



Transportation Alternatives / CMAQ Application for
FY 2018, 2019, and 2020 Projects

Underpass at Chaparral Road and Indian Bend Wash Path

Scottsdale

**APPLICATIONS ARE DUE AT MAG OFFICES BY
Monday, September 21, 2015 at 10:00 a.m.**

(LATE AND/OR INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED)

Scottsdale: Underpass at Chaparral Road and Indian Bend Wash Path**PART A - CONTACT AND PROJECT DESCRIPTION****Contact Information**

1. Name of Sponsoring Agency	Scottsdale
2. Agency Contact Name	Susan Conklu
3. Phone Number of Agency Contact	480-312-2308
4. E-Mail Address of Agency Contact	sconklu@scottsdaleaz.gov
5. Mailing Address of Agency Contact	7447 East Indian School Road, Suite 205, Scottsdale, AZ 85251

Project Description

6. Please provide the Project Title.	Underpass at Chaparral Road and Indian Bend Wash Path
7. Please provide a concise, specific description of the project (250 character limit):	This project will design and construct a north/south non-motorized underpass at Chaparral Road along the Indian Bend Wash Path. It will include connections to the paths, existing east/west tunnel, sidewalks, and crosswalk.
8. Please provide the project limits:	Indian Bend Wash Path at Chaparral Road, east of Hayden Road

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PART B-DETAILED PROJECT DESCRIPTION

This part of the form identifies the current characteristics and proposed improvements for each project.

The purpose of Part B is to provide sufficient information to evaluate the cost estimate for the project and to provide assurance that the project will be capable of meeting the ADOT administered federal design review and clearance process. This process requires environmental, ROW and utilities clearances and a bid ready design prior to FHWA approval to encumber federal funding for construction.

NOTE: For Part B, Questions 14-20, the specified distance will vary (and update automatically) depending on the project type identified in Part B, Question 1. Pedestrian-only projects will use a distance of 1/4 mile, while bicycle and Shared-Use projects will use a distance of 1/2 mile.

1. Please select which funding source(s) this project is applying for. Check all that apply.

- Congestion Mitigation and Air Quality (CMAQ)
- Transportation Alternatives (TA)

2. What type of project is this? (Check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Bicycle Lane (4' min. w/o curb/gutter) | <input type="checkbox"/> Shoulder paving is within 4-miles of a PM-10 Monitor |
| <input type="checkbox"/> Bicycle Lane (5' min. with curb/gutter) | <input type="checkbox"/> Wide Sidewalk (8' min.) |
| <input type="checkbox"/> Buffered Bike Lane | <input type="checkbox"/> Detached Sidewalk with 4' min. buffer |
| <input type="checkbox"/> Protected Bike Lane | <input type="checkbox"/> Signalized Crossing |
| <input checked="" type="checkbox"/> Shared-use path (10' min.) | Other: |
| <input type="checkbox"/> Sidewalk (5' min.) | <input type="text"/> |
| <input type="checkbox"/> Planning Study | |

3. What other major elements are included in this project? (Check all that apply)

- | | |
|--|----------------------|
| <input type="checkbox"/> Bridge (overpass) | Other: |
| <input checked="" type="checkbox"/> Tunnel (underpass) | <input type="text"/> |
| <input type="checkbox"/> Signalized midblock crossing/HAWK | |
| <input type="checkbox"/> Countdown Pedestrian Signal | |

4. What amenities are included in this project?

- | | |
|---|--|
| <input type="checkbox"/> Number of Bike racks/lockers | <input type="checkbox"/> Number of Seating/Rest Area(s) |
| <input type="checkbox"/> Number of Drinking Fountains | <input type="checkbox"/> 1 Number of bicycle/pedestrian counting devices |
| <input type="checkbox"/> Number of Way-finding Signs | <input type="checkbox"/> Number of bicycle/pedestrian counting devices |
| <input type="checkbox"/> Number of Trash receptacles | Other: |
| <input type="checkbox"/> Number of Trees | <input type="text"/> |
| <input type="checkbox"/> Number of new openings in street walls | |
| <input type="checkbox"/> Number of Shade Structures | |

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5. Please describe the existing condition of the project site and any problem(s) being addressed.

The Chaparral and Hayden are arterial roads with high traffic volumes at the intersection (51,200 ADT) and a lot of right-turning vehicles. Hayden is 6-lanes, 40 MPH and Chaparral 4-lanes. The Indian Bend Wash Path runs along both sides of Hayden in this area. In the proposed project location, there is a high volume of north/south path users crossing the east leg of the intersection using the Indian Bend Wash Path, between Chaparral Park and Camelback Park. From 2006-2010, this intersection had a high percentage of car/bike and car/bike collisions compared to others citywide. In summer 2011 the city constructed 2 underpasses in the west and south leg of the intersection. In October 2011, a MAG Road Safety Assessment and staff evaluation recommended this additional grade separated crossing that we are proposing in this application.

6. Please describe the work being done and improvements being made as part of this project.

A 10-foot high by 14-foot wide north/south underpass will be constructed under Chaparral Road, east of Hayden. This will include path connections to the east/west Hayden Tunnel, the Indian Bend Wash Path in both Chaparral and Camelback Parks, and connections to the crosswalks/street sidewalks. There will be lighting in the underpass, a path counter, landscaping, and Wayfinding Signage.

7. What do you hope to achieve with this project?

This will provide a more comfortable, convenient crossing of Chaparral Road, enhance the Indian Bend Wash Path (17 miles long with connection to Tempe Town Lake), and include connections between the sidewalks, paths, and proposed underpass where there is a high volume of path activity throughout the day/evenings. Throughout Indian Bend Wash Path, underpasses at all major road crossings where constructed with the path and flood-channel, however this location is across Hayden from the flood-channel so an underpass was not constructed here as part of that project or the park/path construction. This project combined with the two existing grade-separated crossings along the south and west sides of the intersection will enable neighbors and path/park users to cross this high traffic arterial intersection without interacting with vehicles from all directions. Nearby destinations and connections include: The Chaparral Park, Community Center and Pool, Adapted Services Center for children and adults, City of Scottsdale Club SAR Fitness Center, San Francisco Giants Club and Practice Field, Safeway at Chaparral Plaza, and single and multi family residential including a high percentage of elderly residents.

8. Safety improvements to be included for this project: (Check all that apply)

- Medians with pedestrian crossing islands
- Roadway Reconfiguration (Road Diet)
- Striping/re-striping to narrow vehicle lanes
- Color pavement or similar treatment
- Lighting
- Landscape buffer between sidewalk and roadway
- Rectangular Rapid Flash Beacon (RRFB)
- Driver Feedback Sign

Other

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PART B-DETAILED PROJECT DESCRIPTION

9. Does this project include a road safety education component?

<input type="checkbox"/>	Yes
<input checked="" type="checkbox"/>	No

Please Explain:

Overall our program provides safety education, but not during specific projects.

10. How does this project or planning study address safety?

Collision data from 2006-2010 showed a high number of crashes with pedestrians and bicyclists. There is high traffic volume (51,200 ADT), high bike/ped volume, and both roads are arterials with posted speed limit is 40 MPH. In 2011 underpasses were constructed on the west and south legs of the intersection. Currently north/south path users on the east side must cross at-grade in the crosswalk. There are often right-turning vehicles which create potential conflicts. The southeast corner also has a relatively small landing for path users accessing the pedestrian push button. People on bikes riding up from the path and Camelback Park who wish to cross must negotiate a sharp turn to push the button and then turn northbound into the crosswalk. Bicyclists have been observed cutting this corner, which could make them less visible to right-turning drivers at the southeast corner. Adding an underpass will provide a more comfortable crossing for path users and eliminate these potential conflicts.

11. How does the project improve ADA facilities for persons with disabilities?

This project will complete gaps in the bike network and improve access for all users, including people with disabilities who walk and bicycle. This will enable them to cross Chaparral (4-lanes) and Hayden (6-lanes) in three legs of the intersection and access all four corners without interacting with vehicles. This will connect them to transit stops, City of Scottsdale Adapted Services Center (children and adults), Chaparral Park, Community Center, and Pool, Camelback Park, Club SAR Fitness Center, Safeway, and residential areas.

12. Describe how this project will improve access from nearby neighborhoods and/or adjacent uses:

The Indian Bend Wash Path and surrounding sidewalks and bike lanes connect people well to the neighborhoods and adjacent uses, however this crossing of Chaparral Road at Hayden Road is a barrier to bike and pedestrian travel. The surrounding neighborhood is primarily residential with single and multi-family households including the Villa Monterrey retirement community. To the west is one shopping center with a Safeway, two banks, restaurants, and several other stores. The south end of the project connects to Camelback Park and is 0.5-mile from Scottsdale Club SAR Fitness Center and San Francisco Giants Club and Practice Field. To the north the project links to Chaparral Park, Community Center (0.5-mile away), and pool (0.5-mile away) which includes another 0.5-long area of ballfields, ramadas, a lake, dog park, and connections to adjacent local streets. Adapted Services Center for children and adults is also located adjacent to Chaparral Park, 0.5-mile from this project.

13. How does the project create a sense of place?

This will connect people to places, enhancing quality of life especially for short trips. Neighbors meet & get to know each other while regularly walking, bicycling, & traveling at "human speed." Many of the same people use these parks regularly, so they will start seeing familiar faces which creates and enhances a sense of place.

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14. Connectivity: (Check all that apply)

Project fills a gap in the system
Explain:

This is part of the 17-mile regional Indian Bend Wash Path that connects to Tempe, our most popular, PRIMARY PATH.

Project connects to other local bikeways
List of connected bikeways:

The IBW Path connects to existing Arizona Canal & Pima Paths as well as existing bike lanes on Chaparral, Granite Reef, Miller, Jackrabbit, McDonald, 78th Street, Camelback, Indian School, Thomas, Cactus, Bell, and Thompson Peak Pkwy. It will connect 70 continuous miles of bike lanes and paths.

Multi Jurisdictional Project (please include letter of support (See Part C)
List of Participating Jurisdictions:

Total length of bikeways directly connected by this project (in miles)

15. Number of transit stops this project will connect to. Do NOT count major transit facilities (park and rides, transit centers, etc.) in this question. List associated route(s) and their peak frequency, using Valley Metro as the source.

Within 1/2 mile

16. Number of transit routes serviced by the transit stops in question 15 that this project will connect to. List associated route(s) and their peak frequency, using Valley Metro as the source.

Within 1/2 mile
List routes and frequency:

Route 81 (30 minutes), Miller Road Trolley (30 minutes) has FREE service.

17. Number of major transit facilities (park and rides, transit centers, etc.) served by this project:

Within 1/2 mile
List:

18. Number of non-commercial activity centers (parks, libraries, senior centers, recreational centers, etc.) this project will benefit:

Within 1/2 mile
List:

City of Scottsdale Adapted Services Center (children and adults), Chaparral Park, Community Center, and Pool, Camelback Park, Club SAR Fitness Center.

19. Number of commercial and employment destinations (malls, retail centers, business parks, etc.) this project will benefit (for example, a mall is ONE destination; do NOT count every store in a mall as a separate destination):

Within 1/2 mile
List:

Chaparral Plaza

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20. Number of K-8 public schools this project will benefit:

Within 1/2 mile

List:

1-mile from Navajo Elementary and Mohave Middle School

21. Number of other schools (charter schools, high schools, colleges, and universities) this project will benefit:

Within 1/2 mile

List:

1-mile from Scottsdale Community College (approximately 20,000 students)

22. Number of activity centers for air quality cost effectiveness (i.e. bank, church, hospital, health care facility, light rail station, park-and-ride lot, office park, post office, public library, shopping area, grocery store, university or junior college):

Within 1/4 miles

List:

2 banks (Chase and Wells Fargo), 1 grocery store (Safeway), 1 shopping area (Chaparral Plaza)

1/4 miles to 1/2 miles

List:

23. What are the demographics of the area served:

[MAG Demographic Mapping](#)

People Per Square Mile

% Families in Poverty

Use the MPO/COG Demographic Mapping link above. Zoom in to your project area. On the right-hand side of the screen, under "Reporting," select "Custom Summary." Next, select "Corridor of Interest." Left-click to begin drawing. Draw a line through all census block groups adjacent to your project, left-clicking where needed to change the direction of the line. Double-click to finish drawing the line. The selected census block groups will become highlighted in blue. A pop-up box will appear with "Results for Selected Block Groups." Select the "Summary Report" tab, and use the data found there. You may export the results to Excel (click the printer icon at the top-right side of the pop-up window) for your records.

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24. Please provide the following information on the facility on which the improvement will be located.

For a linear project, please enter the Facility Name, Starting Limit and Ending Limit:

For a point project (e.g. an intersection or crossing), please enter a Facility Name and a Crossing Feature:

Chaparral Road and Hayden Road, east leg of intersection.

Federal Functional Classification of the Facility:

Minor Arterial

[Link to MAG webpage for Federal Functional Classification Map](#)

Type of Facility the Improvement will be located on:

Arterial Road

Length (in Miles)

Posted Speed Limit (MPH)

Number of Travel Lanes Before Project

Number of Travel Lanes After Project

25. Please provide an estimated traffic volume (ADT) on the nearest parallel arterial.

ADT Estimate

Date Counted

Name of road the traffic count was taken from

Intersection of Hayden Road and Chaparral Road

Description of Methodology and Source used for the ADT Estimate

All counts are collected using automated traffic counters using pneumatic roadway sensors and factored based on regional figures provided by MAG.

26. Federal law requires that all federally funded projects comply with a federal environmental clearance. For projects that have a minimum ground disturbance, environmental surveys are required and an environmental document will need to be prepared, which typically requires 12 months to complete.

Describe any known cultural, historical and biological resources, hazardous materials or other environmental issues that could affect work on the segment.

There are no known issues that could affect work on these segments. The project is surrounded by and adjacent to development including roadway and storm drainage corridors. We will work through the required clearances during the regular environmental process.

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27. Current ROW: (Check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Agency owns all ROW Needed | <input type="checkbox"/> Agency owns easement |
| <input type="checkbox"/> ROW to be acquired | <input type="checkbox"/> Agency has right-of-use (i.e. canal) |
| <input type="checkbox"/> Owners will donate ROW | <input type="checkbox"/> Condemnation may be required |

28. Please describe any right of way issues associated with the project.

There are no right-of-way issues. The city owns all right-of-way and both properties that the underpass will cross and connect.

29. Please indicate whether all parcels for this project have been inventoried.

- Yes No

30. Current Utilities in or abutting the alignment: (Check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> No Utility in or abutting the alignment | <input type="checkbox"/> Private Structures |
| <input checked="" type="checkbox"/> Canals & Drainage | |
| <input checked="" type="checkbox"/> Power Lines & Cables | Other: |
| <input checked="" type="checkbox"/> Pipelines, Sewer and Water | <input type="text"/> |

31. Please describe any utility conflicts that will need to be addressed.

There are no known utility conflicts that will need to be addressed.

32. Guidelines used to develop project: (Check all that apply)

- | | |
|---|---|
| <input checked="" type="checkbox"/> AASHTO Guide for Bicycle Facilities | Other: |
| <input checked="" type="checkbox"/> MAG Pedestrian Policies and Design Guidelines | <input type="text" value="Scottsdale's Wayfinding Signage Guidelines"/> |
| <input checked="" type="checkbox"/> MAG Complete Streets Guide | |
| <input checked="" type="checkbox"/> MAG Designing Transit Accessible Communities | |
| <input checked="" type="checkbox"/> MAG Valley Path Brand & Wayfinding Signage Guidelines | |
| <input checked="" type="checkbox"/> NACTO Urban Bikeway Design Guide | |
| <input type="checkbox"/> RPTA Bus Stop Program and Standards | |

33. Jurisdiction has the following policies for improved bicycle/shared use facilities:

- | | |
|--|---------------------------------------|
| With new development and capital improvement projects, bike lanes on arterial streets are: | <input type="text" value="Required"/> |
| With new development and capital improvement projects, bike lanes on collector streets are: | <input type="text" value="Required"/> |
| With pavement restoration or regular pavement maintenance on arterial streets, bike lanes are: | <input type="text" value="Required"/> |
| With new development or during development retrofits, shared-use paths are: | <input type="text" value="Required"/> |
| Bicycle program implemented, including bike education, safety events, and bike maps | <input type="text" value="Yes"/> |
| Complete Streets Policy | <input type="text" value="Yes"/> |

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PART B-DETAILED PROJECT DESCRIPTION

34. The project is: (Check one)

- Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source)
List:
2008 Transportation Master Plan - Bicycle Element recommends grade-separated crossings where paths intersect streets. The 17-miles of Indian Bend Wash has underpasses/bridges at most road crossings except for this location (since it is not within the flood-channel).
- Consistent with general policy/practices, but not formally identified (provide source)
Explain:
City of Scottsdale 2001 General Plan, Community Mobility Element
- Not addressed by jurisdiction's plans, policies, or practices
Explain:

35. How will the applicant measure the success of this project?

As with all city projects where a new connection is constructed, it is anticipated that there will be regular use after it is built. The city will conduct field observations of usage and solicit public feedback on the comfort and convenience of the improvement. There is strong support for biking and walking infrastructure from residents, visitors, Scottsdale Stadium representatives, as well as members of the Transportation Commission, Path and Trails Subcommittee, and Tourism Advisory Task Force. We will continue to get their feedback.

36. Will bicycle/pedestrian count technology be incorporated? Will the devices broadcast automatic updates or require manual data collection? If manual, how will the agency identify staff resources to dedicate to collecting the data?

Yes. We will conduct manual & automatic counts using traffic cameras at the traffic signal and borrow EcoCounter equipment from MAG's counter loan program before construction. The construction will include installing our own EcoCounter equipment at the underpass.

37. Will the project include an education/marketing component upon completion of construction, to publicize the project and increase citizen awareness of the project impact and benefits? If yes, please describe below.

As typical with all City of Scottsdale projects, the community will be involved in the design and implementation of this project through the use of community meetings (public open houses, Path and Trails Subcommittee, and Transportation Commission) and other appropriate methods. These include email, the newspaper, project updates on the city's web page, and social media such as Facebook, Twitter, Speak Up Scottsdale, and Next Door online forums.

38. Will the project include wayfinding signage elements? If yes, please describe below.

Yes. The city's Path and Trails Wayfinding program is currently under design. It will include Wayfinding along the path and streets near access points to the paths and crossings. Wayfinding Signage in this location will be needed to provide clear directional information about the three tunnels, each path, and destination at this intersection. There will be signage added for those either through this project or the separate Wayfinding implementation. We will also use elements of the MAG Wayfinding Guidelines, NACTO, and MUTCD.

Scottsdale:

PART D - TRANSPORTATION ALTERNATIVES COST ESTIMATE FORM														
Please provide a detailed cost estimate for this project. The data entered in this cost estimate sheet will automatically transfer into the correct fields in Part E. Rows 1-9 will remain visible at the top of this page at all times.														
Sponsoring Agency:		Scottsdale	Project Title:		Indian Bend Wash Path Underpass at Chaparral	Application Date:		9/21/2015						
Part	Item Description				Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)		
A. Scoping (15% Preliminary Engineering Design)	1. SITE TOPOGRAPHIC SURVEY				LS	1	\$18,000.00	\$18,000.00	No	\$0.00	\$18,000.00			
	2. PROJECT ASSESSMENT REPORT or DETAILED WORKPLAN				LS	1	\$30,000.00	\$30,000.00	No	\$0.00	\$30,000.00			
	3. ENVIRONMENTAL DETERMINATION (Infrastructure projects, including technical supporting documents)				LS	1	\$10,000.00	\$10,000.00	No	\$0.00	\$10,000.00			
	4. HAZMAT ASSESSMENT				LS	1	\$5,000.00	\$5,000.00	No	\$0.00	\$5,000.00			
	Subtotal Scoping (Part A)							\$63,000.00		\$0.00	\$63,000.00			
B. Final Preliminary Engineering Design - Stages II, III, IV And PS&E	1. Plans, Special Provisions or Bid Manual, Cost Estimate & Schedules.				LS	1	\$125,000.00	\$125,000.00	No	\$0.00	\$125,000.00			
	2. GEOTECHNICAL INVESTIGATION and Materials & Pavement Design Report				LS	1	\$10,000.00	\$10,000.00	No	\$0.00	\$10,000.00			
	3. DRAINAGE REPORT				LS	1	\$30,000.00	\$30,000.00	No	\$0.00	\$30,000.00			
	4. SWPPP				LS	1	\$10,000.00	\$10,000.00	No	\$0.00	\$10,000.00			
	Subtotal PE (Part B)							\$175,000.00		\$0.00	\$175,000.00			
Subtotal Preliminary Engineering (Part A + Part B)							\$238,000.00		\$0.00	\$238,000.00				
C. Right-of-Way Acquisition	1. Right-of-Way Acquisition				LS	1	\$70,000.00	\$70,000.00	No	\$0.00	\$70,000.00			
Subtotal Right-of-Way Acquisition (Part C)							\$70,000.00		\$0.00	\$70,000.00				
D. Utility Relocation	1. Utility Relocation				LS	1	\$95,000.00	\$95,000.00	No	\$0.00	\$95,000.00			
Subtotal Utility Relocation (Part D)							\$95,000.00		\$0.00	\$95,000.00				
E. Construction Or Implementation [For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4]	1. Hardscape Construction			Installation Of SWPP Measures		LS	1	\$40,000.00	\$40,000.00	Yes	\$37,720.00	\$2,280.00		
				Site Preparation		LS	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Demolition			Sawcut		LF	0	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
				Remove Curbs		LF	0	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
				Remove Fencing		LF	0		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Remove Structural Concrete		CY	0		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Remove Asphaltic Concrete Pavement		SY	450	\$12.00	\$5,400.00	\$5,400.00	Yes	\$5,092.20	\$307.80	
				Remove Concrete Sidewalks, Slabs		SF	9,700	\$4.00	\$38,800.00	\$38,800.00	Yes	\$36,588.40	\$2,211.60	
	Retaining Wall - Reinforced Concrete Cantilevered			Hazmat Abatement		LS	1		\$0.00	Yes	\$0.00	\$0.00		
				Retaining Wall - Reinforced Concrete Cantilevered		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Earthwork			Subgrade Preparation		SY	0	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
				Drainage Excavation		CY	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Structural Excavation		CY	4,500	\$20.00	\$90,000.00	\$90,000.00	Yes	\$84,870.00	\$5,130.00	
				Structural Backfill		CY	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Borrow (In Place)		CY	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Curb & Gutter					LF	0	\$0.00	\$0.00	Yes	\$0.00	\$0.00		
	Aggregate Base					SY	450	\$20.00	\$9,000.00	Yes	\$8,487.00	\$513.00		
	Pathway Or Sidewalk Materials			Concrete		SF	1		\$0.00	Yes	\$0.00	\$0.00		
				Colored Concrete		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Stamped Color Concrete		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Precast Concrete Pavers		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Asphaltic Concrete		SY	450	\$65.00	\$29,250.00	\$29,250.00	Yes	\$27,582.75	\$1,667.25	
				Slurry Seal (Includes Oblit & Striping)		SY	5,000	\$6.50	\$32,500.00	\$32,500.00	Yes	\$30,647.50	\$1,852.50	
	Crosswalk Enhancement			Concrete Path		SF	9,800	\$6.50	\$63,700.00	Yes	\$60,069.10	\$3,630.90		
				Stamped Asphalt		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Stamped Concrete		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
				Concrete retaining wall		SF	1,440	\$80.00	\$115,200.00	\$115,200.00	Yes	\$108,633.60	\$6,566.40	
				Integral Color Concrete		SF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00	
	Pedestrian ADA Ramp					SF	1		\$0.00	Yes	\$0.00	\$0.00		
	Ped Underpass					LS	275,000		\$0.00	Yes	\$0.00	\$0.00		
Pedestrian Lighting Including Conduit And Trenching					Each	1	\$20,000.00	\$20,000.00	Yes	\$18,860.00	\$1,140.00			
Handrail			Standard		LF	1		\$0.00	Yes	\$0.00	\$0.00			
			Decorative		LF	1		\$0.00	\$0.00	Yes	\$0.00	\$0.00		
Subtotal Hardscape Construction							\$443,850.00		\$418,550.55	\$25,299.45				

Scottsdale:

PART D - TRANSPORTATION ALTERNATIVES COST ESTIMATE FORM

Please provide a detailed cost estimate for this project. The data entered in this cost estimate sheet will automatically transfer into the correct fields in Part E. Rows 1-9 will remain visible at the top of this page at all times.

Sponsoring Agency:	Scottsdale	Project Title:	Indian Bend Wash Path Underpass at Chaparral	Application Date:	9/21/2015
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Part	Item Description	Unit	Quan.	Unit Price	Total	Federally Eligible	Federal Funds (94.3%)	Local Funds (5.7%)	Note(s)	
E. Construction Or Implementation [For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4]	2. Landscaping & Irrigation Items	Requirements	Each	1		\$0.00	Yes	\$0.00	\$0.00	
		Trees (15 Gallon Size)	Each	1		\$0.00	Yes	\$0.00	\$0.00	
		Trees (5 Gallon Size)	Each	1		\$0.00	Yes	\$0.00	\$0.00	
		Shrubs (5 Gallon Size)	Each	1		\$0.00	Yes	\$0.00	\$0.00	
		Shrubs (1 Gallon Size)	Each	1		\$0.00	Yes	\$0.00	\$0.00	
		Landscaping and Irrigation Modifications	LS	1	\$80,000.00	\$80,000.00	Yes	\$75,440.00	\$4,560.00	
		Mulch	Decomposed Granite	CY	1		\$0	Yes	\$0	\$0
			Organic	CY	1		\$0	Yes	\$0	\$0
		Topsoil	CY	1		\$0	Yes	\$0	\$0	
		Seeding	Acre	1		\$0	Yes	\$0	\$0	
		Turf Sod	SY	1		\$0	Yes	\$0	\$0	
		Boulders	Each	1		\$0	Yes	\$0	\$0	
		Irrigation System	Drip	SF	1		\$0	Yes	\$0	\$0
			Turf	SF	1		\$0	Yes	\$0	\$0
		Sleeving For Irrigation System	Directional Bore	LF	1		\$0	Yes	\$0	\$0
			Cut and Patch	LF	1		\$0	Yes	\$0	\$0
		Landscape Header Curb	LF	1		\$0	Yes	\$0	\$0	
		Landscape Establishment	LS	1		\$0	Yes	\$0	\$0	
	Subtotal Landscaping & Irrigation Items					\$80,000		\$75,440	\$4,560	
	3. Site Furnishings	Benches	Each	1		\$0	Yes	\$0	\$0	
		Seatwalls	LF	1		\$0	Yes	\$0	\$0	
		Bike Racks	Each	1		\$0	Yes	\$0	\$0	
		Trash Receptacles	Each	1		\$0	Yes	\$0	\$0	
		Drinking Fountains	Each	1		\$0	Yes	\$0	\$0	
		Signage (Standard Traffic Control)	LS	1	\$0	\$0	Yes	\$0	\$0	
		Signage (Wayfinding)	Each	1		\$0	Yes	\$0	\$0	
		Tree Grates	Each	1		\$0	Yes	\$0	\$0	
	Subtotal Site Furnishings					\$0		\$0	\$0	
	4. Other Construction Items. Also, Itemized Line Items For Non-Infrastructure Projects. (Insert Additional Rows If Necessary)	Bicycle and Pedestrian Counter	Each	1		\$0	Yes	\$0	\$0	
		Public Art	LS	1	\$13,000	\$13,000	No	\$0	\$13,000	
		City Fees	LS	1	\$32,000	\$32,000	Yes	\$30,176	\$1,824	
		CPM Salaries (CPM, PM and City construction staff)	LS	1	\$6,200	\$6,200	Yes	\$5,847	\$353	
		WO Credits (CIP Supported client dept staff)	LS	1	\$62,000	\$62,000	Yes	\$58,466	\$3,534	
		CPM Allocation (CPM Admin, staff, equipment)	LS	1	\$62,000	\$62,000	Yes	\$58,466	\$3,534	
				1		\$0	Yes	\$0	\$0	
				1		\$0	Yes	\$0	\$0	
				1		\$0	Yes	\$0	\$0	
		Subtotal Other Construction					\$175,200		\$152,955	\$22,245
	5. Mobilization And Administration Costs	Contractor Mobilization	LS	1	\$100,000	\$100,000	Yes	\$94,300	\$5,700	
		Traffic Control	LS	1	\$55,000	\$55,000	Yes	\$51,865	\$3,135	
		Construction Survey & Layout	LS	1	\$18,000	\$18,000	Yes	\$16,974	\$1,026	
		Construction Contingencies	LS	1	\$275,000	\$275,000	Yes	\$259,325	\$15,675	
		Construction Administration	LS	1	\$120,000	\$120,000	Yes	\$113,160	\$6,840	
		Subtotal Mobilization & Administration Costs					\$568,000		\$535,624	\$32,376
	Subtotal Construction Or Implementation Cost (Part E)									
F. Total Scoping, PE, Right-of-Way Acquisition, Utility Relocation, and Construction (Part A, B, C, D, and E)										
G. Adot Fee Review Fee - \$10,000 for Certified Accepted agencies, otherwise \$30,0000										
H. Total Project Cost Including ADOT Fees (Part F + Part G)										

Scottsdale:

PART E - TOTAL PROJECT SCHEDULE AND BUDGET

Please verify that the cost and programming estimates for the total project are correct below. The numeric values on this sheet (in GREY) are automatically populated from the cost estimate sheet (Part D) and cannot be modified. If there are any errors in the numeric values on this sheet, please verify and correct the numbers you have entered into the cost estimate sheet (Part D). You MUST fill in the GREEN portions of Part E manually.

The design for the project should be programmed at least 1 year, preferably 2 years, prior to construction. Utilities and right of way should be programmed at least 1 year prior to construction, but may occur in the same year as construction depending on utility and right of way concerns that are identified in questions 24-27 in Part B.

Cost Estimate for the Project Including ALL Segments	Cost	Additional Notes (if needed)
1. ADOT Fee	\$10,000	
2. Design	\$238,000	
3. Right of way	\$70,000	
4. Utilities	\$95,000	
5. Construction	\$992,050	
6. Contingency	\$275,000	No more than 20% of Construction Cost
7. Total Cost	\$1,680,050	

8. Will the agency maintain the improvement after it is completed?

9. Expected Annual Maintenance Cost

10. Identify Source of Maintenance Funds

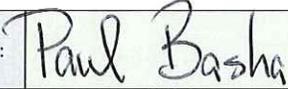
Requested MAG Programming	Year	Short Work Description (E.g. Construct Multiuse Path)	Local Funding Source	Local Cost	Federal Cost	Total Cost	Local Share
11. Design (Optional)	2018	Design Underpass and Path Connections	Sales Tax	\$238,000	Not Available	\$238,000	100.0%
12. Right of way (Optional)			Sales Tax	\$70,000	Not Available	\$70,000	100.0%
13. Utilities (Optional)			Sales Tax	\$95,000	Not Available	\$95,000	100.0%
14. Other (Optional)		ADOT Fee	Sales Tax	\$10,000	Not Available	\$10,000	100.0%
15. Construction	2019	Construct Underpass and Path Connections	Sales Tax	\$84,481	\$1,182,569	\$1,267,050	6.7%
16. Total Costs				\$497,481	\$1,182,569	\$1,680,050	29.6%

PART F - SIGNATURE AND CHECKLIST	
<h1>Checklist</h1>	
This checklist is included to facilitate applicant review and verification that all required fields in the form have been completed.	
COVER SHEET	Complete?
Cover Sheet is completely filled out	Yes
PART A - Contacts and Project Description Fields	Complete?
Contact Information, fields 1 – 5 are complete	Yes
Project Description, fields 6 - 8 are complete	Yes
PART B - Project Description	Complete?
Fields 1 - 14 (Project Description) are complete	Yes
Fields 15 - 17 (Transit) are complete	Yes
Fields 18 – 22 (Attractors and Demographics) are complete	Yes
Fields 23 – 30 (Traffic, Environmental, ROW, and Utilities) are complete	Yes
Fields 31 – 33 (Guidelines, Policies, and Plans) are complete	Yes
Fields 34 – 37 (Maintenance, Performance Measurement, and Wayfinding) are complete	Yes
PART C - Required Attachments	Complete?
Field 1 - Map showing the general location of the proposed project in relation to the region, including a north arrow provided in the printed application and the PDF application.	Yes
Field 2 - Map with streets labeled showing the detailed location(s) of the proposed project, including a north arrow provided in the printed application and the PDF application.	Yes
Field 3 - Up to four (4) photos of existing conditions are provided in the printed application and the PDF application (two 4x6 per page).	Yes
Field 4 - Simple diagram of the current typical cross section of the segment, that shows the right of way limits, widths, sidewalks and shoulders (if any), and the lanes of travel in the printed application and the PDF application.	Yes
(OPTIONAL)- Up to two (2) photos/renderings of the completed project are provided in the printed application and the PDF application.	Yes
(OPTIONAL) - Up to three (3) letters of support for the project are provided in the printed application and the PDF application.	Yes
(OPTIONAL) - GIS coverage (shapefile or geodatabase) is provided on the CD with the application.	No
PART D - Cost Estimate Worksheet	Complete?
Sponsoring Agency, Project Title, and Application Date are complete	Yes
Part A - Scoping is complete	Yes
Part B - Final Preliminary Engineering Design is complete	Yes
Part C - Right-of-Way Acquisition is complete	Yes
Part D - Utility Relocation is complete	Yes
Part E - Construction or Implementation is complete	Yes
Parts F, G, and H - Costs are complete and accurate	Yes
PART E - Total Project Schedule and Budget Including All Segment Fields	Complete?
Fields 1 – 7 are complete and costs are accurate	Yes
Field 8 - 10 are complete	Yes
Fields 11 – 15 Years are complete	Yes
Fields 11 – 15 Local Funding Sources are complete	Yes
Fields 11 – 15 Local Costs are complete and accurate	Yes

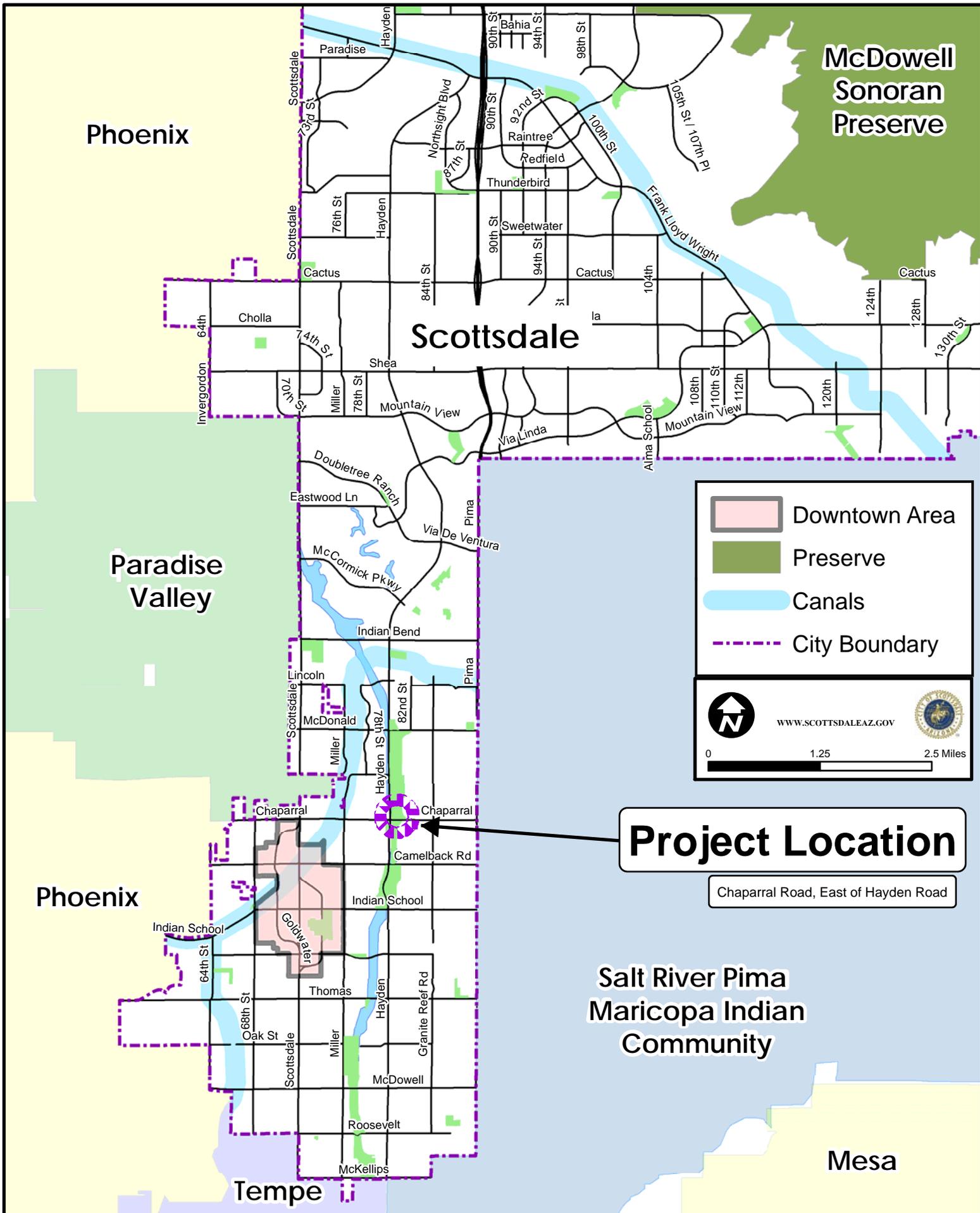
Field 11 - 15 Federal Costs are complete and accurate	Yes
Field 16 Total Costs are complete and accurate	Yes
PART F - Signature and Checklist	Complete?
Entire checklist is completed.	Yes
Form is signed by MAG member agency's manager/administrator or designated representative.	Yes
Name, title and date fields under the signature are completed.	Yes

SIGNATURE(S):

As the MAG member agency's manager/administrator or designated representative, I certify that this application is accurate and complete and that the project will be included in the sponsoring MAG member agency's local CIP/TIP if the project is selected for federal funding.

Signature:	
Name:	Paul Basha
Title:	Transportation Director
Date:	18-Sep-15

City of Scottsdale Attachment 1: Chaparral Road Underpass at Hayden Road



Legend:

- Downtown Area
- Preserve
- Canals
- City Boundary

Scale: 0, 1.25, 2.5 Miles

North Arrow:

Website: WWW.SCOTTSDALEAZ.GOV

City Seal:

City of Scottsdale Attachment 2: Chaparral Road Underpass at Hayden Road



Scottsdale: Chaparral and Hayden Underpass
Part C – Attachment 3: Photos



Photo 1: Looking north towards Chaparral Park from SE corner of Chaparral and Hayden intersection.

- Existing 17-mile path runs along this corridor and through both parks.
- High volume of path users cross here.
- Heavy traffic including frequent right-turning vehicles.

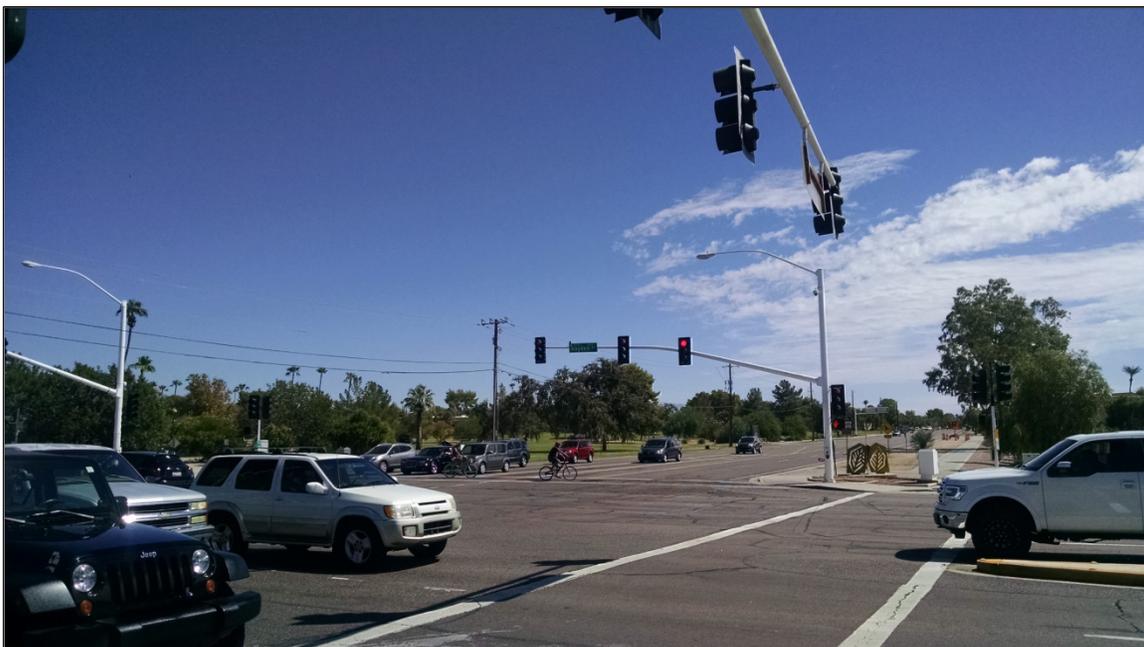


Photo 2: Looking east from SW corner of Chaparral and Hayden.

- Multiple path users crossing from Chaparral Park.
- Heavy vehicular traffic in all directions including right-turning vehicles.

Scottsdale: Chaparral and Hayden Underpass
Part C – Attachment 3: Photos



Photo 3: Looking east from NW corner.

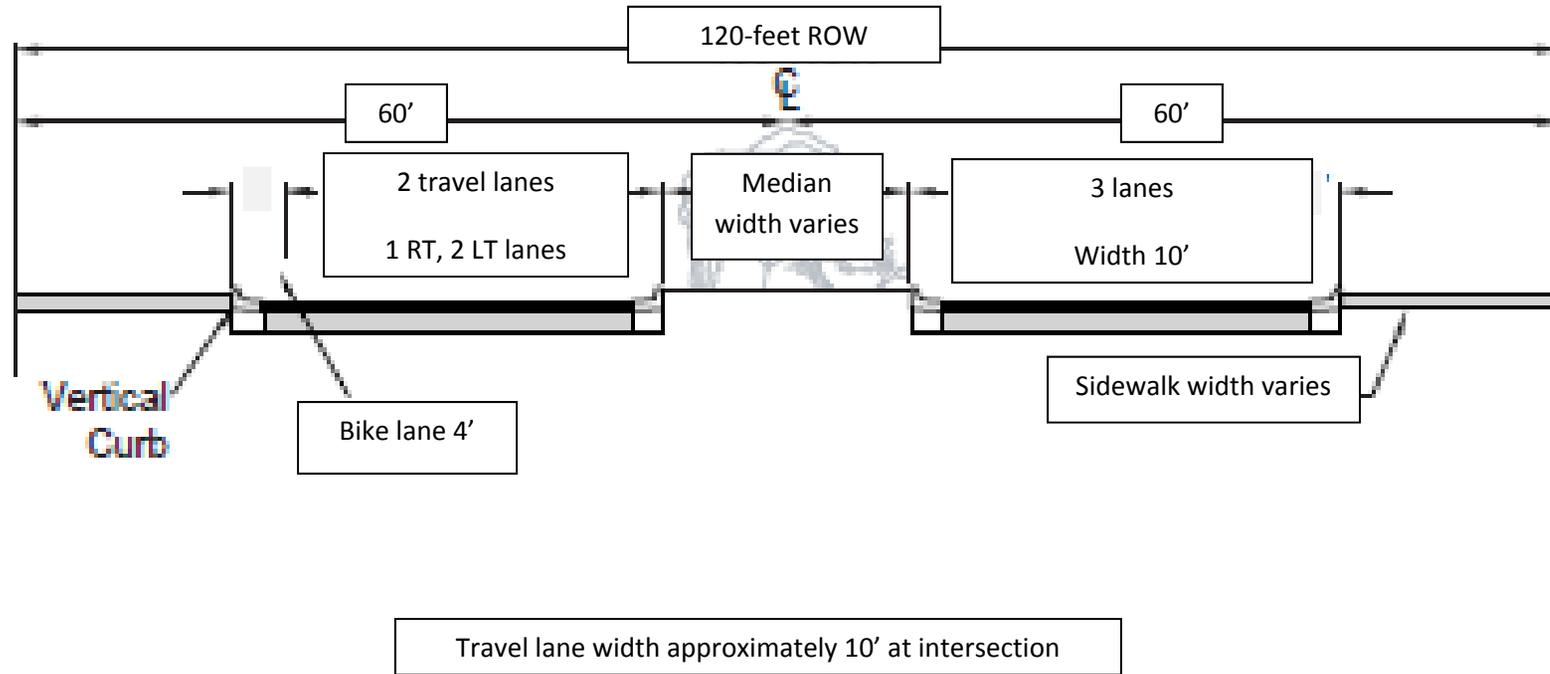
- Pedestrians coming from Chaparral Park (NE corner) waiting to cross to Camelback Park (SE corner).
- Busy traffic including northbound right-turn vehicles waiting.



Photo 4: View of existing east/west Hayden tunnel in Camelback Park (SW of the intersection).

- To the right, the existing path leads to the traffic signal.
- Planned approach to new underpass and new connection from park to crosswalk will replace existing path on the right.
- Planned Wayfinding Signage will provide path/crossing information.

Scottsdale: Chaparral and Hayden Underpass
Part C –Attachment: Cross Section



Scottsdale: Chaparral and Hayden Underpass
Part C – (Optional) Attachment: Photo Rendering of Proposed Improvements



Existing east/west tunnel under Hayden

Proposed path to crosswalk

Proposed north/south tunnel under Chaparral

Existing Path



September 18, 2015

Alex Oreschak and Members of the Bicycle Pedestrian Committee

Maricopa Association of Governments

302 North 1st Avenue, Suite 300

Phoenix, AZ 85003

Gentlemen and Ladies,

This letter is to express support for the proposed City of Scottsdale project to create a pathway underpass at Chaparral Road on the east side of Hayden. This would complete a grade-separated configuration at this busy location that would allow bicyclists and pedestrians to cross the intersection heading in any direction below street level. At the same time, it would connect Indian Bend wash to both parks on the east side of Hayden, increasing ease and safety of access to all of those spaces for surrounding residents and people who ride, run or walk the path network in the area.

This is a project worthy of funding and implementation.

Thank you,

Robert A. Beane, President

Coalition of Arizona Bicyclists