## 2020 YMPO Bicycle and Pedestrian Study and Design Standards

Yuma Metropolitan Planning Organization Approved April 30, 2020

Greenlight Traffic Engineering

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## Introduction

The Yuma Metropolitan Planning Organization (YMPO) has determined a need for a Bicycle and Pedestrian Study for the YMPO region. This study is supported by the 2018-2041 YMPO Long Range Regional Transportation Plan (LRTP), which calls for recommendations for new or improved bicycle and pedestrian facilities and a set of design guidelines for such facilities.


This project will enhance the current Bicycle and Pedestrian plans of each member agency which will result in new and/or improved pathways and trail systems. The primary purpose is to connect neighboring cities, towns, and agencies to expand access to safe facilities for non-motorized users. This concept builds on the current plans and studies conducted by each member agency to construct a regional, comprehensive non-motorized transportation plan. This plan will be consistent with the YMPO motto "Citizens and Local Governments working together."

## Study Objective

The purpose of this study was to evaluate the existing pedestrian and bicycle facilities within the YMPO region and to determine additional facilities that would promote walking and biking in the YMPO region.

Citizens and Local Governments working together YMPO would like to promote walking and biking to major employment, commercial and activity centers to improve the safety and accessibility for bicyclists and pedestrians across the entire region.


## Existing Conditions

Existing conditions of pedestrian and bicycle facilities in the YMPO region were inventoried. This task included a review of existing plans in the region
that recommended bicycle or pedestrian facilities. A review of the pedestrian and bicycle safety in the
region was also performed by
analyzing crash data.
The general public was also asked to provide input on the existing pedestrian and bicycle facilities in the region. Those comments were summarized and used by the study team to determine the need for any additional facilities or safety
improvements.


## Review of Existing Plans

Jurisdictions that make up the YMPO are the City of Yuma, Yuma County, the Cocopah Indian Tribe, the Town of Wellton, the cities of Somerton and San Luis Winterhaven, California and the Quechan Indian Tribe. Many of these agencies have completed general transportation plans or bicycle and pedestrian plans. These plans were reviewed to determine if any bicycle or pedestrian facilities were planned for implementation that should be included as part of this YMPO Bicycle and Pedestrian Plan. Following are brief summaries of these plans.

## ADOT Bicycle and Pedestrian Plan Update, 2013

This plan offered a long-term vision for a statewide system of interconnected and shared roadways and bicycle and pedestrian facilities to guide ADOT transportation decisions relating to bicycle and pedestrian travel, planning, and facility development. The Plan summarizes opportunities for sidewalks and shoulder improvements on state highways but does not have any recommendations in the Yuma region.

## City of Yuma Transportation Master Plan, 2014

The transportation master plan serves as a template for developing the multimodal transportation systems of the City of Yuma into the future. It establishes a clear vision of the City's short- and long-term transportation priorities, aligning the City's future transportation needs and projects with the needs and projects identified by neighboring municipalities.

Short-term (5-year) Bicycle Projects

- A shared use path would be constructed along the Thacker Lateral south from the existing shared use path along the Colorado River Levee. This facility would follow the lateral south to 22nd Street, and then continue south to 32nd Street within an existing canal right-of-way directly on an alignment directly east of 33rd Drive.
- A bike lane would be constructed on Pacific Avenue that would connect the Colorado River Levee shared use path with 12th Street and bike lanes in the eastern portion of the study area.
- A shared use path would be constructed along 40th Street and connected to the East Main Canal; ultimately, this shared use path would extend north of 40th Street along Avenue A providing access to Kofa High School north of 32nd Street.

Short-term (5-year) Pedestrian Projects

- The following segments should be constructed as part of the near-term implementation plan:
- Avenue A between Rosewood Drive and 32nd Street;
- West side of 4th Avenue north of 1st Street;
- 4th Avenue between 32nd Street and 40th Street;

Arizona Avenue between 10th Street and 16th Street;
Pacific Avenue between 8th Street and 12th Street;
East side of Pacific Avenue between Crowder Avenue and 24th Street;
Pacific Avenue between Palo Verde Street and 32nd Street; and
32nd Street between Big Curve and Avenue 3 E;

- Construction of sidewalks along Avenue 3 E between 16th Street and the B Canal/24th Street should be included with the proposed near-term widening of Avenue 3 E.


## City of Yuma General Plan, 2012

The 2012 City of Yuma General Plan reviewed the existing transportation system within the City and identified deficiencies based on a "Complete Streets" approach. The plan identifies the East Main Canal and the Colorado River Levee as main backbones for the City's bicycle network. The plan identified a need for a connection from the west side of Yuma to development on the East Mesa. The plan also identified a need for more bicycle racks at businesses, parks and other destinations to promote bicycling and improve the aesthetic appeal of the overall transportation network.
The figure below highlights the existing and proposed bicycle facilities as part of this General Plan.

The General Plan states that all new roadway construction in the City should include sidewalks for pedestrian movements. The City of Yuma Construction Standards state that sidewalks should be located on both sides of all streets.


## City of Yuma Bicycle Facilities Master Plan, 2009

The Bicycle Facilities Master plan was developed from the bicycle element of the 1995 City of Yuma General Plan. Many of the facilities outlined in the 1995 plan have since been built. The Bicycle Facilities Master Plan aims to build on the success of the General Plan and to act as a framework and planning tool for the City of Yuma as they continue to develop their bicycle facilities. The Bicycle Facilities Master Plan looked at proposed bicycle facility projects from the FY09-FY18 Capital Improvement Program. The tables below summarize those projects.

| CIP Project | Project No. | $\begin{gathered} \text { Bicycle } \\ \text { Facility } \\ \text { Type } \\ \hline \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2011 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2012 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2013 \end{gathered}$ | $\begin{array}{\|c\|} \text { FY } \\ 2014-2018 \end{array}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In \$1,000s |  |  |  |  |  |  |  |  |
| East Wetlands | 1.0002 | Multi- <br> Use |  |  | $\$ 2,800$ |  |  | \$2,800 |
| Fund: Grant |  | Path |  |  | \$2,800 |  |  | \$2,800 |
| 24th Street - Avenue B to Avenue C |  |  |  |  |  |  |  | \$2,527 |
| Bond | 5.8325 | Lane | \$150 |  |  |  |  | \$150 |
| ProRata Funds |  |  | \$2,377 |  |  |  |  | \$2,377 |
| Magnolia Avenue, et al Bond | 5.9105 | Route | $\begin{aligned} & \$ 1,090 \\ & \$ 1,090 \end{aligned}$ |  |  |  |  | $\begin{aligned} & \$ 1,090 \\ & \$ 1,090 \end{aligned}$ |
| 32nd Street - 4th Avenue to Avenue B |  |  | \$1.250 |  |  |  |  | \$1250 |
| Bond | 5.9402 | Lane | \$650 |  |  |  |  | \$650 |
| Surface Iransportation Program |  |  | \$600 |  |  |  |  | \$600 |
| 20th Street - Avenue B to Avenue C Bond | 5.9507 | Path | $\begin{aligned} & \$ 890 \\ & \$ 890 \end{aligned}$ |  |  |  |  | $\begin{aligned} & \$ 890 \\ & \$ 890 \end{aligned}$ |


| CIP Project | $\underset{\text { Project }}{\mathrm{CIP}}$ No. | Bicycle Facility Type | $\begin{gathered} \text { FY } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2011 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2012 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2013 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2014-2018 \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Avenue - 16th Street to 12th Street | 5.9602 | Route | \$320 |  |  |  |  | \$320 |
| Highway Users Fund/ Lottery Funds |  |  | \$320 |  |  |  |  | \$320 |
| Giss Parkway Extension | 5.9707 | Lane |  |  | \$800 | \$1,200 | \$11.450 | \$13,450 |
| City Road Tax |  |  |  |  | \$800 | \$1,200 |  | \$2,000 |
| --CōmīūñityTnvestmèñt |  |  |  |  |  |  | \$11,450 | \$11,450 |
| Avenue B - 24th Street to 32nd Street | 5.9731 | Lane |  |  |  | \$800 | \$9,200 | \$10,000 |
| City Road Tax |  |  |  |  |  | \$800 | \$7,070 | \$7,870 |
| Development Tax |  |  |  |  |  |  | \$2,130 | \$2,130 |
| 12th Street - Avenue A to Avenue B | 5.9811 | Lane | $\begin{aligned} & \$ 1,600 \\ & \$ 1,600 \end{aligned}$ | \$830 | \$5,850 | \$2,250 |  | \$10,530 |
| Bond |  |  |  |  | \$3,850 | \$2, 250 |  | \$7,700 |
| City Road Tax |  |  |  | \$830 | \$2,000 |  |  | \$2,830 |
| 24th Street - Avenue 6E to Avenue 9E | 5.981 | Lane | $\begin{aligned} & \$ 5,150 \\ & \$ 5,150 \end{aligned}$ |  |  |  |  | \$5.150 |
| Bond |  |  |  |  |  |  |  | \$5,150 |
| Arizona Avenue - 16th Street to Giss Pkwy | 5.9913 | Lane | \$650 |  |  |  |  | \$650 |
| City Road Tax |  |  | \$650 |  |  |  |  | \$650 |

Additional bicycle facility projects were identified based on three facility alternatives (Recreational, Cross-Town, Destinations). All proposed projects, including those form the CIP, were summarized and prioritized based on proximity to destinations, connectivity needs and available funding. The projects were prioritized into high-, mid- and low-priority projects. The figure below shows all existing and proposed facilities, with the high-priority projects highlighted.


## High-Priority Bicycle Facilities

$\square$ High-Priority Facility
Bicycle Facilities
Master Plan
-_ Existing Bike Route
.... Proposed Bike Route
-_ Existing Bike Lanes
---- Proposed Bike Lanes

- Existing Bike Path
.-- - Proposed Bike Path
- Existing Multi-Use Path
.-- -- Proposed Multi-Use Path
- Existing Bicycle Crossing
- Proposed Bicycle Crossing
$\star$ Bicycle Station


## Reference Features



## Yuma Bikeways Plan, 2018

From the Yuma Bikeways Plan: "The intent of the 2018 Yuma Bikeways Plan is to establish a comprehensive framework to guide development of the City's bicycle facilities to address current deficiencies and accommodate the region's growth. The vision statement of the plan is to develop "A unified bikeway network providing people of all ages and abilities the opportunity to safely ride a bicycle in Yuma." The plan focuses on goals related to safety, convenience, connectivity and promotion to achieve this vision.

The 2018 Yuma Bikeways Plan proposes adding 53 miles of bike paths, 132 miles of bike lanes and 18 miles of bike routes. The high priority projects are listed in the tables below.

## HIGH PRIORTTY BIKE LANES

| FROJECT | MIEAGE | Cost |
| :---: | :---: | :---: |
| (1) ist street (Ave $B$ to 4 th Ave) | 1.5 m | 5 |
| (2) 16 TH STREET (Ave $B$ to 8 th Ave) | 1.3 m | \$ss |
| (3) 16TH STREET (1st Ave to Paciflc Ave) | 1.25 m | 5 |
| (4) Arizona avenue ( 16 th st to palo verde st) | 1.5 m | \$ $\$$ |
| (5) 24tH Street (Ave $B$ to $A v e A$ ) | 1.0 m | \$ |
| (6) PACIFIC AVENUE (8th 5 to 12 th st ) | 0.5 m | \$ |
| (7) PALO VERDE STREET (Ave $2^{1} / 2 \mathrm{E}$ to Ave 3E) | 0.5 m | \$ |
| (8) ARABY ROAD (24tn St to 32nd St) | 1.0 m | \$ $\$ 85$ |
| (9) AVENUE 9E (24tn St to N Frontage Ra) | 1.0 m | \$ $\$ \$$ |
| (10) N Frontage road (Ave if to Ave 10e) | 1.0 m | \$\$ |

NOTE $;=<\$ 50,000 ; \$=\$ 50,000-250,000 ; \$ \$ \$=\$ 250,000-\$ 1 \mathrm{M} ; 3 \$ 38=\$ 11 \mathrm{M}+$

## HIGH PRIORTTY BIKE PATHS

| PROJECT | MIIEAGE | Cost |
| :---: | :---: | :---: |
| (11) THACKER LATERAL UNEAR PARK (W Main Conal to 24th St) | 3.0 m | \$ $\$ 3.5$ |
| (12) 16TH STREET PATH (Ave C to Ave B) | 1.0 m | \$ $\$ 5$ |
| (13) 32ND STREET PATH (Ave B to Ave A) | 1.0 m | \$5\$ |
| (14) PACIFIC AVENUE PATH (Colorado River Levee Linear Park to 8th St) | 0.25 m | \$ $\$$ |
| (15) COLORADO RIVER LeVEE UNEAR PARK EXTENSION | 5.5 m | \$ 5 \$5 |
| (16) PACIFIC AVENUE (16th st to 32nd St) | 2.0 m | \$5\$ |
| (17) 24TH STREET PATH (Kennedy Ln to B 3.7 Lateral) | 0.13 m | \$ $\$$ |
| (198) B 3.7 LATERAL UNEAR PARK (24th $5 t$ to Palo Verde 5 t) | 0.5 m | \$5\$ |
| (19) 32ND STREET PATH (Arizona Ave to Pacific Ave) | 1.0 m | \$ 58 |
| (29) 32ND STREET PATH (Ave 3E to Ave $71 / 2 \mathrm{E}$ Alignment) | 4.5 m | \$5*5 |
| (21) AVENUE 6E (41 st St to 467h St) | 0.7 m | \$ $5 \$$ |

NOTE: $\$=\langle 50,000 ; \$ \$=\$ 50,000-250,000 ; \$ \$ 4=\$ 250,000-\$ 1 \mathrm{M} ; \$ \$ \$ \mathrm{~s}=\$ 1 \mathrm{M}+$

## HIGH PRIORITY BIKE ROUTES

| (23) 22ND STREET (4th Ave to 24th St ) | 1 m | $\$$ |
| :--- | :--- | :--- |
| (23) PALO VERDE STREET (Arizona Ave to Ave $21 / 2$ E) | 1 m | $\$$ |
| (24) ARIZONA AVENUE (Palo Verde st to 32 nd St ) | 0.5 m | $\$$ |

NOTE $\$=\left\langle \$ 50,000 ; \$ \$=\$ 50,000-250,000 ; \$ \$ \$=\$ 250,000-\$ 1 M ; \$ * \$ \$=\$ 1 M^{+}\right.$

HIGH PRIORITY BIKE CROSSINGS

| FROIECT | COST |
| :--- | :---: |
| (25) E MAIN CANAL \& W MAIN CANAL LINEAR PARKS | $\$$ |
| (26) E MAIN CANAL LINEAR PARK AT BTH STREET | $\$$ |
| (27) E MAIN CANAL LINEAR PARK AT 24TH STREET | $\$ \$$ |
| (28) E MAIN CANAL LINEAR PARK AT 32ND STREET | $\$$ |

## Yuma County 2020 Comprehensive Plan

The purpose of the Plan is to conserve the natural resources of the County in addition to promoting the health, safety and convenience of the general public through the development of unincorporated Yuma County.
The plan identified opportunities for linking natural resources within the County through development/expansion of the Juan Bautista de Anza Trail, the Butterfield Trail and the El Camino del Diablo Trail.

The Plan does not highlight any specific proposed pedestrian or bicycle facilities, but it does identify the following as a Circulation Policy and Priority: "Yuma County will encourage road design, construction or reconstruction to better accommodate pedestrian and bicycle traffic."

## City of San Luis Small Area Transportation Study, 2009

The purpose of this study was to inventory the existing conditions and characteristics of the roadway network in San Luis and to identify potential areas of improvement. The Plan focuses on a "Complete Streets" approach to future development of multi-modal facilities and suggests that San Luis is ideal for walking and bicycling due to its small size and large number of pedestrians and bicyclists crossing the US-Mexico border on a daily basis. The Plan suggests the following general recommendations for pedestrian and bicycle facilities:

- Improved crosswalks
- Pedestrian signals at major intersections
- Improved curb cuts at crosswalk locations
- Pedestrian amenities such as landscaping for shade
- Bulb outs or pedestrian refuge areas in appropriate locations
- pedestrian crossing between Main Street and 1st Avenue
- Bicycle Lanes on Main Street and Juan Sanchez Boulevard
- Establish other low volume, low speed roadways as shared vehicle-bicycle facilities



## San Luis 2020 General Plan, 2011

The 2020 General Plan acts as a guide for City officials and planners to express the vision and values of the community through future development. The Plan does not highlight any specific recommendations but does state that multi-modal facilities should be implemented to provide an effective overall transportation system. The Plan stated that many residents use bicycles to commute to work, school and other local destinations. It also identified a need to complete the connectivity between schools and other activity centers through pedestrian and bicycle facilities to promote student safety.

## Binational San Luis Transportation Study, 2013

The purpose of this study was to address the most critical transportation issues facing the cities of San Luis, AZ and San Luis Rio Colorado, Sonora, Mexico as it related to the exchange of students, employees and recreational users of the border crossing. The plan identifies the need for sidewalk connectivity and bicycle lanes and other facilities near and surrounding the "core activity area". The Plan shows examples of unsafe pedestrian crossings and lists "Stripe/Restripe pedestrian crosswalks" as a low-cost intersection improvement that can be implemented at high conflict locations. In addition, three short term recommendations are highlighted relating to pedestrian and bicycle facilities:

- Conduct study to address pedestrian safety and mobility throughout the city, potential improvements could include pedestrian signal crossing locations and devices and/or pedestrian refugee islands
- Conduct study to review and research bicycle users travel patterns
- Review and research pedestrian and bicycles amenities specific to the needs of San Luis Río Colorado


## Somerton 2010 General Plan Update, 2010

The Somerton General Plan is a statement of the Community Vision for the future. The plan identifies a major circulation goal is to "develop a pedestrian-oriented system" that provides critical links between residential areas, recreational facilities, schools and employment and commercial centers. The Plan encourages the use of existing canal and drainage corridors in development of pedestrian and bicycle facilities, especially since there are many Somerton residents who rely on walking and bicycling as their main or only form of transportation.

## City of Somerton Pathway Master Plan, 2013

The purpose of this master plan is to connect parks and schools and provide safe facilities for non-motorized users. The plan outlines previous recommendations for the Yuma Metropolitan Planning Organization for non-motorized facilities in Somerton, as shown in the tables below.

TABLE 4: YMPO 2011-2016 TIP PROJECTS

| PROJECT NAME | PROJECT LOCATION | FISCAL <br> YEAR | FUNDING | STATUS |
| :--- | :--- | :---: | :---: | :---: |
| Somerton Avenue-mill \& replace | $14^{\mathrm{t}}$ Street to County $15^{\mathrm{k}}$ | 2012 | STP | In process |
| Somerton Canal Shared use <br> pathway-design | Hwy 95 to County $17^{\mathrm{m}}$ | TBD | TE | In process |
| Somerton Canal Shared use <br> pathway-construction | Hwy 95 to County $17^{\mathrm{h}}$ | TBD | TE | Not started |
| Cesar Chavez Avenue Shared use <br> pathway-design | Hwy 95 to Madison Street | TBD | TE | In process |
| Cesar Chavez Avenue Shared use <br> pathway-construction | Hwy 95 to Madison Street | TBD | TE | Not started |
| Main Street Shared use pathway- <br> design | Bingham to Somerton <br> Avenue | TBD | TE | In process |
| Main Street Shared use pathway- <br> construction | Bingham to Somerton <br> Avenue | TBD | TE | Not started |

TABLE 5: YMPO 2033 RTP PROJECTS

| PROJECT NAME | PROJECT LOCATION | FISCAL <br> YEAR | FUNDING | STATUS |
| :--- | :--- | :---: | :---: | :---: |
| Somerton Avenue widening | Fern to County $17^{\text {th }}$ | $2010-2014$ | TBD | Not started |
| Somerton Avenue widening | Jefferson to County $15^{\text {th }}$ | $2010-2014$ | TBD | Not started |
| Somerton Avenue-mill \& replace | County $15^{\text {h }}$ to $14^{\text {th }}$ Street | $2010-2014$ | TBD | In process |

The plan also identifies additional short-, mid- and long-term improvements to multimodal facilities in the area, as listed below.

## Short-term

Build shared use pathways that are designed or under design

- Cesar Chavez Avenue, Eucalyptus Street to Gardenia Street
- Cesar Chavez Avenue, Main Street to County 15th Street
- Somerton Canal shared use pathway, County 17th Street to Patricia Street and Fern Street to Main Street
- Main Street shared use pathway, Somerton Avenue to Bingham Avenue
- Close gaps created by the previous step
- Cesar Chavez Avenue shared use pathway, Garvin Street to Gardenia Street
- Cesar Chavez Avenue shared use pathway, Eucalyptus Street to Main Street

Existing sidewalk and shared use pathway improvements

- Garvin Street sidewalk, Somerton Avenue to Somerton Canal
- Garvin Street shared use pathway, Cesar Chavez Avenue to Somerton Avenue
- Somerton Avenue sidewalk, Garvin Street to Jefferson Street
- Jefferson Street sidewalk, Somerton Avenue to Cesar Chavez Avenue
- Design and build
- Somerton Avenue bike lane, County 15th Street to County 17th Street


## Mid-term

Existing sidewalk improvements

- Main Street sidewalk, Somerton Avenue to Cesar Chavez Avenue
- Jefferson Street sidewalk, Somerton Avenue to Somerton Canal
- Somerton Avenue sidewalk, Jefferson Street to County 15th Street
Design and build bike facility
- Main Street bike lane, Avenue D to Somerton Avenue and Cesar Chavez Avenue to Main Drain
- Main Street bike route, Somerton Avenue to Cesar Chavez Avenue (develop bike route due to lack of bike lane in association with the Main Street Retail Core cross section as shown within the Downtown Somerton Redevelopment Plan)
Design and build shared use pathway
- Somerton Canal shared use pathway, Main Street to Jefferson Street
- Somerton Avenue shared use pathway, County 15th Street to County 17th Street
- Cesar Chavez Avenue shared use pathway, Garvin Street to County 17th Street


## Long-term

Design and build bike facility

- County 17th Street bike lane, Main Drain to Somerton Canal (portions of this project may be developed sooner if combined with County 17th Street roadway improvements)
- County 15th Street bike lane, Main Drain to Somerton Canal (portions of this project may be developed sooner if combined with County 15th Street roadway improvements)
Design and build shared use pathway
- Main Street shared use pathway, Somerton Canal to East Main Canal
- Main Drain shared use pathway, County 15thStreet to County 17th Street
- Garvin Street shared use pathway, Cesar Chavez Avenue to Main Drain
- Jefferson Street sidewalk, Cesar Chavez Avenue to Main Drain
Future regional connections
- East Main Canal shared use pathway, County 19th Street to Somerton Canal
- Somerton Canal shared use pathway, Jefferson Street to East Main Canal
- County 19th Street bike lane, Main Drain to East Main Canal
- Main Drain shared use pathway, County 17th Street to County 19th Street


## City of Somerton Downtown Somerton Redevelopment Plan, 2013

The purpose of this plan is to identify the needs of the downtown Somerton area in order to fully develop it into a thriving employment and retail center. The plan identifies the general need for a robust multi-modal transportation system that connects the downtown area to the surrounding planned trail and path system. The plan states that a focus should be to optimize connections between the downtown area and surrounding neighborhoods and open space areas. Some specific examples cited could be wide sidewalks, enhanced intersection treatments (such as raised traffic tables), covered walkways, bicycle parking and other functional and aesthetic features

## Wellton Transportation Long-Range Plan, 2011

This Plan was awarded through the planning Assistance for Rural Areas (PARA) programs to assist Wellton in developing a multimodal transportation plan for the Town's planning area. The Plan inventoried existing facilities and noted that the only street in the area with paved shoulder in Old Highway 80 and that very few roadway segments in the study area contain sidewalks.

The Plan suggests that the idea of Complete Streets should be implemented to develop a complete multi-modal network. The Plan identifies the need for a Trail/Bicycle/Pedestrian plan to provide more detail on the location and design of non-motorized facilities in Wellton. Specifically, the Plan highlights the following segments where pedestrian and bicycle facilities should be added:

- Avenue 29E/William Street - Old Highway 80 to County 12th Street;
- Old Highway 80 - Avenue 25E to Avenue 31E;
- $\quad$ County 11th Street - Avenue 29E to Avenue 31E;
- County 12th Street - Avenue 25E to Avenue 31E;
- County 12th Street from Avenue 27E to Avenue 29E;
- County 12th Street from Avenue 29E to Avenue 31E;
- Avenue 25E - Old Highway 80 to County 12th Street; and
- Avenue 31E - Old Highway 80 to County 12th Street.


## Wellton Bicycle and Pedestrian Plan, 2014

This Plan builds on recommendations developed in the 2013 Wellton General Plan and the 2011 Transportation Long-Range Plan in order to provide a comprehensive bicycle and pedestrian network. The figure below summarizes the recommendations highlighted in these three plans.


## Inventory of Existing Conditions

Pedestrian and bike crashes accounted for 3\% of all crashes in the YMPO region for the most recent 5 years of crash data (2014-2018) but made up $18 \%$ of the fatal crashes in the region.

The following charts and graphs provide additional insight into the pedestrian and bicycle crashes in the region.

## Pedestrian Crashes



Pedestrian Crashes by Time and Date





## Pedestrian and Driver Actions and Violations



Pedestrian Crash Light Condition


## Pedestrian Crash Impairment



## Pedestrian Crash Intersection Relation



Pedestrian and Driver Age and Gender




## Bicycle Crashes




Bicycle Crashes by Time and Date





## Bicyclist and Driver Actions and Violations



## Bicycle Crash Light Condition



## Bicycle Crash Impairment




## Bicycle Crash Intersection Relation



Bicyclist and Driver Age and Gender


## High Crash Locations

Pedestrian and Bicycle crashes in the region from the past 5 years (2014-2018) were plotted on a map to identify high crash locations. The images below show close-up snapshots that highlight the high crash locations in Yuma and San Luis. The entire crash map can be found at the following link. The link allows users to zoom in to see locations of the crashes and details of the individual crashes.
https:/ / drive.google.com/open?id=1KHwS09syzOriEJbjFc91YFErIs1GT4KN\&usp=sharing


The heat maps on the following pages show where pedestrian and bike crashes are concentrated in the urban areas of Yuma, Somerton, and San Luis.







## Public Outreach

Public outreach efforts were conducted as part of this study and in conjunction with the 2019 update to the YMPO Strategic Transportation Safety Plan. A Social Pinpoint website was established where residents could locate specific locations around the region that present an issue for roadway users, including drivers, bicyclists and pedestrians. 179 comments were received, and $45 \%$ of the comments involved pedestrian and bicyclist issues. Comments received regarding pedestrian and bicycle roadway concerns were reviewed as part of this study to determine appropriate facilities to resolve them. These facilities were included as recommendations in the next section.

YMPO also conducted additional public outreach through vendor booths and flyers around the region that pointed residents to the Social Pinpoint program.

A summary of the comments received is provided in Appendix A.


## Needs and Recommendations



The study team reviewed the existing pedestrian and bicycle facilities in the YMPO region and identified deficits and opportunities for safety improvements.
This section describes the process used to identify and develop recommendations.


## Evaluation Criteria

The following describes the criteria used to recommend facilities:

1. Proposed bike lanes along all arterials
a. Proposed 6-foot wide shoulder for rural arterials, to include signage and striping for bike lanes
b. Sharrow markings in the urban areas with speed limit of 35 mph or less
c. Proposed restriping to add bike lanes in the urban areas with speed limit higher than 35 mph if there is width for restriping
d. For urban areas with speed limit higher than 35 mph but not enough width for restriping, proposed roadway widening to add bike lanes (these projects are expensive and would go to the long-term improvements)
2. Proposed bike lanes along all transit routes following the same logic for arterials
3. Proposed bike lanes along all collectors that are not covered by transit routes and followed the same logic for arterials
4. Proposed marked crosswalks at transit stops
5. Proposed marked crosswalks between neighborhoods and parks

Please note that crosswalk recommendations were based on review of school locations and adjacent land use. It is recommended that crosswalk studies be performed on the proposed crosswalk locations prior to implementation.

The following describes how recommendations were categorized for short-, mid- or long-term improvements:

## 1. Short-term improvements

a. Crosswalks at high frequency pedestrian and bike crash locations
b. Crosswalks at transit stops, and add sidewalks to eliminate any gaps between existing sidewalks near transit stops
c. Sharrow markings for bike lanes along arterials
d. Restriping and adding bike lanes along arterials
e. Restriping and adding bike lanes along collectors
f. Sharrow markings for bike lanes along collectors
g. Sharrow markings for bike lanes along transit routes
h. Develop policy to add bike lanes for any arterial and collector roadway improvement projects if the speed limit is more than 35 mph
i. Develop policy to add Sharrow markings for any arterial and collector roadway improvement projects if the speed limit is 35 mph or less

## 2. Mid-term improvements

a. Crosswalks between neighborhoods and parks
b. Adding shoulders and bike lanes along arterials
c. Adding shoulders and bike lanes along collectors

## 3. Long-term improvements

a. Widen roadways and add bike lanes along arterials
b. Widen roadways and add bike lanes along collectors

Recommendations are summarized in Table 1 through Table 3 and are categorized by short-, mid- or long-term improvements.
Detailed information for these recommendations is provided in Appendix D.

## Pedestrian/Bicycle Design Guidelines

To encourage uniformity and consistency across the region in future bike and pedestrian facilities, design guidelines were developed to include typical cross sections for various facility types. Appendix B contains these design guidelines.

## Elementary School Location Recommendations

Providing appropriate facilities to increase the number of students who can safely and conveniently bicycle and walk to school is an excellent way to increase non-motorized transportation in neighborhoods and improve safety and health. Based on existing conditions at the elementary schools in the region, recommendations were made to improve walking and biking facilities at the schools. Detailed recommendations for each school can be found in Appendix C.

Table 1: Recommended Short Term Improvements


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cocopah Drive and Strand Avenue | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Cocopah RV and Golf Resort | Loops around Tor | nes and Strand | County | Install signage and Sharrow markings | \$15,000 | Short-Term |
| Cottonwood Dr | Salt Cedar Dr | Cottonwood Loop | County | Install signage and Sharrow markings | \$7,500 | Short-Term |
| Cottonwood Loop and Salt Cedar Avenue | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Cottonwood Park Loop and Cottonwood Loop | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| County 8th Street | Avenue D | Avenue C | County | Proposed high visibility crosswalk along with advance pedestrian warning signs; and proposed sidewalk along both sides of 8th St from Avenue D to Avenue C (10,500 feet) | \$535,000 | Short-Term |
| Foothills Blvd | I-8 Frontage Rd | County 12th St | County | Install signage and striping, and Sharrow marking | \$30,000 | Short-Term |
| Fortuna Rd | US 95 | County 12th St | County | Install signage and striping, and Sharrow marking in urban section | \$25,000 | Short-Term |
| Hope Ave | 8th St | Riverside Dr | County | Install signage and Sharrow markings | \$3,250 | Short-Term |
| Hope Way and County 8th Street | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Hope Way and Riverside Drive | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Somerton Avenue and 14th Street | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| Steamboat Street and Orange Grove Way | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Strand Ave | Riverside Dr | Torrey Pines | County | Install signage and Sharrow markings | \$10,000 | Short-Term |
| Strand Avenue and Chapay Street | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement <br> Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 95 | Fortuna Rd | Martinez Lake Rd | County | Install signage and striping | \$52,500 | Short-Term |
| US Highway 95 | Avenue 5E | Avenue 6E | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$18,000 | Short-Term |
| US Highway 95 and County 20 1/2 Street | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| US Highway 95 and Housing Department | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$18,000 | Short-Term |
| Veterans Way - Across From Cocopah Tribal Police | N/A | N/A | County | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| US 95 | Lorena Ave | Ave G | Gadsden | "Install signage and striping | \$25,000 | Short-Term |
| 1st St | C St | Juan Sanchez Blvd | San Luis | Install signage and Sharrow markings | \$3,250 | Short-Term |
| 4th Ave | County 22nd St | Urtuzuastegui St | San Luis | Install signage and Sharrow markings | \$7,500 | Short-Term |
| 4th Avenue - Arizona Street | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| 4th Avenue and B Street | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 4th Avenue and C Street | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 4th Avenue and Juan Sanchez Blvd | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs; Proposed sidewalk on both sides (4,200 Feet) | \$240,000 | Short-Term |
| 4th Avenue and Las Brisas Blvd | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 4th Avenue and Union Street | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| 8th Avenue and America Street | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| Ave F | County 24th St | Juan Sanchez Blvd | San Luis | Install signage and Sharrow markings | \$7,500 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Avenue F and Los Olivos Way | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| C St | Main St | 1st St | San Luis | Install signage and Sharrow markings | \$2,000 | Short-Term |
| County 22nd St | US 95 | 4th Ave | San Luis | Install signage and Sharrow markings | \$3,250 | Short-Term |
| First Ave. and G Street | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| Juan Sanchez Blvd/ SR 195 | Ave E | Ave B | San Luis | Install signage and striping (3 miles) | \$15,000 | Short-Term |
| Juan Sanchez Boulevard and 7th Avenue | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$22,000 | Short-Term |
| Main St/ US 95 | Urtuzuastegui St | Juan Sanchez Blvd | San Luis | "Install signage and striping along west side of Main st; and install Sharrow marking on the pavements for shared bike and car lanes for north directions | \$15,000 | Short-Term |
| Orgullo Del Sol Apartments Between Main Street and 4th Avenue | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| Urtuzuastegui St | Main St | 4th Ave | San Luis | Install signage and Sharrow markings | \$3,250 | Short-Term |
| Urtuzuastegui Street and Cesar Chavez Avenue | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| US 95 | County 22nd St | County 19th St | San Luis | "Install signage and striping | \$15,000 | Short-Term |
| US Highway 95 From Estibella Drive to Lankin Drive | N/A | N/A | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| US Highway 95- Walmart Drive | Piceno Drive | County 22nd Street | San Luis | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| SR 195 | Ave B | 32nd St | San Luis/Yuma | "Install signage and striping for bike lanes/presence of bikes; and six Dynamic speed feedback signs | \$135,500 | Short-Term |
| Farm Rd | County 14th St | County 14 1/2 St | Somerton | Install signage and Sharrow markings | \$8,200 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main St/ US 95 | Avenue F | Congress Avenue | Somerton | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| Main Street Somerton | Cano Street | Avenue E | Somerton | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$11,000 | Short-Term |
| Somerton Ave | County 17th St | County 15th St | Somerton | "Improve existing signage and striping | \$10,000 | Short-Term |
| Somerton Avenue and Garvin Street | N/A | N/A | Somerton | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| Steamboat St | County 14th St | County 16th St | Somerton | Install signage and Sharrow markings | \$8,200 | Short-Term |
| Arizona Avenue | Dome Street | William Street | Wellton | Proposed high visibility crosswalk along with advance pedestrian warning signs; and proposed sidewalk along both sides of Arizona Avenue from Los Angeles Ave (Old US 80) to Dome Street ( 11,500 feet) | \$6,000 | Short-Term |
| Arizona Avenue | William Street | Los Angeles Street | Wellton | Proposed high visibility crosswalk along with advance pedestrian warning signs; and proposed sidewalk along both sides of Arizona Avenue from Los Angeles Ave (Old US 80) to Dome Street ( 11,500 feet) | \$583,000 | Short-Term |
| Dome Street and San Jose Avenue | N/A | N/A | Wellton | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Old US 80 | Avenue 29E | Dome Street | Wellton | Install Sharrow (5,280 Feet) | \$7,500 | Short-Term |
| 10th Avenue | Urtuzuastegui Street | County 22nd Street | Yuma | Install Signage and Sharrow Marking (8,448 Feet) | \$10,415 | Short-Term |
| 12th Street | Castle Dome Ave | Pacific Ave | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 14th St | Pacific Ave | Atlantic Ave | Yuma | Install signage and Sharrow Marking; and install sidewalk on from Pacific Avenue to Atlantic Avenue (5,280 Feet) | \$270,500 | Short-Term |
| 16th Street and Arcadia Lane | N/A | N/A | Yuma | Proposed RRFB along with advance pedestrian warning signs | \$30,000 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Avenue and 10th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$10,000 | Short-Term |
| 1st Avenue and 12th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 1st Avenue and 14th Street | N/A | N/A | Yuma | Proposed RRFB along with advance pedestrian warning signs | \$25,000 | Short-Term |
| 1st Avenue and 5th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 1st Avenue and 8th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$8,000 | Short-Term |
| 1st Street | 1st Street | 23rd Avenue | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$2,000 | Short-Term |
| 1st Street | Winterhaven Drive | 1st Street | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$2,000 | Short-Term |
| 1st Street | 1st Street | Madison Avenue | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| 1st Street | 23rd Avenue | Colorado Street | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$14,000 | Short-Term |
| 1st Street and 1st Avenue | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| 1st Street and 3rd Street / City Hall | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| 1st Street and Maiden Lane | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 21st Drive and 24th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| 23rd Avenue and 28th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$16,000 | Short-Term |
| 23rd Dr | 26th St | 28th St | Yuma | Install signage and Sharrow markings | \$2,000 | Short-Term |
| 24th Street | 24th Street | 31st Avenue | Yuma | "Proposed RRFB along with advance pedestrian warning signs | \$30,000 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24th Street | Avenue C | Avenue B | Yuma | "Proposed high visibility crosswalk along with advance pedestrian warning signs; and proposed sidewalk along both sides of 24th St from Avenue C to Avenue B (10,200 feet) | \$536,000 | Short-Term |
| 24th Street and 6th Avenue | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 24th Street and Avenue 2 $5 / 10$ | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 24th Street and College Avenue | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| 24th Street and Melody Lane | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 24th Street and Vista De Castillo Drive | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| 24th Street at AWC <br> Entrance/ Tamarack Center | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 26th St | Ave B | 21st Dr | Yuma | Install signage and Sharrow markings | \$2,000 | Short-Term |
| 26th Street and 23rd Avenue | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| 32nd Street and Crest Drive | N/A | N/A | Yuma | Proposed RRFB along with advance pedestrian warning signs | \$29,000 | Short-Term |
| 32nd Street and Fortuna Avenue | N/A | N/A | Yuma | Proposed RRFB along with advance pedestrian warning signs | \$29,000 | Short-Term |
| 32nd Street and Soar Avenue | N/A | N/A | Yuma | Proposed RRFB along with advance pedestrian warning signs | \$29,000 | Short-Term |
| 3rd Street | 8th Avenue | 6th Avenue | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| 3rd Street | Avenue A | 17th Avenue | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 3rd Street | 15th Avenue | Avenue B | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$14,000 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3rd Street and Gila Street (Downtown Yuma Transit Center) | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 4th Avenue | Urtuzuastegui Street | County 22nd Street | Yuma | Install Signage and Sharrow Marking 3,100 Feet | \$3,900 | Short-Term |
| 4th Avenue and 12th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 4th Avenue and 17th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$17,000 | Short-Term |
| 4th Avenue and 18th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 4th Avenue and 20th Place | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 4th Avenue and 20th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| 4th Avenue and 26th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$12,000 | Short-Term |
| 6th Avenue | Urtuzuastegui Street | Juan Sanchez Blvd | Yuma | Install Signage and Sharrow Marking (8,976 Feet) | \$11,050 | Short-Term |
| 8th Avenue | Urtuzuastegui Street | County 22nd Street | Yuma | Install Signage and Sharrow Marking (8,976 Feet) | \$11,050 | Short-Term |
| 8th Street | Magnolia Avenue | 10th Avenue | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$10,000 | Short-Term |
| Across Shilo Hotel in loop of Yuma Palms Parkway and Castle Dome Avenue | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| Arizona Ave | 32nd St | 8th St | Yuma | Install signage and Sharrow markings | \$37,500 | Short-Term |
| Arizona Western College | AWC Loop on south end of Campus |  | Yuma | Install signage and Sharrow markings on Campus Loop; extend bike lane striping to 24th St | \$21,000 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Atlantic Ave | 14th St | 16th St/US 95 | Yuma | Install signage and Sharrow Marking; and install sidewalk on from 14th Street to 16th Street ( 2,740 feet) | \$145,000 | Short-Term |
| Avenue 3E and Palo Verde St | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Avenue A and 10th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| Avenue A and 14th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| Avenue A and 18th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| Avenue A and 20th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| Avenue A and 22nd Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$11,000 | Short-Term |
| Avenue A and Southwest Medical Center | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Avenue A and Westridge Drive | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Avenue B and Del Valle Mobile Home Park | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Avenue B and Immaculate Conception Church And School | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Avenue C and 14th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| Avenue C and 18th Street | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$6,000 | Short-Term |
| AWC Loop Road | 24th Street | Adobe Ridge Road | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |


| Location | From | To | Jurisdiction | Improvement Description | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Blue Diamond RV Park 32nd Street and Country Road Boulevard | N/A | N/A | Yuma | Proposed RRFB along with advance pedestrian warning signs | \$29,000 | Short-Term |
| Castle Dome Avenue and Yuma Palms Parkway | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| Catalina Drive and 1st Avenue | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| Catalina Drive and Country Club Drive | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$7,000 | Short-Term |
| County 10th Street and View Parkway | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| County 16th Street | Avenue C | Avenue B | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$20,000 | Short-Term |
| Main Street | 1st Avenue | Lorena Street | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$13,000 | Short-Term |
| Pacific Avenue and San Marcos Drive | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$4,000 | Short-Term |
| Quechan Drive and Indian Hill Road | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Redondo Center Drive Across From Social Security | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |
| Urtuzuastegui Street | Main Street | 10th Avenue | Yuma | Install Signage and Sharrow Marking (9,350 Feet) | \$11,700 | Short-Term |
| US 95 | Ave E | 32nd St | Yuma | Install signage and striping | \$37,000 | Short-Term |
| US Highway 95 and Avenue C | N/A | N/A | Yuma | Proposed high visibility crosswalk along with advance pedestrian warning signs | \$9,000 | Short-Term |

Table 2: Recommended Mid-Term Improvements

| Street Name | From | To | Jurisdiction |  | Cost | Improvement Horizon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County 14th Street | Foothills Boulevard | Avenue 15E | County | Install 6-foot wide shoulder along both sides of the roadway (21,120 Feet); and install signage and striping | \$538,000 | Mid-term |
| County 3rd Street | US 95 | Avenue 16E | County | Install 6-foot wide shoulder along both sides of the roadway ( 18,480 feet); and install signage and striping | \$471,000 | Mid-term |
| Avenue 16E | County 3rd Street | County 4th Street | County | Install 6-foot wide shoulder along both sides of the roadway (5,280 Feet); and install signage and striping | \$134,500 | Mid-term |
| County 4th Street | Avenue 16E | Avenue 18E | County | Install 6-foot wide shoulder along both sides of the roadway ( 18,480 feet); and install signage and striping | \$471,000 | Mid-term |
| Avenue 18E | County 4th Street | County 6th Street | County | Install 6 -foot wide shoulder along both sides of the roadway ( 21,120 Feet); and install signage and striping | \$538,000 | Mid-term |
| County 6th Street | Avenue 18E | Avenue 19E | County | Install 6 -foot wide shoulder along both sides of the roadway ( 10,560 feet); and install signage and striping | \$269,000 | Mid-term |
| Avenue 19E | County 6th Street | County 7th Street | County | Install 6-foot wide shoulder along both sides of the roadway (10,560 feet); and install signage and striping | \$269,000 | Mid-term |
| County 7th Street | Avenue 19E | Avenue 20E | County | Install 6-foot wide shoulder along both sides of the roadway ( 10,560 feet); and install signage and striping | \$269,000 | Mid-term |
| Avenue 20E | County 7th Street | Old US 80 | County | Install 6-foot wide shoulder along both sides of the roadway (42,240 Feet); and install signage and striping | \$1,076,000 | Mid-term |
| Martinez Lake <br> Road | US 95 | Laguna Army Airfield | County | Install 6-foot wide shoulder along both sides of the roadway ( 15,840 feet); and install signage and striping | \$403,500 | Mid-term |
| County 12th Street | Fortuna Road | Avenue 15 E | County | Install 6-foot wide shoulder along both sides of the roadway ( 25,344 feet); and install signage and striping | \$645,000 | Mid-term |
| Avenue 4E | County 14th Street | County 11th Street | County | Install 6-foot wide shoulder along both sides of the roadway (31,680 feet); and install signage and striping | \$807,000 | Mid-term |
| Avenue 40E | Peterson Drive | Gila Levee Rd | County | Install 6 -foot wide shoulder along both sides of the roadway ( 36,960 feet); and install signage and striping | \$941,500 | Mid-term |
| Avenue 36E | Old US 80 | County 6th Street | County | Install 6-foot wide shoulder along both sides of the roadway (33,264 feet); and install signage and striping | \$847,350 | Mid-term |
| County 6th Street | Avenue 37E | Avenue 38E | County | Install 6-foot wide shoulder along both sides of the roadway ( 10,560 feet); and install signage and striping | \$269,000 | Mid-term |






Table 3: Recommended Long- Term Improvements


## Appendix A

YMPO Social Pinpoint Comments

| No. | Type of Comment | Comment | Latitude | Longitude | Route | Area | Location |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B01 | Biking | Where do the bicyclists from this bike lane go from here? This lane leads to nowhere special or convenient. A dead-end. | 32.71231 | -114.625774 | 830 S 5th Ave, Yuma, AZ 85364, USA | Yuma | 5th Avenue south of 8th Street |
| B02 | Biking | North bound has a confusing sign lane markings. the sign says stay in lane to go forward and left lane is striped to move intc | 32.66919 | -114.633016 | 3200 S Avenue A, Yuma, AZ 85365, USA | Yuma | Avenue A \& 32nd St |
| B03 | Biking | 24 th street has had a safety study about 3-4 years ago. 24th from 4th ave to ave B is vary difficult for cyclists. bike lanes are | 32.68707 | -114.631605 | 2241 S Avenue A, Yuma, AZ 85364, USA | Yuma | 22nd Street east of Avenue A |
| B04 | Biking | Traffic lights not in sync. with most yuma traffic lights. Can catch a biker off guard if he is not $100 \%$. | 32.69826 | -114.633172 | 1201 W 16th St, Yuma, AZ 85364, USA | Yuma | Avenue A \& 16th St |
| B05 | Biking | The intersection of 32 nd and Pacific with the new bike path needs additional signs to clarify the direction to the new path a | 32.66861 | -114.598512 | Yuma International Airport, Yuma, AZ 85365, | Yuma | 32nd St \& Pacific |
| B06 | Biking | Road in bad shape and risk to cyclists | 32.50898 | -114.758066 | 1694 9th Ave, San Luis, AZ 85349, USA | San Luis | County 22nd St \& 8th Ave |
| B07 | Biking | Ave 9 E could be widened so that I literally do not have to bike in traffic; most of the autos hang back and allow me to get pa | 32.67975 | -114.477916 | S Ave 9 E, Yuma, AZ 85365, USA | East Yuma | Avenue 9E north of 1-8 |
| B08 | Biking | There is no safe way to ride a bicycle along 32 street, eastbound or westbound from, and/or to Highway 195. I am a retired | 32.66299 | -114.510293 | 7138 36th Pl, Yuma, AZ 85365, USA | East Yuma | 32nd Street |
| B09 | Biking | Eastbound shoulder descending Telegraph pass on 1-8 needs repair work. Road damage and potholes are difficult to see anı | 32.6616 | -114.320552 | I-8, Yuma, AZ 85367, USA | East Yuma | Interstate 8 west of Ligurta |
| B10 | Biking | Share the road signage needed at new roundabouts on both sides of $1-8$ at Araby Rd. The multiple entrances and exits are c | 32.67688 | -114.521059 | 6975 Gila Ridge Rd, Yuma, AZ 85365, USA | East Yuma | 1-8 \& Araby Rd |
| B11 | Biking | Bike/walking path crossing of 1st street needs to be completely re-engineered. Route is dangerous and confusing to both vi | 32.72509 | -114.633536 | 1161 W 1st St, Yuma, AZ 85364, USA | Yuma | Avenue A \& 1st Street |
| B12 | Biking | Canal Bike route crossing 24th St. at YRMC needs improvement. Very awkward walking and bike routing in this congested a | 32.68369 | -114.63807 | 1501 W 24th St, Yuma, AZ 85364, USA | Yuma | 24th St \& Ridgeview Dr |
| B13 | Biking | Narrow shoulder going over rr tracks. | 32.68694 | -114.47844 | 9781 S Ave 9 E, Yuma, AZ 85365, USA | East Yuma | Ave 9E north of 18 |
| B14 | Biking | Shoulder comes and goes from Yu a Palms goung east. | 32.69864 | -114.590181 | 2560 E 16th St, Yuma, AZ 85365, USA | Yuma | 16th Street east of Pacific Ave |
| B15 | Biking | Avenida compadres and attendant cul de sacs desperately need overlay | 32.67403 | -114.456682 | 10313 E 30th St, Yuma, AZ 85365, USA | Fortuna Fo' | Ave Compadres \& 30th St |
| B16 | Biking | county $101 / 2$ very rough needs overlay. short section east of Watson elem. | 32.67737 | -114.459085 | 10490 Summer Ave, Yuma, AZ 85365, USA | Fortuna Fol | County $101 / 2$ east of Watson Elementary |
| B17 | Biking | e 30th needs overlay on west end | 32.67331 | -114.517 | 6700 E 30th St, Yuma, AZ 85365, USA | East Yuma | 30th St \& araby rd |
| B18 | Biking | Ave A needs paved shoulder/bike lane north of county 14th | 32.63118 | -114.636669 | S 4th Ave, Yuma, AZ 85365, USA | Yuma | Avenue A north of County 14th St |
| B19 | Biking | US 8 needs periodic shoulder sweeping | 32.67415 | -114.497452 | 7965 E 30th St, Yuma, AZ 85365, USA | East yuma | Interstate 8 (all) |
| B20 | Biking | Fortuna ave needs bike lanes | 32.66694 | -114.444017 | 11345 S Fortuna Rd, Yuma, AZ 85367, USA | Fortuna Fol | Fortuna Rd South of 18 |
| B21 | Biking | I am very much in support of widening roads to include room for a dedicated bike lane or shoulder on the frontage roads in | 32.6664 | -114.467754 | 9619 E 34th St, Yuma, AZ 85365, USA | Fortuna Fo' | Fortuna Foothills general |
| B22 | Biking | 9 E is a very dangerous road to bike on and it is scheduled for upgrades so it is imperative this is completed this spring. | 32.63145 | -114.65959 | Unnamed Road, Somerton, AZ 85350, USA | Yuma | 9 E |
| B23 | Biking | The bike island is a great improvement - but hawk lights are still needed at the 32nd and canal path intersection | 32.66835 | -114.640574 | 1635 W 32nd Pl, Yuma, AZ 85365, USA | Yuma | 32nd Street \& Canal Path |
| B24 | Biking | The traffic light sensor does not recognize bicyclists and pushing the traffic light control button does not create a traffic ligh- | 32.68743 | -114.58045 | 3214 Gila Ridge Rd, Yuma, AZ 85365, USA | Yuma | Avenue 3 E \& Gila Bridge Road |
| B25 | Biking | South frontage road in my opinion could use improvement to be more bicycle friendly | 32.66894 | -114.465916 | 9724 E 33rd St, Yuma, AZ 85365, USA | Fortuna For | County 11th St in Fortuna Foothills |
| B26 | Biking | Going east downhill starting about a miles after the fence stops and the wall begins, the shoulder's surface is so rutted that | 32.6646 | -114.319181 | 1-8, Yuma, AZ 85367, USA | East Yuma | Interstate 8 west of Ligurta |
| B27 | Biking | I would like to see a bike lane along 32nd street east and west connecting to the bike/pedestrian path at the Airport. | 32.66764 | -114.665901 | 3289 S Appaloosa Way, Yuma, AZ 85365, USA | Yuma | 32nd Street from Avenue C to Airport |
| B28 | Biking | Need a connection from the Canal Path to the road to allow access to the Maul and the softball park | 32.71707 | -114.598475 | Memorial Park, E Levee Rd, Yuma, AZ 85364, | Yuma | Pacific Ave \& Levee Road |
| B29 | Biking | This road is used by bicycles that are taking Avenue A to the 40th street entrance to the Canal path. It needs either bike lans | 32.62687 | -114.634008 | 2429 W County 14th St, Yuma, AZ 85365, US | Yuma | Avenue A north of County 14th St |
| B30 | Biking | The shoulder going east (Downhill past where the fence becomes a wall) has a surface so rutted that it is almost impossible | 32.65759 | -114.341669 | I-8, Yuma, AZ 85367, USA | East Yuma | Interstate 8 east of border patrol checkpoint |
| B31 | Biking | The traffic signal is too quick in low traffic volume for a bicyclist to cross the intersection on the green light. Timing needs to | 32.69862 | -114.59891 | 1615 S Pacific Ave, Yuma, AZ 85365, USA | Yuma | Pacific Ave \& 16th St |
| B32 | Biking | Crossing 1st at avenue A is extremely dangerous on a bicycle. I have almost been hit numerous times this winter. | 32.72522 | -114.633043 | 1095 W 1st St, Yuma, AZ 85364, USA | Yuma | Avenue A \& 1st Street |
| B33 | Biking | Bike lane is consistently full of parked cars making it impossible to safely commute using designated bike lanes. | 32.68753 | -114.632062 | 2157 S 11th Ave, Yuma, AZ 85364, USA | Yuma | 22nd Street east of Avenue A |
| B34 | Biking | Need bike line for children to cycle to school | 32.65372 | -114.538323 | 4112 1/2 Ave $51 / 2$ E, Yuma, AZ 85365, USA | East Yuma | Ave $51 / 2 \mathrm{E}$, South of county 12 th st |
| B35 | Biking | Need a bike lane for children cycling to school | 32.65518 | -114.535113 | 5691 E 39th Ln, Yuma, AZ 85365, USA | East Yuma | County 12th St \& Ave 51/2 E |
| B36 | Biking | San Luis is not bicycle friendly. | 32.49429 | -114.7678 | 1350 Juan Sanchez Blvd, San Luis, AZ 85349, I | I San Luis | All of San Luis |
| B37 | Biking | To many pedestrians exercise on the sidewalks and streets are to busy for safety biking on the street. Adults probably can m | 32.48557 | -114.765209 | 1502 San Pedro St, San Luis, AZ 85349, USA | San Luis | Urtuzuastegui St and 7th Ave |
| B38 | Biking | It would be AWESOME if the bike lane from Avenue C could connect through here to get to the Wetlands on bike faster. The | : 32.72507 | -114.659575 | 3043 W 1st St, Yuma, AZ 85364, USA | Yuma | 1st Street east of Avenue C |
| B39 | Biking | I do not feel safe biking to work in the bike lanes from here to Cibola. I have had to pull kids back walking home from school | 32.7126 | -114.667182 | 805 S Avenue C, Yuma, AZ 85364, USA | Yuma | Avenue C from 8th Street to Cibola |
| B40 | Biking | People bike and walk along the east side of the road a lot. There should be a bike path or sidewalk along the entire stretch c | 32.66004 | -114.530003 | 5954 E 38th St, Yuma, AZ 85365, USA | East Yuma | Ave 6 E from 32nd Street to County 12th St |
| D1 | Driving | Need stop light and cross walk | 32.65551 | -114.529947 | 4022 S Jasmine Ave, Yuma, AZ 85365, USA | East Yuma | County 12th St \& Ave 6E |
| D2 | Driving | Multiple times a day I see people use the bike lane and parking lane as a right turn lane onto 8th st - even when there are ca | 32.71317 | -114.623352 | 773 S Orange Ave, Yuma, AZ 85364, USA | Yuma | 8th Street \& Orange Ave |
| D3 | Driving | I have driven here, and seen many accidents here. Cars suddenly stop for kids crossing. Traffic gets backed up, and cars brak | 32.67623 | -114.633102 | Avenue A Across 28th Street, Yuma, AZ 85364 | Yuma | Avenue A \& 28th St |
| D4 | Driving | High school students walking in front of cars before and after school | 32.69225 | -114.667397 | 1932 S 39th Dr, Yuma, AZ 85364, USA | Yuma | Avenue C East of Cibola HS |
| D5 | Driving | Awful traffic in morning and after school. Stoplight needed! Kids walking everywhere | 32.69476 | -114.667614 | Avenue C @ 18th Street, Yuma, AZ 85364, US | Yuma | Avenue C \& 18th Street |
| G01 | Comments | Traffic does not stop for pedestrians in the crosswalk. This crosswalk needs flashing lights like the one on 8th Street. | 32.68844 | -114.63322 | 2150 S Avenue A, Yuma, AZ 85364, USA | Yuma | Avenue A north of 22nd Street |
| G02 | Comments | This school zone is disregarded and people speed through it during school hours when students are walking to school. | 32.68895 | -114.633254 | 2100 S Avenue A, Yuma, AZ 85364, USA | None | None |
| G03 | Comments | Consider a school zone at 15 mph from here all the way East to Ave C. Too many cars speeding down 16 St during school. Ch | 32.69837 | -114.674105 | 4402 W 16th PI, Yuma, AZ 85364, USA | Yuma | 16th St from 44th Ave to Ave C |
| G04 | Comments | Please add a stop light, speed warnings and a crosswalk you cannot miss. DVA has 1 entrance and traffic is a nightmare. Ma | 32.69845 | -114.66392 | 3681 W 15th Ln, Yuma, AZ 85364, USA | Yuma | 16th Street at Desert View Academy |
| G05 | Comments | The section of 23rd St along Woodard Jr High needs to be designated as a school zone, and a crosswalk needs to be installer | 32.6858 | -114.629106 | 802 W Cortez Ln, Yuma, AZ 85364, USA | Yuma | 23rd street \& 8th Avenue |
| G06 | Comments | 40th Street is riddled with potholes. While I understand it is on the City's list to remove/replace in the next couple of years, | 32.65504 | -114.619804 | 141 W 40th St, Yuma, AZ 85365, USA | Yuma | 40th Street west of Yuma Airport |
| G07 | Comments | South Arizona Avenue is riddled with potholes. While I understand it is on the City's list to remove/replace next year, I wou | 32.6653 | -114.615826 | 3420 S Arizona Ave, Yuma, AZ 85365, USA | Yuma | Arizona Ave north of Yuma Airport |


| No. | Type of Comment | Comment | Latitude | Longitude | Route | Area | Location |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G08 | Comments | Driving a vehicle should not be the only way for kids and families to get to their closest neighborhood park. <br> I look forward to our feedback. | 32.681 | -114.667091 | 2558 S 39th Dr, Yuma, AZ 85364, USA | None | None |
|  |  | . Perhaps students would ride their bikes or walk to the HS is there was a connection. <br> I would strongly encourage, as a high priority, connecting the bike paths that dead end at Ave. C and 24th St. to the afore mentioned developments. There is an opportunity to connect these children and families to the closest COY park. |  |  |  |  |  |
| G09 | Comments | I support bike paths and biking in Yuma but think the families on the West side of Yuma have been overlooked in the overall plan. Driving a vehicle should not be the onl | 32.6819 | -114.6668 | 3926 W 25th PI, Yuma, AZ 85364, USA | None | None |
| G10 | Comments | The bike path within Barkley Ranch dead ends at the gravel (sometimes obstructed shoulder) on Ave D and at Mesquite Elementary School. Crane Middle School has a bike path going into Barkley Ranch on the N. side of 32nd St. The pathway across from the middle school (on the S. side of 32nd St.) dead ends at Ave. C. <br> The result is an island of families bounded by 24 th St., 32nd St., Ave. C and Ave. D. with no connection to existing paths or sidewalks to go to the park or to Cibola HS. | 32.67972 | -114.667229 | 3963 W 26th St, Yuma, AZ 85364, USA | Yuma | Barkley Ranch Neighborhood |
| G11 | Comments | As per article in Sun I tried the website to give input regarding safety concerns. I was not successful in navigating the site menu. <br> I would like to give you my concerns regarding pedestrian and bicycle safety plans. <br> West of Ave. C there is a void in safe connectivity to COY Valley Park E of Ave C. and the families living W of Ave. C. There is only a loose gravel shoulder connecting Park West, Barkley Ranch, Barkley Estates, La Quinta, and Falls Ranch developments to 24th St. The bike path | 32.67935 | -114.66783 | 2648 S 39th Dr, Yuma, AZ 85364, USA | Yuma | Avenue C at Valley Park |
| G12 | Comments | Needs a traffic light here or some kind of light for school kids that cross here | 32.69482 | -114.667241 | 3993 W 18th St, Yuma, AZ 85364, USA | Yuma | Avenue C \& 18th Street |
| W01 | Walking | No crosswalk for kids to cross for school. | 32.6553 | -114.53805 | 5511 E 39th Ln, Yuma, AZ 85365, USA | East Yuma | County 12 th St \& Ave $51 / 2 \mathrm{E}$ |
| w02 | Walking | No side walk to walk to school, no cross walk for kids to cross at. | 32.65078 | -114.538121 | 4262 1/2 S Ave $51 / 2 \mathrm{E}$, Yuma, AZ 85365, USA | East Yuma | Avenue $51 / 2 \mathrm{E}$ north of County $121 / 2$ street |
| W03 | Walking | It is so dark at this intersection which is right next to the park. I worry all the time that someone will step out in front of me | 32.69121 | -114.67584 | 4462 W 20th PI, Yuma, AZ 85364, USA | Yuma | 20th Street \& 45th Ave |
| W04 | Walking | Many dog-owners donấ ${ }^{\text {mTt }}$ keep their dogs on leashes in this area. Makes it unnerving to walk around this area, let alone v | 32.67876 | -114.420891 | 10431 S Del Montes, Yuma, AZ 85367, USA | East Yuma | Del Montes \& Via Estrella |
| w05 | Walking | Students nearly get hit in this intersection every school day in the morning and afternoon. This intersection is in desperate r | 32.68455 | -114.50869 | 24th Street @ College Avenue, Yuma, AZ 853 | East Yuma | 24th Street \& College Ave |
| W06 | Walking | You have to step off of the sidewalk and walk across gravel to access the button to activate the walk signal. Not everyone is | 32.67687 | -114.650088 | 2502 W 28th St, Yuma, AZ 85364, USA | Yuma | Avenue $b$ \& 28th St |
| W07 | Walking | The speed limit at this location is 35 mph . Unfortunately a lot of drivers do not respect this speed limit and even more unfor | 32.49418 | -114.756532 | Juan Sanchez Boulevard @ 9th Avenue, Arizo | San Luis | Juan Sanchez Blvd \& 9th Ave |
| w08 | Walking | The whole of 12th street between Ave C and D is very dangerous for pedestrians and bike riders as it is a very busy street. | 32.70538 | -114.673855 | 4384 W 12th Pl, Yuma, AZ 85364, USA | Yuma | 12th Street between Avenue C \& D |
| W09 | Walking | People crossing in the middle of the street and no pedestrian crossing | 32.48791 | -114.782324 | 766 Main St, San Luis, AZ 85349, USA | San Luis | Main St North of Urtuzuastegui St |
| W10 | Walking | People crossing the road in the middle of a street | 32.48908 | -114.781154 | 623 William Brooks Ave, San Luis, AZ 85349, I | ISan Luis | William Brooks Ave north of B Street |
| W11 | Walking | People crossing without looking | 32.48697 | -114.781122 | 722 Urtuzuastegui St, San Luis, AZ 85349, US/ | San Luis | Urtuzuastegui St \& William Brooks Ave |
| W12 | Walking | People just cross with out looking if cars are coming | 32.48698 | -114.78124 | 722 Urtuzuastegui St, San Luis, AZ 85349, US/ | San Luis | Urtuzuastegui St \& William Brooks Ave |
| W13 | Walking | People cross the streets from not using the pedestrian walkways | 32.48705 | -114.782313 | 503 Main St, San Luis, AZ 85349, USA | San Luis | Urtuzuastegui St \& Main St |
| W14 | Walking | There is no supervision for these kids crossing the street. Just because its high school age does make them safe walkers. Ma | 32.67617 | -114.633113 | Avenue A Across 28th Street, Yuma, AZ 85364 | Yuma | Avenue A \& 28th St |
| W15 | Walking | On 32nd st, roughly from Walmart to the Airport, there are few safe areas to walk or bike without having to do it in the dest | 32.67003 | -114.510992 | 7201 E 32nd St, Yuma, AZ 85365, USA | East Yuma | 32nd Street from Walmart to Airport |
| W16 | Walking | There are several schools in this area and there is not school speed zones on 16th St. and Avenue C where these schools are | 32.6966 | -114.667089 | 3990 W 17th PI, Yuma, AZ 85364, USA | Yuma | Near Desert View Academy |
| W17 | Walking | Lots of people take the bus and walk to the Yuma Community Food Bank and they cross the busy 24th street. We need a crosswalk from the bus stations south to north on 24th at. <br> The students at Yuma Lutheran volunteer at the food Bank and cross the busy street twice a week. Very dangerous. | 32.68416 | -114.597031 | 24th Street - Across Melody Lane, Arizona 85 | Yuma | 24th Street \& Melody Lane |
| W18 | Walking | Sidewalk disappears on one side of the road. | 32.68868 | -114.615877 | 2155 S Arizona Ave, Yuma, AZ 85364, USA | Yuma | Arizona Ave north of 22nd St |
| W19 | Walking | Would love to see a pedestrian stoplight across Ave C here. Eventually, someone is going to get hurt during the after-school | 32.69471 | -114.66761 | Avenue C @ 18th Street, Yuma, AZ 85364, US | Yuma | Avenue C \& 18th Street |
| W20 | Walking | In the last few weeks I have noticed a very large increase in pedestrians attempting to jaywalk across 4th avenue, dodging ti | 32.68483 | -114.62461 | 2361 S 4th Ave, Yuma, AZ 85364, USA | Yuma | 4th Avenue north of 24th St |
| W21 | Walking | There is a brand new crosswalk at the bottom of the hill on 6E just north of the canal - when travelling north on the hill, spe | 32.6461 | -114.529728 | 4474 S Jasmine Ave, Yuma, AZ 85365, USA | East Yuma | 6 E north of canal (near dorothy hall school) |
| W22 | Walking | People don't pay any attention at all to the pedestrian walk signals. As soon as the traffic signal turns green they usually got | 32.6839 | -114.633255 | 1216 S Avenue A, Yuma, AZ 85364, USA | Yuma | Avenue A \& 24th St |
| W23 | Walking | We need a cross walk for the high school kids. la $\epsilon^{\text {mmv }}$ ve seen several times children almost getting hit by cars. | 32.68467 | -114.50854 | 24th Street @ College Avenue, Yuma, AZ 853 | East Yuma | 24th Street \& College Ave |
| W24 | Walking | Lack of sidewalks within Rosewood (entire neighborhood) is causing people to walk, ride and even use motorized chairs in t | 32.6811 | -114.629266 | 820 W Rosewood Dr, Yuma, AZ 85364, USA | Yuma | Rosewood Dr \& 8th Ave (entire neighborhood) |
| W25 | Walking | Agree that Avenida Compadres needs speed control (perhaps increased police presence) \& wider shoulder area, but should | 32.67413 | -114.457026 | 10302 E 30th St, Yuma, AZ 85365, USA | Fortuna For | Avienda Compadres north of l-8 |


| No. | Type of Comment | Comment | Latitude | Longitude | Route | Area | Location |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | avenida compadres needs safety pedestrian/bike four foot safety corridor along east side to accommodate los amigos residents traveling back and forth to clubhouse/pool/etc. |  |  |  |  |  |
| W26 | Walking | Also need 25MPM compatible speed bumps/dips to control speeders, a real safety issue! | 32.67338 | -114.457197 | 13138 E 51st PI, Yuma, AZ 85367, USA | Fortuna Fo. Avienda Compadres north of 1-8 |  |
| W27 | Walking | There is limited shoulder or pedestrian and bike path from 24th street (park west to Livingston ranch. | 32.69541 | -114.665282 | 3786 W 18th St, Yuma, AZ 85364, USA | Yuma | 38th Ave \& 18th St? |
| W28 | Walking | sidewalks are needed for pedestrian safety. | 32.66656 | -114.452734 | 10501 E 34th St, Yuma, AZ 85365, USA | Fortun | Payson Dr South of 18 |
| W29 | Walking | No sidewalks/shoulders make this road dangerous for walking or bicycling. | 32.67019 | -114.468495 | 9515 E 32nd St, Yuma, AZ 85365, USA | Fortun | County 11th St in Fortuna Foothills |

## Appendix B

YMPO Bicycle and Pedestrian Design Guidelines, 2019

## 2019

## Bicycle and Pedestrian Design Guidelines



LOCAL GOVIRNMENTS aCITEZINS WORxiNG: TOGETHLR
-1) Treenlight

Yuma Metropolitan Planning Organization November 2019

By: Greenlight Traffic Engineering

## 1. General

### 1.1. Purpose

The purpose of this document is to provide a set of uniform standards for designing bicycle and pedestrian facilities in the greater Yuma region. These standards are intended to promote safety, efficiency, accessibility and comfort for the intended users of the facilities, and to create consistency in the design and application of bicycle and pedestrian facilities across the region.

The design guidelines outlined in the subsequent sections are intended to supplement, but not replace, the professional judgement of the engineer or planner. While every effort was made to outline all possible roadway geometries and applications, the potential for a unique situation is always present and may require deviations from the practices outlined here. In these cases, engineering judgement and collaboration between designers and local agency representatives should be used to determine the most optimal design solution.

### 1.2. Resources

The following resources were consulted in developing these design guidelines.

- AASHTO Guide for the Development of Bicycle Facilities, Fourth Edition
- NACTO Urban Bikeway Design Guide, Second Edition
- FHWA Small Town and Rural Multimodal Networks, December 2016


## 2. Classifications

The following classifications for land and roadway are important characteristics to know when designing for bicycle and pedestrian facilifies. These classifications will help determine which facility type is most appropriate for a specific application.

### 2.1. Urban vs. Rural

The United States Census Bureau provides the standard delineation between urban and rural areas. The Census Bureau identifies urban areas as those with a population of 50,000 more, and urban clusters as a population of at least 2,500 and less than 50,000 people.

Rural areas include all residences, commercial zones and uninhabited land that do not qualify as an urban area or urban cluster (i.e. - areas having a population of less than 2,500 ).

The roadway networks and travel patterns are vastly different between urban and rural settings. The characteristics of rural areas can vary greatly across different regions, however, there are some common trends that can typically be observed in rural areas:

- Long Travel Distance: The distances between points of interest tend to be much greater in rural areas than urban.
- Income Disparity: Urban households are shown to earn over 30 percent more annually than rural households.
- Chronic Health Concerns: Rural areas tend to have lower rates of physical activity and higher rates of chronic disease.
- Crash Severity: Crashes that occur on rural roadways tend to be at higher speeds and are more likely to result in injury or death.


### 2.2. Roadways

Roadway functional classification is a system used to identify a type of roadway based on the service that it provides to its motorized users. Functional classification assigns a hierarchy to the roads in a region's network and is used for planning and design, as design standards are often designated by functional classification.

Table 1 shows functional classifications of some typical roadway systems seen across the Yuma region. The table also provides some general characteristics that can be used to determine the functional classification of a roadway, and to see how the functional classifications relate to one another.

## Table 1: Typical Functional Classifications and Characteristics

| Functional Classification | Speed (mph) ${ }^{1}$ | Volumes | Number of Lanes | Access Points |
| :--- | :---: | :---: | :---: | :---: |
| Interstate/Freeway | $55-75$ | High | High | High |
| Arterial/Highway | $40-60$ |  | $\downarrow$ | $\downarrow$ |
| Collector | $35-55$ |  | $\downarrow$ | $\downarrow$ |
| Local | $20-45$ | Low | Low | Low |

1. FHWA Road Function Classifications, November 2000

As seen in the table, the roadway types tend to vary from high volume, high speed (Interstates) to low volume, low speed (local roads). In general, as the volumes, speeds and number of lanes decreases, the access of that roadway tends to increase. The primary purpose of interstates, for example, is to provide connectivity between regions, cities and states. These types of roadways are not typically designed for multi-modal travel and do not facilitate easy access to adjacent land uses. In contrast, local roads are established to provide direct access to adjacent land uses, but their low speeds and number of lanes do not promote efficient motorized travel across long distances.

## 3. Design Guidelines

The recommended bicycle and pedestrian facilities for the Yuma region are outlined in the section below. The facilities are broken down by user type and the recommended application of each facility is called out for each.


## BICYCLE FACILITIES

BIKE LANES
BIKE BOULEVARD
PAVED SHOULDERS
CYCLE TRACKS

## BIKE LANES

Bicycle lanes are dedicated facilities intended for preferential use by bicyclists. They are a dedicated portion of a roadway, typically found adjacent to the outside lanes of the roadway. These facilities are used to carry bicycle traffic in the same direction as the vehicular traffic in adjacent lanes.

Bicycle lanes promote safety as they put the bicyclist in a position where they are most likely to be seen by vehicles entering or exiting a roadway.

Bicycle lanes are typically installed on two-way streets and are delineated by pavement markings. Bicycle lanes can be supplemented with identifying or wayfinding signage.


## RECOMMENDED APPLICATION

Roadways
Area
Arterial $\boxtimes$
Urban $\boxtimes$
Collector 区
Rural $\boxtimes$

## BEST PRACTICE

Bicycle lanes are most effective when applied in urban areas or in rural areas with high potential for bicycle traffic. They can be used on roadways with or without street parking where the pavement is in good condition (typically free of cracks, debris, standing water or other obstructions).

## CHALLENGES

- Bicycle lanes require more maintenance than paved shoulders or other low impact facilities. Users expect that bicycle lanes will be in good repair and free of debris and obstructions.
- Bicycle lanes require continuous segments of uninterrupted facilities. It may be difficult in some areas, especially urban areas where the roadways may be narrower, to maintain the minimum recommended width for the duration of the entire bicycle lane. Consider a road diet to accommodate necessary bike lane widths.


## DESIGN CONSIDERATIONS

Width

Measured from center of lane line to edge of pavement.
4 ft minimum, 6 ft preferred.
Increase bicycle lane width on high volume,
high speed roadways or roadways with on-
street parking.
Optional
MUTCD R3-17 (Bike Lane) signage with "Ahead" or "Ends" plaque can be used to show the beginning or end of the bicycle lane.
R3-17 sign can be placed at specified intervals along the bike lane based on engineering judgement.
R7-9 (No Parking Bike Lane) signs can be installed in urban centers where vehicles may tend to park or stop in the bicycle lane.


R3-17


R3-17bP


Physical Separation


Other

Required
A solid white line should delineate the bicycle lane from the adjacent travel lane. A dashed white line can be used at driveway, turn-lane or bus-bay openings.
Place bicycle marking symbols at the beginning of bicycle lanes, after intersections and driveways and prior to crosswalks.

## Optional

Can use bollards, flexible delineators, medians or other physical barriers to separate the bicycle lane from the adjacent travel lane. Can use white paint to create a "buffer zone" between bicycles and vehicles, in place of a physical buffer.

Do not use raised pavement markers or rumble strips within bicycle lanes.


A- Bike Symbol



## BIKE BOULEVARD

Bicycle boulevards are low-volume, low-speed roadways that have been adapted through signing, pavement marking and, in some cases, road diets to accommodate bicycle traffic. These are shared roadway facilities that allow bicycles and vehicles to utilize the same travel space.

These facilities are beneficial in urban areas where the connections between points of interest or other bicycle facilities are not substantial (less than approximately 5 miles). Bicycle boulevards are intended to provide comfortable and safe travel to bicyclists and to connect points of interest.


FHWA Small Town and Rural Multimodal Networks, December 2016


RECOMMENDED APPLICATION

| Roadways | Arterial $\square$ | Collector $\boxtimes$ | Rural $\square$ |
| :--- | :--- | :--- | :--- |
| Lrea | Urban $\boxtimes$ |  |  |

## BEST PRACTICE

Bike boulevards are most helpful on low volume, low speed roads with heavy bicycle traffic. Bike boulevards establish a mixed-use facility designed to give priority to bicycle traffic. These facilities can also be less visually and physically interrupting than bike lanes or other separated facilities in areas where aesthetics is a concern. Bicycle boulevards are best implemented as connections between neighborhoods, urban centers or points of interest.

## CHALLENGES

- Wrong-way riding can cause additional safety concerns in areas where bicycles and vehicles are sharing the travel lane.
- May not be as safe or effective in areas with low lighting.


## DESIGN CONSIDERATIONS

| Width |
| :--- |
| Signage |
|  |
|  |
|  |

Measured from center of lane line to edge of pavement, or from edge of pavement to edge of pavement.

## 12 ft minimum

Optional
Best when paired with bicycle wayfinding signage (MUTCD D11 series). These signs assist with bicycle wayfinding and help alert drivers to the presence of the bicycle boulevard. May also include turn signage (MUTCD DI or D11 series)

(W) Stadium

MUTCD Dו-IC

MUTCD D11-1c
Pavement Marking

Required
Place bicycle boulevard shared lane dentifying markings ("Sharrows") at the beginning and along specified intervals of the bicycle boulevard. Markings should be large enough to be visible by all users.

Not recommended
Physical separation prohibits roadway users from safely and easily passing one another.

Other


Physical Separation

## PAVED SHOULDERS

Paved shoulders are an extension of a paved roadway that allow for additional space on the outside of vehicle travel lanes. This additional pavement can extend the service life of the pavement by reducing edge deterioration. In addition, this space can be utilized by bicyclists, specifically on high-speed roads where other bicycle facilities are not present.

These facilities are beneficial in rural areas where higher cost and higher maintenance facilities may not be practical. Paved shoulders are intended to provide comfortable and safe travel to bicyclists while still allowing functional space for disabled vehicles.


FHWA Small Town and Rural Multimodal Networks, December 2016


## RECOMMENDED APPLICATION

| Roadways | Arterial $\boxtimes$ | Collector $\square$ | Rural $\boxtimes$ |
| :--- | :--- | :--- | :--- |
| Lrea | Urban $\square$ | $\square$ |  |

## BEST PRACTICE

Paved shoulders are most beneficial on high volume and/or high-speed roads with moderate to heavy bicycle traffic. Paved shoulders allow bicyclists to use the space while still providing a location for disabled vehicles to pull off in case of an emergency or break-down. Paved shoulders are a relatively low-cost option to add bicycle facilities when installing dedicated bicycle lanes or other practices is not feasible or practical. In areas where bicycles are already riding on the roadway, paved shoulders can help reduce incidents where bicycles are struck from behind by a motor vehicle.

## CHALLENGES

- Requires a wide roadway.
- Shoulder rumble strips can interfere with the performance of the paved shoulder as a bicycle travel lane.


## DESIGN CONSIDERATIONS

Width
Signage

Measured from center of edge line to edge of pavement.
4 ft minimum
5 ft minimum where roadside barrier (guardrail,
curb, etc.) is present
Recommend increased shoulder width on high
bicycle volume or high-speed roads.
Optional
Can use Bicycle Route Signage (MUTCD DI 1
Series signs)


Physical Separation

Required
8-inch white line separating vehicle travel lanes and paved shoulder.
Can use pavement marking to create a buffer between vehicle lanes and shoulder. Buffer width should be between 18 inches and 4 feet.


## None

Physical separation is prohibited. Paved shoulders are not intended for the exclusive use of bicycles.

Rumble strips are not recommended unless there is at least 4 ft of available clear space from the rumble strip to the outside pavement edge. If rumble strips are applied, 12 ft long entrance/exit gaps should be provided every 40-60 ft.
Can consider contrasting pavement colors on shoulder to further delineate from vehicle travel lanes and prevent vehicle encroachment.


## CYCLE TRACK

Cycle tracks are dedicated facilities intended for preferential use by bicyclists. They are a dedicated portion of a roadway, typically found adjacent to the outside lanes of the roadway, that are physically separated from the roadway travel lanes through bollards, curbs, or other methods.

These facilities are used to carry bicycle traffic in the same direction as the vehicular traffic in adjacent lanes. Cycle tracks can be one-way on either side of a roadway, or two-way and installed on one side of a roadway.

Cycle tracks are typically installed on two-way streets and are delineated by pavement markings and vertical barriers. Cycle tracks can be supplemented with identifying or wayfinding signage.


NACTO Urban Bikeway Design Guide, Second Edition


## RECOMMENDED APPLICATION

| Roadways |
| :--- |
| Area |

Arterial $\boxtimes$
Urban $\boxtimes$

Collector $\boxtimes$
Local $\square$
Rural $\square$

## BEST PRACTICE

Cycle tracks are most effective in locations where a bicycle lane would be installed, but additional physical separation of the bicyclists from adjacent vehicles is recommended for rider comfort and safety. Cycle tracks are most effective when applied in urban areas with high potential for bicycle traffic. They can be used on roadways with or without street parking where the pavement is in good condition (typically free of cracks, debris, standing water or other obstructions).

## CHALLENGES

- Maintenance may be more difficult. The type of barrier separating the cycle track from the vehicle travel lane may restrict certain maintenance vehicles (street sweepers) from entering.
- Cycle tracks have a tendency to collect leaves and other debris so they may require more maintenance than other bicycle facilities.
- Cycle tracks require additional right-of-way which may be limited in certain urban areas.


## DESIGN CONSIDERATIONS

Width

Measured from outside edge of physical barrier to edge of pavement.
One-way cycle track - 6.5 ft typical, 5 ft at
pinch points and intersection approaches as needed
Two-way cycle track - $12 \mathrm{ft} \mathrm{typ} ., 8.5 \mathrm{ft}$ at pinch points and intersection approaches as needed Physical Barrier width - 3 ft typ.

## Optional

"Bike Lane" sign (MUTCD R3-17) may be used to designate the portion of the street for referential use by bicyclists.
A supplemental "No Cars" (MUTCD R5-3) selective exclusion sign may be added for further clarification.


MUTCD R3-17

## NO MOTOR VEHICLES

MUTCD R5-3

| Pavement Marking | Required (Optional when used in conjunction <br> with curb) <br> Solid white line striping width shall be a <br> minimum of 6 inches adjacent to motor vehicle <br> travel lanes. <br> Dotted lines should be 2-foot lines with 2 to 6 <br> foot spacing. 14 to 20-inch square "Elephant's <br> Feet" markings may be used as an alternative <br> to dotted line extensions to offer increased <br> visibility. <br> Bicycle lane word, symbol, and/or arrow <br> markings (MUTCD Figure 9C-3) shall be placed <br> at the beginning of a cycle track and at <br> periodic intervals along the facility based on <br> engineering <br> judgment. <br> Colored paint/pavement may be used to <br> further define the bicycle space. |
| :--- | :--- |
| Required <br> Physical separation can be achieved through <br> curbs, parking lanes, planters, bollards, raised <br> medians, etc. <br> Cycle tracks can also be raised above the <br> pavement. <br> If curb is used to separate the cycle track from <br> the vehicle travel lanes, it can be a mountable <br> curb. |  |



## PEDESTRIAN FACILITIES

SIDEWALKS
CROSSWALKS
SIDEPATH
PEDESTRIAN HYBRID BEACON (HAWKS)

## SIDEWALKS

Sidewalks are dedicated facilities primarily intended for preferential use by pedestrians. They are a dedicated area within public right-of-way that is separated from the roadway vehicles. These facilities are used to improve the mobility and accessibility of pedestrians to any destination roadway users may choose to walk.

Sidewalks dramatically increase the safety of pedestrians as it provides them a safe offset from the roadway from which they have should access to their destination.

Sidewalks are typically installed along both sides of all urban roads, however they are applicable along many rural roadways as well. Regardless of location, a sidewalk must provide ample separation from the roadway.


FHWA Small Town and Rural Multimodal Networks, December 2016


RECOMMENDED APPLICATION

| Roadways | Arterial $\boxtimes$ | Collector $\boxtimes$ | Rural $\boxtimes$ |
| :--- | :--- | :--- | :--- |
| Area | Urban $\boxtimes$ |  | Local $\boxtimes$ |

## BEST PRACTICE

Sidewalks must be considered in all urban areas regardless of roadway classification. In rural areas, they are recommended at any location with high potential for pedestrian traffic, especially when connecting points of interest such as neighborhoods and shopping centers. They must have a minimum clearance from the roadway and providing a buffer area between the road and sidewalk is always encouraged to ensure pedestrian safety.

## CHALLENGES

- Sidewalks, especially those in areas with extreme weather conditions, require maintenance in order to ensure that the walkway is free from hazards such as significant cracking and sand, such that it is traversable for all facility users.


## DESIGN CONSIDERATIONS




## CROSSWALKS

Crosswalks are facilities primarily intended for pedestrians typically composed of pavement markings and supplemental signage which indicate where pedestrians and bicyclists can cross the road. Crosswalks can be placed at locations which delineate the preferred pedestrian path across the roadway, as determined by an engineering study.

Crosswalks promote safety as they give motorists clear visual cues to where pedestrians should be expected to cross their path.

Crosswalks can be supplemented with identifying or wayfinding signage.


Standard Continental


Zebra
Ladder

safety.fhwa.dot.gov


## RECOMMENDED APPLICATION

Roadways
Area

Arterial $\boxtimes$
Urban $\boxtimes$

Collector $\boxtimes$
Rural $\boxtimes$

## BEST PRACTICE

Crosswalks may be employed in either urban areas or rural areas at locations where a preferred pedestrian path is to be delineated. These locations include at signalized intersections or stop signs, non-signalized street crossings in designated school zones, and at non-signalized locations at which engineering judgement deems a crosswalk desirable based upon pedestrian exposure, roadway geometry, and traffic volumes.

## CHALLENGES

- Crosswalks are exposed to traffic daily and as such can become worn, making them less visible to drivers over time. This should be combated through maintenance when markings begin to fade. When possible, crosswalk marking spacing should be designed such that it avoids the typical wheel path, reducing the wear on the markings and extending their life.


## DESIGN CONSIDERATIONS

Width

Measured from edge to edge of a single stripe.
Individual crosswalk markings have a 6 in minimum, 24 in maximum.
When employed on both sides of a crossing, markings should extend across the full width of pavement or to the edge of an intersecting crosswalk.
The width of the crossing must be at least 6 ft .

Figure 3B-19. Examples of Crosswalk Markings



## Pavement Marking

Physical Separation

## Other

Optional
ADOT R1-6AZ or R1-6aAZ (In-Street Pedestrian Crossing) signage can be added to bring further attention to the crosswalk and increase pedestrian safety.
MUTCD R9-2 (Cross only at crosswalk) sign can be placed in order to encourage pedestrians to utilize crosswalk.
If at a signalized intersection, additional signage for pedestrian head indications can be included such as ADOT R10-2 (Cross only on walk signal) or R10-4 (Pedestrian traffic signal). In a school zone, MUTCD S1-1 signage should be used in order to increase pedestrian safety and driver awareness to school zone crosswalks in the area.
At all other locations MUTCD W11-2 is recommended to increase driver awareness if supplemented with an MUTCD R1-5 series sign.

## Required

Crosswalks shall consist of solid white lines unless in a school zone where markings shall be yellow.
Standard crosswalks are composed of two parallel lines.
High visibility crosswalks can be employed in place of standard crosswalks in styles such as the ladder, continental, or zebra. In place of traditional white paint, high visibility crosswalks will use high visibility paint or epoxy embedded with reflective beads.


## None

Raised crosswalks can also be considered as a traffic calming measure. They allow pedestrians to cross without a grade change, elevate pedestrians for increased visibility and slow motorists.

## SIDEPATH

Sidepaths are facilities which are intended for the shared use between pedestrians and bicyclists. It is a facility that is physically separated from the roadway and can be further separated using median barriers or rumble strips.

Sidepaths are most beneficial along high-speed arterials which connect major points of interest within a roadway network. These paths provide an increased level of safety and accessibility to both pedestrians and bicyclists when compared to methods such as paved shoulders due to the physical separation from the roadway.

At points where sidepaths intersect a roadway there are many methods to employ in order to increase safety and visibility of the vulnerable roadway users. These include high visibility crosswalks, intersection geometry which encourages slower vehicular travel, and clear signage to alert drivers of an approaching pedestrian or bicycle crossing.


FHWA Small Town and Rural Multimodal Networks, December 2016


FHWA Small Town and Rural Multimodal Networks, December 2016

## Roadways

Area

Arterial 区
Urban

Collector $\boxtimes$
Rural $\boxtimes$

## BEST PRACTICE

Sidepaths are most commonly employed along rural high-speed, high-volume corridors. At these locations, a sidepath may be the preferred facility over paved shoulders due to the increase in comfort, safety, and accessibility for all vulnerable roadway users. Design details should be made using engineering judgment based on adjacent roadway speeds and volumes, desired user comfort and available right-of-way.

## CHALLENGES

- Sidepaths require significant land use in order to achieve ample separation and pathway area outside of the adjacent roadway.
- As sidepaths are typically located in rural areas, there may be significant vegetation that can lead to path blockage if not properly maintained.


## DESIGN CONSIDERATIONS

Width

Measured from edge to edge of pathway. Path must be 8 ft minimum, 10 ft is preferred.
Path separation from roadway varies based on speed and configuration of adjacent roadway. Minimum separation is $5 \mathrm{ft}, 6.5 \mathrm{ft}$ is preferred.
Optional
MUTCD R1-5 series (Pedestrian traffic) should be employed if a side paths intersect a roadway in order to ensure awareness and safety. MUTCD W11-2 and W11-15 signage should be included to increase driver awareness.
If wayfinding signage is included for sidepath users, it must be placed such that it is not interpreted as guidance for roadway travel lanes.


R1-5


R1-5a


R1-5b


R1-5c



W11-15
Pavement Marking

Optional
If there is significant bi-directional traffic, consider a dashed yellow centerline.
If significant evening use is expected, consider edge line markings to increase visibility for path users.


## Physical Separation

Required
At least 5 ft of physical separation is required from the roadway.
If the 5 ft minimum cannot be met it can be accommodated using a physical barrier between the sidepath and the roadway.


## PEDESTRIAN HYBRID BEACON (HAWK)

Pedestrian hybrid beacons, also commonly known as a High intensity Activated crosswalk or HAWK, is a traffic control device designed primarily for the use of pedestrians but extends to bicyclists as well. HAWKs are employed to supplement the use of crosswalks to further increase the level of safety provided to pedestrians and bicyclists.

HAWKs are most commonly employed at unsignalized locations in order to assist pedestrians in crossing a street or highway at a desired location. The HAWK is not a stand-alone facility and should never be employed without the use of high-visibility crosswalk markings as well as specific signage in order to ensure driver attention.

Use of the HAWK has proven extremely successful in reducing pedestrian and total crashes as well as crash severity upon implementation.

fhwa.dot.gov



## RECOMMENDED APPLICATION

Roadways
Area
Arterial $\boxtimes$
Urban $\boxtimes$

| Collector $\boxtimes$ | Local $\square$ |
| :--- | :--- |
| Rural $\square$ |  |

## BEST PRACTICE

Pedestrian hybrid beacons should be considered to facilitate pedestrian crossings at locations which a traffic signal is not warranted or undesirable. The use of pedestrian hybrid beacons should always be accompanied by high-visibility crosswalks and appropriate signage where pedestrians are intended to enter or cross a street or highway.

## CHALLENGES

- Pedestrian hybrid beacons require significant sight distance for both drivers and pedestrians and as such determination of a location which affords the required amount of clear space can be difficult.
- Placement of pedestrian hybrid beacons can also be an issue due to the proximity of driveways or side streets and as such determining the proper location can prove to be a challenge.


## DESIGN CONSIDERATIONS

Width

MUTCD refers to the distance between the two parallel crosswalk lines at a pedestrian hybrid beacon as crosswalk length, not crosswalk width.
Crosswalk length at a HAWK varies based upon the speeds, traffic volumes and pedestrian crossings along the roadway. This can be determined using tables and figures located in the MUTCD.
Minimum crosswalk length is 34 ft , maximum length is 100 ft .

Figure 4F-1. Guidelines for the Installation of Pedestrian


Figure 4F-2. Guidelines for the Installation of Pedestrian Hybrid Beacons on High-Speed Roadways


| Signage |
| :--- |
| Pavement Marking |
| Physical |
| Separation |
| Other |

Required
ADOT R10-23AZ (Crosswalk stop on red) sign must be mounted adjacent to a pedestrian hybrid beacon face on each major street approach.
MUTCD W11-2 (Pedestrian warning) sign may be placed in order to supplement the pedestrian crossing. This sign may also be supplemented by a warning beacon in order to increase driver attention.
MUTCD R10-6 (Stop here on red) signs may also be installed in order to further guide drivers.
Required
Crosswalk markings at HAWKs should adhere to the standards for high visibility markings.
Advanced stop lines should be used on multi-lane crossings at which HAWKs are employed.
Pedestrian hybrid beacons must be placed at least 100 feet away from side streets or driveways that are controlled by stop or yield signs.
On-street parking or other sight obstructions must be prohibited for at least 100 feet in advance and 20 feet beyond the marked crossing in order to ensure sight visibility.
Pedestrian hybrid beacons have a set flashing pattern which shall be adhered to per MUTCD standards.
If a pedestrian hybrid beacon is installed within a signal system, it should be coordinated.

| CROSSWALK |
| :---: |
| STOP |
| ON RED |

R10-23AZ


R10-6


R10-6a


1. Dark Until Activated
 Upon Activation

2. Steady Yellow

3. Steady Red During Pedestrian Walk Interval

Legend SY Steady yellow FY Flashing yellow SR Steady red FR Flashing red

## Appendix C

Elementary School Location Recommendations

YUMA ELEMENTARY SCHOOL DISTRICT


## ALICE BYRNE ELEMENTARY SCHOOL



## Improvements:

1. High visibility actuated pedestrian crossing on $16^{\text {th }}$ Street between $8^{\text {th }}$ Avenue and $9^{\text {th }}$ Avenue; and on Avenue $A$ at $17^{\text {th }}$ Street
2. High visibility crossing on $17^{\text {th }}$ Street at $9^{\text {th }}$ Avenue intersection
3. Install School Zone Ahead signs along $17^{\text {th }}$ St

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation

## C W MCGRAW ELEMENTARY SCHOOL



## Improvements:

1. High visibility pedestrian crossing on Arizona Avenue, south of $23^{\text {rd }}$ Street
2. Sidewalk along east side of Arizona Avenue from $21^{\text {st }}$ Street to $22^{\text {nd }}$ Street, \& along north side of $22^{\text {nd }}$ Street from Arizona Avenue to Serenity Yoga
3. Install Bike Route Signs along 23 ${ }^{\text {rd }}$ Street

## DESERT MESA ELEMENTARY SCHOOL



## Improvements:

1. High visibility pedestrian crossing on $24^{\text {th }}$ Street at College Avenue

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation

## GEORGE WASHINGTON CARVER ELEMENTARY SCHOOL



Note: Each proposed crosswalk needs further detailed evaluation prior to implementation

## Improvements:

1. High visibility pedestrian crossings on south and east legs of $5^{\text {th }}$ Street $/ 15^{\text {th }}$ Avenue, and north and south legs of Avenue $A / 5^{\text {th }}$ Street intersections
2. Enhancement to the existing crossing on $5^{\text {th }}$ Street at $13^{\text {th }}$ Avenue
3. Install Bike Route signage along $5^{\text {th }} \mathrm{St}$

## JAMES B ROLLE SCHOOL



## Improvements:

1. High visibility pedestrian crossings on Engler Avenue at $27^{\text {th }}$ Lane and at San Macros drive 2. Enhancement to existing crossing on Engler Avenue at 27th Street

Install Bike Route signs along Engler Avenue

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation

## JAMES D PRICE SCHOOL



## Improvements:

1. 

None

MARY A OTONDO ELEMENTARY SCHOOL


## Improvements

1. Sidewalk along eastside of Otondo Drive from the school north driveway to 560 feet west of Ridge Drive
2. Add ladder markings at the existing crosswalks at $24^{\text {th }}$ St and Otondo Drive
3. Installs "Slow Pedestrian Crossing" signs along Otondo Drive on both the north school driveway


## O C JOHNSON ELEMENTARY SCHOOL



## Improvements:

1. Enhancement to the existing pedestrian crossings on $12^{\text {th }}$ Street at $14^{\text {th }}$ Avenue and $12^{\text {th }}$ Avenue and on Avenue $A$ and $12^{\text {th }}$ St Install School Zone Ahead AND Bike Route signs along $12^{\text {th }}$ Street

## PALMCROFT ELEMENTARY SCHOOL



## Improvements:

1. Enhancement to existing pedestrian crossings on Palmcroft Drive in front of the school and at $8^{\text {th }}$ Avenue intersection; and on Holly Dr between Park Lane and $8^{\text {th }}$ Avenue.
2. Proposed high visibility crosswalk on Elm street near Holly Drive
3. Install sidewalk along Holly Drive, Elm Street, Fern Drive, and Solana Drive

4. High visibility pedestrian crossings at $21^{\text {st }} \mathrm{Ave} / 7^{\text {th }} \mathrm{St} ; 6^{\text {th }} \mathrm{St} / 24^{\text {th }}$ Ave; $5^{\text {th }} \mathrm{PI} / 24^{\text {th }}$ Ave; and $5^{\text {th }} \mathrm{St} / 24^{\text {th }}$ Ave
5. Enhancements to existing crossings on north leg of $8^{\text {th }}$ Street $/ 21^{\text {st }}$ Avenue intersection
6. High visibility actuated crossing on $8^{\text {th }}$ Street at $21^{\text {st }}$ Avenue
7. Install bike route signs on $21^{\text {st }}$ Avenue and $6^{\text {th }}$ Place; and school zone ahead warning sign at $8^{\text {th }}$ St and Almond Ave

ROOSEVELT ELEMENTARY SCHOOL


1. Proposed high visibility pedestrian crossings on 5th St/10th Ave; 6th St/6th Ave; and 7th St/6th Ave

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation 12
2. Enhancement of existing pedestrian crossing at $6^{\text {th }}$ Ave $/ 3 \mathrm{rd}$ St; 4 th St/5th Ave; $5^{\text {th }}$ St $/ 6^{\text {th }}$ Ave
3. Install Bike Route signs along $5^{\text {th }}$ Street

## SUNRISE ELEMENTARY SCHOOL



## WELLTON ELEMENTARY SCHOOL DISTRICT



## WELLTON ELEMENTARY SCHOOL



## Improvements:

1. Enhancement to the existing crosswalk on San Jose Ave and Williams Street
2. Install sidewalks along south side of Oakland Ave; both sides of Arizona Ave; both sides of Victor Ave; San Jose Ave (east of the school); and 15 both sides of Jessie St

## SOMERTON ELEMENTARY SCHOOL DISTRICT

K


Improvements:

1. Enhancements to the existing crossings at Highway 95 and Carlisle Avenue and Spring Street and Carlisle Avenue intersections


## ORANGE GROVE ELEMENTARY SCHOOL

## Improvements:

1. Sidewalk along

Avenue B $1 / 2$ (1/4 of a mile on both north and south directions); and County 16 ½ St
2. Proposed high visibility crosswalk on west and north legs of County $161 / 2$ St and Avenue B ½ intersection
3. Enhancement to the existing crosswalks on east and south leg of County $16 ½$ St and Avenue B ½ intersection

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


TIERRA DEL SOL ELEMENTARY \& SOMERTON MIDDLE SCHOOL

## Improvements:

1. Tierra Del Sol Elementary School - Enhancement to the existing crossings on Somerton Ave and Garvin St; and install high visibility crossing on Columbia Ave
2. Somerton Middle School - Add sidewalk along west side of Somerton Avenue between Palo Verde St and Sellers St


## VALLE DEL ENCANTO LEARNING CENTER

## Improvements:

1. Sidewalk along Avenue F from County $16^{\text {th }}$ St to Congress Ave
2. High visibility actuated crossing on Highway 95 (east of Avenue F)
3. High visibility crossing at east leg of Avenue $F$ and Spring Street intersection

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


* Dateland Elementary School (1300 Ave 64E, Dateland, AZ 85333)

CRVSTAL SAND

## DATELAND ELEMENTARY SCHOOL



MOHAWK VALLEY ELEMENTARY SCHOOL DISTRICT


MOHAWK VALLEY SCHOOL


## GADSDEN ELEMENTARY SCHOOL DISTRICT



## ARIZONA DESERT ELEMENTARY SCHOOL \& RIO COLORADO ELEMENTARY SCHOOL

## Improvements:

1. Sidewalks along west side of north William Brooks Avenue; Southside of school driveway (west of Main Street); and other necessary on-campus connections
2. High visibility crosswalk at Driveway; on campus; Williams Brooks Ave and Union St intersection; and Union Street/ $4^{\text {th }}$ Avenue
3. High visibility actuated crosswalk at Main Street/School

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## CESAR CHAVEZ ELEMENTARY SCHOOL

## Improvements:

1. High visibility crosswalk at Lopez Street (west of $10^{\text {th }}$ Avenue); $9^{\text {th }}$ Street ( north of Lopez Street); Stephen Street ( west of $10^{\text {th }}$ Street); Black Street ( east of Cabello Avenue); and Mendez Street ( east of Cabello Avenue)
2. Enhancement to the existing crosswalk at Cesar Chavez Blvd and $10^{\text {th }}$ Ave

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## DESERT VIEW ELEMENTARY SCHOOL

## Improvements:

1. High visibility crosswalk at Torres Street (west of $10^{\text {th }}$ Avenue); and Krystal Street (West of $10^{\text {th }}$ Avenue)

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## Improvements:

1. High visibility crossing on $5^{\text {th }}$ Street, $5^{\text {th }}$ Drive, and Guerrero Ave; 6 ${ }^{\text {th }}$ Drive (north of Juan Sanchez Blvd)
2. Enhancement to the existing crosswalk at $6^{\text {th }}$ Ave, and Juan Sanchez Blvd (east of $6{ }^{\text {th }}$ Avenue)

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## CRANE ELEMENTARY SCHOOL DISTRICT

* Gary A. Knox Elementary School
(2926 South 21st Drive, Yuma, AZ 85364)
* Gowan Science Academy/ H.L. Suverkrup Elementary School (1590 South Avenue C, Yuma, AZ 85364)
* Mesquite Elementary School
(4451 West 28th Street, Yuma, AZ 85364)
* Pueblo Elementary School
(2803 West 20th Street, Yuma, AZ 85364)
- Rancho Viejo Elementary School
(1020 South Avenue C, Yuma, AZ 85364)
* Ronald Reagan Elementary School (3200 West 16th Street, Yuma, AZ 85364)
* Salida del Sol Elementary School/Great Beginnings)
(910 South Avenue C, Yuma, AZ 85364)
* Valley Horizon Elementary School (4501 West 20th Street, Yuma, AZ 85364)



## GARY A. KNOX ELEMENTARY SCHOOL

## Improvements:

1. High visibility crosswalk at $21^{\text {st }}$ Drive (at the school driveway);
2. Enhancement to the existing crosswalk on $28^{\text {th }}$ St (west of $21^{\text {st }}$ Drive)

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


GOWAN SCIENCE ACADEMY \& H.L. SUVERKRUP ELEMENTARY SCHOOL

## Improvements:

1. High visibility crossings on $15^{\text {th }}$ Street and $14^{\text {th }}$ Street ( west of Avenue C)
2. Enhancement to the existing crossings at Avenue C and $16^{\text {th }}$ St
3. Proposed school zone flashing beacons on both $16^{\text {th }}$ st and Avenue C

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## MESQUITE ELEMENTARY SCHOOL



## PUEBLO ELEMENTARY SCHOOL

## mprovements:

1. High visibility crossings on $20^{\text {th }}$ Street at the school driveways; on $29^{\text {th }}$ Avenue and $27^{\text {th }}$ Avenue (south of 20th Street); and Athens Avenue (north of $20^{\text {th }}$ Street)
2. School zone flashing beacon on $20^{\text {th }}$ St

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## RANCHO VIEJO ELEMENTARY SCHOOL; SALIDA DEL SOL ELEMENTARY SCHOOL \& GREAT BEGINNINGS SCHOOL

## Improvements:

1. High visibility crossings on Daisy Street and $11^{\text {th }}$ Street ( west of Avenue C); and on Avenue C (at the school driveways)
2. Enhancement to the existing crosswalks at County $81 / 2$ St and Avenue C; County $8^{\text {th }}$ Street and Avenue C intersections
3. Sidewalks along south side of $11^{\text {th }}$ Street; both sides of Carnes Street; both sides of Crane Street; both sides of Frances Street; and north side of Daisy Street
4. Install school zone flashing beacons on Avenue C

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## RONALD REAGAN ELEMENTARY SCHOOL

## Improvements:

1. High visibility crosswalk at Taylor loop
2. Enhancements to the existing crossings at $16^{\text {th }}$ Street/31 ${ }^{\text {st }}$ Drive intersection
3. Install school zone flashing beacon on $16^{\text {th }}$ Street

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## VALLEY HORIZON ELEMENTARY SCHOOL

## Improvements:

1. High visibility crossing on $18^{\text {th }}$ street, $19^{\text {th }}$ Place, and; on $20^{\text {th }}$ Street (west of $46^{\text {th }}$ Avenue)
2. Install school zone flashing beacon on $20^{\text {th }}$ St west and east of $45^{\text {th }}$ Ave and $45^{\text {th }}$ ave north of $20^{\text {th }} \mathrm{St}$

Note: Each proposed crosswalk needs further detailed evaluation prior to implementation


## Appendix D

Short-, Mid- and Long-Term Improvement Recommendations

## Yuma County or Tribal Land: Proposed Crosswalks

## Agnes Road and Indian Hill Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs
2. Proposed sidewalk along both sides of Agnes Road Indian Hill Road to Quechan Drive ( 1,500 feet)


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Steamboat Street and Orange Grove Way



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Centre Avenue (Farm Road) and Hava Street



## Centre Avenue (Farm Road) \& Steamboat Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 9 , 0 0 0}$

## Chapay Street and Quail Run Loop



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## Chapay Way and Levee Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## Cocopah Drive and Strand Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Cottonwood Loop and Salt Cedar Avenue



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Cottonwood Park Loop and Cottonwood Drive



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$12,000

## Quechan Drive and Indian Hill Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 9 , 0 0 0}$

## Quechan Drive and Sapphire Lane



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$12,000

## Strand Avenue and Chapay Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## US Highway 95 and Avenue C



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## US Highway 95 and Avenue D



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$12,000

## US 95

## Between Avenue 5E and Avenue 6E



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$18,000

## US Highway 95 and County 20 ½ Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Housing Development US Highway 95 Between Avenue G an Avenue H



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 1 8 , 0 0 0}$

## US Highway 95 (Avenue B) and Patricia Lane



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$12,000

## County $10^{\text {th }}$ Street and View Parkway



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## County $16^{\text {th }}$ Street

## From Avenue C to Avenue B



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$20,000


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Yuma County- Proposed Bicycle Lanes

US 95/16 ${ }^{\text {th }}$ Street from Avenue 3E to Fortuna Road


## Proposed Improvements:

1. Improve shoulder for 4 miles, add 2 more feet on each side
2. Install signage and striping

Construction Cost: \$548,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 55
* Configuration: Four-Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Present

From Fortuna Road to Martinez Lake Road


## Proposed Improvements:

1. Install signage and striping

Construction Cost: \$52,500

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 55
* Configuration: Two-lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Present

Avenue 7E
From $16^{\text {th }}$ Street to County $31 / 2$


## Proposed Improvements:

1. Install 6 foot wide shoulder ( 5.5 miles)
2. Install signage and striping

Construction Cost: \$1,452,000

Existing Condition

* Area Type: Urban
* Speed Limit: 35
* Configuration: Two-lane, Two-Way
- Shoulder: Present
* Sidewalk: Not Applicable

Imperial Dam Road
From US 95 to Yuma Proving Ground


## Proposed Improvements:

1. Install shoulder along both sides of Imperial Dam Road
2. Install signage and striping

Construction Cost: \$660,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 55
* Configuration: Two-lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Applicable


## Fortuna Road

From US 95 to County $12^{\text {th }}$ Street


## Proposed Improvements:

1. Install signage and striping, and Sharrow marking in urban section

Construction Cost: \$25,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 35
* Configuration: Two-lane, Two-Way
* Shoulder: Present
* Sidewalk: Present where applicable


## Foothills Boulevard



## Proposed Improvements:

1. Install signage and striping, and Sharrow marking

Construction Cost: \$30,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 35
* Configuration: Five-Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present
* Existing bike lane for whole segment

County $18^{\text {th }}$ Street From Avenue D to Cottonwood Drive


## Proposed Improvements

1. Install signage and striping
2. Install shoulder along both directions (13,780 feet)

Construction Cost: $\mathbf{\$ 3 6 6 , 0 0 0}$

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: Not Present
* Sidewalk: Not Applicable


## Cottonwood Drive

 From Salt Cedar Street to Cottonwood Loop

Proposed Improvements:

1. Install signage and Sharrow markings

Construction Cost: \$7,500

## Existing Condition

* Area Type: Rural
* Speed Limit: 25
* Configuration: Two-lane, Two-Way
* Shoulder: None
\& Sidewalk: None
* Proposed bikeway on whole segment including the cottonwood loop



## Proposed Improvements:

1. Install signage and striping
2. Install Shoulder from Bus Stop to closest residential area (4,000 Feet)

Construction Cost: \$105,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: Present
※ Sidewalk: None


## Cocopah Casino Resort US 95 to Ave B



Proposed Improvements:

1. Install signage and striping
2. Install 6' shoulder along both directions ( 10,000 Feet), areas
nearest to the casino

## Construction Cost: \$257,000

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 50
* Configuration: Two Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Applicable
* Proposed bikeway on whole segment around the Cocopah Resort \& Conference Center


## Avenue G

County $14^{\text {th }}$ Street to County $16^{\text {th }}$ Street


## Proposed Improvements:

1. Install signage and striping
2. Install shoulder from County $14^{\text {th }}$ to County $16^{\text {th }}$ street (21,120 feet)

Construction Cost: \$533,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: Not Applicable


County $14^{\text {th }}$ Street

## From Farm Street to Avenue G



Proposed Improvements:

1. Install signage and striping
2. Install shoulder from Farm Road to Avenue G (19,072 feet)

Construction Cost: \$487,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: Not Applicable

From County $14^{\text {th }}$ Street to Veterans Place


## Proposed Improvements:

1. Install signage and Sharrow Marking

## Construction Cost: \$8,200

## Existing Condition

* Area Type: Rural
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: None


## Steamboat Street

From County $14^{\text {th }}$ Street to County $16^{\text {th }}$ Street


## Proposed Improvements

1. Install signage and Sharrow Marking

Construction Cost: \$8,200

## Existing Condition

* Area Type: Rural
* Speed Limit: 25
* Configuration: Two Lane, Two-Lane
* Shoulder: None
* Sidewalk: None
* Proposed on whole segment
* Portion From County $15^{\text {th }}$ Street to County $16^{\text {th }}$ Street is a dirt road

Riverside Drive From Avenue C to Strand Avenue


Proposed Improvements:

1. Install signage and striping
2. Install Shoulder from Strand Avenue to Avenue C ( 15,840 Feet)

Construction Cost: \$403,500

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 50
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: None


Proposed Improvements:

1. Install signage and Sharrow Marking

Construction Cost: \$3,250

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 35
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: None


## Strand Avenue

## From Riverside Drive to Torrey Pines

## Proposed Improvements:

1. Install signage and Sharrow Marking

## Construction Cost: \$10,000

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 35
* Configuration: Two Lane, Two-Way
- Shoulder: None
* Sidewalk: None


## Chapay Street

## From Chapay Drive to Strand Avenue



## Proposed Improvements:

1. Install signage and Sharrow Marking

Construction Cost: \$13,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 35
* Configuration: Two Lane, Two Way
* Shoulder: None
* Sidewalk: None


## Chapay Drive

From Chapay Street to Levee Road


## Proposed Improvements

1. Install signage and Sharrow Marking

Construction Cost: \$2,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 35
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: None

Cocopah RV and Golf Resort
Loop Starting at Strand and Miller Circle, and Ending Strand and Cocopah Drive


## Proposed Improvements:

1. Install signage and Sharrow Marking

Construction Cost: 15,000

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 15
* Configuration: Two Lane, Two-Way
* Shoulder: None
* Sidewalk: None


## Avenue G



From County 19 ${ }^{\text {th }}$ Street to County $11^{\text {th }}$ Street

## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (84,796 feet)
2. Install signage and striping

Construction Cost: \$2,160,070

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: NA

County $11^{\text {th }}$ Street

## From Avenue G to Avenue D



Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 32,525 feet)
2. Install signage and striping

## Construction Cost: \$829,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Speed Limit 35 on curve at Somerton Avenue
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $18^{\text {th }}$ Street

From Avenue E to Avenue D


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Avenue D

From County $18^{\text {th }}$ Street to County $12^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 63,677 feet)
2. Install signage and striping

Construction Cost: \$1,623,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
- Shoulder: None
* Sidewalk: Not applicable



## Avenue B

From Juan Sanchez Boulevard to County 18 ${ }^{\text {th }}$ Street

Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 52,800 feet)
2. Install signage and striping

Construction Cost: \$1,345,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not applicable


## Avenue B

## From County $18^{\text {th }}$ Street to County $15^{\text {th }}$ Street



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 31,680 feet)
2. Install signage and striping

Construction Cost: \$807,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not applicable


## County 19 ${ }^{\text {th }}$ Street

From Avenue B to Avenue 3E


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (42,665 feet)
2. Install signage and striping

Existing Condition

* Area Type: Rural
* Speed Limit: 50

Construction Cost: \$1,086,760

* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $16^{\text {th }}$ Street From Avenue C to Avenue 3E


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 53,856 feet)
2. Install signage and striping

Existing Condition

- Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $16^{\text {th }}$ Street
From Avenue 3E to Avenue 4E


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Avenue 3E



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 42,768 feet)
2. Install signage and striping

Construction Cost: \$1,089,450

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Avenue 3E

From County $15^{\text {th }}$ to County $14^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
- Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $14^{\text {th }}$ Street

## From Avenue H to Avenue E



Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 34,320 Feet)
2. Install signage and striping

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## County $14^{\text {th }}$ Street

From Avenue E to Avenue 2E


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (63,888 Feet)
2. Install signage and striping

Construction Cost: \$1,628,000

Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable



## Proposed Improvements:

1. Install 2 foot wide shoulder along both sides of the roadway (10,560 Feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: Four Foot Shoulder
* Sidewalk: Not Applicable
* Existing share the road sign at Avenue 2E



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (42,240 Feet)
2. Install signage and striping

Construction Cost: \$1,076,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County 14 ${ }^{\text {th }}$ Street
From Foothills Boulevard to Avenue 15E


Proposed improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 Feet)
2. Install signage and striping

Construction Cost: \$538,000

## Existing Condition

$\psi$ Area Type: Rural

* Speed Limit: 35
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $15^{\text {th }}$ Street
From Avenue B to Avenue 3E


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (42,240 Feet)
2. Install signage and striping

## Existing Condition

Construction Cost: \$1,076,000

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Avenue A

Ad Greenlight

From County $16^{\text {th }}$ Street to County $14^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (21,120 Feet)
2. Install signage and striping

Construction Cost: \$538,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## County $15^{\text {th }}$ Street

From Avenue 3E to Avenue 5E


## Proposed Improvements

1. Install 6 foot wide shoulder along both sides of the roadway ( 21,120 Feet)
2. Install signage and striping

Construction Cost: \$538,000

Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

Avenue 4E

From County $15^{\text {th }}$ Street to County $14^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 Feet)
2. Install signage and striping

## Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

Avenue 5E

From County $15^{\text {th }}$ Street to County $14^{\text {th }}$ Street


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway $(10,560$ Feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Avenue A

From County $14^{\text {th }}$ Street to County $12{ }^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway $(23,760$ Feet)
2. Install signage and striping

## Construction Cost: \$619,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable
$4^{\text {th }}$ Avenue
From County $13^{\text {th }}$ Street to County $11^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (25,872 Feet)
2. Install signage and striping

Construction Cost: \$659,050

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 40
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $12^{\text {th }}$ Street
From Avenue D to Avenue B


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway $(21,120$ Feet)

## Existing Condition

2. Install signage and striping

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $12^{\text {th }}$ Street
From Avenue B to Arizona Avenue


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway $(18,480$ Feet)
2. Install signage and striping

Construction Cost: \$470,750

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable
* Existing gap in street due to canal

Arizona Avenue
From County $12^{\text {th }}$ Street to County $11^{\text {th }}$ Street

Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway $(10,560$ Feet)
2. Install signage and striping

## Construction Cost: \$ 269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 40
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $10^{\text {th }}$ Street

From Avenue E to Avenue C


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 21,120 Feet)
2. Install signage and striping

Construction Cost: \$538,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 45
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 Feet)
2. Install signage and striping

## Existing Condition

Construction Cost: \$269,000

* Area Type: Rural
* Speed Limit: 45
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Avenue C

From County $14^{\text {th }}$ Street to County $12^{\text {th }}$ Street

## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 21,120 Feet)
2. Install signage and striping

Construction Cost: \$ 538,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable



## Avenue C

S. Greenlight

RICK

## From County $12^{\text {th }}$ Street to $1^{\text {st }}$ Street

## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway from County $12^{\text {th }}$ Street to County $10^{\text {th }}$ Street ( 21,120 Feet)
2. Install signage and striping
3. Install Sharrow from County $9^{\text {th }}$ Street to $1^{\text {st }}$ Street

## Construction Cost: \$ 560,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 40 from County $12^{\text {th }}$ Street to County $10^{\text {th }}$ Street
* Speed Limit: 35 from County $9^{\text {th }}$ Street to $1^{\text {st }}$ Street
* Configuration: Three Lane- Two-way
* Shoulder: None
* Sidewalk: Present where applicable
* Existing sidewalk from County $10^{\text {th }}$ Street to County $9^{\text {th }}$ Street

County $3^{\text {rd }}$ Street From US 95 to Avenue 16E


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 18,480 Feet)
2. Install signage and striping

## Existing Condition

Construction Cost: \$471,000

* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

Avenue 16E

From County $4^{\text {th }}$ Street to County $3^{\text {rd }}$ Street


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 5,280 Feet)
2. Install signage and striping

## Construction Cost: \$134,500

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $4^{\text {th }}$ Street
From Avenue 16E to Avenue 18E


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 18,480 Feet)
2. Install signage and striping

## Existing Condition

Construction Cost: \$471,000

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

Avenue 18E
From County $4^{\text {th }}$ Street to County $6^{\text {th }}$ Street


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 21,120 Feet)
2. Install signage and striping

Construction Cost: \$538,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $6^{\text {th }}$ Street
From Avenue 18E to Avenue 19E


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 Feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

Avenue 19E
From County $6^{\text {th }}$ Street to County $7^{\text {th }}$ Street


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 Feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

County $7^{\text {th }}$ Street
From Avenue 19E to Avenue 20E


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 Feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable

Avenue 20E
From County $7^{\text {th }}$ Street to Old US 80


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 42,240 Feet)
2. Install signage and striping

Construction Cost: \$1,076,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Not Applicable


## Martinez Lake Road From US 95 to Laguna Army Airfield



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 15,840 feet)
2. Install signage and striping

Construction Cost: \$403,500

## Existing Condition

* Area Type: Rural
\& Speed Limit: 40
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

County $12^{\text {th }}$ Street From Fortuna Road to Ironwood Drive


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 25,344 feet)
2. Install signage and striping

Construction Cost: \$645,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 40
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

City of Yuma: Proposed Crosswalks

## $12^{\text {th }}$ Street: between Castle Dome Ave \& Asia Pacific Ave



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: $\$ 9,000$

## 16th Street and Arcadia Lane



Proposed Improvements:

1. Proposed RRFB along with advance pedestrian warning signs

Construction Cost: \$30,000

## 16th Street and Atlantic Avenue



Proposed Improvements:

1. Proposed RRFB along with advance pedestrian warning signs

Construction Cost: \$30,000

## 1st Avenue and 10th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: $\$ \mathbf{1 0 , 0 0 0}$

## 1st Avenue and 12th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: \$12,000



## Proposed Improvements:

1. Proposed RRFBs along with advance pedestrian warning signs

Construction Cost: \$25,000

## 1st Avenue and 5th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

1st Avenue and 8th Street


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: $\$ 8,000$

## 1st Street and 1st Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$7,000

## 1st Street and 3rd Street / City Hall



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000



## Proposed Improvements:

1. Proposed high visibility crosswalk

## Construction Cost: \$4,000

## Yuma County Library Main Branch Between $28^{\text {th }}$ Street and $32^{\text {nd }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## 23rd Avenue and 28th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: \$16,000

## 24th Street and Melody Lane



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 9 , 0 0 0}$

## 24th Street

## From Avenue C to Avenue B



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs
2. Proposed sidewalk along both sides of $24^{\text {th }}$ St from Avenue $C$ to Avenue $B(10,200$ feet $)$

## 24th Street at AWC Entrance/ Tamarack Center



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## 24th Street and 6th Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## 24th Street and Avenue 2 5/10



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## 24th Street and College Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$4,000



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$4,000

# Yuma Community Food Bank $24^{\text {th }}$ Street and Engler Avenue 



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$4,000

## Yuma Regional Medical Center $24^{\text {th }}$ Street Between Parkview Loop and Avenue A



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$7,000

## 26th Street and 23rd Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$4,000

## Blue Diamond RV Park <br> 32nd Street and Country Road Boulevard



## Proposed Improvements:

1. Proposed RRFB along with advance pedestrian warning signs

Construction Cost: \$29,000

## 32nd Street and Crest Drive



## Proposed Improvements:

1. Proposed RRFB with advance pedestrian warning signs

Construction Cost: \$29,000

## 32nd Street and Fortuna Avenue



## Proposed Improvements:

1. Proposed RRFB along with advance pedestrian warning signs

Construction Cost: \$29,000

## 32nd Street and Shortway



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs
2. Proposed sidewalk (5,280 Feet)

Construction Cost: \$273,000

## 32nd Street and Soar Avenue



Proposed Improvements:

1. Proposed RRFB along with advance pedestrian warning signs

## 3rd Street

## From 17th Avenue to Avenue A



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

## 3rd Street <br> From Avenue B to 15th Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$14,000

## 3rd Street <br> From $8^{\text {th }}$ Avenue to 6th Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 6 , 0 0 0}$

## Downtown Yuma Transit Center 3rd Street and Gila Street



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## 4th Avenue and 12th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## 4th Avenue and 17th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$17,000

## 4th Avenue and 18th Street



Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs


Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## 4th Avenue and 20th Place



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## 4th Avenue and 26th Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

From Magnolia Avenue to $10^{\text {th }}$ Avenue


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: \$10,000

## AWC Loop Rd:

## between $24^{\text {th }}$ Street and Adobe Ridge Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000



## Proposed Improvements:

1. Proposed high visibility crosswalks and advance warning pedestrian warning sign
2. Proposed sidewalk along both sides of Pacific Avenue to Avenue 3E (11,000 feet) Construction Cost: $\mathbf{\$ 5 6 2 , 0 0 0}$

## Avenue 3E and Palo Verde Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs Construction Cost: \$9,000

## Avenue 9E From 28 $^{\text {th }}$ Street to $31^{\text {st }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs Construction Cost: \$14,000

## Avenue A and $10^{\text {th }}$ Street



## Avenue A and $14^{\text {th }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: $\mathbf{\$ 6 , 0 0 0}$

## Avenue A and $18^{\text {th }}$ Street



1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 6 , 0 0 0}$

## Avenue A and 20 ${ }^{\text {th }}$ Street



Proposed advance pedestrian warning sign



> Proposed high



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: $\mathbf{\$ 6 , 0 0 0}$

## Avenue A and $22^{\text {th }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: \$11,000

## Avenue A: Southwest Medical Center Between: $24^{\text {th }}$ street and $32^{\text {nd }}$ Street



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## Avenue A and Westridge Drive



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## Avenue B Del Valle Mobile Home Park <br> Between: $8^{\text {th }}$ Street and $12^{\text {th }}$ Street



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

# Avenue B Immaculate Conception Church \& School Between $3^{\text {rd }}$ Street and $8^{\text {th }}$ Street 

Greenlight Traffic Engineering


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Avenue C and $14^{\text {th }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 6 , 0 0 0}$

## Avenue C and $18^{\text {th }}$ Street <br> Avenue C and 18 Street



Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$6,000

## Avenue C and $4^{\text {th }}$ Place



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000


Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: $\mathbf{\$ 9 , 0 0 0}$

## Castle Dome Avenue and Yuma Palms Parkway



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$4,000

## Across Shilo Hotel in loop of

Yuma Palms Parkway and Castle Dome Avenue


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$7,000

## Catalina Drive and County Club Drive



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$7,000

## Catalina Drive and $1^{\text {st }}$ Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$4,000

## County $8^{\text {th }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs
2. Proposed sidewalk along both sides of $8^{\text {th }}$ St from Avenue D to Avenue $C(10,500$ feet $)$

Construction Cost: \$535,000

## Hope way and County $8^{\text {th }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Hope Way and Riverside Drive



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

Pacific Avenue and San Marcos Drive


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$4,000

## Walmart Stop

Between Palo Verde Street and 32 ${ }^{\text {nd }}$ Street


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Redondo Center Drive Social Security Access from $16^{\text {th }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## South Frontage Road



## Proposed Improvements:

1. Proposed sidewalk along both sides of South Frontage Road from Avenue $81 / 2 E$ to Foothills Boulevard (21,120 feet)

Construction Cost: \$1,056,000

## City of Yuma: Proposed Crosswalks at Park Crossings

## Yuma Valley Park

 $24^{\text {th }}$ Street and $31^{\text {st }}$ Avenue

1. Proposed RRFB along with advance pedestrian warning signs
2. Proposed sidewalk along both sides of $24^{\text {th }}$ St from Avenue $C$ to Avenue $B(10,200$ feet $)$

Construction Cost: \$293,000

## Latino Americano Park

 $1^{\text {st }}$ Street and 23 ${ }^{\text {rd }}$ Avenue

## Proposed Improvements:

1. Proposed high visibility crosswalk

## Construction Cost: \$2,000

Joe Henry Memorial Park $23^{\text {rd }}$ Avenue and Colorado Street


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Colorado River State Historic Park Winterhaven Drive/4 ${ }^{\text {th }}$ Avenue and $1^{\text {st }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalk

Construction Cost: \$2,000

## Ray Smucker Park

Avenue A and Westridge Drive


Already considered as part of the transit stop crosswalk

## Gateway Park

$1^{\text {st }}$ Street and Madison Avenue


## Proposed Improvements:

1. Proposed high visibility crosswalks

## City of Yuma- Proposed Bicycle Lanes

## US 95



## Proposed Improvements:

1. Install signage and striping

Construction Cost: \$37,000

Existing Condition

* Area Type: Rural
* Speed Limit: 55
* Configuration: Three-Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Applicable


## Avenue B/US 95

From $32^{\text {nd }}$ Street to $16^{\text {th }}$ Street


## Proposed Improvements:

1. Roadway widen and install bike lane ( 2 miles)

## Construction Cost: \$2,122,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 40
* Configuration: Three-Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present for whole segment



## Proposed Improvements:

1. Install signage and striping
2. Install shoulder along south side of $16^{\text {th }}$ St from Avenue $2 \frac{1}{4}$ to Avenue 3E

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 45
* Configuration: Five-Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Present

Avenue 3E
From County $14^{\text {th }}$ Street to County $12^{\text {th }}$ Street


## Proposed Improvements:

1. Install shoulder and signage and striping

Construction Cost: \$264,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Applicable


## $8^{\text {th }}$ Street

From $4^{\text {th }}$ Avenue to Pacific Avenue


## From Avenue D to Avenue C



## Proposed Improvements:

1. Install signage and striping
2. Install shoulder from Avenue $D$ to $45^{\text {th }}$ Avenue (5,350 feet)

Construction Cost: \$137,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 35
* Configuration: Two-lane, Two-Way from Avenue D to $45^{\text {th }}$ Avenue, Four-Lane, Two-Way from $45^{\text {th }}$ Avenue to Avenue C
* Shoulder: Missing from Avenue D to $45^{\text {th }}$ Avenue
* Sidewalk: Present
* Proposed bikeway for whole segment


## Avenue B

Qs Trafic Engininering
R I C K

## From 16 ${ }^{\text {th }}$ Street to $1^{\text {st }}$ Street



## Proposed Improvements:

1. Widen roadway and install bike lanes (2 miles)

Construction Cost: \$2,122,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 45
* Configuration: Five-Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present
* Proposed bike lane for whole segment

Arizona Avenue


## Proposed Improvements:

1. Install signage and Sharrow markings

Construction Cost: \$37,500

## Existing Condition

* Area Type: Urban
* Speed Limit: 35 and 40
* Configuration: Three-Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present
* Proposed bike lane for whole segment

Avenue B to $\mathbf{2 1}^{\text {st }}$ Drive


## Proposed Improvements:

1. Install signage and Sharrow Marking

Construction Cost: \$2,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present

$$
\begin{gathered}
23^{\text {rd }} \text { Drive } \\
26^{\text {th }} \text { Street and } 28^{\text {th }} \text { Street }
\end{gathered}
$$



## Proposed Improvements:

1. Install signage and striping

## Construction Cost: \$2,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present


## Arizona Western College Otondo Drive and Campus Loop



## Proposed Improvements:

1. Install signage and sharrow marking on Campus Loop
2. Extend existing bike lanes on Otondo Dr to $24^{\text {th }}$ St

Construction Cost: \$21,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 15
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present
* Proposed bikeway on whole AWC Loop


## $14^{\text {th }}$ Street

From Pacific Avenue to Atlantic Avenue


## Proposed Improvements

1. Install signage and Sharrow Marking
2. Install sidewalk on from Pacific Avenue to Atlantic Avenue (5,280 Feet)
Construction Cost: \$270,500

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Not Present


## Atlantic Avenue From $14^{\text {th }}$ Street to $\mathbf{1 6}^{\text {th }}$ Street



Proposed Improvements:

1. Install signage and Sharrow Marking
2. Install sidewalk on from $14^{\text {th }}$ Street to $16^{\text {th }}$ Street ( 2,740 feet)

## Construction Cost: \$145,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Not Present



## Proposed Improvements:

1. Install signage and Sharrow Marking

## Construction Cost: \$7,500

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present

From Gila Street to Maiden Lane


## Proposed Improvements:

1. Install signage and Sharrow Marking

Construction Cost: \$2,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, One-Way
* Shoulder: Not Applicable
* Sidewalk: Present


## Harold C Giss Parkway <br> From Gila Street to Maiden Lane



Maiden Lane
From $1^{\text {st }}$ Street to Harold C Giss Parkway


Proposed Improvements:

1. Install signage and Sharrow Marking

## Construction Cost: \$5,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present


## Gila Street

 From $1^{\text {st }}$ Street to $3^{\text {rd }}$ Street

Proposed Improvements:

1. Install signage and striping

## Construction Cost: \$5,000

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present


## 32 ${ }^{\text {nd }}$ Street

From Avenue D to Avenue B


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway ( 32,525 feet)
2. Install signage and striping

## Construction Cost: \$947,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 40
* Configuration: Two-lane Two-way
* Turn lanes are present at intersections
* Shoulder: None
* Sidewalk: Present from Avenue D to $45^{\text {th }}$ Avenue


## Avenue D

From County $\mathbf{1 2}^{\text {th }}$ Street to County $8^{\text {th }}$ Street


## Existing Condition

* Area Type: Rural
* Speed Limit: 50 from County $12^{\text {th }}$ Street to $20^{\text {th }}$ Street
* Speed Limit: 35 from $20^{\text {th }}$ Street to County $8^{\text {th }}$ Street
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Present from $20^{\text {th }}$ Street and $16^{\text {th }}$ Street


## $1^{\text {st }}$ Street

From Avenue C to Avenue B


Proposed Improvements:

1. Install Sharrow (10,560 Feet)

## Construction Cost: \$15,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 35
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None
$5^{\text {st }}$ Street From Avenue C to Avenue B


Proposed Improvements:

1. Install Sharrow (10,560 Feet)

Construction Cost: \$15,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 25
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

Araby Road
From County $10^{\text {th }}$ Street to County $9^{\text {th }}$ Street


## Existing Condition

* Area Type: Rural
* Speed Limit: 45
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

Avenue 4E
County $14^{\text {th }}$ Street to County $11^{\text {th }}$ Street

## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (31,680 feet)
2. Install signage and striping

Construction Cost: \$807,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None


## Avenue 5E

## County $14^{\text {th }}$ Street to County $11^{\text {th }}$ Street



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (31,680 feet)
2. Install signage and striping

Construction Cost: \$807,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

County $13^{\text {th }}$ Street
From Avenue 2E to Avenue 5E


## Proposed Improvements

1. Install 6 foot wide shoulder along both sides of the roadway ( 31,680 feet)
2. Install signage and striping

Construction Cost: \$807,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

Avenue 2E
From County $14^{\text {th }}$ Street to County $13^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

Avenue 3 ½ E
From County $12^{\text {th }}$ Street to County $11^{\text {th }}$ Street


## Proposed Improvements:

. Install 6 foot wide shoulder along both sides of the roadway ( 10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 45
* Configuration: Three Lane - Two-way
* Shoulder: None
* Sidewalk: None

County $12^{\text {th }}$ Street From Avenue 3E to Avenue 6E


## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (31,680 feet)
2. Install signage and striping

Construction Cost: \$807,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 45
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None


## Gadsden: Proposed Crosswalks

Main Street From County $19^{\text {th }}$ St to Lorena Avenue


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$13,000

## Gadsden: Proposed Bicycle Lanes

Main Street/ US 95
From County 19th Street to Lorena Avenue


Proposed Improvements:

1. Widen roadway and install bike lanes

Construction Cost: \$807,400

## Existing Condition

* Area Type: Rural
* Speed Limit: 40
* Configuration: Five-Lane, Two-Way
* Shoulder: Not Applicable
* Sidewalk: Present for whole segment

From Lorena Avenue to Avenue G


Proposed Improvements:

1. Install signage and striping

Construction Cost: \$25,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 55
* Configuration: Five-Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Applicable

County 19 ${ }^{\text {th }}$ Street
US 95 to Avenue B


Proposed Improvements:

1. Install shoulder along both sides of the roadway ( 83,424 feet)
2. Install signage and striping

Construction Cost: \$2,085,600

Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: None
* Sidewalk: Present for whole segment

City of San Luis: Proposed Crosswalks

## 4th Avenue and B Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

4th Avenue and C Street
Greenlight RICK


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

## 4th Avenue and Arizona Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## 4th Avenue and Juan Sanchez Blvd



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs
2. Proposed sidewalk on both sides (4,200 Feet)

Construction Cost: \$240,000

## 4th Avenue and Las Brisas Blvd



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## 4th Avenue and Union Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## 8th Avenue and America Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance school zone warning signs

## Construction Cost: \$7,000

## Avenue F and Los Olivos Drive

 (on olvos Drive

Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Orgullo Del Sol Apartments

 Between Main Street and $4^{\text {th }}$ Avenue

## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Juan Sanchez Boulevard and $7^{\text {th }}$ Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: \$22,000

## US Highway 95

From Estibelle Lane to Lankin Drive


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

## Construction Cost: \$12,000

## US Highway 95- Walmart Drive Between Piceno Drive and County $22^{\text {nd }}$ Street



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

## Urtuzuastegui Street and Cesar Chavez Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$6,000

## Juan Sanchez Boulevard from Main Street to $10^{\text {th }}$ Avenue



## Proposed Improvements

1. Install 6 foot wide shoulder along both sides of the roadway ( 19,200 feet)
2. Install signage and striping

Construction Cost: \$480,000

## Existing Condition

* Area Type: Urban/Rura
* Speed Limit: 35
* Configuration: Two-lane, Two-way
* Shoulder: None
* Sidewalk: Present from $6^{\text {th }}$ Avenue to $10^{\text {th }}$ Avenue on north side only
* School present at $8^{\text {th }}$ Avenue NE Corner


# Juan Sanchez Boulevard from $10^{\text {th }}$ Avenue to Avenue E 



## Proposed Improvements:

1. Install 2 foot wide shoulder along Juan Sanchez Blvd ( 31,680 feet)
2. Install signage and striping

Construction Cost: $\mathbf{\$ 2 6 4 , 0 0 0}$

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: Present
* Sidewalk: Not applicable


## Juan Sanchez Boulevard from Avenue E to Avenue B



Proposed Improvements:

1. Install signage and striping ( 3 miles)

Construction Cost: \$15,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 65
* Configuration: Four-Lane, Two Way

Shoulder: Present

* Sidewalk: Not applicable


## Main Street

from Urtuzuastegui Street to Juan Sanchez Boulevard

Proposed Improvements:


1. Install signage and striping along west side of Main st
2. Install Sharrow marking on the pavements for shared bike and car lanes for north directions

## Construction Cost: \$15,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 25
* Configuration: Two-lane, Two-Way
* Shoulder: Not applicable
* Sidewalk: Present for whole segment
* Bike lane existing southbound from D Street (Roundabout) to Urtuzuastegui Street


## Proposed Improvements:

1. Restripe and add bike lanes along Main street
2. Install signage and striping

Construction Cost: \$42,500

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 35
* Configuration: Three-Lane, Two-Way
* Shoulder: Not applicable
* Sidewalk: Present from Juan Sanchez Boulevard to County $221 / 2$ Street both directions, and from County $221 / 2$ Street to County $22^{\text {nd }}$ Street on east side only

US 95
From County $22^{\text {nd }}$ Street to County $19^{\text {th }}$ Street


## Proposed Improvements:

1. Install signage and striping

Construction Cost: \$15,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 55
* Configuration: Three-Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not applicable


## Juan Sanchez Boulevard/ State Route 195/Araby Road from Avenue B to 32 ${ }^{\text {nd }}$ Street



## Proposed Improvements:

1. Install signage and striping for bike lanes/presence of bikes
2. Six Dynamic speed feedback signs

## Construction Cost: \$135,500

## Existing Condition

* Area Type: Rural
* Speed Limit: 65
* Configuration: Four-Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not applicable
* Connects San Luis to Yuma



## Proposed Improvements:

1. Install signage and Sharrow markings

Construction Cost: \$3,250

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 35
* Configuration: Three-Lane, Two-Way eastbound, and One-Way westbound
* Shoulder: None
* Sidewalk: None
$4^{\text {th }}$ Avenue
From County $\mathbf{2 2}^{\text {nd }}$ Street to Urtuzuasetgui Street



## Proposed Improvements:

1. Install signage and Sharrow markings

Construction Cost: \$7,500

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two-lane, Two-Way
* Shoulder: None
* Sidewalk: Partially south of $G$ Street

Urtuzuasetgui Street

From $4^{\text {th }}$ Avenue to Main Street


Proposed Improvements:

1. Install signage and Sharrow markings

## Construction Cost: \$3,250

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two-lane, Two-Way
- Shoulder: Not applicable
* Sidewalk: Present


## C Street

From Main Street to $1^{\text {st }}$ Street/William Brook Avenue


## Proposed Improvements:

1. Install signage and Sharrow markings

## Construction Cost: \$2,000

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two-lane, Two-Way
* Shoulder: Not applicable
* Sidewalk: Present



## Proposed Improvements:

1. Install signage and Sharrow markings

Construction Cost: \$3,250

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two Lane, One Way
* Shoulder: Not applicable
* Sidewalk: Present


## Avenue F

From County $24^{\text {th }}$ Street to Juan Sanchez Boulevard


## Proposed Improvements:

1. Install signage and Sharrow markings

Construction Cost: \$7,500

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 35
* Configuration: Two Lane, Two-Way
* Shoulder: Not applicable
* Sidewalk: Present


## Avenue E

From County $24^{\text {th }}$ Street to Juan Sanchez Boulevard


## Proposed Improvements:

1. Install signage and striping
2. Install 6' shoulder from County
$24^{\text {th }}$ Street to Juan Sanchez
Boulevard (10,560 feet)
Construction Cost: \$269,000

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 50
* Configuration: Four-Lane, Two-Way
* Shoulder: None
* Sidewalk: Not Applicable

County 24 Street
From Avenue F to Avenue E

## Proposed Improvements:

1. Install signage and striping
2. Install shoulder on County $24^{\text {th }}$ street both directions 10,560 feet

## Construction Cost: $\mathbf{\$ 2 6 9 , 0 0 0}$

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 35
* Configuration: Two Lane, Two-Way
* Shoulder: Present
* Sidewalk: Not Applicable


## Urtuzuastegui Street From Main Street to $10^{\text {th }}$ Avenue

-8) Greenlight
RICK


Proposed Improvements:

1. Install signage and Sharrow marking (9, 350 feet

## Construction Cost: \$11,700

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Two Lane Two Way from Main Street to $6^{\text {th }}$ Avenue
* Configuration: Five Lane Two-way from $6^{\text {th }}$ Avenue and $10^{\text {th }}$ Avenue
* Shoulder: Not Applicable
* Sidewalk: Present
$10^{\text {th }}$ Avenue

From Urtuzuastegui Street to County $222^{\text {nd }}$ Street


## Proposed Improvements:

1. Install signage and Sharrow marking ( 8,448 feet)

Construction Cost: $\mathbf{\$ 1 0 , 4 1 5}$

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: Present


## $8^{\text {th }}$ Avenue

From Urtuzuastegui Street to County $222^{\text {nd }}$ Street


## Proposed Improvements:

1. Install signage and Sharrow marking (8,976 feet)

Construction Cost: \$ 11,050

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Four-lane Two-way
* Shoulder: None
* Sidewalk: Present
$4^{\text {th }}$ Avenue
From Urtuzuastegui Street to County $222^{\text {nd }}$ Street



## Proposed Improvements:

1. Install signage and Sharrow marking (3,100 feet)

## Construction Cost: \$ 3900

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two Lane- Two-way
* Shoulder: None
* Sidewalk: Present from Urtuzasetgui Street to Juan Sanchez Boulevard


## $6^{\text {th }}$ Avenue

From Urtuzuastegui Street to Juan Sanchez Boulevard


## Proposed improvements

1. Install signage and Sharrow marking (8,976 feet)

Construction Cost: \$ 11,050

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 25
* Configuration: Two Lane- Two-way
* Shoulder: None
* Sidewalk: Present

Town of Somerton: Proposed Crosswalks at Park Crossings

## Main Street Park- Somerton

 Between Avenue F and Congress Avenue

## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$6,000

## Somerton Avenue and Crane Street



Already Accounted for in a Previous Slide

## Town of Somerton- Proposed Bicycle Lanes

Main Street/ US 95 From Avenue G to Avenue E


## Proposed Improvements

1. Install 6 foot wide shoulder along both sides of the roadway from Avenue $G$ to 5,000 feet east
2. Install signage and striping, and Sharrow marking

## Construction Cost: $\mathbf{\$ 1 4 0 , 0 0 0}$

## Existing Condition

* Area Type: Urban/Rural
* Speed Limit: 40 from Avenue G to Avenue F
* Speed Limit: 25 from Avenue F to Avenue E
* Configuration: Five-Lane, Two-way
* Shoulder: None
* Sidewalk: Present for whole segment

Somerton Avenue
From County $19^{\text {th }}$ Street to County $17^{\text {th }}$ Street


## Proposed Improvements:

1. Install shoulder along both sides of the roadway ( 21,650 feet)
2. Install signage and striping

Construction Cost: \$541,500

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: Present
\& Sidewalk: Not Present

Somerton Avenue
From County $17^{\text {th }}$ Street to County $15^{\text {th }}$ Street


Proposed Improvements:

1. Improve existing signage and striping

Construction Cost: $\mathbf{\$ 1 0 , 0 0 0}$

## Existing Condition

* Area Type: Urban
* Speed Limit: 25
* Configuration: Three-Lane, Two-Way
* Already bike lanes and signage present
* Shoulder: Not Applicable
* Sidewalk: Present


## Somerton Avenue

From County $15^{\text {th }}$ Street to $8^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder
2. Install signage and striping

Construction Cost: \$1,848,000

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two-lane, Two-Way
* Shoulder: Not Present
* Sidewalk: Not Present

Tacna, AZ - Proposed Bicycle Lanes

## Avenue 40E <br> From Peterson Drive to Gila Levee Road



Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (36,960feet)
2. Install signage and striping

Construction Cost: \$941,500

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two Lane - Two-way
* Shoulder: None
* Sidewalk: None


## Avenue 36E

From County $6^{\text {th }}$ Street to Old US 80


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway $(33,264$ Feet)
2. Install signage and striping

Construction Cost: \$847,350

## Existing Condition

* Area Type: Rural
* Speed Limit: 50
* Configuration: Two Lane - Two-way
* Shoulder: None
* Sidewalk: None



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None


## Avenue 38E

## From County $6^{\text {th }}$ Street to County $5^{\text {th }}$ Street



## Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None


## From Avenue 38E and Avenue 39E



Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

Avenue 39E
RICK County $5^{\text {th }}$ Street and County $6^{\text {th }}$ Street


Proposed Improvements:

1. Install 6 foot wide shoulder along both sides of the roadway (10,560 feet)
2. Install signage and striping

Construction Cost: \$269,000

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 50
* Configuration: Two-lane Two-way
* Shoulder: None
* Sidewalk: None

Town of Wellton: Proposed Crosswalks

## Arizona Avenue From William Street

 to Dome Street

## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs
2. Proposed sidewalk along both sides of Arizona Avenue from Los Angeles Ave (Old US 80) to Dome Street (11,500 feet)

## Construction Cost: \$6,000 (Sidewalk Cost on Next Slide)

## Arizona Avenue From William Street to Los Angeles Ave/OId US 80



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs
2. Proposed sidewalk along both sides of Arizona Avenue from Los Angeles Ave (Old US 80) to Dome Street (11,500 feet)

## Construction Cost: \$583,000

## Dome Street and San Jose Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Town of Wellton Proposed Bicycle Lanes

Old US 80
From Avenue 29E to Dome Street


Proposed Improvements:

1. Install Sharrow ( 5,280 Feet)

Construction Cost: \$7,500

## Existing Condition

* Area Type: Rural/Urban
* Speed Limit: 35
* Configuration: Four-lane Two-way
* Shoulder: None
* Sidewalk: None

Town of Winterhaven, CA: Proposed Crosswalks

## First Avenue and G Street



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$4,000

## First Avenue and McCoy Mobile Home Park

14 Greenlight Trafic crandeening RICK


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## First Street and Roden Baugh Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs Construction Cost: \$4,000

## Ironwood Drive and Ironwood Terrance



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Piacacho Road and Indian Hill Road (3 ${ }^{\text {rd }}$ Street)



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

Picacho Road and Haughtelin Road


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

Picacho Road and Jackson Road


## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs

Construction Cost: \$12,000

## Picacho Road and Ross Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs Construction Cost: \$9,000

## Ross Road and American Farm Road



## Proposed Improvements:

1. Proposed high visibility crosswalks along with advance pedestrian warning signs Construction Cost: \$12,000

## Winterhaven Drive and $2^{\text {nd }}$ Avenue



Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs Construction Cost: \$9,000


Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$9,000

## Arnold Road and Picacho Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$22,000

## Arnold Road and Cocopah Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$9,000

## Winterhaven Drive Sans End RV Park (2209 Winterhaven Drive) and Railroad Avenue



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$18,000


Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

Construction Cost: \$12,000

## Baseline Road and Indian Rock Road



## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs

## Construction Cost: \$12,000

Baseline Road and Miguel Road (5 ${ }^{\text {th }}$ Street)


## Proposed Improvements:

1. Proposed high visibility crosswalk along with advance pedestrian warning signs
