will alleviate the need for a water surface treatment plant. The cost of water infrastructure projects totals approximately \$27.0 million. This value is reduced by the FY 21 outstanding fund balance of \$1.1 million resulting in a net cost of \$25.9 million. The cost of the water infrastructure and water resources growth-related projects is \$35.85 million.

As discussed previously, the maximum day demand per DU is 743 gpd. The \$3.74 unit cost of capacity is multiplied by 743 gpd which totals \$2,776 for the infrastructure portion of the fee. The water resource fee is equal to the annual DU demand of 164,300 gallons multiplied by \$4.46 per gallon for a total of \$732. The total water DIF is \$3,519 which also includes the cost of the study of \$11.

Wastewater Utility Fees

ARS §9-463.05.T.7(b) defines the facilities and assets which can be included in the Wastewater Facilities IIP:

“Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities”

The City provides central wastewater collection, treatment, and disposal service throughout the City limits. The following provides an analysis of the resource and facility costs included in the IIP and DIF calculations.

The calculation of the water facilities DIF was based on information provided by staff in addition to the City's 2018 Integrated Utility Master Plan Update Report (IUMP).

Fee Calculation Methodology

For this 2022 update, Raftelis used the plan-based approach. This approach is based on a forward-looking infrastructure improvements plan which considers the future projects needed to meet the future wastewater demands of the utility. The wastewater development impact fee was calculated using the growth-share component of costs and the incremental capacity added from those facilities. Assumptions on included in the development of this fee were provided by Staff and the IUMP.

Service Area

The wastewater service area includes the northern municipal planning area down to the Estrella Mountains. The service area includes sections that are served by septic systems.

Proportionate Share

ARS §9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development. Page 2-8, Table 2.4 from the 2018 Integrated Utility Master Plan (IUMP) shows in 2016, the City had a total of 24,561 water meters (accounts).

Raftelis assumes that the number of wastewater account types are for the most part the same as water except for landscape meters and customers with septic tanks. Raftelis estimates the 2016 account type counts was approximately 24,000 (excluding irrigation and customers on septic systems) with a total contributed wastewater flow of 5.4 mgd. Based on a water demand of 12.6 mgd, the 2016 return to sewer factor was 44%. The 2018 IUMP indicates that 46% is an appropriate return to sewer factor for planning purposes. Figure WW1 shows the return to sewer percentages for each land use type and their respective contributed wastewater volume.

Figure WW1 – 2016 Account Type Return to Sewer Factors and Contributed Volume

<i>Description</i>	<i>Return to Sewer Factor</i>	<i>Average Daily WW Flow (gpd)</i>
Rural Low Density Residential	35.0%	0
Estate/Low Density Residential	35.0%	11,000
Sports & Entertainment	45.0%	0
Medium Density Residential	40.0%	1,774,000
City Center	60.0%	93,000
Historic Avondale	50.0%	163,000
Medium – High Density Residential	50.0%	165,000
High Density Residential	60.0%	1,138,000
Urban Commercial	60.0%	144,000
Mixed Use	60.0%	351,000
Urban Residential	0.0%	0
Local Commercial	60.0%	343,000
Open Space & Parks	0.0%	0
Open Space – Irrigation	0.0%	0
Freeway Commercial	75.0%	209,000
Business Park	60.0%	263,000
Education	60.0%	244,000
Industrial	60.0%	63,000
Public / Civic	60.0%	34,000
Corporate Park	60.0%	0
Gila River Scenic District	60.0%	0
High Intensity Office	60.0%	166
Office / Professional	60.0%	13,000
Total		5,008,166
Basin No. 2 Adjustment		432,000
Net Wastewater Flow (gpd)		5,440,000
2016 Actual Average Daily WastewaterFlow at WRF		5,600,000
<i>Variance (%)</i>		<i>-3.0%</i>

[1] 2018 IUMP, Page 2.18, Table 2.13; Page 2.20, Table 2.14

Existing Facilities

ARS §9-463.05 (E)(1) requires:

“A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.”

ARS §9-463.05 (E)(2) requires:

“An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.”

Water Reclamation Facility

The City’s Water Reclamation Facility (WRF) is named the Charles M. Wolf Water Resource Center and is located on Dysart Road south of Broadway Road alignment. Wastewater is conveyed to the facility

through two interceptors (36-inch and 48-inch) that enter the facility from the east. The current treatment capacity is a maximum month average daily flow (MMADF) of 9.0 million gallons per day (mgd). State regulations require the expansion of a facility when the facility reaches 80% of rated design capacity. The functional capacity under this regulation is 7.2 MGD. The 2021 average annual daily flow to the Avondale WRF was 6.5 mgd.

Lift Stations and Force Mains

The City currently has 10 lift stations. There are nearly 6.5 miles of force mains associated with the City's lift stations, which range in size from 2 to 16 inches in diameter. Figure WW2 lists the lift stations and their firm capacity.

Figure WW2 – Existing Lift Stations and Firm Capacity

<i>Lift Station</i>	<i>Firm Capacity (gpd)</i>
4th Street	3,200
10th Street	1,150
Central	200
Donatela	350
Friendship Park	350
Fulton	140
Littleton	210
PIR	30
Riley	2,200
Whyman	200

[1] 2018 IUMP Page 5-4, Table 5.1

Gravity Sewer Mains

The City's collection system contains 235 miles of mains ranging in size from 4 to 48 inches. Both the gravity sewer lines and lift stations have sufficient capacity to meet demands over the study period.

The existing wastewater treatment plant, lift stations, and gravity sewer mains have an estimated value of \$692 million. Accounting for accumulated depreciation reduces this value to approximately \$386 million. In other words, the water system's assets are about 55% depreciated in aggregate based on accounting life. This is based on the City's most recent asset records and estimating a replacement cost of facilities using the Engineering News Record Construction Cost Index (ENR-CCI).

Expansion Facility Costs

ARS §9-463.05 (E)(3) requires:

A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.

The City's existing treatment capacity is a maximum month average daily flow (MMADF) of 9.0 mgd. As shown on Figure WW1, the 2016 average annual daily flow to the WRF is 5.6 mgd. From 2016 to 2021, the average annual daily flow increased from 5.6 mgd to 6.5 mgd. The MMADF in 2021 was 6.75 mgd.

Under existing Arizona law, only 80% of the total capacity can be used, or 7.2 MGD. The remaining capacity of 0.45 mgd of additional capacity available for growth. The City has plans for a 3.0 mgd expansion to the Avondale Water Reclaimed Facility (WRF). Also under existing Arizona law, only 80% of the total capacity can be used, giving an additional planned capacity of 2.40 MGD.

Including both the additional capacity available from the existing facility of 0.45 mgd and the planned expansion of 2.40 MGD, the City's wastewater treatment has 2.85 mgd of available wastewater capacity to serve growth. Of that 2.85 mgd capacity, 0.85 mgd will be required to serve growth over the 10-year period. The estimated cost of the additional capacity is approximately \$79.6 million.

Service Units and Demand by Land Use

ARS §9-463.05 (E)(4) requires:

"A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial."

The development of a dwelling unit wastewater service demand incorporates historical wastewater contributed flow data and system peak flow data. A dwelling unit represents the smallest service capacity in the system. For the purposes of this DIF, a dwelling unit demand is equivalent to the average daily flow and peak flow for the City's 3/4" meters.

Residential wastewater DIFs are based on average day gallons per dwelling unit and assessed by meter size. The existing allocated water capacity is 450 gallons per day for a residential DU served by a 3/4" meter. Contributed wastewater flow is estimated to be 46% of water usage based on the planning criteria in the 2018 IUMP. The product of the 450 gpd and 46% equals the average day flow per DU of 207 gpd. The MMADF factor of 1.05 is applied to account for maximum month flows which results in a MMADF of 218 gpd. Figure WW3 shows the calculation of the DU average ad MMADF flows.

Figure WW3 – Wastewater Demand Unit

Description	Amount
Avg Day Water Demand per DU, gpd	450
Return Factor	46%
MMADF Peaking Factor	105%
MMADF Flow per DU, gpd	218

For residential and nonresidential connections, the wastewater DIFs are assessed by water meter size. and are allocated the appropriate meter capacity for wastewater by multiplying the DU MMADF of 218 gpd by the corresponding capacity ratios provided in Figure WW4.

Figure WW4 – Meter Capacity Ratios

Meter Size	Meter Capacity Ratio [1]	MMADF
<i>inches</i>		<i>gpd</i>
0.75	1.00	218
1.00	1.67	363
1.50	3.33	727
2.00	5.33	1,163
3.00	10.67	2,325
4.00	16.67	3,633
6.00	33.33	7,267

[1] American Water Works Association M1 Manual, Principles of Water Rates, Fees, and Charges. 7th Ed.

Projected Service Units

ARS §9-463.05 (E)(5) requires:

“The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria.”

ARS §9-463.05 (E)(6) requires:

“The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.”

It is projected that there will be an additional 5,552 dwelling units built within the City by 2037. Using the MMADF per dwelling unit of 207 gpd, it is estimated that there will be an increase in projected contributed peak wastewater flow of 1.2 mgd ($218 \times 5,552 = 1,210,000$ gpd).

Figure WW5 shows the development of the current annual average daily flow projections, projected average daily and MMADF flow, and the total DU added during the study period. It also shows the DU that will be served by existing available capacity and the capacity added by the IIP. It is estimated that the 2.4 mgd capacity addition will serve approximately 11,009 DU ($2,400,000$ gpd / 218 gpd).

Figure WW5 – Projected Added Dwelling Units and Wastewater Flows Forecast

Line No	Description	Units
Current Dwelling Units and Demand		
1	Current 2022 DU	29,911
2	Demand per DU, gpd	218.00
3	Current Ave Day Demand, gpd	6,520,598
4	MMADF Peak Factor	1.04
5	Avg Day of Maximum Month, gpd (Rounded) (Line 4 x Line 3)	6,751,000
6	Current Firm Capacity, gpd	7,200,000
7	Existing Capacity Available for Growth, gpd (Line 6 - Line 5)	449,000
Added Demand [1]		
8	Added DU, 2023 - 2032	3,907
9	Average Day Demand	207
10	Planning MMADF factor	1.05
11	MMADF per DU, gpd (Line 9 x Line 10)	218
12	Added MMADF, gpd	851,726
13	Additional Capacity Needed for Growth, gpd (Line 12 - Line 7)	402,726
14	DU Served by Existing Available Capacity (Line 7 / Line 11)	2,060
15	DU Served by 10-Year IIP (Line 13 / Line 11)	1,847
16	Total Added DU	3,907
17	DU Served by Full 2.4 mgd Capacity Addition	11,009

[1] The new WWTP adds a total of 2.4 mgd of capacity.

Facility Improvements

The City has plans to expand the existing wastewater treatment plant by 3.0 mgd of which 80% (2.4 mgd) can be used under Arizona law. The total cost of the wastewater treatment plant phase 2 expansion is \$79,590,000. The existing wastewater development fund has \$6,438,870 as of the end of fiscal year 2021. The total cost of the wastewater treatment plant expansion less the existing development fund balance can be recovered through wastewater DIFs. This value divided by the additional capacity added of 2.4 mgd results in a unit cost of \$30.48 per mgd.

As discussed previously, the maximum month average daily flow per demand unit is 218 for wastewater. The \$30.48 unit cost of capacity is multiplied by the MMADF per demand unit of 218 to get a wastewater DIF per 0.75-inch meter equivalent of \$6,656. This includes \$11 for the cost of this impact fee study.

The proposed wastewater DIF is the product of the dwelling unit's maximum month average daily flow (MMADF) and the unit cost of capacity (218 gpd x \$30.48 per gpd) plus a charge of \$11 per dwelling unit for professional services. The proposed DIF totals \$6,656.

Appendix A – Forecast of Revenues

Arizona’s enabling legislation mandates a “required offset” for “excess” construction contracting excise taxes, as stated in ARS § 9-463.05(B)(12)).

The municipality shall forecast the contribution to be made in the future in cash or by taxes, fees, assessments or other sources of revenue derived from the property owner towards the capital costs of the necessary public service covered by the development fee and shall include these contributions in determining the extent of the burden imposed by the development. Beginning August 1, 2014, for purposes of calculating the required offset to development fees pursuant to this subsection, if a municipality imposes a construction contracting or similar excise tax rate in excess of the percentage amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications, the entire excess portion of the construction contracting or similar excise tax shall be treated as a contribution to the capital costs of necessary public services provided to development for which development fees are assessed, unless the excess portion was already taken into account for such purpose pursuant to this subsection.

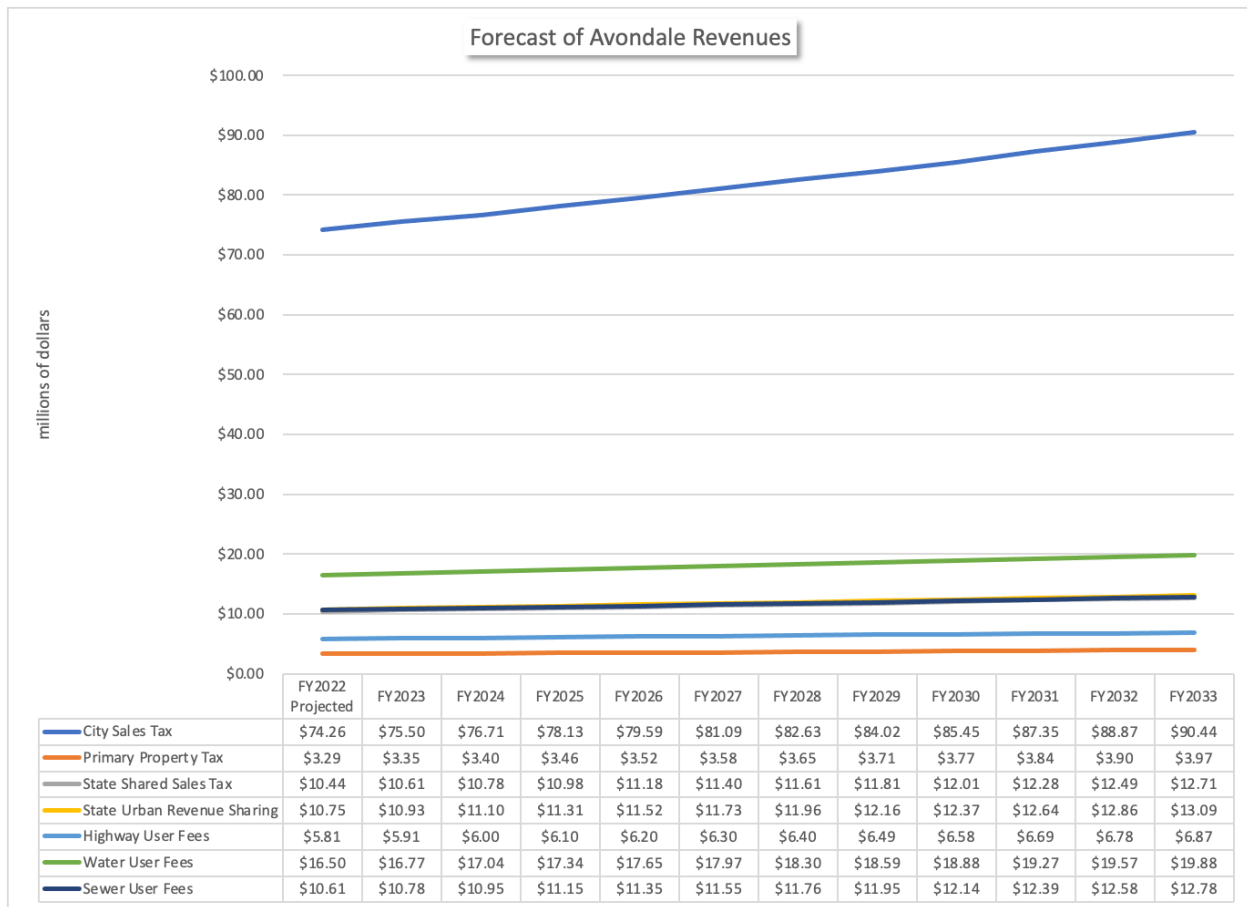
Avondale does not charge a construction excise tax at a rate higher than the rate applicable for other types of business activities. Therefore, no such offset is required.

ARS § 9-463.05(E)(7) requires:

“A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved land use assumptions, and a plan to include these contributions in determining the extent of the burden imposed by the development as required in subsection B, paragraph 12 of this section.”

The required forecast of non-development fee revenue that might be used for growth-related improvements is shown in Figure A1. The forecast of revenues was provided by staff.

Figure A1 – Ten-Year Revenue Projections



Appendix B – MAG Socioeconomic Documentation

Pages 23-25 from MAG Socioeconomic Projections 2019 Documentation are shown below.

Industrial is based on Manufacturing and Warehousing.

INDUSTRIAL EMPLOYMENT AND DEVELOPMENT BY INDUSTRY

		FAR	Sq.Ft. per Employee
Manufacturing			
311	Food Manufacturing	0.26	460
312	Beverage and Tobacco Product Manufacturing	0.37	761
314-			
323	Textiles/Wood Products/Printing	0.31	717
324-			
326	Petroleum/Pharmaceuticals/Plastics	0.28	596
327	Concrete/Concrete Products/Stone	0.08	580
331-			
332	Steel/Fabricated Metals/Machine Shops	0.30	549
333	Machinery Manufacturing	0.37	308
334	Computer and Electronic Product Manufacturing	0.33	428
	Electrical Equipment, Appliance, and Component		
335	Manufacturing	0.35	697
336	Transportation Equipment Manufacturing	0.13	363
337	Furniture and Related Product Manufacturing	0.37	789
339	Miscellaneous Manufacturing	0.26	520
	Total	0.25	495
Warehouse			
423	Merchant Wholesalers, Durable Goods	0.29	514
424	Merchant Wholesalers, Nondurable Goods	0.32	735
484	General Freight Trucking	0.11	191
493	Warehousing and Storage	0.33	1,625

Commercial is based on Retail, Restaurants, and Hotels.

RETAIL EMPLOYMENT AND DEVELOPMENT BY INDUSTRY

		FAR	Sq.Ft. per Employee
Retail			
441	Motor Vehicle and Parts Dealers	0.18	379
441	Recreational Vehicle Dealers	0.10	754
441	Automotive Parts and Accessories Stores	0.26	724
442	Furniture and Home Furnishings Stores	0.31	674
443	Electronics and Appliance Stores	0.31	532
444	Building Material and Garden Equipment and Supplies Dealers	0.24	637
445	Supermarkets and Grocery Stores	0.24	454
445	Other Food and Beverage Stores	0.26	498
446	Health and Personal Care Stores	0.28	562
447	Gasoline Stations	0.10	340
448	Clothing and Clothing Accessories Stores	0.38	615
451	Sporting Goods, Hobby, Book, and Music Stores	0.27	583
452	General Merchandise Stores	0.30	741
452	Warehouse Clubs and Supercenters	0.23	566
452	All Other General Merchandise Stores	0.18	702
453	Miscellaneous Store Retailers	0.32	548
454	Nonstore Retailers	0.22	506
	Retail Total	0.25	561
Restaurants			
722	Food Service Contractors and Caterers	0.23	326
722	Drinking Places (Alcoholic Beverages)	0.27	485
722	Full-Service Restaurants	0.27	471
722	Limited-Service Restaurants	0.24	464
722	Snack and Nonalcoholic Beverage Bars	0.26	485
	Restaurant Total	0.26	463
Hotels		0.37	956

Office/Institutional is based on Information, Finance/Insurance, and Real Estate.

OFFICE EMPLOYMENT AND DEVELOPMENT BY INDUSTRY

	FAR	Sq.Ft. per Employee
Information		
511 Publishing Industries (except Internet)	0.57	390
512 Motion Picture and Sound Recording Industries	0.37	574
515 Broadcasting (except Internet)	0.36	376
517 Telecommunications	0.30	500
518 Data Processing, Hosting and Related Services	0.34	349
519 Other Information Services	0.08	478
51 Total	0.29	463
Finance & Insurance		
522 Banking	0.33	429
522 Consumer Lending	0.46	441
522 Other Lending	0.25	388
523 Investments	0.53	588
524 Insurance Carriers and Related Activities	0.55	423
52 Total	0.42	445
Real Estate and Rental and Leasing		
531 Real Estate Leasing	0.25	520
531 Real Estate Agents	0.37	390
532 Car & Truck Rental	0.08	590
532 Consular Rentals	0.33	623
532 Machinery and Equipment Rental and Leasing	0.13	485
53 Total	0.19	468

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CITY COUNCIL REPORT

SUBJECT: Presentation of the Draft Active Transportation Plan

MEETING DATE: 11/21/2022

TO: Mayor and Council

FROM: Bryan Hughes, Parks and Recreation Director, (623) 333-2411

THROUGH: Tracy Stevens, Deputy City Manager, (623) 333-1014

REVIEWED: Ron Corbin, City Manager, (623) 333-1016

STRATEGIC PLAN:

This agenda item supports the following Avondale Strategic Outcome Areas:

- Diverse Recreation and Entertainment Opportunities - Avondale provides residents with the ability to connect with amenities, businesses, and their community, enhancing the opportunity to live, work, and enjoy a healthy, active, and affordable lifestyle.

The connectivity of sidewalks, bike lanes, and multi-use paths will provide recreation opportunities and connections to entertainment destinations throughout the city.

- Natural Resources and Open Spaces - Avondale recognizes the value of its natural resources and promotes environmental sustainability and conservation in its operations, activities, and planning.

The multi-use paths throughout the city and along our river corridors will allow residents and visitors to take advantage of natural areas unique to Avondale.

PURPOSE:

Staff will provide an update regarding the DRAFT Active Transportation Plan (ATP). This item is for discussion only, input and feedback is requested from City Council.

BACKGROUND:

The City of Avondale has included a multi-model trail system (P0084) in the current capital improvement plan. The development of an ATP helps identify the city-wide multi-purpose trail system and the sidewalks and bike lanes that connect to it.

PROCESS:

Development of the ATP began in October 2021. The process included research of existing planning documents, crash statistics, and GIS data.

A Project Work Group (PWG) was established to guide and coordinate the day-to-day efforts throughout the

Avondale ATP process. The PWG was comprised of Avondale city staff members from various departments to help provide input and oversight to develop a plan that achieves cross-department needs and objectives. The PWG held four meetings at key project milestones to provide feedback.

PUBLIC PARTICIPATION:

- Parks & Recreation Advisory Board: A presentation was made to the Avondale Parks & Recreation Advisory Board on November 10, 2021, to seek input on critical elements of the ATP. A second presentation scheduled for November 9, 2022, will focus on a review of the Draft ATP seeking feedback on recommendations, bike facility and pedestrian path/trail types and locations, evaluation criteria results), and prioritization.
- Public Open House (Virtual): A public open house meeting, held on March 2, 2022, reviewed existing and future conditions, identified deficiencies compared to plan objectives, and sought public input on their preferences and desires for bicycle and pedestrian facility types, locations, and priorities.
- Planning & Zoning Commission: A presentation was made on October 19, 2022, of the Draft ATP seeking feedback on recommendations, bike facility and pedestrian path/trail types and locations, evaluation criteria results), and prioritization.
- Online Survey: An online survey for the community at large was provided and conducted to gauge the public's interest, use, and suggestions for active transportation facilities, as well as to guide the direction and recommendations of this plan. The resident turnout for the survey was considered favorable, with 46 residents responding.
- AVoice/Polco: The Draft Active Transportation Plan has also been made available to the public on the Avondale website and residents are encouraged to comment on the application.

OUTCOME:

Staff will seek approval of the ATP from the City Council to help facilitate the identified projects and pursue grant funding opportunities.

DISCUSSION:

The Avondale Active Transportation Plan will guide the planning of sidewalks, bike lanes, and multi-use paths vision for future growth and development over 20+ years. The plan can be updated as needed depending on the progress of the projects identified.

"Active transportation" is a means of getting around that is powered by human energy, primarily walking and bicycling. The ATP addresses sidewalk, bike lane, and multi-use path connectivity throughout the city. Michael Baker Intl. is the consultant on the project, which includes a Working Group of staff from multiple departments.

Highlights of the plan will include bike and pedestrian connectivity to parks and recreation amenities, schools, entertainment destinations (i.e., The BLVD, Old Town), and multi-use paths throughout the city and along our river corridors. The long-range plan identifies 240 projects separated into short, mid, and long-term priorities and includes cost estimates and potential funding sources to complete the ATP. In addition, the plan will help staff as we plan future capital projects and opportunities to work with external resources to complete projects as part of more significant developments or projects.

BUDGET IMPACT:

Not applicable

RECOMMENDATION:

Presentation Only

Contact person for document distribution:



Aspiring. Achieving. Accelerating.

City of Avondale **Active Transportation Plan**

Draft Final Report

October 2022

Michael Baker

I N T E R N A T I O N A L

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1 INTRODUCTION

PURPOSE & OBJECTIVES

The City of Avondale (Avondale) is preparing a city-wide Active Transportation Plan (ATP). The project study area for this project will include the areas within the incorporated limits of the Avondale, which is approximately 34 square miles.

This ATP is a follow-up effort to the recently completed Avondale Parks, Recreation, Libraries and Trails Master Plan which was not tasked with evaluating and recommending a comprehensive and cohesive network of on-street and off-street bicycle facilities and pedestrian paths - The Avondale ATP seeks to fill that need.

The objectives of the Avondale ATP include:

- Conduct a city-wide inventory and gap analysis of all existing bicycle and pedestrian facilities in Avondale;
- Recommend a comprehensive and cohesive series of city wide on street and off-street bicycle facility types and pedestrian facility types;
- Develop policies and procedures necessary to create a system for bicycle and pedestrian traffic in an integrated, safe and efficient multimodal transportation system;
- Identify locations where Avondale bicycle and pedestrian facilities connect to regional facilities;
- Establish a hierarchy of bicycle facilities and pedestrian path/trail types and planning level cost estimates; and
- Establish a formal ATP to better position Avondale to apply and compete for MAG and other government agency design assistance funding.



STUDY AREA CONTEXT

Avondale is part of the west Phoenix metropolitan area that has established itself as a manufacturing and healthcare hub as well as a world-class sports and entertainment destination for residents and visitors alike.

Rapid residential development in Avondale during the local and national housing boom in the 1990s and early 2000s quickly transformed what had been a farming community into a major suburb of Phoenix. This accelerated growth brought the population from just 8,000 in 1980 to over 87,000 in 2020. During this span, Avondale has welcomed a consistent influx of small businesses and large corporations that have created a unique blend of big-city amenities with a small-town charm.

The Historic Avondale area along Western Avenue preserves the historic business district and safeguards opportunities for small, independent businesses. The public art installations around Avondale and the family-friendly community events hosted by the city create a welcoming cultural environment. From events such as Cycle Avondale, to the Tres Rios Nature Festival, to Billy Moore Days, the events celebrate and highlight the communities, businesses, facilities, and natural environment of the city.

Once an important supply stop for travelers heading west, Avondale is now a destination for many entertainment and recreation options in the Phoenix area. Nearby Estrella Mountain Regional Park and Avondale's 255 acres of additional parks and open spaces provide residents and visitors with dedicated places to exercise, fish, skate, play, and gather. Avondale is home to the Phoenix Raceway, which hosts two NASCAR race weekends annually, and the American Sports Center, which is one of the largest multi-sports facility in the state and welcomes more than 500,000 visitors to its soccer, volleyball, and basketball facilities every year.

Avondale's Municipal Planning Area (MPA) is approximately 94.4 square miles and is roughly bounded by Indian School Road in the north, Litchfield Road and Dysart Road in the west, 99th Avenue and 107th Avenue in the east, and extends far south, wrapping around the Estrella Mountain Regional Park and Gila River Indian Community, as depicted in **Figure 1-1**. Forecasted growth in the MPA over the next 25 years, however, is anticipated to occur in the portion of the MPA located north of the Estrella Mountains. Therefore, the study area defined for this ATP is within the municipal limits of Avondale.

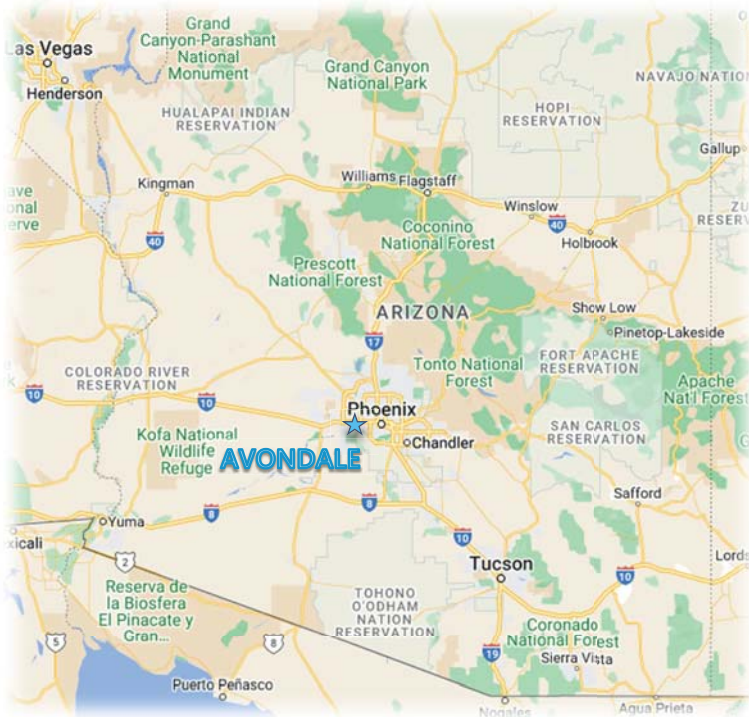
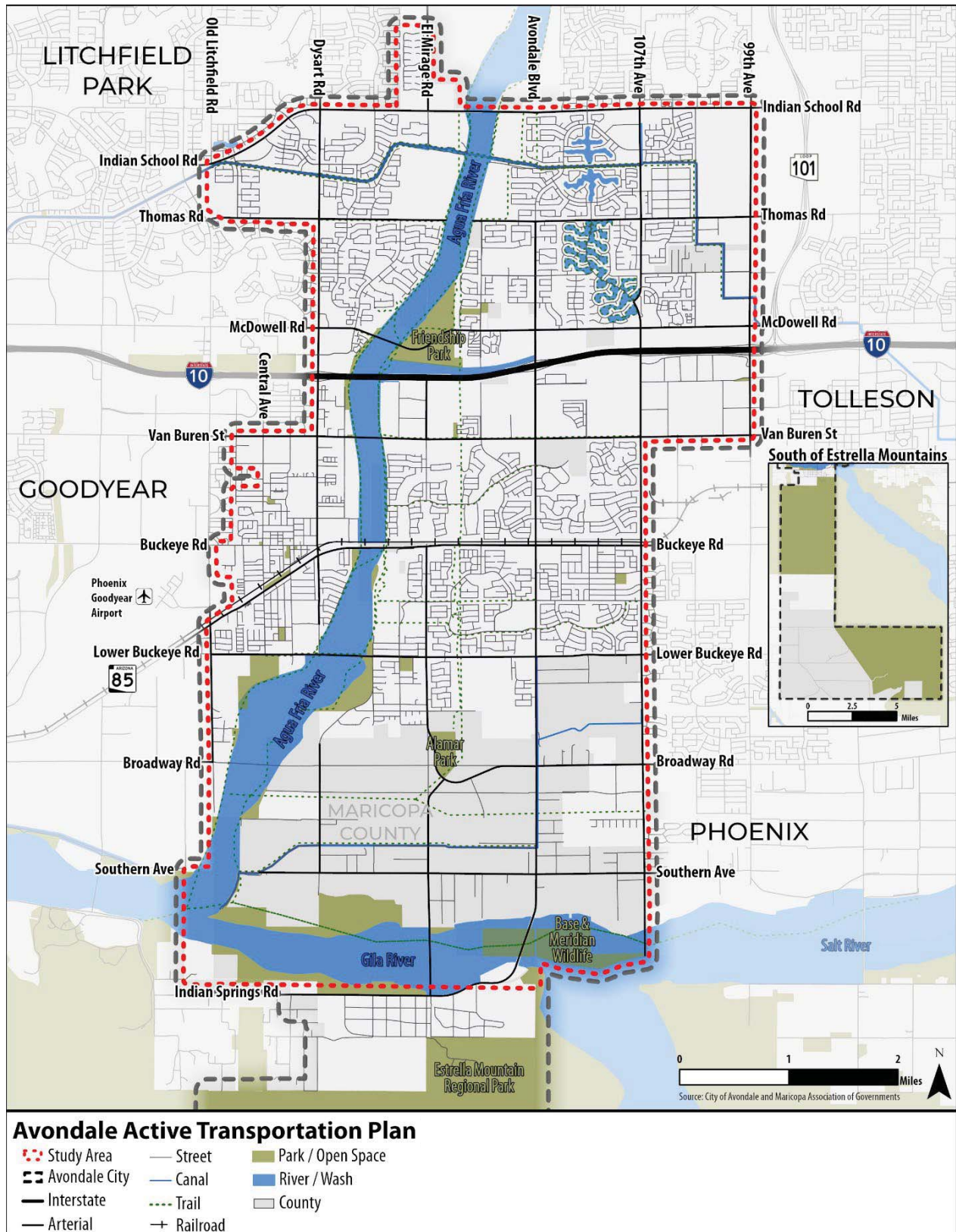


Figure 1-1: Study Area Map



WHAT IS AN ACTIVE TRANSPORTATION PLAN?

Active Transportation is generally defined as human powered movement such as walking and bicycling or using an assistive mobility device. What was once referred to as ‘non-motorized transportation’ has now taken on a new title to capture those that walk and bike to and from destinations, not just those that walk and bike for recreation. What works for recreation, does not always work for destination-based travel. For example, recreational trails often do not connect major employers, nor connect community to community. Both non-motorized recreational use facilities and destination-based non-motorized transportation facilities are part of a successful active transportation network.

Active transportation is an important component to the overall mobility of a community and region, providing a low-cost (relative to traditional vehicular infrastructure) and accessible form of transportation. Investing in walking, biking, and other forms of active transportation results in a more balanced, accessible transportation system. Active transportation benefits also include the alleviation of socioeconomic and health disparities, the support of economic diversity and prosperity, and assists in creating a more livable and sustainable community.

WHY IS ACTIVE TRANSPORTATION IMPORTANT?

There are many benefits from active transportation that contribute positively to our quality of life. Infrastructure investments in trails, sidewalks, traffic-calming, and public transit support active travel and increase routine physical activity, which improves health, the quality of the environment and livability of communities. The following are just a few of the benefits of active transportation.

Heathy & Active Community

There is a clear-cut connection between health and the built environment. Individuals are at an increased risk of many health problems - predominantly obesity, diabetes, and heart disease - with the absence of physical activity in their lifestyle. Active transportation allows people to seamlessly integrate physical activity into everyday life by enabling them to walk or bike to their destinations. Implementing walking and biking facilities creates access to places where residents can be physically active and provides more opportunities for social interaction and community cohesion that have positive impacts for mental health.

Transportation Modal Shift

There is a current paradigm shift occurring that is evident from people altering the way they travel between origins and destinations through a change in travel behaviors, evolving technologies, and social trends. Recent studies suggest that younger and emerging generations are driving less, owning fewer cars, and/or not obtaining a driver's license. As a result, abundant and adequate active transportation infrastructure and options will continue to become more important in communities across the country.

Environmental Benefits

As previously mentioned, as more and more people shift from vehicular trips to active transportation trips, there will be environmental benefits along with the community health benefits. Vehicular travel one of the highest producers of greenhouse gases, and as active travel replaces some vehicular trips, there can be a reducing in car-related emissions, noise pollution, and traffic congestion. Other environmental benefits include energy savings, less water pollution, reduced dependency on fossil fuels, and even reduced pressure to develop agricultural and open spaces.



Economic Prosperity

New Tourism Opportunities

Investment in active transportation facilities such as trails and on-street bike lanes can create new tourism opportunities. These facilities provide recreational activities for residents and visitors. A bike-friendly community with multiple recreational options for biking and walking can encourage return visits. Bicycle related events can be held with additional bicycle facilities, which can attract bicycle tourists.

Talent Attraction

An efficient multi-modal transportation system that includes active transportation options with Complete Streets and bike lanes and trails for both recreation and daily transportation helps create a vibrant city that can attract workforce talent and new companies.

Higher Property Values

Communities with strong Active Transportation Networks typically have a strong tourism economy, attract higher profile employers and a talented, educated workforce, benefit from increased property values, and maintain a strong small business culture. Complete Streets projects are specifically reported as resulting in increased property values.

Capital Savings

The personal automobile in America once meant freedom and status, but vehicle costs can be burdensome, and behaviors are changing as a result. According to the U.S. Department of Labor's U.S. Bureau of Labor Statistics (September 2018), the average vehicle costs \$9,576 per year to own and operate (\$4,054 for purchasing, \$1,968 in gasoline and motor oil expenses, and \$3,554 in other vehicle-related costs). During the last recession, bicycle commuting saw a major increase as drivers opted for a less expensive form of travel. Using alternative modes including transit saves money but riding a bike or walking can save vehicle costs as well as fitness related expenses resulting in an increased savings for the user. As personal vehicle and individual health costs decrease, disposable income increases allowing for more money to be funneled back into the local economy.

Community Livability

Baby boomers, retirees, and millennials are increasingly moving to locations where they can walk or ride a bike to access their daily needs. Research conducted by the Bureau of Transportation Statistics shows that nearly two-thirds of homebuyers consider the walkability of an area in their purchase decision. Furthermore, employers are increasingly looking for locations that offer their employees walkable and bikeable communities in which to live, work, and play.



HOW IS ACTIVE TRANSPORTATION PLANNING DEVELOPED?

The following framework is a comprehensive approach to active transportation planning. As unequal access has been discovered as a significant factor in a user's commute, "Equity" was recently added to the original 5 E's. The expanded 6 E's are as follows:

- **Engineering:** Create pedestrian and bicycle improvements throughout communities and neighborhoods that provide safety and connectivity, keeping in mind that physical environment is key to use. Provide options for all non-motorized users and level of skill, as well as bike parking.
- **Education:** Provide bicycle safety education classes at the community level to ensure knowledge and confidence in all ages. Inform the community about their multi-modal options (maps/ ad campaigns) and educate the community about pedestrian and bicycle friendly driving habits.
- **Encouragement:** Host event-based walking and bicycling promotion such as a walk-a-thon or ciclovia. Open Streets events attract participants of all ages and encourage local spending. National events provide an easy opportunity for encouragement through schools and employers such as National Walk to Work Day (April), National Bike to Work Day (May) and National Walk and Bike to School Day (October).
- **Enforcement:** Ensure law enforcement training is current and increase law enforcement in areas of conflict to enforce traffic and safety laws. Ensuring there is accurate and ample signage in place for pedestrians and bicyclists is also key.
- **Equity:** Work to support safe, active, and healthy opportunities in underrepresented and vulnerable communities. Incorporate equity concerns throughout the other E's to understand and address obstacles, create access, and ensure safe and equitable outcomes.
- **Evaluation:** Like equity, this step is applied to all other E's throughout the process. From gathering existing conditions data to conducting surveys gauging community perception, the issues and challenges must first be understood. Trends must be monitored throughout the process, and the success of outcomes must be measured.



2 EXISTING & FUTURE CONDITIONS FRAMEWORK

An existing and future conditions evaluation can offer insight and guidance on opportunities and constraints for active transportation improvements in Avondale. After identifying a viable candidate corridor for pedestrian or bicycle improvements and exploring existing opportunities, various concepts can be developed. These concepts can help both the public and stakeholders envision potential improvements and drive the decision-making process. In the past two decades, the City has seen tremendous growth, and as a result, the current active transportation infrastructure does not connectivity across the entire community. Inventory and analysis will be an integral element and essential to the creation of this ATP.

This section provides a contextual understanding of Avondale, which includes gaining an understanding of the history of the city, in order to establish the framework, objectives and goals for the ATP. As part of the planning process, a thorough gathering of information included assembling electronic information balanced with aerial photography and field review verification.

The information gathered and presented in this Section will ultimately be provided to Avondale in a GIS database. The electronic data gathering was focused on collecting and verifying infrastructure with the intention of adding to the City's current GIS database relative to components and features that may influence the development of an active transportation plan.

This electronic data was reviewed, and associated mapping was balanced against a field appraisal of existing conditions to better ascertain the physical and environmental opportunities and constraints associated with each potential active transportation corridor.

The GIS data provided by the City identified areas of concern that have been physically evaluated. The site field work included review of the known gaps in pedestrian connectivity throughout Avondale as well as evaluating connections that are a potential link to City identified activity centers or areas of known interest as voiced by local residents and the Parks & Recreation Advisory Board.



EXISTING PLANS, STUDIES & RELEVANT INFORMATION

There are a variety of existing studies and reports that influence and inform the preparation of the Avondale ATP. The studies outlined in **Table 2-1** were reviewed for applicable bicycle and pedestrian facilities, planned parks and regional open spaces, development requirements, design standards, and existing alignments and designations of pedestrian and bicycle routes and facilities in and around Avondale. A detailed review of the key studies is included in Appendix A.

Table 2-1: Inventory of Existing Plan, Studies, & Relevant Information Reviewed

	Plan Title		Plan Type	Year	Key Study
City of Avondale Plans	Avondale Transportation Master Plan		Transportation	2017	✓
	Avondale General Plan 2030		General Plan	2012	✓
	Avondale Strategic Plan		Strategic Plan	2021	✓
	Avondale Parks, Recreation, Libraries and Trails Master Plan Update		Recreation & Trails	2017	✓
	Avondale Wayfinding Master Plan		Active Transportation	2015	✓
	City of Avondale 5-year CIP				✓
	El Rio Design Guidelines & Planning Standards		Design	2015	✓
	Public Art Master Plan		Community	2014	
	North Avondale Specific Plan		Community	2013	✓
	The BLVD Specific Plan		Community	2019	✓
	Healthy Lifestyle Plan		Community	2011	✓
	Freeway Corridor Specific Plan		Transportation	2015	✓
	Tres Rios Greenway Specific Plan		Community	2002	✓
	Old Town, Cashion, Las Ligas/Rio Vista Specific Area Plan		Community	2021	✓
	Municipal Sustainability Plan		Community	2014	✓
	Street Tree Master Plan		Community	2014	
	Safe Routes to School Plans	Completed: Canyon Breeze, Michael Anderson, Estrella Vista, Garden Lakes, Littleton	Active Transportation	Ongoing	✓
		Ongoing: Lattie Coor, Eliseo C Felix, Corte Sierra, Rio Vista, Avondale Middle Schools			
	Stormwater Management Plan		Design	2016	
	Avondale General Engineering Requirements Manual		Design	2018	✓
Regional Plans	MAG Active Transportation Plan		Active Transportation	2020	✓
	MAG Multimodal Level-of-Service Study		Active Transportation	2017	✓
	MAG 2040 Regional Transportation Plan Update		Transportation	2017	
	MAG Regional Bikeway Master Plan		Active Transportation	2007	✓
	MAG Regional Pedestrian Plan		Active Transportation	2000	✓
	MAG West Valley Multimodal Transportation Corridor Plan		Transportation	2001	
County Plans	MCDOT 2035 Regional Transportation System Plan (2040 Update underway)		Transportation	2014	
	MCDOT Active Transportation Plan		Active Transportation	2018	✓
	Maricopa County Regional Trail System Plan		Trails	2004	✓
State Plans	ADOT Bicyclist Safety Action Plan		Active Transportation	2018	✓
	ADOT Pedestrian Safety Action Plan		Active Transportation	2017	✓
	ADOT An Economic Impact Study of Bicycling in Arizona		Economic	2013	



COMMUNITY PROFILE

Current Land Ownership

As noted in **Table 2-2** and **Figure 2-1**, Avondale's MPA covers approximately 94.4 square miles of land owned and maintained by numerous sources, though privately-owned property is the majority ownership category covering over 36 percent of all land in the Avondale MPA.

The Bureau of Land Management (BLM) is the second largest landowner with nearly almost 30 percent of Avondale's MPA located in far south Avondale within and adjacent to Estrella Mountain Regional Park. There are also about 15.5 square miles of other public lands, or about 16 percent.

A map of the current land ownership is illustrated in **Figure 2-2**.

Table 2-2: Land Ownership Distribution

Land Ownership Category	Percent	Square Miles
Private	38.9%	36.8
Bureau of Land Management (BLM)	29.3%	27.7
Other Public Lands	16.4%	15.5
Arizona State Land Department (ASLD)	14.5%	13.6
US Fish and Wildlife (FWS)	0.7%	0.6
Bureau of Indian Affairs (BIA)	0.2%	0.2
Total	100.0%	94.4

Source: Bureau of Land Management, 2021

Figure 2-1: Land Ownership Distribution

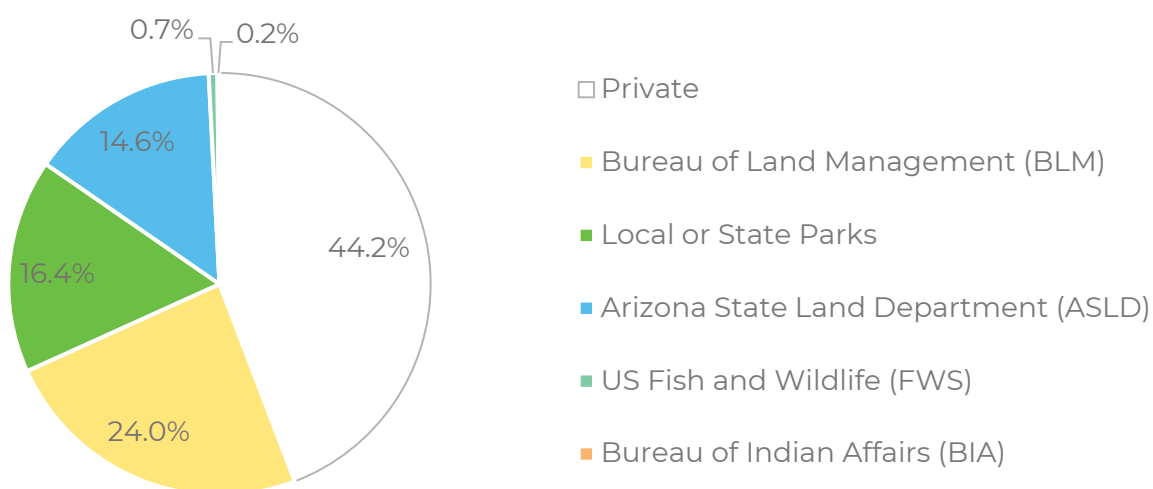
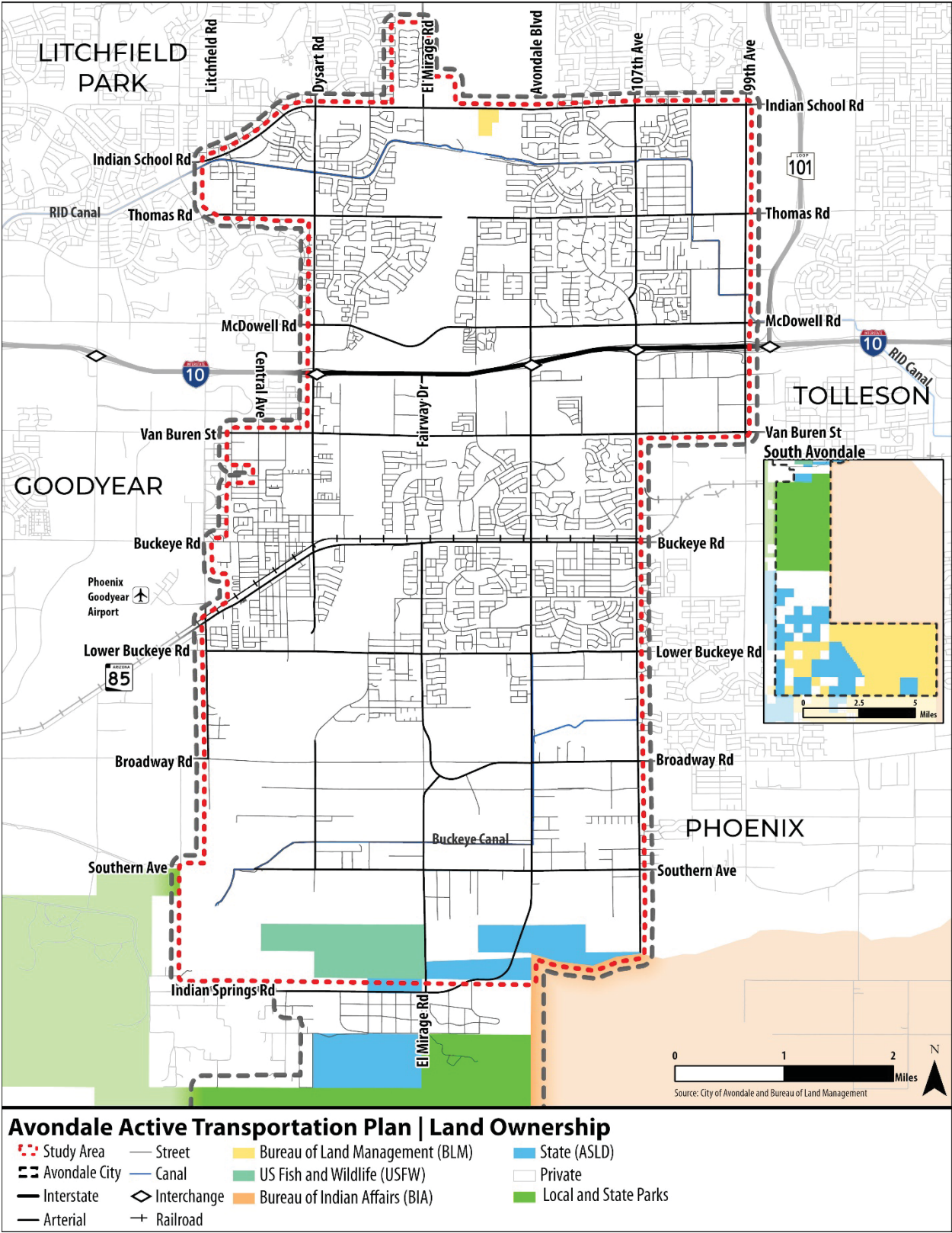


Figure 2-2: Land Ownership Map



Existing Land Use

As shown in **Table 2-3** and **Figure 2-3**, the existing land use composition in Avondale is predominately open space (52.5 percent) and vacant (22.0 percent). Although this is largely due to the large swaths of land of open space that is located within the Estrella Mountain Regional Park, Aqua Fria, Salt, and Gila Rivers, there is vast potential for urban growth within Avondale private land ownership areas. To further reinforce said statement, agriculture land uses account for 6.6 percent of the land within Avondale which present additional opportunities for urban development.

Outside of open space, vacant, and agricultural land, the most predominant land use is traditional single family development accounting for 10.3 percent of the total land within Avondale.

A map of the existing land use in Avondale is provided in **Figure 2-4**.

Table 2-3: Existing Land Use Distribution

Land Use Category	Square Miles	Percent
Agriculture	6.2	6.6%
Commercial	1.1	1.2%
Industrial	0.6	0.6%
Multi-Family Residential	0.5	0.5%
Office	0.1	0.1%
Open Space	49.4	52.5%
Other/Public Employment	4.4	4.5%
Single Family Residential	9.8	10.3%
Transportation	1.7	1.7%
Vacant	20.6	22.0%
Total	94.4	100.0%

Source: Maricopa Association of Governments (2020)

Figure 2-3: Existing Land Use Distribution

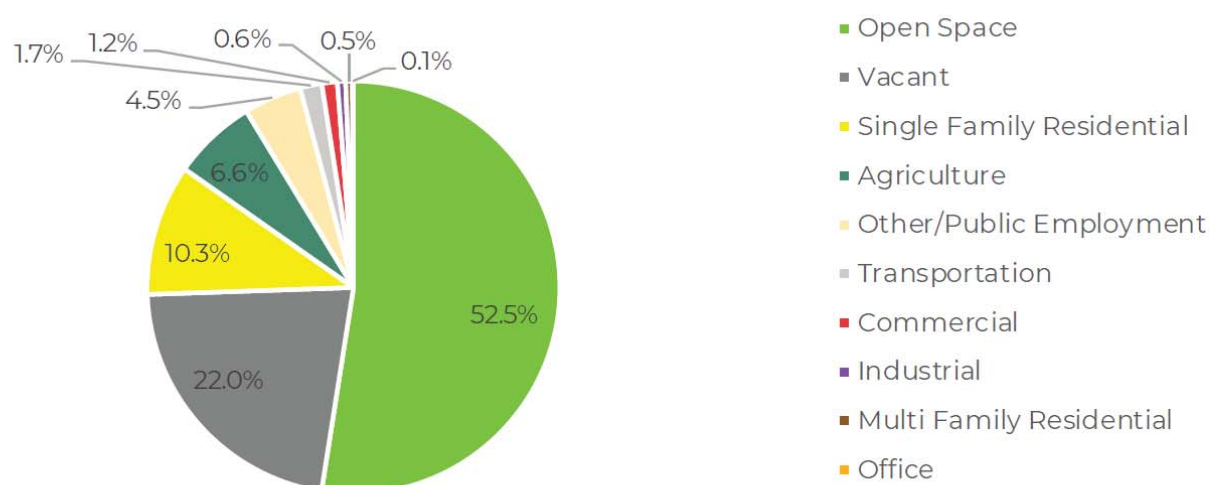
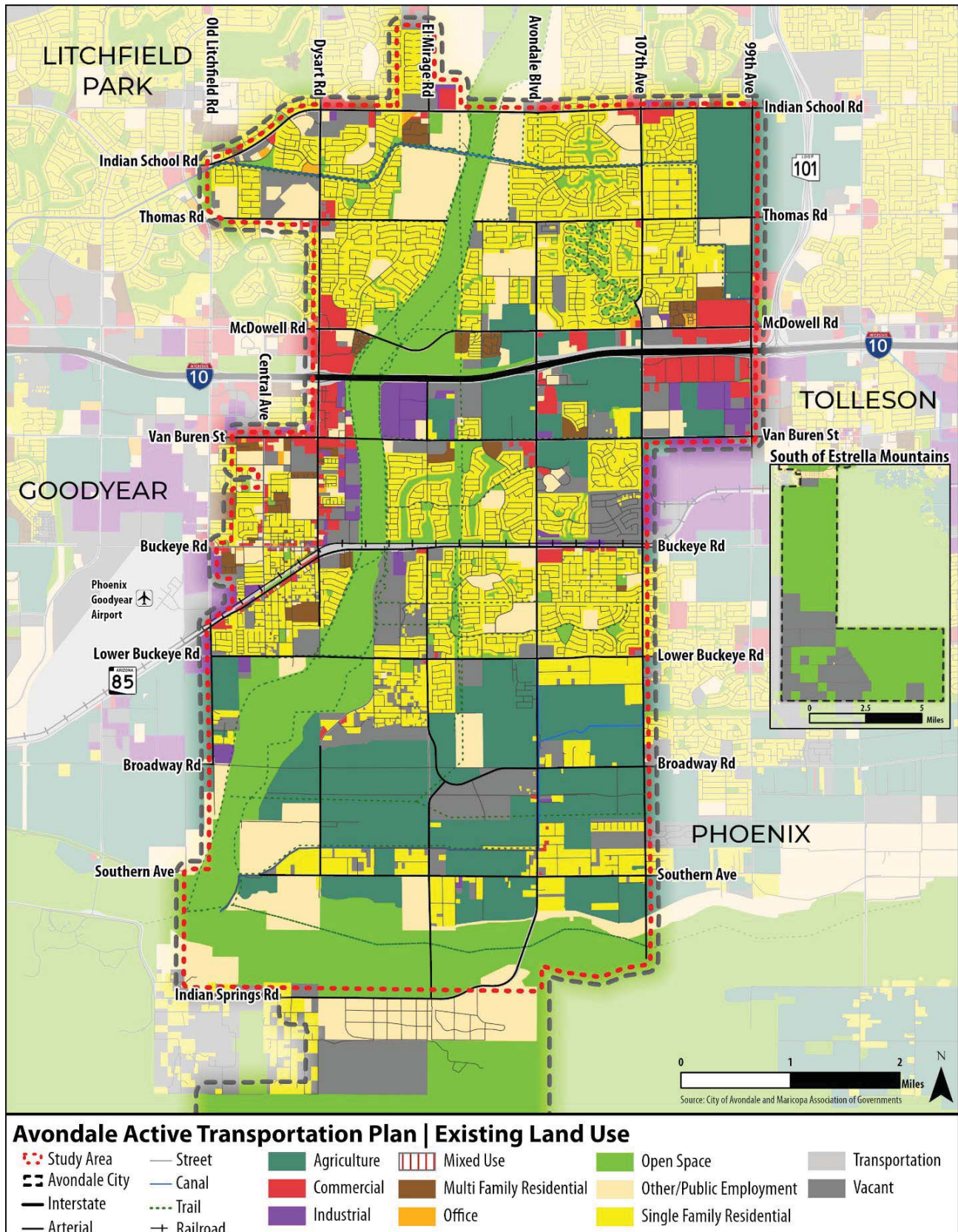


Figure 2-4: Existing Land Use Map



Zoning

Zoning districts in Avondale are established in order to promote the orderly development of the City and in order to classify, regulate, restrict, and separate the use of land, buildings and structures. While the General Plan offers guidance on Avondale's future growth for the entire municipal planning area (94.4 square miles), an evaluation of the existing zoning districts within the Avondale's municipal limits (32.8 square miles) begins to offer a more precise indicator of the existing and future mix, density and intensity of land uses that can be expected in the Avondale ATP study area. Avondale currently contains the following zoning districts within their municipal limits. A breakdown of the various districts and their respective square miles are shown in **Table 2-4**. Refer to **Figure 2-5** for a map illustrating the existing zoning districts.

Table 2-4: Zoning Distribution

Zoning Districts	Square Miles	Percent
Agriculture	9.7	29.7%
Cashion Business District	<0.1	<0.1%
City Center District	0.1	0.4%
Commerce Park	0.1	0.2%
Commercial Office	<0.1	<0.1%
Community Commercial	0.6	1.8%
Community Commercial with Historic Avondale Infill Overlay	<0.1	<0.1%
Freeway Commercial	0.1	0.1%
General Industrial	1.8	5.5%
Historic Avondale Infill Overlay	<0.1	<0.1%
Major Sports and Entertainment District	1.0	2.9%
Manufactured Home Park	0.3	0.8%
Multi-Family Residential	0.5	1.6%
Neighborhood Commercial	<0.1	<0.1%
Old Town Avondale Business	<0.1	<0.1%
Planned Area Development	15.1	46.0%
Rural Residential	1.3	4.0%
Special Use District	0.1	0.4%
Suburban Residential	1.8	5.5%
The BLVDD	0.3	0.9%
Total	32.8	100.0%

Source: City of Avondale, 2021

Nearly half of Avondale consists of the Planned Area Development (PAD) zoning district. The PAD zoning district is primarily designed to accommodate master planned communities that typically consist of a mixture of land uses. The purpose of PADs in Avondale is to promote the development of mixed-use developments and/or residential subdivisions that include residential, commercial or business park development according to an overall development plan.

The lands in the western and parts of northern Avondale maintain a greater mixture of zoning designations. Old Town Avondale, along Western Avenue from Main Street to Dysart Road, has its own zoning designation classified as Old Town Avondale Business District (OTAB). The OTAB is to further the revitalization of the City's original town site and its immediate vicinity by encouraging pedestrian-oriented development and by emphasizing a unique

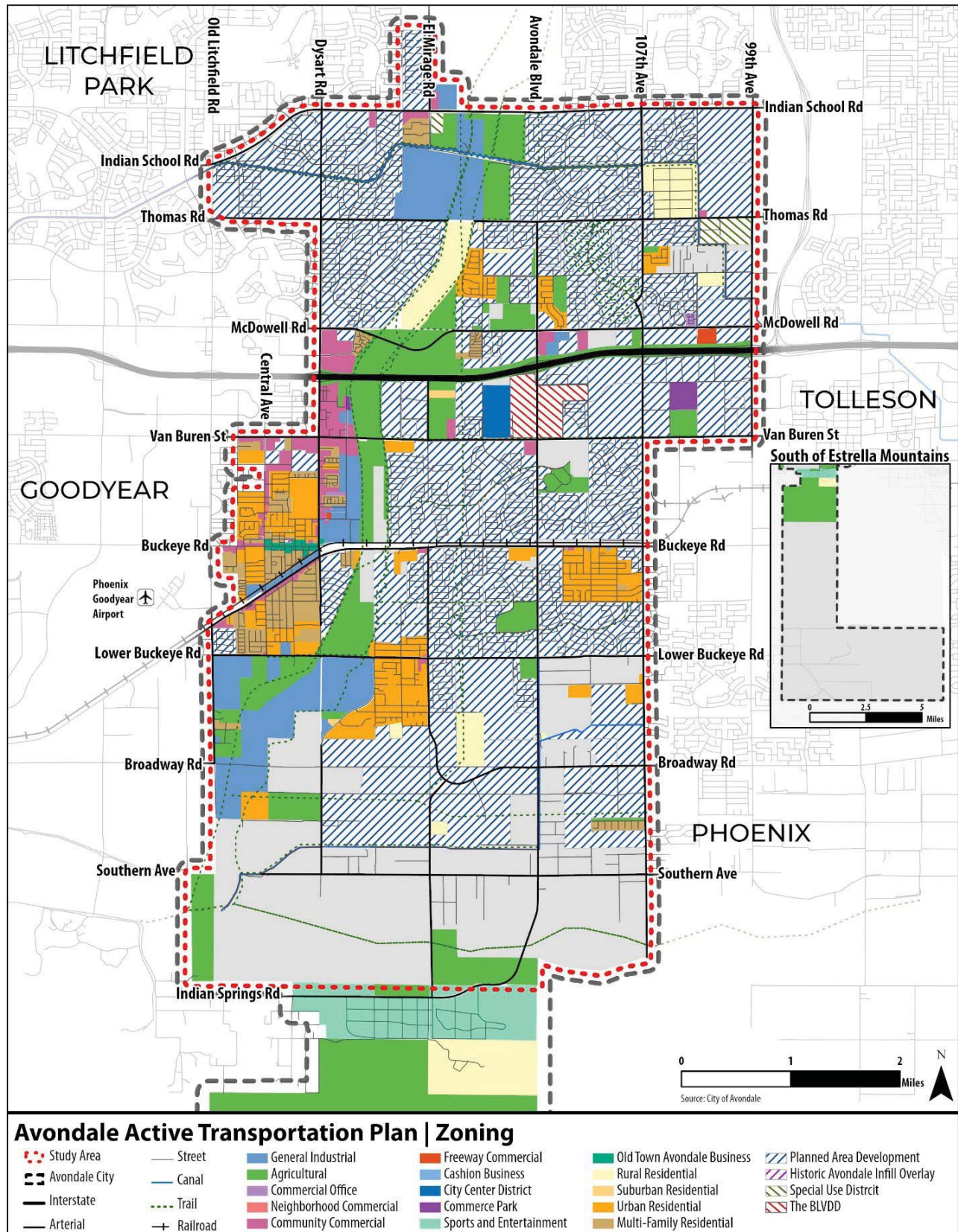
mix of uses intended to make Old Town a destination, with street level activity that takes one back to an earlier place in Avondale's history.

The residential zoning surrounding the OTAB is a higher density of residential land uses which consist of Multi-Family and Urban Residential zoning designations. The Urban Residential zoning districts include R1-7, R1-6, and R1-5 with the intended purpose of providing a variety of single-family detached residential dwelling types at an urban density. The Multi-Family zoning designation include R-2, R-3, and R-4 zoning districts with the intended purpose of providing a mixture of higher density housing. The R-2 zoning district distinctly provides more of a transition from Single-Family Residential neighborhoods to a mixture of higher intensity land uses found in the other Multi-Family zoning districts. Properties in R-2 zoning districts are intended to be developed as single-family detached and attached, townhomes and patio homes. The R-3 zoning district is intended to provide for townhome, condominium and apartment uses, while the R-4 zoning district intended to be located near high activity commercial areas of Avondale and providing for high intensity townhome, condominium, apartment, and loft apartments.

Another notable area with unique zoning designations is around the BLVD District (BLVDD) near the center of the City at Avondale Boulevard and Van Buren Street. The BLVD Specific Plan ("The BSP") was created to implement the City Council's vision of creating a vibrant, urban, mixed-use environment that will become a premier destination for shopping, dining, entertainment, employment and various types of residential uses. The BLVDD is intended to complete the vision expressed in The BSP by prescribing building form, site design and architectural standards for The BLVD area. The BLVDD area is divided into six different sub-districts which include Village, Park Avenue, Residential, Neighborhood, and Promenade Districts. The adjacent City Center District (CCD) and the related City Center Specific Plan (CSP) were the precursors to the BLVDD and the BSP. The CCD and CSP have similar intentions of the BLVDD and BSP such as creating a high-density, mixed-use environment that will become a premier destination for shopping, dining, entertainment, employment and various types of residential uses for the area.



Figure 2-5: Zoning Map



Subdivisions

Subdivisions are the act of dividing land into parcels that are easier to sell or otherwise develop, usually via a plat. Subdivisions may be simple, involving only a single seller and buyer, or complex, involving large tracts of land divided into many smaller parcels.

As illustrated in **Figure 2-6**, Avondale has a mixture of subdivisions throughout the City that have either been completed, currently in progress, or planned to be developed. Much of northern Avondale consists of completed residential subdivisions while central and southern Avondale contains more of the residential subdivisions in progress of being completed or planned to be completed.

Avondale currently has 29 completed subdivisions, seven subdivisions in process of being completed, and eight subdivisions planned to be completed.

Floodplain

Floodplain Delineation Studies identify land areas (floodplains) subject to inundation by a flood that has a one percent probability of being equaled or exceeded in any given year, also known as a 100-year flood. The results of a Floodplain Delineation Study are often submitted to the Federal Emergency Management Agency (FEMA) in order for the study to be incorporated onto the Flood Insurance Rate Maps.

Any development in an area that is determined to be in a FEMA-designated floodplain must meet the requirements of local, state and federal regulations. One of these requirements is to build the structure so the lowest floor is above the base flood elevation. The Base Flood Elevation (BFE) is the predicted highest flood water elevation expected to occur at a location during a 100-year flood event. New habitable construction must be built above the BFE.



As illustrated in **Figure 2-7**, the existing floodplains within Avondale predominately follow the regulatory floodways of the Agua Fria Rivers and the Gila/Salt River. These floodplain corridors often present opportunities for regional active transportation facilities due to their inviting natural open space features and their length and separation from roadways. In fact, the completion of a segment of trail along the Agua Fria Trail was completed in 2021. This segment of the Agua Fria Trail is located approximately a half mile north of Van Buren Street along the Agua Fria River east levee, beneath the I-10 overpass. The work consists of constructing asphaltic concrete and a cement concrete pathway, soil cement bank protection, landscaping and other related work. Access to businesses and residential properties will be maintained throughout the duration of the project, and there will be no impact to travel lanes as most of the work will be in the Agua Fria River levee.

Figure 2-6: Subdivisions Map

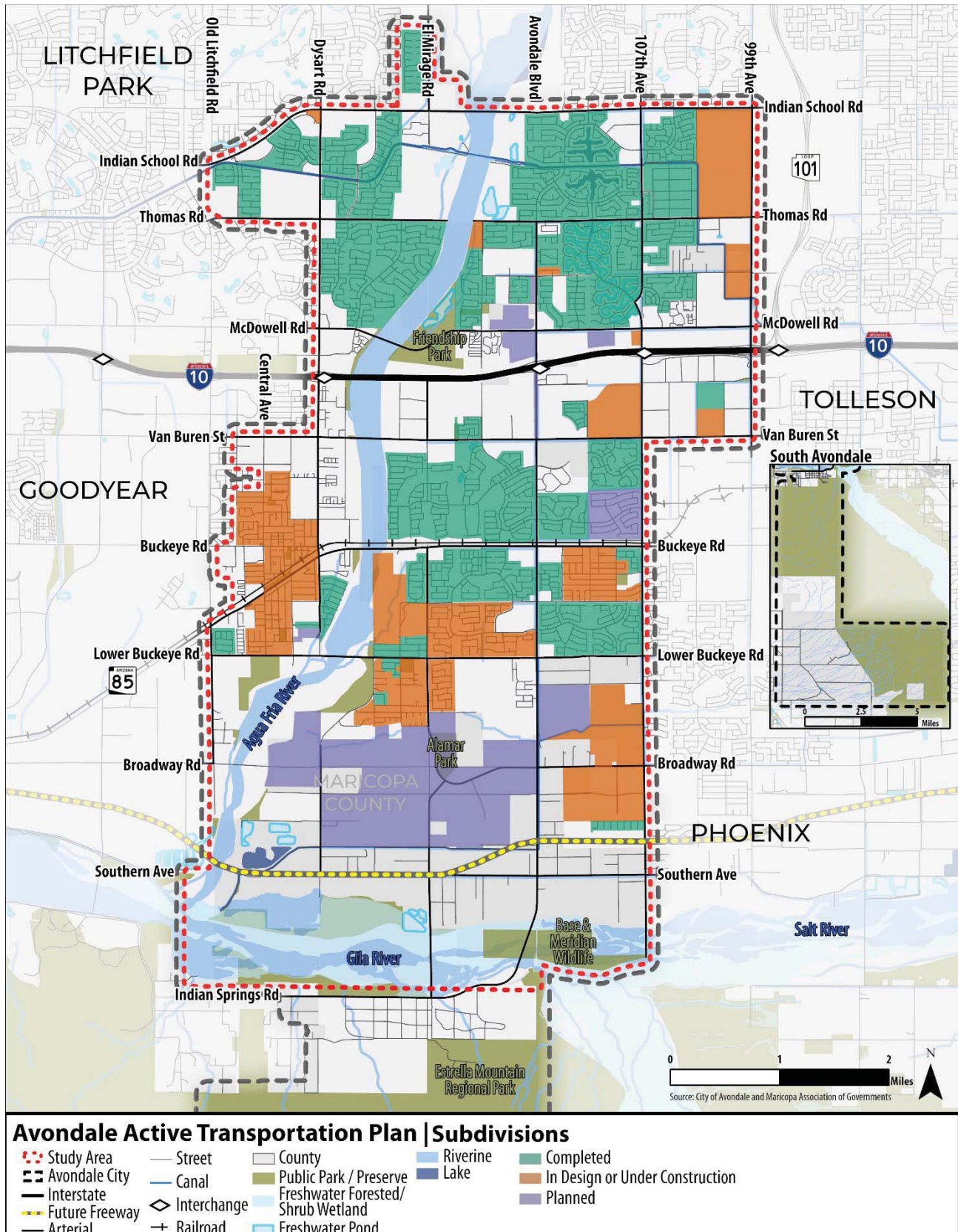
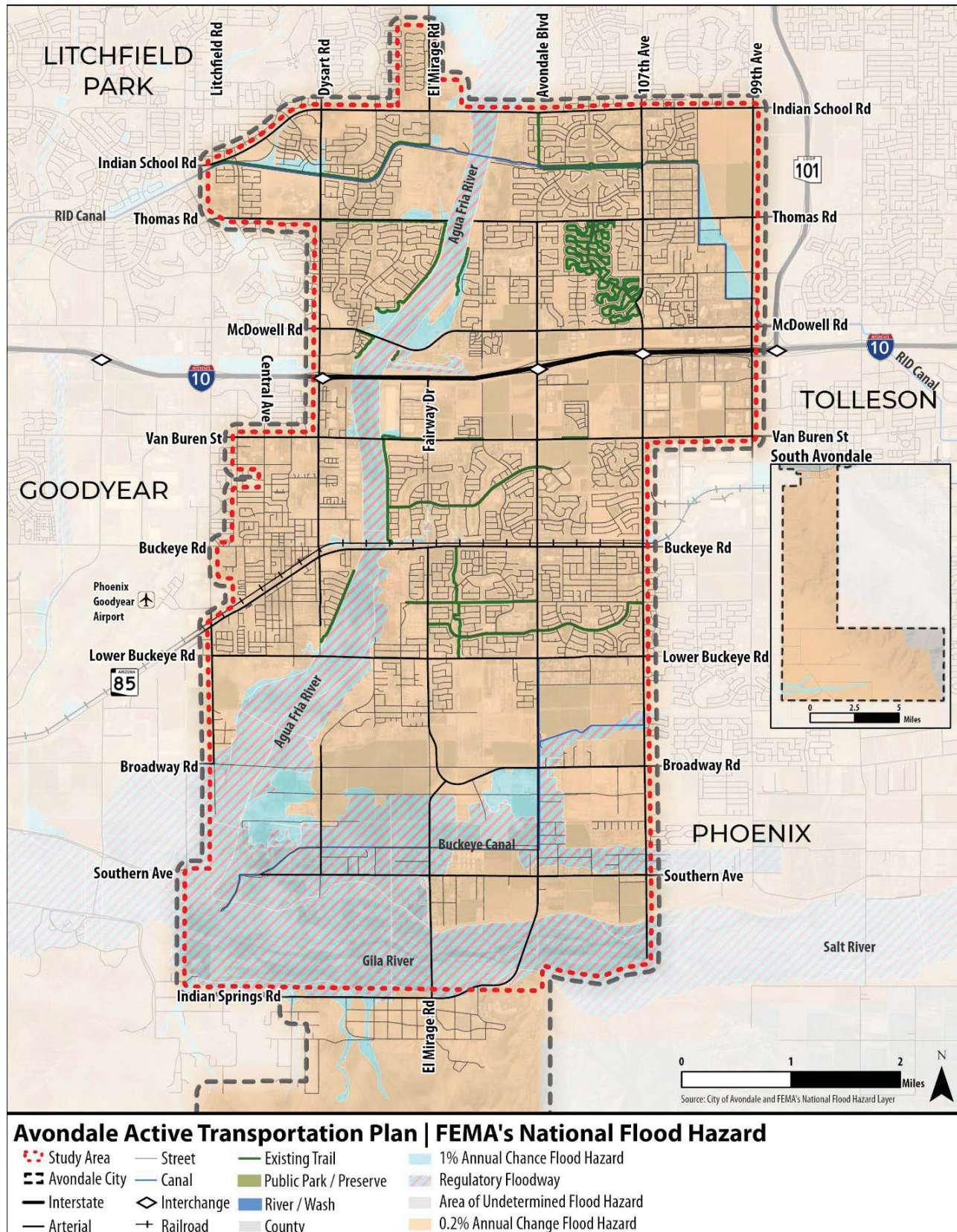


Figure 2-7: Flood Hazard Map



Future Land Use

Open space remains the most predominant land use under the Avondale General Plan future land use plan. The vast amounts of open spaces are largely attributable to the presence of the Aqua Fria and Gila Rivers and Estrella Mountain Regional Park in Avondale. The location and configuration of future planned land uses will provide vast opportunity for recreational trails to navigate throughout the entire City by leveraging the linear nature of the Agua Fria and Gila Rivers. The majority of the developable land (current vacant and agricultural land) under the existing land use scenario is projected to develop into single family residential (except along the I-10 corridor) with an additional 21.6 square miles of new residential development – more than tripling the amount in the current condition. As more residential development occurs, it will result in greater demand for safe, connected active travel infrastructure and implementation of safety measure to ensure motorists traverse the roadway network safety and efficiently with the modes of active transportation. Refer to **Table 2-5** and **Figure 2-8** for a summary of the future land use distribution, and **Figure 2-9** for a map illustrating the future land uses.

Table 2-5: Future Land Use Distribution

Land Use Category	Square Miles	Percent
Commercial	2.6	3%
Industrial	1.1	1%
Mixed Use	1.5	2%
Multi-Family Residential	0.9	1%
Office	0.2	0%
Open Space	50.0	53%
Other/Public Employment	5.0	5%
Single Family Residential	31.4	33%
Transportation	1.7	2%
Total	94.4	100%

Source: Maricopa Association of Governments (2020)

Figure 2-8: Future Land Use Distribution

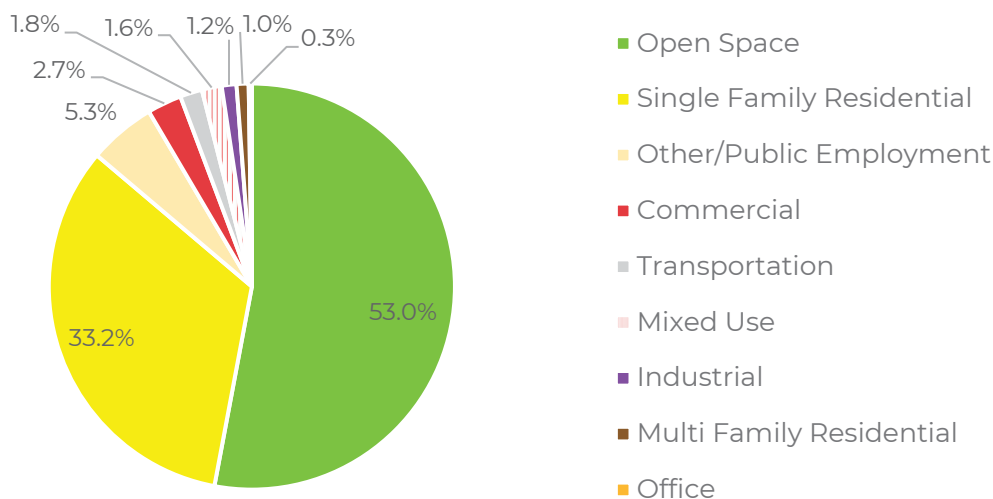
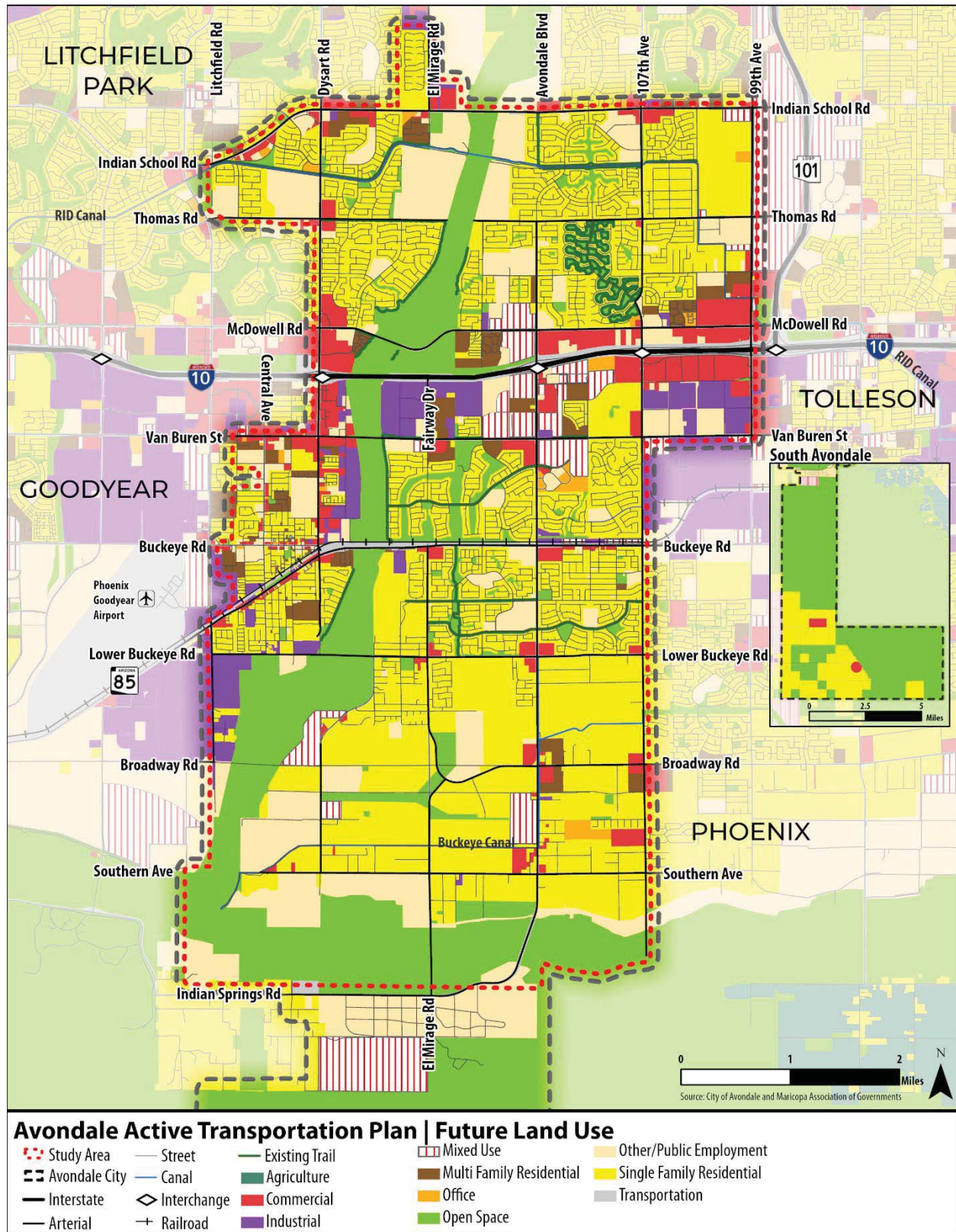


Figure 2-9: Future Land Use Map



DEMOGRAPHIC & SOCIOECONOMIC CONDITIONS

A thorough understanding of the existing and projected demographic and socioeconomic conditions in Avondale can help influence, determine and prioritize areas of Avondale where new or improved active transportation infrastructure should be considered. In addition, this analysis and inventory can aid the identification of active transportation user needs, behaviors and tendencies.

This section includes an inventory of various demographic and socioeconomic conditions which is summarized in Table 2-6.

Population & Jobs

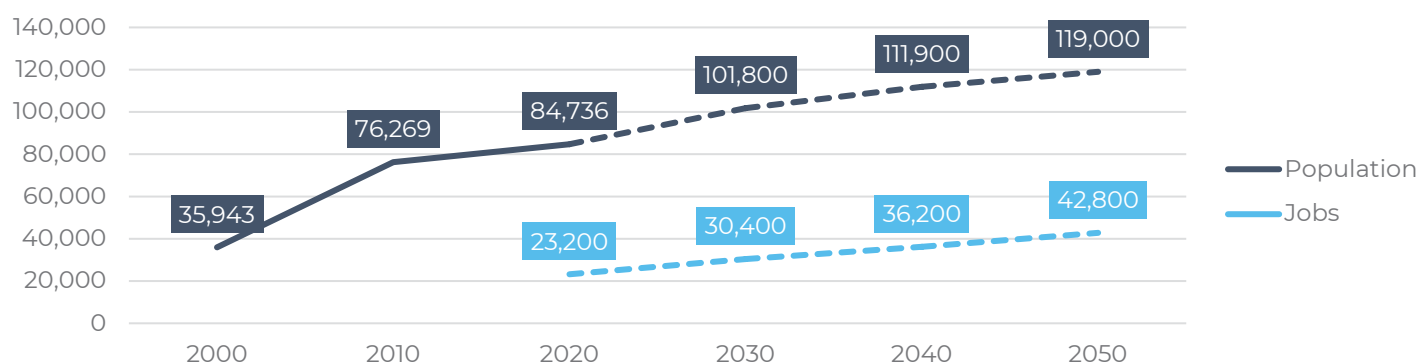
According to MAG, 84,736 people lived in Avondale in 2020 with a population of approximately 898 people per square mile with a median age of approximately 30 years old, substantially younger than the median age of 36 in Maricopa County.

Per MAG projections (**Figure 2-10**), the population is expected to reach approximately 101,800 in 2030, 111,900 in 2040, and 119,000 by 2050. Similar to much of metro Phoenix, Avondale experienced rapid growth between 2000 and 2010 with a total population increase of approximately 112 percent. Since 2010, the rate of population growth recessed some to 11 percent with an increase of 8,467 people from 2010 to 2020. Population in Avondale is expected to increase by around 20 percent between 2020 and 2030 and then begin to plateau thereafter with a population growth of 10 percent and six percent between 2030 and 2040, and 2040 and 2050 as the community nears build out.

As illustrated in **Figure 2-11**, the density of population throughout Avondale is fairly consistent within the MPA with the areas of highest density of population being near Old Town Avondale and few other residential areas north and south of I-10.

As of 2020, there were approximately 23,200 jobs within Avondale and MAG is forecasting a 31 percent increase in jobs, with the city reaching approximately 30,400 jobs by 2030. The rate of job growth is projected to slow with 36,200 jobs projected in 2040, a 10 percent increase from 2030 projections; and ultimately reaching around 42,800 jobs by 2050, a six percent increase from 2040. With the amount of population and employment growth expected to occur in Avondale over the next 20 to 30 years, now is the time to plan, prioritize and invest to incrementally develop bicycle and pedestrian facilities that will help Avondale become a premier community for livability and active transportation.

Figure 2-10: Population & Job Growth



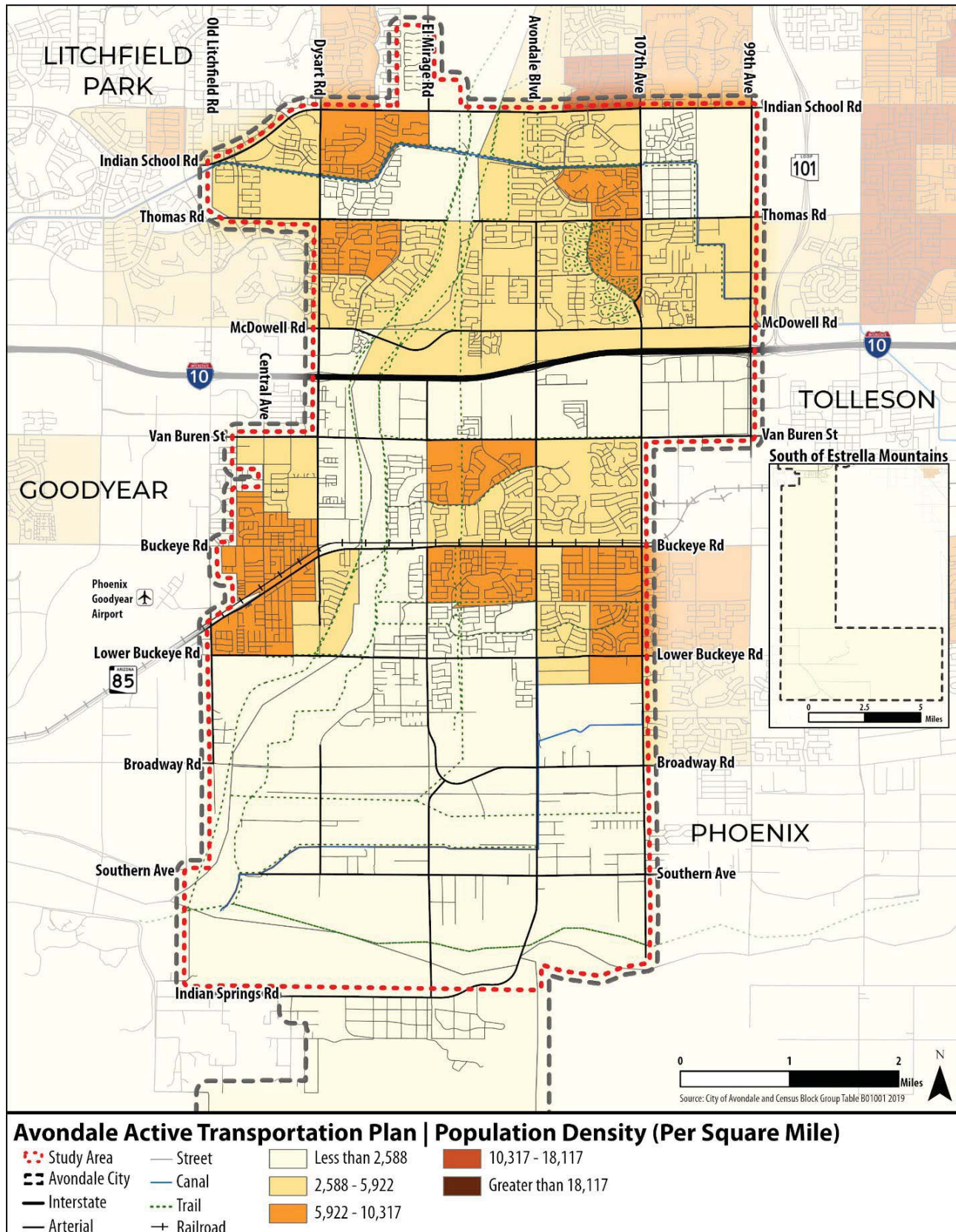
Source: Maricopa Association of Governments, 2020

Table 2-6: Demographic & Socioeconomic Conditions Summary

Demographic & Socioeconomic Conditions	City of Avondale	Maricopa County
Population		
Population	84,736	4,328,810
Population Density (per square mile)	897.72	469.39
Median Age	30.8	36.4
Housing & Households		
Median Household Income	\$61,825.00	\$64,468.00
Households	26,067	1,552,096
Renters	45.00%	37.80%
Mobile Homes	3.80%	4.50%
Families with Female Head of Household	18.08%	12.22%
Income Below Poverty	11.90%	12.11%
No-Vehicle Households	4.80%	5.94%
One-Vehicle Households	29.97%	35.33%
Title VI		
Minority (% of total population)	69.01%	44.76%
Age 65 and older (% of total population)	8.43%	16.09%
Age 17 and younger (% of total population)	30.57%	24.31%
Disability: Households with person(s) with a disability	10.40%	11.20%
Limited English Proficiency (% of population 5 and older)	11.30%	8.80%
Commuting		
Workers 16 years and older	39,960	2,040,912
Car or Truck - drive alone	78.69%	76.00%
Car or Truck - carpool	13.51%	11.00%
Public transportation	0.73%	2.00%
Bicycle	0.40%	0.80%
Walked	1.50%	1.50%
Other means (taxicab, motorcycle, etc.)	1.20%	1.70%
Work at home	7.70%	7.00%

Source: Maricopa Assortment of Governments and US Census Bureau, 2020

Figure 2-11: Existing Population Density Map



Housing

In 2020, approximately 26,067 households existed within Avondale at a median household size of 3.24 people and a median household value of \$215,100 dollars. The median household income in Avondale is \$61,802 dollars, slightly lower than Maricopa County average of \$64,498. The median household income is consistent across the City with the most affluent area being north of I-10. Refer to **Figure 2-12** for a map of Avondale with the median household income.

Title VI

To help inform the “Equity” component of the Six E’s throughout the study process, the following vulnerable populations groups were analyzed in Avondale:

- Minority Population
- Poverty Status
- Age 65 and older
- Age 17 and younger
- Disabled
- Limited English Proficiency

As noted in **Table 2-6**, approximately 69 percent of the population in Avondale is a minority which is higher than the Maricopa County ratio of nearly 45 percent. The percent of the population age of 65 or older is just over eight percent which is lower than the county’s 16 percent of the population; while the percent of the population age 17 and younger is around 30 percent which is higher than the county’s percentage of 24 percent. This means that Avondale has a much higher percentage of a younger population while the amount of older population is less when compared to Maricopa County as a whole. Refer to **Figure 2-13** and **Figure 2-14** for a map illustrating where the younger and older populations live within Avondale. Approximately 10.5 percent of the households within Avondale have at least one person with a disability which is slightly lower than Maricopa County at 11.2 percent. The percent of the population at the age of 5 and older with limited English proficiency in Avondale is over 11 percent which is higher than the County’s percent of 8.8 percent.

Zero-Vehicle Households

The percent of no-vehicle households in Avondale is roughly 4.8 percent which is lower than the County’s 5.9 percent. The no-vehicle ownership data shown in **Figure 2-16** reflects areas around Old Town Avondale and on the east boarder south of Buckeye Road having the highest percentage of households without access to a personal vehicle, equating to roughly one-fifth to over one-third of the households in those areas. Areas adjacent to I-10 and south of the railroad tracks along MC 85 also have a higher percentage of no-vehicle households than the County ranging from 11 to 20 percent of the homes in those areas not having access to a personal vehicle.

Existing Commuting Patterns

According to the 2020 US Census Bureau, an estimated 40,545 people in Avondale are employed that commute either within Avondale or to the surrounding areas. Refer to **Figure 2-17**, **Figure 2-18**, and **Figure 2-19** for maps of people who commute to work by either walking, biking or taking public transit.

Figure 2-12: Median Household Income Map

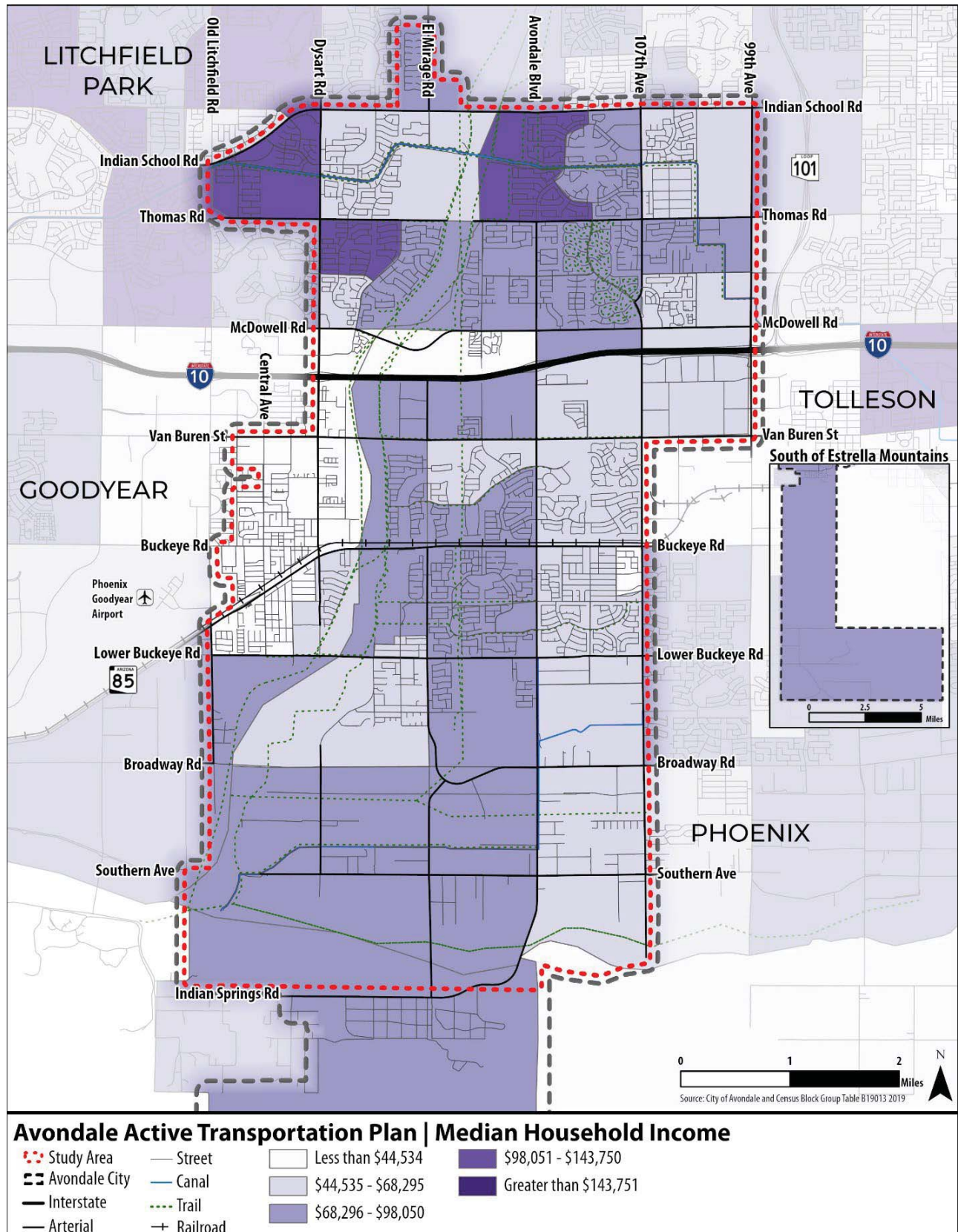


Figure 2-13: Population of 65 Years & Older Map

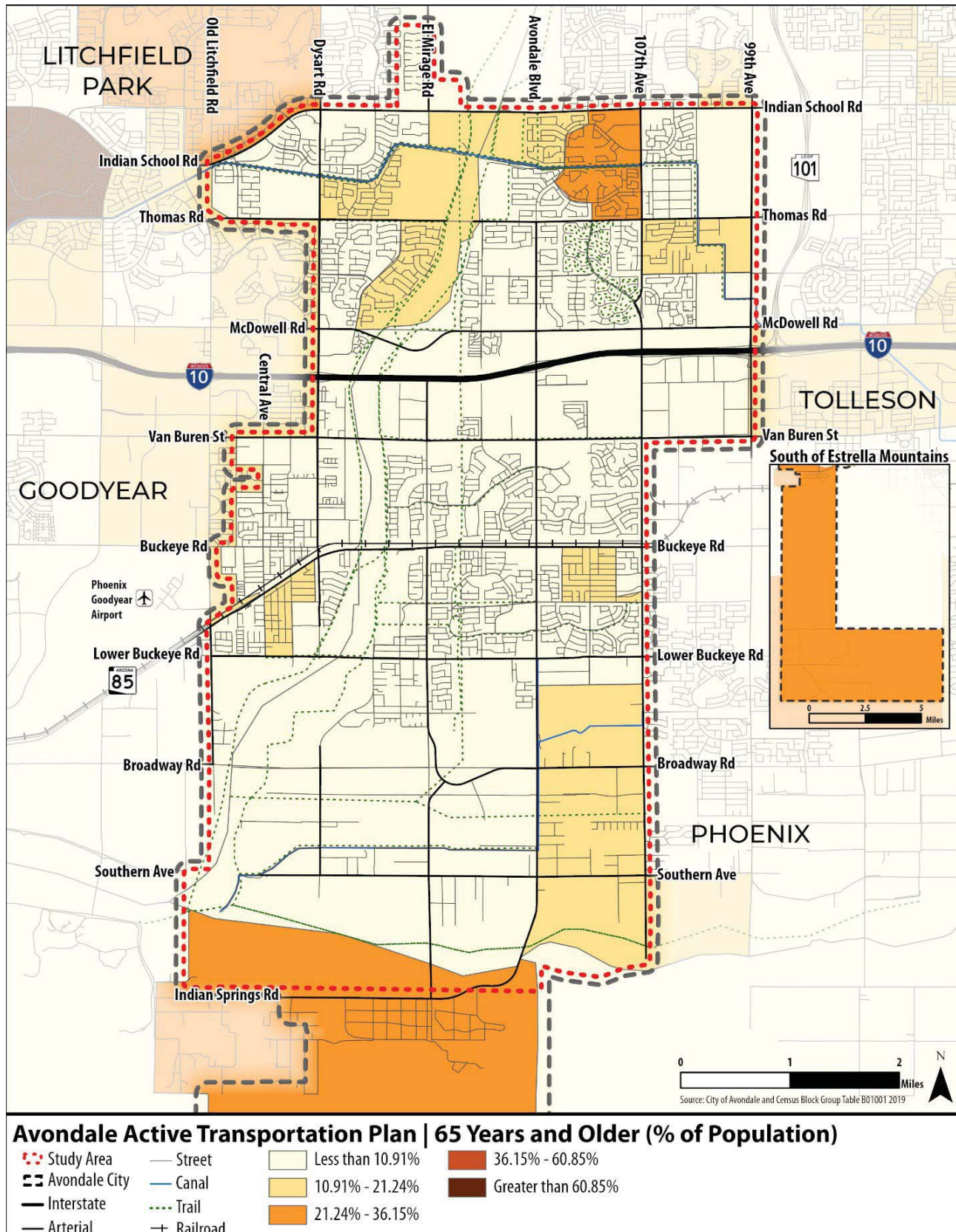


Figure 2-14: Population of 17 Years & Younger Map

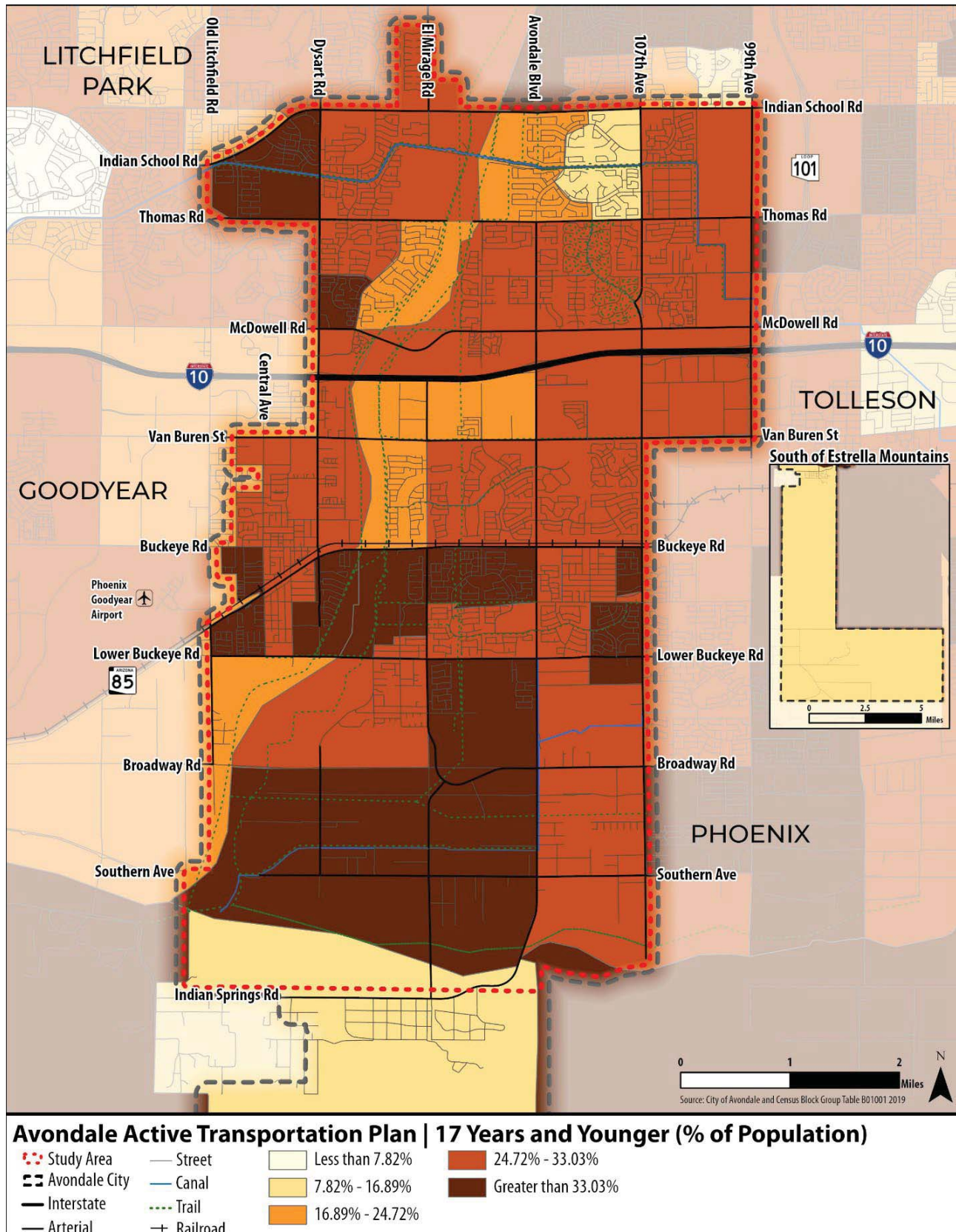


Figure 2-15: Poverty Map

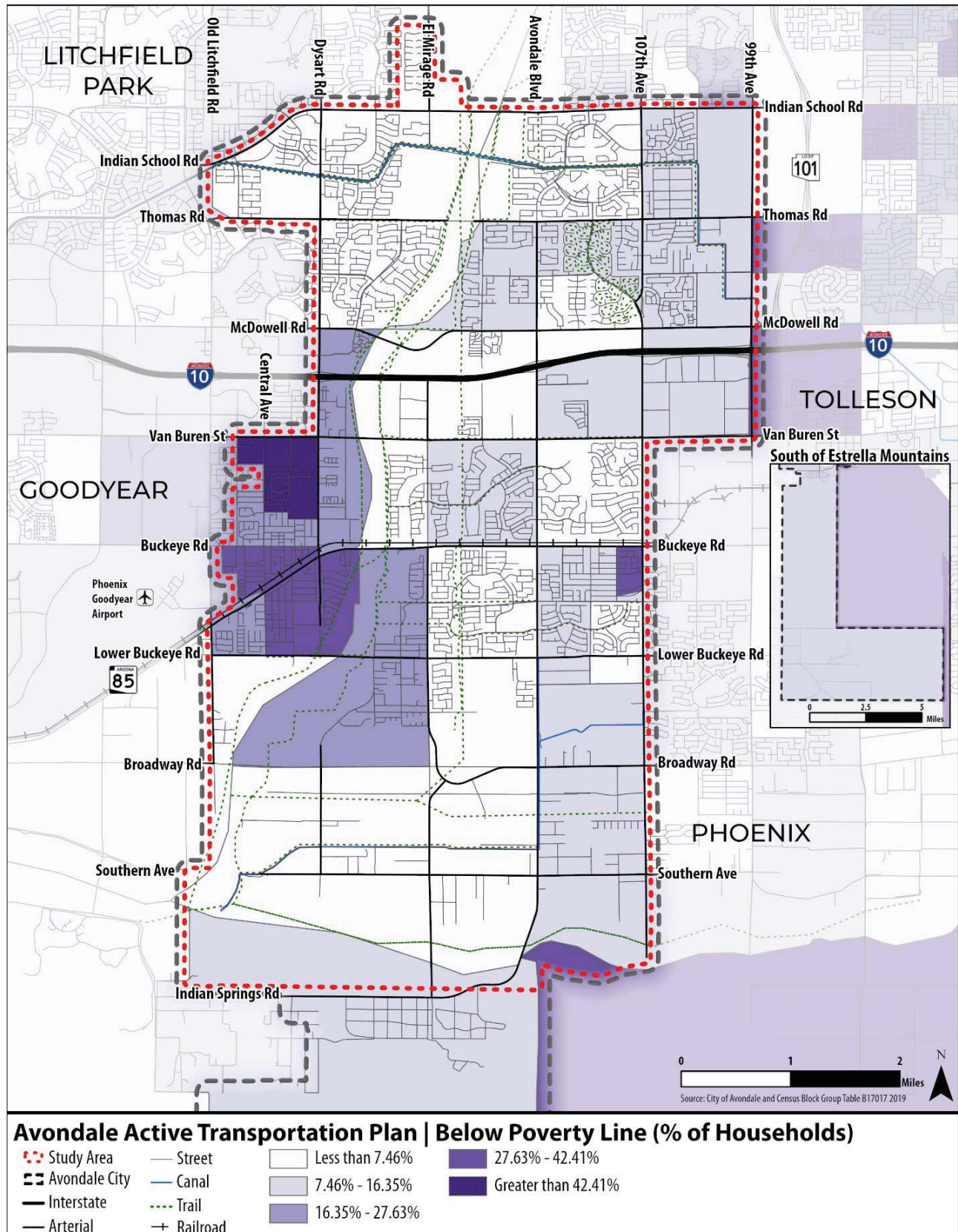


Figure 2-16: Zero-Vehicle Households Map

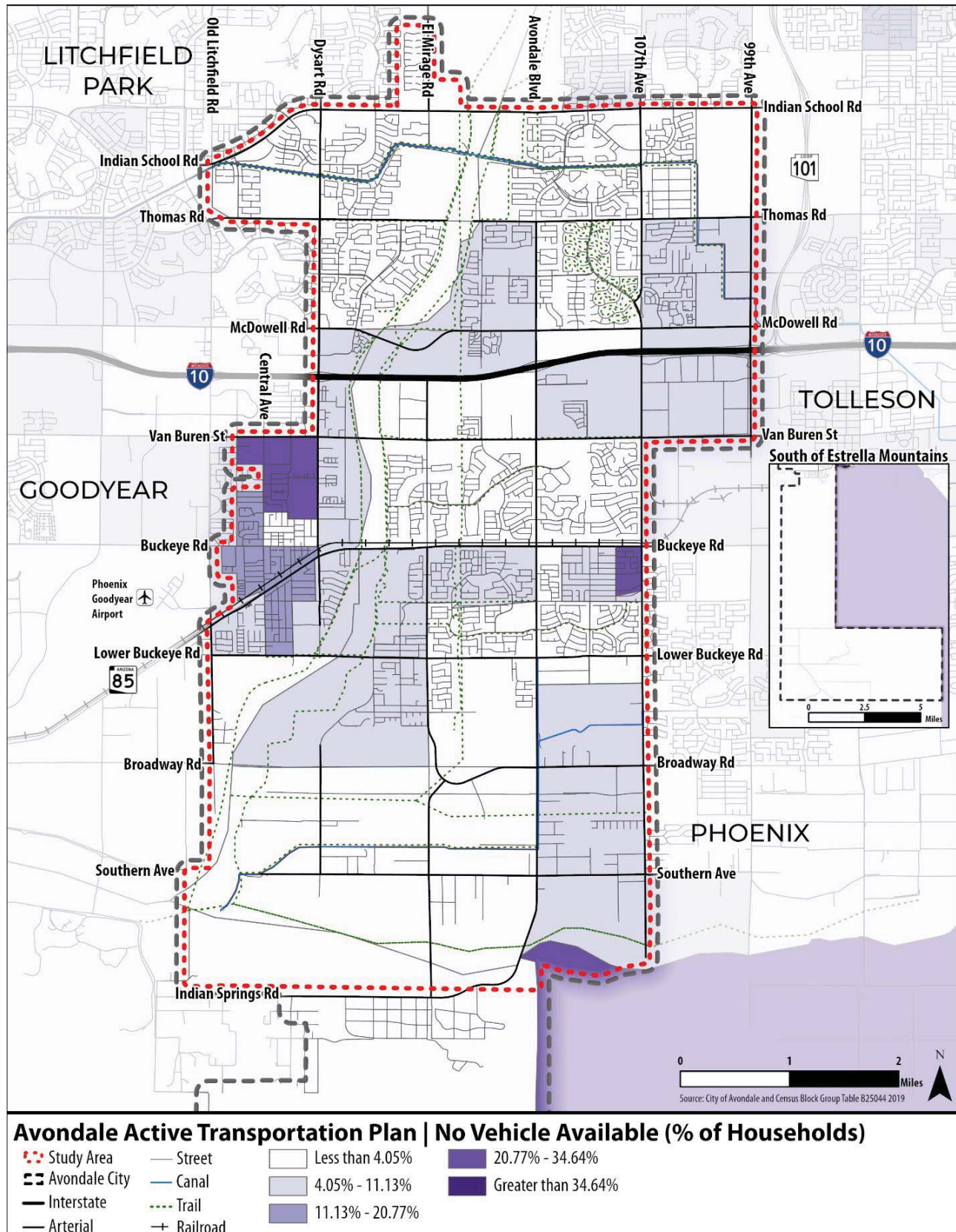


Figure 2-17: Percent of Population that Walk to Work Map

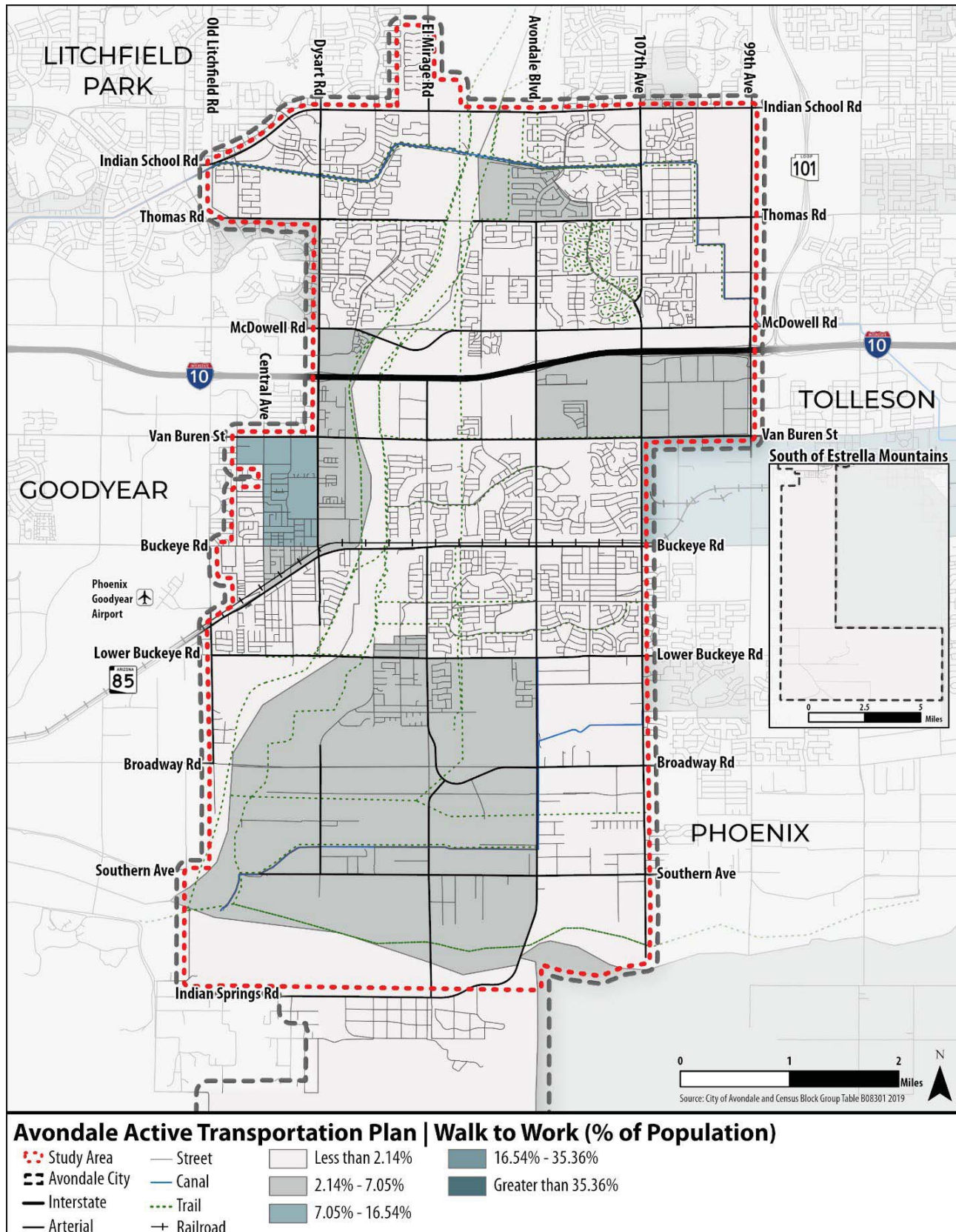


Figure 2-18: Percent of Population that Bike to Work Map

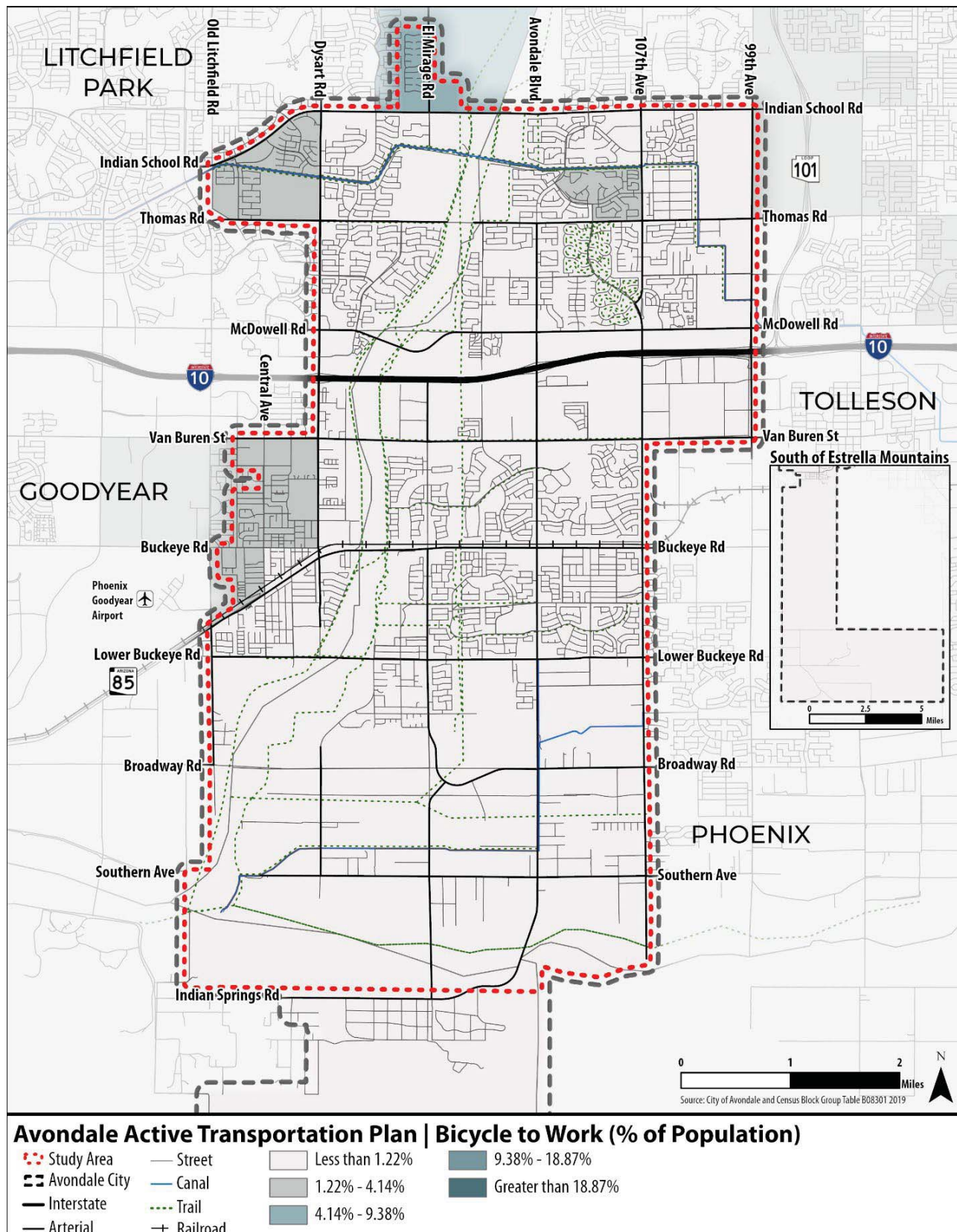
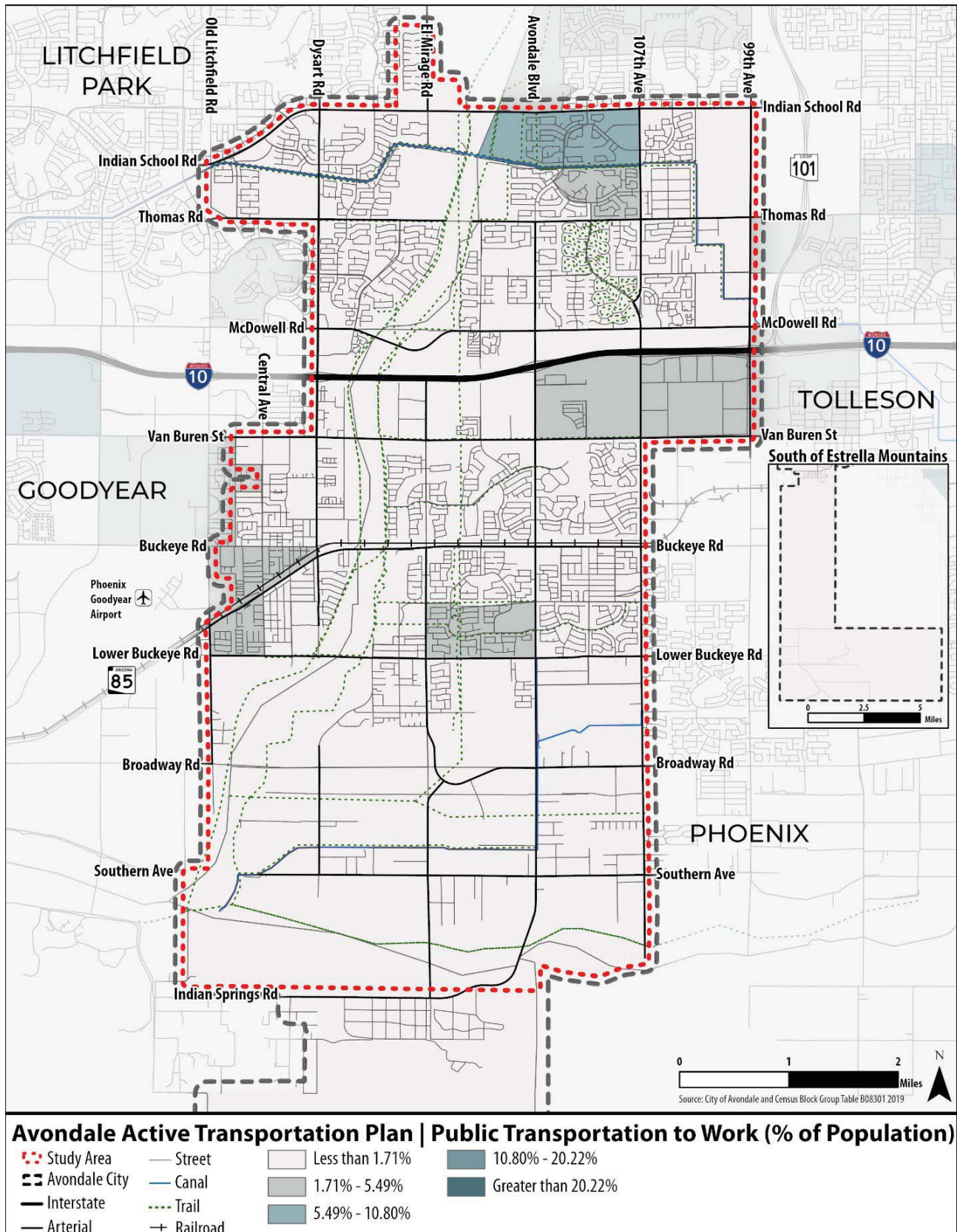


Figure 2-19: Percent of Population that take Public Transportation to Work Map



TRANSPORTATION NETWORK

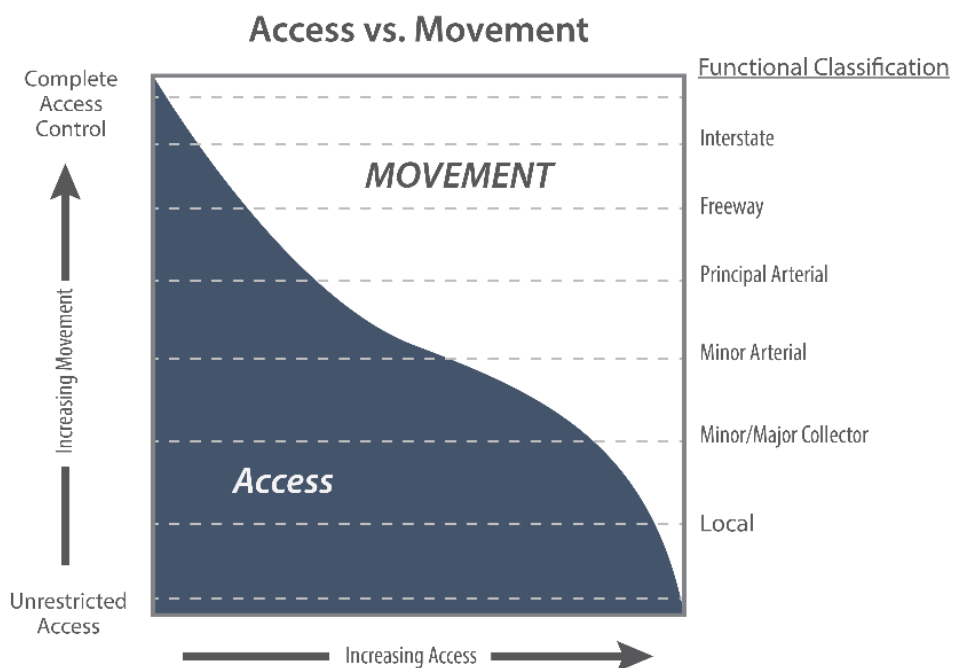
The existing and planned Avondale transportation network was reviewed taking an in-depth analysis of the existing roads, bikeways, sidewalks, and transit system within the Avondale MPA boundary. The existing transportation infrastructure helped guide the needed expansion of the proposed network and specific bicycle and pedestrian infrastructure improvements presented in *Section 4 – Project Recommendations*.

Existing & Planned Roadway Network

Roads provide for two distinct and competing functions: mobility and land access. As mobility increases, land access decreases and vice versa as shown in **Figure 2-20**. Both functions are vital, and no trip is made without both. Roads are functionally classified by the relative amounts of through and land-access service they provide, amounts of traffic they can support, and the distance of trips they facilitate.

Functional classification is used by the planners and engineers to establish a roadway's design standards, speed, capacity, access management features, and land use development. Functional classification also impacts a roadway's eligibility for federal transportation funds for roadway improvements and maintenance.

Figure 2-20: Access versus Movement Graphic



Per the Avondale's General Engineering Requirements Manual, there are four primary functional classifications, which include:

- **Interstates/freeway** facilities are provided to service long distance trips between cities and states. No land access is provided by these facilities – only via traffic interchanges.
- **Arterial/parkway** facilities are provided to primarily serve through-traffic movement. While some land-access service may be accommodated, it is clearly a minor function. All traffic controls and the facility design are intended to provide efficient through movement.
- **Collector** facilities, the "middle" classification, are intended to serve both through and land-access functions in relatively equal proportions. For long through trips, such facilities are usually inefficient, nevertheless they are frequently used for shorter through movements associated with the distribution and collection portion of trips.
- **Local** facilities primarily serve land-access functions. Local Street design and control facilitates the movement of vehicles onto and off the street system from land parcels. Through movement is difficult and is discouraged by both the design and control of this facility.

As noted in **Table 2-7**, of the total 395.2 linear miles of roads within the Avondale MPA, there are nine miles of interstates/freeways/state routes, 65.7 miles of arterial roads, 41.5 miles of collector roads, and 279 miles of local roads. This distribution of functionally classified roads is typical for a suburban community such as Avondale.

Table 2-7: Roadway Functional Classification

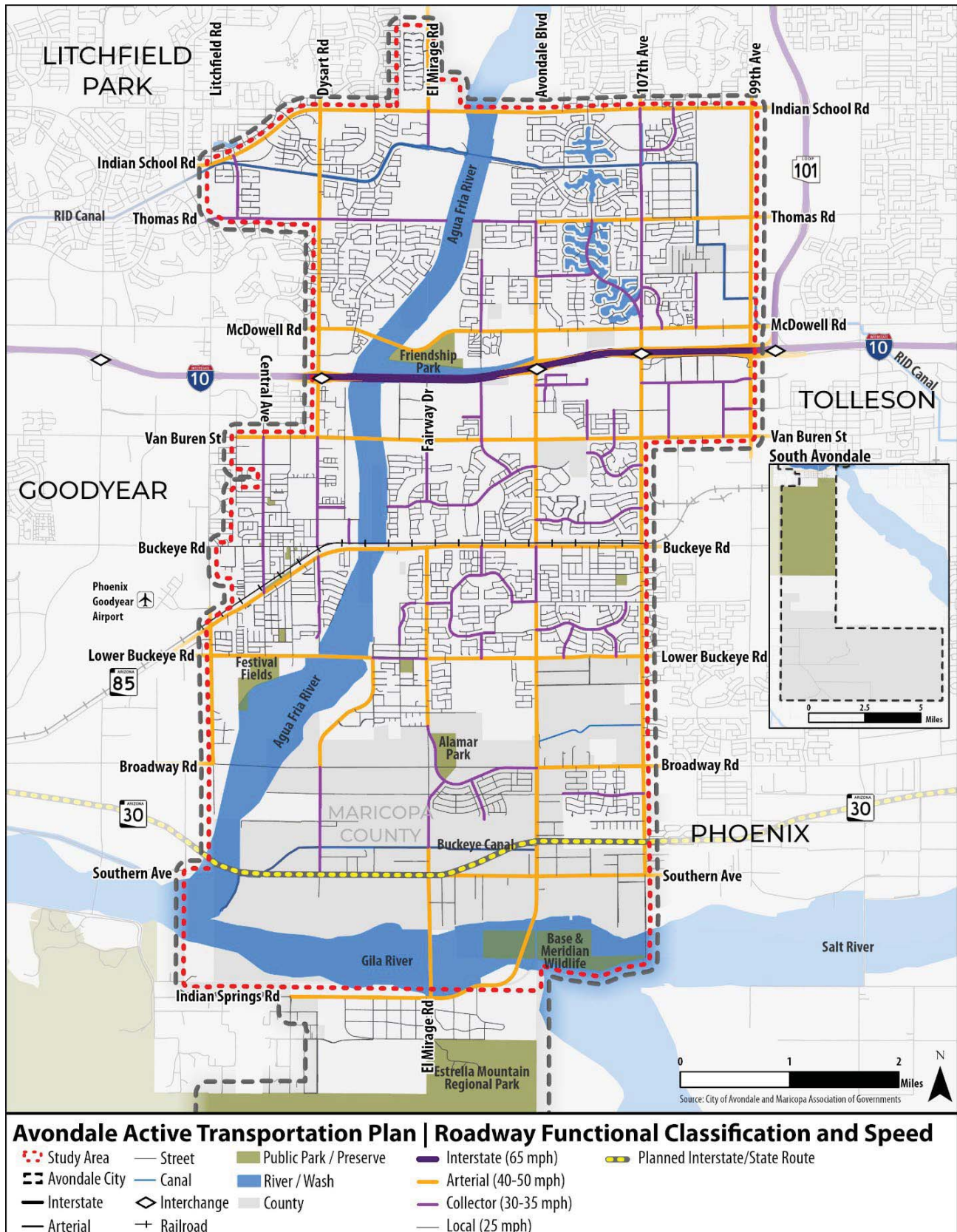
Functional Classification	Length (Linear Miles)
Interstate/State Route	9
Arterial	65.7
Collector	41.5
Local	279
Total	395.2

Illustrated in **Figure 2-21**, the interstate classified roadway facility in Avondale includes only I-10 which traverse the community east to west between 99th Avenue, and Dysart Road with traffic interchanges at 99th Avenue, 107th Avenue, Avondale Boulevard, Fairway Drive (partial access), and Dysart Road. I-10 has a speed limit of 65 miles per hour (MPH) throughout the entire length that spans through Avondale. Although no active transportation infrastructure will be planned or developed on I-10, it is important to understand how other surface streets – particular the arterial network – interface with the interstate to ensure safe crossings for pedestrian and bicyclists.

The arterial roadway network is an important street type to ensure adequate facilities for pedestrians and bicycles because they provide access to the highest variety of destinations; However, balancing the access and safety on arterial streets is a challenge between motorists and other users of the roadways. The north-south arterial roads within Avondale include Dysart Road, Fairway Drive/El Mirage Road, 99th Avenue, Avondale Boulevard and 107th Avenue. The major east-west arterials are Indian School Road, Thomas Road from 99th Avenue to Avondale Boulevard, McDowell Road, Van Buren Street, Buckeye Road, Lower Buckeye Road, Broadway Road from 99th Avenue to Avondale Boulevard, and Southern Avenue. The speed limit on the arterial network ranges from 40 to 50 mph. Collector roadways offer a balance of mobility and access, and for this reason, they provide some of the ideal conditions for bicyclists and pedestrian due to the increased level of access when compared to local roads, and the reduced speed limits and vehicular traffic volume when compared to arterial roads. Collectors tend to lie on the midsection line while arterial roads fall on the section lines; However, some roads on the section line are classified as collectors, such as Thomas Road from Avondale Boulevard to the west MPA boundary (no bridge crossing over the Aqua Fria River), 107th Avenue from McDowell Road to Indian School Road, and Dysart Road south of Van Buren Street. Another primary collector road includes Central Avenue in the Old Town Avondale area.

The balance of the roadway network includes local roads which are typically two-lane facilities that include on-street parking at times. Local roads provide the highest level of comfort for pedestrian, bicyclists, and other active transportation users due to the lower speed limits and vehicular traffic volumes. However, since the speed limits and traffic volumes are lower, there are often not very wide sidewalks and typically no dedicated bike facilities are located on local roads.

Figure 2-21: Roadway Functional Classification Map



State Route 30

As shown in **Figure 2-21**, the only future roadway not yet constructed within the Avondale MPA is State Route 30 (SR-30) which is currently in the planning process. In April 2020, The Arizona Department of Transportation (ADOT) released the Final Location/Design Concept Report (L/DCR) for SR-30 which included the selected alternative/alignment. In November 2020, the Final Environmental Assessment and Finding of No Significant Impact (FONSI) was issued, resulting in the selected alternative to move forward to the next study phases and future implementation process.

The purpose of SR-30 is to alleviate traffic congestion on I-10, often referred to as the “I-10 reliever”. The future facility is located approximately 4.5 miles south of I-10 and will run parallel to I-10 for about 13 miles (5 miles within Avondale). The ultimate configuration of SR-30 is expected to be 10 lanes – four travel lanes and one high occupancy vehicle (HOV) lane in each direction – with the mainline predominately having an at-grade profile with the freeway crossing over the crossroads. Each arterial crossroad was evaluated on a case-by-case basis to determine the need for an interchange. The L/DCR identifies potential traffic interchanges within Avondale to include 107th Avenue, Avondale Boulevard, El Mirage Road, and Dysart Road.

Bicycle and Pedestrian Considerations: Bicycle and pedestrian facilities in the corridor generally fall into two categories – those that fall on the arterial roadways and those that have dedicated trails or paths. The intent of the SR-30 corridor is to perpetuate and/or accommodate all existing and planned bicycle and pedestrian facilities that cross the SR 30 corridor.

Along the arterials, each City’s ultimate planned cross sections (according to the Cities’ general plans and roadway classification maps) is accommodated at each crossing. If the City’s section includes space for sidewalks, paths, or bike lanes, that space is perpetuated through the planned freeway crossing.

Existing and planned trails and pathways also cross the SR 30 corridor. Many of this follows or are planned to follow other existing features such as canals, washes, rivers, and powerlines. Since SR 30 must cross each of these elements, it is the intent that the existing or planned trails and pathways that would cross SR 30 would also be spanned to preserve the continuity of the trail or pathway. Additional coordination will be needed during final design with the local agencies on how to accommodate all the bicycle and pedestrian facilities crossing the corridor. It should be noted that no trail or pathway is included in and along the SR 30 corridor.

It is important to note that House Bill 2685 (Proposition 400) was vetoed by the Governor in July 2022, and as a result, the SR-30 and other major highway/roadway projects are currently on-hold until further notice and/or supplemental funding sources are identified.

State Route 30 Active Transportation Conceptual Plan

As previously noted, MAG in partnership with the ADOT have been studying the SR-30 proposed freeway. The project spans about 13 miles and roughly follows the Rio Salado and the Lower Gila River. During the development of this Plan, MAG kicked-off the SR-30 Active Transportation Conceptual Plan which is aiming at developing a strategy and conceptual plan to integrate active transportation infrastructure and routes along the proposed SR-30 corridor as well as routes that intersect with the proposed facility.

In September, 2022, MAG closed a survey that to help develop a vision for alternative transportation options along future SR-30 corridor. Survey results would help inform development of a vision and conceptual plans for an active transportation facility alongside SR-30.



Existing Bikeways

Bicycling is an essential component of any transportation system and yields benefits in numerous ways including health, economics, environment, and equity. As Avondale has grown over the last two decades, the City has made steady progress in providing bicycle facilities along its maintained arterial and collector roadways.

Location & Types of Bicycle/Multi-Use Facilities

As shown in **Table 2-8**, there are 92.3 centerline miles of bike lanes and routes and 1.5 miles of paved shoulders within Avondale. In addition, there are 34.5 miles of multi-use paths that are either paved or unpaved. As illustrated in **Figure 2-22**, bike lanes and routes are primarily located on arterial and collector streets. Multi-use paths are largely constructed as part of the various master planned communities. Other multi-use paths are located along the Agua Fria River and the Roosevelt Irrigation District (RID) Canal.

Table 2-8: Existing Bicycle & Multi-Use Facilities

Bikeway Facility Type	Length (Miles)
Bike Lane Miles	88
Bike Route	4.3
Multi-Use Path – Paved	20.5
Multi-Use Path – Unpaved	14
Paved Shoulder	1.5
Recreation Trails	23.7
Total	152

Source: Maricopa Association of Governments, 2020

Currently, Avondale's General Engineering Requirements Manual does not contain specific design guidelines for bicycle facilities and only notes that all arterial and collector roads are required to include a bike lane. For the purposes of the active transportation inventory, typical bicycle facilities available in the Avondale ATP study area include:

- **Bike Lane** – striped lane (4 ft or wider) with pavement markings and a designated buffer space separating the bike lane from motor vehicle travel lanes. Facilities may have curb and gutter present or a flush shoulder (the gutter pan may be included in the 4 ft width).
- **Bike Route** – signed, shared roadway without pavement markings that provides shared use for bicyclist and vehicles.
- **Paved Shoulder** – wide shoulder adjacent to the roadway that provides a functional space for bicyclists to travel. Typically, does not have curb and gutter.
- **Multi-Use Path** - bidirectional pathway (8 ft or wider) that is physically separated from motorized vehicular traffic by an open space or barrier. Multi-use paths may be used by pedestrians, bicyclists, skaters, wheelchair users, joggers and other nonmotorized user.

Regional Bikeway Networks

Regional bicycle networks help to resolve complex, interrelated issues concerning traffic congestion, air quality, public health, and livability. Avondale's bicycle network is supported by a larger, regionwide network of bicycle facilities that has been partially developed and is maintained by the numerous municipalities and agencies in the region. Collectively, this regional bicycle network consists of a combination of bike lanes, bike routes, paved shoulders, and multi-use paths. While the network is vast and far-reaching, Avondale has a tremendous opportunity to collaborate with neighboring jurisdictions to expand the region's bicycle network through the current canal network and the Agua Fria and the Salt/Gila River corridors.

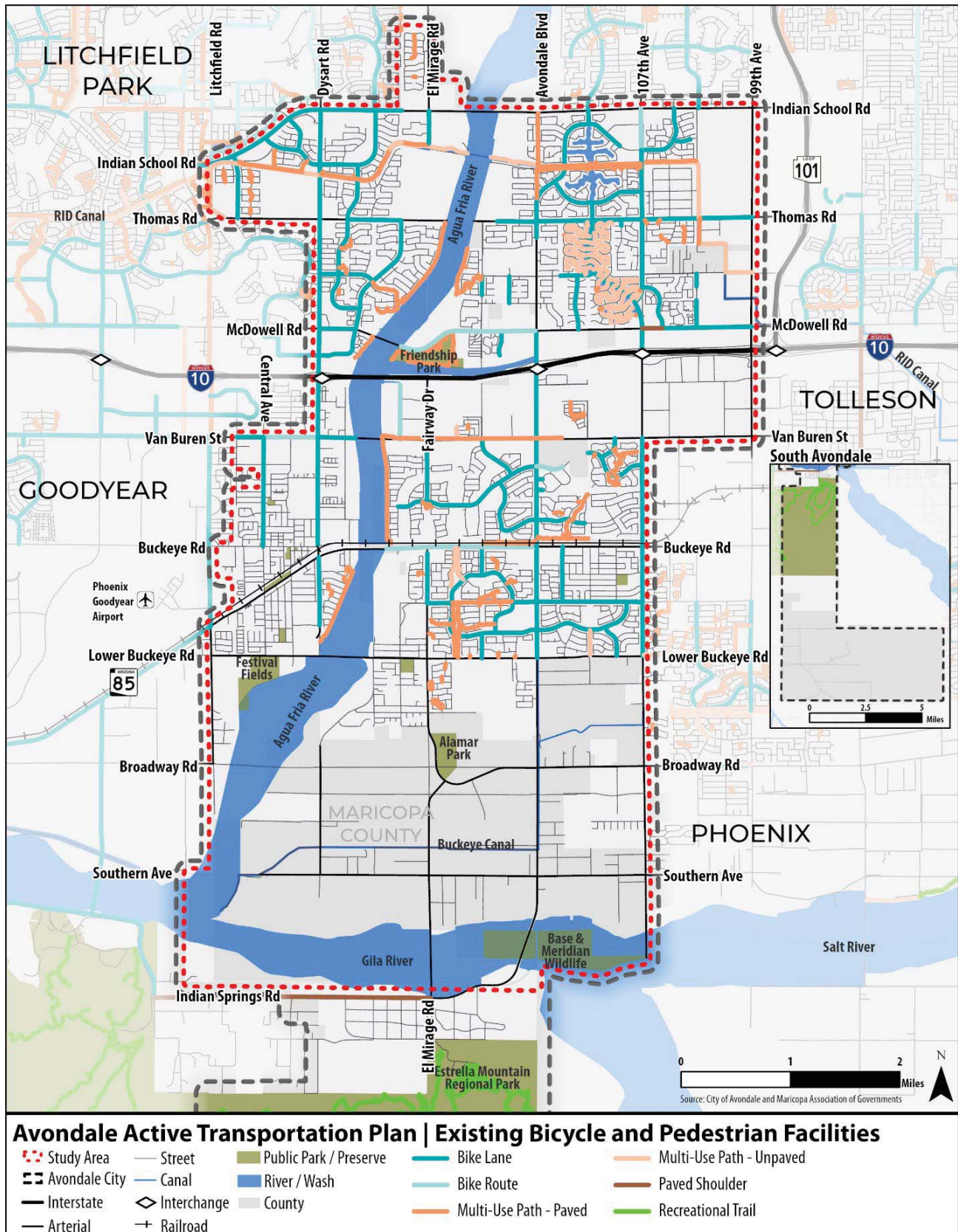


Off-Street Paths and Trails

When bicycle and pedestrian facilities are connected to recreational areas they act as an extension of the transportation system. Connecting parks, open spaces and other recreational facilities via bicycle and pedestrian facilities is a way to make parks and open spaces more accessible and provide a safe and convenient means for residents to explore the recreational system. Off-street paths and trails are open to bikers, walkers, hikers, runners, and often equestrians. **Figure 2-22** illustrates the locations of major local and regional trails.



Figure 2-22: Existing Bicycle & Multi-Use Facilities Map



Examples of Bicycle & Multi-Use Facilities



Dysart Rd

Bike Lane

- Striped lane with pavement markings and signs that designate an exclusive lane for bicycle use.
- Typically 5-6 ft or greater in width.



McDowell Rd

Buffered Bike Lane

- Increases riding space and comfort by adding a painted buffer to a standard bike lane.
- Typically 5-6 ft or greater in width.



Dysart Rd

Bike Route/ Shoulder

- Route where the travel lane is shared by drivers and bicyclists.
- Shoulders on the edge of pavement can be widened and enhanced to allow bicyclists more separation from vehicles.



Central Ave

Protected Bike Lane

- Like sidewalks for bikes, these facilities use physical dividers (such as bollards, medians, raised curbs, armadillos, and planters) to separate bike lanes from both cars and sidewalks.



Del Rio Ranch Path

Multi-Use Path

- Off-street facility dedicated exclusively for nonmotorized travel that can be paved or unpaved.



Estrella Mountain

Recreational Trail

- Like multi-use trails, hikers, bicyclists, and horses share the dirt on these off-street recreational trails, the main difference is these meander open space and don't connect to urban destinations.

Bike Lane Conditions

From field verification and aerial review, an inventory of the existing conditions of the bike lanes to help inform recommendations and identify deficiencies was conducted.

As illustrated in **Figure 2-23**, approximately 7 percent of the bike lanes in Avondale have some level of barrier or buffer between bicyclists and motorists. The existing buffered bike lanes are along Garden Lakes Parkway and two short segments at the intersection of McDowell Road and 107th Avenue. Central Avenue has a protected bike lane with a physical landscaped median between the travel lane and the bike lane. The majority of the arterial roads with bike lanes do not have a buffer, and with the typical traffic volume and speeds they support, they are prime candidates for improved bike lanes with a buffer.

The on-street bike lanes range in width from 5 ft to 8 ft, as shown in **Figure 2-24**. Over 70 percent of the bike lanes in Avondale are 5 ft wide and almost 30 percent are 8 ft wide. The minimum width of a bike lane is 4 ft, meaning the majority of the bike lanes in Avondale are generally regarded as sufficient and similar to conditions throughout other comparable cities but could be widened for enhanced comfort and increased safety of cyclists. More than 97 percent of the roads with bike lanes have them included in both directions. Avondale Boulevard from McDowell Road to I-10 only has a bike lane in the northbound direction largely due to the undeveloped parcel on the west side of the roadway.

Bikeway Network Gaps

The existing bicycle network facilities are scattered and lack connectivity in some areas of Avondale, limiting their function to the community. The on-street bicycle facilities are often isolated and missing mode separation safety features. As for the off-street facilities gaining traction, linear parks which extend along local waterways and provide access to green space and connectivity away from traffic. Although Avondale does have some facilities and potential to grow, there are still areas in portions of Avondale that lack any bikeway facility.



As shown in **Figure 2-25**, there is considerable opportunity for new on-street bike facilities. In fact, almost 45 miles (roughly 41 percent) of arterial and collector roadways do not have any on-street bike facility. Some of the primary arterial roads with gaps in the on-street bike facility network include:

- Indian School Road from 99th Avenue to El Mirage Road;
- Thomas Road from Litchfield Road to Santa Fe Trail;
- McDowell Road from Rancho Santa Fe Boulevard to Harbor Shore Boulevard; and
- Van Buren Street from Central Avenue to Dysart Road, on the Agua Fria River bridge, and from Avondale Boulevard to 99th Avenue.

Figure 2-23: On-Street Bike Facility Types Map

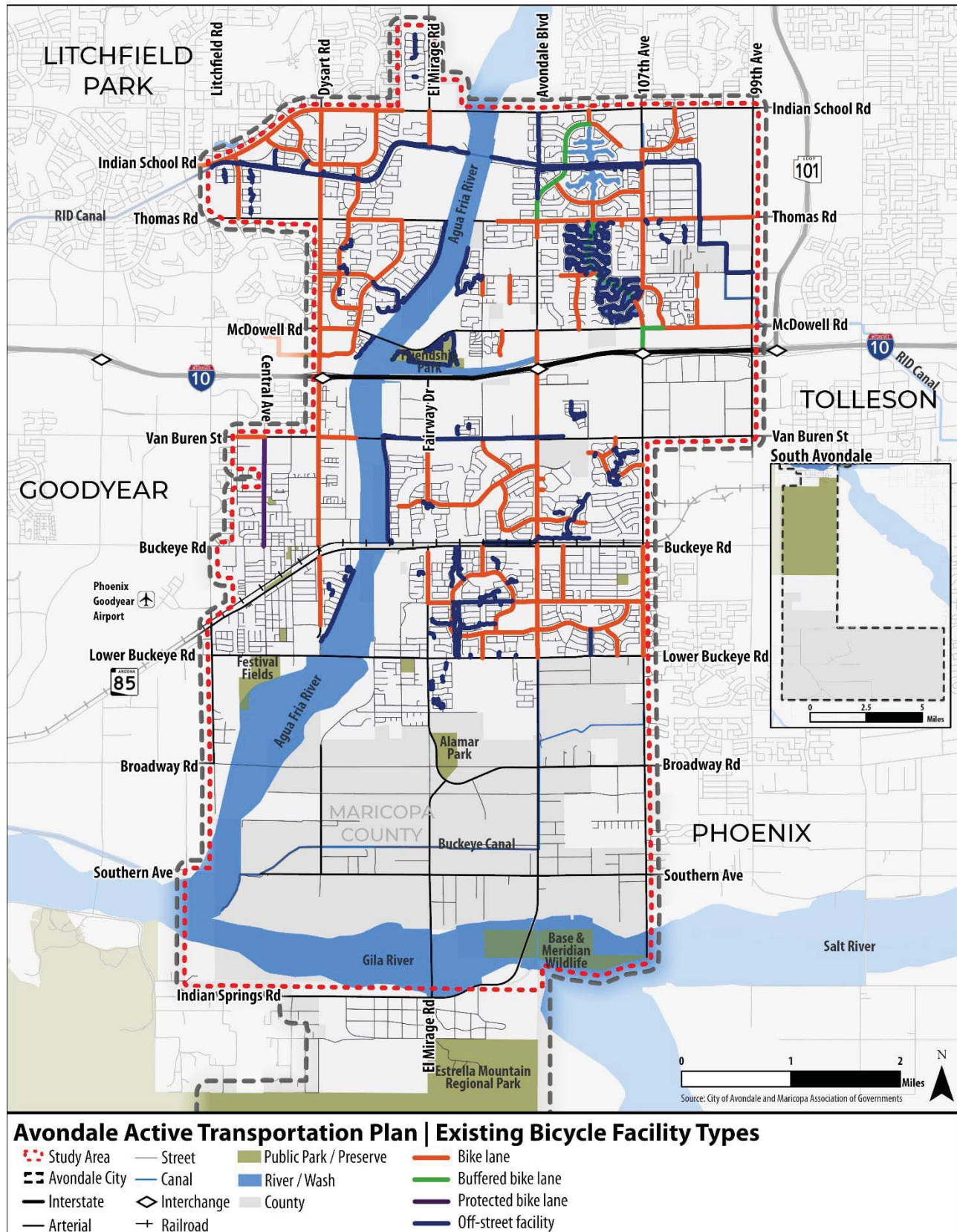


Figure 2-24: On-Street Bike Facility Widths Map

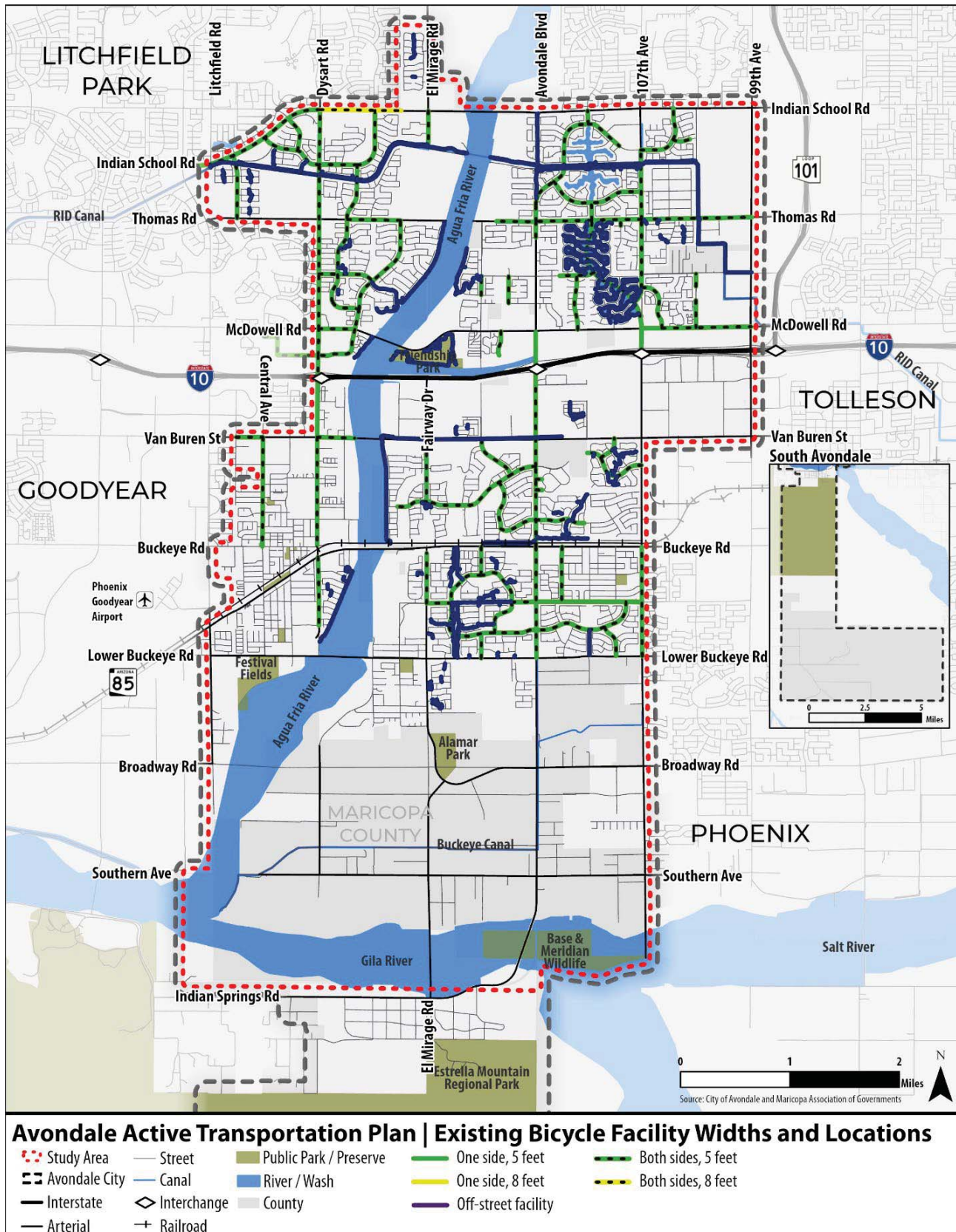
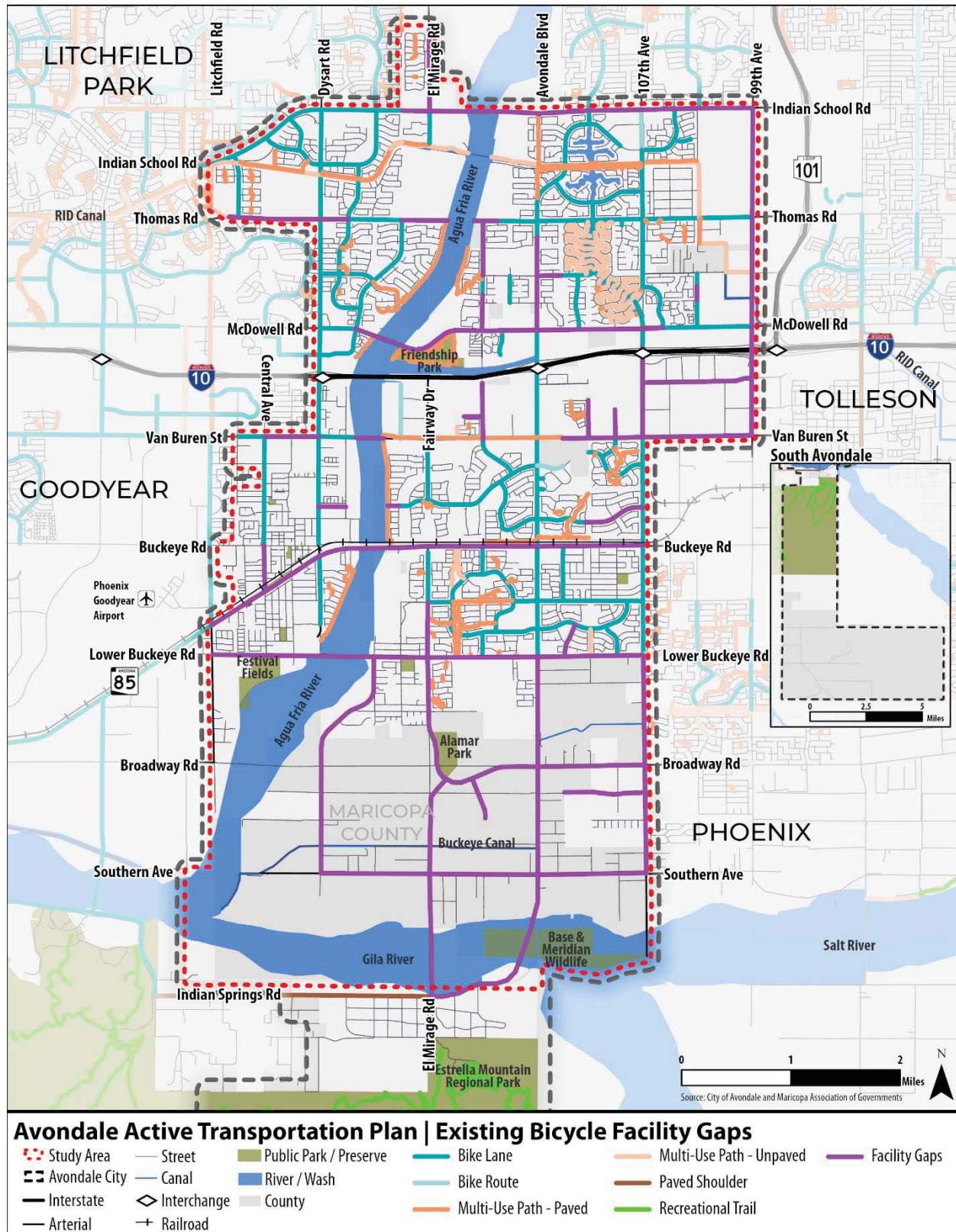


Figure 2-25: Bicycle & Multi-Use Facility Gap Map



Existing Sidewalk Facilities

Sidewalks provide a place for people to walk for commuting or recreational purposes; they are especially important for providing independence to the mobility impaired or persons without access to a vehicle. In addition to sidewalks, pedestrian facilities such as crossings, curb ramps, curb extensions, traffic calming features, and other improvements help create a more comfortable walking environment. In order to understand the walking environment in Avondale, an extensive mapping exercise and inventory of sidewalks was conducted. Currently,

The vast majority of Avondale planned residential communities have sidewalks on both sides of street; However, as illustrated in **Figure 2-26**, there are locations of where sidewalks existing on one side of the road or not all. Sporadic corridor and business development has caused gaps in Avondale's existing pedestrian network, which creates barriers to pedestrian travel. Currently there are:

- 243.6 miles of roadways with sidewalks on both sides of the road;
- 34.4 miles of roadways with sidewalks on one side of the road; and
- 67.4 miles of roadways with no sidewalks at all.



Intersection Traffic

To complete the pedestrian network, sidewalks are supported by a collection of facilities to create a more visible, navigable, and enjoyable walking experience. Facilities include signage, crosswalks, curb ramps, median refuge islands, overpasses, and signalized pedestrian crossings. At signalized intersections, it is essential that are signals phased and timed to allow pedestrians of all abilities to cross the roadway, including those who are typically slower (children, senior citizens, people with limited mobility). At the same time, signal delay must be minimized to reduce the amount of illegal and unsafe crossing that occurs when pedestrians get impatient waiting for the signal to change.

Sidewalk Widths

Figure 2-27 illustrates the widths of all existing sidewalks. Avondale's General Engineering Requirements provides standards for sidewalks, which includes:

- Arterial Streets: 6 feet detached sidewalks (except for adjacent to a school, which requires 10-foot detached sidewalks), two bicycle lanes,
- Collector Streets: 6-foot detached sidewalks and striped bicycle lanes. For industrial collectors, sidewalks may be attached, and bike lane markings may be deleted with the City Traffic Engineer's approval.
- Local Streets: 5feet wide detached sidewalk
- Sidewalks abutting schools require a minimum width of 10 feet. Sidewalks along designated safe routes to schools may be required to have wider than minimum width as directed by the City. Additional right-of-way or a sidewalk easement may be required to accommodate the extra width sidewalk.

Examples of Sidewalks & other Pedestrian Facilities



Avondale Blvd



Garden Lakes Pkwy

Arterial Road Sidewalks

- Pathway along major travel routes with high vehicle volumes.
- Intermediate and long-distance travel.
- Access to many destinations.
- Typically 5-6 ft or greater in width.

Collector Road Sidewalks

- Pathway that connects residential and commercial areas to arterials with medium to low vehicle volumes.
- Typically 5-6 ft or greater in width.



Granada Rd



107th Ave

Local Road Sidewalks

- Pathways on low volume roads that provide local access to homes, business, schools, etc. Low vehicle speeds.
- Usually includes a combination of standard and rolled curbs.
- Typically 4-5 ft in width.

Buffered Sidewalks

- Pathways offset from a roadway by a landscape, rock, or natural buffer. In this case, the striped bike lane also adds to the sidewalk buffer.
- Most suitable on roads with high speeds and traffic volumes.



Avondale Blvd



Van Buren Street

Curb Ramps and Shade Structures

- Curb ramps provide a detectable warning for physically impaired pedestrians.
- Decorative crosswalks and shade are amenities that offer a more comfortable experience for walkers.

Crosswalks

- Crosswalks improve the visibility of pedestrians walking across a road.

Figure 2-26: Existing Sidewalks Map

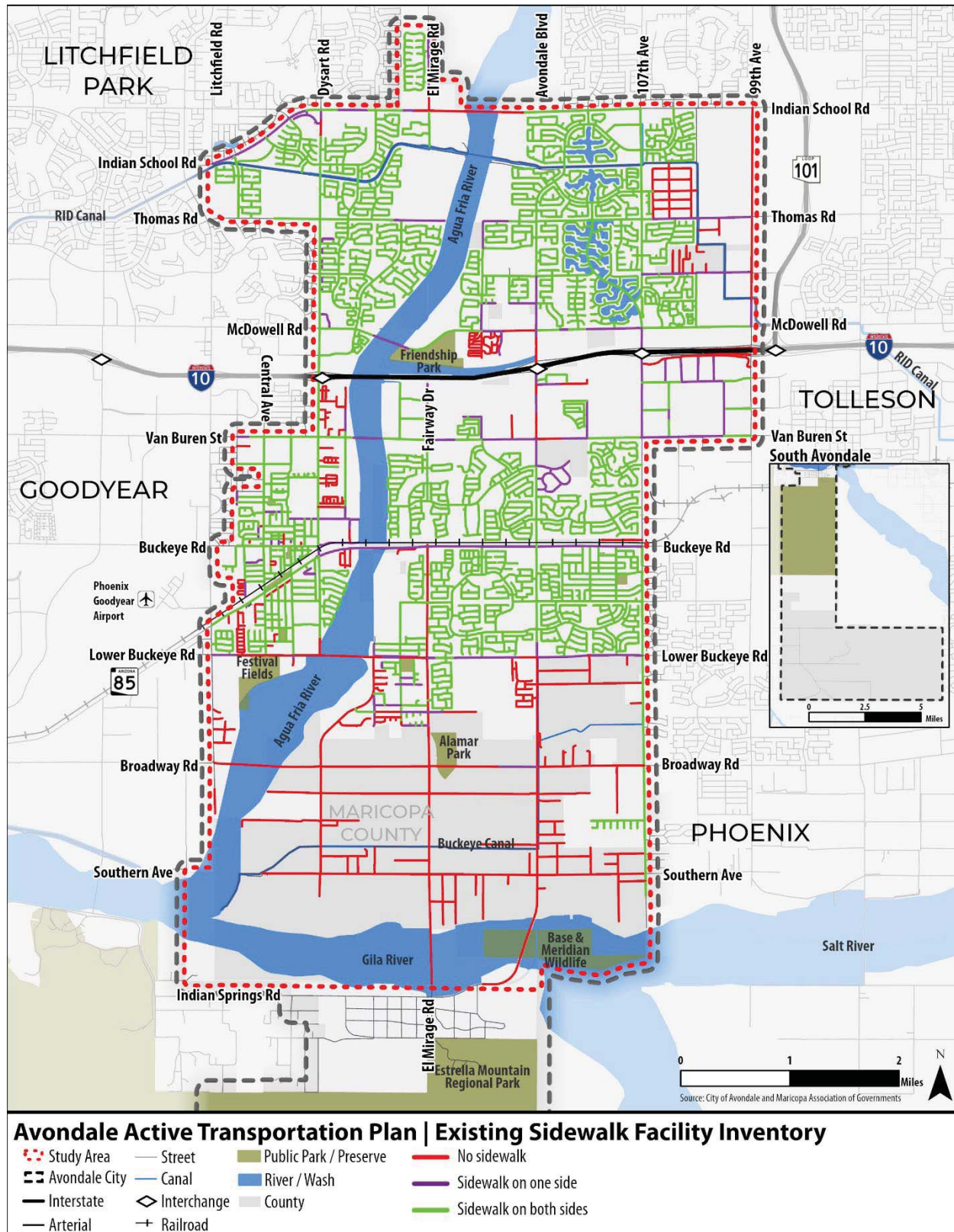


Figure 2-27: Existing Sidewalk Widths Map



TRANSIT SERVICES

Understanding the location of transit routes and stops is critical when developing a walking and biking network, because almost every transit trip begins or ends with walking and/or biking. Often people who could potentially utilize transit choose to drive because no transit stops are conveniently located near their starting points or final destinations. Establishing walking and biking facilities along “first and last mile” paths expands a person’s transportation choices by making transit more accessible. Integrating active transportation networks and transit helps to create a balanced and efficient multimodal transportation network that makes transportation affordable, convenient, and flexible for all users regardless of their age, ability, or socioeconomic status.

As shown in **Figure 2-28**, there are four types of transit services available provided by Valley Metro, the regional transit authority in the Valley:

- **ZOOM:** a local neighborhood circulator system that connect residential areas to major destinations and the regional transit network. All ZOOM vehicles are wheelchair accessible and include bicycle racks. A one-way fare costs rider \$0.50.
- **Fixed Route:** three fixed-routes – Routes, 3, 17, and 41 - operate in Avondale primarily along arterial roads including Van Buren Street, McDowell Road, and Indian School Road. Service hours and frequency vary by route, as well as the condition of bus stops.
- **Express bus:** one express bus routes – route 563 - provides peak hour service to and from downtown Phoenix during the week.
- **Rural Connector:** the Ajo Express – Route 685 – provides transit service between downtown Phoenix and rural community of Ajo southwest Arizona.

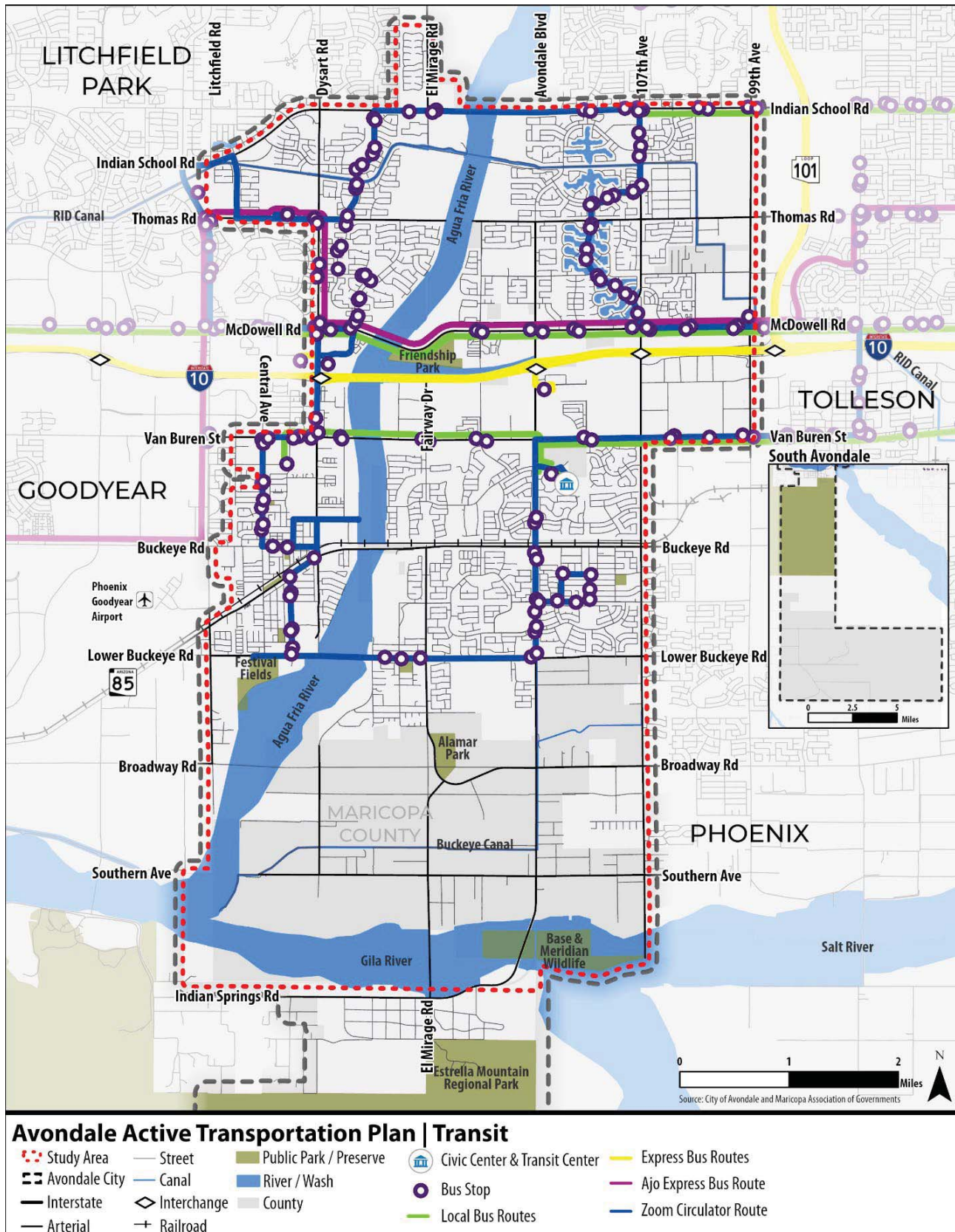
Bus Stops

Bus stops provide a safe boarding location for passengers while each route provides options for Avondale residents and visitors to access nearby and regional destinations. Typically bus stops are located at one-quarter mile intervals for convenience.

In 2017, Valley Metro conducted a bus stop inventory to determine what types of facilities are present at each stop. Data developed by Valley Metro was verified and updated to reflect existing conditions in Avondale. Within the study area, there are 124 bus stops with varying amenities. Typical facilities found within the study area include:

- **Bus Shelters:** 34 bus stops are sheltered.
- **Bicycle Racks:** 2 bus stops are equipped with bicycle racks.
- **Benches:** 35 bus stops have benches.
- **Sidewalk Connectivity** – 77 bus stops have sidewalk, while 47 bus stops don’t have sidewalks and fall on a sidewalk gap.
- **Trash receptacles:** 27 bus stops have a trash receptacle.
- **Lighting:** 3 bus stops have enhanced lighting.
- **Bus Bay:** 10 bus stops have a bus bay.

Figure 2-28: Existing Transit Service Map



Ridership

Ridership information (Table 2-9) provides important information on where people are accessing transit. Due to the decline in ridership during the COVID-19 pandemic, 2019 ridership data was used in this inventory. In 2019, 303,007 people boarded a bus in within the Avondale MPA; and of those riders, 8,933 were bicyclists and 2,000 were wheelchair users – accounting for roughly 2.9 percent and 0.7 percent of the total riders in Avondale.

Table 2-9: Current Bus Ridership

Bus Route	Total Boarding's	Bikes	Wheelchair
3 – Van Buren Street	56,200	2,105	234
17 – McDowell Road	38,423	1,593	202
41 – Indian School Road	26,599	755	92
563 – Express Route	8,214	4	0
ZOOM	173,571	4,476	1,472
Total	303,007	8,933	2,000

Source: Valley Metro, 2019

Future Transit Service

As noted previously, the SR-30 freeway corridor is in the planning process. With a capped five-lane freeway footprint, there is recognition that the SR-30 corridor will require a next generation high-capacity mode of transportation to serve this unmet travel demand. In addition, with the proliferation of high-speed rail corridors around the country, it is not hard to imagine that a high-speed rail corridor between southern California and the Phoenix area could be built someday. Geography limits the options where this type of facility could be feasibly built. The SR-30 corridor is the most likely route. In response, a 50-foot-wide future transit corridor is being preserved in the proposed SR-30 ROW using geometry sufficient to accommodate all known current modes of transit, including the most restrictive high speed rail option. This future transit corridor will generally follow the south ROW except at the system interchanges with SR-303L and SR-202L, where the corridor will transition into the median of SR-30 to pass through them.

The Final L/DCR does not attempt to define the transit mode or the technology to be used in this future transit corridor. At the speed at which technology changes, any attempt to do so with today's knowledge would almost certainly be wrong in the future. It is also unclear when or if this transit corridor would be built, because it is not funded. However, the travel demand need will clearly exist, so it is imperative that the SR-30 planning process includes provisions in the design so that future generations can respond to this demand in a cost-effective manner.

Avondale-Goodyear Transit Study

The Avondale-Goodyear Transit Study evaluated the need for new and/or improved transit service in the cities of Avondale and Goodyear. In addition to traditional, fixed-route bus service, the study considered emerging alternatives such as microtransit, flex routes, mobility hubs, and other flexible options.

The study included a review of existing conditions, a best practices report, a market analysis, route and service recommendations, and public and stakeholder outreach throughout the project. The year-long effort kicked off in the summer of 2020 and concluded in the summer of 2021.

MAG facilitated this transit study for the cities of Avondale and Goodyear, with support from our consultant team and input from Valley Metro. More information about the results of the Study can be referenced on the project [website](#).

SAFETY ANALYSIS & CRASH STATISTICS

Analysis of pedestrian and bicycle-related crash data provides Avondale with important safety information to help make informed decisions on future, potential improvements. A thorough analysis of the crash data will demonstrate if there are any identifiable trends, patterns, predominant crash types and if there are any locations for re-occurring crashes that trigger notable bicycle and pedestrian safety concerns.

A crash data analysis of pedestrian- and bicycle-related crashes over a five-year period (2016 to 2020) was conducted. **Figure 2-29** shows the number of total pedestrian- and bicycle-related crashes by injury severity.

Crash information is based on historical crash records reported by the Arizona Department of Transportation (ADOT), and although **Figure 2-31** shows crashes within and adjacent to Avondale, the data presented herein only includes crashes within the Avondale MPA, which may include crashes adjacent to, but not located on, Avondale roads.

During the five-year analysis period, there were a total of 166 pedestrian- and bicycle-related crashes located on or adjacent to Avondale roads. As illustrated in **Figure 2-30**, of the 166 crashes, three percent (five crashes) resulted in no injury, 26 percent (44 crashes) resulted in a possible injury, 52 percent (86 crashes) resulted in a non-incapacitating injury, 16 percent (25 crashes) resulted in an incapacitating injury, and three percent (five crashes) resulted in a fatality.

After a nearly a 70 percent increase in bicycle- and pedestrian-related crashes between 2016 and 2017 (an increase of 19 crashes), Avondale has been experiencing a decline in the number of crashes since peaking in 2017 with 41 in 2018, 37 in 2019 and 19 in 2020.

Figure 2-29: Bicycle & Pedestrian Crash Injury Severity Distribution

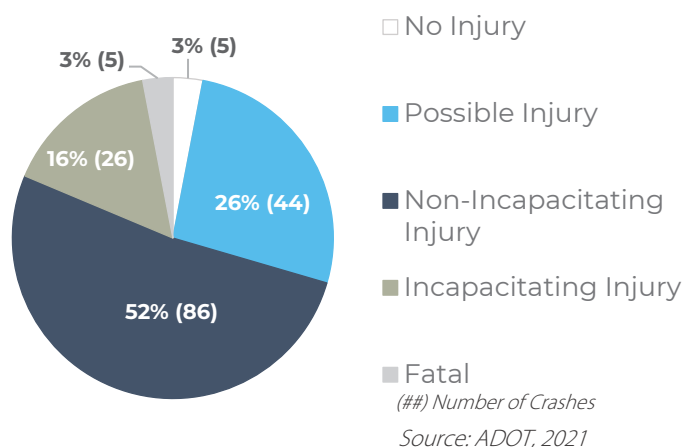
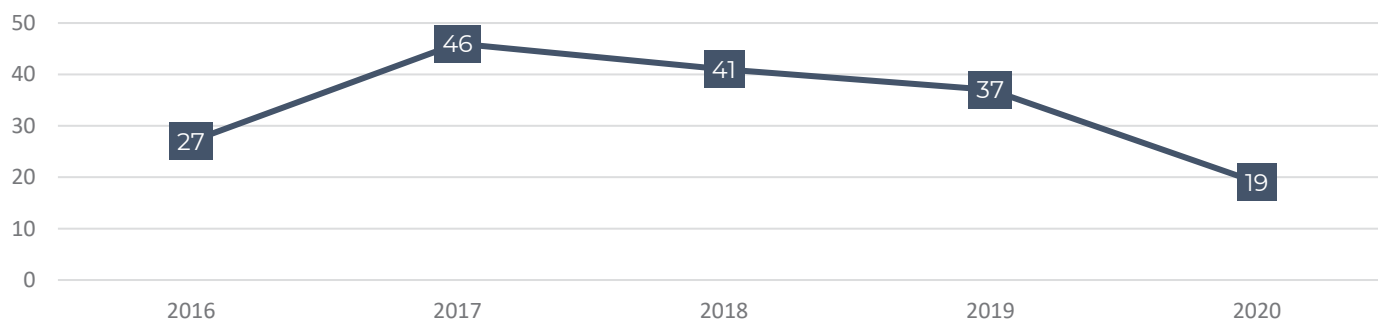


Figure 2-30: Bicycle & Pedestrian Crashes by Year



Source: ADOT, 2021

Crash Locations

The location of pedestrian- and bicycle-related crashes that have occurred in Avondale are illustrated in **Figure 2-31**. Over 67.4 percent of the 166 pedestrian- and bicycle-related crashes in the Avondale MPA occurred at an intersection. The highest number of crashes occurred at the intersection of Dysart Road and Van Burren Street. Corridors and intersections with a higher number of pedestrian- and bicycle-related crashes include:

- Dysart Road and Van Burren Street intersection;
- Dysart Road from Indian School Road to Buckeye Road;
- Van Burren Street from Central Avenue to Dysart Road;
- Buckeye Road and Riley Drive;
- Buckeye Road and Dysart Road intersection;
- Buckeye Road from Central Avenue to Dysart Road; and
- Lower Buckeye Road from Dysart Road to Fairway Drive.

Crash Trend

Roughly 25 percent of all pedestrian- and bicycle-related crashes occurred when a motor vehicle was turning right. This maneuver, often called a “right hook,” takes place when a driver cuts off a bicyclist or pedestrian by turning right across their path onto a road or a driveway. In addition, over 10 percent of pedestrian- and bicycle-related crashes occurred when motorists made a left turn. Left turn crashes are commonly due to a motorist not seeing a pedestrian or bicyclist when turning left onto a road or intersection.

A full inventory of the pedestrian- and bicycle-related crashes during the analysis period can be found in Appendix B.

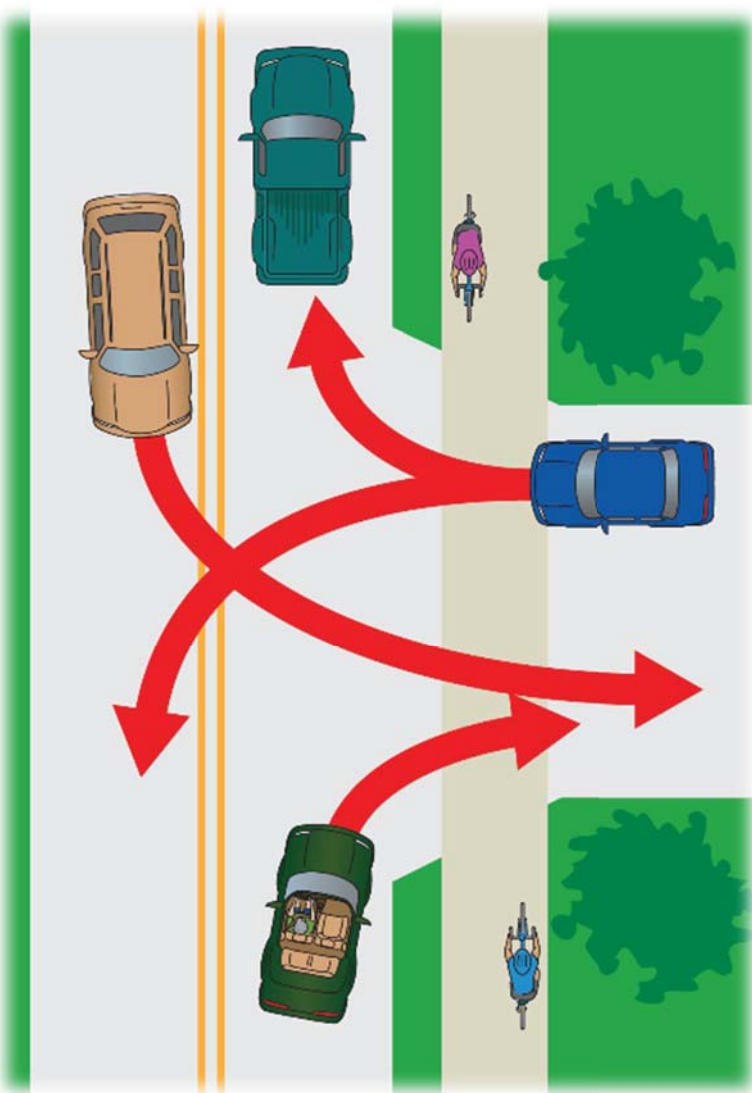
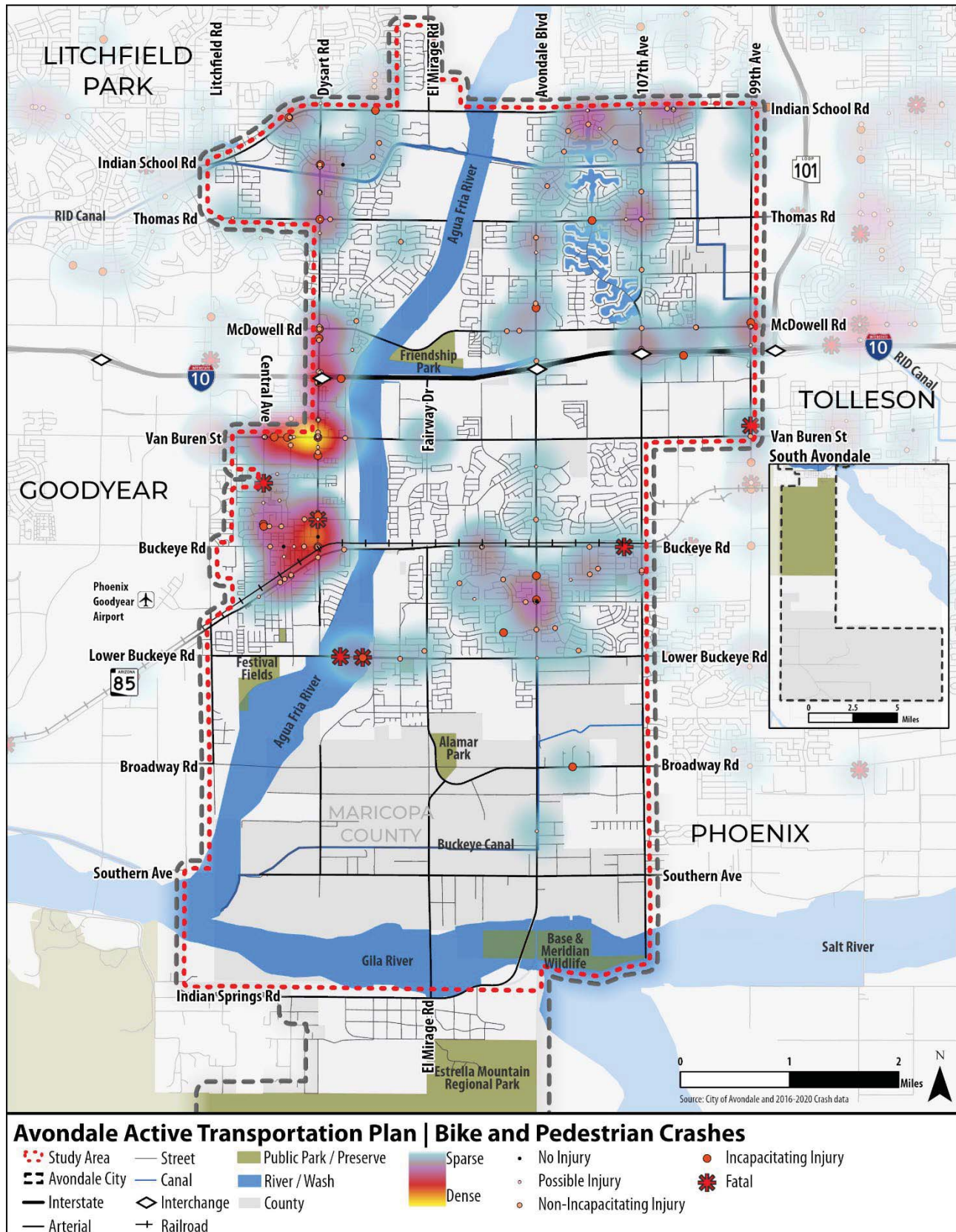


Figure 2-31: Bicycle & Pedestrian Crash Location Map



PEDESTRIAN & BICYCLE VOLUMES

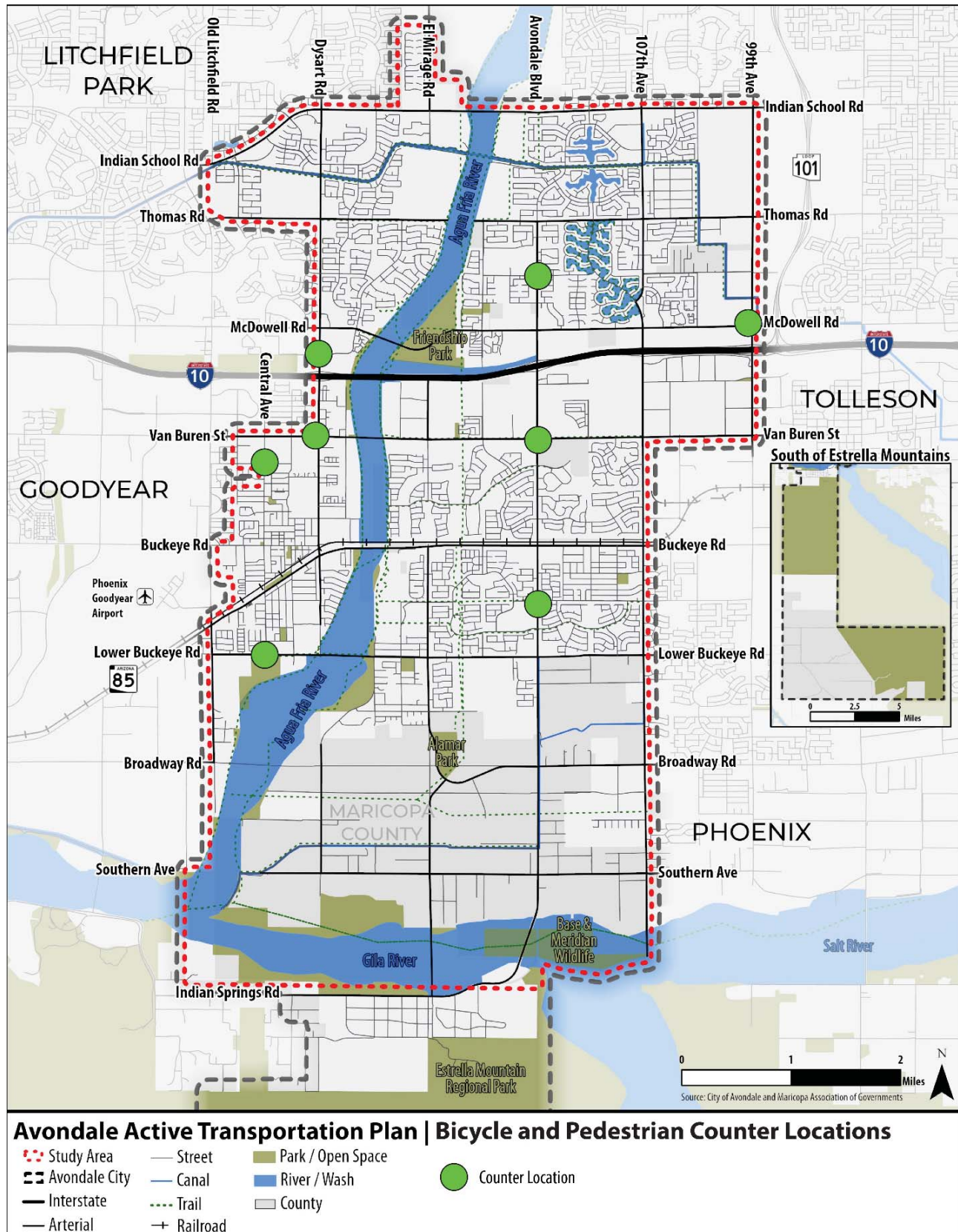
As part of the inventorying process for the Avondale ATP, pedestrian and bicycle counts were conducted at eight strategic locations in (see **Figure 2-32**). The intent of the bicycle and pedestrian counts are to evaluate targeted locations where there are known levels of pedestrian and bicycle activity. These locations were determined through discussions with City staff and analysis by the consultant to determine the priority locations. The study team collected 24-hour bicycle and pedestrian turning movement counts in fifteen-minute intervals at the following locations on Thursday, December 9, 2021:

1. Dysart Road and Van Buren Street
2. Dysart Road and Ranch Santa Fe Road
3. 99th Avenue and McDowell Road
4. Avondale Boulevard and Van Buren Street
5. Central Avenue and Lower Buckeye Road (in the vicinity of Festival Fields Park)
6. Avondale Boulevard and Encanto Boulevard
7. Avondale Boulevard and Durango Street
8. Central Avenue and La Canada Boulevard

The pedestrian and bicycle counts at the above-mentioned locations were collected on the roadways and also within the existing crosswalks. See Appendix C for details for a full detailed report of the bicycle and pedestrian count results. The following subsections provides a brief synopsis of the results.



Figure 2-32: Bicycle & Pedestrians Count Locations Map



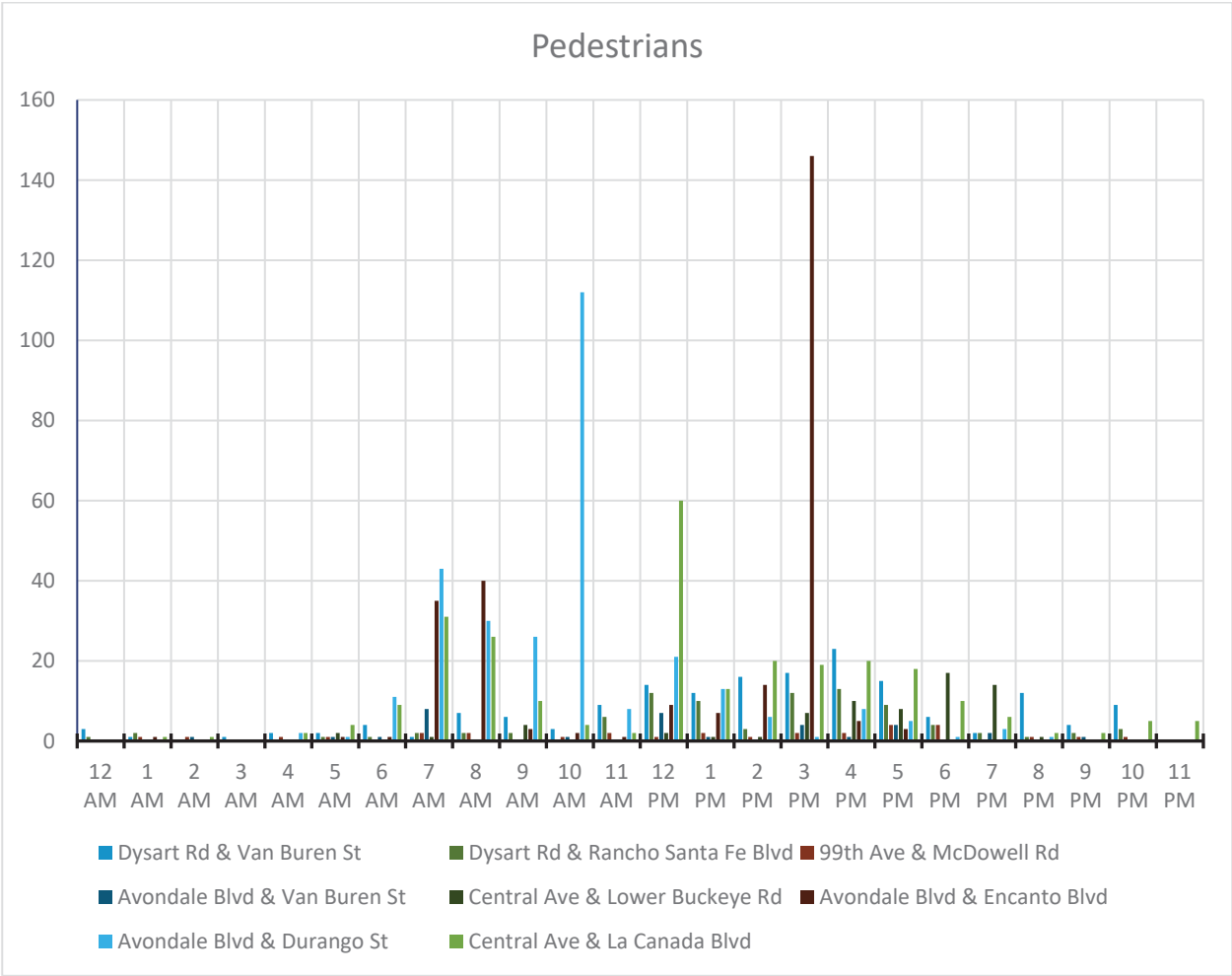
Pedestrian Counts

Table 2-10 and Figure 2-33 together illustrate a summary of the pedestrian counts conducted at the eight locations in one-hour segments over the 24-hour period. A total of 1,217 pedestrians were counted at all eight of locations over the 24-hour period. The one-hour period with the highest number of pedestrians was from 3:00 to 4:00 PM with a total of 208 pedestrians, while the most active time of the day was during the AM peak period from 7:00 to 11:00 AM with 432 pedestrians over that four-hour time span. The three locations with the highest level of pedestrian activity included Avondale Boulevard and Durango Street with 292 pedestrians, Central Avenue and La Canada Boulevard with 270 pedestrians, and Avondale Boulevard and Encanto Boulevard with 268 pedestrians. The other five locations ranged from 30 to 169 pedestrians over the 24-hour period.

Table 2-10: Pedestrian Count Results

Time	Dysart Rd & Van Buren St	Dysart Rd & Rancho Santa Fe Blvd	99th Ave & McDowell Rd	Avondale Blvd & Van Buren St	Central Ave & Lower Buckeye Rd	Avondale Blvd & Encanto Blvd	Avondale Blvd & Durango St	Central Ave & La Canada Blvd	Total
12:00 AM	3	1	0	0	0	0	0	0	4
1:00 AM	1	2	1	0	0	1	0	1	6
2:00 AM	0	0	1	1	0	0	0	1	3
3:00 AM	1	0	0	0	0	0	0	0	1
4:00 AM	2	0	1	0	0	0	2	2	7
5:00 AM	2	1	1	1	2	1	1	4	13
6:00 AM	4	1	0	1	0	1	11	9	27
7:00 AM	1	2	2	8	1	35	43	31	123
8:00 AM	7	2	2	0	0	40	30	26	107
9:00 AM	6	2	0	0	4	3	26	10	51
10:00 AM	3	0	1	1	0	2	112	4	123
11:00 AM	9	6	2	0	0	1	8	2	28
12:00 PM	14	12	1	7	2	9	21	60	126
1:00 PM	12	10	2	1	1	7	13	13	59
2:00 PM	16	3	1	0	1	14	6	20	61
3:00 PM	17	12	2	4	7	146	1	19	208
4:00 PM	23	13	2	1	10	5	8	20	82
5:00 PM	15	9	4	4	8	3	5	18	66
6:00 PM	6	4	4	0	17	0	1	10	42
7:00 PM	2	2	0	2	14	0	3	6	29
8:00 PM	12	1	1	0	1	0	1	2	18
9:00 PM	4	2	1	1	0	0	0	2	10
10:00 PM	9	3	1	0	0	0	0	5	18
11:00 PM	0	0	0	0	0	0	0	5	5
Total	169	88	30	32	68	268	292	270	1,217

Figure 2-33: Pedestrian Count Results



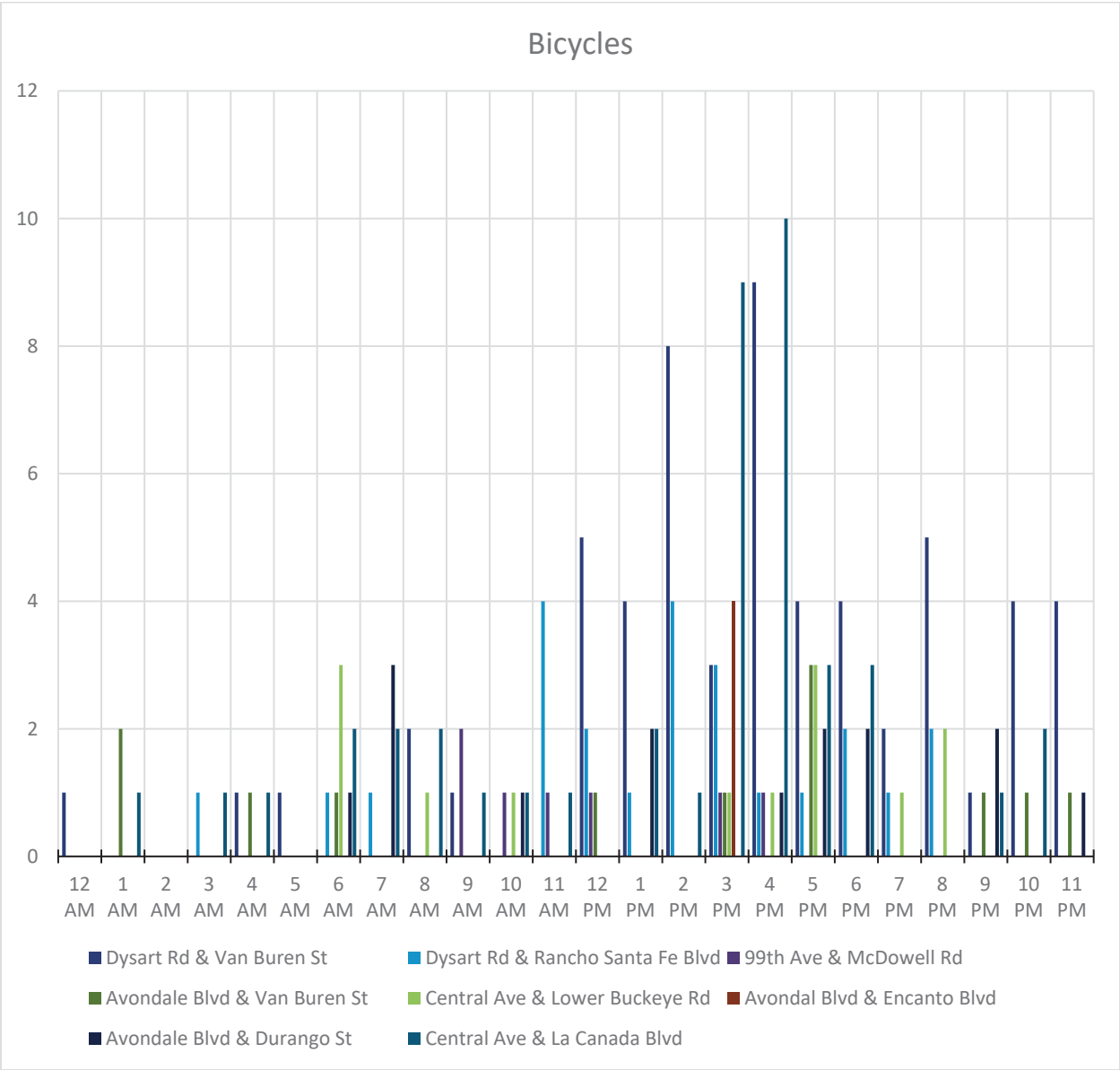
Bicycle Counts

Table 2-11 and Figure 2-34 provide a summary of the bicycle counts conducted at the eight locations in one-hour segments over the 24-hour period. A total of 177 bicycles were counted at all eight of locations over the 24-hour period. The one-hour period with the highest number of bicycles was from 4:00 to 5:00 PM with a total of 23 bicyclists, while the most active time of the day was during the PM peak period from 2:00 to 6:00 PM with 74 bicyclists over that four-hour time span. The three locations with the highest amount of bicycle activity included Dysart Road and Van Buren Street with 59 bicyclists, Central Avenue and La Canada Boulevard with 43 bicyclists, and Dysart Road and Ranch Santa Fe Road with 24 bicyclists. The other five locations ranged from 4 to 15 bicyclists over the 24-hour period.

Table 2-11: Bicyclist Count Results

Time	Dysart Rd & Van Buren St	Dysart Rd & Rancho Santa Fe Blvd	99th Ave & McDowell Rd	Avondale Blvd & Van Buren St	Central Ave & Lower Buckeye Rd	Avondale Blvd & Encanto Blvd	Avondale Blvd & Durango St	Central Ave & La Canada Blvd	Total
12:00 AM	1	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	2	0	0	0	1	3
2:00 AM	0	0	0	0	0	0	0	0	0
3:00 AM	0	1	0	0	0	0	0	1	2
4:00 AM	1	0	0	1	0	0	0	1	3
5:00 AM	1	0	0	0	0	0	0	0	1
6:00 AM	0	1	0	1	3	0	1	2	8
7:00 AM	0	1	0	0	0	0	3	2	6
8:00 AM	2	0	0	0	1	0	0	2	5
9:00 AM	1	0	2	0	0	0	0	1	4
10:00 AM	0	0	1	0	1	0	1	1	4
11:00 AM	0	4	1	0	0	0	0	1	6
12:00 PM	5	2	1	1	0	0	0	0	9
1:00 PM	4	1	0	0	0	0	2	2	9
2:00 PM	8	4	0	0	0	0	0	1	13
3:00 PM	3	3	1	1	1	4	0	9	22
4:00 PM	9	1	1	0	1	0	1	10	23
5:00 PM	4	1	0	3	3	0	2	3	16
6:00 PM	4	2	0	0	0	0	2	3	11
7:00 PM	2	1	0	0	1	0	0	0	4
8:00 PM	5	2	0	0	2	0	0	0	9
9:00 PM	1	0	0	1	0	0	2	1	5
10:00 PM	4	0	0	1	0	0	0	2	7
11:00 PM	4	0	0	1	0	0	1	0	6
Total	59	24	7	12	13	4	15	43	177

Figure 2-34: Bicyclist Count Results



3 PUBLIC & STAKEHOLDER INPUT

Actively informing and engaging the public and stakeholders throughout the Avondale ATP process has been critical to the success of the Avondale ATP. Public and stakeholder input, including a public survey, helped ensure that decisions were informed and influenced by public and stakeholder input, and the plan recommendations reflected community needs and desires. Opportunities to participate were continuous throughout the study schedule to keep open lines of communication, build relationships, encourage mutual understanding, and improve the outcomes of the plan.

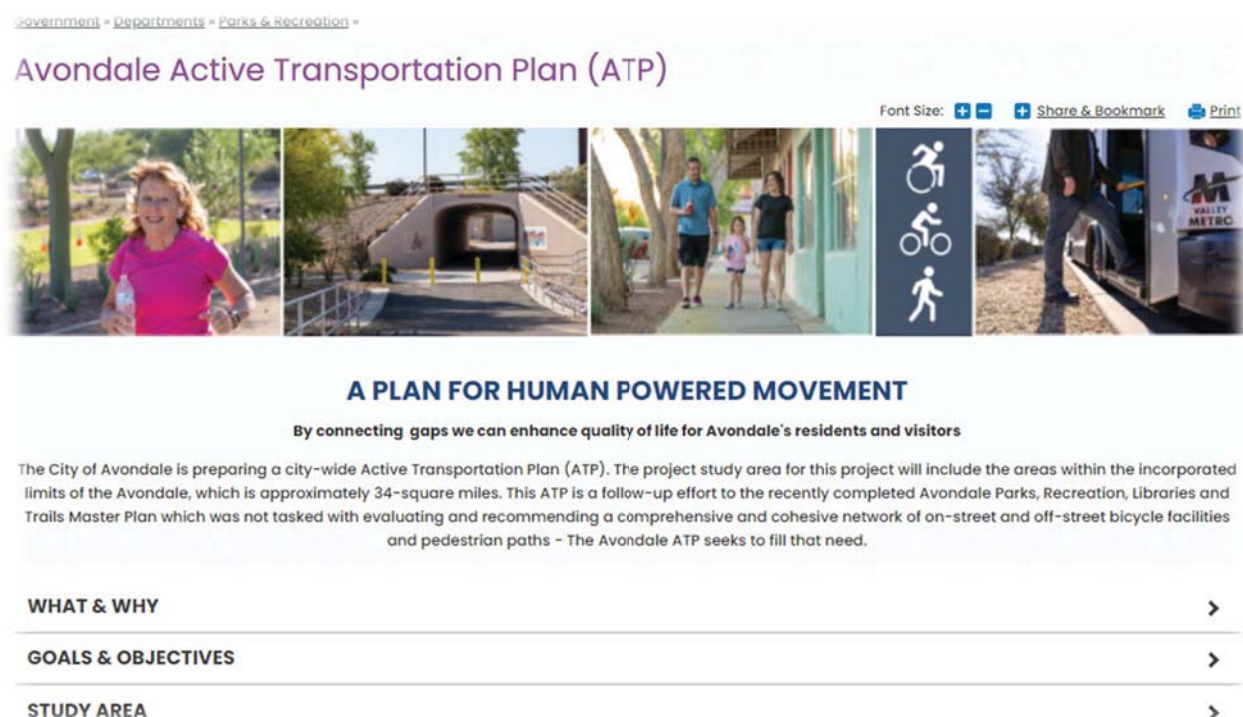
The City of Avondale consists of a collection of many individuals, stakeholders, groups and neighborhoods. This section provides an overview the public and stakeholder involvement that has been employed over the course of the Avondale ATP process. Please reference Appendix D to view the Public Involvement Plan (PIP) for additional detail and structure of the public and stakeholder engagement process.

PROJECT WEBSITE

The City of Avondale's website was utilized as a project information hub to distribute information about the ATP and provided a digital platform to house and share presentations and draft and final documents for the public and stakeholders to review. The project website, svmpo.org/transportation-planning/short-range-transit-plan-update/ and shown in **Figure 3-1**, included the following elements:

- A description of the Avondale ATP and the goals.
- Links to the public survey.
- Links to each of the Avondale ATP documents as they were completed.
- Links to presentations given to stakeholders and the public.

Figure 3-1: Avondale ATP Project Website



PUBLIC & STAKEHOLDER ENGAGEMENT MILESTONES

City Council

City Council has been informed of the ATP process over two briefings during the ATP process. The first briefing introduced the project and obtain input and guidance from Council. The second briefing focused on a review of preliminary recommendations while also seeking feedback and guidance on suggested project prioritization.

Project Work Group Meetings

A Project Work Group (PWG) was established to guide and coordinate the day-to-day efforts throughout the course of the Avondale ATP process. The PWG was comprised of Avondale city staff members from various departments to help provide input and oversight to developing a plan that achieves cross department needs and objectives. The PWG held four meetings at key project milestones to provide feedback.

Parks & Recreation Advisory Board Meetings

The Avondale Parks & Recreation Advisory Board will be briefed to seek input on key elements of the ATP. The first briefing, already conducted on November 10, 2021, introduced the project and obtain input and guidance from board members. The second briefing will focus on a review of the Draft ATP seeking feedback on recommendations, bike facility and pedestrian path/trail types and locations, evaluation criteria results), and prioritization.

Planning & Zoning Commission

The second briefing focused on a review of preliminary recommendations while also seeking feedback and guidance on suggested project prioritization

Public Open House #1 (Virtual)

The first public open house meeting, held on March 2, 2022, reviewed existing and future conditions, identified deficiencies as compared to plan objectives and sought public input on their preferences and desires for bicycle and pedestrian facility types, locations and priorities. The meeting consisted of a presentation followed by an open house style meeting with information stations and interactive exercises to engage participants input.

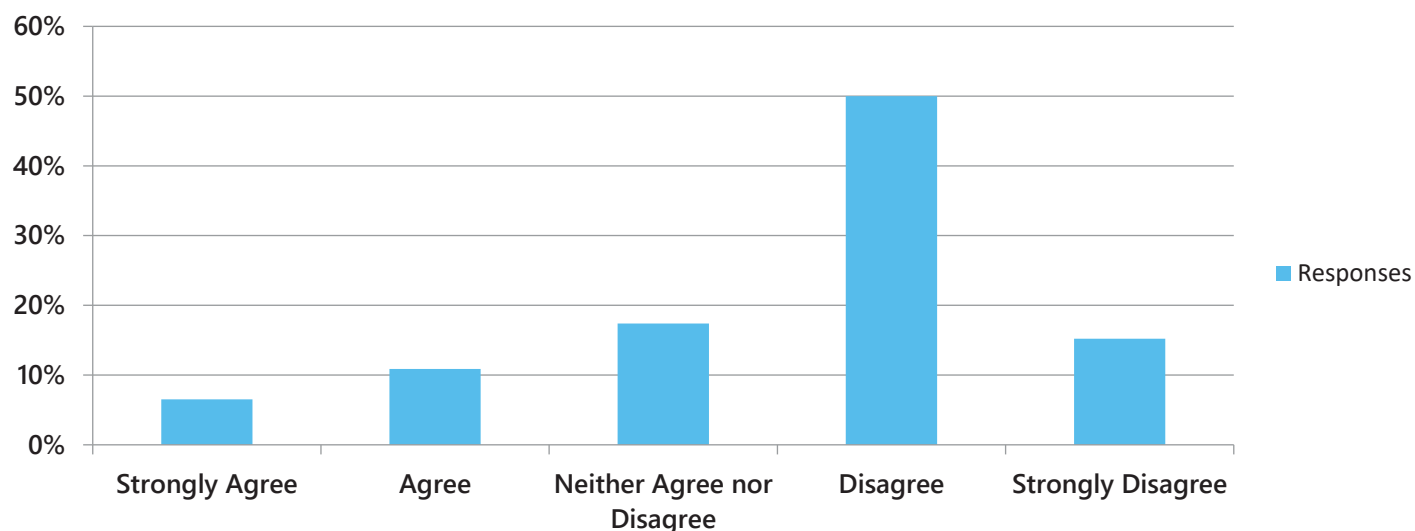
Online Survey

An online survey for the community at-large was provided and conducted to gauge the public's interest, use, and suggestions for active transportation facilities, as well as to guide the direction and recommendations of this Plan. The resident turnout for the survey was considered favorable, with a total of 46 residents responding to the survey.

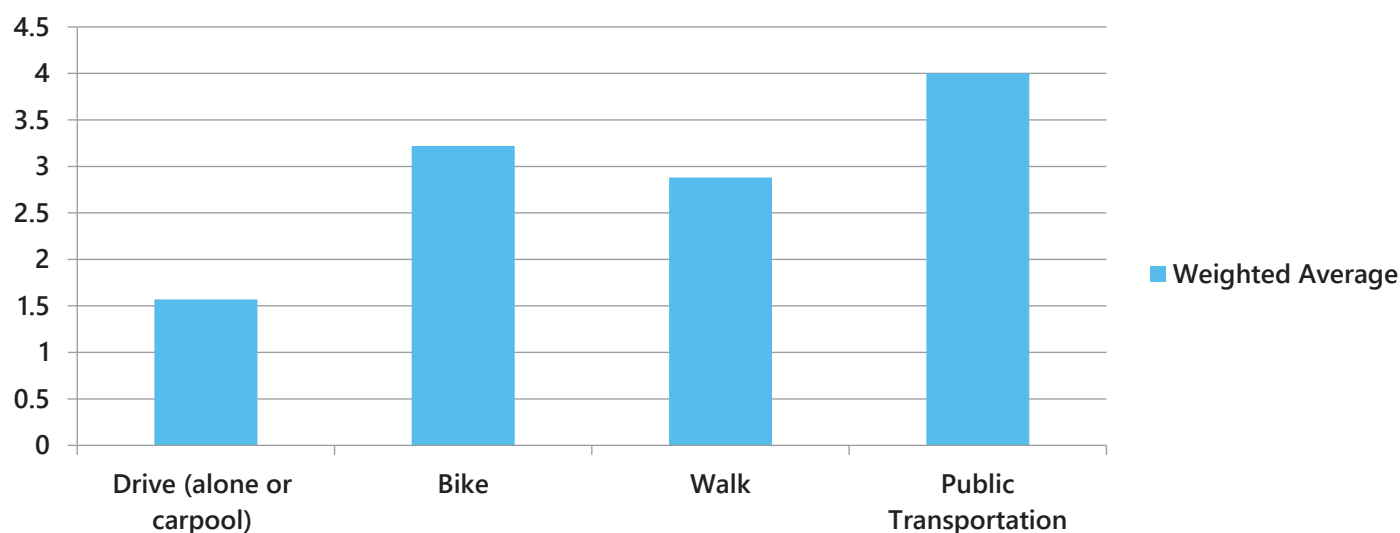
The survey was available online through the project website and was distributed via several of the City's social media platforms. The survey included 16 questions, with seven required questions focusing active transportation while the remaining eight questions were socioeconomic-related questions to gain additional insight about the nature of the respondents. The responses show a strong desire for the expansion of walking and cycling infrastructure that can be used by all ages and abilities. Improving safety and lighting is another priority identified through the survey. The results of the survey are summarized in this section while the complete survey results are included in the Appendix E.



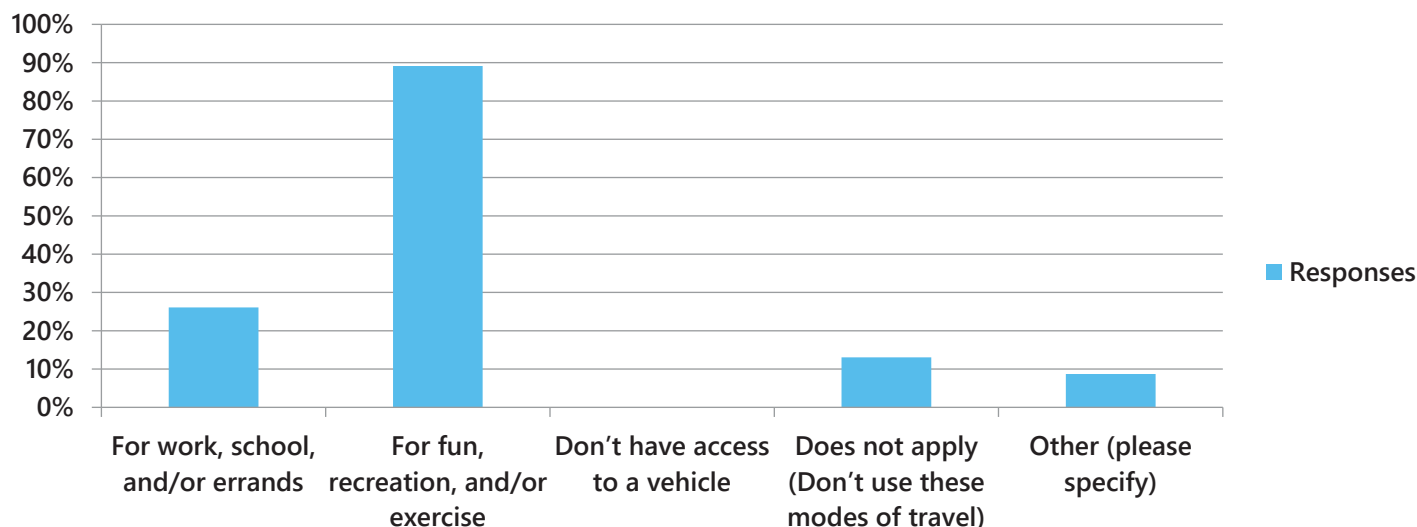
1. Walking and biking in Avondale is a safe and convenient means of traveling from one place to another?



2. During a typical week, how many days do you use the following modes of transportation?



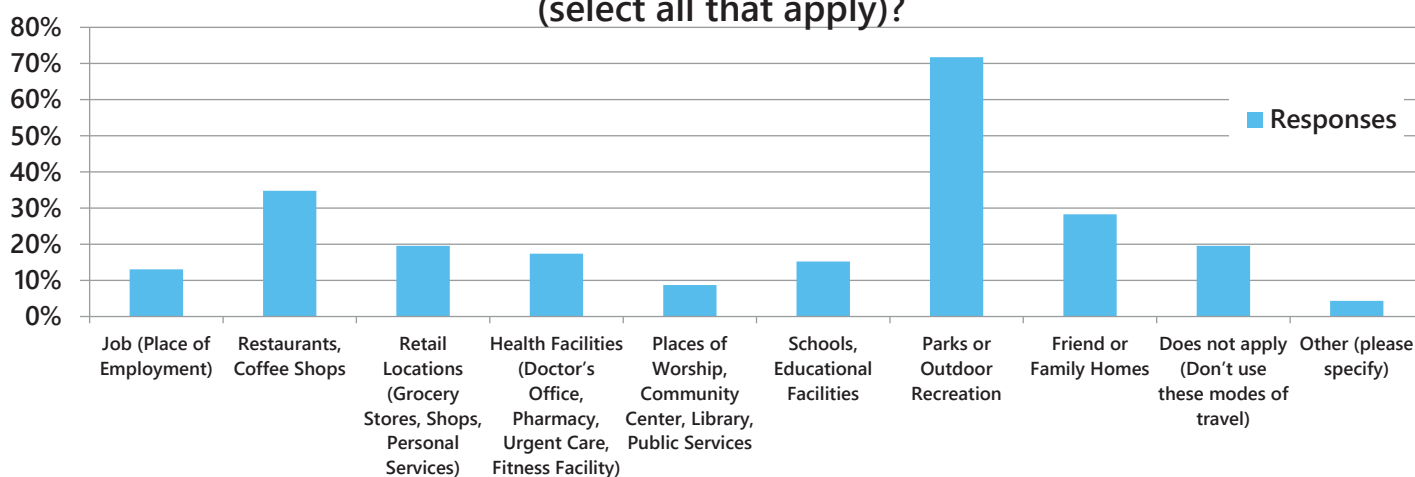
3. For what purpose do you walk, bike, and/or take public transportation (select all that apply)?



Other responses:

- My kids walk to their school bus stop. Pedestrians are not safe when walking here
- To save gas running errands
- Walking pets

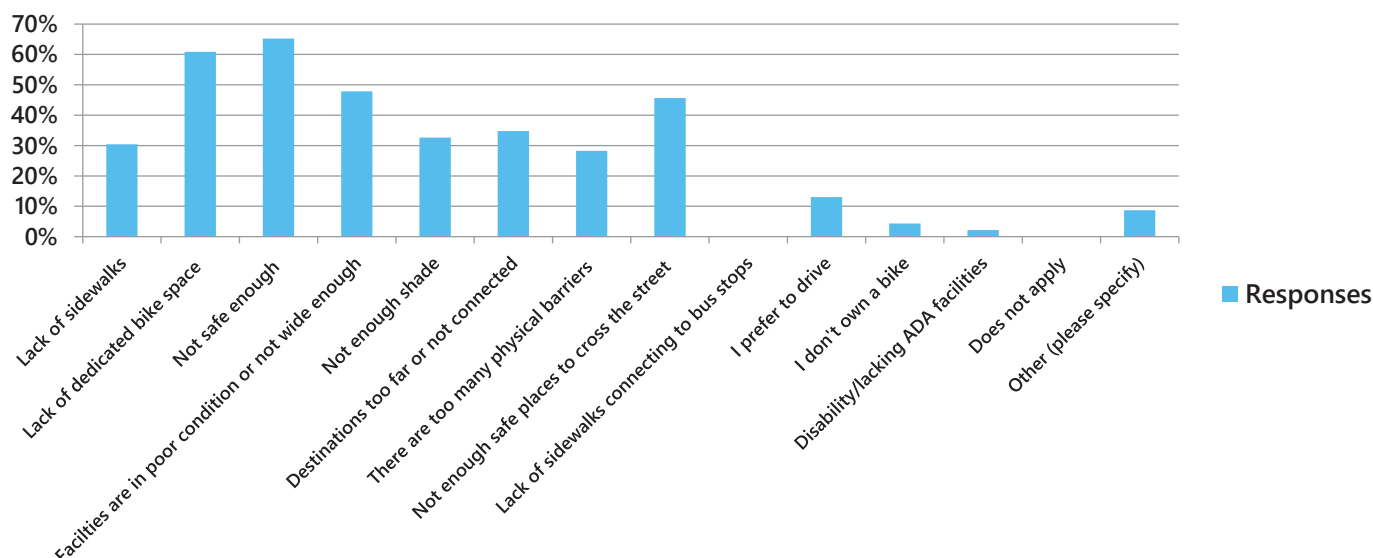
4. What type of destinations do you walk, bike, or take transit to (select all that apply)?



Other responses:

- Exercise only
- "Use trail system from Glendale to Peoria for biking"

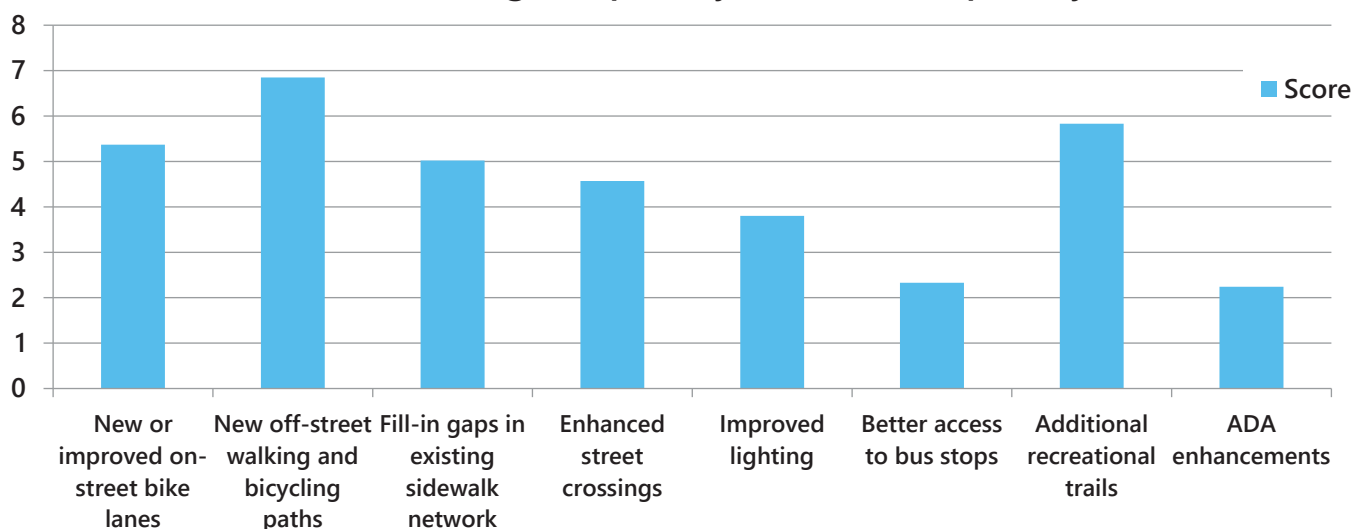
5. What prevents you from walking, biking, and/or taking public transit (select all that apply)?



Other responses:

- Motorists don't give cyclists respect! They drive to close, flip us off, blow exhaust smoke at us.
- My work does not provide a safe place to store my bike.
- Bus service too infrequent, does not connect to places I need to go

6. What improvements would you like to see Avondale invest in? Rank 1 (highest priority) to 8 (lowest priority).



7. What do you view as the greatest challenge(s) to walking and bicycling (mobility) in Avondale?

- Safety of paths lack of lights
- The number of people driving that are not obeying the speed limit makes me feel unsafe.
- Red light runners, people who don't yield to bicycles when using crosswalks, cars going way over the speed limit, cars not looking for bicycles even though you are at an intersection
- places I would walk to are too far from residential area
- Sidewalks that don't connect
- Safe bike lanes
- Lots of homeless around Central Ave. Very little light.
- No sidewalks
- Safety, designated bike lane, lack of enforcement of 3 feet law, driver education programs that bikes share the road.
- Distracted Drivers. Bikers and walkers need a better safe space than right next to cars.
- Crossing I-10 & main roads without bike lanes
- The lack of Safe and maintained bike lanes. Also trail heads that are closed, not marked or difficult to identify. I've called Parks and rec about the trailhead in friendship park and none of the employees knew what I was talking about.
- Cars
- Clearly marked bike lanes on streets.
- Safety. Riding a bicycle on most roads in the west valley isn't for the inexperienced. Dedicated space/lanes like other cities have helps significantly create a safe way to ride.
- Bike lanes are inconsistent and not interconnected. So, I might be able to ride one or two miles on a bike lane, but then the lane ends for a mile or two and then picks back up again. It's very difficult or impossible to plan a route, and have it be safe. Additionally, bike lanes are sometimes not well maintained and have debris and potholes, which make them dangerous.
- Motorists
- Safety along biking/walking paths. They all need barriers like landscaping or poles. Curbs that run flat into the street aren't safe because they encourage cars to cut corners and drive recklessly!
- It's not safe
- Continuous bike paths
- Lack of trails that connect to other trails or pathways.
- The bike path that follows Agua Fria is great. We need more paths like that. Keeps motorists and cyclists / walkers separated from each other. It's safer for everyone.
- There aren't a lot of safe places to ride and the destinations aren't connected.
- Motorized vehicles
- Lack of sidewalks and insufficient or non-existent bike lanes. This is more evident south of I10.
- Traffic, mostly at stop signs
- Shade during summer, city sprawl means locations are far apart
- Crossing major intersections
- Street lighting



- Neighbor areas are not connected to walking paths
- Providing parking to use the trail system and the system is not connected from southern to northern parts of Avondale and connected to Glendale
- Safety
- Lack of bike lanes and few off street bike/walking paths.
- Speeding cars
- High speed and dense traffic conditions.
- The coffee shops or other restaurants are kind of far away for walking or biking
- Lighting, traffic and overall safety
- We need more light systems. There is so much development and new housing. We need traffic lights and speed zones so families feel comfortable walking/riding bikes.
- Bike lanes
- Lighting and continuous sidewalks
- Unfamiliar with available paths and not enough paths / connection
- Safety- crime, and people drive crazy - speeding/unauthorized parking/etc.
- Stores are so far apart and sidewalks don't go everywhere. McDowell west of Avondale is all dirt for a while and my husband, and I both got flat tires when we tried to bike there
- Dangerous intersections and lack of sidewalks completed throughout the path I want to take. Unsafe to take children and cross major roads.
- We need the trail along the Agua Fria River at the I-10 to connect to Friendship Park and then on to Peoria's New River trail. Once that happens the whole valley is open to bike travel.



4 PROJECT RECOMMENDATIONS

Avondale's current and future active communities deserve a safe, connected, and substantive active transportation network that builds upon the existing infrastructure and provides a balance of utilitarian and recreational facilities. The Avondale ATP project recommendations will assist the City in bicycle and pedestrian project decision making and prioritization, resource allocation, design, implementation, and maintenance of the proposed multimodal network. Avondale's active transportation network should include options that provide a variety of choices for users of varying ages and capabilities. This includes existing users such as road cyclists that ride scenic routes to younger cyclists that ride shorter distances recreationally, as well as pedestrians throughout the region. Bicycling and walking infrastructure are most effective when destinations are nearby, as is the case in mixed-use developments, and when multiple transportation options are available for residents near employment centers. A multi-use trail system is also an important element of the proposed active transportation network and can improve community-wide mobility and connectivity, promote economic development efforts and enhance the overall appeal of Avondale.

The Avondale ATP recommends carefully integrating pedestrian, bicycle, and transit planning to ensure an effective and truly connected active transportation system. Connecting both walking and bicycling to transit increases the "catchment area" of transit stations and increases the total possible trip length for all users, which replaces longer car trips and can lead to reduced emissions.

The proposed active transportation network was developed with a focus on connecting people to places and using a place-based approach. The proposed network was developed by documenting the existing infrastructure, reviewing proposed bicycle projects from previous plans and studies, evaluating public and stakeholder inputs and survey responses, and analysis of existing data. The network was carefully designed by developing routes that connect with regional destinations or other multimodal facilities, while ensuring routes were placed with a conscious focus on safety and accessibility.

This section provides a summary of recommendations for new and improved active transportation infrastructure; as well as, recommendations that go beyond the "Engineering", but also take into account on the other five E's of active transportation: Evaluation, Education, Encouragement, Enforcement, and Equity. It is important to keep in mind when planning and implementing active transportation projects and programs, nearly all recommendations in this Plan require a collaborative effort between public, private, non-profit organizations, and local businesses and residents. There must be support and leadership from a network of strong and willing partners in order to implement the recommendations of this Plan.

The active transportation project recommendations included in this Section outline projects that can be implemented over the next 20 years to create a safe and equitable active transportation network that is accessible and well-connected throughout the region. The recommendations were built around the following considerations:

- Building a functional pedestrian/bicycle transportation network;
- Coordinating previous planning efforts;
- Connecting pedestrians and bicyclist to public transit; and
- Improving signage.

The recommendations are broken down into three categories or project types:

1. On-street bicycle network;



2. Off-Street multi-use network; and
3. Pedestrian network.

ON-STREET BICYCLE NETWORK

A primary objective of this Plan is to create a well-connected bicycle network through a series of loops, spines, branches, and protected lanes. An additional objective of the Plan is to focus on investing and creating a connected network of active transportation facilities, not isolated facilities.

Many of the recommendations from previous planning efforts are reiterated and complement the newer and expanded aspects of this Plan. Based on the assessment of bicycle transportation needs and practices in the region, recognition as budget priorities to the recommendations presented in this Plan are necessary to support the City's vision to attract more residents to use alternative modes of transportation.

Methods for creating a safe and desirable bicycle network include the process of making priority destinations accessible. Bicycle networks should strive to accommodate a wide range of bicyclists in the community. Common trends in bicycle networks across the United States are incorporating design features to accommodate for all ages and abilities. Designing an interconnected and accessible network for all ages and abilities provides the entire community a safe alternative mode of transport.

The proposed bicycle network is based on the notion that bike lanes address the desire for efficient bicycle transportation with more cyclist's comfort when compared to sharing the same travel lane with vehicular traffic. This would appeal to those who are not as comfortable to ride in traffic but are frustrated by factors such as indirectness and frequent stops and starts. Creating a high-quality, connected network appeals to a broader range of residents.

The proposed bike facility projects could be implemented incrementally by building on Avondale's existing base of on-street bikeways over the next 20 years to achieve the long-term network.

The proposed on-street bicycle recommendations include adding bike lanes to roads currently lacking a dedicated bicycle facility and implementing wayfinding signage. Some roads currently have no bike lanes on either side of the roadway while some only have a bike lane one side of the road. These gaps can be the result of the development process – vacant parcels yet to develop their roadway and other frontage improvements such as bike lanes and sidewalks. The proposed on-street bicycle network ensures all arterial and collector roadways within Avondale have bike lanes on both side of the road. The proposed and existing on-street bicycle facilities illustrated in **Figure 4-1. Table 4-1** (in no particular order) provides a complete list of the on-street bicycle recommendations.

In total, there are 71 proposed on-street bicycle recommendations which include three projects that would add a bike lane on one side of the street, 53 projects that would add bike lanes on both sides of the street, and 15 wayfinding signage projects.

Currently there are a total of 93.8 miles of on-street bike ways in Avondale, and the proposed on-street bicycle recommendations would add an additional 91.2 miles of bike lanes to the overall on-street network, yielding roughly 185 linear miles of bike lanes in Avondale. As adoption of this Plan, Avondale's General Engineering Requirements Manual does not contain specific design guidelines for bicycle facilities and only notes that all arterial and collector roads are required to include a bike lane. For the purposes of the Avondale ATP, the typical bicycle lane envisioned would consist of a striped lane (4 ft or wider) with pavement marking and a designated buffer space separating the bike lane from motor vehicle travel lanes. Facilities may have curb and gutter present or a flush shoulder.



Figure 4-1: On-Street Bicycle Network Recommendations Map

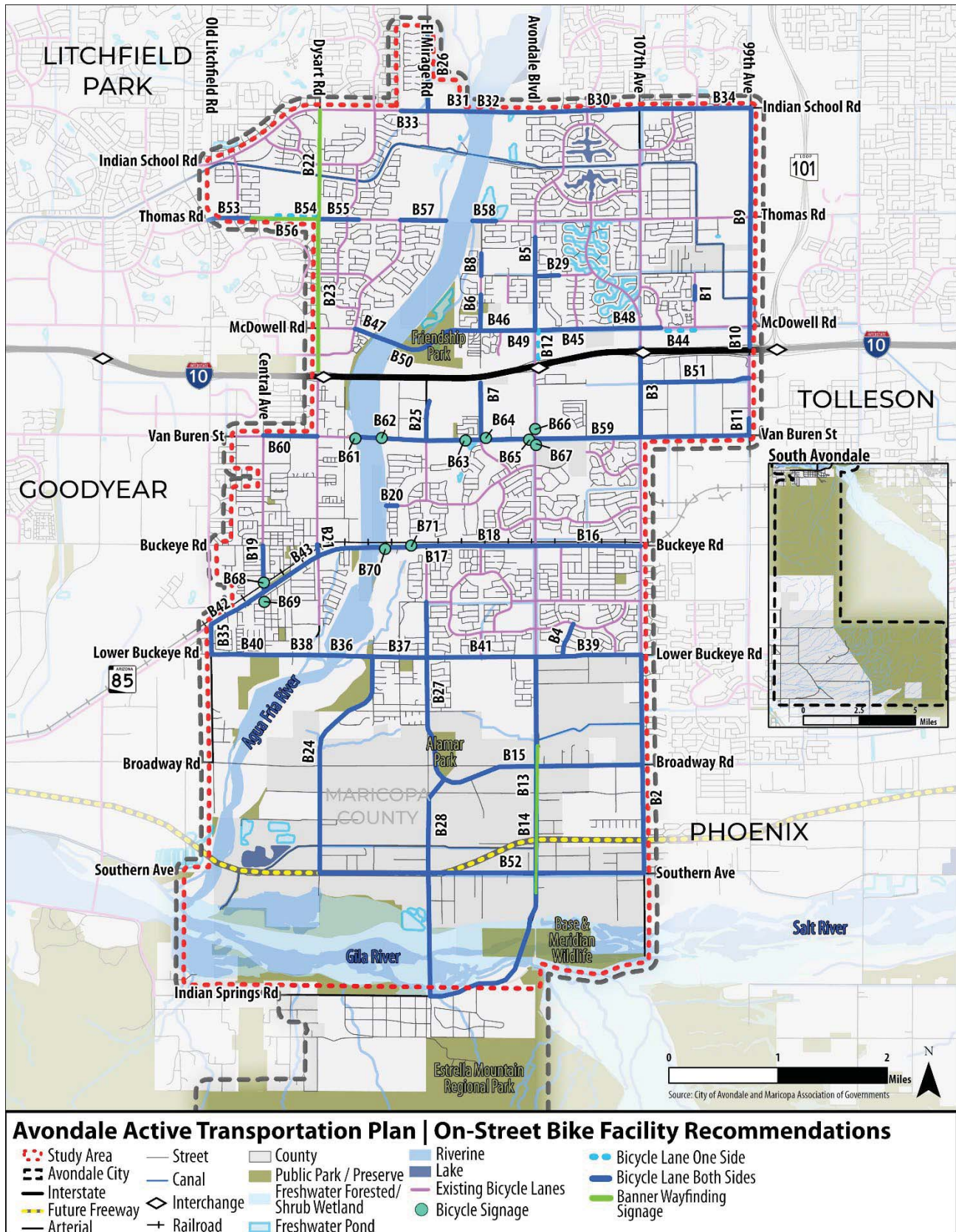


Table 4-1: On-Street Bicycle Network Recommendations

ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
B1	103rd Ave	Bicycle Lane Both Sides	0.13	Zinc Apartment Parcel	Zinc Apartment Parcel
B2	107th Ave	Bicycle Lane Both Sides	1.99	Lower Buckeye Rd	Southern Ave
B3	107th Ave	Bicycle Lane Both Sides	0.81	I-10	Van Buren St
B4	112th Lane	Bicycle Lane Both Sides	0.32	Whyman Ave	Lower Buckeye Rd
B5	115th Ave	Bicycle Lane Both Sides	0.84	Roanoke Dr	McDowell Rd
B6	119th Ave	Bicycle Lane Both Sides	0.33	Monte Vista Rd	McDowell Rd
B7	119th Ave	Bicycle Lane Both Sides	0.51	I-10	Van Buren St
B8	119th Ave	Bicycle Lane Both Sides	0.20	Thomas Rd	Encanto Blvd
B9	99th Ave	Bicycle Lane Both Sides	2.00	Indian School Rd	McDowell Rd
B10	99th Ave	Bicycle Lane Both Sides	0.19	McDowell Rd	I-10
B11	99th Ave	Bicycle Lane Both Sides	0.16	820 feet North Van Buren St	Van Buren St
B12	Avondale Blvd	Bicycle Lane One Side	0.28	McDowell Rd	I-10
B13	Avondale Blvd	Banner Wayfinding Signage	1.35	Broadway Rd	Southern Ave
B14	Avondale Blvd	Bicycle Lane Both Sides	3.74	Lower Buckeye Rd	Southern Ave
B15	Broadway Rd	Bicycle Lane Both Sides	1.85	El Mirage Rd	107th Ave
B16	Buckeye Rd	Bicycle Lane Both Sides	0.96	Avondale Blvd	107th Ave
B17	Buckeye Rd	Bicycle Lane Both Sides	0.35	1000 ft West El Mirage Rd	760 ft East El Mirage Rd
B18	Buckeye Rd	Bicycle Lane Both Sides	0.86	121st Lane	Avondale Blvd
B19	Central Ave	Bicycle Lane Both Sides	0.42	Western Ave	Main St
B20	Coldwater Springs Blvd	Bicycle Lane Both Sides	0.10	126th Ave	125th Ave
B21	Dysart Rd	Bicycle Lane Both Sides	0.11	Western Ave	Buckeye Rd
B22	Dysart Rd	Banner Wayfinding Signage	1.00	Indian School Rd	Thomas Rd
B23	Dysart Rd	Banner Wayfinding Signage	1.39	Thomas Rd	I-10
B24	Dysart/Vermeersch Rd	Bicycle Lane Both Sides	2.19	Lower Buckeye Rd	Southern Ave
B25	El Mirage Rd	Bicycle Lane Both Sides	0.36	Garfield St	Van Buren St
B26	El Mirage Rd	Bicycle Lane Both Sides	0.74	Highland Ave	Indian School
B27	El Mirage Rd	Bicycle Lane Both Sides	1.65	Durango St	Broadway Rd
B28	El Mirage Rd	Bicycle Lane Both Sides	2.02	Broadway Rd	Indian Springs Rd
B29	Encanto Blvd	Bicycle Lane Both Sides	0.22	115th Ave	112th Lane
B30	Indian School Rd	Bicycle Lane Both Sides	1.99	El Mirage Rd	103rd Ave
B31	Indian School Rd	Bicycle Lane Both Sides	0.17	1000 ft East El Mirage Rd	Agua Fria River Bridge
B32	Indian School Rd	Bicycle Lane Both Sides	0.31	Agua Fria River West	Agua Fria River East
B33	Indian School Rd	Bicycle Lane Both Sides	0.25	124th Ave	El Mirage Rd
B34	Indian School Rd	Bicycle Lane Both Sides	0.50	103rd Ave	99th Ave
B35	Litchfield Rd	Bicycle Lane Both Sides	0.28	Main St	Lower Buckeye Rd



ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
B36	Lower Buckeye Rd	Bicycle Lane Both Sides	0.57	Agua Fria River West	Agua Fria River East
B37	Lower Buckeye Rd	Bicycle Lane Both Sides	0.49	127th Ave	El Mirage Rd
B38	Lower Buckeye Rd	Bicycle Lane Both Sides	0.16	4th St	Agua Fria River West
B39	Lower Buckeye Rd	Bicycle Lane Both Sides	0.97	Avondale Blvd	107th Ave
B40	Lower Buckeye Rd	Bicycle Lane Both Sides	0.75	Litchfield Rd	4th St
B41	Lower Buckeye Rd	Bicycle Lane Both Sides	1.01	El Mirage Rd	Avondale Blvd
B42	Main St	Bicycle Lane Both Sides	0.28	Litchfield Rd	Hummingbird 2 MPH
B43	Main St / Buckeye Rd	Bicycle Lane Both Sides	1.69	Hummingbird 2 MPH	1000 ft West El Mirage Rd
B44	McDowell Rd	Bicycle Lane One Side	0.31	Harbor Shores Blvd	103rd Ave
B45	McDowell Rd	Bicycle Lane Both Sides	0.48	Avondale Blvd	515 ft East 112th Ave
B46	McDowell Rd	Bicycle Lane Both Sides	0.19	119th Ave	117th Ave
B47	McDowell Rd	Bicycle Lane Both Sides	0.20	Rancho Santa Fe	Agua Fria River
B48	McDowell Rd	Bicycle Lane Both Sides	0.67	112th Ave	Harbor Shores Blvd
B49	McDowell Rd	Bicycle Lane Both Sides	0.31	117th Ave	Avondale Blvd
B50	McDowell Rd	Bicycle Lane Both Sides	1.04	Agua Fria River West	119th Ave
B51	Roosevelt St	Bicycle Lane Both Sides	1.00	107th Ave	99th Ave
B52	Southern Ave	Bicycle Lane Both Sides	2.97	Dysart Rd	107th Ave
B53	Thomas Rd	Bicycle Lane Both Sides	0.63	Litchfield Rd	Estrella Mountain CC
B54	Thomas Rd	Bicycle Lane One Side	0.38	Estrella Mountain CC	Dysart Rd
B55	Thomas Rd	Bicycle Lane Both Sides	0.37	Dysart Rd	560 ft East Santa Fe Trl
B56	Thomas Rd	Banner Wayfinding Signage	0.62	136th Ave	Dysart Rd
B57	Thomas Rd	Bicycle Lane Both Sides	0.42	Rancho Santa Fe Blvd	Agua Fria River West
B58	Thomas Rd	Bicycle Lane Both Sides	0.21	Agua Fria River East	118th Dr
B59	Van Buren St	Bicycle Lane Both Sides	3.62	Agua Fria River West	99th Ave
B60	Van Buren St	Bicycle Lane Both Sides	0.49	Central Ave	Dysart Rd
B61	Van Buren St	Bicycle Signage	-	Van Buren St and Agua Fria River EB	.
B62	Van Buren St	Bicycle Signage	-	Van Buren St and Agua Fria River WB	.
B63	Van Buren St	Bicycle Signage	-	Van Buren St and 120th Ave EB	.
B64	Van Buren St	Bicycle Signage	-	Van Buren St and 120th Ave WB	.
B65	Van Buren St	Bicycle Signage	-	Van Buren St and Avondale Blvd EB	.
B66	Avondale Blvd	Bicycle Signage	-	Avondale Blvd and Van Buren St SB	.
B67	Avondale Blvd	Bicycle Signage	-	Avondale Blvd and Van Buren St NB	.
B68	Central Ave	Bicycle Signage	-	Central Ave and Main St SB	.
B69	Central Ave	Bicycle Signage	-	Central Ave and Harrison Dr NB	.
B70	Buckeye Rd	Bicycle Signage	-	Buckeye Rd and Agua Fria River EB	.
B71	Buckeye Rd	Bicycle Signage	-	Buckeye Rd and Agua Fria River WB	.



OFF-STREET MULTI-USE NETWORK

Existing and new paths will serve the on-street bicycle network. These off-street multi-use facilities were selected because they provide an enhanced level of safety considering they are not sharing a road with automobiles. The paths along the Agua Fria and the Gila/Salt Rivers act like spines connecting to other bicycle and pedestrian facilities within the City, while the paths also can provide a regional conduit connecting to neighboring municipalities and destinations outside of Avondale.

The proposed and existing off-street multi-use facilities are illustrated in **Figure 4-2**; and, **Table 4-2** provides a complete inventory of all of the on-street bicycle recommendations. There are a total of 11 proposed off-street multi-use facility recommendations which include either a multi-use path or a trail segment.

The proposed off-street multi-use paths provide facilities on both sides of the Agua Fria River and on the north side of the Gila/Salt River throughout the City. In addition, there are three proposed multi-use paths outside of the river basins; one along the Durango Street alignment just east of El Mirage Road that connects to a proposed Agua Fria River multi-use path (MU7), another along the future State Route 30, and a proposed multi-use path connecting an existing path within the Del Rio community to Alamar Park to the south starting from Lower Buckeye Road and ultimately connecting to the a proposed Agua Fria River path to the west.

Currently there are a total of 34.5 miles of off-street multi-use paths in Avondale, and the proposed off-street multi-use facility recommendations would add an additional 22.7 miles of multi-use paths to the overall off-street facility network, yielding roughly 57.2 linear miles of off-street multi-use paths and 23.7 linear miles of recreation trails across the city upon buildout.

Figure 4-2: Off-Street Multi-Use Network Recommendations Map

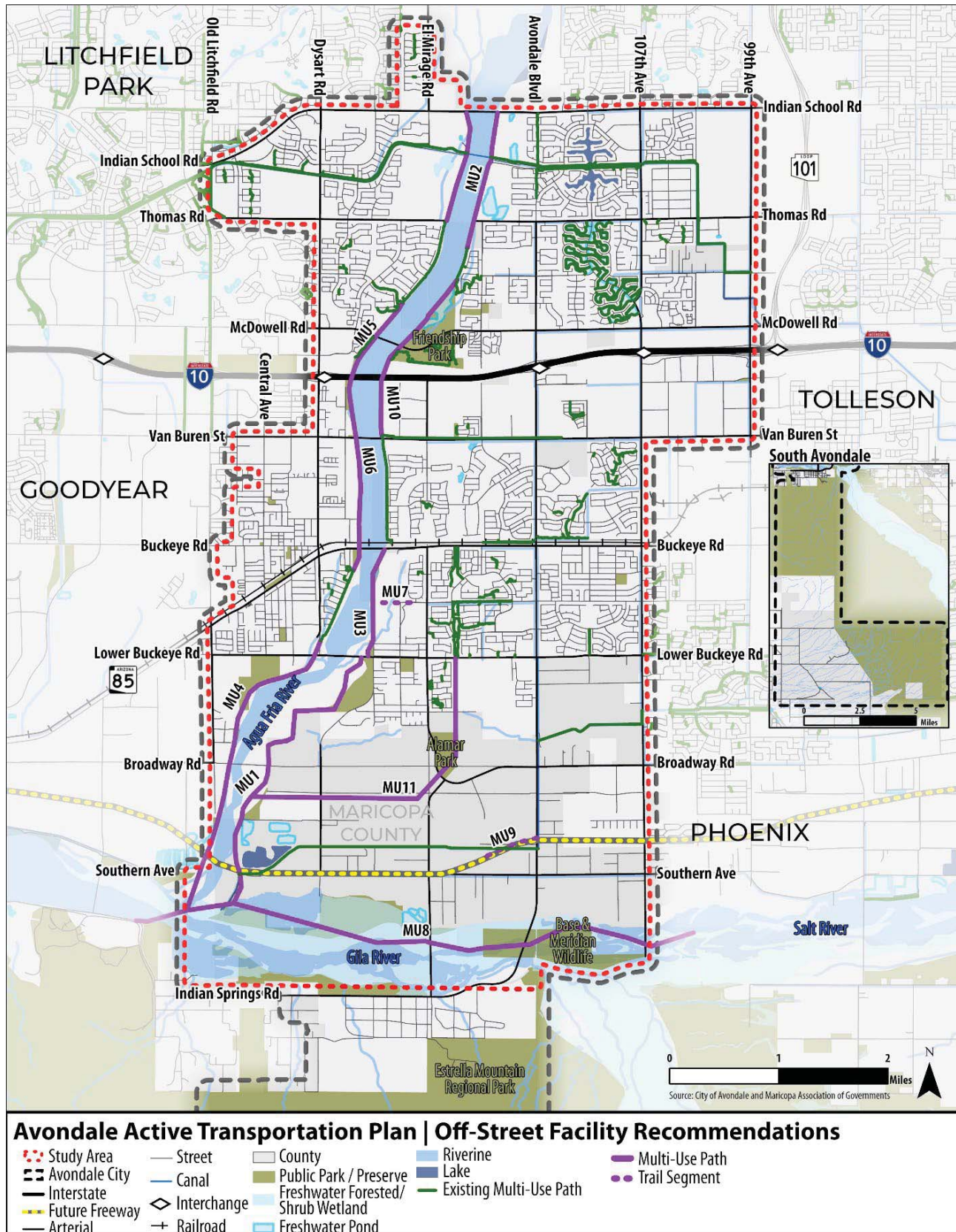


Table 4-2: Off-Street Multi-Use Network Recommendations

ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
MU1	Agua Fria River East	Multi-Use Path	2.97	Lower Buckeye Rd	Gila River
MU2	Agua Fria River East	Multi-Use Path	2.07	Indian School Rd	McDowell Rd
MU3	Agua Fria River East	Multi-Use Path	1.01	Buckeye Rd	Lower Buckeye Rd
MU4	Agua Fria River West	Multi-Use Path	2.81	Lower Buckeye Rd	Gila River
MU5	Agua Fria River West	Multi-Use Path	1.87	Indian School Rd	I-10
MU6	Agua Fria River West	Multi-Use Path	1.92	I-10	Lower Buckeye Rd
MU7	Durango Street	Trail Segment	0.32	125th Ave	Agua Fria Trail
MU8	Gila River	Multi-Use Path	5.27	143rd Ave	East of 107 Ave
MU9	SR-30	Trail Segment	0.57	119th Ave	Avondale Blvd
MU10	Agua Fria River	Multi-Use Path	0.88	McDowell Rd	Van Buren St
MU11	Transmission Lines	Multi-Use Path	2.95	Lower Buckeye Rd	Broadway Rd / Agua Fria River

PEDESTRIAN NETWORK

A priority of this Plan is to ensure residents have safe, secure, reliable, accessible, and connected sidewalks.

The approach to developing the proposed pedestrian network focused on closing existing sidewalk gaps and providing a safe and comfortable experience for users of all ages and abilities. In addition, the proposed pedestrian network aimed to include accessible sidewalk connections to all transit stops equipped with shelters, signage, and education resources should be considered, as well as incorporating accessible boarding and alighting for those with mobility issues.

The existing and proposed pedestrian network is illustrated in **Figure 4-3**, while **Table 4-3** provides a complete inventory of all of sidewalk network recommendations. The result of the proposed pedestrian network would ensure sidewalks are offered on both sides of the street on all roads within Avondale. The proposed pedestrian network would more than 100 miles of new sidewalks within the city – nearly a 20 percent increase from the existing condition.

Sidewalks provide many benefits including safety, mobility, and healthier communities. In addition to reducing walking along roadway crashes, sidewalks reduce other pedestrian crashes. Roadways without sidewalks are more than twice as likely to have pedestrian crashes as sites with sidewalks on both sides of the street. By providing sidewalks on both sides of the street, numerous midblock crossing crashes can be eliminated.

By providing facilities that are more comfortable, we can increase the number of trips made by walking, particularly in areas with mixed land uses. Moreover, we can better serve our local populations. Many people cannot drive a car and are reliant on walking and public transit for transportation. Children, older adults, and people with disabilities make up a substantial portion of the population. Other people might choose to walk if they had better accommodations. Providing sidewalks, widened paved shoulders, or stabilized shoulders—particularly when providing access to transit and schools—can increase the transportation options for these individuals. Additionally, by moving pedestrians off the travel lanes, motorists' operations are improved and capacity increased. Research also indicates that people will walk for recreational purposes if a facility is provided. Recreational walking is one of the easiest ways for people to get the recommended allotment of physical exercise each day.

Figure 4-3: Pedestrian Network Recommendations Map

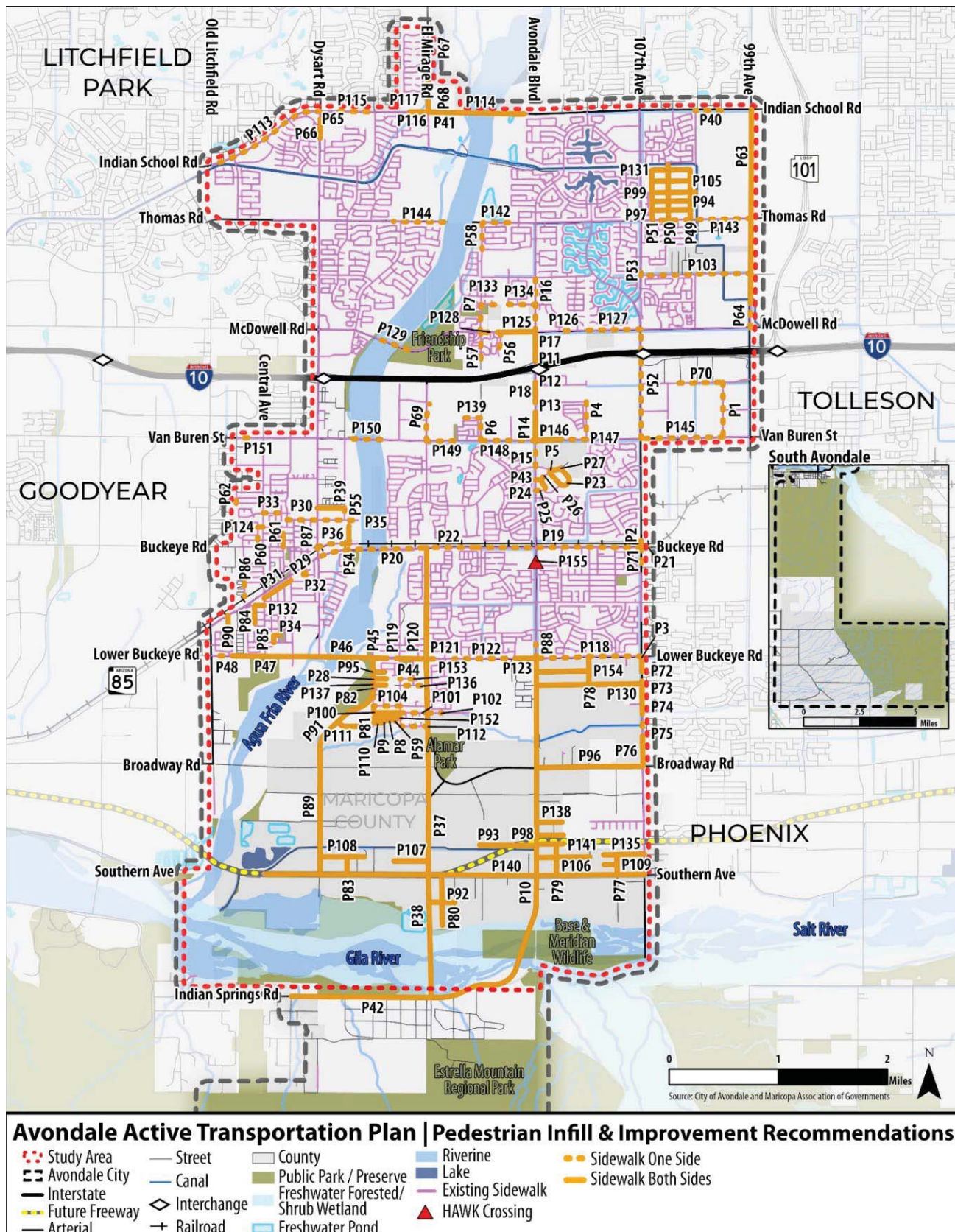


Table 4-3: Pedestrian Network Recommendations

ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
P19	Buckeye Rd	Sidewalk One Side	1.53	119th Ln	107th Ave
P124	W Madden Dr	Sidewalk Both Sides	0.05	1st Ave	Central Ave
P87	S 8th St	Sidewalk One Side	0.10	Western Ave	Buckeye Rd
P113	W Indian School Rd	Sidewalk One Side	1.13	Litchfield Park	Dysart Rd
P52	N 107th Ave	Sidewalk One Side	1.00	McDowell Rd	Van Buren St
P46	Lower Buckeye Rd	Sidewalk Both Sides	0.72	4th St	127th Ave
P16	Avondale Blvd	Sidewalk One Side	0.49	Encanto Blvd	McDowell Rd
P31	E Brooke Pl	Sidewalk Both Sides	0.30	Central Ave	4th St
P143	W Thomas Rd	Sidewalk One Side	0.91	106th Ave	99th Ave
P20	Buckeye Rd	Sidewalk One Side	0.97	Dysart Rd	El Mirage Rd
P60	N 1st Ave	Sidewalk One Side	0.12	Madden Dr	Hill Dr
P35	E Riley Dr	Sidewalk One Side	0.65	4th St	420 ft East Eliseo C Felix Jr Way
P71	S 107th	Sidewalk One Side	0.15	350 north Buckeye Rd	2nd St
P36	E Western Ave	Sidewalk One Side	0.29	Dysart Rd	Eliseo C Felix Jr Way
P14	Avondale Blvd	Sidewalk Both Sides	0.23	City Center Dr	Van Buren St
P15	Avondale Blvd	Sidewalk One Side	0.24	Van Buren St	Coldwater Springs Blvd
P61	N 3rd St	Sidewalk Both Sides	0.13	Kinderman Dr	Hill Dr
P126	W McDowell Rd	Sidewalk One Side	0.08	113th Dr	113th Ave
P127	W McDowell Rd	Sidewalk One Side	0.50	415 ft East 112th Ave	107th Ave
P21	Buckeye Rd	Sidewalk Both Sides	0.06	107th Ave	320 ft East 107th
P64	N 99th Ave	Sidewalk One Side	0.22	Palm Ln	McDowell Rd
P12	Avondale Blvd	Sidewalk One Side	0.10	I-10	Roosevelt St
P29	E Agua Fria Ln	Sidewalk One Side	0.08	Corral St	Dead End
P32	E Corral St	Sidewalk One Side	0.10	Corral St	7th St
P2	107th Ave	Sidewalk One Side	0.07	350 ft north Buckeye Rd	Buckeye Rd
P155	Avondale Blvd	HAWK Crossing	-	Avondale and Littleton Elementary	.
P10	Avondale Blvd	Sidewalk Both Sides	3.73	Lower Buckeye Rd	El Mirage Rd
P125	W McDowell Rd	Sidewalk Both Sides	0.32	117th Ave	Avondale Blvd
P129	W McDowell Rd	Sidewalk One Side	0.34	Agua Fria River West	Agua Fria River East
P84	S 1st Ave	Sidewalk Both Sides	0.16	Overlin Ln	Whymen Ave
P65	N Dysart Rd	Sidewalk One Side	0.10	Indian School Rd	500 ft south of Dysart Rd
P148	W Van Buren St	Sidewalk One Side	0.50	119th Ave	Avondale Blvd
P149	W Van Buren St	Sidewalk One Side	0.25	Fairway Dr	120th Ln
P13	Avondale Blvd	Sidewalk One Side	0.17	515 ft south Roosevelt St	City Center Dr
P18	Avondale Blvd	Sidewalk Both Sides	0.10	Roosevelt St	515 ft south Roosevelt St

ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
P150	W Van Buren St	Sidewalk One Side	0.27	Agua Fria River West	Agua Fria River East
P37	S El Mirage Rd	Sidewalk Both Sides	4.12	Buckeye Rd	Indian Springs Rd
P118	W Lower Buckeye Rd	Sidewalk One Side	0.97	Avondale Blvd	107th Ave
P40	Indian School Rd	Sidewalk One Side	0.24	100th Ave	103rd Ave
P41	Indian School Rd	Sidewalk Both Sides	0.07	El Mirage Rd	El Mirage Rd to East .07 miles
P117	W Indian School Rd	Sidewalk Both Sides	0.14	745 ft West El Mirage Rd	El Mirage Rd
P86	S 3rd Ave	Sidewalk One Side	0.13	Rhodes Ave	Dead End
P90	S Greenleaf Ln	Sidewalk Both Sides	0.08	Main St	Dead End
P132	W Overlin Ln	Sidewalk Both Sides	0.09	1st Ave	Central Ave
P146	W Van Buren St	Sidewalk Both Sides	0.24	Avondale Blvd	1/4 mile west 111th Ave
P63	N 99th Ave	Sidewalk Both Sides	1.78	Indian School Rd	Palm Ln
P151	W Van Buren St	Sidewalk One Side	0.10	137th Ave	535 ft east of 137th Ave
P121	W Lower Buckeye Rd	Sidewalk One Side	0.07	El Mirage Rd	460 ft East El Mirage Rd
P11	Avondale Blvd	Sidewalk Both Sides	0.22	290 ft south McDowell Rd	I-10
P66	N Dysart Rd	Sidewalk Both Sides	0.15	500 ft south of Dysart Rd	Fairmount Ave
P22	Buckeye Rd North	Sidewalk One Side	0.47	West of El Mirage Rd	West of 119th Ave
P53	N 107th Ave	Sidewalk One Side	0.10	320 ft North Encanto Blvd	Encanto Blvd
P116	W Indian School Rd	Sidewalk One Side	0.11	125th Dr	745 ft West El Mirage Rd
P128	W McDowell Rd	Sidewalk One Side	0.18	119th Ave	117th Ave
P48	Lower Buckeye Rd	Sidewalk One Side	0.21	Litchfield Rd	300 ft East of 5th Ave
P33	E Ludlow Dr	Sidewalk One Side	0.17	Central Ave	3rd St
P3	107th Ave	Sidewalk Both Sides	0.02	Lower Buckeye Rd	125 ft south Lower Buckeye Rd
P44	Lower Buckeye Rd	Sidewalk Both Sides	0.03	125th Ave	125th Ave East .01 miles
P115	W Indian School Rd	Sidewalk One Side	0.29	700 ft east Dysart Rd	320 ft east Santa Fe Trl
P34	E Park Dr	Sidewalk Both Sides	0.05	1st St	2nd St
P85	S 1st St	Sidewalk Both Sides	0.06	Park Dr	Elm Ln
P47	Lower Buckeye Rd	Sidewalk Both Sides	0.52	300 ft East of 5th Ave	4th St
P68	N El Mirage Rd	Sidewalk Both Sides	0.16	825 ft north Indian School Rd	Indian School Rd
P51	N 106th Ave	Sidewalk Both Sides	0.46	Mulberry Dr	Thomas Rd
P134	W Palm Ln	Sidewalk One Side	0.25	116th Ln	Avondale Blvd
P30	E Brinker Dr	Sidewalk Both Sides	0.25	Dysart Rd	Eliseo C Felix Jr Way
P17	Avondale Blvd	Sidewalk One Side	0.06	McDowell Rd	290 ft south McDowell Rd
P88	S Avondale Blvd	Sidewalk One Side	0.13	Rio Vista Ln	Lower Buckeye Rd
P122	W Lower Buckeye Rd	Sidewalk One Side	0.59	121st Dr	116th Ave
P123	W Lower Buckeye Rd	Sidewalk Both Sides	0.17	116th Ave	Avondale Blvd
P103	W Encanto Blvd	Sidewalk One Side	1.01	107th Ave	99th Ave
P145	W Van Buren St	Sidewalk One Side	0.75	107th Ave	101st Ave

ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
P114	W Indian School Rd	Sidewalk Both Sides	0.81	380 ft East El Mirage Rd	Copenhagen Dr
P69	N El Mirage Rd	Sidewalk One Side	0.34	Garfield St	Van Buren St
P142	W Thomas Rd	Sidewalk One Side	0.24	119th Ave	116th Ave
P49	N 103rd Ave	Sidewalk Both Sides	0.46	Mulberry Dr	Thomas Rd
P50	N 105th Ave	Sidewalk Both Sides	0.50	Mulberry Dr	Thomas Rd
P94	W Avalon Dr	Sidewalk Both Sides	0.35	106th Ave	103rd Ave
P97	W Catalina Dr	Sidewalk Both Sides	0.35	106th Ave	103rd Ave
P45	Lower Buckeye Rd	Sidewalk Both Sides	0.08	127th Ave	127th Ave East .07 miles
P82	S 127th Ave	Sidewalk Both Sides	0.31	Lower Buckeye Rd	Superior Ave
P153	W Whyman St	Sidewalk One Side	0.12	125th Ave	124th Ave
P120	W Lower Buckeye Rd	Sidewalk Both Sides	0.21	175 ft East 125th Ave	El Mirage Rd
P105	W Flower St	Sidewalk Both Sides	0.35	106th Ave	103rd Ave
P131	W Mulberry St	Sidewalk Both Sides	0.35	106th Ave	103rd Ave
P147	W Van Buren St	Sidewalk One Side	0.22	1/4 mile west 111th Ave	111th Ave
P39	Elisio Felix Jr Way	Sidewalk One Side	0.11	Brinker Dr	Riley Dr
P62	N 4th Ave	Sidewalk One Side	0.10	Loma Linda Blvd	Brinker Dr
P99	W Earll Dr	Sidewalk Both Sides	0.40	106th Ave	103rd Ave
P91	S Vermeersch Rd	Sidewalk Both Sides	0.67	Superior Ave	1.5 miles south Superior Ave
P96	W Broadway Rd	Sidewalk Both Sides	0.98	Avondale Blvd	107th Ave
P67	N El Mirage Rd	Sidewalk One Side	0.58	<Null>	825 ft north Indian School Rd
P144	W Thomas Rd	Sidewalk One Side	0.46	350 ft West Rancho Santa Fe Blvd	Agua Fria River West
P6	119th Ave	Sidewalk One Side	0.21	Roosevelt St	Van Buren St
P7	119th Ave	Sidewalk One Side	0.26	Palm Ln	McDowell Rd
P23	Civic Center Dr	Sidewalk Both Sides	0.31	400 ft southeast 114th Ave	Coldwater Springs Blvd
P24	Civic Center Dr	Sidewalk One Side	0.09	Avondale Blvd	Madison St
P56	N 117th Ave	Sidewalk One Side	0.22	McDowell Rd	1/4 mile south McDowell Rd
P57	N 119th Ave	Sidewalk One Side	0.24	McDowell Rd	Roosevelt Ave
P139	W Roosevelt St	Sidewalk One Side	0.16	120 Dr	119th Ave
P1	101st Ave	Sidewalk One Side	0.50	Roosevelt St	Van Buren St
P70	Roosevelt St	Sidewalk One Side	0.40	103rd Ave	101st Ave
P28	County Line Rd	Sidewalk Both Sides	0.12	127th Ave	Dead End
P95	W Bohn St	Sidewalk Both Sides	0.11	127th Ave	Dead End
P119	W Lower Buckeye Rd	Sidewalk One Side	0.16	126th Ave	125th Ave
P54	N 10th St	Sidewalk Both Sides	0.14	435 ft south Riley Dr	Western Ave
P55	N 10th St	Sidewalk One Side	0.08	Riley Dr	435 ft south Riley Dr
P81	S 127th Ave	Sidewalk One Side	0.28	Vermeersch Rd	Illini St
P101	W Elwood St	Sidewalk One Side	0.25	125th Ave	El Mirage Rd



ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
P5	114th Ave	Sidewalk One Side	0.04	Coldwater Springs Blvd	Civic Center Dr
P25	Civic Center Dr	Sidewalk Both Sides	0.09	Madison St	Jefferson St
P26	Civic Center Dr	Sidewalk One Side	0.17	Jefferson St	400 ft southeast 114th Ave
P27	Coldwater Springs Blvd	Sidewalk Both Sides	0.10	114th Ave	Civic Center Dr
P43	Jefferson St	Sidewalk One Side	0.06	Avondale Blvd	Civic Center Dr
P58	N 119th Ave	Sidewalk One Side	0.24	Thomas Rd	Virginia Ave
P42	Indian Springs Rd	Sidewalk Both Sides	1.28	133rd Ave	El Mirage Rd
P136	W Pioneer St	Sidewalk One Side	0.19	125th Ave	330 ft east 124th Ave
P137	W Pioneer St	Sidewalk Both Sides	0.12	127th Ave	Dead End
P154	W Winslow Ave	Sidewalk Both Sides	0.48	Avondale Blvd	111th Ave
P140	W Southern Ave	Sidewalk Both Sides	3.47	Buckeye Canal	107th Ave
P72	S 107th Ave	Sidewalk Both Sides	0.09	125 ft south Lower Buckeye Rd	600 ft south Lower Buckeye Rd
P73	S 107th Ave	Sidewalk One Side	0.14	600 ft south Lower Buckeye Rd	Miami Ave
P74	S 107th Ave	Sidewalk Both Sides	0.25	Miami Ave	1/4 Mile south Miami Ave
P4	111th Ave	Sidewalk One Side	0.34	Roosevelt St	Van Buren St
P152	W Warner St	Sidewalk Both Sides	0.24	127th Ave	125th Ave
P133	W Palm Ln	Sidewalk One Side	0.12	119th Ave	650 ft East 119th Ave
P112	W Illini St	Sidewalk One Side	0.25	125th Ave	El Mirage Rd
P8	126th Ave	Sidewalk Both Sides	0.03	Warner St	Dead End
P9	126th Dr	Sidewalk Both Sides	0.04	Warner St	Illini St
P59	N 125th Dr	Sidewalk Both Sides	0.03	Warner St	Dead End
P100	W Elwood St	Sidewalk Both Sides	0.24	127th Ave	125th Ave
P104	W Florence St	Sidewalk One Side	0.25	127th Ave	125th Ave
P110	W Illini St	Sidewalk Both Sides	0.09	127th Ave	126th Dr
P111	W Illini St	Sidewalk Both Sides	0.19	Vermeersch Rd	Dead End
P38	el Mirage Rd	Sidewalk Both Sides	0.26	Alta Vista Rd	Gila River
P75	S 107th Ave	Sidewalk One Side	0.26	1/4 Mile south Miami Ave	Jones Ave
P76	S 107th Ave	Sidewalk Both Sides	0.25	Jones Ave	Broadway Rd
P89	S Dysart Rd	Sidewalk Both Sides	1.24	1.5 miles south of Superior St	Southern Ave
P78	S 111th Ave	Sidewalk Both Sides	0.26	Lower Buckeye Rd	Miami Ave
P130	W Miami Ave	Sidewalk Both Sides	0.97	Avondale Blvd	107th Ave
P102	W Elwood St	Sidewalk One Side	0.13	El Mirage Rd	122nd Ave
P77	S 109th Ave	Sidewalk Both Sides	0.19	Pecan Rd	Southern Ave
P79	S 114th Ave	Sidewalk Both Sides	0.29	Sunland Ave	Southern Ave
P80	S 122nd Ave	Sidewalk Both Sides	0.45	Southern Ave	Gila River
P83	S 129th Ave	Sidewalk Both Sides	0.16	Hidalgo Ave	Southern Ave
P92	W Alta Vista Rd	Sidewalk Both Sides	0.24	El Mirage Rd	121st Ave



ID	Location	Facility Type	Length (Miles)	Limit From	Limit To
P93	W Atlanta Ave	Sidewalk Both Sides	0.52	1/2 Mile west Avondale Blvd	Avondale Blvd
P98	W Chambers Ave	Sidewalk Both Sides	0.25	Avondale Blvd	350 ft east 114th Ave
P106	W Hidalgo Ave	Sidewalk Both Sides	0.49	Avondale Blvd	111th Ave
P107	W Hidalgo Ave	Sidewalk Both Sides	0.31	1/4 mile El Mirage Rd	El Mirage Rd
P108	W Hidalgo Ave	Sidewalk Both Sides	0.40	Dysart Rd	830 ft east of 129th Ave
P109	W Hidalgo Ave	Sidewalk Both Sides	0.12	630 ft west of 109th Ave	109th Ave
P135	W Pecan Rd	Sidewalk Both Sides	0.37	625 ft west 109th Ave	107th Ave
P138	W Roeser Rd	Sidewalk Both Sides	0.24	Avondale Blvd	350 ft east 114th Ave
P141	W Sunland Ave	Sidewalk Both Sides	0.25	Avondale Blvd	350 ft east 114th Ave

SUPPORTING POLICY CONSIDERATIONS

In addition to improving Avondale's active transportation network through tangible projects and engineering solutions, a holistic perspective of supporting policy, programmatic, education, enforcement, and encouragement elements will be critical for implementing and sustaining a pedestrian- and bicycle-friendly network. The following supporting policy and programming recommendations are categorized in the six E's of active transportation.

Engineering

Creating safe and convenient places to ride and walk

- Continue to evaluate the City's Capital Improvement Programs annually to include priority projects and programs recommended in the ATP.
- Upgrade roadway design standards to include more modern bicycle pedestrian facility types and conditions.
- The average person feels most comfortable walking or riding a bike off the roadway, particularly with children in-tow. For this reason, residential PUD's or MPC's should be required to improve bicycle and pedestrian facilities within new subdivisions well as connection between subdivisions (or residential communities) in the subdivision platting process. In addition, pedestrian connections should be made to cul- de-sac, and around (not through) retention and detention basins. All connections should be complete with equitable ADA transitions and signage providing access for all abilities. Additional considerations should be made to incorporate a "Behind the Wall" trail system/design connecting neighborhoods and amenities including City-planned paths and trails
- Retrofit existing facilities to incorporate ADA compliant facilities, as needed.
- Canopies, awnings, and similar architectural features that shade public and private sidewalks and accentuate entries should be incorporated into the design of buildings, where appropriate.
- In conjunction with routine roadway maintenance and/or pavement management system, implement a roadway re-striping program to include provisions for bike lanes when and where feasible.
- Coordinate with Phoenix, Tolleson and Goodyear to achieve continuity of bike lanes across jurisdictional boundaries.
- Consider the creation a Vision Zero Policy and attach a date: recommended 2040 (consistent with the plan horizon of the Avondale Transportation Planning Study). Vision Zero was created to reduce traffic related pedestrian deaths, with the ultimate goal of zero.
- In relation to the ongoing General Plan update, consider a policy that encourages housing at greater densities within transit corridors and transit stops to facilitate walkable neighborhoods that encourage healthy lifestyles.
- Create an ordinance to prohibit illegal uses on the path and trail systems and establish fines that serve as a substantial deterrent. Require removable bollards at entrances to all multi-use paths to prevent OHV's and other forms of unwarranted motorized vehicles (including e-bikes of a certain speed threshold) from entering and to provide access for maintenance vehicles.
- Continue to ensure bicycle racks are placed in public areas and pedestrian activity centers. These areas include, but are not limited to parks, civic uses, churches, and schools. These efforts should consist of the City placing bike racks or working with other public institutions to have them placed on site. The City should add minimum bike parking requirements to their



zoning codes for private developments. Typically bike parking requirements should be 10 to 20 percent of the number of off-street spaces that are required with a minimum of two bike parking spaces provided on-site (one inverted U rack). This provision could be waived if public facilities are available nearby. The inverted U is the preferred type of bike rack.

- Formulate a policy to consider access and ways to activate the space along and/or adjacent to canals with all incoming developments
- In high pedestrian activity areas, evaluate pedestrian crossing times to ensure that pedestrians have ample time to cross.
- Create an ordinance or policy that either allows or disallows private companies from operating a bike or scooter share in the City of Avondale. If desired, the City's ordinance can serve as an attractor to such companies.
- The term "Complete Streets" refers to the practice of designing streets so that people of all ages and abilities can choose and use their travel mode safely (i.e. take transit, use a wheelchair or other mobility device, drive a car, walk, ride a bicycle) and not be confined to one choice. The City should consider adopting a Complete Streets policy to ensure that all users are considered, if not accommodated, with each opportunity for changing streets within Avondale City Limits. Some recommended aspects of such policy include, but are not limited to:
 - Drinking fountains/ water bottle fillers (dogs too!) and trash receptacles
 - Shade (art, landscaping, architecture)
 - Lighting and seating
 - Wayfinding
- Identify best practices for all implemented facilities regarding striping, sealing, reconstruction, and environmental damage repair. Utilize volunteer and community service organizations for trail maintenance and litter abatement activities on a quarterly basis.
- Work with the Parks and Recreation Department to install signage on routes that connect to parks and trailheads.
- Collaborate with MAG and local jurisdictions to incorporate wayfinding for regional bicycle routes.

Education

Giving people of all ages and abilities the skills and confidence to ride and walk

- Design and launch a broad reaching bike skills training and bike lock/safety gear distribution initiative.
- Launch a professional driver education program.
- Improve the reach of safety outreach campaigns to drivers.
- Public Service Announcements - Visual Trainings to educate all ages on important safety topics.

Evaluation & Planning

Evaluate use of the active transportation network and impact of implemented projects, programs and policies

- Increase local capacity for pedestrian/bike project planning, implementation, and evaluation.
- Establish a set of performance measures to annually evaluate and report on the progress of active transportation network improvements and mode shift.
- In tandem with developing performance measure, create a “data dashboard” of key metrics and evaluate progress towards walk and bike mode goals and performance measure.

Encouragement

Creating a strong culture that welcomes and celebrate multimodal users

- Expand the landscape of encouragement events to offer new, and more frequent programming.
- Host targeted events and programs to engage underrepresented groups, such as women and seniors.
- Grow awareness of and participation in existing Transportation Demand Management Programs.

Enforcement

Ensuring safe roads for all users

- Revise crash reporting protocol to collect more robust data for crashes involving people walking or biking.
- Increase collaboration between local law enforcement agencies, emergency service providers, City departments, and local organizations.

Equity

Supporting safe, active, and healthy opportunities in underrepresented and vulnerable communities

- Expand education efforts and access to low income and minority communities
- Consider location equity in distributing walk/bike improvements across Avondale’s neighborhoods.
- Safeguard against discriminatory enforcement.

5 IMPLEMENTATION PLAN

This section outlines a sequence to help appropriately and effectively implement the recommended active transportation infrastructure. Successfully implementing the Plan's recommendations will help achieve the Avondale's vision for a safe and accessible active transportation network. The implementation framework focuses on an equitable and systematic prioritization of projects to determine the Plan's implementation over a timeframe that spans 20 years. The goal is to incrementally implement as many of the projects as possible while recognizing fiscal limitations and other municipal budgetary needs will influence the specific implementation of the many projects identified in this ATP.

PRIORITIZATION & IMPLEMENTATION TIMELINE

Project Prioritization Approach

Creating a prioritization framework assists in directing Avondale design efforts and funding considerations towards areas which are in the highest need, and likely to yield the highest return on investment in bicycling, walking, and using transit once facilities are installed or upgraded. These areas are prioritized based on factors such as safety, proximity to schools, neighborhoods, jobs, and cultural institutions as well as areas where bicycling, walking, and using transit may be the predominant mode of travel for socioeconomic reasons.

A prioritization model was developed to inform the intended implementation process. The prioritization tool was created to be dynamic and flexible by accommodating updates in the future as the recommendations are implemented and new needs arise. Through the application of quantitative and qualitative evaluation criteria, the results of the prioritized recommendations provide clear, pragmatic, and justifiable guidance on the order of which recommendations should be implemented.

During the creation of the prioritization model, five evaluation criteria were identified, and weights were assigned based on stakeholder inputs received. **Table 5-1** provides a description of each evaluation criteria and the corresponding weight.

Table 5-1: Evaluation Criteria & Weighting

Evaluation Criteria	Weight
Proximity & Connectivity: a project that fills a gap or connects to the network and is adjacent to key destinations.	20
Safety: a project that may improve the safety and potentially reduce pedestrian- or bicycle-related crashes	30
Comfort: a project creating a more comfortable experience for pedestrians and bicyclists by mitigating the negative effects of vehicular speed, traffic volume, and the number of potential conflicts.	20
Social Equity: a project providing access to or located within an underserved geography where bicycling, walking, and using transit may be the predominant mode of travel based on socioeconomic conditions.	15
Deliverability & Constructability: a project that is more likely to be implanted based on other factors such as roadway ownership, estimated cost, and previously recommended improvement from prior planning efforts.	15

The results of the prioritization process are not intended to preclude projects from receiving funding or from being incorporated into a new development or other roadway project. All recommended improvement projects have merit and should be implemented as timely and cost-effective opportunities arise regardless if they are initiated by Avondale or other government agency, a land owner or other entity.

Prioritization Sub-Criterion & Scoring

Four additional metrics (Sub-Criteria) were developed for each of previously mentioned evaluation criteria to score and rank the recommendations and projects. The evaluation criteria and sub-criteria resulted in an objective and equitable scoring system that measures each project. Both qualitative and quantitative metrics were used creating an intuitive and clear, data-driven format that meets the needs of the community and the objectives of this Plan.

The possible score for each sub-criterion is determined by the weight of the corresponding evaluation criterion. There are four sub-criteria with each evaluation criterion, and the possible scores of the metric are equal within the evaluation criteria. For example, if an evaluation criterion was assigned a weight of 20, each of the sub-criteria had a highest possible score of 5. Depending on the sub-criterion and the results of the evaluation, each sub-criterion scored a project under two or three scoring thresholds. The lowest possible score a project could receive for any sub-criterion is 1. And the sub-criterion with a three-tier scoring threshold used an intermediate score of half of the total possible points. Using the same example, if the total possible score for a sub-criterion is five, projects falling within the middle scoring threshold would receive 2.5 points.

Table 5-2 through **Table 5-6** describe the project prioritization sub criteria scoring utilized. Ultimately, the sub criteria scores for each project are combined to generate an overall project score. A high priority project (a project with a higher overall score) provides the greatest benefit for the criteria identified. Avondale staff should regularly revisit the project list and reapply the prioritization methodology to help schedule short-term improvements.

Table 5-2: Proximity & Connectivity Evaluation/Scoring Framework

Proximity & Connectivity				
Fills a gap or connects to the network and adjacent to key destinations				
Weight	Sub-Criteria Description	Metric	Scoring Thresholds	
20	Project addresses infrastructure gaps or connects to the current system to create a continuous network.	Spatial overlay to determined connections to the existing/planned network.	5	Yes = 5
				No = 1
	Project connects people within City neighborhoods and/or across adjacent jurisdictions.	Spatial inventory of total connections.	5	7 to 12 = 5
				4 to 6 = 2.5
				0 to 3 = 1
	Project improves direct access to critical facilities such as schools and medical services.	Spatial inventory of the total number of critical facilities within 1/4 mile.	5	5 to 7 = 5
				2 to 4 = 2.5
				0 to 1 = 1
	Project improves access to transit stops and surrounding destinations.	Spatial inventory of bus stops located within 1/4 mile.	5	8 to 13 = 5
				2 to 7 = 2.5
				0 to 1 = 1

Table 5-3: Safety Evaluation/Scoring Framework

Safety				
May improve the safety and potentially reduce pedestrian- or bicycle-related crashes				
Weight	Sub-Criteria Description	Metric	Scoring Thresholds	
30	Project may address areas with a high number of pedestrian/bicycle related crashes.	Spatial inventory of pedestrian and or bicycle related crashes within 250 Ft.	7.5	7 to 17 = 7.5
				2 to 6 = 3.75
				0 to 1 = 1
	Project may address areas with a higher number of crashes resulting in serious injuries for bicyclists and pedestrians.	Spatial inventory of crashes within 250 ft that resulted in a bicyclist or pedestrian fatality or incapacitating injury.	7.5	2 to 3 = 7.5
				1 = 3.75
				0 = 1
	Project may address areas with a high number of all types of crashes.	Spatial inventory of all crash types and severity within 250 ft.	7.5	273 to 779 = 7.5
				80 to 272 = 3.75
				0 to 79 = 1
	Project has a high likelihood of reducing bicycle and pedestrian crashes.	The facility type has a positive Crash Reduction Factor (CRF) assigned by FHWA's Crash Modification Factors Clearinghouse.	7.5	Yes = 7.5
				No = 1

Table 5-4: Comfort Evaluation/Scoring Framework

Comfort				
Creates a more comfortable experience for pedestrians and bicyclists by mitigating the negative effects of vehicular speed, traffic volume, and the number of potential conflicts.				
Weight	Sub-Criteria Description	Metric	Scoring Thresholds	
20	Project provides increased comfort for bicyclists and pedestrians through new or improved infrastructure on roads with higher amount of traffic lanes.	Average number of vehicular traffic lanes adjacent to a project.	5	4.3 to 6 = 5
				2.1 to 4.2 = 2.5
				0 to 2 = 1
	Project provides increased comfort for bicyclists and pedestrians through new or improved infrastructure on roads with a higher posted speed limit.	Average speed limit on roads adjacent to a project.	5	31 to 50 = 5
				1 to 30 = 2.5
				0 = 1
	Project provides increased comfort for bicyclists and pedestrians through new or improved infrastructure on roads with a higher amounts of traffic volumes.	Average daily traffic volumes on roads adjacent to a project.	5	23,512 to 53,711 = 5
				9,859 to 23,511 = 2.5
				0 to 9,858 = 1
	Project provides increased comfort for bicyclists and pedestrians through new or improved infrastructure on roads with a higher frequency of conflict points (i.e. intersections, driveways, and railroad crossings).	Total number of potential conflict points within project limits.	5	9 to 19 = 5
				4 to 8 = 2.5
				0 to 3 = 1

Figure 5-1 shows examples of comfort for multimodal roadway users by facility type and condition.

Figure 5-1: Multimodal Roadway User Comfort Level Scale

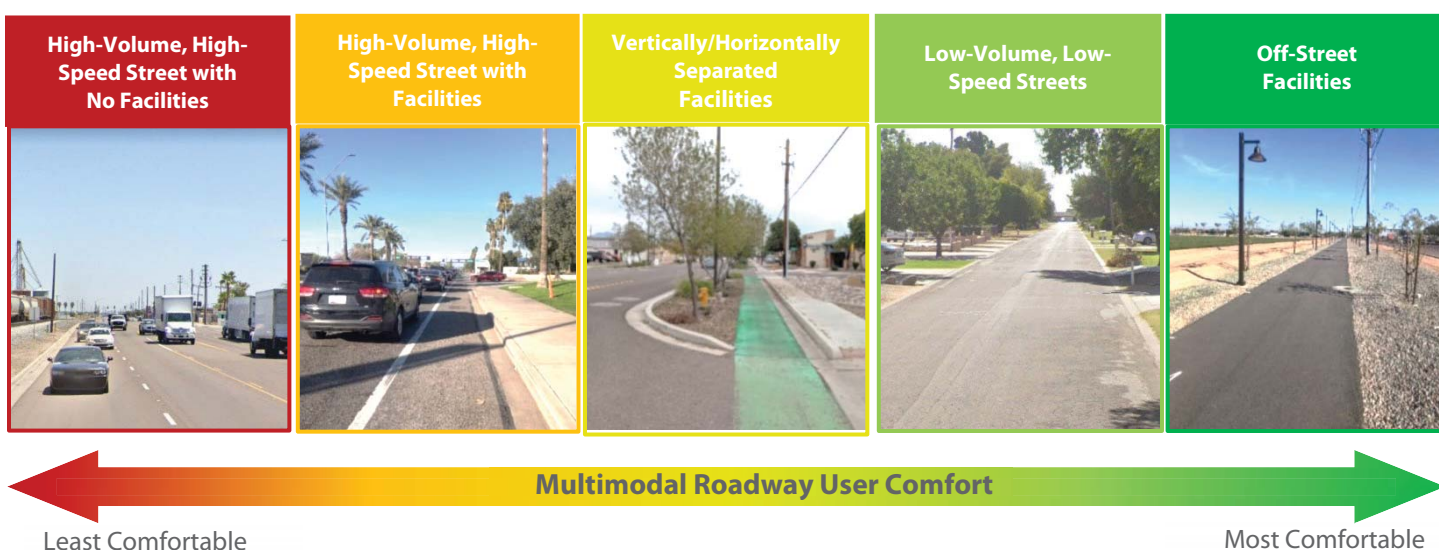


Table 5-5: Social Equity Evaluation/Scoring Framework

Social Equity				
<i>Provides access to underserved geography where bicycling, walking, and using transit may be the predominant mode of travel based on socioeconomic conditions.</i>				
Weight	Sub-Criteria Description	Metric	Scoring Thresholds	
15	Project serves an area with high number of low income and zero-car household populations.	Total number of people below the poverty level or without access to an automobile within 1/4 mile.	3.75	832 to 20,666 = 3.75
				307 to 831 = 1.875
				3 to 306 = 1
	Project serves an area with a high number of individuals with disabilities.	Total number of people with disabilities within 1/4 mile.	3.75	603 to 1,401 = 3.75
				235 to 602 = 1.875
				3 to 234 = 1
	Project serves an area with a disproportionate rate of vulnerable users (i.e. children, elderly, and minorities).	Total population of potential vulnerable roadway users within 1/4 mile.	3.75	5,607 to 9,613 = 3.75
				2294 to 5,606 = 1.875
				18 to 2,293 = 1
	Project provides active transportation facilities in an area where residents more frequently commute by alternative modes of transportation.	The average percent of the population within 1/4 mile who commute to work by walking, biking, or taking public transportation.	3.75	6.68% to 21.66% = 3.75
				2.27% to 6.67% = 1.875
				0% to 2.26% = 1

Table 5-6: Deliverability & Constructability Evaluation/Scoring Framework

Deliverability & Constructability				
<i>Higher likelihood of implementation based on other factors such as roadway ownership, estimated cost, and previously recommended improvement from prior planning efforts.</i>				
Weight	Sub-Criteria Description	Metric	Scoring Thresholds	
15	Project was previously recommended prior to this Plan.	Project is derived from a previous locally or regionally adopted plan or report - Yes or No.	3.75	Yes = 3.75
				No = 1
	Project cost estimate for construction.	The total planning-level cost estimate for construction relative to other projects.	3.75	\$3k to \$2.09M = 3.75
				\$2.09M to \$6.49M = 1.875
				\$6.49M to \$16.49M = 1
	Projected maintenance cost.	Estimated level of ongoing maintenance based on the project type.	3.75	Low = 3.75
				Medium = 1.875
				High = 1
	Roadway ownership status.	Project is located on a roadway owned and maintained by the City.	3.75	Fully Owned = 3.75
				Partially Owned = 1.875
				No Owned = 1

Project Prioritization & Implementation

This section summarizes the project scores derived from the application of the evaluation criteria and the projects total score and rank. Refer to Appendix F for the full inventory of the results from the project prioritization model, which includes the detailed results of the inputs and outputs for each of the sub-criteria and the resulting score for each project. A total of 240 recommended active transportation projects were identified as part of this Plan. Each of the projects were scored through the previously mentioned evaluation criteria on a scale from 0 to 100. The highest ranked project received a score of 82 points while the lowest ranked project scored 35.63 points.

The projects identified in this Plan can each be considered segments of the full proposed network. Creating the vision for the proposed full network is a multi-year process; implementation of the full proposed network will be phased over the next 20 years and beyond, with the goal of more than doubling the miles of improved and interconnected on-street and off-street routes within the network over the next 20+ years. All 240 projects have been prioritized and divided into three different implementation timeframes based on the results of the evaluation criteria and project ranking. The three implementation timeframes include:

- **Short-Term: 0-5 Years**
- **Mid-Term: 5-20 Years**
- **Long-Term 20+ Years**

Projects considered high priority within the short-term period are proposed to be developed within the first five years after Plan adoption. It is highly recommended that at least eight projects be completed each year to meet this goal. Projects in the mid-term of the network development will build upon the connected network built within 20 years, while the projects within the long-term will further enhance the network towards complete beyond 20 years.

Planning-level Cost Estimates

The planning-level cost estimates generated as part of this Plan are presented in 2021 dollars. Site specific details of each project, such as utility impacts, detailed constructability issues, and environmental investigations, were not intended to be investigated under the scope of work for this Plan, but will be further evaluated in any future engineering design process. Unit costs were developed here to reflect average conditions in the region.

Improvements on some corridors are likely to be more expensive than estimated, while others are likely to be less expensive than estimated. That is to say, costs included herein will fluctuate when further defined in future engineering design processes but are of value here as a broad measure of anticipated project costs for comparative purposes in this Plan. The cost estimates do not include any potential right-of-way acquisition, also to be determined on individual projects' right-of-way needs during the future engineering design process as projects become implemented. However, the cost estimates are intended to include both design and contingency factors.

Cost estimates were determined using a four-step process, as follows:

1. Project identification;
2. Determine facility type of each project;
3. Identify unit costs for each accommodation type; and
4. Calculate cost estimate for each project as the product of the length and the unit cost.

Table 5-7: Planning-level Cost Estimate Unit Costs

Facility Type	Cost	Unit
Bike lanes (both sides)	\$350,000	Per mile
New off-street paved path	2,000,000	Per mile
HAWK Crossing	\$180,000.00	Per crossing
Sidewalks (include C/G)	\$71	Per linear foot
Local road	\$3,200,000.00	Per mile
Bicycle wayfinding sign	\$1,685	Per sign
Design factor	10%	-
Contingency factor	30%	-

Short-Term Projects

Based on the results of the project prioritization process, a total of 40 projects are identified as a short-term priority. The short-term recommended projects include a variety of project facility types; however, this set of projects primarily includes the installation of new bike lanes to fill an existing gap in the on-street network (19 of the 40 projects). Other projects include bicycle signage, wayfinding signage and applications, and sidewalk infill projects.

The short-term priority projects are estimated to cost approximately \$16.2 million to collectively implement. These projects would result in roughly 34 lane-miles of new on-street bike facilities, 10 miles of new sidewalks, a roadway improvement project, and a series of directional and wayfinding signage originally recommended by the Avondale Wayfinding Plan. **Figure 5-2** illustrates the impact of the short-term projects on the active transportation network by showing the increase of miles of new on-street bike, off-street multi-use, and pedestrian facilities.

Refer to **Figure 5-3** for a map of all 40 short-term projects and **Table 5-7** for a complete inventory of recommended short-term projects, which includes the project ID, location, cost estimate, and evaluation criteria and project prioritization results.

Figure 5-2: Short-Term Projects Infographic

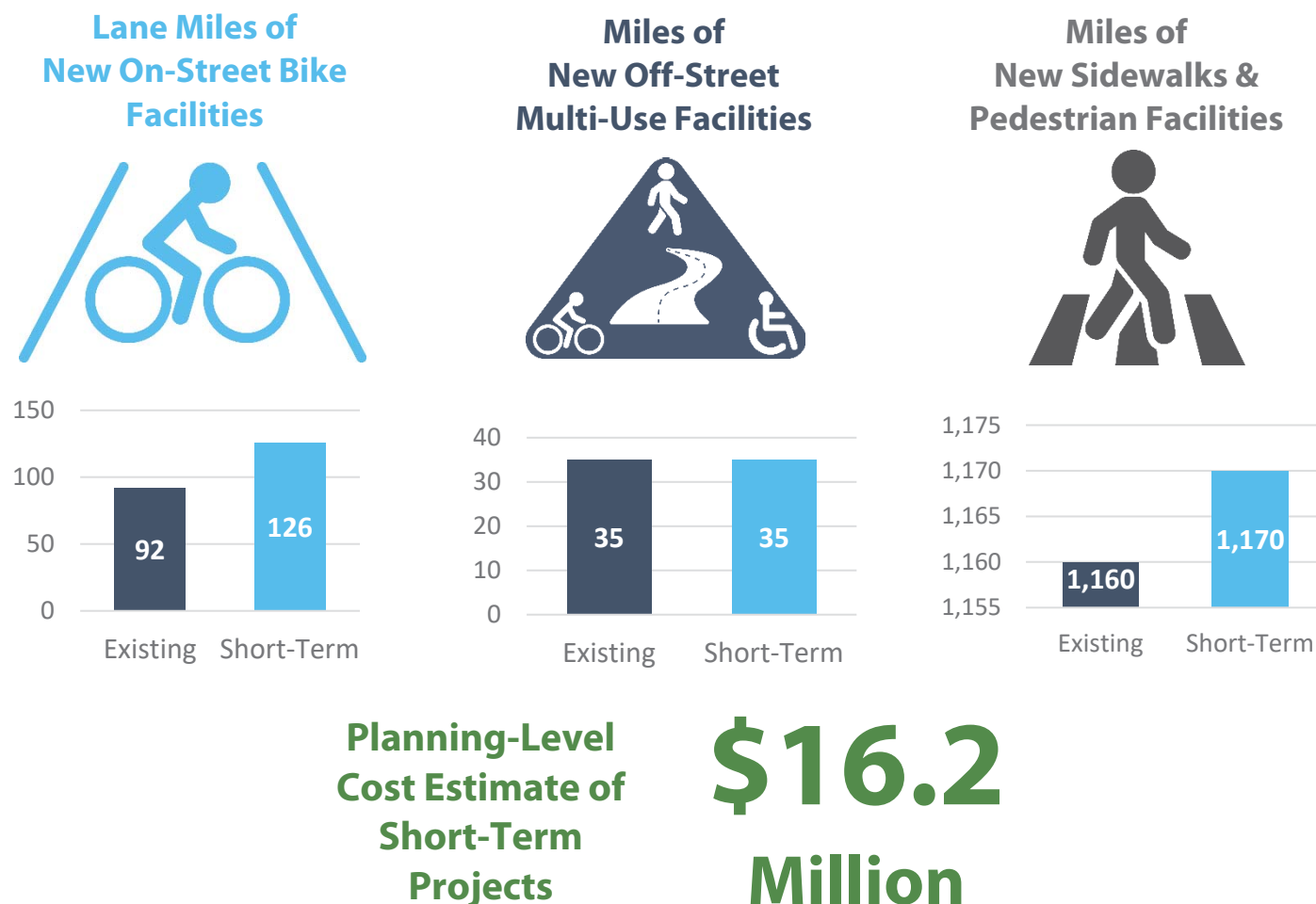


Figure 5-3: Map of Short-Term Projects (0-5 years)

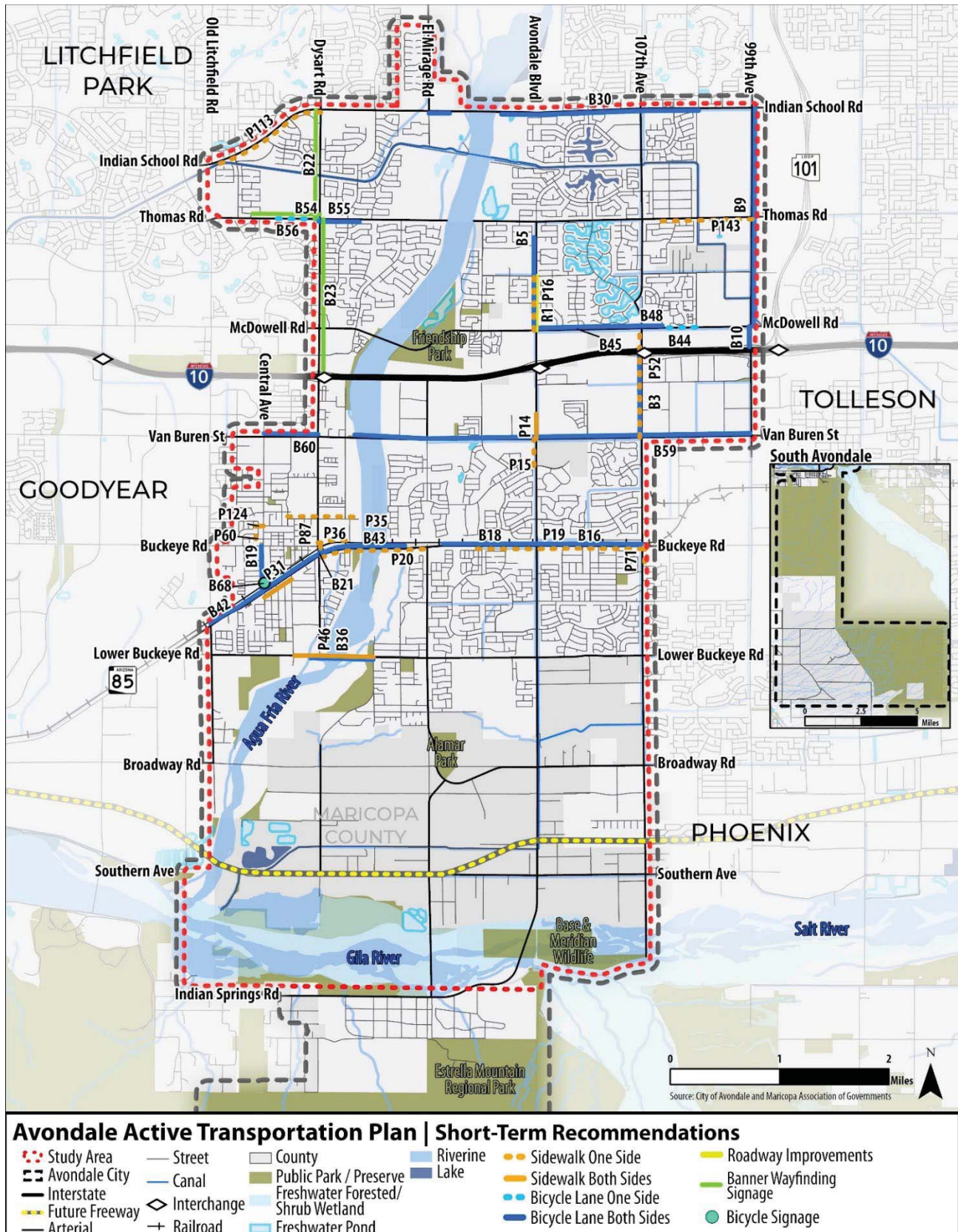


Table 5-8: Short-Term Projects Inventory

ID	Location	Facility Type	Miles	Project Limits	Cost Estimate	Evaluation Criteria Results					Prioritization	
						Proximity & Connectivity	Safety	Comfort	Social Equity	Deliverability & Constructability	Score	Rank
B23	Dysart Rd	Banner Wayfinding Signage	1.39	Thomas Rd to I-10	\$53,000	12	30	17.5	7.5	15	82.00	1
B30	Indian School Rd	Bicycle Lane Both Sides	1.99	El Mirage Rd to 103rd Ave	\$1,092,000	20	23.5	15	6.625	10.375	75.50	2
B22	Dysart Rd	Banner Wayfinding Signage	1.00	Indian School Rd to Thomas Rd	\$53,000	11	26.25	15	6.625	15	73.88	3
B43	Main St/Buckeye Rd	Bicycle Lane Both Sides	1.69	Hummingbird 2 MPH to 1000 ft West El Mirage Rd	\$924,000	13.5	19.75	15	13.125	11.25	72.63	4
B60	Van Buren St	Bicycle Lane Both Sides	0.49	Central Ave to Dysart Rd	\$271,000	12	30	12.5	7.5	10.375	72.38	5
B16	Buckeye Rd	Bicycle Lane Both Sides	0.96	Avondale Blvd to 107th Ave	\$526,000	13.5	18.75	12.5	10.375	13.125	68.25	6
P19	Buckeye Rd	Sidewalk One Side	1.53	119th Ln to 107th Ave	\$894,000	13.5	18.75	12.5	10.375	10.375	65.50	7
P124	W Madden Dr	Sidewalk Both Sides	0.05	1st Ave to Central Ave	\$57,000	12.5	19.75	5.5	15	12.25	65.00	8
B21	Dysart Rd	Bicycle Lane Both Sides	0.11	Western Ave to Buckeye Rd	\$59,000	9.5	18.75	8.5	15	13.125	64.88	9
B59	Van Buren St	Bicycle Lane Both Sides	3.62	Agua Fria River West to 99th Ave	\$1,981,000	17.5	16	13.5	7.5	10.375	64.88	10
B19	Central Ave	Bicycle Lane Both Sides	0.42	Western Ave to Main St	\$232,000	15	10.5	11	15	13.125	64.63	11
B87	S 8th St	Sidewalk One Side	0.10	Western Ave to Buckeye Rd	\$60,000	9.5	18.75	8.5	15	12.25	64.00	12
B10	99th Ave	Bicycle Lane Both Sides	0.19	McDowell Rd to I-10	\$102,000	9.5	18.75	16	6.625	13.125	64.00	13
P113	W Indian School Rd	Sidewalk One Side	1.13	Litchfield Park to Dysart Rd	\$663,000	11	22.5	12.5	5.75	12.25	64.00	14
P52	N 107th Ave	Sidewalk One Side	1.00	McDowell Rd to Van Buren St	\$586,000	12.5	19.75	12.5	6.625	12.25	63.63	15
B5	115th Ave	Bicycle Lane Both Sides	0.84	Roanoke Dr to McDowell Rd	\$460,000	15	18.75	11	7.5	10.375	62.63	16
B9	99th Ave	Bicycle Lane Both Sides	2.00	Indian School Rd to McDowell Rd	\$1,095,000	9.5	22.5	12.5	6.625	11.25	62.38	17
B54	Thomas Rd	Bicycle Lane One Side	0.38	Estrella Mountain CC to Dysart Rd	\$104,000	15	16	11	6.625	13.125	61.75	18
P46	Lower Buckeye Rd	Sidewalk Both Sides	0.72	4th St to 127th Ave	\$845,000	13.5	19.75	9.5	6.625	12.25	61.63	19
B44	McDowell Rd	Bicycle Lane One Side	0.31	Harbor Shores Blvd to 103rd Ave	\$85,000	9.5	16	16	6.625	13.125	61.25	20
B56	Thomas Rd	Banner Wayfinding Signage	0.62	136th Ave to Dysart Rd	\$53,000	11	16	12.5	6.625	15	61.13	21
P16	Avondale Blvd	Sidewalk One Side	0.49	Encanto Blvd to McDowell Rd	\$290,000	12.5	18.75	9.5	7.5	12.25	60.50	22
B36	Lower Buckeye Rd	Bicycle Lane Both Sides	0.57	Agua Fria River West to Agua Fria River East	\$314,000	13.5	19.75	9.5	6.625	10.375	59.75	23
B45	McDowell Rd	Bicycle Lane Both Sides	0.48	Avondale Blvd to 515 ft East 112th Ave	\$264,000	9.5	13.25	16	7.5	13.125	59.38	24
R1	Avondale Blvd	Roadway Improvements	0.49	Encanto Blvd to McDowell Rd	\$875,000	11	18.75	9.5	7.5	12.25	59.00	25
B55	Thomas Rd	Bicycle Lane Both Sides	0.37	Dysart Rd to 560 ft East Santa Fe Trl	\$204,000	12.5	18.75	8	6.625	13.125	59.00	26
B48	McDowell Rd	Bicycle Lane Both Sides	0.67	112th Ave to Harbor Shores Blvd	\$367,000	12.5	13.25	16	6.625	10.375	58.75	27
P31	E Brooke Pl	Sidewalk Both Sides	0.30	Central Ave to 4th St	\$348,000	11	13.25	7	15	12.25	58.50	28
P143	W Thomas Rd	Sidewalk One Side	0.91	106th Ave to 99th Ave	\$533,000	12	13.25	13.5	7.5	12.25	58.50	29
P20	Buckeye Rd	Sidewalk One Side	0.97	Dysart Rd to El Mirage Rd	\$569,000	12	16	12.5	7.5	10.375	58.38	30
P60	N 1st Ave	Sidewalk One Side	0.12	Madden Drive to Hill Drive	\$69,000	15	10.5	5.5	15	12.25	58.25	31
B68	Central Ave	Bicycle Signage	0	Central Ave and Main St 58	\$3,000	8	10.5	9.5	15	15	58.00	32
P35	E Riley Dr	Sidewalk One Side	0.65	4th St to 420 ft East Eliseo C Felix Jr Way	\$380,000	11	19.75	7	7.5	12.25	57.50	33
P71	S 107th	Sidewalk One Side	0.15	350 north Buckeye Rd to 2nd St	\$88,000	11	10.5	11	12.25	12.25	57.00	34
B18	Buckeye Rd	Bicycle Lane Both Sides	0.86	121st Ln to Avondale Blvd	\$468,000	13.5	16	11	8.5	7.625	56.63	35
B3	107th Ave	Bicycle Lane Both Sides	0.81	I-10 to Van Buren St	\$443,000	11	16	12.5	6.625	10.375	56.50	36
P36	E Western Ave	Sidewalk One Side	0.29	Dysart Rd to Eliseo C Felix Jr Way	\$172,000	9.5	16	5.5	13.125	12.25	56.38	37
B42	Main St	Bicycle Lane Both Sides	0.28	Litchfield Rd to Hummingbird 2 MPH	\$152,000	8	10.5	9.5	15	13.125	56.13	38
P14	Avondale Blvd	Sidewalk Both Sides	0.23	City Center Dr to Van Buren St	\$269,000	8	13.25	16	6.625	12.25	56.13	39
P15	Avondale Blvd	Sidewalk One Side	0.24	Van Buren St to Coldwater Springs Blvd	\$143,000	8	13.25	16	6.625	12.25	56.13	40



Mid-Term Projects

There are 104 projects (beginning with the 41st ranked project) that are recommended to be implemented within the mid-term or intermediate planning horizon – 5 to 20 years. The mid-term recommended projects include a variety of project facility types; however, this set of projects primarily includes the installation of new sidewalks to fill an existing gap (66 of the 104 projects). The mid-term projects also include 25 on-street bike facility projects, two off-street multi-use facility projects, and one mid-block crossing.

The mid-term projects are collectively estimated to cost approximately \$50.5 million to implement, which would result in roughly 19 lane-miles of new on-street bike facilities, 42 miles of new sidewalks, and five miles of new multi-use paths. **Figure 5-4** illustrates the impact of the mid-term projects (including the short-term projects) on the active transportation network by showcasing the increase of miles of new on-street bike, off-street multi-use, and pedestrian facilities.

Refer to **Figure 5-5** for a map of all 104 mid-term projects and **Table 5-8** for a complete inventory of mid-term projects, which includes the project ID, location, cost estimate, and evaluation criteria and project prioritization results.

Figure 5-4: Mid-Term Projects Infographic

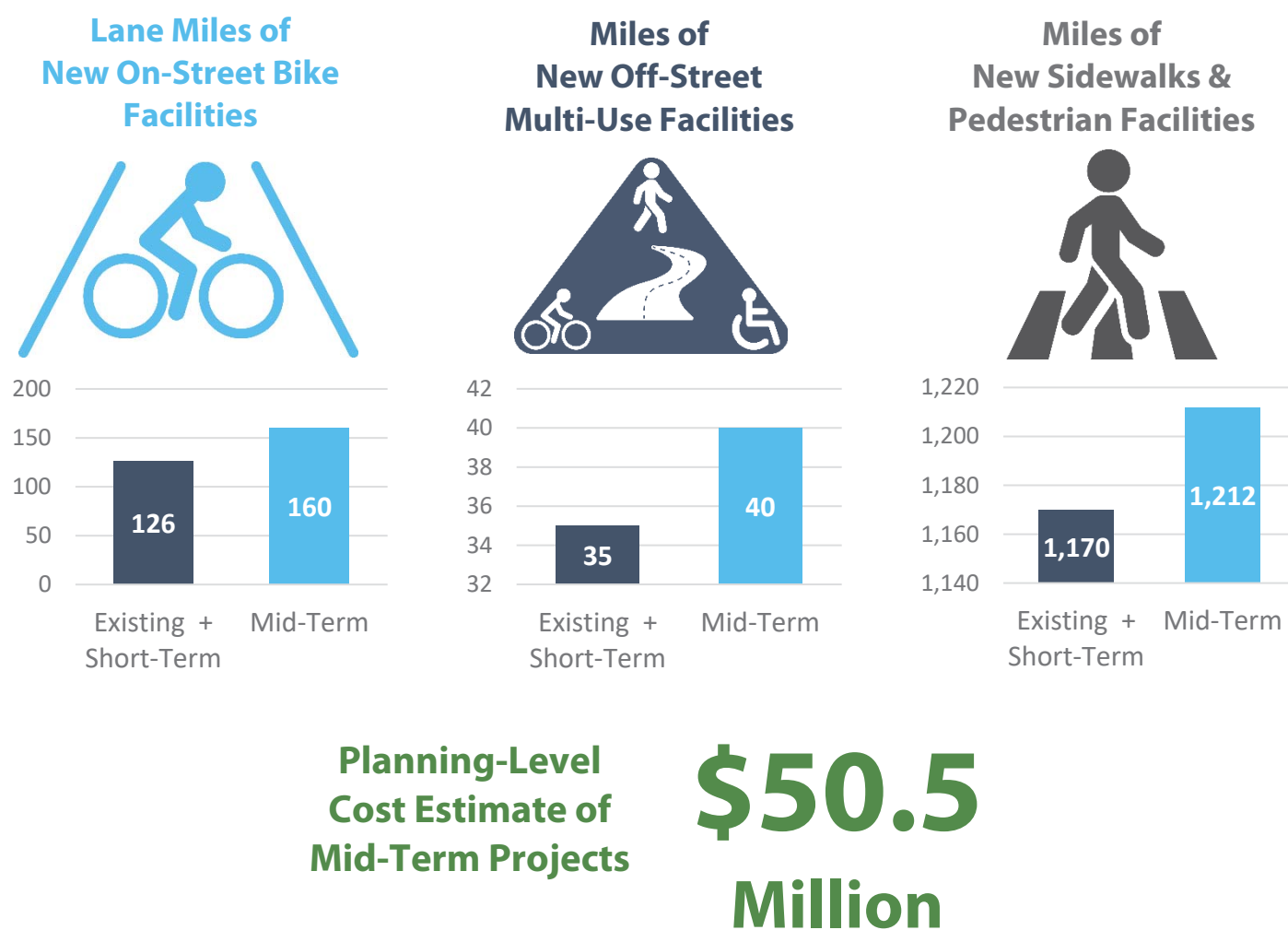


Figure 5-5: Map of Mid-Term Projects (5-20 years)

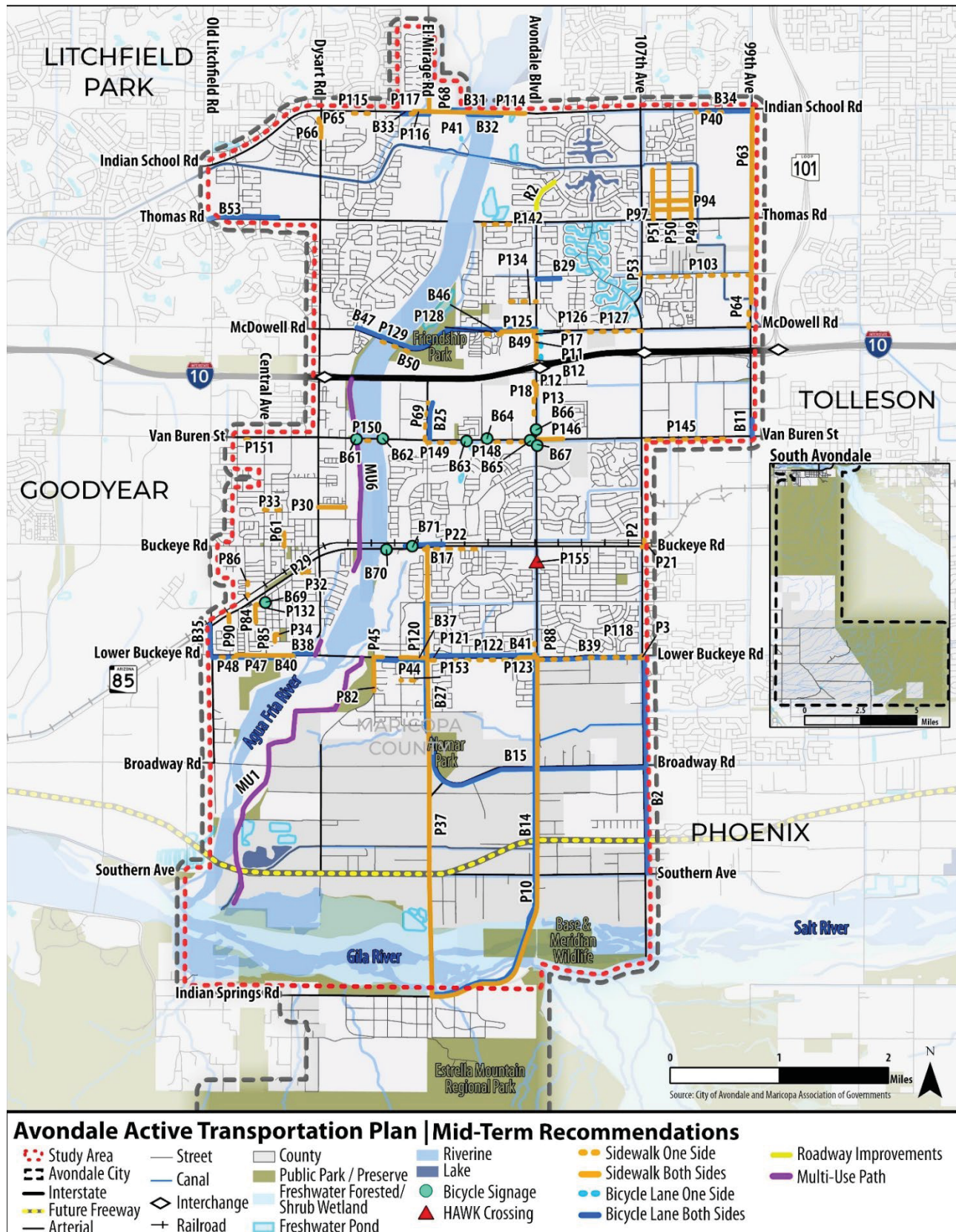


Table 5-9: Mid-Term Projects Inventory

ID	Location	Facility Type	Miles	Project Limits	Cost Estimate	Evaluation Criteria Results					Prioritization	
						Proximity & Connectivity	Safety	Comfort	Social Equity	Deliverability & Constructability	Score	Rank
P61	N 3rd St	Sidewalk Both Sides	0.13	Kinderman Dr to Hill Dr	\$148,000	12.5	10.5	5.5	15	12.25	55.75	41
P126	W McDowell Rd	Sidewalk One Side	0.08	113th Dr to 113th Ave	\$47,000	9.5	10.5	16	7.5	12.25	55.75	42
B47	McDowell Rd	Bicycle Ln Both Sides	0.20	Rancho Santa Fe to Agua Fria River	\$107,000	11	10.5	13.5	7.5	13.125	55.63	43
P127	W McDowell Rd	Sidewalk One Side	0.50	415 ft East 1112th Ave to 107th Ave	\$295,000	12.5	13.25	11	6.625	12.25	55.63	44
P21	Buckeye Rd	Sidewalk Both Sides	0.06	107th Ave to 320 ft East 107th	\$71,000	9.5	10.5	11	12.25	12.25	55.50	45
P64	N 99th Ave	Sidewalk One Side	0.22	Palm Ln to McDowell Rd	\$131,000	9.5	18.75	11	6.625	9.5	55.38	46
P12	Avondale Blvd	Sidewalk One Side	0.10	I-10 to Roosevelt St	\$60,000	8	13.25	16	5.75	12.25	55.25	47
B61	Van Buren St	Bicycle Signage	0	Van Buren St and Agua Fria River EB	\$3,000	11	10.5	11	7.5	15	55.00	48
B11	99th Ave	Bicycle Ln Both Sides	0.16	820 ft North Van Buren St to Van Buren St	\$85,000	11	10.5	16	4	13.125	54.63	49
P29	E Agua Fria Ln	Sidewalk One Side	0.08	Corral St to Dead End	\$47,000	11	10.5	5.5	15	12.25	54.25	50
P32	E Corral St	Sidewalk One Side	0.10	Corral St to 7th St	\$61,000	11	10.5	5.5	15	12.25	54.25	51
P2	107th Ave	Sidewalk One Side	0.07	350 ft north Buckeye Rd to Buckeye Rd	\$39,000	9.5	10.5	9.5	12.25	12.25	54.00	52
P155	Avondale Blvd	HAWK Crossing	0	Avondale and Littleton Elementary	\$282,000	7	10.5	11	10.375	15	53.88	53
B14	Avondale Blvd	Bicycle Ln Both Sides	3.74	Lower Buckeye Rd to Southern Ave	\$2,046,000	11	16	13.5	4.875	8.5	53.88	54
P10	Avondale Blvd	Sidewalk Both Sides	3.73	Lower Buckeye Rd to El Mirage Rd	\$4,379,000	11	16	13.5	4.875	8.5	53.88	55
P125	W McDowell Rd	Sidewalk Both Sides	0.32	117th Ave to Avondale Blvd	\$375,000	9.5	13.25	11	7.5	12.25	53.50	56
P129	W McDowell Rd	Sidewalk One Side	0.34	Agua Fria River West to Agua Fria River East	\$700,000	9.5	10.5	13.5	7.5	12.25	53.25	57
B41	Lower Buckeye Rd	Bicycle Ln Both Sides	1.01	El Mirage Rd to Avondale Blvd	\$551,000	13.5	13.25	11	4.875	10.375	53.00	58
B53	Thomas Rd	Bicycle Ln Both Sides	0.63	Litchfield Rd to Estrella Mountain CC	\$189,000	11	10.5	12.5	5.75	13.125	52.88	59
P84	S 1st Ave	Sidewalk Both Sides	0.16	Overlin Ln to Whyman Ave	\$189,000	9.5	10.5	5.5	15	12.25	52.75	60
P65	N Dysart Rd	Sidewalk One Side	0.10	Indian School Rd to 500 ft south of Dysart Rd	\$58,000	8	13.25	13.5	5.75	12.25	52.75	61
B63	Van Buren St	Bicycle Signage	0	Van Buren St and 120th Ave EB	\$3,000	9.5	10.5	11	6.625	15	52.63	62
B64	Van Buren St	Bicycle Signage	0	Van Buren St and 120th Ave WB	\$3,000	9.5	10.5	11	6.625	15	52.63	63
B39	Lower Buckeye Rd	Bicycle Ln Both Sides	0.97	Avondale Blvd to 107th Ave	\$530,000	11	13.25	9.5	5.75	13.125	52.63	64
P148	W Van Buren St	Sidewalk One Side	0.50	119th Ave to Avondale Blvd	\$294,000	9.5	13.25	11	6.625	12.25	52.63	65
P13	Avondale Blvd	Sidewalk One Side	0.25	Fairway Dr to 120th Ln	\$147,000	9.5	13.25	11	6.625	12.25	52.63	66
P18	Avondale Blvd	Sidewalk Both Sides	0.10	515 ft south Roosevelt St to City Center Dr	\$103,000	8	10.5	16	5.75	12.25	52.50	67
P150	W Van Buren St	Sidewalk One Side	0.27	Roosevelt St to 515 ft south Roosevelt St	\$115,000	8	10.5	16	5.75	12.25	52.50	68
B66	Avondale Blvd	Bicycle Signage	0	Agua Fria River West to Agua Fria River East	\$161,000	11	10.5	11	7.5	12.25	52.25	69
P132	W Overlin Ln	Bicycle Signage	0	Avondale Blvd and Van Buren St SB	\$3,000	4	10.5	16	6.625	15	52.13	70
P37	S el Mirage Rd	Sidewalk Both Sides	4.12	Buckeye Rd to Indian Springs Rd	\$4,836,000	13.5	13.25	12	4.875	8.5	52.13	72
B62	Van Buren St	Bicycle Signage	0	Van Buren St and Agua Fria River WB	\$3,000	8	10.5	11	7.5	15	52.00	73
P118	W Lower Buckeye Rd	Sidewalk One Side	0.97	Avondale Blvd to 107th Ave	\$567,000	11	13.25	9.5	5.75	12.25	51.75	74
B49	McDowell Rd	Bicycle Ln Both Sides	0.31	117th Ave to Avondale Blvd	\$172,000	9.5	13.25	11	7.5	10.375	51.63	75
P40	Indian School Rd	Sidewalk One Side	0.24	100th Ave to 103rd Ave	\$142,000	9.5	10.5	13.5	5.75	12.25	51.50	76
P41	Indian School Rd	Sidewalk Both Sides	0.07	El Mirage Rd to El Mirage Rd to East .07 miles	\$86,000	11	10.5	11	6.625	12.25	51.38	77
B50	McDowell Rd	Bicycle Ln Both Sides	1.04	Agua Fria River West to 119th Ave	\$567,000	9.5	10.5	13.5	7.5	10.375	51.38	78
P117	W Indian School Rd	Sidewalk Both Sides	0.14	745 ft West El Mirage Rd to El Mirage Rd	\$166,000	11	10.5	11	6.625	12.25	51.38	79
P86	S 3rd Ave	Sidewalk One Side	0.13	Rhodes Ave to Dead End	\$75,000	8	10.5	5.5	15	12.25	51.25	80
P90	S Greenleaf Ln	Sidewalk Both Sides	0.08	Main St to Dead End	\$94,000	8	10.5	5.5	15	12.25	51.25	81
P132	W Overlin Ln	Sidewalk Both Sides	0.09	1st Ave to Central Ave	\$106,000	8	10.5	5.5	15	12.25	51.25	82
B27	El Mirage Rd	Bicycle Ln Both Sides	1.65	Durango St to Broadway Rd	\$906,000	13.5	10.5	12	4.875	10.375	51.25	83
B65	Van Buren St	Bicycle Signage	0	Van Buren St and Avondale Blvd EB	\$3,000	8	10.5	11	6.625	15	51.13	84
B12	Avondale Blvd	Bicycle Ln One Side	0.28	McDowell Rd to I-10	\$76,000	9.5	13.25	9.5	5.75	13.125	51.13	85
P146	W Van Buren St	Sidewalk Both Sides	0.24	Avondale Blvd to 1/4 mile west 111th Ave	\$285,000	9.5	13.25	9.5	6.625	12.25	51.13	86
B46	McDowell Rd	Bicycle Ln Both Sides	0.19	119th Ave to 117th Ave	\$103,000	9.5	10.5	11	6.625	13.125	50.75	87
P63	N 99th Ave	Sidewalk Both Sides	1.78	Indian School Rd to Palm Ln	\$2,086,000	9.5	13.25	11	6.625	10.375	50.75	88
P151	W Van Buren St	Sidewalk One Side	0.10	137th Ave to 535 ft east of 137th Ave	\$60,000	11	10.5	9.5	7.5	12.25	50.75	89



ID	Location	Facility Type	Miles	Project Limits	Cost Estimate	Evaluation Criteria Results					Prioritization	
						Proximity & Connectivity	Safety	Comfort	Social Equity	Deliverability & Constructability	Score	Rank
P121	W Lower Buckeye Rd	Sidewalk One Side	0.07	El Mirage Rd to 460 ft East El Mirage Rd	\$40,000	11	10.5	12	4.875	12.25	50.63	90
B35	Litchfield Rd	Bicycle Ln Both Sides	0.28	Main St to Lower Buckeye Rd	\$151,000	8	10.5	9.5	9.375	13.125	50.50	91
P111	Avondale Blvd	Sidewalk Both Sides	0.22	290 ft south McDowell Rd to I-10	\$254,000	9.5	13.25	9.5	5.75	12.25	50.25	92
MU11	Agua Fria River East	Multi-Use Path	2.97	Lower Buckeye Rd to Gila River	\$9,298,000	9.5	19.75	4	6.625	10.375	50.25	93
B69	Central Ave	Bicycle Signage	0	Central Ave and Harrison Dr NB	\$17,000	4	10.5	5.5	1.5	15	50.00	94
P66	N Dysart Rd	Sidewalk Both Sides	0.15	500 ft south of Dysart Rd to Fairmount Ave	\$172,000	8	10.5	13.5	5.75	12.25	50.00	95
P22	Buckeye Rd North	Sidewalk One Side	0.47	West of El Mirage Rd to West of 119th Ave	\$278,000	9.5	10.5	11	6.625	12.25	49.88	96
B71	Buckeye Rd	Bicycle Signage	0	Buckeye Rd and Agua Fria River WB	\$60,000	9.5	10.5	11	6.625	12.25	49.88	97
P53	N 107th Ave	Sidewalk One Side	0.10	320 ft North Encanto Blvd to Encanto Blvd	\$3,000	11	10.5	9.5	6.625	12.25	49.88	98
P116	W Indian School Rd	Sidewalk One Side	0.11	125th Dr to 745 ft West El Mirage Rd	\$63,000	9.5	10.5	11	6.625	12.25	49.88	99
P128	W McDowell Rd	Sidewalk One Side	0.18	119th Ave to 117th Ave	\$106,000	9.5	10.5	11	6.625	12.25	49.88	100
MU6	Agua Fria River West	Multi-Use Path	1.92	I-10 to Lower Buckeye Rd	\$6,001,000	15	10.5	5.5	7.5	11.25	49.75	101
P48	Lower Buckeye Rd	Sidewalk One Side	0.21	Litchfield Rd to 300 ft East of 5th Ave	\$125,000	9.5	10.5	8	9.375	12.25	49.63	102
B33	Indian School Rd	Bicycle Ln Both Sides	0.25	124th Ave to El Mirage Rd	\$136,000	11	10.5	11	6.625	10.375	49.50	103
B70	Buckeye Rd	Bicycle Signage	0	Buckeye Rd and Agua Fria River EB	\$3,000	8	10.5	11	7.5	12.25	49.25	104
P33	E Ludlow Dr	Sidewalk One Side	0.17	Central Ave to 3rd St	\$98,000	13.5	10.5	5.5	7.5	12.25	49.25	105
P3	107th Ave	Sidewalk Both Sides	0.02	Lower Buckeye Rd to 125 ft south Lower Buckeye Rd	\$28,000	8	10.5	8	10.375	12.25	49.13	106
P44	Lower Buckeye Rd	Sidewalk Both Sides	0.03	125th Ave to 125th Ave East, 0.1 miles	\$39,000	13.5	10.5	8	4.875	12.25	49.13	107
B32	Indian School Rd	Bicycle Ln Both Sides	0.31	Agua Fria River West to Agua Fria River East	\$167,000	8	10.5	13.5	6.625	10.375	49.00	108
P115	W Indian School Rd	Sidewalk One Side	0.29	700 ft east Dysart Rd to 320 ft east Santa Fe Trl	\$170,000	9.5	10.5	11	5.75	12.25	49.00	109
B37	Lower Buckeye Rd	Bicycle Ln Both Sides	0.49	127th Ave to El Mirage Rd	\$270,000	13.5	10.5	9.5	4.875	10.375	48.75	110
P34	E Park Dr	Sidewalk Both Sides	0.05	1st St to 2nd St	\$53,000	11	10.5	5.5	9.375	12.25	48.63	111
P85	S 1st St	Sidewalk Both Sides	0.06	Park Dr to Elm Ln	\$74,000	11	10.5	5.5	9.375	12.25	48.63	112
P47	Lower Buckeye Rd	Sidewalk Both Sides	0.52	300 ft East of 5th Ave to 4th St	\$615,000	11	10.5	8	6.625	12.25	48.38	113
P68	N El Mirage Rd	Sidewalk Both Sides	0.16	825 ft north Indian School Rd to Indian School Rd	\$183,000	11	10.5	8	6.625	12.25	48.38	114
P51	N 106th Ave	Sidewalk Both Sides	0.46	Mulberry Dr to Thomas Rd	\$538,000	11	10.5	7	7.5	12.25	48.25	115
B2	107th Ave	Bicycle Ln Both Sides	1.99	Lower Buckeye Rd to Southern Ave	\$1,090,000	9.5	10.5	12	5.75	10.375	48.13	116
B17	Buckeye Rd	Bicycle Ln Both Sides	0.35	1000 ft West El Mirage Rd to 760 ft East El Mirage Rd	\$192,000	9.5	10.5	11	6.625	10.375	48.00	117
B31	Indian School Rd	Bicycle Ln Both Sides	0.17	1000 ft East El Mirage Rd to Agua Fria River Bridge	\$92,000	9.5	10.5	11	6.625	10.375	48.00	118
B38	Lower Buckeye Rd	Bicycle Ln Both Sides	0.16	4th St to Agua Fria River West	\$85,000	11	10.5	9.5	6.625	10.375	48.00	119
B40	Lower Buckeye Rd	Bicycle Ln Both Sides	0.75	Litchfield Rd to 4th St	\$409,000	11	10.5	9.5	6.625	10.375	48.00	120
P134	W Palm Ln	Sidewalk One Side	0.25	116th Ln to Avondale Blvd	\$145,000	9.5	16	5.5	7.5	9.5	48.00	121
B25	El Mirage Rd	Bicycle Ln Both Sides	0.36	Garfield St to Van Buren St	\$195,000	9.5	13.25	5.5	6.625	13.125	48.00	122
R2	Garden Lakes Parkway	Improvements Phase 1	0.44	Thomas Rd to Lakeshore Dr	\$900,000	8	13.25	7	7.5	12.25	48.00	123
P30	E Brinker Dr	Sidewalk Both Sides	0.25	Dysart Rd to Eliseo C. Felix Jr Way	\$292,000	12	10.5	5.5	7.5	12.25	47.75	124
P17	Avondale Blvd	Sidewalk One Side	0.06	McDowell Rd to 290 ft south McDowell Rd	\$32,000	9.5	10.5	9.5	5.75	12.25	47.50	125
P88	S Avondale Blvd	Sidewalk One Side	0.13	Rio Vista Ln to Lower Buckeye Rd	\$76,000	9.5	10.5	9.5	5.75	12.25	47.50	126
P122	W Lower Buckeye Rd	Sidewalk One Side	0.59	121st Dr to 116th Ave	\$345,000	9.5	10.5	9.5	5.75	12.25	47.50	127
P123	W Lower Buckeye Rd	Sidewalk Both Sides	0.17	116th Ave to Avondale Blvd	\$194,000	9.5	10.5	9.5	5.75	12.25	47.50	128
P103	W Encanto Blvd	Sidewalk One Side	1.01	107th Ave to 99th Ave	\$595,000	11	10.5	7	6.625	12.25	47.38	129
B15	Broadway Rd	Bicycle Ln Both Sides	1.85	El Mirage Rd to 107th Ave	\$1,013,000	9.5	13.25	12	4	8.5	47.25	130
P145	W Van Buren St	Sidewalk One Side	0.75	107th Ave to 101st Ave	\$442,000	9.5	10.5	11	4	12.25	47.25	131
P114	W Indian School Rd	Sidewalk Both Sides	0.81	380 ft East El Mirage Rd to Copenhagen Dr	\$947,000	9.5	10.5	11	6.625	9.5	47.13	132
P69	N El Mirage Rd	Sidewalk One Side	0.34	Garfield St to Van Buren St	\$201,000	9.5	13.25	5.5	6.625	12.25	47.13	133
B34	Indian School Rd	Bicycle Ln Both Sides	0.50	103rd Ave to 99th Ave	\$271,000	9.5	10.5	13.5	5.75	7.625	46.88	134
P142	W Thomas Rd	Sidewalk One Side	0.24	119th Ave to 116th Ave	\$141,000	9.5	10.5	8	6.625	12.25	46.88	135
P49	N 103rd Ave	Sidewalk Both Sides	0.46	Mulberry Dr to Thomas Rd	\$535,000	9.5	10.5	7	7.5	12.25	46.75	136
P50	N 105th Ave	Sidewalk Both Sides	0.50	Mulberry Dr to Thomas Rd	\$590,000	9.5	10.5	7	7.5	12.25	46.75	137
P94	W Avalon Dr	Sidewalk Both Sides	0.35	106th Ave to 103rd Ave	\$412,000	11	10.5	5.5	7.5	12.25	46.75	138
P97	W Catalina Dr	Sidewalk Both Sides	0.35	106th Ave to 103rd Ave	\$411,000	11	10.5	5.5	7.5	12.25	46.75	139



ID	Location	Facility Type	Miles	Project Limits	Cost Estimate	Evaluation Criteria Results				Prioritization		
						Proximity & Connectivity	Safety	Comfort	Social Equity	Deliverability & Constructability	Score	Rank
P45	Lower Buckeye Rd	Sidewalk Both Sides	0.08	127th Ave to 127th Ave East .07 miles	\$98,000	11	10.5	8	4.875	12.25	46.63	140
P82	S 127th Ave	Sidewalk Both Sides	0.31	Lower Buckeye Rd to Superior Ave	\$363,000	9.5	10.5	9.5	4.875	12.25	46.63	141
P153	W Whyman St	Sidewalk One Side	0.12	125th Ave to 124th Ave	\$72,000	13.5	10.5	5.5	4.875	12.25	46.63	142
B29	Encanto Blvd	Bicycle Ln Both Sides	0.22	115th Ave to 112th Ln	\$119,000	13.5	10.5	5.5	6.625	10.375	46.50	143
P120	W Lower Buckeye Rd	Sidewalk Both Sides	0.21	175 ft East 125th Ave to El Mirage Rd	\$249,000	13.5	10.5	8	4.875	9.5	46.38	144



Long-Term Projects

There are 96 projects that are recommended to be implemented within the long-term planning horizon – after 20 years and beyond. The long-term recommended projects include a variety of project facility types; however, this set of projects primarily includes (72 of the 96 projects) the installation of new sidewalks to fill an existing gap. The long-term project set also includes 13 on-street bike facility projects, nine off-street multi-use facility projects, one wayfinding project, and one roadway extension project.

The long-term projects are estimated to cost approximately \$86.6 million to implement, which would result in roughly 23 lane-miles of new on-street bike facilities, 41 miles of new sidewalks, 18 miles of off-street multi-use/trail facilities, two miles wayfinding applications, and one roadway extension project. **Figure 5-6** illustrates the impact of the long-term projects (plus the short- and mid-term projects) on the active transportation network by showcases the increase of miles of new on-street bike, off-street multi-use, and pedestrian facilities.

Refer to **Figure 5-7** for a map of all 96 long-term projects and **Table 5-9** for a complete inventory of long-term projects, which includes the project ID, location, cost estimate, and evaluation criteria and project prioritization results.

Figure 5-6: Long-Term Projects Infographic

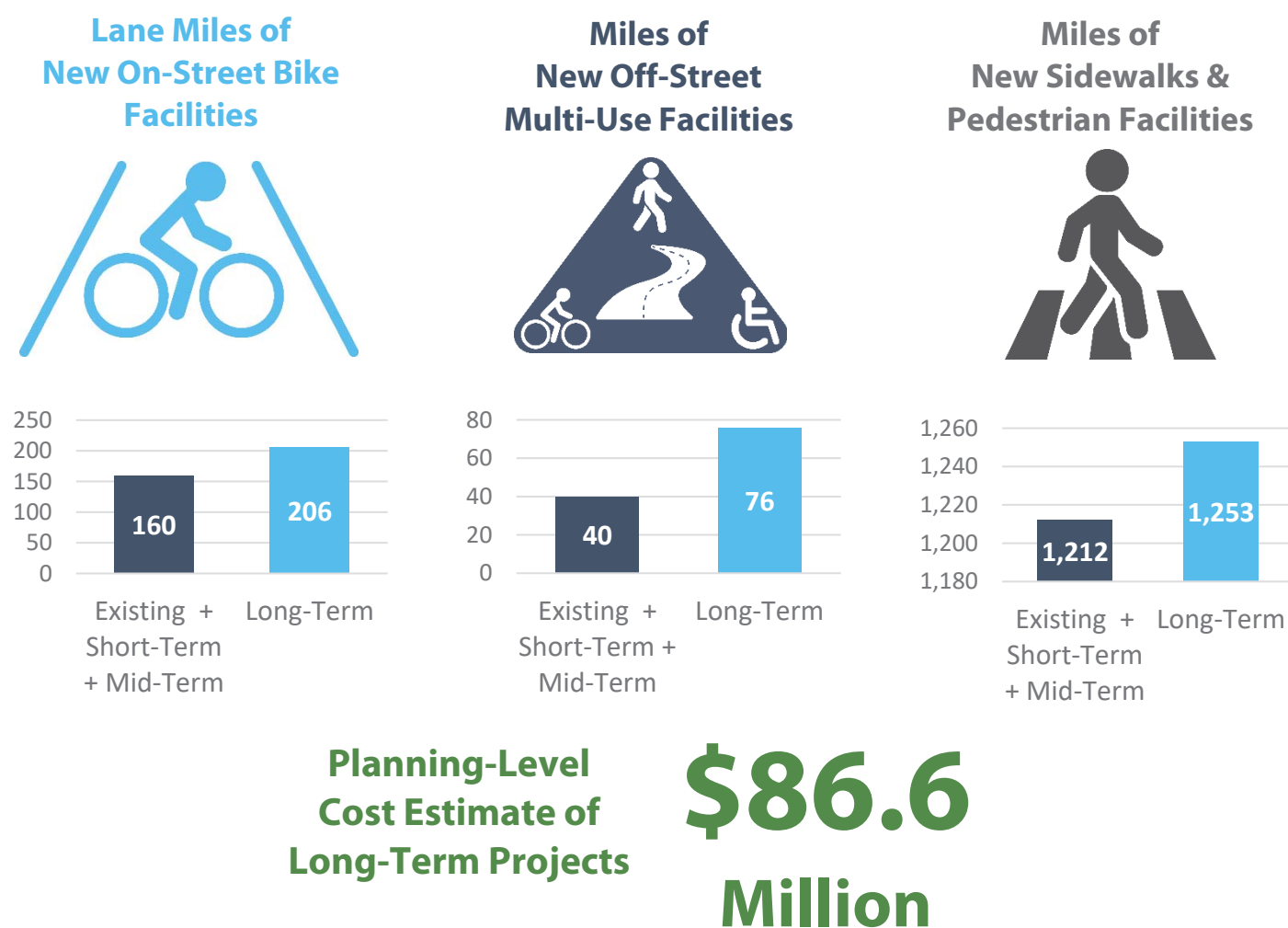


Figure 5-7: Map of Long-Term Projects (20+ years)

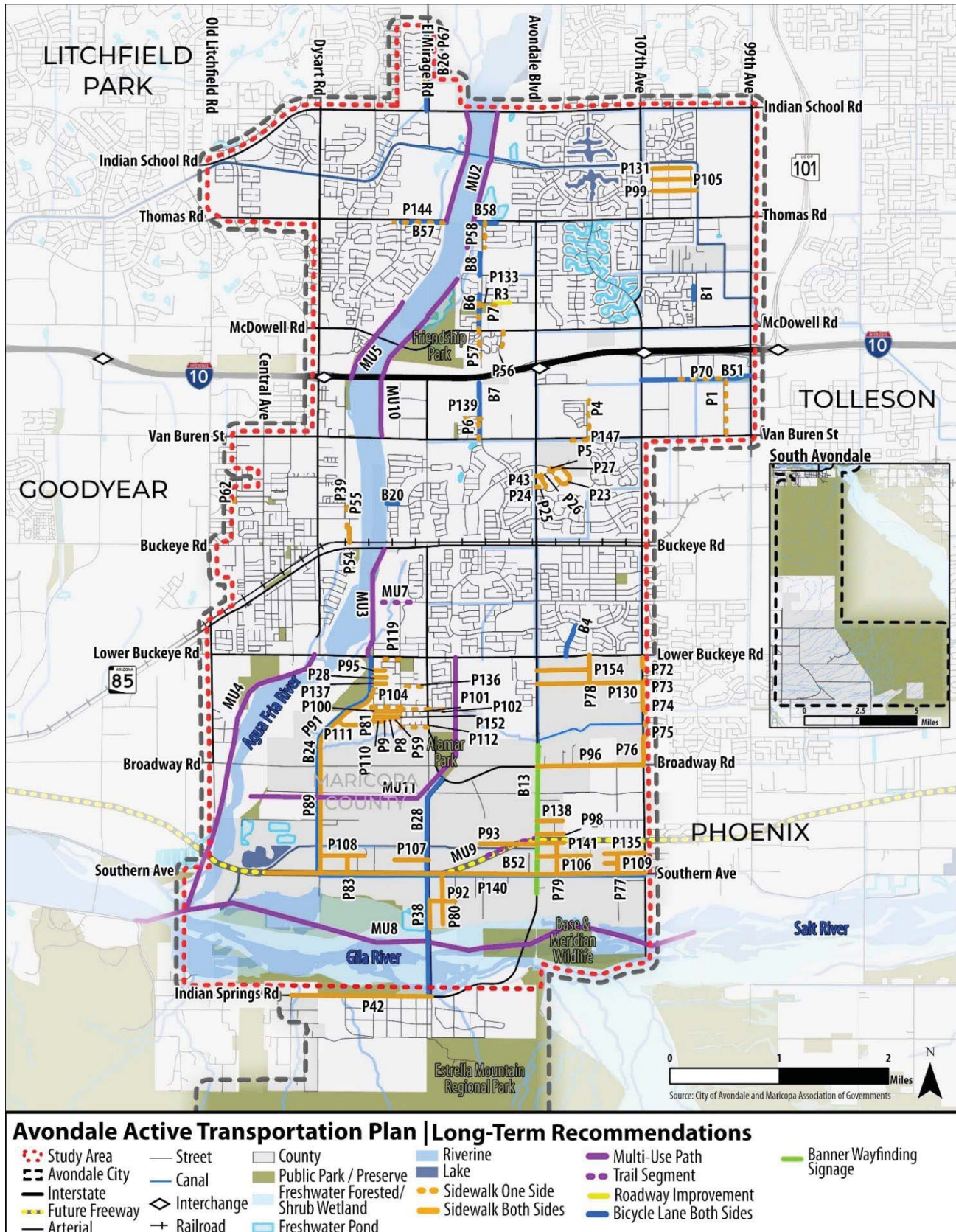


Table 5-10: Long-Term Projects Inventory

ID	Location	Facility Type	Miles	Project Limits	Cost Estimate	Evaluation Criteria Results				Deliverability & Constructability	Prioritization	
						Proximity & Connectivity	Safety	Comfort	Social Equity		Score	Rank
B1	103rd Ave	Bicycle Ln Both Sides	0.13	Zinc Apartment Parcel	\$69,000	8	10.5	8	6,625	13.125	46.25	145
P105	W Flower St	Sidewalk Both Sides	0.35	106th Ave to 103rd Ave	\$413,000	11	10.5	5.5	6,625	12.25	45.88	146
P131	W Mulberry St	Sidewalk Both Sides	0.35	106th Ave to 103rd Ave	\$412,000	11	10.5	5.5	6,625	12.25	45.88	147
P147	W Van Buren St	Sidewalk One Side	0.22	1/4 mile west 11th Ave to 11th Ave	\$130,000	9.5	10.5	9.5	4	12.25	45.75	148
MU3	Agua Fria River East	Multi-Use Path	1.01	Buckeye Rd to Lower Buckeye Rd	\$3,161,000	12	10.5	4	7.5	11.25	45.25	149
P39	Elisio Felix Jr Way	Sidewalk One Side	0.11	Brinker Dr to Riley Dr	\$63,000	9.5	10.5	5.5	7.5	12.25	45.25	150
P62	N 4th Ave	Sidewalk One Side	0.10	Loma Linda Blvd to Brinker Dr	\$58,000	9.5	10.5	5.5	7.5	12.25	45.25	151
P99	W Earl Dr	Sidewalk Both Sides	0.40	106th Ave to 103rd Ave	\$468,000	9.5	10.5	5.5	7.5	12.25	45.25	152
P91	S Vermeersch Rd	Sidewalk Both Sides	0.67	Superior Ave to 1.5 miles south Superior Ave	\$785,000	9.5	10.5	8	4,875	12.25	45.13	153
P96	W Broadway Rd	Sidewalk Both Sides	0.98	Avondale Blvd to 107th Ave	\$1,146,000	9.5	13.25	8	4	10.375	45.13	154
P67	N El Mirage Rd	Sidewalk One Side	0.58	825 ft north Indian School Rd to city limits	\$340,000	9.5	10.5	8	6,625	10.375	45.00	155
B58	Thomas Rd	Bicycle Ln Both Sides	0.21	Agua Fria River East to 118th Dr	\$117,000	9.5	10.5	8	6,625	10.375	45.00	156
B20	Coldwater Springs Blvd	Bicycle Ln Both Sides	0.10	126th Ave to 125th Ave	\$55,000	8	10.5	5.5	7.5	13.125	44.63	157
B26	El Mirage Rd	Bicycle Ln Both Sides	0.74	Highland Ave to Indian School	\$405,000	11	10.5	8	6,625	8.5	44.63	158
P144	W Thomas Rd	Sidewalk One Side	0.46	350 ft West Rancho Santa Fe Blvd to Agua Fria River West	\$270,000	8	10.5	8	5.75	12.25	44.50	159
MU7	Durango St	Trail Segment	0.32	125th Ave to Agua Fria Trail	\$1,015,000	9.5	10.5	4	11.25	13.125	44.38	160
P6	119th Ave	Sidewalk One Side	0.21	Roosevelt St to Van Buren St	\$123,000	9.5	10.5	5.5	6,625	12.25	44.38	161
P7	119th Ave	Sidewalk One Side	0.26	Palm Ln to McDowell Rd	\$150,000	9.5	10.5	5.5	6,625	12.25	44.38	162
MU2	Agua Fria River East	Multi-Use Path	2.07	Indian School Rd to McDowell Rd	\$6490,000	12	10.5	4	6,625	11.25	44.38	163
P23	Civic Center Dr	Sidewalk Both Sides	0.31	400 ft southeast 114th Ave to Coldwater Springs Blvd	\$362,000	9.5	10.5	5.5	6,625	12.25	44.38	164
P24	Civic Center Dr	Sidewalk One Side	0.09	Avondale Blvd to Madison St	\$54,000	9.5	10.5	5.5	6,625	12.25	44.38	165
P56	N 117th Ave	Sidewalk One Side	0.22	McDowell Rd to 1/4 mile south McDowell Rd	\$131,000	9.5	10.5	5.5	6,625	12.25	44.38	166
P57	N 119th Ave	Sidewalk One Side	0.24	McDowell Rd to Roosevelt Ave	\$143,000	9.5	10.5	5.5	6,625	12.25	44.38	167
P139	W Roosevelt St	Sidewalk One Side	0.16	120 Dr to 119th Ave	\$96,000	9.5	10.5	5.5	6,625	12.25	44.38	168
MU5	Agua Fria River West	Multi-Use Path	1.87	Indian School Rd to I-10	\$5,837,000	9.5	10.5	5.5	7.5	11.25	44.25	169
P1	101st Ave	Sidewalk One Side	0.50	Roosevelt St to Van Buren St	\$295,000	9.5	10.5	8	4	12.25	44.25	170
P70	Roosevelt St	Sidewalk One Side	0.40	103rd Ave to 101st Ave	\$237,000	8	10.5	9.5	4	12.25	44.25	171
P78	County Line Rd	Sidewalk Both Sides	0.12	127th Ave to Dead End	\$143,000	11	10.5	5.5	4,875	12.25	44.13	172
P95	W Bohme St	Sidewalk Both Sides	0.11	127th Ave to Dead End	\$125,000	11	10.5	5.5	4,875	12.25	44.13	173
B4	112th Ln	Bicycle Ln Both Sides	0.32	Whyman Ave to Lower Buckeye Rd	\$173,000	9.5	10.5	7	6,625	10.375	44.00	174
B6	119th Ave	Bicycle Ln Both Sides	0.33	Monte Vista Rd to McDowell Rd	\$178,000	9.5	10.5	7	6,625	10.375	44.00	175
P119	W Lower Buckeye Rd	Sidewalk One Side	0.16	126th Ave to 125th Ave	\$94,000	11	10.5	8	4,875	9.5	43.88	176
P54	N 10th St	Sidewalk Both Sides	0.14	435 ft south Riley Dr to Western Ave	\$161,000	8	10.5	5.5	7.5	12.25	43.75	177
P55	N 10th St	Sidewalk One Side	0.08	Riley Dr to 435 ft south Riley Dr	\$49,000	8	10.5	5.5	7.5	12.25	43.75	178
P81	S 127th Ave	Sidewalk One Side	0.28	Vermeersch Rd to Illini St	\$167,000	9.5	10.5	7	4	12.25	43.25	179
P101	W Elwood St	Sidewalk One Side	0.25	125th Ave to El Mirage Rd	\$149,000	9.5	10.5	7	4	12.25	43.25	180
P5	114th Ave	Sidewalk One Side	0.04	Coldwater Springs Blvd to Civic Center Dr	\$25,000	8	10.5	5.5	6,625	12.25	42.88	181
P25	Civic Center Dr	Sidewalk Both Sides	0.09	Madison St to Jefferson St	\$109,000	8	10.5	5.5	6,625	12.25	42.88	182
P26	Civic Center Dr	Sidewalk One Side	0.17	Jefferson St to 400 ft southeast 114th Ave	\$100,000	8	10.5	5.5	6,625	12.25	42.88	183
P27	Coldwater Springs Blvd	Sidewalk Both Sides	0.10	114th Ave to Civic Center Dr	\$121,000	8	10.5	5.5	6,625	12.25	42.88	184
B24	Dysart/Vermeersch Rd	Bicycle Ln Both Sides	2.19	Lower Buckeye Rd to Southern Ave	\$1,198,000	9.5	10.5	9.5	4,875	8.5	42.88	185
P43	Jefferson St	Sidewalk One Side	0.06	Avondale Blvd to Civic Center Dr	\$34,000	8	10.5	5.5	6,625	12.25	42.88	186
P58	N 119th Ave	Sidewalk One Side	0.24	Thomas Rd to Virginia Ave	\$143,000	8	10.5	5.5	6,625	12.25	42.88	187
P42	Indian Springs Rd	Sidewalk Both Sides	1.28	133rd Ave to El Mirage Rd	\$1,502,000	8	10.5	8	4	12.25	42.75	188
B13	Avondale Blvd	Banner Wayfinding Signage	1.35	Broadway Rd to Southern Ave	\$53,000	4	10.5	11	4	13.125	42.63	189
B57	Thomas Rd	Bicycle Ln Both Sides	0.42	Rancho Santa Fe Blvd to Agua Fria River West	\$229,000	8	10.5	8	5.75	10.375	42.63	190
P136	W Pioneer St	Sidewalk One Side	0.19	125th Ave to 330 ft east 124th Ave	\$113,000	9.5	10.5	5.5	4,875	12.25	42.63	191
P137	W Pioneer St	Sidewalk Both Sides	0.12	127th Ave to Dead End	\$135,000	9.5	10.5	5.5	4,875	12.25	42.63	192
B7	119th Ave	Bicycle Ln Both Sides	0.51	I-10 to Van Buren St	\$277,000	9.5	10.5	5.5	6,625	10.375	42.50	193



ID	Location	Facility Type	Miles	Project Limits	Cost Estimate	Evaluation Criteria Results					Prioritization	
						Proximity & Connectivity	Safety	Comfort	Social Equity	Deliverability & Constructability	Score	Rank
MU4	Agua Fria River West	Multi-Use Path	2.81	Lower Buckeye Rd to Gila River	\$8,778,000	11	10.5	4	6,625	10,375	42.50	194
B51	Roosevelt St	Bicycle Ln Both Sides	1.00	107th Ave to 99th Ave	\$549,000	8	10.5	9.5	4	10,375	42.38	195
P154	W Winslow Ave	Sidewalk Both Sides	0.48	Avondale Blvd to 111th Ave	\$565,000	11	10.5	5.5	5.75	9.5	42.25	196
B52	Southern Ave	Bicycle Ln Both Sides	2.97	Dysart Rd to 107th Ave	\$1,625,000	8	10.5	12	4	7,625	42.13	197
P142	W Southern Ave	Sidewalk Both Sides	3.47	Buckeye Canal to 107th Ave	\$4,065,000	8	10.5	12	4	7,625	42.13	198
P72	S 107th Ave	Sidewalk One Side	0.09	125 ft south Lower Buckeye Rd to 600 ft. south	\$103,000	8	10.5	8	5.75	9.5	41.75	199
P73	S 107th Ave	Sidewalk One Side	0.14	600 ft south Lower Buckeye Rd to Miami Ave	\$81,000	8	10.5	8	5.75	9.5	41.75	200
P74	S 107th Ave	Sidewalk Both Sides	0.25	Miami Ave to 1/4 Mile south Miami Ave	\$295,000	8	10.5	8	5.75	9.5	41.75	201
P4	111th Ave	Sidewalk One Side	0.34	Roosevelt St to Van Buren St	\$201,000	9.5	10.5	5.5	4	12.25	41.75	202
P152	W Warner St	Sidewalk Both Sides	0.24	127th Ave to 125th Ave	\$286,000	8	10.5	7	4	12.25	41.75	203
MU10	Agua Fria River	Multi-Use Path	0.88	McDowell Rd to Van Buren St	\$2,761,000	8	10.5	4	7.5	11.25	41.25	204
R3	Palm Ln	Road Extension	0.14	116th Ave to 118th Ave	\$691,000	9.5	10.5	4	6,625	10,375	41.00	205
P133	W Palm Ln	Sidewalk One Side	0.12	119th Ave to 650 ft East 119th Ave	\$73,000	8	10.5	5.5	6,625	10,375	41.00	206
P112	W Illini St	Sidewalk One Side	0.25	125th Ave to El Mirage Rd	\$144,000	9.5	10.5	7	4	9.5	40.50	207
B28	El Mirage Rd	Bicycle Ln Both Sides	2.02	Broadway Rd to Indian Springs Rd	\$1,108,000	8	10.5	9.5	4	8.5	40.50	208
P8	126th Ave	Sidewalk Both Sides	0.03	Warner St to Dead End	\$33,000	8	10.5	5.5	4	12.25	40.25	209
P9	126th Dr	Sidewalk Both Sides	0.04	Warner St to Illini St	\$42,000	8	10.5	5.5	4	12.25	40.25	210
P59	N 125th Dr	Sidewalk Both Sides	0.03	Warner St to Dead End	\$32,000	8	10.5	5.5	4	12.25	40.25	211
P100	W Elwood St	Sidewalk Both Sides	0.24	127th Ave to 125th Ave	\$286,000	8	10.5	5.5	4	12.25	40.25	212
P104	W Florence St	Sidewalk One Side	0.25	127th Ave to 125th Ave	\$144,000	8	10.5	5.5	4	12.25	40.25	213
P110	W Illini St	Sidewalk Both Sides	0.09	127th Ave to 126th Dr	\$111,000	8	10.5	5.5	4	12.25	40.25	214
P111	W Illini St	Sidewalk Both Sides	0.19	Vermeersch Rd to Dead End	\$225,000	8	10.5	5.5	4	12.25	40.25	215
B8	S 119th Ave	Bicycle Ln Both Sides	0.20	Thomas Rd to Encanto Blvd	\$112,000	8	10.5	5.5	5.75	10,375	40.13	216
P38	El Mirage Rd	Sidewalk Both Sides	0.26	Alta Vista Rd to Gila River	\$305,000	8	10.5	8	4	9.5	40.00	217
P75	S 107th Ave	Sidewalk One Side	0.26	1/4 Mile south Miami Ave to Jones Ave	\$150,000	8	10.5	8	4	9.5	40.00	218
P76	S 107th Ave	Sidewalk Both Sides	0.25	Jones Ave to Broadway Rd	\$294,000	8	10.5	8	4	9.5	40.00	219
P89	S Dysart Rd	Sidewalk Both Sides	1.24	1.5 miles south of Superior St to Southern Ave	\$1,458,000	8	10.5	8	4	9.5	40.00	220
P78	S 111th Ave	Sidewalk Both Sides	0.26	Lower Buckeye Rd to Miami Ave	\$303,000	8	10.5	5.5	5.75	9.5	39.25	221
P130	W Miami Ave	Sidewalk Both Sides	0.97	Avondale Blvd to 107th Ave	\$1,134,000	8	10.5	5.5	5.75	9.5	39.25	222
P102	W Elwood St	Sidewalk One Side	0.13	El Mirage Rd to 122nd Ave	\$74,000	9.5	10.5	5.5	4	9.5	39.00	223
P77	S 109th Ave	Sidewalk Both Sides	0.19	Pecan Rd to Southern Ave	\$222,000	8	10.5	5.5	4	9.5	37.50	224
P79	S 114th Ave	Sidewalk Both Sides	0.29	Sunland Ave to Southern Ave	\$340,000	8	10.5	5.5	4	9.5	37.50	225
P80	S 122nd Ave	Sidewalk Both Sides	0.45	Southern Ave to Gila River	\$531,000	8	10.5	5.5	4	9.5	37.50	226
P83	S 129th Ave	Sidewalk Both Sides	0.16	Hidalgo Ave to Southern Ave	\$190,000	8	10.5	5.5	4	9.5	37.50	227
P92	W Alta Vista Rd	Sidewalk Both Sides	0.24	El Mirage Rd to 121 st Ave	\$281,000	8	10.5	5.5	4	9.5	37.50	228
P93	W Atlanta Ave	Sidewalk Both Sides	0.52	1/2 Mile west Avondale Blvd to Avondale Blvd	\$609,000	8	10.5	5.5	4	9.5	37.50	229
P98	W Chambers Ave	Sidewalk Both Sides	0.25	Avondale Blvd to 350 ft east 114th Ave	\$291,000	8	10.5	5.5	4	9.5	37.50	230
P106	W Hidalgo Ave	Sidewalk Both Sides	0.49	Avondale Blvd to 111th Ave	\$573,000	8	10.5	5.5	4	9.5	37.50	231
P107	W Hidalgo Ave	Sidewalk Both Sides	0.31	1/4 mile El Mirage Rd to El Mirage Rd	\$369,000	8	10.5	5.5	4	9.5	37.50	232
P108	W Hidalgo Ave	Sidewalk Both Sides	0.40	Dysart Rd to 830 ft east of 129th Ave	\$475,000	8	10.5	5.5	4	9.5	37.50	233
P109	W Hidalgo Ave	Sidewalk Both Sides	0.12	630 ft west 109th Ave to 109th Ave	\$140,000	8	10.5	5.5	4	9.5	37.50	234
P135	W Pecan Rd	Sidewalk Both Sides	0.37	625 ft west 109th Ave to 107th Ave	\$436,000	8	10.5	5.5	4	9.5	37.50	235
P138	W Roesser Rd	Sidewalk Both Sides	0.24	Avondale Blvd to 350 ft east 114th Ave	\$277,000	8	10.5	5.5	4	9.5	37.50	236
P141	W Sunland Ave	Sidewalk Both Sides	0.25	Avondale Blvd to 350 ft east 114th Ave	\$291,000	8	10.5	5.5	4	9.5	37.50	237
MU11	Transmission Lines	Multi-Use Path	2.95	Lower Buckeye to Broadway / Agua Fria River	\$9,227,000	9.5	10.5	5.5	4	7,625	37.13	238
MU8	Gila River	Multi-Use Path	5.27	143rd Ave to East of 107 Ave	\$16,489,000	8	10.5	4	4	10,375	36.88	239
MU9	SR-30	Trail Segment	0.57	119th Ave to Avondale Blvd	\$1,770,000	4	10.5	4	4	13.125	35.63	240



FUNDING OPPORTUNITIES

Funding for proposed active transportation projects is a key obstacle to their implementation. Mobility improvements and active transportation projects are funded from a variety of sources. The available funding comes from an array of local, state, and federal sources, with federal transportation programs being a common source of funding for bicycle and pedestrian improvements.

The potential funding source is dependent on the type of project or program. Several factors such as the project's location, type, and target user can impact the decision of which funding source or sources to pursue. Project phases can also be funded separately using different sources. For example, funding opportunities exist for design phases and construction. The adjacent table shows common funding sources for active transportation projects and programs.

Several funding resources need to be allocated through various entities and programs. The prioritization of projects helps determine which projects should be funded in the short-term. Some of the potential funding sources for the recommended projects are listed below:

- City General Funds
- Capital Improvement Program Revenue Sources
- Private Funding/Development/Public Private Partnerships
- MAG Funding Opportunities
- Federal Land Access Program - National Parks Service
- Federal Transit Administration Grant Programs
- U.S. Department of Transportation (USDOT) Grant Programs

To make the Plan a reality, local officials will need to move quickly to get projects on the ground. Greater reliance on phased or "rapid implementation" approaches using less expensive materials can be effective and efficient and provide for a more adaptable transportation network. This approach will not only bring substantial transportation benefits sooner, but it will also allow for flexibility as transportation patterns continue to shift over the next 20 years and beyond.

Priority projects that can be easily completed should be programmed into the City's Capital Improvement Program (CIP). The project recommendations included in this Plan should be reviewed when developing the CIP.

Potential Funding Strategies & Policy Considerations

The Active Transportation Plan supports a variety of strategies and actions to effectively fund and implement the recommended projects and programs.

- Establish dedicated budget funds/dedicated funding source for active transportation projects.
- Consider creating developer incentives to encourage developers to provide Complete Streets.
- Secure private funding and consider public-private partnerships.
- Consider public financing tools such tax-increment financing and public improvement districts.
- Utilize MAG planning process, Transportation Improvement Program (TIP), and Design Assistance to program funds.
- Pursue state and federal grants.
- Establish annual funding targets.

- Market the Plan (i.e. Foldout map with advertisement space).
- Coordinate with school districts to create and implement Safe Routes to School plans.
- Set aside dedicated funding annually for proper maintenance of bike facilities and sidewalks.
- Set aside dedicated funding annually specifically for ADA and accessibility related projects.

Investment in the region's active transportation system will require the use of a multitude of funding strategies to help achieve this Plan's vision and meet the mobility needs of the community. It is essential to consider all funding options, including bonds, reallocation of existing sales tax revenues, reallocation of general fund budget, grants, improvement districts, and the creation of new revenue sources.

Potential Funding Sources

The appropriate funding opportunity for each unique project in this Plan can be identified quickly using Table 5-11. Detailed descriptions of each funding source can be found in the following sub-sections.

Table 5-11: Potential Funding Sources Matrix

Funding Source	Design/Build	Planning	Programming
Local			
City General Funds	✓	✓	✓
City Capital Improvement Program	✓		✓
MAG Safe Routes to School		✓	✓
MAG Transportation Improvement Program	✓	✓	✓
MAG Design Assistance Program	✓		
State			
AZ Governor's Office of Highway Safety			✓
Arizona State Parks and Trails	✓	✓	✓
Federal			
Federal Highway Administration	✓	✓	✓
Federal Transit Administration	✓	✓	✓
National Parks Service	✓	✓	
Land and Water Conservation Fund	✓	✓	
USDOT Safe Streets and Roads for All (SS4A) Action Plan Grants		✓	✓
USDOT Safe Streets and Roads for All (SS4A) Implementation Grants	✓	✓	✓
USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants	✓	✓	✓
Other			
American Association of Retired Persons	✓		
Active Living Research		✓	✓
Trust for Public Land		✓	
People for Bikes	✓		
Rails to Trails Conservancy	✓		

Local Funding Sources

The following are potential funding strategies and sources at the local level.

City of Avondale Funding Mechanisms

The City of Avondale can include a variety of items in their active transportation project funding toolbox. The City can program projects through their recurring CIP process. The City can also utilize Development Impact Fees, sell path and trail naming rights, utilize severance fees from the various operations surrounding the Agua Fria and Gila Rivers, sell Bonds, and seek funds from the General Fund when available. School Zone speeding fines can also be allocated to the construction and maintenance of paths and trails. There are opportunities for fundraising and campaign drives, trail sponsorship funds, corporate donations, and the use of volunteers to save money.

MAG Safe Routes to School Funds

Each year MAG budgets approximately \$400,000 for non-infrastructure projects related to Safe Routes to School. In fall of 2017, a call for applications occurred and 39 projects were awarded. While much of the money has been allocated, there is two million dollars remaining for projects through fiscal year 2022, specifically for Priority 2-SRTS Support Activities.

MAG TIP Modal Applications (Transportation Alternatives)

Bicycle-Pedestrian non-infrastructure Safe Routes to School projects and bicycle and pedestrian infrastructure projects are both eligible for Federal Highway Administration funds allocated via MAG via the following programs: Congestion Mitigation and Air Quality Improvement Program (CMAQ-2.5), Congestion Mitigation and Air Quality Improvement Program (CMAQ), Transportation Alternatives (Infrastructure and Non-infrastructure) (TA-MAG), and Surface Transportation Block Grant Program (STBGPMAG). Total funding available as of September 2017 was estimated at \$42.8 million.

MAG Design Assistance Program

The MAG Design Assistance Program was created to assist communities by funding infrastructure projects related to bike, pedestrian, and shared-use facilities such as multi-use paths. A request for projects for Design Assistance funding is released by MAG in May each year. Types of projects that are eligible for Design Assistance funding include: projects that facilitate safe crossings and access to bike/pedestrian facilities, bike and pedestrian access to transit, and bike and pedestrian facility construction and improvements (sidewalk improvements, bike lanes and shoulders, safety improvements, and signing, marking and wayfinding). Applicants interested in using design assistance funds must create preliminary scoping documents for each project.

State Funding Sources

The following are potential funding strategies and sources at the state level.

Arizona State Parks and Trails (ASPT)

Motorized and Non-Motorized Grant Program funds can be allocated for trail development and maintenance (equestrian, pedestrian, and bicycling uses included ADA access needs), off-road vehicle trails and law enforcement of OHVs, and trail education and safety programs and materials. There is an additional OHV Supplemental Program which can be utilized for repairs to OHV trails due to weather and/ or vandalism, constructing and maintaining

trails, and law enforcement. ASPT provides Safety and Environmental Education (SEE) funds for trail programs and educational aspects of projects.

Arizona Governor's Office of Highway Safety (GOHS)

The Arizona Governor's Office of Highway Safety places a special emphasis on projects that enforce pedestrian and bicycle safety laws, as well as school-based education programs. Their funding can be applied to supporting "Bicycle Safety Month" and "Back to School Safety Month" efforts, bicycle helmet distribution programs (specifically to low-income areas), the coordination of "Safety Fairs", comprehensive school-based pedestrian and bicycle safety education outreach, and the CARE fair (Children's Assistance and Resource Event) which distributes bicycle helmets to children and provides safety education. AGOHS grant funding is based on the Federal fiscal year calendar (October 1 - September 30). Grants for the 2020 Federal fiscal year are awarded for a one-year period. Applying for a GOHS grant begins with submission of a proposal and signed cover letter. Grant applications are available for download in PDF format on the GOHS website beginning January 21, 2019.

Federal Funding Sources

The following are potential funding strategies and sources at the federal level.

The Federal Highway Administration (FHWA)

There are multiple funding sources available for bike and pedestrian projects through the FHWA. Funding programs include: The Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Surface Transportation Block Grant Program (STBG), Highway Safety Improvement Program (HSIP), National Highway Performance Program (NHPP), Federal Lands Access Programs (FLAP), the Surface Transportation Block Grant Program (FAST Act), and Transportation Alternatives (TA). Each program has different requirements to receive funding. For example:

- CMAQ funds must be used for projects that benefit air quality.
- HSIP projects must be consistent with the State Strategic Highway Safety Plan and address a highway safety problem.
- NHPP-funded projects or activities must be associated with an NHS facility.
- FLAP funds could be used for bicycle and pedestrian accommodations on, adjacent to, or within Federal lands.
- TAP funds can be used for capital costs related to bike share, educational programs, lighting and environmental resiliency for bike and pedestrian facilities, project planning, and land acquisition for bike and pedestrian facilities.
- FAST Act funds can be used for recreational trails and pedestrian and bicycle projects, safe routes to school projects, bridge and tunnel projects, as well as improvements to roadways from the minor collector functional classification to the principal arterial.
- Recreational Trails Program (RTP) funds can be applied using a "user pay/benefit" model that uses a small portion of fuel sales tax from non-highway trail users (OHVs) to build trails (motorized trails, and non-motorized multi-use trails).

The Federal Transit Administration (FTA)

FTA funding may also be utilized for bike and pedestrian improvements adjacent to transit projects through the Capital Investment Grant Program (Section 5309), the associated transit improvements component of the Rural Area Formula Program Grants (Section 5311), and the Enhanced Mobility for Seniors and Individuals with



Disabilities (Section 5310). Transit funds may be used to improve bicycle lanes and sidewalks if they provide direct access to transit and Section 5310 funds can be used to construct accessible connections to a bus stop, as well as signage and wayfinding.

The National Park Service (NPS)

NPS offers community assistance through the Rivers, Trails, and Conservation Assistance Program (RTCA). RTCA funds can be used to create recreation opportunities, preserve and improve access to rivers, and design parks and trails. This program has a rotating deadline of June 30th.

Land & Water Conservation Fund (LWCF)

This funding source can be used to construct trail projects as well as recreation (including playgrounds) and conservation projects. It can be utilized for land acquisition, the protection of fish and wildlife habitat and preserving public access for recreation uses.

Safe Streets and Roads for All (SS4A) Action Plan Grants

SS4A Action Plan Grants provide competitive discretionary funding to develop, complete, or supplement a comprehensive safety action plan. Action Plan Grants may also fund supplemental Action Plan activities. The goal of an Action Plan is to develop a holistic, well-defined strategy to prevent roadway fatalities in a locality, tribe, or region.

The competitive grant solicitation process is initiated by the USDOT on an annual-basis through issuance of a Notice of Funding Opportunity. Eligible jurisdictions must submit a grant application and compete for an award of funding. Action Plan grants award amounts are based on estimated costs, with an expected minimum of \$200,000 for all applicants, and an expected maximum of \$1,000,000 for a political subdivision of a State.

Successful Action Plan grant applications and strategies include leadership commitment and safety goal setting, identification of a committee, task force, implementation group, or similar body charged with overseeing plan development, analysis of historical safety trends and existing conditions, robust engagement with the public and relevant stakeholders, including the private sector and community groups, and plan development using inclusive and representative processes geared towards underserved communities.

Safe Streets and Roads for All (SS4A) Implementation Grants

SS4A Implementation Grants fund capital projects and strategies identified in an Action Plan that address roadway safety problems. Implementation Grants may also fund associated planning and design and supplemental action plan activities in support of an existing Action Plan. Applicants must have an existing Action Plan to apply for Implementation Grants or have an existing plan that is substantially similar and meets the eligibility requirements of an Action Plan as defined in the SS4A Program Notice of Funding Opportunity.

The competitive grant solicitation process is initiated by the USDOT on an annual-basis through issuance of a Notice of Funding Opportunity. Eligible jurisdictions must submit a grant application and compete for an award of funding. For Implementation Grants, the USDOT expects the minimum award will be \$5,000,000 and the maximum award will be \$30,000,000 for political subdivisions of a State.



Typical successful Implementation Grant applications and projects consider promoting improved safety, employing low-cost, high-impact strategies that can improve safety over a wide geographic area, ensuring equitable investment in the safety needs of underserved communities, incorporation of evidence-based projects and strategies, and aligning with the USDOT's mission and priorities such as equity, climate and sustainability, quality job creation, and economic strength and global competitiveness.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants

RAISE Grants provide competitive discretionary funding of planning and capital investments in surface transportation that will have a significant local or regional impact by improving safety, economic strength and global competitiveness, equity, and mitigating climate change and promoting sustainability consistent with the USDOT's strategic goals.

Eligible projects are surface transportation capital projects that are highway, bridge, or other road projects, public transportation projects, passenger and freight rail projects, port infrastructure investments, surface transportation components of an airport project, intermodal projects, projects to replace or rehabilitate a culvert or prevent stormwater runoff, projects investing in surface transportation located on tribal land, and any other transportation infrastructure projects that the Secretary considers to be necessary to advance the goals of the program.

Planning activities are also eligible and include multidisciplinary projects or regional planning, such as development of master plans, comprehensive plans, integrated land use and transportation plans, or corridor plans, planning activities related to the development of a multimodal freight corridor, including those that seek to reduce conflicts with residential areas and with passenger and non-motorized traffic, development of port and regional port planning grants, risk assessments to identify vulnerabilities and address the transportation system's ability to withstand probable occurrence or recurrence of an emergency or major disaster.

USDOT seeks to fund projects that, to the extent possible, target at least 40 percent of resources and benefits towards low-income communities, disadvantaged communities, communities underserved by affordable transportation, or overburdened communities. The competitive grant solicitation process is initiated by the USDOT on an annual-basis through issuance of a Notice of Funding Opportunity. The minimum Capital Grant award is \$5 million in urban areas and \$1 million in rural areas, and the maximum amount that can be requested is \$45 million. Planning Grants do not have a minimum request threshold and must not exceed \$45 million.

Other Funding Sources

The following are other potential funding strategies and sources.

American Association of Retired Persons (AARP)

AARP provides funding to communities through their competitive Annual Community Challenge. The goal of the challenge is to make immediate improvements for long-term progress helping residents of all ages improve their quality of life. The "quick-action" solutions can include transportation and public spaces improvements.

Active Living Research (ALR)

Grants can be procured through ALR for various types of projects benefiting human activity, environmental improvements, researching health needs, and more.



The Trust for Public Land

Previously known as The Conservation Campaign, The Trust for Public Land's Action Fund can be used to assist in land conservation efforts and the creation of public parks. They offer legal assistance with ballot measures and provide legislative advocacy.

People for Bikes

The People for Bikes Community Grant Program awards funding to projects that advance bicycling such as trails and paths (including rail trails and mountain bike trails), and bike and BMX parks. They have an alternating grant schedule, with odd years supporting bike park and pump track projects only.

Rails To Trails Conservancy (RTC)

The Rails to Trails Conservancy offers an annual competitive grant program titled the Doppelt Family Trail Development Fund. Funds can be used to build to improve multi-use trails.

ACTIVE TRANSPORTATION PLAN MAINTENANCE & UPDATING

As illustrated in **Figure 5-8**, there are multiple key ingredients for plan execution - It is essential the implementation of this Plan to be an ongoing, community-oriented effort. Implementing the Plan will require a collaborative and coordinated effort with community leaders, residents, stakeholders, and partner entities.

Effective and ongoing outreach and community engagement is vital to the ATP's success. Involving the public in the Plan's implementation can play a key role in ensuring successful outcomes.

Thus, it is necessary to continually engage stakeholders and the public throughout the Plan's implementation phase through various channels such as neighborhood workshops, online tools, and events. Furthermore, additional partners should be pursued and engaged during the implementation phase. This Plan shall remain a top priority for residents and stakeholders.

Making the Plan accessible using an interactive online platform will help enable implementation. This also ensures the public's continued involvement in the Plan's implementation and future update process.

Figure 5-8: Recipe of Key Elements for ATP Implementation



Strategies to Facilitate Implementation

The following set of strategies will help effectively implement this Plan:

- Referencing of ATP on staff communications to City Council, Technical and Policy Committees, and Planning Commission when applicable.
- Produce an Annual Strategic Report.
- Develop and monitor performance measures.
- Publish yearly list of projects on a website.
- Continued engagement on social media; engagement at neighborhood level.
- Ensuring future plans, developments, and code changes are aligned with the Plan.
- Initiate pilot projects and tactical urbanism.
- Create ATP Facility Selection Guide.
- Utilize the ATP priorities when developing the CIP.
- Strategically increase collaboration and shared responsibility between the Planning & Zoning Commission and Parks and Recreation Board in the review of development proposals and other planning activities to ensure provision of recommended bike facilities.

Lastly, the implementation strategies should also be revisited regularly as part of the Plan's evaluation and update process. It is recommended that the Plan be revisited every 3 to 5 years to determine if an update is warranted.

Appendix A – Literature Review of Existing Plans, Studies & Relevant Information

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EXISTING PLANS, STUDIES & RELEVANT INFORMATION

There are a variety of existing studies and reports that influence and inform the preparation of the Avondale ATP. The studies outlined in **Table 1** were reviewed for applicable bicycle and pedestrian facilities, planned parks and regional open spaces, development requirements, design standards, and existing alignments and designations of pedestrian and bicycle routes and facilities in and around Avondale. A detailed review of the key studies is included in following sub-sections.

Table 1: Existing Plan, Studies, & Relevant Information

	Plan Title		Plan Type	Year	Key Study
City of Avondale Plans	Avondale Transportation Master Plan		Transportation	2017	✓
	Avondale General Plan 2030		General Plan	2012	✓
	Avondale Strategic Plan		Strategic Plan	2021	✓
	Avondale Parks, Recreation, Libraries and Trails Master Plan Update		Recreation & Trails	2017	✓
	Avondale Wayfinding Master Plan		Active Transportation	2015	✓
	City of Avondale 5-year CIP				✓
	El Rio Design Guidelines & Planning Standards		Design	2015	✓
	Public Art Master Plan		Community	2014	
	North Avondale Specific Plan		Community	2013	✓
	The BLVD Specific Plan		Community	2019	✓
	Healthy Lifestyle Plan		Community	2011	✓
	Freeway Corridor Specific Plan		Transportation	2015	✓
	Tres Rios Greenway Specific Plan		Community	2002	✓
	Old Town, Cashion, Las Ligas/Rio Vista Specific Area Plan		Community	2021	✓
	Municipal Sustainability Plan		Community	2014	✓
	Street Tree Master Plan		Community	2014	
	Safe Routes to School Plans	Completed: Canyon Breeze, Michael Anderson, Estrella Vista, Garden Lakes, Littleton	Active Transportation	Ongoing	✓
		Ongoing: Lattie Coor, Eliseo C Felix, Corte Sierra, Rio Vista, Avondale Middle Schools			
	Stormwater Management Plan		Design	2016	
	Avondale General Engineering Requirements Manual		Design	2018	✓
Regional Plans	MAG Active Transportation Plan		Active Transportation	2020	✓
	MAG Multimodal Level-of-Service Study		Active Transportation	2017	✓
	MAG 2040 Regional Transportation Plan Update		Transportation	2017	
	MAG Regional Bikeway Master Plan		Active Transportation	2007	✓
	MAG Regional Pedestrian Plan		Active Transportation	2000	✓
	MAG West Valley Multimodal Transportation Corridor Plan		Transportation	2001	
County Plans	MCDOT 2035 Regional Transportation System Plan (2040 Update underway)		Transportation	2014	
	MCDOT Active Transportation Plan		Active Transportation	2018	✓
	Maricopa County Regional Trail System Plan		Trails	2004	✓
State Plans	ADOT Bicyclist Safety Action Plan		Active Transportation	2018	✓
	ADOT Pedestrian Safety Action Plan		Active Transportation	2017	✓
	ADOT An Economic Impact Study of Bicycling in Arizona		Economic	2013	



CITY OF AVONDALE PLANS

Avondale Transportation Master Plan

The City of Avondale 2017 Transportation Plan Update is a robust document that provides detailed analysis and specifies recommendations for the future of Avondale's multi-modal transportation system which include development of streets, transit services, bicycle facilities, and intelligent transportation systems (ITS). This document contains fairly updated roadway classification, truck plan, transit plan, and recommended bicycle network maps.

This document also includes roadway cross-sections for arterial, minor arterial, and collector roadways, all of which contain required bike and pedestrian facilities.

Relevant Street Plan Recommendations:

- Take advantage of partially improved corridors/segments to complete gaps within the roadway network and/or multimodal networks within the City.

Relevant Short-Term Transit Enhancements:

- Transit Plan Updates and Passenger Amenity Improvements (i.e. terminal/ stop facilities)

Relevant Bike Plan Recommendations (See Figure 2 below):

- Require all newly constructed and improved roadways on arterial- and collector-class facilities and all pavement preservation projects to conform to standard cross-sections, which include bike lane provisions.
- Provide bi-directional improvements where current facilities on arterial roadways exist on only one side.
- Provide a bikeway improvement on the Durango Street alignment from 125th Avenue to Agua Fria Trail. Also, divert the existing Durango Channel Trail west and south along the SR-30 Right of Way. These trail improvements were not scored along with the roadway bicycle improvements but were given low priority due to expected development schedules.
- Work with developers to provide bicycle-friendly amenities and connections and/or integrate similar aspects into City projects, as appropriate.
- Review public buildings for bicycle-friendly amenities—work with City facilities, parks, and police divisions.
- Strive to achieve a Bike Friendly Community rating through the League of American Bicyclists.
- Coordinate efforts and potential projects with information presented in the recently adopted "Parks, Recreation and Trails Master Plan" and with an ultimate goal of a bikeway network that connects to the City's system of parks.
- Implement a roadway re-striping program to include provisions for bike lanes when and where feasible.
- Coordinate with adjacent jurisdictions to achieve continuity of bike lanes across jurisdictional boundaries.

Figure 2: Recommended Bicycle-Only Projects



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Avondale General Plan 2030

The City of Avondale General Plan is a guiding document that forecasts the city's needs for twenty years and is generally applicable for ten. The ratified document contains five themes: Sustainable Development, Open Space, Community Mobility, Community Facilities, and Quality of Life. The policies within the following goals will be applied to the recommendations of the Avondale Active Transportation Plan wherever relevant.

Goals from the Community Mobility Theme's include:

Bicycle Element-

1. Develop a safe bicycle transportation system that provides connectivity throughout the City, including major public and private facilities, and to transit.
2. Continue to make the street system accessible, safe, and convenient for bicycles and pedestrians.
3. Increase recreational opportunities for bicyclists throughout Avondale.
4. Become a recognized bicycling friendly city.

Transit Oriented Development Element-

1. Enhance public transit options for residents of Avondale.
2. Require development and redevelopment within areas designated as TOD on the General Plan Land Use Map to facilitate and encourage the use of transit by visitors and residents.
3. Promote and support the incorporation of commercial uses as a component of transit-oriented development.
4. Promote and support the incorporation of complete streets design criteria into TOD development, which contributes to a healthy community.

Goals from the Open Space Theme relevant to Active Transportation include:

Open Space Element-

2. Create linkages to parks, trails, rivers, and mountains.

Recreation Element-

4. Create shared use linkages throughout the community in order to support a healthy lifestyle.

Avondale Strategic Plan (2021)

"Avondale's strategic planning process was designed to assure:

- A shared vision of the city's ultimate goals. Organizations driven by clear purposes and shared values have a greater capacity to succeed than those that are not.

- A collective understanding of the available resources, the environment, and the principles upon which strategies will be based.
- Acceptance of the direction and urgency of the strategic plan, which will be integrated into the way the city is operated on a day-to-day basis.”

There are seven Avondale strategic outcome areas listed below along with associated strategies relevant to Active Transportation:

1. Creative and Sustainable Community Development
 - a. Maintain and expand quality infrastructure and improve connectivity to city amenities
2. Diverse Recreation and Entertainment Opportunities
 - a. Promote community's health, wellness, active lifestyle, and social connectivity
3. Community-Oriented Lifelong Learning Opportunities
4. Innovative Program and Service Delivery
5. Connected Community
6. Public Health and Safety
7. Natural Resources and Open Spaces
 - a. Promote and expand Avondale's natural assets such as parks, trails, rivers, and wilderness areas to residents, visitors, and businesses

Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017

This update to the 2009 Plan includes a Parks Chapter, Trails Chapter, and Recommendations Chapter that are all relevant to the creation of this Active Transportation Plan. As a result of the public outreach efforts of the Parks, Recreation, Libraries & Trails Master Plan Update, the community identified four priorities, with the following priority relating directly to active transportation: *Trail system development to connect Avondale's facilities, the regional trail system and natural resource areas.* The Plan also provided reinvestment goals that include sidewalk repair or replacement.

Parks Planning:

While much of this chapter is not directly relevant to active transportation, the following topics will be referenced during the preparation of this Plan.

Bicycle and Pedestrian Access to Existing Parks:

For this analysis, a ½ mile radius buffer was applied to each park, both public and private as shown in Figure 3. This buffer was selected as an assumed comfortable distance for bicyclists and pedestrians of most abilities. Highlights from the analysis are as follows:

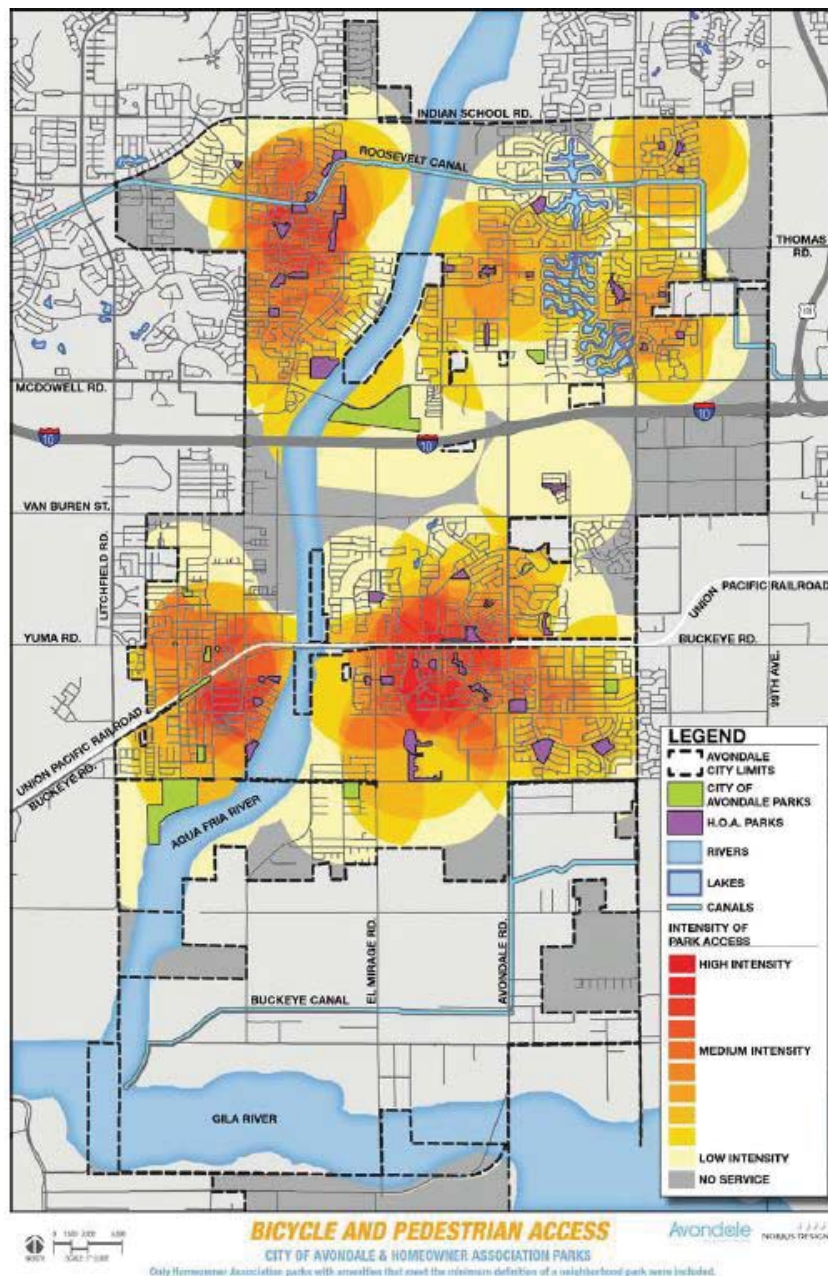
- The western portion of the City along Buckeye Road has the highest intensity of bicycle/pedestrian access to City Parks. This is due to many small parks being located relatively close to one another.
- Some overlap of service between HOA and City parks occurs in the southern portion of Avondale.

- Gaps in coverage occur in the central and northern Avondale, with the entire northeastern portion of the city having limited bicycle/pedestrian access to City parks.

Conclusions (relevant to Active Transportation):

- Improve connection to City parks by developing a trail system along the Aqua Fria River
- Improve pedestrian connections to parks through trail, greenway and multi-use path development.

Figure 3: Bicycle and Pedestrian Access to Existing Parks Provided by the City of Avondale and Homeowners' Associations



Trails Planning:

This section of the Plan provides trail classifications, designations, and cross-sections as well as the following Key Findings, Key Observations, Areas of Focus, and Conclusions.

Key Findings:

- Avondale is at the confluence of many trails planning efforts. Major connections along the Agua Fria and Gila Rivers make Avondale a critical regional connection.
- The Agua Fria River multi-use path is a major connection and a high priority as it serves as a primary corridor in Avondale's planned trail system.
- Roosevelt and Buckeye Canals as well as Van Buren Street provide secondary trail corridors.
- Avondale is a prime connection for the Phoenix-metropolitan area to regional natural resource parks such as Estrella Mountain Regional Park, Base Meridian Wildlife Area and Tres Rios Wetlands.
- Avondale can capitalize on the completion of the Maricopa Regional Trail system along the Agua Fria, Salt and Gila Rivers.
- Trails and open space requirements for new development provide a high level of connectivity.
- Ensure trails and open space in new development connect to existing and planned trail systems.
- Create connections between homeowner association owned paths and larger trail system (fill in the gaps).

Key Observations:

- Avondale is a prime connection for the rest of the Metro Phoenix area to Regional Natural resource parks; Estrella Mountain Park and Tres Rios
- Avondale can capitalize on the completion of the Maricopa Regional Trail system along the Agua Fria, Salt and Gila Rivers.
- HOA trails are defined as existing pathways that are separate from sidewalks and run through designated open space. (See Del Rio Ranch Trails)
- The planned multi-purpose path along the Agua Fria River would connect many of Avondale's parks
- HOA trail systems offer a high level of connectivity within development, but limited connectivity to trail systems outside of development.
- Surrounding jurisdiction trails are converging or are planned to converge on Avondale. Two types of trails are converging:
 - Enhanced transportation corridors: sidewalk and soft paths along roadways (see City of Phoenix trails along Lower Buckeye Road).
 - Regional River Trails: part of Maricopa County Regional Trail System along Agua Fria and Salt/Gila Rivers
 - River trails are major connectors for the trail system in the West Valley. An essential segment in the completion of Maricopa County's Sun Circle Trail, a loop centered on the Gila River, is located in Avondale.



- River trails connect to regional natural resource parks, i.e., Estrella Mountain Regional Park, Tres Rios Wetlands and Base & Meridian Wildlife Area

Areas of Focus:

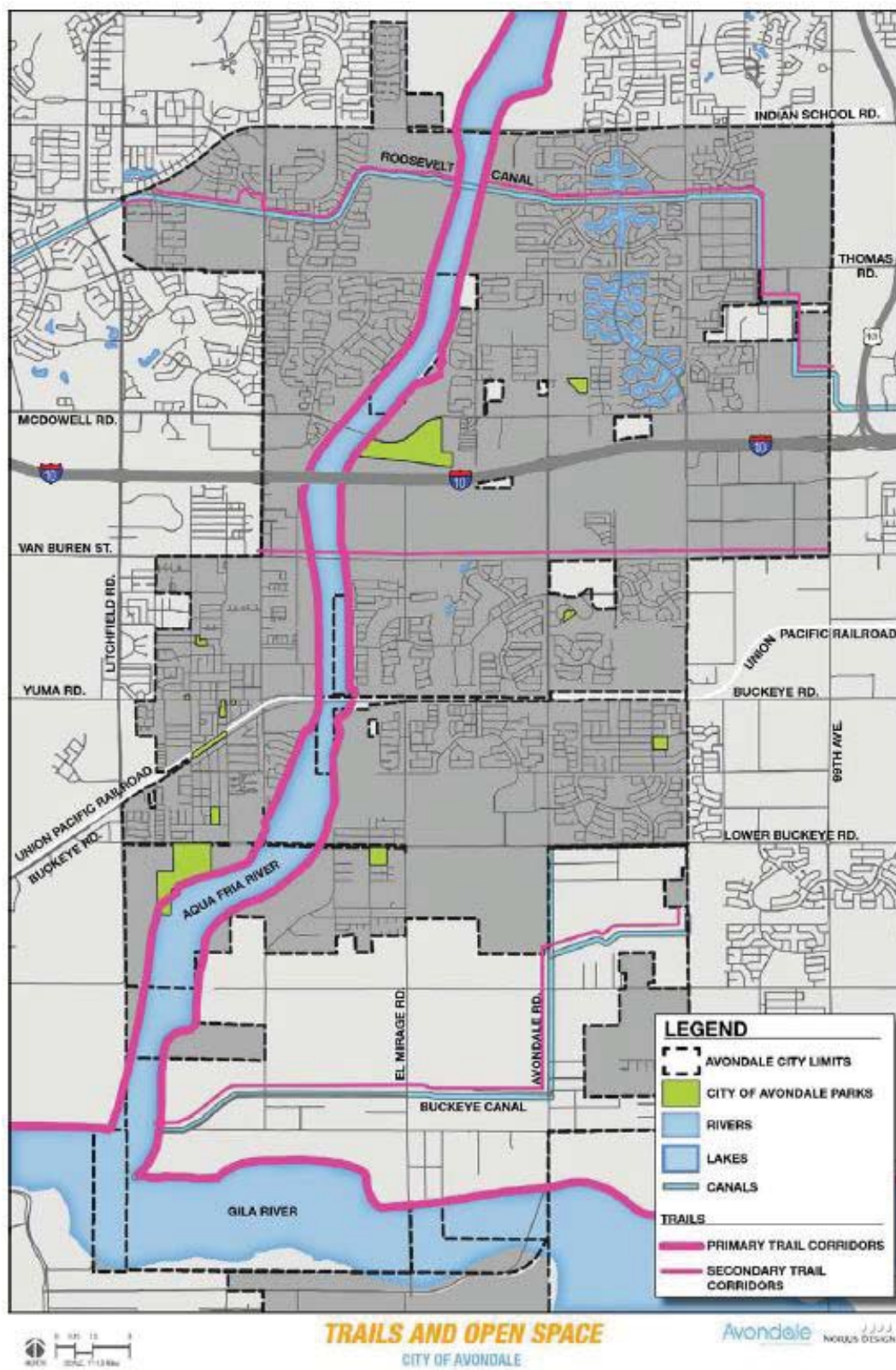
Sun Circle Trail-McDowell Road to Indian School Road; Goodyear Trail Connection North of I-10; Yuma Road/ Western Avenue to Agua Fria; Litchfield Road to Lower Buckeye Road; Del Rio Ranch to Agua Fria via Durango Street; City of Phoenix Lower Buckeye Road Multi-Use Path; Confluence of Agua Fria and Gila River; South Avondale and Planning Area.

Conclusions:

1. Avondale is a prime connection for the rest of the Metro Phoenix area to Regional Natural resource parks; Estrella Mountain Regional Park and Tres Rios.
2. Avondale can capitalize on the completion of the Maricopa Regional Trail system along the Agua Fria, Salt and Gila Rivers.
3. HOA trails are defined as existing pathways separate from sidewalks and running through designated open space, such as Crystal Gardens walking trails along lakes, Del Rio Ranch trails and Roosevelt Canal Trail.
4. Surrounding jurisdiction trails are converging or are planned to converge on Avondale. Two types of trails are converging:
 - a. Enhanced transportation corridors: sidewalk and soft path along roadways (see City of Phoenix trails along Lower Buckeye Road)
 - b. Regional River Trails: Part of Maricopa County Regional Trail System along Agua Fria and Salt/Gila Rivers
 - i. River trails are major connectors for trail system in the West Valley. Avondale is the last piece to complete a loop the Sun Circle trail made up of the Salt, Gila and Agua Fria River trails.
 - ii. River trails connect to regional natural resource parks – Estrella Mountain Park, Tres Rios Wetlands and Base & Meridian Wildlife Area
5. The Agua Fria trail would connect a majority of Avondale Parks. 4. HOA trail systems offer a high level of connectivity within a development but limited connectivity to trail system outside of the development.
6. Trails and open space in new developments should connect to existing and planned trail systems.
7. Create connections between HOA trails and larger trail systems by filling in gaps.
8. Coordinate trail connections with the Development and Engineering Services Department as well as surrounding jurisdictions.
9. The Agua Fria trail is a major connection and a high priority.
10. Other possible trail locations:
 - a. Buckeye Canal: Alignment in Maricopa county. The Western end has a flat dirt access road that connects to the Agua Fria.
 - b. Lower Buckeye Road: City of Phoenix multi-use path with sidewalk and soft path along Lower Buckeye road east of Avondale. The roadway runs West and crosses the Agua Fria. Las Ligas Park and Festival Fields are located on Lower Buckeye Road.



Figure 4: Planned Trails Corridors in the City of Avondale



Recommendations

Relevant plangoals include:

- GOAL 3: Respond to the community's priorities of investing in walking and biking paths, neighborhood and community park improvements, and Civic Center Library and Community/Senior Center improvements as identified in the public outreach process.
- GOAL 4: Respond to the community's priority to increase connectivity through implementation of existing trails master plans.

Avondale Wayfinding Master Plan

The City of Avondale Wayfinding Master Plan provides core wayfinding principles (Connect Places, Be Predictable, & Keep it Simple), as well as technical guidance for vehicular, bicycle, and pedestrian signage complete with Americans with Disabilities Act (ADA) Guidance. The Plan also provides specific recommendations including: Wayfinding Sign Family, Brand Identity, Destination Hierarchy and Sign Placement. Recommended sign schedule is identified in Figure 5 and sign placement is identified in Figure 6.

Figure 5: Bicycle & Trail Signage Needs Tables from Wayfinding Master Plan

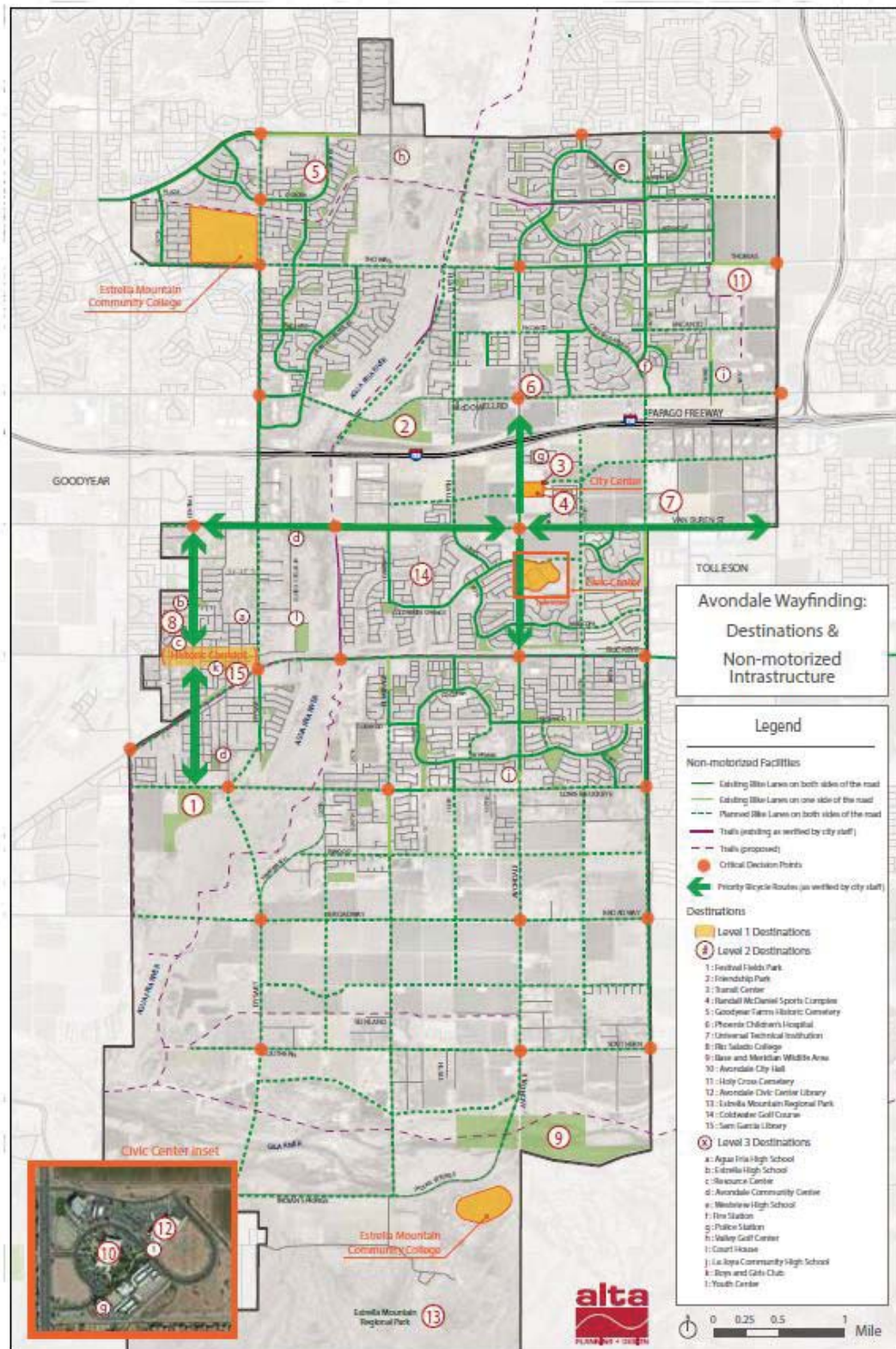
Table 6: Priority Bicycle Directional Sign Schedule

SIGN NO.	LOCATION
1	Heading WB: north side of Van Buren Road
2	Heading NB: east side of Central Ave.
3	Heading WB: north side of Van Buren Road
4	Heading EB: south side of Van Buren Road
5	Heading WB: north side of Van Buren Road
6	Heading EB: south side of Van Buren Road
7	Heading WB: north side of Van Buren Road
8	Heading EB: south side of Van Buren Road
9	Heading SB: west side of Avondale Blvd.
10	Heading NB: west side of Avondale Blvd.
11	Heading SB: east side of Central Road
12	Heading SB: west side of Central Road
13	Heading NB: east side of Central Road
14	Heading SB: west side of Central Road
15	Heading NB: east side of Central Road
16	Heading EB: south side of Buckeye Road
17	Heading WB: north side of Buckeye Road

Table 7: Trail Directional Signs

SIGN NO.	LOCATION
1	Heading NB: east side of Shared Use Path
2	Heading SB: west side of Shared Use Path

Figure 6: Avondale Bicycle Circulation and Decision Points:



City of Avondale 5-year Capital Improvement Plan (CIP)

The City of Avondale maintains their CIP within their overall city budget. Programmed projects with Active Transportation impacts are as follows:

1. Garden Lakes Parkway Improvements Phase I (Thomas Road to Lakeshore Drive)
2. Agua Fria Trail Phase I
3. Transportation Safety Enhancement
4. Agua Fria Trail Phase II (Pedestrian Bridge)
5. Street Light Infill Program
6. Thomas Road Bridge design concept review
7. Palm Lane Road Extension - 116th Avenue to 118th Avenue
8. Historic Avondale, Cashion and Las Ligas Improvements – Streets
9. Bus Shelters
10. Van Buren Multi-Use Path
11. Wayfinding Signage
12. Bike Retrofit Program
13. Pedestrian Ramp/Sidewalks Program
14. Traffic Signal - 119th Ave and McDowell- removing RRFB to be used elsewhere in the future*
15. Streetlight Replacement Program
16. Avondale Blvd- McDowell to Encanto
17. Crystal Gardens Trail Improvements
18. Multi-Modal Trail System

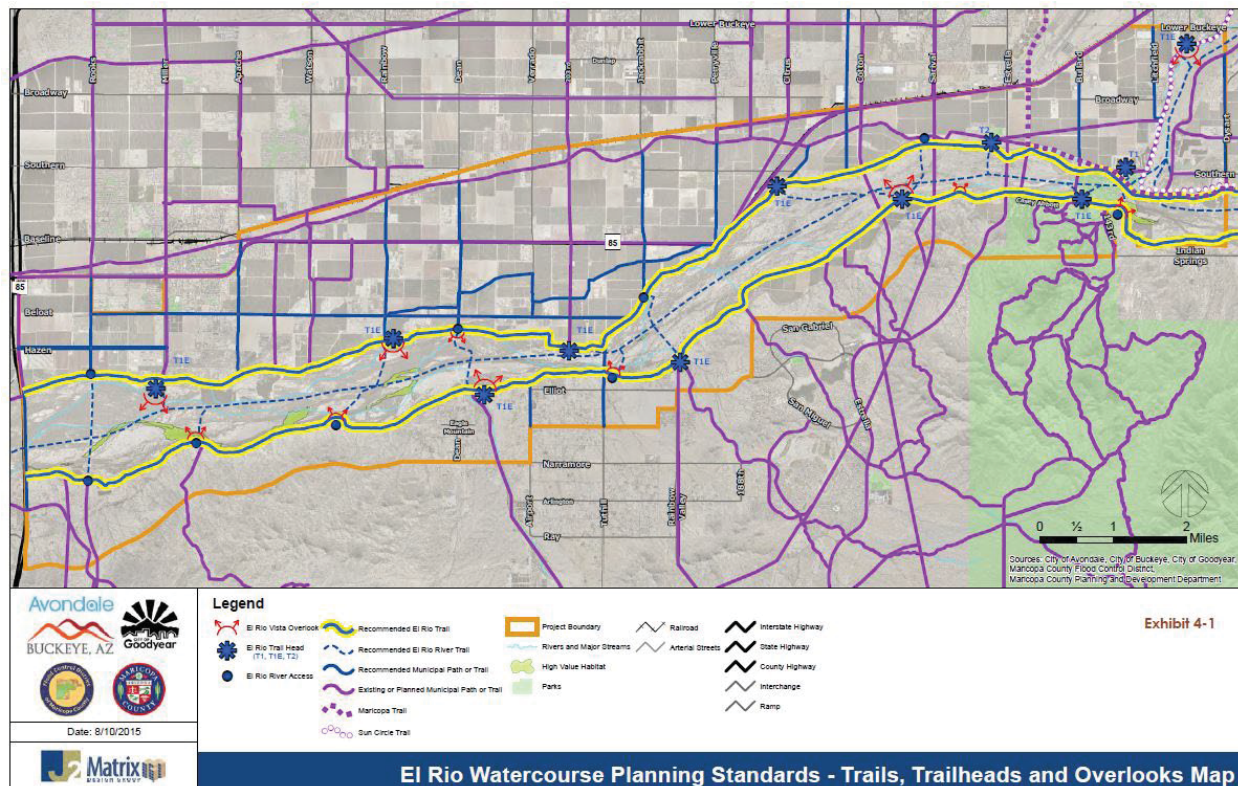
These projects include the addition of bike lanes, ADA improvements, sidewalk and ramp upgrades, street lighting and wayfinding upgrades, bus shelter upgrades and install, and trail and multi-use path developments.

More information about these projects can be found in Appendix B.

El Rio Design Guidelines & Planning Standards

This Plan addresses a 53 square mile area in South Avondale along the Gila River and provides 12 Character Areas and a Vision for the project area's development. Chapter 4 outlines Open Spaces, Paths, Trails and Edge Treatments across the El Rio project corridor. There are additional wayfinding requirements identified as well. Chapter 4 provides Path, Trail, and Trailhead Design recommendations, 9 Trail Goals and 5 Edge Treatment Goals, and lays out plans for the El Rio Trail and El Rio River Trail.

Figure 7: El Rio Watercourse Planning Standards- Trails, Trailheads and Overlooks Map



North Avondale Specific Plan

This Plan focuses on North Avondale and contains 8 objectives. Each objective references various goals and policies from the General Plan 2030. Objective 4 is relevant to Active Transportation within the study area and states “Increase the multi-modal transportation options available in North Avondale.” In addition to this objective and a list of ways this can be achieved, the plan identifies Design and Development Requirements as shown below:

- All residential developments, regardless of density and type, shall be planned with pedestrian cut-through pathways that provide residents with easy access to adjacent collector or arterial street rights-of-way.
- Residential development adjacent to commercially zoned or developed parcels shall provide direct pedestrian access from the residential community into the commercial area. Likewise, commercial development shall be designed to welcome pedestrian access from adjacent residential neighborhoods. Existing neighborhoods and adjacent commercial centers that do not incorporate these types of compatible designs should be evaluated for opportunities to enhance connectivity.
- All new roads shall be “complete streets”, designed for pedestrian, cyclist, automobile, and potentially transit use. Existing roadways shall be converted to “complete streets” where feasible.

- Development in North Avondale shall provide transit stops at any location determined to be required by the City Engineer. Each stop shall be unique and incorporate materials, colors, and themes from the adjacent development. Stops must include shading, seating, lighting, a trash receptacle, and artistic features. A photovoltaic system should be used to supply the power needed for illumination purposes and WiFi at these locations if feasible.
- Developers of sites adjacent to the Agua Fria River will be responsible for the construction of any portion of the Agua Fria Trail adjacent to their properties. Pedestrian nodes shall be located at minimum increments of every 1,300 feet. The design specifications of the remainder of the trail shall be per City of Avondale and FCDMC standards.
- Developers of sites adjacent to the Roosevelt Irrigation District (RID) canal will be responsible for construction and dedication of a public trail abutting the RID right-of-way. Pedestrian nodes shall be located at minimum increments of every 1,300 feet.

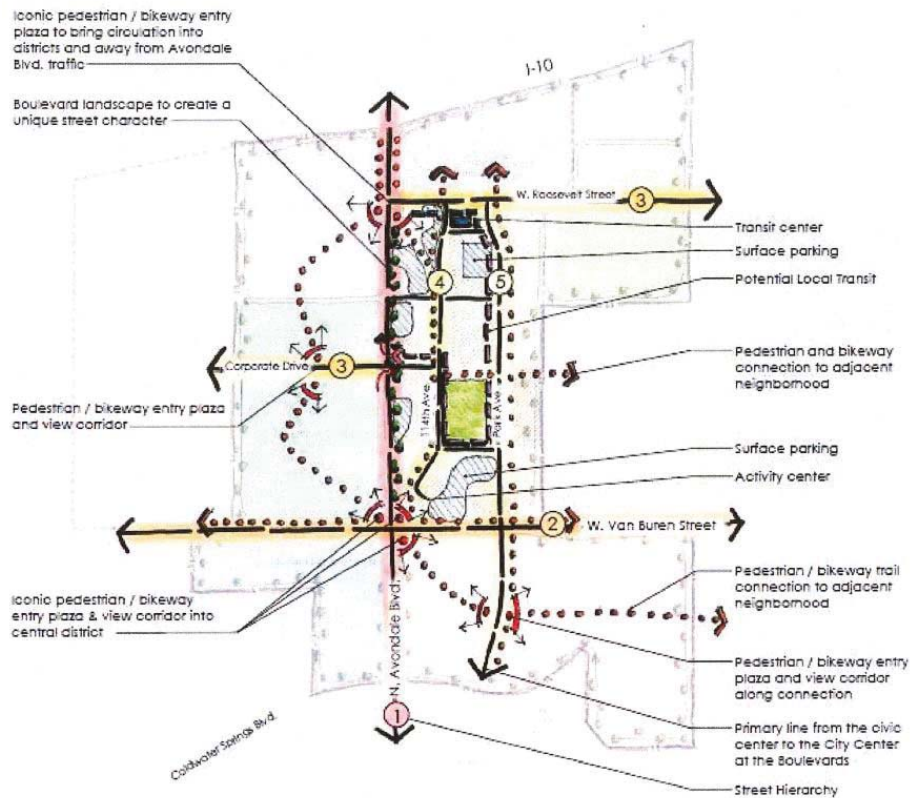
The Plan contains additional development and design requirements that support and encourage multi-modal transportation, but do not directly apply to this specific planning effort.

The BLVD Specific Plan

The BLVD Specific Plan outlines a plan for development for the area bounded by I-10, 11th Avenue, the 117th Avenue alignment, and the Civic Center. The BLVD contains six districts with specified land use types and densities. These districts include: The Gateway District, Residential District, Village District, Park Avenue District, Neighborhood District, and the Promenade District.

This plan addresses multimodal circulation within and between the BLVD districts and provides six roadway cross-section details for the following roadways: Avondale Boulevard, Van Buren Street, Roosevelt Street (2), Park Avenue, and Corporate Drive, all of which provide dedicated space for cyclists and pedestrians. It also recommends safe pedestrian crossings mid-block on both Avondale Boulevard and Van Buren Street to enhance pedestrian connectivity and identifies a High Intensity Activated Crosswalk (HAWK) or pedestrian bridge may be appropriate solutions.

Figure 8: The BLVD Specific Plan Street Network Concept



Avondale Healthy Lifestyle Plan

This Plan primarily focuses on food security and sustainability, but it also highlights healthy lifestyle factors in the community such as walkability, connectivity, shade, scale and pedestrian amenities, public transit, and automobile dependence.

Active Lifestyle Recommendations include:

- Extend the current bicycle lanes already in use.
- Use of bicycle lanes to incorporate more of the city, connectivity with lanes to shopping, arterial streets to encourage biking as another form of transportation
- Construction of more parks especially south of interstate 10 where only 1 exists. Dispersing of parks to more residents, avoid clustering of parks within 1.5 miles of one another.

Avondale Healthy Lifestyle Policies that are related to active transportation are as follows:

Land Use Theme

- Take alternative methods of transportation, including transit, bus, and walking into account when considering all proposals for development.
- Support higher density/urban land uses to support future transit and light rail.
- Continue to monitor the zoning and design requirements for Old Town to ensure these requirements are functioning optimally to create a visually interesting, active, and vibrant pedestrian oriented place.
- Coordinate connectivity opportunities with neighboring communities when creating pedestrian and non-motorized trail systems.

Economic Vitality Theme

- Recruit businesses that encourage pedestrian traffic into appropriate mixed-use areas and transit riders.

Neighborhoods Theme

- Encourage subdivision design, which promotes non-vehicular access to trails and transit routes/centers as a component of a healthy lifestyle.
- Ensure all new non-residential development is designed to actively engage and attract pedestrians and to provide residents the opportunity to lead a healthy lifestyle residing in the surrounding neighborhoods.
- Improve the physical connectivity between our existing neighborhoods as well as between our existing neighborhoods and nearby non-residential developments.

Sustainable Development Theme

- Encourage “walkable” communities, vertical development where appropriate, transit, and efficient land use patterns to minimize fuel consumption and energy usage.
- Encourage City employees to reduce vehicle trips by carpooling, biking, taking transit, and utilizing alternate work schedules.

Open Space Theme

- Retain Avondale’s commitment to becoming a “Healthy Lifestyle Community” through development of the Tres Rios Greenway Specific Plan.
- Establish Avondale as a “Healthy Community” by encouraging walkable neighborhoods, community gardens, urban agriculture, and other healthy lifestyle services.
- Link parks to open spaces, other community facilities, and each other through a citywide trail system.
- Actively work with public and private partners to develop the Tres rios Greenway Specific Plan as a recreational amenity, equestrian, and transportation facility.
- Link community parks to open spaces, other community facilities, and each other as a means to providing further physical activity for one’s well being.



- Retain Avondale's commitment to becoming a "Healthy Lifestyle Community" through development of Tres Rios Greenway Specific Plan.
- Identify the recreation needs of the community
- Provide a range of parks and recreation facilities that are linked to one another and equitably distributed throughout the City.
- Establish Avondale as a "Healthy Community" by encouraging walkable neighborhoods, community gardens, urban agriculture, and other healthy lifestyle services.
- Link parks to open spaces, other community facilities, and each other through a Citywide trail system.

Community Mobility Theme

- Integrate bicycle transportation needs into ongoing and future planning.
- Create a plan of action to meet the requirements in order to be recognized as a bicycling friendly and healthy lifestyle community.
- Emphasize accessibility for pedestrians and bicyclists by providing direct and linked access internally as well as to adjacent residential and non-residential areas.
- Concentrate housing at greater densities within transit corridors and at transit stops to facilitate walkable neighborhoods that encourage healthy lifestyles.
- Determine which bicycling advocacy's rating program best fits with Avondale's existing conditions and future plans.
- Create a plan of action to meet the requirements in order to be recognized as a bicycling friendly and healthy lifestyle community.
- Emphasize accessibility for pedestrians and bicyclists by providing direct and linked access internally as well as to adjacent residential and non-residential areas.
- Explore the advantages of walkable/bikeable neighborhoods in lowering vehicle use and reducing harmful pollutants caused by vehicular traffic and the resulting benefits for the residents.

Freeway Corridor Specific Plan

The Freeway Corridor Specific Plan is primarily an economic development plan with an additional focus on circulation, connectivity, and walkability. The Freeway Corridor is loosely bounded by Dysart Road, Van Buren Street, 99th Avenue, and McDowell Road.

Objective 4 is relevant to Active Transportation within the study area and states "Ensure new development in the Plan area is pedestrian/bicyclist friendly and contributes to a walkable community."

Freeway Corridor Design and Development Requirements relevant to active transportation include:

- All development shall provide safe, convenient pedestrian and bicyclist access to each building on site from adjacent rights-of-way, transit stops, and parking areas. Pedestrian connections shall feature a minimum 5' wide path and shading. Pedestrian

paths, except where they cross driveways and drive aisles, are expected to be located at least 10' from driveways and parking spaces, to buffer pedestrians from vehicular traffic.

- All public sidewalks shall be detached and shaded with trees unless otherwise approved by the City Engineer.
- Development adjacent to the City's planned HCT corridor should anticipate providing right-of-way beyond what is typically required (up to 50' additional per half street) to accommodate future transit service.
- Retail/ Restaurant developments adjacent to collector or local streets should incorporate "parklets" into their designs. Parklets are small areas designed to accommodate pedestrian seating and are generally located in areas of high pedestrian traffic.

Tres Rios Greenway Specific Plan

This Plan addresses the three rivers that intersect Avondale's boundaries: The Gila, The Salt, and The Agua Fria. This intersection is dubbed the Tres Rios Greenway. The Greenway will, upon completion, contain trails, bikeways, and pathways that will connect neighboring communities, facilities, and regional open spaces.

The Plan contains design specifics relative to Multi-Use Trails (both urbanized and natural area examples), the Sun Circle Multi Use Trail, signage, lighting, and furnishings. The Plan also identifies design requirements for circulation internally and externally which includes arterials, canals, activity nodes, and parking.

TRES RIOS

REGIONAL OPEN SPACE PLAN

Sources:
 Maricopa Association of Governments
 Maricopa County Department of Transportation
 Arizona Department of Transportation
 City of Avondale, Arizona

March 18, 2002

Legend:

- HOA Parks
- Parks
- Golf Courses
- Floodway
- Trails
 - Hike/Bike/Horse
 - Bike
 - Trail
- Streets
- Hydrology
- Railroad
- Planning Boundary
- Water

Inset Map Labels: MAP AREA, SOUTH PLANNING AREA

Old Town, Cashion, Las Ligas/Rio Vista Specific Area Plan

This Plan implements the General Plan within three historic areas of Avondale; Old Town, Cashion, and Las Ligas & Rio Vista.

Old Town is loosely bounded by Van Buren Street, The Agua Fria River, Lower Buckeye Road, and Local Roadways east of Litchfield Road. Old Town serves as a business district with a pedestrian focus. There are six districts within Old Town: Core Business District, Commercial District Areas, Eliseo C Felix Jr. Industrial District, Historic Neighborhood (1930-1950), Historic Neighborhood (1951-1970), and Contemporary Neighborhood (1970-Present).

Cashion is loosely bounded by Buckeye Road, 107th Ave, Durango Street, and 113th Avenue. Cashion has opportunity for commercial and light industrial infill. Buckeye Road properties qualify for commercial development and the Cashion Business District (CBD) zoning in lieu of residential zoning.

Las Ligas & Rio Vista is loosely bounded by the Agua Fria River, local roadways north of Lower Buckeye Road, El Mirage Road, and Illini Street. Las Ligas & Rio Vista provides opportunity for residential development and increased density.

All three of these areas are host to the City's largest concentration of older commercial buildings and residential homes. The character of these areas is the key to their success, and therefore preservation and restoration is paramount.

The four guiding principles of the Plan are:

- Encourage well-placed, well-designed commercial and residential developments
- Create a walkable, livable environment with plentiful open space
- Encourage a mix of residential, office, retail, restaurant, and service uses along with entertainment activities
- Foster high-quality development reflective of present-day market conditions while preserving the areas' culture and the opportunity for the area to flourish in the future

While the Circulation section of the Plan addresses bike and pedestrian connectivity, the roundabout design and the Western cross sections provided do not include bicycle facilities, only pedestrian connections.

Municipal Sustainability Plan

The City of Avondale proved their commitment to a sustainable future with the creation of this Municipal Sustainability Plan (MSP). The MSP identifies 11 Impact Areas: Community & Engagement; Transportation; Land Use; Procurement, Materials & Waste; Buildings & Maintenance; Health & Well-being; Ecosystems; Energy & Climate; Water; Air Quality, and Economy.

In Section 1: Current State Assessment, The Transportation Impact Area identifies current actions by the City (as of 2014) including Transit efforts, programming the Bike, Pedestrian, and

Trails Master Plan, adopting a Complete Streets philosophy, City staff alternative transportation incentive and driving reduction programs. This section also identifies opportunities for improvement which include: adopting an official complete street policy, providing continuity between existing pedestrian and bike routes, enhancing the public transit system, continue and enhance City staff programs, increase bike parking, and continue developing the Transit Oriented Development in Central Avondale specified in the 2030 General Plan.

In Section 2: Vision and Goals, there is one applicable active transportation related “Create an accessible, multimodal transportation system that enables safe movement and promotes human and environmental health”.

In Section 3: Implementation System, the Transportation Impact Area has 5 Strategies, 12 Actions, and 9 Targets as shown below in Figure 10.

Figure 10: Implementation System- Transportation Impact Area

#	Strategy	Action	Additional Impact Areas										Related *All percentage-based targets use a 2013 baseline, unless otherwise noted.	Targets	Related Goals
			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024			
Transportation															
10	Fuel efficiency	Green vehicle policy	✓	✓	✓					✓	✓	✓	- Perform lifecycle analysis for all new vehicle purchases by 2016 - Reduce vehicle emissions 10% by 2017; 20% by 2020; and 30% by 2030 - Increase fleet fuel efficiency 4% by 2017; 10% by 2020; and 15% by 2025 3% of fleet uses alternative fuels by 2017; 8% by 2020; and 12% by 2025 - Evaluate fleet size, determine reduction targets for 2015 - Increase staff alternative commuting 5% by 2017; 10% by 2020; and 20% by 2023 - All staff receive annual efficient driving and alternative commute training - All City-led development incorporates Complete Streets by 2016 - All applicable developers encouraged to use Complete Streets principles by 2016	1, 2, 3, 4, 5, 6, 7, 8, 9	
11		Efficient driving training	✓	✓	✓					✓	✓	✓			
12	Alternative fuels	Hybrid and electric administrative vehicles	✓	✓	✓					✓	✓	✓			
13		Plan for alternative fuel large fleet vehicles	✓	✓	✓					✓	✓	✓			
14	Fleet size	Phase-out unnecessary administrative vehicles	✓	✓	✓					✓	✓	✓			
15	Multimodal transportation	Complete Streets development guidelines	✓	✓	✓					✓	✓	✓			
16		Complete Streets policy for City development	✓	✓	✓					✓	✓	✓			
17		Bicycle, Pedestrian, and Trails Master Plan	✓	✓	✓					✓	✓	✓			
18	Alternative commuting	Season-specific alternative commuting promotion	✓	✓	✓					✓	✓	✓			
19		Recognize top alternative commuting employees	✓	✓	✓					✓	✓	✓			
20		Safe cycling on the street course	✓	✓	✓					✓	✓	✓			
21		City bike map	✓	✓	✓					✓	✓	✓			

Safe Routes to School Studies

The U.S. Department of Transportation defines Safe Routes to School (SRTS) as “an approach that promotes walking and bicycling to school through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school.” SRTS focuses on enhancing safety and physical health in children. Local SRTS funds are distributed to applicants based on need through our metropolitan planning organization, Maricopa Association of Governments (MAG).

In 2018, the City of Avondale received \$96,186 for SRTS studies at Canyon Breeze Elementary, Michael Anderson Elementary, Estrella Vista Elementary, Garden Lakes Elementary, and Littleton Elementary. In 2019, the City of Avondale received \$96,186 for SRTS studies at Rio Vista Elementary, Corte Sierra Elementary, Avondale Middle School, Lattie Coor Elementary, and Eliseo C. Felix Elementary. In 2020, the City of Avondale received \$100,000 for SRTS studies at Quentin Elementary, Collier Elementary, Legacy Traditional School, and Rancho Santa Fe Elementary.

Completed study boundaries include:

Canyon Breeze Elementary

Completed by our team in 2019 simultaneously with Canyon Breeze Elementary, this study focused on the neighborhood bounded by McDowell Road, 120th Avenue, West Virginia Avenue, and Avondale Boulevard.

Michael Anderson Elementary

Completed by our team in 2019 simultaneously with Michael Anderson Elementary, this study focused on the neighborhood bounded by Harrison Drive, Dysart Road, Riley Drive and Litchfield Road.

Estrella Vista Elementary

This study focused on the neighborhood bounded by Buckeye Road, Avondale Boulevard, Lower Buckeye Road and El Mirage Road.

Garden Lakes Elementary

This study focused on the neighborhood bounded by Garden Lakes Parkway, 107th Avenue, Lakeshore Drive, Roosevelt Canal, and Indian School Road.

Littleton Elementary

This study focused on the neighborhood bounded by Buckeye Road, 11th Avenue, Durango Street, Cocopah Circle and 119th Avenue.

Some recommendations of these completed Safe Routes to School Studies include:

- HAWK crossings
- Proposed School Crosswalks (with Crossing Guards)
- Enhanced signage
- Sidewalk repairs and/or installation
- Striping
- Speed limit analysis and stop sign warrant studies
- Turn lane reconfigurations
- Bike facilities
- Shade enhancements for pedestrian facilities

Avondale General Engineering Requirements Manual

This Manual includes the following active transportation related engineering requirements:

Roadway Street Classifications*

- Arterial Streets: 6-foot detached sidewalks (except for adjacent to a school, which requires 10-foot detached sidewalks), two bicycle lanes,
- Collector Streets: 6-foot detached sidewalks and striped bicycle lanes. For industrial collectors, sidewalks may be attached and bike lane markings may be deleted with the City Traffic Engineer's approval.
- Local Streets: 5-foot wide detached sidewalk

*Special Note:

Sidewalks abutting schools require a minimum width of 10 feet. Sidewalks along designated safe routes to schools may be required to have wider than minimum width as directed by the City. Additional right-of-way or a sidewalk easement may be required to accommodate the extra width sidewalk.

Pedestrian Ways

Pedestrian ways shall be constructed to connect sidewalks with public and private facilities not located in the public street right-of-way. Public pedestrian ways shall be within a tract or easement for such purposes that define the access and maintenance responsibility. The minimum width shall be six feet, or a width consistent with adjacent trails, and may be used for additional purposes as approved by the City. If additional uses are approved, the minimum required width may be increased depending on the specific use.

Multi-Use Paths/Trails

Multi-use path or trail surfaces should be firm, stable, and slip resistant material. Minimum design criteria for a multi-use path is as follows:

- (1) Minimum 12-foot in width paved/concrete, unless the Design Engineer can show that 12 feet cannot be accommodated; in such cases, 10-foot shall be the minimum.
- (2) Maximum longitudinal grade shall be five percent unless otherwise approved by the City.
- (3) Minimum foot graded area adjacent to both sides of the path
- (4) Minimum separation of five feet from a roadway
- (5) Maintain a minimum vertical clearance of eight feet, and keep free to protruding objects.
- (6) Edge protection, if required, shall be a minimum height of 42 inches.
- (7) Paths designated for equestrian and pedestrian use, the vertical clearance must be 10 feet.

The Manual also addresses: Public Transit Facilities, Bus Pull-Out Bays, Bus Shelter Pads, Traffic Calming, Street Lighting, and Signage and Pavement Markings.

REGIONAL PLANS

Maricopa Association of Governments Active Transportation Plan 2018

The Maricopa Association of Governments (MAG) Active Transportation Plan (ATP) completed in 2018 was developed to provide guidance to communities on how to best achieve regional active transportation connectivity while increasing walking, biking, and transit use locally. MAG stresses the regions need for enhanced infrastructure and safety in the plan and sites the following alarming statistics: “Since 2007, 1,069 pedestrians and 196 bicyclists have been killed in the MAG region, and an average of over 2,000 people walking and biking have been injured on roads in the region each year.” Also, “...from 2007 to 2016 there was an 80% increase in the total number of bicyclist fatalities and a 63% increase in pedestrian fatalities.”

Goals of the plan include: GOAL 1: Increase the active transportation mode share to 30 percent by 2040, GOAL 2: Achieve zero pedestrian and bicyclist traffic fatalities by 2030, GOAL 3: Increase the percentage of people getting enough physical activity to 80 percent by 2040.

Some strategies to achieve these goals include the following: Create desirable short trips, provide comfortable networks, manage vehicle speeds, integrate active transportation and transit, and count active transportation trips. The plan also provides an existing active transportation grid for communities to capitalize on, highlights regional conduits that are primed for active transportation development, and identifies activity centers that deserve special attention.

The plan outlines four “*Principles for an all ages and abilities active transportation network*”: Equity and Inclusion, Safety, Comfort, and Connectivity. The MAG ATP also provides a list of local agency tools:

- Build high quality infrastructure within the AT Grid, activity centers and Regional Conduits
- Adopt policies or ordinances that support complete streets
- Establish a Safe System policy
- Update street design standards and guidelines
- Adopt supportive land use and development regulations
- Update parking requirements
- Dedicate resources for active transportation
- Become a walk friendly and bicycle friendly community

In regard to implementation cost, the Plan estimates that Regional Conduits will cost Avondale \$4,200,000, and outlines funding and assistance opportunities to help with that cost. Additionally, the MAG ATP references the City of Avondale Central Avenue Protected Bikes Lanes as a Case Study of a successful facility.



Maricopa Association of Governments Multimodal Level-of-Service (MMLOS) Study

The Multimodal Level-of-Service (MMLOS) study performed an evaluation at nine locations in the MAG region – which included $\frac{3}{4}$ miles stretch of McDowell Road from 107th Avenue to 101st Avenue in Avondale. This MMLOS Study provided analysis for urban streets and explored a method for assessing how well an urban street serves multimodal users. The method for evaluating the MMLOS estimates the auto, bus, bicycle, and pedestrian level-of-service (LOS) on an urban street. It uses a combination of available data and data gathered by an agency to assess auto and transit level of service.

The intent was to gain a greater understanding of how the tool may be used to facilitate planning efforts and establish performance metrics for the region. The results of the study provide a better understanding of the variables that improve the experiences of all users. It also underscores the reality that creating an objective metric for non-vehicular travel experience is complex.

Avondale – McDowell Road Inventory and MMLOS Analysis

Table 2 displays key study corridor characteristics, including the number of travel lanes, the curb-to-curb width, presence and type of median, presence of bike lane, and posted speed limit. There are three different cross-section widths along the Avondale study corridor, ranging from 94' to 108'. McDowell Avenue is a 5- or 6-lane roadway with posted speeds of 45 mph. Segments 1 and 3 differ only in the type of median present. Of the four cross-sections along the study corridor, Segment 3, between 103rd Street and 101st St, was chosen for development of Striping and Customized alternatives for further MMLOS analysis.

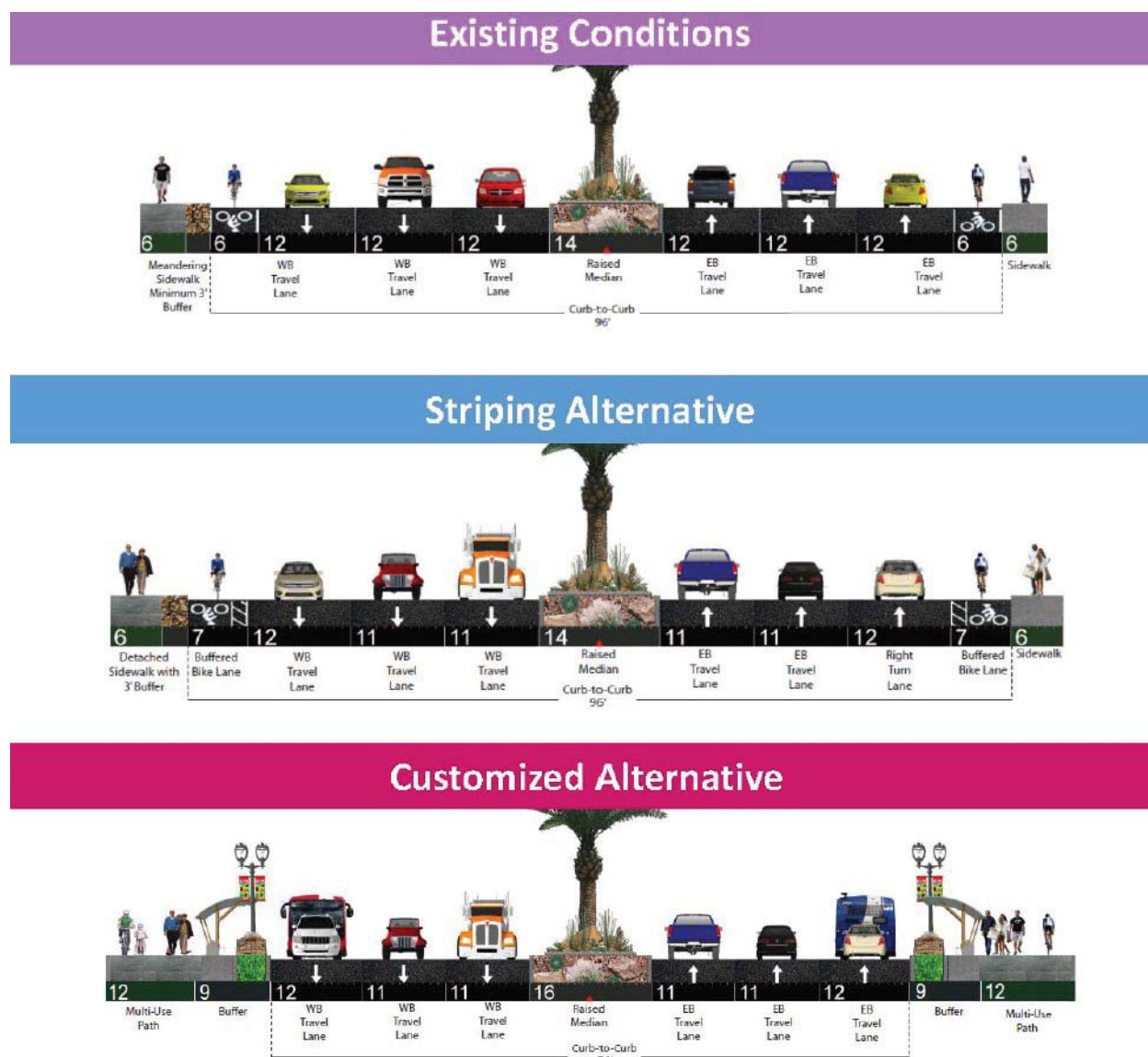
Figure 11 displays existing conditions, as well as the Striping and Customized alternatives for Segment 3 of McDowell Road. As shown, reductions in the width of travel lanes provide sufficient room for the installation of 1-foot buffers along the existing bike lanes. The Customized alternative, by contrast, allows for the addition of two feet to the center raised median, while accommodating pedestrians and cyclists via a multi-use path, set back approximately 9 feet from the roadway.

Table 2: Avondale – McDowell Road Study Corridor Inventory

Seg. ID	From	To	WB Lanes	EB Lanes	Curb-to-Curb Width (ft)	Median Type	Bike Lane Present?	Posted Speed Limit (mph)
1	107 th Avenue	1,000 feet east of 107 th Avenue	3	2	96'	2 Way Left Turn Lane	No	45
2	1,000 feet east of 107 th Avenue	103 rd Avenue	3	3	94-96'	2 Way Left Turn Lane	No	45
3	103 rd Avenue	101 st Avenue	3	3	96'	Raised	No	45
4	101 st Avenue	99 th Avenue	3	3	96-108'	Raised	No	45

Source: Chen Ryan Associates, January 2017

Figure 11: Avondale - McDowell Road Study Corridor Alternatives



MMLOS analyses were performed for Segment 3, between 103rd Avenue and 10th Avenue, under Striping alternative and Customized alternative conditions. These results are summarized in **Table 3**.

As shown, the Striping alternative provides moderate improvement to pedestrians, bicycles, and transit with no degradation to auto LOS. The Customized alternative provides a significant improvement to pedestrians and bikes through the introduction of a separate, multi-use path facilities.

Table 3: MMLOS Analysis Results for Avondale – McDowell Road from 103rd Avenue to 107th Avenue

Period		Auto LOS/Score				Pedestrian LOS/Score				Bike LOS/Score				Transit LOS/Score				
Existing Conditions																		
		EB		WB		EB		WB		EB		WB		EB		WB		
AM	B	2.22	B	2.21	D	3.52	D	3.65	D	3.75	D	4.10	B	2.48	A	1.12		
PM	B	2.26	B	2.24	D	3.72	D	3.70	D	3.88	E	4.45	B	2.61	A	1.24		
Striping Alternative																		
		EB		WB		EB		WB		EB		WB		EB		WB		
AM	B	2.22	B	2.21	C	3.45	D	3.57	C	3.39	D	3.74	B	2.45	A	1.10		
PM	B	2.26	B	2.24	D	3.65	D	3.62	D	3.51	D	4.09	B	2.58	A	1.22		
Customized Alternative																		
		EB		WB		EB		WB		EB		WB		EB		WB		
AM	B	2.22	B	2.21	A (Multi-Use Path)									B	2.36	A	1.01	
PM	B	2.26	B	2.24										B	2.49	A	1.13	

Source: Chen Ryan Associates, January 2017

COUNTY PLANS

MCDOT Active Transportation Plan 2018

In 2016, Maricopa County Department of Transportation (MCDOT) initiated the Active Transportation Plan (ATP) to develop a comprehensive guide that outlines a vision for active transportation within unincorporated Maricopa County. the ATP is an action plan that guides decisions and investments about when, where, why, and how to logically and meaningfully increase active transportation in Maricopa County. The actions and needs identified in the ATP will strategically overcome network gaps, support growth, and increase transportation options along MCDOT roadways.

The plan held the following four goals: GOAL 1: Provide a System that is Safe and Efficient for All Modes of Travel, GOAL 2: Promote Quality of Life and Economic Vitality, GOAL 3: Encourage a Seamless Regional Transportation Network, and GOAL 4: Protect Past and Future Transportation Investments through Strategic System Preservation. The following 20 Avondale-area Active Transportation needs were identified in the plan:

Pedestrian Network Needs

Sidewalks Missing at Intersection:

1. Sidewalk NE corner- Indian School Rd & El Mirage Rd
2. Sidewalk SW & SE corner- Lower Buckeye Rd & 107th Ave
3. Sidewalk SE corner- Lower Buckeye Rd & 125th Ave
4. Sidewalk ADA- MC 85 & 107th Ave

Minor Gap Needs in the Pedestrian Network:

5. Sidewalk south side- Indian School Rd from 103rd Ave to West of 100th Ave (0.05 miles)
6. Sidewalk both sides- Indian School Rd from El Mirage Rd to East of El Mirage Rd (0.07 miles)
7. Sidewalk both sides- Lower Buckeye Rd from 127th Ave to East of 127th Ave (0.07 miles)



8. Sidewalk both sides- Lower Buckeye Rd from West of 125th Ave to West of 125th Ave (0.01 miles)

Corridor and Network Expansion Needs in the Pedestrian Network:

9. Sidewalk both sides- Lower Buckeye Rd from 4th St to 127th Ave (0.72 miles)
10. Sidewalk both sides- Lower Buckeye Rd from East of 5th Ave to 4th St (0.54 miles)
11. Sidewalk south side- Lower Buckeye Rd from Litchfield Rd to East of Litchfield Rd (0.22 miles)
12. Sidewalk both sides- MC 85 from West of El Mirage Rd to East of El Mirage Rd (0.42 miles)

Bicycle Network Needs

River, Canal, and Roadway Crossing Needs in the Bicycle Network:

13. River Crossing- Indian School Rd at the Agua Fria River
14. River Crossing- Lower Buckeye Rd at the Agua Fria River

Regional Bicycle Connections and Network Expansion in the Bicycle Network:

15. Bicycle facility- 107th Ave from Southern Ave to Lower Buckeye Rd (2 miles)
16. Bicycle facility- Indian School Rd from El Mirage Rd to 103rd Ave (2.46 miles)
17. Bicycle facility- Lower Buckeye Rd from 127th Ave to El Mirage Rd (0.48 miles)
18. Bicycle facility- Lower Buckeye Rd from 4th St to 127th Ave (0.72 miles)
19. Bicycle facility- Lower Buckeye Rd from Avondale Blvd to 107th Ave (0.97 miles)
20. Bicycle facility- Lower Buckeye Rd from Litchfield Rd to 4th St (0.76 miles)

Maricopa County Regional Trail System Plan

The Maricopa County Regional Trail System Plan of 2004 laid the groundwork for a regional trail system consisting of the Maricopa Trail (242 miles) and the Sun Circle Trail (appx. 140 miles) connecting the county's regional parks. The plan provides three goals, 23 policies, and trail design guidelines to help steer the development of the regional system.

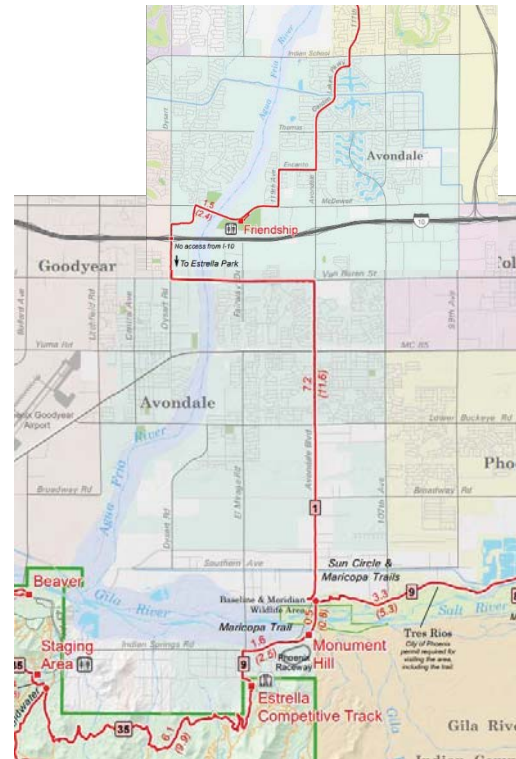
The plan held the following three goals:

- GOAL 1: Provide a shared use, nonmotorized trail system to connect the Maricopa County Regional Parks together.
- GOAL 2: Link metropolitan areas, municipal trails, communities, and neighborhoods with regional nonmotorized multi-modal corridors.
- GOAL 3: Provide open space corridors to protect natural and cultural resources from development.

Avondale Facilities

Segments 1 and 9 of the Sun Circle Trail bisect the City of Avondale connecting the northern boundary at Phoenix to the southern boundary at Estrella Mountain Regional Park. There are two trailheads within Avondale: Friendship Trailhead at Friendship Park and Monument Hill Trailhead at Monument Hill north of the Phoenix Raceway. The Monument Hill Trailhead serves as a terminus for the Maricopa Trail that circumnavigates the County.

Figure 12: Sun Circle Trail- Avondale Sections 1 & 9



STATE PLANS

ADOT Bicyclist Safety Action Plan Update 2018

The 2018 Bicycle Safety Action Plan (BSAP) consists of an update to the 2012 BSAP that results in a strategic action plan that effectively focuses resources on making the changes that reduce the greatest number of severe injury and fatal bicycle motor vehicle crashes. ADOT recognizes that the focus of the BSAP identifies and evaluates only a small percentage of the total number of crashes involving people on bikes that occur in the state of Arizona because it does not include any crashes off the State Highway System that ADOT owns and operates. The BSAP observes that other agencies and jurisdictions in Arizona will develop their own bicycle safety action plans to meet their respective needs. The following objectives guide the 2018 BSAP Update development:

- Evaluate the strategies, progress, and effectiveness of the 2012 BSAP to reduce the frequency of bicycle crashes.
- Collect and analyze bicycle crash data on the SHS for the most recent five years available (2012- 2016). Identify crash types and review contributing factors to the crashes.
- Identify high-priority crash locations involving people biking.

- Identify specific steps, actions, and potential countermeasures that, upon implementation and over time, will measurably reduce bicycle crashes, injuries, and fatalities on the SHS.

This study is extensive in nature and includes the following additional topics for discussion and evaluation:

- State Highway System bicycle crash locations
- Bicycle Crash potential assessment
- Priority locations and potential countermeasures
- Evaluation of high crash locations and future possible ADOT five-year Transportation Facilities Construction program
- Funding sources for bicycle infrastructure and programs

One high crash intersection exists at Dysart Road and Interstate 10 within the City of Avondale with 5 crash occurrences reported (analysis years 2012-2016). Through the bicycle crash potential assessment process conducted by the BSAP, it was determined that no further analysis of high crash potential locations is required within the City of Avondale. Additional information of interest to the Avondale ATP includes:

- 1) 62.7% of all vehicle-bicycle crashes on the ADOT SHS have no presence of a bicycle facility on the roadway and that there were more crashes in instances where the paved shoulder is greater than/equal to 4 feet (27.2%) versus those roadways with shoulders 4 foot or less (5.5%).
- 2) Nearly 80% of all people on bikes involved in crashes on the ADOT SHS were males.
- 3) The most prominent violation for motorists was failure to yield the right-of-way (20.6 percent) For people on bikes, the most prominent violation was driving/riding in the opposing traffic lane (25.1 percent) and disregarding traffic signals (12.7 percent).
- 4) The BSAP analysis concluded through its investigations the person riding their bike was primarily at fault in nearly 43 percent of the reported crashes. The motorist was judged to be primarily at fault in almost 39 percent of the reported crashes. Both were at fault in 7.7% of the crashes, and fault could not be determined or was not reported in 8.5% of the person riding/person driving crashes.
- 5) Over 58 percent of the reported bicycle crashes occurred when the person biking was riding along the sidewalk, riding in the crosswalk, or crossing a driveway. Twenty-one (21) percent of the crashes included the person riding in the general travel lane (no bicycle lane present).
- 6) The crash analysis identified many crashes that occur on the state highway system occur at interstate interchanges with local arterials.

ADOT Pedestrian Safety Action Plan 2017

The 2017 Pedestrian Safety Action Plan (PSAP) serves as an update to the 2009 PSAP that provides a strategic action plan that effectively focuses resources to reduce the greatest number of severe injury and fatal pedestrian-motor vehicle crashes on the Arizona State Highway System (SHS). Like the BSAP, the PSAP addresses only a small percentage of the total

number of pedestrian crashes that occur in the state of Arizona. The PSAP was developed under the following objectives:

- Evaluate the framework, strategies, progress, and effectiveness of the 2009 PSAP.
- Collect and analyze pedestrian crash data for the five most recent years available (2011-2015) for crashes that occurred within the ADOT-maintained state highway right-of-way.
- Identify specific steps, actions, and potential countermeasures that, upon implementation, will measurably reduce pedestrian crashes, injuries, and fatalities on the SHS.

A summary of some key findings of the PSAP include:

- 1) Overall, pedestrian-vehicle crashes saw an increase on the SHS in 2011-2015 from analysis years 2002-2006 to 2011. Total pedestrian crashes were on the SHS were up 6.9% on average.
- 2) In an analysis and identification of high priority pedestrian crash roadway segments on the SHS, none are located in the City of Avondale.
- 3) Crossing-at-intersection or midblock crashes were the most prevalent crash types in terms of crash frequency.
- 4) The other common crash type fell within the “unusual circumstances” description. It was found that these crashes were the result of a person stepping out of a possibly disabled vehicle on the side of the highway/freeway and getting struck by a vehicle. Nearly 15% of all crashes were categorized in this class and had a 52% severe injury percentage.
- 5) 53% of pedestrian crashes occurred during nighttime or dark conditions. 41% of pedestrian crashes occurred in daylight conditions. Injury severity was increased for crashes occurring at nighttime.
- 6) With respect to evaluating a pedestrian crash risk assessment of the probability of future pedestrian crashes, no highway segments in the City of Avondale were identified as high-risk locations.

▶ ANNUAL BUDGET & FINANCIAL PLAN

ARTIST'S RENDERING OF THE CARE1ST AVONDALE RESOURCE CENTER



ARTIST'S
RENDERING OF
THE POLICE
DEPARTMENT'S
HEADQUARTERS
EXPANSION

FISCAL YEAR **2020-2021**

Avondale
Arizona

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Friendship Park Enhancements **Project Number:** 1027**Funding Source:** Operating Funds**Project Type:** Parks and Culture**Project Description:**

Changes to Friendship Park for FY 2020-2021 include replacing the existing playground equipment within the existing area, surfacing and shading for the playground at the west end of park, installing two new shade canopies inside the maintenance yard to protect and preserve equipment, creating a new bicycle park area for novice mountain bike training on the east side of the park (east of the basketball and tennis court area). Also, replacing the existing tennis court fence fabric, adding new windscreen material to the fence, and if funding allows to create a new lighted monument sign along McDowell Road north of the small pond at the park.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
310 - 8001-Design/Engineering Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0
310 - 8210-Land Improvements	\$0	\$595,000	\$595,000	\$0	\$0	\$0	\$0
Totals	\$0	\$595,000	\$595,000	\$0	\$0	\$0	\$0

Project Title: Multi-Modal Trail System **Project Number:** 1029**Funding Source:** Operating Funds**Project Type:** Parks and Culture**Project Description:**

This request is to develop new primary trails along the Agua Fria River corridor and connect missing links of trails from residential areas to the primary trail on the Agua Fria River. Phased development of various segments are identified to extend the primary trail between Indian School Road on the northern end of Avondale to Lower Buckeye Road at Festival Fields within the next five years, and within the 10-year program trails connecting the northern city limits at Indian School Road to the Gila River.

Phased implementation of recreational trails and improvements throughout the West Valley Multi-modal Recreation Corridor parallel to the Agua Fria River. A multi-modal trail system will be developed to provide connectivity between the Agua Fria River, the El Rio Watercourse Master Plan, Tres Rios, and the City of Avondale Bike, Pedestrian and Trails Master Plan.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
310 - 8210-Land Improvements	\$0	\$0	\$0	\$300,000	\$3,200,000	\$300,000	\$340,000
Totals	\$0	\$0	\$0	\$300,000	\$3,200,000	\$300,000	\$340,000

Operating Impact

Object	2021	2022	2023	2024	2025
6731-R&M Grounds & Parks	\$0	\$0	\$0	\$0	\$0
Totals	\$0	\$0	\$0	\$0	\$0

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Goodyear Farms Cemetery Gate **Project Number:** 1387**Funding Source:** Operating Funds**Project Type:** Parks and Culture**Project Description:**

All work and improvements funded in Fiscal Year 2019-2020 should be completed by June 2020. Improvements include paved parking, security lighting, security cameras, electronic gate, public art (arch over gateway entrance), irrigation system installation, and landscape improvements focusing on new shade trees.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
310 - 8210-Land Improvements	\$0	\$245,000	\$245,000	\$0	\$0	\$0	\$0
Totals	\$0	\$245,000	\$245,000	\$0	\$0	\$0	\$0

Project Title: Crystal Gardens Trail Improvements **Project Number:** 1462**Funding Source:** Operating Funds**Project Type:** Parks and Culture**Project Description:**

To replace an existing deteriorated metal edging along the existing walking paths in all 21 small ponds/lakes within the Crystal Gardens development with concrete curbing. Also, re-compact the soft-surface walking path along with site restoration after the concrete flatwork disturbance. Additional improvements to many of the lake cells also include landscape replacements such as irrigation system modifications and upgrades to better reduce water consumption, landscape plantings to replace plants that have perished over time and decomposed granite throughout the various lake "cells" in the Crystal Gardens residential area.

This request is to renovate the existing infrastructure and assets that are currently unsafe in some areas, and failing in other areas throughout each of the various lakes that the city is required to maintain by development agreement.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
310 - 8210-Land Improvements	\$250,000	\$169,000	\$419,000	\$0	\$250,000	\$250,000	\$250,000
Totals	\$250,000	\$169,000	\$419,000	\$0	\$250,000	\$250,000	\$250,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Avondale Blvd - McDowell to Encanto **Project Number:** 1125**Funding Source:** Development Fees
Operating Funds**Project Type:** Transportation**Project Description:**

This project includes the design and construction of improvements that will complete the widening of Avondale Boulevard. A project design engineering firm has been retained for preparing construction documents. The road will be widened with a single southbound lane along the west side of Avondale Boulevard from McDowell Road to Encanto Boulevard for a total distance of 2,600 feet. The project improvements include vertical curb and gutter, sidewalk, bike lanes, conduit, streetlights, a new pavement section, new striping, temporary retention basins, and scuppers. The project will include the undergrounding of an existing irrigation ditch as well as the relocation of existing overhead electric lines (12kV). Landscaping of new median will be included as part of these improvements. Right of Way acquisition will commence once 30% plans are completed.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001-Design/Engineering Services	\$0	\$312,000	\$312,000	\$0	\$0	\$0	\$0
304 - 8012-Technology - Hardware	\$100,000	\$0	\$100,000	\$0	\$0	\$0	\$0
304 - 8420-Roadway Improvement/Major Main	\$0	\$675,000	\$675,000	\$0	\$0	\$0	\$0
340 - 8420-Roadway Improvement/Major Main	\$975,000	\$0	\$975,000	\$0	\$0	\$0	\$0
Totals	\$1,075,000	\$987,000	\$2,062,000	\$0	\$0	\$0	\$0

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$0	\$1,000	\$1,000	\$1,000	\$1,000
Totals	\$0	\$1,000	\$1,000	\$1,000	\$1,000

Project Title: Streetlight Replacement Program **Project Number:** 1164**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project is a program that allocates funds to be used citywide to replace streetlight poles that have reached the end of their life-cycle. In FY24, \$200k is allocated for the next citywide street light pole assessment and prioritization.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001-Design/Engineering Services	\$0	\$0	\$0	\$0	\$0	\$200,000	\$0
304 - 8420-Roadway Improvement/Major Main	\$200,000	\$330,000	\$530,000	\$200,000	\$200,000	\$200,000	\$200,000
Totals	\$200,000	\$330,000	\$530,000	\$200,000	\$200,000	\$400,000	\$200,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Traffic Signal - 119th Ave and McDowell **Project Number:** 1187**Funding Source:** Development Fees
Operating Funds**Project Type:** Transportation**Project Description:**

This project includes design and construction of a traffic signal using rectangular, cocoa brown double mast arms and poles at the intersection of 119th Avenue and McDowell Road. The City will re-evaluate the traffic impact of West Point High School at this location and design the signal and improvements accordingly.

A crosswalk with a rectangular rapid flashing beacon (RRFB) was installed during FY2020 as an interim measure to assist students crossing McDowell Road. Once the traffic signal is installed, the RRFB equipment will be removed and inventoried for future use where needed.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001-Design/Engineering Services	\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0
304 - 8420-Roadway Improvement/Major Main	\$125,000	\$0	\$125,000	\$0	\$0	\$0	\$0
340 - 8420-Roadway Improvement/Major Main	\$475,000	\$0	\$475,000	\$0	\$0	\$0	\$0
Totals	\$675,000	\$0	\$675,000	\$0	\$0	\$0	\$0

Operating Impact

Object	2021	2022	2023	2024	2025
6230-Electricity	\$0	\$2,000	\$2,000	\$2,000	\$2,000
6712-R&M ROW	\$0	\$1,000	\$1,000	\$1,000	\$1,000
Totals	\$0	\$3,000	\$3,000	\$3,000	\$3,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Pedestrian Ramp/Sidewalks Program **Project Number:** 1220**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project is an annual program that allocates money to facilitate the Citywide installation of sidewalk improvements and Americans with Disabilities Act (ADA) compliant ramps where needed. This program will also allocate funds to upgrade existing ramps to ADA compliant ramps. Future locations will be evaluated, but areas addressed during FY20 include:

Crosswalk and ramps at Estrella Vista Elementary School, curb ramps at 119th & McDowell, Lower Buckeye & Central Avenue (Festival Fields Entrance) and El Mirage and Indian School Rd.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8420-Roadway Improvement/Major Main	\$100,000	\$188,000	\$288,000	\$100,000	\$100,000	\$100,000	\$200,000
Totals	\$100,000	\$188,000	\$288,000	\$100,000	\$100,000	\$100,000	\$200,000

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Totals	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Western - Central to 4th Ave - Improvements **Project Number:** 1275**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project includes design and construction of improvements that will reconstruct Western Avenue from Central Avenue to 4th Avenue. The improvements will include replacing the street pavement section and the addition of storm drain facilities. The reconstruction of driveways, sidewalks, and curb and gutter are included in the cost. The project will also include re-striping, which may consider alternative on-street parking options on the north side of Western Avenue.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001-Design/Engineering Services	\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0
304 - 8420-Roadway Improvement/Major Main	\$0	\$0	\$0	\$925,000	\$0	\$0	\$0
Totals	\$75,000	\$0	\$75,000	\$925,000	\$0	\$0	\$0

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$0	\$0	\$3,000	\$3,000	\$3,000
Totals	\$0	\$0	\$3,000	\$3,000	\$3,000

Project Title: Communication Conduit and Fiber Backbone Program **Project Number:** 1294**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project will install fiber optic infrastructure and interim equipment to utilize existing wireless communications systems, including replacing the existing wireless communication system. This infrastructure is crucial to running the Traffic Operations Center (TOC). This project will include design, construction, and possible right-of-way acquisition. Upon ultimate completion, this project will include infrastructure for Lower Buckeye, Van Buren Street, Indian School Road, and will complete infrastructure on McDowell Road, Avondale Boulevard, and Dysart Road.

Recently completed conduit installations include Avondale Blvd by the new signal at Maricopa Street, and Avondale Blvd along the West Point High School frontage. This year, the project will address a relocation of a fiber communication vault at Coldwater Springs Blvd and Avondale Blvd to provide proper clearance from an existing SRP irrigation pipe.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8012-Technology - Hardware	\$250,000	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
304 - 8410-Roadway Construction	\$0	\$173,000	\$173,000	\$0	\$0	\$0	\$0
Totals	\$250,000	\$173,000	\$423,000	\$250,000	\$250,000	\$250,000	\$250,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Van Buren Multi-Use Path **Project Number:** 1408**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project has been designed and construction will commence in the Spring of 2020. Since this is a federally funded project, Arizona Department of Transportation (ADOT) will be administering the construction.

This project will design and construct a multi-use path between 127th Avenue and 113th Avenue. The trail will include lighting, landscaping, and other pedestrian and bicycle amenities. Previously, this project included a drainage channel component, which has been removed, and the current project comprises the path only. Federal TAP funding of \$2M is available towards construction. All right-of-way along the north side of Van Buren Street has been acquired for the project.

In FY20, the City applied for additional Federal funding through Maricopa Association Funding (MAG) for \$253k. An additional City contribution of \$15k was required to match the Federal funds. The City is also setting aside an additional \$35k for contingency.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
Totals	\$0	\$0					

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$0	\$10,000	\$10,000	\$10,000	\$10,000
Totals	\$0	\$10,000	\$10,000	\$10,000	\$10,000

Project Title: Wayfinding Signage **Project Number:** 1460**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project will continue to install Wayfinding signs in conformance with the Wayfinding Signage Master Plan. In FY19, the City installed street sign toppers for several neighborhood districts within Historic Avondale in conformance with the Historic Avondale Design and Development Guidelines.

In FY21, the City plans to install Wayfinding signs south of I-10, to inform and direct drivers to destinations in Historic Avondale. In FY21 the City also plans to install a digital monument sign along Avondale BLVD including campus pedestrian Wayfinding signs throughout the Civic Center campus.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8410-Roadway Construction	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$25,000
Totals	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$25,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Dysart Road Median Improvements - I-10 to Indian School **Project Number:** 1465**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project is being completed in FY20

This project will remove and replace all broken median curbing, remove and replace brick pavers as needed, remove/replace dead trees and shrubs, and supplement the existing trees with new trees and shrubs. The project is also replacing the existing irrigation system with new pipes, valves and controllers. The project will be 100% City funded.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8420-Roadway Improvement/Major Main	\$0	\$379,000	\$379,000	\$0	\$0	\$0	\$0
Totals	\$0	\$379,000	\$379,000	\$0	\$0	\$0	\$0

Project Title: Bus Shelters **Project Number:** 1466**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This program will design and construct bus shelters where needed throughout the City. Design and construction of ADA compliant ramps and sidewalk are included.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
325 - 8630-Equipment	\$0	\$500,000	\$500,000	\$50,000	\$50,000	\$50,000	\$50,000
Totals	\$0	\$500,000	\$500,000	\$50,000	\$50,000	\$50,000	\$50,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Historic Avondale, Cashion and Las Ligas Improvements - Streets **Project Number:** 1500**Funding Source:** Bond Funds
Operating Funds**Project Type:** Transportation**Project Description:**

This program will address the reconstruction of roads and upgrades of water and sewer facilities in neighborhoods located in Historic Avondale, Cashion and Las Ligas. The project has been broken into six identified phases and the scope of work will include the removal and replacement of asphalt pavement as well as the installation of sidewalk, ramp and driveway improvements in accordance with current Americans with Disabilities Act (ADA) guidelines, the relocation of existing utility poles and the upgrade of water and sewer facilities. The six areas, include:

Phase 1 - 3rd Avenue to Central Avenue, Western Ave to Buckeye Road(MC 85) for FY21.

Phase 2 - 3rd Ave/3rd Pl to Central Avenue, Western to Dooley for FY22

Phase 3 - Cashion, 113th to 111th Ave, Durango to MC 85 for FY23

Phase 4 - Central to 4th Street, Elm to Harrison for FY24

Phase 5 - 1st St to Central Avenue, Whyman to MC 85 & Greenleaf, and 4th ST to 7th St, Pacific to Western Ave (includes coordination with the Roosevelt Irrigation District) for FY25

Phase 6 - Las Ligas, 127th Ave to 125th Ave, Elwood to Illini for FY26

During FY20, a Design Build Contractor was retained and design for Phase I is underway

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001- Design/Engineering Services	\$0	\$0	\$0	\$0	\$90,000	\$251,000	\$169,000
304 - 8420-Roadway Improvement/Major Main	\$0	\$65,000	\$65,000	\$0	\$0	\$2,225,000	\$1,825,000
351 - 8001- Design/Engineering Services	\$282,000	\$0	\$282,000	\$346,000	\$197,000	\$0	\$0
351 - 8420-Roadway Improvement/Major Main	\$1,475,000	\$0	\$1,475,000	\$2,025,000	\$1,675,000	\$0	\$0
360 - 8001- Design/Engineering Services	\$200,000	\$0	\$200,000	\$275,000	\$0	\$0	\$0
360 - 8520-Water Sys. Improve/Major Main.	\$1,125,000	\$150,000	\$1,275,000	\$2,250,000	\$0	\$0	\$0
513 - 8620-Sewer Sys. Improve/Major Main.	\$100,000	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
514 - 8001- Design/Engineering Services	\$0	\$0	\$0	\$275,000	\$222,000	\$79,000	\$97,000
514 - 8520-Water Sys. Improve/Major Main.	\$0	\$0	\$0	\$0	\$6,875,000	\$2,625,000	\$1,000,000
Totals	\$3,182,000	\$215,000	\$3,397,000	\$5,271,000	\$9,159,000	\$5,280,000	\$3,191,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Palm Lane Road Extension - 116th Avenue to 118th Avenue **Project Number:** 1509**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project includes design and construction of half-street improvements on the southern portion of Palm Lane between 116th and 118th Avenue. Palm Lane is classified as a local road which requires 50-feet of right-of-way (ROW) and includes 2-travel lanes, bike lanes, and sidewalks. Specific half-street improvements include curb gutter, sidewalk, pavement, drainage, and streetlight improvements. It is assumed that the existing basin on the school property can be utilized for the new roadway drainage. The project estimate assumes that ROW will be dedicated by the school along Palm Lane at no cost to the City. Landscaping is not included as part of this project.

A design consultant has been selected, and project design is underway.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001-Design/Engineering Services	\$0	\$39,000	\$39,000	\$0	\$0	\$0	\$0
304 - 8200-Land Acquisition	\$0	\$35,000	\$35,000	\$0	\$0	\$0	\$0
304 - 8420-Roadway Improvement/Major Main	\$300,000	\$0	\$300,000	\$0	\$0	\$0	\$0
Totals	\$300,000	\$74,000	\$374,000	\$0	\$0	\$0	\$0

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$0	\$1,000	\$1,000	\$1,000	\$1,000
Totals	\$0	\$1,000	\$1,000	\$1,000	\$1,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Street Light Infill Program **Project Number:** 1517**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project is intended to add street light poles with Light Emitting Diode (LED) fixtures along sections of roadway which are not lighted adequately due to large gaps between existing street lights.

In FY21, the Cashion neighborhood will receive fifteen (15) additional street light poles with LED fixtures.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8420-Roadway Improvement/Major Main	\$50,000	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$100,000
Totals	\$50,000	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$100,000

Project Title: 9th Street Roadway Improvements **Project Number:** 1520**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project will construct 9th Street to the extent required to serve the proposed Resource Center. 9th Street will extend from Riley Drive approximately 575 feet south to the road terminus. Design will include pavement, curb, gutter, sidewalk, street drainage and street lights. Project design has been complete.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8410-Roadway Construction	\$400,000	\$0	\$400,000	\$0	\$0	\$0	\$0
Totals	\$400,000	\$0	\$400,000	\$0	\$0	\$0	\$0

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Totals	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** 119th Avenue Road Connection **Project Number:** 1541**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project includes the design and construction of one lane in each direction on 119th Avenue extending from the West Point High School Driveway to Virginia Avenue. Relocation of two overhead electric lines (69kV) poles and utility coordination will be required with Salt River Project (SRP), and a retaining wall will be required. The project will extend the existing 10-foot multiuse path. Project will include curb, gutter, new asphalt pavement, guard rail at utility poles and street lighting. The project will address any localized drainage issues and a temporary drainage easement may be required. Right of way acquisition is not anticipated. The cost of construction includes the relocation of two SRP poles.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001- Design/Engineering Services	\$150,000	\$0	\$150,000	\$0	\$0	\$0	\$0
304 - 8410-Roadway Construction	\$0	\$0	\$0	\$1,350,000	\$0	\$0	\$0
Totals	\$150,000	\$0	\$150,000	\$1,350,000	\$0	\$0	\$0

Operating Impact

Object	2021	2022	2023	2024	2025
6712-R&M ROW	\$0	\$0	\$500	\$500	\$500
Totals	\$0	\$0	\$500	\$500	\$500

Project Title: Agua Fria Trail Phase II (Pedestrian Bridge) **Project Number:** 1542**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project will design and construct a pedestrian/bike bridge including communication conduits across the Arizona Department of Transportation (ADOT) channel connecting Friendship Park to the existing trail head recently constructed with the Agua Fria I-10 Underpass Project. This project will require a 404 permit (Section 404 of the Clean Water Act (CWA) establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands) from the Army Corps of Engineers. The conduit will provide future connectivity to one of the City water facility.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001- Design/Engineering Services	\$200,000	\$0	\$200,000	\$0	\$0	\$0	\$0
304 - 8012-Technology - Hardware	\$0	\$0	\$0	\$0	\$35,000	\$0	\$0
304 - 8410-Roadway Construction	\$0	\$0	\$0	\$0	\$2,800,000	\$0	\$0
Totals	\$200,000	\$0	\$200,000	\$0	\$2,835,000	\$0	\$0

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Transportation Safety Enhancement **Project Number:** 1552**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

The project included the design and construction of safety enhancements such as ramps, sidewalk, traffic signal, storm drain system or any other related Transportation related features.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8410-Roadway Construction	\$500,000	\$0	\$500,000	\$500,000	\$0	\$0	\$0
Totals	\$500,000	\$0	\$500,000	\$500,000	\$0	\$0	\$0

Project Title: Agua Fria Trail Phase I **Project Number:** 1553**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

The design for this project has been completed in FY19. The project improvements involve construction of a paved path approximately 2,400 feet long and 12 to 16-foot wide for pedestrian and bicycle use that will terminate at a trail head that will be constructed as part of the Aqua Fria Trail and Trailhead project Phase. The path system elements include: ramps, lighting, pedestrian amenities, and trail termination amenities.

This project is located approximately 200 ft north of Van Buren Street and along the eastern Agua Fria levee.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8420-Roadway Improvement/Major Main	\$700,000	\$0	\$700,000	\$0	\$0	\$0	\$0
310 - 8210-Land Improvements	\$0	\$391,000	\$391,000	\$0	\$0	\$0	\$0
Totals	\$700,000	\$391,000	\$1,091,000	\$0	\$0	\$0	\$0

Project Title: Traffic Signal Replacements **Project Number:** 1554**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

The repair or replacement of traffic signals throughout Avondale that are at the end of their life.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 7691-Traffic Signals	\$300,000	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Totals	\$300,000	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000

Capital Improvement Plan - Fiscal Years 2020-2025**Project Title:** Dysart Road Median Offsets **Project Number:** 1558**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This project will design and construct modifications to existing medians at intersections along Dysart Road between McDowell Rd and Osborn Rd. The City will apply for funding through the MAG (Maricopa Association of Government) Road Safety Program (RSP) to share the cost of improvements. The following are the intersections that will be evaluated for potential modification:

Dysart Road and Thomas Road

Dysart Road and Osborn Road

Dysart Road and McDowell Road

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001- Design/Engineering Services	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
304 - 8410-Roadway Construction	\$0	\$0	\$0	\$0	\$450,000	\$0	\$0
Totals	\$0	\$0	\$0	\$50,000	\$450,000	\$0	\$0

Project Title: Garden Lakes Parkway Improvements Phase I (Thomas Rd to Lakeshore Dr) **Project Number:** 1601**Funding Source:** Operating Funds**Project Type:** Transportation**Project Description:**

This is the first phase of a three-phase project along the Garden Lakes Parkway (GLP) corridor. This project (Phase I) will design and construct raised center medians with turn lanes at Garden Lake Parkway intersections between Thomas Road and Lakeshore Drive. The existing at-grade footpath on the west side of GLP will be converted to a raised sidewalk with curb and curb ramps. Buffered bike lanes with small decorative paved medians located at intersections and mid-block locations will be installed to channelize vehicles entering and exiting GLP and reduce high-risk passing maneuvers.

At the intersection of Lakeshore Drive and GLP, the intersection will be raised to provide a traffic table, improve pedestrian visibility and reduce approaching vehicle speeds. The four corners of the intersection will be extended with reduced curb returns/bulb-outs to reduce the pedestrian crossing distance on all four legs of the intersection. Speed table warning signs will be placed in advance of the intersection on all four approaches.

Land acquisition is not anticipated as part of the project.

Capital Outlay

Fund - Object	2021	Carryover	2021 Total	2022	2023	2024	2025
304 - 8001- Design/Engineering Services	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0
304 - 8410-Roadway Construction	\$0	\$0	\$0	\$0	\$750,000	\$0	\$0
Totals	\$0	\$0	\$0	\$0	\$900,000	\$0	\$0

Proposed Capital Improvement Plan

FY2022

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Capital Improvement Report

Project Number:	1500	Project Stage:	Funded / Planned						
Title:	Historic Avondale, Cashion and Las Ligas Improvements								
Reason:	Maintaining Service	Impact Fee Eligible?	No						
Priority Rank:	2								
Scope:	This program will address the reconstruction of roads and upgrades of water and sewer facilities in neighborhoods located in Historic Avondale, Cashion and Las Ligas. The project has been broken into six identified phases and the scope of work will include the removal and replacement of asphalt pavement as well as the installation of sidewalk, ramp and driveway improvements in accordance with current Americans with Disabilities Act (ADA) guidelines, the relocation of existing utility poles and the upgrade of water and sewer facilities. The six areas, include: Phase 1 - 3rd Avenue to Central Avenue, Western Ave to Buckeye Road(MC 85) for FY21. Phase 2 - 3rd Ave/3rd Pl to Central Avenue, Western to Dooley for FY22 Phase 3 - Cashion, 113th to 111th Ave, Durango to MC 85 for FY23 Phase 4 - Central to 4th Street, Elm to Harrison for FY24 Phase 5 - 1st St to Central Avenue, Whyman to MC 85 & Greenleaf, and 4th ST to 7th St, Pacific to Western Ave (includes coordination with the Roosevelt Irrigation District) for FY25 Phase 6 - Las Ligas, 127th Ave to 125th Ave, Elwood to Illini for FY26								
Justification:	These streets are amongst the oldest pavements in the City, and are all past their useful life. Additionally the utility lines in the area also are need of repair and replacement. This program will improve aesthetics of the Historic Avondale, Las Ligas and Cashion neighborhoods.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Design/Engineering	\$0	\$0	\$0	\$90,000	\$251,000	\$169,000	\$0	\$0	\$510,000
Street Construction - Design/Engineering	\$0	\$0	\$346,000	\$197,000	\$0	\$0	\$0	\$0	\$543,000
Street Construction - Infrastructure - CAP	\$65,000	\$0	\$0	\$0	\$2,225,000	\$1,825,000	\$1,175,000	\$0	\$5,225,000
Street Construction - Infrastructure - CAP	\$65,000	\$0	\$2,025,000	\$1,675,000	\$0	\$0	\$0	\$0	\$3,700,000
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Capital Improvement Report

Street Construction - Infrastructure - CAP	\$65,000	\$0	\$608,000	\$503,000	\$668,000	\$548,000	\$353,000	\$0	\$2,680,000
Totals	\$0	\$0	\$2,979,000	\$2,465,000	\$3,144,000	\$2,542,000	\$1,528,000	\$0	\$12,658,000

Capital Improvement Report

Project Number:	1125	Project Stage:	Funded / Planned						
Title:	Avondale Blvd - McDowell to Encanto								
Reason:	Enhanced Level of Service	Impact Fee Eligible?	Yes						
Priority Rank:	11								
Scope:	This project includes the design and construction of improvements that will complete the widening of Avondale Boulevard. A project design engineering firm has been retained for preparing construction documents. The road will be widened with a single southbound lane along the west side of Avondale Boulevard from McDowell Road to Encanto Boulevard for a total distance of 2,600 feet. The project improvements include vertical curb and gutter, sidewalk, bike lanes, conduit, streetlights, a new pavement section, new striping, temporary retention basins, and scuppers. The project will include the undergrounding of an existing irrigation ditch as well as the relocation of existing overhead electric lines (12kV). Landscaping of new median will be included as part of these improvements. Right of Way acquisition has commenced.								
Justification:	Residential development including the Elementary School has led to the increase in traffic volumes creating significant traffic queues during school hours that require expansion of the existing road. The additional lane will increase the necessary capacity to help mitigate the delays. The project will provide sidewalks and bike lanes to support students in walking and biking to school.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Infrastructure - CAP	\$675,000	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0	\$600,000
Street Construction - Land Acquisition	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$200,000
Street Construction - Technology - Hardware CAP	\$100,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$75,000
Totals	\$100,000	\$0	\$875,000	\$0	\$0	\$0	\$0	\$0	\$875,000

Capital Improvement Report

Project Number:	1220	Project Stage:	Funded / Planned						
Title:	ADA and Sidewalk Gap Study								
Reason:	Maintaining Service	Impact Fee Eligible?	No						
Priority Rank:	16								
Scope:	This project is an annual program that allocates money to facilitate the Citywide installation of sidewalk improvements and Americans with Disabilities Act (ADA) compliant ramps where needed. This program will also allocate funds to upgrade existing ramps to ADA compliant ramps. In FY 21, the pedestrian refuge island on El Mirage Road was addressed. The FY22 program will include a ADA transition study to provide an assessment of our current street roadway ADA compliance. This study will identify the location of the infrastructure that does not currently meet ADA requirements and cost to bring them into compliance. The cost of study will be approximately \$150K.								
Justification:	The ramps and sidewalk program improves ADA-compliant pedestrian connectivity, meeting current Federal guidelines.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Design/Engineering	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
Street Construction - Infrastructure - CAP	\$288,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Totals		\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000

Capital Improvement Report

Project Number:	1517	Project Stage:	Funded / Planned						
Title:	Street Light Infill Program								
Reason:	Maintaining Service	Impact Fee Eligible?	No						
Priority Rank:	17								
Scope:	This project is intended to add street light poles with Light Emitting Diode (LED) fixtures along sections of roadway which are not lighted adequately due to large gaps between existing street lights.								
	In FY21, work began on providing fifteen additional street light poles with LED fixture thru out the the Cashion neighborhood to meet current lighting standards. In FY22, the Cashion streetlight project will be completed. The project will also include a lighting analysis for other neighborhoods in Southern Avondale to identify under lit areas.								
Justification:	As part of the LED Street Light Conversion Project in 2018, the City's consultant conducted a photometric analysis, identifying gaps in street lighting within the Cashion neighborhood. Future analysis will identify other lighting needs throughout the City. The infill of street lights adds additional light where needed in the roadway, and improves safety.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Infrastructure - CAP	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Totals	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000

Capital Improvement Report

Project Number:	1460	Project Stage:	Funded / Planned						
Title:	Wayfinding Signage								
Reason:	Maintaining Service	Impact Fee Eligible?	No						
Priority Rank:	20								
Scope:	In FY21, the City installed a parking lot sign at Western Avenue and 6th Street and three directional sign in Old town Avondale. It also included vehicular directional signs, vehicular destination signs and pedestrian directional signs, that were installed as part of Phase I signage of the Civic Center Campus project.								
	The future Phase II signage for the Civic Center Annex will include vehicular directional (One sign), vehicular destination (Seven signs) and pedestrian directional (two signs).								
Justification:	The signage will improve pedestrian navigation within the Civic Center campus, build our brand equity and create a sense of space as our Civic Center Campus grows while enhancing the level of signage currently provided on our campus.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Infrastructure - CAP	\$120,000	\$0	\$110,000	\$0	\$0	\$25,000	\$25,000	\$50,000	\$210,000
Street Construction - Infrastructure - CAP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Totals	\$120,000	\$0	\$110,000	\$0	\$0	\$25,000	\$25,000	\$50,000	\$210,000

Capital Improvement Report

Project Number:	1541	Project Stage:	Funded / Planned						
Title:	119th Avenue Road Connection								
Reason:	Enhanced Level of Service	Impact Fee Eligible?	No						
Priority Rank:	22								
Scope:	This project includes the design and construction of one lane in each direction on 119th Avenue extending from the West Point High School Driveway to Virginia Avenue. Relocation of two overhead electric lines (69kV) poles and utility coordination will be required with Salt River Project (SRP), and a retaining wall will be required. The project will extend the existing 10-foot multiuse path. Project will include curb, gutter, new asphalt pavement, guard rail at utility poles and street lighting. The project will address any localized drainage issues and a temporary drainage easement may be required. Right of way acquisition is not anticipated. The cost of construction includes the relocation of two SRP poles.								
Justification:	The development of the new High School has generated significant volumes of traffic especially during peak periods. This project will improve traffic circulation, reducing congestion on Encanto Boulevard and Avondale Boulevard, due to the increased volume from the newly constructed High School.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Infrastructure - CAP	\$0	\$0	\$1,350,000	\$0	\$0	\$0	\$0	\$0	\$1,350,000
Totals	\$0	\$0	\$1,350,000	\$0	\$0	\$0	\$0	\$0	\$1,350,000

Capital Improvement Report

Project Number:	1542	Project Stage:		Funded / Planned					
Title:	Agua Fria Trail Phase II (Pedestrian Bridge)								
Reason:	Enhanced Level of Service	Impact Fee Eligible?	No						
Priority Rank:	25								
Scope:	This project will design and construct a pedestrian/bike bridge including communication conduits across the Arizona Department of Transportation (ADOT) channel connecting Friendship Park to the existing trail head recently constructed with the Agua Fria I-10 Underpass Project. This project will require a 404 permit (Section 404 of the Clean Water Act (CWA) establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands) from the Army Corps of Engineers. The conduit will provide future connectivity to one of the City water facility.								
Justification:									
This project will improve local and regional connectivity to the newly constructed Agua Fria Trail project and will promote the ability to walk/bike around the City. This project is a high priority due to Federal Highway requirement for the reimbursement of funds for Agua Fria Trail.									
The City applied for Congestion Mitigation of Air Quality (CMAQ) and Transportation Alternatives (TA) funding through MAG (Maricopa Association of Government) for the Pedestrian Bridge over the ADOT Channel (connecting to Friendship Park). The City was advised in late December 2019, that the application for grant funding was unsuccessful, and Avondale will not receive either CMAQ or TA funding toward the project. Our project didn't rank high as compared to the others proposed around the Valley. Federal Highway Administration (FHWA) requires this project to be under construction by 2023 or else the City will need to reimburse FHWA for the Agua Fria Trail Phase I.									
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Infrastructure - CAP	\$0	\$0	\$0	\$2,800,000 0	\$0	\$0	\$0	\$0	\$2,800,000
Street Construction - Technology - Hardware CAP	\$0	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$35,000
Totals	\$0	\$0	\$0	\$2,835,000 0	\$0	\$0	\$0	\$0	\$2,835,000

Capital Improvement Report

Project Number:	AUTO - 579	Project Stage:	Funded / Planned						
Title:	Western Avenue Pedestrian Streetlights								
Reason:	Enhanced Level of Service	Impact Fee Eligible?	No						
Priority Rank:	61								
Scope:	This project includes design and construction to remove 52 existing double mast arm decorative pedestrian light poles/fixtures along Western Avenue between Dysart Road and Central Avenue to replace them with single mast arm pedestrian light poles and fixtures similar to the style used on Dysart Road north of Buckeye Road (MC85). The pedestrian lights will be 16 feet tall with a 5 foot extension to accommodate future string lights and banners. The new pedestrian lights will be able to use the existing bases with a retrofit kit. The project will also upgrade existing wiring, conduit and Junction boxes to new standards. In order to accommodate new string lights, an additional structural design of the pedestrian light pole and foundation will be required. The plans will be need to be submitted for approval to Arizona Public Service (APS).								
Justification:	The new lighting system will improve aesthetics on Western Avenue, will enhance pedestrian safety and will serve as a revitalization effort in accordance with the Historic Avondale Specific Plan.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Design/Engineering	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
Street Construction - Infrastructure - CAP	\$0	\$0	\$595,000	\$0	\$0	\$0	\$0	\$0	\$595,000
Totals	\$0	\$0	\$645,000	\$0	\$0	\$0	\$0	\$0	\$645,000

Capital Improvement Report

Project Number:	1510	Project Stage:	Funded / Planned						
Title:	Thomas Road Bridge design								
Reason:	Enhanced Level of Service	Impact Fee Eligible?	No						
Priority Rank:	63								
Scope:	This project includes the design and construction of improvements that will widen Thomas Road to two lanes in each direction with curb, gutter sidewalk and conduit, including a concrete bridge from approximately 0.5 miles west of the Agua Fria River westerly levee to 0.4 miles east of the easterly levee. The bridge will be approximately 1,300 feet in length spanning the Agua Fria River and will include lighting with pedestrian and bicycle facilities. The project will require permits from the United States Army Corps of Engineers (404 and 408 permits) through coordination with the Maricopa Flood Control District for construction within navigable waters of the US. A major right of way acquisition will be required for the project. The Design Concept Report was completed in FY21 and included 15% design plans for the proposed Bridge. This request is to move the funding for the remainder of Bridge Design from FY25 to FY22, which will identify all required right of way needs.								
Justification:	This project would provide a major east-west connectivity across the Agua River River, reducing congestion on the adjacent arterial streets. During peak hours of the day McDowell Road operated at Level of Service F. Construction of the bridge will help McDowell to an acceptable Level Of Service. The City has applied for Prop 400 Extension funds through MAG, and grant funding for the bridge, if awarded, may be available as early as FY26. Moving the design funding to FY22 will allow the City to complete design in advance of the construction funding, positioning the City to utilize the construction funding as soon as it becomes available.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Street Construction - Design/Engineering	\$284,000	\$0	\$3,400,000	\$0	\$0	\$0	\$0	\$0	\$3,400,000
Street Construction - Infrastructure - CAP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000,000	\$15,000,000
Street Construction - Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$2,480,000	\$0	\$2,480,000
Street Construction - Technology - Hardware CAP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
Totals	\$284,000	\$0	\$3,400,000	\$0	\$0	\$0	\$2,480,000	\$15,250,000	\$21,130,000

Capital Improvement Report

Project Number:	1462	Project Stage:	Funded / Planned						
Title:	Crystal Gardens Trail Improvements								
Reason:	Maintaining Service	Impact Fee Eligible?	No						
Priority Rank:	5								
Scope:	To replace an existing deteriorated metal edging along the existing walking paths in all 21 small ponds/lakes within the Crystal Gardens development with concrete curbing. Also, re-compact the soft-surface walking path along with site restoration after the concrete flatwork disturbance. Additional improvements to many of the lake cells also include landscape replacements such as irrigation system modifications and upgrades to better reduce water consumption, landscape plantings to replace plants that have perished over time and decomposed granite throughout the various lake "cells" in the Crystal Gardens residential area. This request is to renovate the existing infrastructure and assets that are currently unsafe in some areas, and failing in other areas throughout each of the various lakes that the city is required to maintain by development agreement. Justification: The existing landscape and paths along the various lake areas are part of the city's discharge and water reclamation facilities. These service areas are nearing 20 years of age and are in a state of decline and in need of replacement. Original irrigation systems are failing. The trail buffering is failing and in need replacement with a more permanent solution, such as a concrete curb. Much of the landscaping has died and needs replacement. In 2014 capital funding was established to renovate metal edging to a concrete curb that separates granite walking path and grass. Concrete edging has been replaced in 12 of the 21 cells. It is estimated that another \$1,000,000 will complete renovations for the 9 remaining cells if the work was completed in one phase. Priorities for these replacements and renovations occur between the City's staff expertise with input from our landscape maintenance contractor based on the system condition, and with input from the homeowners association board members.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Park Construction - Land Improvement	\$419,000	\$0	\$275,000	\$275,000	\$275,000	\$275,000	\$0	\$0	\$1,100,000
Totals	\$419,000	\$0	\$275,000	\$275,000	\$275,000	\$275,000	\$0	\$0	\$1,100,000

Capital Improvement Report

Project Number:	1029	Project Stage:	Funded / Planned						
Title:	Multi-Modal Trail System								
Reason:	New Program	Impact Fee Eligible?	No						
Priority Rank:	8								
Scope:	This request is to develop new primary trails along the Agua Fria River corridor and connect missing links of trails from residential areas to the primary trail on the Agua Fria River. Phased development of various segments are identified to extend the primary trail between Indian School Road on the northern end of Avondale to Lower Buckeye Road at Festival Fields within the next five years, and within the 10-year program trails connecting the northern city limits at Indian School Road to the Gila River. In FY2023, a Design Concept Review (DCR) is planned to help guide future expansions of the multi-modal trail system. Phased implementation of recreational trails and improvements throughout the West Valley Multi-modal Recreation Corridor parallel to the Agua Fria River. A multi-modal trail system will be developed to provide connectivity between the Agua Fria River, the El Rio Watercourse Master Plan, Tres Rios, and the City of Avondale Bike, Pedestrian and Trails Master Plan.								
Justification:	Development of the trail connections include City of Avondale investment and adjacent development requiring connectivity. Priority trail development is focused along the Agua Fria River between Indian School Road and Lower Buckeye Road. In addition to private development/investment and capital improvement program funding, federal funding will be sought to leverage costs to maximize future development of the trails system along the Agua Fria river.								
Expenditures									
Fund/Object	2021	Carryover	2022	2023	2024	2025	2026	2027-2031	10 Yr Total
Park Construction - Design/Engineering	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000
Park Construction - Land Improvement	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0	\$8,140,000	\$8,440,000
Totals		\$0	\$300,000	\$200,000	\$0	\$0	\$0	\$8,140,000	\$8,640,000

Appendix B – Crash Data

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Appendix C – Detailed Pedestrian & Bicycle Count Data

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Avondale Active Transportation Plan

Pedestrian and Bicycle Count Location Raw Data

Location 1	
N-S Street	Dysart Rd
E-W Street	Van Buren St
Date	12/09/21
Day	Thursday
City	Avondale

TIME	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	1	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	1	0	1
1:00 AM	0	0	0	0
1:15 AM	0	0	0	1
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	1	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	1
4:30 AM	0	0	0	1
4:45 AM	0	0	0	0
5:00 AM	0	0	1	1
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	1	0	1
6:15 AM	0	0	0	1
6:30 AM	0	0	0	0
6:45 AM	0	1	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	1	0
8:00 AM	1	0	1	0
8:15 AM	0	0	1	0
8:30 AM	0	1	0	1
8:45 AM	0	0	1	1
9:00 AM	0	0	0	1
9:15 AM	0	0	1	0
9:30 AM	1	1	0	1
9:45 AM	0	0	0	1
10:00 AM	0	0	0	0
10:15 AM	1	0	0	2
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	1	0	3	0
11:45 AM	3	0	1	1
12:00 PM	0	0	2	1
12:15 PM	3	0	1	3
12:30 PM	0	0	1	0
12:45 PM	0	0	1	2
1:00 PM	1	0	0	0
1:15 PM	1	0	2	2
1:30 PM	2	0	0	2
1:45 PM	1	0	0	1
2:00 PM	2	0	1	2
2:15 PM	1	0	1	0
2:30 PM	0	0	1	4
2:45 PM	2	0	0	2
3:00 PM	0	0	0	2
3:15 PM	0	0	0	0
3:30 PM	4	1	2	1
3:45 PM	2	1	2	2
4:00 PM	0	1	4	0
4:15 PM	4	0	5	5
4:30 PM	1	1	1	0
4:45 PM	0	0	1	0
5:00 PM	2	1	1	0
5:15 PM	1	0	1	1
5:30 PM	0	0	0	0
5:45 PM	2	2	0	4
6:00 PM	2	0	0	1
6:15 PM	0	0	0	0
6:30 PM	0	0	0	1
6:45 PM	2	0	0	0
7:00 PM	0	1	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	1
7:45 PM	0	0	0	0
8:00 PM	0	0	1	0
8:15 PM	0	0	0	0
8:30 PM	6	0	1	0
8:45 PM	2	1	0	1
9:00 PM	1	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	1	0	0
9:45 PM	0	1	0	1
10:00 PM	1	1	0	0
10:15 PM	0	0	0	2
10:30 PM	0	1	2	0
10:45 PM	0	1	0	1
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	50	20	42	57

TIME	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	1	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	1	0
5:00 AM	0	1	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	1	0	1	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	1	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	0
12:45 PM	0	3	0	2
1:00 PM	0	0	2	0
1:15 PM	1	0	0	0
1:30 PM	0	0	0	1
1:45 PM	0	0	0	0
2:00 PM	2	0	0	0
2:15 PM	0	0	0	4
2:30 PM	0	0	0	1
2:45 PM	0	0	0	1
3:00 PM	0	0	1	0
3:15 PM	0	0	0	0
3:30 PM	0	0	0	1
3:45 PM	0	0	0	1
4:00 PM	3	1	2	1
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	1	0	1
5:00 PM	0	0	1	0
5:15 PM	2	0	0	1
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	1	2	0	1
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	2	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	1	0	0
8:30 PM	0	2	2	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	1	0	0
10:00 PM	0	0	1	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	1
10:45 PM	0	0	0	2
11:00 PM	1	0	0	1
11:15 PM	0	0	0	2
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	12	15	11	21

Location 2									
N-S Street					Dysart Rd				
E-W Street					Rancho Santa Fe Blvd				
Date					12/09/21				
Day					Thursday				
City					Avondale				
PEDESTRIANS					BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG	TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	12:00 AM	0	0	0	0
12:15 AM	0	0	0	0	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0	12:30 AM	0	0	0	0
12:45 AM	0	0	1	0	12:45 AM	0	0	0	0
1:00 AM	0	0	0	0	1:00 AM	0	0	0	0
1:15 AM	0	0	0	0	1:15 AM	0	0	0	0
1:30 AM	0	0	0	0	1:30 AM	0	0	0	0
1:45 AM	0	0	2	0	1:45 AM	0	0	0	0
2:00 AM	0	0	0	0	2:00 AM	0	0	0	0
2:15 AM	0	0	0	0	2:15 AM	0	0	0	0
2:30 AM	0	0	0	0	2:30 AM	0	0	0	0
2:45 AM	0	0	0	0	2:45 AM	0	0	0	0
3:00 AM	0	0	0	0	3:00 AM	0	0	0	0
3:15 AM	0	0	0	0	3:15 AM	0	0	0	0
3:30 AM	0	0	0	0	3:30 AM	0	0	0	0
3:45 AM	0	0	0	0	3:45 AM	0	1	0	0
4:00 AM	0	0	0	0	4:00 AM	0	0	0	0
4:15 AM	0	0	0	0	4:15 AM	0	0	0	0
4:30 AM	0	0	0	0	4:30 AM	0	0	0	0
4:45 AM	0	0	0	0	4:45 AM	0	0	0	0
5:00 AM	0	0	0	0	5:00 AM	0	0	0	0
5:15 AM	0	0	0	0	5:15 AM	0	0	0	0
5:30 AM	1	0	0	0	5:30 AM	0	0	0	0
5:45 AM	0	0	0	0	5:45 AM	0	0	0	0
6:00 AM	0	0	0	0	6:00 AM	0	0	0	0
6:15 AM	0	0	0	0	6:15 AM	0	0	0	0
6:30 AM	1	0	0	0	6:30 AM	0	0	1	0
6:45 AM	0	0	0	0	6:45 AM	0	0	0	0
7:00 AM	0	0	0	0	7:00 AM	0	0	0	0
7:15 AM	1	0	0	0	7:15 AM	1	0	0	0
7:30 AM	0	0	0	0	7:30 AM	0	0	0	0
7:45 AM	0	0	1	0	7:45 AM	0	0	0	0
8:00 AM	0	0	0	0	8:00 AM	0	0	0	0
8:15 AM	0	0	0	0	8:15 AM	0	0	0	0
8:30 AM	0	0	0	0	8:30 AM	0	0	0	0
8:45 AM	1	0	1	0	8:45 AM	0	0	0	0
9:00 AM	0	0	0	0	9:00 AM	0	0	0	0
9:15 AM	1	0	0	0	9:15 AM	0	0	0	0
9:30 AM	0	0	0	0	9:30 AM	0	0	0	0
9:45 AM	1	0	0	0	9:45 AM	0	0	0	0
10:00 AM	0	0	0	0	10:00 AM	0	0	0	0
10:15 AM	0	0	0	0	10:15 AM	0	0	0	0
10:30 AM	0	0	0	0	10:30 AM	0	0	0	0
10:45 AM	0	0	0	0	10:45 AM	0	0	0	0
11:00 AM	0	0	1	0	11:00 AM	0	0	0	0
11:15 AM	2	0	0	0	11:15 AM	0	0	0	0
11:30 AM	0	0	0	0	11:30 AM	2	0	2	0
11:45 AM	0	0	3	0	11:45 AM	0	0	0	0
12:00 PM	1	0	2	0	12:00 PM	0	0	0	0
12:15 PM	4	0	3	0	12:15 PM	0	0	0	0
12:30 PM	0	0	2	0	12:30 PM	0	0	0	0
12:45 PM	0	0	0	0	12:45 PM	0	0	2	0
1:00 PM	1	0	3	0	1:00 PM	0	0	0	0
1:15 PM	0	0	1	0	1:15 PM	0	0	1	0
1:30 PM	3	0	0	0	1:30 PM	0	0	0	0
1:45 PM	1	0	1	0	1:45 PM	0	0	0	0
2:00 PM	1	0	0	0	2:00 PM	0	0	0	0
2:15 PM	0	0	1	0	2:15 PM	0	1	1	0
2:30 PM	0	0	0	0	2:30 PM	1	0	0	0
2:45 PM	0	0	1	0	2:45 PM	0	0	1	0
3:00 PM	0	0	0	0	3:00 PM	0	0	0	0
3:15 PM	2	0	3	0	3:15 PM	0	0	0	0
3:30 PM	0	0	1	1	3:30 PM	2	0	1	0
3:45 PM	2	0	2	1	3:45 PM	0	0	0	0
4:00 PM	0	0	0	1	4:00 PM	0	0	0	0
4:15 PM	2	0	1	2	4:15 PM	0	0	1	0
4:30 PM	0	0	0	2	4:30 PM	0	0	0	0
4:45 PM	2	0	3	0	4:45 PM	0	0	0	0
5:00 PM	1	0	1	1	5:00 PM	0	0	0	0
5:15 PM	1	0	1	1	5:15 PM	0	0	0	0
5:30 PM	1	0	1	0	5:30 PM	0	0	1	0
5:45 PM	1	0	0	0	5:45 PM	0	0	0	0
6:00 PM	0	0	0	0	6:00 PM	0	0	0	1
6:15 PM	1	0	0	0	6:15 PM	0	0	0	0
6:30 PM	0	0	3	0	6:30 PM	0	0	1	0
6:45 PM	0	0	0	0	6:45 PM	0	0	0	0
7:00 PM	0	0	1	0	7:00 PM	0	0	0	1
7:15 PM	0	0	1	0	7:15 PM	0	0	0	0
7:30 PM	0	0	0	0	7:30 PM	0	0	0	0
7:45 PM	0	0	0	0	7:45 PM	0	0	0	0
8:00 PM	0	0	1	0	8:00 PM	0	0	0	0
8:15 PM	0	0	0	0	8:15 PM	0	0	0	0
8:30 PM	0	0	0	0	8:30 PM	0	0	2	0
8:45 PM	0	0	0	0	8:45 PM	0	0	0	0
9:00 PM	0	0	0	0	9:00 PM	0	0	0	0
9:15 PM	0	1	1	0	9:15 PM	0	0	0	0
9:30 PM	0	0	0	0	9:30 PM	0	0	0	0
9:45 PM	0	0	0	0	9:45 PM	0	0	0	0
10:00 PM	1	0	0	1	10:00 PM	0	0	0	0
10:15 PM	0	0	0	0	10:15 PM	0	0	0	0
10:30 PM	0	0	1	0	10:30 PM	0	0	0	0
10:45 PM	0	0	0	0	10:45 PM	0	0	0	0
11:00 PM	0	0	0	0	11:00 PM	0	0	0	0
11:15 PM	0	0	0	0	11:15 PM	0	0	0	0
11:30 PM	0	0	0	0	11:30 PM	0	0	0	0
11:45 PM	0	0	0	0	11:45 PM	0	0	0	0
TOTAL	33	1	44	10	TOTAL	6	2	14	2

Location 3	
N-S Street	99 th Ave
E-W Street	McDowell Rd
Date	12/09/21
Day	Thursday
City	Avondale

PEDESTRIANS				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	1	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	1	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	1
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	1	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	1	0	0	0
7:45 AM	0	0	1	0
8:00 AM	1	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	1
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	1	0	0
11:00 AM	0	0	0	1
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	1	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	1
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	1	0
1:45 PM	0	1	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	1
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	1	0	0	0
3:15 PM	0	0	0	0
3:30 PM	0	1	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	1
4:15 PM	0	1	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	1
5:15 PM	0	1	0	2
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	1	0	0	0
6:30 PM	0	0	0	1
6:45 PM	0	1	0	1
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	1	0	0	0
9:00 PM	0	1	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	1
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	7	9	2	12

BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	0	0	1	0
9:15 AM	0	0	0	0
9:30 AM	1	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	1
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	1	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	1	0	0
12:30 PM	0	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	1	0
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	1
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	2	1	2	2

Location 4				
N-S Street			Avondale Blvd	
E-W Street			Van Buren St	
Date			12/09/21	
Day			Thursday	
City			Avondale	

PEDESTRIANS				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	1
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	1	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	1	0	0	0
7:00 AM	3	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	2
7:45 AM	2	0	1	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	1
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	1	0	0	0
12:15 PM	2	0	0	2
12:30 PM	0	0	0	2
12:45 PM	0	0	0	0
1:00 PM	0	0	1	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	1
3:15 PM	0	0	0	1
3:30 PM	1	0	0	0
3:45 PM	0	0	0	1
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	1
5:00 PM	0	0	0	1
5:15 PM	2	0	0	1
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	2	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	1
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	14	1	2	15

BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	1	0	0	1
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	1	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	1	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	1	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	1	0	0	0
3:15 PM	0	0	0	0
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	2	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	1	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	1	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	1	0	0	0
11:00 PM	0	0	0	0
11:15 PM	1	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	10	0	1	1

Location 5	
N-S Street	Central Ave
E-W Street	Lower Buckeye Rd
Date	12/09/21
Day	Thursday
City	Avondale

PEDESTRIANS				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	2	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	1	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	1	0	1	0
9:15 AM	0	0	0	0
9:30 AM	2	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	1	0
12:45 PM	0	0	0	1
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	1
1:45 PM	0	0	0	0
2:00 PM	0	0	0	1
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	0	3
3:30 PM	0	0	0	0
3:45 PM	0	0	0	4
4:00 PM	0	0	0	0
4:15 PM	0	0	2	0
4:30 PM	0	0	0	0
4:45 PM	0	0	3	5
5:00 PM	0	0	0	1
5:15 PM	0	0	0	4
5:30 PM	0	0	2	1
5:45 PM	0	0	0	0
6:00 PM	0	0	1	0
6:15 PM	0	0	1	2
6:30 PM	0	0	3	3
6:45 PM	0	0	4	3
7:00 PM	0	0	1	3
7:15 PM	0	0	2	0
7:30 PM	0	3	3	0
7:45 PM	0	0	0	2
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	1	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	3	3	28	34

BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	2	1
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	1	0
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	1	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	0	1
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	1	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	1	1
5:15 PM	0	0	1	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	1	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	1	0
8:45 PM	0	1	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	0	1	9	3

Location 6					
N-S Street			Avondale Blvd		
E-W Street			Encanto Blvd		
Date			12/09/21		
Day			Thursday		
City			Avondale		

PEDESTRIANS				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	1	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	1	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	1	0	0	0
6:45 AM	0	0	0	0
7:00 AM	1	2	0	0
7:15 AM	2	3	0	0
7:30 AM	4	0	0	1
7:45 AM	22	0	0	0
8:00 AM	30	1	0	0
8:15 AM	8	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	1	0	0
9:00 AM	0	0	0	0
9:15 AM	1	0	0	0
9:30 AM	1	1	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	1	0	0	0
10:45 AM	1	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	1	0	0
12:00 PM	0	2	0	0
12:15 PM	0	0	0	0
12:30 PM	0	7	0	0
12:45 PM	0	0	0	0
1:00 PM	2	2	0	0
1:15 PM	1	0	0	0
1:30 PM	2	0	0	0
1:45 PM	0	0	0	0
2:00 PM	2	0	0	0
2:15 PM	7	1	0	0
2:30 PM	2	1	0	0
2:45 PM	1	0	0	0
3:00 PM	100	0	13	0
3:15 PM	26	1	5	0
3:30 PM	0	1	0	0
3:45 PM	0	0	0	0
4:00 PM	1	0	0	0
4:15 PM	3	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	1	0	0
5:00 PM	2	0	0	0
5:15 PM	0	0	0	0
5:30 PM	1	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	223	26	18	1

BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	2	0	1	0
3:15 PM	1	0	0	0
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	3	0	1	0

Location 7	
N-S Street	Avondale Blvd
E-W Street	Durango St
Date	12/09/21
Day	Thursday
City	Avondale

PEDESTRIANS				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	2	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	1
5:45 AM	0	0	0	0
6:00 AM	1	0	0	1
6:15 AM	0	0	0	1
6:30 AM	0	2	0	0
6:45 AM	0	6	0	0
7:00 AM	2	22	0	1
7:15 AM	1	8	0	1
7:30 AM	1	0	0	0
7:45 AM	0	6	0	1
8:00 AM	0	4	0	0
8:15 AM	0	11	0	1
8:30 AM	0	5	1	0
8:45 AM	0	8	0	0
9:00 AM	0	2	0	0
9:15 AM	0	3	1	0
9:30 AM	0	5	4	2
9:45 AM	0	5	4	0
10:00 AM	1	5	0	0
10:15 AM	0	1	0	0
10:30 AM	2	80	10	1
10:45 AM	0	8	4	0
11:00 AM	0	2	0	0
11:15 AM	0	6	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	2	1	2	2
12:15 PM	2	3	3	0
12:30 PM	0	0	0	0
12:45 PM	2	2	2	0
1:00 PM	0	3	1	0
1:15 PM	0	2	0	0
1:30 PM	2	3	1	0
1:45 PM	0	1	0	0
2:00 PM	1	0	0	0
2:15 PM	2	1	0	0
2:30 PM	0	2	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	0	0
3:30 PM	0	0	1	0
3:45 PM	0	0	0	0
4:00 PM	0	1	5	1
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	1	0
5:00 PM	0	0	0	0
5:15 PM	0	3	0	0
5:30 PM	1	0	0	0
5:45 PM	0	0	0	1
6:00 PM	0	0	1	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	1	0	0
7:15 PM	0	0	1	0
7:30 PM	0	0	0	0
7:45 PM	0	0	1	0
8:00 PM	0	0	0	0
8:15 PM	0	1	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	20	213	45	14

BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	1	0	0
7:00 AM	0	0	0	1
7:15 AM	0	1	0	0
7:30 AM	0	1	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	1	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	1	0	0
1:30 PM	1	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	0	0
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
4:00 PM	1	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	1	1	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	1	0
6:15 PM	1	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	0
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	2	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	1	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	3	7	4	1

Location 8									
N-S Street					Central Ave				
E-W Street					La Canada Blvd				
Date					12/09/21				
Day					Thursday				
City					Avondale				
PEDESTRIANS					BICYCLES				
TIME	N-LEG	S-LEG	E-LEG	W-LEG	TIME	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	12:00 AM	0	0	0	0
12:15 AM	0	0	0	0	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0	12:30 AM	0	0	0	0
12:45 AM	0	0	0	0	12:45 AM	0	0	0	0
1:00 AM	0	0	0	0	1:00 AM	0	0	1	0
1:15 AM	0	0	1	0	1:15 AM	0	0	0	0
1:30 AM	0	0	0	0	1:30 AM	0	0	0	0
1:45 AM	0	0	0	0	1:45 AM	0	0	0	0
2:00 AM	0	0	0	0	2:00 AM	0	0	0	0
2:15 AM	0	0	0	0	2:15 AM	0	0	0	0
2:30 AM	0	0	1	0	2:30 AM	0	0	0	0
2:45 AM	0	0	0	0	2:45 AM	0	0	0	0
3:00 AM	0	0	0	0	3:00 AM	0	0	0	0
3:15 AM	0	0	0	0	3:15 AM	0	0	0	0
3:30 AM	0	0	0	0	3:30 AM	0	0	0	1
3:45 AM	0	0	0	0	3:45 AM	0	0	0	0
4:00 AM	0	0	0	0	4:00 AM	0	0	1	0
4:15 AM	0	0	0	0	4:15 AM	0	0	0	0
4:30 AM	0	0	0	0	4:30 AM	0	0	0	0
4:45 AM	0	1	1	0	4:45 AM	0	0	0	0
5:00 AM	0	0	0	0	5:00 AM	0	0	0	0
5:15 AM	0	0	1	0	5:15 AM	0	0	0	0
5:30 AM	0	0	1	0	5:30 AM	0	0	0	0
5:45 AM	0	0	2	0	5:45 AM	0	0	0	0
6:00 AM	0	0	0	0	6:00 AM	0	0	0	1
6:15 AM	0	0	0	0	6:15 AM	0	0	0	0
6:30 AM	0	0	1	2	6:30 AM	0	0	1	0
6:45 AM	0	2	0	4	6:45 AM	0	0	0	0
7:00 AM	1	0	2	0	7:00 AM	0	0	0	1
7:15 AM	1	0	1	1	7:15 AM	0	0	0	0
7:30 AM	3	0	3	1	7:30 AM	0	0	0	0
7:45 AM	4	0	3	11	7:45 AM	0	0	1	0
8:00 AM	4	0	0	8	8:00 AM	0	0	0	0
8:15 AM	3	1	1	1	8:15 AM	0	0	0	1
8:30 AM	0	3	1	1	8:30 AM	0	0	1	0
8:45 AM	1	0	1	1	8:45 AM	0	0	0	0
9:00 AM	0	0	4	0	9:00 AM	0	0	0	0
9:15 AM	1	0	1	0	9:15 AM	0	0	1	0
9:30 AM	0	0	1	0	9:30 AM	0	0	0	0
9:45 AM	1	0	2	0	9:45 AM	0	0	0	0
10:00 AM	0	0	2	0	10:00 AM	0	0	0	0
10:15 AM	0	0	1	1	10:15 AM	0	0	1	0
10:30 AM	0	0	0	0	10:30 AM	0	0	0	0
10:45 AM	0	0	0	0	10:45 AM	0	0	0	0
11:00 AM	0	0	0	0	11:00 AM	0	0	0	0
11:15 AM	0	0	0	0	11:15 AM	0	0	0	0
11:30 AM	0	0	0	0	11:30 AM	0	0	1	0
11:45 AM	0	0	1	1	11:45 AM	0	0	0	0
12:00 PM	0	0	1	0	12:00 PM	0	0	0	0
12:15 PM	0	0	0	2	12:15 PM	0	0	0	0
12:30 PM	26	0	4	24	12:30 PM	0	0	0	0
12:45 PM	1	0	0	2	12:45 PM	0	0	0	0
1:00 PM	2	0	1	0	1:00 PM	0	0	0	1
1:15 PM	0	0	1	0	1:15 PM	0	0	0	0
1:30 PM	3	0	0	1	1:30 PM	0	0	0	0
1:45 PM	0	0	5	0	1:45 PM	0	1	0	0
2:00 PM	2	0	1	0	2:00 PM	0	0	0	0
2:15 PM	1	0	2	1	2:15 PM	0	0	0	0
2:30 PM	3	0	4	2	2:30 PM	0	0	1	0
2:45 PM	0	0	2	2	2:45 PM	0	0	0	0
3:00 PM	0	0	1	0	3:00 PM	0	0	0	1
3:15 PM	0	0	3	0	3:15 PM	0	0	1	1
3:30 PM	3	0	5	1	3:30 PM	0	0	2	2
3:45 PM	1	0	1	4	3:45 PM	0	0	2	0
4:00 PM	6	1	5	0	4:00 PM	1	0	2	0
4:15 PM	0	0	2	0	4:15 PM	0	0	1	0
4:30 PM	0	0	3	0	4:30 PM	0	0	5	1
4:45 PM	0	0	3	0	4:45 PM	0	0	0	0
5:00 PM	0	0	5	0	5:00 PM	0	0	0	1
5:15 PM	3	0	7	0	5:15 PM	0	0	0	1
5:30 PM	0	0	1	0	5:30 PM	0	0	0	0
5:45 PM	0	1	1	0	5:45 PM	0	0	0	1
6:00 PM	2	1	1	0	6:00 PM	0	0	0	0
6:15 PM	0	0	1	1	6:15 PM	0	0	0	2
6:30 PM	0	0	1	0	6:30 PM	0	0	0	1
6:45 PM	0	0	2	1	6:45 PM	0	0	0	0
7:00 PM	0	0	4	1	7:00 PM	0	0	0	0
7:15 PM	0	0	0	0	7:15 PM	0	0	0	0
7:30 PM	1	0	0	0	7:30 PM	0	0	0	0
7:45 PM	0	0	0	0	7:45 PM	0	0	0	0
8:00 PM	0	0	0	0	8:00 PM	0	0	0	0
8:15 PM	0	0	1	1	8:15 PM	0	0	0	0
8:30 PM	0	0	0	0	8:30 PM	0	0	0	0
8:45 PM	0	0	0	0	8:45 PM	0	0	0	0
9:00 PM	0	0	1	0	9:00 PM	0	0	0	0
9:15 PM	0	0	1	0	9:15 PM	0	0	0	0
9:30 PM	0	0	0	0	9:30 PM	0	0	0	0
9:45 PM	0	0	0	0	9:45 PM	0	0	0	1
10:00 PM	0	0	1	1	10:00 PM	0	0	0	1
10:15 PM	0	0	1	0	10:15 PM	0	0	0	0
10:30 PM	0	0	2	0	10:30 PM	0	0	0	0
10:45 PM	0	0	0	0	10:45 PM	0	0	1	0
11:00 PM	0	0	1	0	11:00 PM	0	0	0	0
11:15 PM	0	0	3	0	11:15 PM	0	0	0	0
11:30 PM	0	0	0	1	11:30 PM	0	0	0	0
11:45 PM	0	0	0	0	11:45 PM	0	0	0	0
TOTAL	73	10	110	77	TOTAL	1	1	23	18

Appendix D – Public Involvement Plan

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City of Avondale

Active Transportation Plan

Public Involvement Plan

November 10, 2021

INTRODUCTION

The City of Avondale is seeking assistance to prepare a city-wide Active Transportation Plan (ATP). The project study area for this project will include the areas within the incorporated limits of the City of Avondale, which is approximately 47 square miles.

The existing Avondale Parks, Recreation, Libraries and Trails Master Plan was not tasked with evaluating and recommending a comprehensive and cohesive network of on street and off-street bicycle facilities and pedestrian paths. The Avondale ATP seeks to fill that need.

This Public Involvement Plan (PIP) outlines the necessary steps to achieve a successful level of outreach and engagement with the public and stakeholders.

ROLES & RESPONSIBILITIES

Consultant

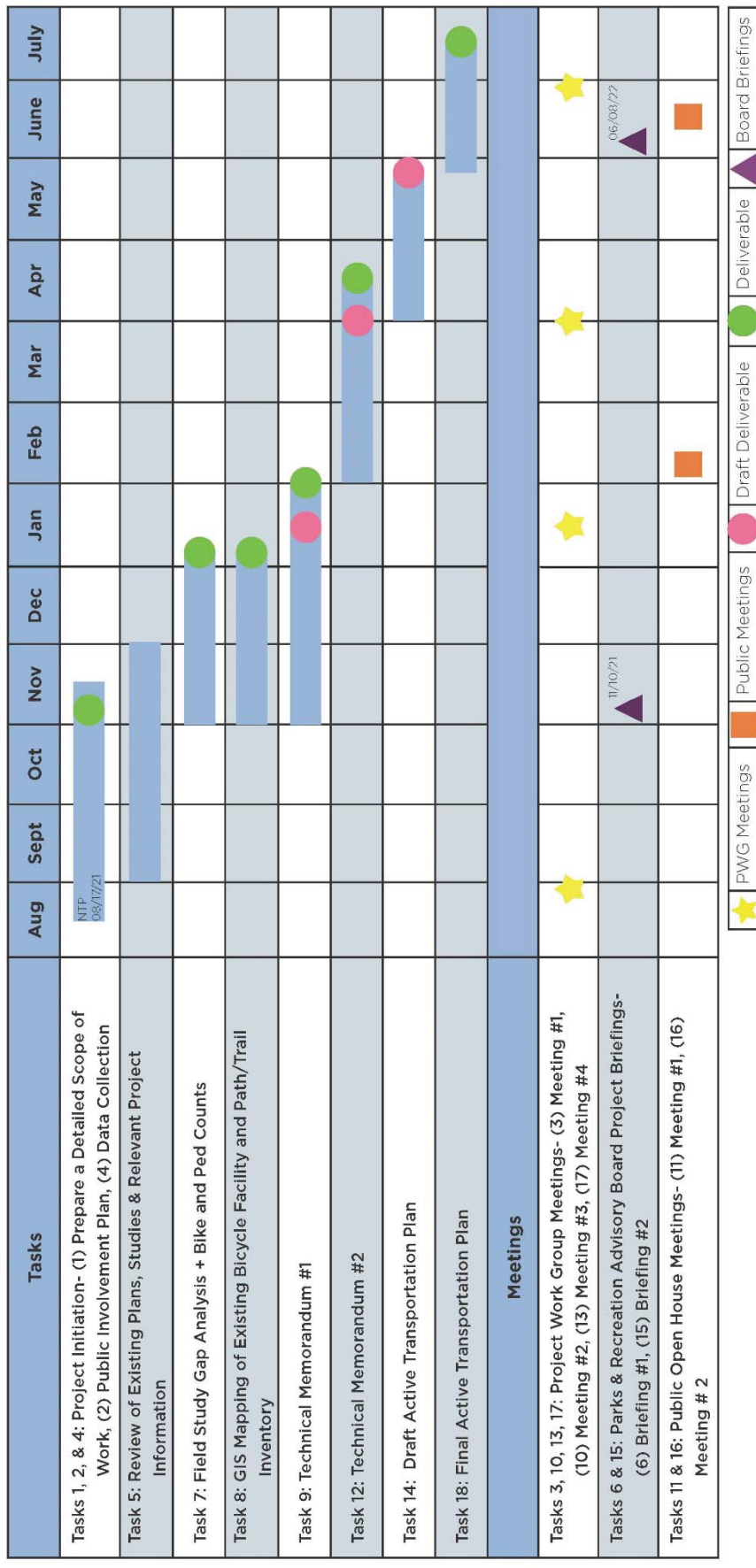
- For each Public Open House meeting (2), a meeting announcement/ flyer in 8.5 X 11" PDF format will be prepared by the consultant in coordination with City staff for advertising and distribution. The consultant will create PowerPoint Presentations, meeting presentation boards (up to 5), sign-in sheets, and meeting summary reports for both meetings. The consultant will also provide up to three (3) staff in attendance.
- For each Project Work Group meeting (4), the consultant will prepare PowerPoint Presentations, sign-in sheets, and meeting summary reports.
- For each Parks & Recreation Advisory Board Briefing (2), the consultant will create PowerPoint Presentations and will also provide up to two (2) staff in attendance.
- In the event of that the optional City Council Project Briefings are instated; the consultant will prepare PowerPoint Presentations and provide up to two (2) staff in attendance.
- All draft materials will be provided to City Staff for review prior to their dissemination.

Client

- For each Public Open House meeting (2), City staff will reserve the meeting facility. The City of Avondale will also be responsible for the dissemination of all electronic and/or print mediums of public notification to stakeholders and the public.
- For each Project Work Group meeting (4), City staff will assist Consultant in scheduling the meeting and securing the meeting facility.
- For each Parks & Recreation Advisory Board Briefing (2), the City will keep official meeting minutes.
- All draft materials will be carefully reviewed with City Staff prior to their dissemination.

**Meetings and briefings are presently assumed to be in-person, however as the COVID-19 Pandemic evolves, these roles and responsibilities may be revised upon discussion with staff.*

PROJECT TIMELINE



GOALS

The Avondale ATP will:

- 1) Conduct a city-wide inventory and gap analysis of all existing bicycle and pedestrian facilities in Avondale,
- 2) Recommend a comprehensive and cohesive series of city wide on street and off-street bicycle facility types and pedestrian facility types,
- 3) Develop policies and procedures necessary to create a system for bicycle and pedestrian traffic in an integrated, safe and efficient multi-modal transportation system,
- 4) Identify locations where Avondale bicycle and pedestrian facilities connect to regional facilities,
- 5) Establish a hierarchy of bicycle facilities and pedestrian path/trail types and design specifications and planning level cost estimates, and
- 6) Establish a formal ATP to better position Avondale to apply and compete for MAG and other government agency design assistance funding.

KEY STAKEHOLDERS

The City of Avondale is made up of many individuals, stakeholders, groups and neighborhoods. This section provides an overview of the varying members of “The Public” that will be engaged during the ATP.

COMMUNITY MEMBERS

The City of Avondale is a product of an assortment of individuals with varying points of views, life experiences, and priorities. To capture those and see them reflected in the ATP, public outreach to the following groups will be invaluable to the process:

- Residents,
- Community Service Organizations,
- Neighborhood/Homeowner Associations,
- Education groups,
- Healthcare organizations,
- Cycling groups,
- Youth organizations, and
- Local Church Communities

STAKEHOLDERS

Stakeholders are individuals or groups with direct interests in the community that wish to participate in the planning process or whose support is key to implementing certain aspects of the ATP. Stakeholders range from major employers, to small business owners and from large landowners and developers, to school boards and youth groups. The more diverse the group

of stakeholder's expertise is, the more encompassing and successful the ATP will be. Stakeholders identified to date include:

- Mayor & Council
- Planning & Zoning Commission Members
- Chamber of Commerce
- Major Employers and Local Business Leaders
- Landowners and community developers
- Public Agency and Service Representatives

COMMUNICATION METHODS AND TOOLS

While techniques may ultimately vary to address new issues that may arise over the life of the project, at minimum, the community wide Avondale ATP public engagement process will encompass the following key efforts:

PROJECT WORK GROUP (PWG) AND PWG MEETINGS (4)*

A Project Work Group (PWG) will be established to guide and coordinate the Consultant's efforts throughout the course of the Avondale ATP process. The PWG will be comprised of Avondale city staff members from various departments to help provide input and oversight to developing a plan that achieves cross department needs and objectives. The PWG will hold four (4) meetings at key project milestones to provide the Consultant feedback on various draft deliverables.

PARKS & RECREATION ADVISORY BOARD BRIEFINGS (2)

Michael Baker will brief members of the Parks & Recreation Advisory Board to seek input on key elements of the ATP. The first briefing will introduce the project and obtain input and guidance from board members. The second briefing will focus on a review of the Draft ATP seeking feedback on recommendations, bike facility and pedestrian path/trail types and locations, evaluation criteria results (if necessary), and prioritization.

PUBLIC OPEN HOUSE MEETINGS (2)*

The Michael Baker Team will prepare for and facilitate two (2) public open house meetings associated with the ATP process. The following is a conceptual format for each meeting that will be modified and refined based on further discussion with City Staff upon their implementation.

Public Open House Meeting #1- Review of Technical Memo #1

This meeting will review existing and future conditions, identify deficiencies as compared to plan objectives and seek public input on their preferences and desires for bicycle and pedestrian facility types, locations and priorities. Consult will first lead a presentation, followed by an open house style meeting with information stations and interactive exercises to engage participants input.

Public Open House Meeting #2- Draft Active Transportation Plan Review

The purpose of Public Meeting #2 is to obtain public input on the Draft Active Transportation Plan recommendations. Meeting attendees will receive a presentation on the draft ATP recommendations, bike facility types and locations, pedestrian path/trail types and locations, evaluation criteria results (if necessary). Through thoughtful discussion and an interactive exercise, meeting attendees will provide input to identify areas of agreement and areas of potential change or adjustment in prioritization or application of recommended facilities. Consult will first lead a presentation, followed by an open house style meeting with information stations and interactive exercises to engage participants input.

OPTIONAL CITY COUNCIL BRIEFINGS

Michael Baker will brief members of the City Council as needed (2 optional meetings scoped). The first briefing may introduce the project and obtain input and guidance from Council. The second briefing may focus on a review of the Technical Memo #2 or the Draft ATP seeking feedback on recommendations and prioritization.

**Meetings and briefings are presently assumed to be in-person, however as the COVID-19 Pandemic evolves, these communication methods and tools may be revised upon discussion with staff.*

Appendix E – Public Survey Results

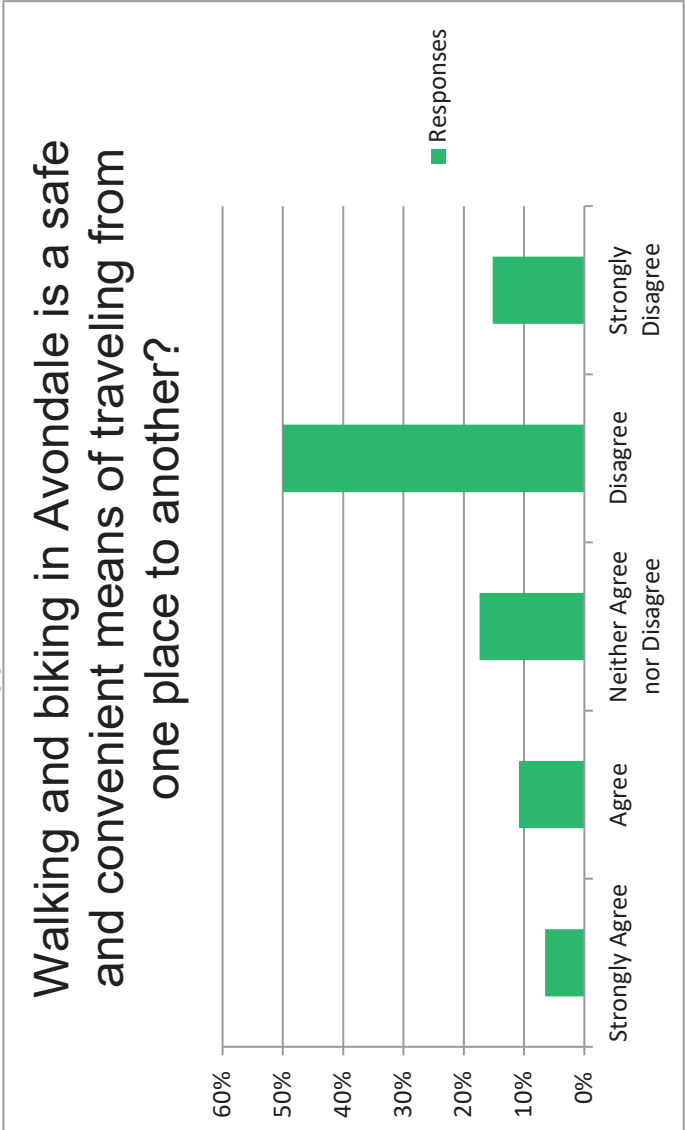
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Avondale Active Transportation Plan

Walking and biking in Avondale is a safe and convenient means of traveling from one place to another?

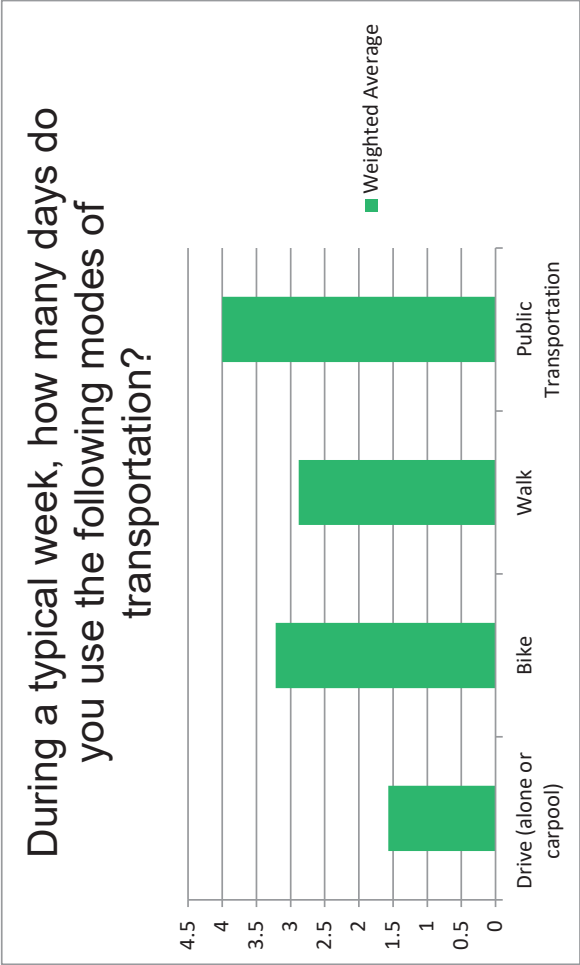
Answer Choices	Responses
Strongly Agree	7%
Agree	11%
Neither Agree nor Disagree	17%
Disagree	50%
Strongly Disagree	15%
Answered 46	
Skipped 0	



Avondale Active Transportation Plan

During a typical week, how many days do you use the following modes of transportation?

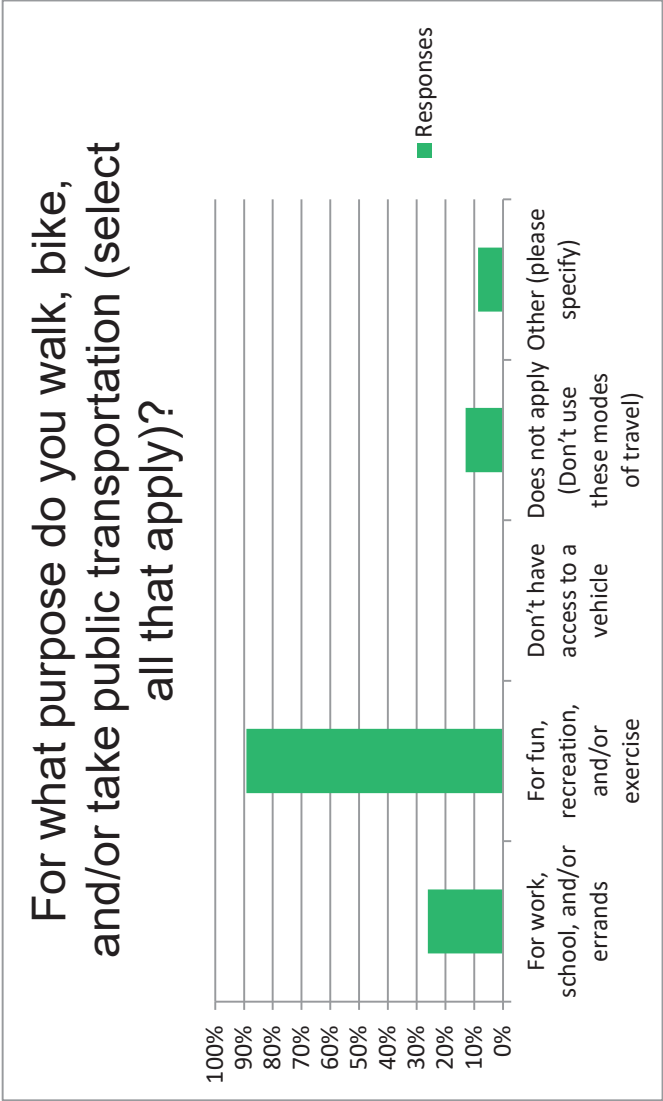
	Everyday	3-6 days a week	1-2 days a week	Never	Total	Weighted Average
Drive (alone or carpool)	52.27%	23	17	0	44	1.57
Bike	2.22%	1	9	21	45	3.22
Walk	14.29%	6	5	12	42	2.88
Public Transportation	0.00%	0	0	41	41	4
				Answered	46	
				Skipped	0	



Avondale Active Transportation Plan

For what purpose do you walk, bike, and/or take public transportation (select all that apply)?

Answer Choices	Responses
For work, school, and/or errands	12
For fun, recreation, and/or exercise	41
Don't have access to a vehicle	0
Does not apply (Don't use these modes of travel)	6
Other (please specify)	4
	46
Answered	
Skipped	0



Respondents	Response Date	Other (please specify)	Tags
1	Mar 16 2022	0 My kids walk to their school bus stop.	Pedestrians are not safe when walking here
2	Mar 15 2022	0 To save gas running errands	
3	Mar 05 2022	1 Ugh	
4	Feb 24 2022	1 Walking pets	

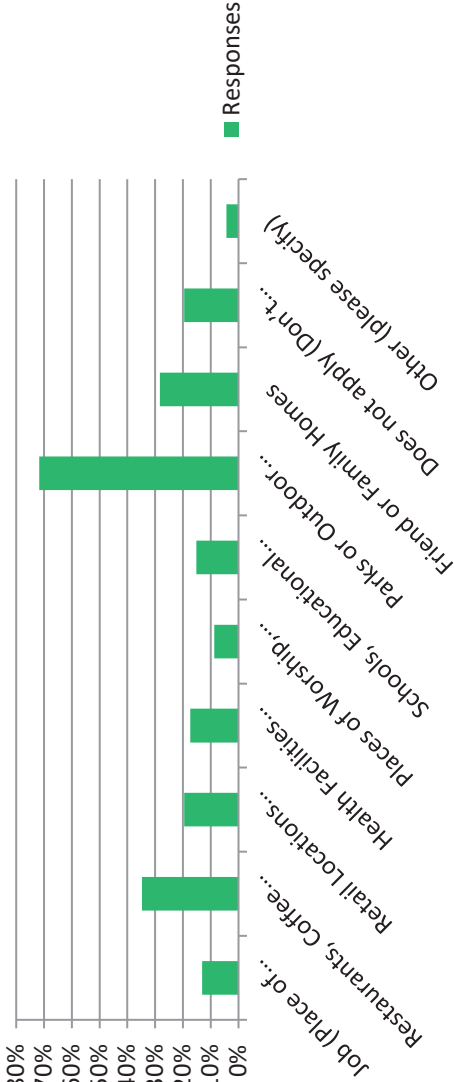
Avondale Active Transportation Plan

What type of destinations do you walk, bike, or take transit to (select all that apply)?

Answer Choices	Responses
Job (Place of Employment)	6
Restaurants, Coffee Shops	16
Retail Locations (Grocery Stores, Shops, Personal Services)	9
Health Facilities (Doctor's Office, Pharmacy, Urgent Care, Fitness Fa	8
Places of Worship, Community Center, Library, Public Services	4
Schools, Educational Facilities	7
Parks or Outdoor Recreation	33
Friend or Family Homes	13
Does not apply (Don't use these modes of travel)	9
Other (please specify)	2
	46
	0

Answered
Skipped

What type of destinations do you walk, bike, or take transit to (select all that apply)?



1 Mar 03 2022 0 Exercise only

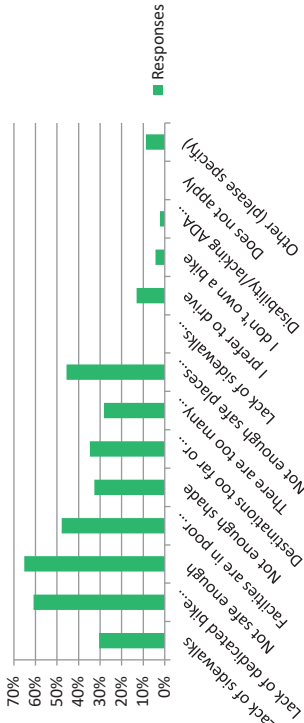
2 Feb 25 2022 0 Use trail system from Glendale to Peoria for biking ☐

Avondale Active Transportation Plan

What prevents you from walking, biking, and/or taking public transit (select all that apply)?

Answer Choices	Responses
Lack of sidewalks	14
Lack of dedicated bike space	28
Not safe enough	30
Facilities are in poor condition or not wide enough	22
Not enough shade	15
Destinations too far or not connected	16
There are too many physical barriers	13
Not enough safe places to cross the street	21
Lack of sidewalks connecting to bus stops	0
I prefer to drive	6
I don't own a bike	2
Disability/lacking ADA facilities	1
Does not apply	0
Other (please specify)	9%
	46
	0

What prevents you from walking, biking, and/or taking public transit (select all that apply)?



Respondents

Response Date Other (please specify) Tags

1 Mar 15 2022 0N.a

2 Mar 05 2022 1Motorists don't give cyclists respect! They drive to close, flip us off, blow exhaust smoke at us.

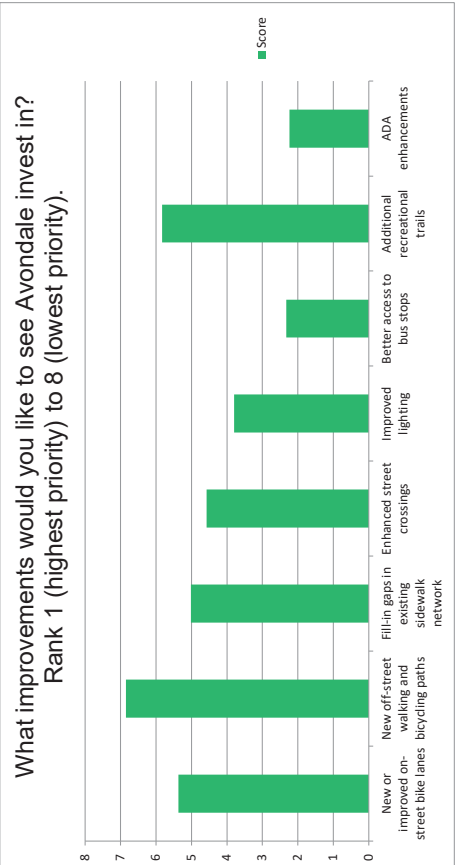
3 Mar 04 2022 0My work does not provide a safe place to store my bike.

4 Feb 26 2022 1Bus service too infrequent, does not connect to places I need to go

Avondale Active Transportation Plan

What improvements would you like to see Avondale invest in? Rank 1 (highest priority) to 8 (lowest priority).

	1		2		3		4		5		6		7		8		Total	Score
New or improved on-street bike lanes	26.09%	12	15.22%	7	10.87%	5	13.04%	6	10.87%	5	6.52%	5	10.87%	3	6.52%	5	46	5.37
New off-street walking and bicycling paths	36.96%	17	36.96%	17	10.87%	5	8.70%	4	2.17%	1	4.35%	1	0.00%	2	0.00%	0	46	6.85
Fill-in gaps in existing sidewalk network	6.52%	3	10.87%	5	23.91%	11	21.74%	10	19.57%	9	8.70%	4	8.70%	4	0.00%	0	46	5.02
Enhanced street crossings	4.35%	2	13.04%	6	8.70%	4	19.57%	9	30.43%	14	13.04%	6	8.70%	4	2.17%	1	46	4.57
Improved lighting	2.17%	1	2.17%	1	8.70%	4	15.22%	7	19.57%	9	41.30%	19	6.52%	3	4.35%	2	46	3.8
Better access to bus stops	2.17%	1	0.00%	0	6.52%	3	2.17%	1	4.35%	2	10.87%	5	41.30%	19	32.61%	15	46	2.33
Additional recreational trails	21.74%	10	19.57%	9	26.09%	12	15.22%	7	4.35%	2	4.35%	2	0.00%	2	8.70%	0	46	5.83
ADA enhancements	0.00%	0	2.17%	1	4.35%	2	4.35%	2	8.70%	4	10.87%	5	23.91%	5	45.65%	11	46	2.24
																	Answered	46
																	Skipped	0



Avondale Active Transportation Plan

What do you view as the greatest challenge(s) to walking and bicycling (mobility) in Avondale?

Answered 46

Skipped 0

Respondents	Response Date	Responses	Tags	Sentiment
1	Mar 16 2022 0	It's not safe		Negative
2	Mar 16 2022 0	The number of people driving that are not obeying the speed limit makes me feel unsafe.		Negative
3	Mar 16 2022 0	Safety of paths lack of lights red Light runners, people who don't yield to bicycles when using crosswalks, cars going way over the speed limit, cars not looking		Negative
4	Mar 15 2022 0	for bicycles even though you are at an intersection		Negative
5	Mar 15 2022 0	places I would walk to are too far from residential area		Negative
6	Mar 15 2022 0	Sidewalks that don't connect		Positive
7	Mar 15 2022 0	Safe bike lanes		Negative
8	Mar 15 2022 0	Lots of homeless around Central Ave. Very little light.		Neutral
9	Mar 15 2022 1	No side walk		Negative
10	Mar 09 2022 0	Safety, designated bike lane, lack of enforcement of 3 feet law, driver education programs that bikes share the road.		Negative
11	Mar 08 2022 0	Distracted Drivers. Bikers and walkers need a better safe space than right next to cars.		Negative
12	Mar 08 2022 0	Crossing I-10 & main roads without bike lanes The lack of Safe and maintained bike lanes. Also trail heads that are closed, not marked or difficult to identify. I've called Parks		Negative
13	Mar 07 2022 1	and rec about the trailhead in friendship park and none of the employees knew what I was talking about.		Negative
14	Mar 07 2022 0	Cars		Negative
15	Mar 07 2022 0	Clearly marked bike lanes on streets. Safety. Riding a bicycle on most roads in the west valley isn't for the inexperienced. Dedicated space/lanes like other cities have		Negative
16	Mar 05 2022 0	helps significantly create a safe way to ride. Bike lanes are inconsistent and not interconnected. So, I might be able to ride one or two miles on a bike lane, but then the lane		Negative
17	Mar 05 2022 1	ends for a mile or two and then picks back up again. It's very difficult or impossible to plan a route, and have it be safe.		Negative
18	Mar 05 2022 1	Additionally, bike lanes are sometimes not well maintained and have debris and pot holes, which make them dangerous. Motorists		Negative
19	Mar 04 2022 0	Safety along biking/walking paths. They all need barriers like landscaping or poles. Curbs that run flat into the street aren't safe		Negative
20	Mar 04 2022 0	because they encourage cars to cut corners and drive recklessly!		Negative
21	Mar 04 2022 1	Continuous bike paths		Negative
22	Mar 04 2022 1	Lack of trails that connect to other trails or pathways.		Unknown
23	Mar 04 2022 0	na The bike path that follows agua fria is great. We need more paths like that. Keeps motorists and cyclists / walkers separated from		Negative
24	Mar 04 2022 0	each other. It's safer for everyone.		Negative
25	Mar 03 2022 0	There aren't a lot of safe places to ride and the destinations aren't connected.		Negative
26	Mar 03 2022 0	Motorized vehicles		Negative
27	Mar 03 2022 0	Lack of sidewalks and insufficient or non-existent bike lanes. This is more evident south of I10.		Positive
28	Mar 02 2022 0	motivation		Negative
28	Mar 02 2022 1	Traffic, mostly at stop signs		Negative

29 Feb 26 2022 1 Shade during summer, city sprawl means locations are far apart

Crossing major intersections □

30 Feb 26 2022 0 Street lighting

31 Feb 25 2022 1 Neighbor areas are not connected to walking paths

32 Feb 25 2022 0 connected to Glendale

33 Feb 25 2022 0 Safety

34 Feb 24 2022 1 Lack of bike lanes and few off street bike/walking paths.

35 Feb 24 2022 0 Speeding cars

36 Feb 24 2022 0 High speed and dense traffic conditions.

37 Feb 24 2022 0 The coffee shops or other restaurants are kind of far away for walking or biking

38 Feb 24 2022 1 Lighting, traffic and overall safety

We need more light systems. There is so much development and new housing. We need traffic lights and speed zones so

39 Feb 24 2022 1 families feel comfortable walking/riding bikes.

40 Feb 24 2022 1 Bike lanes

41 Feb 24 2022 1 Lighting and continuous sidewalks

42 Feb 24 2022 1 Unfamiliar with available paths and not enough paths / connection

43 Feb 24 2022 1 Safety- crime, and people drive crazy - speeding/unauthorized parking/etc.

Stores are so far apart and sidewalks don't go everywhere. McDowell west of Avondale is all dirt for a while and my husband and

44 Feb 24 2022 1 I both got flat tires when we tried to bike there

45 Feb 24 2022 1 major roads.

We need the trail along the Agua Fria river at the I-10 to connect to Friendship Park and then on to Peoria's New River trail. Once

46 Feb 24 2022 1 that happens the whole valley is open to bike travel.

Negative

Negative

Negative

Positive

Negative

Negative

Negative

Negative

Negative

Negative

Negative

Negative

Positive

Negative

Negative

Negative

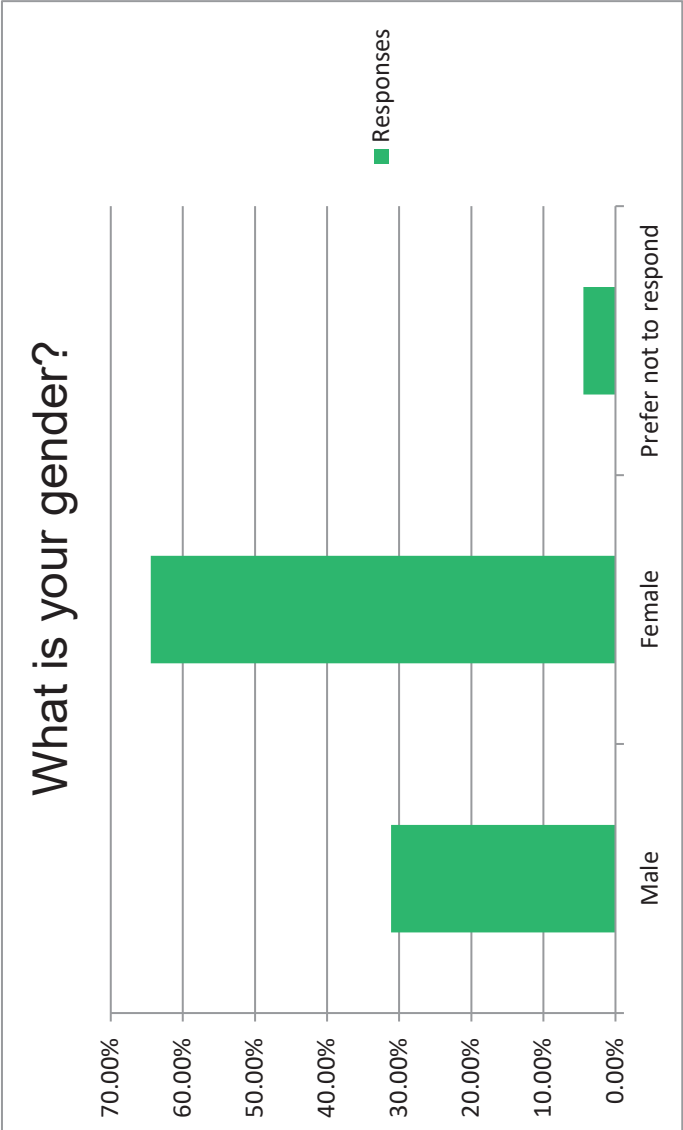
Negative

Negative

Avondale Active Transportation Plan

What is your gender?

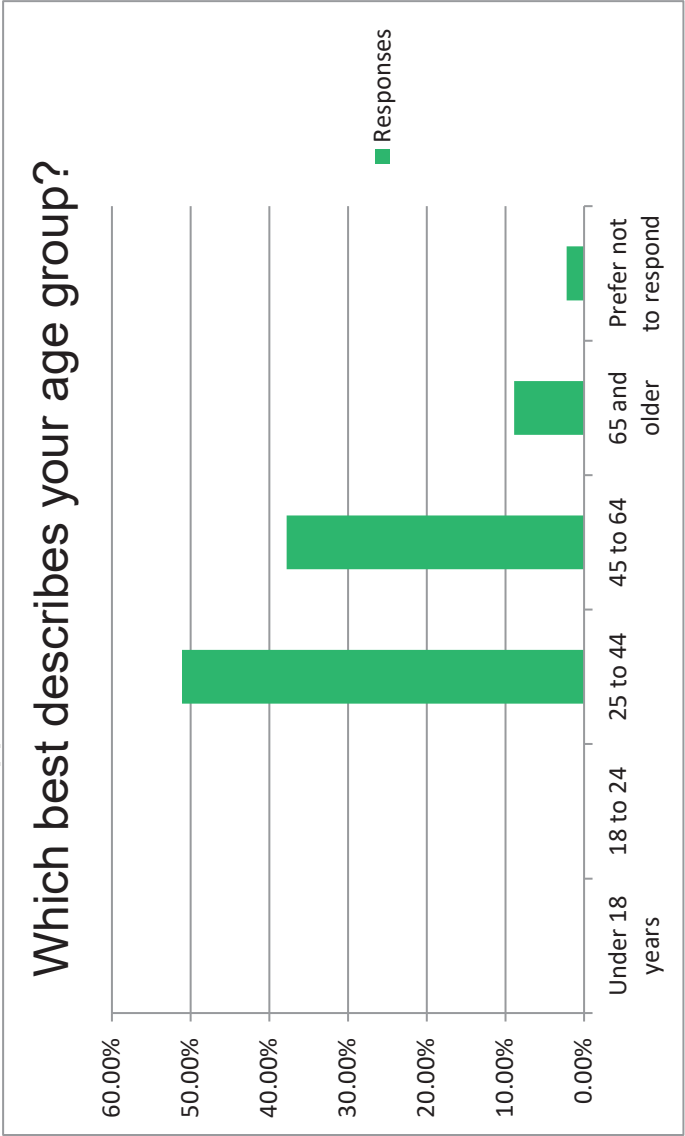
Answer Choices		Responses
Male		14
Female		29
Prefer not to respond		2
Answered		45
Skipped		1



Avondale Active Transportation Plan

Which best describes your age group?

Answer Choices	Responses
Under 18 years	0
18 to 24	0
25 to 44	23
45 to 64	17
65 and older	4
Prefer not to respond	1
	Answered 45
	Skipped 1

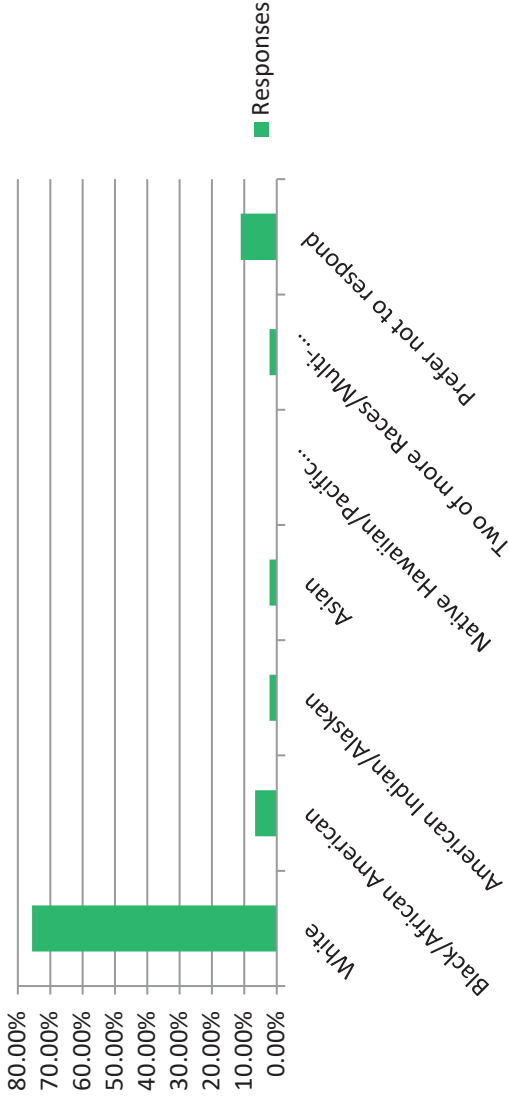


Avondale Active Transportation Plan

Race (Self-Identify the group you most closely relate to)

Answer Choices	Responses
White	34
Black/African American	3
American Indian/Alaskan	1
Asian	1
Native Hawaiian/Pacific Islander	0
Two of more Races/Multi-Racial	1
Prefer not to respond	5
	45
	Skipped
	1

Race (Self-Identify the group you most closely relate to)

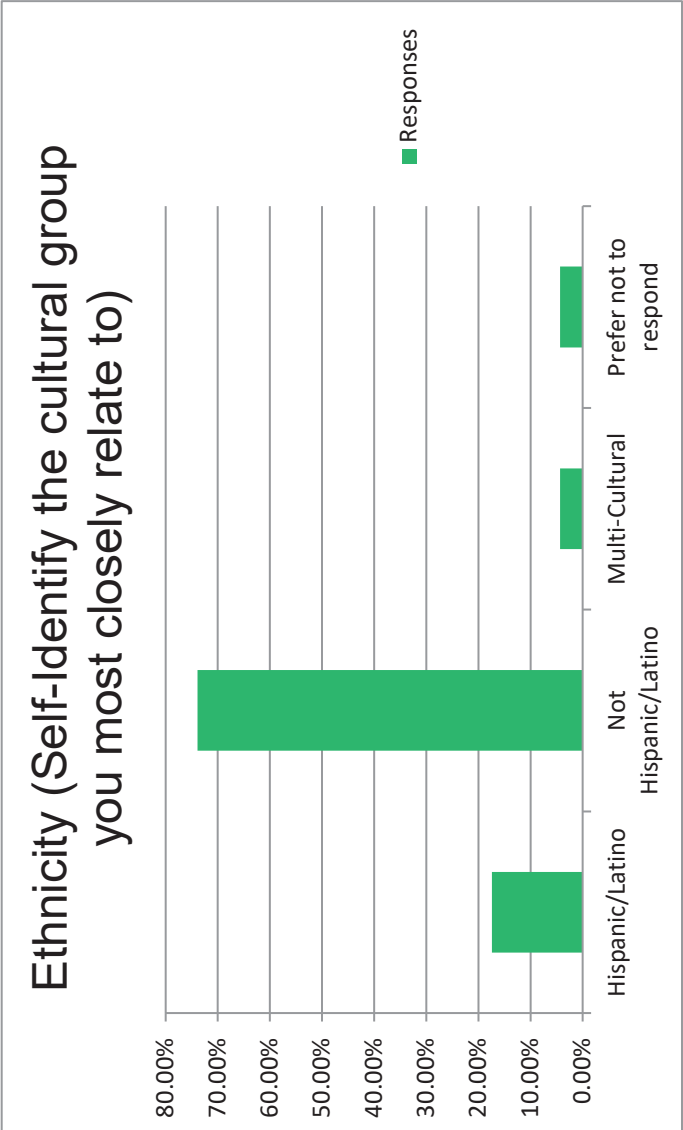


Avondale Active Transportation Plan

Ethnicity (Self-Identify the cultural group you most closely relate to)

Answer Choices	Responses
Hispanic/Latino	8
Not Hispanic/Latino	34
Multi-Cultural	2
Prefer not to respond	2

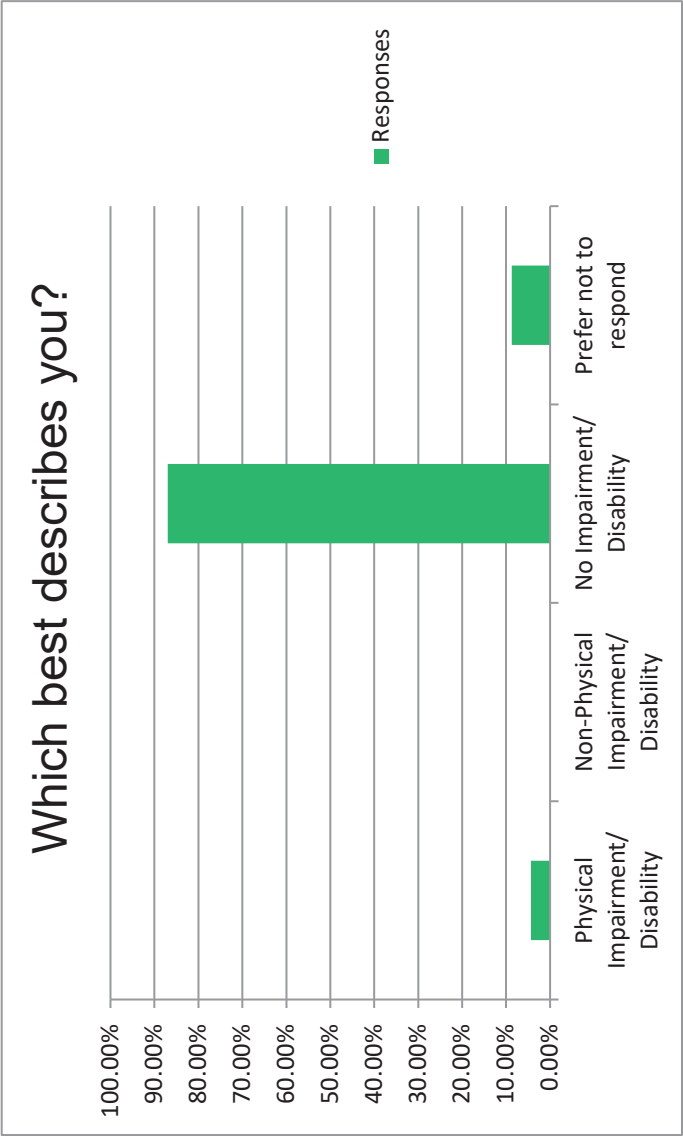
Answered 46
Skipped 0



Avondale Active Transportation Plan

Which best describes you?

Answer Choices	Responses
Physical Impairment/ Disability	4.35% 2
Non-Physical Impairment/ Disability	0.00% 0
No Impairment/ Disability	86.96% 40
Prefer not to respond	8.70% 4
	Answered 46
	Skipped 0

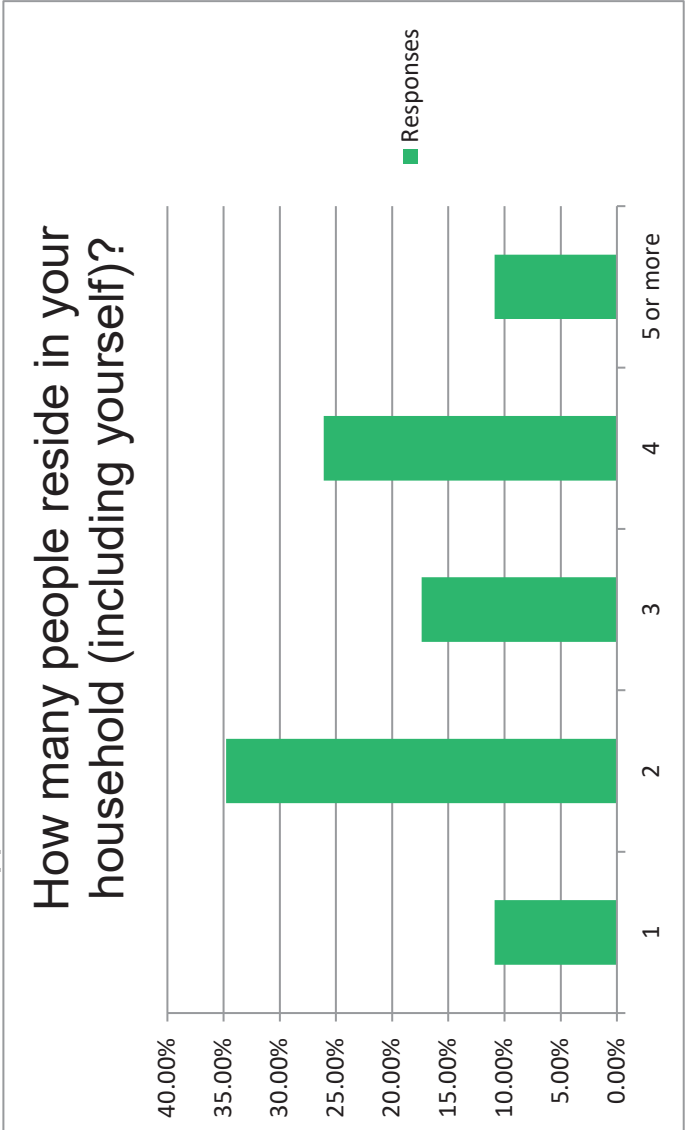


Avondale Active Transportation Plan

How many people reside in your household (including yourself)?

Answer Choices	Responses
1	5
2	16
3	8
4	12
5 or more	5

Answered 46
Skipped 0



Avondale Active Transportation Plan

What is the nearest intersection to your residence?

Answer Choices	Responses
Street 1	100.00% 37
Street 2	100.00% 37

Answered

37

9

Respondents	Response Date	Street 1	Tags	Street 2	Tags
1	Mar 16 2022	0 Broadway Rd		Priest Dr	
2	Mar 16 2022	0 Fairway		Avondale blvd	
3	Mar 15 2022	0 Avondale Blvd		McDowell	
4	Mar 15 2022	0 Garden Lakes Parkway		Indian School	
5	Mar 15 2022	0 Durango		Avondale	
6	Mar 15 2022	0 107th Avenue		Thomas Road	
7	Mar 15 2022	0 3rd st		Dooley	
8	Mar 15 2022	1 MC 85		Avondale	
9	Mar 09 2022	0 Bullard Rd		Earl Drive	
10	Mar 08 2022	0 Dysart		Thomas	
11	Mar 07 2022	1 Avondale Blvd		Buckeye Rd	
12	Mar 07 2022	0 Elliot		Estrella Parkway	
13	Mar 07 2022	0 MC Dowell		Rancho	
14	Mar 05 2022	0 McDowell		Dysart	
15	Mar 05 2022	1 Bethany Home		Dysart	
16	Mar 05 2022	1 Estrella		Vineyard	
17	Mar 04 2022	0 Yuma		Sarival	
18	Mar 04 2022	0 Yuma		Estrella	
19	Mar 04 2022	0 na		na	
20	Mar 04 2022	0 107th ave		Thomas	
21	Mar 03 2022	0 Avondale Blvd		Encanto	
22	Mar 02 2022	0 Avondale		MC 85	
23	Mar 02 2022	1 Van Buren		Avondale Blvd.	
24	Feb 26 2022	0 Avondale blvd		Van buren	
25	Feb 25 2022	1 Avondale Blvd		VanBuren	

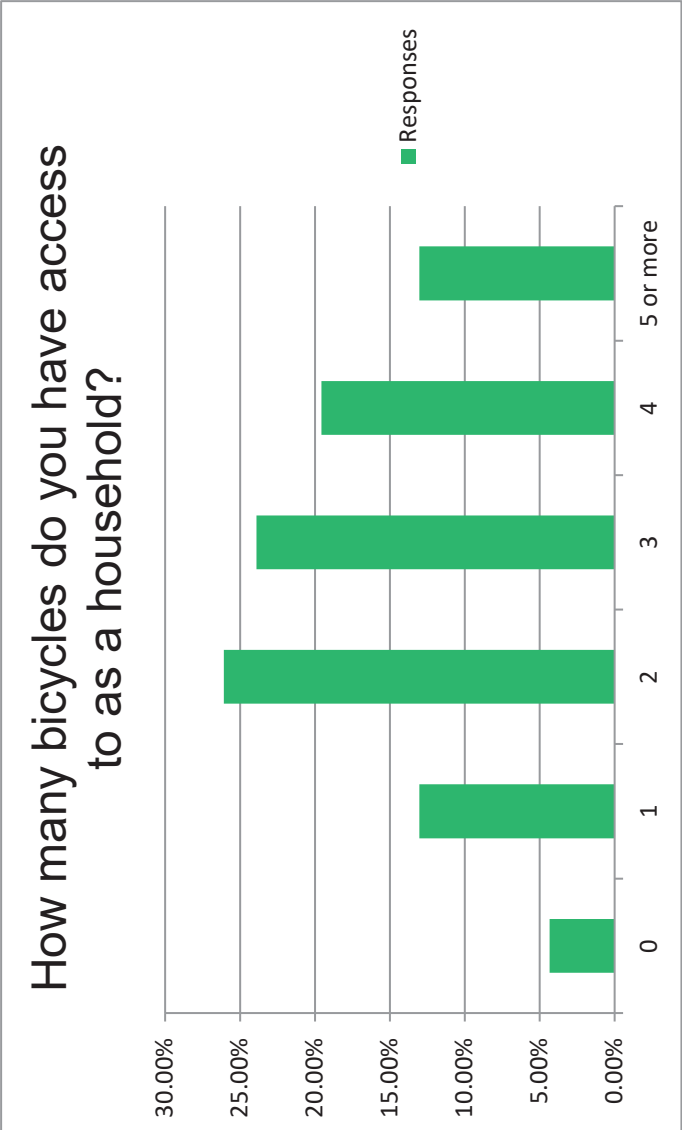
26 Feb 25 2022 0 Dysart
27 Feb 25 2022 0 Fairway
28 Feb 24 2022 0 McDowell
29 Feb 24 2022 0 Van Buren
30 Feb 24 2022 0 Avondale Blvd
31 Feb 24 2022 1 111
32 Feb 24 2022 1 Doris
33 Feb 24 2022 1 Encanto
34 Feb 24 2022 1 115th Ave
35 Feb 24 2022 1 Buckeye
36 Feb 24 2022 1 Avondale or 107th
37 Feb 24 2022 1 North Fairway

Sage
Van Buren
119th Ave
107th Ave
MC85
Pima
Dysart
Avondale blvd
Thomas
El mirage
Van Buren
West Van Buren

Avondale Active Transportation Plan

How many bicycles do you have access to as a household?

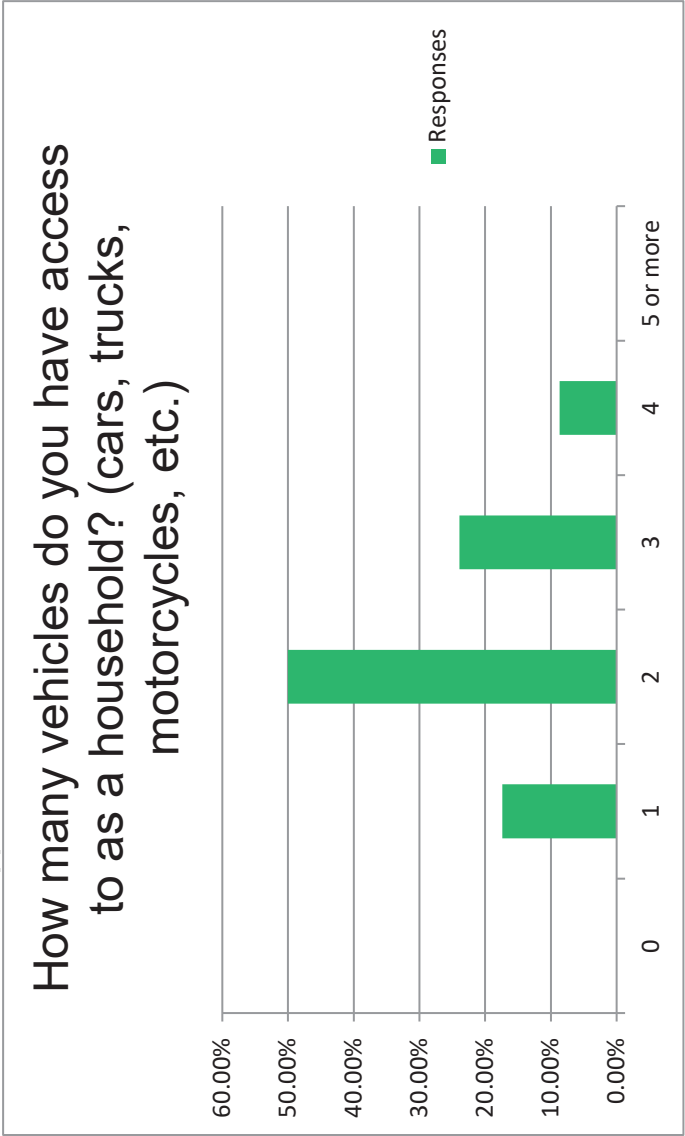
Answer Choices	Responses
0	4.35% 2
1	13.04% 6
2	26.09% 12
3	23.91% 11
4	19.57% 9
5 or more	13.04% 6
Answered 46	
Skipped 0	



Avondale Active Transportation Plan

How many vehicles do you have access to as a household? (cars, trucks, motorcycles, etc.)

Answer Choices	Responses
0	0.00% 0
1	17.39% 8
2	50.00% 23
3	23.91% 11
4	8.70% 4
5 or more	0.00% 0
Answered 46	
Skipped 0	



Appendix F – Detailed Project Prioritization Results

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Proximity & Connectivity				
Criteria Weight	Sub-Criteria (SC)	SC Score	Scoring Thresholds	
20	Fills a gap in the existing system	5	Yes	5
			No	1
	Connects neighborhoods /parks/adjacent jurisdictions	5	7-12	5
			4-6	2.5
			0-3	1
	Provides access to school and medical facilities	5	5-7	5
			2-4	2.5
			0-1	1
	Addresses first mile/last mile connection	5	8-13	5
			2-7	2.5
			0-1	1

Safety				
Criteria Weight	Sub-Criteria (SC)	(SC) Score	Scoring Thresholds	
30	May Address pedestrian/ bicycle safety issues	7.5	7-17	7.5
			2-6	3.75
			0-1	1
	May Address pedestrian/ bicycle fatality and/or incapacitating injury	7.5	2-3	7.5
			1	3.75
			0	1
	May address related safety issues at project location	7.5	273-779	7.5
			80-272	3.75
			0-79	1
			Yes	7.5
Positive Crash Reduction Factor		7.5	0	1

Comfort				
Criteria Weight	Sub-Criteria (SC)	(SC) Score	Scoring Thresholds	
20	Number of Lanes	5	4.3-6	5
			2.1-4.2	2.5
			0-2	1
	Speed Limit	5	31-50	5
			1-30	2.5
			0	1
	Traffic Volume	5	23,512-53,711	5
			9,859-23,511	2.5
			0-9,858	1
	Facility conflicts	5	9-19	5
			4-8	2.5
			0-3	1

Social Equity				
Criteria Weight	Sub-Criteria (SC)	SC Score	Scoring Thresholds	
			832-20666	3.75

15	Serves an area with high number of low income and zero car household populations	3.75	307-831	1.875
			3-306	1
	Serves an area with high number of individuals with disabilities	3.75	603-1401	3.75
			235-602	1.875
			3-234	1
	Serves areas with disproportionate rate of vulnerable users	3.75	5607-9613	3.75
			2294-5606	1.875
			18-2293	1
			6.68-21.66	3.75
	Provides active transportation facilities in an area where residents commute by alternative modes of transportation	3.75	2.27-6.67	1.875
			0-2.26	1

Deliverability & Constructability				
Criteria Weight	Sub-Criteria (SC)	SC Score	Scoring Thresholds	
15	Previously recommended project	3.75	Yes	3.75
			No	1
	Project cost	3.75	\$3,000 - 2.09M	3.75
			2.09M - 6.49M	1.875
			6.49M - 16.49M	1
	Maintenance cost	3.75	Low	3.75
			Medium	1.875
			High	1
	Physical constraints (Owned and Maintained Roadway)	3.75	Avondale Maintained	3.75
			Partially Maintained	1.875
			County Maintained	1

ATTRIBUTE TABLE

Project ID	Length (Miles)	Location	Facility Type	Plan	Limit From	Limit To	Roadway Classification	Join_Field
P1	0.50	01st Ave	Sidewalk One Side	Avondale ATP 2022	Rosewell Street	Van Buren Street	LOCAL	1
B1	0.13	03rd Avenue	Bicycle Lane Both Sides	Avondale Transportation Master Plan	Zinc Apartment Prcld	Zinc Apartment Prcld	COLLECTOR	2
P2	0.07	07th Ave	Sidewalk One Side	MCDOT ATP 2018	350 feet north Buckeye Rd	Buckeye Rd	ARTERIAL	3
B2	1.99	07th Ave	Bicycle Lane Both Sides	MCDOT ATP 2018	Lower Buckeye Rd	Southern Ave	ARTERIAL	4
B3	0.81	07th Ave	Bicycle Lane Both Sides	Avondale ATP 2022	I-10	Van Buren Street	ARTERIAL	5
P3	0.02	07th Ave	Sidewalk Both Sides	MCDOT ATP 2018	Lower Buckeye Road	125 feet south Lower Buckeye Road	ARTERIAL	6
P4	0.34	11th Ave	Sidewalk One Side	Avondale ATP 2022	Rosewell Street	Van Buren Street	COLLECTOR	7
B4	0.32	12th Lane	Bicycle Lane Both Sides	Avondale ATP 2022	Whyman Ave	Lower Buckeye Road	COLLECTOR	8
P5	0.04	14th Ave	Sidewalk One Side	Avondale ATP 2022	Goldwater Springs Blvd	Civic Center Drive	LOCAL	9
B5	0.84	15th Ave	Bicycle Lane Both Sides	Avondale ATP 2022	Roosevelt Drive	McDowell Road	ARTERIAL	10
B6	0.33	19th Ave	Bicycle Lane Both Sides	Avondale ATP 2022	Monte Vista Road	McDowell Road	COLLECTOR	11
B7	0.31	19th Ave	Bicycle Lane Both Sides	Avondale ATP 2022	Thomas Road	Van Buren Street	COLLECTOR	12
B8	0.20	19th Ave	Bicycle Lane Both Sides	Avondale ATP 2022	Encanto Blvd	Encanto Blvd	COLLECTOR	13
P6	0.21	19th Ave	Sidewalk One Side	Avondale ATP 2022	Rosewell Street	Van Buren Street	COLLECTOR	14
P7	0.26	19th Ave	Sidewalk One Side	Avondale ATP 2022	Palm Lane	McDowell Road	COLLECTOR	15
P8	0.03	26th Ave	Sidewalk Both Sides	Avondale ATP 2022	Warner Street	Dead End	LOCAL	16
P9	0.04	26th Dr	Sidewalk Both Sides	Avondale ATP 2022	Warner Street	Illini Street	LOCAL	17
B9	2.00	98th Avenue	Bicycle Lane Both Sides	Avondale Transportation Master Plan	Indian School Road	McDowell Road	ARTERIAL	18
B10	0.19	98th Avenue	Bicycle Lane Both Sides	Avondale Transportation Master Plan	McDowell Road	I-10	ARTERIAL	19
B11	0.16	98th Avenue	Bicycle Lane Both Sides	Avondale Transportation Master Plan	820 feet North Van Buren St	Van Buren St	ARTERIAL	20
M11	2.97	Aqua Fria River East	Multi-Use Path	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	Lower Buckeye Road	Gila River	OFF-Street	21
M12	2.07	Aqua Fria River East	Multi-Use Path	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	Indian School Road	McDowell Road	OFF-Street	22
M13	1.01	Aqua Fria River East	Multi-Use Path	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	Buckeye Road	Lower Buckeye Road	OFF-Street	23
M14	2.81	Aqua Fria River West	Multi-Use Path	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	Lower Buckeye Road	Gila River	OFF-Street	24
M15	1.87	Aqua Fria River West	Multi-Use Path	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	Indian School Road	I-10	OFF-Street	25
M16	0.38	Aqua Fria River West	Multi-Use Path	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	I-10	Lower Buckeye Road	OFF-Street	26
B12	0.28	Avondale Blvd	Bicycle Lane One Side	Avondale Transportation Master Plan	McDowell Road	Southern Avenue	ARTERIAL	27
B13	0.49	Avondale Blvd	Banner Wayfinding Signage	Wayfinding Master Plan	Brookway Road	McDowell Road	ARTERIAL	28
P10	3.74	Avondale Blvd	Bicycle Lane Both Sides	Avondale ATP 2022	Lower Buckeye Road	Southern Ave	ARTERIAL	29
P11	0.23	Avondale Blvd	Sidewalk Both Sides	Avondale ATP 2022	390 feet south McDowell Road	I-10	ARTERIAL	30
P12	0.10	Avondale Blvd	Sidewalk One Side	Avondale ATP 2022	515 feet south Roosevelt Street	Rosewell Street	ARTERIAL	31
P13	0.17	Avondale Blvd	Sidewalk One Side	Avondale ATP 2022	CITY Center Drive	CITY Center Drive	ARTERIAL	32
P14	0.33	Avondale Blvd	Sidewalk Both Sides	Avondale ATP 2022	Van Buren Street	Van Buren Street	ARTERIAL	33
P15	0.24	Avondale Blvd	Sidewalk One Side	Avondale ATP 2022	Goldwater Springs Blvd	Goldwater Springs Blvd	ARTERIAL	34
P16	0.09	Avondale Blvd	Sidewalk One Side	Avondale ATP 2022	Encanto Blvd	Encanto Blvd	ARTERIAL	35
P17	0.08	Avondale Blvd	Sidewalk One Side	Avondale ATP 2022	McDowell Road	390 feet south McDowell Road	ARTERIAL	36
B15	1.03	Brookway Road	Bicycle Lane Both Sides	Avondale ATP 2022	Rosewell Street	515 feet south Roosevelt Street	ARTERIAL	37
P18	0.10	Avondale Blvd	Sidewalk One Side	Avondale ATP 2022	El Mirage Road	107th Ave	ARTERIAL	38
P19	1.53	Buckeye Rd	Sidewalk One Side	Avondale ATP 2022	119th Lane	107th Ave	ARTERIAL	39
P20	0.37	Buckeye Rd	Sidewalk One Side	Avondale ATP 2022	Dysart Road	El Mirage Road	ARTERIAL	40
P21	0.06	Buckeye Rd	Sidewalk Both Sides	MCDOT ATP 2018	West of El Mirage Rd	107th Avenue	ARTERIAL	41
B16	0.47	Buckeye Rd North	Bicycle Lane Both Sides	Avondale Transportation Master Plan	Avondale Blvd	West of El Mirage Road	ARTERIAL	42
B17	0.36	Buckeye Road	Bicycle Lane Both Sides	Avondale Transportation Master Plan	1000 ft West El Mirage Road	780 ft East El Mirage Road	ARTERIAL	43
B18	0.86	Buckeye Road	Bicycle Lane Both Sides	Avondale ATP 2022	121st Lane	Avondale Blvd	ARTERIAL	44
B19	0.42	Central Avenue	Bicycle Lane Both Sides	Avondale Transportation Master Plan	Western Ave	Main Street	COLLECTOR	45
P23	0.31	DWC Center Dr	Sidewalk One Side	Avondale ATP 2022	400 feet southeast 114th Ave	Madison Street	LOCAL	46
P24	0.09	DWC Center Dr	Sidewalk Both Sides	Avondale ATP 2022	Avondale Blvd	Jefferson Street	LOCAL	47
P25	0.09	DWC Center Dr	Sidewalk One Side	Avondale ATP 2022	128th Avenue	Jefferson Street	LOCAL	48
P26	0.17	DWC Center Dr	Sidewalk One Side	Avondale ATP 2022	114th Ave	Civic Center Drive	COLLECTOR	49
B20	0.10	Goldwater Springs Blvd	Bicycle Lane Both Sides	Avondale Transportation Master Plan	Dead End	Dead End	COLLECTOR	50
P27	0.10	Goldwater Springs Blvd	Sidewalk Both Sides	Avondale ATP 2022	125th Avenue	125th Avenue	COLLECTOR	51
P28	0.12	County Line Rd	Sidewalk Both Sides	Avondale ATP 2022	25th Avenue	25th Avenue	LOCAL	52
M17	0.32	Durango Street	Trail Segment	Avondale Transportation Master Plan	Western Ave	Aqua Fria Trail	OFF-Street	53
B21	0.11	Dysart Road	Bicycle Lane Both Sides	Avondale Transportation Master Plan	Western Ave	Buckeye Road	ARTERIAL	54
B22	1.00	Dysart Road	Banner Wayfinding Signage	Wayfinding Master Plan	Indian School Road	Thomas	ARTERIAL	55
B23	1.39	Dysart Road	Banner Wayfinding Signage	Wayfinding Master Plan	Lower Buckeye Road	I-10	ARTERIAL	56
B24	2.19	Dysart/Vermerech Road	Sidewalk One Side	Avondale ATP 2022	Corral Street	Southern Ave	ARTERIAL	57
P30	0.08	Aqua Fria Ln	Sidewalk Both Sides	Avondale ATP 2022	Dysart Rd	Dead End	LOCAL	58
P31	0.25	Brinker Pl	Sidewalk Both Sides	Avondale ATP 2022	Central Ave	Eliseo C Felix Jr Way	COLLECTOR	59
P32	0.10	Corral St	Sidewalk One Side	Avondale ATP 2022	Central Ave	4th Street	LOCAL	60
P33	0.10	Corral St	Sidewalk One Side	Avondale ATP 2022	Central Ave	7th Street	LOCAL	61
P34	0.05	Ludlow Dr	Sidewalk One Side	Avondale ATP 2022	1st Street	3rd Street	LOCAL	62
P35	0.65	Elery Dr	Sidewalk One Side	Avondale ATP 2022	4th Street	420 feet East Eliseo C Felix Jr Way	LOCAL	63
P36	0.29	Western Ave	Sidewalk One Side	Avondale ATP 2022	Dysart Road	Eliseo C Felix Jr Way	LOCAL	64

Construction Cost	Inflation Adjustment	Design	contingency	Cost Estimate
\$ 188,480	\$ 210,551	\$ 21,055	\$ 21,055	\$ 295,000
\$ 44,107	\$ 49,272	\$ 4,927	\$ 4,927	\$ 69,000
\$ 24,825	\$ 27,732	\$ 2,773	\$ 2,773	\$ 39,000
\$ 696,859	\$ 778,462	\$ 77,846	\$ 77,846	\$ 1,090,000
\$ 283,105	\$ 316,256	\$ 31,626	\$ 31,626	\$ 443,000
\$ 17,838	\$ 19,926	\$ 1,993	\$ 1,993	\$ 28,000
\$ 128,741	\$ 143,816	\$ 14,382	\$ 14,382	\$ 201,000
\$ 110,937	\$ 123,928	\$ 12,393	\$ 12,393	\$ 173,000
\$ 15,783	\$ 17,331	\$ 1,763	\$ 1,763	\$ 25,000
\$ 293,958	\$ 328,380	\$ 32,838	\$ 32,838	\$ 460,000
\$ 114,076	\$ 127,434	\$ 12,743	\$ 12,743	\$ 178,000
\$ 177,160	\$ 197,906	\$ 19,791	\$ 19,791	\$ 272,000
\$ 71,452	\$ 79,819	\$ 7,982	\$ 7,982	\$ 112,000
\$ 78,441	\$ 87,627	\$ 8,763	\$ 8,763	\$ 123,000
\$ 96,055	\$ 107,303	\$ 10,730	\$ 10,730	\$ 150,000
\$ 21,030	\$ 23,493	\$ 2,349	\$ 2,349	\$ 32,000
\$ 27,078	\$ 30,449	\$ 3,025	\$ 3,025	\$ 42,000
\$ 700,363	\$ 783,275	\$ 78,238	\$ 78,238	\$ 1,095,000
\$ 64,953	\$ 72,559	\$ 7,256	\$ 7,256	\$ 102,000
\$ 54,457	\$ 60,834	\$ 6,083	\$ 6,083	\$ 85,000
\$ 5,945,232	\$ 6,641,486	\$ 664,149	\$ 664,149	\$ 9,298,000
\$ 4,149,482	\$ 4,635,386	\$ 463,539	\$ 463,539	\$ 6,490,000
\$ 2,021,316	\$ 2,258,012	\$ 225,801	\$ 225,801	\$ 3,161,000
\$ 5,613,022	\$ 6,270,307	\$ 627,031	\$ 627,031	\$ 8,881,000
\$ 3,733,370	\$ 4,169,341	\$ 416,943	\$ 416,943	\$ 5,837,000
\$ 3,837,178	\$ 4,286,512	\$ 428,651	\$ 428,651	\$ 6,001,000
\$ 48,837	\$ 54,555	\$ 5,456	\$ 5,456	\$ 76,000
\$ 33,600	\$ 37,535	\$ 3,753	\$ 3,753	\$ 53,000
\$ 1,308,491	\$ 1,461,716	\$ 146,172	\$ 146,172	\$ 2,046,000
\$ 2,799,778	\$ 3,127,632	\$ 312,763	\$ 312,763	\$ 4,379,000
\$ 163,206	\$ 181,312	\$ 18,131	\$ 18,131	\$ 254,000
\$ 38,670	\$ 43,109	\$ 4,310	\$ 4,310	\$ 60,000
\$ 65,549	\$ 73,225	\$ 7,322	\$ 7,322	\$ 103,000
\$ 171,194	\$ 193,258	\$ 19,258	\$ 19,258	\$ 269,000
\$ 91,868	\$ 102,403	\$ 10,240	\$ 10,240	\$ 143,000
\$ 185,555	\$ 207,783	\$ 20,783	\$ 20,783	\$ 290,000
\$ 20,812	\$ 23,037	\$ 2,304	\$ 2,304	\$ 32,000
\$ 732,19	\$ 81,793	\$ 8,179	\$ 8,179	\$ 115,000
\$ 647,565	\$ 723,395	\$ 72,339	\$ 72,339	\$ 1,013,000
\$ 571,797	\$ 638,754	\$ 63,875	\$ 63,875	\$ 894,000
\$ 363,583	\$ 406,159	\$ 40,616	\$ 40,616	\$ 569,000
\$ 45,486	\$ 50,813	\$ 5,081	\$ 5,081	\$ 71,000
\$ 177,737	\$ 198,550	\$ 19,855	\$ 19,855	\$ 278,000
\$ 336,364	\$ 375,753	\$ 37,575	\$ 37,575	\$ 526,000
\$ 122,788	\$ 137,167	\$ 13,717	\$ 13,717	\$ 192,000
\$ 299,332	\$ 334,384	\$ 34,384	\$ 34,384	\$ 488,000
\$ 146,632	\$ 160,037	\$ 16,004	\$ 16,004	\$ 232,000
\$ 231,319	\$ 258,406	\$ 25,841	\$ 25,841	\$ 362,000
\$ 34,354	\$ 38,377	\$ 3,838	\$ 3,838	\$ 54,000
\$ 69,916	\$ 78,103	\$ 7,810	\$ 7,810	\$ 109,000
\$ 63,838	\$ 71,313	\$ 7,313	\$ 7,313	\$ 100,000
\$ 35,361	\$ 39,501	\$ 3,950	\$ 3,950	\$ 55,000
\$ 77,380	\$ 86,442	\$ 8,644	\$ 8,644	\$ 121,000
\$ 91,451	\$ 102,160	\$ 10,216	\$ 10,216	\$ 143,000
\$ 649,300	\$ 725,533	\$ 72,533	\$ 72,533	\$ 1,015,000
\$ 37,913	\$ 42,353	\$ 4,235	\$ 4,235	\$ 59,000
\$ 33,600	\$ 37,535	\$ 3,753	\$ 3,753	\$ 53,000
\$ 33,600	\$ 37,535	\$ 3,753	\$ 3,753	\$ 53,000
\$ 766,279	\$ 856,010	\$ 85,601	\$ 85,601	\$ 1,198,000
\$ 29,911	\$ 33,413	\$ 3,341	\$ 3,341	\$ 47,000
\$ 186,827	\$ 208,704	\$ 20,870	\$ 20,870	\$ 292,000
\$ 222,814	\$ 248,905	\$ 24,890	\$ 24,890	\$ 348,000
\$ 38,943	\$ 43,503	\$ 4,350	\$ 4,350	\$ 61,000
\$ 62,447	\$ 69,759	\$ 6,976	\$ 6,976	\$ 98,000
\$ 33,920	\$ 37,892	\$ 3,789	\$ 3,789	\$ 53,000
\$ 243,241	\$ 271,724	\$ 27,172	\$ 27,172	\$ 380,000
\$ 110,114	\$ 123,009	\$ 12,301	\$ 12,301	\$ 172,000

P37		4.12 S el Mirage Rd	Avondale ATP 2022	Avondale ATP 2022	Buckeye Road	Indian Springs Road	Arterial		3,092,288	3,454,395	345,440	1,036,319	\$
P38		0.26 E el Mirage Rd	Avondale ATP 2022	Avondale ATP 2022	Alta Vista Road	Gila River	Arterial		195,247	218,110	21,811	65,433	\$
B25		0.36 E el Mirage Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Garfield Street	Van Buren Street	Arterial		124,488	139,066	13,907	41,720	\$
B26		0.74 E el Mirage Road	Avondale ATP 2022	Avondale ATP 2022	Highland Ave	Van Buren Street	Arterial		258,728	289,025	28,903	86,708	\$
B27		1.65 E el Mirage Road	Avondale ATP 2022	Avondale ATP 2022	Durango Street	Broadway Road	Arterial		579,188	647,011	64,701	194,103	\$
B28		2.02 E el Mirage Road	Avondale ATP 2022	Avondale ATP 2022	Broadway Road	Indian Springs Road	Arterial		708,181	791,109	79,111	237,333	\$
P39		0.11 Bkilo Felix Jr Way	Avondale ATP 2022	Avondale ATP 2022	Brinker Drive	Riley Drive	Collector		40,358	45,084	4,508	13,925	\$
B29		0.22 Encanto Blvd	Avondale ATP 2022	Avondale ATP 2022	115th Ave	112th Lane	Collector		76,062	84,969	8,497	25,491	\$
R2		0.44 Sarden Lakes Parkway	City of Avondale 5-year CIP	City of Avondale 5-year CIP	Thomas Road	Eastshore Drive	Collector						\$
MJ8		5.27 Gila River	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	Avondale Parks, Recreation, Libraries & Trails Master Plan Update 2017	143rd Ave	East of 107 Ave	Off-Street		10,543,008	11,777,759	1,177,759	3,533,278	\$
B30		1.99 Indian School Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	El Mirage Rd	103rd Ave	Arterial		697,943	779,672	77,967	233,902	\$
P40		0.24 Indian School Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	100th Ave	103rd Ave	Arterial		90,487	101,083	10,108	30,325	\$
P41		0.07 Indian School Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	El Mirage Rd	El Mirage Rd to East .07 miles	Arterial		54,694	61,099	6,110	18,330	\$
B31		0.17 Indian School Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	1000 Ft East El Mirage Road	Aqua Fria River Bridge	Arterial		58,617	65,481	6,548	19,644	\$
B32		0.31 Indian School Road	MCDOOT ATP 2018	MCDOOT ATP 2018	Aqua Fria River West	Aqua Fria River East	Arterial		106,992	119,521	11,952	35,856	\$
B33		0.25 Indian School Road	Avondale ATP 2022	Avondale ATP 2022	124th Ave	El Mirage Road	Arterial		86,926	97,105	9,710	29,131	\$
B34		0.50 Indian School Road	Avondale ATP 2022	Avondale ATP 2022	103rd Ave	99th Ave	Arterial		173,360	193,660	19,366	58,098	\$
P42		1.28 Indian Springs Road	Avondale ATP 2022	Avondale ATP 2022	133rd Ave	El Mirage Road	Arterial		960,605	1,073,091	107,309	321,997	\$
P43		0.06 Jefferson St	Avondale ATP 2022	Avondale ATP 2022	Avondale Blvd	Civic Center Drive	Local		21,465	23,378	2,398	7,193	\$
B35		0.28 Uitchfield Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Main Street	Lower Buckeye Road	Arterial		96,321	107,600	10,760	32,280	\$
B36		0.57 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	127th Ave	Aqua Fria River East	Arterial		200,544	224,028	22,403	67,208	\$
B37		0.49 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	127th Ave	El Mirage Rd	Arterial		192,541	192,746	19,275	57,824	\$
B38		0.16 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	4th St	Aqua Fria River West	Arterial		54,635	61,083	6,103	18,310	\$
B39		0.97 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	Avondale Blvd	Aqua Fria River West	Arterial		338,624	378,276	37,828	113,483	\$
B40		0.25 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	Uitchfield Rd	4th St	Arterial		25,124	28,066	2,807	8,739	\$
P44		0.03 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	125th Ave	125th Ave East .01 miles	Arterial		70,104	77,010	7,010	21,031	\$
P45		0.08 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	127th Ave	127th Ave East .07 miles	Arterial		540,084	603,327	60,333	180,998	\$
P46		0.72 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	4th St	127th Ave	Arterial		393,133	439,169	43,917	131,751	\$
P47		0.52 lower Buckeye Rd	MCDOOT ATP 2018	MCDOOT ATP 2018	300 feet East of 5th Ave	4th St	Arterial		80,180	89,569	8,957	26,871	\$
P48		0.31 lower Buckeye Rd Southside	MCDOOT ATP 2018	MCDOOT ATP 2018	Uitchfield Rd	300 feet East of 5th Ave	Arterial		352,291	393,345	39,354	118,953	\$
B41		1.01 lower Buckeye Road	Avondale ATP 2022	Avondale ATP 2022	El Mirage Road	Hummingbird 2 MPH	Arterial		96,947	108,399	10,830	32,490	\$
B42		0.28 Main Street	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Uitchfield Road	Hummingbird 2 MPH	Arterial		590,497	659,844	65,964	197,828	\$
B43		1.69 Main Street / Buckeye Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Hummingbird 2 MPH	1000 Ft West El Mirage Road	Arterial		54,096	60,431	6,043	18,129	\$
B44		0.31 McDonnell Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Harbor Shores Blvd	103rd Avenue	Arterial		168,682	188,335	18,843	56,530	\$
B45		0.48 McDonnell Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Avondale Blvd	117th Avenue	Arterial		515 Ft East 112th Avenue	73,437	7,344	22,081	\$
B46		0.19 McDonnell Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	119th Avenue	117th Avenue	Arterial		65,739	73,437	7,344	22,081	\$
B47		0.20 McDonnell Road	Avondale Transportation Master Plan	Avondale Transportation Master Plan	Rancho Santa Fe	Aqua Fria River	Arterial		68,633	76,669	7,667	23,001	\$
B48		0.67 McDonnell Road	Avondale ATP 2022	Avondale ATP 2022	12th Ave	Aqua Fria River	Arterial		734,705	762,189	26,219	78,657	\$
B49		0.31 McDonnell Road	Avondale ATP 2022	Avondale ATP 2022	Avondale Blvd	Avondale Blvd	Arterial		110,208	123,113	13,111	36,894	\$
B50		0.14 McDonnell Road	Avondale ATP 2022	Avondale ATP 2022	Aqua Fria River West	119th Ave	Arterial		363,704	403,177	40,158	121,353	\$
P49		0.50 E 103rd Ave	Avondale ATP 2022	Avondale ATP 2022	Wilderby Drive	Thomas Road	Local		323,377	382,770	38,247	114,741	\$
P50		0.50 E 103rd Ave	Avondale ATP 2022	Avondale ATP 2022	Wilderby Drive	Thomas Road	Local		377,079	431,135	42,178	127,353	\$
P51		0.48 E 103rd Ave	Avondale ATP 2022	Avondale ATP 2022	Wilderby Drive	Thomas Road	Local		343,880	384,148	38,415	115,244	\$
P52		0.48 E 103rd Ave	Avondale ATP 2022	Avondale ATP 2022	Wilderby Drive	Thomas Road	Local		374,791	418,079	41,868	125,604	\$
P53		0.10 N 107th Ave	Avondale ATP 2022	Avondale ATP 2022	McDowell Road	Encanto Blvd	Arterial		36,298	42,783	4,478	12,835	\$
P54		0.14 N 107th Ave	Avondale ATP 2022	Avondale ATP 2022	McDowell Road	Encanto Blvd	Arterial		102,842	114,884	11,468	34,465	\$
P55		0.08 N 107th St	Avondale ATP 2022	Avondale ATP 2022	320 feet North Encanto Blvd	435 feet south Riley Drive	Local		31,049	34,684	3,468	10,405	\$
P56		0.22 N 117th Ave	Avondale ATP 2022	Avondale ATP 2022	McDowell Road	Western Ave	Local		93,534	95,338	9,534	28,001	\$
P57		0.24 N 117th Ave	Avondale ATP 2022	Avondale ATP 2022	McDowell Road	1/4 mile south McDowell Road	Local		91,481	102,153	10,219	30,658	\$
P58		0.24 N 117th Ave	Avondale ATP 2022	Avondale ATP 2022	McDowell Road	Roosevelt Ave	Collector		91,703	102,441	10,244	30,732	\$
P59		0.03 N 125th Dr	Avondale ATP 2022	Avondale ATP 2022	Thomas Road	Virginia Ave	Collector		20,669	23,089	2,309	6,927	\$
P60		0.12 N 124 Ave	Avondale ATP 2022	Avondale ATP 2022	Warner Street	Dead End	Local		44,127	49,295	4,929	14,788	\$
P61		0.13 N 3rd St	Avondale ATP 2022	Avondale ATP 2022	Walden Drive	Hill Drive	Local		96,321	105,365	10,537	31,610	\$
P62		0.10 N 4th Ave	Avondale ATP 2022	Avondale ATP 2022	Kinderman Drive	Hill Drive	Local		36,907	41,229	4,123	12,369	\$
P63		1.28 N 99th Ave	Avondale ATP 2022	Avondale ATP 2022	Loma Linda Blvd	Brinker Drive	Local		1,333,737	1,489,917	148,992	446,975	\$
P64		0.22 N 99th Ave	Avondale ATP 2022	Avondale ATP 2022	Indian School Road	Palm Lane	Arterial		93,618	93,618	9,362	28,085	\$
P65		0.10 N Dysart Rd	Avondale ATP 2022	Avondale ATP 2022	McDowell Road	McDowell Road	Arterial		83,804	93,618	9,362	28,085	\$
P66		0.15 N Dysart Rd	Avondale ATP 2022	Avondale ATP 2022	Indian School Road	500 Ft south of Dysart Road	Arterial		37,140	41,489	4,149	12,447	\$
P67		0.38 N el Mirage Rd	Avondale ATP 2022	Avondale ATP 2022	Indian School Road	825 feet north Indian School Road	Arterial		109,665	122,507	12,251	36,752	\$
P68		0.15 N el Mirage Rd	Avondale ATP 2022	Avondale ATP 2022	Safe Routes to School Studies	Indian School Road	Arterial		217,476	242,943	24,293	72,883	\$
P69		0.34 N el Mirage Rd	Avondale ATP 2022	Avondale ATP 2022	Garfield Street	Indian School Road	Arterial		117,161	130,881	13,088	39,264	\$
R3		0.14 Palm Lane	Safe Routes to School Studies	Safe Routes to School Studies	116th Avenue	Van Buren Street	Arterial		128,570	143,026	14,368	43,088	\$
P70		0.40 Roosevelt St	Avondale ATP 2022	Avondale ATP 2022	103rd Ave	118th Avenue	Local		441,763	493,494	49,349	148,048	\$
B51		1.00 Roosevelt Street	Avondale ATP 2022	Avondale ATP 2022	107th Ave	99th Ave	Local		351,133	392,251	39,225	117,675	\$
P71		0.15 S 107th	Avondale ATP 2022	Avondale ATP 2022	350 north Buckeye Road	2nd Street	Arterial		56,561	63,184	6,318	18,955	\$
P72		0.09 S 107th Ave	Avondale ATP 2022	Avondale ATP 2022	125 feet south Lower Buckeye Road	600 feet south Lower Buckeye Road	Arterial		66,065	73,801	7,380	22,140	\$
P73		0.14 S 107th Ave	Avondale ATP 2022	Avondale ATP 2022	600 feet south Lower Buckeye Road	Miami Ave	Arterial		51,894	57,941	5,794	17,382	\$
P74		0.25 S 107th Ave	Avondale ATP 2022	Avondale ATP 2022	Miami Ave	1/4 Mile south Miami Ave	Arterial		188,361	210,419	21,042	63,071	\$
P75		0.26 S 107th Ave	Avondale ATP 2022	Avondale ATP 2022	Jones Ave	Jones Ave	Arterial		95,697	106,904	10,690	32,126	\$
P76		0.25 S 107th Ave	Avondale ATP 2022	Avondale ATP 2022	Lower Buckeye Road	Broadway Road	Arterial		187,722	209,704	20,970	62,911	\$
P77		0.19 S 109th Ave	Avondale ATP 2022	Avondale ATP 2022	Pecan Road	Southern Ave	Local		141,747	158,346	15,835	47,504	\$
P78		0.26 S 111th Ave	Avondale ATP 2022	Avondale ATP 2022	Lower Buckeye Road	Miami Ave	Local		193,981	216,096	21,670	65,009	\$
P79		0.29 S 114th Ave	Avondale ATP 2022	Avondale ATP 2022	Sumland Ave	Southern Ave	Local		217,649	243,314	24,314	72,941	\$

P80		0.45 S 122nd Ave	Avondale ATP 2022	Southern Ave	Gila River	LOCAL	143	\$	339,617	\$	379,386	\$	37,939	\$	113,816	\$	531,000
P81		0.28 S 122nd Ave	Avondale ATP 2022	Vermeersch Road	Illini Street	COLLECTOR	144	\$	106,627	\$	119,113	\$	11,911	\$	35,734	\$	167,000
P82		0.31 S 122nd Ave	Avondale ATP 2022	Lower Buckeye Road	Southern Ave	COLLECTOR	145	\$	232,135	\$	259,318	\$	25,932	\$	77,795	\$	363,000
P83		0.16 S 122nd Ave	Avondale ATP 2022	Hidalgo Ave	Southern Ave	LOCAL	146	\$	121,653	\$	135,899	\$	13,590	\$	40,770	\$	190,000
P84		0.16 S 122nd Ave	Avondale ATP 2022	Overlin Lane	Whyman Ave	LOCAL	147	\$	121,120	\$	135,303	\$	13,530	\$	40,591	\$	189,000
P85		0.06 S 115 St	Avondale ATP 2022	Park Drive	Elm Lane	LOCAL	148	\$	47,323	\$	52,864	\$	5,286	\$	15,859	\$	74,000
P86		0.13 S 3rd Ave	Avondale ATP 2022	Western Ave	Rhodes Ave	LOCAL	149	\$	48,045	\$	53,671	\$	5,367	\$	16,101	\$	75,000
P87		0.10 S 8th St	Avondale ATP 2022	Western Ave	Buckeye Road	ARTERIAL	150	\$	38,477	\$	42,983	\$	4,298	\$	12,895	\$	60,000
P88		0.13 S Avondale Blvd	Avondale ATP 2022	Rio Vista Lane	Lower Buckeye Road	ARTERIAL	151	\$	48,912	\$	54,640	\$	5,464	\$	16,332	\$	76,000
P89		1.24 S Dwyer Rd	Avondale ATP 2022	1.5 miles south of Superior Street	Southern Ave	ARTERIAL	152	\$	931,969	\$	1,041,102	\$	104,110	\$	312,331	\$	1,458,000
P90		0.08 S Greenleaf Ln	Avondale ATP 2022	Main Street	Dead End	LOCAL	153	\$	60,269	\$	67,327	\$	6,733	\$	20,198	\$	94,000
P91		0.67 S Greenleaf Ln	Avondale ATP 2022	Superior Street	1.5 miles south Superior Ave	COLLECTOR	154	\$	502,041	\$	560,830	\$	56,833	\$	168,249	\$	785,000
P92		0.24 W Alta Vista Rd	Avondale ATP 2022	El Mirage Road	121st Ave	LOCAL	155	\$	179,768	\$	200,819	\$	20,082	\$	60,246	\$	281,000
P93		2.97 Southern Ave	Avondale ATP 2022	Dwyer Road	107th Ave	ARTERIAL	156	\$	1,038,933	\$	1,160,592	\$	116,059	\$	348,178	\$	1,625,000
MJ9		0.57 98-30	Avondale Transportation Master Plan	119th Ave	Avondale Blvd	OFF-Street	157	\$	1,131,764	\$	1,264,294	\$	126,429	\$	379,288	\$	1,770,000
B53		0.63 Thomas Road	Avondale Transportation Master Plan	Litchfield Road	Estrella Mountain CC	ARTERIAL	158	\$	220,494	\$	246,314	\$	24,631	\$	73,894	\$	345,000
B54		0.38 Thomas Road	Avondale Transportation Master Plan	Estrella Mountain CC	Estrella Mountain CC	ARTERIAL	159	\$	66,239	\$	73,996	\$	7,400	\$	22,769	\$	104,000
B55		0.37 Thomas Road	Avondale Transportation Master Plan	Dwyer Road	560 ft East Santa Fe Trl	ARTERIAL	160	\$	130,425	\$	145,697	\$	14,570	\$	43,799	\$	204,000
B56		0.62 Thomas Road	Wayfinding Master Plan	136th Avenue	Dwyer Road	ARTERIAL	161	\$	33,600	\$	37,535	\$	3,753	\$	11,260	\$	53,000
B58		0.42 Thomas Road	Avondale ATP 2022	Rancho Santa Fe Blvd	Aqua Fria River West	ARTERIAL	162	\$	146,280	\$	163,410	\$	16,341	\$	49,023	\$	229,000
MJ10		0.21 Thomas Road	Avondale ATP 2022	Aqua Fria River East	118th Drive	ARTERIAL	163	\$	74,942	\$	83,718	\$	8,372	\$	25,115	\$	117,000
B59		3.62 Van Buren Street	Avondale Transportation Master Plan	McDowell Road	Van Buren	OFF-Street	164	\$	1,765,094	\$	1,971,787	\$	197,179	\$	591,536	\$	2,761,000
B60		0.49 Van Buren Street	Avondale ATP 2022	Aqua Fria River West	96th Ave	ARTERIAL	165	\$	1,266,602	\$	1,414,921	\$	141,492	\$	424,476	\$	2,871,000
P94		0.32 W Alton Dr	Avondale ATP 2022	Central Ave	Dwyer Road	ARTERIAL	166	\$	173,141	\$	193,416	\$	19,342	\$	58,025	\$	271,000
P95		0.11 W Bohne St	Avondale ATP 2022	112 Mile west Avondale Blvd	Avondale Blvd	LOCAL	168	\$	389,437	\$	435,107	\$	43,511	\$	130,532	\$	619,000
P96		0.88 W Broadway Rd	Avondale ATP 2022	127th Ave	Dead End	LOCAL	169	\$	263,138	\$	293,951	\$	29,395	\$	88,185	\$	412,000
P97		0.35 W Catalina Dr	Avondale ATP 2022	Avondale Blvd	107th Ave	ARTERIAL	170	\$	80,033	\$	89,405	\$	8,941	\$	26,822	\$	125,000
P98		0.35 W Chambers Ave	Avondale ATP 2022	106th Ave	107th Ave	ARTERIAL	171	\$	733,068	\$	818,910	\$	81,891	\$	245,673	\$	1,146,000
P99		0.40 W Elwell Dr	Avondale ATP 2022	Avondale Blvd	350 feet east 144th Ave	LOCAL	172	\$	185,996	\$	207,776	\$	20,778	\$	62,333	\$	291,000
P100		0.24 W Elwood St	Avondale ATP 2022	106th Ave	107th Ave	LOCAL	174	\$	298,946	\$	333,952	\$	33,395	\$	100,186	\$	468,000
P101		0.15 W Elwood St	Avondale ATP 2022	125th Ave	125th Ave	LOCAL	175	\$	182,782	\$	204,186	\$	20,419	\$	61,256	\$	286,000
P102		0.13 W Elwood St	Avondale ATP 2022	107th Ave	El Mirage Road	COLLECTOR	176	\$	95,427	\$	106,601	\$	10,660	\$	31,980	\$	149,000
P103		1.01 W Elwood Blvd	Avondale ATP 2022	El Mirage Road	122nd Ave	LOCAL	177	\$	47,521	\$	53,085	\$	5,309	\$	15,926	\$	74,000
P104		0.25 W Elwood St	Avondale ATP 2022	107th Ave	99th Ave	LOCAL	178	\$	380,356	\$	424,886	\$	42,486	\$	127,669	\$	595,000
P105		0.35 W Elwood St	Avondale ATP 2022	106th Ave	107th Ave	LOCAL	179	\$	92,084	\$	103,867	\$	10,387	\$	30,860	\$	144,000
P106		0.49 W Elwood Ave	Avondale ATP 2022	Avondale Blvd	111th Ave	LOCAL	180	\$	264,030	\$	294,937	\$	29,494	\$	88,481	\$	413,000
P107		0.31 W Elwood Ave	Avondale ATP 2022	14 Mile El Mirage Road	El Mirage Road	LOCAL	181	\$	365,653	\$	409,620	\$	40,960	\$	127,880	\$	572,000
P108		0.40 W Elwood Ave	Avondale ATP 2022	320 feet east 129th Ave	320 feet east 129th Ave	LOCAL	182	\$	235,749	\$	263,356	\$	26,336	\$	79,007	\$	369,000
P109		0.35 W Elwood Ave	Avondale ATP 2022	510 feet west of 109th Ave	109th Ave	LOCAL	183	\$	303,549	\$	339,094	\$	33,909	\$	101,778	\$	475,000
P110		0.38 W Elwood St	Avondale ATP 2022	127th Ave	128th Drive	LOCAL	184	\$	89,486	\$	99,965	\$	9,966	\$	29,989	\$	140,000
P111		0.13 W Elwood St	Avondale ATP 2022	Vermeersch Road	Dead End	LOCAL	185	\$	70,951	\$	79,971	\$	7,971	\$	23,781	\$	111,000
P112		0.25 W Elwood St	Avondale ATP 2022	Litchfield Park	El Mirage Road	LOCAL	186	\$	143,703	\$	163,930	\$	16,933	\$	48,339	\$	223,000
P113		1.13 W Indian School Rd	Avondale ATP 2022	123th Ave	Dwyer Road	ARTERIAL	187	\$	32,342	\$	36,356	\$	3,636	\$	10,340	\$	44,000
P114		0.81 W Indian School Rd	Avondale ATP 2022	380 feet East El Mirage Road	Copernicus Drive	ARTERIAL	188	\$	424,016	\$	473,068	\$	47,367	\$	142,100	\$	663,000
P115		0.25 W Indian School Rd	Avondale ATP 2022	320 feet east Santa Fe Trl	320 feet east Santa Fe Trl	ARTERIAL	189	\$	605,838	\$	676,782	\$	67,678	\$	203,035	\$	947,000
P116		0.11 W Indian School Rd	Avondale ATP 2022	123th Drive	745 feet West El Mirage Road	ARTERIAL	190	\$	106,532	\$	121,308	\$	12,131	\$	36,392	\$	170,000
P117		0.14 W Indian School Rd	Avondale ATP 2022	145 feet West El Mirage Road	El Mirage Road	ARTERIAL	191	\$	40,214	\$	44,923	\$	4,492	\$	13,477	\$	63,000
P118		0.57 W Lower Buckeye Rd	Avondale ATP 2022	Avondale Blvd	107th Ave	ARTERIAL	192	\$	105,509	\$	118,311	\$	11,831	\$	35,493	\$	166,000
P119		0.16 W Lower Buckeye Rd	Avondale ATP 2022	Avondale Blvd	126th Ave	ARTERIAL	193	\$	362,319	\$	404,746	\$	40,475	\$	121,424	\$	567,000
P120		0.21 W Lower Buckeye Rd	Avondale ATP 2022	175 feet East 125th Ave	125th Ave	ARTERIAL	194	\$	159,221	\$	177,865	\$	17,787	\$	53,360	\$	249,000
P121		0.07 W Lower Buckeye Rd	Avondale ATP 2022	El Mirage Road	460 feet East El Mirage Road	ARTERIAL	195	\$	25,509	\$	28,497	\$	2,850	\$	8,549	\$	40,000
P122		0.59 W Lower Buckeye Rd	Avondale ATP 2022	121st Drive	116th Ave	ARTERIAL	196	\$	220,741	\$	246,889	\$	24,689	\$	73,977	\$	345,000
P123		0.17 W Lower Buckeye Rd	Avondale ATP 2022	1st Ave	Avondale Blvd	ARTERIAL	197	\$	124,120	\$	138,654	\$	13,865	\$	41,596	\$	194,000
P124		0.05 W Warden Dr	Avondale ATP 2022	117th Ave	Central Ave	LOCAL	199	\$	36,260	\$	40,506	\$	4,051	\$	12,352	\$	57,000
P125		0.32 W McDowell Rd	Avondale ATP 2022	113th Drive	Avondale Blvd	ARTERIAL	200	\$	239,689	\$	267,757	\$	26,776	\$	80,327	\$	375,000
P126		0.08 W McDowell Rd	Avondale ATP 2022	415 feet East 112th Ave	113th Ave	ARTERIAL	201	\$	30,160	\$	33,692	\$	3,369	\$	10,208	\$	47,000
P127		0.50 W McDowell Rd	Avondale ATP 2022	119th Ave	107th Ave	ARTERIAL	202	\$	186,660	\$	210,752	\$	21,075	\$	63,226	\$	295,000
P128		0.18 W McDowell Rd	Avondale ATP 2022	117th Ave	117th Ave	ARTERIAL	203	\$	68,023	\$	75,988	\$	7,599	\$	22,796	\$	106,000
P129		0.34 W McDowell Rd	Avondale ATP 2022	Aqua Fria River West	Aqua Fria River East	ARTERIAL	204	\$	128,126	\$	143,330	\$	14,313	\$	42,959	\$	200,000
P130		0.57 W Miami Ave	Avondale ATP 2022	Avondale Blvd	107th Ave	LOCAL	205	\$	725,120	\$	810,031	\$	81,003	\$	243,009	\$	1,134,000
P131		0.35 W Mulberry St	Avondale ATP 2022	106th Ave	103rd Ave	LOCAL	206	\$	263,187	\$	294,006	\$	29,401	\$	88,202	\$	412,000
P132		0.09 W Overlin Ln	Avondale ATP 2022	1st Ave	Central Ave	LOCAL	207	\$	67,828	\$	75,770	\$	7,777	\$	23,770	\$	106,000
P133		0.12 W Palm Ln	Avondale ATP 2022	119th Ave	650 feet East 119th Ave	LOCAL	208	\$	46,687	\$	52,154	\$	5,215	\$	15,646	\$	73,000
P134		0.25 W Palm Ln	Avondale ATP 2022	116th Lane	Avondale Blvd	LOCAL	209	\$	93,022	\$	103,915	\$	10,392	\$	31,705	\$	145,000
P135		0.19 W Pecon Rd	Avondale ATP 2022	625 feet West 109th Ave	107th Ave	LOCAL	210	\$	278,497	\$	311,109	\$	31,111	\$	93,333	\$	436,000
P136		0.19 W Pioneer St	Avondale ATP 2022	125th Ave	330 feet east 124th Ave	LOCAL	211	\$	72,282	\$	80,746	\$	8,075	\$	24,224	\$	113,000
P137		0.12 W Pioneer St	Avondale ATP 2022	127th Ave	Dead End	LOCAL	212	\$	86,279	\$	96,383	\$	9,638	\$	28,915	\$	135,000
P138		0.24 W Roeder Rd	Avondale ATP 2022	Avondale Blvd	350 feet east 144th Ave	LOCAL	213	\$	176,964	\$	197,687	\$	19,769	\$	59,306	\$	277,000
P139		0.16 W Roosevelt St	Avondale ATP 2022	320 Drive	119th Ave	LOCAL	214	\$	61,660	\$	68,880	\$	6,888	\$	20,664	\$	96,000
P140		3.47 W Southern Ave	Avondale ATP 2022	Buckeye Canal	107th Ave	ARTERIAL	215	\$	2,599,428	\$	2,903,382	\$	290,382	\$	871,146	\$	4,065,000
P141		0.25 W Sunland Ave	Avondale ATP 2022	Avondale Blvd	350 feet east 144th Ave	LOCAL	216	\$	186,155	\$	207,954	\$	20,795	\$	62,386	\$	291,000

Facility Type	Cost	Unit
Bike lanes (both sides)	\$350,000	Per mile
New off-street paved path	2,000,000	Per mile
PAV Crossing	\$1,800,000.00	Per crossing
Sidewalks (include C/G)	\$21	Per linear foot
Local road	\$3,200,000.00	Per mile
Bicycle wayfinding sign	\$1,685	Per sign
Design factor	10%	-
Contingency factor	30%	-

ATTRIBUTE TABLE														EVALUATION				
Project ID	Length (Miles)	Location	Facility Type	Limit From	Limit To	Project Cost	Access & Connectivity	Safety	Resilient User Stress Level	Equity	Environmental & Sustainability	Total	Tier	Rank				
B123	1.39	Dyart Road	Barrier Wayfinding Signage	Thomas Road	110	\$53,000	12	30	17.5	7.5	12.25	79.25	Short	1				
B30	1.59	Indian School Rd	Barrier Wayfinding Signage	El Mirage Rd	103rd Ave	\$1,092,000	20	23.5	15	6.625	7.625	72.75	Short	2				
B22	1.00	Dyart Road	Barrier Wayfinding Signage	Indian School Road	Thomas	\$53,000	11	26.25	15	6.625	12.25	71.13	Short	3				
B43	1.69	Man Street / Buckeye Road	Barrier Wayfinding Signage	Hummingbird / 2 MPH	1000 ft West El Mirage Road	\$904,000	13.5	19.75	15	13.125	8.5	69.88	Short	4				
B62	0.48	Van Buren Street	Bicycle Lane Both Sides	Central Ave	Dyart Road	\$271,000	12	30	12.5	7.5	7.625	69.63	Short	5				
B45	0.48	Van Buren Street	Bicycle Lane Both Sides	Central Ave	Dyart Road	\$271,000	12	30	12.5	7.5	7.625	69.63	Short	6				
P19	1.53	Buckeye Rd	Bicycle Lane Both Sides	119th Ave	107th Ave	\$894,000	13.5	18.75	12.5	10.375	7.625	62.75	Short	7				
P124	0.05	W Madden Dr	Sidewalk Both Sides	341 Ave	Central Ave	\$57,000	12.5	19.75	5.5	15	9.5	62.25	Short	8				
B21	0.11	Dyart Road	Bicycle Lane Both Sides	Western Ave	Buckeye Road	\$59,000	9.5	18.75	8.5	15	10.375	62.13	Short	9				
B59	3.92	Van Buren Street	Bicycle Lane Both Sides	Agua Fria River West	99th Ave	\$1,981,000	17.5	16	13.5	7.5	7.625	62.13	Short	10				
B39	0.42	Central Avenue	Bicycle Lane Both Sides	Western Ave	Man Street	\$232,000	15	10.5	11	15	10.375	61.88	Short	11				
B10	0.19	99th Avenue	Bicycle Lane Both Sides	McDowell Road	110th Ave	\$102,000	9.5	18.75	16	6.625	10.375	61.25	Short	12				
P113	1.13	W Indian School Rd	Sidewalk One Side	Litchfield Park	Dyart Road	\$663,000	11	22.5	12.5	5.75	9.5	61.25	Short	14				
P52	1.00	N 107th Ave	McDowell One Side	McDowell Road	Van Buren Street	\$586,000	12.5	19.75	12.5	6.625	9.5	60.88	Short	15				
B5	0.84	111th Ave	Bicycle Lane Both Sides	Rosander Drive	McDowell Road	\$460,000	15	18.75	11	7.5	7.625	59.88	Short	16				
B9	2.00	99th Avenue	Bicycle Lane Both Sides	Indian School Road	McDowell Road	\$1,095,000	9.5	22.5	12.5	6.625	8.5	59.63	Short	17				
B54	0.28	Thomas Road	Bicycle Lane One Side	Estrella Mountain CC	Dyart Road	\$104,000	13.5	16	11	6.625	10.375	59.00	Short	18				
B47	0.28	Thomas Road	Bicycle Lane One Side	Estrella Mountain CC	Dyart Road	\$104,000	13.5	16	11	6.625	10.375	59.00	Short	19				
B44	0.31	McDowell Road	Bicycle Lane One Side	Harbor Shores Blvd	103rd Avenue	\$85,000	9.5	16	16	6.625	10.375	58.50	Short	20				
B56	0.62	Thomas Road	Barrier Wayfinding Signage	136th Avenue	Dyart Road	\$53,000	11	16	12.5	6.625	12.25	58.38	Short	21				
P16	0.49	Avondale Blvd	Sidewalk One Side	Encanto Blvd	McDowell Road	\$290,000	12.5	18.75	9.5	7.5	9.5	57.75	Short	22				
B36	0.57	Lower Buckeye Rd	Bicycle Lane Both Sides	Agua Fria River West	103rd Ave	\$314,000	13.5	19.75	9.5	6.625	7.625	57.00	Short	23				
B45	0.48	McDowell Road	Bicycle Lane Both Sides	Avondale Blvd	342 ft East 127th Avenue	\$264,000	11.5	18.25	9.5	7.5	7.625	56.63	Short	24				
B55	0.37	Thomas Road	Barrier Wayfinding Signage	Dyart Road	560 ft East San Rafael Trl	\$204,000	12.5	18.75	8	6.625	10.375	56.25	Short	25				
B48	0.67	McDowell Road	Bicycle Lane Both Sides	112th Ave	Harbor Shores Blvd	\$367,000	12.5	13.25	16	6.625	7.625	56.00	Short	27				
P31	0.30	E Brooke Pl	Sidewalk Both Sides	Central Ave	4th Street	\$346,000	11	13.25	7	15	9.5	55.75	Short	28				
P143	0.91	W Thomas Rd	Sidewalk One Side	106th Ave	99th Ave	\$533,000	12	13.25	13.5	7.5	9.5	55.75	Short	29				
P20	0.37	Buckeye Rd	Sidewalk One Side	El Mirage Road	110th Ave	\$509,000	12	16	12.5	7.5	7.625	55.63	Short	30				
B68	0.37	Central Avenue	Bicycle Lane One Side	Central Avenue	110th Ave	\$1,000	11	10.5	9.5	7.5	10.375	55.25	Short	31				
P35	0.65	E Riley Dr	Sidewalk One Side	4th Street	119.75	\$380,000	8	10.5	9.5	7.5	12.25	55.25	Short	32				
P71	0.15	5-107th	Sidewalk One Side	350 foot north Buckeye Road	420 feet East Ellice C Fels Jr Way	\$88,000	11	10.5	11	12.25	9.5	54.75	Short	34				
B18	0.86	Buckeye Road	Bicycle Lane Both Sides	121st Lane	Avondale Blvd	\$488,000	13.5	16	11	8.5	4.875	53.88	Short	35				
B3	0.81	107th Ave	Bicycle Lane Both Sides	110th Ave	Van Buren Street	\$443,000	11	16	12.5	6.625	7.625	53.75	Short	36				
P36	0.29	E Western Ave	Sidewalk One Side	Dyart Road	Ellice C Fels Jr Way	\$174,000	9.5	16	5.5	13.125	9.5	53.63	Short	37				
B42	0.28	Man Street	Bicycle Lane Both Sides	Litchfield Road	Harmon Road / 2 MPH	\$152,000	9	10.5	9.5	15	10.375	53.38	Short	38				
B42	0.28	Man Street	Bicycle Lane Both Sides	Litchfield Road	Harmon Road / 2 MPH	\$152,000	9	10.5	9.5	15	10.375	53.38	Short	39				
P15	0.24	Avondale Blvd	Sidewalk One Side	City Center Drive	Van Buren Street	\$143,000	8	13.25	16	6.625	9.5	53.38	Short	40				
P61	0.13	N 3rd St	Sidewalk Both Sides	Kendleman Drive	Hill Drive	\$348,000	12.5	10.5	5.5	15	9.5	53.00	Mld	41				
P126	0.08	W McDowell Rd	Sidewalk One Side	113th Ave	113th Ave	\$47,000	9.5	10.5	16	7.5	9.5	53.00	Mld	42				
B47	0.20	McDowell Rd	Bicycle Lane Both Sides	Rancho Santa Fe	Agua Fria River	\$107,000	11	10.5	13.5	7.5	10.375	52.88	Mld	43				
P127	0.50	W McDowell Rd	Sidewalk One Side	415 feet East 112th Ave	320 feet East 107th	\$295,000	12.5	13.25	11	6.625	9.5	52.88	Mld	44				
P21	0.06	Buckeye Rd	Sidewalk Both Sides	107th Ave	320 feet East 107th	\$71,000	9.5	10.5	11	12.25	9.5	52.75	Mld	45				
P64	0.22	N 9th Ave	Sidewalk One Side	Palm Lane	McDowell Road	\$131,000	9	18.75	11	6.625	6.75	52.63	Mld	46				
P12	0.10	Avondale Blvd	Sidewalk One Side	Reverend Street	Reverend Street	\$60,000	8	13.25	16	5.75	9.5	52.50	Mld	47				
B61	0.10	Avondale Blvd	Bicycle Signage	Van Buren Street and Agua Fria River EB	...	\$3,000	11	10.5	11	7.5	12.25	52.25	Mld	48				
B13	0.18	99th Avenue	Bicycle Lane Both Sides	420 feet North Van Buren St	...	\$5,000	11	10.5	16	4	10.375	51.88	Mld	49				
P32	0.10	E Corral St	Sidewalk One Side	Central Street	7th Street	\$61,000	11	10.5	5.5	15	9.5	51.50	Mld	50				
P29	0.07	107th Ave	Sidewalk One Side	350 feet north Buckeye Rd	Buckeye Rd	\$39,000	9.5	10.5	9.5	12.25	12.25	51.50	Mld	51				
P155	0	Avondale Blvd	HAWK Crossing	Avondale and Littleton Elementary	...	\$282,000	7	10.5	11	10.375	12.25	51.13	Mld	53				
B14	3.74	Avondale Blvd	Bicycle Lane Both Sides	Lower Buckeye Road	Southern Ave	\$2,046,000	11	16	13.5	4.875	5.75	51.13	Mld	54				
P125	3.73	Avondale Blvd	Sidewalk Both Sides	Lower Buckeye Road	El Mirage Road	\$4,379,000	11	16	13.5	4.875	7.625	53.00	Mld	55				
P125	0.32	W McDowell Rd	Sidewalk Both Sides	Agua Fria River West	117th Ave	\$375,000	9.5	13.25	11	7.5	9.5	50.75	Mld	56				
P129	0.34	W McDowell Rd	Sidewalk One Side	Agua Fria River West	Agua Fria River East	\$200,000	9.5	10.5	13.5	7.5	9.5	50.50	Mld	57				
B43	1.01	Lower Buckeye Road	Bicycle Lane Both Sides	El Mirage Road	Avondale Blvd	\$551,000	13.5	13.25	11	4.875	7.625	50.25	Mld	58				
P84	0.63	Thomas Road	Bicycle Lane Both Sides	Litchfield Road	Estrella Mountain CC	\$345,000	11	10.5	12.5	5.75	10.375	50.13	Mld	59				
P65	0.16	5-114 Ave	Sidewalk One Side	Ovlerin Lane	Whitman Ave	\$189,000	9.5	10.5	5.5	15	9.5	50.00	Mld	60				
B46	0.10	N Dyart Rd	Bicycle Signage	Indian School Road and 120th Avenue	500 ft South of Dyart Road	\$86,000	8	13.25	13.5	5.75	9.5	50.00	Mld	61				
B63	0.10	N Dyart Rd	Bicycle Signage	Indian School Road and 120th Avenue WB	...	\$86,000	8	13.25	13.5	5.75	9.5	50.00	Mld	62				
B39	0.97	Lower Buckeye Rd	Bicycle Lane Both Sides	Avondale Blvd	107th Ave	\$530,000	9.5	10.5	11	6.625	12.25	49.88	Mld	63				
P149	0.50	W Van Buren St	Sidewalk One Side	159th Ave	Avondale Blvd	\$294,000	9.5	13.25	9.5	5.75	10.375	49.88	Mld	64				
P149	0.25	W Van Buren St	Sidewalk One Side	159th Ave	120th Ave	\$147,000	9.5	13.25	11	6.625	9.5	49.88	Mld	65				
P13	0.17	Avondale Blvd	Sidewalk One Side	515 feet south Roosevelt Street	City Center Drive	\$103,000	8	10.5	16	5.75	9.5	49.75	Mld	67				
P13	0.10	Avondale Blvd	Sidewalk Both Sides	Roosevelt Street	...	\$115,000	8	10.5	16	5.75	9.5	49.75	Mld	68				
P150	0.27	W Van Buren St	Sidewalk One Side	Agua Fria River West	Agua Fria River East	\$31,000	9	10.5	11	7.5	9.5	49.75	Mld	69				
B66	0	Avondale Blvd	Bicycle Signage	Avondale Blvd and Van Buren Street SB	...	\$3,000	4	10.5	16	6.625	12.25	49.38	Mld	70				
B67	0	Avondale Blvd	Bicycle Signage	Avondale Blvd and Van Buren Street NB	...	\$3,000	4	10.5	16	6.625	12.25	49.38	Mld	71				
P27	4.12	5-e El Mirage Rd	Sidewalk Both Sides	Buckeye Road	Indian Springs Road	\$4,886,000	13.5	13.25	12	4.875	7.625	51.25	Mld	72				
B62	0	Van Buren Street	Bicycle Signage	Van Buren Street and Agua Fria River WB	...	\$3,000	8	10.5	11	7.5	12.25	49.25	Mld	73				
P118	0.97	W Lower Buckeye Rd	Sidewalk One Side	Avondale Blvd	107th Ave	\$567,000	11	13.25	9.5	5.75	9.5	49.00	Mld	74				
B49	0.31	McDowell Road	Bicycle Lane Both Sides	117th Ave	Avondale Blvd	\$177,000	9.5	13.25	11	7.5	7.625	48.88	Mld	75				
P40	0.24	Indian School Rd	Sidewalk One Side	100th Ave	103rd Ave	\$142,000	9.5	10.5	13.5	5.75	9.5	48.75	Mld	76				
P41	0.07	Indian School Rd	Bicycle Lane Both Sides	El Mirage Rd	107th Ave	\$86,000	11	10.5	11	6.625	9.5	48.63	Mld	77				
B50	1.04	McDowell Road	Bicycle Lane Both Sides	Agua Fria River West	119th Ave	\$567,000	9.5	10.5	13.5	7.5	7.625	48.63	Mld	78				
P117	0.14	W Indian School Rd	Sidewalk Both Sides	745 feet West El Mirage Road	El Mirage Road	\$166,000	11	10.5	11	6.625	9.5	48.63	Mld	79				
P86	0.13	5-14 Ave	Sidewalk One Side	Rhodes Ave	Dead End	\$75,000	8	10.5	5.5	15	9.5	48.50	Mld	80				
P90	0.08	S Greenfield Ln	Sidewalk Both Sides	Man Street	Central Ave	\$94,000	8	10.5	5.5	15	9.5	48.50	Mld	81				
P132	0.09	W Overlin Ln	Sidewalk Both Sides	141st Ave	Central Ave	\$106,000	8	10.5	5.5	15	9.5	48.50	Mld	82				

P70	0.50 101st Ave	Roosevelt Street	Van Buren Street	101st Ave
P71	0.40 Roosevelt St	103rd Ave	101st Ave	101st Ave
P28	0.12 County Line Rd	127th Ave	Dead End	Dead End
P29	0.12 131st Ave	127th Ave	Dead End	Dead End
P45	0.31 119th Ave	McDowell Road	McDowell Road	McDowell Road
B6	0.33 119th Ave	McDowell Road	McDowell Road	McDowell Road
P119	0.16 W Lower Buckeye Rd	126th Ave	125th Ave	125th Ave
P54	0.14 N 10th St	435 feet south Riley Drive	Western Ave	Western Ave
P55	0.08 N 10th St	Riley Drive	435 feet south Riley Drive	435 feet south Riley Drive
P56	0.26 S 127th Ave	Vermorensch Road	Illin Street	Illin Street
P57	0.26 S 127th Ave	Vermorensch Road	Illin Street	Illin Street
P5	0.04 114th Ave	Goldwater Springs Blvd	Civic Center Drive	Civic Center Drive
P25	0.09 Civic Center Dr	Madison Street	Jefferson Street	Jefferson Street
P26	0.17 Civic Center Dr	Jefferson Street	400 feet southeast 114th Ave	400 feet southeast 114th Ave
P27	0.10 Goldwater Springs Blvd	114th Ave	Civic Center Drive	Civic Center Drive
B24	2.19 Dyant/Vermorensch Road	Lower Buckeye Road	Southern Ave	Southern Ave
P29	0.19 114th Ave	Thomas Road	Southern Ave	Southern Ave
P48	0.24 N 119th Ave	Thomas Road	Virginia Ave	Virginia Ave
P42	1.26 Indian Springs Road	133rd Ave	El Mirage Road	El Mirage Road
B13	1.35 Avondale Blvd	Barney Way/Inding Signage	Southern Avenue	Southern Avenue
B37	0.42 Thornhill Road	Rancho Santa Fe Blvd	Agua Fria River West	Agua Fria River West
P136	0.19 W Pioneer St	125th Ave	330 feet east 124th Ave	330 feet east 124th Ave
P137	0.19 W Pioneer St	125th Ave	330 feet east 124th Ave	330 feet east 124th Ave
P7	0.51 131st Ave	140 Ave	Van Buren Street	Van Buren Street
P73	0.44 S 107th Ave	Lower Buckeye Road	Gila River	Gila River
M34	2.85 Agua Fria River West	107th Ave	99th Ave	99th Ave
B51	1.00 Roosevelt Street	Avondale Blvd	111th Ave	111th Ave
P154	0.48 W Window Ave	107th Ave	107th Ave	107th Ave
B52	2.97 Southern Ave	Deant Road	107th Ave	107th Ave
P40	0.26 S 127th Ave	Lower Buckeye Road	107th Ave	107th Ave
P70	0.26 S 127th Ave	Lower Buckeye Road	107th Ave	107th Ave
P73	0.44 S 107th Ave	Miami Ave	1/4 Mile south Miami Ave	1/4 Mile south Miami Ave
P4	0.25 S 107th Ave	Miami Ave	Roosevelt Street	Roosevelt Street
P4	0.25 S 107th Ave	Miami Ave	1/4 Mile south Miami Ave	1/4 Mile south Miami Ave
P152	0.24 W Warner St	127th Ave	125th Ave	125th Ave
M10	0.88 Agua Fria River	McDowell Road	127th Ave	127th Ave
P13	0.12 W 9th Ave	119th Avenue	119th Avenue	119th Avenue
P113	0.25 W 9th Ave	119th Avenue	119th Avenue	119th Avenue
P112	0.25 W 9th Ave	119th Avenue	119th Avenue	119th Avenue
B28	2.02 El Mirage Road	Broadway Road	Indian Springs Road	Indian Springs Road
P8	0.03 126th Ave	Warner Street	Dead End	Dead End
P9	0.04 126th Dr	Warner Street	Illin Street	Illin Street
P100	0.24 W Pioneer St	127th Ave	Dead End	Dead End
P100	0.24 W Pioneer St	127th Ave	Dead End	Dead End
P104	0.25 W Florence St	127th Ave	125th Ave	125th Ave
P110	0.09 W Illin St	127th Ave	125th Drive	125th Drive
P111	0.19 W Illin St	Vermorensch Road	Dead End	Dead End
B8	0.20 119th Ave	Thomas Road	Encanto Blvd	Encanto Blvd
P38	0.26 S 127th Ave	127th Ave	Gila River	Gila River
P76	0.26 S 127th Ave	127th Ave	Gila River	Gila River
P76	0.26 S 127th Ave	127th Ave	Gila River	Gila River
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