



# South Mountain Transportation Corridor Study

Citizens Advisory Team  
Technical Report Summary

## Draft Construction Cost Estimate

### ***What is included in the Draft Construction Cost Estimate?***

The Draft Construction Cost Estimate is a continuation of the Draft Design Data Report in that the elements included in the estimate are referenced directly out of the criteria used when developing the right-of-way footprints.

The major components of the cost estimate include earthwork, pavement, structures, and drainage. The remainder of the estimate items is derived through price per mile or a percentage of the major items, both of which are based on historical trends. A final contingency factor for Level 1 (Design Concept Report [DCR]) estimates is also included. This approach for developing construction estimates has been developed by the Arizona Department of Transportation (ADOT) and the Maricopa Association of Governments (MAG) over the last 20 years during implementation of the Regional Freeway System. As projects move into design and ultimately reach construction bidding, cost estimates are refined based upon the developed design details.

At this time, the cost estimate assumes the following:

- Roadway elevation is at-grade or elevated everywhere except 1 mile of demi-depressed freeway at Dobbins Road,
- Initial construction of 3 lanes in each direction,
- Excavation for the drainage channel and basins is included,
- There is no traffic interchange at 32<sup>nd</sup> Street, and
- There is a traffic interchange at 25<sup>th</sup> Avenue.

### ***Why address these issues in the Environmental Impact Statement (EIS)?***

While cost is not a primary criteria for eliminating alternatives during the detailed study phase, it is a criteria used in the comparison of similar alternatives. As such, a certain level of construction cost estimating is performed.

### ***What if the project was not constructed?***

If the project were not constructed, the funding currently designated would be returned to Regional Freeway Funding source administered by MAG.

### ***Are there any specific and/or unique impacts from the action alternatives?***

The project area is broken into 5 construction segments, which are described in Table 1. Segments 1 and 2 are in the Eastern Section, while segments 3, 4, and 5 are in the Western Section. Construction segments are used to define the limits of the potential implementation phases. The segments shown are draft pending completion of the implementation plan currently under development.



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**Table 1: Construction Segment Limits**

Segment	Limits
1	40 <sup>th</sup> Street to 17 <sup>th</sup> Avenue
2	17 <sup>th</sup> Avenue to 55 <sup>th</sup> Avenue
3	55 <sup>th</sup> Avenue to Southern Avenue
4	Southern Avenue to Buckeye Road
5	Buckeye Road to I-10

The alignment total construction cost estimate was built by combining the proper construction segment estimates. Table 2 lists the alternative estimates and total cost.

**Table 2: Alternatives Construction Cost Estimate**

Alignment	Western Section	Eastern Section	Total
W55 and E1	\$598,000,000	\$478,000,000	\$1,076,000,000
W71 and E1	\$ 517,000,000	\$478,000,000	\$995,000,000
W101WPR and E1	\$ 812,000,000	\$478,000,000	\$1,290,000,000
W101WFR and E1	\$ 794,000,000	\$478,000,000	\$1,272,000,000
W101CPR and E1	\$802,000,000	\$478,000,000	\$1,280,000,000
W101CFR and E1	\$784,000,000	\$478,000,000	\$1,262,000,000
W101EPR and E1	\$818,000,000	\$478,000,000	\$1,296,000,000
W101EFR and E1	\$800,000,000	\$478,000,000	\$1,278,000,000

For a comparative, the segments without a system interchange or a crossing of the Salt River average \$45 million per mile.

***Are the conclusions presented in this summary final?***

It is quite likely that quantitative findings relative to impacts are subject to change. The reasons for future changes which will be presented to the public during the Draft EIS, Final EIS and Final Design stages are based on the following:

- Refinement in design features through the design process.
- Updated aerial photography as it relates to rapid growth in the Western Section of the Study Area.
- On-going communications with the City of Phoenix regarding measures to minimize harm to South Mountain Park/Preserve.
- On-going communications with GRIC in regards to granting permission to study action alternatives on GRIC lands.
- Potential updates to traffic forecasts as updated regularly by MAG.



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- Potential updates with regards to the special 2005 survey to augment the 2000 Census.
- As design progresses, cost estimates for construction, right-of-way acquisition, relocation and mitigation will be updated on a regular basis (The RTP Freeway Program is updated by ADOT every six months)

However, even with these factors affecting findings, it is anticipated the affects would be equal among the alternatives and consequently impacts would be comparatively the same. This assumption would be confirmed if and when such changes were to occur.

### ***As a member of the Citizens Advisory Team, how can you review the entire technical report?***

The complete technical report is available for review by making an appointment with Mike Bruder or Mark Hollowell at 602-712-7545.