PHOENIX TRANSPORTATION 2050
Building our Future

Current Conditions Report

Mobility Area 5: Kuban Park

Prepared For

City of Phoenix

Prepared By

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1.0 Introduction

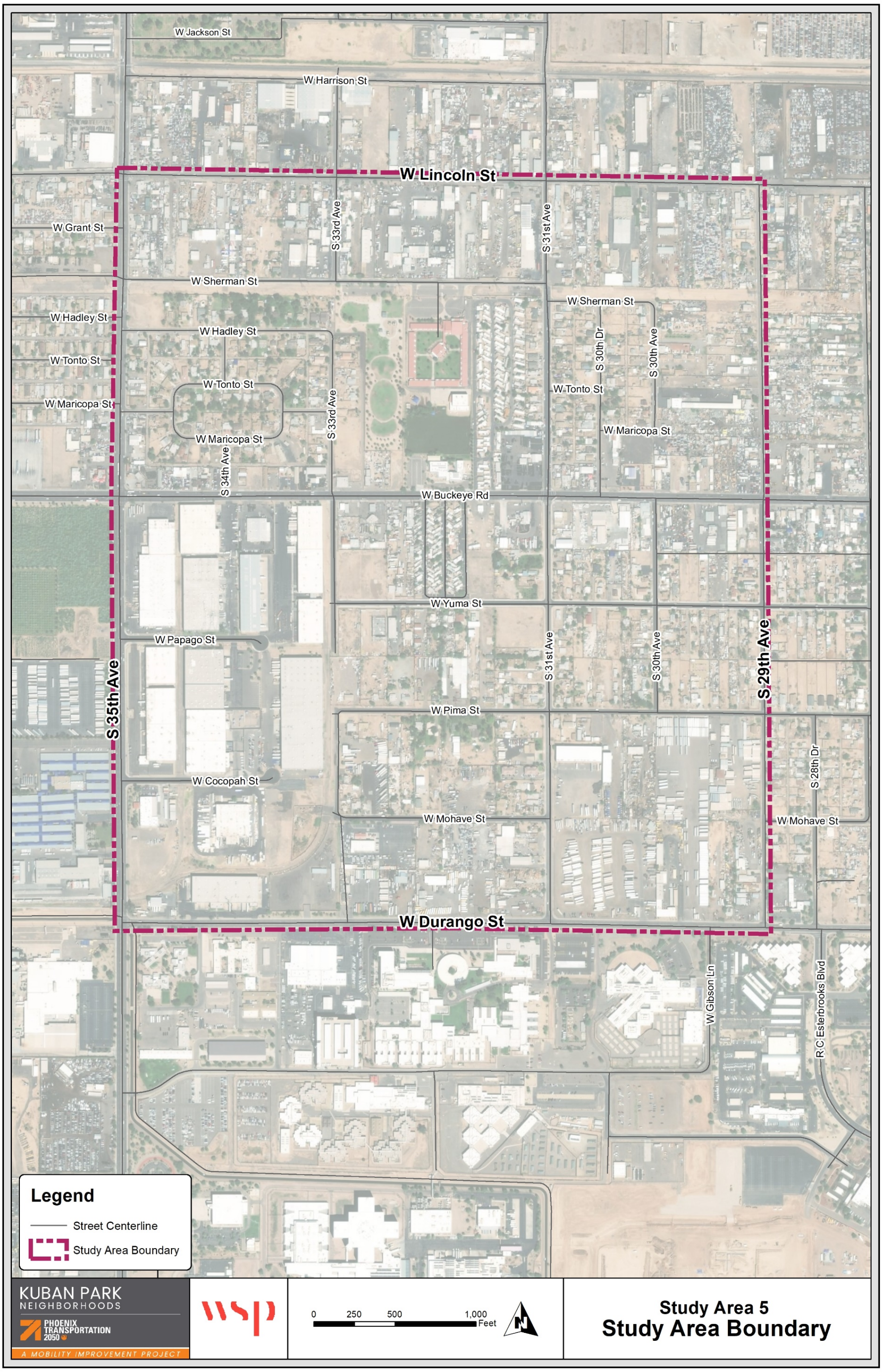
As part of the City of Phoenix Transportation 2050 Plan, the T2050 Mobility Improvements Program was established to conduct mobility assessments in several defined geographic areas of the City with the greatest mobility deficiencies and needs. This program will implement new projects designed to improve multimodal connectivity and mobility, and provide Americans with Disabilities Act (ADA) access to important destinations.

The primary purpose of these mobility studies is to conduct a complete mobility gaps analysis based on available data and previous studies in the area. This study will look at mobility issues and potential solutions for bicycle and pedestrian facilities and connections to existing transit services to improve the safety and connectivity for all roadway users. To determine potential mobility solutions the current conditions reports will look at demographic data, existing plans and documents, key destinations, existing transportation facilities, land-use, infrastructure, and environmental constraints. Additionally, stakeholders were identified and stakeholder outreach was conducted to gain public input on current conditions and mobility concerns. Based on the gaps analysis, a prioritized list of mobility improvements will be developed and presented to the public. The public feedback will be used to reprioritize the projects, if necessary, and the team will develop a final list of recommended projects, a construction schedule and cost estimates. The current conditions report will serve as a guiding document to identify recommended mobility solutions.

1.1 Overview of Mobility Area 5 – Kuban Park

The study area for Kuban Park is a 3-square mile area that extends from Lincoln Street on the north to Durango Street on the south, and from 35th Avenue on the west to 29th Avenue on the east (see **Figure 1-1**). The area is located just west of Interstate 17 (I-17) and southwest of Downtown Phoenix. The Kuban Park study area is primarily industrial, with residential pockets scattered throughout the study area, and is essential for connections with freight transportation.

Figure 1-1: Study Area



1.2 Purpose

The purpose of the Mobility Area 5 - Kuban Park Current Conditions Report is to identify the existing mobility conditions in the study area.

1.3 Mobility Study Goals

The goal of the study is to improve safety, connectivity, and accessibility for all persons who walk, ride a bicycle, or use transit services so they can reach their destinations safely and efficiently.

1.4 Mobility Study Objectives

The objective of the Mobility Area 5 - Kuban Park Mobility Study Current Conditions Report is to identify the existing conditions of key mobility facilities and neighborhood characteristics. The key facilities and characteristics to be studied include bicycle facilities, sidewalks, street lighting, and shade.

1.5 Study Approach

To identify the existing mobility conditions of the Kuban Park neighborhoods, Geographic Information System (GIS) data were provided by the City of Phoenix to develop maps of existing mobility facilities. The maps, as well as information collected from stakeholder interviews, have been analyzed to present a full scope of existing conditions for this study area. In addition to identifying existing conditions gaps in mobility infrastructure were also identified. Gaps in mobility infrastructure were identified by field reviews, GIS analysis, and stakeholder interviews. Gaps looks at where infrastructure is lacking and where future connections could be made.

2.0 Previous Planning Efforts – Existing Plans

Existing plans and documents pertinent to this study were identified, reviewed, and summarized to endure previously studied and recommended projects within the mobility area were taken into consideration. Previous plans and documents provide key information on existing policies, plans, and projects. This study will present key takeaways from previous planning efforts. In addition, these plans and documents will provide a basis for our recommendations. Plans and documents include:

Table 2-1: Plans and Documents Reviewed

Plan/Document Name	Year
Phoenix: LED Street Light Program Fact Sheet	2018
Phoenix: Capital Improvement Program 2017-2022 ADOT	2017
Maricopa Association of Governments (MAG): Transportation Improvement Program FY 2018 – 2022	2017
ADOT: State Transportation Improvement Program 2018 - 2022	2017
MAG: Freight Transportation Plan	2017
Phoenix: Complete Streets Policy	2017

MAG 2040: Regional Transportation Plan	2017
Phoenix: Public Transportation Department Annual Report Fiscal Year 2015/2016	2016
Phoenix: Plan PHX 2015 General Plan	2015
Phoenix: TOD Annual Report 2015-2016	2015
Phoenix: Comprehensive Bicycle Master Plan	2014
NACTO: Urban Street Design Guide	2013
Phoenix: Tree and Shade Master Plan	2010

Key takeaways from plans and documents include existing transportation facilities, recent changes to transportation facilities, and completed or on-going transportation projects. Pertinent documents include the MAG Freight Transportation Plan which identified Buckeye Road as a critical urban freight corridor. **Appendix A** provides more detail on pertinent information on existing plan and documents.

3.0 Socioeconomic Characteristics

Socioeconomic demographics were obtained from the American Community Survey Census 2012-2016, 5-Year Estimates (ACS Estimates). The demographic analysis considered existing populations that are within the Kuban Park study area, and compared the socioeconomic distribution to the overall distribution within Phoenix. Demographic characteristics were used to determine the likelihood of specific populations using transportation facilities and services including public transportation, sidewalks and bicycle facilities. Specific populations include Ages 17 and Younger, Ages 65+, Low-Income, and Transit-Dependent Households. The socioeconomic data were displayed using block group data and show the block groups within the Kuban Park study area.

Population Ages 17 and Younger

Populations Ages 17 and Younger were identified to determine the concentration of young persons within the Kuban Park study area. The analysis indicates that the concentration of young persons increases north of Buckeye Road (see **Figure 3-1**).

Population Ages 65+

Populations Age 65+ were identified to see where concentrations of elderly populations occur within the study area. The analysis shows that the aging population also increases north of Buckeye Road (see **Figure 3-2**).

Low-Income Households

The Low-Income Households category looked at where households have fallen below the poverty line. These households are households that would be more likely to use alternative modes of transit including public transportation, walking, and biking. The ACS Estimates of households with income below the poverty line indicates that most of

the Kuban Park study area has a high concentration of residents living below the poverty line (see **Figure 3-3**).

Transit-Dependent Households
Transit-Dependent Households are households without a vehicle. The ACS Estimates for households without a vehicle (see **Figure 3-4**) indicates a high concentration of transit dependent households north of Buckeye Road.

Population Density
ACS data indicate that the densely populated areas of the Kuban Park Neighborhoods are in the central and northeastern portion of the study area (see **Figure 3-5**). The most densely populated area is the neighborhood surrounding Jack L. Kuban Elementary.

Bike to Work
ACS data indicate that individuals who bike to work are mostly in the neighborhood south of Buckeye Road (see **Figure 3-6**). However, most of the population within the study area does not bike to work.

Walk to Work
Per the ACS data in **Figure 3-7** less than 5 percent of individuals in the study area identify as walking to work. The highest concentration of persons walking to work is in the neighborhoods north of Buckeye Road.

Transit to Work
ACS data indicates that a relatively high concentration of individuals in the southern portion of the study area take transit to work (see **Figure 3-8**); However, the overall percentage of individuals taking transit to work is low.

Table 3-1 compares the demographics of the Kuban Park area to the overall demographics of Phoenix. The comparison shows that the area has 28.5 percent more low-income households and 10.5 percent more transit-dependent households than the city overall. The study area also has a density of 2,942 people per square mile, which is only 66 fewer people per square mile than the city overall.

Table 3-1: Demographics Comparison: Phoenix vs. Study Area

Demographics	Phoenix City	Kuban Park
Population Ages 17 and Younger	26.80%	21.66%
Population Ages 65+	9.80%	6.78%
Low-Income Households	17.67%	46.17%
Transit-Dependent Households	8.81%	19.61%
Population Walking to Work	0.70%	0.92%
Population Bicycling to Work	1.76%	0.99%
Population Taking Public Transportation to Work	3.35%	3.76%

Figure 3-1: Population Ages 17 and Younger

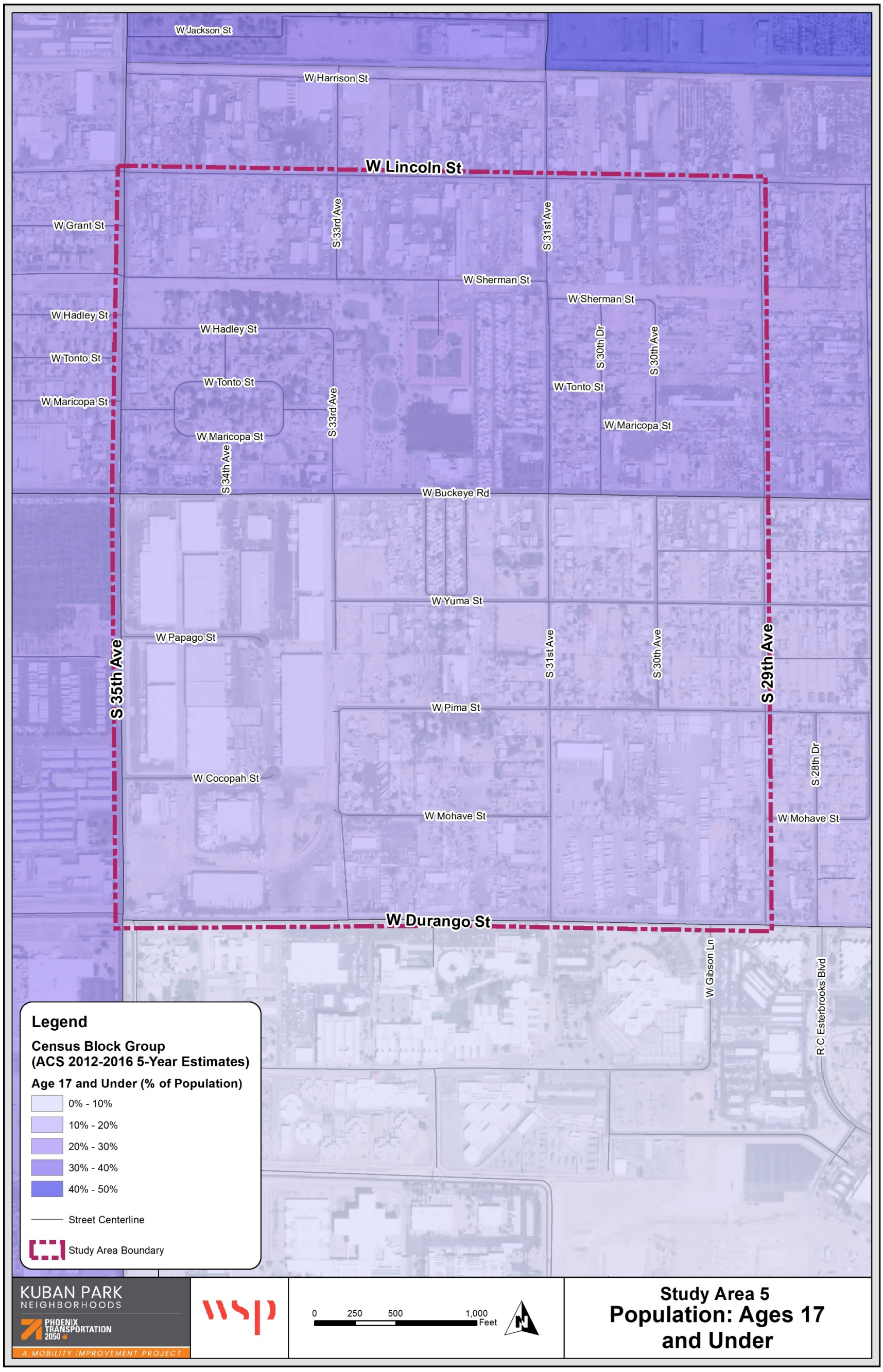


Figure 3-2: Population Ages 65+

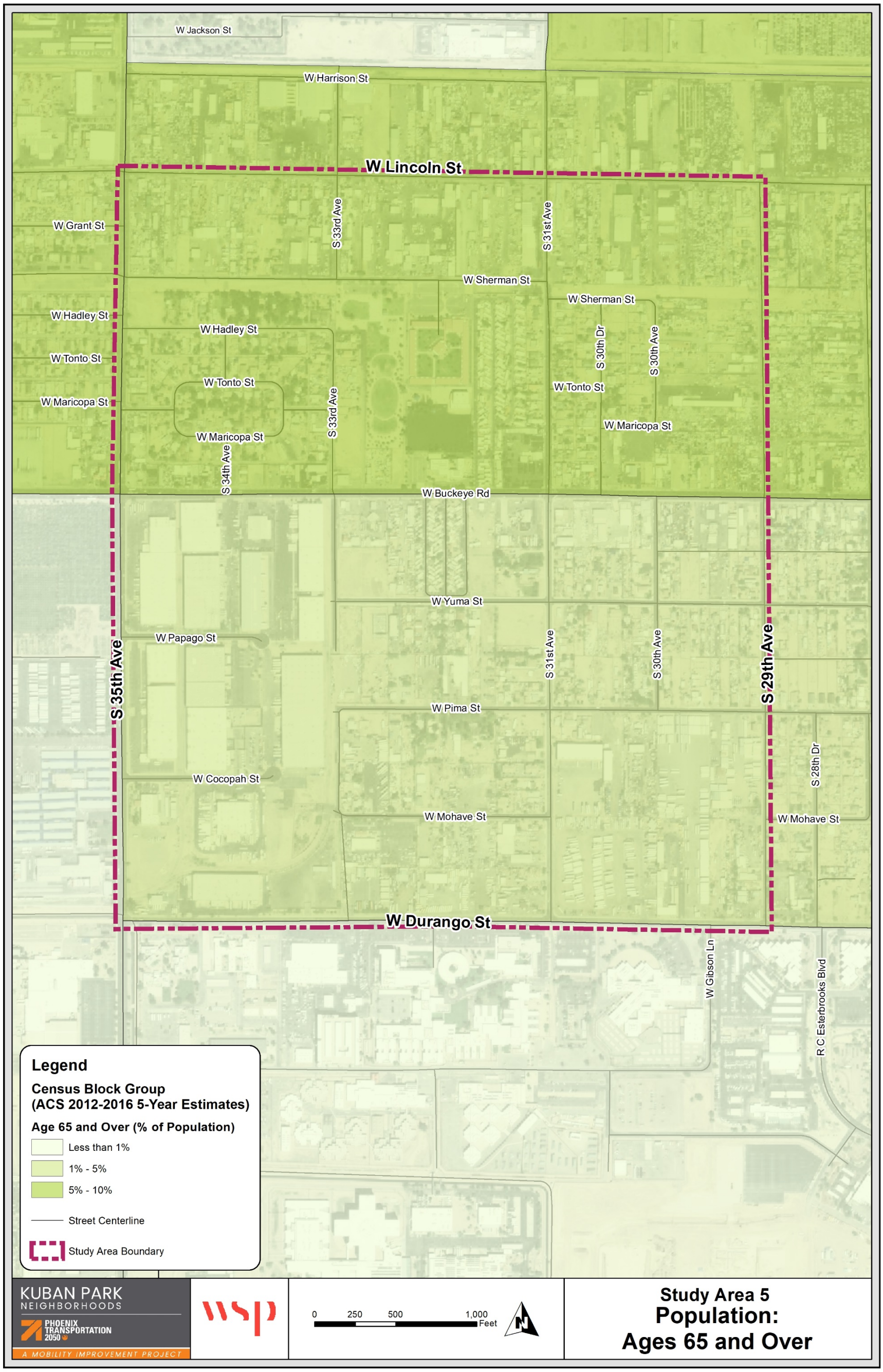


Figure 3-3: Low-Income Households

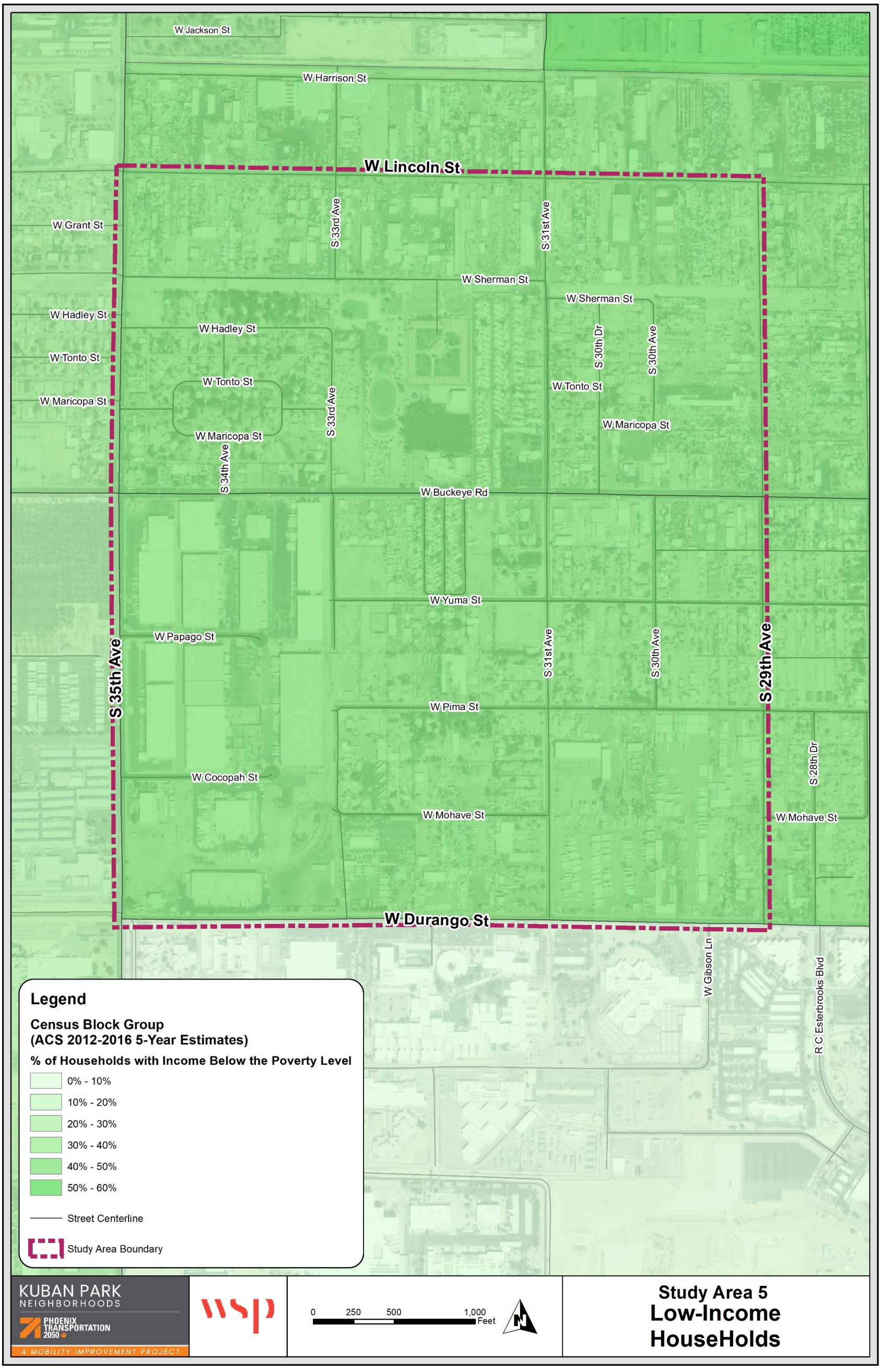


Figure 3-4: Transit-Dependent Populations

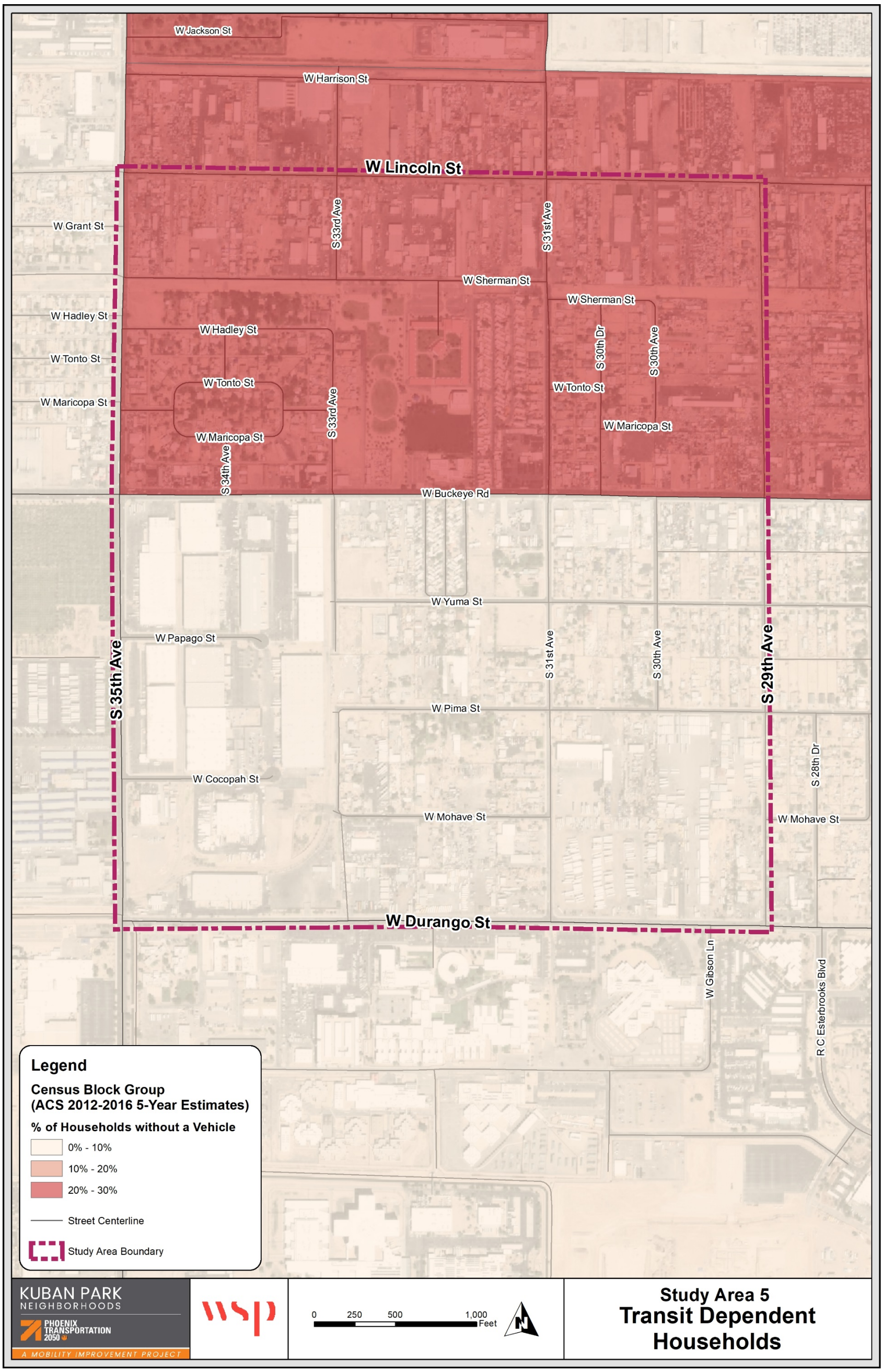


Figure 3-5: Population Density

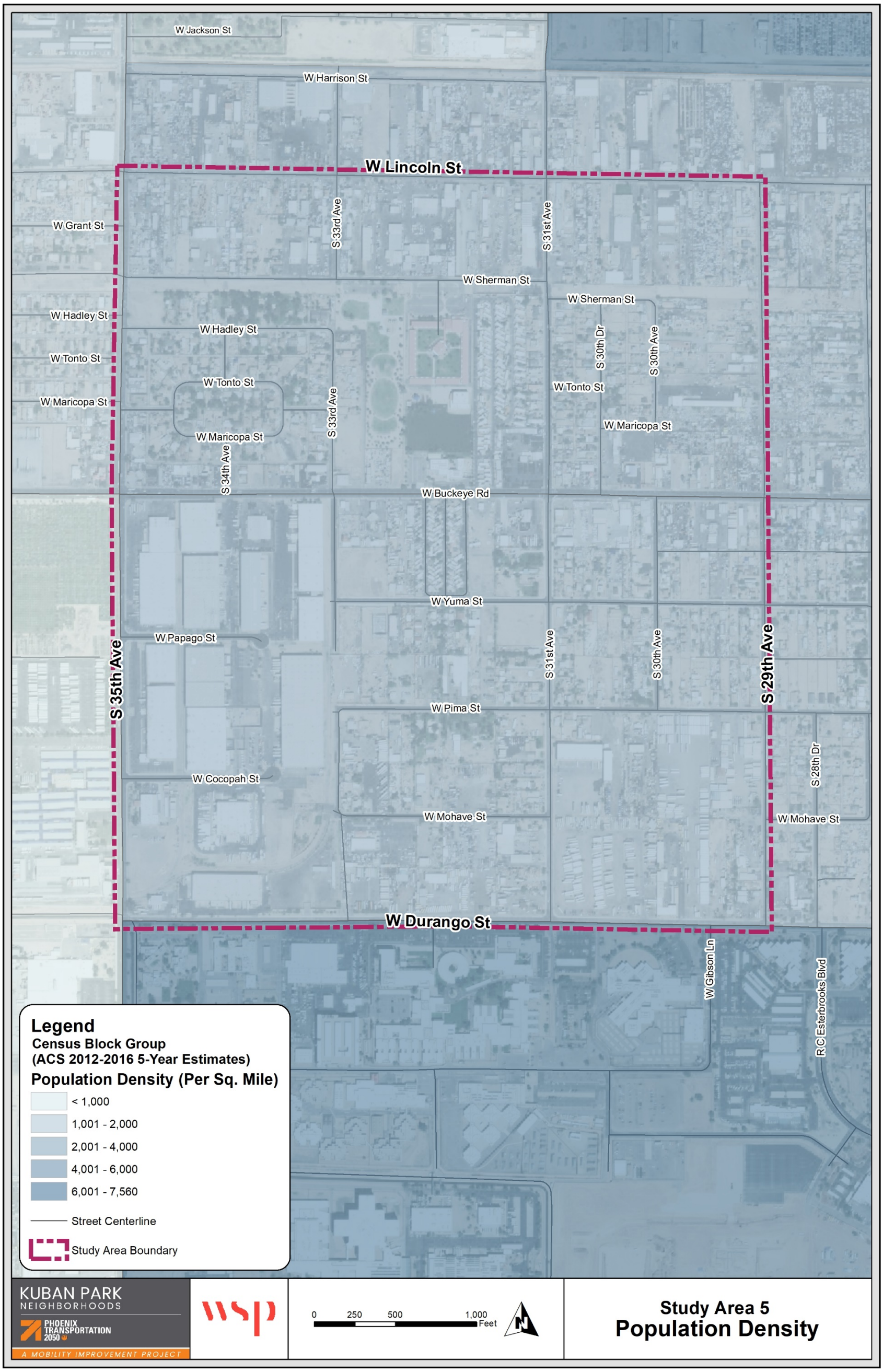


Figure 3-6: Bike to Work

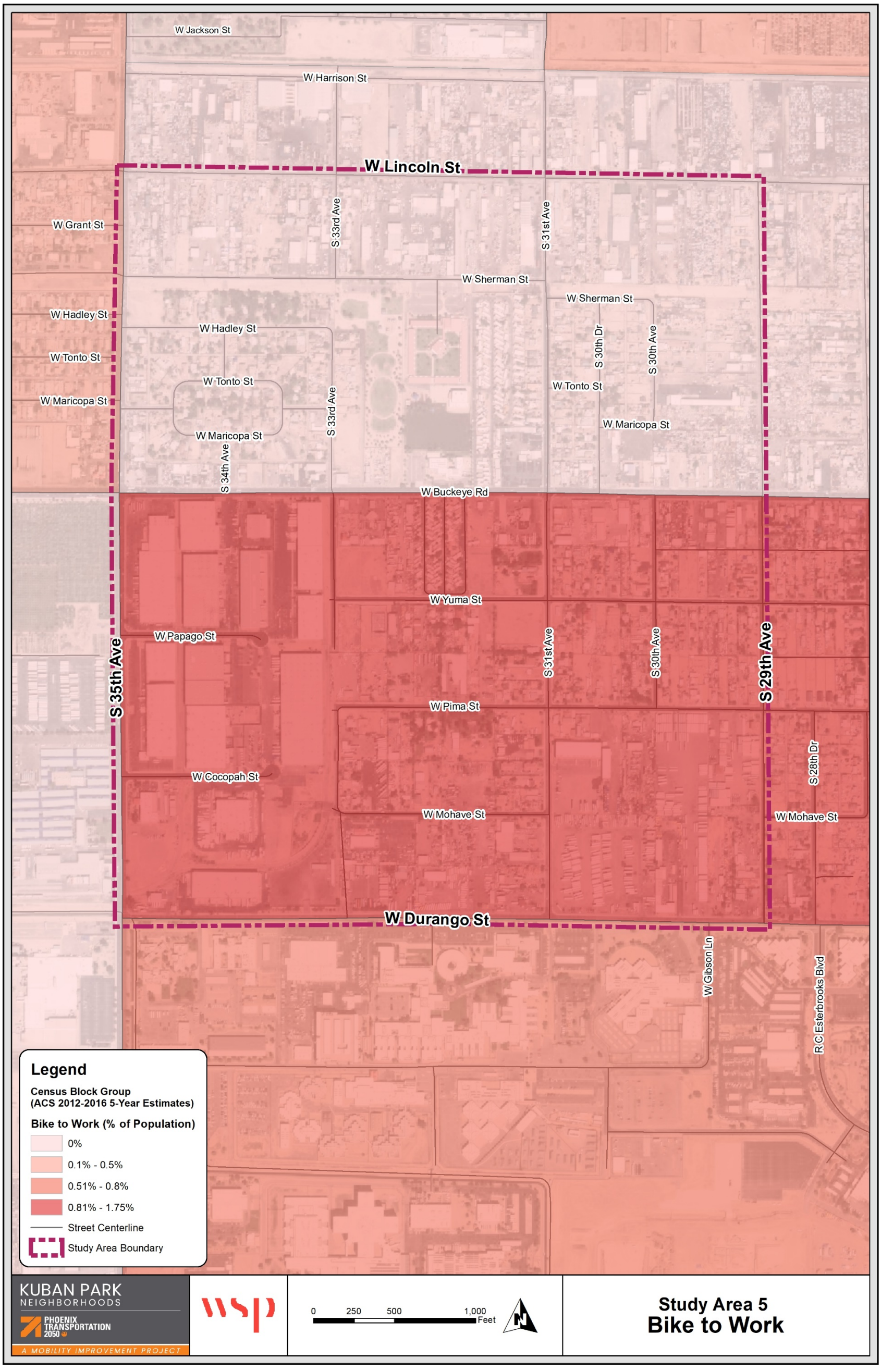


Figure 3-7: Walk to Work

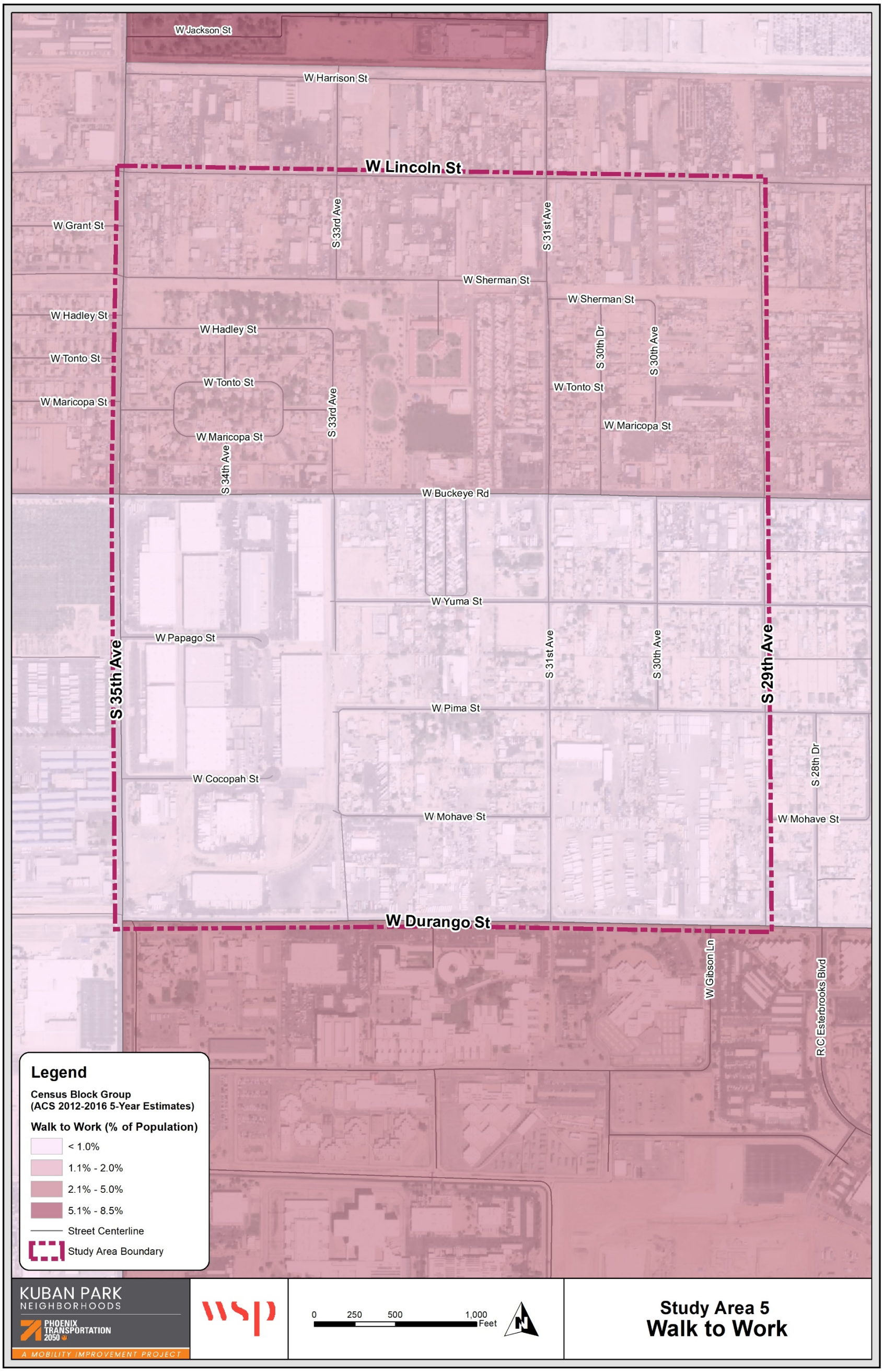
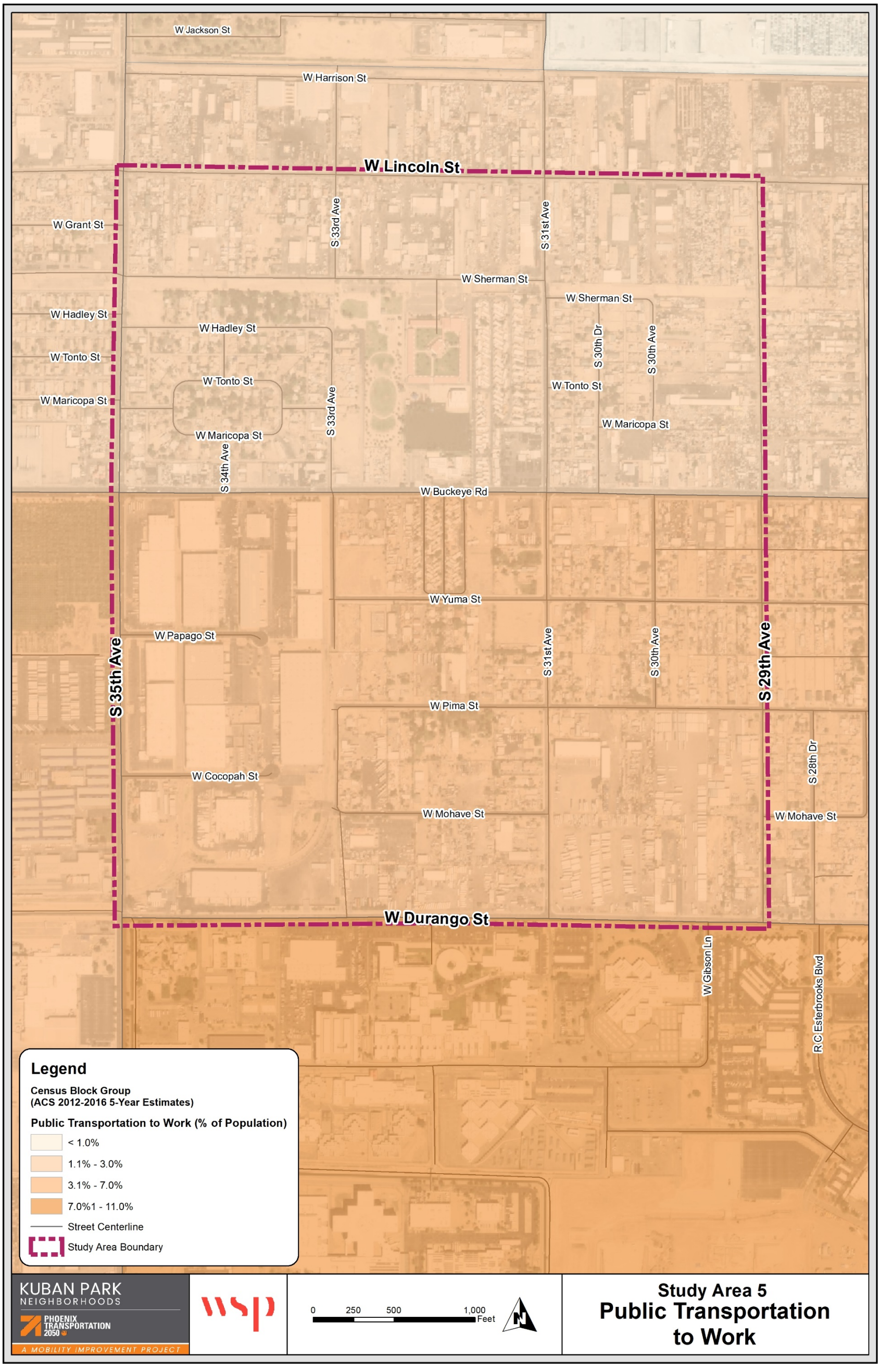


Figure 3-8: Public Transportation to Work



4.0 Destinations

A combination of field reviews and stakeholder interviews identified key destinations within and adjacent to the Kuban Park study area (see **Figure 4-1**). Destinations include neighborhoods, employment centers, shopping/retail centers, community centers, park/recreational facilities, medical facilities, educational facilities, government facilities, and industrial/manufacturing facilities. Information on destinations provide insight on what kind of travel activity occurs inside and outside the study area, and how people travel.

The Kuban Park area includes two social service agencies, the Maricopa County Child Welfare Center and the Phoenix Rescue Mission. The Maricopa County Child Welfare Center is adjacent to Durango Street and the southern Kuban Park study area boundary. The Phoenix Rescue Mission, which serves individuals struggling with homelessness, addiction, and trauma, is on 35th Avenue, between the State prison and the County Welfare Center. The Phoenix Rescue Mission is a destination for social workers and people experiencing homelessness, many of whom are traveling on foot or bicycle from the downtown homeless shelter.

There are also several State County Government facilities in the southern portion of the Kuban Park study area. The Maricopa County Complex, which includes the County Jail and County Superior Court, is on Durango Street. The Arizona State Prison Phoenix West Complex is within the Kuban Park study area, north of Durango Street. These facilities require extensive security on premises and are frequented by visitors like families and attorneys.

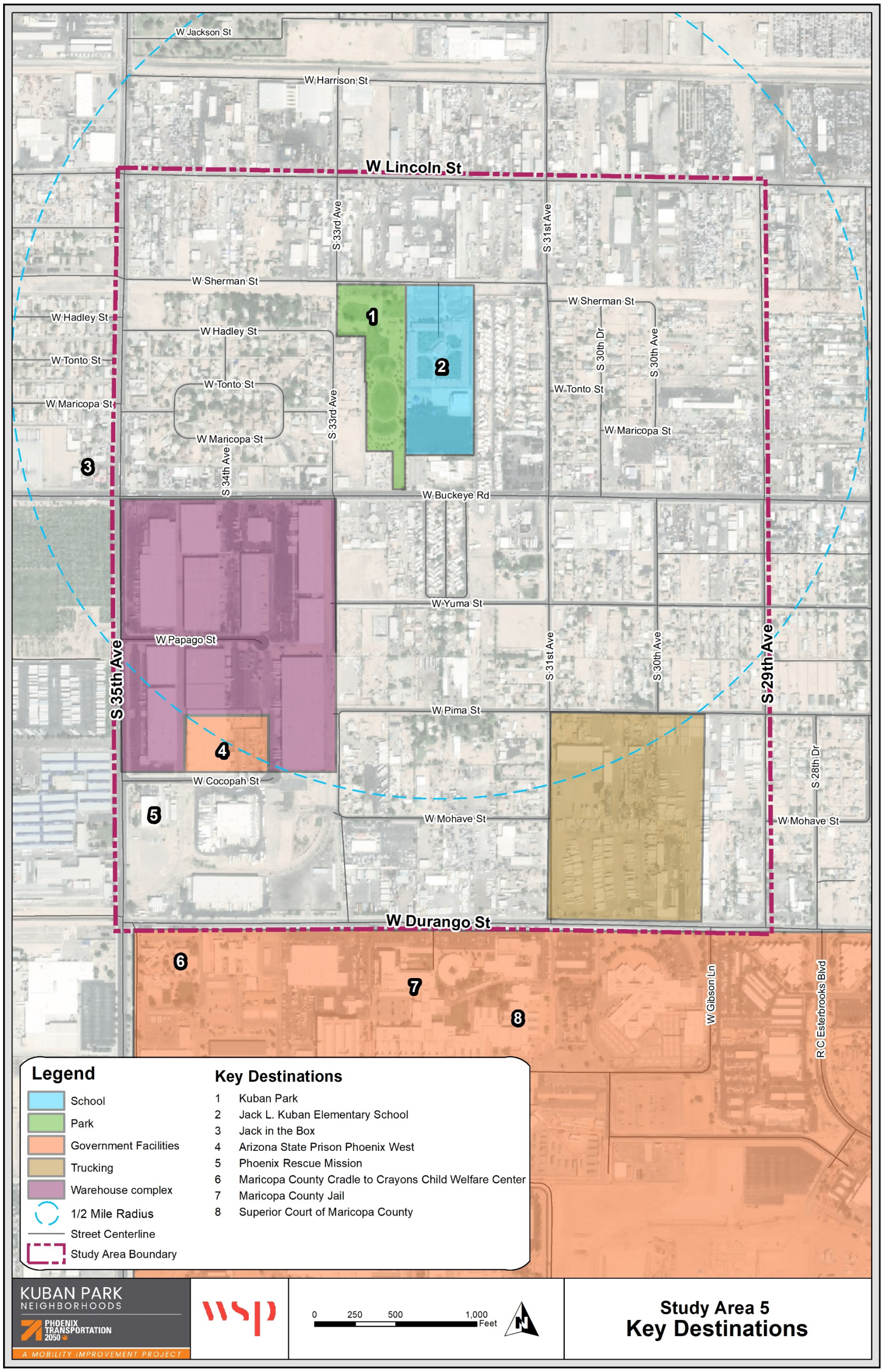
Other key destinations include Kuban Park and Jack L. Kuban Elementary School. Both facilities are next to each other between Sherman Street and Buckeye Road. The school and park are within one block of the warehouse complex and three to four blocks of the State and County facilities. This area appears to be a neighborhood destination, with limited access points. In addition to the school and park, there is a Jack in the Box on the western edge of the Kuban Park study boundary.

Issues and Concerns

The major concerns in the area regarding key destinations is accessibility. Accessibility within the overlap of conflicting land uses and zoning, and ROW encroachments, is limited. Limited accessibility in the area includes:

- Key destinations are not connected to safe pedestrian and bicycle networks.
- Accessibility between destinations like Kuban Park and Kuban Elementary School are limited by physical barriers like the APS transmission lines and fencing along 33rd Avenue.
- The elementary school, park, and residential neighborhoods are within walking distance to a jail, prison, and warehouse complex, which could pose safety risks.

Figure 4-1: Key Destinations



5.0 Existing Transportation Facilities

The existing transportation facilities assessment identified streets and roadways, right-of-way (ROW), public transportation facilities, bicycle and pedestrian facilities, and supportive streetscape amenities. Existing transportation facilities were analyzed to understand the current transportation network and identify areas of concern.

5.1 Streets and Roadways

The hierarchy of streets and roadways by functional class, roadway characteristics, traffic volumes, and bicycle and pedestrian crashes were identified within the Kuban Park study area (see **Figure 5-3**). These data illustrate the overall emphasis on automobile-oriented infrastructure within the study area.

Figure 5-1: No sidewalks and vehicles on ROW

Functional Classification and Hierarchy

There are four types of roadway functional classification within the Kuban Park study area. These include major arterials, minor arterials, collector/minor collector roads, and local roads There are two main arterial roads that cross the Kuban Park neighborhood: 35th Avenue and Buckeye Road, and two collector roads. All other minor roadways are categorized as local roads. Buckeye Road is a major WB/EB arterial, and 35th Avenue is a minor arterial south of Durango Street and a major arterial north of Buckeye Road.

Table 5-1: Functional Classification

Classification	Street Name	Direction
Major Arterial/Minor Arterial	35th Ave.	NB/SB
Major Arterial	Buckeye Rd.	WB/EB

Volume of Traffic

Traffic volumes show the utilization of roads and streets within the study area and help identify areas of concern and dense traffic concentrations. 2017 Traffic volumes were provided for a 24-hour period. Areas of highest traffic volumes are shown in **Table 5-2**.

As seen in **Figure 5-3,** traffic volumes westbound on Buckeye Road decrease by about 2,300 vehicles west of 31st Avenue, and traffic increases eastbound by nearly 850 vehicles. Traffic volumes on 35th Avenue change by about 1,000 vehicles past Buckeye Road and where 35th Avenue becomes a minor arterial south of Buckeye Road.

Table 5-2: Traffic Volumes

Roadway Segment	Classification	Direction	Volume
Buckeye Rd.: east of 31st Ave.	Major Arterial	WB	17,227
35th Ave. north of Buckeye Rd.	Major Arterial	NB	16,377
35th Ave. south of Buckeye Rd.	Minor Arterial	NB	15,356
Buckeye Rd.: 35th Ave. to 31st Ave.	Major Arterial	EB	14,905
Buckeye Rd.: east of 31st Ave.	Major Arterial	EB	13,434
35th Ave. north of Buckeye Rd.	Major Arterial	SB	12,667
Buckeye Rd.: 35th Ave. to 31st Ave.	Major Arterial	WB	12,562
35th Ave. south of Buckeye Rd.	Minor Arterial	SB	11,606

Crashes

As documented from police reports between 2013 and 2016, a total of 14 crashes were recorded within the Kuban Park study area. Two of the crashes were fatal and involved pedestrians. Both crashes occurred at the intersection of a local street and a major arterial, and both intersections were controlled by a stop sign. Although there were two fatal crashes, there were also multiple serious, minor, and no injury crashes identified along major and minor arterials, particularly between intersections along 35th Avenue and Buckeye Road (See **Figure 5-4**). Many of the crashes are concentrated on 35th Avenue north of Buckeye Road.

Bicycle and pedestrian crashes were analyzed to identify areas of major safety concern. Crash severity was categorized by fatal, serious, and minor crashes based on data from police reports.

Table 5-3: Intersections of Concern

Intersection	Type	Signage	Cause	Severity
35th Ave. and Sherman St.	Major Arterial/Local	Stop Sign	Did not use sidewalk	Fatal
Buckeye Rd. and 34th Ave.	Major Arterial/Local	Stop Sign	Failed to yield	Fatal
Buckeye Rd. and 31st Ave.	Major Arterial/Local	None	In opposing lane	Serious

Buckeye Rd. and 33rd Ave.	Major Arterial/Local	None	None	Serious
35th Ave. and Sherman St.	Major Arterial/Local	Stop Sign	Failed to yield	Serious
35th Ave. and Buckeye Rd.	Major Arterial	Signalized Intersection	Failed to yield	Serious
35th Ave. and Hadley St.	Major Arterial/Local	Stop Sign	Did not use sidewalk	Serious
Buckeye Rd. and 33rd Ave.	Major Arterial/Local	Stop Sign	Did not use sidewalk	Minor
Durango St. and 29th Ave.	Major Arterial/Local	Stop Sign	In opposing lane	Minor
Durango St. and 35th Ave.	Major Arterial	Signalized Intersection	None	Minor
Lincoln St. and 29th Ave.	Local roads	Stop Sign	None	Minor
35th Ave. and Durango St.	Major Arterial	Signalized Intersection	None	Minor
Buckeye Rd. and 35th Ave.	Major Arterial	Signalized Intersection	Followed too close	Minor
35th Ave and Sherman St.	Major Arterial/Local	Stop Sign	None	Minor

Signage and Traffic Calming Applications

Signage for intersections include signalized and non-signalized controlled intersections. The Kuban Park study area has signalized intersections at specific high traffic points, and a significant number of non-signalized intersections. Most signalized intersections are along major and minor arterials. Non-signalized intersections are mostly within neighborhoods and where collector roads intersect with major and minor arterials. There are four-way signalized crosswalks at the intersections of Lincoln Street & 35th Avenue, Buckeye Road & 31st Avenue, and Buckeye Road & 35th Avenue. A three-way signalized crosswalk was installed at Durango Street & 35th Avenue and an RRFB crosswalk is located on Lincoln Street east of 31st Avenue.

Speed humps are used throughout the Kuban Park study area as traffic calming devices. The speed humps are placed within some residential pockets, and not others

Figure 5-2: Vehicles on sidewalks on a local street in the study area

Issues and Concerns

The major issue and concern regarding street and roadway infrastructure is safety. Specific issues and concerns are listed below:

- Fatal crashes occurring at non-signalized intersections of Buckeye Road and 34th Avenue, and Sherman Street and 35th Avenue, suggest potential connections to key destinations. Sherman Street off 35th Avenue is a direct route to Kuban Elementary School for the neighborhoods west of the school, and the warehouse complex is adjacent to Buckeye Road on the south, where residents may attempt to cross for employment.
- Many crashes reportedly occurred on Buckeye Road and 35th Avenue. Buckeye Road is a major arterial with high traffic volumes traversing east and west, and most north and south bound traffic must cross Buckeye Road by yielding to eastbound and westbound traffic. This suggests that a person on bike or foot would have the same level of risk to cross Buckeye Road. 35th Avenue is similar because most individuals are crossing mid-block or at stop sign controlled intersections, so they must yield to the high volume of northbound and southbound traffic, which puts the pedestrian or bicyclist at risk.

Figure 5-3: Streets and Roadways

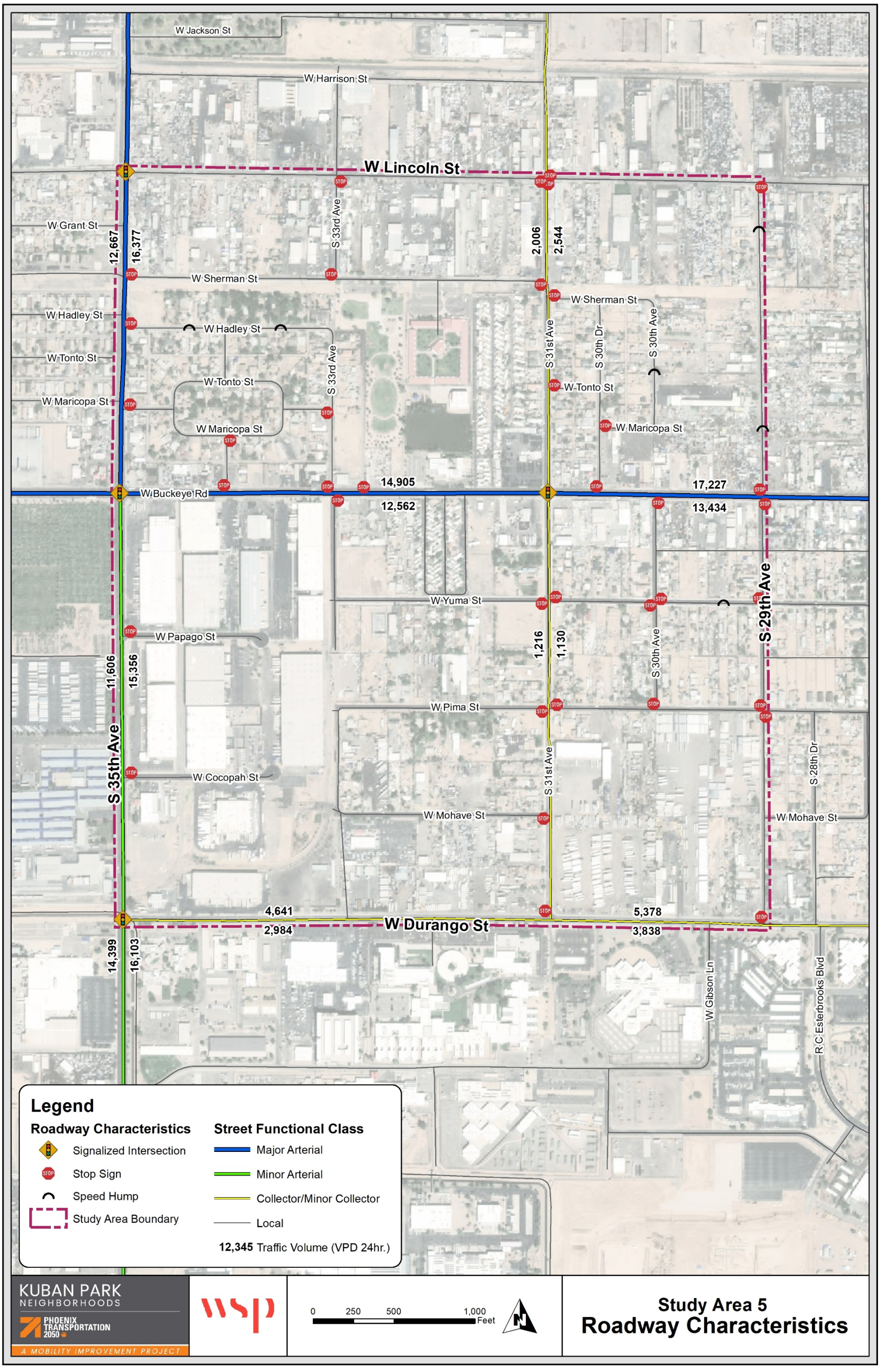
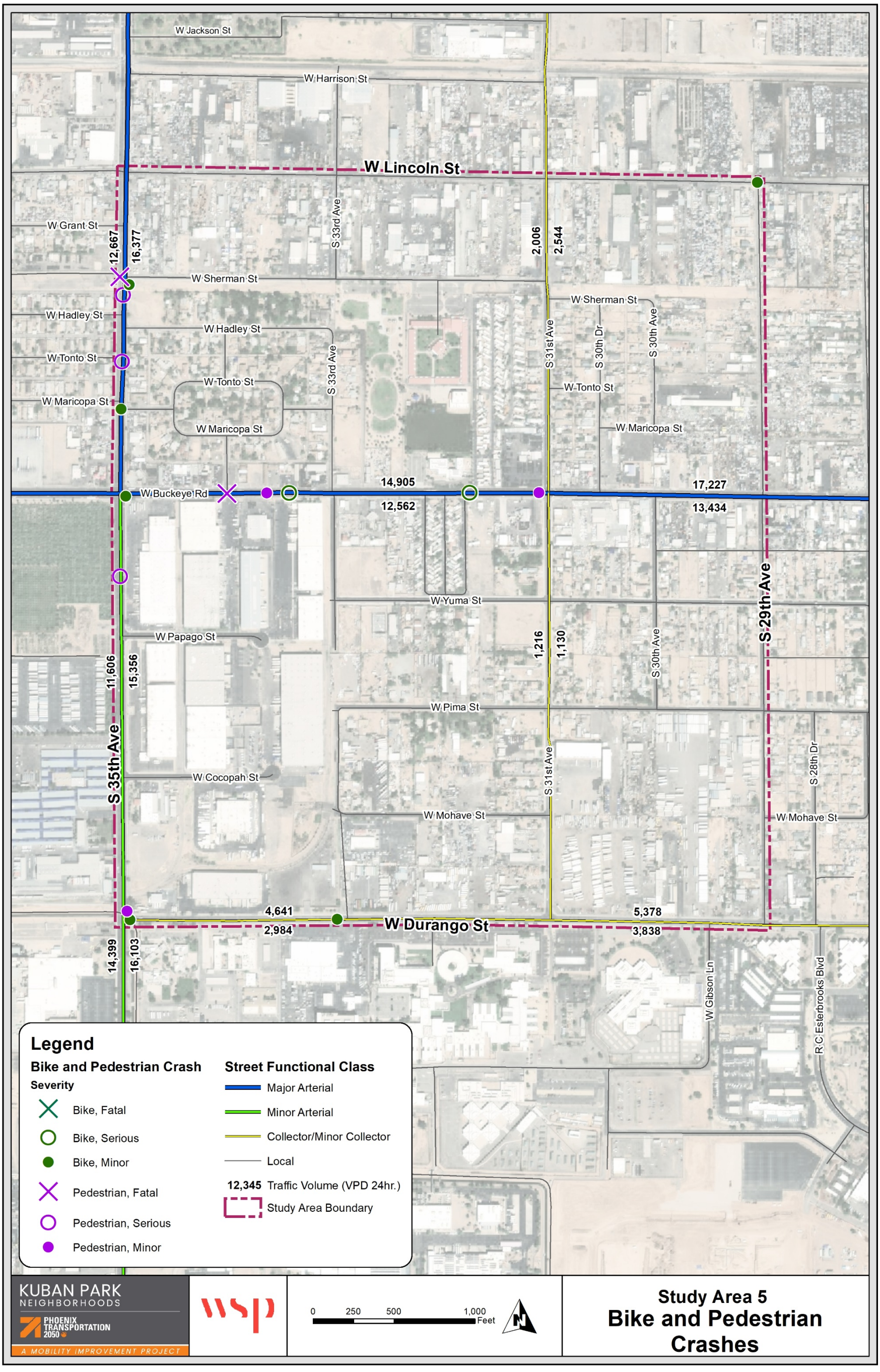


Figure 5-4: Bike and Pedestrian Crashes

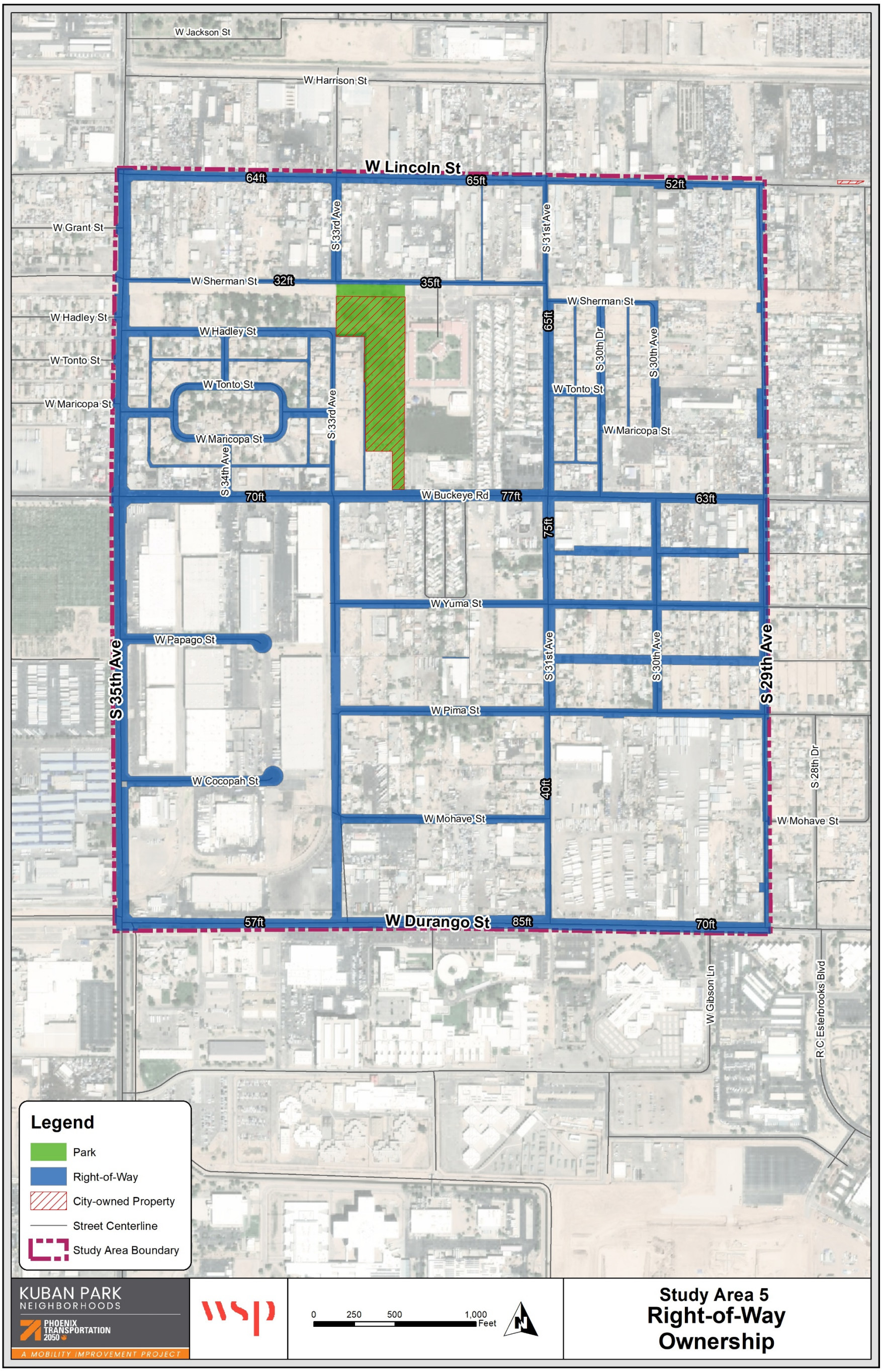


5.2 Right-of-Way

ROW data will help determine where potential projects can be implemented based upon land already owned by the city, and the space between city-owned parcels to determine project size and opportunities for greater project flexibility and shade implementation. From the ROW analysis, **Figure 5-5** illustrates the ROW on many of the local roads is a result of overly wide paved surfaces and ROW for streetscape amenities that are not currently in place such as missing sidewalks. Furthermore, on some collector roads some properties have encroached with extended property lines or parked vehicles on the existing ROW.

ROW of roads and streets was determined based on City parcel lines. Street ROW indicates the current amount of space owned by the City from edge to edge for through movement. The existing street ROW will help determine if a recommendation can go forward or if further discussion on land is needed.

Figure 5-5: Right-of-Way



5.3 Public Transportation Facilities

Public transportation facilities were inventoried to understand where they are located and if there are gaps and/or barriers to accessing them. Public transportation in the area includes transit routes and stops. The Americans with Disabilities Act of 1990 (ADA) was passed to ensure equal opportunity and access for persons with disabilities[1]. The U.S. Department of Transportation regulates ADA rules regarding transit services and facilities. For this report, transit stops were identified and the associated data included current compliance status. Public transportation services show what transit stops are most utilized, annual ridership, transit routes and transit connections.

Transit Service and Routes

There are two fixed bus routes that provide services through the Kuban Park study area (see **Table 5-4**). Route 13 provides EB/WB service along Buckeye Road and Route 35 provides NB/SB service along 35th Avenue 35th Avenue and Buckeye Road are major arterials with high traffic counts. **Figure 5-6** shows a bicyclist on the sidewalk on 35th Avenue north of Buckeye Road heading towards the NB bus stop. Route 35 and Route15 cross at 35th Avenue and Buckeye Road (see **Figure 5-7**). The bus stops at this intersection have the highest ridership within the study area. There are five ADA non-compliant bus stops and two ADA non-accessible bus stops, both of which do not meet current ADA standards.

Figure 5-6: Bus stop along 35th Avenue -no bus pullout (major arterial)

Table 5-4: Transit Routes

Name	Route Type	Route Description	Frequency (Minutes / Days)	Key Stops (highest ridership)
Route 13 EB/WB	Fixed	Buckeye Rd.	30 M-SU	Buckeye Rd. & 35th Ave.
Route 35 NB/SB	Fixed	35th Ave.	30 M-SU	Buckeye Rd. & 35th Ave.

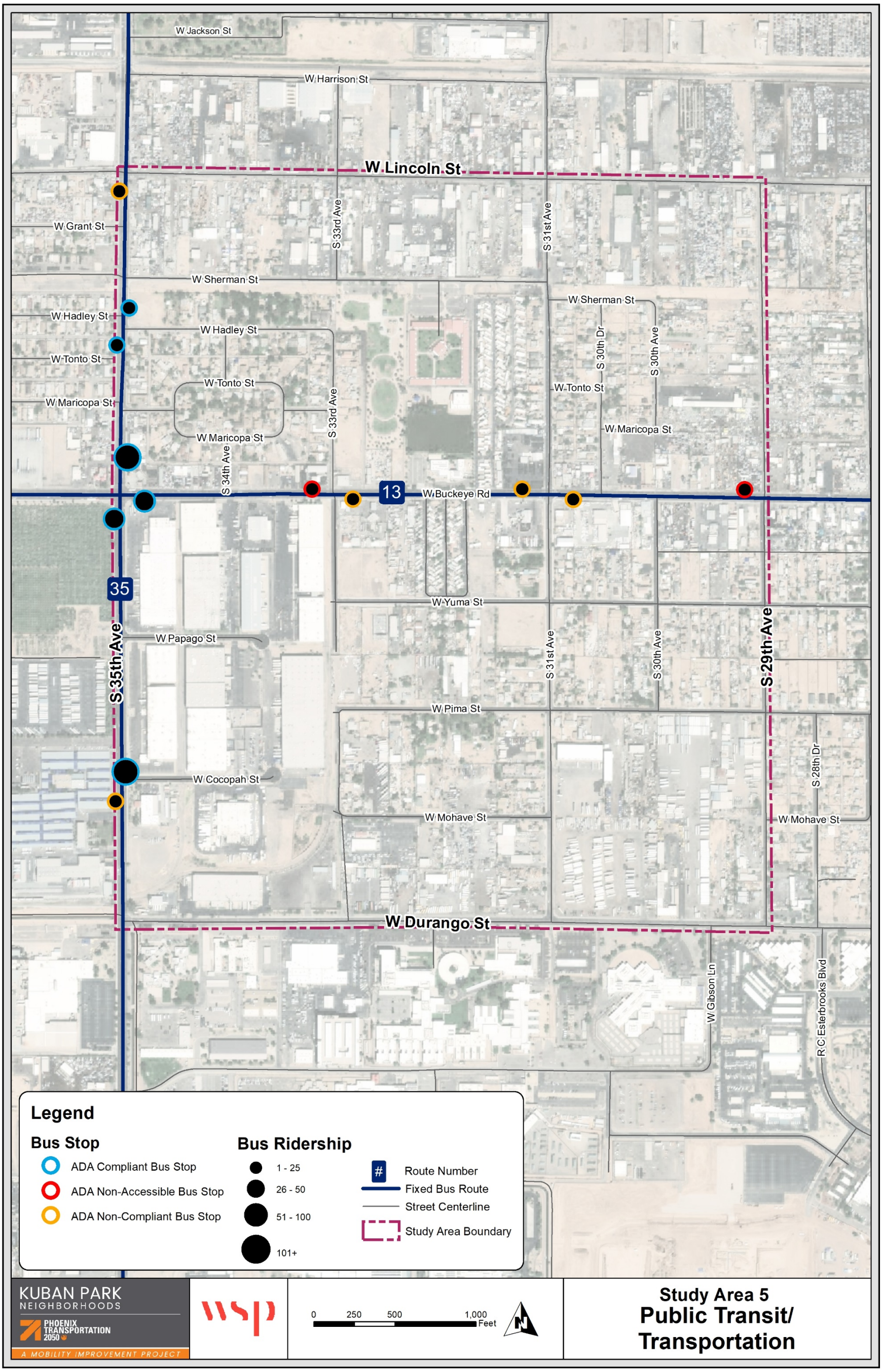
[1] U.S. Department of Transportation (2015). *Americans with Disabilities Act (ADA): Guidance Circular*. Federal Transit Administration

Issues and Concerns

The major issues and concerns regarding public transportation facilities is ADA compliance and accessible facilities. Listed below are the key issues and concerns:

- There are five bus stops that the city data has identified as ADA non-compliant and one bus stop that city data has identified as ADA non-accessible. Bus stops that are deemed non-compliant or non-accessible are characterized as not meeting current ADA standards. The issues with these stops include not being connected to a sidewalk and not having adequate space for ADA accessibility.
- Highly used bus stops on major arterials with high traffic volumes do not have bus pullouts or bus bays

Figure 5-7: Transit Facilities and Ridership



5.4 Bicycle and Pedestrian Facilities

Bike and pedestrian facilities include sidewalks, crossings, bike lanes, bike routes, bicycle boulevards, paths, and shared-use paths. In addition to identifying existing bike and pedestrian facilities, hot spots and areas of concern were highlighted.

Pedestrian Facilities

Pedestrian facilities include sidewalks, signalized crossings, and mid-block crossings. Sidewalks within the study area vary in size and connectivity. Sidewalks located in neighborhoods have an average width of four feet, and an average width of six feet along arterials. Connectivity of sidewalks is key to understanding gaps in the pedestrian environment and how people will decide to get to their destinations.

In addition to sidewalks, crossings are an important element that affords mobility and accessibility to pedestrians. The number of crossings available to pedestrians help determine where mobility can be improved. Most signalized crossings occur at major intersections. Crossings at intersections can range from 400 feet to a half mile apart. Longer distances between crossings do not provide adequate accessibility for many destinations.

Figure 5-8: Narrow sidewalks

There are many gaps in the sidewalk infrastructure causing pedestrians and cyclists to use the local roads or cross the unmarked Right-of-Way (ROW) as seen in **Figure 5-9.** Many sidewalks within the study area average four feet and most areas do not have a buffer (seen **Figure 5-8**). These factors limit mobility and safety for all persons. Areas with sidewalks include:

- Both sides of 35th Avenue
- The south side of Sherman Street between 35th Avenue and 31st Avenue
- Sections on both sides of 31st Avenue
    - Missing sections of sidewalk on
        - The east side of 31st Avenue south of Buckeye Road
        - Between Buckeye Road and Maricopa Street on the west side of 31st Avenue
        - Between Sherman Street and Lincoln Street on the east side of 31st Avenue.
- Sections on both sides of Buckeye Road
- Both sides of Yuma Street

Bicycle Facilities

Bicycle facilities were analyzed within and adjacent to the Kuban Park study area. The analysis looked at bike lanes, bike routes, boulevards, paths, and shared-use paths. The Kuban Park study area has one bike lane along Durango Street adjacent to eastbound traffic between 35th Avenue and 29th Avenue.

Some of the major gaps and barriers between bicycle facilities exist within neighborhoods and crossing freeways. Many portions of the Kuban Park area are residential and there are no designated bike facilities connecting the residential areas, commercial areas, and local school.

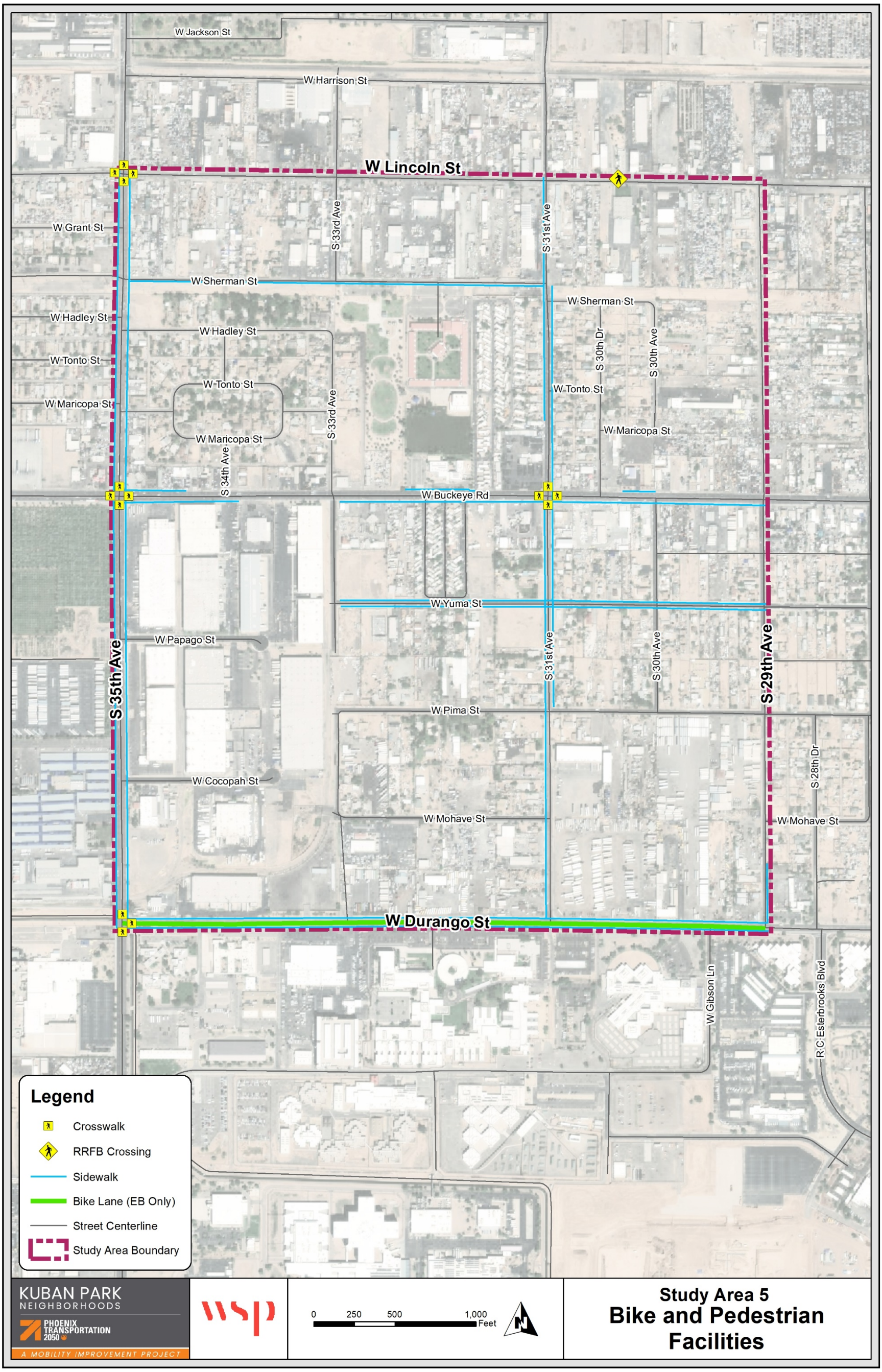
Figure 5-9: Missing sidewalk on Lincoln Street

Issues and Concerns

The major issues and concerns regarding pedestrian and bicycle facilities include accessibility and connectivity. Listed below are the key issues and concerns:

- One bike lane exists traveling eastbound (EB) along Durango Street.
- No bicycle connections exist through local streets and neighborhoods.
- Lighted crossings are only located at major intersections and one rectangular rapid flash beacon (RRFB) along Lincoln Street.
- Sidewalks are installed in some places on local roads and within neighborhoods and not others.
- Sidewalks along major/minor arterials are narrow and missing in some places.

Figure 5-10: Bike and Pedestrian Facilities



5.5 Supportive Streetscape Amenities

The supportive streetscape amenities assessment looked at lighting and landscaping. Lighting and landscaping were analyzed as they are an important part of the mobility picture: They help encourage the use of alternatives modes of transportation, promote safety, provide a cooler environment, and, overall provide an inviting environment to bicyclists and pedestrians which can encourage greater use.

Street Lighting

The lighting infrastructure assessment identified existing lighting, lighting coverage, and lighting facilities that will be updated through the LED Light Program. Areas of concern were also identified.

Existing Lighting

Existing light infrastructure shows that most lighting is located along major/minor arterials and some local roads such as (see **Figure 5-12**):

- Buckeye Road
- 35th Avenue
- 31st Avenue
- Durango Street
- Lincoln Street
- 29th Avenue

Figure 5-11: Limited street lights

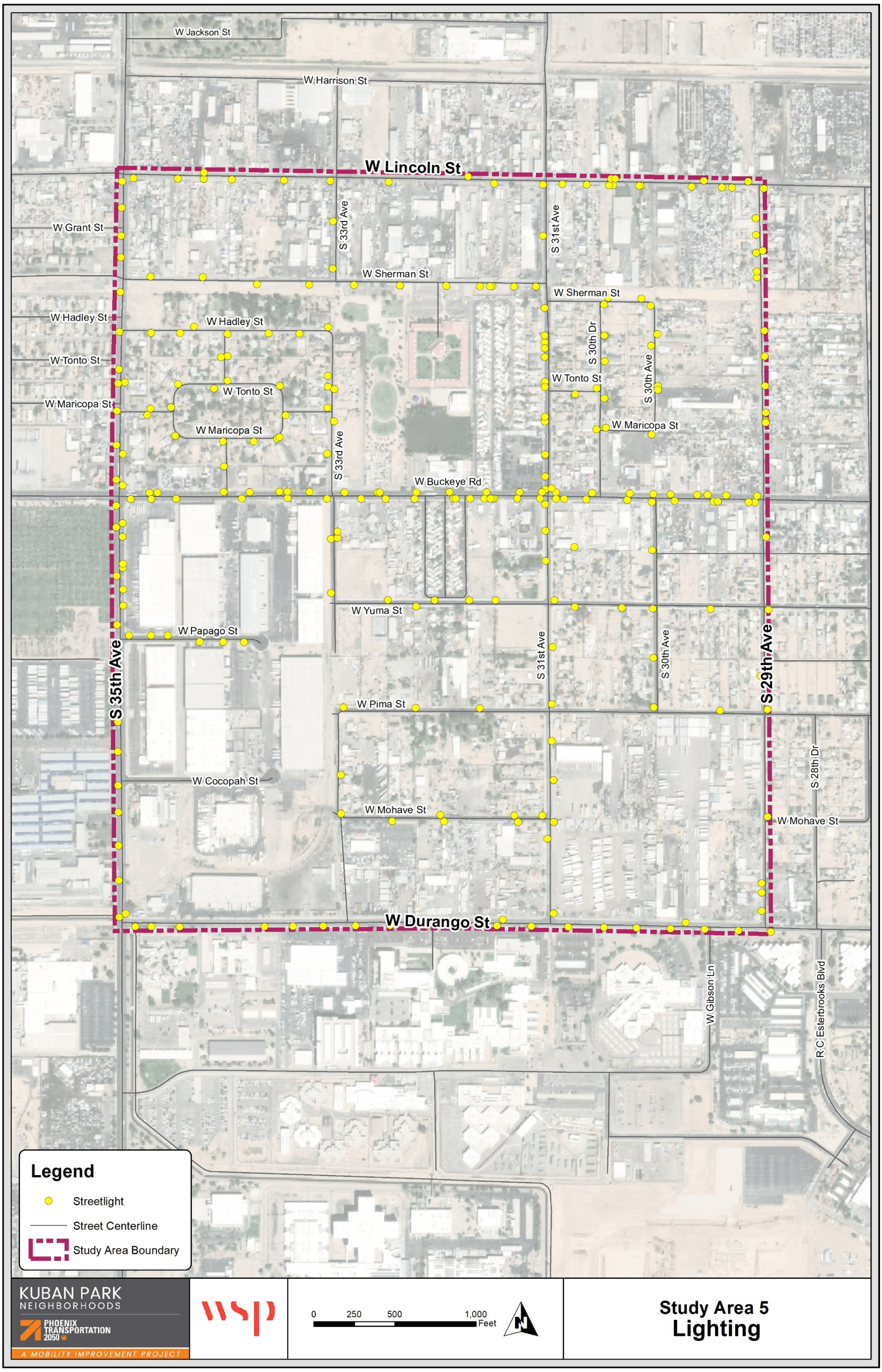
The City of Phoenix is in the process of updating street lighting infrastructure to light-emitting diode (LED) light fixtures. The LED lighting program will replace 100,000 existing street lights with LED fixtures. The program began in 2016 and is programmed to be completed in fall 2019. Updated fixtures will improve visibility for pedestrians, bicyclists, and vehicles as well as creating a safer environment for non-motorized modes of transportation while reducing operating and maintenance costs.

Issues and Concerns

The Supportive Streetscape Amenities Assessment showed a lack of consistent lighting throughout the entire study area. Listed below are the key issues and concerns:

- Lighting infrastructure is concentrated along major/minor arterials like Buckeye Road and 35th Avenue. Yuma Street and Pima Street, where the neighborhood is more residential, have less lighting infrastructure. There are also large gaps in lighting infrastructure on Pima Street between 31st Avenue and 30th Avenue where there are no light poles except at the cross-streets.

Figure 5-12: Lighting



Landscaping and Shade

Landscaping and the tree canopy are identified is key streetscape amenities to transportation facilities that encourage multimodal access by providing shade. As part of the City's environmental sustainability goals, Phoenix is exploring ways to plant trees in areas with reduced tree canopy and where additional shade is needed near transportation corridors.

Figure 5-13: Lack of proper shade covering

Understanding the placement of the existing tree canopy within the Kuban Park study area is a key part of determining the best way to improve connections to transportation facilities and for safe mobility. Data for city-owned tree sites/tree pits were provided by the City of Phoenix.

Figure 5-14: Shade in some areas and not others

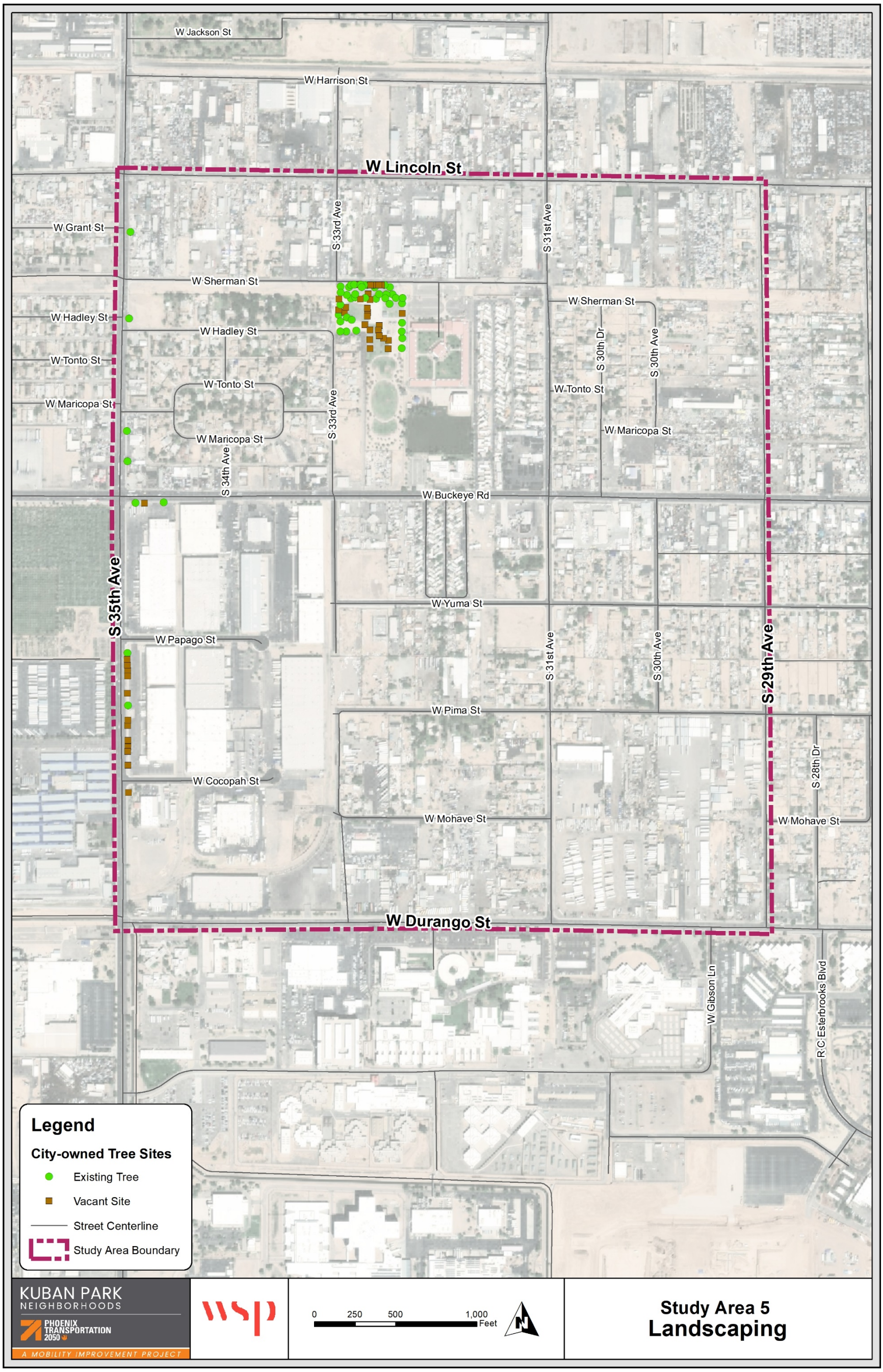
Analysis of the city-owned tree sites/tree pits data identified a concentration of roughly 75 percent of the area's tree sites/tree pits in the southeast corner of 33rd Avenue and Sherman Street (see **Figure 5-15**), which is the location of Kuban Park. About 25 percent of the tree sites/tree pits in this area are vacant, meaning the city designated this plot for a tree but there is currently no tree. About 50 percent of the sites have planted trees that provide some shade to surrounding areas. There are also tree sites/tree pits spread along 35th Avenue between Grant Street and Cocopah Street. Most of the tree sites/tree pits south of Buckeye Road are vacant.

Issues and Concerns

Overall the Kuban Park study area does not have adequate shade coverage. Where landscaping has been provided, there are large gaps that detract from its effectiveness. Listed below are the key issues and concerns:

- Trees and tree pits are located at Kuban Park and in some areas along Buckeye Road, and 35th Avenue.
- Most of the Kuban Park study area is void of shade coverage.
- Trees that are located within the study area are shade trees and do provide shade to pedestrian and bicycle facilities, however, trees are spaced far apart and are generally inconsistent.

Figure 5-15: Landscaping



6.0 Land-Use and Infrastructure

In addition to existing transportation facilities, land-use, zoning, infrastructure, and environmental constraints were evaluated. Existing infrastructure includes ROW, drainage structures, and utilities. Environmental constraints include culturally sensitive sites.

6.1 Zoning

Current zoning was used to evaluate how closely the current use of the parcels follows the City's requirements. Zoning, in some cases, doesn't reflect the land-use designations set forth in the General Plan. However, the zoning is generally consistent with current usage within the study area. Based on the City of Phoenix General Plan zoning regulations, most of the Kuban Park study area is zoned for Light Industrial, Multi-Family Residential, and Commercial-General Commercial (see **Figure 6-1**). Buckeye Road, which is the major arterial for EB/WB traffic, is lined mostly by Commercial-General Commercial with some light Industrial zoning west of 33rd Avenue 35th Avenue is lined by Light Industrial zoning south of Buckeye Road where the road is considered a minor arterial. 35th Avenue becomes a major arterial north of Buckeye Road where zoning is mostly Commercial-General Commercial and Multi-Family. The notable zoning changes illustrated in Figure 6-1 show that Kuban Park will change from Multi-Family Residential to Commerce Park-General Commerce Park Option.

6.2 Land-Use

The Land-Use designations for the Kuban Park study area are like the existing zoning (see **Figure 6-2**). There are Industrial and Commercial uses along Buckeye Road., Industrial uses along 35th Avenue south of Buckeye Road, and Multi-Family and Commercial uses north of Buckeye Road. The area adjacent to Durango Street and south of the Kuban Park study area is designated as Public/Quasi-Public. Compared to zoning, the land-use seen in the area between Buckeye Road and Durango Street is a mix of commercial, industrial, and some residential land-use. However, the zoning map shows these areas as being mostly residential and industrial with some commercial.

Figure 6-1: Zoning

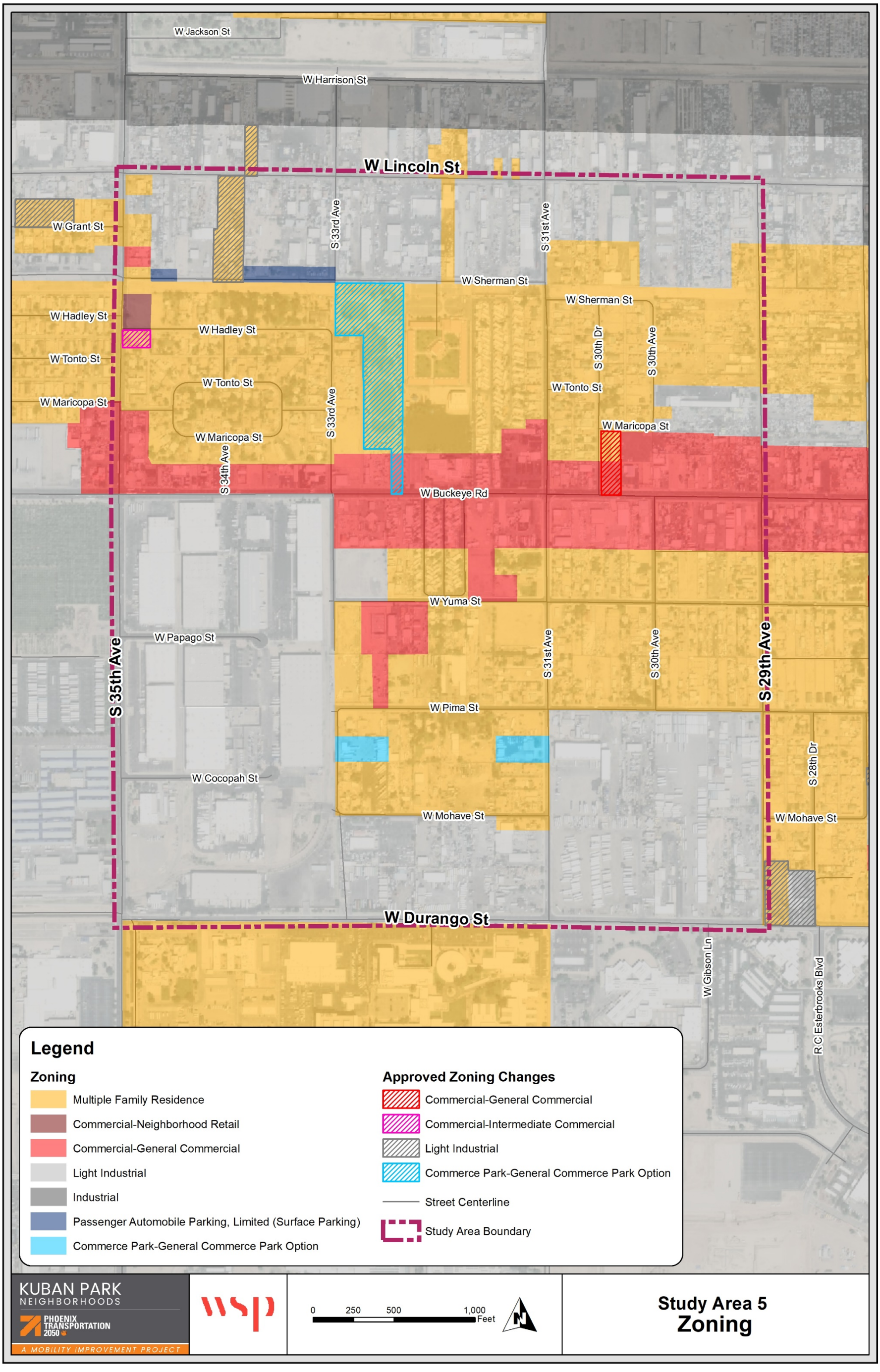
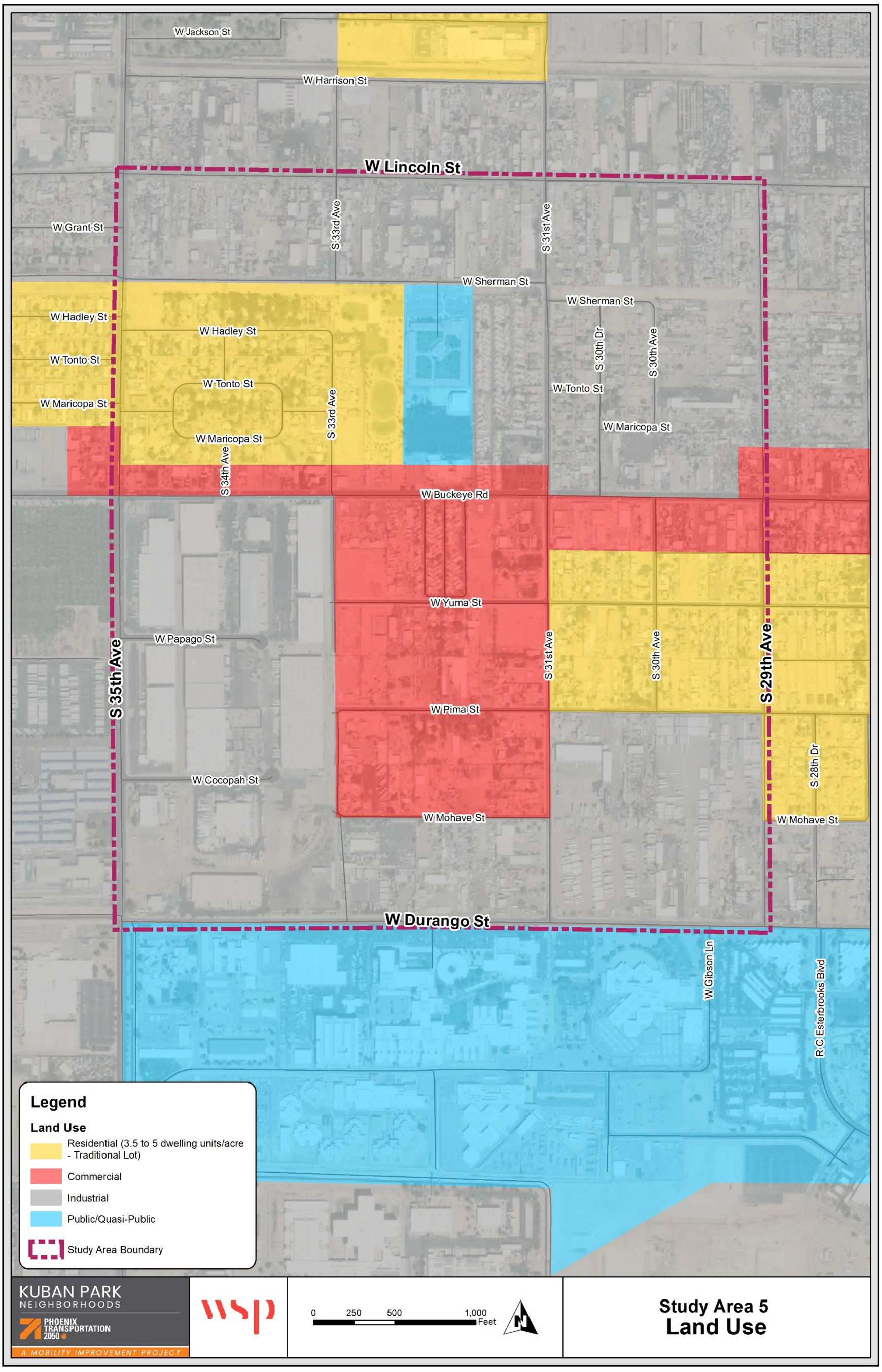


Figure 6-2: Land-Use



6.3 Drainage

Existing drainage infrastructure and drainage concern areas were identified within the Kuban Park study area. Stormwater storage areas are located along major/minor arterials and some local streets. Some key gaps in stormwater storage areas are in neighborhoods. Most stormwater structures are also located on major/minor arterials and some local streets. Like stormwater storage, stormwater structures are also generally absent or incomplete within neighborhoods.

The Kuban Park study area has linear open channel stormwater structures along 35th Avenue, Durango Street, and 31st Avenue between Buckeye Road and Durango Street (see **Figure 6-4**). Additionally, there are stormwater retention areas near 29th Avenue and Durango Street.

Drainage concern areas are based on complaints made by the public about drainage facilities that cause issues for the community or where infrastructure is needed to correct problems. Drainage concern areas were identified at Mohave Street and Pima Road, and at Buckeye Road and 31st Avenue. These areas do not have the necessary stormwater structures.

6.4 Utilities

Transmission lines run east/west about a block south of Lincoln Street through the Kuban Park study area. The current structure of the transmission lines creates a barrier between development on the north side and south side of the fenced transmission lines (see **Figure 6-3**). Areas of concern highlighted in **Figure 6-5**, show the limited access and lack of crossings along the transmission lines.

Figure 6-3: Utility infrastructure

Other utility information was collected but is not included because it does not supplement the purpose of this report. As mobility recommendations are determined in the next report, the recommendations and additional utility data will be reviewed and addressed as necessary.

Figure 6-4: Drainage

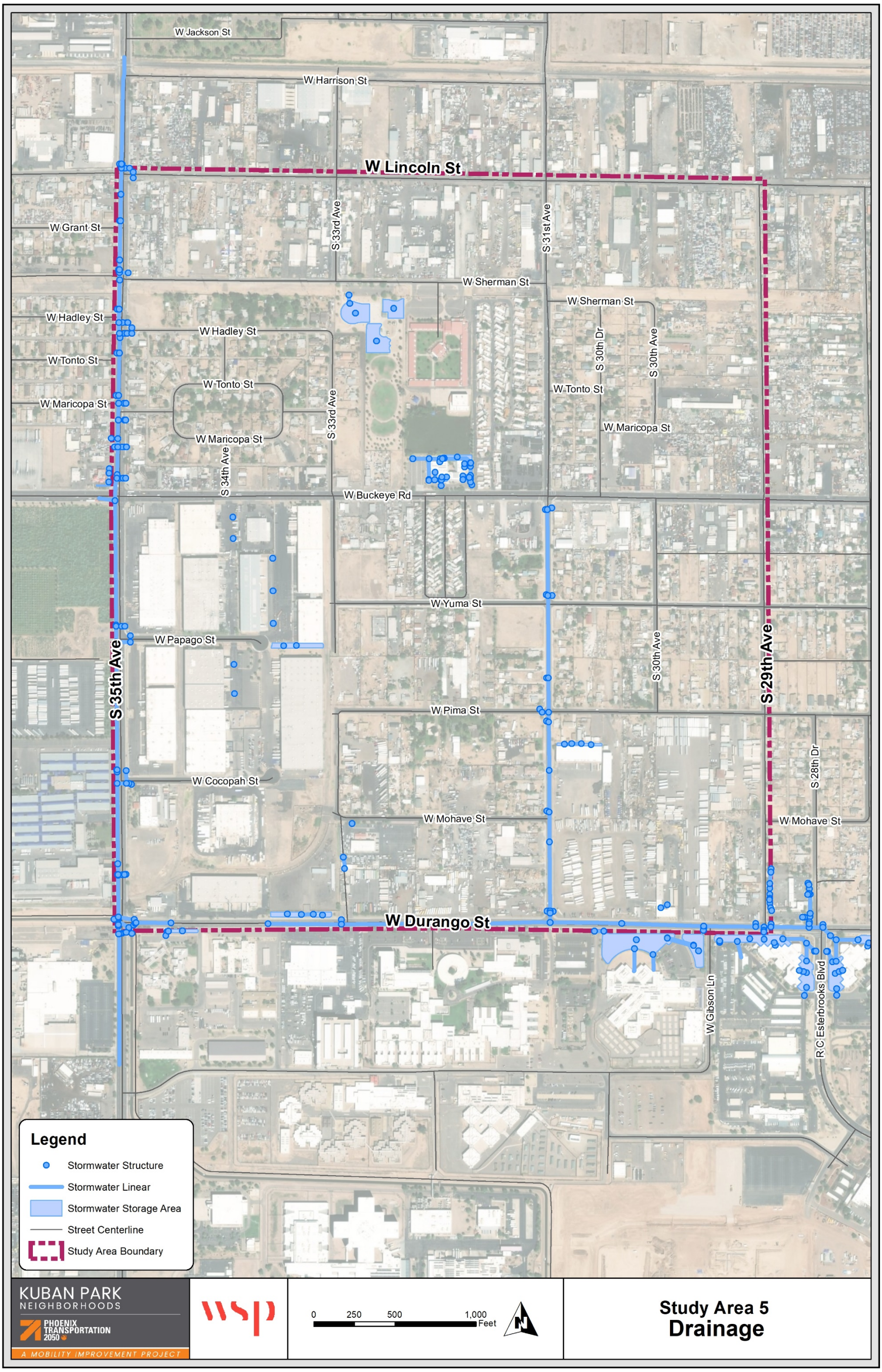
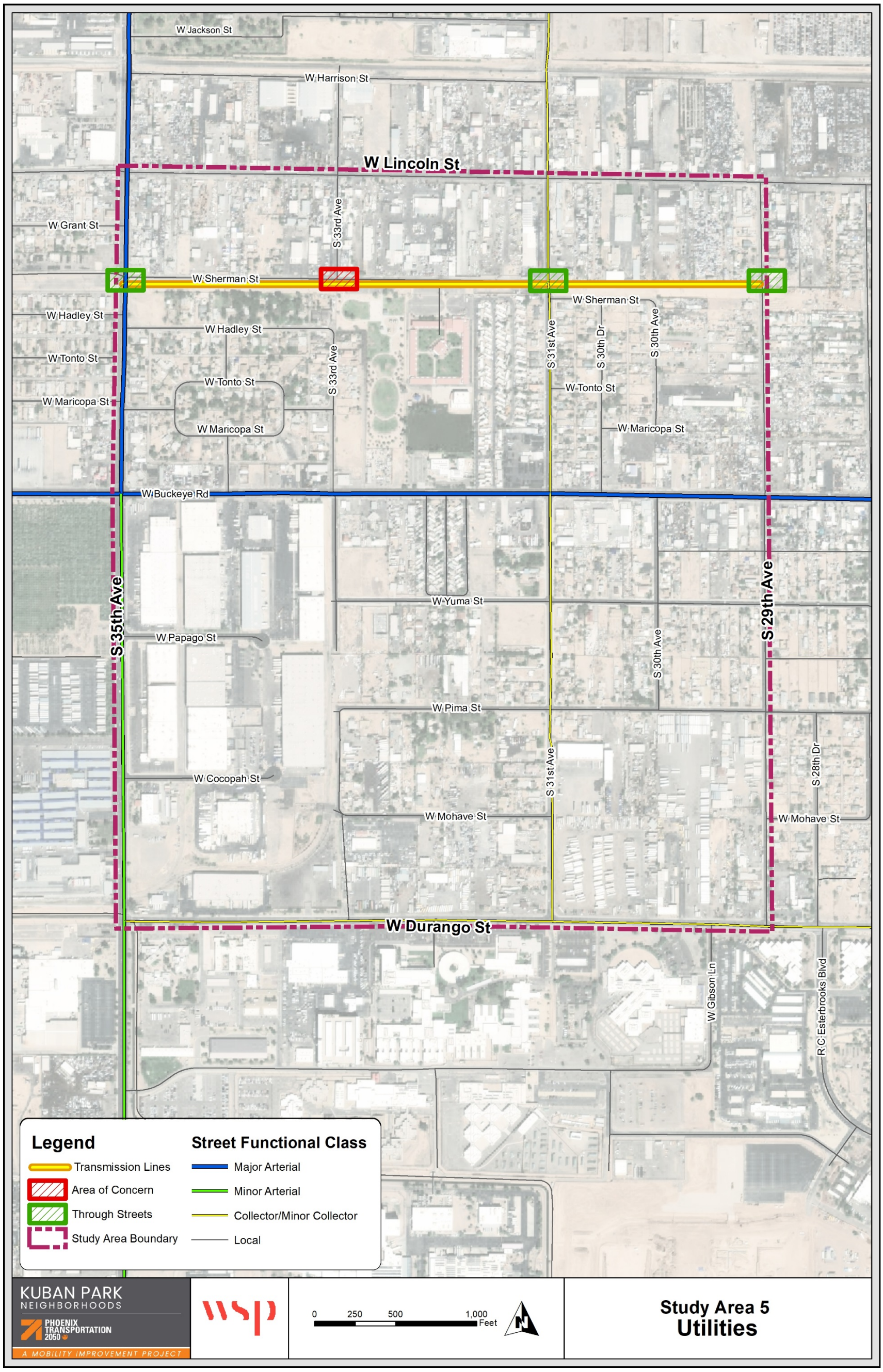


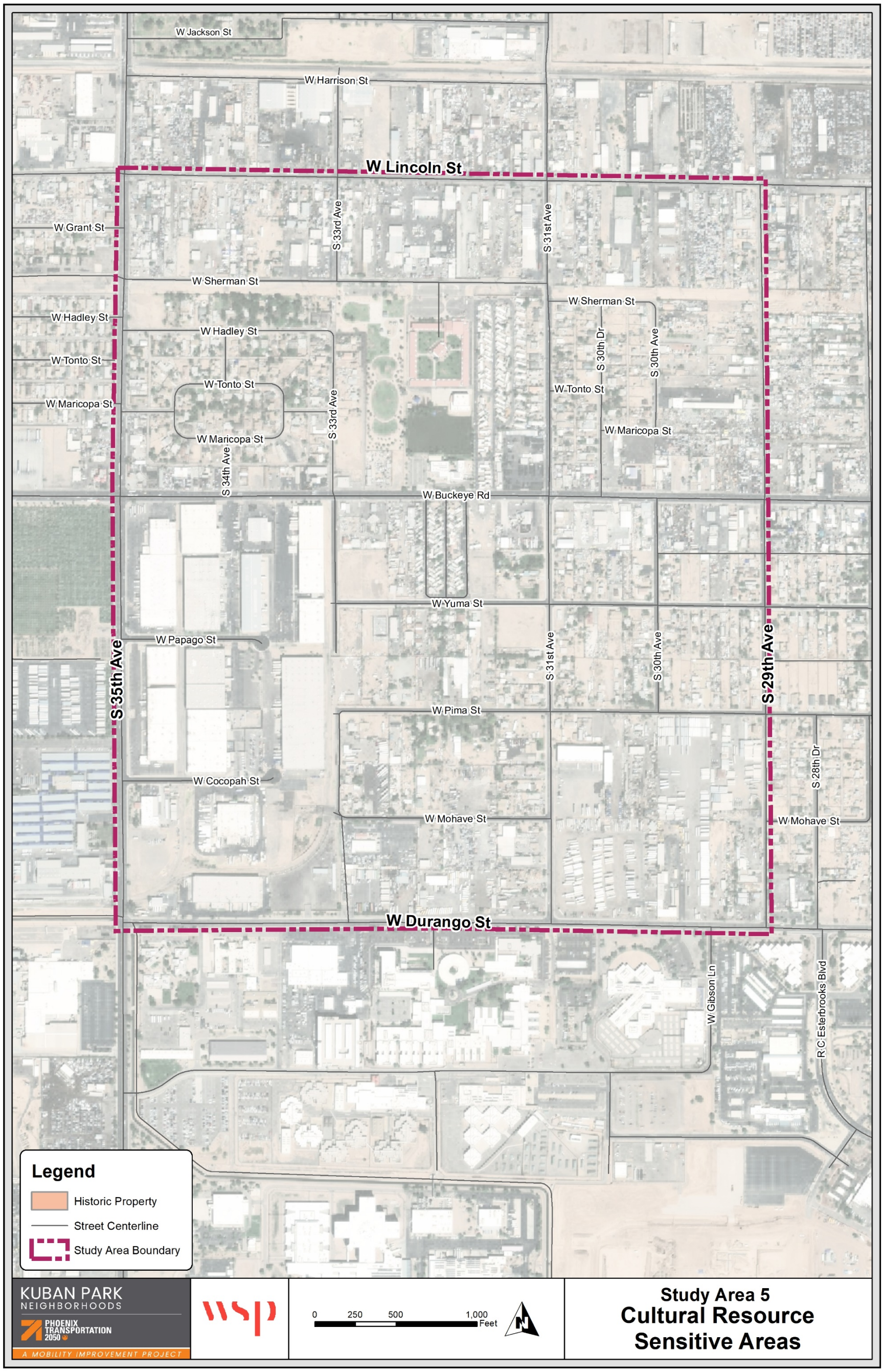
Figure 6-5: Utilities



6.5 Environmental and Cultural Resources

In addition to land-use and infrastructure, environmental constraints were also considered. Environmental constraints include cultural resources, such as historic properties and sites. Historic properties pose constraints to future mobility projects due to their protected status or eligibility to obtain protected status. An analysis of environmental concerns (see **Figure 6-6**) suggests that there are no historic properties that could affect potential mobility projects within or near the Kuban Park study area.

Figure 6-6: Cultural Resource Sensitive Areas



7.0 Stakeholder Outreach

Stakeholder outreach was conducted through interviews with people within the mobility area to gain a better understanding of the local community, how individuals use existing transportation facilities, and where they would like to see improvements. Stakeholders were selected based upon their connections to the community and their knowledge of activity within the mobility area. Outreach efforts focused on conducting and recording individual telephone interviews with the key stakeholders. An interview guide was crafted to help interviewers encourage interviewees to share the information that was most relevant to them. Stakeholders included schools, neighborhoods associations, neighborhood watches, non-profit organizations, and medical facilities.

7.1 Stakeholder Interviews

Interviews with stakeholders were conducted over the phone. Participants were asked a series of questions about who lives within the community, what kinds of activities take place in the community, and where improvements are needed.

Interviews were conducted with the following individuals:

Marge Sperry - Old Castle Building Envelope

- Mostly visit fast food restaurants in the area during 30-minute lunch break.
- People do not travel as far as I-10.
- Many employees go to the Circle-K on Buckeye Road west of 35th Avenue – which is also a busy arterial).
- Just south of Old Castle Building Envelope is a rehab shelter and the Phoenix Rescue Mission. Both organizations are on 35th Avenue.
- Many clients from the nearby shelter and rehab center get employed by the Old Castle Building Envelope.
- The County animal shelter is also in the area.
- Most employees drive or ride the bus and get off at 35th Avenue and Buckeye Road, which is less than a ½ mile walk to the facility. Many people walk/bike on the sidewalks.
- Bike lanes on 35th Avenue would be a good idea.

Justin Essary - Community Tire Pros

- Stakeholder mainly commutes to work and states that most of the people he knows of also use a vehicle to get around.
- 24th Street and Buckeye Road intersection is dangerous for pedestrian and bicyclists. There are many accidents that occur at this intersection.
- There are too many vehicles on the road. Everyone drives a vehicle to get around.

- Drivers are not aware of bicyclists and pedestrians and they speed.
- Many sidewalks are in disrepair
- Places are too far away to walk/bike.
- Traffic calming devices are needed coming out of the airport on 24th Street.

Michelle Lopez - Murphy School District

- Michelle Lopez is the main administrative assistant for the school.
- The most popular destinations within the mobility area include the Health Center on 31st and Buckeye.
- Popular destinations outside of the mobility area include the outlet malls, the Arizona Center, Walmart at 35th and Southern, Food City on 27th and Van Buren.
- The most common way to get around in the area is by car or bus.
- Areas to avoid are 27th Avenue and Jefferson (going southbound) due to accidents and Kuban Park at night due to loitering and inadequate lighting.
- There are too many industrial uses, which are not conducive to walking,
- There aren't enough sidewalks or bike lanes.
- There are not enough safe places to cross the street between intersections.
- Vehicles drive too fast.
- 31st Avenue and Buckeye Road intersection needs pedestrian amenities such as a HAWK or a refuge and more sidewalks are needed.

Jose Trevizo - Jack L Kuban Elementary School

- Jose Trevizo is the principal for Jack L. Kuban Elementary School.
- Destinations include the Kuban Elementary School and Food City on 35th Avenue and Van Buren Street.
- Mobility issues include north or south on 31st Avenue. Most people stay close by because there no other destinations nearby. Some go west to 43rd Avenue and as far east as 19th Avenue
- Other mobility issues and areas of concern include motorists driving fast on 31st Avenue and Sherman Street, and safety.
- Students would prefer to walk/bike to school but the transient population, loose dogs, and drug activity create an unsafe environment. Also, there is no clear path and not enough sidewalks.
- Mobility improvements include more transit services, and speed bumps east and west on Sherman Street.

Ahlee Larson - R & C Trading

- Ahlee runs a business that operates out of a warehouse on Buckeye Road. She supervises employees and handles freight logistics.
- None of the employees at the facility travel within the mobility area. They commute to/from their homes outside of the area. Truck drivers come to the facility via I-10 and Buckeye Road to pick up goods from RC Trading for delivery to locations outside of the mobility area.
- One of the things that make it hard for trucks to enter the business is homeless people along Buckeye Road. The homeless population also make it uncomfortable for employees to walk to/from their cars in the morning and after their shifts.
- Making Buckeye Road wider would help make congestion better so trucks could enter our business more easily during rush hour.

Eva Olivas – Phoenix Revitalization Corporation (PRC)

- Eva is the executive director of PRC and has been actively involved in the South Phoenix/Central Phoenix areas for many years. She sees mobility problems as stemming from multiple causes including lack of lighting, shade and security.
- The Health Clinic associated with Murphy School District is an important destination for residents.
- One of the main issues preventing pedestrian and bicyclist activity within the mobility area is that Buckeye Road is blighted and there are not many places people want to go. A grocery store and chain dollar store is needed.
- Improvements needed include eliminating the loose dog issue, installing better lighting and creating more shade along sidewalks.
- Transit is used a great deal within the area.

7.2 Key Takeaways

Stakeholder interviews provided essential knowledge about how the community uses transportation facilities and where improvements are needed. Some of the key takeaways from the interviews include highlighting key destinations, key problems, and mobility improvements that are needed. Some of the key destinations include health services, school, parks, transit stations, grocery stores, and social services. Some of the key problems include drivers not obeying traffic laws, crime activity, and issues with safety. Through the interviews, interviewees stated that they wanted more bike lanes, protected bike lanes, lighting, sidewalks, and pedestrian crossings. In addition to these major concerns listed below are locations and mobility concerns that are most significant to the study area:

- Most crashes are occurring along Buckeye Road, with a total of 5 crashes including one fatal pedestrian crash, and along 35th Avenue with a total of 8 crashes including one fatal pedestrian crash.
- Most crashes occur at mid-block with no signalized or non-signalized crossing.
- Buckeye Road has a total of 5 bus stops and 35th Avenue has a total of two bus stops do not meet current ADA standards.
- Only one bike lane exists along Durango Street traveling EB.
- Little to no sidewalks within the neighborhoods and sidewalks along major/minor arterials are narrow with utility obstructions within the sidewalk.
- Lighting is minimal and widely spaced through the entire study area.
- Minimal landscaping exists with the study area and landscaping on exists small sections along 35th Avenue and Buckeye Road and within Kuban Park.
- Most zoning changes are transitioning from residential to industrial.

8.0 Conclusion

The goal of the existing conditions report is to identify key mobility infrastructure, find gaps and constraints in the mobility infrastructure and gain better understanding the community's view of what is needed. Two of the key takeaways are the lack of connectivity between pedestrian and bicycle facilities and safety pertaining to the use of these facilities, especially crossing between neighborhood roads and major arterials. While there are sidewalks and bike facilities located within the study area, most lack connectivity between neighborhoods and areas beyond the study area. The Kuban Park study area shows a high number of pedestrian and bicycle crashes at the intersections of major and minor arterials, and neighborhood streets.

8.1 Next Steps

Following the existing conditions report a recommendations report will identify key areas where improvements can be made to mobility. Recommendations will build upon existing conditions and input received from stakeholders.

Appendix A: Summary of Existing Plans and Documents

Document	Date	Agency	Summary
Phoenix Capital Improvement Program 2017-22	2017	City of Phoenix	The City of Phoenix Capital Improvements Program (CIP) includes documentation on budgeted and planned projects for years 2017-2022. Pertinent projects to Mobility Area 5 include: • Yuma St.: 31st Ave. to 28th Ave. - Construct curb and sidewalk on Yuma St. from 31st Ave. to 28th Ave.
FY 2018-2022 MAG Transportation Improvement Program (TIP)	2017	MAG	Program (TIP) is a federally required program report that serves as a five-year guide for the preservation, management, and expansion services across Maricopa County. This report also implements the MAG Regional Transportation Plan (RTP). Citywide improvements include: • Bikeshare station siting (2019) and equipment (2020)
Plan PHX 2015 General Plan	2015	City of Phoenix	The Plan PHX General Plan identified area for growth and preservation as well as future infrastructure that could be improved. Growth / Preservation Areas • Cores, Centers and Corridors • Infill Development • Opportunity Sites • Transit Oriented Development Infrastructure Areas • Complete Streets • Bicycles • Public Transit • Parks • Canals / Trails • Access and Functional Needs Infrastructure • Knowledge Infrastructure
2040 Regional Transportation Plan (RTP)	2017	MAG	The 2040 Regional Transportation Plan is a comprehensive, performance based, multimodal and coordinated regional plan, covering the period through 2040. This report covers the planned recommendations of all major modes of transportation at a regional level.

			Key Takeaways: • Arterial Capacity/Intersection Improvements • Intelligent Transportation Systems • Arterial Street Grid Extensions, Widenings and Improvements • Planned Dial-A-Ride/Paratransit Programs/Vanpools • Planned HCT • Expansion/addition of bus services • Continued support and implementation of the various regional Bike and Ped programs and plans. • Support the Transportation enhancements program: designed to strengthen the aesthetic, cultural and environmental aspects of intermodal transportation. • There will be weekend service in all 4 areas
Bike Master Plan	2014	City of Phoenix	The Bike Master Plan identified potential projects and policy recommendations for future bike infrastructure. Potential projects from the Bike Master Plan pertaining to Mobility Area 8 include. • 24th St. from Van Buren to Baseline Rd. • Reinvent Phoenix Gateway Bicycle Infrastructure and Intersection Projects • Reinvent Phoenix Eastlake Bicycle Infrastructure and Intersection Projects • Measure changes in the level of bicycling throughout the community o Conduct biannual bicycle counts • Develop interactive smart phone application for bicycle facility inventory and reporting • Review and update City policies, procedures, codes, ordinances, guidelines, and standards to promote bicycle safety and facilities • Create an interdepartmental bicycle Task Force to plan for, fund, manage and maintain bicycle facilities. • Establish and promote City of Phoenix as a bicycle friendly community

			• Tier I – III projects: o Grand Canal
LED Street Light Program	2018	City to Phoenix	The LED Street Program As part of a citywide effort, the city is replacing approximately 100,000 existing street light fixtures with energy-efficient light-emitting diode (LED) fixtures. New fixtures feature a 2,700 kelvin LED, the city's new kelvin standard for street lights
Phoenix Parks and Recreation Department's 2017 Annual Report	2017	City to Phoenix	The Phoenix Parks and Recreation Annual Report highlights completed projects, programs and outreach efforts surrounding parks and recreation facilities within the city. Programs pertinent to Mobility Are 5 include: • Mobile Recreation: active programming to 20 parks 5 days a week to strategically ensure opportunities for youth in areas of the city that do not have a nearby recreation/community center.
City of Phoenix Tree and Shade Master Plan	2010	City of Phoenix	The Tree and Shade Master Plan is a roadmap to implementing green, sustainable shade structures throughout the City. Key takeaways include: • Raise Awareness • Preserve, Protect, Increase o Create an Urban Forest Infrastructure Team o Conduct a Tree Inventory o Develop and Adopt Best Management Practices o Research and Develop Dedicated Revenue Streams • Sustainable and maintainable infrastructure o Revise City Ordinances
MAG Freight Transportation Plan	2018	MAG	The MAG Freight Transportation Plan is a federally-supported freight network and identified routes used by freight transportation. This includes primary highway freight system, critical rural freight corridors, and critical urban freight corridors. Priority corridors and critical urban freight corridors within Mobility Area 5 include: • Buckeye Rd. from 7th St. to 75th Ave.

Appendix B: Stakeholder Interview Questionnaire

PHOENIX TRANSPORTATION 2050

City of Phoenix Mobility Studies

Stakeholder Interview Questionnaire

Interviewee Name: _____

Interviewee Organization: _____

Interview Date: _____

Interviewer Name: _____

1. Where do you and other people regularly travel to in the area? (Destinations, such as schools, social service facilities, parks, houses, shopping, restaurants.)

2. What is the most common way to get around in the area? For instance, walking, driving, riding with someone in a car, biking or using transit?

3. Do you travel recreationally in the area, such as taking walks or bike rides? Do you see or know of others who do?

4. How often do you (or your organization/group/members...) travel within the area?

5. Where do you (or your organization/group/members...) travel outside of the area? What are the most popular places to travel to in the surrounding area(s)?

6. What areas do you avoid or instruct others to avoid?

7. Why do you avoid the stated areas? (please list any safety concerns, i.e. loitering, lack of lighting, hiding areas, etc.)

8. Have you ever had a negative experience (crash, near-miss, bad motorist behavior, etc.) in this Mobility Area while you were:

Riding a bicycle?	Yes ☐	No ☐
Walking?	Yes ☐	No ☐

PHOENIX TRANSPORTATION 2050

Driving? Yes ☐ No ☐

9. Have you heard others express issues with mobility in the area, such as a lack of parking, disconnected sidewalks, areas where collisions seem more likely?

10. What areas/streets do you feel are most dangerous for pedestrians and cyclists? Where do accidents mostly occur?

11. What is the greatest mobility/transportation issue within the study area?

12. Where would you like to see more bicycle/pedestrian/transit amenities (crosswalks, sidewalks, traffic calming devices, shade, pedestrian refuge island, bike lanes, etc.)

13. Inside of this Mobility Area where would you like to walk, bike, or ride transit to, but can't?

a. _____ - (nearest intersection)_____

b. _____- _____

c. _____ - _____

14. What are the top five challenges to getting around in this area

a. There aren't enough sidewalks – mainly walking areas
b. Sidewalks are cracked/ in disrepair
c. There aren't enough bike lanes
d. Bike lanes are too narrow
e. It's difficult for me to cross busy intersections
f. My neighborhood streets and bike lanes/routes don't go where I want to go
g. The places I want to go are too far away to walk/bike
h. There isn't enough shade (not enough trees)
i. There aren't enough safe places to cross the street *between* intersections
j. The existing streets and sidewalks don't go where I want to go
k. There isn't enough street lighting (it's too dark)
l. I am afraid of crime
m. I am afraid of stray dogs
n. Drivers don't obey traffic laws
o. Vehicles drive too fast – noisy cars
p. Vehicles drive too close to me