

**CURRENT CONDITIONS REPORT
MOBILITY AREA 2
INDIAN SCHOOL-GRAND NEIGHBORHOODS**

PREPARED FOR

City of Phoenix

PREPARED BY

**Olsson Associates
7250 North 16th Street
Phoenix, AZ 85020
602.748.1000**

July 2018

Table of Contents

Mobility Area 1

Stakeholder Outreach 9

Key Destinations 14

Existing Pedestrian and Bicycle Network, Transit Facilities 18

Additional Infrastructure and Land Use Issues and Constraints 37

Previous City of Phoenix Public Outreach 46

Crash History 47

Planned City of Phoenix Projects/Activities 55

List of Maps

Map 1A - Study Area5

Map 1B - Mobility Dependent Population6

Map 1C - Zero Car Households7

Map 1D - Poverty Level8

Map 2 - Destinations17

Map 3A - Bikeways22

Map 3B - Sidewalks27

Map 3C - Lighting31

Map 3D - Pavement Condition33

Map 4 – Transit36

Map 5 - Right of Way40

Map 6 - Environmental Constraints42

Map 7 - Drainage Concerns45

Map 8 - Crash History54

Current Conditions Report

Indian School-Grand Canal Neighborhoods (Mobility Area 2)

Mobility Area

T2050 Mobility Assessment Study Area 2, Indian School-Grand Neighborhoods, is a 0.4 square mile area bounded by 23rd Avenue on the west, 18th Avenue on the east, Turney Avenue on the north, and Clarendon Avenue on the south.

Figure 1 - Study Area 2



Current Conditions Report

Map 1A - Study Area shows the location of Study Area 2 and identifies zoning near the study area. Study Area 2 consists of Commercial, and Residential zoned properties. The Commercial zoned properties are at the intersection of Indian School Road and 19th Avenue, see Photo 1 and Photo 2 (page 3). These properties are surrounded by single-family and multi-family Residential zoned properties, see Photo 3 and Photo 4 (page 4).

Using the most recent census information, the City has identified locations with mobility dependent populations, percentages of the population with zero-car households, and the percentage of people living below the poverty level.

Mobility Dependent Population

Mobility dependent population is defined as population younger than 9 years and older than 65 years. This population is considered mobility dependent as they are less likely to be able to travel to their destinations by vehicle. Map 1B - Mobility Dependent Population identifies the percentage of the population that is mobility dependent.

- North of Indian School Road and west of 19th Avenue, 28% to 32% of the population is mobility dependent.
- South of Indian School Road, 21% to 24% of the population is mobility dependent.
- North of Indian School Road and east of 19th Avenue, 15% to 21% of the population is mobility dependent.
- East of 19th Avenue and north of the Grand Canal, only 2% to 15% of the population is mobility dependent.

Zero Car Households

Map 1C - Zero Car Households identifies the percentage of households by block that do not own a vehicle. This portion of the population is mobility dependent as they are less likely to travel to their destinations by vehicle.

- Between Indian School Road and Devonshire Avenue, and between 21st Avenue and 19th Avenue, .51% to 64% of households are zero car households.
- North of Devonshire Avenue and west of 21st Avenue, 11% to 20% of households are zero car households.
- East of 19th Avenue and north of Indian School Road, 11% to 20% of households are zero car households.

Current Conditions Report

- East of 19th Avenue and south of Indian School road, 0% to 10% of households are zero car households.
- South of Indian School Road and west of 22nd Avenue, 11% to 20% of households are zero car households.
- South of Indian School Road and east of 22nd Avenue, 21% to 30% of households are zero car households.

Poverty Level

Map 1D - Poverty Level shows what portions of the population in the study area are living below the poverty level. The U.S. Census Bureau uses a threshold for a family of four at \$21,954.

- North of Indian School Road and west of 19th Avenue, over 49% of the population is living below the poverty level.
- In the remainder of the study area, 13% to 36% of the population is living below the poverty level.

Photo 1 - Commercial



Photo 2 - Commercial



Current Conditions Report

Photo 3 - Single Family Residential



Photo 4 - Single Family Residential



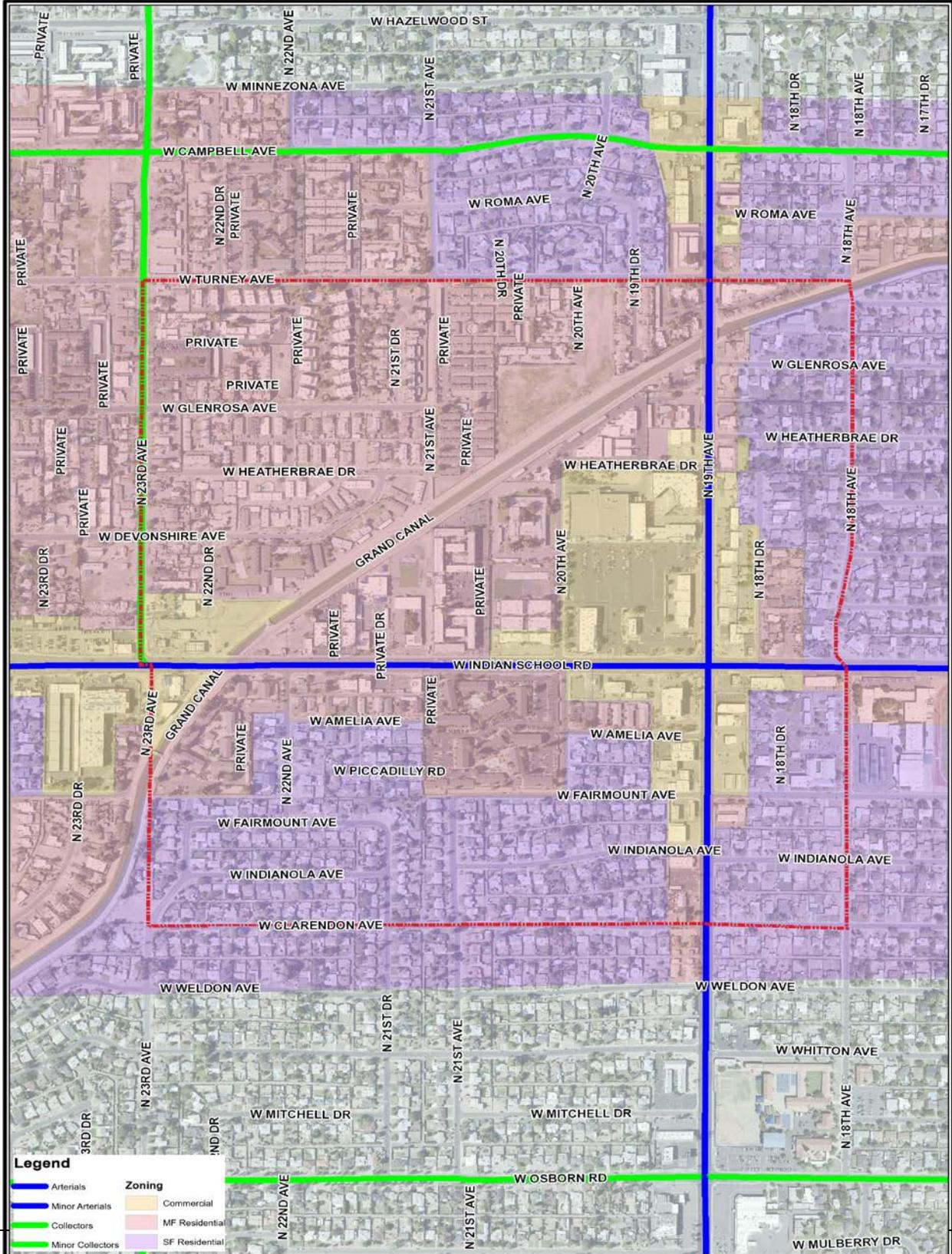
Photo 5 - Multi-Family Residential



Photo 6 - Multi-Family Residential

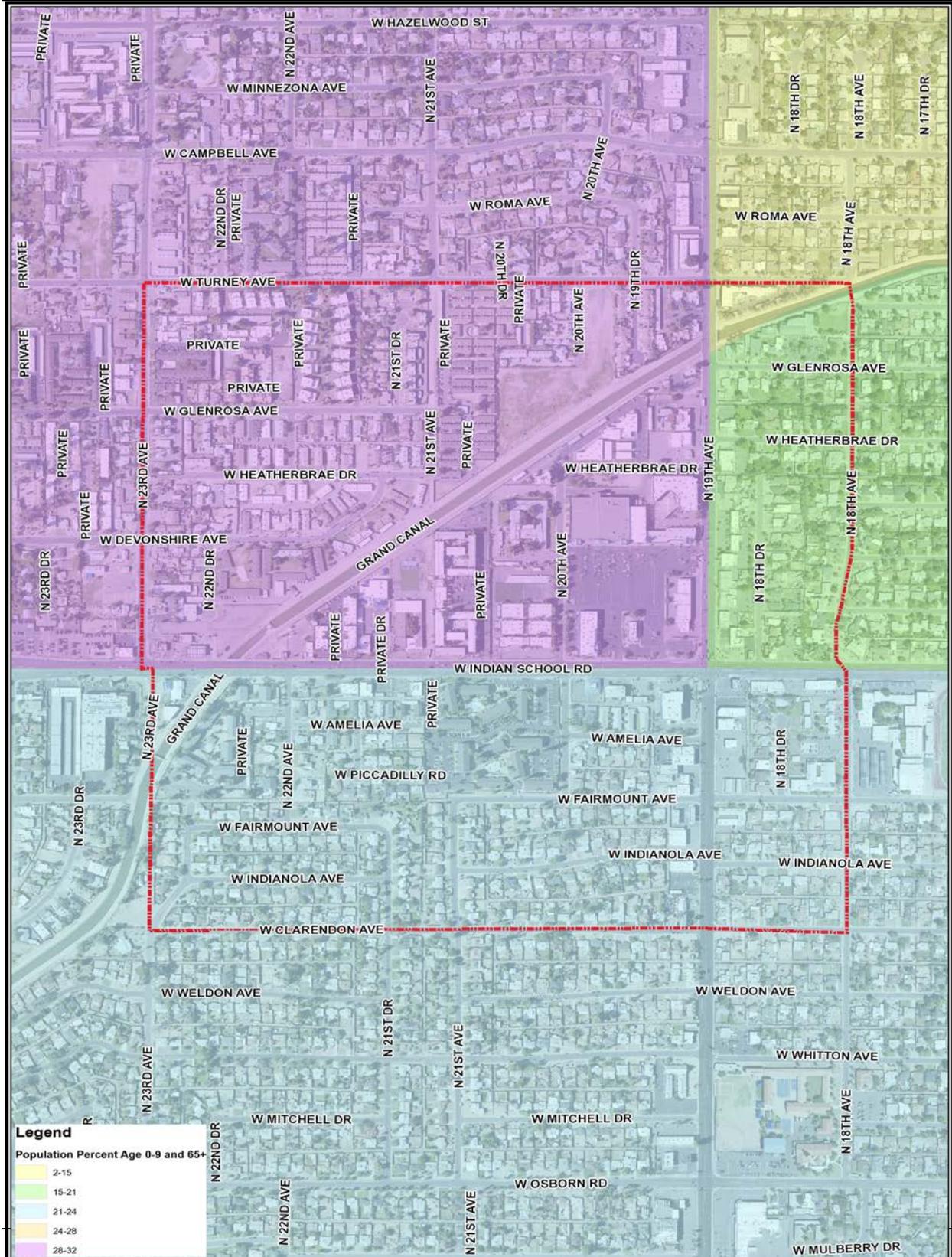


Current Conditions Report

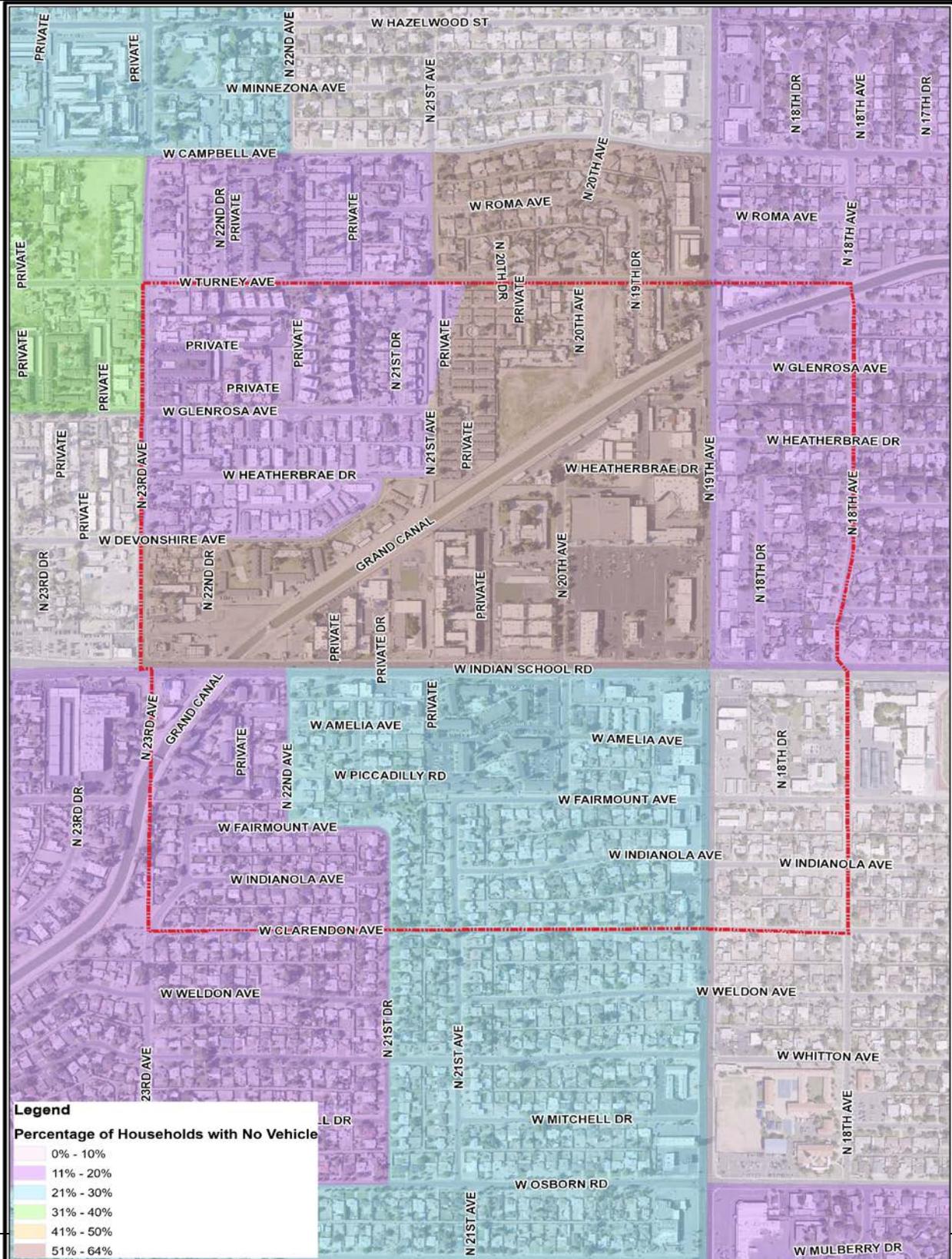


Legend	
	Arterials
	Minor Arterials
	Collectors
	Minor Collectors
Zoning	
	Commercial
	MF Residential
	SF Residential

Current Conditions Report



Current Conditions Report

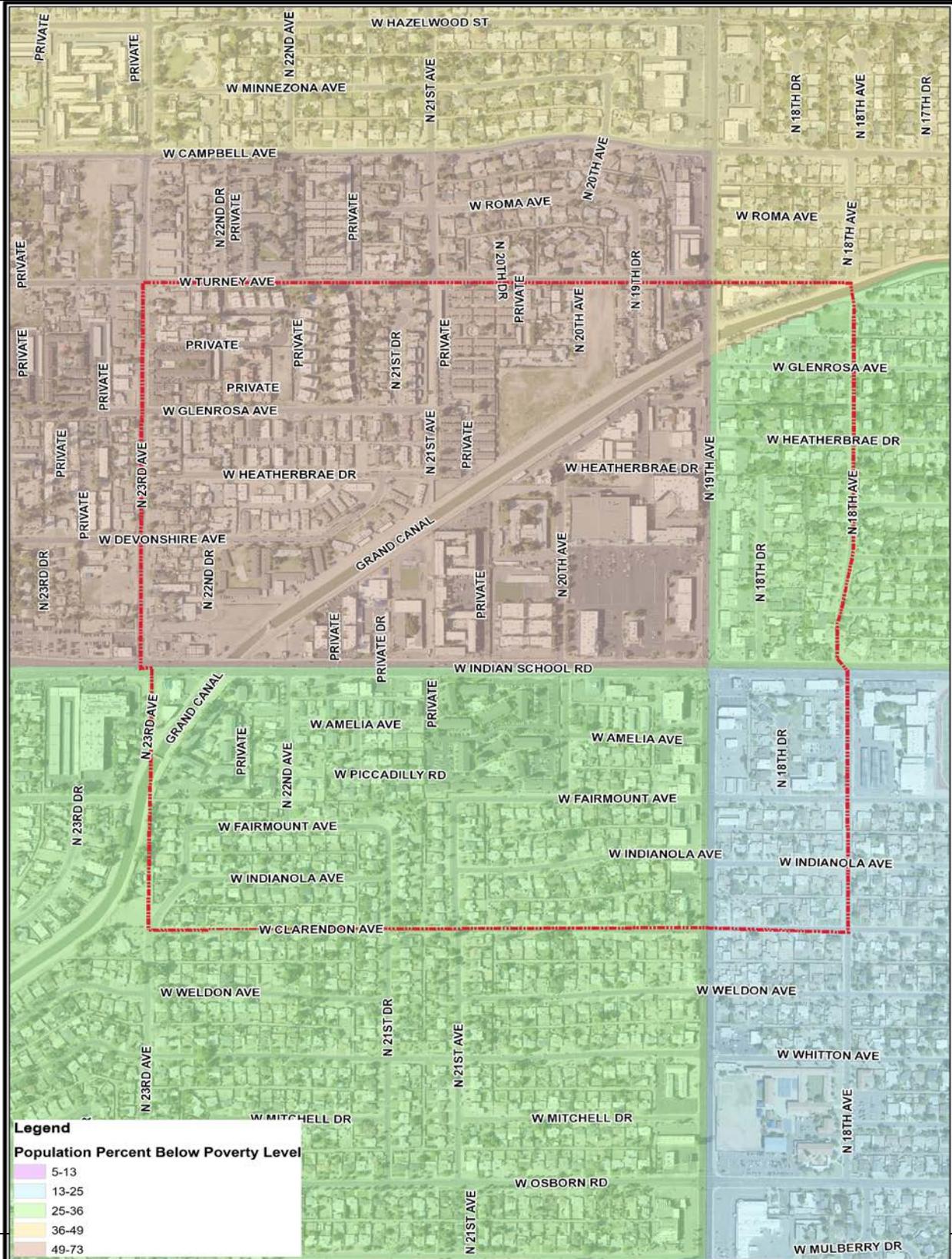


Legend

Percentage of Households with No Vehicle

0% - 10%
11% - 20%
21% - 30%
31% - 40%
41% - 50%
51% - 64%

Current Conditions Report



Legend

Population Percent Below Poverty Level

5-13
13-25
25-36
36-49
49-73

Stakeholder Outreach

As part of the stakeholder outreach efforts, the project team reached out to several individuals and organizations in the study area. Several stakeholders responded, and interviews were conducted with the following individuals.

Arthur Cassidy, Westwood Estates Resident

- Arthur is a resident of the Westwood Estate neighborhood. He lives near the intersection of 23rd Avenue and Fairmount Avenue. See Photo 7 and Photo 8 (page 10).
- Arthur feels that the canal and Indian School Road have been barriers to keep crime out of his neighborhood. He feels that construction of the pedestrian bridge over the canal has resulted in increased crime in the neighborhood.
- Arthur is opposed to an Indian School Road crossing at the future canal path, he feels that it will also result in increased crime in the neighborhood, and believes that an additional midblock crossing will add to traffic congestion on Indian School Rd.
- There is a lot of traffic during the afternoon rush hour on 23rd Ave. Arthur feels that several people are trying to avoid I-17 NB traffic by exiting on Thomas and taking 23rd Avenue NB to Indian School. Arthur has also noticed some vehicles travel north on 23rd Avenue and then use the canal to access Indian School Road. In the past, there was a barrier to prevent vehicle access to the canal, but the barrier has been removed.
- There are existing speed humps on 23rd Avenue south of Fairmount Avenue, but none on Fairmount Avenue or 22nd Avenue. Arthur would like to see additional traffic calming measures on these streets.
- Vehicle speeds and traffic volume on 23rd Avenue, Fairmount Avenue, and 22nd Avenue are safety concerns for pedestrians in the area.
- There are existing stop signs for SB traffic on 22nd Avenue, and WB traffic on Fairmount, but the signs are ignored. Arthur would like to see improvements to make the signs more noticeable.
- Arthur feels that there is insufficient lighting along the canal and at the pedestrian bridge. Improved lighting here would reduce crime in the area. See Photo 9 and Photo 10 (page 10).
- Mobility destinations in the include Christown Mall at 19th Avenue/Bethany Home Road; Safeway at 7th Avenue/Osborn; Light rail on Camelback.
- Arthur feels that crime in the area is the biggest issue preventing mobility in the neighborhood. People don't feel safe.

Current Conditions Report

Photo 7 - 23rd Ave/Fairmount



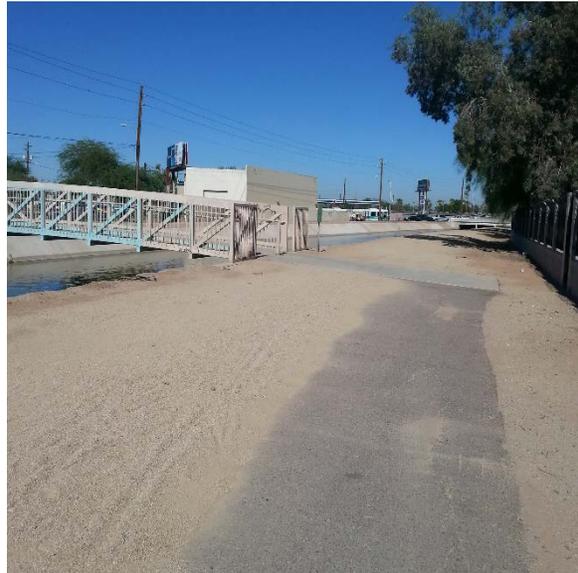
Photo 8 - 23rd Ave/Fairmount



Photo 9 - 23rd Ave/Grand Canal



Photo 10 - 23rd Ave/Grand Canal



Current Conditions Report

Haley Ritter, Resident

- Haley lives near 22nd Drive and Turney Avenue.
- Haley uses 21st Avenue regularly to access Camelback Road to the north of the study area.
- Haley is very supportive of the Grand Canal project, she feels that it will be a valuable resource to connect neighborhoods.
- Haley feels that 19th Avenue will be an important location to access the Grand Canal. She would like to see a HAWK beacon at this location, as well as a rest area with water, benches, etc.
- The existing pavement on 23rd Ave. is in bad shape.
- The north and south legs of 23rd Ave at Indian School Rd are offset. The intersection is difficult to navigate for bicycles and for users with disabilities.
- Many school buses use Turney Ave. and Campbell Ave.
- There is a lot of traffic at Westwood Primary School on 23rd Ave, during drop-off/pickup times. Haley would like to see projects that improve safety for school children.
- Haley is concerned about traffic speeds on arterial roads, especially at intersections. Haley would like to see bicycle safety improvements at major intersections. Lighting at major intersections is a safety concern for bicycles.
- Haley would like to see additional crosswalks across 23rd Ave. between Indian School Road and Campbell Ave. She thinks that Turney Ave and Devonshire Ave are good locations for a crosswalk.
- Haley would like to see lighting improvements throughout the area. She mentioned additional lighting along Turney specifically.

Don Cross, City of Phoenix

- Don works closely with schools throughout the City.
- Don provided insight into various needs of the schools within the study area. He was also able to provide additional contacts within the study area. Some of his feedback regarding area schools include:

Pan American Charter School

- Located at Indian School Road and 20th Avenue.
- Pan American is a charter school and so has no boundaries, it is unclear right now where students are coming from.
- The original Pan American school closed and had recently reopened.
- The City installed a RRFB crossing across Indian School at 20th Ave, when the school closed, crossings were reduced. The City has not conducted new counts since the school reopened. This
- The school might benefit from a canal crossing.
- There are a lot of crossing across 20th Ave from the Food City parking lot, but these crossing don't count toward the warrant analysis, since parents are driving from a different location, and then walking their students across the street. The study needs to evaluate solutions across 20th Street.

Phoenix Christian High School

- Located at Indian School Road and 18th Avenue.
- Phoenix Christian is a private school and so has no boundaries, it is assumed that most students commute from out of the area.
- There is a Phoenix Christian elementary school on the east side of 18th Ave. There is an existing crosswalk across 18th Ave at Fairmount Ave. Should the study evaluate a crossing across 18th Ave between Fairmount and Indian School.

St. Gregory Catholic School

- Located at 19th Avenue and Osborn Road.
- St Gregory is a private school and so has no boundaries, most of the students come from the adjacent neighborhood east of 19th Ave. and north of Osborn.
- There are existing school zones on Whitton and Osborn. The school zone on Whitton is scheduled to be eliminated.

Encanto/Clarendon Elementary School

- Located at 11th Avenue and Osborn Road.
- Both schools are part of Osborn School District.
- The school boundaries are south of Camelback and east of 19th Ave.
- Students in Area 2, east of 19th are bussed to school
- There is an existing school zone on 15th Ave between Osborn and Whitton. The City is evaluating a HAWK at 15th Ave and Whitton.

Current Conditions Report

Montebello School

- Located at 27th Avenue and Montebello Avenue.
- Part of the Alhambra School District.
- The school boundaries extend south of Indian School and east to 19th Ave.
- Students in Area 2, south of Indian School, are bussed to school.

R.E. Simpson/Westwood Primary School

- Westwood is located at 23rd Drive and Highland.
- R.E. Simpson is located at 24th Drive and Missouri Ave.
- Part of the Alhambra School District.
- The school boundaries are between I-17 and 19th Ave and north of Indian School.

Joseph Perez, City of Phoenix

- The study needs to look at ways to make Indian School Road safer for bike/pedestrian users.
- Recently bike lanes were added to Indian School between 27th Avenue and 19th Avenue.
- 19th Avenue is the top bus bike boarding corridor in the City.
- The City is looking at reducing the number of lanes to provide bike lanes, on Osborn Road between 19th Avenue and 15th Avenue.
- The Grand Canal multi-use path is expected to be constructed in 2018. There will be HAWKs at the Indian School crossing, and at the 19th Avenue crossing.
- Joe recommended looking at protected bike lane alternatives on 23rd Avenue.
- An overlay is scheduled for Indian School Road between 19th Avenue and 7th Avenue. The lane configuration will be redone at this time to provide bike lanes.

Key Destinations

Map 2 - Destinations identifies key destinations and traffic generators in the study area. Key destinations that have been identified during stakeholder interviews and field observations include:

19th Avenue/Indian School Road Intersection

This area contains the commercial zoned properties along Indian School Road and along 19th Avenue in the study area. Destinations in this area include:

- The Food City shopping center is located at the northwest corner of Indian School Road and 19th Avenue. The shopping center also has an Ace Hardware store, a Check Smart store, and various restaurants. See Photo 14 (page 15).
- CVS Pharmacy is located at the southwest corner of Indian School Road and 19th Avenue. See Photo 11 (page 15).
- Pan American Charter School is on the northwest corner of 20th Avenue and Indian School Road. Stakeholder interviews have indicated that the school is a traffic generator for the surrounding neighborhoods.
- There are various businesses including restaurants, barbershops, tattoo parlors, and other small businesses along 19th Avenue. See Photo 12 (page 15) and Photo 13 (page 15).
- There are also various medical providers along 19th Avenue, and along Indian School Road.

Current Conditions Report

Photo 11 - CVS Pharmacy



Photo 12 - 19th Avenue



Photo 13 - 19th Avenue



Photo 14 - Shopping Center



Bus Stops

Transit stops are a key generator in this area. The bus stops in the area are some of the most heavily used in the City. Map 2 - Destinations identifies bus stop locations in the area. For further discussion on bus routes, refer to the section titled Transit Facilities.

Schools

Schools within the study area include:

- Pan American Charter School is located at the northwest corner of 20th Avenue and Indian School Road.
- Phoenix Christian High School is located at the southwest corner of 18th Avenue and Indian School Road.
- St. Gregory Catholic School is located at the northeast corner of 19th Avenue and Osborn Road.
- R.E. Simpson/Westwood Primary School is located at 23rd Drive and Highland. Its boundaries include the neighborhoods north of Indian School Road, and west of 19th Avenue.
- Montebello School is located at 27th Avenue and Montebello Avenue. Its boundaries include the neighborhoods south of Indian School Road and west of 19th Avenue.
- Encanto/Clarendon Elementary School is located at 11th Avenue and Osborn Road. Its boundaries include the neighborhoods east of 19th Avenue.

Places of Worship

Places of worship within the study area include:

- Beacon Baptist Church is located on 23rd Avenue, south of Devonshire Avenue.
- First Arabic Baptist Church is located on Campbell Avenue, east of 23rd Avenue.
- Redemption Church Alhambra is located on Glenrosa Avenue east of 19th Avenue.
- Light and Life Free Methodist Church is located at the northwest corner of 18th Avenue and Fairmount Avenue.
- St. Gregory Catholic Church is located at the northwest corner of 19th Avenue and Osborn Road.

Current Conditions Report



- Legend**
- Valley Metro Bus Stops
 - Churches
 - Commercial
 - Dining
 - Groceries
 - Medical
 - Park
 - Recreation Center
 - School
 - Social Services
 - Key Destinations

Existing Pedestrian and Bicycle Network, Transit Facilities

Bikeways

Map 3A - Bikeways identifies existing bikeways in the study area, per the City of Phoenix Master Bike Plan. The map also identifies the Grand Canal as a bikeway, the Grand Canal is a Tier II bike way project per the master plans.

23rd Avenue

- 23rd Avenue is an existing bikeway from Virginia Avenue north to Glendale Avenue.
- Currently, in the study area, 23rd Avenue has striped bike lanes in each direction from Osborn Road north to Fairmount Avenue.
- There are no striped bike lanes from Fairmount Avenue to Indian School Road. The striped bike lanes resume at Indian School Road north to Glendale Road.

Indian School Road

- The City master plan classifies Indian School Road from I-17 to 19th Avenue as a bikeway.
- Currently Indian School Road has striped bike lanes from 23rd Avenue to 19th Avenue.
- Indian School Road east of 19th Avenue is scheduled to have the lanes reconfigured to add a striped bike lane at the next pavement maintenance project.

Grand Canal

- The Grand Canal Multi-use path is a Tier II project.
- Construction is scheduled for 2019.
- In addition to a new path, the project will include lighting, and HAWK beacons at Indian School Road and at 19th Avenue.

19th Avenue

- 19th Avenue is not classified as an existing bikeway, and it does not currently have any striped bike lanes.

Current Conditions Report
Traffic

The City has collected information on existing traffic within the study area. Map 3A - Bikeways identifies signalized intersections, marked crosswalks in the study area, existing and planned crossing treatments such as HAWKs or RRFBs, and traffic calming in the study area.

Traffic Volumes

The City provided 24 Hour traffic volumes on arterial roadways within the study area. The volumes for these roadway segments are discussed below.

Traffic Volumes			
Roadway Segment	Roadway Classification	Existing Lane Configuration	24-Hour Traffic Volume
Indian School Rd.- I-17 to 19 th Ave.	Arterial	3 travel lanes and bike lane in each direction, and a two-way left turn lane	WB: 33,000 Vehicles
			EB: 31,000 Vehicles
Indian School Rd.- East of 19 th Ave.	Arterial	4 travel lanes in the WB direction, 3 travel lanes and a bike lane in each direction, and a two-way left turn lane	WB: 30,000 Vehicles
			EB: 27,800 Vehicles
19 th Avenue- South of Indian School Rd.	Arterial	3 travel lanes in the NB direction, 2 travel lanes in the SB direction, and a two-way left turn lane	NB: 16,000 Vehicles
			SB: 14,500 Vehicles
19 th Avenue- North of Indian School Rd.	Arterial	3 travel lanes in the NB direction, 2 travel lanes in the SB direction, and a two-way left turn lane	NB: 12,700 Vehicles
			SB: 10,700 Vehicles

Signalized Intersections

- The intersection of 23rd Avenue and Indian School Road is signalized and has marked crosswalks at all four legs of the intersection. The existing pedestrian button types, placements, and locations do not meet current accepted standards.
- The intersection of 19th Avenue and Indian School Road is signalized and has marked crosswalks. The existing pedestrian button types, placements, and locations do not meet current accepted standards.
- The intersection of 19th Avenue and Osborn Road is signalized but is outside of the study area. The intersection has marked crosswalks at all four legs of the intersection.
- The intersection of 19th Avenue and Campbell Avenue is signalized but is outside of the study area. The intersection has marked crosswalks at all four legs of the intersection.

Marked Crosswalks

In addition to the marked crosswalks at signalized intersections in the study area, there are marked crosswalks at the following locations:

- There is a marked two stage crosswalk across Indian School Road at 20th Avenue. There is an existing RRFB at this location.
- There is a marked crosswalk across 19th Avenue on the north side of Fairmount Avenue.
- At the intersection of 19th Avenue and Whitton Avenue, there is a marked crosswalk across 19th Avenue on the south side of Whitton. There is also a marked crosswalk across Whitton Avenue on the east side of 19th Avenue.
- There is a marked crosswalk across 19th Avenue on the south side of Heatherbrae Avenue.
- There is a marked crosswalk across 18th Avenue on the south side of Indian School Road.
- There is a marked crosswalk across 18th Avenue on the north side of Fairmount Avenue.

High Intensity Activated crosswalk (HAWK)

HAWK beacons are a crossing treatment that stops traffic when the push button is activated by pedestrians. The beacon will signal traffic to stop until pedestrian have crossed and are out of the crosswalk. There are currently no existing or planned HAWK beacons in the study area.

Current Conditions Report

Rapid Rectangular Flashing Beacon (RRFB)

An RRFB is a crossing treatment that warns vehicles that pedestrians are crossing in the crosswalk when the push button is activated by pedestrians. These types of beacons do not signal traffic to stop, they are only used to warn traffic that pedestrians or bicycles are in the crosswalk.

- There is currently only one existing or proposed RRFB in the study area. The RRFB is located at the crosswalk across Indian School on the east side of 20th Avenue. See Photo 15 and Photo 16 (page 21).

Photo 15 - 20th Ave RRFB



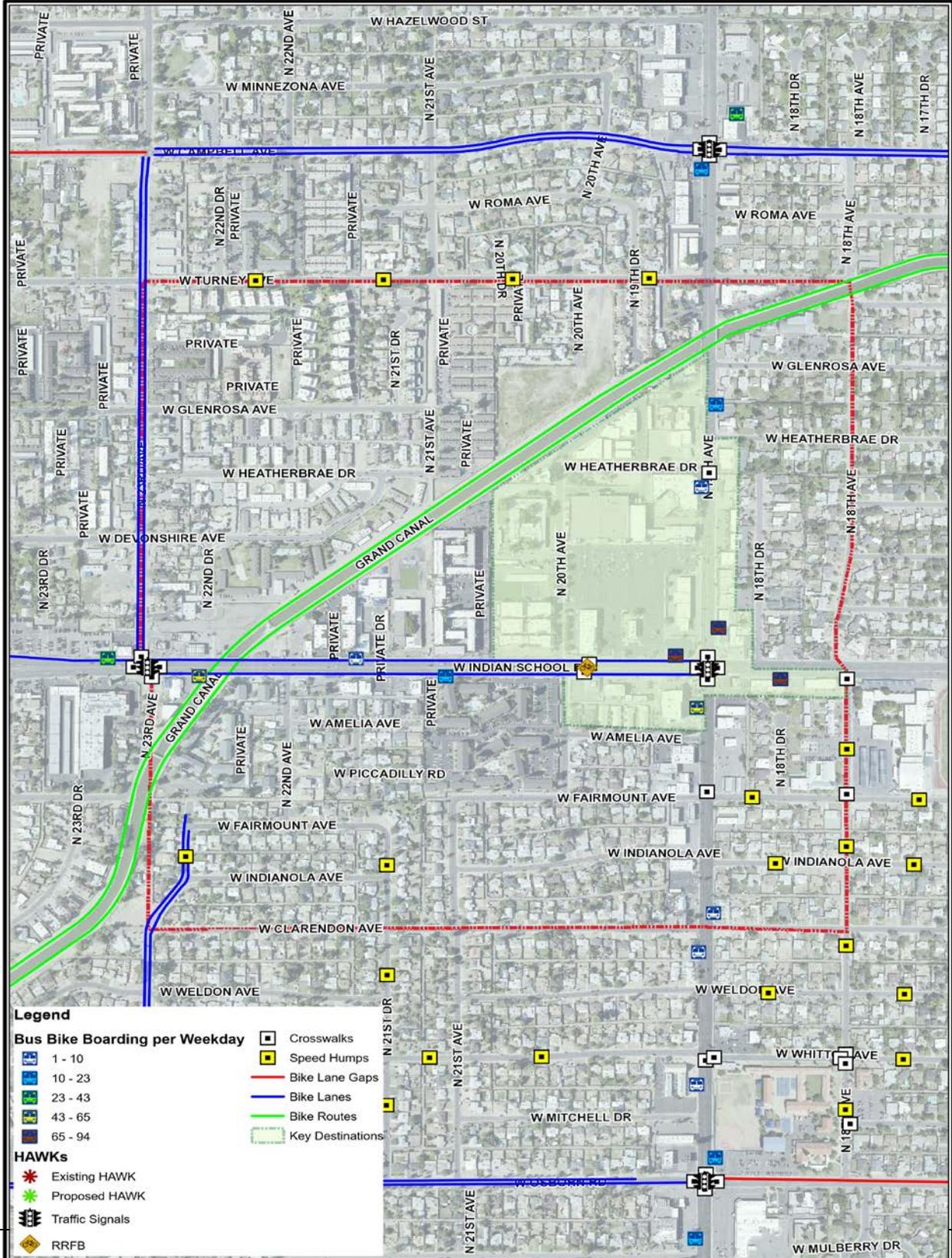
Photo 16 - 20th Ave RRFB



Traffic Calming

Traffic calming in the study area consists of speed humps. Map 3A - Bikeways shows speed hump locations. In general, speed humps are located south of Indian School Road.

Current Conditions Report



Current Conditions Report

Sidewalks and Gaps, ADA Compliance

Map 3B - Sidewalks identifies locations where there are gaps in the existing sidewalk system, and locations where the existing sidewalk does not meet ADA guidelines. The map also identifies locations where the existing curb ramps do not meet ADA guidelines, or locations where there are no existing curb ramps.

Existing Sidewalk

- Much of the neighborhood south of Indian School Road, and west of 19th Avenue consists of mountable curb & gutter with sidewalk behind. Most of the neighborhood has existing sidewalk. There are sidewalk gaps in various locations. See Photo 17 and Photo 18 (page 23).
- The neighborhoods east of 19th Avenue also consist of mountable curb & gutter with sidewalk behind. There are very few sidewalk gaps in these neighborhoods.
- The neighborhoods north of the Grand Canal have very few sidewalk gaps. Most of the existing sidewalk in this neighborhood is 4-ft wide. In many locations, there is no curb & gutter, only sidewalk. See Photo 19 (page 24). In other locations, mountable curb & gutter is used.
- The existing sidewalk along 23rd Avenue is barrier type curb & gutter. The existing sidewalk needs to be repaired in various locations. See Photo 20 (page 24).

Photo 17 - Mountable Curb & Gutter



Photo 18 - Mountable Curb & Gutter



Current Conditions Report

Photo 19 - No Gutter



Photo 20 - 23rd Avenue



ADA Compliance

Existing facilities in the study area, such as curb ramps, sidewalks, and driveways, were evaluated to determine accessibility per the American with Disabilities Act (ADA). The following standards were used to determine whether the existing facilities were ADA compliant.

- Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way published by the United States Access Board.
- City of Phoenix Standard Details P1230-P1241, P1243, and P1255.
- Maricopa Association of Governments (MAG) Standard Details 230, 234-237, and 250.

Curb Ramps

Map 3B - Sidewalks identifies both ADA compliant and non-compliant curb ramps in the study area. The map also identifies locations where there should be a curb ramp, but the ramp is missing. These areas have been identified as non-accessible, see Photo 23 and Photo 24 (page 25). For this study, a curb ramp is considered non-compliant if it is missing detectable warning surface, if the landing behind the ramp is less than 4-ft x 4-ft in size, or if there are obstructions in the ramp or in the landing, see Photo 22 (page 25) In many locations, there is mountable curb & gutter. There is sidewalk in

Current Conditions Report

these locations, but curb ramps have not been installed and so have been labeled as non-accessible.

Photo 21 - ADA Compliant Ramp



Photo 22 - ADA Non-Compliant Ramp



Photo 23 - Non-Accessible Ramp



Photo 24 - Non-Accessible Ramp



Current Conditions Report

Sidewalk/Driveways

Map 3B - Sidewalks also identifies sidewalk locations that are not ADA compliant. These sidewalks have been labeled with orange. These sidewalks are not considered ADA compliant because existing driveways are not ADA compliant. ADA compliant driveways provide a 3-ft minimum width landing/walk way behind the ramp so that users with mobility disabilities do not have to navigate the warped portion of the driveway. See Photo 25 and Photo 26 (page 26).

- Most of the neighborhoods northwest of the Grand Canal have sidewalk. The sidewalk is 4-ft wide which meets ADA guidelines. The sidewalk is blocked for pedestrian use when garbage cans are out. Furthermore, the existing driveways, are not ADA compliant and so the sidewalk is not considered compliant with ADA guidelines.
- The sidewalks along Indian School Road and along 19th Avenue are 6-ft wide. However, the existing driveways are not ADA compliant which means the sidewalk is not considered compliant with ADA guidelines.

Photo 25 - Indian School Road



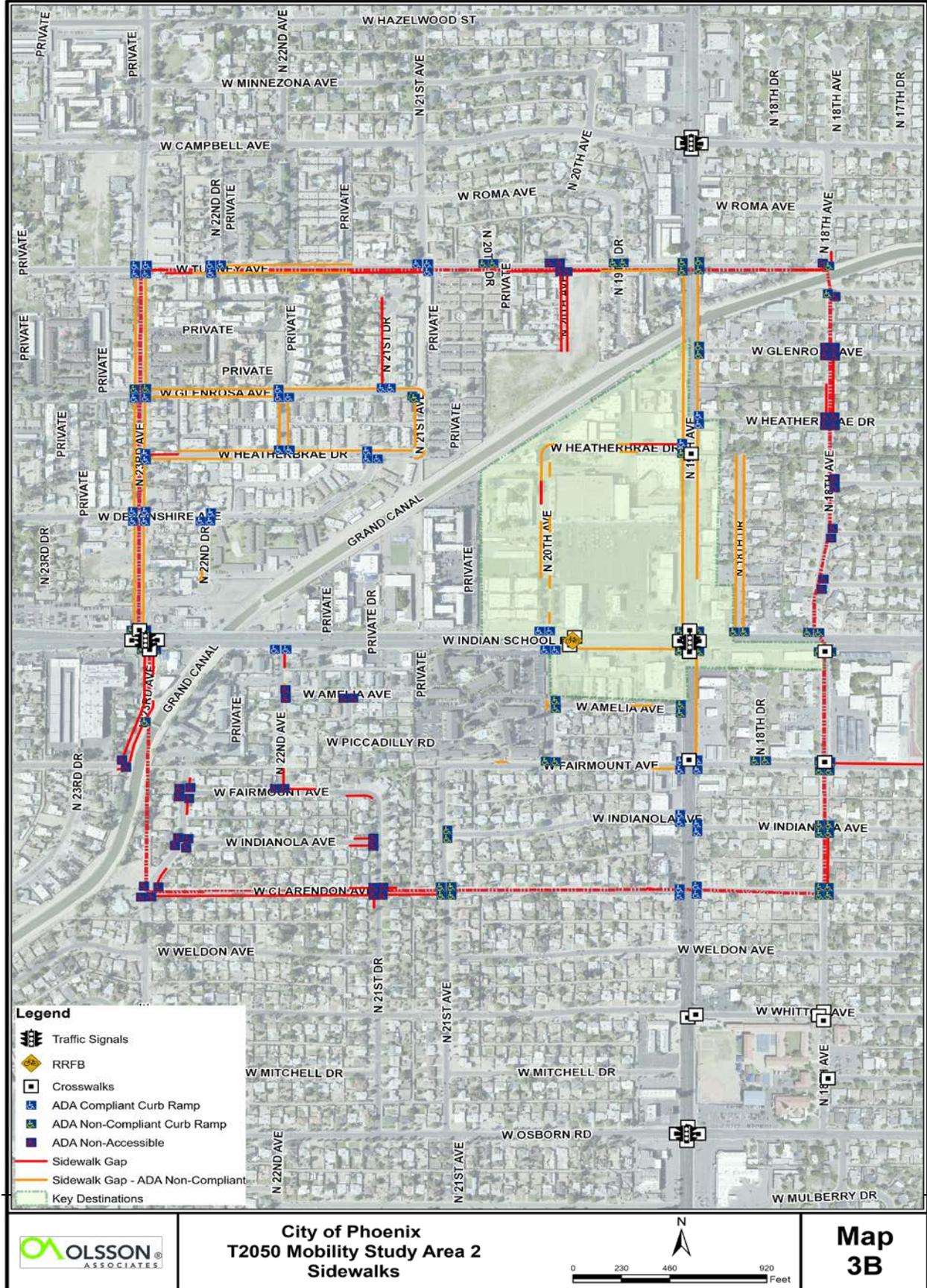
Photo 26 - 19th Avenue



Landscaping

The study evaluated locations with existing landscape buffers and identified locations where the landscaping was maintained. There were not any existing landscape buffers identified within this study area.

Current Conditions Report



Lighting

Existing lighting, within the study area, was evaluated based on the City of Phoenix Streetlighting Layout Guidelines. Table 1: Spacing and Mounting Height Criteria provides the criteria used to evaluate spacing of the existing lighting. The study only evaluated spacing, it did not evaluate watts, lumens, or mounting height. Map 3C - Lighting identifies light pole locations, and the maximum light pole spacing based on the City guidelines. The study did not examine the existing light fixtures, but only noted that most of lights in the area are mounted on wood poles. The lighting will be evaluated more closely as potential projects are identified. See Photo 27, Photo 28, Photo 29, and Photo 30 (page 29 and 30).

- In general, the spacing of the existing lighting on local streets in the study area does not meet the City guidelines.
- Lighting spacing along 23rd Avenue, north of Indian School Road, does not meet the City guidelines.
- Lighting spacing along 19th Avenue does not meet the City guidelines.
- Spacing along Indian School Road appears to meet the City guidelines.

City of Phoenix Streetlighting Layout Guidelines Table 1: Spacing and Mounting Height Criteria						
Classification	Utility Company	Watts	Lumens	Mounting Height	Standard Spacing	Spacing Type
Arterial (7 lanes or more / median island wider than 62')	SRP	130W	9,900	35'	200-250'	Double-Sided Staggered
Arterial (Narrower than 62')	SRP	130W	9,900	35'	200-250'	Single Sided
Collector (Median island or wider than 62')	SRP	106W	8,300	35'	200-250'	Double-Sided Staggered
Collector (Narrower than 62')	SRP	106W	8,300	35'	200'	Single Sided
Local	SRP	67W	5,300	26'	250'	Single Sided

Current Conditions Report

City of Phoenix Streetlighting Layout Guidelines Table 1: Spacing and Mounting Height Criteria						
Classification	Utility Company	Watts	Lumens	Mounting Height	Standard Spacing	Spacing Type
Arterial (7 lanes or more / median island wider than 62')	APS	130W	9,900	34'-3"	200-250'	Double-Sided Staggered
Arterial (Narrower than 62')	APS	130W	9,900	34'-3"	200-250'	Single Sided
Collector (Median island or wider than 62')	APS	106W	8,300	32'-11"	200-250'	Double-Sided Staggered
Collector (Narrower than 62')	APS	106W	8,300	32'-11"	200'	Single Sided
Local	APS	67W	5,300	25'-11"	250'	Single Sided

Photo 27 - Light Pole Example



Photo 28 - Light Pole Example



Current Conditions Report

Photo 29 - Light Pole Example



Photo 30 - Light Pole Example



Current Conditions Report



Current Conditions Report

Pavement Condition

The City of Phoenix provided the pavement conditions index for roads within the study area. The existing pavement conditions have been evaluated based on the pavement condition index. The local roads have been classified as being in fair condition. Indian School Road west of 19th Avenue, and 19th Avenue south of Indian School Road, are classified as being in good condition. Pavement preservation projects have recently been completed in the neighborhoods south of Indian School Road. Future pavement preservation projects are planned on Indian School Road and in the neighborhoods north of Indian School Road.

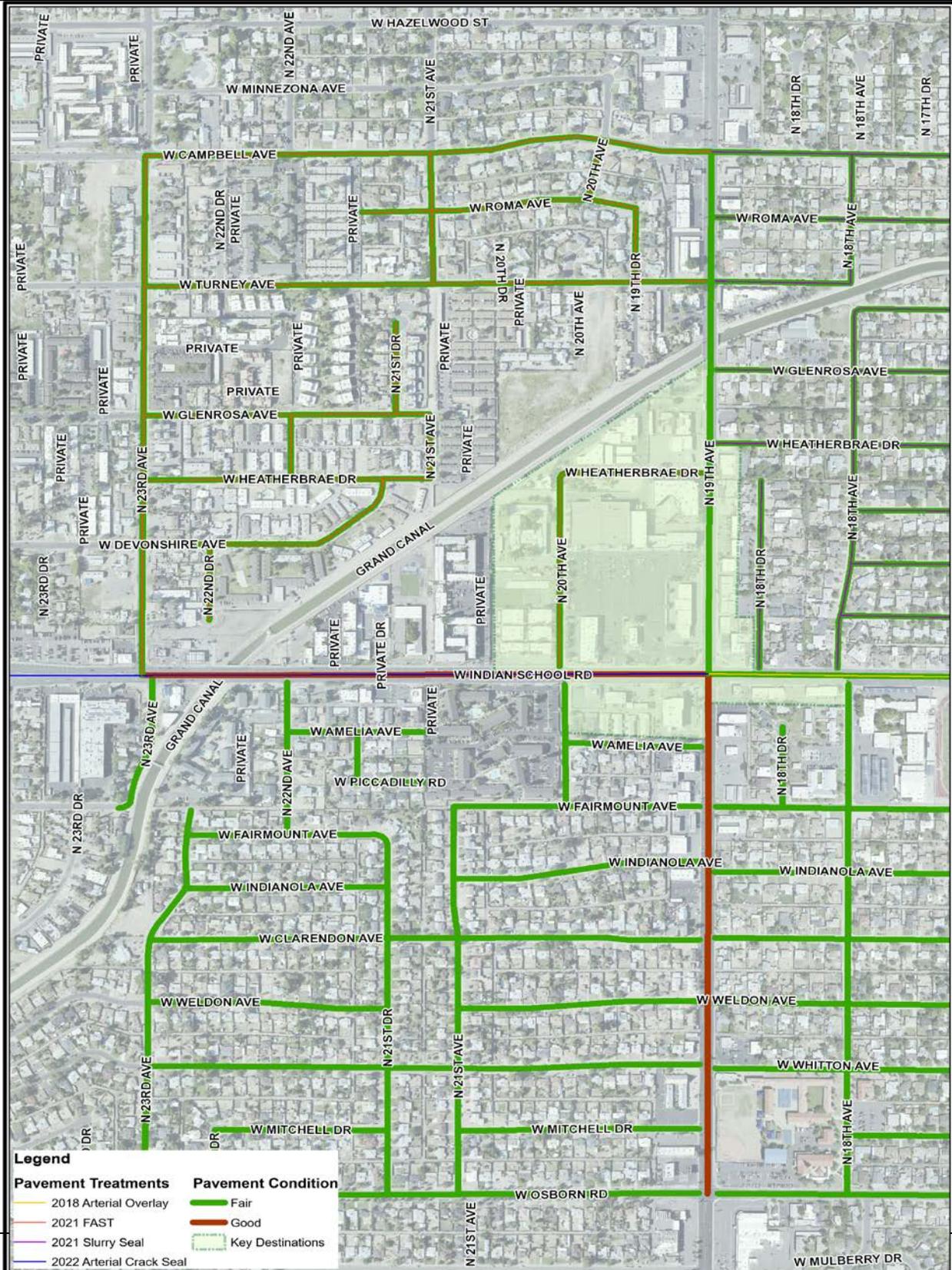
Photo 31 - 23rd Avenue Pavement



Photo 32 - Heatherbrae Dr. Pavement



Current Conditions Report



Current Conditions Report

Transit Facilities

Map 4 - Transit identifies existing transit in the study area. Currently, existing transit in the area consists of bus routes along 19th Avenue, and Indian School Road. The map also identifies the frequency of bus boarding in the area.

Bus Routes

- Bus Route 19 travels along 19th Avenue from Baseline Road to Happy Valley Road. Per discussions with stakeholders, Route 19 has the most bike boarding's on average in the city.
- Bus Route 41 travels along Indian School Road from 107th Avenue to Granite Reef Road.

Bus Stops

Bus stops in the area were evaluated for ADA accessibility and for amenities provided. A bus stop is considered accessible if users can access the stop by sidewalk. Users should not be required to walk in the street or on the shoulder to access the bus stop. None of the bus stops within the study area are considered ADA non-accessible. Bus stop amenities were evaluated to determine if a bus stop is missing a bench, a shelter or both. Several bus stops within the area are missing these amenities.

Photo 33 – Bus Stop, All Amenities Provided



Photo 34 - Bus Stop, Missing Shelter/Bench



Current Conditions Report
Bus Boardings

The highest concentration of bus boarding's in the study area are found at the intersection of 19th Avenue and Indian School Road, and at the intersection of 23rd Avenue and Indian School Road. The table shows the number of bus boarding's for each bus stop in the study area.

Area 2 Bus Boarding's				
Route	Mainline	Bus Stop	Direction	Bus Boarding's
19	19 th Avenue	Clarendon Avenue	SB	5
19	19 th Avenue	Indian School Road	SB	182
19	19 th Avenue	Heatherbrae Drive	SB	26
19	19 th Avenue	Campbell Avenue	SB	57
19	19 th Avenue	Clarendon Avenue	NB	9
19	19 th Avenue	Indian School Road	NB	252
19	19 th Avenue	Heatherbrae Drive	NB	66
19	19 th Avenue	Campbell Avenue	NB	94
41	Indian School Road	23 rd Avenue	WB	100
41	Indian School Road	20 th Avenue	WB	33
41	Indian School Road	19 th Avenue	WB	236
41	Indian School Road	17 th Avenue	WB	2
41	Indian School Road	I-17	EB	46
41	Indian School Road	23 rd Avenue	EB	200
41	Indian School Road	22 nd Avenue	EB	67
41	Indian School Road	19 th Avenue	EB	192

Future Transit

The study team is unaware of any future transit plans in the study area.

Current Conditions Report



Additional Infrastructure and Land Use Issues and Constraints

Land Use Zoning

Map 1A - Study Area identifies land use in the study area.

Commercial

- Indian School Road from 20th Avenue to 18th Avenue, and along 19th Avenue from Indianola Avenue to Heatherbrae Avenue, is commercial zoning. Commercial properties at this location include the Food City grocery store, Ace Hardware, CVS Pharmacy, various restaurants, and various other small businesses.
- Indian School Road west of the Grand Canal is also commercial zoning. Commercial properties at this location include a gas station, various restaurants, and various other small business.

Multi-Family Residential

- Most of the neighborhoods north of Indian School Road and west of 19th Avenue are multi-family residential zoning. Most of the properties in this location are multi-family homes, and many of these properties are lower income housing.
- There are also locations south of Indian School Road, east of the Grand Canal, that are multi-family residential zoning. Many of these properties are apartment complexes.

Single-Family Residential

- In general, the neighborhoods south of Indian School Road single-family residential zoning.
- The neighborhoods east of 19th Avenue are also mostly single family residential zoning.

Future Land Use

Currently, the City does not have any plans for economic redevelopment in this study area, or to redefine land use in the study area.

Current Conditions Report
Right of Way
City of Phoenix Owned Parcels

The City of Phoenix owns various parcels within the study area. The City owns a large parcel at the southwest corner of 20th Avenue and Turney Avenue. The parcel is “L” shaped and borders the Grand Canal on the south.

Right of Way Widths

As part of this study, existing right-of-way was evaluated along collector and arterial roadways within the study area. The following table identifies average right-of-way widths and potential right-of-way conflicts if the corridor is identified as a potential location for mobility improvements.

Right-of-Way			
Roadway Segment	Right-of-Way Average Width	Pavement & Sidewalk Average Width	Potential Right-of-Way Constraint?
23 rd Avenue – South of Indian School Road	Approx. 60-ft	Approx. 44-ft	No
23 rd Avenue – North of Indian School Road	Approx. 50-ft	Approx. 50-ft	Yes, existing R/W is at the back of existing sidewalk on both sides of the road.
Indian School Road	Approx. 100-ft	Approx. 100-ft	Yes, existing R/W is at the back of existing sidewalk on both sides of the road.
19 th Avenue	Approx. 80-ft	Approx. 80-ft	Yes, existing R/W is at the back of existing sidewalk on both sides of the road.

Current Conditions Report

Additional potential right-of-way conflicts have also been identified in the following locations.

- There is a right-of-way constraint at the northeast intersection of 23rd Avenue and Heatherbrae Avenue. The full width of right-of-way on Heatherbrae Avenue was not acquired when the road was originally constructed. Heatherbrae Avenue is only constructed to its half width at this location.
- There is a similar right-of-way constraint at the southeast intersection of 23rd Avenue and Turney Avenue. Turney Avenue is only constructed to its half width at this location.

Photo 35 - Heatherbrae Ave/23rd Ave



Photo 36 - Turney Ave/23rd Ave



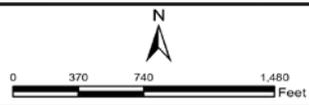
Current Conditions Report



Legend
 City Owned Property
 Key Destinations



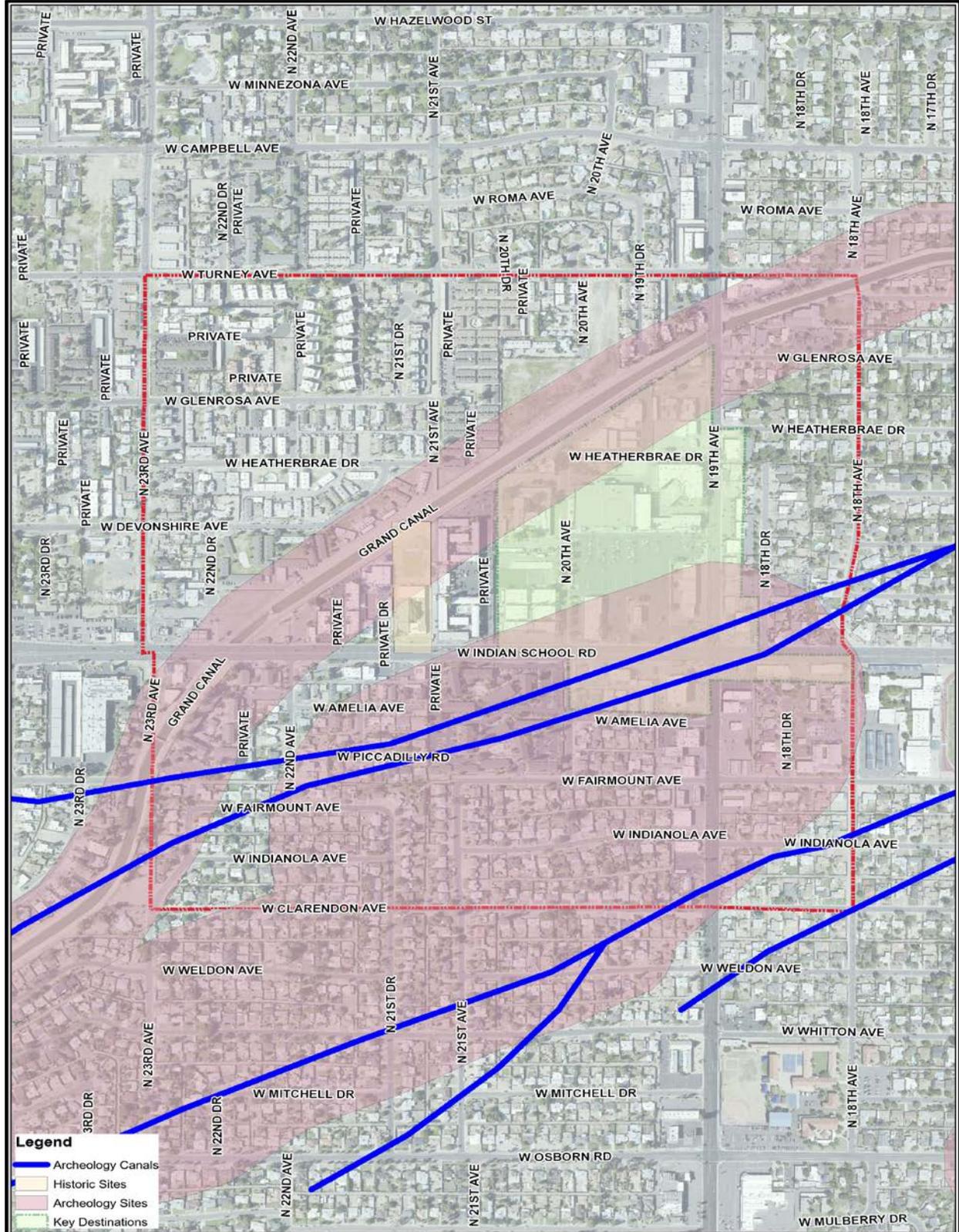
City of Phoenix
 T2050 Mobility Study Area 2
 Right of Way



Map
 5

The City of Phoenix has identified some of the environmentally sensitive sites within the study area. Map 6 - Environmental Constraints shows some of the archaeological sites that have been found within the study area.

Current Conditions Report



Current Conditions Report

Drainage Concerns

The City provide a list of public concerns and work orders initiated within the study area. Map 7 - Drainage Concerns shows locations where the City completed work orders associated with flooding or other drainage concerns. The map also shows the existing drainage infrastructure as wells as locations where curb & gutter is missing. Missing curb & gutter is a drainage concern because storm water cannot be conveyed properly. Areas with potential flooding concerns include:

- The City has completed various work orders associated with flooding and clogged storm drains around the intersection of 23rd Avenue and Indian School Road. See Photo 41 (page 44).
- The City has also completed work around the intersection of 19th Avenue and Indian School Road. See Photo 42 (page 44).
- The City has completed many work orders at the intersection of of 22nd Drive and Devonshire Road. See Photo 38 (page 43)
- The City has received complaints of flooding and clogged catch basins at the intersection of 18th Avenue and Turney Avenue. See Photo 39 and Photo 40 (page 44).
- There is an open drainage channel on the west side of 23rd Avenue between Heatherbrae Avenue and Glenrosa Avenue. The City frequently receives requests from the public to clean and mow the ditch. See Photo 37 (page 43).

Photo 37 - 23rd Avenue Ditch



Photo 38 - 22nd Dr./Devonshire Ave.



Current Conditions Report

Photo 39 - 18th Avenue/Turney Avenue



Photo 40 - 18th Avenue/Turney Avenue



Photo 41 - 23rd Ave./Indian School Rd.



Photo 42 - 19th Ave./Indian School Rd.



Current Conditions Report



Current Conditions Report

Previous City of Phoenix Public Outreach

The study team has not identified any previous public outreach efforts conducted by the City of Phoenix in the study area.

Crash History

The City of Phoenix provided history on pedestrian and bicycle related crashes. The data shows crashes clustered at various locations. Bicycle and pedestrian related crashes at clustered locations are summarized below. For more information refer to the crash data report in the appendix.

Total Bicycle/Pedestrian Related Crashes, Study Area 1		
	Bicycle	Pedestrian
Total Crashes	28	44
Fatal Crashes	1	6
Serious Crashes	2	14
Minor Crashes	25	24

Indian School at 23rd Avenue

The crash history at this location includes 7 bicycle related crashes and 5 pedestrian related crash.

Bicycle Related Crashes – Indian School Road/23rd Avenue				
Severity	Conditions	Bicycle Action	Bicycle Violation	Vehicle Violation
Minor	Light	Riding in South X-Walk	Rode Opposing Traffic	Unknown
Minor	Light	Riding w/ Traffic	Inattention	None
Minor	Dark	Riding w/ Traffic	None	Improper Turn
Minor	Dark	Riding w/ Traffic	Non	Inattention
Minor	Dark	Riding in N. X-Walk	Rode Opposing Traffic	None
Minor	Dark	Riding in N. X-Walk	Rode Opposing Traffic	None
Minor	Light	Riding Against Traffic	Failed to Yield	None

- Five of the bicycle related crashes at this location involved vehicles making a right turn. In four of those crashes the bicyclist was determined to be at fault.
- Two of the bicycle related crashes involved vehicles exiting a driveway, in one crash the vehicle was at fault and in the other the bicycle was at fault.

Current Conditions Report

Pedestrian Related Crashes – Indian School Road/23 rd Avenue				
Severity	Conditions	Pedestrian Action	Pedestrian Violation	Vehicle Violation
Minor	Light	Crossing in E. X-Walk	Disregarded Signal	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Serious	Light	Crossing Road	Did Not Use X-Walk	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None

- In all the pedestrian related crash, the pedestrian was determined to be at fault, for not using the crosswalk or ignoring the signal when crossing the road.

Indian School Road, between 22nd Avenue and 20th Avenue

The crash history at this location includes 6 bicycle related crashes and 18 pedestrian related crashes.

Bicycle Related Crashes – Indian School Road, 22 nd Avenue to 20 th Avenue				
Severity	Conditions	Bicycle Action	Bicycle Violation	Vehicle Violation
Minor	Light	Crossing Road	Failed to Yield	None
Minor	Light	Riding Against Traffic	Rode Opposing Traffic	Failed to Yield
Fatal	Light	Crossing in X-walk	Inattention	None
Minor	Light	Riding Against Traffic	Failed to Yield	None
Minor	Light	Riding Against Traffic	Unknown	Unknown
Minor	Light	Riding w/ Traffic	Other	Failed to Yield

- In two of the bicycle related crashes involved, the vehicle was traveling straight. In both the of these incidents, the bicyclist failed to yield or was cited for inattention. One of these crashes was a fatal crash.
- Four of these crashes involved a vehicle making a turning movement.
- In one of these crashes the bicyclist was drinking at the time.

Current Conditions Report

Pedestrian Related Crashes – Indian School Road, 22nd Avenue to 20th Avenue				
Severity	Conditions	Pedestrian Action	Pedestrian Violation	Vehicle Violation
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Minor	Dark	Crossing in X-Walk	None	Inattention
Minor	Dark	Crossing in X-Walk	None	Failed to Yield
Minor	Light	Crossing Road	Did Not Use X-Walk	None
Fatal	Dark	Crossing Road	Did Not Use X-Walk	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Serious	Dark	Crossing Road	Did Not Use X-Walk	None
Fatal	Dark	Crossing Road	Did Not Use X-Walk	None
Minor	Light	Crossing in X-Walk	None	Failed to Yield
Minor	Dark	Crossing Road	Did Not Use X-Walk	None
Fatal	Light	Crossing Road	Did Not Use X-Walk	Speed to Fast
Minor	Dark	Walking with Traffic	None	Drove onto Sidewalk
Minor	Dark	Walking Against Traffic	Unknown	Unknown
Serious	Dawn	Crossing Road	Did Not Use X-Walk	None
Minor	Light	Crossing Road	Did Not Use X-Walk	None
Minor	Light	Crossing in X-Walk	None	Disregarded Signal

Current Conditions Report

- In 12 of these pedestrian related crashes, the pedestrian did not use the crosswalk. 9 of those crashes were serious or fatal.
- In 5 of these crashes, the pedestrian was drinking or doing drugs at the time of the crash.

Indian School Road at 19th Avenue

The crash history at this location includes 9 bicycle related crashes and 9 pedestrian related crashes.

Bicycle Related Crashes – Indian School Road/19th Avenue				
Severity	Conditions	Bicycle Action	Bicycle Violation	Vehicle Violation
Minor	Light	Riding Against Traffic	Rode in NB Lanes	None
Minor	Dark	Riding in S. XWalk	Inattention	Inattention
Minor	Light	Riding in S. XWalk	Disregarded Signal	None
Minor	Light	Riding Against Traffic	None	Failed to Yield
Minor	Dark	Riding in W. XWalk	Failed to Yield	None
Minor	Dark	Riding Against Traffic	None	None
Minor	Light	Riding in W. XWalk	Other	Failed to Yield
Minor	Dark	Riding in W. XWalk	Riding in XWalk	None
Serious	Dark	Riding w/ Traffic	Unknown	Unknown

- In seven of the bicycle related crashes, the vehicle was making a turning movement or exiting a driveway.
- In one of the crashes, the bicyclist was drinking and fell into the road.

Current Conditions Report

Pedestrian Related Crashes – Indian School Road/19th Avenue				
Severity	Conditions	Pedestrian Action	Pedestrian Violation	Vehicle Violation
Minor	Dark	Crossing in N. X-Walk	None	Failed to Yield
Serious	Dark	Crossing in S. X-Walk	Disregarded Signal	None
Minor	Dark	Crossing Road	Did Not Use X-Walk	None
Minor	Light	Crossing Road	Did Not Use X-Walk	None
Fatal	Dark	Crossing Road	Did Not Use X-Walk	None
Minor	Light	Crossing in E. X-Walk	None	Failed to Yield
Minor	Dark	Crossing in E. X-Walk	None	Failed to Yield
Minor	Dark	Crossing in W. X-Walk	None	Unknown
Minor	Dark	Crossing in W. X-Walk	None	Failed to Yield

- In four of the pedestrian related crashes, the pedestrian did not use the crosswalk or disregarded the traffic signal.
- In four of the crashes the pedestrian did use the crosswalk, and the driver failed to yield.
- In two of the crashes, pedestrian was drinking or using drugs.

Current Conditions Report

19th Avenue at Indianola Avenue

The crash history at this location includes 1 bicycle related crash and 2 pedestrian related crashes.

Bicycle Related Crashes – 19 th Avenue/Indianola Avenue				
Severity	Conditions	Bicycle Action	Bicycle Violation	Vehicle Violation
Minor	Light	Riding Against Traffic	None	None

- In the bicycle related crash, the bicyclist was riding against traffic, but neither the bicyclist or the driver was cited.

Pedestrian Related Crashes – 19 th Avenue/Indianola Avenue				
Severity	Conditions	Pedestrian Action	Pedestrian Violation	Vehicle Violation
Serious	Dark	Crossing Road	Walking in Roadway	None
Minor	Light	Walking Against Traffic	None	Failed to Yield

- In one of these crashes, the pedestrian was crossing 19th Avenue.
- In the other crash, the driver was making a right turn and hit the pedestrian.

19th Avenue, between Glenrosa Avenue and Turney Avenue

The crash history at this location includes 2 bicycle related crashes and 4 pedestrian related crashes.

Bicycle Related Crashes – 19 th Avenue/Glenrosa Avenue				
Severity	Conditions	Bicycle Action	Bicycle Violation	Vehicle Violation
Minor	Light	Riding Against Traffic	Rode Opposing Traffic	None
Serious	Dark	Crossing Road	Failed to Yield	None

- In one of the bicycle related crashes, the bicycle was riding opposing traffic and was hit by a vehicle making a right turn.
- In the other crash, the bicycle was crossing the road at the canal crossing.

Current Conditions Report

Pedestrian Related Crashes – 19th Avenue/Glenrosa Avenue				
Severity	Conditions	Pedestrian Action	Pedestrian Violation	Vehicle Violation
Minor	Light	Walking Against Traffic	None	Inattention
Fatal	Light	Crossing in S. X-Walk	None	Failed to Yield
Fatal	Dark	Crossing Road	Did Not Use Xwalk	Unknown
Serious	Light	Crossing in S. X-Walk	Unknown	Unknown

- In one of the fatal crashes, pedestrian was crossing in the crosswalk and was hit by a vehicle that failed to yield.
- In the other fatal crash, the pedestrian was drinking at the time of the crash. In this crash, the pedestrian did not use the crosswalk.

Current Conditions Report



- Legend**
- Crash Severity**
- ⊗ Bike, Fatal
 - Bike, Serious
 - Bike, Minor
 - ⊗ Ped, Fatal
 - Ped, Serious
 - Ped, Minor
 - ⊠ Traffic Signals
 - ◆ RRFB
 - Crosswalks
 - Key Destinations

Current Conditions Report

Planned City of Phoenix Projects/Activities

City of Phoenix Capital Improvement Program

There are currently no planned projects in the City of Phoenix Capital Improvement Program with the study area.