State Route 347 at Union Pacific Railroad Design Concept Report and Environmental Study

Preferred Alternative Public Hearing

Dec. 3, 2014 Maricopa Unified School District Administrative Offices ADOT study No. 347 PN 172 H7007 01L | Federal study No. 347-A(204)T









Welcome and Agenda

- Introduction of study team
- Meeting purpose
- Study area
- Study purpose and need
- Initial screening method and criteria
- Alternatives
- Recommended alternative
- Environmental summary
- Comment period





Title VI Overview

- Title VI is a federal law that prohibits discrimination on the basis of race, color, or national origin in Federally assisted programs & activities.
- The law specifically states: "No person in the United States shall on the ground of race, color, or national origin be excluded from participation in, denied the benefits of, or subjected to discrimination under any program or activity receiving Federal financial assistance." (42 USC 200d)
- ADOT's Title VI Policy: Assures that no person shall on the grounds of race, color, national origin, gender, age, or disability be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination under any ADOT sponsored program or activity.



Study Team

- Asad Karim, ADOT Study Manager
- Daniel Gabiou, ADOT Environmental Planner
- Pete Mayne, ADOT Right of Way
- Bill Fay, City of Maricopa
- Elijah Williams, Consultant Study Manager
- Nancy Shelton, Consultant Environmental Planner



Meeting Purpose

- Study development
- Provide an overview of the alternative selection process
- Environmental assessment to date
- Meet with study team
- Have your questions answered during open house
- Obtain your comments during public hearing



Study Area

- UPRR and SR 347 intersection
- The study area is within the City of Maricopa
- The Heritage District surrounds the intersection
- The Ak-Chin Indian Community is one-half mile south of the study area





Purpose

The purpose of the study is to evaluate potential grade separated crossings of the Union Pacific Railroad tracks and recommend a solution that would improve access, mobility and address congestion on SR 347.



Need

- The city of Maricopa is one of the fastest growing communities in the nation
 - Population has grown from 4,000 residents to 45,000 residents in the last decade
- SR 347 is the main transportation corridor through the community, serving as a regional connector to major employment and recreation areas
 - Daily traffic averages approximately 31,000 vehicles per day
 - Future traffic projections (2040) show as many as 67,000 vehicles per day



Need

- SR 347 crosses the existing Union Pacific Railroad, which is currently double tracked
 - Currently about 40 trains per day
 - Plans for more than 100 trains per day in the future
- Amtrak's Maricopa Station is located adjacent to the SR 347/UPRR intersection
 - Passenger operations routinely stop traffic for 10 to 30 minutes resulting in substantial traffic delays



Alternatives

10 build alternatives have been evaluated

- Three alternatives remained from the 2007 Feasibility Study
- Seven additional concepts were evaluated
- No-build alternative









Screening Alternatives

- Criteria were developed in response to the issues, concerns and opportunities identified during the agency and public scoping meetings
- Alternatives were evaluated and assigned a numerical score between one and five (five being best)

The ranking levels were as follows:





Screening Results

Evaluation Criteria		Alignment Alternatives								
	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F2	Alt F3	Alt F5	Alt G	Alt H
Maintenance of Traffic/Constructability	• 4	• 1	3	3	• 2	0 2	0 2	0 2	• 1	0 3
Minimum Design Speed (Other Arterials)	• 5	• 5	3	3	0 š	• 5	3	• 4	• 5	8.3
Drainage/Floodplain Impacts	3	3	3	3	3	0 3	3	0 2	3	0 3
Cultural Resources	• 5	• 5	• 5	• 5	0 3	.5	• 5	• 5	• 2	• 5
Physical and Natural Resources	3	3	3	3	3		3	3	3	0 3
Lane Miles/Future Maintenance	3	3	3	3	- 4		• 4	3	2	0.3
Section 4(f) Resources	• 5	• 4	• 5	• 5	•	. 5	• 5	• 5	• 5	• 5
Right-of-Way	3	3	3	3	- 4	⊜ 4	• 4	3	• 1	.4
Utility Conflicts	@ 2	01	3	0.3	3	0 3	0.3	0 3	0 3	0.3
Residential/Commercial Impacts	• 1	01	0 2	0 2	2	.4	01	0 3	01	
Traffic Operations	0 3	0 3	0 2	01	0 2	0 2	0 3	0 4	• 1	0 4
Multi-Modal Transportation	0.3	03	04	@ 4	3	0 3	0 3	0 2	0 2	
Preliminary Cost Estimate	0 3	0 2	6 3	0 3	3	. 4	0 3	0 3	• 1	. 3
Total Score	43	37	42	41	-44	47	42	42	30	47
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Screening Results

• Three build alternatives, plus the no-build alternative were recommended for further refinement/evaluation









Alternative Development

The three alternatives were developed in greater detail.

- Roadway profiles refined
- Right-of-way impacts
- Environmental Assessment (Cultural, Biological, 4(f), Air Quality, Noise/Visual, Drainage, etc.)
- Construction cost estimates
- Traffic operations (Intersection Level of Service Analysis)
- Access to properties





Evaluation Matrix

Evaluation Criteria	No Build	E	F2	H
Section 4(f) Lands	\checkmark	\checkmark	\checkmark	\checkmark
Cultural Resource Impacts	\checkmark	\checkmark	\checkmark	\checkmark
Biological Resource Impacts	\checkmark	\checkmark	\checkmark	\checkmark
Air Quality	\checkmark	\checkmark	\checkmark	\checkmark
404 Wash Impacts	\checkmark	\checkmark	\checkmark	\checkmark
Total Right-of-way	\checkmark	\checkmark	\checkmark	\checkmark
Residential/Commercial Structures Impacted	\checkmark	 Image: A second s	\checkmark	\checkmark
Noise Impacts	\checkmark	\checkmark	\checkmark	\checkmark
Visual Impacts	\checkmark	\checkmark	\checkmark	\checkmark
Construction Cost	\checkmark	\checkmark	\checkmark	\checkmark
Traffic Operations – 2040 Level of Service	 ✓ ✓ 	~	 Image: A set of the set of the	 Image: A second s
Drainage/Floodplain Impacts	\checkmark	\checkmark	\checkmark	\checkmark
Access	\checkmark	\checkmark	\checkmark	\checkmark
Maintenance of Traffic/Constructability	\checkmark	\checkmark	\checkmark	\checkmark
Lane miles/Future maintenance	\checkmark	\checkmark	\checkmark	\checkmark
Most Favorable Alignment	No	No	No	YES

Rating	Symbol
Disadvantage	 Image: A set of the set of the
Neutral	\checkmark
Advantage	\checkmark



Intersection Level of Service

- Level of Service (LOS):
 - The ability of a transportation system to handle traffic demand.
 - Intersection LOS is determined by how long drivers have to wait at an intersection.
 - The minimum acceptable LOS rating is D.





No Build (Not Recommended)





Alternative E (Not Recommended)





Alternative F2 (Not Recommended)





Alternative H (Recommended)





What is an Environmental Assessment (EA)?

A document that is prepared to comply with the National Environmental Policy Act, or NEPA, which includes:

- discussion of the need for and purpose of the study
- the alternatives evaluated
- the environmental impacts of the study alternatives
- coordination with agencies and the public



Draft Environmental Assessment

- Prepared in accordance with the National Environmental Policy Act (NEPA)
- City of Maricopa is the local government proponent
- ADOT and Federal Highway Administration are joint lead agencies



NEPA Process

- Evaluates the level of potential environmental impacts of a proposed action
- Provides an opportunity for the public and agencies to provide input and/or comment
- Assists in the final decision-making process



NEPA Process

- Evaluation and analysis
- Draft Environmental Assessment
- Public review and public hearing (We are here)
- Final Environmental Assessment spring 2015
- Decision document spring 2015



Potential Environmental Impacts

- Human
- Cultural
- Physical
- Natural





Human Environment

- Land use
 - Consistent with city and county land-use and transportation plans
- Neighborhood continuity
 - Would not bisect neighborhoods or interrupt community cohesion
- Emergency services
- Improved response times





Social Impacts and Changes in Access

- Requires right-of-way acquisition, changes in access and time required for motorists/consumers to become comfortable with the new roadway configuration, which would affect local businesses and residents in the study area
- Long-term benefits include improved traffic flow for motorists and emergency services



Cultural Environment

- 17 cultural resources occur within or adjacent to the build alternative
- All sites will be avoided
- No adverse effects would occur







Physical Environment

- Air quality
 - Minor impacts during construction, but reduced emissions due to improved traffic flow (fewer emissions due to idling)
- Noise
 - Minor increase east of SR 347, but no mitigation required
- Water resources
 - Drainage will be addressed by construction





Natural Environment

- No threatened or endangered species
- Survey for burrowing owls will be conducted prior to construction and mitigation will be implemented if they are present





Visual Character

- Study introduces new transportation feature to the study area (bridge)
- New train station in an undeveloped parcel
- Public art and aesthetic treatments could be incorporated







Recommended Alternative - Simulation





Recommended Alternative - Simulation







Phasing Opportunities

 The Recommended Improvements may be broken in to three phases to facilitate construction





Next Steps







Your input is Important

Comments must be received or postmarked by Dec. 18 to be included in the study record

- Provide comments tonight
- Mail in written comments
 - c/o SR347, 1655 W Jackson, #126F, Phoenix, AZ 85007
- Fill out the online form azdot.gov/SR347
- Email comments SR347@azdot.gov
- Phone 855.712.8530



Thank you for attending



Providing Public Testimony

- Speakers will be called in the order speaker cards are received with elected officials going first.
- There is a three-minute time limit. The yellow card will signify 30 seconds remaining and the red card means time is up.
- Public testimony is not intended as a Q&A. Questions should be directed to study team members in the Open House room.
- Those wishing to speak a second time may do so after all others have been called to testify.

