TITLE VI AND ENVIRONMENTAL JUSTICE

The U.S. Environmental Protection Agency (EPA) and FHWA define environmental justice as "fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations, and policies." Environmental justice principles and procedures are followed to improve all levels of transportation decision making. Title VI prohibits discrimination on the basis of race, color, or national origin. The 1994 Executive Order 12898 on environmental justice addresses minority and low-income populations. The rights of women, the elderly, and the disabled are protected under related statutes. This Presidential Executive Order and other related statutes fall under the umbrella of Title VI. The U.S. Department of Transportation Order 5610.2(a) requires that environmental justice principles be considered in all the Department's programs, policies, and activities.

Three fundamental environmental justice principles apply to the transportation project development process:

- ➤ to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations
- to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process
- ➤ to prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and lowincome populations

Effective transportation decision making depends on understanding and properly addressing the unique needs of different socioeconomic groups. Properly implemented, environmental justice principles and procedures improve all levels of transportation decision making. The approach will:

- ➤ make better transportation decisions that meet the needs of all people
- design transportation facilities that fit more harmoniously into neighborhoods

- provide opportunities for neighborhood input in the process, including identifying potential effects and mitigation measures in consultation with affected neighborhoods and improving accessibility to public meetings, official documents, and notices to affected neighborhoods
- ➤ improve data collection, monitoring, and analysis tools that assess the needs of, and analyze the potential impacts on, minority and low-income populations
- avoid disproportionately high and adverse impacts on minority and low-income populations
- minimize and/or mitigate unavoidable impacts by identifying concerns early in the planning phase and providing offsetting initiatives and enhancement measures to benefit affected neighborhoods

The minority groups addressed by Title VI are:

- Black (a person having origins in any of the black racial groups of Africa)
- Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race)
- Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands)
- American Indian and Alaska Native (a person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition)
- some other race (a person who does not identify with one of the previously listed four races) or persons of more than one race

Environmental justice populations include concentrations of low-income, elderly, disabled, and female head of household populations. A member of a low-income population is defined as "a person whose household income is at or below the Department of Health and Human Services poverty guidelines." The U.S. Department of Health and Human Services poverty guidelines state that the poverty income level for a family of four in 2009 was \$22,050. A geographic area is considered to have a minority or low-income population if more than 50 percent of its population meets the above minority or low-income definitions or if its minority or low-income population percentage is meaningfully greater in the affected area than is that for the general population.

DATA ASSUMPTIONS

To establish whether the proposed action would disproportionately affect environmental justice populations, a basis for comparison was established. Because the proposed action would affect multiple jurisdictions, all within Maricopa County, the county was identified as the area of comparison.

Environmental justice populations were identified as those populations in census geographies where the percentage of the environmental justice population is known to exceed the percentage of an "identifiable group," in accordance with FHWA guidance. This study used a lower threshold for the identifiable group by determining the lesser of either 1½ times the area 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 2010 U.S. Census, with the exception of disabled, which is based on data from the 2000 U.S. Census.

To focus on potentially affected neighborhoods, the smallest unit of analysis for each of the studied populations was identified. Census block-level data were used to identify minority, elderly, and female head of household populations. Census block group-level data were used to identify low-income and disabled populations.

AFFECTED ENVIRONMENT Affected Populations

The percentages of Title VI and environmental justice populations for the Study Area, affected jurisdictions, Maricopa County, and the state of Arizona are shown in Table 4-10.

4-29



Data in Table 4-10 illustrate the social diversity in the Study Area. Compared with Maricopa County as a whole, the Study Area has a greater percentage of all of the sensitive populations discussed, except for disabled and elderly populations. The portion of minorities in the Study Area is 68.1 percent, 64 percent greater than the county percentage of 41.4 percent. The percentage of the Study Area population that is low-income (13.9 percent) is 10 percent larger than the percentage for the county (15.3 percent). The percentage of female heads of household with children (11.6 percent) is 59 percent higher than that of the county (7.3 percent). Figures 4-10 through 4-14 illustrate the geographic distribution in the Study Area of Title VI and environmental justice populations.

Census blocks containing a percentage 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 ¹/₂ mile of I-10 (Papago Freeway) and within the Community. While minority populations are widely distributed in the Study Area, two communities, Santa Maria and Tolleson, bear further discussion (see Figure 4-8, on page 4-22, for community descriptions).

- ► Census blocks that make up the Santa Maria community have populations of between 76 and 100 percent minorities, 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)—almost twice the corresponding figure for Maricopa County (37 percent) (U.S. Census Bureau 2010c).
- ➤ Overall, the city of Tolleson is 89 percent minority. In this largely Hispanic community (80 percent), Spanish is spoken in 70 percent of households,

		-											
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			
Title VI													
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	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	0.2	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			
Environmental Justice													
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			
ote:Evaluations for all cities and Maricopa	County were cal	culated by summ	ing all the tracts w	vith centroids in	each municipal r	lanning area and	then calculating	the percentage					

Table 4-10 Title VI and Environmental Justice Population Percentages, Affected Study Area Jurisdictions

Note: Evaluations for all cities and Maricopa County were calculated by summing all the tracts with centroids in each municipal planning area and then calculating the percentage. Sources: State, county, city, tribal, and Study Area figures are based on data from the U.S. Census Bureau (2010), with the exception of disabled, which is based on data from U.S Census Bureau (2000), and low-income, 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 U.S. Census, American Community Survey: Poverty Status in the Past 12 Months

^c based on U.S. Census 2000: Civilian Noninstitutionalized Persons Age of 5 and Over with Sensory, Physical, Mental, and/or Self-care Disabilities

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

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

compared with Maricopa County, where 21 percent of households speak Spanish in the home (American Community Survey 2007–2011).

Low-income populations are less widely distributed in the Study Area than minority populations. 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 (Papago Freeway), east of 83rd Avenue. Many factors contribute to this concentration of low-income households, not the least of which is the availability of affordable housing in 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. Most of the elementary school districts in the Western Section of the Study Area reported in 2009 that most students are eligible for free lunch, an indicator of lower incomes (the Arizona Department of Education National School Lunch Program determines eligibility for

free lunches). Additionally, the U.S. Census Bureau's Small Area Income and Poverty Estimates (2009) for school districts was considered.

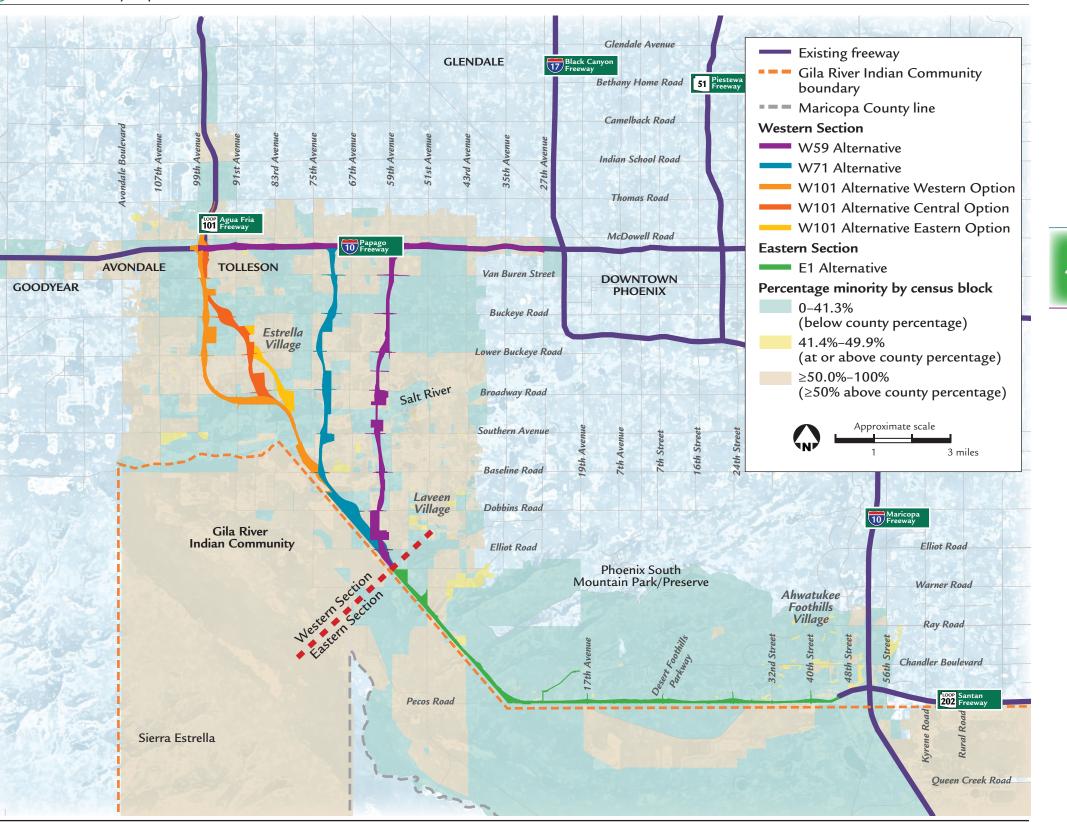
Existing Trends Affecting Populations

The rural character of the Western Section of the Study Area is changing. Low-density residential and agricultural land uses are being supplanted by mediumdensity residential subdivisions. This planned change in land use presents challenges to minority and low-income populations:

- ► Agricultural uses have provided jobs for many minority farm workers.
- ➤ The growth is resulting in increased land values, making homes less affordable.

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 prices also increased, although not as much during this period. The U.S. Department of Housing and Urban Development (HUD) reported that fair market rents for the Phoenix metropolitan area increased by 31 percent between 2000 and 2011 (HUD 2011).

Because of the greater percentage of low-income and minority populations in the Study Area relative to Maricopa County, local school districts, social outreach agencies, and aid organizations in the area were contacted to determine the social services provided to the area and the effects a major transportation corridor in the area might have. Social service agencies, such as shelters for the homeless, addiction treatment and recovery centers, soup kitchens, and public schools providing free meals, reported that most clients arrive in cars or by taxi or bus, or, in the case of low-income children receiving free meals at school, by school bus.



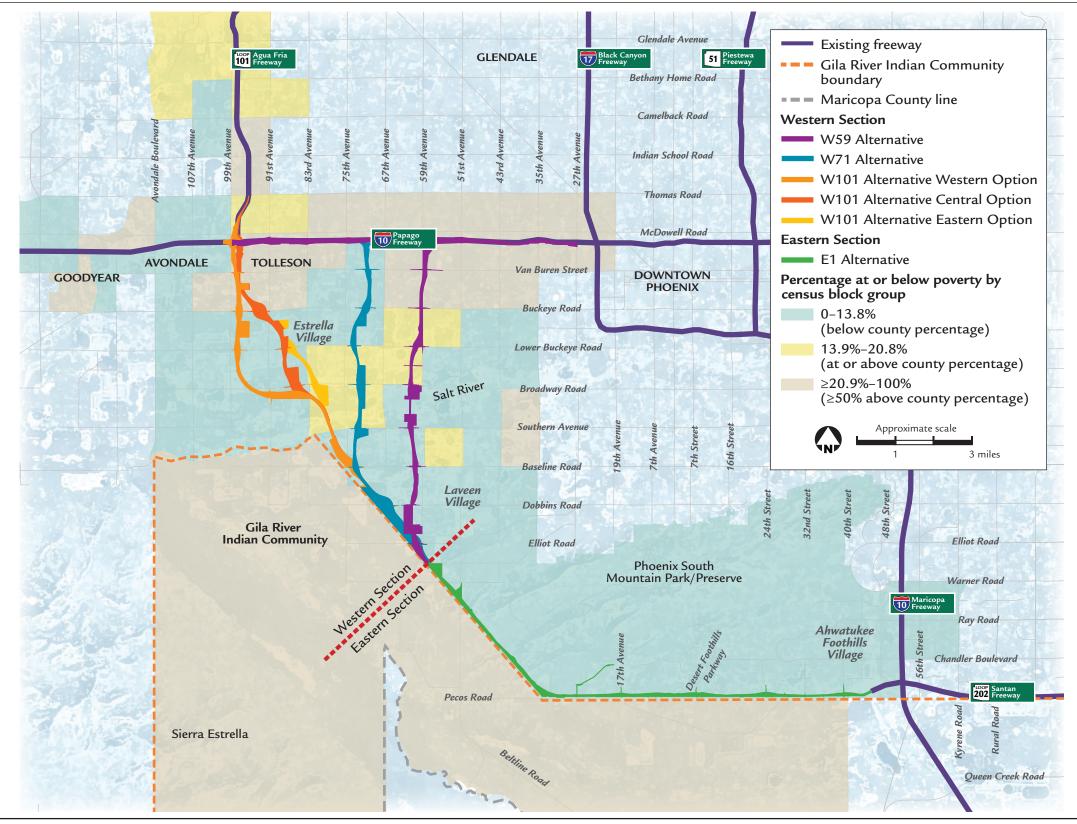
Minority populations, as identified through the use of census data, are prevalent throughout much of the Study Area. The U.S. Census Bureau uses geographic areas that do not correspond with the boundaries of Phoenix South Mountain Park/Preserve (SMPP). While the map colors may suggest that people live in SMPP, in fact, the data are depicting adjacent areas.

Figure 4-10 Minority Populations Distribution

Engaging all populations in the EIS process for the proposed action

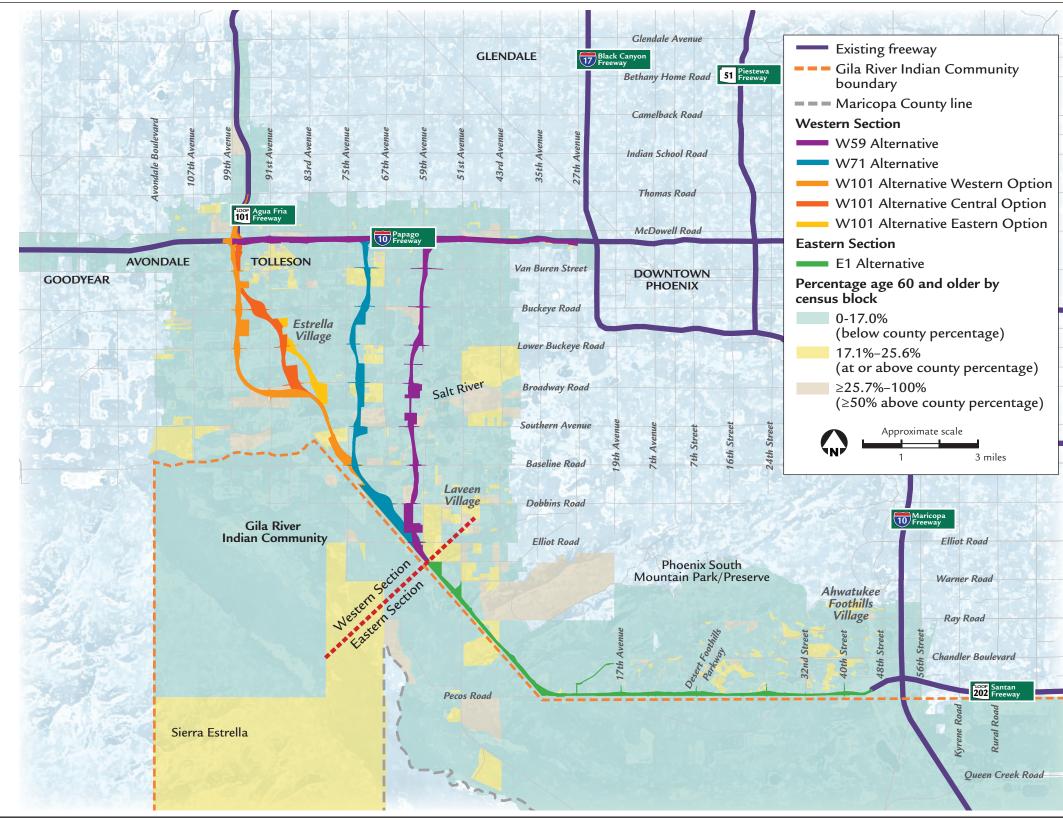
Public scoping is an integral part of identifying and analyzing Title VI and environmental justice impacts. Throughout the EIS process, early and continued communication with potentially affected neighborhoods ensured that neighborhood impacts would be identified and persons would not be overlooked or excluded from the process. Title VI and environmental justice concerns have been addressed continuously since the start of the EIS process for the proposed action. Specific strategies to ensure participation by the Hispanic, Native American, and low-income populations were established at the outset. Specific activities to engage these populations in the process included multiple-language newsletters (Spanish and Native American), other printed materials available in Spanish, the availability of Spanish translators and team members at public meetings to facilitate comments, and direct and ongoing communication with Community members and tribal leaders. The SMCAT, with representation of minorities and both sexes, was convened early and met continuously through the completion of the impact analyses to provide input and guidance on the process. Chapter 2, Gila River Indian Community Coordination, and Chapter 6, Comments and Coordination, discuss specifics regarding the extent of engagement of all affected populations in the process.

Figure 4-11 Low-income Populations Distribution



Low-income populations, as identified through the use of census block groups, are prevalent throughout much of the northern and northwestern portions of the Study Area. The U.S. Census Bureau uses geographic areas that do not correspond with the boundaries of Phoenix South Mountain Park/Preserve (SMPP). While the map colors may suggest that people live in SMPP, in fact, the data are depicting adjacent areas.





The majority of population segments in the Study Area fall below the overall county percentage of populations of people 65 years old and older. The U.S. Census Bureau uses geographic areas that do not correspond with the boundaries of Phoenix South Mountain Park/Preserve (SMPP). While the map colors may suggest that people live in SMPP, in fact, the data are depicting adjacent areas.



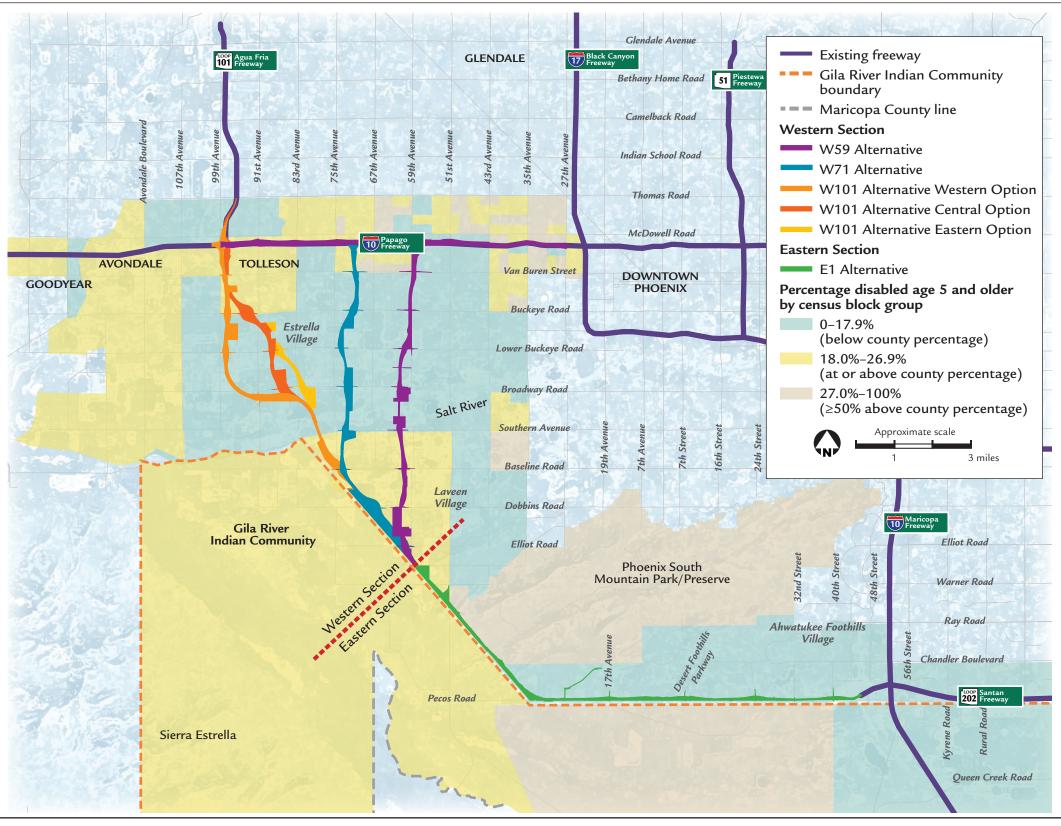


Figure 4-13 Disabled Populations Distribution

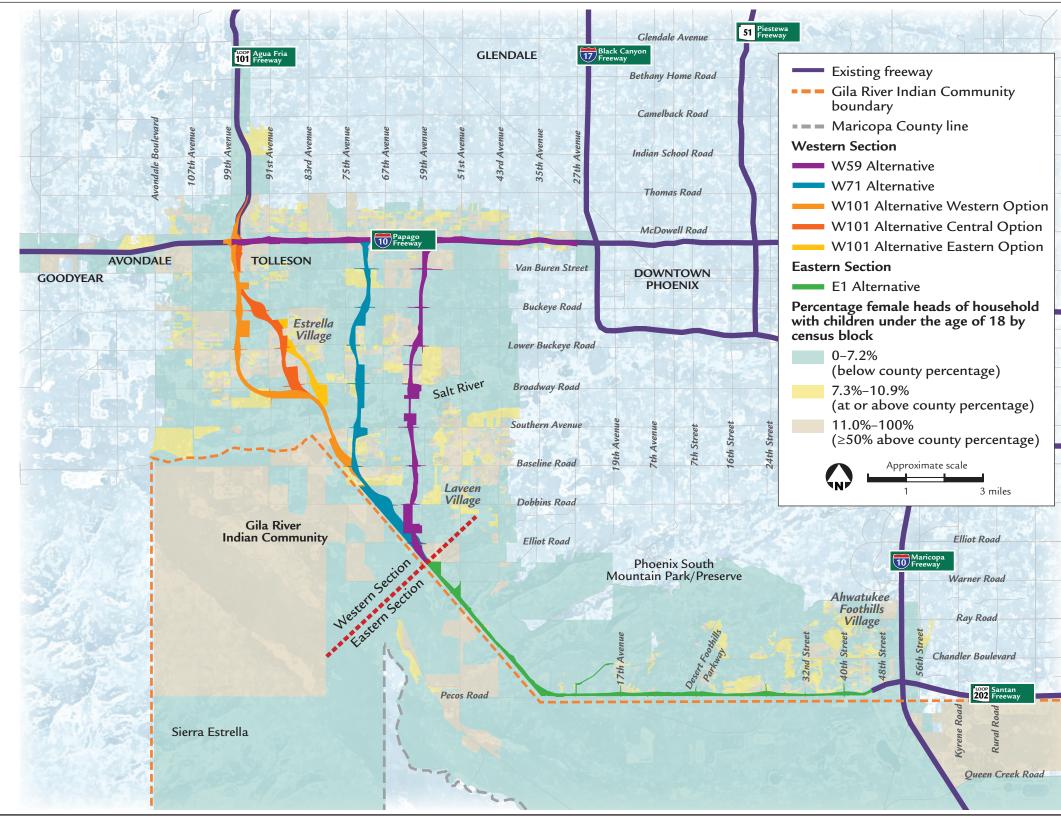


Figure 4-14 Female Heads of Household Populations Distribution

Populations with comparatively high percentages of female heads of household are found throughout the Study Area. The U.S. Census Bureau uses geographic areas that do not correspond with the boundaries of Phoenix South Mountain Park/Preserve (SMPP). While the map colors may suggest that people live in SMPP, in fact, the data are depicting adjacent areas.







ENVIRONMENTAL CONSEQUENCES

The environmental justice analysis focused on areas where there would be adverse environmental impacts, which includes all areas within the R/W footprint. Populations within census blocks or census block groups that would be affected by the action alternatives are shown in Table 4-11. This analysis identified environmental justice populations as those census blocks or block groups where the percentage of these groups is equal to or greater than 50 percent or 150 percent of the county percentage, whichever is less (in the case of minorities, the threshold is equal to or greater than 50 percent).

All action alternatives and options would affect residences using Section 8 housing vouchers. The HUD Section 8 housing assistance program is a rent subsidy

 Table 4-11
 Protected Populations Affected by Action Alternatives

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).

Specific impacts are described under the action alternatives, Western Section and Eastern Section. All action alternatives and options would affect census blocks with minority populations greater than 50 percent because of displacements and relocations associated with the additional R/W needs. Replacement housing policy and guidance are addressed in the section, Displacements and Relocations, beginning on page 4-39.

All action alternatives would entail construction impacts that would affect all populations-environmental justice and otherwise. Such impacts would be temporary and would not cause undue hardship on any one population.

Action Alternatives, Western Section W59 (Preferred) Alternative

	Western Section					Eastern Section			
Population	W59	W71	W101 Western Option	W101 Central Option	W101 Eastern Option	E1			
Census Block-level Data									
Census blocks affected	99	104	105	115	131–132	52			
With no population ^a	53	27	55	59-60	59-60	23			
With impacts	12	56	37	44	52-53	10			
With minority populations ≥50% ^b	9	51	32	39	47	2			
With elderly populations ≥25.7% ^c	2	0	1	0	0	1			
With female head of household populations ≥11.0% ^d	6	22	14	23	24	2			
Census Block Group-level Data									
2000 Census block groups affected	5	5	7–9	9	9	15			
With impacts	4	5	2	2	3	5			
With disabled ≥27% ^e	1	1	0	0	0	1			
Census Tract-level Data									
2010 Census tracts affected	9	7	10–11	11	11	10			
With impacts	5	5	3	5	6	4			
With low-income ≥20.9% ^f	2	0	0	0	0	0			

Sources: State, county, city, tribal, and Study Area figures are based on data from the U.S. Census Bureau (2010), with the exception of disabled, which is based on data from U.S Census Bureau (2000), and low-income 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

Figures 4-10 through 4-14 support the findings presented in the discussion of impacts. Table 4-12 in the section, Displacements and Relocations, also supports the discussion.

Nine of the 12 census blocks with residential displacements under the W59 Alternative contain 50 percent or greater minority populations. Of these 9 census blocks, impacts on 1 are common to all of the Western Section action alternatives. Six of the

9 minority population census blocks also contain a percentage of female head of household populations above the established threshold.

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

In addition to the single-family residential displacements, the W59 Alternative would displace two apartment complexes totaling up to 680 units. These apartments fall within a census block where greater than 50 percent of the population is minority. Most of the apartment units have "market-rate" rents; however, one apartment complex 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 with residential displacements that would be caused by the W71 Alternative, 51 contain minority populations of 50 percent or greater than the census blocks' total population. Twenty-two of these 56 blocks are also identified as having a percentage of female head of household populations above the established threshold.

Nearly half of the 705 single-family homes that would be affected by the W71 Alternative are 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) reported 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 Alternativeare homes within the Sienna Vista and Windsong and Estrella Village subdivisions. These subdivisions are comprised largely of census blocks with greater than 50 percent minority populations and female head of households with 11 percent or greater of the census blocks' total population.

The W71 Alternative would purposefully avoid affecting the community of Santa Maria and Santa Maria Middle School, located along Lower Buckeye Road.

None of the five census tracts with residential displacements under the W71 Alternative would affect low-income populations. A census block group containing a disabled population would have 17 singlefamily 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 on census blocks with minority populations representing 50 percent or greater of the census blocks' total population. A number of these census blocks are common to all three options, while the W101 Alternative Eastern Option would affect the most census blocks with minority populations, and the Western Option would affect the fewest census blocks with minority populations. The options of the W101 Alternative would also result in varying effects on census blocks with female head of household populations with 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.

The W101 Alternative Western Options would affect one census block with elderly populations greater than 150 percent of the County percentage, located within the Country Place subdivision.

Western Option

The W101 Alternative Western Option would displace an additional 171 single-family homes 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 would be affected.

Central Option

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

Eastern Option

The W101 Alternative Eastern Option would displace an additional 430 single-family homes in the 91st Avenue and Lower Buckeye Road, Ryland at Heritage Point, 83rd Avenue and Lower Buckeye Road, and Hurley Ranch subdivisions, consisting almost entirely of census blocks with greater than 50 percent minority populations and 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 reported that a majority of students are minorities and 16 percent are low-income. An additional 11 residences using Section 8 housing vouchers would be affected by this option.

No residential displacements would occur in Tolleson as a result of the proposed action. Project-related disruptions in Tolleson would chiefly occur in industrial areas and would not adversely affect environmental justice populations in residential neighborhoods. The proposed action would not cut off access or restrict the mobility of environmental justice populations. Access to the high school would not be impaired.



All alternatives (including the No-Action Alternative) would have the potential to create adverse impacts on, as well as benefits for, all population segments in the Study Area and its surroundings. Impacts include community disruption and fragmentation; relocations and displacements; and air, noise, and visual quality intrusions from the proposed action. These impacts are directly addressed in the sections, Land Use, Social Conditions, Displacements and Relocations, Economic Impacts, Air Quality, Noise, Cultural Resources, Visual Resources, Prime and Unique Farmlands, and Temporary Construction Impacts, found elsewhere in this chapter. In addressing environmental justice, it is important to understand whether the proposed action would have disproportionately high and adverse impacts on the protected population.

Action Alternative, Eastern Section

E1 (Preferred) Alternative

The E1 Alternative would result in 121 residential displacements. Two of the ten census blocks with residential displacements contain minority populations. Two affected census blocks contain female heads of household populations greater than the threshold value; one of these census blocks is also identified as a minority block. One census block with residential impacts contains greater than the threshold for age 60 and over populations. Residential displacements would occur in one census block group containing an environmental justice population of people with disabilities. Environmental justice concerns with regard to the Community are presented in the section, Context of Coordination in Relation to Environmental Justice Executive Order, on page 2-11.

No-Action Alternative

Socioeconomic conditions under the No-Action Alternative would be similar to existing conditions. As discussed previously, rural land uses are being converted to urban uses throughout the Western Section of the Study Area. These changes have been planned; agricultural land uses are not shown on any of the Study Area's affected municipalities' future land use maps.

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

MITIGATION

No undue hardship or disproportionate adverse impacts on populations afforded protection under Title VI, Executive Order 12898, the U.S. Department of Transportation Order 5610.2(a), and other related statutes would occur and, therefore, no mitigation would be required. Mitigation measures as presented in the sections, Land Use (beginning on page 4-3), Social Conditions (beginning on page 4-20), Displacements and Relocations (beginning on page 4-39), Economic Impacts (beginning on page 4-46), Air Quality (beginning on page 4-58), Noise (beginning on page 4-80), Cultural Resources (beginning on page 4-128), Prime and Unique Farmlands (beginning on page 4-149), Visual Resources (beginning on page 4-155), and Temporary Construction Impacts (beginning on page 4-161), would result in reduction, minimization, and avoidance of impacts as well as overall benefits to all populations in the Study Area.

CONCLUSIONS

ADOT and FHWA have engaged all population segments to ensure access to the EIS study process. Assisted by this involvement, analytical results indicate the proposed action would benefit all populations in the Study Area in general by reducing traffic congestion, enhancing accessibility, and supporting local economic development plans

- ► As part of the approved RTP—which includes planned improvements to the Regional Freeway and Highway System, arterial street network, transit, and other aspects of the region's freeway system (see the text box, What is the Regional Transportation Plan?, on page 1-5)—environmental justice populations would benefit from the RTP at approximately the same level or, in some cases, at a higher level than would populations in areas not considered to have environmental justice populations (MAG 2003). In connecting the eastern, southeastern, and southwestern regions of the Phoenix metropolitan area, the proposed action would provide improved access for all area residents to key employment areas to the north, south, and east along the I-10 corridor, and in central Phoenix.
- ➤ The proposed action would reduce congestion and improve the area transportation system. Improvements would be especially important given the projected growth and development in the southwestern Phoenix metropolitan area. Along with

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.

Therefore, because the proposed action would not cause disproportionately high and adverse effects on any environmental justice populations, no environmental justice or Title VI mitigation would be required.

the general population, Title VI and environmental justice populations would benefit from these improvements. Accessibility to regional public and private facilities and services would be improved. Under the No-Action Alternative, accessibility to employment and housing might be impeded by increased congestion.

All action alternatives and options would have an adverse effect on environmental justice populations, primarily during construction, but impacts would be temporary and would not create undue hardship or be disproportionately high compared with projected impacts on all populations in the Study Area. Mitigation presented throughout this chapter (see sidebar on this page for specific topics) would reduce many of the adverse impacts. All populations would benefit from the proposed action's implementation through improved regional mobility and reduced local arterial street traffic.