



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

North South Rail Spur Multi-use Path Project

City of Tempe

**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)**

**Tempe: North South Rail Spur MUP****PART A - CONTACT AND PROJECT DESCRIPTION****Contact Information**

1. Name of Sponsoring Agency	Tempe
2. Agency Contact Name	Shelly Seyler- Deputy Public Works Manager-Transportation
3. Phone Number of Agency Contact	480-350-8854
4. E-Mail Address of Agency Contact	shelly_seyler@tempe.gov
5. Mailing Address of Agency Contact	City of Tempe - Public Works - Transportation 200 E 5th Street, 2nd Floor Tempe, AZ 85281

**Project Description**

6. Please provide the Project Title.	North South Rail Spur MUP
7. Please provide a concise, specific description of the project (250 character limit):	
<p>Construct 4.1 miles of ADA compliant bicycle/pedestrian shared use path along the Union Pacific Railroad corridor from University Drive to Baseline Road.</p>	
<p>The proposed 4.1 mile project will connect the existing shared use path north of University Drive to downtown Tempe and ASU and the soon to be built Alameda Drive Project to Phoenix and Tempe Diablo Stadium.</p>	

Tempe : North South Rail Spur MUP

**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 checked="" 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 checked="" type="checkbox"/> Bicycle Lane (5' min. with curb/gutter) | <input type="checkbox"/> Wide Sidewalk (8' min.)                              |
| <input checked="" type="checkbox"/> Buffered Bike Lane                      | <input type="checkbox"/> Detached Sidewalk with 4' min. buffer                |
| <input checked="" 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" value="Railroad and arterial Crossing"/>                   |
| <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 type="checkbox"/> Tunnel (underpass)                           | <input type="text" value="Rail Road Crossing improvements and Arterial Crossings"/> |
| <input checked="" type="checkbox"/> Signalized midblock crossing/HAWK |   |
| <input type="checkbox"/> Countdown Pedestrian Signal                  |   |

4. What amenities are included in this project?

- |  |   |
|--|---|
| <input type="text" value="25"/> Number of Bike racks/lockers         | <input type="text" value="4"/> Number of Seating/Rest Area(s)                       |
| <input type="text" value=""/> Number of Drinking Fountains           | <input type="text" value="10"/> Number of bicycle/pedestrian counting devices       |
| <input type="text" value="10"/> Number of Way-finding Signs          | <input type="text" value=""/> Number of bicycle/pedestrian counting devices         |
| <input type="text" value=""/> Number of Trash receptacles            | Other:  |
| <input type="text" value="120"/> Number of Trees                     | <input type="text" value="Anti graffiti coating on all exposed at-risk surfaces."/> |
| <input type="text" value=""/> Number of new openings in street walls |   |
| <input type="text" value="4"/> Number of Shade Structures            |   |

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

The North South Railroad Spur Multi-use Path is proposed to be phased with the first four miles of the seven mile path studied by the design assistance grant funded by MAG. The proposed North South Spur Line MUP is located adjacent to the railroad spur line right-of-way and is separated from the roadway to provide nonmotorized transportation users with a direct and safe alternative to using the streets. The project will provide a north/south link for employees and residents located in south Tempe to Tempe Town Lake, ASU, Downtown Tempe, Rio Salado, ASU Stadium District, Tempe Marketplace and vice-versa.

Tempe : North South Rail Spur MUP

**PART B-DETAILED PROJECT DESCRIPTION**

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

Construct ADA/AASHTO/MUTCD compliant and safe bicycle/pedestrian shared-use path adjacent to the UPRR railroad south Tempe Spur Line. This project will improve pedestrian and bicycle mobility in Tempe by enhancing connectivity of the city's existing off-street network and setting the foundation for a pathway system that spans the length of the city. The proposed path would connect important multi-use paths within Tempe including those at Tempe Town Lake and along the Western Canal. The city of Tempe also plans to work with the city of Chandler to extend the path south through Chandler, resulting in the creation of a regional path system that would include connections between Scottsdale (accessible by the path system at Tempe Town Lake), Tempe, Mesa (accessible by the canal system and Rio Salado Pathway) and Chandler. The project would also help improve bicycle and pedestrian crossing safety as it would establish additional signalized crossing points across busy arterials throughout Tempe.

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

The project will improve pedestrian and bicycle mobility in Tempe by enhancing connectivity of the city's existing off-street network and setting the foundation for a pathway system that spans the length of the city. The proposed path would connect important multi-use paths within Tempe including those at Tempe Town Lake and along the Western Canal. The city of Tempe also plans to work with the city of Chandler to extend the path south through Chandler resulting in the creation of a regional path system that would include connections between Scottsdale (accessible by the path system at Tempe Town Lake), Tempe, Mesa (accessible by the canal system and Rio Salado Pathway) and Chandler. The project would also help improve bicycle and pedestrian crossing safety as it would establish additional signalized crossing points across busy arterials throughout Tempe.

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

<input checked="" type="checkbox"/>	Medians with pedestrian crossing islands	Other Bicycle and Pedestrian railroad crossing signals
<input checked="" type="checkbox"/>	Roadway Reconfiguration (Road Diet)	
<input checked="" type="checkbox"/>	Striping/re-striping to narrow vehicle lanes	
<input type="checkbox"/>	Color pavement or similar treatment	
<input checked="" type="checkbox"/>	Lighting	
<input checked="" type="checkbox"/>	Landscape buffer between sidewalk and roadway	
<input type="checkbox"/>	Rectangular Rapid Flash Beacon (RRFB)	
<input type="checkbox"/>	Driver Feedback Sign	

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

- Yes
- No

Please Explain:

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

The project will improve railroad crossing signals at Alameda Drive; signalize arterial crossings as appropriate; median refuges if appropriate; and buffered bike lanes. The proposed path will also include lighting and warning signs and fencing as appropriate because of proximity to the railroad track.

Tempe : North South Rail Spur MUP

**PART B-DETAILED PROJECT DESCRIPTION**

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

The shared-use path will be constructed to meet or exceed current ADA requirements. Persons with disabilities will be able to travel concrete path away from automobile traffic. The project will provide a safer alternative route and will link more than 50 miles of off-street local and regional ADA accessible path systems when fully implemented. The project will provide a continuous ADA accessible off-street link for persons with disabilities that connects Downtown Tempe, Town Lake, ASU, and ASU stadium District.

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

The proposed North/South Spur Line MUP is located adjacent to the railroad spur line right-of-way and is separated from the roadway to provide nonmotorized transportation users with a direct and safe alternative to using the streets. The project will provide a north/south link for residents and employees located in south Tempe to Tempe Town Lake, ASU, Downtown Tempe, Rio Salado, Stadium District, Tempe Marketplace and vice-versa.

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

The project will provide shaded areas along the path and will also function as a linear park. The improved intersections will also include improved waiting areas and rest areas at certain locations along the path. Another component that will

14. Connectivity: (Check all that apply)

Project fills a gap in the system

Explain:

The North/South Spur Line MUP will provide a much needed connection between south Tempe to Downtown Tempe and ASU.

Project connects to other local bikeways

List of connected bikeways:

Western Canal, Kyrene Canal and the private development donated path between 7th and 5th streets.

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 77: 15 Peak and 30 Minute off peak; Route 61: 15 Peak and 30 Minute off peak; Route 45: 15 Peak and 30 Minute off peak; Route 65: 30 minute all day and Route 66: 30 minute all day; Orbit Venus and Mercury, both 15 minutes all day.

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**PART B-DETAILED PROJECT DESCRIPTION**

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:

Rio SaladoRiver Riparian Area; Town Lake; and ASU Karsten Golf Course.

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:

Downtown Tempe (10 mini malls) ; ASU; 15 mini malls along University Drive; 15 mini malls along south Mil Avenue; 5 mini malls along Baseline Road; 7 mini malls along Broadway Road.

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

Within 1/2 mile

List:

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

Within 1/2 mile

List:

Arizona State University

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:

ASU; 2 Banks; 1 Hospital; 2 Office Parks; 1 grocery stores

1/4 miles to 1/2 miles

List:

ASU; 3 Banks; 3 Office Parks; 2 grocery stores

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**PART B-DETAILED PROJECT DESCRIPTION**

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.

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:

Federal Functional Classification of the Facility:

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

Type of Facility the Improvement will be located on:

Length (in Miles)

Posted Speed Limit (MPH)

Number of Travel Lanes Before Project

Number of Travel Lanes After Project

Tempe : North South Rail Spur MUP

**PART B-DETAILED PROJECT DESCRIPTION**

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

Mill Avenue Total Counts for 4 mile segment is ADT 110,978. Average per mile ADT is 27,744.

Description of Methodology and Source used for the ADT Estimate

City of Tempe Traffic Counts. Actual ADT count.

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.

None

27. Current ROW: (Check all that apply)

- Agency owns all ROW Needed
- ROW to be acquired
- Owners will donate ROW

- Agency owns easement
- Agency has right-of-use (i.e. canal)
- Condemnation may be required

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

Non-city entities that own parcels of land along the 7-mile corridor include UPRR, Broadway Towers (a residential development), the Arizona Board of Regents, private residences, and AAA Alliance Self Storage of Tempe and UPRR.

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

Yes

No

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**PART B-DETAILED PROJECT DESCRIPTION**

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 type="checkbox"/>	Canals & Drainage		
<input checked="" type="checkbox"/>	Power Lines & Cables		Other:
<input type="checkbox"/>	Pipelines, Sewer and Water		<input type="text"/>

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

None

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

<input checked="" type="checkbox"/>	AASHTO Guide for Bicycle Facilities	<input type="text" value="Other: City of Tempe Design Guidelines"/>
<input checked="" type="checkbox"/>	MAG Pedestrian Policies and Design 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="Recommended"/>
With new development and capital improvement projects, bike lanes on collector streets are:	<input type="text" value="Recommended"/>
With pavement restoration or regular pavement maintenance on arterial streets, bike lanes are:	<input type="text" value="Recommended"/>
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"/>

34. The project is: (Check one)

<input checked="" type="checkbox"/>	Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source)
	List: <input type="text" value="Tempe General Plan 2040; Tempe Transportation Master Plan 2040; Tempe Capital Improvement Program 2015-2020."/>
<input type="checkbox"/>	Consistent with general policy/practices, but not formally identified (provide source)
	Explain: <input type="text"/>
<input type="checkbox"/>	Not addressed by jurisdiction's plans, policies, or practices
	Explain: <input type="text"/>

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**PART B-DETAILED PROJECT DESCRIPTION**

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

The city will count the number of bicyclists and pedestrians using the shared-use path. The city will also review bicycle and pedestrian accident data at the nearest aerial crossings. The reduction of bike and ped related incidents would be included in the measure of success.

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?

As part of this project, the city is including the purchase of counters that automatically broadcast counts and updates and will be deployed at strategic locations along MUP.

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.

The City of Tempe has a very progressive bike and ped marketing program. Tempe promotes bike and ped improvements, including transit connections, via the internet, radio, and television advertisements. Tempe also partners with Arizona State University in advertising transit, bicycle, and pedestrian facility improvements in the city.

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

In addition to the regional wayfinding signs, the city will also install BIKEiT wayfinding signs indicating connections to other paths and major destinations and locations that can be accessed through the shared-use path and connecting paths.

Tempe: North South Rail Spur MUP

**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.

<b>Sponsoring Agency:</b>	City of Tempe	<b>Project Title:</b>	Rio Salado Shared-use Path Underpass at McClintock	<b>Application Date:</b>	September 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)
A. Scoping (15% Preliminary Engineering Design)	1. SITE TOPOGRAPHIC SURVEY	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	2. PROJECT ASSESSMENT REPORT or DETAILED WORKPLAN	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	3. ENVIRONMENTAL DETERMINATION (Infrastructure projects, including technical supporting documents)	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	4. HAZMAT ASSESSMENT	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	<b>Subtotal Scoping (Part A)</b>				<b>\$0.00</b>		<b>\$0.00</b>	<b>\$0.00</b>	
B. Final Preliminary Engineering Design - Stages II, III, IV And PS&E	1. Plans, Special Provisions or Bid Manual, Cost Estimate & Schedules.	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	2. GEOTECHNICAL INVESTIGATION and Materials & Pavement Design Report	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	3. DRAINAGE REPORT	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	4. SWPPP	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	<b>Subtotal PE (Part B)</b>				<b>\$490,000.00</b>		<b>\$0.00</b>	<b>\$490,000.00</b>	
	<b>Subtotal Preliminary Engineering (Part A + Part B)</b>				<b>\$490,000.00</b>		<b>\$0.00</b>	<b>\$490,000.00</b>	
C. Right-of-Way Acquisition	1. Right-of-Way Acquisition	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	<b>Subtotal Right-of-Way Acquisition (Part C)</b>				<b>\$0.00</b>		<b>\$0.00</b>	<b>\$0.00</b>	
D. Utility Relocation	1. Utility Relocation	LS	1	\$0.00	\$0.00	No	\$0.00	\$0.00	
	<b>Subtotal Utility Relocation (Part D)</b>				<b>\$0.00</b>		<b>\$0.00</b>	<b>\$0.00</b>	
E. Construction Or Implementation [For Non-Infrastructure Projects (No Ground Disturbing Activities), Address Only Part 4]	1. Hardscape Construction	Installation Of SWPP Measures		LS	125	\$0.00	Yes	\$0.00	\$0.00
		Site Preparation		LS	1	\$0.00	Yes	\$0.00	\$0.00
		Demolition	Sawcut	LF	1	\$0.00	Yes	\$0.00	\$0.00
			Remove Structures and Obstructions	LS	1	\$0.00	Yes	\$0.00	\$0.00
			Remove Fencing	LF	1	\$0.00	Yes	\$0.00	\$0.00
			Remove Structural Concrete	CY	1	\$0.00	Yes	\$0.00	\$0.00
			Remove Asphaltic Concrete Pavement	CY	1	\$0.00	Yes	\$0.00	\$0.00
			Remove Concrete Sidewalks, Slabs	CY	1	\$0.00	Yes	\$0.00	\$0.00
		Hazmat Abatement		LS	1	\$0.00	Yes	\$0.00	\$0.00
		Retaining Wall - Reinforced Concrete Cantilevered		SF	1	\$0.00	Yes	\$0.00	\$0.00
		Earthwork	General Excavation	CY	1	\$0.00	Yes	\$0.00	\$0.00
			Drainage Excavation	CY	1	\$0.00	Yes	\$0.00	\$0.00
			Structural Excavation	CY	1	\$0.00	Yes	\$0.00	\$0.00
			Structural Backfill	CY	1	\$0.00	Yes	\$0.00	\$0.00
		Borrow (In Place)		CY	1	\$0.00	Yes	\$0.00	\$0.00
		Curb & Gutter		LF	1	\$0.00	Yes	\$0.00	\$0.00
		Aggregate Base		CY	1	\$0.00	Yes	\$0.00	\$0.00
		Pathway Or Sidewalk Materials	Concrete	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Colored Concrete	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Stamped Color Concrete	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Precast Concrete Pavers	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Asphaltic Concrete	Ton	1	\$0.00	Yes	\$0.00	\$0.00
			Polymer or Resin Stabilized Surface	SF	1	\$0.00	Yes	\$0.00	\$0.00
		Concrete Pavers	Concrete Pavers	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Stamped Asphalt	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Stamped Concrete	SF	1	\$0.00	Yes	\$0.00	\$0.00
			Concrete	SF	1	\$0.00	Yes	\$0.00	\$0.00
		Crosswalk Enhancement		SF	1	\$0.00	Yes	\$0.00	\$0.00
		Integral Color Concrete		SF	1	\$0.00	Yes	\$0.00	\$0.00
		Pedestrian ADA Ramp		SF	1	\$0.00	Yes	\$0.00	\$0.00
Culvert Extensions		LF	1	\$0.00	Yes	\$0.00	\$0.00		
Pedestrian Lighting Including Conduit And Trenching		Each	8	\$0.00	Yes	\$0.00	\$0.00		
Handrail	Standard	LF	1	\$0.00	Yes	\$0.00	\$0.00		
	Decorative	LF	1	\$0.00	Yes	\$0.00	\$0.00		
	<b>Subtotal Hardscape Construction</b>				<b>\$2,100,000.00</b>		<b>\$1,980,300.00</b>	<b>\$119,700.00</b>	

Tempe: North South Rail Spur MUP

**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.

<b>Sponsoring Agency:</b>	City of Tempe	<b>Project Title:</b>	Rio Salado Shared-use Path Underpass at McClintock	<b>Application Date:</b>	September 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	5		\$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		
	Cactus (5 Gallon Size)	Each	1		\$0.00	Yes	\$0.00	\$0.00		
	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					\$0		\$0	\$0	
	3. Site Furnishings	Benches	Each	1		\$0	Yes	\$0	\$0	
		Seatwalls	LF	1		\$0	Yes	\$0	\$0	
		Bike Racks	Each	5		\$0	Yes	\$0	\$0	
		Trash Receptacles	Each	1		\$0	Yes	\$0	\$0	
		Drinking Fountains	Each	1		\$0	Yes	\$0	\$0	
		Signage (Standard Traffic Control)	Each	4		\$0	Yes	\$0	\$0	
Signage (Wayfinding)		Each	10		\$0	Yes	\$0	\$0		
Tree Grates		Each	1		\$0	Yes	\$0	\$0		
Subtotal Site Furnishings					\$25,000		\$23,575	\$1,425		
4. Other Construction Items. Also, Itemized Line Items For Non-Infrastructure Projects. (Insert Additional Rows If Necessary)		Bicycle and Pedestrian Counter	Each	8	\$7,500	\$60,000	Yes	\$56,580	\$3,420	
			1		\$0	Yes	\$0	\$0		
			1		\$0	Yes	\$0	\$0		
			1		\$0	Yes	\$0	\$0		
			1		\$0	Yes	\$0	\$0		
			1		\$0	Yes	\$0	\$0		
			1		\$0	Yes	\$0	\$0		
			1		\$0	Yes	\$0	\$0		
	Subtotal Other Construction					\$60,000		\$56,580	\$3,420	
	5. Mobilization And Administration Costs	Contractor Mobilization	LS	1	\$80,000	\$80,000	No	\$0	\$80,000	
Traffic Control		LS	1	\$60,000	\$60,000	Yes	\$56,580	\$3,420		
Construction Survey & Layout		LS	1	\$40,000	\$40,000	Yes	\$37,720	\$2,280		
Construction Contingencies		LS	1	\$120,000	\$120,000	Yes	\$113,160	\$6,840		
Construction Administration		LS	1	\$50,000	\$50,000	Yes	\$47,150	\$2,850		
Subtotal Mobilization & Administration Costs					\$350,000		\$254,610	\$95,390		
<b>Subtotal Construction Or Implementation Cost (Part E)</b>							<b>\$2,535,000</b>	<b>\$2,315,065</b>	<b>\$219,935</b>	
<b>F. Total Scoping, PE, Right-of-Way Acquisition, Utility Relocation, and Construction (Part A, B, C, D, and E)</b>							<b>\$3,025,000</b>	<b>\$2,315,065</b>	<b>\$709,935</b>	
<b>G. Adot Fee Review Fee - \$10,000 for Certified Accepted agencies, otherwise \$30,0000</b>							<b>\$10,000</b>	\$0	\$10,000	
<b>H. Total Project Cost Including ADOT Fees (Part F + Part G)</b>							<b>\$3,035,000</b>	<b>\$2,315,065</b>	<b>\$719,935</b>	

Tempe: North South Rail Spur MUP

**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	\$490,000	
3. Right of way	\$0	
4. Utilities	\$0	
5. Construction	\$2,415,000	
6. Contingency	\$120,000	No more than 20% of Construction Cost
7. Total Cost	\$3,035,000	

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)	2017	Environmental Clearance Preliminary/Final Design/PS&E	Sales Tax	\$490,000	Not Available	\$490,000	100.0%
12. Right of way (Optional)				\$0	Not Available	\$0	
13. Utilities (Optional)				\$0	Not Available	\$0	
14. Other (Optional)	2017	ADOT FEES		\$10,000	Not Available	\$10,000	100.0%
15. Construction	2020	Construction		\$219,935	\$2,315,065	\$2,535,000	8.7%
16. Total Costs				\$719,935	\$2,315,065	\$3,035,000	23.7%

**PART F - SIGNATURE AND CHECKLIST****Checklist**

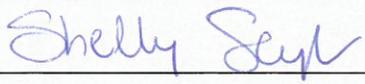
This checklist is included to facilitate applicant review and verification that all required fields in the form have been completed.

<b>COVER SHEET</b>	<b>Complete?</b>
Cover Sheet is completely filled out	Yes
<b>PART A - Contacts and Project Description Fields</b>	<b>Complete?</b>
Contact Information, fields 1 – 5 are complete	Yes
Project Description, fields 6 - 8 are complete	Yes
<b>PART B - Project Description</b>	<b>Complete?</b>
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
<b>PART C - Required Attachments</b>	<b>Complete?</b>
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.	No
(OPTIONAL) - Up to three (3) letters of support for the project are provided in the printed application and the PDF application.	No
(OPTIONAL) - GIS coverage (shapefile or geodatabase) is provided on the CD with the application.	Yes
<b>PART D - Cost Estimate Worksheet</b>	<b>Complete?</b>
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
<b>PART E - Total Project Schedule and Budget Including All Segment Fields</b>	<b>Complete?</b>
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
<b>PART F - Signature and Checklist</b>	<b>Complete?</b>
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

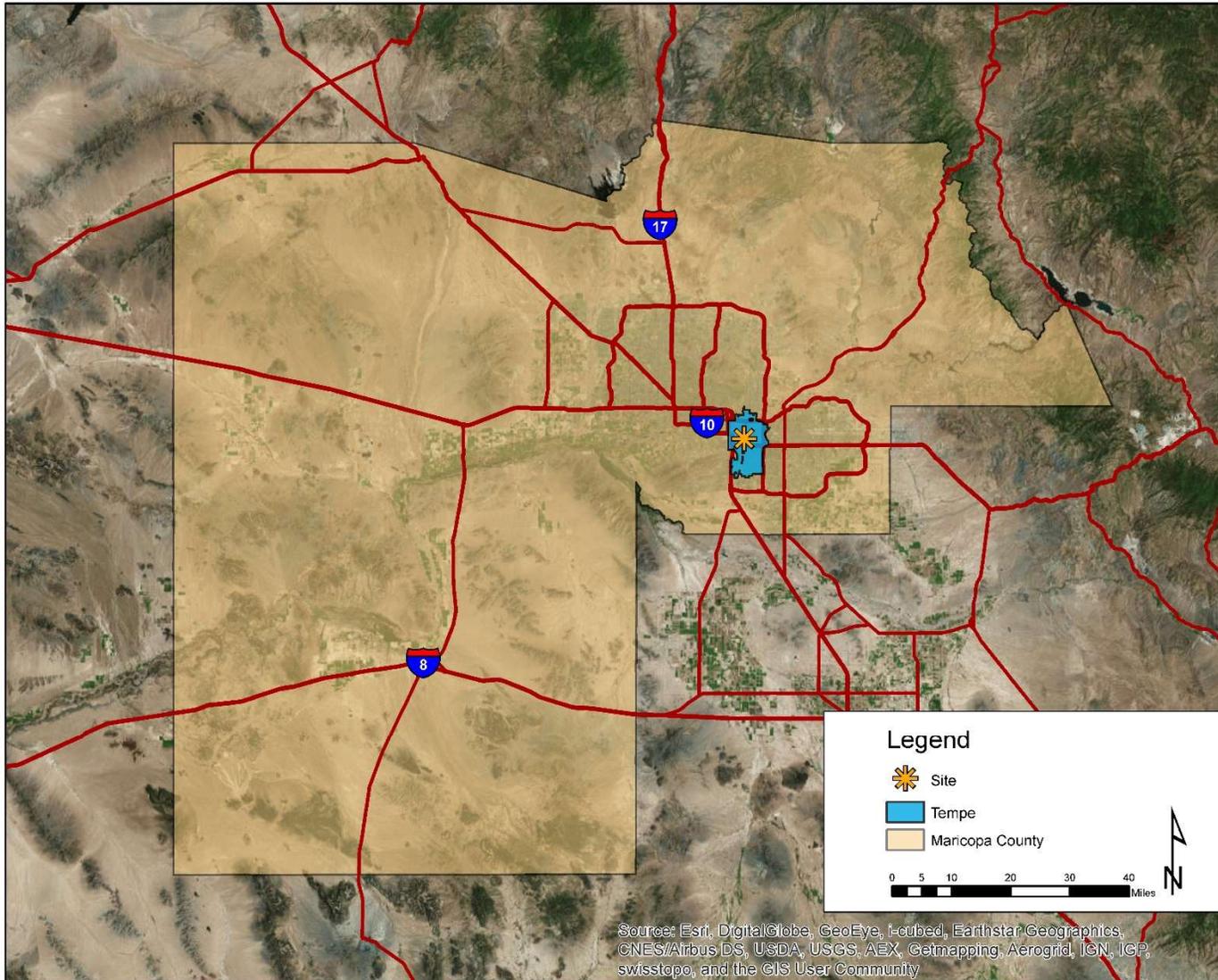
## SIGNATURE(S):

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:	Shelly Seyler
Title:	Deputy Public Works Manager - Transportation
Date:	9/18/15

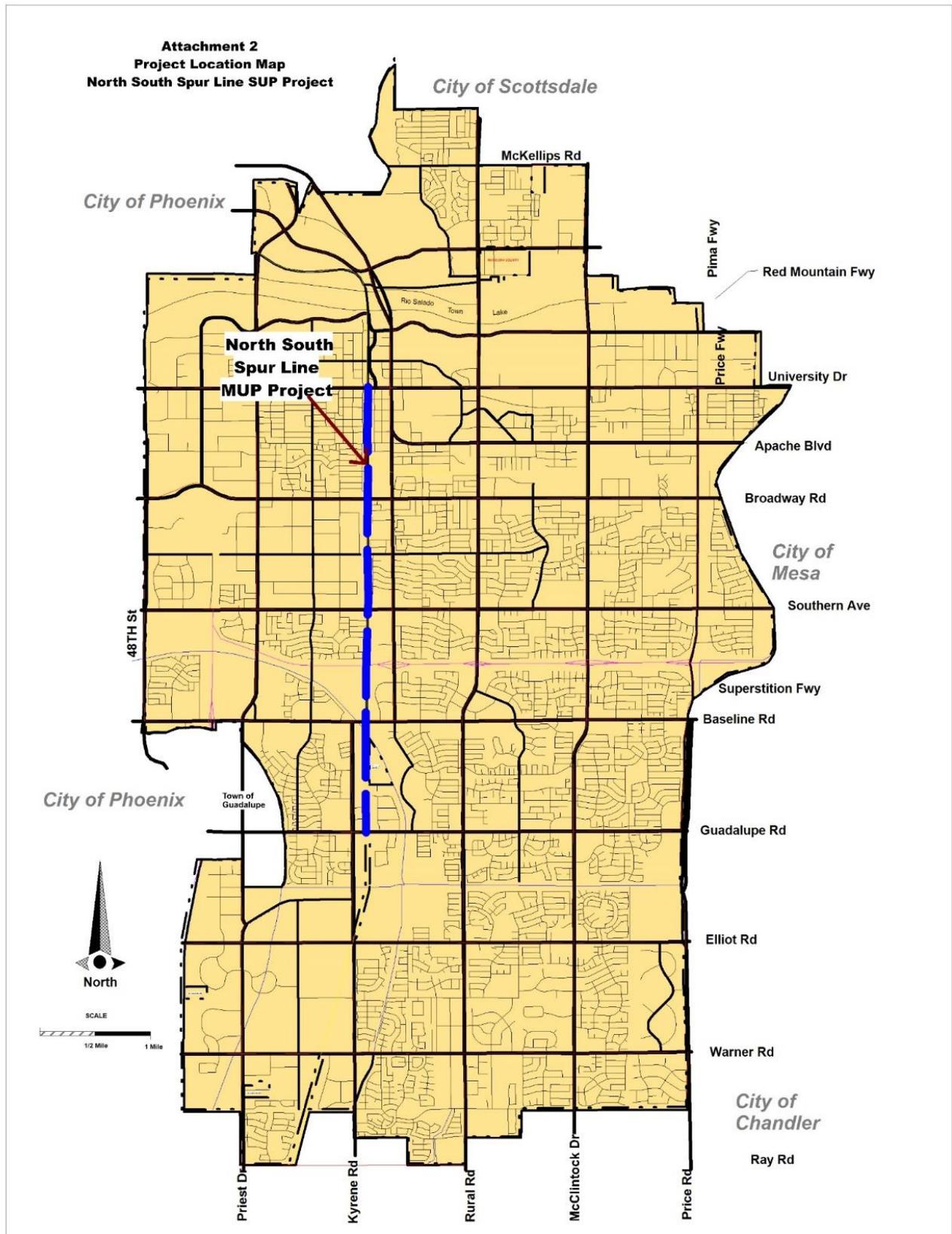
# Attachment 1 – Regional Location Map: North South Spur Line MUP

## North South Rail Spur Multi-use Path



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

# Attachment 2 – Location Map: North South Spur Line MUP



## Attachment 3 – North South Spur Line MUP Existing Conditions

Picture 1 - Southern Avenue at UPRR Crossing Looking South



Picture 2 – Southern Avenue at UPRR Looking North



## Attachment 3 – North South Spur Line MUP Existing Conditions

Picture 3 – Alameda Drive at UPRR Crossing Looking West



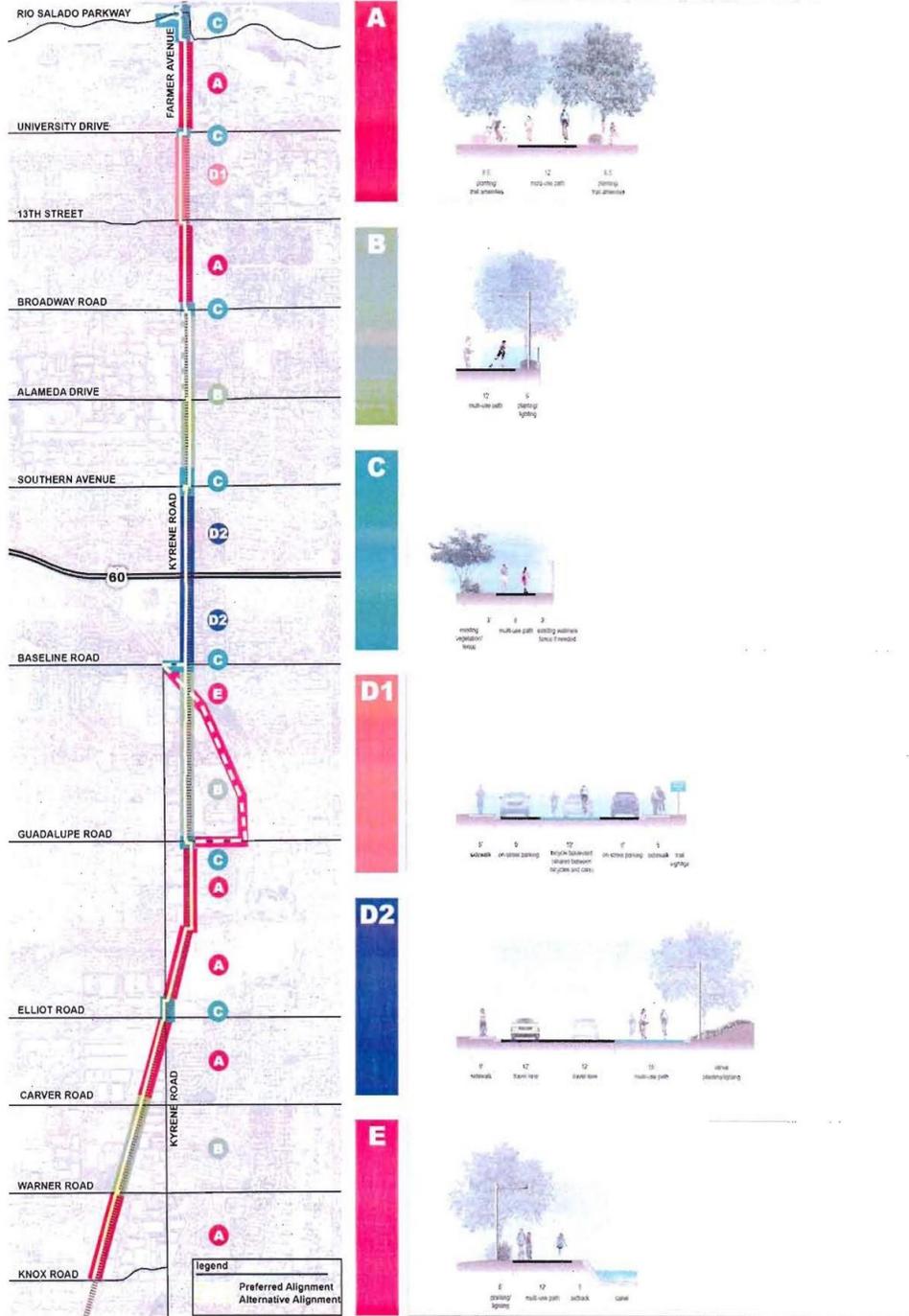
Picture 4 – Broadway Road at UPRR Crossing Looking South



# Attachment 4 – North South Spur Line MUP Cross Sections

## Cross Section A – Typical Link Cross Sections

### Tempe **NORTH SOUTH RAIL SPUR MULTI-USE PATH** TEMPE, ARIZONA



**PATH ALIGNMENT**

# Attachment 4 – North South Spur Line MUP Cross Sections

## Cross Section A – Typical Intersection Cross Sections

