



**CITY OF PHOENIX  
STREET TRANSPORTATION DEPARTMENT**

**T2050 MOBILITY ASSESSMENT  
CAPITOL NORTH NEIGHBORHOODS  
STUDY AREA #7**

**DRAFT CURRENT CONDITIONS REPORT  
COP PROJECT No.: ST87210020-1**

June 2018

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Job No. 1803



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# Current Conditions Report

## Mobility Area

The Capitol North Neighborhoods area (Mobility study area 7) is approximately 0.7 square miles in size; situated between Madison Street and Roosevelt Street from 20<sup>th</sup> Avenue to 12<sup>th</sup> Avenue (see Figure 1).

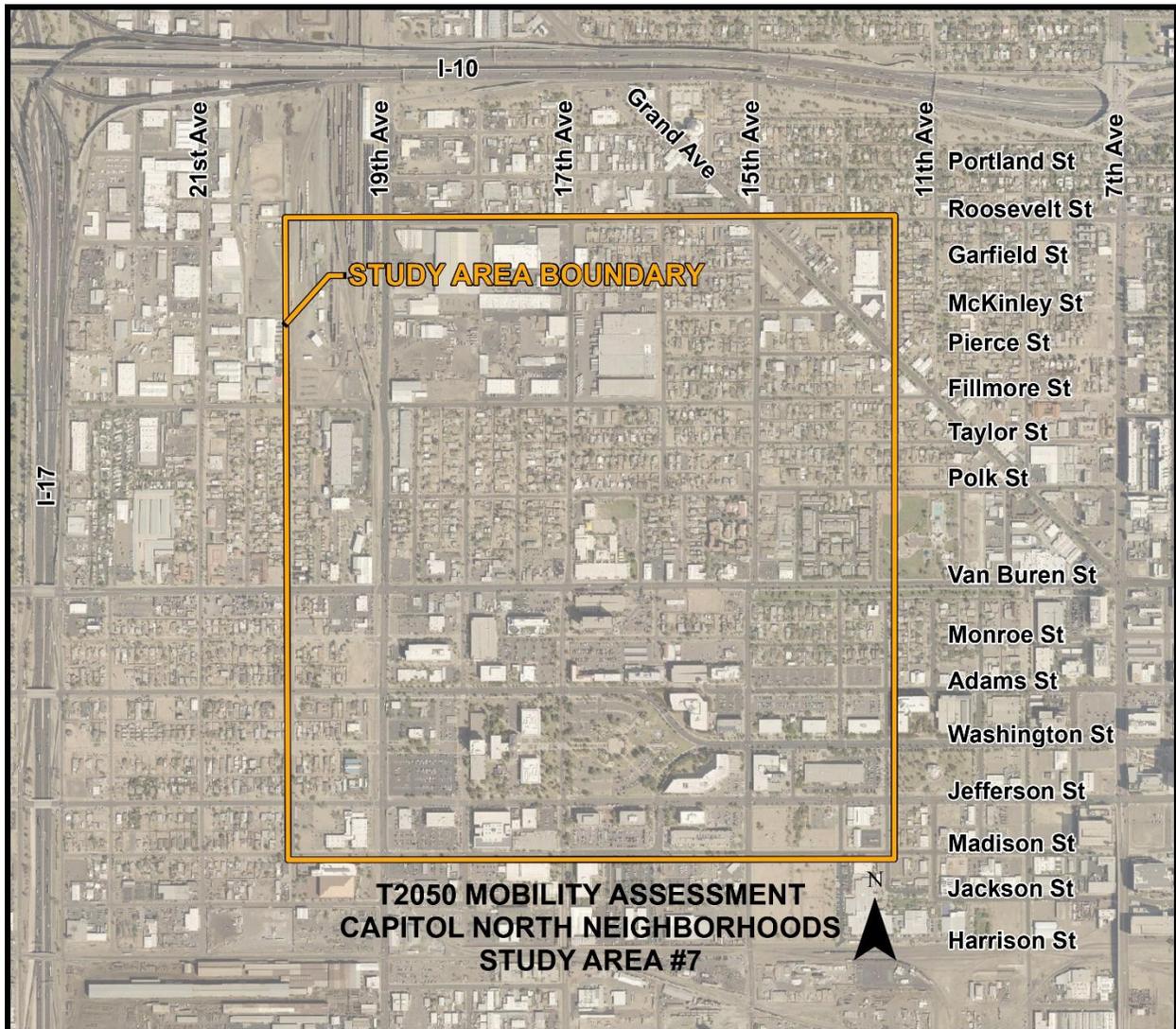


Figure 1 – Study Area Map

The land use in the study area is primarily State government offices south of Van Buren Street and north of Van Buren is mostly older, single family housing; even though the area is zoned for multi-family housing. The northwest corner of the study area is industrial with several manufacturing plants and warehouses. There are also numerous commercial properties in the study area that are primarily located along the Van Buren Street, 15<sup>th</sup> Avenue and Grand Avenue corridors.

The study area has several bus routes including Washington/Jefferson Street, Van Buren Street, 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue. Depending on the results from an upcoming Public Transit study, 19<sup>th</sup> Avenue may also become a Bus Rapid Transit route. Providing accessible routes to the bus stops is an important aspect of improving mobility in the study area.

The Capitol/I-10 West light rail extension, which is in the early planning stage, will run through the study along Jefferson Street, 19<sup>th</sup> Avenue and Van Buren Street. Mobility improvements necessary to get pedestrians and bicyclists to the proposed light rail stations will be one of the focuses of this study.



*Government offices/bus route along Washington St.*



*Non-compliant sidewalk ramp.*

Most of the homes in the study area were built in the early part of the last century, before 1940; well before requirements for accessible sidewalks. While ramps have been added to most of the sidewalks, many of them are older styles that are not compliant with the ADA requirements. There are also a few streets that don't have sidewalks.

## Public Outreach

The project team reached out to several individuals and organizations that have a vested interest in improving mobility in the study area and interviews were conducted with those that responded to our request for an interview. The team also reached out to City staff with knowledge of mobility issues in the study area. This effort is ongoing as we continue to reach out to the public. The following is a summary of the interviews that have been conducted so far.

### **Mr. Michael Guerra**– Principal, St. Matthews Catholic School

- St. Matthews is a K-8 School with about 220 students.
- Almost all the students are dropped off.
- Two students walk to school from the neighborhood east of 19<sup>th</sup> Avenue and few take the city bus, but most are dropped off.
- Some students go to an after-school program at the Boys and Girls Club, but the Club provides transportation.
- Mr. Guerra’s primary concerns are:
  1. The intersection at 19<sup>th</sup> Avenue and Van Buren is dangerous with the proximity of the railroad tracks, bus stops too close to the street and the busy Jack in the Box at the southeast corner.
  2. The afternoon traffic on Van Buren Street is very congested; vehicles come to a standstill, which seems to have gotten worse lately.
  3. Coordination with the Police Department is difficult. It is hard to get their attention and they are not very informative.
  4. City waterlines that serve the school are regularly breaking causing disruptions in water service to the School.



*Intersection of 19<sup>th</sup> Ave. and Van Buren St.*

### **Mr. Armando Cuellar** – Transportation Supervisor, Phoenix Elementary School District

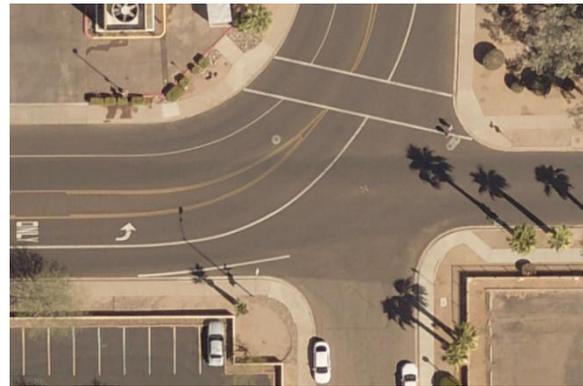
- Capitol Elementary is a K-8 School with about 600 students.
- The school boundaries are approximately Madison Street to McDowell Road between 23<sup>rd</sup> Avenue and 15<sup>th</sup> Avenue.
- Students who live between 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue, north of Van Buren Street, are expected to walk to school. The District provides bus service for other students who live south of Van Buren Street and/or west of 19<sup>th</sup> Avenue.

- Mr. Cuellar is not aware of any problems with students walking or riding bikes to school, but he will contact us if he hears of any issues.

**Joe Perez**, City of Phoenix Bicycle Coordinator

Joe had the following recommendations:

- Bikeway on 17<sup>th</sup> Ave., Madison St. to Roosevelt St.
- Bike lanes on Roosevelt St. from 19<sup>th</sup> Ave. to 15<sup>th</sup> Ave.
- Sidewalk improvements on 19<sup>th</sup> Ave. from Harrison St. to Van Buren St.
- Bike lanes on Grand Ave. from 15<sup>th</sup> Ave to the fairgrounds at McDowell Rd.
- Protected cycle track under I-10 bridge deck.
- Bikeway on Madison St. from 20<sup>th</sup> Ave. to 3<sup>rd</sup> Ave.
  - 20<sup>th</sup> Ave to 19<sup>th</sup> Ave. is tight and may not provide enough space for bike lanes.
  - Remove parking on south side of Madison St. between 18<sup>th</sup> Ave. and 17<sup>th</sup> Ave.
  - Reconstruct/Re-stripe/Re-sign Madison St. and 16<sup>th</sup> Ave. intersection; reconfigure to a standard 4-way intersection.
- Add bike connection from Madison St. to Washington St. along 16<sup>th</sup> Ave. which will be challenging.



*Existing Madison St. & 16<sup>th</sup> Ave. intersection.*

**Don Cross**, City of Phoenix School Coordinator

Don had the following comments relating to the schools located in the study area.

*Capitol Elementary School:*

- Located at 17<sup>th</sup> Ave. and Van Buren St. and within the Phoenix School District.
- Most students are from the local neighborhood, not many out of district students.

*St Matthew Catholic School (K-8):*

- Located at 21st Ave. and Van Buren St.
- Most students are dropped off. Some students walk from neighborhood, and there are some that use signal at 21st Ave. to cross Van Buren St.

## Key Destinations

Based on field observations and stakeholder interviews, a KEY DESTINATIONS map (Map 1) was developed that shows destinations in the study area. These destinations are bicycle and pedestrian trip generators that include places of worship, social service centers, stores and restaurants, parks, schools and convenience markets. Bus stops are also key destinations which are shown separately on the TRANSIT map (Map 4).

### **Churches**

There are four churches in and adjacent to the study area which include:

1. Cristo Viene on Taylor Street, west of Grand Avenue.
2. Mater Misericordiae Mission at Monroe Street and 16<sup>th</sup> Avenue.
3. Phoenix Chin Bethel Church on Fillmore Street west of Grand Avenue.
4. King's Chapel Altar of Prayer on Fillmore Street east of 17<sup>th</sup> Avenue.

### **Social Service Centers**

There are several social service organizations in or adjacent to the study area which include:

1. Central Arizona Shelter Services, located 11<sup>th</sup> Avenue and Madison Street, provides shelter, veteran support, employment and housing assistance, and family services to homeless people.
2. Andre House, located at 11<sup>th</sup> Avenue and Jackson Street, provides services to people in need including food, clothing and transitional housing.
3. Society of St. Vincent DePaul, located at 12<sup>th</sup> Avenue and Jackson Street, provides food, clothing, housing and medical treatment for people in need.
4. Neighborhood Ministries, located on Van Buren Street west of 19<sup>th</sup> Avenue, provides food, clothing and youth programs to families in need.

### **Schools**

There are two elementary schools located in and adjacent to the study area.

1. Capitol Elementary School (kindergarten through 8<sup>th</sup> grade) is located at Van Buren Street and 17<sup>th</sup> Avenue. It is in the Phoenix Elementary School District and serves the area between Madison Street and McDowell Road from 23<sup>rd</sup> Avenue to 15<sup>th</sup> Avenue. Students who live between 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue, north of Van Buren Street, are expected to walk to school. The District

provides bus service for other students who live south of Van Buren Street and/or west of 19<sup>th</sup> Avenue.

2. St. Matthew’s Catholic School (kindergarten through 8<sup>th</sup> grade) is located at 21<sup>st</sup> Avenue and Van Buren Street. Most of its students are driven to school, but there a couple that walk to school from the neighborhood east of 19<sup>th</sup> Avenue.

### **Parks**

There are five parks located in or adjacent to the study area.

1. Woodland Park is 68-foot wide, landscaped parkway along the south side of Van Buren Street between 15<sup>th</sup> Avenue and 9<sup>th</sup> Avenue. It is currently closed to the public.
2. University Park is a 10-acre community park with a swimming pool, a lighted ballfield, basketball courts, picnic areas, restrooms and a parking lot. It is located at the northeast corner of Van Buren Street and 12<sup>th</sup> Avenue.
3. Library Park is a 5-acre landscaped area surrounding the Arizona Carnegie Library located at Washington St. and 11<sup>th</sup> Ave. The site is leased by the State and used as administrative and museum space for the Arizona State Library. The landscaped area is not open for Park use.
4. Wesley Bolin Memorial Plaza is a 12-acre parking area and open space in front of the State Capitol building. It is a tourist attraction that is home to numerous memorials.
5. Pioneer and Military Memorial Park is 12-acre historic cemetery located east of 15<sup>th</sup> Avenue between Harrison Street and Jefferson Street.



*Government offices along Washington St.*

### **State Capitol / Government Offices**

Most of the southern part of the study area, south of Van Buren Street, is a major employment center for State employees. As can be seen from Map 1, most of the area south of Van Buren is comprised of State government offices.

### ***Van Buren Street***

There are several businesses along Van Buren Street between 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue, including seven restaurants, a bank, laundry, convenience stores, and a dollar store.



*Van Buren Street.*



*Grand Avenue shops.*

### ***Grand Avenue Shops***

Grand Avenue between Van Buren Street and Roosevelt Street is an area in transition that already includes several shops and restaurants.

**Legend**

 Study Area #7

Key Destinations

 Government Offices

 Park or Memorial

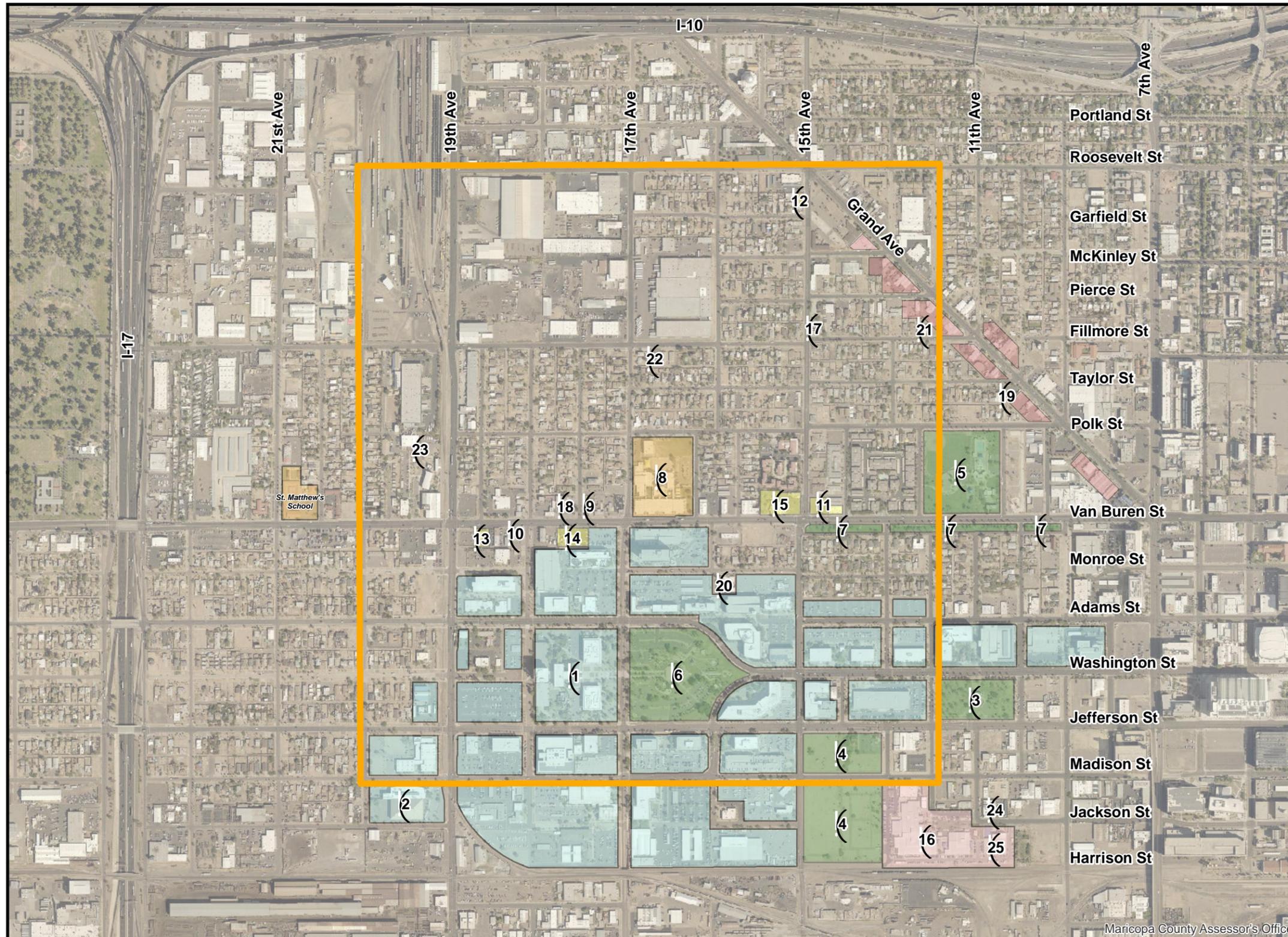
 Restaurants

 Schools

 Grand Avenue Shops

 Social Services

- 1 Arizona State Capitol
- 2 Arizona State Library, Archives & Public Records
- 3 Library Park
- 4 Pioneer & Military Memorial Park
- 5 University Park
- 6 Wesley Bolin Memorial Plaza
- 7 Woodland Park
- 8 Capitol Elementary School
- 9 Art's All American Cafe
- 10 Elchino Tacos
- 11 International House of Food
- 12 Irma's Kitchen
- 13 Jack In The Box
- 14 La Canasta Capitolio
- 15 Mission Possible Cafe
- 16 Central Arizona Shelter Services
- 17 Buster's Market
- 18 Circle K
- 19 Cristo Viene
- 20 Mater Misericordiae Mission
- 21 Phoenix Chin Bethel Church
- 22 King's Chapel Altar of Prayer
- 23 Neighborhood Ministries
- 24 Andre House
- 25 Society of St. Vincent DePaul



## Existing Pedestrian and Bicycle Network, Transit Facilities

### **Sidewalks**

As can be seen on the SIDEWALKS map (Map 2), most of the streets in the study area have sidewalks, but there are several gaps. There are also many missing sidewalk ramps as well as non-compliant ramps and driveways.



*No sidewalk on 16<sup>th</sup> Ave.*

**Sidewalk Gaps** – There are approximately 12,600 feet (2.4 miles) of sidewalk gaps in the study area that are shown on Map 2. They include the west side of 19<sup>th</sup> Avenue as well as portions of Jackson Street, Madison Street, Polk Street, Garfield Street, 16<sup>th</sup> Avenue and 15<sup>th</sup> Avenue. The Woodland Park frontage along the south side of Van Buren Street was also identified as a sidewalk gap.

**Missing Sidewalk Ramps** – As can be seen on Map 2, there are approximately 30 missing sidewalk ramps in the study area. The missing ramps are not concentrated on any one street; instead they occur throughout the study area.

**Non-Compliant Sidewalk Ramps** – There are approximately 320 existing sidewalk ramps that are identified as Non-Compliant on Map 2. Generally, these ramps were constructed prior to the ADA compliance

guidelines for sidewalks and are either missing a detectable warning surface, don't have an accessible landing area or are too steep or too narrow to meet current ADA design guidance.

**Non-Accessible Driveways** – Non-Accessible driveways are a common problem in the study area; there are more than 200 driveways that don't comply with the ADA design guidelines. They interfere with the accessible pedestrian route because they don't have a level sidewalk area at the back of the driveway; resulting in a sidewalk cross slope of about 10% at the driveways. This problem is most prevalent along 15<sup>th</sup> Avenue, but there are several other streets that also have non-compliant driveways. Many of the



*Non-accessible driveway at bus stop.*

residential streets don't have an issue with non-compliant driveways because most of them have the sidewalks set back behind the curb; allowing adequate space for the driveway to slope up between the curb and the sidewalk.

*Traffic Signals* – There are thirteen signalized intersections in the study area that include crosswalks. They are shown on Map 2 and are located on arterial and collector streets, including: 19<sup>th</sup> Avenue, 15<sup>th</sup> Avenue, Van Buren Street, Washington Street and Jefferson Street. There is also one at 17<sup>th</sup> Avenue and Madison Street.

*HAWK Beacon* – There is a HAWK pedestrian signal at the intersection of Filmore Street and Grand Avenue which assists pedestrians with crossing Grand Avenue. It is in the middle of the Grand Avenue commercial district; about half way between Van Buren Street and Roosevelt Street.

*Railroad Crossings* – The Railroad tracks run along the west side of 19<sup>th</sup> Avenue and there are signalized RR crossings at every street that intersects the Railroad; a total of six signalized RR crossings.

*School Crossings* – There are two school crossings in the study area that serve Capitol Elementary School. One is across 17<sup>th</sup> Avenue at Polk Street and the other is across Polk Street at 16<sup>th</sup> Avenue.

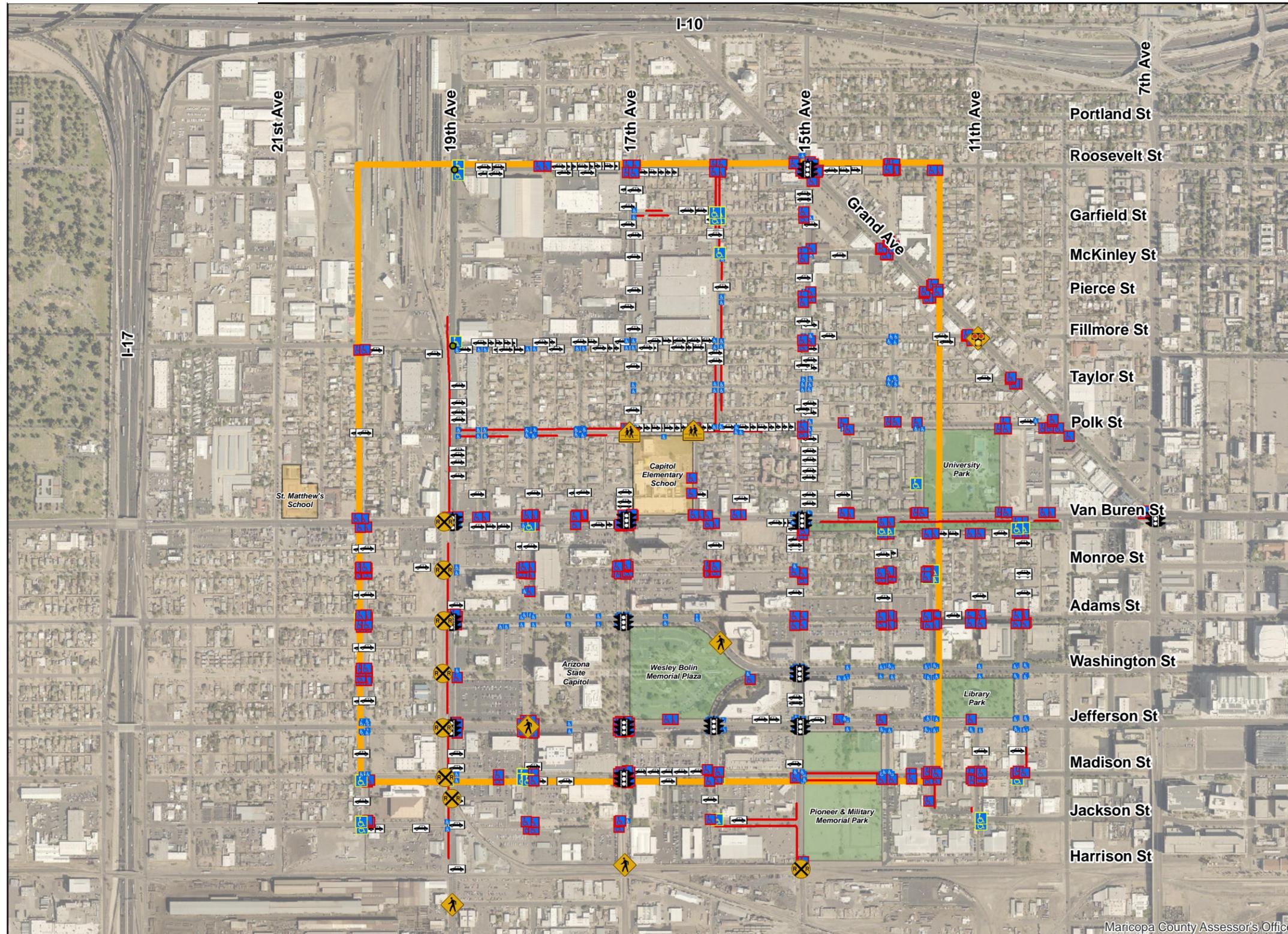
*Unsignalized Crosswalks* – There are several unsignalized crosswalks in the study area, most of which are in the State Government office complex south of Van Buren Street. They include crosswalks on Monroe at 18<sup>th</sup> Avenue, at the intersection of 17<sup>th</sup> Avenue and Monroe, five across Washington Street between 18<sup>th</sup> Avenue and 12<sup>th</sup> Avenue and three across Jefferson Street between 18<sup>th</sup> and 13<sup>th</sup> Avenue. The one across Jefferson Street at 18<sup>th</sup> Avenue has a high visibility warning sign for eastbound traffic. There are also crosswalks at Polk and 17<sup>th</sup> Avenue that serve Capitol Elementary and across Van Buren at 16<sup>th</sup> Avenue which also serves Capitol Elementary.



*High visibility crosswalk on Jefferson St.*

**Legend**

-  Compliant Ramp
-  Non Compliant Ramp
-  Missing Ramp
-  Non-Accessible Driveway
-  Sidewalk Gap
-  <all other values>
-  HAWK Traffic Signal
-  Pedestrian Crossing (High Visibility Signage)
-  School Crossing
-  Railroad Crossing
-  TRAFFIC SIGNAL
-  Study Area #7



Maricopa County Assessor's Office

## ***Bikeways***

As can be seen on the Bikeways map (Map 3), there are existing bike lanes on Roosevelt Street, Washington Street, Jefferson Street, 15<sup>th</sup> Avenue, and Grand Avenue. Bike lanes are defined in the City’s Comprehensive Bicycle Master Plan as bikeways created by designating a portion of the street, using pavement markings and signs, for the exclusive use by bicyclists. The following is a description of the existing bikeways and gaps that were identified.

*Roosevelt Street Bike Lanes* – Roosevelt Street has existing bike lanes that run from 15<sup>th</sup> Avenue to the east, but the City has identified a ½-mile long bike lane gap on Roosevelt between 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue. Filling this gap will provide a connection from the 19<sup>th</sup> Avenue bus route to the Roosevelt Street, 15<sup>th</sup> Ave., and Grand Ave. bike lanes.

*Washington Street Bike Lanes* – Washington Street has an existing bike lane for west-bound travel that runs through the study area. The City has identified a gap in the bike lane at 16<sup>th</sup> Avenue where the wye in Washington Street occurs on the east side of Wesley Bolin Plaza. Filling this gap would provide a bike lane for cyclists who want to use the Washington Street bike lanes to access the government offices south of the Capitol building.

*Jefferson Street Bike Lanes* – There is an existing bike lane on Jefferson Street for eastbound travel that runs through the study area. No gaps were identified for the Jefferson Street Avenue bike lanes.

*15<sup>th</sup> Avenue Bike Lanes* – 15<sup>th</sup> Avenue has existing bike lanes that run through the study area; including protected bike lanes between Jefferson Street and Van Buren Street. No gaps were identified for the 15<sup>th</sup> Avenue bike lanes.

*Grand Avenue Bike Lanes* - Grand Avenue has existing bike lanes between Roosevelt Street and Van Buren Street that connect the Grand Avenue commercial district to the Roosevelt Street bike lanes.

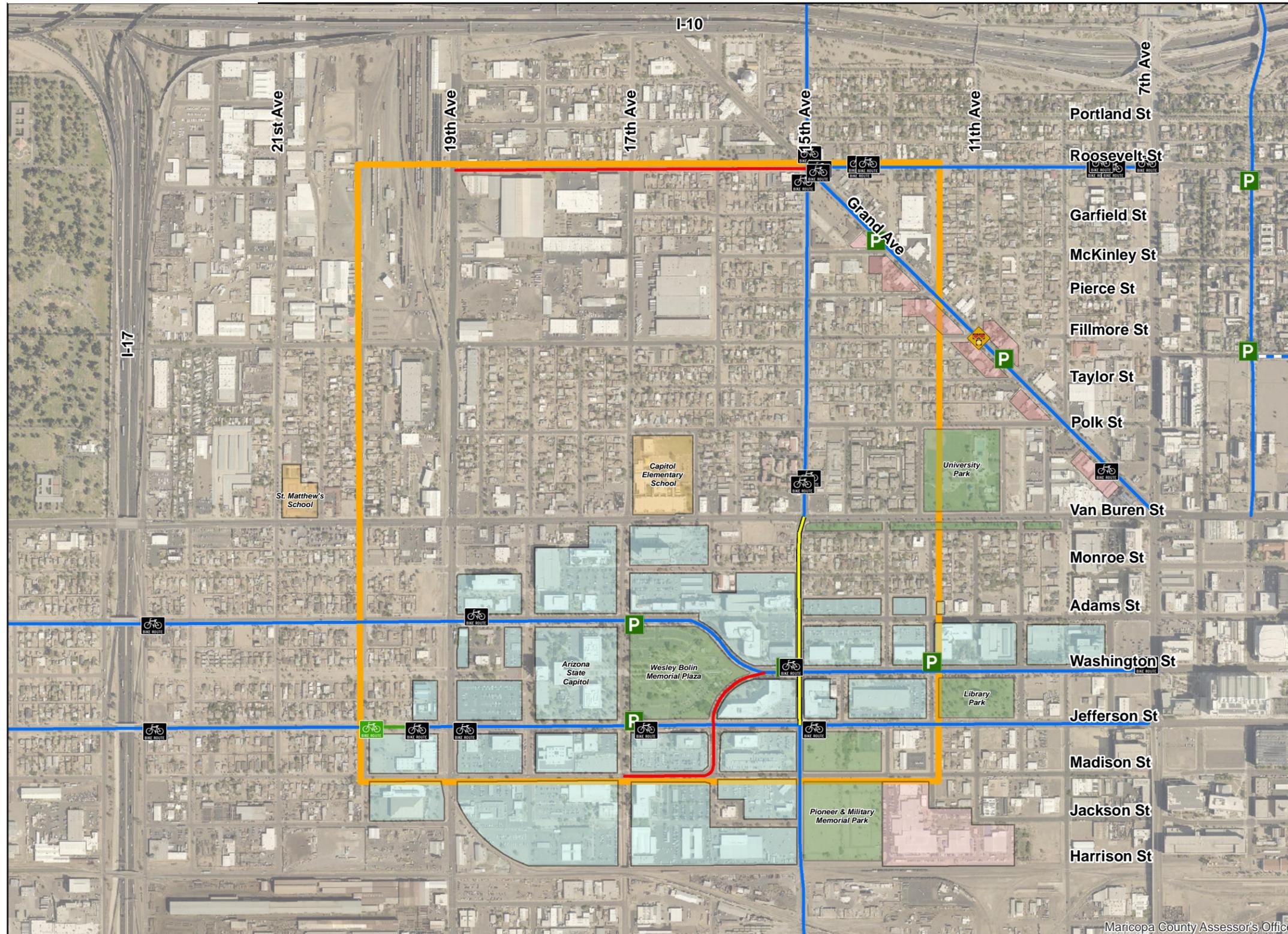
In addition to the bike lanes and bike lane gaps described above, Joe Perez (City Bicycle Coordinator) has several recommendations for expanding the bikeway network in the study area. These recommendations include adding a bikeway on 17<sup>th</sup> Avenue between Madison Street and Roosevelt Street, Extending the Grand Avenue bike lanes to the Fairgrounds at McDowell Road, and adding a bikeway on Madison Street that runs from 20<sup>th</sup> Avenue, through the study area to 3<sup>rd</sup> Avenue.



*Current end of Grand Ave. bike lanes.*

**Legend**

- Ⓢ Bike Lane Sign
- Ⓢ Bike Route Sign
- A Bike Share Parking
- Protected Bike Lane
- Bike Lane
- Bike Lane Gap
- - - Bike Boulevard
- Bike Route
- Ⓢ HAWK Signal
- ▭ Study Area #7



Maricopa County Assessor's Office

**Transit Facilities**

As shown on the TRANSIT map (Map 4), there are existing bus routes along many of the streets in the study area including Van Buren Street, Washington Street, Jefferson Street, 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue. There is also the proposed Capitol/I-10 West extension of the Light Rail which runs through the study area. Providing accessible routes to the bus stops and future light rail stations is an important aspect of improving mobility in the study area.

*Bus Ridership* – According to data provided in Valley Metro’s Ridership Data Portal, there is an average of about of about 1400 people from the study area boarding the bus each weekday. As can be seen from Map 4, most of these are boarding the Van Buren Street, Jefferson Street and 19<sup>th</sup> Avenue buses in the area around the State Government offices. The rest board the 15th Avenue bus.

*Bus Stops* – Bus stops are generally located at quarter mile intervals along the bus routes. The majority of the bus stops have shelters and are ADA compliant, but there are several that are either non-compliant or don’t have shelters.

*Non-Compliant and/or Non-Standard Bus Stops* – There are sixteen non-compliant and/or non-standard bus stops in the study area. Non-compliant means that they don’t meet the ADA Guidelines for bus stops which requires an accessible route to the bus stop and a bus boarding/alighting pad that is 8 feet long perpendicular to the curb by 5 feet wide parallel with the curb. Non-standard means that it doesn’t have a shelter and isn’t constructed in accordance with City Standard Details. Many of these non-compliant/non-standard bus stops, particularly along 19<sup>th</sup> Avenue and 15<sup>th</sup> Avenue, are simply bus stop signs installed at the back of the existing sidewalk without any other bus stop infrastructure.



*Non-compliant bus stop on 19<sup>th</sup> Ave.*

*Possible Future 19<sup>th</sup> Avenue Bus Rapid Transit (BRT)* – Depending on the results from an upcoming Public Transit study, 19<sup>th</sup> Avenue may become a BRT route. The Public Transit Department plans to add a north-south BRT route that will run either along 19<sup>th</sup> Avenue or 35<sup>th</sup> Avenue. The results of the study will determine whether it will be on 19<sup>th</sup> Avenue. Regardless of the BRT route, however, the gap in sidewalks along 19<sup>th</sup> Avenue should be filled to provide better access to the 19<sup>th</sup> Avenue bus stops.

*Rapid/Express Bus Routes* – In addition to the local bus routes, there are also express routes along Grand Avenue and Washington/Jefferson Streets that serve customers that commute to the downtown area on the bus. Most of these express routes run along freeways to destinations miles away from downtown.

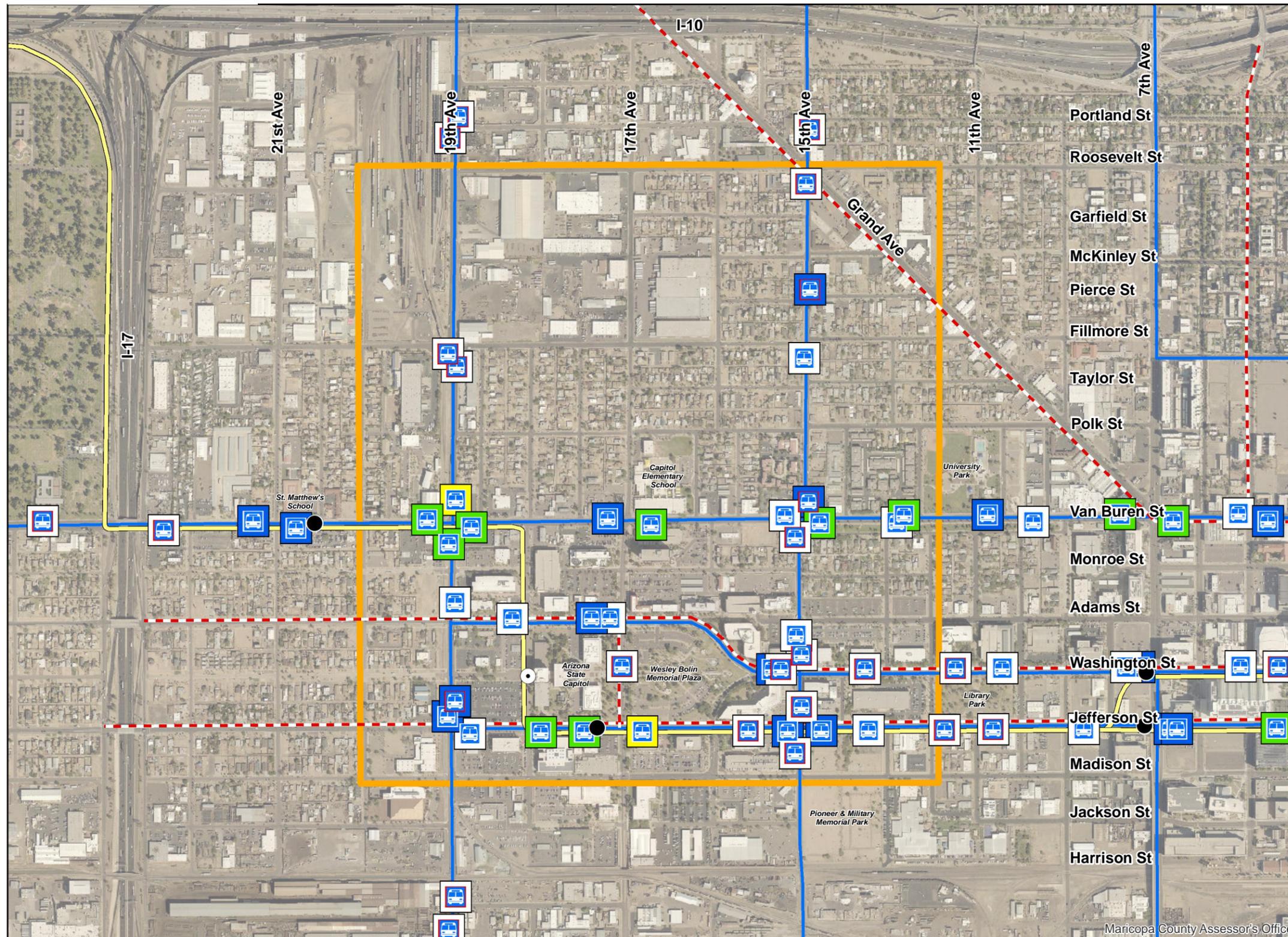
*Future Light Rail Extension* – The proposed Capitol/I-10 West extension of the Light Rail will run through the study area, although the design has not been done yet. Concept plans indicate that the light rail alignment will run along Jefferson Street, north on 18<sup>th</sup> Avenue (or possibly 19<sup>th</sup> Avenue) and west on Van Buren Street. There is also a proposed light rail station in the study area at Jefferson Street and 17<sup>th</sup> Avenue with a second, optional station on 18<sup>th</sup> Avenue behind the Capitol building.

**Legend**

-  City Standard Bus Stop
-  Non Standard and/or Non Accessible Bus
-  Local Buses
-  Rapid / Express Bus
-  Future Light Rail Extension
-  Proposed Light Rail Station
-  Optional Light Rail Station
-  Study Area

**Average Bus Boardings per Average Weekday**

-  0 - 24
-  27 - 70
-  72 - 145
-  155 - 171



Additional Infrastructure, Land Use, Issues and Constraints

**Key Corridors/Right-of-Way/City-Owned Property**

The key corridors in the study area are shown on the KEY CORRIDORS/CITY-OWNED PROPERTY map (Map 5). They include the arterial streets and the collector streets. Also included on Map 5 is an inventory of City-owned property.

*Arterial Streets:*

- **19<sup>th</sup> Avenue** is a 5-lane, 52 to 56-foot wide arterial which includes two northbound lanes, two southbound lanes and a continuous left turn lane. On the east side of the road the right-of-way is close to the back of the existing sidewalk, but there appears to be enough space to fix ADA compliance issues. The right-of-way on the west side of the road varies significantly and is impacted by the Railroad that runs parallel to the roadway. There are also overhead power lines along the east side of the roadway that will impact the ability to plant shade trees.



*19<sup>th</sup> Avenue*



*17<sup>th</sup> Avenue*

- **17<sup>th</sup> Avenue** is classified as an arterial street, but it is only a 2-lane roadway with a raised median. It has 100 feet of right-of-way with shaded, setback sidewalks on both sides of the street.



*Grand Avenue*

- **Grand Avenue** is a 60-foot wide arterial with one lane in each direction and a painted median. It has bike lanes and on-street parking with sidewalks set back from the curb. It also has a significant number of shade trees.

- **Van Buren Street** is 56-foot wide roadway with two lanes in each direction and a painted median. Many of the existing sidewalks are set back from the curb. The right-of-way width varies from 80 to 90 feet and in most locations, there appears to be enough right-of-way behind the sidewalk to correct ADA compliance issues and plant shade trees.



*Van Buren Street*



*Washington Street*

- **Washington Street** is a 60-foot wide, one-way road with three traffic lanes, a bike lane, a dedicated bus lane and on-street parking. For most of its length is has 100 feet of right-of-way with sidewalks set back from the curb. It also has a significant number of shade trees.

- **Jefferson Street** has the same section as Washington Street, but with less shade trees.



*Jefferson Street*

*Collector Streets:*

- **Roosevelt Street** is a 34 to 38-foot wide collector with one lane in each direction. Most of the existing sidewalks are set back from the curb. The right-of-way width varies from 60 to 66 feet and in most locations, there appears to be enough right-of-way behind the sidewalk to correct ADA compliance issues. West of 15<sup>th</sup>

Avenue, there are overhead power lines on the north side of Roosevelt which switch to the south side east of 15<sup>th</sup>. The power lines will impact the ability to plan shade trees.



*Roosevelt Street*



*15<sup>th</sup> Avenue*

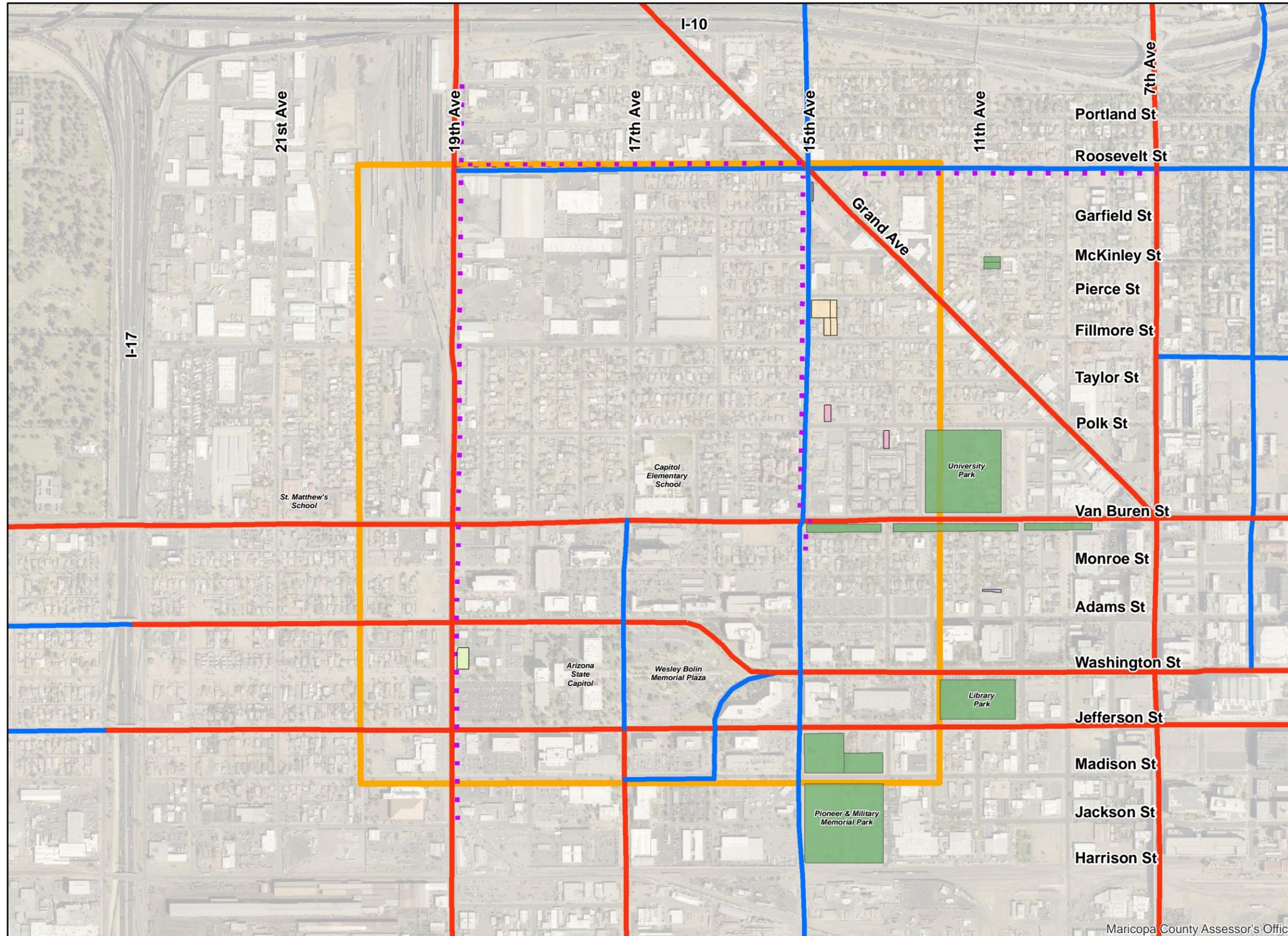
- **15<sup>th</sup> Avenue** is a 40 to 45-foot road with a painted median and one traffic lane and a bike lane in each direction. The right-of-way width is 60 feet. In many locations, especially along the east side of the street, the right-of-way line is at the back of the sidewalk which will impact the ability to make sidewalk improvements. There are also overhead power lines along the west side of the roadway, north of Van Buren Street, that will impact the ability to plant shade trees.

*City-Owned Property:*

There are several city-owned properties in the study area that are shown on Map 5. Some of them could provide an opportunity to improve sidewalks and provide shade. One of these opportunities is Woodland Park along the south side of Van Buren Street. Currently there is no sidewalk along Woodland Park and it is closed to the public, but the opportunity exists to add a sidewalk that takes advantage of existing shade trees in the Park. There is also the possibility of adding more shade trees to supplement the ones that already exist.



*Opportunity for shaded sidewalk at Woodland Park on Van Buren St.*



**Legend**

 Study Area #6

**City Owned Parcels**

**Department**

-  Finance
-  Fire
-  Neighborhood Services
-  Parks and Recreation
-  Street Transportation

**Key Corridors**

-  Arterial Streets
-  Collector Streets
-  Overhead Power Lines Along Key Corridors

Maricopa County Assessor's Office

## Streetlights

The existing streetlights within the Study area are shown on the STREETLIGHTS map (Map 6). As the map indicates, there are existing streetlights on all the streets and most meet the City's Streetlight Standards for spacing. In order to graphical display lighting coverage, the diameter of the circles around each streetlight shown on Map 6 is equal to the City's streetlight spacing requirements. For example, the street light spacing requirement for local streets is 250 feet; therefore, the circle around each local streetlight was drawn with a diameter of 250 feet.

*Arterial Streets* – The City's standard streetlight spacing for arterial streets is 200 to 250 feet. If the street is wider than 62 feet, the standards require streetlights on both sides of the street, but none of the arterials are wider than 62 feet. The diameter of the circles around the arterial streetlights shown on Map 6 were all drawn at the maximum spacing length of 250 feet.

- **19<sup>th</sup> Avenue** is a 5-lane, 52 to 56-foot wide arterial which only requires streetlights on one side. The spacing of the existing streetlights on 19<sup>th</sup> Avenue appears to meet City standards.
- **Grand Avenue** is a 3-lane, 60-foot wide arterial with bike lanes and on-street parking which only requires streetlights on one side, but it has existing double sided lights which appear to be more than adequate to meet City spacing requirements.
- **Van Buren Street** is a 5-lane road with a 56-foot width which only requires streetlights on one side, but there are existing streetlights on both sides of the street that appear to provide more than enough streetlight coverage to meet the City's Standards.
- **Washington Street** is a 3-lane, one-way road with a 60-foot width which only requires streetlights on one side, but there are existing streetlights on both sides of the street that appear to provide more than enough streetlight coverage to meet the City's Standards.
- **Jefferson Street** is also a 3-lane, one-way road with a 62-foot width which only requires streetlights on one side, but there are existing streetlights on both sides of the street that appear to provide more than enough streetlight coverage to meet the City's Standards.
- **17<sup>th</sup> Avenue** is classified as an arterial south of Jefferson Street where it is a 3-lane, 40-foot wide road that has more than enough street light coverage to meet the City's standards.

*Collector Streets* – The City's standard streetlight spacing for collector streets is 200 feet for streets less than 62 feet wide. Collector streets wider than 62 feet require

streetlights on both sides of the road, but all of the collector streets in the study area are less than 62 feet wide.

- **Roosevelt Street** is a 2-lane, 34 to 38-foot wide collector which only requires streetlights on one side. The existing streetlights appear to provide enough streetlight coverage to meet the City's Standards.
- **15<sup>th</sup> Avenue** is a 3-lane collector with bike lanes that varies in width from 40 to 45 feet wide and only requires streetlights on one side. The existing street lights appear to provide more than enough streetlight coverage to meet the City's Standards.
- **16<sup>th</sup> Avenue** between Washington Street and Madison Street is classified as a collector and appears to have adequate streetlight coverage to meet the City's Standards.

*Local Streets* – The City's standard streetlight spacing for local streets is 250 feet. As can be seen on Map 6, most of the local streets have adequate streetlight coverage, but there are some gaps.

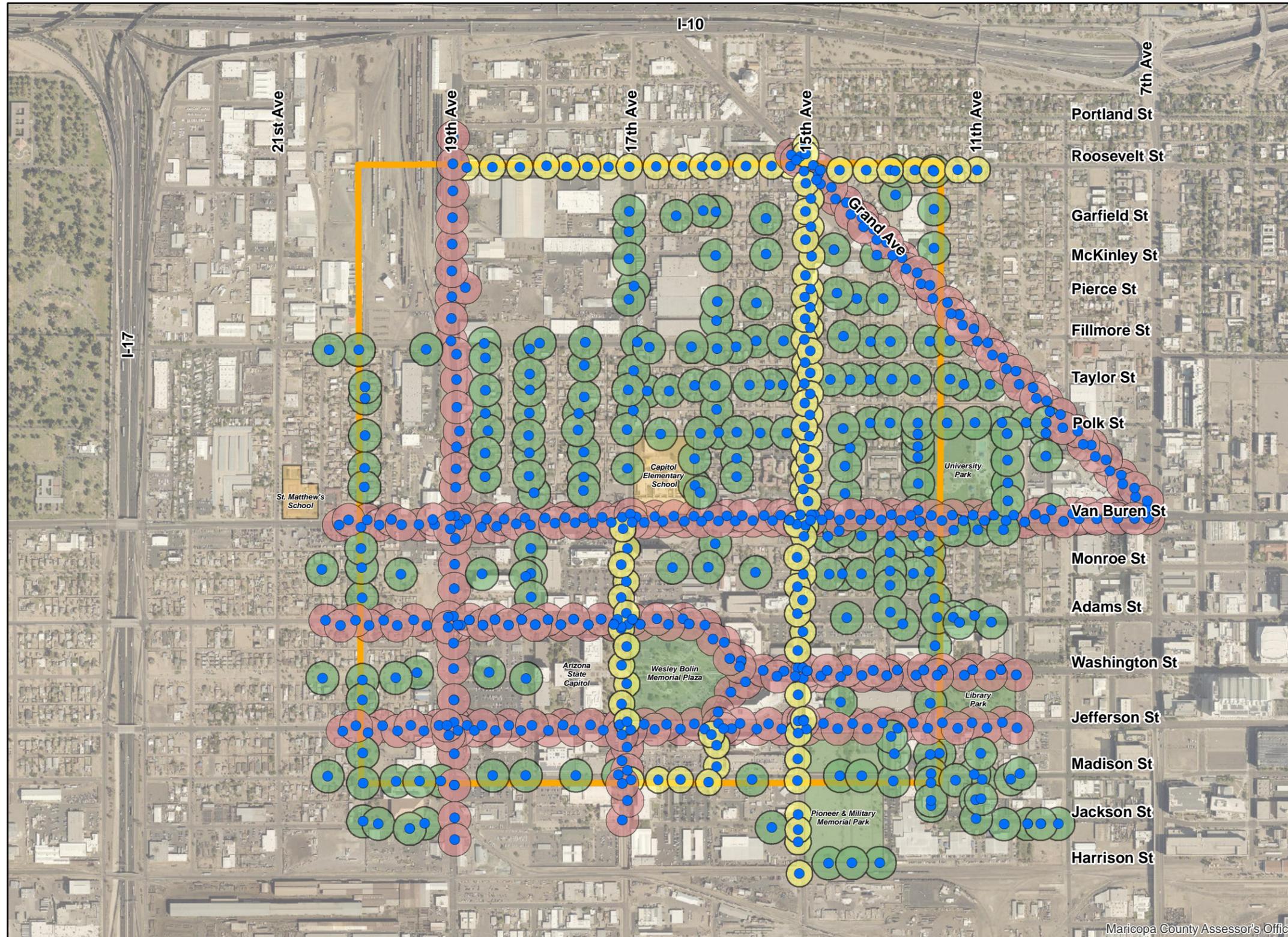
Legend

( APS Light Poles

Study Area #7

Maximum Streetlight Coverage

- Arterial Streetlight (250' Dia. Max. Spacing)
- Collector Streetlight (200' Dia. Max Spacing)
- Local Streetlight (250' Dia. Max. Spacing)



## **Zoning and Land Use**

The land use in the study area is primarily State government offices south of Van Buren Street while the area north of Van Buren is mostly older, single family housing. The northwest corner of the study area is industrial with several manufacturing plants and warehouses. There are also numerous commercial properties in the study area that are primarily located along the Van Buren Street, 15<sup>th</sup> Avenue and Grand Avenue corridors.

The zoning in the study area is shown on the ZONING map (Map 7). As can be seen from the Map, zoning in the study area is mostly Multi-Family Residential or Commercial, but there is also significant area of Industrial zoning.

*Multi-Family Residential* – Most of the residential areas in the study area are zoned R-5 Multi-Family Residential, but much of the existing housing is single family. The R-5 Zoning allows alternate living styles including rental, condominiums and single ownership of land with multiple living units. While most of the housing is single family dwellings, there are some small apartment buildings, duplexes and backyard rentals. There is also the 8-acre Legacy Bungalow Apartments on the north side of Van Buren Street between 14<sup>th</sup> Avenue and 12<sup>th</sup> Avenue.

*Commercial Areas* – Other than the State Government offices that are located in the area south of Van Buren Street, most of the commercial zoning lies along Van Buren Street, 15<sup>th</sup> Avenue and Grand Avenue. Both Van Buren Street and Grand Avenue have a significant number of commercial business; particularly Grand Avenue which has numerous shops and restaurants. The current land use along 15<sup>th</sup> Avenue is a mix of single family residential and commercial buildings.

*Industrial Areas* – As Map 7 indicates there is a significant amount of Industrial zoned land in the northwest corner of the study area that is being used for industrial purposes; including Smith Pipe & Steel Co., Modular Systems, Inc., and Royal Paper.

**Legend**

 Study Area #6

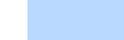
**Zoning**

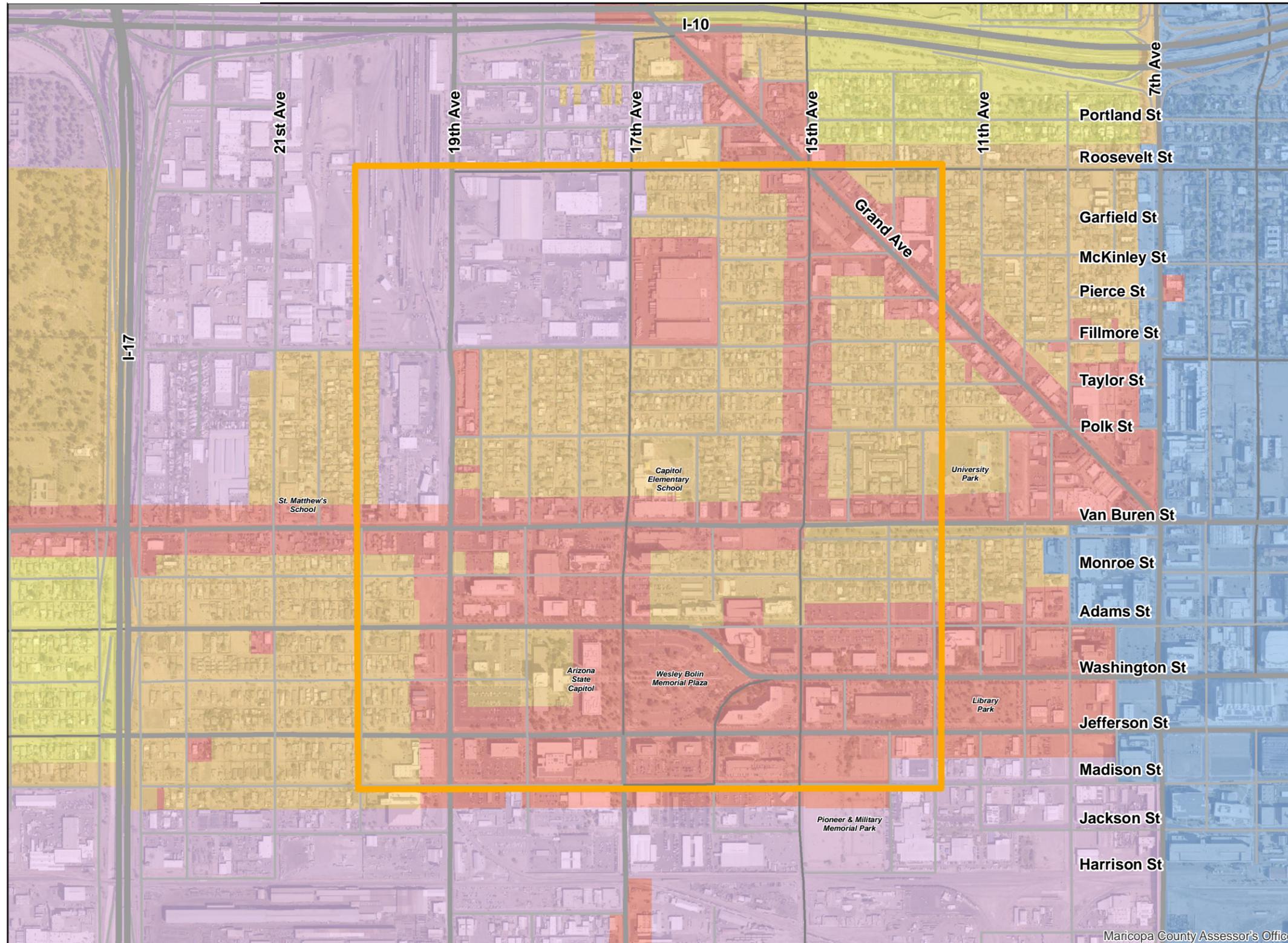
 SF Residential

 MF Residential

 Commercial

 Industrial

 Downtown Code



Maricopa County Assessor's Office

### ***Land Development Plans***

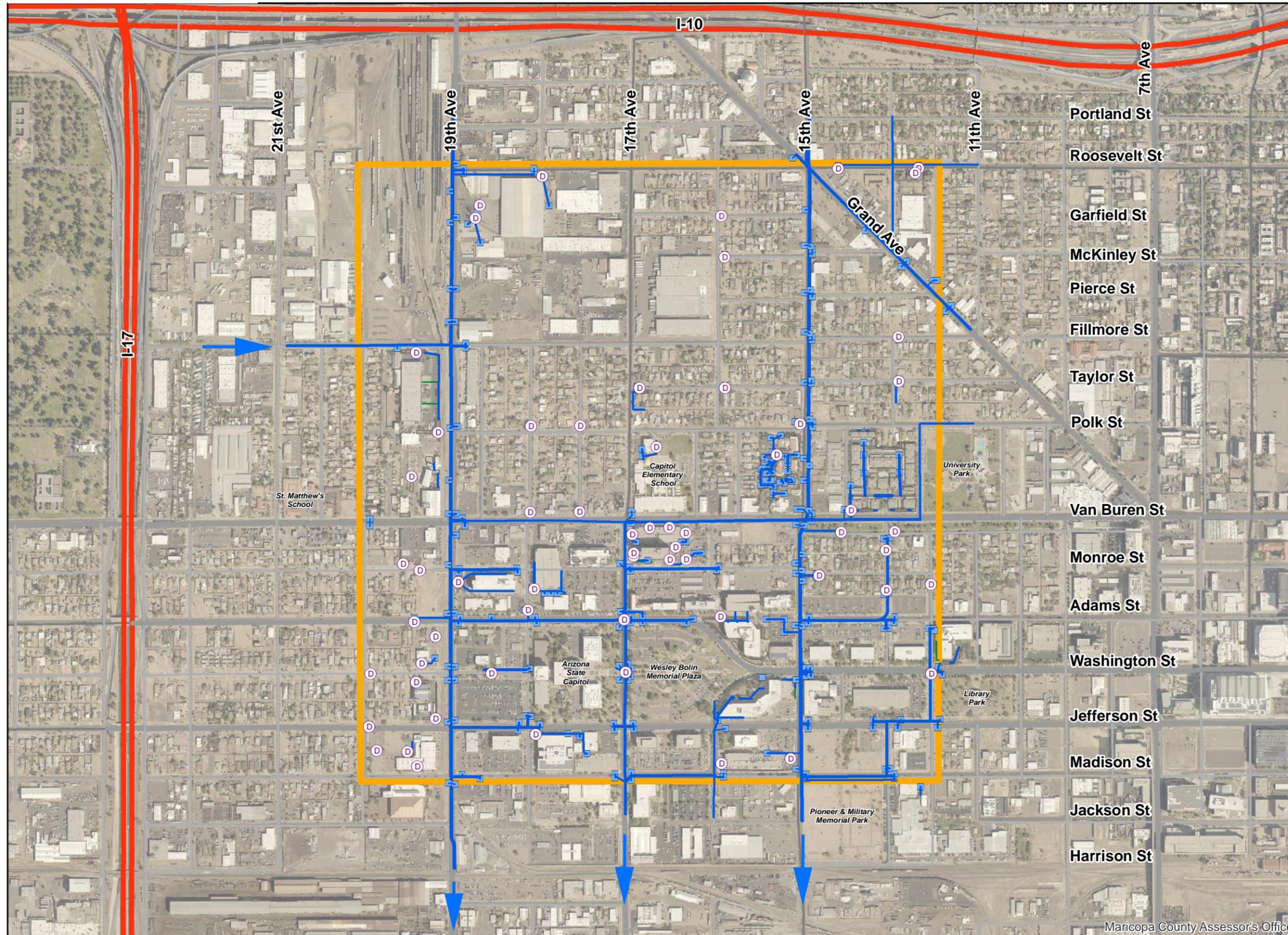
There are no significant development plans in the study area. The Planning and Development Department has five recently approved zoning adjustment cases on file, but they are all minor adjustments. Two were requests for adjustment to building setbacks for properties along Roosevelt Street. Two others were requests for wall height adjustments for properties on Van Buren Street and the other was an adjustment to building setbacks which was for a property on Van Buren. The study team contacted Hanna Oliver Bleam (Central City Village Planner) to verify that there were no significant upcoming land development projects that would impact mobility; she concurred.

### ***Drainage***

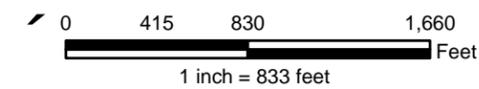
As shown on the DRAINAGE map (Map 8), there is a well-developed system of storm drainage in the study area with storm drains in 19<sup>th</sup> Avenue, 17<sup>th</sup> Avenue and 15<sup>th</sup> Avenue. All the storm drains discharge to the Salt River. The study team did not identify any drainage issues in the study area that would impact mobility. The drainage section of the Street Transportation Department was contacted to collect known drainage complaints. While there are three complaints on file, drainage improvement projects have already been done at all three to resolve the issues.

**Legend**

-  Storm Drain Pipe
-  Drainage Direction
-  Storm Drain Inlet
-  Drywell
-  Study Area #7



Maricopa County Assessor's Office



### ***Environmental/Cultural***

As shown on the ENVIRONMENTAL CONSTRAINTS map (Map 9), there are several archaeological sites and pre-historic canals in the study area. There are also several historic districts as well as individual historic properties.

*Archaeological Sites* – There are many archaeological sites located within the study area. These include several prehistoric canals, the archaeological site around the Capitol, a large site at the southeast corner of the study area, and corridors along the Railroad, Van Buren Street and 17<sup>th</sup> Avenue. Environmental review will be required within these areas which may result in a requirement for archaeological monitoring during construction to secure and preserve any cultural resources that may be encountered.

*Historic Districts and Properties* – There are two historic districts and seven historic properties located in the study area. The historic districts include the Woodland District south of Van Buren and Oakland District north of Van Buren. Mobility projects planned within these Districts will require review by the Historic Preservation Office which may have special requirements if modifications to such features as the sidewalks, streetlights, shade trees and curbs.

**Legend**

 Study Area #6

**Archaeological Sites**

 Archaeological Site Boundary

 Archaeological Sites

 Archaeological Sites (Pueblo Grande Museum)

 Archaeological Site Buffer

 Approximated Sites

 Pre-Historic Canals (Howard Maps)

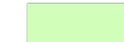
**Historic Districts & Historic Properties**

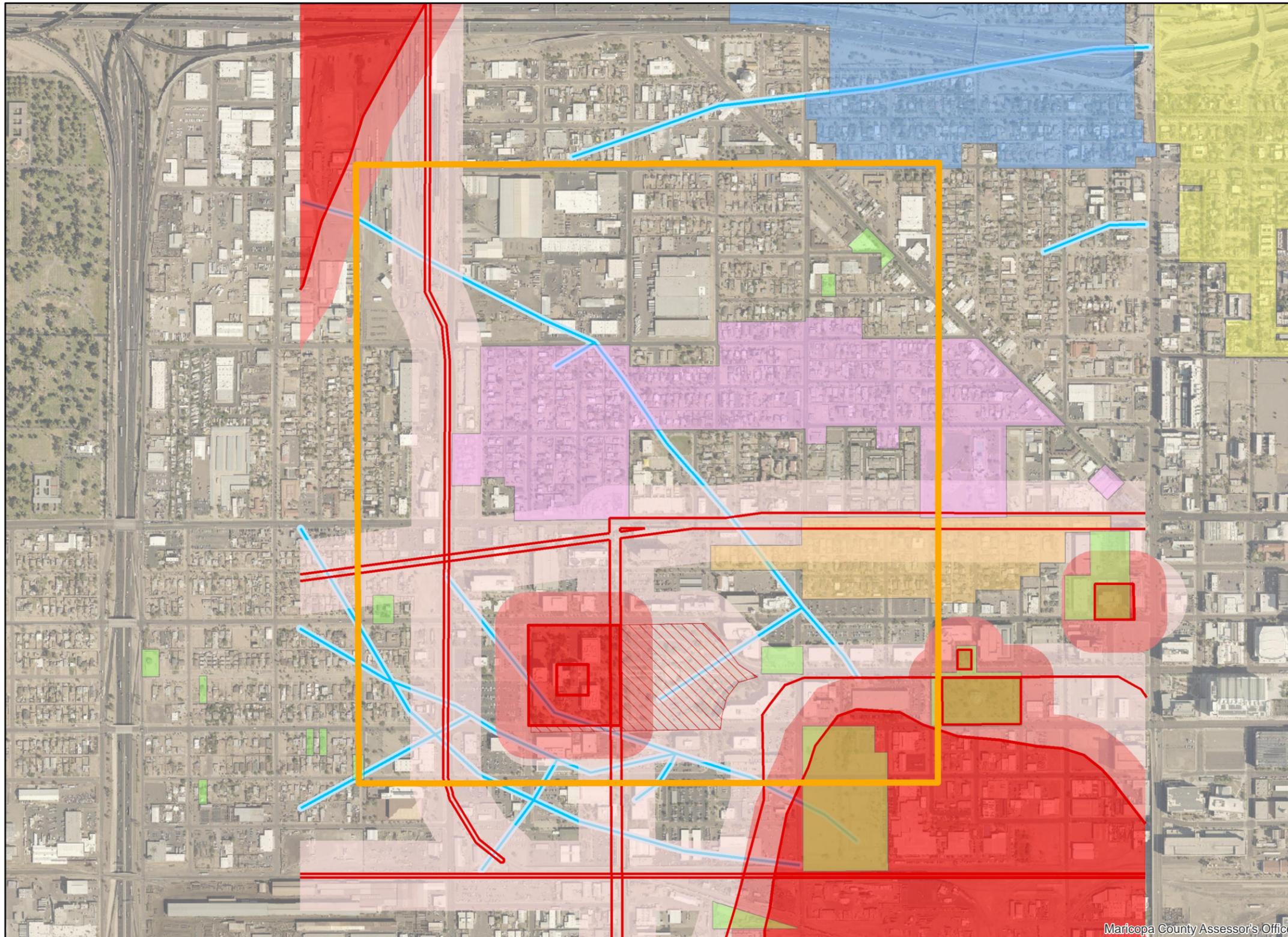
 F.Q. Story

 Oakland

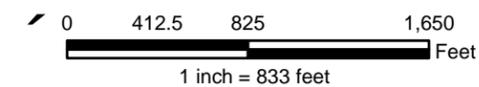
 Woodland

 Roosevelt

 Individual Properties



Maricopa County Assessor's Office



## Previous City of Phoenix Public Outreach

The design team is not aware of any recent public outreach in the study area. This item shall be discussed at the upcoming Technical Advisory Committee meeting.

## Crash History

A summary of pedestrian and bicycle crash reports for the study area was obtained for the 5-year period from 2012 through 2016 which are shown on the PEDESTRIAN & BICYCLE CRASH HISTORY map (Map 10). The table below presents the total pedestrian and bicycle crashes within the study area for the 5-year period.

Total Pedestrian/Bicycle Related Crashes  
(Mobility Area #7)

<i>Severity</i>	<i>Pedestrian</i>	<i>Bicycle</i>
Fatal	2	0
Serious Injury	8	1
Minor Injury	5	8
Possible Injury	6	8
No Injury	3	0

Total Crashes: 24 17

## **Crash Data**

Of the total 41 incidents, the majority occurred on the arterial streets; particularly along 19<sup>th</sup> Avenue and Van Buren Street. The following is a summary of several locations in the study area that experienced the most crashes.

*19th Avenue – Madison Street to Van Buren Street*

This segment of 19<sup>th</sup> Avenue, which is missing sidewalks along its west side, has experienced fourteen incidents. While there have not been any fatalities, four of the accidents resulted in serious injuries. The table below provides a summary of the pedestrian and bicycle crashes that have occurred in this area over the 5-year period from 2012-2016.

<i>Date</i>	<i>Action</i>	<i>Injury Severity</i>	<i>Light Condition</i>	<i>Pedestrian/Bicycle Violation</i>	<i>Drive/Vehicle Violation</i>
<b>Pedestrian Related Crashes</b>					
01/24/12	Crossing in S. Xwalk	Serious	Light	None	Failed to Yield
04/26/13	Walking Against Traffic	None	Light	Did Not Use Xwalk	Failed to Yield
08/23/13	Crossing in S. Xwalk	Minor	Dark	Disregarded Signal*	None
12/17/15	Crossing Road	Serious	Light	None	Failed to Yield
02/19/16	Crossing in S. Xwalk	Serious	Dark	None	Disregarded Signal
03/21/16	Walking with Traffic	Possible	Light	Unknown	Unknown
<b>Bicycle Related Crashes</b>					
06/02/13	Riding in S. Xwalk	Possible	Light	Rode Opp. Traffic	None
07/30/13	Riding Against Traffic	Possible	Light	Inattention	None
08/13/13	Riding Against Traffic	Serious	Light	Failed to Yield	None
10/08/13	Riding in S. Xwalk	Minor	Dark	Disregarded Signal	None
10/24/14	Riding in S. Xwalk	Possible	Dark	None	Failed to Yield
05/28/15	Riding Against Traffic	Minor	Light	Drove in Opp. Lanes	None
09/18/15	Riding in S. Xwalk	Minor	Light	None	Failed to Yield
05/31/16	Riding in E. Xwalk	Possible	Light	Failed to Yield	None

\* Comments: Pedestrian Drinking

*Van Buren Street between 19th Avenue and 15th Avenue*

There have been seven incidents on this section of Van Buren Street, one of which was a fatal pedestrian accident. The fatality involved pedestrian intoxication, but there was another seriously injured pedestrian that did not involve drinking. The table below provides a summary of the pedestrian and bicycle crashes that have occurred in this area over the 5-year period from 2012-2016.

<i>Date</i>	<i>Action</i>	<i>Injury Severity</i>	<i>Light Condition</i>	<i>Pedestrian/Bicycle Violation</i>	<i>Drive/Vehicle Violation</i>
<b>Pedestrian Related Crashes</b>					
01/26/12	Crossing Road	Fatal	Dark	Did Not Use Xwalk*	None
01/11/13	Crossing in Xwalk	Serious	Light	None	Failed to Yield
03/25/15	Crossing Road	Possible	Light	None	Unknown
06/15/16	Crossing Road	Minor	Light	Did Not Use Xwalk	None
<b>Bicycle Related Crashes</b>					
04/16/14	Riding Against Traffic	Possible	Light	Unknown	None
09/17/15	Riding Against Traffic	Minor	Light	Drove in Opp.Lanes	None
10/20/16	Riding with Traffic	Minor	Light	Faulty/Miss. Equip.	None

\* Comments: Pedestrian Drinking

15<sup>th</sup> Avenue – Van Buren Street to Grand Avenue: This segment of 15<sup>th</sup> Avenue has experienced six incidents, four of which were pedestrian related; including one fatal accident. The fatality involved pedestrian intoxication as did two of the other pedestrian accidents. The table below provides a summary of the pedestrian and bicycle crashes that have occurred in this area over the 5-year period from 2012-2016.

Date	Action	Injury Severity	Light Condition	Pedestrian/Bicycle Violation	Drive/Vehicle Violation
<b>Pedestrian Related Crashes</b>					
10/06/13	Walking With Traffic	Serious	Dark	Did Not Use Xwalk*	None
03/22/14	Ran into Vehicle	Fatal	Light	Unknown*	None
10/06/14	Crossing in S. Xwalk	Minor	Light	Disregarded Signal	None
12/03/15	Crossing Road	Possible	Dark	Did Not Use Xwalk*	None
<b>Bicycle Related Crashes</b>					
07/26/15	Riding in N. Xwalk	Minor	Light	Unknown	None
04/14/16	Riding with Traffic	Possible	Light	None	Failed to Yield

\* Comments: Pedestrian Drinking

12<sup>th</sup> Avenue – Madison Street to Washington Street: This segment of 12<sup>th</sup> Avenue has experienced four incidents, three of which were pedestrian related; including one serious injury. The table below provides a summary of the pedestrian and bicycle crashes that have occurred in this area over the 5-year period from 2012-2016.

Date	Action	Injury Severity	Light Condition	Pedestrian/Bicycle Violation	Drive/Vehicle Violation
<b>Pedestrian Related Crashes</b>					
08/14/14	Lying	Minor	Light	Other	Speed Too Fast
04/20/16	Crossing Road	Serious	Light	Failed to Yield	None
11/13/16	Crossing Road	Possible	Light	Did Not Use Xwalk	Speed Too Fast
<b>Bicycle Related Crashes</b>					
10/01/13	Riding in N. Xwalk	Possible	Light	Riding in Xwalk	Ran STOP Sign

*Intersection of Van Buren Street and 20<sup>th</sup> Avenue:*

There have been four incidents at or near this intersection. The two pedestrian accidents were due to not using the crosswalks. While there are no crosswalks at 20<sup>th</sup> Avenue, there are signalized crosswalks at both 21<sup>st</sup> Avenue and 19<sup>th</sup> Avenue. The two bicycle accidents were at least partially caused by the cyclist riding against traffic. The table below provides a summary of the pedestrian and bicycle crashes that have occurred in this area over the 5-year period from 2012-2016.

<i>Date</i>	<i>Action</i>	<i>Injury Severity</i>	<i>Light Condition</i>	<i>Pedestrian/Bicycle Violation</i>	<i>Drive/Vehicle Violation</i>
<b>Pedestrian Related Crashes</b>					
07/04/12	Crossing Road	Serious	Light	Did Not Use Xwalk	None
09/29/16	Crossing Road	None	Light	Did Not Use Xwalk	None
<b>Bicycle Related Crashes</b>					
02/12/15	Riding Against Traffic	Minor	Light	None	Failed to Yield
08/03/16	Riding Against Traffic	Minor	Light	Failed to Yield	None

**Traffic Volumes**

Traffic volumes in the study area were obtained from the City of Phoenix and are shown on the AVERAGE DAILY TRAFFIC map (Map 11). The traffic volumes correlate well with the crash history data. As can be seen from Map 11, most of the traffic in the study area is carried on the arterial streets which is also where most of the pedestrian/bicycle accidents occur. 19<sup>th</sup> Avenue is busiest roadway with about 23,000 vehicles per day followed by Van Buren Street which has about 16,000 vehicles per day. Jefferson Street and Washington Street each have about 8000 vehicles per day and 15<sup>th</sup> Avenue is also busy with approximately 7000 vehicles per day.

**Legend**

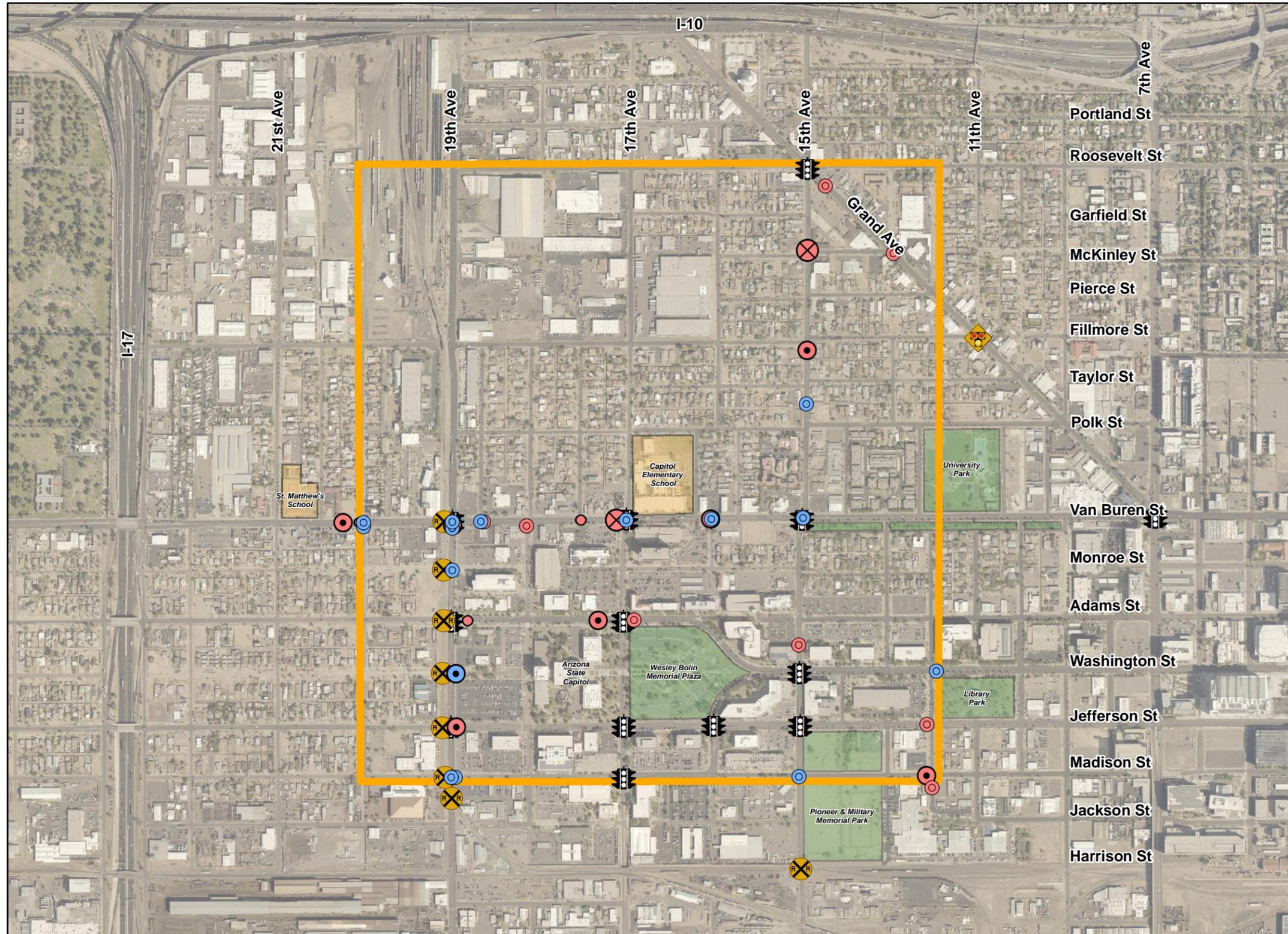
Study Area #6

**Crash Type and Severity**

- Bike, Fatal
- Bike, Serious
- Bike, Minor
- Bike, Property Damage Only (PDO)
- Pedestrian, Fatal
- Pedestrian, Serious
- Pedestrian, Minor
- Pedestrian, Property Damage Only (PDO)

**Signalized Crossings**

- HAWK Signal
- Traffic Signal
- Railroad Crossing



**Legend**

Study Area #7

**Key Destinations**

Government Offices

Park or Memorial

Schools

Grand Avenue Shops

Social Services

W/B 3,000 Average Daily Traffic

