



**SCOTTSDALE TRANSPORTATION COMMISSION  
Notice and Agenda**

**Date: Thursday, August 19, 2021**

**Time: 5:15 P.M.**

**Location: Virtual**

**Live Stream: <https://www.scottsdaleaz.gov/scottsdale-video-network/live-stream>**

**Meeting will be held electronically and remotely**

Until further notice, Transportation Commission meetings are being held electronically to virtually attend and listen/view the meeting in progress. Transportation Commission meetings are televised on Cox Cable Channel 11/streamed online at ScottsdaleAZ.gov (search “live stream”) or will be available on Scottsdale’s YouTube channel to allow the public to listen/view the meeting in progress.

**Call To Order**

**Roll Call**

Don Anderson, Vice-Chair	Mary Ann Miller, Commissioner
Pamela Iacovo, Chair	Donald Pochowski, Commissioner
Karen Kowal, Commissioner	Andy Yates, Commissioner
B. Kent Lall, Commissioner	

**Public Comment**

Spoken comment is being accepted on both agendized and non-agendized items. To sign up to speak on these items, please [click here](#). Request to speak forms must be submitted no later than 90 minutes before the start of the meeting.

Written comment is being accepted for both agendized and non-agendized items and should be submitted electronically at least 90 minutes before the meeting. These comments will be emailed to the Transportation Commission and posted online prior to the meeting. To submit a written public comment electronically, please [click here](#).

- [Approval of Meeting Minutes](#)----- Discussion and Action**  
Regular Meeting of the Transportation Commission – June 17, 2021
- [Guidelines to Identify Pedestrian Crossing Treatments](#)----- Discussion**  
Presentation and overview of the guidelines to identify Pedestrian Crossing Treatments – Kiran Guntupalli, Principal Traffic Engineer

3. [FY 2021-22 Arterial Life Cycle Program Update](#)----- **Discussion**  
Update on status of ALCP projects in design and construction – David Meinhart, Transportation Planning Manager
4. [Pathways Wayfinding Signage](#)-----**Presentation, Discussion and Possible Action**  
Presentation of the Pathways Wayfinding Signage CIP project – Susan Conklu, Senior Transportation Planner
5. [Commission Identification of Future Agenda Items](#)----- **Discussion**  
Commission members identify items or topics of interest to staff for future Commission presentations

## **Adjournment**



Persons with a disability may request a reasonable accommodation by contacting Frances Cookson at 480-312-7637. Requests should be made 24 hours in advance, or as early as possible, to allow time to arrange the accommodation. For TYY users, the Arizona Relay Service (1-800-367-8939) may also contact Frances Cookson at 480-312-7637.



**DRAFT SUMMARIZED MINUTES**

**CITY OF SCOTTSDALE  
TRANSPORTATION COMMISSION  
REGULAR MEETING**

**Thursday, June 17, 2021**

**Meeting Held Electronically and Remotely**

**1. CALL TO ORDER**

Chair Iacovo called the regular meeting of the Scottsdale Transportation Commission to order at 5:15 p.m.

**2. ROLL CALL**

**PRESENT:** Pamela Iacovo, Chair  
Don Anderson, Vice Chair  
Karen Kowal  
B. Kent Lall  
Mary Ann Miller  
Donald Pochowski  
Andy Yates

**STAFF:** Mark Melnychenko, Transportation & Streets Director  
Susan Conklu, Senior Transportation Planner  
Dave Meinhart, Transportation Planning Manager  
Greg Davies, Senior Transportation Planner  
Shayne Lopez, Paving Manager  
Nathan Domme, Senior Transportation Planner  
Kiran Guntupalli, Principal Traffic Engineer

**3. PUBLIC COMMENT**

Susan Conklu, Senior Transportation Planner, stated that two written comments were received but there were no requests to speak in person.

**4. APPROVAL OF MINUTES**

One correction was made.

COMMISSIONER YATES MOVED TO APPROVE THE REGULAR MEETING MINUTES OF THE TRANSPORTATION COMMISSION ON MAY 20, 2021 AS AMENDED. COMMISSIONER ANDERSON SECONDED THE MOTION, WHICH CARRIED 7-0 WITH CHAIR IACOVO, VICE CHAIR ANDERSON, COMMISSIONERS KOWAL, LALL, MILLER, POCHOWSKI AND YATES VOTING IN THE AFFIRMATIVE WITH NO DISSENTING VOTES.

#### **4. RESEARCH PREFORMED ON COOL PAVEMENT**

Shayne Lopez, Paving Manager, introduced ASU research team, Jennifer Vanos, Ph.D. and Ariane Middel, Ph.D. Dr. Vanos stated that the purpose of the presentation is to provided a background on reflective pavement technologies, methodologies and data collection in collaboration with the City of Phoenix over the past year. Reflective or cool pavement reflects the sun's energy back to the sky, keeping surfaces cooler during the day and preventing heat release at night. A range of technologies are used, including Cool Seal, a water-based asphalt emulsion. Benefits include reduced surface temperatures, possible reduction of air temperature, potential to improve livability in cities in summer months as well as pavement preservation. The pilot program in Phoenix included eight neighborhoods, including 36 miles of residential roads. The analysis by ASU tested air and surface temperatures in three neighborhoods four times per day, twice per hour. Long-term assessments were done in the other neighborhoods. The vehicles used for the analysis were fine wire thermocouples to determine air temperature difference between cool seal areas and asphalt areas.

Dr. Middel provided the comparative analysis between the Cool Seal and asphalt. The regular asphalt heated to a range of up to 150 degrees Fahrenheit on September 5th. The Cool Seal surfaced ranged up to 110 degrees. A thermal camera was used to get measurements from the sky, including helicopter overflights. Photographs of the evaluations were reviewed. The helicopter overflight measured asphalt heat ranges from 120 to 130 degrees and Cool Seal ranges from 90 to 100 degrees. Mean radiant temperature evaluations were also performed, which provide an integrated value of what a human would feel when air and radiant temperatures are combined. These numbers are currently being analyzed. Another evaluation measures long-term reflectivity, or degradation of Cool Seal over time. Another ASU lab is responsible for ongoing field observations and performance testing, including bond testing, friction testing and surface wear.

Dr. Vanos stated that there is currently an ongoing survey to residents consistent of approximately 30 questions mailed to 2,000 randomly selected addresses. Next steps including a final report and release of results in July, 2021 as well as future long-term testing and new surface types.

Commissioner inquired as to the potential for shared findings with other countries. Dr. Vanos stated that the City of Phoenix shares and collects information from various countries and companies. Dr. Middel cited a press release from Qatar, as they had painted some roads blue, using a different product.

Commissioner inquired as to reflectivity on buildings. Dr. Vanos stated that the surface has thus far only been installed on roadways in residential neighborhoods and not close to houses. They have not yet studied the impact on buildings. There are no issues anticipated with low-lying one-story residential buildings. It is hope that if air temperature can be reduced, this will result in lower energy and water costs.



Commissioner asked about preliminary measurements of long-term reflectivity. Dr. Vanos stated that they are not yet able to share all findings, but the measurements vary a lot by neighborhood, based on traffic and other attributes.

In response to a Commissioner questions, Dr. Middel stated that the City of Phoenix has not shared cost data, other than to say that the Cool Seal is not significantly more expensive than the regular coating.

Chair inquired as to whether there are locations in the City being considered for cool pavement. Mark Melnychenko, Transportation & Streets Director, said staff has spoken internally regarding potential locations in the Old Town area and a few selective sites have been identified.

## **5. OLD TOWN BICYCLE MASTER PLAN**

Ms. Conklu stated that the project is largely funded through MAG. Scottsdale was able to select the team from MAG's on-call list and those include Y2K Engineering and its subconsultants. The project purposes include identify gaps in infrastructure, identify opportunities to improve connectivity, increase active transportation and promote health and economic impacts. The project area and goals were identified. A virtual open house was held December 15th, 2020 to January 5, 2021, including a video presentation and questionnaire with 79 responses received. Questionnaire results were reviewed.

A series of stakeholder sessions have been held over a three-week period and highlights of feedback were discussed:

- Overall support for biking in Old Town
- Need to make the Old Town bike network safe for all users to support the diverse people that live, work and visit Old Town
- Plan's goals adjusted to include safety
- Should connect people to/ from and within Old Town Scottsdale
- Quantity of improvements and routes is more important than high quality, yet not at the expense of safety
- Important consideration for implementation

Proposed routes were reviewed and visual examples were provided for various types of improvements. Next steps in the process include finishing the draft of the Master Plan, providing a project update on the City's webpage and completion of the final Master Plan in August. Key route recommendations will be included in the Neighborhood Bikeways portion of the Transportation Action Plan.

Dave Meinhart, Transportation Planning Manager, stated that staff will be incorporating ideas previously discussed with the Commission which will be part of the final plan for the Old Town area on some of the higher volume roads, such as the couplet system being reclassified as minor arterial. This would provide flexibility to reappropriate pavement in the couplets to be more friendly to bike and pedestrian traffic.

Commissioner commented that the feedback indicates strong desire by residents for more connectivity and routes. Commissioner suggested colored markings for bicycle paths, particularly near intersections within the plan.

Chair inquired as to the breakdown of survey respondents according to residents living in Old Town versus cyclists who visit the area. Ms. Conklu said the stakeholder groups participated in interactive meetings comprised of residents, resorts, developers and small businesses. That process was separate from the questionnaire. She undertook to follow up in terms of whether this question was asked in the survey.

## **5. OTHER TRANSPORTATION PROJECTS AND PROGRAM STATUS**

Mr. Melnychenko provided a brief update on the following projects:

- Sidewalks between Miller Road and Camelback Road
- Alley upgrades in Old Town
- Paving between Camelback and Chapparal Road with buffered bike lanes
- 2nd Street improvements between Goldwater and Drinkwater Boulevards
- Saddlebag/Camelback Road HAWK
- Civic Center Master Plan
- Alley paving program
- Streetlight pole replacement
- Lighted intersection street signs
- Cool paving pilot program
- E-scooters ordinance modifications

## **6. COMMISSION IDENTIFICATION OF FUTURE AGENDA ITEMS**

Commissioners agreed to cancel the regular meeting of July 15, but go ahead with the Special Meeting scheduled for July 8.

Chair asked about a mechanism by which Commissioners can review comments from the public and the City's responses regarding particular transportation-related issues, such as the Rawhide Wash project. Ms. Conklu said she could look into how this process works. Written comments are typically forwarded to the project manager or appropriate staff. Mr. Meinhart stated that when comments are submitted specifically to the Transportation Commission by a resident, staff can make it part of the process to provide a copy of its response to the resident to the Commission as well. Commissioner shared the understanding that once a written comment is received from a resident, the item becomes part of the agenda, in which case a response from staff is to be expected. Chair reiterated the Commission's desire to be provided with the City's responses to submitted comments. Mr. Meinhart clarified that there were two different types of comments provided. It is not anticipated that staff would send copies to the Commission of every comment received through the virtual public meeting process. Separate written comments are sent directly to the Commission. Mr. Melnychenko stated that if a written comment to the Commission requires a response, the Commission will be provided with a copy of the response.

Discussion ensued regarding the City's plans to resume in-person meetings. Mr. Melnychenko said that City Council meetings will begin to have limited public attendance over the next few meetings. The timeline for resumption of in-person meetings for the Commission would likely not take place until the August or September time frame.

Commissioners provided future identified items:

- Update on the Paths & Trails Subcommittee

## **9. ADJOURNMENT**

With no further business to discuss, being duly moved by Vice Chair Anderson and seconded by Commissioner Kowal, the meeting adjourned at 6:55 p.m.

AYES: Chair Iacovo, Vice Chair Anderson, Commissioners Kowal, Lall, Miller and Yates

NAYS: None

SUBMITTED BY:

eScribers, LLC

**\*Note: These are summary action meeting minutes only. A complete copy of the audio/video recording is available at <http://www.scottsdaleaz.gov/boards/transp.asp>**

# TRANSPORTATION COMMISSION REPORT



**To:** Transportation Commission  
**From:** Kiran Guntupalli, Principal Traffic Engineer  
**Subject:** Guidelines to Identify Pedestrian Crossing Treatments  
**Meeting Date:** August 19, 2021

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**Action:** Information and Discussion - no action requested.

## **Purpose:**

Between the years of 2014 and 2018, the state of Arizona has seen a 59% increase in the annual number of pedestrian fatalities. To proactively address this issue on local roads in the city of Scottsdale, Traffic Engineering staff has created a guiding document that takes elements of other national, state, and local pedestrian crossing guidelines and fits it to Scottsdale's roads. This document also incorporates many elements from past draft versions that Traffic Engineering staff has utilized over the years when installing new pedestrian crossing treatments. This item presents a guiding document entitled "Guidelines to Identify Pedestrian Crossing Treatments" for information and discussion at the Paths and Trails Subcommittee.

## **Background:**

Traffic Engineering and Transportation Planning staff receive many requests for painted crosswalks, flashing crosswalk signs, and other traffic control to assist pedestrians and bicyclists when crossing busy streets. There is some guidance for determining which traffic control is appropriate based upon the number of crossings and the volume of traffic, but traffic engineers mostly have to rely on published guidelines that have been developed at the national and state level, and engineering judgment. For any traffic control application, Traffic Engineers have to be concerned about justification and consistency. Criteria is typically developed and applied to establish justification for when a traffic control device is appropriate. Also, installing a traffic control device at one location but not at a location with similar conditions can make the city liable if a collision occurs at the location without the device.

For the development of the Guidelines to Identify Pedestrian Crossing Treatments, Traffic Engineering staff primarily utilized information from the following documents:

- Federal Highway Administration Safe Transportation for Every Pedestrian (STEP) – Resources
- Arizona Department of Transportation Pedestrian Safety Action Plan and Pedestrian Hybrid Beacon Warrants
- Manual on Uniform Traffic Control Devices (MUTCD)

Traffic Engineering staff also identified twenty (20) pedestrian crossing locations to evaluate for potential crossing treatment. Staff collected data at these locations and used the information to help modify established recommendations to better fit the Scottsdale environment.

## **Information:**

The guidelines document outlines a clear three step process for evaluating a potential pedestrian crossing location. The first step "Identification and Description of Crossing Location" is a cursory review of the crossing locational characteristics, feedback from the public or city staff and any other information about the area that can be gleaned from city's records. The second step "Traffic Data Collection and Operational Analysis" involves physically visiting the site, conducting observations of existing operational characteristics, and collecting any relevant data that could not be acquired in step one. The third and final step is to put all the information gathered in steps one and two together using the established evaluation sheets in the exhibit section which includes the selection of a recommended treatment or counter measure. The guidelines document including all exhibits is provided in [Attachment 1](#).

The evaluation focuses primarily on the following ten considerations and assign weighting that was based on past studies in the city and other national and state guidelines. The ten criteria are:

- Origin and Destination
- Pedestrian Volume
- Vehicular Volume
- Distance to the Nearest Defined Crossing
- Posted Speed Limit
- Crossing Distance
- Median Type
- Roadway Illumination
- Collision History
- Sight Distance (Calculations in **Exhibit C**)

These criteria are each described in detail in the document and combined into an evaluation scoresheet in **Exhibit A** of the document. The scoresheet is to be used in each pedestrian crossing study to help assign priority to the project and help with selection of the appropriate counter measure. One of the defining features of the document and part of what makes it unique to Scottsdale is its use and definition of “Origin and Destination.” Again, to be proactive the city has factored in Origin and Destination, or in other words latent pedestrian demand, into the decision-making process for installing pedestrian crossing treatments. The Origin and Destination factor uses a pedestrian Gravity Demand Model developed by the Maricopa Association of Governments (MAG) for the city that estimates levels of pedestrian level activity for a particular area based on existing development along with geographic and demographic information. A more detailed description of this model is in **Exhibit B** of the document.

The selection of a counter measure is made in part by the evaluation score, an understanding of the location’s context, and the benefits and disadvantages of each counter measure. Locations with a score of 30 or more warrant consideration of a higher-level treatment such as a Rectangular Rapid Flashing Beacon (RRFB) or a Pedestrian Hybrid Beacon (PHB). Counter measures described in the report that have been used throughout the city of Scottsdale include:

- Improved Street Lighting
- High Visibility Striped Crosswalk
- In-Pavement Signage
- Raised Crosswalk
- Bulb out/Curb Extension
- Unmarked Pedestrian Refuge
- Rectangular Rapid Flashing Beacon (RRFB)
- Pedestrian Hybrid Beacon (PHB)
- Traffic Signal
- Grade Separated Crossing

Each of the above listed counter measures are listed in **Exhibit D** of the document and include traffic volume and speed criteria for installation along with general notes of how and when each might be typically applied. It also includes rough cost estimates to provide context for budget estimation. It should also be mentioned that these counter measures may also be combined into one comprehensive counter measure depending on the location characteristics. For example, on a wide road with an existing raised median or two-way left turn lane, the most appropriate solution might involve both a pedestrian refuge, a high visibility crosswalk and a Rectangular Rapid Flashing Beacon or Pedestrian Hybrid Beacon.

**Other Committee Presentations:**

This item was presented for information and discussion at Paths and Trails Sub-Committee on August 3, 2021.

**Next Steps:**

City staff will use this document to guide analysis and implementation of new pedestrian crossing treatments throughout the city.

[Attachment 1](#): Guidelines to Identify Pedestrian Crossing Treatments



# Guidelines to Identify Pedestrian Crossing Treatments

Effective: January 2020



## 1.0 INTRODUCTION

The primary purpose of this document is to standardize the decision-making process to identify and prioritize the implementation of various pedestrian crossing treatments in the City of Scottsdale. Special attention is focused on consideration of standards set forth by Federal Highway Administration (FHWA), Institute of Transportation Engineers (ITE), Manual on Uniform Traffic Control Devices (MUTCD), National Association of City Transportation Officials (NACTO), and Transportation Research Board (TRB).

The general guidance provided in this document should not serve as a replacement for engineering judgement. It is important that engineering flexibility is maintained, as each pedestrian crossing location presents unique obstacles which may be addressed in varying ways.

The 2009 MUTCD outlines such engineering judgement; in Section 1A.09 the following provision is presented:

*The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and applications of traffic control devices, this Manual should not be considered a substitute for engineering judgment. Engineering judgment should be exercised in the selection and application of traffic control devices, as well as in the location and design of roads and streets that the devices complement.*

While these guidelines focus primarily on addressing the needs of pedestrians, they may also be used to address the needs of other non-motorized road users that may benefit from the installation of a pedestrian crossing improvement. Special consideration should be given in order to accommodate the needs of disabled persons.

## 2.0 EVALUATION PROCEDURE

Evaluation of an individual crossing location for potential crossing treatments in the City of Scottsdale should include the following steps:

- |         |   |
|---------|---|
| Step 1: | Identification and Description of Crossing Location |
| Step 2: | Traffic Data Collection and Operational Analysis    |
| Step 3: | Crossing Evaluation                                 |

The Crossing Evaluation Worksheet is included in **Exhibit A** and may be utilized as a guide through these steps.

### **Step 1: Identification and Description of Crossing Location**

Conduct an office level review of the location using geographic information and other city records to define the study limits. Consider the following characteristics:

- Character area and surrounding land use (school, park, etc.).
- Future development proposals.
- Potential path or trail connections.
- Posted speed along the major street at the crossing location.
- Nearest crossings in each direction and associated traffic controls.
- Crossing distance along with the number and type of lanes.
- Presence and type of median (raised, striped, center two-way left turn lane, etc.)

The primary goal of this step is to determine the precise crossing location and to note any important characteristics that should be observed during a field visit.

## Step 2: Data Collection and Observational Analysis

- Conduct a field review and make note of pedestrian and vehicle activity and other factors that are not observable by reviewing a map or other electronic and paper records.
- Collect a minimum of two hours of pedestrian counts if there is a possibility that the number of crossings may exceed 20 in a peak hour within the crossing area. A reasonable effort should be made to collect counts during the hours when the most pedestrian crossing events are expected to occur.
- Gather or collect hourly and average daily traffic (ADT) volumes for automobile traffic along the roadway at the crossing location. This data is often obtainable through the city's past count records.
- Measure the stopping and crossing sight distance for each approach. Refer to **Exhibit C** for calculations.
- Due to the potential for vehicular traffic queues to impact safety at the crossings, the presence of queues extending from downstream signals or intersections back into the crossing location should be observed, as well as any "differential" queuing that may occur on a lane to lane basis.
- Collect and analyze pedestrian and bicyclist crash data for crashes occurring within or on either side of the crossing location for the most recent five years of available data.

## Step 3: Crossing Evaluation

- Using all data and pertinent information collected in steps 1 and 2, complete the pedestrian crossing evaluation form and associated attachments in **Exhibits A - D**.

*It is important to keep in mind that to be effective, a traffic control device should meet five basic requirements:*

- A. Fulfill a need;*
- B. Command attention;*
- C. Convey a clear, simple meaning;*
- D. Command respect from road users;*
- E. Provide adequate time for proper response.*

## 3.0 EVALUATION CONSIDERATIONS

Recognizing the limited availability of resources to implement crossing treatments within the City, it is important to use careful discretion when deciding to install a crossing treatment. Potential crossing locations should exhibit substantial need for treatment. The primary considerations and factors involved in the decision-making process and evaluation score sheet (**Exhibit A**) are described in further detail in this section.

### Origin and Destination

In a proactive effort to address safety concerns for active transportation users, the City of Scottsdale considers potential pedestrian and bicyclist origins and destinations within the vicinity of the crossing area as the most significant factor in warranting a pedestrian crossing treatment study. This factor also considers the latent demand for the crossing location. It is essential that the expected increase in volume of pedestrian crossings after the installation of a crossing treatment be considered as a part of this evaluation. This potential increase in usage is estimated by considering the existing surrounding land use, past trends in pedestrian activity, roadway characteristics and newly planned developments.

In order to provide a baseline for this analysis, the City of Scottsdale utilizes the active transportation gravity demand model developed by the Maricopa Association of Governments as a starting point. Refer to **Exhibit B** for further information regarding the demand model. Adjustments can be made to the gravity demand model score in order to account for unique and localized variations within the vicinity of the crossing area.



## **Pedestrian Volume**

The number of existing pedestrian crossings at an uncontrolled location is often a good indicator of the overall demand for an improved crossing treatment. A general rule of thumb is that if 20 pedestrians are currently crossing within the study area during a typical peak hour then the location meets the minimum threshold for a higher-level crossing treatment (i.e. RRFB, PHB, Traffic Signal or Separated Grade Crossing). However, the lack of crossings does not always discount the need for a crossing treatment, since some locations may be difficult to cross, but still have a high demand. Latent demand captured within the origin and destination score is used to account for this.

## **Vehicular Volume**

The conflicting vehicular volume is another significant factor when evaluating a crossing location since it is indicative of the delay that a pedestrian may experience while attempting to cross the road. The longer the pedestrian must wait, the less likely they will wait for an acceptable/safe crossing gap. Additionally, high traffic volumes increase the potential number of conflicts that a pedestrian may experience while crossing.

## **Distance to the Nearest Defined Crossing**

Pedestrians are often unwilling to walk far out of their way to utilize an improved crossing. Many roads in the southwest portion of the United States, including the City of Scottsdale, have signalized intersections spaced at quarter mile or half mile increments and are often farther away than pedestrians are willing to walk. It can be expected that the number of midblock pedestrian crossing events will increase as the distance between the study location and the nearest improved crossing increases.

## **Posted Speed Limit**

Similar to vehicular volume, the posted speed on the conflicting road within the study location can be used to better understand the potential outcomes of conflicts between pedestrians and motor vehicles. Higher vehicular speeds tend to correlate with higher injury rates in pedestrian-vehicle collisions. For many pedestrians, roads with high posted speeds are considered greater crossing obstacles and may discourage pedestrian trips in an area where pedestrian activity may otherwise be high.

## **Crossing Distance**

The crossing distance or the combined width of each lane and potential median on the conflicting road is an indication of the amount of time it takes a pedestrian to cross at the study area. Additionally, a high vehicular volume in association with a long crossing distance generally indicates that the number of acceptable gaps for a pedestrian to cross are minimal.

## **Median Type**

The presence and type of median may affect the degree of safety at a crossing location. In general, roads with raised medians are more accommodating for pedestrians than roads with no median because the median provides a refuge area to help the pedestrian complete a two-stage crossing, i.e., when a pedestrian crosses one direction of travel, waits in the refuge area and then crosses the second direction of travel.

## **Roadway Illumination**

Many pedestrian collisions happen at nighttime when visibility is limited. Often in this case, the pedestrian may expect that the vehicles will notice them and slow down as they cross. However, the nighttime conditions make driver detection of a pedestrian less likely at necessary distances to allow for time to slow or take evasive action. The type and intensity of existing roadway lighting should be considered in the crossing evaluation. Double-sided street lighting is preferred for pedestrian crossing locations.

## **Collision History**

Past trends in collision history are often good indicators to be used in determining the most appropriate treatment at a crossing location. However, it is important to recognize that there is often a high degree of randomness associated with pedestrian collisions. Some locations that experience a pedestrian crash may not be suitable for a new crossing treatment or may already have an effective treatment.

## **Sight Distance**

Sight distance plays a pivotal role in the safety of pedestrians and drivers alike. A driver must be able to see that a pedestrian is in the roadway at sufficient distance to allow for time to react to avoid a collision. Similarly, a pedestrian looking to cross the roadway must be able to anticipate that they will have enough time to do so without risking exposure to a conflicting vehicle. Therefore, in selecting a crossing treatment both factors must be accounted for.

### **Stopping Sight Distance:**

Vehicle stopping sight distance is the distance at which the driver of the vehicle must be able to identify a person or object, have time to react, and safely come to a stop.

### **Crossing Sight Distance:**

Pedestrian crossing sight distance refers to the distance away that a pedestrian must be able to observe approaching vehicles in order to make the decision to cross the roadway and safely cross without potential conflict with a vehicle. Because vehicles are required to yield to pedestrians, crossing sight distance is not necessarily required. However, to reduce the potential conflicts providing the pedestrian adequate sight distance is highly desirable for any crossing.

An inspection of the available sight distance should be performed, and the worksheet in **Exhibit C** should be used in all pedestrian crossing studies. If it is possible to provide the required pedestrian crossing sight distance, reasonable effort should be made. In locations that do not provide the pedestrian adequate crossing sight distance it becomes exceedingly important to incorporate added safety features if crossing treatment is pursued. Particularly, there should be added effort to raise driver awareness of the pedestrian in the crossing facility and reduce the required sight distance for crossing (i.e. reduce speeds, reduce crossing distance).

## **4.0 CONCLUSION**

With the creation of these guidelines the City of Scottsdale intends to standardize the decision-making process for evaluating the installation of pedestrian crossing treatments at unsignalized and uncontrolled locations. When used in combination with engineering judgement and available resources for construction and operations, these guidelines will aid in reducing the number of daily instances where a pedestrian is faced with two undesirable options:

- Cross a busy street at an uncontrolled location; or,
- Walk an extended distance to utilize a safe crossing

## Exhibit A: Pedestrian Crossing Evaluation

Location: \_\_\_\_\_

Date: \_\_\_\_\_

**1. Origin/Destination (0–12 points)** – Award points based on MAG Gravity Demand Model. Refer to Exhibit B: Up to 5 points may be added or subtracted to the point value to account for special circumstances.

Provide Justification for any addition or subtraction in the comments section.

Less than 100	0 points	_____
100 and 150	4 points	
150 -185	8 points	
185 – 223	12 points	

**2. Pedestrian Volume (0-10 points)** – Award points based on the number of observed crossing events during a typical pedestrian peak hour:

Less than 10	0 points	_____
Between 10 and 20	5 points	
20 or more	10 points	

**3. Vehicular Volume (0-6 points)** – Award Points:

Less than 3,000 ADT	0 points	_____
3,000 – 9,000 ADT	2 points	
9,000 – 15,000 ADT	4 points	
15,000 ADT or greater	6 points	

**4. Distance to Nearest Controlled Crossing (0-8 points)** – Award points:

Less than 300 feet	0 points	_____
300 – 600 feet	2 points	
600 – 900 feet	4 points	
900 – 1,500 feet	6 points	
Greater than 1,500 feet	8 points	

**5. Posted Speed (0-6 points)** - Award points:

25 mph	0 points	_____
30 mph	2 points	
35 mph	4 points	
40 mph or Greater	6 points	

**6. Crossing Distance (0-4 points)** – Award points:

Less than 35 feet	0 points	_____
35 - 50 feet	1 points	
50 - 60 feet	2 points	
60 – 70 feet	3 points	
Greater than 70 feet	4 points	

**7. Median Type (0-5 points)** – Award points:

10 feet or greater (raised)	0 points	_____
Between 3 feet and 10 feet (raised)	2 points	
Center two-way left turn lane	3 points	
Striped median	4 points	
No median	5 points	

**8. Roadway Illumination (0-3 points)** – Award points based on presence and/or type of existing roadway illumination within proximity to the crossing area:

\_\_\_\_\_

**9. Collision History** – Award 5 points for every correctable pedestrian, bicycle, skateboarder, or scooter related collision that has been reported within the study area in the most recent 5 years of collision data:

\_\_\_\_\_

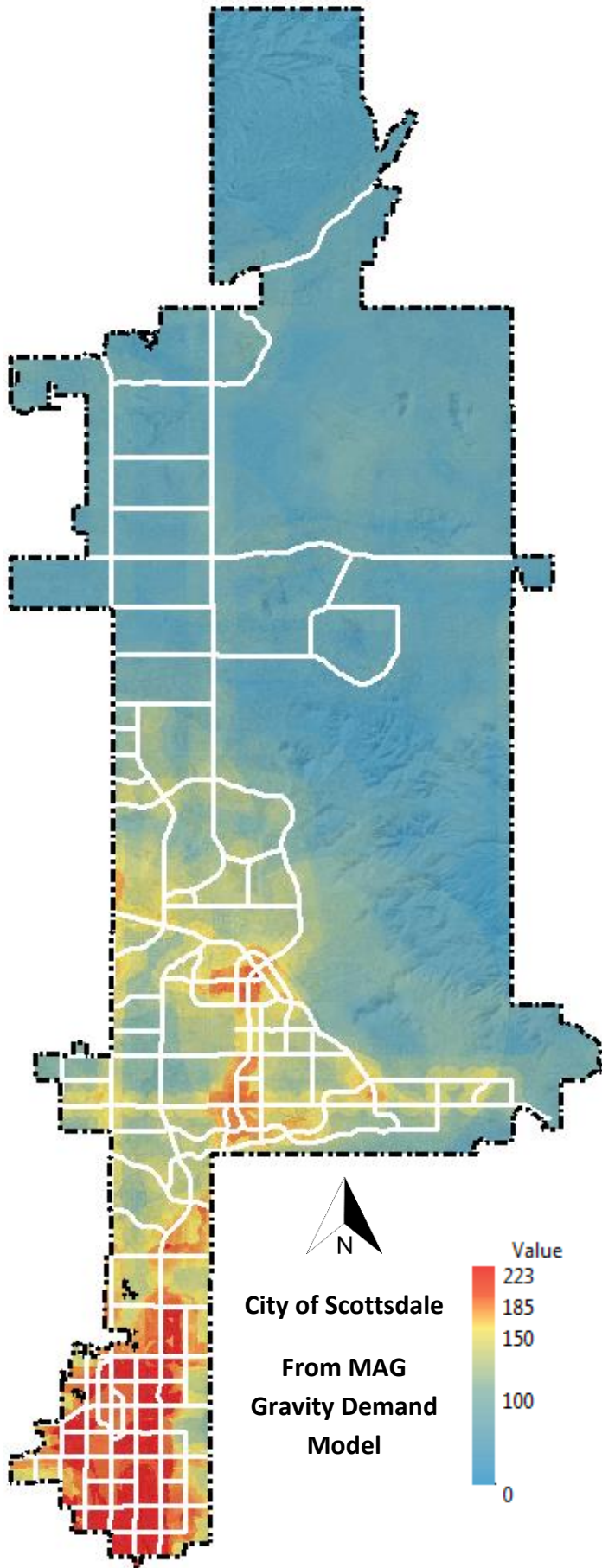
**GRAND TOTAL**

\_\_\_\_\_

**Note:** A minimum total score of 30 points must be achieved for the location to be considered for a RRFB, PHB, Traffic Signal, or Separated Grade Crossing. Refer to **Exhibit D** for counter measure selection guidance. Scores may be used for prioritization of funds.



## Exhibit B: MAG Gravity Demand Model



### Gravity Analysis Factors and Variables

Factor	Variable	Distance	Weight
Pedestrian and Bicycle Crash History *	Weighted crash kernel density	0.25 mile	10
Employment Density (number of jobs)*	Proximity to employment and number of jobs	2 miles	20
School	Proximity to schools	0.5 mile	10
University	Proximity to Universities	1 mile	15
Existing Transit	Proximity to bus stops	0.25 mile	10
	Proximity to light rail stops	0.50 mile	10
	Proximity to transit stops with high ridership	bus 0.25 miles rail .050 mile	10
Parks	Proximity to parks	.025 mile	10
Demographics*	High population density	NA	20
	High bike mode share	NA	10
	High walk mode share	NA	10
	High transit mode share	NA	10
	High percentage of low-income households	NA	10
	High percentage of older adult population (65+)	NA	10
	High percentage of zero vehicle households	NA	10
Strava Data*	Annual Bicyclist Activity	0.5 mile	20
	Annual Pedestrian Activity	0.5 mile	20

\* These factors use a tiered weighting method in which the variables are broken into quintiles and scored using a quintile scale. For example, a variable with a weight of 10 will apply a score of 10 to the highest quintile and the proceeding quintiles receive a score of 8, 6, 4, and the lowest quintile receiving a score of 0.

**Contact City of Scottsdale Traffic Engineering staff for locational demand model scores.**

**Refer to the MAG Active Transportation Plan for more Information regarding demand model scoring and analysis.**

### **Exhibit C: Sight Distance Calculations**

$$SSD = (1.47 * PS * 2.5secs) + 1.075 * (\frac{PS^2}{11.2ft/s^2})$$

Posted Speed - PS (mph)	Stopping Sight Distance - SSD (ft)	Posted Speeds - PS (mph)	Stopping Sight Distance - SSD (ft)
15	80	40	305
20	115	45	360
25	155	50	425
30	200	55	495
35	250		

$$CSD = 1.47 * PS * (2.5sec + \frac{CD}{3.5 ft/s})$$

Posted Speed -PS (mph)	Crossing Distance - CD (ft)	Crossing Sight Distance - CSD (ft)	Posted Speed -PS (mph)	Crossing Distance - CD (ft)	Crossing Sight Distance - CSD (ft)
25	24	344	45	24	619
25	36	470	45	36	846
25	48	596	45	48	1073
30	24	413	50	24	688
30	36	564	50	36	940
30	48	715	50	48	1192
35	24	481	55	24	757
35	36	658	55	36	1034
35	48	834	55	48	1311
40	24	550			
40	36	752			
40	48	953			

**Evaluation:**

Posted Speed: \_\_\_\_\_

Crossing Distance: \_\_\_\_\_

\*Crossing distance may be measured to the median if a 10 foot or wider raised median is present

Required Stopping Sight Distance: \_\_\_\_\_

Required Crossing Sight Distance: \_\_\_\_\_

Satisfies Both Required Sight  
Distance Criteria?

**Yes / No**

**Existing Sight Distance:**

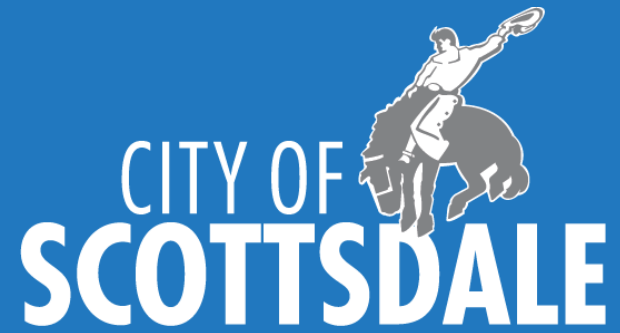
Stopping:      Direction (\_\_\_) = \_\_\_\_\_ ft.      Direction (\_\_\_) = \_\_\_\_\_ ft.

Crossing:      Direction (\_\_\_) = \_\_\_\_\_ ft.      Direction (\_\_\_) = \_\_\_\_\_ ft.

## **Exhibit D: Pedestrian Crossing Treatment Options**

Treatment Option	Appropriate Conditions
<b>Improved Street Lighting</b>	<ul style="list-style-type: none"> <li>- Posted Speed: Any</li> <li>- Traffic Volume: Any</li> <li>- Used to improve visibility of the crossing area during nighttime hours</li> <li>- Average Cost: \$2,000 per street light pole and light fixture*</li> </ul>
<b>High Visibility Striped Crosswalk with Warning Signs (Uncontrolled)</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 25 – 30 mph</li> <li>- Traffic Volume: 3,000 – 5,000 ADT</li> <li>- Crossing distance: less than 50 feet</li> <li>- Often used where yield compliance is a concern</li> <li>- Average Cost: \$1,500*</li> </ul>
<b>In Pavement Signage</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 25 – 30 mph</li> <li>- Traffic Volume: 5,000 – 10,000 ADT</li> <li>- Often used where both yield compliance and speed compliance are concerns</li> <li>- Include High Visibility Crosswalk</li> <li>- Average Cost: \$1,000*+\$1,500 accounts for ongoing maintenance</li> </ul>
<b>Raised Crosswalk</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 25 mph</li> <li>- Traffic Volume: 1,500 – 5,000 ADT</li> <li>- Often used where both yield compliance and speed compliance are concerns</li> <li>- Include High Visibility Crosswalk + In Pavement Signage (If feasible)</li> <li>- Average Cost: \$8,000*</li> </ul>
<b>Bulb out/Curb Extension</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 25 – 30 mph</li> <li>- Traffic Volume: 3,000 – 9,000 ADT</li> <li>- Used to shorten crossing distance and improve sight distance</li> <li>- Used in areas with on-street parking, must not restrict bike lanes and drainage</li> <li>- Include High Visibility Crosswalk + In Pavement Signage + Raised Crosswalk (If feasible)</li> <li>- Average Cost: \$15,000 per extension*</li> </ul>
<b>Pedestrian Refuge (Unmarked)</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 30 – 45 mph</li> <li>- Traffic Volume: 5,000 – 15,000 ADT</li> <li>- Used where crossing distance, vehicular volumes, and speeds are concerns</li> <li>- Often used as a first step in areas with low existing or latent pedestrian demand</li> <li>- Average Cost: \$30,000*</li> </ul>
<b>Rectangular Rapid Flashing Beacon (RRFB)</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 30 – 35 mph</li> <li>- Traffic Volume: 9,000 – 15,000 ADT</li> <li>- Often used to improve yield compliance and visibility</li> <li>- Often used as a first step in areas with moderate pedestrian demand (&lt; 20 pedestrian crossing in a peak hour)</li> <li>- Add Pedestrian Refuge (If feasible)</li> <li>- Average Cost: \$20,000 beacon/signing and striping only*</li> </ul>
<b>Pedestrian Hybrid Beacon (PHB)</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 35 – 50 mph</li> <li>- Traffic Volume: 12,000 ADT or greater</li> <li>- Typically used on arterial roads with high speeds and volumes</li> <li>- May be warranted by MUTCD guidance</li> <li>- Used to assign right of way to pedestrians</li> <li>- Average Cost: \$150,000*</li> </ul>
<b>Traffic Signal</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 25 – 55 mph</li> <li>- Traffic Volume: 10,000 ADT or greater</li> <li>- Used where vehicular activity at an intersection may also warrant the installation of a traffic signal</li> <li>- A complete traffic signal warrant analysis must be completed in accordance with MUTCD Chapter 4C</li> <li>- Average Cost: \$275,000*</li> </ul>
<b>Separated Grade Crossing</b>	<ul style="list-style-type: none"> <li>- Posted Speed: 30 – 55 mph</li> <li>- Traffic Volume: 15,000 ADT or greater</li> <li>- Used at multi-use path crossings or other high-profile crossing locations</li> <li>- Average Cost: Highly variable between \$600,000 and \$6,000,000*</li> </ul>

\*Average costs are rough estimates based on 2019 market value; the actual project cost may vary considerably by location. Two or more treatment options may be used in conjunction with one another



# **Guidelines to Identify Pedestrian Crossing Treatments**

**Transportation Commission— August 19, 2021**



# Background

- Number of Requests
- Improve Pedestrian Safety
- Uniformity in Analysis
- Engineering Judgement
- Countermeasure Identification



## Guidelines to Identify Pedestrian Crossing Treatments

Effective: January 2020

# Guidelines Development Process

- Past Experiences
- References
  - Federal Highway Administration - Safe Transportation for Every Pedestrian (STEP) — Resources
  - Arizona Department of Transportation -Pedestrian Hybrid Beacon evaluation sheet
  - Manual on Uniform Traffic Control Devices (MUTCD)
- Follow up Analysis

Table 1. Application of pedestrian crash countermeasures by roadway feature.

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	1 2 4 5 6	1 2 7 9	1 2 7 9	1 2 4 5 6	1 2 5 6	1 2 7 9	1 2 4 5 6	1 2 7 9	1 2 5 6
3 lanes with raised median (1 lane in each direction)	1 2 3 4 5	1 2 3 7 9	1 2 3 7 9	1 2 3 4 5 6	1 2 3 5 6	1 2 3 7 9	1 2 3 4 5 6	1 2 3 7 9	1 2 3 5 6
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	1 2 3 4 5 6	1 2 3 7 9	1 2 3 7 9	1 2 3 4 5 6	1 2 3 5 6	1 2 3 7 9	1 2 3 4 5 6	1 2 3 7 9	1 2 3 5 6
4+ lanes with raised median (2 or more lanes in each direction)	1 2 3 4 5 6	1 2 3 7 8 9	1 2 3 7 8 9	1 2 3 4 5 6	1 2 3 5 6	1 2 3 7 8 9	1 2 3 4 5 6	1 2 3 7 8 9	1 2 3 5 6
4+ lanes w/o raised median (2 or more lanes in each direction)	1 2 3 4 5 6	1 2 3 7 8 9	1 2 3 7 8 9	1 2 3 4 5 6	1 2 3 5 6	1 2 3 7 8 9	1 2 3 4 5 6	1 2 3 7 8 9	1 2 3 5 6

Given the set of conditions in a cell,  
 # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.  
 1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs  
 2 Raised crosswalk

## Exhibit 640-A. PEDESTRIAN HYBRID BEACON (PHB) EVALUATION

PEDESTRIAN HYBRID BEACON (PHB) EVALUATION

Location: \_\_\_\_\_ Date: \_\_\_\_\_

- Motor vehicle crashes correctable by installation of PHB – Award 5 points for each crash (for the most recent 5 years of data) involving pedestrians, bicyclists, wheel chairs, skateboards, motorized scooters, or golf carts crossing within 500 feet on either side of the proposed PHB locations, or half the distance to the nearest signal (whichever is less): \_\_\_\_\_
  - 0 points → 0 – 10 pedestrians per peak hour (average)
  - 2 points → 11 – 20 pedestrians per peak hour (average)
  - 4 points → 21 – 39 pedestrians per peak hour (average)
  - 6 points → 40+ pedestrians per peak hour (average)
- Peak hour pedestrian crossing volume – Award points if the average peak hour pedestrian crossing volume within 500 feet on either side of the proposed PHB location, or half the distance to the nearest traffic signal (whichever is less): \_\_\_\_\_
  - 0 points → 0 – 10 pedestrians per peak hour (average)
  - 2 points → 11 – 20 pedestrians per peak hour (average)
  - 4 points → 21 – 39 pedestrians per peak hour (average)
  - 6 points → 40+ pedestrians per peak hour (average)
- Location of nearest existing traffic signal or existing PHB – Award points: \_\_\_\_\_
  - 5 points → Less than 500 feet
  - 0 points → 500 – 1,000 feet
  - 5 points → Over 1,000 feet
- Posted speed limit – Award points: \_\_\_\_\_
  - 0 points → Under 30 mph
  - 2 points → 30 – 35 mph
  - 4 points → 40 – 45 mph
- Roadway traffic volume (AADT) – Award points: \_\_\_\_\_
  - 0 points → Less than 5,000
  - 2 points → 5,000 – 9,999
  - 4 points → 10,000 – 14,999
  - 6 points → 15,000+
- Raised median – Award 5 points if the roadway does not have a raised median with a minimum width of 6 feet. \_\_\_\_\_
- Shared-use path or walkway – Award 5 points if a designated, maintained, and permitted shared-use path or walkway crosses the road at the proposed PHB location. \_\_\_\_\_
- Pedestrian activity generator – Award 5 points if the proposed PHB location is within 500 feet of a senior center, medical facility, community center, school, or other pedestrian activity generator. \_\_\_\_\_
- Roadway illumination – Award 5 points if the proposed PHB location does not have roadway illumination. \_\_\_\_\_
- Crossing distance – Award 5 points if the crossing distance is greater than 36 feet. (If a raised median with a minimum width of 6 feet is present, the crossing distance is measured to the median). \_\_\_\_\_

**GRAND TOTAL** \_\_\_\_\_

top Here For) Pedestrians sign  
 ising sign  
 ng Beacon (RRFB)\*\*  
 n (PHB)\*\*  
 ), Safety effects of marked versus unmarked  
 61 on Uniform Traffic Control Devices, 2009 Edition  
 //www.cmb-transportation.org/, FHWA, Pedestrian  
 ter, S. Smith, C. Sunstrom, N.J. Threlk, J. Zeger  
 crossing Treatments, Transportation Research Board  
 Highways, Transportation Research Board, Washing

# Evaluation Procedure

- Identification and Description of Crossing Location
- Traffic Data Collection and Operational Analysis
- Crossing Evaluation



# Evaluation Considerations

- Origin and Destination
- Pedestrian Volume
- Vehicular Volume
- Distance to the Nearest Defined Crossing
- Posted Speed limit



# Evaluation Considerations (Cont.)

- Crossing Distance
- Median Type
- Roadway Illumination
- Collision History
- Sight Distance



## Exhibit A: Pedestrian Crossing Evaluation

Location: \_\_\_\_\_ Date: \_\_\_\_\_

**1. Origin/Destination (0-12 points)** – Award points based on MAG Gravity Demand Model. Refer to Exhibit B: Up to 5 points may be added or subtracted to the point value to account for special circumstances.

Provide Justification for any addition or subtraction in the comments section.

Less than 100	0 points	_____
100 and 150	4 points	_____
150 -185	8 points	_____
185 – 223	12 points	_____

**2. Pedestrian Volume (0-10 points)** – Award points based on the number of observed crossing events during a typical pedestrian peak hour:

Less than 10	0 points	_____
Between 10 and 20	5 points	_____
20 or more	10 points	_____

**3. Vehicular Volume (0-6 points)** – Award Points:

Less than 3,000 ADT	0 points	_____
3,000 – 9,000 ADT	2 points	_____
9,000 – 15,000 ADT	4 points	_____
15,000 ADT or greater	6 points	_____

**4. Distance to Nearest Controlled Crossing (0-8 points)** – Award points:

Less than 300 feet	0 points	_____
300 – 600 feet	2 points	_____
600 – 900 feet	4 points	_____
900 – 1,500 feet	6 points	_____
Greater than 1,500 feet	8 points	_____

**5. Posted Speed (0-6 points)** - Award points:

25 mph	0 points	_____
30 mph	2 points	_____
35 mph	4 points	_____
40 mph or Greater	6 points	_____

**6. Crossing Distance (0-4 points)** – Award points:

Less than 35 feet	0 points	_____
35 - 50 feet	1 point	_____
50 - 60 feet	2 points	_____
60 – 70 feet	3 points	_____
Greater than 70 feet	4 points	_____

**7. Median Type (0-5 points)** – Award points:

10 feet or greater (raised)	0 points	_____
Between 3 feet and 10 feet (raised)	2 points	_____
Center two-way left turn lane	3 points	_____
Striped median	4 points	_____
No median	5 points	_____

**8. Roadway Illumination (0-3 points)** – Award points based on presence and/or type of existing roadway illumination within proximity to the crossing area:

**9. Collision History** – Award 5 points for every correctable pedestrian, bicycle, skateboarder, or scooter related collision that has been reported within the study area in the most recent 5 years of collision data:

GRAND TOTAL \_\_\_\_\_

**Note:** A minimum total score of 30 points must be achieved for the location to be considered for a RRFB, PHB, Traffic Signal, or Separated Grade Crossing. Refer to Exhibit D for counter measure selection guidance. Scores may be used for prioritization of funds.

# Pedestrian Crossing Evaluation Score Sheet

- Thresholds developed using past studies and national guidelines
- High Scoring locations gain higher priority and may be appropriate for higher level treatments

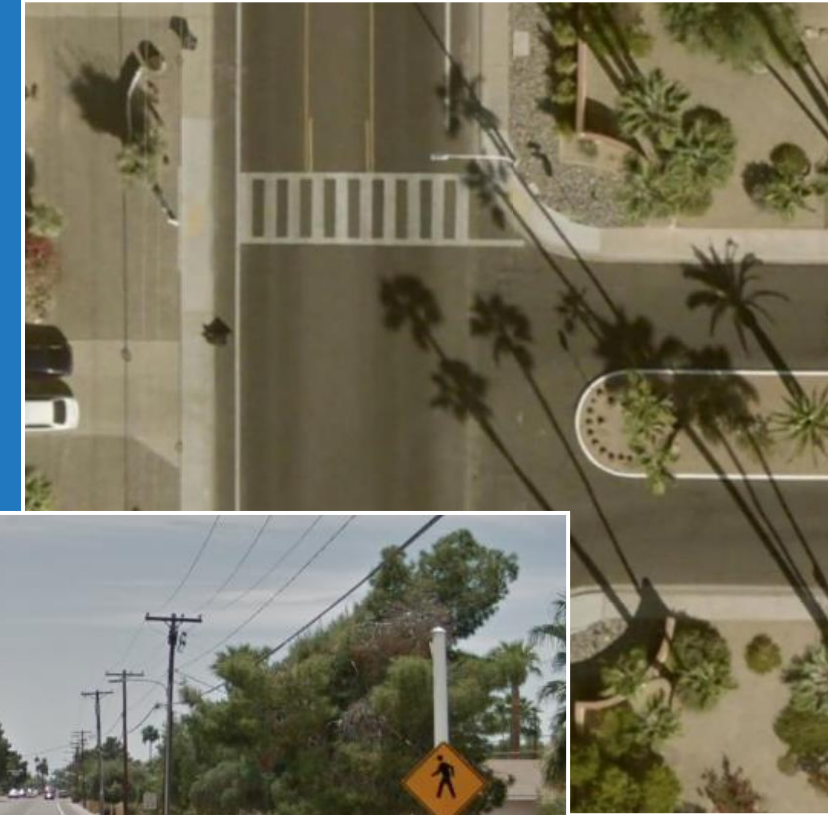


# Pedestrian Crossing Treatment Options

- Improved Street Lighting
- High Visibility Striped Crosswalk
- In-Pavement Signage
- Raised Crosswalk
- Bulb-Out/Curb Extension
- Unmarked Pedestrian Refuge
- Rectangular Rapid Flashing Beacon
- Pedestrian Hybrid Beacon
- Traffic Signal
- Separated Grade Crossing

# High Visibility Marked Crosswalk

- Posted Speed: 25 – 30 mph
- Traffic Volume: 3,000 – 5,000 ADT
- Crossing distance: less than 50 feet
- Typical Cost: \$1,500\*





# In-Pavement Signage

- Posted Speed: 25 — 30 mph
- Traffic Volume: 5,000 — 10,000 ADT
- Include High Visibility Crosswalk
- Typical Cost: \$1,000\* + \$1,500  
accounts for ongoing maintenance



# Raised Crosswalk

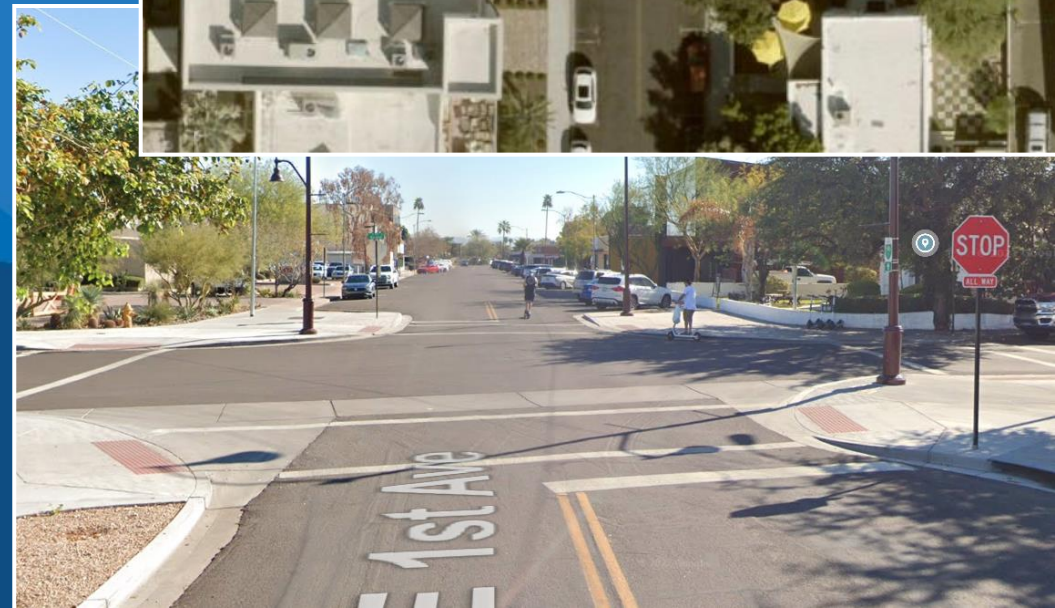
- Posted Speed: 25 mph
- Traffic Volume: 1,500 – 5,000 ADT
- Include High Visibility Crosswalk + In Pavement Signage (If feasible)
- Typical Cost: \$8,000\*





# Bulb-Out/Curb Extension

- Posted Speed: 25 – 30 mph
- Traffic Volume: 3,000 – 9,000 ADT
- Shorten crossing distance and improve sight distance
- Used in areas with on-street parking
- Include High Visibility Crosswalk + In Pavement Signage + Raised Crosswalk (If feasible)
- - Average Cost: \$15,000 per extension\*



# Unmarked Pedestrian Refuge

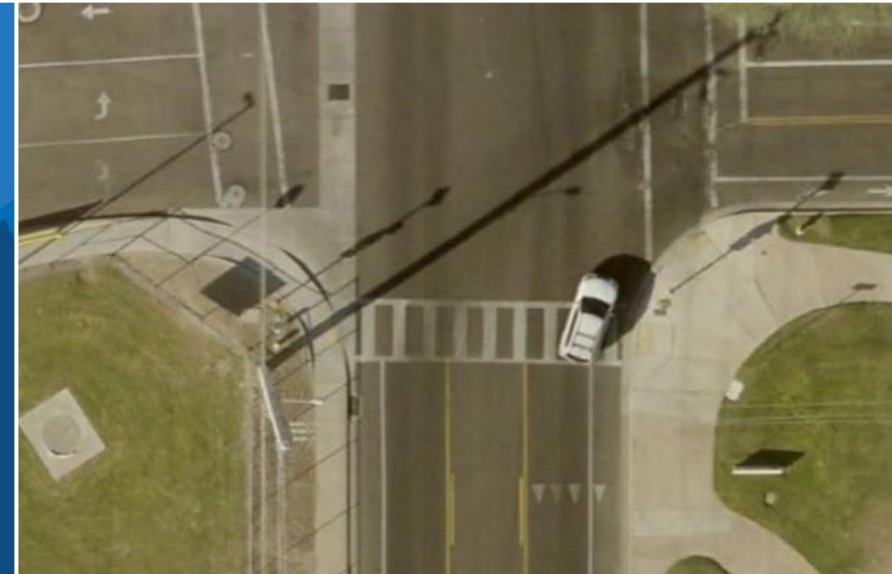
- Posted Speed: 30 — 45 mph
- Traffic Volume: 5,000 — 15,000 ADT
- Used where crossing distance, vehicular volumes, and speeds are concerns
- Often used as a first step in areas with low existing or latent pedestrian demand
- Average Cost: \$30,000\*





# Rectangular Rapid Flashing Beacon (RRFB)

- Posted Speed: 30 — 35 mph
- Traffic Volume: 9,000 — 15,000 ADT
- Often used to improve yield compliance and visibility
- Often used as a first step in areas with moderate pedestrian demand (< 20 pedestrian crossing in a peak hour)
- Add Pedestrian Refuge (If feasible)
- Average Cost: \$20,000 beacon/signing and striping only\*



# Pedestrian Hybrid Beacon (PHB)

- Posted Speed: 35 – 50 mph
- Traffic Volume: 12,000 ADT or greater
- Typically used on arterial roads with high speeds and volumes
- May be warranted by MUTCD guidance
- Used to assign right of way to pedestrians
- Average Cost: \$250,000\*



# Traffic Signal

- Posted Speed: 25 — 55 mph
- Traffic Volume: 10,000 ADT or greater
- Used where vehicular activity at an intersection may also warrant the installation of a traffic signal
- A complete traffic signal warrant analysis must be completed in accordance with MUTCD Chapter 4C
- Average Cost: \$275,000\*



# Grade Separated Pedestrian Crossing

- Posted Speed: 30 — 55 mph
- Traffic Volume: 15,000 ADT or greater
- Used at multi-use path crossings or other high-profile crossing locations with very high pedestrian volumes
- Average Cost: Highly variable between \$600,000 and \$6,000,000\*





**Presented at Paths and Trails Sub-Committee  
on August 3, 2021**

**Questions?**

# Additional Slides



Table 1. Application of pedestrian crash countermeasures by roadway feature.

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
<b>2 lanes</b> (1 lane in each direction)	① 2 4 5 6	① 5 6 7 9	① 5 6 7 9	① 4 5 6 7 9	① 5 6 7 9	① 5 6 7 9	① 4 5 6 7 9	① 5 6 7 9	① 5 6 9
<b>3 lanes with raised median</b> (1 lane in each direction)	① 2 3 4 5	① ③ 5 7 9	① ③ 5 7 9	① 3 4 5 7 9	① ③ 5 7 9	① ③ 5 7 9	① ③ 4 5 7 9	① ③ 5 7 9	① ③ 5 9
<b>3 lanes w/o raised median</b> (1 lane in each direction with a two-way left-turn lane)	① 2 3 4 5 6 7 9	① ③ 5 6 7 9	① ③ 5 6 9	① 3 4 5 6 7 9	① ③ 5 6 7 9	① ③ 5 6 9	① ③ 4 5 6 7 9	① ③ 5 6 9	① ③ 5 6 9
<b>4+ lanes with raised median</b> (2 or more lanes in each direction)	① ③ 5 7 8 9	① ③ 5 7 8 9	① ③ 5 8 9	① ③ 5 7 8 9	① ③ 5 7 8 9	① ③ 5 8 9	① ③ 5 7 8 9	① ③ 5 8 9	① ③ 5 8 9
<b>4+ lanes w/o raised median</b> (2 or more lanes in each direction)	① ③ 5 6 7 8 9	① ③ 5 6 7 8 9	① ③ 5 6 8 9	① ③ 5 6 7 8 9	① ③ 5 6 7 8 9	① ③ 5 6 8 9	① ③ 5 6 7 8 9	① ③ 5 6 8 9	① ③ 5 6 8 9
<p>Given the set of conditions in a cell,</p> <ul style="list-style-type: none"> <li># Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.</li> <li>● Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.</li> <li>○ Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*</li> </ul> <p>The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.</p>					<ul style="list-style-type: none"> <li>1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs</li> <li>2 Raised crosswalk</li> <li>3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line</li> <li>4 In-Street Pedestrian Crossing sign</li> <li>5 Curb extension</li> <li>6 Pedestrian refuge island</li> <li>7 Rectangular Rapid-Flashing Beacon (RRFB)**</li> <li>8 Road Diet</li> <li>9 Pedestrian Hybrid Beacon (PHB)**</li> </ul>				

\*Refer to Chapter 4, 'Using Table 1 and Table 2 to Select Countermeasures,' for more information about using multiple countermeasures.

\*\*It should be noted that the PHB and RRFB are not both installed at the same crossing location.

This table was developed using information from: Zegeer, C.V., J.R. Stewart, H.H. Huang, P.A. Lagerwey, J. Feaganes, and B.J. Campbell. (2005). Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines. FHWA, No. FHWA-HRT-04-100, Washington, D.C.; FHWA. Manual on Uniform Traffic Control Devices, 2009 Edition. (revised 2012). Chapter 4F, Pedestrian Hybrid Beacons. FHWA, Washington, D.C.; FHWA. Crash Modification Factors (CMF) Clearinghouse. <http://www.cmfclearinghouse.org/>; FHWA. Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE). <http://www.pedbikesafe.org/PEDSAFE/>; Zegeer, C., R. Srinivasan, B. Lan, D. Carter, S. Smith, C. Sundstrom, N.J. Thirsk, J. Zegeer, C. Lyon, E. Ferguson, and R. Van Houten. (2017). NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. Transportation Research Board, Washington, D.C.; Thomas, Thirk, and Zegeer. (2016). NCHRP Synthesis 498: Application of Pedestrian Crossing Treatments for Streets and Highways. Transportation Research Board, Washington, D.C.

## Exhibit 640-A. PEDESTRIAN HYBRID BEACON (PHB) EVALUATION

### PEDESTRIAN HYBRID BEACON (PHB) EVALUATION

Location: \_\_\_\_\_ Date: \_\_\_\_\_

1. Motor vehicle crashes correctable by installation of PHB – Award 5 points for each crash (for the most recent 5 years of data) involving pedestrians, bicyclists, wheel chairs, skateboards, motorized scooters, or golf carts crossing within 500 feet on either side of the proposed PHB locations, or half the distance to the nearest signal (whichever is less): \_\_\_\_\_
  2. Peak hour pedestrian crossing volume – Award points if the average peak hour pedestrian crossing volume within 500 feet on either side of the proposed PHB location, or half the distance to the nearest traffic signal (whichever is less): \_\_\_\_\_
    - 0 points → 0 – 10 pedestrians per peak hour (average)
    - 2 points → 11 – 20 pedestrians per peak hour (average)
    - 4 points → 21 – 39 pedestrians per peak hour (average)
    - 6 points → 40+ pedestrians per peak hour (average)
  3. Location of nearest existing traffic signal or existing PHB – Award points: \_\_\_\_\_
    - 5 points → Less than 500 feet
    - 0 points → 500 – 1,000 feet
    - 5 points → Over 1,000 feet
  4. Posted speed limit – Award points: \_\_\_\_\_
    - 0 points → Under 30 mph
    - 2 points → 30 – 35 mph
    - 4 points → 40 – 45 mph
  5. Roadway traffic volume (AADT) – Award points: \_\_\_\_\_
    - 0 points → Less than 5,000
    - 2 points → 5,000 – 9,999
    - 4 points → 10,000 – 14,999
    - 6 points → 15,000+
  6. Raised median – Award 5 points if the roadway does not have a raised median with a minimum width of 6 feet. \_\_\_\_\_
  7. Shared-use path or walkway – Award 5 points if a designated, maintained, and permitted shared-use path or walkway crosses the road at the proposed PHB location. \_\_\_\_\_
  8. Pedestrian activity generator – Award 5 points if the proposed PHB location is within 500 feet of a senior center, medical facility, community center, school, or other pedestrian activity generator. \_\_\_\_\_
  9. Roadway illumination – Award 5 points if the proposed PHB location does not have roadway illumination. \_\_\_\_\_
  10. Crossing distance – Award 5 points if the crossing distance is greater than 36 feet. (If a raised median with a minimum width of 6 feet is present, the crossing distance is measured to the median). \_\_\_\_\_
- GRAND TOTAL** \_\_\_\_\_

## Exhibit A: Pedestrian Crossing Evaluation

Location: \_\_\_\_\_ Date: \_\_\_\_\_

**1. Origin/Destination (0-12 points)** – Award points based on MAG Gravity Demand Model. Refer to Exhibit B:  
Up to 5 points may be added or subtracted to the point value to account for special circumstances.

Provide Justification for any addition or subtraction in the comments section.

Less than 100	0 points	_____
100 and 150	4 points	_____
150 -185	8 points	_____
185 – 223	12 points	_____

**2. Pedestrian Volume (0-10 points)** – Award points based on the number of observed crossing events during a typical pedestrian peak hour:

Less than 10	0 points	_____
Between 10 and 20	5 points	_____
20 or more	10 points	_____

**3. Vehicular Volume (0-6 points)** – Award Points:

Less than 3,000 ADT	0 points	_____
3,000 – 9,000 ADT	2 points	_____
9,000 – 15,000 ADT	4 points	_____
15,000 ADT or greater	6 points	_____

**4. Distance to Nearest Controlled Crossing (0-8 points)** – Award points:

Less than 300 feet	0 points	_____
300 – 600 feet	2 points	_____
600 – 900 feet	4 points	_____
900 – 1,500 feet	6 points	_____
Greater than 1,500 feet	8 points	_____

**5. Posted Speed (0-6 points)** - Award points:

25 mph	0 points	_____
30 mph	2 points	_____
35 mph	4 points	_____
40 mph or Greater	6 points	_____

**6. Crossing Distance (0-4 points)** – Award points:

Less than 35 feet	0 points	_____
35 - 50 feet	1 points	_____
50 - 60 feet	2 points	_____
60 – 70 feet	3 points	_____
Greater than 70 feet	4 points	_____

**7. Median Type (0-5 points)** – Award points:

10 feet or greater (raised)	0 points	_____
Between 3 feet and 10 feet (raised)	2 points	_____
Center two-way left turn lane	3 points	_____
Striped median	4 points	_____
No median	5 points	_____

**8. Roadway Illumination (0-3 points)** – Award points based on presence and/or type of existing roadway illumination within proximity to the crossing area:

**9. Collision History** – Award 5 points for every correctable pedestrian, bicycle, skateboarder, or scooter related collision that has been reported within the study area in the most recent 5 years of collision data:

GRAND TOTAL \_\_\_\_\_

**Note:** A minimum total score of 30 points must be achieved for the location to be considered for a RRFB, PHB, Traffic Signal, or Separated Grade Crossing. Refer to Exhibit D for counter measure selection guidance. Scores may be used for prioritization of funds.

# List of Locations for Evaluation

Scottsdale Road and 1st Ave	Hayden N of Princess	82nd St and Bell Road
Scottsdale Rd. and Belleview-Enterprise	68th Street and 2nd Street	Via Linda West of Frank Lloyd Wright
Miller and Earll	Mountain View and Loop 101	Granite Reef S of McDonald
Scottsdale Rd. and Palm Ln.	90th and San victor	Thunderbird and 84th Street
86th Street and Thomas	92nd between Cochise and North Ln	105th St and Queen Wreath
Scottsdale Rd and Angus	Shea and 66th Street	Camelback Rd. and Saddlebag Trl.
Goldwater Blvd. and Marshall Wy.	Gold Dust and 68th Way	
Lincoln W of Scottsdale	108th St and Via Linda	



# SCOTTSDALE TRANSPORTATION COMMISSION REPORT



**To:** Transportation Commission  
**From:** Dave Meinhart, Transportation Planning Manager  
**Subject:** Fiscal Year 2021-22 Arterial Life Cycle Program Update  
**Meeting Date:** August 19, 2021

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**Action:** Discussion – no action requested.

## Introduction:

The Arterial Life Cycle Program (ALCP) is managed by the Maricopa Association of Governments (MAG) as part of the Proposition 400-funded Regional Transportation Plan. Proposition 400 provided countywide authorization of a 0.5%, 20-year sales tax extension. The sales tax extension runs through the first half of FY 2025/26 (12/31/25). Regional sales tax funds are combined with federal block grants to fund 70% of Arterial Roadway Projects.

The ALCP requires that each roadway improvement project include a minimum 30% local match. The city's local matching funds are provided by the 0.1% temporary (10-year) transportation sales tax (approximately 75% of matching funds) and the 0.2% permanent transportation sales tax (approximately 25% of matching funds).

## Information:

During the first half of 2021, staff worked with MAG to update funding amounts for the city's ALCP projects based on more current cost estimates and schedules. Since the total amount of funds available to the city through the ALCP is capped, funding increases for projects must be offset by funding decreases in other projects. During the Fiscal Year 2021-22 (FY 22) update, the majority of funding increases were able to be accommodated by the proposed removal of a project, Legacy Boulevard – Hualapai Drive to 88<sup>th</sup> Street, no longer deemed feasible by the Transportation Commission and the City Council. Additional budget changes were possible due to an increase in the total amount of ALCP funding programmed for Scottsdale and to scope adjustments that resulted from more detailed project analysis. Changes to total project budgets are summarized in the table below.

Project	FY 21-26 Total Budget	FY 22-26 Total Budget
Legacy Blvd: Hualapai to 88th	\$17,600,000	\$0
Happy Valley Rd: Pima to Alma School	\$15,800,000	\$23,500,000
Pima Rd: Pinnacle Peak to Happy Valley	\$25,000,000	\$30,500,000
Raintree Dr: Scottsdale to Hayden	\$26,300,000	\$40,000,000
Hayden/Miller Rd: Pinnacle Peak to Happy Valley	\$5,800,000	\$14,200,000
Frank Lloyd Wright/Loop 101 Interchange	\$2,200,000	\$4,000,000
Raintree Drive/Loop 101 Interchange	\$6,800,000	\$1,200,000
Redfield Rd: Raintree (76th Pl.) to Hayden	\$2,100,000	\$500,000

The FY 22 ALCP Update was formally approved by MAG's Regional Council on June 26, 2021. The FY 22 ALCP Update includes \$240.4M of regional funding from FY 22 through mid-FY 26 for Scottsdale projects. A list of all ALCP projects is attached.

### **Status of Active and Near-term Projects**

#### *ALCP Projects Under Construction*

- Raintree Drive: Scottsdale to Hayden (starts September 2021)
  - Total budget = \$40M (including future Phase 2)
  - Phase 1A – 2-lane collector complete street between 76<sup>th</sup> Place/Redfield Road and 78<sup>th</sup> Place/Raintree drive (includes roundabout at 76<sup>th</sup> Place)
  - Phase 1B – roundabout at Raintree Drive/Hayden Road and connection to 78<sup>th</sup> Way
  - Phase 2 – widening to 4 lanes between Scottsdale and 76<sup>th</sup> Place with roundabout at 73<sup>rd</sup> to be coordinated with Raintree: Hayden to Loop 101 Phase 2

#### *ALCP Projects in Final Design*

- Pima Road: Pinnacle Peak to Happy Valley
  - Total budget = \$30.5M
  - 6-lane arterial complete street with shared use path and trail
  - Construction start in early 2022 (packaged with Happy Valley Road project)
- Happy Valley Road – Pima to Alma School
  - Total budget = \$23.5M
  - 4-lane arterial complete street with shared use path and trail
  - Construction start in early 2022 (packaged with Pima Road project)
- Hayden/Miller Road: Pinnacle Peak to Happy Valley
  - Total budget = \$14.2M
  - 4-lane collector complete street with bridge over Rawhide Wash
  - Construction start in mid-2022
- Scottsdale Road: Jomax to Dixileta
  - Total budget = \$23.8M
  - 4-lane arterial with roundabout at Dynamite Boulevard and shared use path and trail
  - Construction start in mid-2022
- Raintree Drive: Hayden to Loop 101
  - Total budget = \$6.2M

- 4-lane collector with new bike lanes and roundabout at Northsight Boulevard
- Phase 1 repaving and restriping complete
- Phase 2 - Raintree/Northsight construction after Loop 101 widening project
- Pima Road: McDowell to Via Linda
  - Total budget = \$71M (\$50M grant to Salt River Pima-Maricopa Indian Community (SRPMIC); \$21M from ALCP)
  - 4-lane arterial complete street
  - Design at 60% (managed by SRPMIC)
  - Construction start in late-2022

*ALCP Projects with Final Design Upcoming*

- Hualapai Drive: Hayden to Pima
  - Total budget = \$10.7M
  - 4-lane arterial complete street (portions already constructed)
  - Design contract awarded 6/21
    - Estimated design completion June 2022
- Loop 101 Freeway Interchanges
  - Frank Lloyd Wright/Loop 101 conversion to diamond interchange (Total budget = \$4M)
  - Raintree/Loop 101 additional right turn bays @ NE, SE, NW corners (Total budget = \$1.2M)
  - Shea/Loop 101 WB right turn bay extension (Total budget = \$400K)
  - All projects to be designed by ADOT beginning Fall 2021 (18-month design schedule)
  - Construction start mid-2023
- Pima Road: Happy Valley to Jomax
  - Total budget = \$16.4M
  - 4-lane arterial complete street with shared use path and trail
  - Design procurement underway
- Carefree Highway: Cave Creek to Scottsdale
  - Total budget = \$11.4M
    - Construction is underfunded (to be reviewed in FY 23 ALCP Update)
  - 4-lane arterial complete street with shared use path and trail on south side
  - North side is Town of Carefree; west end on south side is Town of Cave Creek

- Design procurement Fall 2021
- Pima Road: Dynamite to Las Piedras
  - Total budget = \$19.9M
  - 4-lane arterial complete street with shared use path and trail
  - Rawhide Wash crossing improvements
  - Design procurement Fall 2021

**Next Steps:**

Continue to move forward with design and construction of ALCP projects.

[Attachment:](#) FY 22 ALCP Update Spreadsheet

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**Contact:** Dave Meinhart, 480-312-7641, [dmeinhart@scottsdaleaz.gov](mailto:dmeinhart@scottsdaleaz.gov)

Attachment  
Draft FY 2022 Arterial Life Cycle Program

RTP Project	RTP Code	Remaining Regional Budget (FY22)	Unfunded Due to Deficit	Programmed	Fund Type	Work Phase	FY for Work	Original RTP Phase	Status	FY19 2018\$*	FY20 2019\$*	FY21 2020\$*	FY22	FY23	FY24	FY25	FY26	Unfunded Due to Deficit	
PHASE III												PHASE IV							
<b>SCOTTSDALE/CAREFREE</b>																			
Pima Rd: SR101L to Happy Valley Rd and Dynamite Rd to Cave Creek Rd	ACI-PMA-10-03	\$ 72,373,491	\$ 307,282	\$ 75,116,048															
Pima Rd: Thompson Peak Pkwy to Pinnacle Peak (SCT)	ACI-PMA-10-03-A				RARF	DES	2005-2012	2	CO										
					RARF	ROW	2009-2012	2	CO										
					RARF	CONST	2010-2012	2	CO										
Happy Valley Rd: Pima Rd to Alma School Rd	ACI-PMA-10-03-B				RARF	DES	2019/2020	2	D	0.286	0.166	0.324	0.825						
					RARF	ROW	2020	2	D		0.026		2.031						
					RARF	CONST	2021/2022	2	D				8.149		4.673				
Pima Rd: Pinnacle Peak to Happy Valley Rd (SCT)	ACI-PMA-10-03-C				RARF	DES	2017	2	D	0.603	0.861	0.268							
					RARF	ROW	2018	2	D		0.018		3.230	2.095					
					RARF	CONST	2019-2021	2	D				12.717	1.352					
Pima Rd: Dynamite Blvd to Las Piedras (SCT)	ACI-PMA-10-03-D				RARF	DES	2022-2024	2	D				0.910	0.280					
					RARF	ROW	2023	2	D							0.210			
					RARF	CONST	2024/2025	2	D							3.240	9.280		
Pima Rd: Las Piedras to Stagecoach Rd (SCT)	ACI-PMA-10-03-G				RARF	DES	2023/2024	2	D							1.000	1.450		
					RARF	ROW	2024	2	D								0.350		
					RARF	CONST	2025/2026	2	D							9.154	6.176		
Pima Rd: Stagecoach Rd to Cave Creek (CFR)	ACI-PMA-10-03-E				RARF	CONST	2025/2026	2	D								1.387	3.864	0.307
Pima Rd: SR101L to Thompson Peak Pkwy (SCT)	ACI-PMA-10-03-F				RARF	DES	2004-2008	2	A/CO										
					RARF	ROW	2006-2008	2	A/CO										
					RARF	CONST	2006-2008	2	A/CO										
<b>SCOTTSDALE</b>																			
Carefree Hwy: Cave Creek Rd to Scottsdale Rd	ACI-CFR-10-03	\$ 8,011,907	\$ -	\$ 8,011,907															
					RARF	DES	2022	3	D				1.120						
					RARF	ROW	2023	3	D					0.840					
					STBGP	CONST	2024/2025	3	D							6.052			

Draft FY 2022 Arterial Life Cycle Program

RTP Project	RTP Code	Remaining Regional Budget (FY22)	Unfunded Due to Deficit	Programmed	Fund Type	Work Phase	FY for Work	Original RTP Phase	Status	FY19 2018\$*	FY20 2019\$*	FY21 2020\$*	FY22	FY23	FY24	FY25	FY26	Unfunded Due to Deficit	
										PHASE III			PHASE IV						
Loop 101 North Frontage Rds: Pima/Princess Dr to Scottsdale Rd	ACI-SFN-10-03	\$ -	\$ -	\$ -															
Loop 101 N Frontage Rd: Hayden Rd to Scottsdale Rd	ACI-SFN-10-03-A				RARF	DES	2007/2008	1	CO										
					RARF	ROW	2008	1	CO										
					RARF	CONST	2008/2009	1	CO										
Miller Rd/SR-101L Underpass	ACI-MLR-10-03	\$ 2,075,891	\$ -	\$ 9,598,404	RARF	PRE-DES	2017/2018	3											
Miller Rd/SR-101L Underpass	ACI-MLR-10-03-A				STBGP	DES	2018	3											
					STBGP	ROW	2019	3											
					STBGP	CONST	2019	3		1.602	5.597								
					STBGP	SAVE	2022						2.076						
Miller Road: Princess Blvd. to Legacy Blvd	ACI-MLR-10-03-B				STBGP	DES	2027	3	D										
					STBGP	ROW	2027	3	D										
					STBGP	CONST	2028	3	D										
Pima Rd: Happy Valley Rd to Dynamite Blvd	ACI-PMA-20-03	\$ 23,747,179	\$ -	\$ 23,747,179															
Pima Rd: Happy Valley Rd to Jomax Rd	ACI-PMA-20-03-A				RARF	DES	2021	3	D				1.000						
					RARF	ROW	2022	3	D				0.350						
					STBGP	CONST	2023/2024	3	D					10.145					
					STBGP	SAVE	2024	3	D							4.051			
Pima Rd: Jomax Rd to Dynamite Blvd	ACI-PMA-20-03-B				RARF	DES	2024/2025	3	D							0.560			
					STBGP	CONST	2025/2026	3	D								7.642		
Pima Rd: McKellips Rd to Via Linda	ACI-PMA-30-03	\$ 22,012,411	\$ -	\$ 23,256,095															
Pima Rd: Via Linda to McDowell Rd	ACI-PMA-30-03-A				RARF	DES	2021	1		0.024			2.236						
					RARF	ROW		1	D										
					RARF	CONST	2022	1	D				19.777						
Pima Rd: Via De Ventura to Krail St	ACI-PMA-30-03-B				RARF	DES	2010	1	D/CO										
					RARF	CONST	2010-2012	1	D/CO										
Pima Rd: Krail St to Chaparral Rd	ACI-PMA-30-03-C				RARF	DES	2020	1	D	0.320									
					RARF	CONST	2021-2022	1	D	0.821									
Scottsdale Airpark Area Capacity Improvements	ACI-SAT-10-03	\$ 40,587,829	\$ -	\$ 50,843,373															
Frank Lloyd Wright Blvd at Loop 101 Traffic Interchange	ACI-SAT-10-03-A				STBGP	DES	2022	3	D				0.350						
					STBGP	ROW	2022	3	D				0.500						
					STBGP	CONST	2023	3	D					1.950					
Raintree Dr at Loop 101 Traffic Interchange	ACI-SAT-10-03-B				STBGP	DES	2022	3	D				0.123						
					STBGP	ROW	2020-2021	3	D										
					STBGP	CONST	2023	3	D					0.718					
Northsight Blvd: Hayden Rd to Frank Lloyd Wright Blvd	ACI-SAT-10-03-C				RARF	DES	2011-2013	3	A/CO										
					RARF	ROW	2012/2013	3	A/CO										
					RARF	CONST	2013-2015	3	A/CO										
Redfield Rd: Raintree Dr to Hayden Rd	ACI-SAT-10-03-E				RARF	DES	2016	3	D				0.100						
					RARF	ROW	2016	3	D				0.050						
					RARF	CONST	2019	3	D				0.168						
Raintree Drive: Scottsdale Rd to Hayden Rd	ACI-SAT-10-03-F				RARF	DES	2015-2017	3		0.048	0.012	0.307	0.501						
					RARF	ROW	2018	3		0.193	2.249	0.658							
					RARF	CONST	2019	3			0.179	0.184	12.934	5.742					
Raintree Dr: Hayden Rd to Loop 101	ACI-SAT-10-03-G				RARF	DES	2018	3		0.274	0.091	0.055	0.277						
					RARF	ROW	2019	3	D			0.013	1.037						
					RARF	CONST	2020	3	D				2.550						

Draft FY 2022 Arterial Life Cycle Program

RTP Project	RTP Code	Remaining Regional Budget (FY22)	Unfunded Due to Deficit	Programmed	Fund Type	Work Phase	FY for Work	Original RTP Phase	Status	FY19 2018\$*	FY20 2019\$*	FY21 2020\$*	FY22	FY23	FY24	FY25	FY26	Unfunded Due to Deficit	
										PHASE III			PHASE IV						
Frank Lloyd Wright Blvd at 76th/78th/82nd St Intersection Improvements	ACI-SAT-10-03-H				RARF	DES	2012/2013	3	A										
					RARF	CONST	2014	3	A										
Southbound Loop 101 Frontage Road Connections	ACI-SAT-10-03-I				RARF	PRE DES	2015	3		0.000									
					RARF	ROW	2017	3											
					RARF	CONST	2018	3											
Hayden Rd at Loop 101 Interchange Improvements	ACI-SAT-10-03-J				STBGP	DES	2025	3	D							2.220			
					STBGP	ROW		3	D										
					STBGP	CONST	2026	3	D									11.367	
Airpark DCR	ACI-SAT-10-03-K				RARF	DES	2013		CO										
Scottsdale Rd: Thompson Peak Pkwy to Jomax Rd	ACI-SCT-10-03	\$ 7,928,377	\$ -	\$ 8,786,450															
Scottsdale Rd: Thompson Peak Pkwy to Pinnacle Peak Pkwy Phase I	ACI-SCT-10-03-A				RARF	PRE DES	2009-2011	2	CO										
					RARF	DES	2011/2012	2	CO										
					RARF	ROW	2012/2013	2	CO										
					RARF	CONST	2013-2015	2	CO										

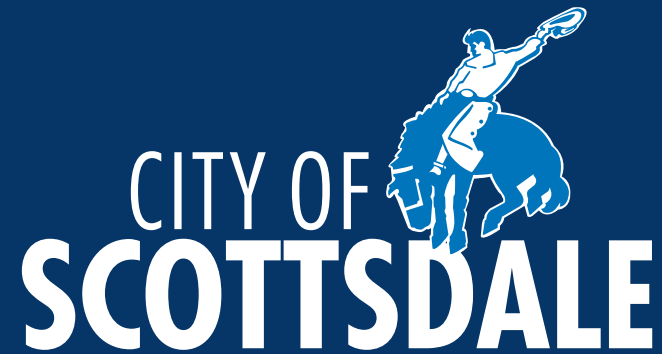


Draft FY 2022 Arterial Life Cycle Program

RTP Project	RTP Code	Remaining Regional Budget (FY22)	Unfunded Due to Deficit	Programmed	Fund Type	Work Phase	FY for Work	Original RTP Phase	Status	FY19 2018\$*	FY20 2019\$*	FY21 2020\$*	FY22	FY23	FY24	FY25	FY26	Unfunded Due to Deficit	
										PHASE III			PHASE IV						
Scottsdale Rd: Thompson Peak Pkwy to Pinnacle Peak Pkwy Phase II	ACI-SCT-10-03-B				RARF	DES	2024/2025	2	D						1.000	0.650			
					RARF	ROW	2025	2	D							0.350			
					RARF	CONST	2026	2	D								4.128		
Scottsdale Rd: Pinnacle Peak Pkwy to Jomax Rd	ACI-SCT-10-03-C				RARF	DES	2024/2025	2	D						0.280	0.980			
					RARF	ROW	2025	2	D							0.350			
					RARF	CONST	2026	2	D								0.190		
Scottsdale Rd: Jomax Rd to Carefree Hwy	ACI-SCT-20-03	\$ 28,277,788	\$ -	\$ 28,496,613															
Scottsdale Rd: Jomax Rd to Dixileta Dr	ACI-SCT-20-03-A				RARF	DES	2020/2021	3	D			0.219	0.971						
					RARF	ROW	2021	3	D				0.420						
					STBGP	CONST	2022-2023	3	D				15.049						
Scottsdale Rd: Dixileta Dr to Carefree Hwy	ACI-SCT-20-03-B				RARF	DES	2023/2024	3	D					1.400					
					RARF	ROW	2024	3	D						0.350				
					RARF	CONST	2025	3	D							10.088			
Shea Blvd: SR-101L to SR-87	ACI-SHA-20-03	\$ 13,926,388	\$ -	\$ 14,115,242															
Shea Blvd at 90th/92nd/96th: Intersection Improvements	ACI-SHA-20-03-A				RARF	DES	2005	4	A/CO										
					RARF	ROW	2006	4	A/CO										
					RARF	CONST	2007	4	A/CO										
Shea Auxiliary Lane from 90th St to Loop 101	ACI-SHA-20-03-B				STBGP	DES	2022	4					0.646						
					RARF	ROW	2022	4					1.550						
					STBGP	CONST	2023	4						1.564					
Shea Blvd at Via Linda (Phase1): Intersection Improvements	ACI-SHA-20-03-C				RARF	DES	2005	4	A/CO										
					RARF	CONST	2006	4	A/CO										
Shea Blvd Intersection Improvements	ACI-SHA-20-03-D				RARF	DES	2020	4				0.189	0.511						
					RARF	ROW	2021	4					0.500						
					RARF	CONST	2021	4					4.935						
					RARF	SAVE	2022						3.792						
Shea Blvd at 120/124th St: Intersection Improvements	ACI-SHA-20-03-E				RARF	DES	2010	4	A/CO										
					RARF	ROW	2010/2011	4	A/CO										
					RARF	CONST	2011/2012	4	A/CO										
Shea Blvd at Mayo/134th St: Intersection Improvements	ACI-SHA-20-03-F				RARF	DES	2005	4	A/CO										
					RARF	CONST	2006	4	A/CO										
Shea Blvd: SR-101L to 96th St: ITS Improvements	ACI-SHA-20-03-G				RARF	DES	2009	4	A/CO										
					RARF	CONST	2009/2010	4	A/CO										
Shea Blvd at 124th St: Intersection Improvements	ACI-SHA-20-03-N				RARF	DES	2021/2022	4	A/CO				0.216						
					RARF	CONST	2021/2022	4	A/CO				0.212						
Legacy Blvd: Hayden Rd to Pima Rd	ACI-UNH-10-03	\$ 7,490,000	\$ -	\$ -															
Hualapai Dr: Hayden Rd to Pima Dr	ACI-UNH-10-03-B			\$ 7,490,000	RARF	DES	2021	4					0.700						
					RARF	ROW	2022	4					2.240						
					STBGP	CONST	2023	4						4.550					
Drinkwater Blvd Bridge	ACI-DRK-30-03	\$ 97,306	\$ -	\$ 4,294,064															

Draft FY 2022 Arterial Life Cycle Program

RTP Project	RTP Code	Remaining Regional Budget (FY22)	Unfunded Due to Deficit	Programmed	Fund Type	Work Phase	FY for Work	Original RTP Phase	Status	FY19 2018\$*	FY20 2019\$*	FY21 2020\$*	FY22	FY23	FY24	FY25	FY26	Unfunded Due to Deficit	
										PHASE III			PHASE IV						
					RARF	DES	2018/2019		CO		0.301								
					RARF	CONST	2019/2020		CO		3.896		0.097						
					RARF	SAVE	2022		CO										
Hayden/Miller: Pinnacle Peak to Happy Valley	ACI-HAY-10-03	\$ 13,877,470	\$ 19,166,632	\$ 13,877,470															
					RARF	DES	2021						0.817						
					RARF	CONST	2022/2023						3.470	5.630			3.961	19.167	



# **Arterial Life Cycle Program Fiscal Year 2021-22 Update**

Transportation Commission  
August 19, 2021

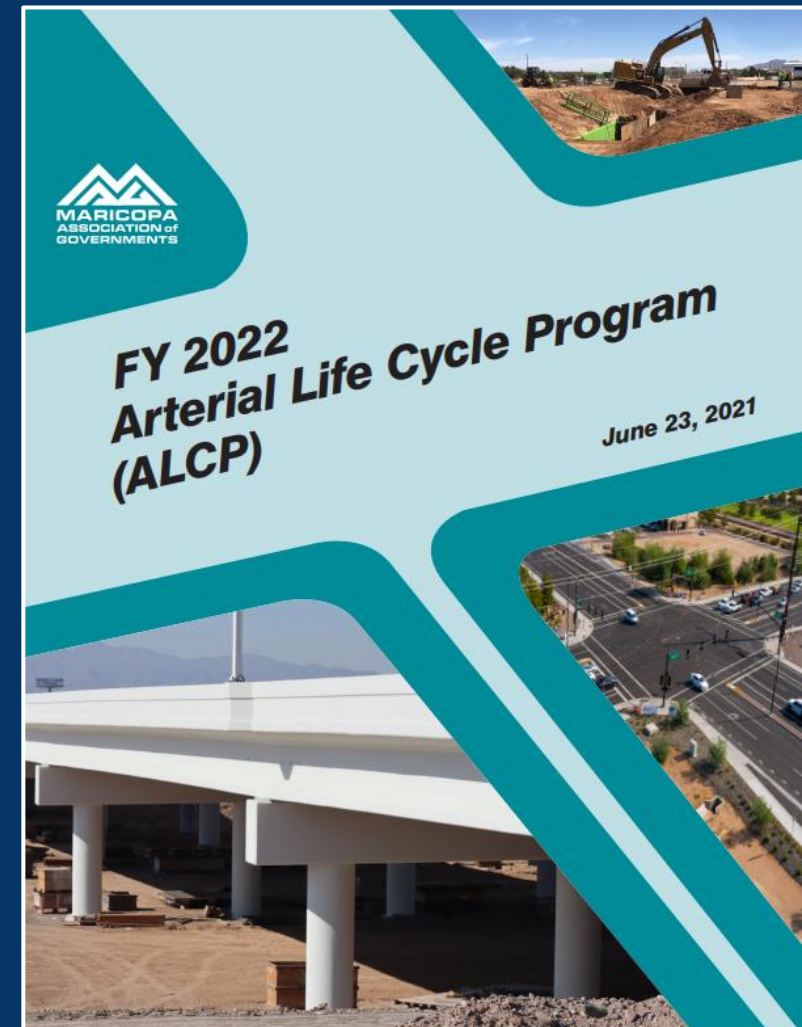
# Arterial Life Cycle Program (ALCP) Fiscal Year 2021-22 (FY 22) Update

## Regional 0.5% Transportation Sales Tax

- 20-year sales tax extension (Proposition 400) approved by Countywide vote in 2004
  - Expires 12/31/25
  - Administered by Maricopa Association of Governments (MAG)
- Combined with Federal block grants to fund 70% of Arterial Roadway Projects
  - FY 22 Update includes \$240.4M FY 22 through mid-FY 26 for Scottsdale projects underway and planned
  - City match from 0.2% Transportation Sales Tax (=25%) and 0.1% Temporary Transportation Sales Tax (=75%)



*Note: This is the next update in a series that have occurred through this past year on the ALCP process and associated projects that are in various phases.*



# ALCP FY 22 Substitute Project Request

Legacy Blvd: Hualapai to 88th section

- Removed from 2016 Transportation Master Plan
- \$12.4M of ALCP for transfer

Hualapai Dr: Hayden Rd to Pima Rd.

- Retained in 2016 TMP

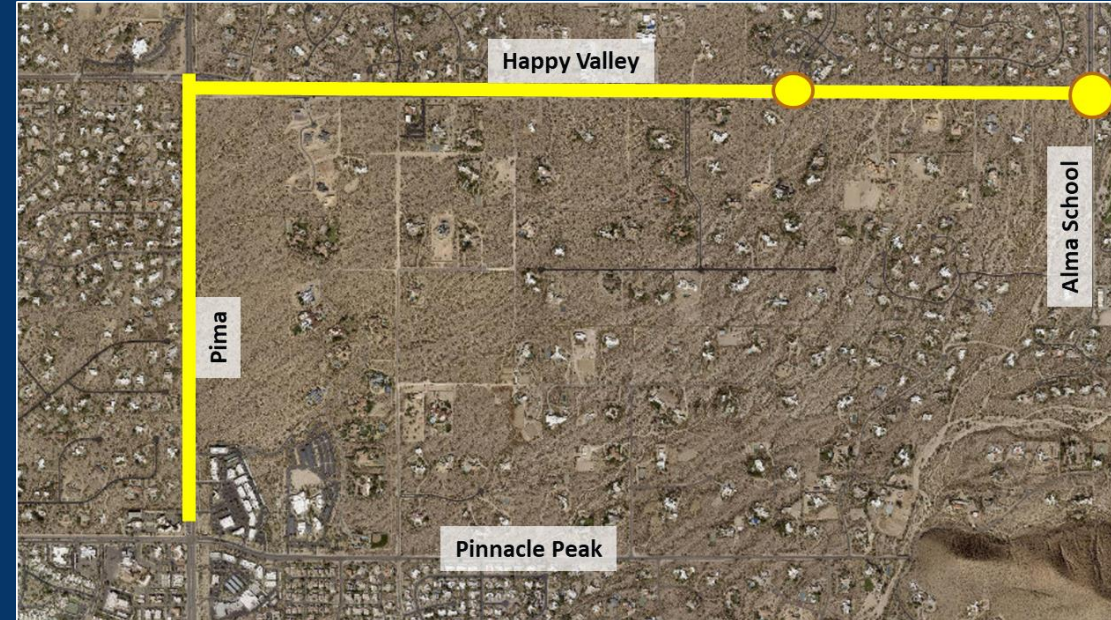




# ALCP FY 22 Substitute Project Request

ALCP transfers from Legacy Blvd:  
Hayden to Pima

- \$5.4M to Happy Valley Rd: Pima to Alma School
- \$3.9M to Pima Rd: Pinnacle Peak to Happy Valley
- \$3.1M to Raintree Dr: Scottsdale to Hayden

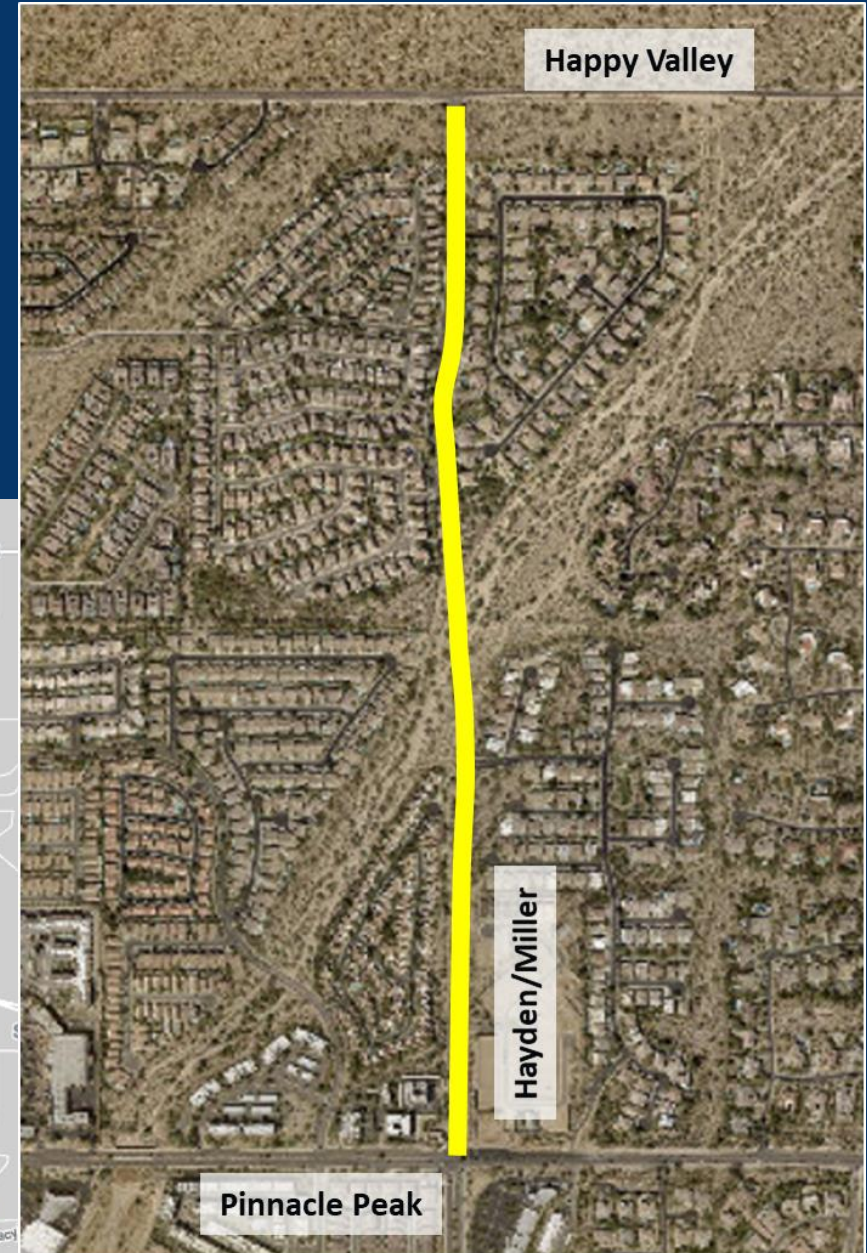
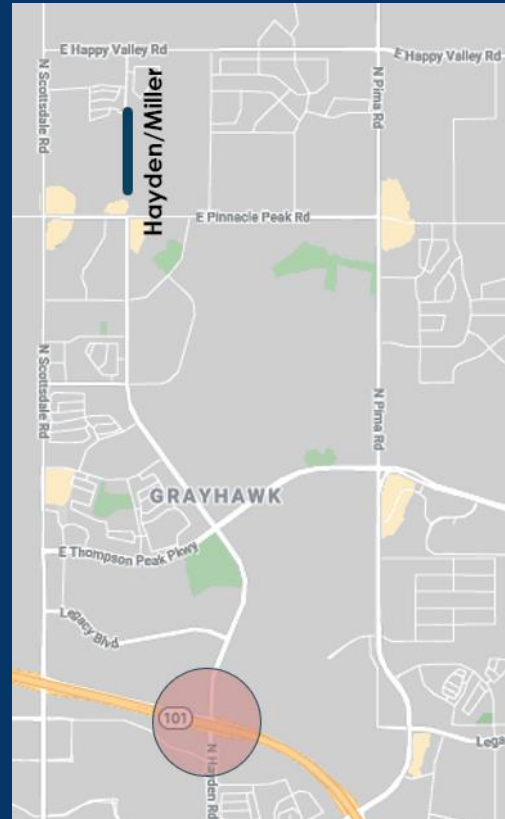




# ALCP FY 22 Budget Adjustments

## Hayden/Miller Rd: Pinnacle Peak to Happy Valley

- \$5.6M increase in ALCP funding
  - From ALCP rebalance that increased regional funding in Scottsdale by \$19.9M through 12/31/25

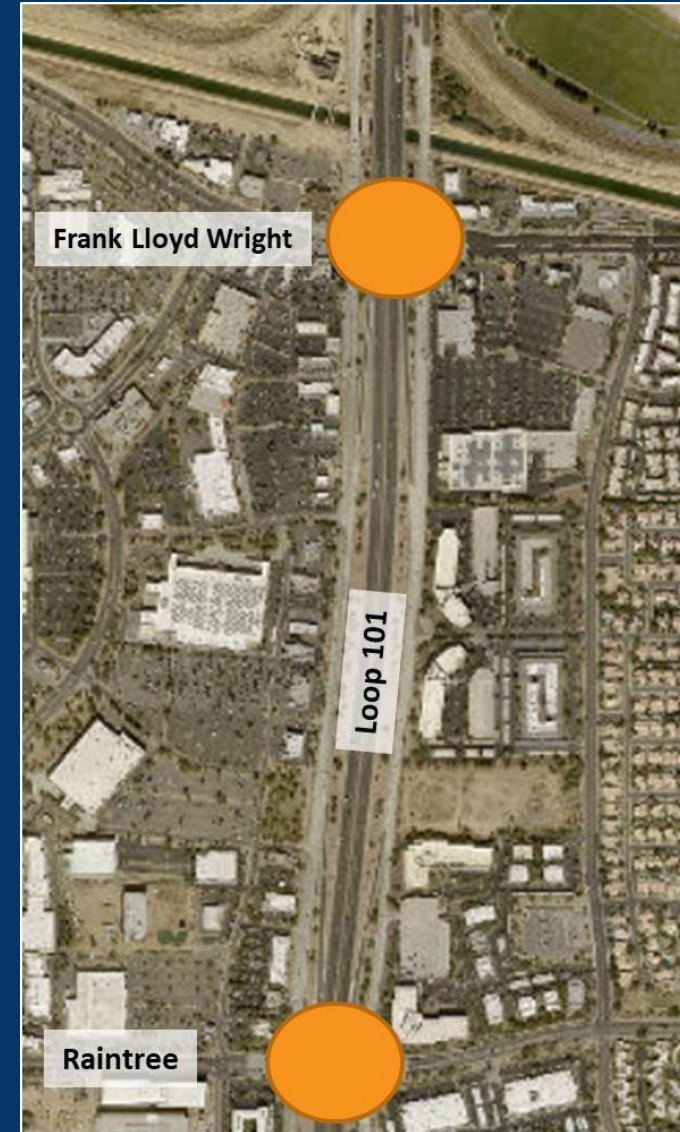




# ALCP FY 22 Budget Adjustments

## Scottsdale Airpark Area Projects

- Frank Lloyd Wright/Loop 101 interchange ALCP increased \$1.2M
- Raintree/Loop 101 interchange ALCP decreased \$4.4M
- Redfield Rd: Raintree to Hayden ALCP decreased \$1.2M



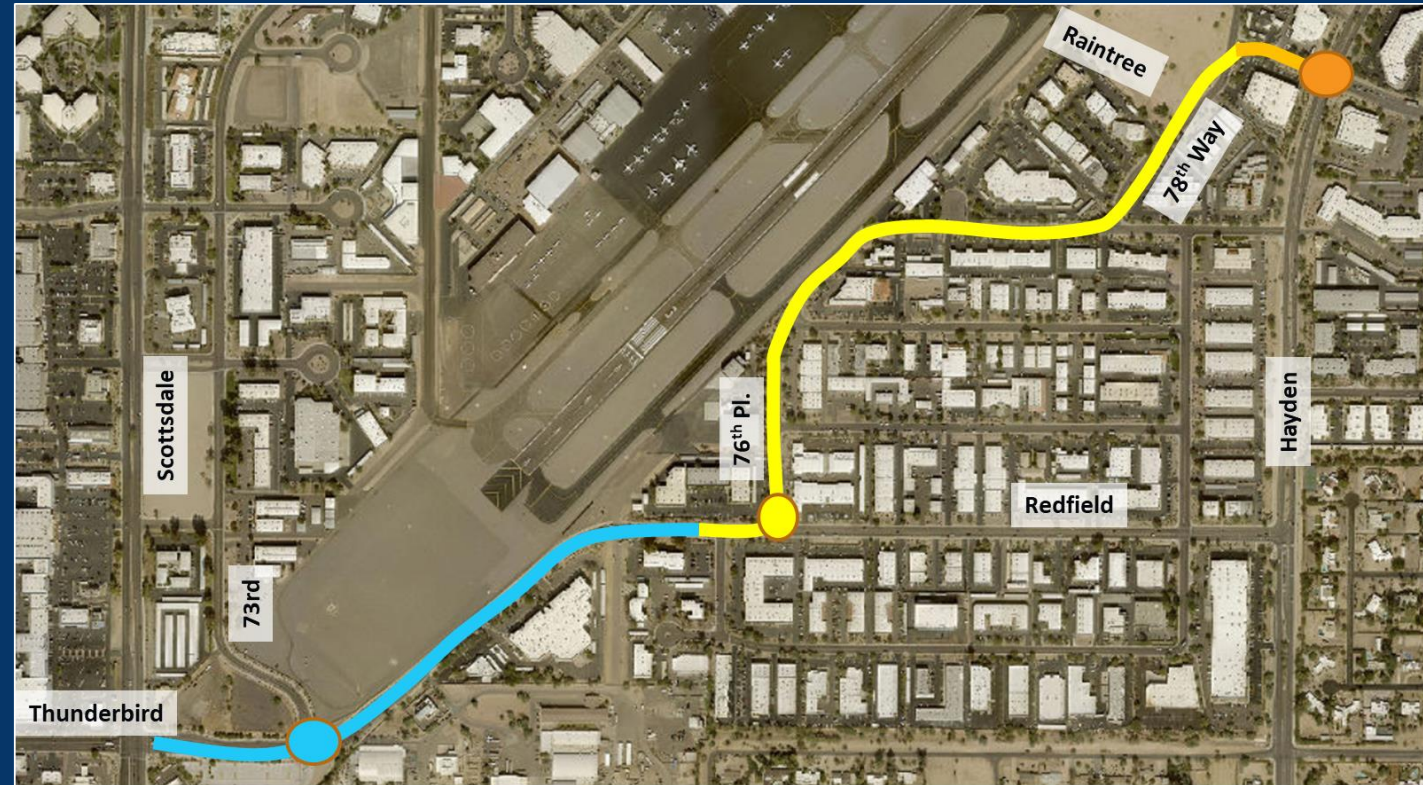
Total of \$4.4M transferred to Raintree: Scottsdale to Hayden

# Project Status Updates - Construction



# Raintree Drive: Scottsdale to Hayden

- Total budget = \$40M
- Design complete
- Construction in Phases
  - **Phase 1A** – 76<sup>th</sup> Place/Redfield to Raintree/ 78<sup>th</sup> Way
    - Construction 9/21-12/22
  - **Phase 1B** – Raintree/78<sup>th</sup> Way to Hayden
    - Construction 1/23-6/23
  - **Phase 2** – Scottsdale to 76<sup>th</sup> Place
    - Construction after Pima Freeway Widening



New collector corridor from 76<sup>th</sup> to Hayden

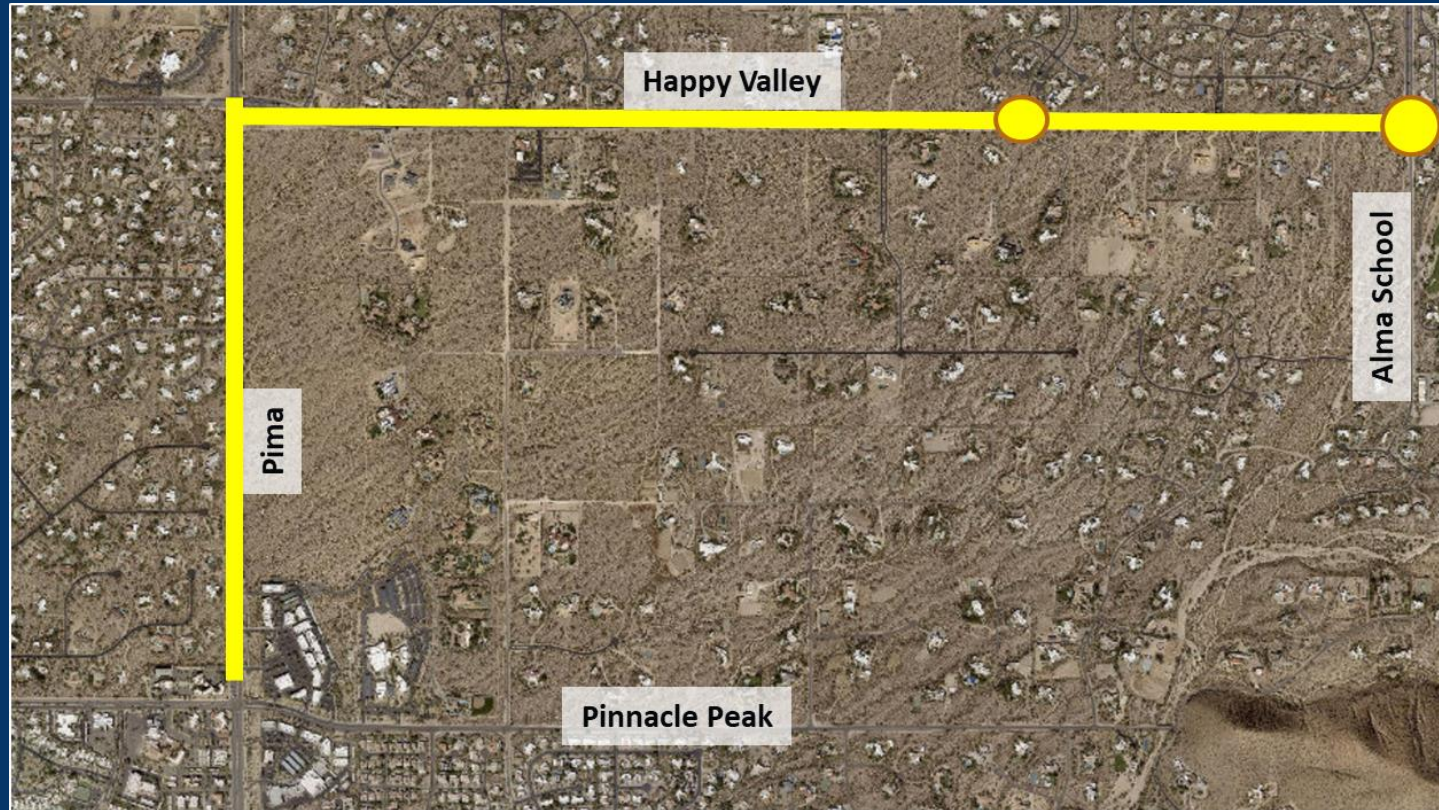
# Project Status Updates – In Design



# Pima Road: Pinnacle Peak to Happy Valley

# Happy Valley: Pima to Alma School

- Total budgets: Pima = \$30.5M; Happy Valley = \$23.5M
  - Pima also has additional flood control costs
- Design for both complete Fall 2021
- Construction of both projects to be packaged
  - Current schedule 1/22 to 9/23

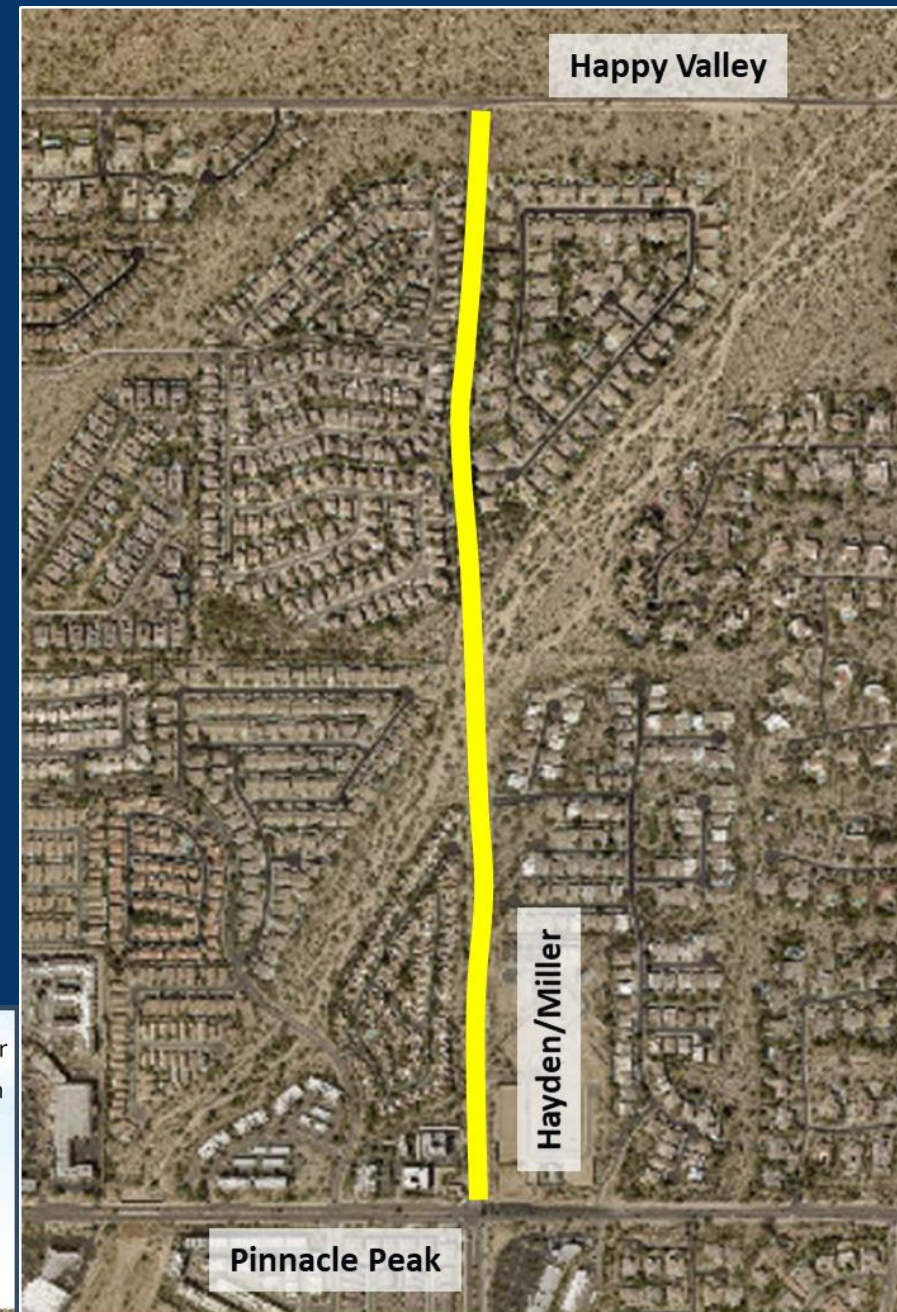
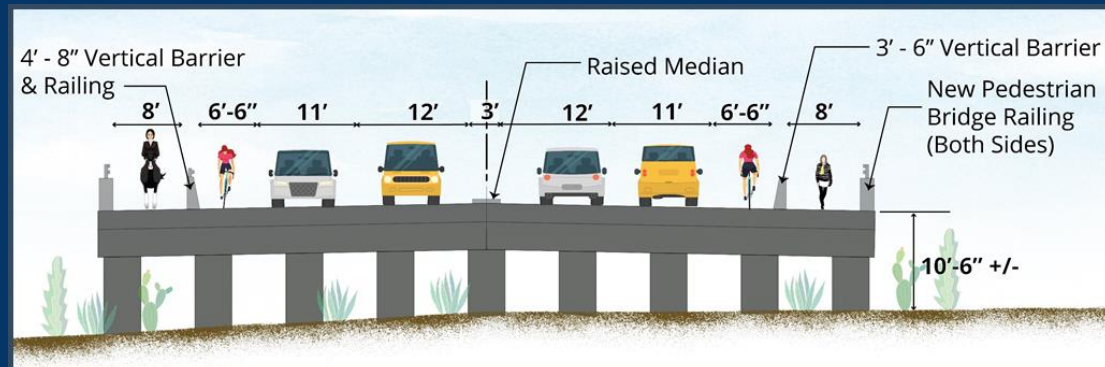


6 lanes on Pima Road and 4 lanes on Happy Valley Road



# Hayden/Miller: Pinnacle Peak to Happy Valley

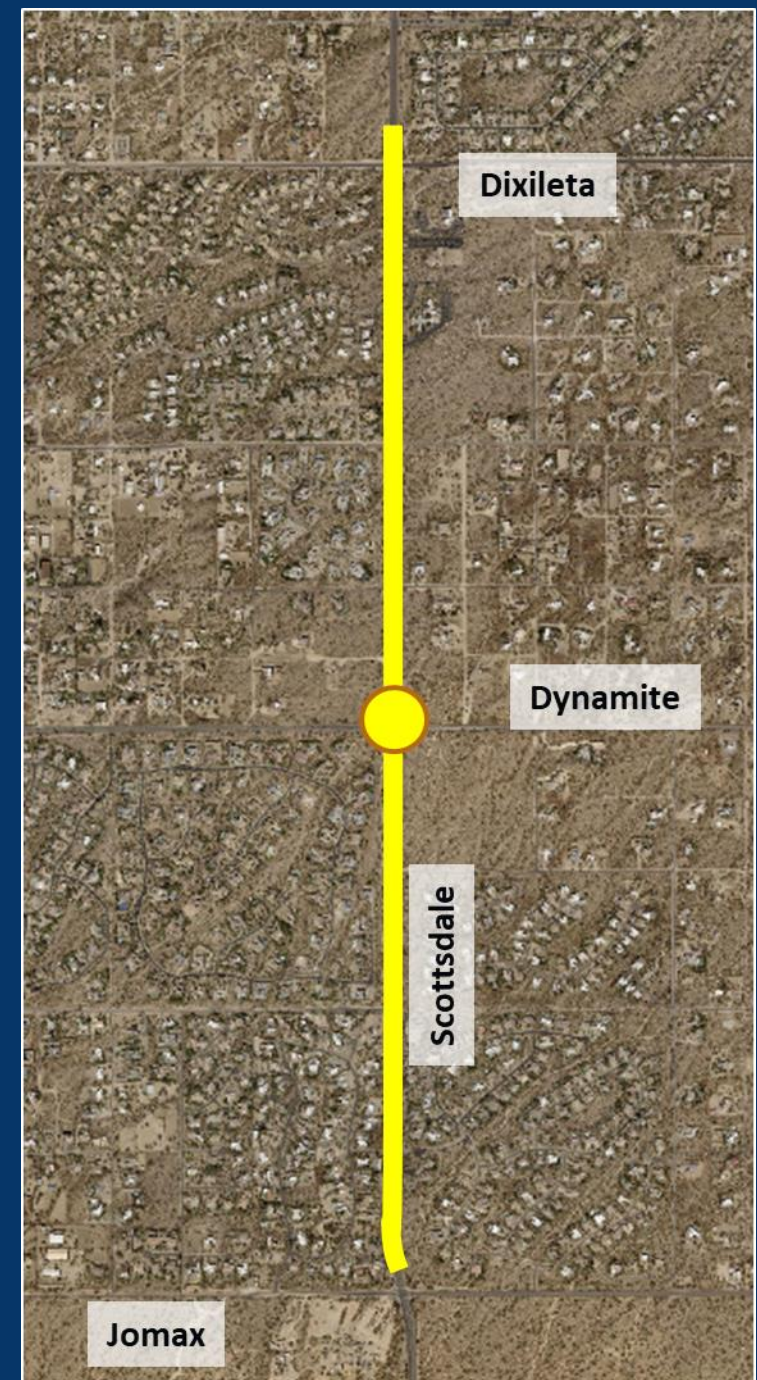
- Total budget = \$14.2M
- Design approaching 60% complete
  - 4 lanes with new bridge
- Construction
  - Current startup is mid-2022
    - Utility relocations will precede





# Scottsdale Road: Jomax to Dixileta

- Total budget = \$23.8M
- Design 30% complete
  - Includes grant funded roundabout at Dynamite
  - 4-lane arterial complete street with shared use path and trail
- Construction
  - Current schedule is 9/22 to 7/23



# Raintree Drive: Hayden to Loop 101



- Total budget = \$6.2M
- Design of Raintree/Northsight roundabout 90% complete
- Right-of-way acquisition underway
- Construction in Phases
  - Phase 1 – Repaving and restriping for bike lanes is complete
  - Phase 2 – Roundabout
    - Construction after Pima Freeway Widening
    - Coordinate with Raintree: Scottsdale to Hayden Phase 2



# Pima Road: McDowell to Via Linda

- Total budget = \$71M
  - \$50M in federal grants for Salt River Pima-Maricopa Indian Community
  - \$21M ALCP
- Design over 60% complete (SRPMIC)
- 4 lanes for whole corridor
- Also includes flood control outfall to Salt River
- Construction
  - Current schedule is 10/22-9/24



## Project Overview

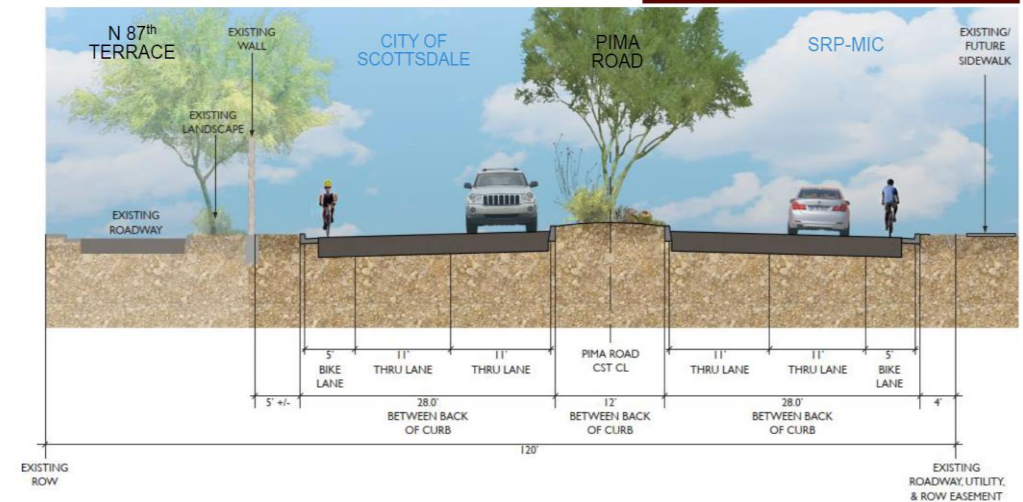
- 🔍 Pima Road Widening from McDowell Road to Krail Street
- 🔍 Major Intersection Improvements
- 🔍 Granite Reef Watershed (GRW) Improvements
- 🔍 Landscape Improvements



6 **Pima Road Improvements**  
McDowell Road to Via Linda

## Pima Road Widening

## Typical Cross Section



8 **Pima Road Improvements**  
McDowell Road to Via Linda

# Project Status Updates – Upcoming Designs

# Hualapai Drive: Hayden to Pima

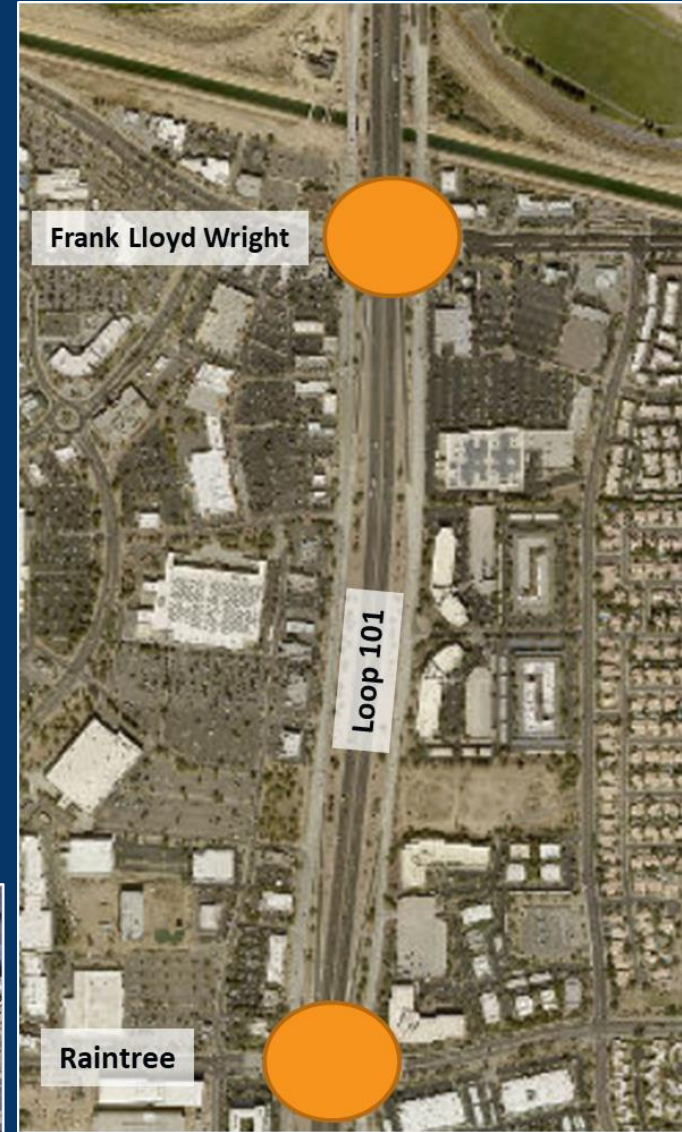
- Total budget = \$10.7M
- 4-lane arterial complete street
  - Portions already constructed
- Design contract awarded 6/21
  - Estimated contract completion June 2022





# Freeway Interchanges

- Frank Lloyd Wright/Loop 101 conversion to diamond interchange (Total budget = \$4M)
- Raintree/Loop 101 additional right turn bays @ NE, SE, NW corners (Total budget = \$1.2M)
- Shea/Loop 101 WB right turn bay extension (Total budget = \$400K)
  - All projects to be designed by ADOT beginning Fall 2021 (18-month design schedule)
  - Construction start mid-2023



# Pima Road: Happy Valley to Jomax

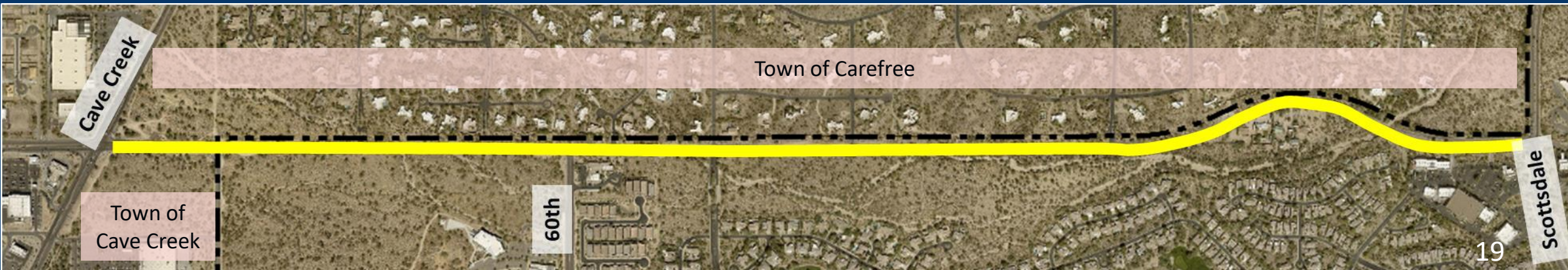
- Total budget = \$16.4M
- 4-lane arterial complete street with shared use path and trail
- Design procurement underway





# Carefree Highway: Cave Creek to Scottsdale

- Total budget = \$11.4M
  - Construction is underfunded – to be reviewed in FY 23 ALCP Update
- 4-lane arterial complete street with shared use path and trail on south side
- North side is Town of Carefree
- West end on south side is Town of Cave Creek
- Design procurement Fall 2021



# Pima Road: Dynamite to Las Piedras

- Total budget = \$19.9M
- 4-lane arterial complete street with shared use path and trail
- Rawhide Wash crossing improvements
- McDowell Sonoran Preserve on east side
- Design procurement Fall 2021



# Project Issues Most Likely to Affect Budgets and Schedules

- Utility relocations
- Right-of-way acquisition
- Drainage

# Questions



# SCOTTSDALE TRANSPORTATION COMMISSION REPORT



**To:** Transportation Commission  
**From:** Susan Conklu, Senior Transportation Planner  
**Subject:** Pathways Wayfinding Signage  
**Meeting Date:** August 19, 2021

## ITEM IN BRIEF

**Action:** Information and Discussion

**Purpose:** Provide an update on the Pathways Wayfinding Signage Capital Improvement Program (CIP) project.

### Background:

In 2016 a design was completed for path and trail signage by Gavan and Barker and JRC Design. The designs will be used in future phases along the full paths and trails network. The design project included mapping the sign types and locations on paths between McKellips Road and Indian Bend Road. The majority of signage was planned along the Indian Bend Wash Path (IBWP), with some signage on the Crosscut and Arizona Canal paths and Pima Path.

The designs include directional signage (Figure 1), path identification, bridge and underpass crossings, and other sign types.

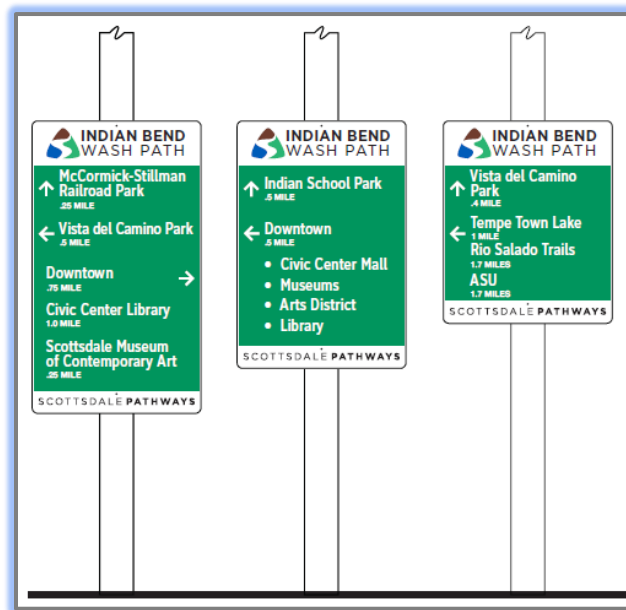


Figure 1: Directional Signage

To receive public comment on the proposed sign design, staff had three open house meetings. In addition, staff has presented the new sign design to the Scottsdale Transportation Commission Path and Trails Subcommittee, the Transportation Commission, and the Parks and Recreation Commission. Also, the signs were on display in the One Civic Center atrium from April to August 2016.

Upon completion of the design package for the signage, Transportation staff requested funding for implementation through the CIP process. The project was funded in the Fiscal Year 2020/2021 CIP.

**Update:**

Staff are working on implementation of the Path Wayfinding Signage CIP project from Thomas Road to Indian Bend Road. When the Indian Bend Wash Parks Master Plan is implemented from McKellips to Thomas roads, the signage will be added during that project. Wayfinding signage installation north of Indian Bend Road will be linked to future IBW Path CIP improvements.

**Next Steps:**

A project webpage will be created to provide the public with information on the wayfinding signage types, installation timing and locations.

Staff will present an update and request amended approval of the sign designs from the Development Review Board on September 16, 2021.

Installation is tentatively planned to begin in October 2021, utilizing the city's Job Order Contractor. The older green directional and path identification signs will be removed in the project area after the new signs are installed.

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**Contacts:** Susan Conklu, 480-312-2308, [sconklu@scottsdaleaz.gov](mailto:sconklu@scottsdaleaz.gov)

# Pathways Wayfinding Signage

Transportation Commission  
August 19, 2021

# Background

## Design of Paths and Trails Wayfinding Signage 2016

- Gavan and Barker with JRC Design

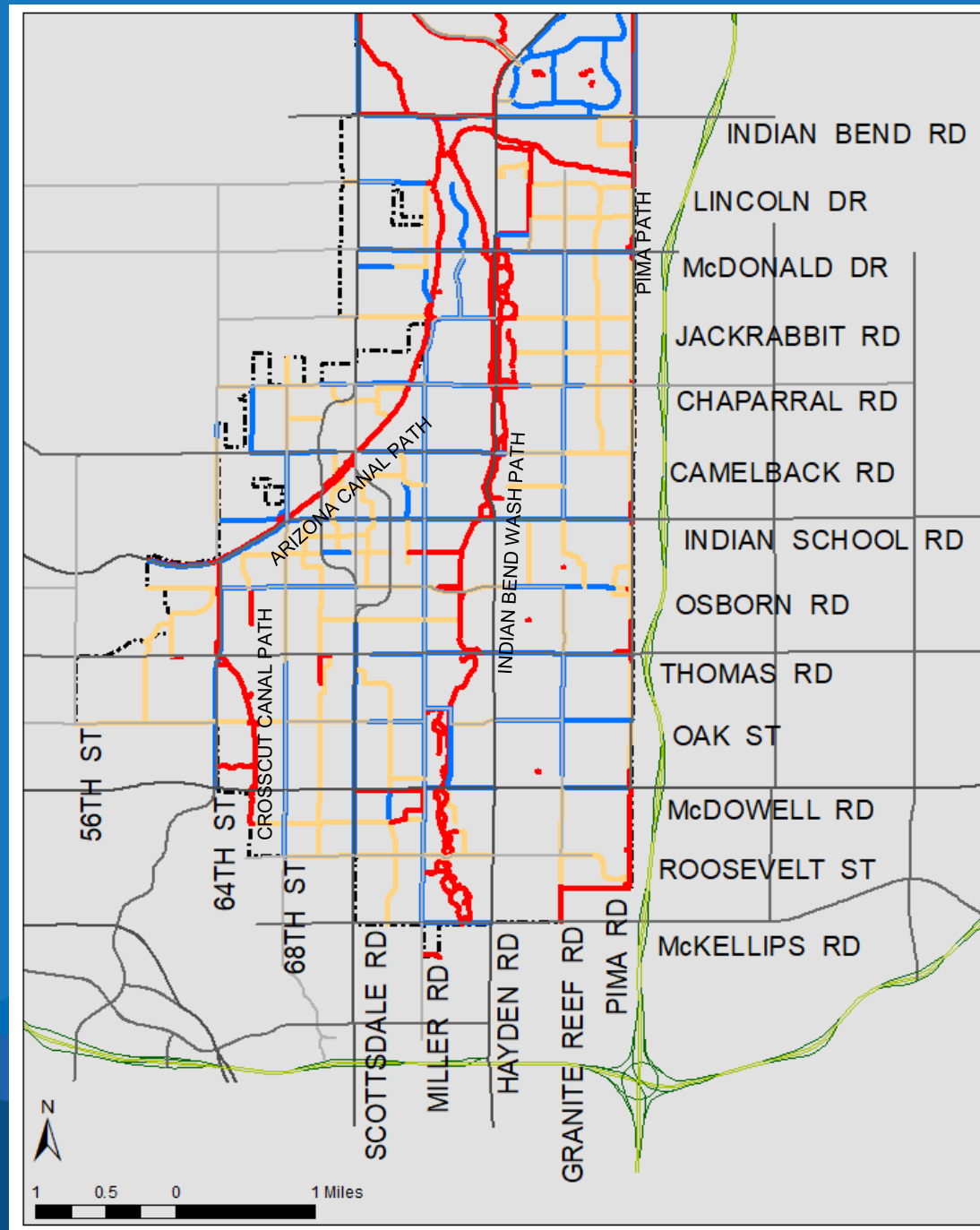
## Public Outreach

- Paths and Trails Subcommittee
- Transportation Commission
- Parks and Recreation Commission
- Cycle the Arts event
- Open House Meetings
- One Civic Atrium



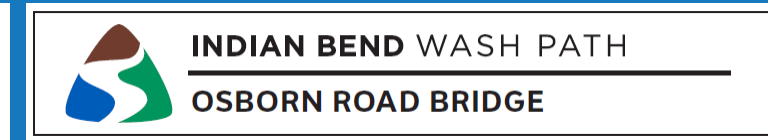
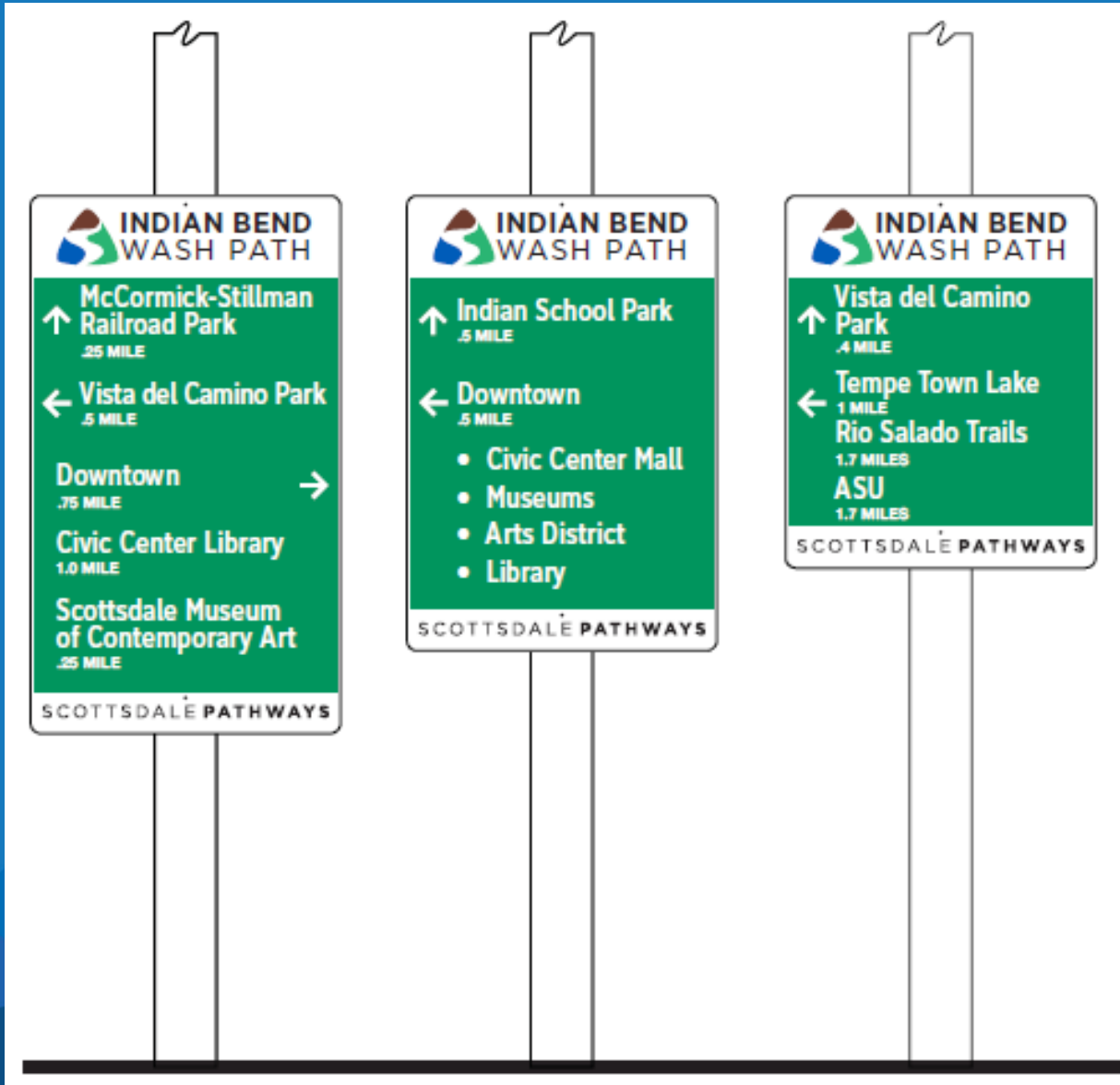
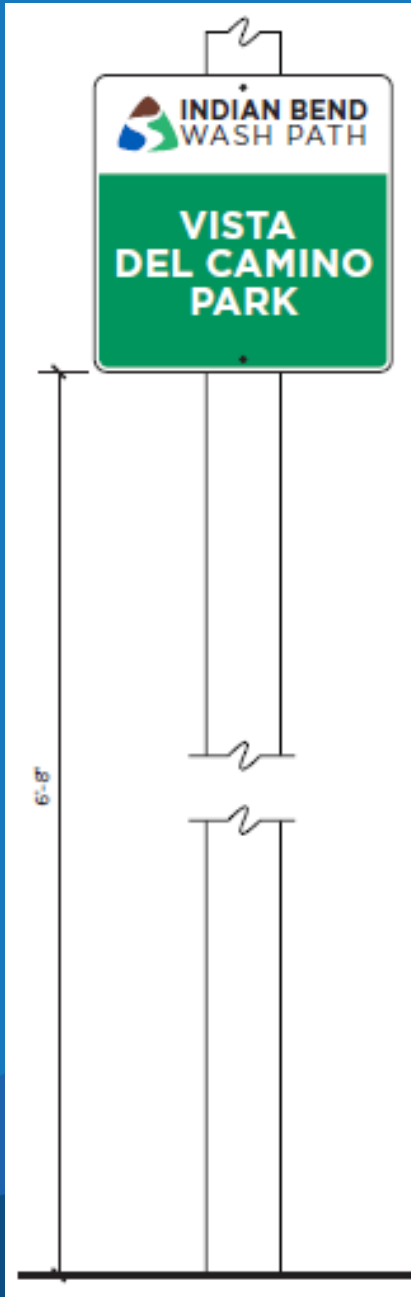
# Project Area

- Total Project Budget
- \$802,600





# Sign Types



# Next Steps

- Project webpage with Virtual Open House in August
  - Sign types
  - Locations
  - Installation timing
- Development Review Board September 16, 2021
- Tentative installation begins October 2021
- Older green path signs will be removed

# Discussion

# TENTATIVE FUTURE AGENDA ITEMS

Rev.8-10-2021

## TRANSPORTATION COMMISSION

### MEETING DATE: September 16, 2021

### REPORTS/PRESENTATIONS DUE September 9

- **Approval of Meeting Minutes** ..... **Action**  
*Approval of Regular meeting minutes August 19, 2021*
- **Transportation Action Plan** ..... **Presentation, Discussion and Possible Action**  
*Presentation of the draft Transportation Action Plan – David Meinhart, Transportation Planning Manager*
- **Bicycle and Related Devices Ordinance** ..... **Presentation, Discussion and Possible Action**  
*Presentation of the amended Bicycle and Related Devices Ordinance – Susan Conklu, Senior Transportation Planner*
- **Other Transportation Projects and Programs Status** ..... **Information**  
*Status of projects and programs – Mark Melnychenko, Transportation & Streets Director*
- **Commission Identification of Future Agenda Items** ..... **Discussion**  
*Commissioners may identify items or topics of interest for future Commission meetings*

### MEETING DATE: October 21, 2021

### REPORTS/PRESENTATIONS DUE October 14

- **Approval of Meeting Minutes** ..... **Action**  
*Approval of Regular meeting minutes September 16, 2021*
- **Median Opening Analysis** ..... **Presentation and Discussion**  
*Reviewing data for left-in left-out median openings compared to standard median openings – David Smith, Traffic Engineer Senior*
- **Five Year Paving Prioritization Plan** ..... **Presentation and Discussion**  
*Paving prioritization based off PCI survey– Shayne Lopez, Transportation & Streets Paving Manager*
- **Other Transportation Projects and Programs Status** ..... **Information**  
*Status of projects and programs – Mark Melnychenko, Transportation & Streets Director*
- **Commission Identification of Future Agenda Items** ..... **Discussion**  
*Commissioners may identify items or topics of interest for future Commission meetings*

### MEETING DATE: November 18, 2021

### REPORTS/PRESENTATIONS DUE November 11

- **Approval of Meeting Minutes** ..... **Action**  
*Approval of Regular meeting minutes October 21, 2021*
- **Other Transportation Projects and Programs Status** ..... **Information**  
*Status of projects and programs – Mark Melnychenko, Transportation & Streets Director*
- **Clever Devices Application on buses** ..... **Presentation and Discussion**  
*Discussion of the status of the Clever Devices application that will provide computer aided dispatch a vehicle locator system*
- **Commission Identification of Future Agenda Items** ..... **Discussion**  
*Commissioners may identify items or topics of interest for future Commission meetings*

### FUTURE ITEMS:

- **Miller Road Bridge and Flood Control Project** ..... **Presentation, Discussion and Possible Action**  
*Update on the Miller Road Bridge and Flood Control Project – David Meinhart, Transportation Planning Manager*
- **Loop 101 Mobility Project** ..... **Presentation and Discussion**  
*Kristin Darr, consultant*
- **Impact on Parking** ..... **Presentation and Discussion**



*Latest parking study, Walter Brodzinski, Right-Way Supervisor*

- **November 2018 Sales Tax Projects**.....**Presentation and Discussion**  
*Status of Projects funded by November 2018 Additional Sales Tax*
- **Assist Business' during CIP Construction** .....**Presentation and Discussion**  
*Discussion on working with local business' during Capital Improvement Projects – Dave Lipinski, City Engineer*
- **Urban Air Mobility** .....**Presentation and Discussion**  
*Discuss Urban Air Mobility as Mode of Transportation*
- **Smart City**.....**Presentation and Discussion**  
*Discussion on the City's participation in Smart City applications.*
- **New Project Development** .....**Presentation and Discussion**  
*Project development and how it ties in with Transportation – Phil Kercher, Traffic Engineer & Ops Manager*
- **Vacant Land** .....**Presentation and Discussion**  
*Impact on areas and traffic with new buildings created – Phil Kercher, Traffic Engineer & Ops Manager*
- **Study and Results from Truck Platooning** .....**Presentation and Discussion**  
*Update on Study and Results from Truck Platooning*
- **Electric Car Movement**.....**Presentation and Discussion**  
*Presentation on electric car movement – Hong Huo, Traffic Engineer Principal*
- **Shea and 124<sup>th</sup> Street Underpass** .....**Presentation and Discussion**  
*Update on underpass – Greg Davies, Transportation Planner Senior or David Meinhart, Transportation Planning Manager*
- **Downtown Trolley**.....**Presentation and Discussion**  
*Update on trolley usage – Ratna Korepella*
- **General Plan Update**.....**Presentation and Discussion**  
*Update on general plan – Erin Perreault*
- **Bus Ridership and the Transit System**.....**Presentation and Discussion**  
*Update on bus ridership and the Transit System – Ratna Korepella*
- **Transportation Action Plan** ..... **Action**  
*Presentation of the Transportation Action Plan recommendations - presented by David Meinhart*
- **Transit System Evaluation Recommendations**..... **Action**  
*Presentation of the Transit Plan Evaluation Recommendations – Ratna Korepella*
- **Update on MAG Prop 400E** .....**Presentation and Discussion**  
*Update on MAG Prop 400E – MAG staff*
- **Approval and Funding Process of Projects Related to the Transportation Action Plan...****Presentation and Discussion**  
*Discuss the approval and funding process of projects related to the Transportation Action Plan– David Meinhart, Transportation Planning Manager*
- **Utilities Causing Project Delays**..... **Discussion**  
*Discuss the delays utility projects are holding up project schedules and budgets- Mark Melnychenko, Transportation & Streets Director*

## **PATHS & TRAILS SUBCOMMITTEE**

**MEETING DATE: October 5, 2021**

**REPORTS DUE September 28, 2021**

- **Approval of Meeting Minutes** ..... **Action**  
*Approval of Regular meeting minutes of August 3, 2021*
- **Bicycle and Related Devices Ordinance** ..... **Presentation and Discussion**  
*Presentation of the amended Bicycle and Related Devices Ordinance – Susan Conklu, Senior Transportation Planner*
- **Civic Center Renovation** ..... **Presentation and Discussion**  
*Update on design and construction of Civic Center renovation project – Susan Conklu, Senior Transportation Planner*
- **Other Transportation Projects and Programs Status**..... **Information**  
*Status of projects and programs – Susan Conklu, Senior Transportation Planner*
- **Subcommittee Identification of Future Agenda Items**..... **Discussion**  
*Subcommittee members may identify items or topics of interest for future Subcommittee meetings*

**MEETING DATE: December 7, 2021**

**REPORTS DUE November 30, 2021**

- **Approval of Meeting Minutes** ..... **Action**  
*Approval of Regular meeting minutes of October 5, 2021*
- **Other Transportation Projects and Programs Status**..... **Information**  
*Status of projects and programs – Susan Conklu, Senior Transportation Planner*
- **Subcommittee Identification of Future Agenda Items**..... **Discussion**  
*Subcommittee members may identify items or topics of interest for future Subcommittee meetings*

### **FUTURE ITEMS:**

- **Wayfinding**..... **Presentation and Discussion**  
*Update on Wayfinding – Susan Conklu, Senior Transportation Planner*
- **Bicycle Education Program** ..... **Presentation and Discussion**  
*Update on Laws and Education – Susan Conklu, Senior Transportation Planner*
- **Bike Month Recap**..... **Presentation and Discussion**  
*Information on Bike Month – Susan Conklu, Senior Transportation Planner*
- **Vision Zero**..... **Presentation and Discussion**  
*Information on Vision Zero (Tempe) – Susan Conklu, Senior Transportation Planner*
- **Equestrian Connectivity** ..... **Presentation and Discussion**  
*Panel – Susan Conklu, Senior Transportation Planner*
- **Access to Indian Bend Wash** ..... **Presentation and Discussion**  
*Better access and how the Parks Dept. can assist. – Susan Conklu, Senior Transportation Planner*
- **Path and Trail Gap Analysis** ..... **Presentation and Discussion**  
*Information on gaps in the citywide path and trails network – Greg Davies, Senior Transportation Planner*



## Lofgren, Kyle

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**From:** Transportation Commission  
**Sent:** Monday, August 9, 2021 6:03 PM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #207)

**Categories:** Important

## Transportation Commission Public Comment (response #207)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/9/2021 6:02:15 PM

### Survey Response

COMMENT	
Comment:	<p>My family and I own a home that is in direct line of sight with where the new 4-lane Miller Rd will be constructed along with the bridge over Rawhide Wash. The back of our home has a view fence that will not block any noise. I have a noise meter and measured the noise at the back of my property's view fence, 33.2 db to 51.4db, very quiet. MY home is within 170 ft direct line of site of the closest lane of where the new Miller Rd will be, well within the 300ft parameters. Measuring noise from car along our roadways, ever care measured above 64db noise. In fact most were above 75db, harleys are over 110db. The noise from the new road will have more then a 15db increase after Miller Rd is built. An 8ft wall noise barrier will decrease the noise by much more then 5db. Why is the city transportation planning department denying us any noise barriers or abatements to separate us from the noise from Miller Rd. Trees, bushes and foliage will not be adequate, we are requesting a 8ft-10ft brick wall be built parallel to Miller Rd the entire length between Loas Portones and Pinnacle Peak Reserve, between Miller Rd and what is now our NAOS. I paid a \$35,000 lot premium for this lot to back up to this NAOS when I built this home in 1997. The city plans on taking our NAOS land to relocation water pipes, we would like to know exactly where in the NAOS land the pipes will be buried and what else the city plans on</p>



doing with our NAOS land. Prior to having any meetings or conversations with our HOA, City of Scottsdale purchased new water pipe and possibly sewer pipe, to relocate it through our NAOS, as the current pipes run directly under where Miller Rd and the new bridge will be constructed, and need to be relocated. I understand the city has also contracted with a company to do the pipe relocation through our NAOS without so much as mentioning this to our HOA. I now understand that the city is going to either purchase to "take" the NAOS land behind our home. There are 7 other homes of my neighbors in PPR that back directly up to this NAOS land that are also very unhappy about the land takeover. On the other side of the NAOS to the south is Los Portones, where they have 18 homes backing directly up to the same NAOS land, and homes in a newer development just to the west of us that also have numerous homes backing up to the same NAOS land. We are also concerned that the only "wall" separating us from Miller Rd will be taken down, and not put back. We request a new 8-10ft wall be built in its place for noise abatement. A relevant noise study needs to be conducted on Miller Rd in the wash area where the bridge is planned to be built, and where Miller Rd will be built at the wall where that separates our NAOS land from the proposed location of the new 4-lane Miller Rd. This is imparitive "before" noise study, in fact, a noise study can also be done in the NAOS area behind our homes to show how very quiet it is here. We would expect the same allowances per effected property that is offered to the Desert Highlands HOA community for the 4-lane expansion of Happy Valley Rd, and the Roundabouts being installed at Golf Club Rd. and Happy Valley and at Alma School and Happy Valley. Pinnacle Peak Reserve PPR has requested numerous times a roundabout be added at the intersection of Juan Tabo and Miller Rd. We are also requesting traffic calming speed bumps between Happy valley and Juan Tabo, and Between Juan Tabo and Parkview lane. In 8-5-2021 edition of the Scottsdale Independent newspaper on-line version, they interviewed Scottsdale PD and wrote a story titled "Scottsdale sees an explosion of high speed citations" the article goes on to say there are numerous photo radar citations in north Scottsdale on Pima Rd and Scottsdale road up to 100MPH. The Miller Rd and bridge project you planning is directly between Scottsdale Rd and Pima Rd. we were told there will be no traffic control devices installed along Miller Rd through PPR, and the city will rely 100% on Police to control speeders. Miller Rd and Pinnacle Peak Reserve is directly between Scottsdale and Pima Rd. This is what I have been saying all along, there is a tremendous amount of high performance cars driven in close proximity within the immediate vicinity of Pinnacle Peak Reserve daily, we can hear them from inside of our homes and when we are outside in our yards. How are the police going to have the manpower to camp out on Miller Rd 24x7 if they don't have enough man power or the ability to stop the speeding

on Pima Rd and Scottsdale Rd? Pima and Scottsdale are the only other two north and southbound roads in this area, on either side of Miller Rd, and parallel Miller Rd. Speed limit signs do not work and are ignored, and the speed the driver chooses to drive is at their discretion. Installing a roundabout and speed bumps on Miller Rd. makes it mandatory for every driver to limit their speed and removes their ability to drive at such reckless and dangerous deadly speeds. Are the police going to camp out on Scottsdale Rd, Pima Rd and Miller road every day and night? I think not. Will photo radar stop this behavior? Clearly it is unable to control it. Why are we being denied the noise abatement allowances and considerations the Desert Highlands HOA is receiving as per the information on the transportation commission website. <https://www.scottsdaleaz.gov/construction/project-list/happy-valley-road-improvements> The law is the same and applies to all communities correct!? Happy Valley Rd between Miller Rd and Hayden Rd is a narrow 2-lane Rd and is flooded and washed-out when it rains heavily by Rawhide Wash, the same wash you are building a \$14M bridge over 1/3 mile to the south at Miller Rd. It makes not sense to build a bridge over Rawhide Wash at Miller Rd, just to dump all that traffic onto Happy Valley Rd, that gets flooded by the exact same wash 1/3 miler to the north. During a recent meeting on 8-4-21 with the project manager he told us there is no-one, no builder, no developer , no entity at all expressing interest in developing the land North of Happy Valley Rd, where Miller Terminates at Happy Valley ,either turn left, or turn right. We were previously told this is an imminent requirement so the builders can expand the 2-lane Happy Valley Rd into 4-lanes and continue Miller Rd north of Happy Valley Rd as the development progresses, There is no-one to develop the land now, or in the foreseeable future so why the hurry to push this project through so fast. It makes better sense to prepare Happy Valley Rd. before you connect any more roads or traffic to it.

Comments are limited to 8,000 characters and may be cut and pasted from another source.

**PLEASE PROVIDE YOUR NAME:**

First & Last Name:	Dan Lundberg
--------------------	--------------

**AND ONE OR MORE OF THE FOLLOWING ITEMS:**

Email:	<a href="mailto:DL@Centurylink.net">DL@Centurylink.net</a>
--------	--

Phone:	(602) 618-8155
--------	----------------

Address:	7545 E Alameda Rd
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Example: 3939 N. Drinkwater Blvd, Scottsdale 85251

## Lofgren, Kyle

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**From:** Transportation Commission  
**Sent:** Monday, August 9, 2021 6:41 PM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #208)

## Transportation Commission Public Comment (response #208)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/9/2021 6:40:22 PM

### Survey Response

COMMENT	
Comment:	<p>Addendum to previous message: Since our home is meets all the criteria for noise abatement allowance, we request the option of replacing our view fence with a brick wall at the city of Scottsdale's expense. The back of our home is in direct line of sight and within 300ft of the proposed Miller Rd location in the Rawhide Wash area. We dont know how bad the noise will get, but I am sure with the volume of predicted traffic we have seen in your presentations, we are extremely concerned and confident the noise levels reaching the back of our home will require abatement. previous message below: My family and I own a home that is in direct line of sight with where the new 4-lane Miller Rd will be constructed along with the bridge over Rawhide Wash. The back of our home has a view fence that will not block any noise. I have a noise meter and measured the noise at the back of my property's view fence, 33.2 db to 51.4db, very quiet. MY home is within 170 ft direct line of site of the closest lane of where the new Miller Rd will be, well within the 300ft perameters. Measuring noise from car along our roadways, ever care measured above 64db noise. In fact most were above 75db, harleys are over 110db. The noise from the new road will have more then a 15db increase after Miller Rd is built. An 8ft wall noise barrier will decrease the noise by much more then 5db. Why is the city transportation planning department denying us any noise barriers or abatements to separate us from the noise from Miller</p>

Rd. Trees, bushes and foliage will not be adequate, we are requesting a 8ft-10ft brick wall be built parallel to Miller Rd the entire length between Loas Portones and Pinnacle Peak Reserve, between Miller Rd and what is now our NAOS. I paid a \$35,000 lot premium for this lot to back up to this NAOS when I built this home in 1997. The city plans on taking our NAOS land to relocation water pipes, we would like to know exactly where in the NAOS land the pipes will be buried and what else the city plans on doing with our NAOS land. Prior to having any meetings or conversations with our HOA, City of Scottsdale purchased new water pipe and possibly sewer pipe, to relocate it through our NAOS, as the current pipes run directly under where Miller Rd and the new bridge will be constructed, and need to be relocated. I understand the city has also contracted with a company to do the pipe relocation through our NAOS without so much as mentioning this to our HOA. I now understand that the city is going to either purchase to "take" the NAOS land behind our home. There are 7 other homes of my neighbors in PPR that back directly up to this NAOS land that are also very unhappy about the land takeover. On the other side of the NAOS to the south is Los Portones, where they have 18 homes backing directly up to the same NAOS land, and homes in a newer development just to the west of us that also have numerous homes backing up to the same NAOS land. We are also concerned that the only "wall" separating us from Miller Rd will be taken down, and not put back. We request a new 8-10ft wall be built in its place for noise abatement. A relevant noise study needs to be conducted on Miller Rd in the wash area where the bridge is planned to be built, and where Miller Rd will be built at the wall where that separates our NAOS land from the proposed location of the new 4-lane Miller Rd. This is imparitive "before" noise study, in fact, a noise study can also be done in the NAOS area behind our homes to show how very quiet it is here. We would expect the same allowances per effected property that is offered to the Desert Highlands HOA community for the 4-lane expansion of Happy Valley Rd, and the Roundabouts being installed at Golf Club Rd. and Happy Valley and at Alma School and Happy Valley. Pinnacle Peak Reserve PPR has requested numerous times a roundabout be added at the intersection of Juan Tabo and Miller Rd. We are also requesting traffic calming speed bumps between Happy valley and Juan Tabo, and Between Juan Tabo and Parkview lane. In 8-5-2021 edition of the Scottsdale Independent newspaper on-line version, they interviewed Scottsdale PD and wrote a story titled "Scottsdale sees an explosion of high speed citations" the article goes on to say there are numerous photo radar citations in north Scottsdale on Pima Rd and Scottsdale road up to 100MPH. The Miller Rd and bridge project you planning is directly between Scottsdale Rd and Pima Rd. we were told there will be no traffic control devices installed along Miller Rd through PPR, and the city will rely 100% on Police to

control speeders. Miller Rd and Pinnacle Peak Reserve is directly between Scottsdale and Pima Rd. This is what I have been saying all along, there is a tremendous amount of high performance cars driven in close proximity within the immediate vicinity of Pinnacle Peak Reserve daily, we can hear them from inside of our homes and when we are outside in our yards. How are the police going to have the manpower to camp out on Miller Rd 24x7 if they don't have enough man power or the ability to stop the speeding on Pima Rd and Scottsdale Rd? Pima and Scottsdale are the only other two north and southbound roads in this area, on either side of Miller Rd, and parallel Miller Rd. Speed limit signs do not work and are ignored, and the speed the driver chooses to drive is at their discretion. Installing a roundabout and speed bumps on Miller Rd. makes it mandatory for every driver to limit their speed and removes their ability to drive at such reckless and dangerous deadly speeds. Are the police going to camp out on Scottsdale Rd, Pima Rd and Miller road every day and night? I think not. Will photo radar stop this behavior? Clearly it is unable to control it. Why are we being denied the noise abatement allowances and considerations the Desert Highlands HOA is receiving as per the information on the transportation commission website. <https://www.scottsdaleaz.gov/construction/project-list/happy-valley-road-improvements> The law is the same and applies to all communities correct!? Happy Valley Rd between Miller Rd and Hayden Rd is a narrow 2-lane Rd and is flooded and washed-out when it rains heavily by Rawhide Wash, the same wash you are building a \$14M bridge over 1/3 mile to the south at Miller Rd. It makes not sense to build a bridge over Rawhide Wash at Miller Rd, just to dump all that traffic onto Happy Valley Rd, that gets flooded by the exact same wash 1/3 miler to the north. During a recent meeting on 8-4-21 with the project manager he told us there is no-one, no builder, no developer , no entity at all expressing interest in developing the land North of Happy Valley Rd, where Miller Terminates at Happy Valley ,either turn left, or turn right. We were previously told this is an imminent requirement so the builders can expand the 2-lane Happy Valley Rd into 4-lanes and continue Miller Rd north of Happy Valley Rd as the development progresses, There is no-one to develop the land now, or in the foreseeable future so why the hurry to push this project through so fast. It makes better sense to prepare Happy Valley Rd. before you connect any more roads or traffic to it.

Comments are limited to 8,000 characters and may be cut and pasted from another source.

**PLEASE PROVIDE YOUR NAME:**

First & Last Name:

Dan Lundberg

**AND ONE OR MORE OF THE FOLLOWING ITEMS:**



Email:	<a href="mailto:DL@Centurylink.net">DL@Centurylink.net</a>
Phone:	(602) 618-8155
Address:	7545 E Alameda Rd
Example: 3939 N. Drinkwater Blvd, Scottsdale 85251	

## Lofgren, Kyle

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**From:** Transportation Commission  
**Sent:** Monday, August 9, 2021 8:30 PM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #209)

## Transportation Commission Public Comment (response #209)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/9/2021 8:29:40 PM

### Survey Response

COMMENT	
Comment:	<p>I want to see the plans for the NAOS behind my house in Pinnacle Peak Reserve so I can see exactly where the pipes are supposed to go. Why was this not on the project website from the beginning? Why was this not mentioned in any of the email exchanges we had on that pipe purchase? Also, why not just pay our HOA to access the land? We can then use those funds to gate our community to ensure Juan Tabo does not also become a major corridor. Also, please explain why our Pinnacle Peak Reserve neighborhood is not receiving roundabouts and \$60,000 for noise abatement like those residences at the project widening Happy Valley at Pima and Alma School. We clearly meet all the same perimeters. I have requested a new noise study and you both have not responded to my last 2 emails. I find it ridiculous that you are improving Happy Valley at that location and not where you plan to dump 7,500 cars/trucks/ etc. at the end of Miller Road. You are spending millions to move traffic .6 miles up the road from Pinnacle Peak to an unimproved Happy Valley Road. You are creating a tight funnel of traffic specifically through my neighborhood with absolutely no improvements or accommodations. And again, why now? When there is no development north on Happy Valley is the city spending \$14M. I do not feel that this project has been presented with any level of transparency and that our neighborhood is being treated fairly. You are not being a "good neighbor" like</p>

	you repeatedly stated in that zoom meeting. I await your response.
--	--

Comments are limited to 8,000 characters and may be cut and pasted from another source.

**PLEASE PROVIDE YOUR NAME:**

First & Last Name:	Lori Lundberg
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**AND ONE OR MORE OF THE FOLLOWING ITEMS:**

Email:	<a href="mailto:loriscomputer@centurylink.net">loriscomputer@centurylink.net</a>
--------	--

Phone:	(480) 620-2960
--------	----------------

Address:	7545 East Alameda Road, Scottsdale 85255
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Example: 3939 N. Drinkwater Blvd, Scottsdale 85251

**From:** Transportation Commission  
**Sent:** Tuesday, August 10, 2021 6:44 AM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #210)

## Transportation Commission Public Comment (response #210)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/10/2021 6:43:45 AM

### Survey Response

COMMENT	
Comment:	<p>I have read through the first draft of the Noise Analysis Technical Report and have the following questions. I figured it would be better to try to answer some of these prior to the meeting. • The biggest question I have is on the location of the noise level monitoring sites and noise validation sites:</p> <ul style="list-style-type: none"><li>o On 3/24/21, noise levels were measured at Park View Lane and Miller – this location is at the barricade where Miller Road currently ends in Pinnacle Peak Reserve. Why are you measuring noise at an area where there has never been traffic?</li><li>o The other noise monitoring site seems to be on the other side of the Rawhide Wash in the new neighborhood area at Pinnacle Peak and Miller intersection. The site description is the same for both but the pictures clearly show different sites. Again, no traffic is currently flowing there.</li><li>o Regarding the noise validation sites for comparison, those are cul-de-sacs with 3 houses in areas that do not get through traffic. The report states that “validation involves comparing actual noise measurements with the noise levels predicted by the model for existing conditions at the same location” (page 7).Essentially you are comparing 2 quiet locations to 2 other quiet locations – all of which do not accurately reflect what the traffic noise will be with the Miller Road extension.</li><li>o The report mentions “Proposed Alternatives” on page 1 – are those the validation sites? I am not sure why the report states “predict future (design year) noise levels with existing noise levels (page 1) – again, you are</li></ul>

comparing sites and points of time where there is no traffic. This does not accurately reflect how residents will be impacted by this road extension. o The study states that noise level monitoring “helps describe the existing noise environment throughout the project area and capture the contribution of traffic noise from surrounding roadways.” We already know our neighborhood is quiet. What we need to know is how much noise we will have to deal with once the road goes through. o If you are redirecting traffic onto Miller, why would you not study the noise from the area the traffic is being redirected from? If there are anticipated 7,500 cars/trucks/etc. to begin travelling on Miller to Happy Valley Road, what noise level does amount of traffic measure? o The report states that “traffic volumes used in the noise model should represent ‘worst-case’ approach” (page 8) – how is anything that was measured at these quiet locations with no traffic a worst case? The road going through is worst case for our neighborhood. When I purchased my house, we were promised there would never be anything behind my house. This is worst case for me! • The report concludes that “mitigation evaluation was not necessary because there were no noise impacts to any of the noise-sensitive residential receptors” (page 11) – I know how quiet my neighborhood is after 23 years of living here. There is no noise impacts because there is no traffic right now. You can not tell me that there will not be any noise once a 10 foot tall 4-lane bridge is constructed (that I will be able to see and hear through my view fence) and that I won’t hear 7,500 cars/trucks/etc. I would like a noise study to know what those noise levels will be. • The report states that “no barriers were evaluated or are recommended” (page 12) – I was told jersey barrier were being incorporated. • The project description does not mention any improvements to Miller Road through Pinnacle Peak Reserve. Are there plans to make improvements to the current retaining walls in the wash or on Miller through our neighborhood? The report mentions “doubling the distance between the source and the receptor reduces noise by three dBA” (page 5) – other surrounding neighborhoods have those wider set backs and buffers from traffic and noise and we do not. • What is the timeframe for the final determination of noise abatement measures? It seems to be after the project has been approved to move forward. Shouldn’t that be determined before so that costs can be included in the project and neighbors should know exactly how noise will be addressed? This road will effect daily life in Pinnacle Peak Reserve – it will be traffic, noise, crime, effect where we can safely walk our dogs and ride our bikes, etc.

Comments are limited to 8,000 characters and may be cut and pasted from another source.

**PLEASE PROVIDE YOUR NAME:**



First & Last Name:	Lori Lundberg
<b>AND ONE OR MORE OF THE FOLLOWING ITEMS:</b>	
Email:	<a href="mailto:loriscomputer@centurylink.net">loriscomputer@centurylink.net</a>
Phone:	(480) 620-2960
Address:	7545 East Alameda Road, Scottsdale 85255
Example: 3939 N. Drinkwater Blvd, Scottsdale 85251	

## Lofgren, Kyle

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**From:** Transportation Commission  
**Sent:** Tuesday, August 10, 2021 6:50 AM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #211)

## Transportation Commission Public Comment (response #211)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/10/2021 6:50:04 AM

### Survey Response

COMMENT	
Comment:	<ul style="list-style-type: none"><li>• ROUNDABOUTS: o You state that you would evaluate once the bridge is completed and traffic patterns are established. How long after will this evaluation take place – a year, 6 months, etc.? Will collisions at Happy Valley and Scottsdale and Juan Tabo and Scottsdale be included because when these happen, traffic flows all through our neighborhood and roundabouts on Miller Road would be beneficial in these situations. o For the roundabout on 60th Street and East Dove Valley by Cactus Shadow High School – did that meet all of the criteria for a roundabout? I worked at the District Office at CCUSD for 4 years so know the traffic patterns very well. That is not a major corridor like you label the Miller Road extension and yet, there is a roundabout. Please clarify because that roundabout seems to have been built specifically to slow traffic. o Will there be additional signs added indicating the speed limit? Currently there is only 1 and not one pays attention to it. o We have called upon the police when there are speeders in our neighborhood and they do not come out unless there is a crime. They stated that they do not have time to monitor speeders in neighborhoods. This is why roundabouts are being requested by neighbors. Again – you should be requesting feedback from neighbors in this regard.</li></ul>
Comments are limited to 8,000 characters and may be cut and pasted from another source.	

**PLEASE PROVIDE YOUR NAME:**

First & Last Name:

Lori Lundberg

**AND ONE OR MORE OF THE FOLLOWING ITEMS:**

Email:

[loriscomputer@centurylink.net](mailto:loriscomputer@centurylink.net)

Phone:

(480) 620-2960

Address:

7545 East Alameda Road, Scottsdale 85255

Example: 3939 N. Drinkwater Blvd, Scottsdale 85251

## Lofgren, Kyle

---

**From:** Transportation Commission  
**Sent:** Wednesday, August 11, 2021 12:15 PM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #212)

**Categories:** Important

## Transportation Commission Public Comment (response #212)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/11/2021 12:14:49 PM

### Survey Response

COMMENT	
Comment:	<p>Hello, As a homeowner that will be directly affected by the increase in noise from the new Miller Rd. development project in Rawhide Wash, I am requesting a relevant noise study be done in the exact location where the new Miller Rd 4-lane will be constructed, and is well withing 300ft and direct line of sight from the rear of my home. We are also requesting noise abatement in accordance with Scottsdale policy of Brick Walls as noted below. I have seen irrelevant reports that were supposed to represent this project of noise studies done 2 miles away on Redbird Rd., a cul-de-sac with 3 houses, and 71st St again a cul-de-sac 2 miles away with 3 houses on each side, at Parkview lane and Miller and 75th St south of Juan Tabo, another picture showed measurements taken what looks to be in the dirt next to Happy Valley Rd, and another picture of the meter on a tripod in the NE corner of the new development new Pinnacle Peak and Miller, about 100yards NE of the intersection, but no noise studies done directly where the new Miller road extension will be, which is now dirt road at best and leads into Rawhide Wash where the bridge will be constructed. The noise studies done are irrelevant to the location in direct line of sight to the back of our home. The location of the Miller Rd extension project nearest lane is and closest point to my homes is less then 175ft from the back of</p>

my house, and well within 300ft as per policy guidelines. I have purchased a new and very accurate noise meter and took measurements where Miller Rd will be in the direct line of sight of the back of my house and the readings ranged from 30.7db to 54.9 at 11:30AM today 8-11-2. After the road is in I am sure he measurements will far exceed 64db. I have taken measurements from cars and trucks on nearby roads and all are well above 64db, most between 70db and 88db, standard passenger cars, SUV's and pickup trucks. We are requesting the retaining wall separating our NAOS on the west side of Miller Rd., currently the only thing between our homes and Miller Rd., be increased to at least 8ft in height the entire length parallel with the new Miller Rd extension, between Pinnacle Peak Reserve and Los Portones, this retaining wall separates our NAOS behind our homes from the proposed Miller Rd extension. The homeowners in Pinnacle Peak Reserve also feel noise and security are issues, and trees and foliage will not be enough to lower the traffic noise of the vast volume of new traffic that will drive on the new road behind our homes, and do nothing for security. Security is an issue. If the current wall is removed, and/or is not increased in height, we feel vulnerable to burglaries as nothing will keep thieves from parking on the new road, or the service ramps for the bridge, walking behind our homes in the desert NAOS area, and burglarizing our homes. Maintaining and increasing the height of the wall along Miller Rd between Pinnacle Peak Reserve and Los Portones will prevent many unwanted intrusions and burglaries as it wont be so convenient as to just get out of the car and walk behind our homes and rob houses, and leave on the new escape route to the south on the new Miller Rd extension. We don't believe that taking down the existing wall and adding foliage will best serve our community for a noise barrier , will decrease the security of our properties with an "open-Path" and it will not help us maintain the security of our homes and properties. Attachments show the noise abatement allowances offered to the neighboring community of Desert Highlands just to the east of our community, just on the other side of Pima Rd. we meet all the qualifying criteria for noise abatement according to the Scottsdale noise abatement policy and what is also spelled out in the "Happy Valley Road Pima Road to Alma School Road" 5-9-18 Noise Analysis PDF attached. We believe we qualify for the same noise abatement accommodations and allowances as the homeowners and Affected properties just to the east of our community. We are also requesting the option at the expense of the city, replacing our iron view fence at the very back of our property(s) with a Block Wall. The view fence is over 70ft long and blocks absolutely no noise and is less secure then a clock wall.

Comments are limited to 8,000 characters and may be cut and pasted from another source.



**PLEASE PROVIDE YOUR NAME:**

First & Last Name:	Dan Lundberg
--------------------	--------------

**AND ONE OR MORE OF THE FOLLOWING ITEMS:**

Email:	<a href="mailto:DL@Centurylink.net">DL@Centurylink.net</a>
--------	--

Phone:	(602) 618-8155
--------	----------------

Address:	7545 E Alameda Rd
----------	-------------------

Example: 3939 N. Drinkwater Blvd, Scottsdale 85251

## Lofgren, Kyle

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**From:** Transportation Commission  
**Sent:** Wednesday, August 11, 2021 1:53 PM  
**To:** Conklu, Susan  
**Subject:** Transportation Commission Public Comment (response #213)

**Categories:** Important

## Transportation Commission Public Comment (response #213)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/11/2021 1:52:36 PM

### Survey Response

<b>COMMENT</b>	
Comment:	<p>Dear Sirs, This comment is regarding Pima Road and Happy Valley Road Improvements. I did comment on both the Pima Road project and the Happy Valley Road project via the city's construction site. Regarding Pima Road and the sound wall. There should be a way for large animals to get across this road and through that sound wall. The contractor could overlap the wall to allow this which might help eliminate the inadvertent "trapping" of animals. Or the city could provide a "underpass consisting of large culverts for these animals to pass under the road. There have been several deer hit along this route. Also, I think the contractor/supplier for plants for all city projects need to be responsible for the plants for 2 years. Replacing what dies and keeping weeds like desert bloom eradicated. Let's keep Scottsdale beautiful and take care of the animals that were here first. rlb</p>
Comments are limited to 8,000 characters and may be cut and pasted from another source.	
<b>PLEASE PROVIDE YOUR NAME:</b>	
First & Last Name:	Ron Borino
<b>AND ONE OR MORE OF THE FOLLOWING ITEMS:</b>	

Email:	<a href="mailto:ron@borino.com">ron@borino.com</a>
Phone:	(602) 550-9939
Address:	29443 North 108th PI
Example: 3939 N. Drinkwater Blvd, Scottsdale 85251	

**From:** [Transportation Commission](#)  
**To:** [Conklu, Susan](#)  
**Subject:** Transportation Commission Public Comment (response #214)  
**Date:** Wednesday, August 11, 2021 2:00:38 PM

## Transportation Commission Public Comment (response #214)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/11/2021 1:59:54 PM

### Survey Response

COMMENT	
Comment:	<p>Dear Sirs, This comment was posted to Nextdoor regarding the number of deer and other animals hit on Scottsdale road ways. After reading the post today about a young lady hitting a deer on Dynamite Road and comments it is imperative that our city planning commission know that we want a solution incorporated in to all road project design to minimize these accidents. There are solutions and compared to the costs of damage to property, the trauma to people involved and of course the death of these animal and these solutions are cheap. Please take a minute and view this video , <a href="https://duckduckgo.com/?q=wildlife+crossing+solutions&amp;t=chromentp&amp;iax=videos&amp;ia=videos&amp;iai=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DND0D3bVbM7Y">https://duckduckgo.com/?q=wildlife+crossing+solutions&amp;t=chromentp&amp;iax=videos&amp;ia=videos&amp;iai=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DND0D3bVbM7Y</a> Please work with the city planning department to incorporate these solutions. There is time to get these solutions incorporated in to the Pima Road and the Happy Valley Road projects and ALL future projects. Either over or underpasses. Lets stop this carnage! Perhaps a small cross ought to be placed along the road with an outline of the animal hit so folks know exactly how many animals are killed on our roads. Let's differentiate Scottsdale as a place that cares for the desert animals we share this habitat with.</p>
Comments are limited to 8,000 characters and may be cut and pasted from another source.	
PLEASE PROVIDE YOUR NAME:	
First & Last Name:	Ron Borino
AND ONE OR MORE OF THE FOLLOWING ITEMS:	
Email:	<a href="mailto:ron@borino.com">ron@borino.com</a>
Phone:	(602) 550-9939
Address:	29443 North 108th Pl
Example: 3939 N. Drinkwater Blvd, Scottsdale 85251	

**From:** [Transportation Commission](#)  
**To:** [Conklu, Susan](#)  
**Subject:** Transportation Commission Public Comment (response #215)  
**Date:** Sunday, August 15, 2021 10:51:29 AM

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## Transportation Commission Public Comment (response #215)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/15/2021 10:50:43 AM

### Survey Response

COMMENT	
Comment:	<p>A diagram for the relocation of the water/sewer pipes on the Miller Road extension project shows that the pipes are not going to be relocated on Pinnacle Peak Reserve NAOS. It appears that the pipes are in the wash area and NAOS of Los Portones. Why is it necessary to take Pinnacle Peak Reserve NAOS. Clearly it is not unless there is something else planned in the future that we are not aware of. Also the diagram shows lines for electrical. You had told me that there was not going to be any lights, etc. on the bridge so why the need for electrical? Mr. Richter had shown plot/land diagrams at the zoom meeting that shows the NAOS land that the City wants to take from Pinnacle Peak Reserve and Los Portones for this project and the HOA and neighbors in Pinnacle Peak Reserve are interested in seeing those specific diagrams. . The website for this projects is still NOT updated. Any interested neighbors have no way of staying up to date or properly informed on this project. I think our neighbors should know if our NAOS is being compromised. That was never mentioned at any point in this project until this recent zoom meeting. That is not being transparent.</p>



Comments are limited to 8,000 characters and may be cut and pasted from another source.

**PLEASE PROVIDE YOUR NAME:**

First & Last Name:	Lori Lundberg
--------------------	---------------

**AND ONE OR MORE OF THE FOLLOWING ITEMS:**

Email:	<a href="mailto:loriscomputer@centurylink.net">loriscomputer@centurylink.net</a>
--------	--

Phone:	(480) 620-2960
--------	----------------

Address:	7545 East Alameda Road, Scottsdale 85255
----------	---

Example: 3939 N. Drinkwater Blvd, Scottsdale 85251

**From:** [Transportation Commission](#)  
**To:** [Conklu, Susan](#)  
**Subject:** Transportation Commission Public Comment (response #216)  
**Date:** Sunday, August 15, 2021 10:53:32 AM

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## Transportation Commission Public Comment (response #216)

### Survey Information

Site:	ScottsdaleAZ.gov
Page Title:	Transportation Commission Public Comment
URL:	<a href="https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment">https://www.scottsdaleaz.gov/boards/transportation-commission/public-comment</a>
Submission Time/Date:	8/15/2021 10:52:48 AM

### Survey Response

COMMENT	
Comment:	<p>In the Draft Noise Analysis Technical Report, it is stated in the Executive Summary that: three 10-minute interval equivalent noise level measurements (Leq) were conducted at each site. Measured noise levels ranged from 48-53 dBA” and that “Future Build (2040) peak hour traffic noise levels ranged from 49-62 dBA Leq and are not predicted to impact any of the 45 noise receiver locations, which represent 108 receptors or dwelling units. Therefore, mitigation analysis was not required.” Mr. Richter states in emails below that my house will only have a level of 52 dBA. How is this possible? If I understand correctly, you are saying that after the road goes through, we will not hear any additional noise?! Please clarify. Where your measurements taken at the front or back of our house? The back of our house is 175 feet in direct line of sight from where the road will be. Currently, we can hear people in their backyards across the wash and traffic on Pinnacle Peak Road. Dense foliage does nothing to mitigate noise. There WILL be noise and it needs to be addressed now and accommodations planned and budgeted for, such as a 8 ft wall blocking our NAOS from the road.</p>

Comments are limited to 8,000 characters and may be cut and pasted from another source.

**PLEASE PROVIDE YOUR NAME:**

First & Last Name:	Lori Lundberg
--------------------	---------------

**AND ONE OR MORE OF THE FOLLOWING ITEMS:**

Email:	<a href="mailto:loriscomputer@centurylink.net">loriscomputer@centurylink.net</a>
--------	--

Phone:	(480) 620-2960
--------	----------------

Address:	7545 East Alameda Road, Scottsdale 85255
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Example: 3939 N. Drinkwater Blvd, Scottsdale 85251