



South Mountain Transportation Corridor Study

Citizens Advisory Team
Technical Report Summary

Draft Prime and Unique Farmland

Why study prime and unique farmland in the Environmental Impact Statement (EIS)?

The Phoenix metropolitan area is founded in agriculture and is rich in its agricultural history. As the Phoenix metropolitan area has developed, agricultural lands have been converted to nonagricultural uses at a rapid pace. The phenomenon is not unique to just the Phoenix metropolitan area. In fact, at the national level, Congress recognized that the nation's farmlands are a unique natural resource providing food and fiber necessary for the continued welfare of the people of the United States. However, each year, large amounts of the nation's farmland are irrevocably being converted from actual or potential agricultural use to non-agricultural uses. In response, Congress enacted the Farmland Protection Policy Act (FPPA) (7 CFR Part 658). The act states that "purpose is to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland."

A substantial portion of the Western Section of the Study Area currently is in agricultural use (Figure1); however, rapid planned development is contributing to the conversion of these lands to residential, business, and industrial uses. A project like the South Mountain Freeway could contribute to the conversion of farmlands to nonagricultural uses. The purpose of studying the potential impacts on farmlands is to determine if such impacts are unnecessarily contributing to such a conversion, and if such a project is inconsistent with state and local planning.

What kind of impacts would occur from construction?

The types of environmental impacts that could occur as a result of a project like the South Mountain Freeway include:

- Direct conversion: Actions or projects that result in making land non-farmable. Action (building or construction) on a specific area results in a direct impact.
- Cumulative: May include isolation of remnant parcels (agricultural land that is bisected by a project such as a highway rendering two now isolated parcels).
- Indirect (secondary): Taking land adjacent to a specific impact area out of agricultural production.

How do the alternatives differ in construction-related impacts?

All action alternatives would convert some agricultural lands to a non-agricultural transportation-related use as shown in the table below.



South Mountain Transportation Corridor Study

Citizens Advisory Team
 Technical Report Summary

Draft Prime and Unique Farmland

Farmland Conversion

Alternative/Option	Total Acres	Total Acres/Freeway Mile*
Western Section Alternatives		
W55	581	68
W71	963	106
W101WPR	1103	98
W101WFR	1103	98
W101W99	1208	106
W101CPR	1132	104
W101CFR	1133	104
W101EPR	1039	96
W101EFR	1039	96
Eastern Section Alternative		
E1	156	N/A
*Acreages are approximates. N/A = Not Applicable		

The majority of agricultural lands are located in the Western Section of the Study Area. As shown in the table, the amount of farmland that would be converted to a transportation use increases with alternatives as they move from the east to the west and consequently, the W101 Alternative and Options would have the greatest impact on farmland. However, factors should be considered when reaching such a conclusion. First, the W55 Alternative is the most eastern of the alternatives and as currently planned, would closely follow the freeway alignment as it has been planned for over twenty years. Unlike the W71 and W101 Alternatives, much of what has been planned along the W55 Alternative are commercial and industrial uses. Second, rapid urbanization is moving in a westward manner. By the time freeway construction were to begin, it is likely that farmland acreages converted to a transportation use for the western-most alternatives will be less than currently being reported as such land will likely have already been converted from agricultural use to residential, commercial, and/or industrial uses. Third, when considered in farmland conversion per freeway mile, the impact would be relatively the same, with the exception of the W55 Alternative for reasons described above.

When considered in the context of planned growth consistent with state and local planning, any of the action alternatives would have similar impacts and such impacts are unnecessarily contributing to such a conversion and if such a project is inconsistent with state and local planning

What kind of freeway operational impacts (post-construction) would occur?



South Mountain Transportation Corridor Study

Citizens Advisory Team
Technical Report Summary

Draft Prime and Unique Farmland

Depending on plot size and crop type, farmland not directly affected by the technical study acquisition could become too small for continued economic use and eliminated from further usefulness as farmland. Agricultural parcels that are bisected by the proposed action and become independent islands (remnant parcels) is an example of farmland that could become too small for continued economic use.

How do the alternatives differ in operational-related impacts?

There are no substantial differences in the types or magnitude of impacts among the action alternatives once they have been constructed and open to the public.

What if the project was not constructed?

There would be no impact on farmland if the project was not constructed. However, due to the urban growth of the Phoenix metropolitan area as it is currently planned, it is likely that farmland in the Western Section of the Study Area would eventually be converted to urban uses.

Are there any specific and/or unique impacts from the build alternatives?

For a project of the magnitude of the South Mountain Freeway, there are no unique impacts anticipated.

Are there things that could be done to reduce or avoid impacts?

The potential to avoid any prime and unique farmland conversion with any alternative or option is minimal. Prime and unique farmland, as defined by the Farmlands Protection Policy Act, is extensive throughout the Study Area. Measures to reduce the impacts will be evaluated where appropriate.

What can be done to reduce construction impacts?

Agricultural practices adjacent to freeway construction could be affected by the project. Impacts could include surface water runoff into irrigation canals and farm fields, impediments to the efficient movement of farm equipment, and construction-related emissions and dust on crops. ADOT would undertake several actions to minimize these types of impacts.

As it relates to surface water-related impacts, Section 402 National Pollutant Discharge Elimination System (NPDES) of the Clean Water Act requires that ADOT, or its contractor, obtain a permit before beginning construction.

The permit requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared. The plan will include what are known as Best Management Practices for controlling construction



South Mountain Transportation Corridor Study

Citizens Advisory Team
Technical Report Summary

Draft Prime and Unique Farmland

related pollution discharge. Some of the types of practices ADOT could employ to reduce impacts in the floodplains during construction include:

- Constructing silt barriers
- Insuring construction equipment is in good working order
- Creating sediment basins
- Using controlled equipment fueling and maintenance areas
- Ensuring proper disposal of potentially contaminated materials
- Limiting vegetation removal and soil disturbance
- Seeding and mulching exposed slopes immediately after construction
- Ensuring existing flows of existing canals and irrigation water

ADOT would develop a specific SWPPP during the final design efforts for the project.

Relative to air quality-related impacts, ADOT, or its contractor would prepare and obtain an approved *Application for Earth Moving Permit, Demolition, and Dust Control Plan* in accordance with Maricopa County Rule 310, Fugitive Dust Ordinance, before beginning construction, would be obtained from the Maricopa County Environmental Services Department. The permit would describe measures to control and regulate air pollutant emissions during construction.

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.
- 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.

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?

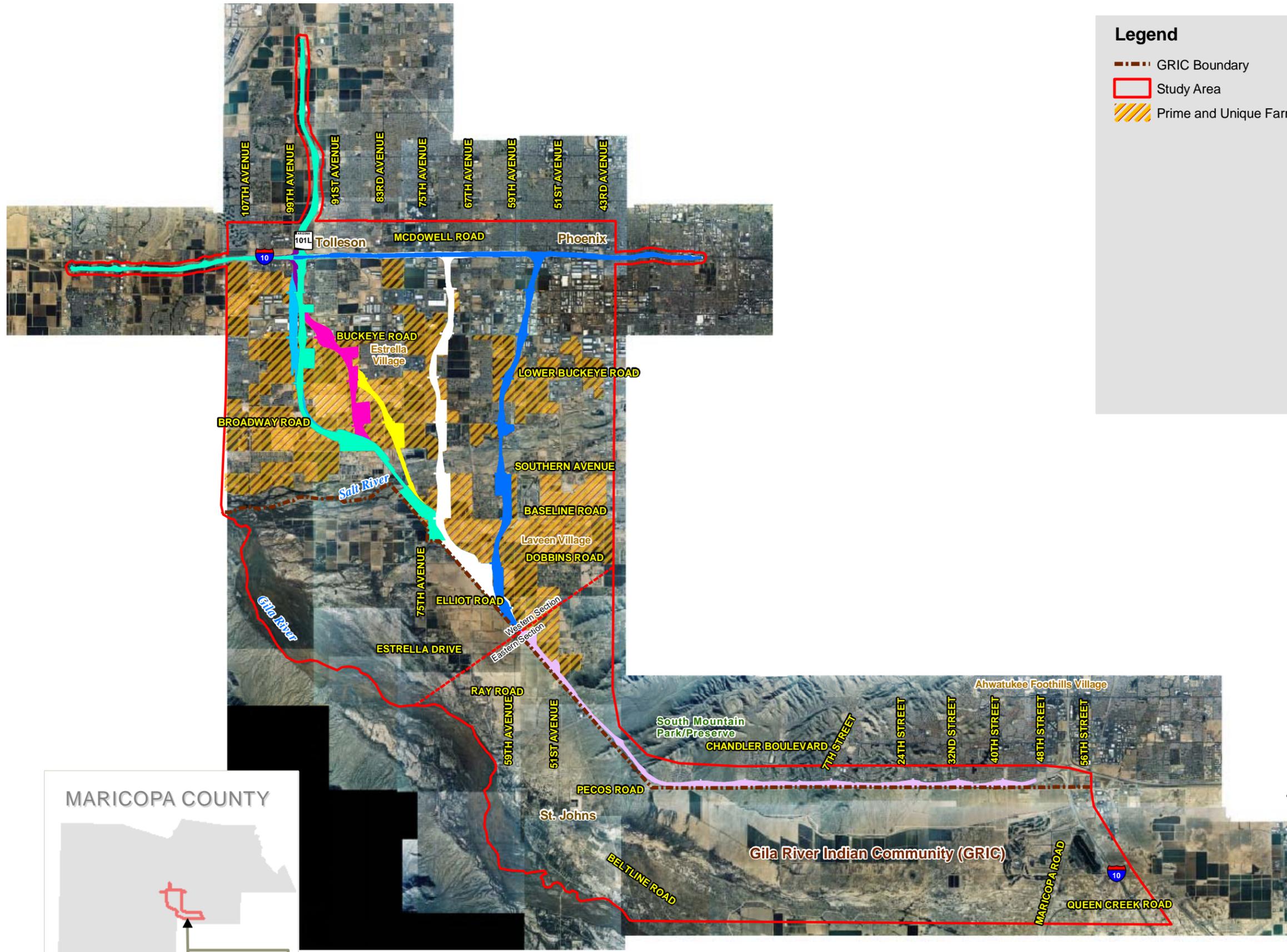


South Mountain Transportation Corridor Study

Citizens Advisory Team
Technical Report Summary

Draft Prime and Unique Farmland

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



Legend

- GRIC Boundary
- Study Area
- Prime and Unique Farmland

Western Section Alternatives

- W55
- W71
- W101WPR
- W101WFR
- W101W99
- W101CPR
- W101CFR
- W101EFR
- W101EFR

Eastern Section Alternative

- E1

0 6,000 12,000 Feet
1 inch equals 12,000 feet

N
↑

Draft Prime and Unique Farmland Report

Prime and Unique Farmland Within the Study Area

South Mountain Freeway Transportation Corridor Study

Aerial Photography Date: Winter 2005

DRAFT: October 2005



South Mountain Transportation Corridor
TRACS No. 202L MA 054 H5764 01L
FHWA Federal Project No. NH-202-D()
E:\projects\AZ\ADOT\SouthMtn\TECH_REPOR\T0905\Farmland\Farmland.mxd



Figure 1
October 2005