



Title VI and Environmental Justice Report

In support of the
Environmental Impact Statement

South Mountain Transportation Corridor in Maricopa County, Arizona

Arizona Department of Transportation
Federal Highway Administration
in cooperation with
U.S. Army Corps of Engineers
U.S. Bureau of Indian Affairs
Western Area Power Administration



April 2013

Federal-aid Project Number: NH-202-D(ADY)
ADOT Project Number: 202L MA 054 H5764 01L



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Abstract: This document assesses and describes the potential effects on Title VI and environmental justice populations that would occur as a result of the construction and operation of the proposed South Mountain Freeway as adopted in the 2003 *Regional Transportation Plan*. Contents of this document will be presented in Chapter 4 of the South Mountain Transportation Corridor Environmental Impact Statement.

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List of Acronyms and Abbreviations

ADOT	Arizona Department of Transportation
C	Central
Community	Gila River Indian Community
E	Eastern
E1	E1 Alternative
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
FR	Full Reconstruction
HUD	U.S. Department of Housing and Urban Development
I-10	Interstate 10
MAG	Maricopa Association of Governments
PR	Partial Reconstruction
RTP	<i>Regional Transportation Plan</i>
R/W	right-of-way
SMTC	South Mountain Transportation Corridor
SR	State Route
TI	traffic interchange
W	Western
W101CFR	W101 Alternative, Central Option, Full Reconstruction
W101CPR	W101 Alternative, Central Option, Partial Reconstruction
W101EFR	W101 Alternative, Eastern Option, Full Reconstruction
W101EPR	W101 Alternative, Eastern Option, Partial Reconstruction
W101WFR	W101 Alternative, Western Option, Full Reconstruction
W101WPR	W101 Alternative, Western Option, Partial Reconstruction
W59	W59 Alternative
W71	W71 Alternative

Glossary

affected environment	Those elements of the Study Area that may be changed by the proposed alternatives. These changes might be positive or negative in nature.
capacity	The maximum number of vehicles that a given section of road or traffic lane can accommodate.
census block	Census blocks are areas bounded on all sides by visible features such as roads, streams, and railroad tracks and by invisible boundaries such as city, town, township, and county limits; property lines; and short, imaginary extensions of roads. Generally, census blocks are small in area—for example, a block bounded by city streets. However, census blocks in remote areas may be large and irregular and may contain many square miles. A census block's population can range from 0 to 2,000, but the average population is about 100.
census block group	Census block groups are clusters of census blocks generally containing between 600 and 3,000 people, with an optimum size of 1,500 people. Census block groups never cross the boundaries of census tracts, but may cross the boundary of other geographic entities.
census tract	Census tracts are small, relatively permanent statistical subdivisions of a county. The primary purpose of a census tract is to provide a stable set of geographic units for the presentation of decennial census data. Census tracts generally have between 1,500 and 8,000 people, with an optimum size of 4,000 people.
direct impact	A change that is caused by the action and occurs at the same time and same place as the action.
disabled populations	Civilian noninstitutionalized persons aged 5 and over with sensory, physical, mental, self-care, going outside of home, or employment disabilities.
Eastern Section	The portion of the Study Area located east of 59th Avenue.
environmental impact statement (EIS)	The project documentation prepared in accordance with the National Environmental Policy Act when the project is anticipated to have a significant impact on the environment.
elderly	Those persons age 60 and older.
female head of household	A female serving as the head of household, with no husband present, with her own children under the age of 18.
Federal Highway Administration (FHWA)	A branch of the U.S. Department of Transportation responsible for administering the Federal-aid Program. The program provides financial resources and technical assistance for constructing, preserving, and improving the National Highway System along with other urban and rural roads.
low-income	Populations in households with an income at or below the U.S. Department of Health and Human Services poverty guidelines.

market rent	Gross rent estimate that includes the shelter rental cost plus the cost of all utilities, except telephone. The level at which fair market rent is set is expressed as a percentile point within the rent distribution of standard-quality rental housing units. The current definition used is the 40th percentile rent, the dollar amount below which 40 percent of the standard-quality rental housing units are rented. The 40th percentile rent is drawn from the distribution of rents of all units occupied by recent movers (renter households who moved to their present residence within the past 15 months).
minority populations	People who identify themselves as Hispanic or Latino, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, some other race, or more than one race.
mitigation	An action taken to reduce or eliminate an adverse impact stemming from construction, operation, or maintenance of a proposed action alternative. Mitigation could reduce the magnitude and extent of an impact from a level of significance to a level of insignificance. Mitigation includes <i>avoiding</i> the impact altogether by not taking a certain action or parts of an action; <i>minimizing</i> impacts by limiting the degree of magnitude of the action and its implementation; <i>rectifying</i> the impact by repairing, rehabilitating, or restoring the affected environment; <i>reducing or eliminating</i> the impact over time by preservation and maintenance operations during the life of the action; and <i>compensating</i> for the impact by replacing or providing substitute resources or environments. (40 Code of Federal Regulations § 1508.20)
right-of-way (R/W)	Publicly-owned land used or intended to be used for transportation and other purposes.
single-family residence	A single-family, detached house.
Study Area	The geographic area within which build alternative solutions to the problem are developed.
Western Section	The portion of the Study Area located west of the common point.

1. Project Description and Purpose and Need

Project Description

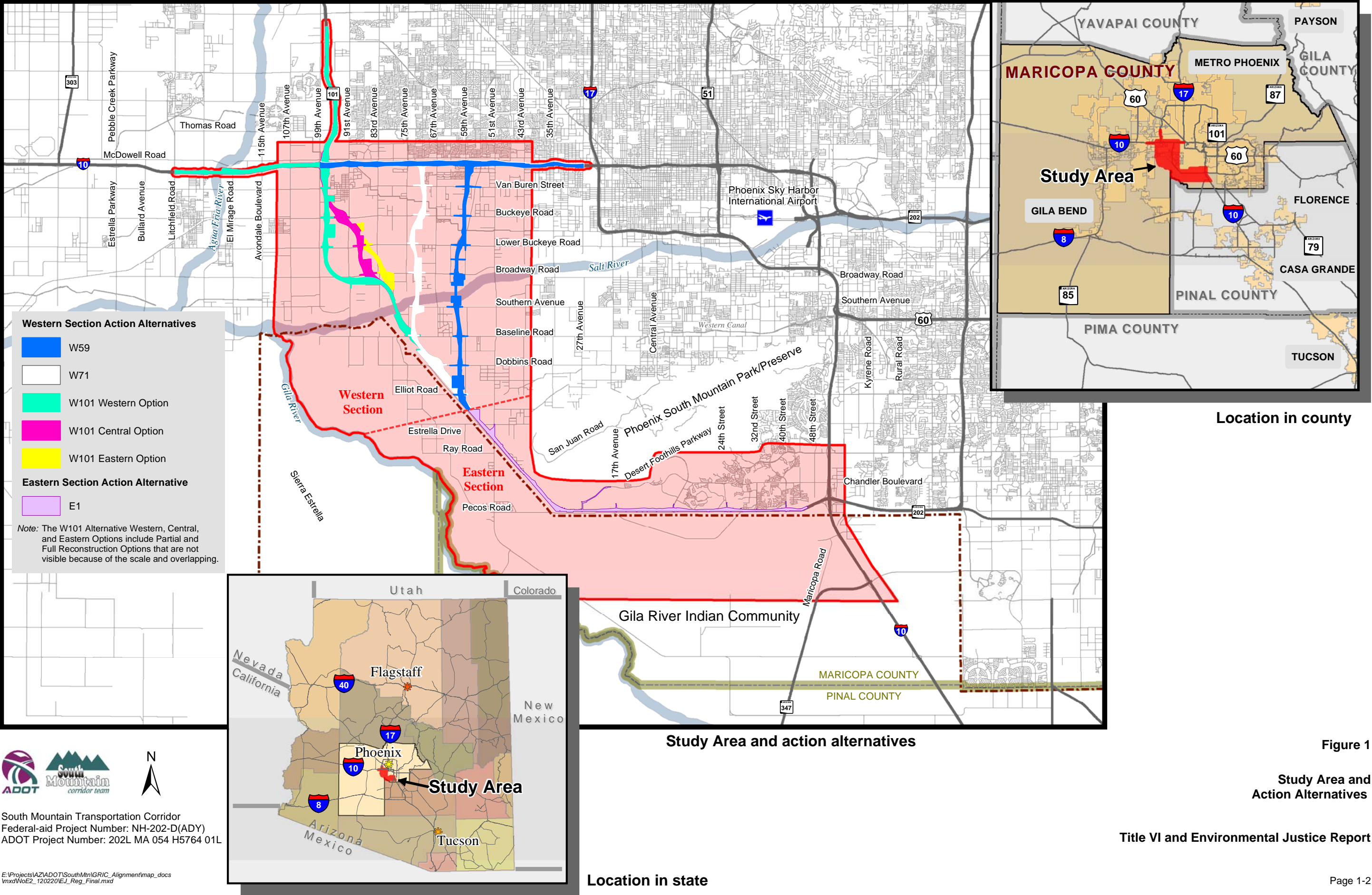
The Arizona Department of Transportation (ADOT) is studying the South Mountain Transportation Corridor (SMTC) in southern Phoenix, Maricopa County, Arizona. The South Mountain Freeway corridor was adopted into the Maricopa Association of Governments (MAG) regional freeway system in 1985 as part of the *MAG Freeway/Expressway Plan* (MAG 1985), at which time it was placed on the state highway system by the State Transportation Board. In 1988, ADOT prepared a design concept report and a state-level environmental assessment for the project, identified at that time as the South Mountain Parkway (ADOT 1988a, 1988b). As presented then, the project would connect Interstate 10 (I-10) (Maricopa Freeway) south of Phoenix with I-10 (Papago Freeway) west of the city, following an east-to-west alignment along Pecos Road through the western tip of the Phoenix South Mountain Park/Preserve, then north to I-10 between 59th and 99th avenues. Because of the time elapsed since those documents were approved and to secure eligibility for federal funding for a proposed project within this corridor, ADOT and the Federal Highway Administration (FHWA) are now preparing an environmental impact statement (EIS) in accordance with the National Environmental Policy Act. In November 2004, the MAG *Regional Transportation Plan* (RTP) (2003) was placed before Maricopa County voters, who approved the sales tax funding the plan. The South Mountain Freeway was included in this plan.

Alternatives considered for the SMTC included past freeway proposals as well as transportation system management, transportation demand management, transit improvements, arterial street network improvements, and land use controls. A freeway facility was determined to best address the project purpose and need. Therefore, this report discusses the potential impacts of a proposed freeway in the SMTC.

The Study Area for the EIS encompasses more than 156 square miles and is divided into a Western Section and an Eastern Section at a location common to all action alternatives (Figure 1). The division between sections occurs just east of 59th Avenue and south of Elliot Road.

Within the Western Section, three action alternatives are being considered for detailed study. These are the W59, W71, and W101 Alternatives. The W59 Alternative would connect to I-10 at 59th Avenue, while the W71 Alternative would connect at 71st Avenue. The W101 Alternative would connect to I-10 at the existing State Route (SR) 101L (Agua Fria Freeway)/I-10 system traffic interchange (TI) and has six associated options. The W101 Alternative options vary geographically among the Western (W), Central (C), and Eastern (E) Options and would vary geometrically based on a Partial Reconstruction (PR) or a Full Reconstruction (FR) of the system TI.

Improvements to I-10 (Papago Freeway) would occur for each Western Section action alternative (W59, W71, and W101). Improvements to SR 101L would occur for each option associated with the W101 Alternative.



Project Description and Purpose and Need

Within the Eastern Section of the Study Area, one action alternative is being considered. The E1 Alternative would begin near Elliot Road and 59th Avenue and proceed to the southeast to Pecos Road, which it would follow to the east until connecting to I-10 (Maricopa Freeway) at the Pecos Road/I-10/SR 202L (Santan Freeway) system TI.

The action alternatives and options are summarized in Table 1.

Table 1. Action Alternatives and Options

Section	Interstate 10 Connection	Action Alternative	Option – Broadway Road to Buckeye Road	Option – State Route 101L/ Interstate 10 Connection Reconstruction	Option Name
Western	59th Avenue	W59	— ^a	—	—
	71st Avenue	W71	—	—	—
	State Route 101L	W101	Western	Partial Reconstruction	W101WPR
				Full Reconstruction	W101WFR
			Central	Partial Reconstruction	W101CPR
				Full Reconstruction	W101CFR
			Eastern	Partial Reconstruction	W101EPR
				Full Reconstruction	W101EFR
Eastern	Pecos Road	E1	—	—	—

^a not applicable

The No-Action Alternative is being considered for the entire Study Area.

Purpose and Need

An analysis of population trends, land use plans, and travel demand shows that a considerable traffic problem in the Phoenix metropolitan area is projected for the future, resulting in the need for a new freeway in the SMTA. This traffic problem is likely to worsen if plans are not made to accommodate the regional travel anticipated. The purpose of a freeway within the SMTA is to support a solution to traffic congestion. Between the early 1950s and the mid-1990s, the metropolitan area grew by over 500 percent, compared with approximately 70 percent for the United States as a whole (MAG 2001). From 1980 to 2005, the Maricopa County population more than doubled, from 1.5 million to 3.7 million. The MAG region has been one of the fastest-growing metropolitan areas in the United States; Phoenix is now the fifth-largest city in the country, and the region ranks as the 12th-largest metropolitan area in the country.

Travel demand and vehicle miles driven in the metropolitan area are expected to increase at a faster rate than the population. MAG projections (conducted in collaboration with the Arizona Department of Economic Security) indicate Maricopa County's population will increase from 3.7 million in 2005 to 6.5 million in 2035 (MAG 2009). It is projected that in the next 25 years, daily vehicle miles traveled will increase from 101 million to 185 million.

Project Description and Purpose and Need

Even with anticipated improvements in light rail service, bus service, trip reduction programs, and existing roads and freeways, vehicle traffic volumes are expected to exceed the capacity of Phoenix metropolitan area streets and highways by as much as 11 percent in 2035. A freeway within the SMTTC would accommodate approximately 6 percentage points of the 11 percent of the unmet travel demand and would be part of an overall traffic solution.

2. Title VI and Environmental Justice

Introduction

The purpose of the Title VI and environmental justice analysis is to determine whether low-income or minority communities (and other sensitive communities as identified below) would bear a disproportionately high and adverse effect attributable to the proposed action. Two documents providing the basis for this analysis, Title VI of the Civil Rights Act of 1964 and Executive Order 12898, are described here.

Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, or disability.

Executive Order 12898 (1994) was created to identify and address disproportionately high and adverse human health or environmental effects of federal programs, policies, and activities on minority and low-income populations. Environmental justice is defined by the U.S. Environmental Protection Agency (EPA) as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Fair treatment is defined by EPA as “no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. Meaningful involvement means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that would affect their environment and/or health; (2) the public’s contribution can influence the regulatory agency’s decision; (3) the concerns of all participants involved would be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected” (EPA 1998).

For the purposes of this evaluation, Title VI populations are defined as follows:

- Minority populations include people who identify themselves as Hispanic or Latino, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, some other race, or more than one race. Figure 2 shows minority populations in the Study Area.

In addition to minorities, environmental justice populations are further defined as follows:

- Low-income populations are households with an income at or below the U.S. Department of Health and Human Services poverty guidelines. The poverty thresholds vary by household size and are revised annually to allow for changes in the cost of living. It is important to note that the poverty thresholds are the same for all parts of the country—they are not adjusted for regional, state, or local variations in the cost of living. Figure 3 shows low-income populations in the Study Area.

- ▶ Elderly populations include those persons age 60 and older. Figure 4 shows elderly populations in the Study Area.
- ▶ Disabled populations are civilian, noninstitutionalized persons age 5 and over with sensory, physical, mental, self-care, going-outside-of-home, and employment disabilities. Figure 5 shows disabled populations in the Study Area.
- ▶ Female head of household populations include households with a female serving as the head of household, with no husband present, and with her own children under the age of 18. Figure 6 shows female head of household populations in the Study Area. These households tend to have lower incomes than married couple families or single male-headed households, and oftentimes have higher demand for affordable housing units (Blisard and Harris 2001).

The Council on Environmental Quality's environmental justice guidance defines a minority or low-income population as occurring when either (1) the low-income or minority population of the affected area exceeds 50 percent or (2) the low-income or minority population percentage of the affected area is meaningfully greater than the low-income or minority population percentage in the general population or other appropriate unit of geographic analysis (Council on Environmental Quality 1997).

To establish whether environmental impacts would disproportionately affect minority or low-income populations, it is necessary to first establish a basis of comparison. Because the Study Area and proposed alternatives would affect multiple jurisdictions, all within Maricopa County, the county was chosen as the community of comparison.

This analysis identified environmental justice communities as those census geographies where the percentage of the environmental justice population (minority, low-income, etc.) is known to exceed the percentage of an identifiable group, in accordance with FHWA guidance. This study employed the use of a lower threshold for the identifiable group by determining the lesser of either 1½ times the community of comparison (Maricopa County) or 50 percent of the total population in the census geography.

The demographic information used in this analysis is from the U.S. Census. The 2010 Census remains the most comprehensive source of demographic data available. When appropriate and available, other more recent socioeconomic information is cited.

Although census tracts are most often used, this analysis examines the effects at the census block and census block group level as well, both of which are smaller than census tracts. A census block is the smallest geographic unit used by the U.S. Census Bureau, while census block groups are clusters of census blocks created by the U.S. Census Bureau at a geographic level between census blocks and census tracts to permit the release of tabulated data that cannot be presented at the block level for confidentiality purposes.

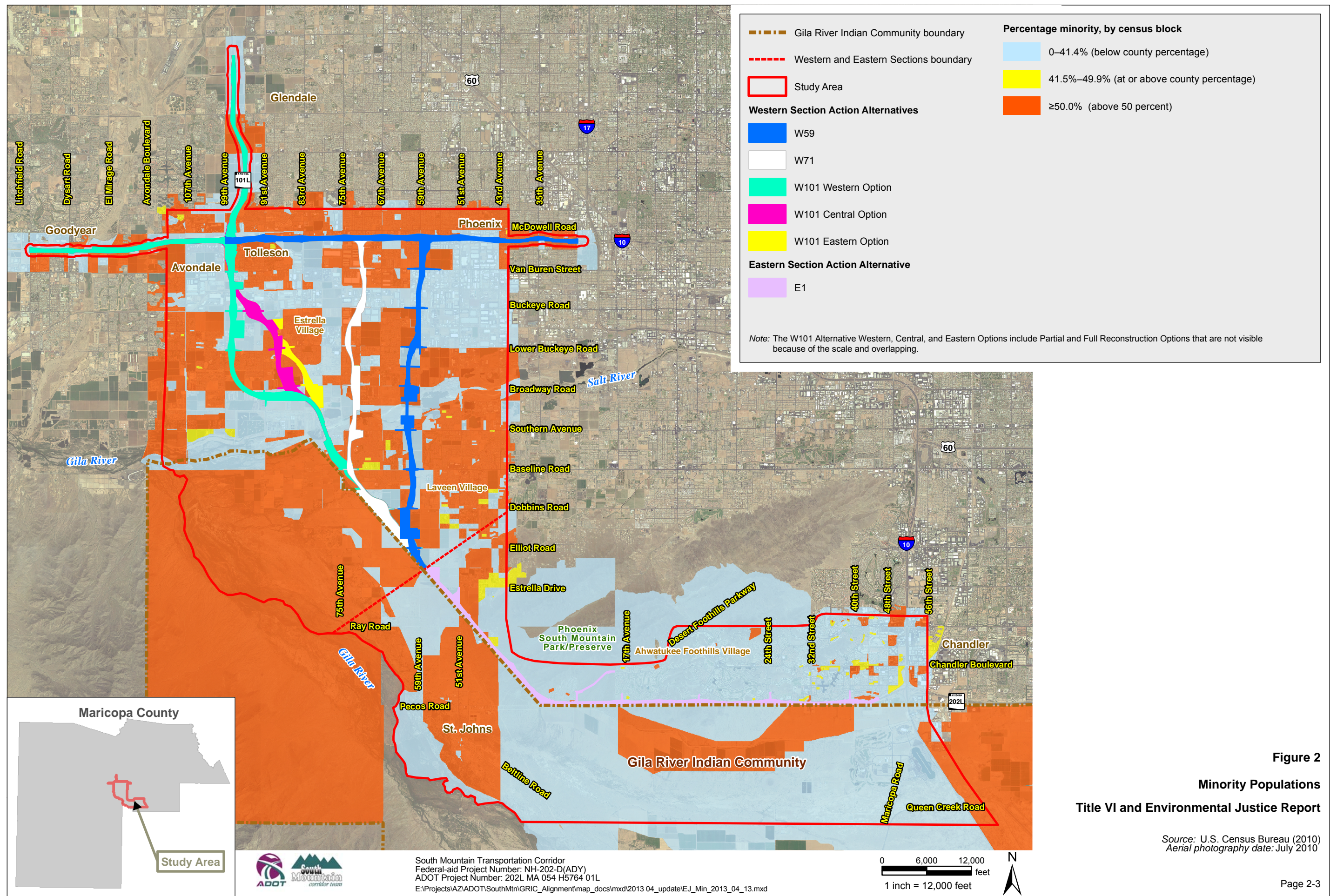


Figure 2
Minority Populations
Title VI and Environmental Justice Report

Source: U.S. Census Bureau (2010)
Aerial photography date: July 2010

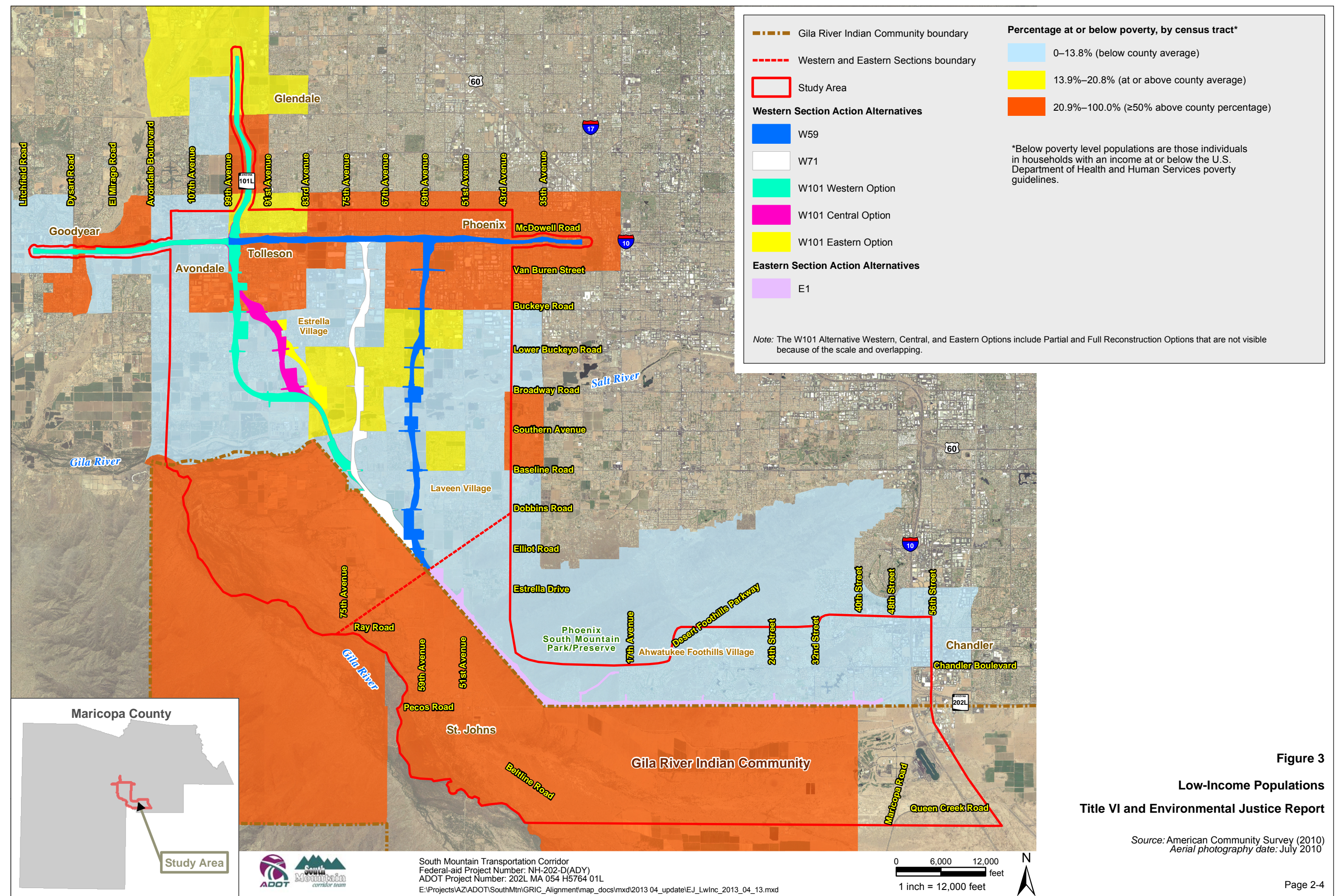


Figure 3
Low-Income Populations
Title VI and Environmental Justice Report

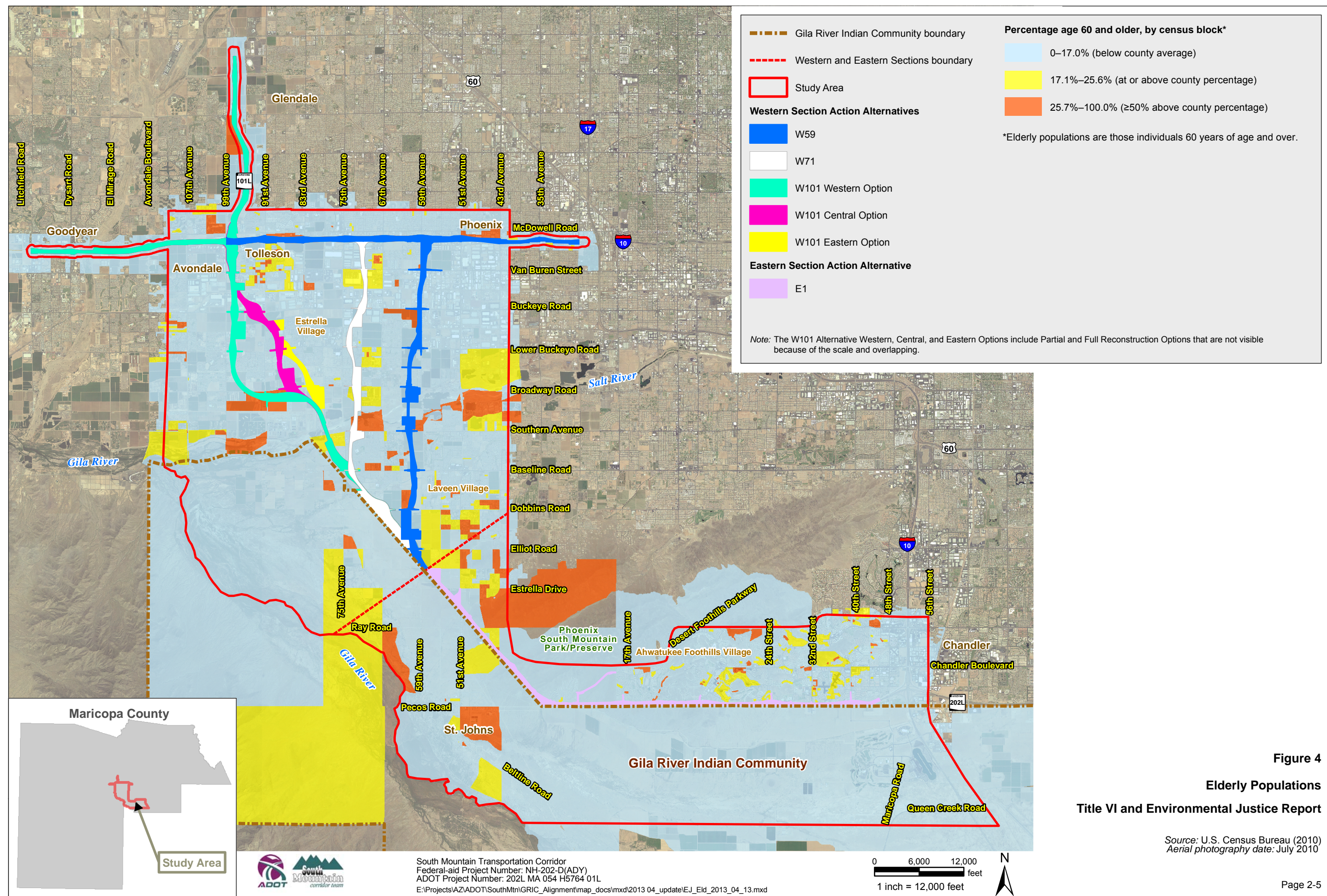


Figure 4
Elderly Populations
Title VI and Environmental Justice Report

Source: U.S. Census Bureau (2010)
Aerial photography date: July 2010

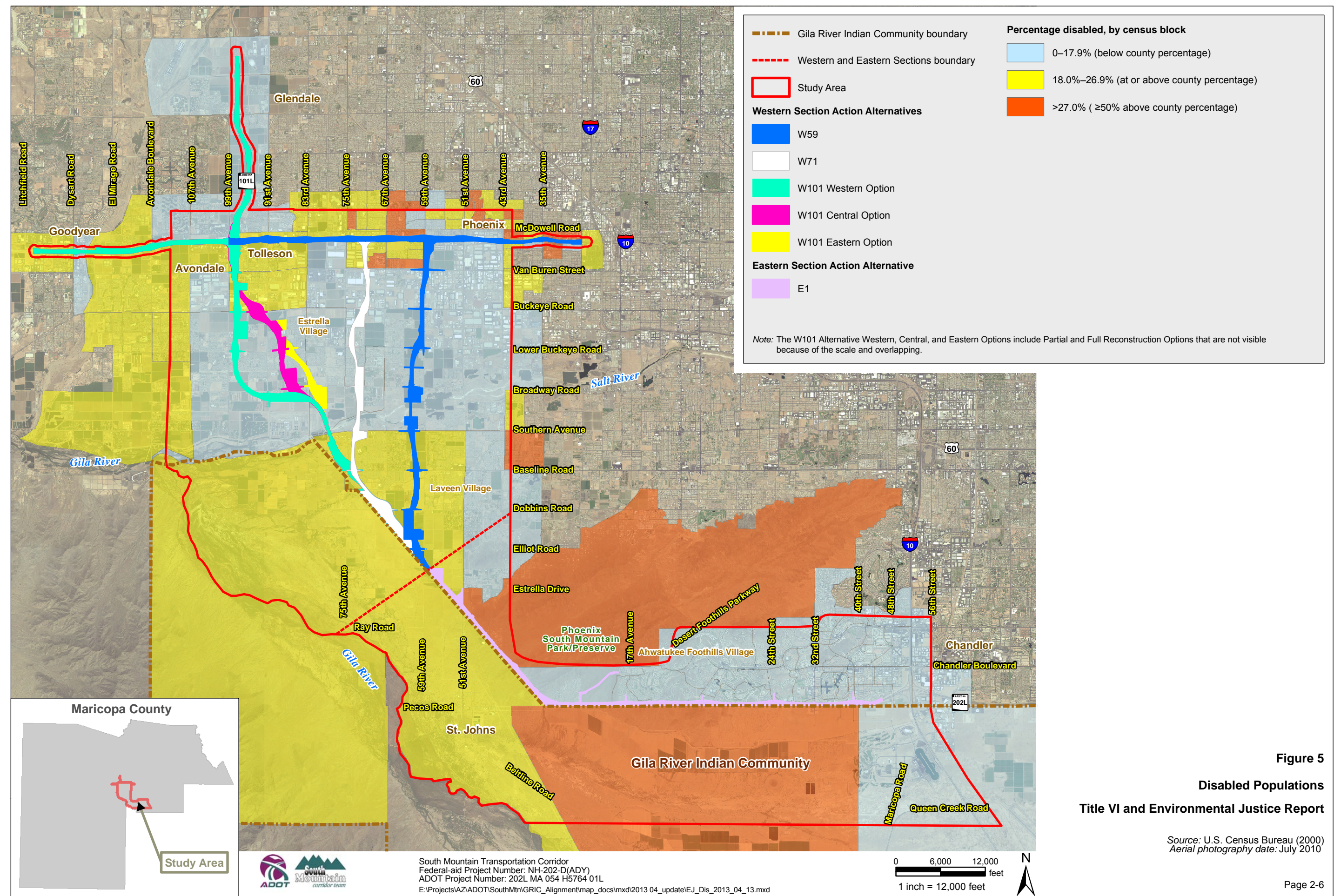


Figure 5
Disabled Populations
Title VI and Environmental Justice Report

Source: U.S. Census Bureau (2000)
Aerial photography date: July 2010

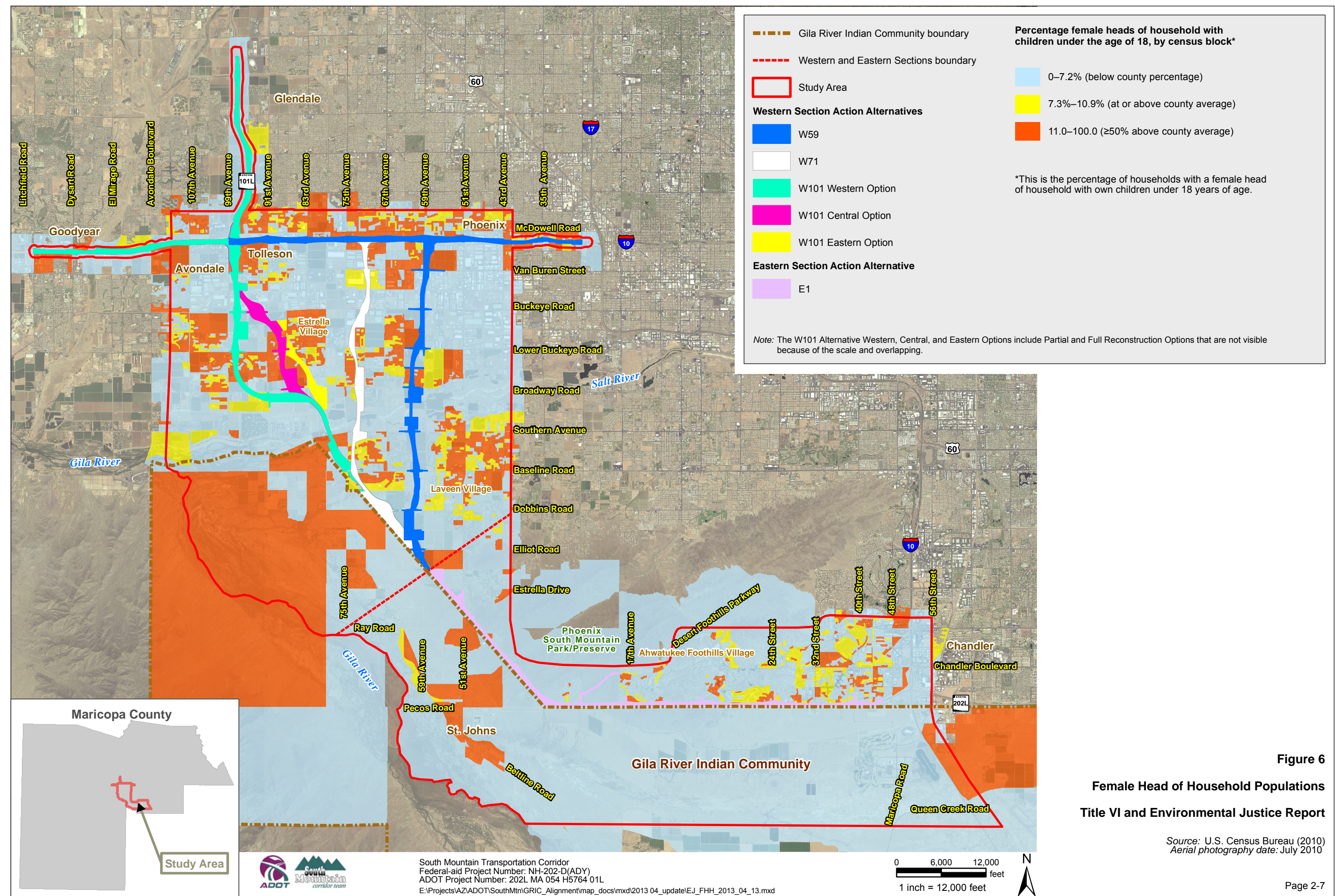


Figure 6
Female Head of Household Populations
Title VI and Environmental Justice Report

Source: U.S. Census Bureau (2010)
 Aerial photography date: July 2010

To focus on potentially affected communities, the smallest unit of analysis for each of the studied populations was chosen—*block level* census data were used to identify members of minority groups, elderly populations, and female head of household populations; *block group level* census data were used to identify disabled populations; and *tract level* census data were used to identify low-income and disabled populations.

The percentage of environmental justice populations for the Study Area, affected jurisdictions, Maricopa County, and the state of Arizona are shown in Table 2.

Table 2. Title VI and Environmental Justice Populations within the Affected Jurisdictions

Population	State of Arizona %	Maricopa County %	Gila River Indian Community %	City of Avondale %	City of Chandler %	City of Glendale %	City of Goodyear %	City of Phoenix %	City of Tolleson %	Study Area %
Minority	42.1	41.4	98.8	65.9	38.3	48.4	41.7	53.4	89.2	68.1
Hispanic or Latino ^a	29.6	29.6	15.3	50.3	21.9	35.5	27.8	40.8	80.1	51.3
Black or African American	3.7	4.6	0.3	8.7	4.5	5.6	6.3	6.0	5.8	8.4
American Indian or Alaska Native	4.0	1.6	81.4	1.0	1.1	1.2	1.0	1.6	1.0	2.2
Asian	2.7	3.4	0.0	3.3	8.1	3.8	4.2	3.0	0.8	4.0
Native Hawaiian or Other Pacific Islander	0.2	0.2	0.1	0.3	0.2	0.2	0.1	0.1	0.2	0.2
Some other race	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.2	0.2	0.2
More than one race	1.8	1.9	1.7	2.1	2.3	2.0	2.2	1.7	1.1	1.8
Low-income ^b	15.3	13.9	47.8	13.6	7.1	16.3	7.8	18.8	18.0	15.5
Disabled ^c	19.3	18.0	25.7	16.3	13.3	18.3	14.8	19.1	22.5	17.2
Elderly ^d	19.3	17.1	9.0	8.8	12.2	13.9	16.4	12.8	12.5	7.7
Female head of household ^e	7.1	7.3	18.3	10.9	7.2	9.6	6.4	9.0	18.5	11.6

Sources: State, county, city, tribal, and Study Area figures are based on data from the U.S. Census Bureau (2010a), with the exception of information for disabled populations, which is based on older data from the U.S Census Bureau (2000), and information for low-income populations, which is based on the 5-year American Community Survey (2006–2010).

^a based on U.S. Census Table P5: Hispanic or Latino, and Not Hispanic or Latino by Race

^b based on American Community Survey Table S1701: Poverty Status in the Past 12 Months

^c based on U.S. Census Table P41: Civilian Noninstitutionalized Persons Age of 5 and Over with Sensory, Physical, Mental, and/or Self-care Disabilities

^d based on U.S. Census Table P12: Sex by Age

^e based on U.S. Census Table P19: Household Size By Household Type By Presence of Own Children

3. Affected Environment

The SMTC Study Area encompasses a large and socially diverse area. Compared with Maricopa County as a whole, the Study Area includes a greater percentage of all of the sensitive communities discussed, excluding disabled and elderly persons. The portion of minorities in the Study Area is 68.1 percent, 64 percent greater than the county percentage of 41.4 percent; the share of the Study Area population that is low-income (15.5 percent) is 12 percent larger than the percentage of the county (13.9 percent); and the female head of household population is 11.6 percent, is 59 percent higher than that of the county (7.3 percent).

In addition to the use of Census data to identify environmental justice populations, additional information on such populations was identified through project scoping, the SMTC public involvement program, and community outreach. Information on these efforts can be found in the *Scoping Summary Report* (ADOT 2002).

Census blocks containing a share of minorities at or above 50 percent are distributed throughout the Study Area. Within the Study Area, the blocks with the greatest percentage of minority populations are located within ½ mile of the existing I-10 corridor (Papago Freeway) and within the Gila River Indian Community (Community). While minority populations are widely distributed in the Study Area, three communities of minority populations bear further discussion.

The first is Santa Maria, an unincorporated townsite located on 80 acres at the southwestern corner of Lower Buckeye Road and 67th Avenue. It is an enclave of long-time residents. The townsite, which is eligible for listing in the National Register of Historic Places, has had residential development since 1916, when Mexican immigrants who worked on local farms established a tent city. Today, the census blocks that make up the townsite are between 76 and 100 percent minority, mostly Hispanic. Additionally, a strong sense of community exists, as evidenced in the percentage of area residents who have lived in the same home since before 1995: 72 percent—nearly twice that of Maricopa County’s 37 percent (U.S. Census Bureau 2000).

The second is Tolleson, a unique city because of its small size and homogeneous population. Tolleson is an incorporated city of approximately 6 square miles located in the northwestern portion of the Study Area. The community is bisected east-to-west by I-10. Overall, Tolleson is 89 percent minority. In this largely Hispanic community (80 percent), Spanish is spoken in 70 percent of households, compared with Maricopa County, where 21 percent of households speak Spanish in the home (U.S. Census Bureau 2010b).

The third is the Community, which is composed of members of two tribes, the Pima and Maricopa. It is located in south-central Arizona, immediately south of the Phoenix metropolitan area. The reservation covers approximately 372,000 acres (582 square miles). It was established by an act of Congress in 1859 and was formally established by Constitution in 1939.

The Community has seven districts, three of which are within the SMTC Study Area: Districts 4, 6, and 7. The Community's tribal administrative offices and departments are located in Sacaton, Arizona.

Compared with Maricopa County as a whole, the Community includes greater percentages of all of the sensitive populations discussed, excluding elderly persons (it is notable that the percentage of persons age 60 and older in the Community is slightly more than half the percentage of those age 60 and older in Maricopa County). The portion of minorities in the Community is 98.8 percent, and most of these minorities are classified as American Indian or Alaska Native (this is a U.S. Census Bureau designation). The portion of the Community population that is low-income (47.8 percent) is more than three times larger than that of Maricopa County (13.9 percent). Within the Study Area, the portion of Community members in poverty is 61.9 percent; Community members with disabilities (25.7 percent) form a somewhat higher portion than the share of people with disabilities in Maricopa County (18 percent); the percentage of Community members who are female heads of household with children (18.3 percent) are two and one-half times that of Maricopa County (7.3 percent).

The low-income population in the Study Area is less widely distributed than the minority population. The census block groups with the greatest percentage of people living in poverty are located in the northern portion of the Study Area, concentrated around I-10, east of 83rd Avenue. Many factors contribute to this concentration of low-income households, not least of which is the availability of affordable housing within the Study Area. Within the Study Area, there is a higher percentage of multifamily housing units in the area immediately surrounding I-10, east of Tolleson.

The U.S. Department of Housing and Urban Development (HUD) Section 8 housing assistance program (referred to as housing choice vouchers) is a rent subsidy program for eligible low-income families (in general, the family's income may not exceed 50 percent of the median income for the county or metropolitan area in which the family chooses to live). The subsidies make up the difference between what a family can afford (usually 30 percent of household income) and the market rent for suitable housing (HUD 2000). The City of Phoenix Housing Department issued more than 5,900 Section 8 housing choice vouchers in the 2008 fiscal year (City of Phoenix 2009). Approximately 7 percent of the housing units receiving these vouchers (410 units) are found within the ZIP Codes that would be affected by the action alternatives. These properties were mapped and are included in the analysis of the action alternatives. Additional information is provided in the *Environmental Consequences* section.

The rural character of the Western Section of the Study Area is changing. As detailed in the *Land Use Report*, low-density residential and agricultural land uses that provided the traditional employment base for many minority farm workers are being supplanted by medium-density residential subdivisions (3 to 5 dwelling units per acre). The changes in land use as a result of this conversion likely have greater repercussions for minority and low-income populations than the proposed project, as the extent of these changes stretches beyond the Study Area to the entire Phoenix metropolitan area, and the growth is resulting in increased land values.

For most of the last decade, low-income residents faced rapidly increasing home prices. Because of the recent economic downturn, however, median single-family home prices in 2009 were comparable to home prices in 2000 (Arizona State University 2009). In 2004, areas such as South Phoenix and Tolleson, which at that time had median home prices below \$150,000, saw the biggest jumps in sales and prices. Rental costs also increased, although not as much during this period. HUD reported that fair market rents for the Phoenix metropolitan area increased by 31 percent between 2000 and 2011 (HUD 2011).

Because of the larger percentage of minority and low-income populations in the Study Area relative to Maricopa County, local school districts, social outreach, and aid organizations in the area were contacted to determine the social services provided to the community and the effect a major transportation corridor in the area might have on them. Social service agencies such as shelters for the homeless, addiction treatment and recovery centers, soup kitchens, and public schools providing free meals reported that the majority of clients arrive in cars, taxis, or buses or, in the case of low-income children receiving free or reduced price meals at school, by school bus. The proposed project is not anticipated to have an effect on these services.

Public Involvement

Public scoping is an integral part of identifying and analyzing Title VI and environmental justice impacts. Throughout the National Environmental Policy Act assessment process, early and continued communication with potentially affected communities ensures that community impacts would be identified and persons not be overlooked or excluded from the process. Title VI and environmental justice concerns are addressed in the adopted public involvement plan for this project.

The public involvement plan outlines specific strategies to ensure participation by Hispanic, Native American, and low-income communities. Specific activities to engage these populations in the process include bilingual (English and Spanish) newsletters, printed materials available in English and Spanish, the availability of Spanish-speaking translators and team members at public meetings to facilitate comments, and direct and ongoing communication with Community members and tribal leaders.

The South Mountain Citizens Advisory Team, with representation of minorities and both sexes, was convened early in the project to provide input and guidance on the process. The project team has met regularly with this group throughout the assessment process.

4. Environmental Consequences

In addressing environmental justice, it is important to understand whether the proposed action would have disproportionately high and adverse impacts on the protected populations. All of the action alternatives and options have the potential to have adverse impacts on these populations. Possible impacts include community disruption and fragmentation, relocations and displacements, increased noise levels, and adverse impacts on air and visual quality. These specific impacts are also addressed in the *Social Conditions*, *Economic Impacts*, *Noise*, *Air Quality*, and *Visual Resources* reports. The environmental justice analysis focused on the areas where there would be adverse environmental impacts, which includes all areas within the footprint of the right-of-way (R/W).

Impacts outside the R/W include noise, which is addressed in the *Noise Report*. The report recommends noise mitigation following FHWA criteria and ADOT policy. The reader is referred to that report for additional discussion pertaining to noise.

Census geographies (census blocks or census block groups, depending on the population being considered) potentially affected by the action alternatives and options were identified by overlaying the action alternatives and options with the census block or census block group data for each environmental justice population. Results of this analysis are shown in Table 3.

A number of the affected census geographies for each of the action alternatives are located along the existing I-10 and SR 101L corridors, where capacity improvements are planned as a result of the SMTC. Traffic volumes along these routes are anticipated to increase with or without the SMTC. Therefore, the census geographies outside of the action alternative's TI with I-10 were eliminated from further discussion unless the increased R/W along I-10 or SR 101L associated with the action alternative would result in residential relocations (in which case, the affected census geographies were included in this analysis).

As stated previously, the Study Area has a higher percentage of minorities than Maricopa County as a whole. Implementation of any of the action alternatives and options would result in impacts on census blocks with minority populations greater than 50 percent because of displacements and relocations associated with the additional R/W requirements. The extent of impacts varies by alternative.

Table 3. Protected Populations Affected by Action Alternatives

Population	Western Section								Eastern Section
	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR	E1
Census Block-level Data									
Census blocks affected	99	104	105	105	115	115	132	131	52
with no population ^a	53	27	55	55	59	60	60	59	23
with impacts	12	56	37	37	44	44	53	52	10
with minority $\geq 50\%$ ^b	9	51	32	32	39	39	47	47	2
with elderly $\geq 25.7\%$ ^c	2	0	1	1	0	0	0	0	1
with female heads of household $\geq 11.0\%$ ^d	6	22	14	14	23	23	24	24	2
Census Block Group-level Data									
2000 Census block groups affected	5	5	7	9	9	9	9	9	15
with impacts	4	5	2	2	2	2	3	3	5
with disabled $\geq 27\%$ ^e	1	1	0	0	0	0	0	0	1
Census Tract-level Data									
2010 Census tracts affected	9	7	10	11	11	11	11	11	10
with impacts	5	5	3	3	5	5	6	6	4
with low-income $\geq 20.9\%$ ^f	2	0	0	0	0	0	0	0	0

Sources: State, county, city, tribal, and Study Area figures are based on data from the U.S. Census Bureau (2010a), with the exception of information on disabled populations, which is based on data from the U.S. Census Bureau (2000), and information on low-income populations, which is based on the 5-year American Community Survey (2006–2010).

^a No population is those census blocks where the 2010 U.S. Census reported the population to be zero.

^b based on U.S. Census Table P5: Hispanic or Latino, and Not Hispanic or Latino by Race

^c based on U.S. Census Table P12: Sex by Age

^d based on U.S. Census Table P19: Household Size By Household Type By Presence of Own Children

^e based on U.S. Census Table P41: Civilian Noninstitutionalized Persons Age of 5 and Over with Sensory, Physical, Mental, and/or Self-care Disabilities

^f based on American Community Survey Table S1701: Poverty Status in the Past 12 Months

The availability of replacement housing is addressed in the *Economic Impacts Report*. Private property owners would be compensated at fair market value for land and may be eligible for additional benefits. As for renters, HUD considers anything under a 6 percent rental vacancy rate as a tight rental market (i.e., replacement rental housing may be difficult to locate). The 2010 Census reported an overall rental vacancy rate of 13.3 percent for the census tracts that make up the Study Area. Phoenix's rental vacancy rate in 2010 was higher, at 15 percent. For comparison, the Phoenix-Mesa-Scottsdale metropolitan statistical areas' fourth-quarter 2011 rental vacancy rate was 10.9 percent, slightly higher than the previous quarter vacancy rate, which was 10.4 percent.

The following discussion focuses on the direct impacts that may result from the action and No-Action alternatives. Appendix A reports the affected census blocks by the action alternatives and options.

Western Section

W59 Alternative

Implementation of the W59 Alternative would result in the least residential displacements of all of the action alternatives and options. In developing this analysis, each apartment unit was considered an individual residential displacement. Nine of the 12 census blocks with residential displacements contain 50 percent or greater minority populations. Of these 9 census blocks, impacts on 1 block would occur with all of the Western Section action alternatives. Six of the 9 minority blocks also contain a percentage of female head of household populations above the established threshold.

Of the single-family residential displacements that would result from this alternative, 28 are in an established subdivision immediately adjacent to I-10. Nine are located within the Rio Del Rey subdivision located at Broadway Road and 63rd Avenue. Rio Del Rey is within the Riverside Elementary School District, which reports that a majority of the students are minorities and 18 percent are low-income. The remaining 9 single-family homes that would be displaced by the W59 Alternative are rural residential properties, primarily located south of the Salt River.

In addition to the single-family displacements, the W59 Alternative would result in the potential displacement of two apartment complexes having a total of 680 units. These apartments fall within a census block where greater than 50 percent of the population is minority. The majority of the apartment units are "market-rate" rents; however, one of the apartment complexes currently accepts Section 8 housing vouchers. (Of the 264 units in the complex, 16 currently use Section 8 vouchers.)

W71 Alternative

Of the 56 census blocks that would have residential displacements caused by the W71 Alternative, 51 contain minority populations at levels that are 50 percent or greater than each census block's population. Twenty-two of these 56 blocks are also identified as having a percentage of female heads of households above the established threshold. Nearly half of the 705 single-family homes that would be affected by the W71 Alternative are homes within the Laveen Meadows, Laveen Ranch, and Laveen Farms subdivisions.

These subdivisions are within the Laveen Elementary School District where the local elementary school (Desert Meadows Elementary) reports that a majority of the students are minorities and 16 percent are low-income.

Another 252 single-family homes that would be affected by the W71 Alternative are homes within the Sienna Vista, Windsong, and Estrella Village subdivisions. These subdivisions consist largely of census blocks with greater than 50 percent minority populations and with female head of household populations at 11 percent or greater of the census blocks' total population.

The action alternative would purposefully avoid affecting the community of Santa Maria and the Santa Maria Middle School, located along Lower Buckeye Road.

None of the five census tracts with displacements affected by the W71 Alternative include low-income populations greater than the established threshold. A census block group containing a disabled population would have 17 single-family residential displacements. This census block group is located between Van Buren Street and I-10. In addition, seven of the single-family residences within the W71 Alternative currently accept Section 8 housing vouchers.

W101 Alternative

The options of the W101 Alternative would result in varying impacts to census blocks with minority populations representing 50 percent or greater than each census block's population. A number of these would be affected by all of the W101 Alternative Options, while the W101 Alternative Eastern Option would affect the most census blocks with minority populations and the W101 Alternative Western Option would affect the fewest census blocks with minority populations. The options of the W101 Alternative would also result in varying impacts on census blocks with female head of household populations at 11 percent or greater of the census blocks' total population. Several of these census blocks are common to all three options, while the W101 Alternative Eastern Option would affect the most census blocks with female head of household populations and the Western Option would affect the fewest census blocks with female head of household populations. In addition, any of the W101 Alternative Options would displace 400 single-family residential units in the Laveen Meadows, Laveen Ranch, and Laveen Farms subdivisions. These subdivisions are within the Laveen Elementary School District where the local elementary school (Desert Meadows Elementary) reports a majority of the students are minorities.

The W101 Alternative Western Option would affect one census block with elderly populations greater than 150 percent of the Maricopa County percentage, located in the Country Place subdivision. The options of the W101 Alternative would result in varying impacts to single-family residences that use Section 8 housing vouchers. Four of these affected residences are common to all of the W101 Alternative Options (two in each of the Laveen Meadows and Laveen Ranch subdivisions). The W101 Eastern and Central Options would affect an additional eight single-family residences accepting Section 8 vouchers in the Farmington Park subdivision.

Eastern Option

The W101 Alternative Eastern Option would acquire an additional 430 single-family residences in the 91st and Lower Buckeye, Ryland at Heritage Point, 83rd and Lower Buckeye, and Hurley Ranch subdivisions, consisting almost entirely of census blocks with greater than 50 percent minority populations and with female head of household populations with 11 percent or greater of the census blocks' total population. These subdivisions are within the Union Elementary School District, which reports a majority of the students are minorities and 16 percent are low-income. Also affected is the Tuscano subdivision, part of the Fowler Elementary School District, which reports a majority of students are minority and 20 percent are low-income. An additional 11 residences accepting Section 8 housing vouchers in the Madrid Place subdivision would be affected by this option.

Central Option

The W101 Alternative Central Option would acquire an additional 344 single-family homes in the 91st and Lower Buckeye and Hurley Ranch subdivisions, consisting almost entirely of census blocks with greater than 50 percent minority populations and with female head of household populations with 11 percent or greater of the census blocks' total population. An additional 9 residences accepting Section 8 housing vouchers in the Hurley Ranch subdivision would be affected by this option.

Western Option

The W101 Alternative Western Option would acquire an additional 171 single-family residences in the Country Place subdivision. This subdivision consists of census blocks with greater than 50 percent minority populations. An additional 3 residences using Section 8 housing vouchers in the Country Place subdivision would be affected.

No residential displacements in Tolleson would result from the proposed action. As a result of the implementation of the W101 Alternative and associated options, commercial businesses in Tolleson would be affected. The economic impact of business closures and the resultant number of affected employees are discussed in the *Economic Impacts Report*. Project-related disruptions in Tolleson would occur chiefly in industrial areas, would not adversely affect protected populations in residential neighborhoods, and would not cut off access or restrict the mobility of protected populations. Access to the high school would not be impaired because of the use of grade-separated roadways.

Eastern Section

E1 Alternative

The E1 Alternative would result in approximately 121 residential displacements. Two of the ten census blocks with residential displacements contain minority populations. Two affected census blocks contain female head of household populations greater than the threshold value, one of which is also identified as a minority census block. One census block with residential impacts contains greater than the threshold for elderly populations. Residential displacements would occur in one census block group containing protected populations of people with disabilities.

The E1 Alternative's general alignment along the Community border would create a partition between the Community and the Phoenix metropolitan area along the northern portion of the Community from approximately 51st Avenue to I-10 (Maricopa Freeway). Without the proposed freeway, however, that partition already exists for much of the action alternative's length as a result of several factors including land ownership (Community versus private and public—i.e., Phoenix South Mountain Park/Preserve), fencing, drainage features, Pecos Road, and development patterns.

No-Action Alternative

It is anticipated that socioeconomic characteristics under the No-Action Alternative would be similar to the existing conditions. As discussed previously, rural land uses are converting to urban uses throughout the Study Area. These changes have been planned, and the agricultural land use is not shown on any of the affected municipalities' future land use maps.

Congestion would increase with the No-Action Alternative, and accessibility to employment and housing may be impeded by increased congestion. As congestion on surface streets would increase, all communities would be affected equally. The No-Action Alternative would result in no property acquisitions and no household relocations. Therefore, Title VI and environmental justice populations would not be affected by R/W acquisitions.

Conclusion

The proposed action would generate benefits for the Study Area in general by reducing traffic congestion, enhancing accessibility, and supporting local economic development plans. The proposed project is part of the RTP, approved by Maricopa County voters on November 2, 2004. In addition to freeways/highways, the RTP included plans for transit and arterial road improvements. Each of the three components (freeways/highways, transit, and arterial roads) was analyzed separately to assess the distribution of benefits of projects included within the RTP. The RTP analysis of plan improvements showed that environmental justice communities benefited from the RTP at approximately the same level or, in some cases, at a higher level than the areas not considered environmental justice communities.

The SMTC is an integral component of SR 202L, which is planned to connect the eastern, southeastern, and southwestern regions of the Phoenix metropolitan area. Completion of the roadway would provide improved access for residents of the area to key employment areas to the north along the I-10 corridor and central Phoenix, as well as provide improved regional mobility. Generally, the implementation of the proposed project would result in enhanced access to regional employment centers for most of the Study Area's population.

The proposed action would reduce congestion and improve the area transportation system. The improvements would be especially important given the projected growth and development occurring in the southwestern Phoenix metropolitan area. Along with the general population, Title VI and environmental justice portions of the population would benefit from these improvements. Accessibility to regional public and private facilities and services would be improved.

All of the action alternatives and options would reduce anticipated future traffic volumes along the local arterial street network, thereby improving road conditions for pedestrian and bicycles over a No-Action condition. Because the action alternatives and options incorporate TIs at all major arterial street crossings, east–west mobility throughout the area would not be reduced. In addition, the proposed project would include another all-weather crossing of the Salt River, improving north–south mobility in the area.

There would be no residential relocations in Tolleson as a result of implementation of the proposed project. However, as a result of the implementation of the W101 Alternative and associated options, businesses in Tolleson would be affected. The economic impact of business closures and the resultant number of affected employees are discussed in the *Economic Impacts Report*.

Households using Section 8 vouchers would be affected by all of the Western Section action alternatives. Housing units that participate in the program are not limited, except by the availability of vouchers; therefore, the availability of replacement housing is not easily quantified. Based on discussions with the City of Phoenix Housing Department, there is currently replacement housing in the area.

In all instances of required relocations, ADOT would implement a R/W acquisition program in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91:646) and the Uniform Relocation Act Amendments of 1987 (Public Law 100-17). Private property owners would be compensated at fair market value for land that is acquired for project R/W in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended in 1987. The landowner required to move to a replacement site may be eligible for relocation benefits in accordance with the Act. These payments may include a housing supplement, moving costs, reestablishment costs, incidental expenses, and closing costs. Because of planned and new housing construction in progress throughout the Study Area, replacement housing and rental properties are generally available.

All of the action alternatives and options would result in an adverse effect on Title VI and environmental justice populations, but impacts would not be disproportionately high after comparing the impacts and benefits to all populations in the Study Area. An analysis of the proposed project demonstrates that the benefits of the SMTC, such as the improved regional mobility and reduced local arterial street traffic, accrue to both environmental justice and non-environmental justice communities. Additionally, low-income and minority populations would not be disproportionately affected and would be beneficiaries of the transportation improvements proposed by the action alternatives and options.

It is expected that all residents of the area would experience short-term impacts such as noise, vibration, dust, and temporary street restrictions and closures during construction. However, these impacts would be no greater than those experienced by non-environmental justice populations who also reside in the Study Area. In addition, all members of the general population would share project-generated benefits on an equal basis.

Environmental Consequences

Therefore, because the proposed action would not cause disproportionately high and adverse effects on any minority or low-income populations, no environmental justice or Title VI mitigation is warranted.

5. Mitigation

While no disproportionate adverse impacts to populations afforded protection under Title VI of the Civil Rights Act and Executive Order 12898 are anticipated, the following describes potential mitigation measures for ADOT to consider as future commitments to be implemented as part of the project to avoid, reduce, or otherwise mitigate environmental impacts affecting all populations in the Study Area. The discussion of these measures in this report does not obligate ADOT to these specific measures. ADOT, along with FHWA, may choose to modify, delete, or add measures to mitigate impacts. Results would be made available in the Draft EIS.

The project could generate short-term impacts such as noise, vibration, dust, and temporary street restrictions and closures during construction for which mitigation measures have been identified in the Air Quality and Noise Reports.

An acquisition and relocation assistance program would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49 Code of Federal Regulations § 24), which identifies the process, procedures, and time frame for R/W acquisition and relocation of affected residents or businesses. Relocation resources would be available to all residential and business relocatees, without discrimination. All replacement housing would be decent, safe, and sanitary. Replacement housing is available in the general area; last resort housing would, however, be provided if it were found that sufficient, comparable housing were not available. If necessary, specific relocation plans would be developed to assist displaced residents of mobile homes in finding alternative locations for their mobile homes. All acquisitions and relocations resulting from the proposed alternative would comply with Title VI of the Civil Rights Act of 1964 and with 49 Code of Federal Regulations § 24.

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Appendix A

Census Blocks with Minority Populations Where Action Alternatives Cause Impacts or Displacements

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040130822041003	72	73.6				x	x				
040130822041004	198	77.8				x	x				
040130822041005	140	87.1				x	x				
040130822041006	71	87.3				x	x				
040130822041007	85	84.7				x	x				
040130822041008	80	91.3				x	x				
040130822041013	116	75.9				x	x				
040130822041014	52	84.6				x	x				
040130822041015	80	78.8				x	x				
040130822041016	71	88.7				x	x				
040130822041020	327	80.7				x	x				
040130822041021	61	77.0				x	x				
040130822041023	141	85.1				x	x				
040130822042028	20	100.0				x	x				
040130822042032	2	100.0				x	x				
040130822051002	102	83.3						x	x	x	x
040130822051003	68	66.2						x	x	x	x

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040130822051004	148	85.8						x	x	x	x
040130822051005	94	81.9						x	x		
040130822051006	210	75.7						x	x	x	x
040130822051007	131	80.9						x	x		
040130822051008	121	82.6						x	x	x	x
040130822051009	141	81.6						x	x	x	x
040130822051010	122	77.9						x	x	x	x
040130822051011	90	83.3						x	x	x	x
040130822051012	147	85.0						x	x	x	x
040130822051019	112	91.1						x	x	x	x
040130822052014	314	67.2								x	x
040130822052016	53	75.5								x	x
040130822052017	141	81.6								x	x
040130822052022	57	87.7						x	x	x	x
040130822052023	65	78.5								x	x
040130822052030	118	86.4								x	x
040130822052032	50	70.0								x	x
040130822052033	19	84.2								x	x

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040130822061001	42	88.1								x	x
040130822061002	114	86.8								x	x
040130822061003	84	88.1						x	x	x	x
040130822061004	95	83.2								x	x
040130822061005	30	73.3						x	x	x	x
040130822061006	43	95.3						x	x	x	x
040130822061007	75	76.0						x	x	x	x
040130822061008	36	83.3						x	x		
040130822061010	166	66.9						x	x	x	x
040130822061012	86	91.9						x	x		
040130822061013	447	77.4						x	x	x	x
040130822061015	107	96.3						x	x		
040130822061016	67	79.1								x	x
040130822061018	155	90.3								x	x
040130822061019	15	80.0						x	x		
040130822061020	157	92.4								x	x
040130822061021	38	71.1								x	x
040130822061022	117	92.3								x	x

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040130822061025	133	82.7								x	x
040130822061026	71	80.3						x	x		
040130822061027	12	100.0						x	x		
040130822061028	33	93.9								x	x
040130822061029	108	77.8								x	x
040130822061030	49	73.5								x	x
040130822061031	89	98.9								x	x
040130822061033	39	76.9						x	x		
040130822061038	5	100.0						x	x	x	x
040130822061059	134	71.6								x	x
040130830002019	418	87.1				x	x	x	x	x	x
040131125052002	371	91.4		x							
040131125052003	274	85.8		x							
040131125052006	59	89.8		x							
040131125053001	31	87.1		x							
040131125053012	96	94.8		x							
040131125053016	85	95.3		x							
040131125053017	80	90.0		x							

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040131125054001	518	95.8		x							
040131125054002	2	100.0		x							
040131125081001	139	92.8			x						
040131125081003	177	84.2			x						
040131125081005	149	94.6			x						
040131125081006	279	92.8			x						
040131125081008	64	90.6			x						
040131125081009	421	68.9			x						
040131125081019	155	88.4			x						
040131125081020	4	75.0			x						
040131125081021	133	93.2			x						
040131125081022	156	89.7			x						
040131125093000	1029	93.3			x						
040131125102000	46	80.4			x						
040131125102001	39	53.8			x						
040131125102035	8	100.0			x						
040131125102047	110	86.4			x						
040131125111042	98	67.3			x						

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040131125111043	142	72.5			x						
040131125111052	3	100.0				x	x	x	x	x	x
040131125111054	4	75.0				x	x	x	x	x	x
040131125111064	6	50.0			x						
040131125112000	26	53.8			x						
040131125112001	223	88.8			x						
040131125112002	184	94.6			x						
040131125112003	33	93.9			x						
040131125112005	65	81.5			x						
040131125112008	157	83.4			x						
040131125112011	18	100.0			x						
040131125112012	237	88.6			x						
040131125112016	83	89.2			x						
040131125112017	175	79.4			x						
040131125112025	11	72.7			x						
040131125112026	60	90.0			x						
040131125112027	99	77.8			x						
040131125112028	227	85.0			x						

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040131125112034	38	86.8			x						
040131125112038	87	81.6			x						
040131125112039	32	59.4			x						
040131125112040	79	72.2			x						
040131125121015	590	93.7		x							
040131125121016	813	94.1		x							
040131125132002	7	71.4		x							
040131125132009	7	100.0		x							
040131125133021	141	68.1		x							
040131125133024	112	82.1		x							
040131125134001	641	84.7		x							
040131125134002	66	93.9		x							
040131125134003	107	85.0		x							
040131125134004	49	83.7		x							
040131125134006	57	86.0		x							
040131125134007	88	89.8		x							
040131125134008	112	86.6		x							
040131125134009	157	94.9		x							

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040131125134010	147	78.2		x							
040131125134011	95	90.5		x							
040131125134012	69	91.3		x							
040131125134013	112	86.6		x							
040131125134016	24	79.2		x							
040131125141007	1	100.0		x							
040131125141035	3	100.0		x							
040131125142043	269	71.4		x							
040131166031006	58	84.5			x						
040131166031007	93	57.0			x						
040131166031008	102	72.5			x						
040131166031009	163	83.4			x						
040131166031010	46	82.6			x	x	x	x	x	x	x
040131166031016	118	69.5			x	x	x	x	x	x	x
040131166031017	142	62.7			x						
040131166031030	92	64.1			x	x	x	x	x	x	x
040131166031031	94	56.4			x	x	x	x	x	x	x
040131166031036	62	71.0			x	x	x	x	x	x	x

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040131166031037	22	54.5			x	x	x	x	x	x	x
040131166032001	190	59.5		x							
040131166032007	8	87.5			x						
040131166032008	324	75.3			x						
040131166032026	141	70.9			x						
040131166032027	96	68.8			x						
040131166032028	97	75.3			x						
040131166032029	45	68.9			x						
040131166032037	13	100.0		x							
040131166032053	30	70.0		x							
040131166041014	190	64.7		x							
040131166081002	88	60.2			x	x	x	x	x	x	x
040131166081007	301	71.8			x	x	x	x	x	x	x
040131166081008	109	78.9			x	x	x	x	x	x	x
040131166081009	254	64.2			x	x	x	x	x	x	x
040131166081012	73	82.2			x	x	x	x	x	x	x
040131166081013	73	60.3			x	x	x	x	x	x	x
040131166081015	115	57.4			x	x	x	x	x	x	x

Table A-1. Census Blocks with Minority Populations Equal to or Greater than 50 Percent Where Action Alternatives Cause Impacts or Residential Displacements

Census Block	Total Population	Minority Percentage	E1	W59	W71	W101WPR	W101WFR	W101CPR	W101CFR	W101EPR	W101EFR
040131166081016	64	59.4			x	x	x	x	x	x	x
040131166081017	101	61.4			x	x	x	x	x	x	x
040131166081018	45	73.3			x	x	x	x	x	x	x
040131166081019	53	66.0			x	x	x	x	x	x	x
040131166081020	40	60.0			x	x	x	x	x	x	x
040131166081024	42	69.0			x	x	x	x	x	x	x
040131166082020	2	100.0		x							
040131166082028	12	66.7		x							
040131166082031	10	70.0		x	x	x	x	x	x	x	x
040131166082040	7	71.4		x	x	x	x	x	x	x	x
040131166092023	10	90.0		x	x	x	x	x	x	x	x
040131166112059	2	100.0	x								
040131166112079	26	88.5	x								
040131166112089	26	80.8	x								
040131167142013	62	62.9	x								
040131167301003	72	56.9	x								
040139410001016	22	95.5			x	x	x	x	x	x	x