

EASTLAKE / GARFIELD  
NEIGHBORHOOD  
(CHOICE NEIGHBORHOODS)



A MOBILITY IMPROVEMENT PROJECT

# PHOENIX MOBILITY STUDY

## Eastlake/Garfield Neighborhoods

### *Mobility Area #11*

## Final Report

*November 2019*

Prepared for:



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## **MOBILITY AREA #11 OVERVIEW**

Illustrated in **Figure 1**, the T2050 Mobility Assessment Area #11 (MA 11) is located just east of Downtown Phoenix and northwest of Phoenix Sky Harbor International Airport. MA 11 is generally bounded by Interstate 10 (I-10) to the north, Jackson Street to the south, I-10 to the east, and 9<sup>th</sup> Street to the west. MA 11 includes a mix of single and multi-family residential neighborhoods, public housing, schools, parks, and several retail centers.

The light rail traverses the study area along Washington and Jefferson Streets, with stations in both directions at 12<sup>th</sup> Street. The area adjacent to the 12<sup>th</sup> Street stations has potential capacity for transit-oriented development and several dense residential projects are currently underway. The 12<sup>th</sup> Street stations serve a major mobility hub for the community and enhancing connections to and from the station is critical.

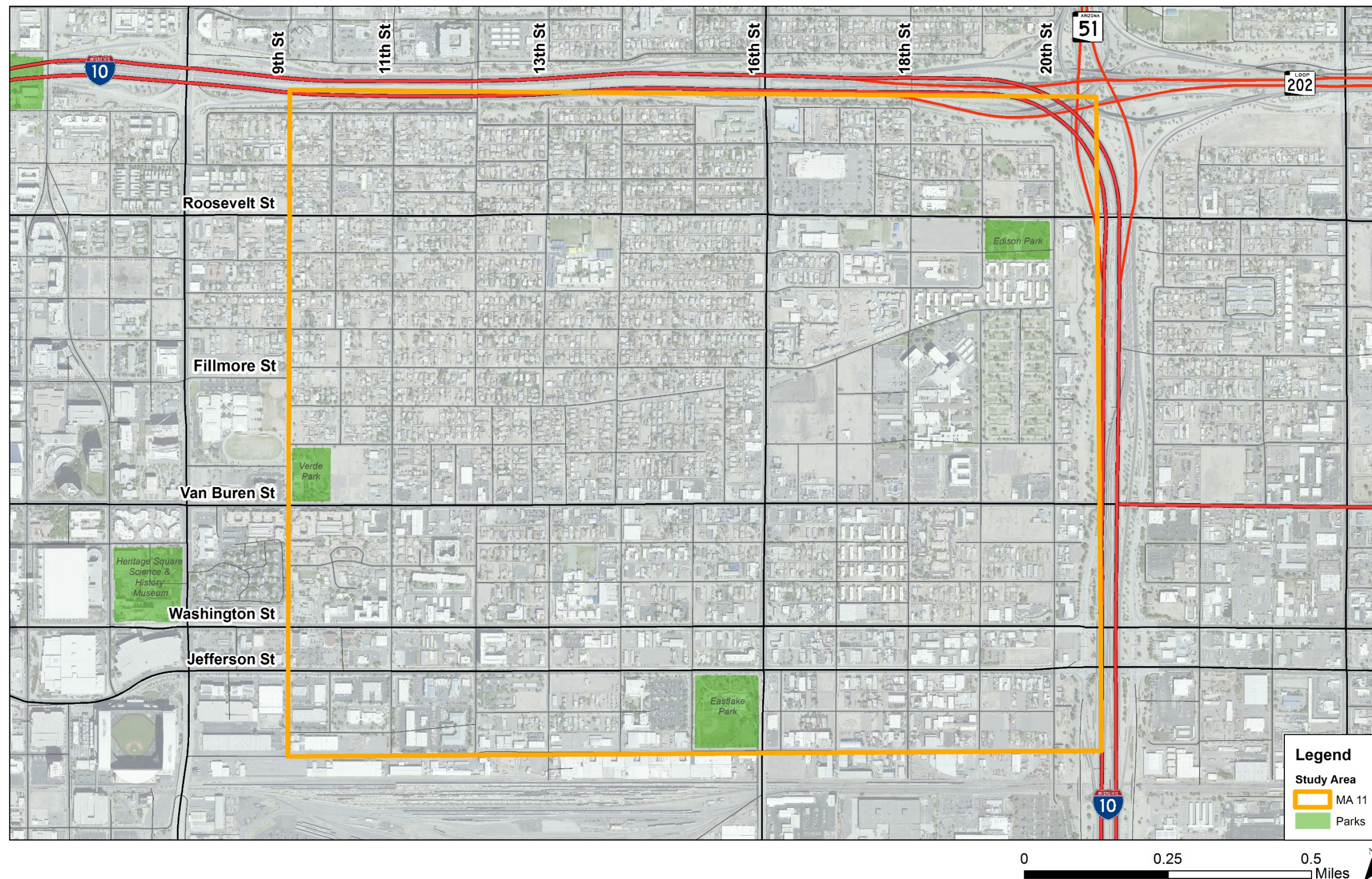
MA 11 also contains two of the oldest residential communities in Phoenix; Eastlake and the Garfield neighborhoods.

Eastlake is the larger of the two covering the area east of 16<sup>th</sup> Street between Moreland and Jackson Street. St. Luke's Medical Center, Pro's Ranch Market, and Edison Elementary School and Park are some of the major destinations within the Eastlake Neighborhood. South of Roosevelt Street is unique as it has a mix of vacant land, light industrial, commercial, warehouses, and multi-family housing. The northeast corner of the neighborhood has the most character with many single-story ranch-style homes.

In the southern half of the Eastlake neighborhood, single-family homes, small businesses, churches, and schools, including Faith North and Shaw Elementary, characterize the Eastlake Park neighborhood. Homes generally date back to the 1940s and 50s. Just south of Eastlake, along Jackson Street, is an industrial zone and rail yard.

The Garfield Neighborhood makes up the northwest corner of MA 11 and is approximately a half-mile from the light rail stops at 12<sup>th</sup> Street. The neighborhood is one of Phoenix's first streetcar neighborhoods, with some housing dating back to the 19th century. Many properties are currently being restored and renovated, and there has been an increase in construction throughout the neighborhood. Verde Park, and Garfield Elementary are prominent locations, and the neighborhood is known for its active artist community, including Alwun House, a non-profit art gallery and notable landmark.

**Figure 1: Mobility Area #11 Study Area Boundary**



### **Assets & Key Destinations**

Assets are the primary destinations and trip generators of the community. These include major employers, schools, historic buildings, community organizations, initiatives, institutions and infrastructure. Asset mapping helps inform the planning process by creating an inventory for preserving, improving or further supporting the areas existing resources, while also identifying where residents and visitors will likely be traveling to and from. The major assets within MA 11 are depicted in **Figure 2** and listed below:

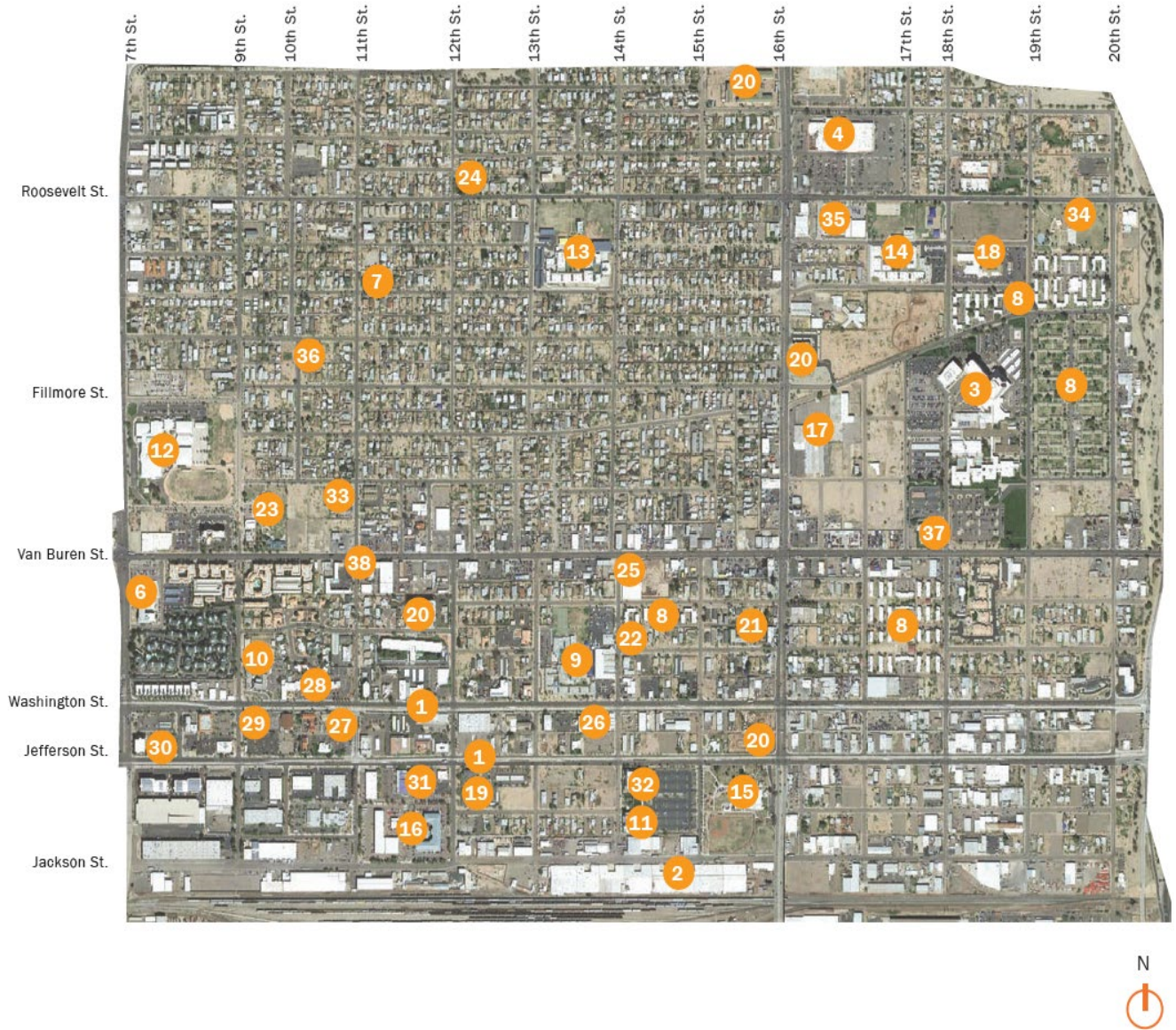
1. Valley Metro Light Rail Stop
2. Produce Distributor
3. St. Luke's Medical Center
4. Pro's Ranch Market
5. Downtown
6. Children's Museum of Phoenix
7. Historic Neighborhood
8. Public Housing
9. Shaw Elementary School
10. Faith North Montessori School
11. Teleos Preparatory Academy
12. ASU Preparatory Academy
13. Garfield Elementary School
14. Edison Elementary School
15. Eastlake Park
16. Phoenix Fire Department
17. Former Goodwill/Academy
18. Economic Security Department
19. New Times Building
20. Senior Housing
21. Booker T. Washington Child Development Center
22. Phillips Memorial CME Church
23. Verde Park
24. La Tolteca
25. Arnold's Pickle House
26. Helen K. Mason Performing Arts Center
27. CO+HOOTS Coworking Space & Beneficial Beans Coffee Shop
28. Azteca Bridal Wedding Plaza
29. Immaculate Heart of Mary Catholic Church
30. Historic Tanner Chapel AME Church
31. First Institutional Baptist Church
32. Pilgrim Rest Baptist Church
33. Fire Station
34. Edison Park
35. Maricopa County Public Health Clinic
36. New Pathways Center for Youth
37. Southwest Autism Research & Resource Center (SAARC)
38. 11<sup>th</sup> Street Bicycle & Pedestrian Improvements

# EASTLAKE / GARFIELD NEIGHBORHOOD (CHOICE NEIGHBORHOODS)



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## Figure 2: Key Destinations



## **PROPOSED RECOMMENDATIONS**

During the first phase of the project, the consultants performed necessary fieldwork, data gathering, and a thorough analysis of existing conditions through a mobility improvements walkabout and a pedestrian, bicycle, and transit facility adequacy analysis. Community stakeholders and city staff were also involved to voice their concerns and project objectives to aid in the identification of lacking infrastructure and showcase deficiencies/gaps in the network. Refer to the Current Conditions report (Appendix A) for more information's pertaining to the existing conditions of the Mobility Area.

The goal of the mobility study is to propose recommendations to facilitate safe, convenient, and enhanced walking, biking, and transit trips from homes to local destinations. **Table 1** shows a list of 20 prioritized mobility recommended projects that address the identified needs of the East Lake/Garfield Mobility Area. Each project includes a description of the project and what improvements will be made. **Figure 3** illustrates the location of the proposed mobility recommendations with a corresponding map identification number from **Table 1**. The recommendations are displayed in the following categories:

- Curb ramps;
- Sidewalks;
- Street lighting;
- Trees/shade;
- Traffic control/calming
- Mid-block crossings
- Bike facilities; and
- Pedestrian crossing.

Traffic calming recommendations are tools used with the goal of reducing vehicle speed and improving the safety of motorists, pedestrians, and bicyclists. Roosevelt Street and 9<sup>th</sup> Street were identified as roadways experiencing higher vehicle speeds because motorists used them to bypass congestion on arterial roads such as 7<sup>th</sup> Street, Van Buren Street, and McDowell Road. Multiple traffic calming projects were recommended on Roosevelt Street and 9<sup>th</sup> Street in response to the higher vehicle speeds.

Pedestrian categorized projects include recommended mid-block crossings, newly or freshly striped crosswalks, and sidewalk improvement or construction projects. For example, Project Number 6 – 16<sup>th</sup> Street and Portland Street Mid-Block Crossing includes a recommended High Intensity Activated Crosswalk (HAWK) signal with high-visibility crosswalks to allow users to cross 16<sup>th</sup> Street safely.

Bicycle recommendations are corridor specific projects that either enhance an existing bicycle facility or the introduction of bicycle infrastructure. For instance, Project Number

33 – Roosevelt Street Buffered Bike Lane, is a project that improves an existing facility. The majority of Roosevelt Street currently has a bike lane within the mobility area, however, between 16<sup>th</sup> Street and 24<sup>th</sup> Street there is sufficient space to accommodate a horizontal buffer between the travel lanes and the existing bike lanes. On the other hand, the Project Number 28 – Roosevelt Street Bike Lane Extension at Shared-Lane Markings recommends extending the bike lanes on Roosevelt Street to the intersection of 10<sup>th</sup> Street and introduce shared-lane markings on Roosevelt Street between 9<sup>th</sup> Street and 7<sup>th</sup> Street.

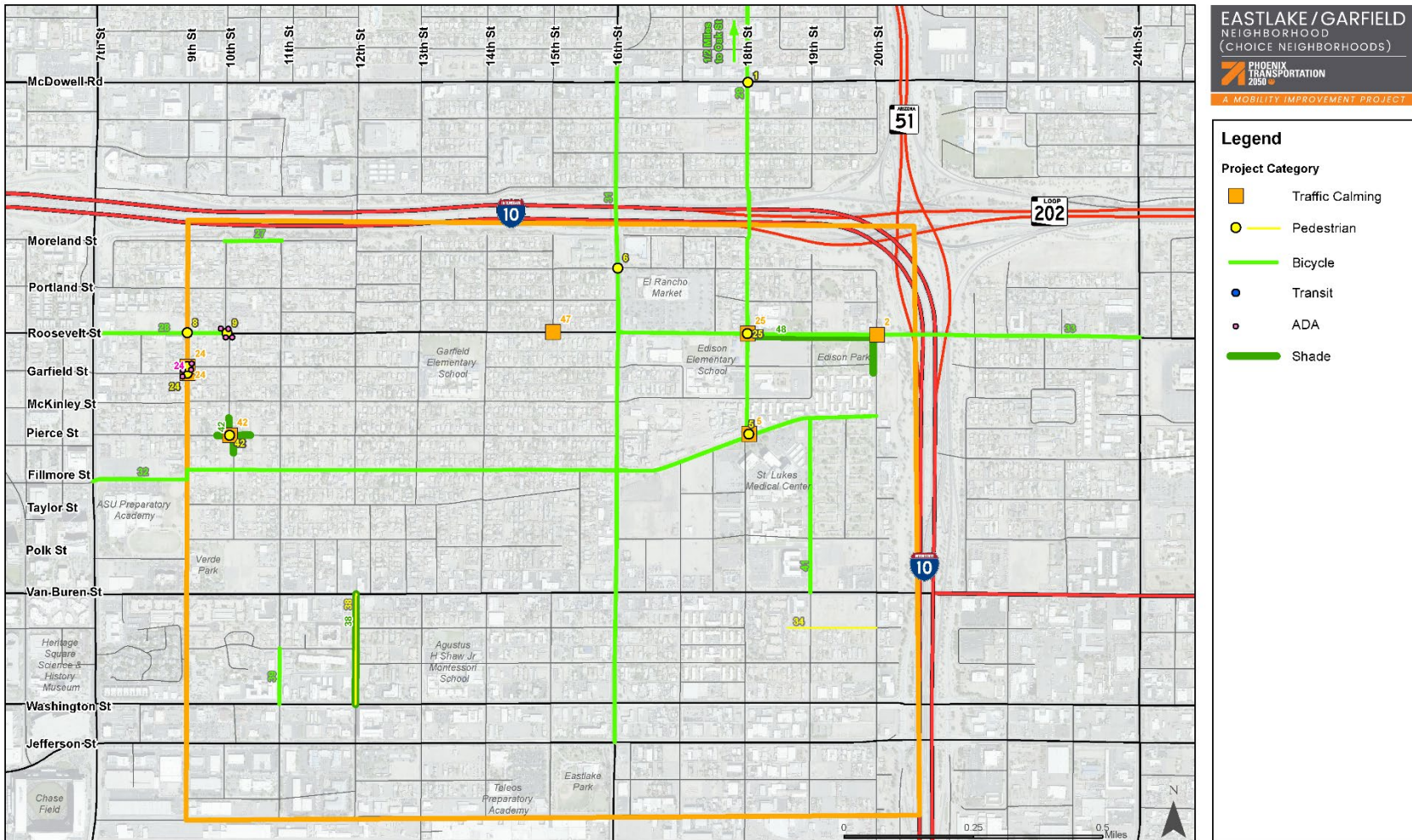
Transit type recommendations are improvements to enhance accessibility to and from existing bus stops. An inventory of all bus stops within the mobility area was conducted to identify which stop where not ADA compliant, so the transit projects all recommend improve or retrofitting the non-ADA complaint bus stops. A total of six bus stops were identified within the mobility area. Four bus stops along Valley Metro Bus Route 10 on Roosevelt Street and two stops along Valley Metro Bus Route 16 on 16<sup>th</sup> Street.

American Disability Act (ADA) projects simply identify the existing curb ramps within the Eastlake Neighborhood Mobility Area that are currently non-ADA complaint. A total of 341 ramps were identified as non-ADA complaint. The City has an ongoing initiative in place to replace and/or update all non-ADA complaint ramps within city limits. For this study, we identified which non-ADA complaint ramps can be updated with the implementation of another proposed recommendation. A total of 30 ramps can be updated at six different project locations.

Shade projects are unique in that they are recommendations that include shade in the form of trees and/or shade structures. The City adopted a Tree and Shade Master Plan in 2010 and has been making progress to provide more shade to create healthier and more comfortable pedestrian environments. In this study, there was three projects identified that could incorporate shade as an additional ingredient. For example, Project Number 48 – Edison Park Beautification includes planting trees on the northern and eastern boundary of Edison Park along Roosevelt Street and 20<sup>th</sup> Street. This project will introduce more shade to the park and the adjacent sidewalks.



**Figure 3: Top 20 Prioritized Mobility Recommendations**



## Prioritization of Proposed Recommendations

It can be a challenge to equitably compare projects across varying project types, especially with variation in cost, complexity, and project type. In response, the City worked with the consultant to develop a set of evaluation criteria and weighting as an instrument to rank and prioritize the various recommendations. The projects with the highest scores will ultimately rank above the projects with lower scores. The project prioritization tool was set up on a 100-point scale with the following six prioritization categories:

1. Safety (36 Possible Points);
2. Connectivity (20 Possible Points);
3. Public Input (20 Possible Points);
4. Deliverability/Constructability (10 Possible Points);
5. Project Cost (10 possible points); and
6. Project Bundling (4 possible points).

The purpose of the prioritization tool is to take the complete list of all 50 proposed mobility recommendations to reach a more fiscally constrained list of projects for implementation, which are the Top 20 highest scoring projects. The evaluation criteria and weighting tool was strategically prioritized to yield an advantage for safety and connectivity as central goals of the Mobility Study. However, even though the preliminary list of the 50 recommendations was developed by the project team, a fundamental element to the prioritized projects were developed by the biking and walking experts - the residents themselves. Residents and other members of the public were engaged in the process at a Community Open House where they provided feedback and gave their input on the proposed recommendations. The public also had an opportunity to solicit and provide community feedback on project recommendations and prioritization through a community preference survey. The community preference survey was provided as a hard copy as well as listed on the City's website. These results accounted for 20% (20 points) of the prioritization results. An additional 10 possible bonus points was awarded based on the rank of the Mobility Area. Since the Eastlake/Garfield Neighborhood Mobility Area was one of the highest priority mobility assessment areas in the city, each project was awarded an additional 5 points. Refer to **Appendix B** for the results of the prioritization criteria for each of the preliminary 50 proposed mobility recommendations.

**Table 1: Proposed Mobility Recommendations**

Rank	Project Name	Route(s)	Project limits	Project Type	Project Description	Cost Estimate	Evaluation Criteria Score	Map ID
1	Roosevelt Street Bike Lane Improvement	Roosevelt Street	16 <sup>th</sup> Street to 24 <sup>th</sup> Street (1 mile)	Bicycle facility	<p>Project includes a new striped buffer for the existing bike lane on Roosevelt Street from 16<sup>th</sup> Street to 24<sup>th</sup> Street for approximately 1-mile. The travel lanes currently within the project limits vary in width from 13 feet to over 16 feet, allowing for the introduction of a 2- to 5-foot buffer while maintaining 11-foot travel lanes. The buffers would need to terminate approaching signalized intersections at 16<sup>th</sup> Street, 20<sup>th</sup> Street, and 24<sup>th</sup> Street.</p> <p>The project would also include the introduction of a 10-foot by 10-foot bike box with green pavement markings for the westbound bike lane at the intersection of 16<sup>th</sup> Street. The bike lane and right turn lane currently share space, so the bike box would provide dedicated space for westbound cyclists waiting at a red light at 16<sup>th</sup> Street. Required Yield to Bicyclist signage would also be included.</p>	\$73,281	95	33
2	Edison Park Shade Trees	Edison Park	-	Shade	<p>Plant shade trees (24" box) every 50 feet on center along the south side of Roosevelt Street the between 18<sup>th</sup> Street and 20<sup>th</sup> Street (1185 ft) – totaling 25 trees.</p> <p>Plant shade trees (24" box) every 50 feet on center adjacent to 20<sup>th</sup> Street along the east side of Edison Park (360 ft) - totaling 7 trees.</p> <p>The entire project requires two valves, one backflow with a cage, one 1" meter, and one controller.</p>	\$112,004	94	48
3	Fillmore/Villa Street Bike Facility	Fillmore/ Villa Street	20 <sup>th</sup> Street to 7 <sup>th</sup> Street (1.55 miles)	Bicycle Facility	<p>Construct an 8-foot two-way cycle track on the south side of Villa Street from 20<sup>th</sup> Street to 18<sup>th</sup> Street.</p> <p>Stripe two 6-foot bike lanes with 2-foot buffer from 18<sup>th</sup> Street to 16<sup>th</sup> Street. Sequential shared-lane markings with green stamps on Fillmore Street to 7<sup>th</sup> Street.</p> <p>A center Lane Stripe is required on Fillmore Street between 16<sup>th</sup> Street and 7<sup>th</sup> Street.</p>	\$1,325,428	94	32
4	19 <sup>th</sup> Street Bike Facility	19 <sup>th</sup> Street	19 <sup>th</sup> Street; Van Buren Street to Villa Street (0.34 miles)	Bicycle Facility	<p>Two-way cycle tracks (also known as protected bike lanes, separated bikeways, and on-street bike paths) are physically separated cycle tracks that allow bicycle movement in both directions on one side of the road. This project includes the construction of a 12-foot two-way cycle track on 19<sup>th</sup> Street between Villa Street and Van Buren Street. This two-way cycle track would be separated from the vehicular lanes by appropriately spaced plastic bollards.</p> <p>Two-cycle tracks dedicate and protect space for bicyclists by improving perceived comfort and safety. They also eliminate risk and fear of collisions with over-taking vehicles and are more attractive to a wide range of bicyclists at all levels and ages.</p>	\$135,665	94	41
5	18 <sup>th</sup> Street and Roosevelt Road Intersection Improvement	18 <sup>th</sup> Street and Roosevelt Street	-	Traffic Calming/Control Mid-block Crossing Pedestrian	<p>The project includes the construction of a raised intersection at the intersection of 18<sup>th</sup> Street and Roosevelt Street. A raised intersection is essentially a speed table for the entire intersection, with ramps on each vehicle approach, which elevate the entire intersection to the level of the sidewalk.</p> <p>The project includes a HAWK mid-block crossing with high-visibility crosswalks. There would be pedestrian advanced warning signage on the east and west legs of the intersection. Street lighting will also be included to light the intersection during the evening.</p>	\$1,191,099	90	25

Rank	Project Name	Route(s)	Project limits	Project Type	Project Description	Cost Estimate	Evaluation Criteria Score	Map ID
6	18 <sup>th</sup> Street Bike Facility	18 <sup>th</sup> Street	Villa Street to Oak Street (1.2 miles)	Bicycle Facility	Stripe a 5-foot bike lane in both directions on 18th Street from Villa Street to McDowell Road for approximately 0.7 miles. The bike facility will then shift into a signed bicycle route north of McDowell Road to Oak Street for approximately one-half of a mile.  This bike route would connect the Phoenix Bicycle Boulevard, as well as the East Lake-Garfield neighborhood, to the Oak Street Bike Route, which has one of the only pedestrian bridges over SR-51.	\$412,371	90	29
7	10 <sup>th</sup> Street and Pierce Street Intersection Improvement	10 <sup>th</sup> Street and Pierce Street	-	Traffic calming Pedestrian Shade Pedestrian/bicycle Lighting	This project includes trees on all legs of the intersection with 20 trees per leg. Palo Verde or Mesquite trees serve as a most viable option due to their resiliency in desert climates, canopy, and low cost of maintenance. The project also includes the construction of a raised intersection at 10 <sup>th</sup> Street and Pierce Street, primarily along Pierce Street alignment. The intersection would include striped white crosswalks with additional pedestrian crossing signage at all four legs of the intersection. The crosswalks are a low-cost improvement that will enhance the crossing experience for users accessing Gallo Blanco, New Pathways for Youth Community Center, Welcome Dinner and the surrounding residential uses, while the trees create walkable streets and vibrant pedestrian places. The raised intersection will reduce the speed of vehicles on Pierce Street enhancing experience for users.	\$598,466	89	42
8	16 <sup>th</sup> Street and Portland Street Mid-Block Crossing	16 <sup>th</sup> Street and Portland Street	-	Mid-block crossing Pedestrian	Construct a HAWK mid-block crossing with high-visibility crosswalks at 16th Street and Portland Street. The project would also include arterial street level ADA compliant curb ramps the east and west sides of 16th Street. LED street lights are also recommended to be included in the project to light the area during dusk and evening hours.  This HAWK would significantly enhance connections to Edison Park, St. Luke's Medical Campus, 18th Street Pedestrian Bridge, and most importantly El Rancho Market. A pedestrian fatality occurred at this location in 2015.	\$372,615	85	6
9	Moreland Street Bike Lane Extension	Moreland Street	11 <sup>th</sup> Street to 10 <sup>th</sup> Street (630 feet)	Mid-block crossing Pedestrian	Extend bike lanes in each direction on Moreland Street to connect with the 10th Street Pedestrian Bridge over I-10. The extension would be approximately 630 feet between the 10th Street Pedestrian Bridge and the intersection of Moreland Street and 11th Street. The project would also include the reconfiguration of the ramps at 10th Street pedestrian bridge over I-10.  The extension of this bike lane will provide a dedicated area for the cyclists on Moreland Street and will create a full connection to the 10th Street Pedestrian Bridge over I-10.	\$138,757	85	27
10	9 <sup>th</sup> Street and Garfield Intersection Improvement	9 <sup>th</sup> Street and Garfield Street	-	Traffic Calming Curb Ramps Pedestrian	Construct two traffic calming chicanes/curb bulb-outs on 9 <sup>th</sup> Street. One on the north leg on the east side of the street, and the other on the south leg on the west side of the street.  Install ADA complaint curb ramps with truncated domes at the six curb ramp locations at the intersection of 9 <sup>th</sup> Street and Garfield Street.  Repaint crosswalks and add signage to enhance pedestrian crossing	\$165,410	84	24

Rank	Project Name	Route(s)	Project limits	Project Type	Project Description	Cost Estimate	Evaluation Criteria Score	Map ID
11	16 <sup>th</sup> Street Bike Facility	16 <sup>th</sup> Street	Jefferson Street to Almeria Road (1.34 miles)	Bicycle Facility Traffic Control/calming	Stripe a 6-foot buffered bike lane with 4-foot buffer for approximately 1.34 miles from Jefferson Street to Almeria Street.  This project would require the removal of one southbound lane for the additional 10 feet of asphalt to fit the buffered bike lane on each side of 16 <sup>th</sup> Street.	\$371,304	83	31
12	9 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	9 <sup>th</sup> Street and Roosevelt Street	-	Pedestrian	Construct white crosswalks at all legs of the intersection of 9 <sup>th</sup> Street and Roosevelt Street with pedestrian crossing signage.  These crosswalks are a low-cost solution that will significantly enhance connections to Welcome Dinner, Watermill Express, GRID Bike Share Dock, the surrounding homes, and the many land users along 7 <sup>th</sup> Street.	\$50,086	82	8
13	12 <sup>th</sup> Street Improvement	12 <sup>th</sup> Street	Washington Street to Van Buren Street (1108 feet)	Sidewalk Shade	Widen the sidewalk on the west side of 12 <sup>th</sup> Street between Van Buren Street and Washington Street from 4 feet to 6 feet - approximately 1108 feet.  Plant shade trees (24" box) every 100 feet on both side of the sidewalk on 12 <sup>th</sup> Street - totaling 23 trees.	\$459,848	82	38
14	18 <sup>th</sup> Street and McDowell Road Mid-Block Crossing	18 <sup>th</sup> Street and McDowell Road	-	Pedestrian crossing Street lighting	Construct a HAWK with three high-visibility crosswalks at 18 <sup>th</sup> Street and McDowell Road.  The recommendation also includes LED street lighting at the mid-block crossing to illuminate the area.  ADA-compliant curb ramps currently exist at all corner of the intersection.  Can be implemented when a conventional signal warrant is not met or where a conventional traffic signal is not desired due to the potential to increase traffic volumes on minor street approaches	\$589,142	81	1
15	11 <sup>th</sup> Street Bike Lane Extension	11 <sup>th</sup> Street	Washington Street to Monroe Street (565 feet)	Bike facility	Extend the Bike Lane on 11 <sup>th</sup> Street to Washington Street for approximately 565 feet	\$50,086	81	39
16	15 <sup>th</sup> Street and Roosevelt Street Traffic Calming	15 <sup>th</sup> Street and Roosevelt Street	-	Traffic control/calming	Construct a traffic circle at the intersection of 15 <sup>th</sup> Street and Roosevelt Street.  Traffic circles (also known as mini roundabouts) lower speeds at minor intersection crossings and are an ideal treatment for uncontrolled intersections.  Mini roundabouts may be installed using simple markings or raised islands. This recommendation includes the application of a raised island in conjunction with plantings that beautify the street and the surrounding neighborhood. There is enough space at the intersection to ensure available lane width and turning radius	\$212,378	81	47

Rank	Project Name	Route(s)	Project limits	Project Type	Project Description	Cost Estimate	Evaluation Criteria Score	Map ID
17	20 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	20 <sup>th</sup> Street and Roosevelt Street	-	Traffic Control/Calming Pedestrian crossing	<p>Construct a signalized intersection at 20<sup>th</sup> Street and Roosevelt Street per the current City of Phoenix standards.</p> <p>Include high-visibility crosswalks at all legs of the intersection.</p> <p>The signalized intersection will reduce the speed of vehicles on Roosevelt Street providing a safer crossing environment for users accessing Edison Elementary, Edison Park, Biaz Market, Phoenix Public Housing, and El Rancho Market.</p>	\$589,142	80	2
18	18 <sup>th</sup> Street and Villa Street Intersection Treatment	18 <sup>th</sup> Street and Villa Street	-	Traffic control/calming Pedestrian crossing	<p>Reconstruct Intersection to bring the curb in and reduce the curb radii</p> <p>Stripe high-visibility crosswalks at all legs of the intersection with the introduction of a stop bar at the west leg of the intersection</p> <p>Install 8 ADA-complaint curb ramps as well.</p>	\$668,004	79	5
19	Monroe Street Sidewalk	Monroe Street	19 <sup>th</sup> Street to 20 <sup>th</sup> Street (919 feet)	Sidewalk	Construct 5' sidewalks on both sides of the street on Monroe Street from 19 <sup>th</sup> Street to 20 <sup>th</sup> Street.	\$338,012	77	34
20	Crosswalk Treatments at 10 <sup>th</sup> Street and Roosevelt Street	10 <sup>th</sup> Street and Roosevelt Street	-	Pedestrian Crossing Curb Ramp	<p>Stripe a white cross walk with additional pedestrian crossing signage at all four legs of the intersection of 10<sup>th</sup> Street and Roosevelt Street.</p> <p>Install ADA complaint curb ramps with truncated domes at all ramp locations.</p> <p>These crosswalks are a low-cost solution that will significantly enhance connections to Welcome Dinner, Watermill Express, GRID Bike Share Dock, the surrounding homes, and the many land users along 7<sup>th</sup> Street.</p>	\$70,846	76	9



Project Name	Rank	Map ID
Roosevelt Street Bike Lane Improvement	1	33
Project Limits	Prioritization Score	
Roosevelt Street; 16 <sup>th</sup> Street to 24 <sup>th</sup> Street (1 mile)	95	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Vehicular speeding concern</li> <li>• Frequent bicycle activity</li> <li>• Four fatalities on Roosevelt Street – two pedestrians and two bicyclists.</li> </ul>	<ul style="list-style-type: none"> <li>• Edison Elementary</li> <li>• Edison Park</li> <li>• 18<sup>th</sup> Street Pedestrian Bridge</li> <li>• St. Luke’s Medical Campus</li> <li>• Phoenix Public Housing</li> <li>• Aero Terra Housing Community</li> </ul>

Project Elements	Project Type	Benefits
Buffered Bike Lane	Bicycle Facility	Increased comfort and safety
Bike Box	Bicycle Facility	Higher visibility at intersections

### Detailed Project Description

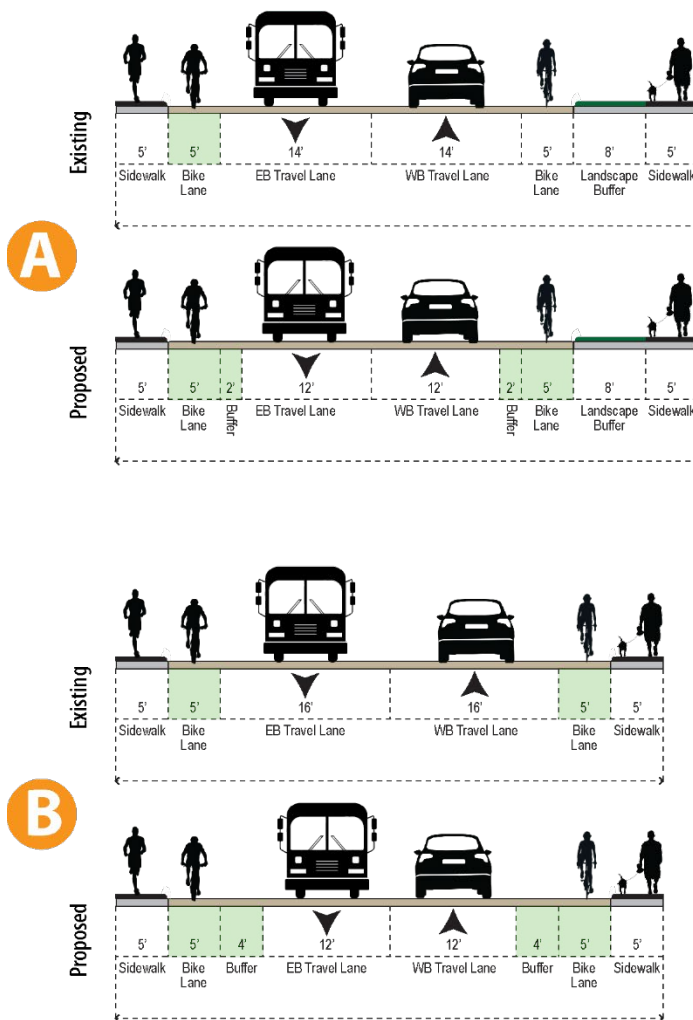
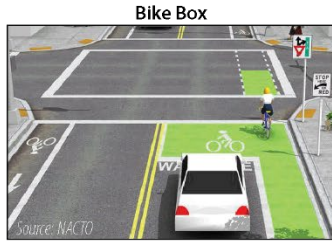
- Project includes a new striped buffer for the existing bike lane on Roosevelt Street from 16<sup>th</sup> Street to 24<sup>th</sup> Street for approximately 1-mile. The travel lanes currently within the project limits vary in width from 13 feet to over 16 feet, allowing for the introduction of a 2- to 5-foot buffer while maintaining 11-foot travel lanes. The buffers would need to terminate approaching signalized intersections at 16<sup>th</sup> Street, 20<sup>th</sup> Street, and 24<sup>th</sup> Street.
- The project would also include the introduction of a 10-foot by 10-foot bike box with green pavement markings for the westbound bike lane at the intersection of 16<sup>th</sup> Street. The bike lane and right turn lane currently share space, so the bike box would provide dedicated space for westbound cyclists waiting at a red light at 16<sup>th</sup> Street. Required Yield to Bicyclist signage would also be included.

Project Location	Project Cost Estimates	
	Design	\$ 40,132
	ROW	\$ -
	Construction	\$ 26,101
	Other	\$ 1,566
	Grand Total	\$ 73,281
<b>Delivery Considerations</b> N/A		



Project Name	Rank	Map ID
Roosevelt Street Bike Lane Improvement	1	33
Project Limits	Prioritization Score	
Roosevelt Street; 16 <sup>th</sup> Street to 24 <sup>th</sup> Street (1 mile)	95	

**Project Example Photos/Graphic**







Project Name	Rank	Map ID
Edison Park Shade Trees	2	48
Project Limits	Prioritization Score	
Edison Park	94	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>High traffic volumes</li> <li>Vehicular speeding concern</li> <li>Frequent pedestrian activity</li> <li>Four fatalities on Roosevelt Street – two pedestrians and two bicyclists.</li> </ul>	<ul style="list-style-type: none"> <li>Edison Elementary</li> <li>Edison Park</li> <li>18<sup>th</sup> Street Pedestrian Bridge</li> <li>St. Luke’s Medical Campus</li> <li>Phoenix Public Housing</li> <li>Aerro Terra Housing Community</li> </ul>

Project Elements	Project Type	Benefits
Shade Trees	Shade	Increased comfort for pedestrians
		Improved air quality
		Enhanced environment

Detailed Project Description
<ul style="list-style-type: none"> <li>Plant shade trees (24” box) every 50 feet on center along the south side of Roosevelt Street the between 18<sup>th</sup> Street and 20<sup>th</sup> Street (1185 ft) – totaling 25 trees.</li> <li>Plant shade trees (24” box) every 50 feet on center adjacent to 20<sup>th</sup> Street along the east side of Edison Park (360 ft) - totaling 7 trees.</li> <li>The entire project requires two valves, one backflow with a cage, one 1” meter, and one controller.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$42,921
	ROW	\$-
	Construction	\$66,122
	Other	\$2,961
	Grand Total	\$112,004

**Delivery Considerations**

- Tree projects may require utility relocation/construction.
- The above cost estimate does not include annual maintenance costs.

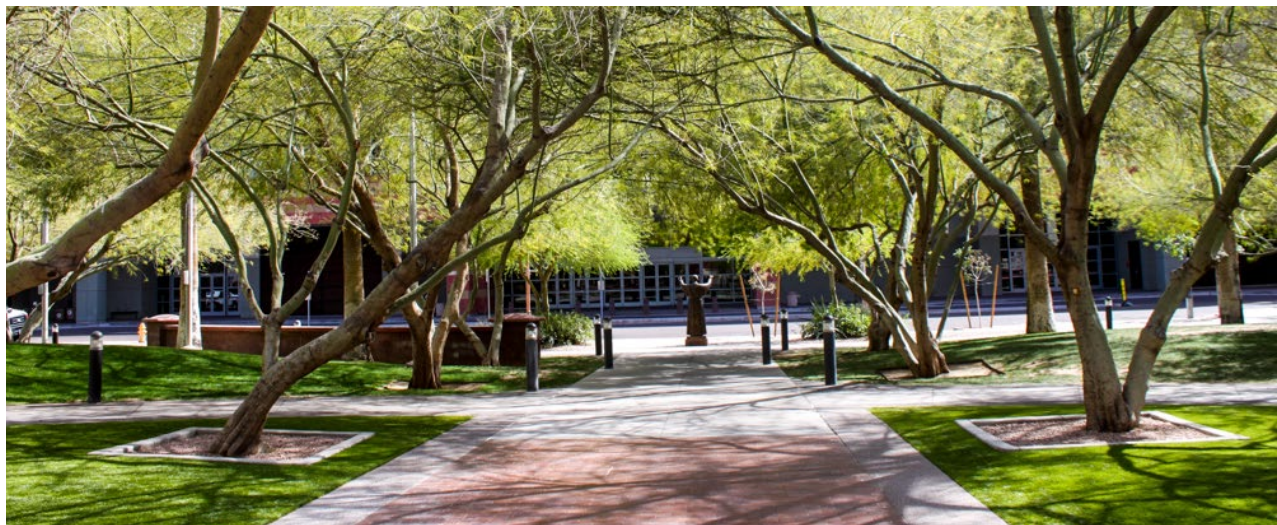
Tree Maturation	Estimated Maintenance Cost	Estimated Irrigation Cost
Young Tree (15 gallon)	\$50.00	\$15.00
Mature Tree (24” box)	\$250.00	\$50.00

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
Edison Park Shade Trees	2	48
<b>Project Limits</b>	<b>Prioritization Score</b>	
Edison Park	94	

**Project Example Photos**





Project Name	Rank	Map ID
Fillmore/Villa Street Bike Facility	3	32
Project Limits	Prioritization Score	
Fillmore/Villa Street; 20 <sup>th</sup> Street to 7 <sup>th</sup> Street (1.55 miles)	94	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>High bicycle activity due to the Bicycle Boulevard designation</li> <li>Land use between 16<sup>th</sup> Street and 7<sup>th</sup> Street is primarily single-family residential</li> <li>Land use between 16<sup>th</sup> Street and 20<sup>th</sup> Street is primarily multi-family residential</li> </ul>	<ul style="list-style-type: none"> <li>Gallo Blanco</li> <li>Garfield Elementary</li> <li>Welcome Diner</li> <li>Edison Elementary/Park</li> <li>New Path Ways Community Center</li> </ul>

Project Elements	Project Type	Benefits
Two-way cycle track	Bicycle Facility	Safe, dedicated space for cyclists
Bike lane	Bicycle Facility	Safe, dedicated space for cyclists
Shared-lane markings	Bicycle Facility	Advertises the presence of cyclists

Detailed Project Description
<ul style="list-style-type: none"> <li>Construct an 8-foot two-way cycle track on the south side of Villa Street from 20<sup>th</sup> Street to 18<sup>th</sup> Street. Stripe two 6-foot bike lanes with 2-foot buffer from 18<sup>th</sup> Street to 16<sup>th</sup> Street. Sequential shared-lane markings with green stamps on Fillmore Street to 7<sup>th</sup> Street.</li> <li>Two-way cycle tracks (also known as protected bike lanes, separated bikeways, and on-street bike paths) are physically separated cycle tracks that allow bicycle movement in both directions on one side of the road. This project includes the construction of a 12-foot two-way cycle track on 19<sup>th</sup> Street between Villa Street and Van Buren Street. This two-way cycle track would be separated from the vehicular lanes by appropriately spaced plastic bollards.</li> <li>A center Lane Stripe is required on Fillmore Street between 16<sup>th</sup> Street and 7<sup>th</sup> Street.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$220,159
	ROW	\$-
	Construction	\$1,057,900
	Other	\$47,369
	Grand Total	\$1,325,428
<b>Delivery Considerations</b>		
N/A		

\*Design fees are 15% of construction or a minimum of \$30,000

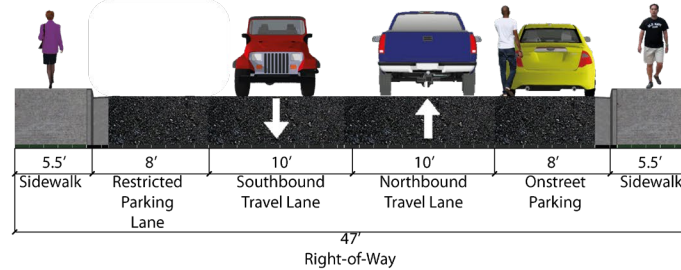


<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
Fillmore/Villa Street Bike Facility	3	32
<b>Project Limits</b>	<b>Prioritization Score</b>	
Fillmore/Villa Street; 20 <sup>th</sup> Street to 7 <sup>th</sup> Street (1.55 miles)	94	

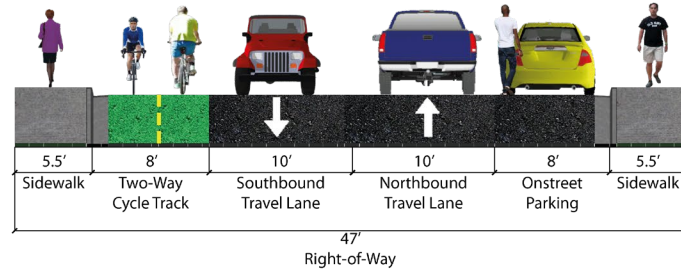
### Project Example Photos

#### Villa Street - 20<sup>th</sup> Street to 18<sup>th</sup> Street

*Existing*

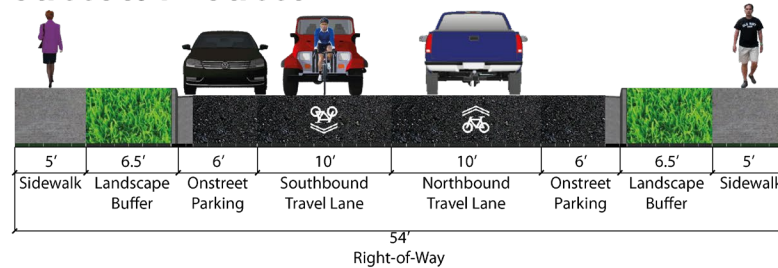


*Proposed*

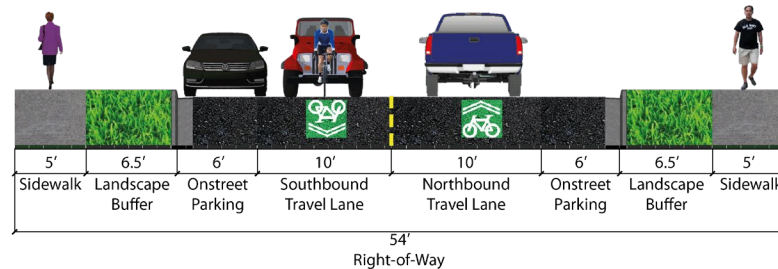


#### Fillmore Street - 16<sup>th</sup> Street to 7<sup>th</sup> Street

*Existing*



*Proposed*





<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
19 <sup>th</sup> Street Bike Facility	4	41
<b>Project Limits</b>	<b>Prioritization Score</b>	
19 <sup>th</sup> Street; Van Buren Street to Villa Street (0.34 miles)	94	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• Extra pavement section with a surplus of available on-street parking</li> <li>• High pedestrian and bicyclist activity near St. Luke's</li> </ul>	<ul style="list-style-type: none"> <li>• St. Luke's Health Medical Campus</li> <li>• AeroTerra Senior Village</li> <li>• Phoenix Public Housing</li> <li>• Edison Park</li> <li>• Biaz Market</li> </ul>

Project Elements	Project Type	Benefits
Two-way cycle track	Bicycle Facility	Safe, dedicated space for cyclists

Detailed Project Description
<ul style="list-style-type: none"> <li>• Two-way cycle tracks (also known as protected bike lanes, separated bikeways, and on-street bike paths) are physically separated cycle tracks that allow bicycle movement in both directions on one side of the road. This project includes the construction of a 12-foot two-way cycle track on 19th Street between Villa Street and Van Buren Street. This two-way cycle track would be separated from the vehicular lanes by appropriately spaced plastic bollards.</li> <li>• Two-cycle tracks dedicate and protect space for bicyclists by improving perceived comfort and safety. They also eliminate risk and fear of collisions with over-taking vehicles and are more attractive to a wide range of bicyclists at all skill levels and ages.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$44,789
	ROW	
	Construction	\$86,981
	Other	\$3,895
	Grand Total	\$135,665
	<b>Delivery Considerations</b>	
Potential coordination with St. Luke's Hospital may be required to obtain permission.		

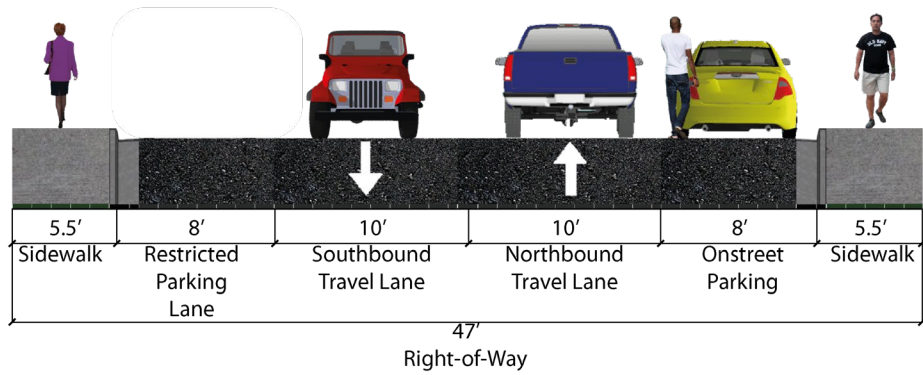
\*Design fees are 15% of construction or a minimum of \$30,000



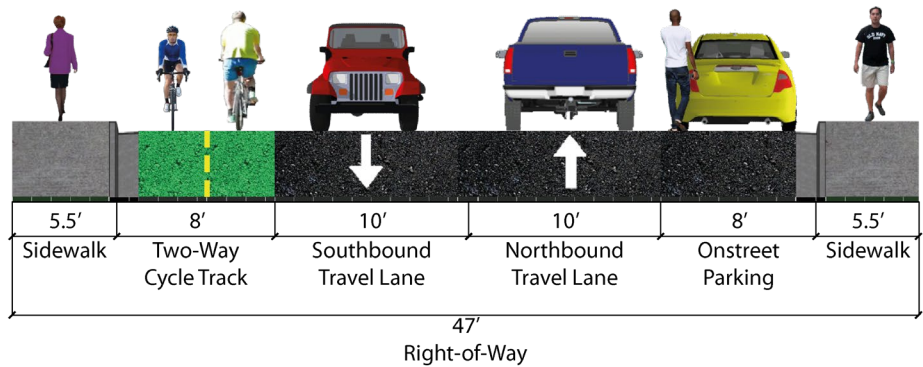
<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
19 <sup>th</sup> Street Bike Facility	4	41
<b>Project Limits</b>	<b>Prioritization Score</b>	
19 <sup>th</sup> Street; Van Buren Street to Villa Street (0.34 miles)	94	

**Project Example Photos**

*Existing*



*Proposed*





Project Name	Rank	Map ID
18 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	5	25
Project Limits	Prioritization Score	
18 <sup>th</sup> Street and Roosevelt Street Intersection	90	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Vehicular speeding concern</li> <li>• Frequent pedestrian activity</li> <li>• Four fatalities on Roosevelt Street – two pedestrians and two bicyclists.</li> </ul>	<ul style="list-style-type: none"> <li>• Edison Elementary</li> <li>• Edison Park</li> <li>• 18<sup>th</sup> Street Pedestrian Bridge</li> <li>• St. Luke’s Medical Campus</li> <li>• Phoenix Public Housing</li> <li>• Aero Terra Housing Community</li> </ul>

Project Elements	Project Type	Benefits
Raised intersection	Traffic calming	Reduced vehicular speed
HAWK mid-block crossing	Mid-block crossing	Dedicated crossing location
Stripped Crosswalk	Pedestrian	Increased visibility
Advanced Warning signage	Pedestrian	Increased safety

Detailed Project Description
<ul style="list-style-type: none"> <li>• The project includes the construction of a raised intersection at the intersection of 18th Street and Roosevelt Street. A raised intersection is essentially a speed table for the entire intersection, with ramps on each vehicle approach, which elevate the entire intersection to the level of the sidewalk.</li> <li>• The project includes a HAWK mid-block crossing with high-visibility crosswalks. There would be pedestrian advanced warning signage on the east and west legs of the intersection. Street lighting will also be included to light the intersection during the evening.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$198,441
	ROW	-
	Construction	\$737,115
	Other	\$255,542
	Grand Total	\$1,191,099
	Delivery Considerations	N/A

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
18 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	5	25
<b>Project Limits</b>	<b>Prioritization Score</b>	
18 <sup>th</sup> Street and Roosevelt Street Intersection I	90	

### Project Example Photos







<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
18 <sup>th</sup> Street Bike Facility	6	29
<b>Project Limits</b>	<b>Prioritization Score</b>	
18 <sup>th</sup> Street; Villa Street to Oak Street (1.2 miles)	90	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Vehicular speeding concern</li> <li>• Frequent pedestrian activity</li> <li>• Four fatalities on Roosevelt Street – two pedestrians and two bicyclists.</li> </ul>	<ul style="list-style-type: none"> <li>• Edison Elementary</li> <li>• Edison Park</li> <li>• 18<sup>th</sup> Street Pedestrian Bridge</li> <li>• St. Luke’s Medical Campus</li> <li>• Phoenix Public Housing</li> <li>• Aerro Terra Housing Community</li> </ul>

Project Elements	Project Type	Benefits
Bike Lane	Bicycle	Dedicated riding space for cyclists
Bike Route	Bicycle	Dedicated riding space for cyclists

Detailed Project Description
<ul style="list-style-type: none"> <li>• Stripe a 5-foot bike lane in both directions on 18th Street from Villa Street to McDowell Road for approximately 0.7 miles. The bike facility will then shift into a signed bicycle route north of McDowell Road to Oak Street for approximately one-half of a mile.</li> <li>• This bike route would connect the Phoenix Bicycle Boulevard, as well as the East Lake-Garfield neighborhood, to the Oak Street Bike Route, which has one of the only pedestrian bridges over SR-51.</li> </ul>

Project Location	Project Cost Estimates
<p>Legend: <span style="color: cyan;">█</span> Project Location</p>	Design* \$78,072
	ROW -
	Construction \$318,506
	Other \$15,794
	Grand Total \$412,371
<b>Delivery Considerations</b>	
N/A	

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
18 <sup>th</sup> Street Bike Facility	6	29
Project Limits	Prioritization Score	
18 <sup>th</sup> Street; Villa Street to Oak Street (1.2 miles)	90	

**Project Example Photos**





<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
10 <sup>th</sup> Street and Pierce Street Intersection Improvement	7	42
<b>Project Limits</b>	<b>Prioritization Score</b>	
10 <sup>th</sup> Street and Pierce Street Intersection	89	

<b>Current Conditions</b>	<b>Destinations</b>
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Vehicular speeding concern</li> <li>• Frequent pedestrian and bicyclist activity</li> <li>• Neighborhood hub of various types of destinations</li> </ul>	<ul style="list-style-type: none"> <li>• Welcome Diner</li> <li>• Pathways Community Center</li> <li>• Gallo Blanco</li> <li>• Frailey's/ Pueblo's</li> </ul>

<b>Project Elements</b>	<b>Project Type</b>	<b>Benefits</b>
Raised intersection	Traffic calming	Reduces vehicular speeding
Crosswalks	Pedestrian	Increases pedestrian visibility
Shade trees	Shade	Increases comfort
Wayfinding	Pedestrian/bicycle	Increases mobility
Street lighting	Lighting	Increases visibility during night

### Detailed Project Description

This project includes trees on all legs of the intersection totaling 20 trees per leg. Palo Verde or Mesquite trees serve as a most viable option due to their resiliency in desert climates, canopy, and low cost of maintenance. The project also includes the construction of a raised intersection at 10<sup>th</sup> Street and Pierce Street, primarily along Pierce Street alignment. The intersection would include a striped white crosswalks with additional pedestrian crossing signage at all four legs of the intersection. The crosswalks are a low-cost improvement that will enhance the crossing experience for users accessing Gallo Blanco, New Pathways for Youth Community Center, Welcome Dinner and the surrounding residential uses, while the trees create walkable streets and vibrant pedestrian places. The raised intersection will reduce the speed of vehicles on Pierce Street enhancing experience for users.

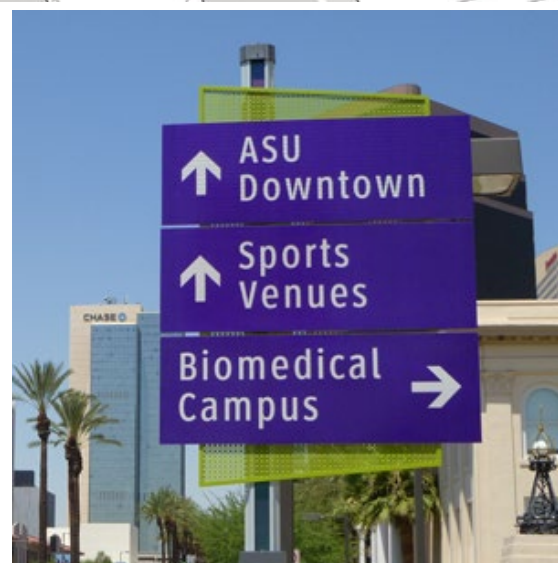
<b>Project Location</b>	<b>Project Cost Estimates</b>		
	Design*	\$110,084	
	ROW	-	
	Construction	\$286,770	
	Other	\$201,612	
	Grand Total	\$598,466	
	<b>Delivery Considerations</b>		
	<ul style="list-style-type: none"> <li>• Trees may require utility relocation</li> <li>• The above cost estimate does not include annual maintenance costs.</li> </ul>		
	<b>Tree Maturation</b>	<b>Estimated Maintenance Cost</b>	<b>Estimated Irrigation Cost</b>
	Young Tree (15 gallon)	\$50.00	\$15.00
	Mature Tree (24" box)	\$250.00	\$50.00

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
10 <sup>th</sup> Street and Pierce Street Intersection Improvement	7	42
<b>Project Limits</b>	<b>Prioritization Score</b>	
10 <sup>th</sup> Street and Pierce Street Intersection Improvement	89	

**Project Example Photos**





<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
16 <sup>th</sup> Street and Portland Street Mid-Block Crossing	8	6
<b>Project Limits</b>	<b>Prioritization Score</b>	
16 <sup>th</sup> Street & Portland Street	85	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Frequent pedestrian and bicycle jay walking across 16<sup>th</sup> Street</li> <li>• Fast vehicular speeds</li> <li>• One pedestrian fatality crossing 16<sup>th</sup> Street</li> </ul>	<ul style="list-style-type: none"> <li>• El Rancho Market</li> <li>• Edison Elementary</li> <li>• Edison Park</li> <li>• 18<sup>th</sup> Street Pedestrian Bridge</li> <li>• St. Luke's Medical Campus</li> </ul>

Project Elements	Project Type	Benefits
HAWK mid-block crossing	Mid-block crossing	Increases safety for pedestrians
Crosswalks	Pedestrian	Increases pedestrian awareness
Wayfinding	Pedestrian	Provides greater mobility

**Detailed Project Description**

- Construct a HAWK mid-block crossing with high-visibility crosswalks at 16th Street and Portland Street. The project would also include arterial street level ADA compliant curb ramps the east and west sides of 16th Street. LED street lights are also recommended to be included in the project to light the area during dusk and evening hours.
- This HAWK would significantly enhance connections to Edison Park, St. Luke's Medical Campus, 18th Street Pedestrian Bridge, and most importantly El Rancho Market. A pedestrian fatality occurred at this location in 2015.

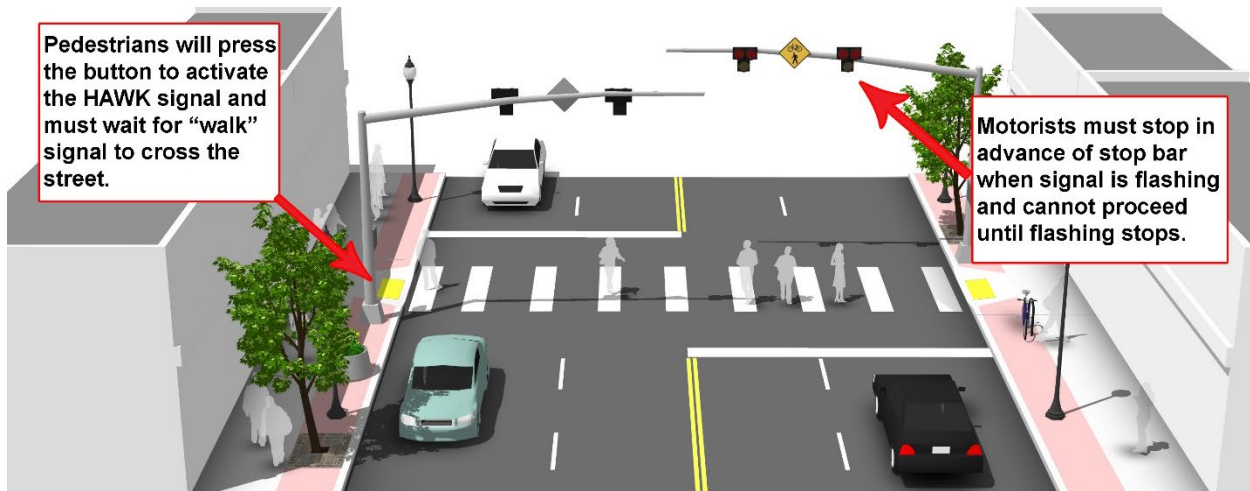
Project Location	Project Cost Estimates	
	Design*	\$71,026
	Right-of-way	-
	Construction	\$140,329
	Other	\$161,260
	Grand Total	\$372,615
	<b>Delivery Considerations</b>	
N/A		

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
16 <sup>th</sup> Street and Portland Street Mid-Block Crossing	8	6
<b>Project Limits</b>	<b>Prioritization Score</b>	
16 <sup>th</sup> Street & Portland Road	85	

### Project Example Photos





Project Name	Rank	Map ID
Moreland Street Bike Lane Extension	9	27
Project Limits	Prioritization Score	
Moreland Street; 11 <sup>th</sup> Street to 10 <sup>th</sup> Street (630 feet)	85	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Frequent pedestrian and bicycle activity</li> <li>• Fast vehicular speeds</li> </ul>	<ul style="list-style-type: none"> <li>• 10<sup>th</sup> Street Pedestrian Bridge</li> <li>• Welcome Diner</li> <li>• Hood Ride Bicycles</li> <li>• Phoenix Hostel</li> <li>• New Pathways for Youth</li> <li>• Gallo Blanco</li> <li>• Alwun House</li> </ul>

Project Elements	Project Type	Benefits
Bike Lane	Bicycle	Increases safety for bicyclists
Curb ramp reconfiguration	Curb Ramp	Increases mobility for bridge users

Detailed Project Description
<ul style="list-style-type: none"> <li>• Extend bike lanes in each direction on Moreland Street to connect with the 10<sup>th</sup> Street Pedestrian Bridge over I-10. The extension would be approximately 630 feet between the 10<sup>th</sup> Street Pedestrian Bridge and the intersection of Moreland Street and 11<sup>th</sup> Street. The project would also include the reconfiguration of the ramps at 10<sup>th</sup> Street pedestrian bridge over I-10.</li> <li>• The extension of this bike lane will provide a dedicated area for the cyclists on Moreland Street and will create a full connection to the 10<sup>th</sup> Street Pedestrian Bridge over I-10.</li> </ul>

Project Location	Project Cost Estimates	
<p>Legend: <span style="color: red;">█</span> Project Location</p>	Design*	\$45,785
	Right-of-way	-
	Construction	\$88,580
	Other	\$4,392
	Grand Total	\$138,757
<b>Delivery Considerations</b>		
N/A		

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
Moreland Street Bike Lane Extension	9	27
Project Limits	Prioritization Score	
Moreland Street; 11 <sup>th</sup> Street to 10 <sup>th</sup> Street (630 feet)	85	

**Project Example Photos**







Project Name	Rank	Map ID
9 <sup>th</sup> Street and Garfield Intersection Improvement	10	24

Project Limits	Prioritization Score
9 <sup>th</sup> Street and Garfield Street	84

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High pedestrian activity</li> <li>• Primarily residential land uses</li> <li>• Offset intersection</li> <li>• High traffic volume and vehicular speeds related to cut through traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Welcome Diner</li> <li>• Mother Bunch</li> <li>• 10<sup>th</sup> St pedestrian bridge</li> <li>• Apostolic Assembly Phoenix</li> <li>• Hood Ride Bicycles</li> <li>• Cheba Hut</li> </ul>

Project Elements	Project Type	Benefits
Traffic Chicane	Traffic Calming	Lower vehicular speeds
ADA Curb Ramps	Curb Ramps	Better mobility for disabled populations
Crosswalks	Pedestrian	Increases pedestrian visibility

### Detailed Project Description

- Construct two traffic calming chicanes/curb bulb-outs on 9<sup>th</sup> Street. One on the north leg on the east side of the street, and the other on the south leg on the west side of the street.
- Install ADA complaint curb ramps with truncated domes at the six curb ramp locations at the intersection of 9<sup>th</sup> Street and Garfield Street.
- Repaint crosswalks and add signage to enhance pedestrian crossing

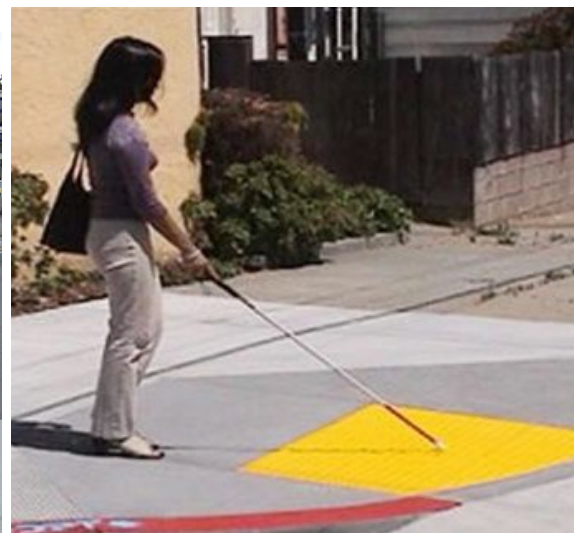
Project Location	Project Cost Estimates	
	Design*	\$48,086
	ROW	-
	Construction	\$111,781
	Other	\$5,543
	Grand Total	\$165,410
	<b>Delivery Considerations</b>	
N/A		

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
9 <sup>th</sup> Street and Garfield Intersection Improvement	10	24
<b>Project Limits</b>	<b>Prioritization Score</b>	
9 <sup>th</sup> Street and Garfield Street	84	

**Project Example Photos**





Project Name		Rank	Map ID
16 <sup>th</sup> Street Bike Facility		11	31
Project Limits		Prioritization Score	
16 <sup>th</sup> Street; Jefferson Street to Almeria Road (1.34 miles)		83	
Current Conditions		Destinations	
<ul style="list-style-type: none"> <li>• High traffic volumes</li> <li>• Frequent pedestrian and bicycle activity along 16<sup>th</sup> Street</li> <li>• Excessive vehicular speeds</li> <li>• Provides a bicycle connection to the 16<sup>th</sup> Street Light Rail stop</li> </ul>		<ul style="list-style-type: none"> <li>• 16th Street Light Rail Stop</li> <li>• El Rancho Market</li> <li>• Edison Elementary</li> <li>• Edison Park</li> <li>• 18<sup>th</sup> Street Pedestrian Bridge</li> <li>• St. Luke's Medical Campus</li> </ul>	
Project Elements	Project Type	Benefits	
Bike lane	Bicycle	Dedicated space for bicyclists	
Bike lane buffer	Bicycle	Increases comfort and safety	
Bike lane signage	Bicycle	Provides more bicycle visibility	
Travel lane removal	Traffic Control/calming	Reduces vehicular speed	

**Detailed Project Description**

- Stripe a 6-foot buffered bike lane with 4-foot buffer on both sides of 16<sup>th</sup> Street for approximately 1.34 miles from Jefferson Street to Almeria Street.
- This project would require the removal of one southbound vehicular travel lane to incorporate the additional 10 feet of asphalt to accommodate the buffered bike lane on each side of 16<sup>th</sup> Street.

Project Location	Project Cost Estimates	
<p>■ — Project Location</p>	Design*	\$70,871
	ROW	-
	Construction	\$286,239
	Other	\$14,194
	Grand Total	\$371,304
	Delivery Considerations	<p><i>Cost estimate only includes striping and signing of the proposed buffered bike lanes</i></p>

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
16 <sup>th</sup> Street Bike Facility	11	31
Project Limits	Prioritization Score	
16 <sup>th</sup> Street; Jefferson Street to Almeria Road	83	

**Project Example Photos**





Project Name	Rank	Map ID
9 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	12	8
Project Limits	Prioritization Score	
9 <sup>th</sup> Street and Roosevelt Street Intersection	82	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High pedestrian activity</li> <li>• Primarily residential land uses</li> <li>• High traffic volume and vehicular speeds related to cut through traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Welcome Diner</li> <li>• Hood Ride Bicycles</li> <li>• Water Mill</li> <li>• 11<sup>th</sup> St Pedestrian bridge</li> <li>• Mother Bunch</li> <li>• Cheba Hut</li> </ul>

Project Elements	Project Type	Benefits
Crosswalks	Pedestrian	Improves pedestrian safety
Pedestrian crossing signage	Pedestrian	Improve pedestrian visibility

### Detailed Project Description

- Construct white crosswalks at all legs of the intersection of 9<sup>th</sup> Street and Roosevelt Street with pedestrian crossing signage.
- These crosswalks are a low-cost solution that will significantly enhance connections to Welcome Dinner, Watermill Express, GRID Bike Share Dock, the surrounding homes, and the many land uses along 7<sup>th</sup> Street.

Project Location	Project Cost Estimates	
	Design*	\$38,130
	ROW	-
	Construction	\$11,392
	Other	\$565
	Grand Total	\$50,086
	Delivery Considerations	N/A

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
9 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	12	8
<b>Project Limits</b>	<b>Prioritization Score</b>	
9 <sup>th</sup> Street and Roosevelt Street Intersection	82	

**Project Example Photos**





<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
12 <sup>th</sup> Street Improvement	13	38
<b>Project Limits</b>	<b>Prioritization Score</b>	
12 <sup>th</sup> Street; Washington Street to Van Buren Street (1,108 feet)	82	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• Adjacent to the 12<sup>th</sup> Street Light Rail Station</li> <li>• Frequent pedestrian and bicycle activity</li> <li>• Primarily surrounded by single-family residential land uses</li> </ul>	<ul style="list-style-type: none"> <li>• Augustus H. Shaw Jr. Montessori School</li> <li>• Phoenix New Times,</li> <li>• Food for the Hungry</li> <li>• Ability 360</li> <li>• Hope House</li> <li>• Washington Manor</li> <li>• 12<sup>th</sup> St Light Rail Stop</li> </ul>

Project Elements	Project Type	Benefits
Sidewalk widening	Sidewalk	Increases pedestrian comfort/safety
Tress	Shade	Increases pedestrian comfort

Detailed Project Description
<ul style="list-style-type: none"> <li>• Widen the sidewalk on the west side of 12<sup>th</sup> Street between Van Buren Street and Washington Street from 4 feet to 6 feet - approximately 1108 feet.</li> <li>• Plant shade trees (24" box) every 100 feet on both side of the sidewalk on 12<sup>th</sup> Street - totaling 23 trees.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$69,701
	ROW	\$-
	Construction	\$376,214
	Other	\$13,933
	Grand Total	\$459,848
	<b>Delivery Considerations</b>	
<ul style="list-style-type: none"> <li>• Tree projects may require utility relocation/construction.</li> <li>• The above cost estimate does not include annual maintenance costs:</li> </ul>		
	<b>Estimated Maintenance Cost</b>	<b>Estimated Irrigation Cost</b>
<b>Tree Maturation</b>		
Young Tree (15 gallon)	\$50.00	\$15.00
Mature Tree (24" box)	\$250.00	\$50.00

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
12 <sup>th</sup> Street Improvement	13	38
Project Limits	Prioritization Score	
12 <sup>th</sup> Street; Washington Street to Van Buren Street (1,108 feet)	82	

**Project Example Photos**







Project Name	Rank	Map ID
18 <sup>th</sup> Street and McDowell Road Mid-Block Crossing	14	1

Project Limits	Prioritization Score
18 <sup>th</sup> Street & McDowell Road	81

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High vehicular volumes</li> <li>• Fact vehicular speeds</li> <li>• One pedestrian fatality</li> <li>• Frequent pedestrian and bicyclist crossing</li> </ul>	<ul style="list-style-type: none"> <li>• Edison Park</li> <li>• 18<sup>th</sup> Street Pedestrian Bridge</li> <li>• Oak Street Pedestrian Bridge</li> <li>• Filibertos</li> <li>• Whitter Elementary</li> <li>• McDowell Place Senior Center</li> <li>• Pro's Ranch Market</li> <li>• Circle K</li> </ul>

Project Elements	Project Type	Benefits
HAWK mid-block crossing	Pedestrian crossing	Improves street crossing safety
High-visibility crosswalks	Pedestrian crossing	Improves street crossing safety
LED Street lighting	Street lighting	Increases nighttime visibility

**Detailed Project Description**

- Construct a HAWK with three high-visibility crosswalks at 18<sup>th</sup> Street and McDowell Road.
- The recommendation also includes LED street lighting at the mid-block crossing to illuminate the area.
- ADA-compliant curb ramps currently exist at all corner of the intersection.
- Can be implemented when a conventional signal warrant is not met or where a conventional traffic signal is not desired due to the potential to increase traffic volumes on minor street approaches

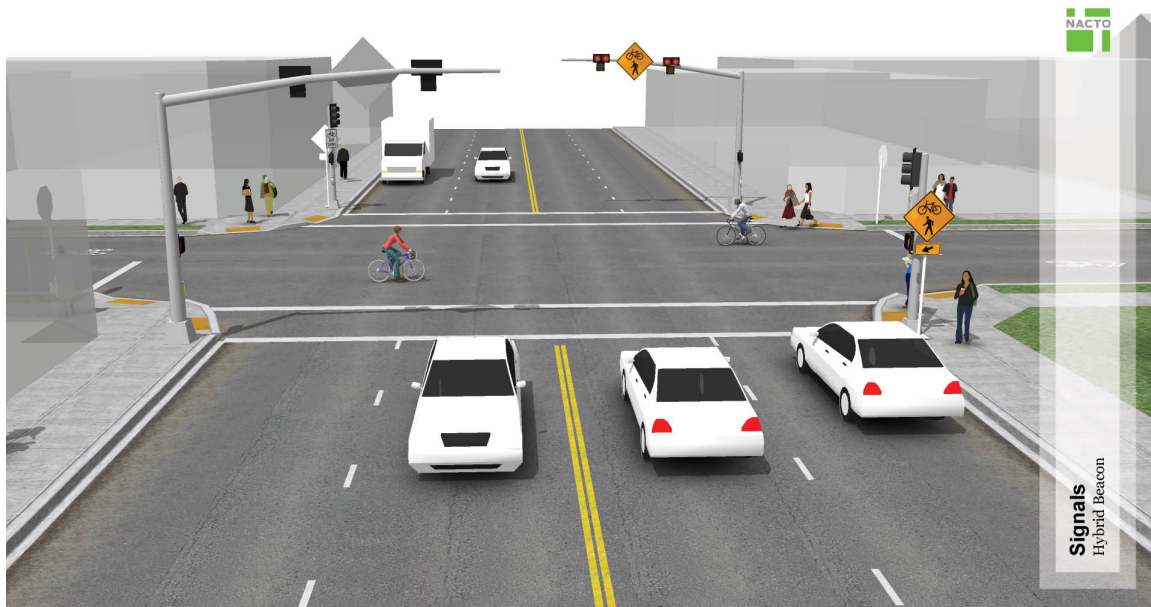
Project Location	Project Cost Estimates	
	Design*	\$108,917
	ROW	\$-
	Construction	\$201,737
	Other	\$278,488
	Grand Total	\$589,142
<b>Delivery Considerations</b>		
Signal warrant analysis may be required		

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
18 <sup>th</sup> Street and McDowell Road Mid-Block Crossing	14	1
<b>Project Limits</b>	<b>Prioritization Score</b>	
18 <sup>th</sup> Street & McDowell Road	81	

**Project Example Photos**





Project Name	Rank	Map ID
11 <sup>th</sup> Street Bike Lane Extension	15	39
Project Limits	Prioritization Score	
11 <sup>th</sup> Street; Washington Street to Monroe Street (565 feet)	81	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• Less than a ¼ miles from the 12<sup>th</sup> Street light rail stop</li> <li>• Primarily surrounded by single-family residential land uses</li> <li>• Collector street with existing bike lanes</li> </ul>	<ul style="list-style-type: none"> <li>• Augustus H. Shaw Jr. Montessori School</li> <li>• Phoenix New Times</li> <li>• Food for the Hungry</li> <li>• Christian Methodist Episcopal</li> <li>• Ability 360</li> <li>• Hope House</li> <li>• 12<sup>th</sup> St Light Rail Stop</li> </ul>

Project Elements	Project Type	Benefits
Bike lane	Bike facility	Increased bicyclist safety

### Detailed Project Description

- Extend the existing Bike Lane on 11<sup>th</sup> Street to Washington Street for approximately 565 feet

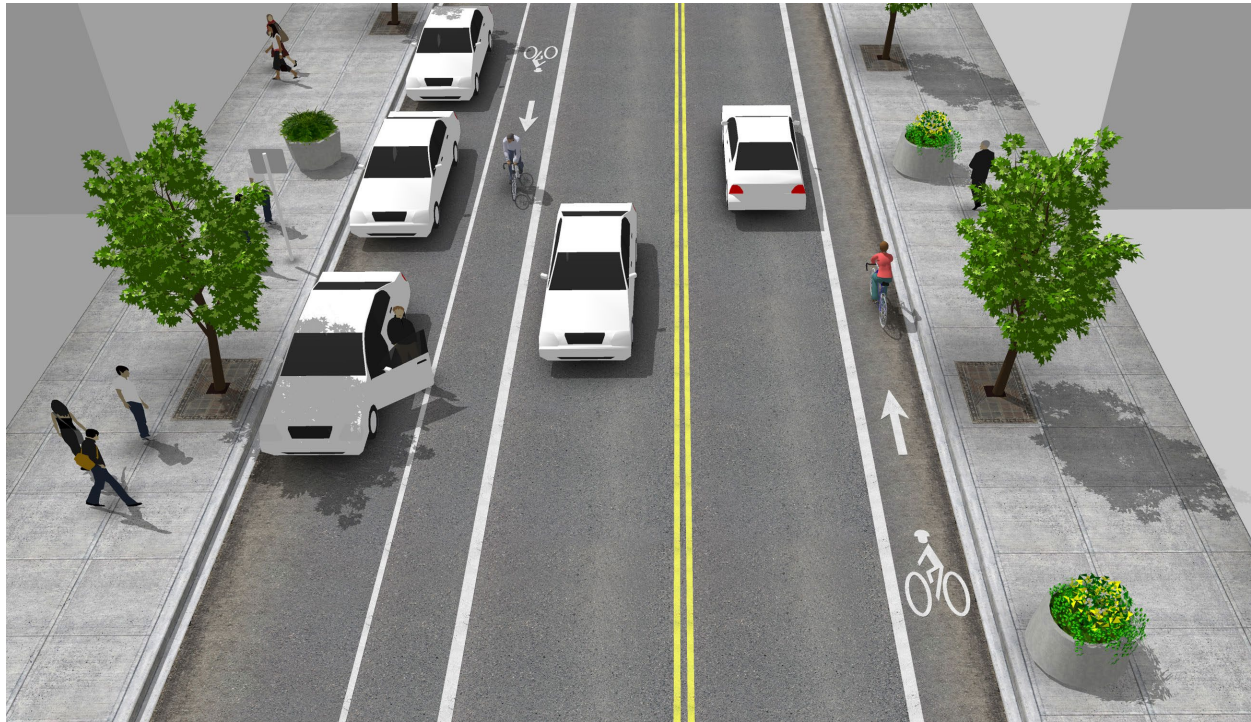
Project Location	Project Cost Estimates	
	Design*	\$38,130
	ROW	\$-
	Construction	\$11,392
	Other	\$565
	<b>Grand Total</b>	<b>\$50,086</b>
<b>Delivery Considerations</b>		
N/A		

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
11 <sup>th</sup> Street Bike Lane Extension	15	39
Project Limits	Prioritization Score	
11 <sup>th</sup> Street; Washington Street to Monroe Street (565 feet)	81	

**Project Example Photos**





Project Name	Rank	Map ID
15 <sup>th</sup> Street and Roosevelt Street Traffic Calming	16	47
Project Limits	Prioritization Score	
15 <sup>th</sup> Street & Roosevelt Street	81	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• Typical local street intersection</li> <li>• High percentage of cut-through traffic</li> <li>• High pedestrian and bicyclist activity</li> <li>• Primarily surrounded by single-family residential land uses</li> </ul>	<ul style="list-style-type: none"> <li>• Garfield Elementary</li> <li>• Garfield Seventh Day Adventists</li> <li>• Garfield Commons</li> <li>• Phoenix Gospel Church</li> <li>• Alwun House</li> <li>• Quality Market</li> <li>• Rito's Restaurant</li> </ul>

Project Elements	Project Type	Benefits
Neighborhood traffic circle	Traffic control/calming	Vehicular speed reduction

### Detailed Project Description

- Construct a traffic circle at the intersection of 15<sup>th</sup> Street and Roosevelt Street.
- Traffic circles (also known as mini roundabouts) lower speeds at minor intersection crossings and are an ideal treatment for uncontrolled intersections.
- Mini roundabouts may be installed using simple markings or raised islands. This recommendation includes the application of a raised island in conjunction with plantings that beautify the street and the surrounding neighborhood. There is sufficient space at the intersection to ensure available lane width and turning radius.

Project Location	Project Cost Estimates	
	Design*	\$52,141
	ROW	\$-
	Construction	\$152,667
	Other	\$7,570
	<b>Grand Total</b>	<b>\$212,378</b>
	Delivery Considerations	N/A

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
15 <sup>th</sup> Street and Roosevelt Street Traffic Calming	16	35
<b>Project Limits</b>	<b>Prioritization Score</b>	
15 <sup>th</sup> Street & Roosevelt Street	81	

**Project Example Photos**





Project Name	Rank	Map ID
20 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	17	2
Project Limits	Prioritization Score	
20 <sup>th</sup> Street and Roosevelt Street Intersection	80	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High traffic volumes for a collector street</li> <li>• Excessive vehicular speed for a collector street</li> <li>• Two adjacent pedestrian/bicyclist fatalities</li> <li>• Adjacent to the Phoenix Bike Boulevard</li> </ul>	<ul style="list-style-type: none"> <li>• Edison Park</li> <li>• Edison Elementary</li> <li>• St. Luke’s Medical Campus</li> <li>• Baiz Market</li> <li>• Fillmore Gardens</li> </ul>

Project Elements	Project Type	Benefits
Traffic Signal	Traffic Control/Calming	Controls speed/behavior of vehicles
High visibility crosswalks	Pedestrian crossing	Increases the safety of pedestrians

Detailed Project Description
<ul style="list-style-type: none"> <li>• Construct a signalized intersection at 20<sup>th</sup> Street and Roosevelt Street per the current City of Phoenix standards.</li> <li>• Include high-visibility crosswalks at all legs of the intersection.</li> <li>• The signalized intersection will reduce the speed of vehicles on Roosevelt Street providing a safer crossing environment for users accessing Edison Elementary, Edison Park, Biaz Market, Phoenix Public Housing, and El Rancho Market.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$108,917
	ROW	\$-
	Construction	\$201,737
	Other	\$278,488
	<b>Grand Total</b>	<b>\$589,142</b>
	<b>Delivery Considerations</b>	
Traffic signal warrant analysis may be required		

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
20 <sup>th</sup> Street and Roosevelt Street Intersection Improvement	17	2
Project Limits	Prioritization Score	
20 <sup>th</sup> Street and Roosevelt Street Intersection	80	

**Project Example Photos**







<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
18 <sup>th</sup> Street and Villa Street Intersection Treatment	18	5
<b>Project Limits</b>	<b>Prioritization Score</b>	
18 <sup>th</sup> Street and Villa Street Intersection	79	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• Frequent pedestrian and bicyclist activity</li> <li>• Surrounded by a variety of land uses</li> <li>• Adjacent to the designated Phoenix Bicycle Boulevard</li> </ul>	<ul style="list-style-type: none"> <li>• St Luke’s Medical Campus</li> <li>• SAARC</li> <li>• Edison Park</li> <li>• Edison Elementary</li> <li>• AeroTerra Senior Village</li> <li>• Baiz Market</li> <li>• Hochani Park</li> </ul>

Project Elements	Project Type	Benefits
Curb Radii reduction	Traffic control/calming	Reduces vehicular speed
High-visibility crosswalks	Pedestrian crossing	Increases pedestrian safety

**Detailed Project Description**

- Reconstruct Intersection to bring the curb in and reduce the curb radii
- Stripe high-visibility crosswalks at all legs of the intersection with the introduction of a stop bar at the west leg of the intersection
- Install 8 ADA-complaint curb ramps.

Project Location	Project Cost Estimates	
	Design*	\$110,267
	ROW	\$-
	Construction	\$534,789
	Other	\$22,948
	<b>Grand Total</b>	<b>\$668,004</b>
<b>Delivery Considerations</b>		

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
18 <sup>th</sup> Street and Villa Street Intersection Treatment	18	5
<b>Project Limits</b>	<b>Prioritization Score</b>	
18 <sup>th</sup> Street and Villa Street Intersection	79	

**Project Example Photos**



PBIC Image Library





Project Name		Rank	Map ID
Monroe Street Sidewalk		19	34
Project Limits		Prioritization Score	
Monroe Street; 19 <sup>th</sup> Street to 20 <sup>th</sup> Street (919 feet)		77	
Current Conditions		Destinations	
<ul style="list-style-type: none"> <li>• Currently no sidewalks</li> <li>• Primarily surrounded by light industrial and single-family residential land uses</li> <li>• Directly adjacent to a vacant lot</li> </ul>		<ul style="list-style-type: none"> <li>• Sohu Park</li> <li>• Circle K</li> <li>• St. Luke's Medical Campus</li> <li>• SARRC</li> <li>• Sidney P. Osborn Computer Lab</li> <li>• Kana Park</li> </ul>	
Project Elements	Project Type	Benefits	
Sidewalk	sidewalk	Increases pedestrian safety	
Detailed Project Description			

Construct 5' sidewalks on both sides of the street on Monroe Street from 19<sup>th</sup> Street to 20<sup>th</sup> Street.

Project Location	Project Cost Estimates	
	Design*	\$56,771
	ROW	\$-
	Construction	\$271,355
	Other	\$9,885
	Grand Total	\$338,012
	Delivery Considerations	Sidewalks may require ROW acquisition. Adjacent to a vacant lot so construction could be contingent on future development.

\*Design fees are 15% of construction or a minimum of \$30,000



<b>Project Name</b>	<b>Rank</b>	<b>Map ID</b>
Monroe Street Sidewalk	19	34
<b>Project Limits</b>	<b>Prioritization Score</b>	
Monroe Street; 19 <sup>th</sup> Street to 20 <sup>th</sup> Street (919 feet)	77	

**Project Example Photos**





Project Name	Rank	Map ID
Crosswalk Treatments at 10 <sup>th</sup> Street and Roosevelt Street	20	9
Project Limits	Prioritization Score	
10 <sup>th</sup> Street and Roosevelt Street Intersection	76	

Current Conditions	Destinations
<ul style="list-style-type: none"> <li>• High amount of cut through traffic avoiding traffic congestion on 7<sup>th</sup> Street</li> <li>• Frequent pedestrian and bicyclist activity</li> <li>• Adjacent neighborhood retail destinations</li> <li>• Primarily surrounded by multi-family and single-family residential land uses</li> </ul>	<ul style="list-style-type: none"> <li>• Welcome Diner</li> <li>• Hood Ride Bicycles</li> <li>• Water Mill</li> <li>• Tonatierra Community Development</li> <li>• Mother Bunch</li> <li>• Cheba Hut</li> <li>• 11<sup>th</sup> St Pedestrian bridge</li> </ul>

Project Elements	Project Type	Benefits
Crosswalk	Pedestrian Crossing	Increased pedestrian crossing safety
ADA-compliant curb ramps	Curb Ramp	Increased pedestrian crossing safety

Detailed Project Description
<ul style="list-style-type: none"> <li>• Stripe a white cross walk with additional pedestrian crossing signage at all four legs of the intersection of 10<sup>th</sup> Street and Roosevelt Street.</li> <li>• Install ADA complaint curb ramps with truncated domes at all ramp locations.</li> <li>• These crosswalks are a low-cost solution that will significantly enhance connections to Welcome Dinner, Watermill Express, GRID Bike Share Dock, the surrounding homes, and the many land users along 7<sup>th</sup> Street.</li> </ul>

Project Location	Project Cost Estimates	
	Design*	\$39,231
	ROW	\$-
	Construction	\$30,499
	Other	\$1,116
	<b>Grand Total</b>	<b>\$70,846</b>
<b>Delivery Considerations</b>		
N/A		

\*Design fees are 15% of construction or a minimum of \$30,000



Project Name	Rank	Map ID
Crosswalk Treatments at 10 <sup>th</sup> Street and Roosevelt Street	21	9
Project Limits	Prioritization Score	
10 <sup>th</sup> Street and Roosevelt Street Intersection	76	

**Project Example Photos**

