



Socioeconomic Resources Technical Memorandum

MoPac (State Loop 1) Intersections, Austin District

From North of Slaughter Lane to South of La Crosse Avenue

CSJ: 3136-01-015

Travis County, Texas

June 2015

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

This page intentionally left blank.

TABLE OF CONTENTS

1.0 SOCIOECONOMIC RESOURCES	1
1.1 Regulatory Requirements and Methodology	1
1.2 Affected Environment	3
1.2.1 Historic and Projected Growth.....	3
1.2.2 Race and Ethnicity	4
1.2.3 Household Income	6
1.2.4 Age Groups.....	7
1.2.5 Employment and Economic Conditions	7
1.2.6 Community Facilities	9
1.3 Environmental Consequences	11
2.0 ENVIRONMENTAL JUSTICE	12
2.1 Regulatory Requirements and Methodology	12
2.1.1 Definitions	12
2.2 Affected Environment	13
2.3 Environmental Consequences	15
3.0 LIMITED ENGLISH PROFICIENCY (LEP)	15
3.1 Regulatory Requirements and Methodology	15
3.2 Affected Environment	16
3.3 Environmental Consequences	16
4.0 CONCLUSIONS	17
5.0 REFERENCES	18

LIST OF TABLES

Table 1: Historic Population, Household and Employment Growth.....	3
Table 2: Projected Population and Household Growth	3
Table 3: Race and Ethnicity (2010)	5
Table 4: Household Income (2012 dollars).....	6
Table 5: Age Groups (2010).....	7
Table 6: Employment Characteristics of the Population 16 Years and Older.....	8
Table 7: Businesses at MoPac and Slaughter Lane	9
Table 8: 2014 Poverty Guidelines	13
Table 9: Languages Spoken in the Proposed Project Study Area	16

FIGURES

Figure 1: Socioeconomic Resources Study Area	2
Figure 2: Environmental Justice Populations in the Socioeconomic Resources Study Area	14

This page left intentionally blank.

1.0 SOCIOECONOMIC RESOURCES

This technical memorandum describes the socioeconomic conditions that could be affected by the proposed MoPac Intersections project, which includes intersection improvements at Slaughter Lane and La Crosse Avenue, and a shared use path extending from Slaughter Lane to La Crosse Avenue (CSJ: 3136-01-015). The socioeconomic characteristics analyzed include: historic and projected growth, race and ethnicity, household income, age, employment and economic conditions, community facilities, environmental justice and limited English proficiency.

1.1 REGULATORY REQUIREMENTS AND METHODOLOGY

A socioeconomic resources study area was developed which includes all Census block groups (and the Census blocks within them) located immediately adjacent to the proposed project. The socioeconomic resources study area is predominantly located in the city of Austin, with a portion located in the unincorporated area of Travis County. The Census geography within the study area (**Figure 1**) includes four Census block groups and 160 Census blocks:

- ▶ Census Tract 17.37, Block Group 2, Blocks 2000 to 2072
- ▶ Census Tract 17.40, Block Group 1, Blocks 1000 to 1018
- ▶ Census Tract 17.40, Block Group 2, Blocks 2000 to 2032
- ▶ Census Tract 17.70, Block Group 2, Blocks 2000 to 2034

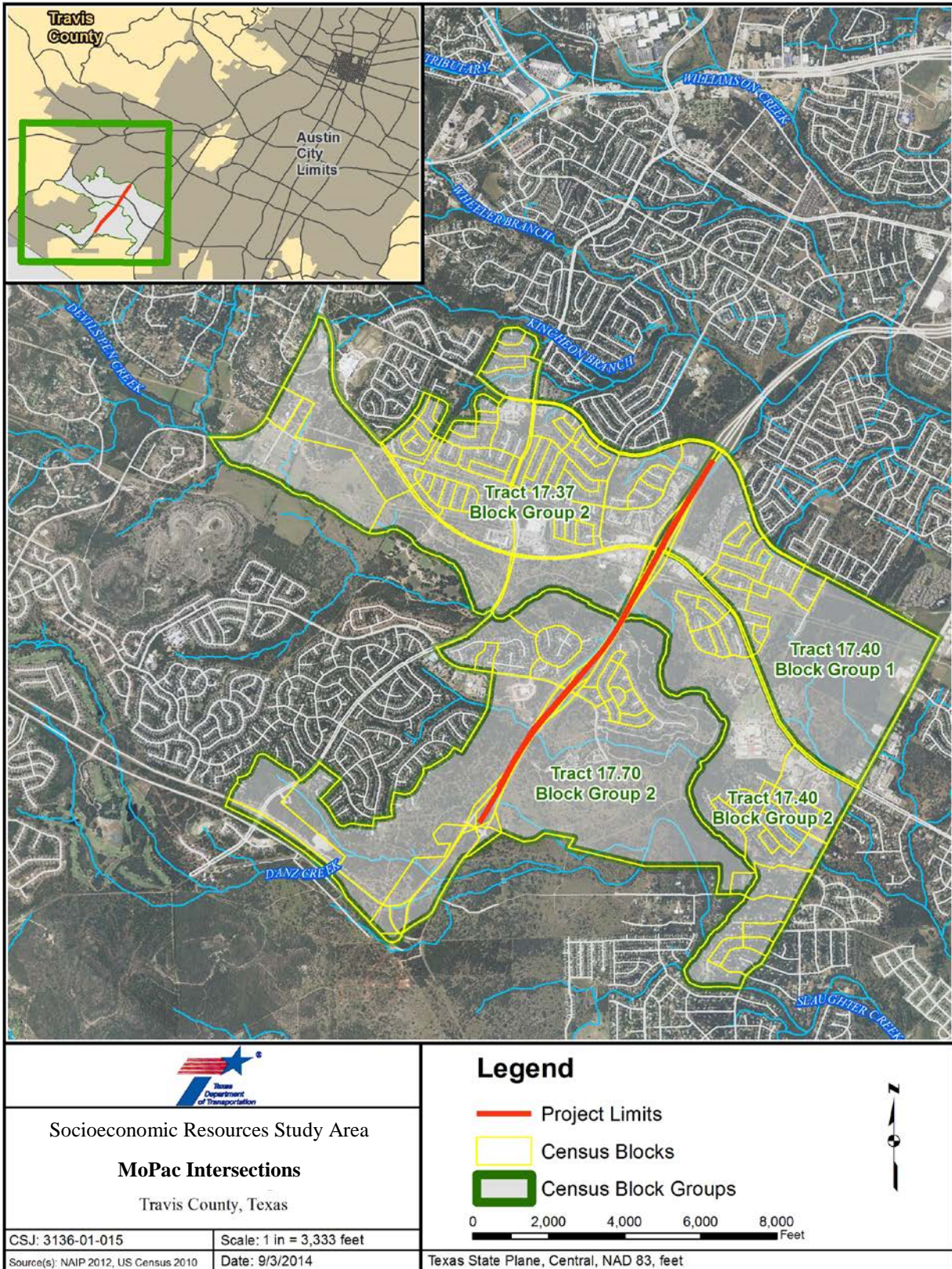


Figure 1: Socioeconomic Resources Study Area

1.2 AFFECTED ENVIRONMENT

1.2.1 Historic and Projected Growth

The city of Austin and Travis County have experienced substantial growth between 1990 and 2010; the population, the number of households, and employment has almost doubled. In this time period, Austin added approximately 325,000 people, 134,000 households, and 206,000 employees (**Table 1**).

Table 1: Historic Population, Household and Employment Growth

Demographic Characteristic		City of Austin	Travis County
1990	Population	465,622	576,407
	Households	192,148	232,861
	Employment	264,516	326,788
2000	Population	656,562	812,280
	Households	265,649	320,766
	Employment	376,704	460,525
2010	Population	790,491	1,024,266
	Households*	325,991	405,406
	Employment*	470,717	589,028
1990-2010 Percent Change	Population	69.8%	77.7%
	Households*	69.7%	74.1%
	Employment*	77.9%	80.2%

Source: U.S. Census Bureau, 1990, 2000, and 2010 Census, Total Population, Total Households; 1990 and 2000 Census, Employment; 2008-2012 American Community, Selected Economic Characteristics.

* Household and Employment data is sourced from the 2008-2012 American Community Survey and therefore represents an estimate of 2012 demographic characteristics.

In 2010, there were over 11,000 people and 4,300 households living in the socioeconomic resources study area. As seen in **Table 2**, projections produced by the Capital Area Metropolitan Planning Organization (CAMPO) identify a 62.7 percent growth in population and a 55.3 percent growth in households within the socioeconomic resources study area by 2035.

Table 2: Projected Population and Household Growth

Demographic Characteristic		Socioeconomic Resources Study Area	City of Austin	Travis County
2010	Population	11,342	790,491	1,024,266
	Households*	4,390	325,991	405,406
2035	Population	18,458	1,326,478	1,555,281
	Households	6,819	619,325	619,325
2010-2035 Percent Change	Population	62.7%	51.8%	51.8%
	Households*	55.3%	63.9%	52.8%

Source: U.S. Census Bureau, 2010 Census, Total Population; 2008-2012 American Community, Selected Economic Characteristics; CAMPO, 2035 Projections.

* Household data is sourced from the 2008-2012 American Community Survey and therefore represents an estimate of 2012 demographic characteristics.

1.2.2 Race and Ethnicity

The population in the socioeconomic resources study area is comprised of a 69 percent non-minority population (white non-Hispanic or non-Latino) (**Table 3**). The remaining 31 percent of the population is comprised of racial and ethnic minorities. The total racial and ethnic composition of the socioeconomic resources study area is 16.9 percent Hispanic and Latino, 9.4 percent Asian, 2.3 percent Black or African American, 0.3 percent American Indian/Alaska Native, 0.1 percent Native Hawaiian and Pacific Islander, 0.4 percent Some Other Race, and 1.6 percent two or more races.

The city of Austin is the more racially and ethnically diverse (51.3 percent minority), than Travis County (49.5 percent minority), and the socioeconomic resources study area (31.0 percent minority).

Table 3: Race and Ethnicity (2010)

Demographic		Socioeconomic Resources Study Area	City of Austin	Travis County
Non-Hispanic/ Non-Latino	Total	9,426 83.1%	512,683 64.9%	681,500 66.5%
	White Only	7,826 69.0%	385,271 48.7%	517,644 50.5%
	Black or African American	265 2.3%	60,760 7.7%	82,805 8.1%
	American Indian and Alaska Native	34 0.3%	1,967 0.2%	2,611 0.3%
	Asian	1,071 9.4%	49,159 6.2%	58,404 5.7%
	Native Hawaiian and Pacific Islander	6 0.1%	401 0.1%	540 0.1%
	Some Other Race	40 0.4%	1,448 0.2%	1,813 0.2%
	Two or More Races	184 1.6%	13,677 1.7%	17,683 1.7%
Hispanic/ Latino	Total	1,916 16.9%	277,707 35.1%	342,766 33.5%
	White Only	1,439 12.7%	154,489 19.5%	192,170 18.8%
	Black or African American	28 0.2%	3,646 0.5%	4,503 0.4%
	American Indian and Alaska Native	24 0.2%	4,934 0.6%	5,944 0.6%
	Asian	9 0.1%	705 0.1%	929 0.1%
	Native Hawaiian and Pacific Islander	0 0.0%	128 0.0%	178 0.0%
	Some Other Race	317 2.8%	100,756 12.7%	122,893 12.0%
	Two or More Races	99 0.9%	13,049 1.7%	16,149 1.6%
Total Minority* Population		3,516 31.0%	405,119 51.3%	506,622 49.5%
Total Population		11,342 100.0%	790,390 100.0%	1,024,266 100.0%

Source: U.S. Census Bureau, 2010 Census, Table P5, Hispanic or Latino by Race

* Minority includes all people except white non-Hispanic populations.

Notes: The 2010 Census asked respondent to identify their race and ethnicity based on their own perception of their racial and ethnic identity. Ethnicity is defined as a population that shares common characteristics such as religion, traditions, culture, language, and/or tribal or national origin. As such, people who identify themselves as Hispanic can be of any race.

1.2.3 Household Income

The 2012 median household income in the socioeconomic resources study area ranged between approximately \$67,000 and \$138,000. This was greater than the median household income for the city of Austin and Travis County. Household income data are used to identify the presence of low-income populations. According to the U.S. Department of Health and Human Services (HHS) 2014 poverty guidelines, a household is considered low income if they earn less than \$19,790 for a three-person household or \$23,850 for a four-person household. As shown in **Table 4**, 7.0 percent of the households in the socioeconomic resources study area earn less than \$24,999 per year. In comparison, 22.7 percent of households in the city of Austin, and 20.7 percent of households in Travis County earn less than \$24,999 per year. More than half of the households in the socioeconomic resources study area earn \$100,000 per year or more.

Table 4: Household Income (2012 dollars)

Household Income	Socioeconomic Resources Study Area	City of Austin	Travis County
Less than \$10,000	147 3.3%	26,993 8.3%	30,135 7.4%
\$10,000 to \$14,999	34 0.8%	15,430 4.7%	17,611 4.3%
\$15,000 to \$19,999	24 0.5%	15,084 4.6%	17,299 4.3%
\$20,000 to \$24,999	104 2.4%	16,588 5.1%	19,012 4.7%
\$25,000 to \$29,999	56 1.3%	17,853 5.5%	20,771 5.1%
\$30,000 to \$34,999	137 3.1%	17,001 5.2%	20,056 4.9%
\$35,000 to \$39,999	103 2.3%	17,513 5.4%	20,553 5.1%
\$40,000 to \$44,999	105 2.4%	17,265 5.3%	20,179 5.0%
\$45,000 to \$49,999	94 2.1%	13,086 4.0%	16,335 4.0%
\$50,000 to \$59,999	294 6.7%	25,070 7.7%	31,106 7.7%
\$60,000 to \$74,999	501 11.4%	31,841 9.8%	39,868 9.8%
\$75,000 to \$99,999	537 12.2%	37,083 11.4%	47,344 11.7%
\$100,000 to \$124,999	739 16.8%	25,127 7.7%	32,806 8.1%
\$125,000 to \$149,999	566 12.9%	14,947 4.6%	20,527 5.1%
\$150,000 to \$199,999	463 10.5%	16,651 5.1%	23,753 5.9%
\$200,000 or More	486 11.1%	18,459 5.7%	28,051 6.9%
Total Households	4,390 100.0%	325,991 100.0%	405,406 100.0%
Median Household Income	\$66,538 to \$137,796	\$52,431	\$56,403

Source: U.S. Census Bureau, 2008-2012 American Community Survey, Household Income and Median Household Income

1.2.4 Age Groups

The socioeconomic resources study area is primarily a suburban area outside of the central business district of Austin. Based on an analysis of age groups (**Table 5**), the socioeconomic resources study area is home to a greater share of households with school-aged children (17 years old and younger), with 29.2 percent, than that of the city of Austin (22.2 percent), and Travis County (23.9 percent). However, there is a greater share of 18 to 29 year olds in the city of Austin (25.6) and Travis County (22.6 percent) compared to the socioeconomic resources study area (11.2 percent). The share of elderly population (65 years and older) is highest in the city of Austin (7.0 percent), with the socioeconomic resources study area and Travis County being comparable with 5.7 percent and 5.4 percent, respectively.

Table 5: Age Groups (2010)

Age Groups	Socioeconomic Resources Study Area	City of Austin	Travis County
Under 5 years old	949 8.4%	57,982 7.3%	75,774 7.4%
5 to 17 years old	2,358 20.8%	117,483 14.9%	169,263 16.5%
18 to 29 years old	1,275 11.2%	202,628 25.6%	231,247 22.6%
30 to 39 years old	2,200 19.4%	139,622 17.7%	174,207 17.0%
40 to 49 years old	2,107 18.6%	102,083 12.9%	140,480 13.7%
50 to 59 years old	1,350 11.9%	85,266 10.8%	117,538 11.5%
60 to 69 years old	739 6.5%	48,310 6.1%	48,310 4.7%
70 to 79 years old	235 2.1%	21,909 2.8%	21,909 2.1%
Over 80 years old	129 1.1%	15,107 1.9%	15,107 1.5%
Total Elderly Population (65 years and older)	642 5.7%	55,695 7.0%	55,695 5.4%
Total Population	11,342 100.0%	790,390 100.0%	1,024,266 100.0%

Source: U.S. Census Bureau, 2010 Census, Sex by Age

1.2.5 Employment and Economic Conditions

Of the labor force that lives within the socioeconomic resources study area, most are employed in educational services, health care, and social services, or professional, scientific, management, administrative and waste management services. These employment trends are consistent with the dominant economics sectors in Austin and Travis County (**Table 6**).

Table 6: Employment Characteristics of the Population 16 Years and Older

Employment Characteristic	Socioeconomic Resources Study Area	City of Austin	Travis County
In the Labor Force	13,825 100.0%	471,511 100.0%	589,989 100.0%
Armed Forces	66 0.5%	794 0.2%	961 0.2%
Civilian Labor Force	13,759 99.5%	470,717 99.8%	589,028 99.8%
Civilian Unemployed	424 3.1%	34,525 7.3%	43,165 7.3%
Civilian Employed	13,335 96.9%	436,192 92.7%	545,863 92.7%
Agriculture, forestry, fishing and hunting, and mining	26 0.2%	2,044 0.4%	2,790 0.5%
Construction	263 1.9%	34,396 7.3%	44,713 7.6%
Manufacturing	1,768 12.8%	33,396 7.2%	45,291 7.7%
Wholesale trade	400 2.9%	8,430 1.8%	11,937 2.0%
Retail trade	1,026 7.4%	45,380 9.6%	56,511 9.6%
Transportation and warehousing, and utilities	449 3.2%	10,813 2.3%	15,026 2.5%
Information	428 3.1%	11,881 2.5%	14,427 2.4%
Finance and insurance, real estate, and rental and leasing	1,271 9.2%	29,426 6.2%	37,617 6.4%
Professional, scientific, management, administrative, and waste management services	2,587 18.7%	67,913 14.4%	83,884 14.2%
Educational services, health care, and social services	2,706 19.6%	90,438 19.2%	110,986 18.8%
Arts, entertainment, recreations, accommodation and food services	953 6.9%	51,151 10.8%	58,013 9.8%
Other services except public administration	556 4.0%	22,884 4.9%	28,784 4.9%
Public administration	902 6.5%	27,697 5.9%	35,884 6.1%

Source: U.S. Census Bureau, 2008-2012 American Community Survey, Industry by Employment Status for the Population 16 Years and Older.

While there are no major employers within the socioeconomic resources study area, the proposed project would affect the commute patterns of those traveling between the study area and the major employers in Austin. According to the Austin Chamber of Commerce, the five largest employers in Austin in 2013 were the State of Texas (60,863 employees), The University of Texas at Austin (25,974 employees), Dell (14,000 employees), Seton Healthcare Family (12,606 employees), and St. David's Healthcare Partnership (7,500 employees). The economic activity in the proposed project area includes the businesses in the commercial shopping centers located at the intersection of MoPac and Slaughter Lane (**Table 7**).

Table 7: Businesses at MoPac and Slaughter Lane

Location	Business Name	Business Type
Southwest Corner	Alamo Drafthouse	Movie theater
	Austin Diagnostic Clinic	Medical
	Sleep Experts	Home Goods
	ATX Bikes	Retail – recreational
	Koko Fit Club	Fitness
	Mail Express	Retail – shipping
	Reid's Cleaners	Cleaners
	Coffee Bean and Tea Leaf	Food and beverage
	TCBY Frozen Yogurt	Food and beverage
	ProNails	Beauty services
	Mathew Horne Dentistry	Medical
	Burger Fi	Restaurant
	AT&T	Retail – telecommunications
	Zpizza	Restaurant
	Wells Fargo	Bank
Northwest Corner	Class Act Cleaners	Cleaners
	Nails and You	Beauty services
	Kash Boutique	Retail – women's clothing
	St. David's Urgent Care	Medical
	KUMON	Educational Services
	Kidspa Austin	Children's Daycare
	Chase Bank	Bank
	Southwest Smiles	Medical
Southeast Corner	United Heritage Credit Union	Bank
	Walgreens	Retail – Health and Pharmacy
Northeast Corner	McLean Family Dentistry	Medical
	Austin Immediate Care ER Alternative	Medical
	Taco Bueno	Restaurant
	Wendy's	Restaurant
	Back Spin Texas Sports Bar	Restaurant and Bar
	Which Wich	Restaurant
	Castle Dental	Medical
	Harpers Jewelry	Retail – jewelry
	Say Om Yoga	Fitness
Birds Barbershop	Beauty Services	

Source: MoPac Intersections Environmental Study Team, 2014.

1.2.6 Community Facilities

1.2.6.1 Police, Fire and Emergency Services

There are no police stations located within the proposed project area; however the area falls within the Austin Police Department's Southwest Area Command Station and Southeast Area Command Station. The proposed project area is served by two Austin Fire Department stations: Fire Stations 29 and 43. Fire Station 29 is located at 3703 Deer Lane and Fire Station 43 is located at 11401 Escarpment Boulevard (City of Austin 2014). There are no hospitals located within the proposed project area; however, there are two urgent care clinics located in the shopping centers at MoPac and Slaughter Lane: St. David's North Austin Medical Center and Austin Immediate Care.

1.2.6.2 Neighborhoods

There are several residential neighborhoods within one-half mile of the proposed project, including Circle C Ranch, Maple Run, Sendera, and Village of Western Oaks. Residents of these communities are likely to travel through the proposed project area to commute to work and to access shopping, community facilities, and other services.

Circle C Ranch is a large master-planned community located east and west of MoPac between La Crosse Avenue and West Slaughter Lane. The community includes more than 4,800 homes, a golf course, tennis club, two swim centers, and Fire Station 43. The median home value in 2013 was \$335,000 (Real Estate Appraisals Austin 2014).

The Sendera master-planned community is located east of MoPac and along Slaughter Lane. It is divided into two subdivisions: Sendera includes the homes in between Davis Lane and West Slaughter Lane as well as a small group of homes on Copano Drive and Sendera South is south of West Slaughter Lane. The amenities in the community include a swimming pool, picnic area, and playground (see *Section 2.1.6.3 Parklands* for a description). The median home value in 2013 was \$250,000 (Reilly Realtors 2014 and Sky Realty Austin 2014a).

The Village at Western Oaks master-planned community is located on the west side of MoPac and is north of West Slaughter Lane. The Village at Western Oaks encompasses five neighborhoods and is over 600 acres. There are 1,622 homes in this community with hike and bike trails, greenbelts, a playground, and parks. The median home value in 2013 was \$289,000 (Sky Realty Austin 2014b).

1.2.6.3 Parklands

There are six parklands within one-half mile of the proposed project: The Ladybird Johnson Wildflower Center, Circle C Ranch Metropolitan Park, Dick Nichols District Park, Sendera Mesa Park, Deer Park at Maple Run Preserve and the Violet Crown Trail.

Lady Bird Johnson Wildflower Center is located on the east side of MoPac and south of La Crosse Avenue at 4801 La Crosse Avenue. It is both a parkland facility and an organized research unit of The University of Texas at Austin. The mission of the center is to increase the sustainable use and conservation of native wildflowers, plants and landscapes; provide comprehensive guidelines and benchmarks for developing environmentally healthy landscapes through its voluntary professional rating and certification system; educate the public about Texas flora and fauna and serve as a professional resource for sustainable gardening and landscaping approaches; and apply its research through applied landscape projects. The Center features a display of more than 650 native Texas plant species in gardens, meadows and woodlands. The grounds include nature trails, central gardens, and facilities such as an auditorium, visitors' gallery, wildflower center store, café, library, observation tower, children's facility, the Margaret and Eugene McDermott Learning Center, and research facilities including native plant growing facilities (Lady Bird Johnson Wildflower Center 2014).

Circle C Ranch Metropolitan Park is located at 6301 West Slaughter Lane and is approximately 545 acres. It generally follows Slaughter Creek and is located on both the east and west sides of MoPac between Slaughter Lane and La Crosse Avenue. The park amenities include 5.9 miles of walking trails, a 3.1 mile veloway, basketball courts, volleyball courts, athletic fields, a disc golf course, a playground and a picnic area. Most of these amenities are located west of MoPac. The eastern portion of the park is predominantly open space and is the location of the veloway. The veloway is a non-motorized paved path for the exclusive use of cyclists and

rollerbladers. The entrance to the veloway is located at 4900 La Crosse Avenue (Austin Parks Foundation 2014a and Veloway.com 2014).

Dick Nichols District Park is located at 8011 Beckett Road between Davis Lane and Convict Hill Road and is approximately 152 acres. Amenities at the park include one mile of walking trail, basketball courts, tennis courts, volleyball courts, athletic fields, a playground, a picnic area with tables, shelter and barbeque pits, a swimming pool, a children's splash pool, and a community facility that can be reserved (Austin Parks Foundation 2014b).

Sendera Mesa Park is located at 4717 Davis Lane and is managed by the Sendera Home Owners Association. The park features a swimming pool, a covered children's pool, a playground, and a picnic area with tables and barbeque pits. This park is for the exclusive use of Sendera and Sendera South residents (Sendera Homeowners Association 2012).

Deer Park at Maple Run Preserve is approximately 25 acres and is currently undeveloped open space.

Violet Crown Trail is a planned hiking trail that will be built by the City of Austin and the Hill Country Conservancy. When complete, the trail will extend 30 miles from Barton Springs Pool in Zilker Park, Austin south to Hays County. A portion of this proposed trail will pass through the project area as it traverses under MoPac at Dick Nichols District Park and through the eastern portion of Circle C Ranch Metropolitan Park. A trail head will be built in Dick Nichols District Park and at the Lady Bird Johnson Wildflower Center. The trail will be built in segments over the next few years. The segment that passes through the project area is anticipated to begin construction in 2014 (Hill Country Conservancy 2011).

1.2.6.4 Schools

There is one elementary school and one university within one-half mile of the proposed project. Bernice Kiker Elementary is west of MoPac and located at 5913 La Crosse Avenue. The elementary school ranks as the top performing elementary school in the Austin Independent School District (Austin Independent School District 2014). The University of St. Augustine for Health Sciences is west of MoPac at 5401 La Crosse Avenue. This university offers entry-level degrees for the developing health care practitioner (University of St. Augustine for Health Sciences 2014).

1.2.6.5 Cemeteries and Places of Worship

There are no cemeteries or places of worship within one-half mile of the proposed project.

1.3 ENVIRONMENTAL CONSEQUENCES

An adverse impact on community cohesion occurs when an action severs or alters social interaction among groups or individual members of a community, divides or displaces a functioning neighborhood, or displaces areas where members of a community assemble and interact, such as a place of worship or community facility. The proposed project would not require additional right-of-way; therefore, no displacements or relocations would be required. The proposed project would not sever or alter social interactions. The proposed project would improve mobility in the project area by replacing the at-grade intersections with grade-separated intersections at Slaughter Lane and La Crosse Avenue; thereby separating north-south traffic traveling on MoPac from east-west traffic traveling along Slaughter Lane and La Crosse Avenue. The project would improve accessibility within and through the proposed project area and would improve access to and from the neighborhoods, businesses and

community facilities in the proposed project area. The reduction in congestion at these intersections would potentially improve the response time of emergency services providers.

2.0 ENVIRONMENTAL JUSTICE

2.1 REGULATORY REQUIREMENTS AND METHODOLOGY

Presidential Executive Order (EO) 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations, mandates that federal agencies “identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs on minority and low-income populations” (59 Federal Register [FR] 7629-7633, February 16, 1994). The three fundamental principles of environmental justice (EJ) are 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; and
- ▶ Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- ▶ Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

According to the Federal Highway Administration (FHWA) Order 6640.23A and U.S. Department of Transportation (USDOT) Order 5610.2(a), disproportionately high and adverse effects on minority or low-income populations generally means an adverse effect that is predominantly borne by a minority and/or low-income population, or would be suffered by the minority and/or low-income population, and is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority and/or non-low-income population (USDOT 2012).

2.1.1 Definitions

A minority is defined in Order 5610.2(a) as:

- ▶ **Black**: a person having origins from any of the black racial groups of Africa
- ▶ **Hispanic or Latino**: 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, or Indian subcontinent
- ▶ **American Indian and Alaskan Native**: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition
- ▶ **Native Hawaiian and Other Pacific Islander**: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

Low income is defined in Order 5610.2(a) as a person whose median household income is at or below the HHS poverty guidelines. The HHS poverty guidelines are categorized by the number of persons living in a household (**Table 8**).

Table 8: 2014 Poverty Guidelines

Persons in Family/Household	Poverty Guideline
1	\$11,670
2	\$15,730
3	\$19,790
4	\$23,850
5	\$27,910
6	\$31,970

Source: U.S. Department of Health and Human Services, 2014 Poverty Guidelines

In accordance with EO 12898 and FHWA Order 6640.23A, data on the presence of minority and low-income populations should be analyzed at the project level to ensure that the proposed project does not subject these populations to a “disproportionately high and adverse effect.” As such, socioeconomic factors are analyzed using the most detailed geographies available; household income are analyzed at the Census block group level, and race and ethnicity are analyzed at the Census block level.

EJ populations were identified in the socioeconomic resources study area by locating concentrations of minority and low-income populations. If the 2010 population within a Census block was greater than 50 percent minority, it was considered EJ. According the 2008-2012 American Community Survey, household sizes in the socioeconomic resources study area ranged from 2 to 4 persons per household. A block group was considered EJ if the median household income was below the poverty guideline for a four-person household (\$23,850).

Direct effects are defined in 40 CFR 1508.08 as those caused by the proposed project and which occur at the same time and place. This means that the effects are likely to be experienced as a result of project activities, such as construction impacts, and are likely to be experienced at properties that are located at and adjacent to the project. For this analysis, direct effects to EJ populations could occur within the socioeconomic resources study area (the four Census block groups and the 160 Census blocks within them, which are located immediately adjacent to the proposed project study).

2.2 AFFECTED ENVIRONMENT

Of the 160 Census blocks in the socioeconomic resources study area, 62 are not populated and two blocks contain a population that is greater than 50 percent minority population:

- ▶ Tract 17.40, Block Group 2, Block 2003
- ▶ Tract 17.40, Block Group 2, Block 2031

These Census blocks would not be directly affected by the proposed project, as they are not adjacent to the proposed project alignment (**Figure 2**).

The 2012 median household income in the socioeconomic resources study area ranged between approximately \$67,000 and \$138,000. These values are well above the 2014 HHS poverty guidelines of \$23,850. As such, there are no Census block group that meets the criteria of low income. Despite this, there are 150 households (3.5 percent of the total households in the socioeconomic resources study area) that earn less than \$20,000 per year, and 212 (4.9 percent) that earn less than \$24,999 per year. These households are located throughout the socioeconomic resources study area and are not concentrated in a particular area.



Figure 2: Environmental Justice Populations in the Socioeconomic Resources Study Area

2.3 ENVIRONMENTAL CONSEQUENCES

There are no EJ populations that live adjacent to or within 500 feet of the proposed project area. The proposed project would not require additional right-of-way; therefore, no displacement of residences, businesses, or community facilities would occur. The proposed project would not negatively impact community cohesion.

The proposed project would improve intersection operations and enhance safety within and through the proposed project area for vehicle and pedestrian/bicycle traffic, which would benefit all people including EJ populations.

Overall, the proposed project would not subject EJ populations to disproportionately high and adverse impacts; as such, no mitigation will be required. The directive of EO 12898 has been satisfied.

3.0 LIMITED ENGLISH PROFICIENCY (LEP)

3.1 REGULATORY REQUIREMENTS AND METHODOLOGY

The MoPac Intersection Improvements Study Team has provided meaningful communications to local residents who could be affected by the construction and operations of the project. Meaningful communication included conveying messages, reports, and other materials in language(s) that local citizens can understand to the greatest extent practical. Limited English Proficiency (LEP) is defined as having “limited ability to read, write, speak, or understand English” (67 FR 41459). Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, was signed in August 2000. It advances Title VI of the Civil Rights Act of 1964, as amended, by ensuring that LEP people have meaningful access to services and communications and are thereby not discriminate against on the basis of national origin.

Data from the 2008-2012 American Community Survey were gathered at the Census Tract level to identify if there are LEP populations that could be affected by the proposed project. As Census data is self-reported, an individual’s ability to speak English represents the respondent’s own perception about his/her ability to speak English.

3.2 AFFECTED ENVIRONMENT

Table 9 lists the 10 most commonly spoken languages in the proposed project study area and the number of LEP speakers. The majority of people in the proposed project study area (83.1 percent) speak English only and 4.3 percent are LEP speakers. More than half of the LEP speakers that live in the proposed project study area speak Spanish or Spanish Creole, Chinese and Vietnamese.

Table 9: Languages Spoken in the Proposed Project Study Area

Language	Total Speakers	LEP Speakers
English Only	19,750 83.1%	0 0.0%
Spanish or Spanish Creole	1,959 8.2%	263 1.1%
Chinese	566 2.4%	300 1.3%
Korean	223 0.9%	85 0.4%
Vietnamese	197 0.8%	144 0.6%
Other Asian Languages	171 0.7%	24 0.1%
Japanese	141 0.6%	53 0.2%
German	122 0.5%	0 0.0%
French including Patois and Cajun	103 0.4%	17 0.1%
Arabic	94 0.4%	31 0.1%
Total Speakers	23,779 100.0%	1,021 4.3%

Source: U.S. Census Bureau, 2008-2012 American Community Survey, Languages Spoken at Home by Ability to Speak English for the Population 5 Years and Over.

3.3 ENVIRONMENTAL CONSEQUENCES

In order to provide meaningful communication to the people that could be affected by the proposed project, materials were made available in the dominant language spoken (English) and translation services were available upon request for speakers of other languages. The public involvement activities and communications for the proposed project were and will continue to be conducted in accordance with EO 13166 to ensure full and fair participation.

4.0 CONCLUSIONS

The MoPac Intersection Improvements would not result in adverse impacts to the socioeconomic conditions of the project area and would not subject EJ populations to disproportionately high and adverse impacts. The proposed project would improve intersection operations and enhance safety within and through the proposed project area, which would benefit all people including EJ populations. These changes would improve access to and from the neighborhoods, businesses and community facilities in the proposed project area. The reduction in congestion would improve the response time of emergency services providers.

5.0 REFERENCES

- Austin Chamber of Commerce. 2013. Greater Austin Region Top 100 Selected Major Employers 2013. <https://www.austinchamber.com/site-selection/files/maps/MajorEmployersMap2013.pdf> (accessed May 20, 2014).
- Austin Independent School District. 2014. Bernice Kiker Elementary School. <http://www.kikerelementary.org/> (accessed May 20, 2014).
- Austin Parks Foundation. 2014a. Circle C Ranch Metropolitan Park. <http://www.austinparks.org/our-parks.html?parkid=226> (accessed May 20, 2014).
- Austin Parks Foundation. 2014b. Dick Nichols Park. <http://www.austinparks.org/our-parks.html?parkid=238> (accessed May 20, 2014).
- Capital Area Metropolitan Planning Organization (CAMPO). Population and Employment Forecast. 2035 Forecasts GIS shapefile. <http://www.campotexas.org/plans-programs/population-employment-forecast/> (accessed May 6, 2014).
- City of Austin. 2014. Index of AFD Stations' Addresses. <https://www.austintexas.gov/page/index-afd-stations-addresses> (accessed May 20, 2014).
- Federal Register. 1994, Executive Order 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations. Vol. 59, No. 32. 16 Feb 1994. pp 7629-7633. <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf> (accessed May 6, 2014).
- _____. 2002. Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons. Vol. 67, No. 117. 18 Jun 2002. pp. 41455-41472. <http://www.justice.gov/crt/about/cor/lep/DOJFinLEPFRJun182002.pdf> (accessed May 6, 2014).
- Hill Country Conservancy. 2011. Violet Crown Trail. <http://www.hillcountryconservancy.org/land-projects/violetcrowntrail/> (accessed May 20, 2014).
- Lady Bird Johnson Wildflower Center. 2014. About. <http://www.wildflower.org/> (accessed May 20, 2014).
- Real Estate Appraisals Austin. 2014. Circle C Ranch Estate Report. <http://www.realestateappraisalsaustin.com/reports/circle-c-ranch-real-estate-report/> (accessed May 20, 2014).
- Reilly Realtors. 2014. Sendera Austin, TX. <http://www.austinhomelistings.com/sendera-austin-homes.php> (accessed May 20, 2014).
- Sendera Homeowners Association. 2012. Amenities. <http://www.senderahoa.org/amenities> (accessed May 20, 2014).
- Sky Realty Austin. 2014a. Sendera Subdivision. http://www.heartofaustinhomes.com/Sendera_Austin_Subdivision/page_2028127.html (accessed May 20, 2014).

-
- _____. 2014b. Villages at Western Oaks.
http://www.heartofaustinhomes.com/Villages_at_Western_Oaks/page_2079258.html
(accessed May 20, 2014).
- U.S. Census Bureau, 1990 Census. Census of Population and Housing.
<http://www.census.gov/prod/www/decennial.html> (accessed May 6, 2014).
- _____. 2000 Census. PHC-2 Summary Social, Economic and Housing Characteristics.
<http://www.census.gov/prod/www/decennial.html> (accessed May 6, 2014).
- _____. 2008-2012 American Community Survey, Table B16001 - Languages Spoken at Home by Ability to Speak English for the Populations 5 Years and Over.
<http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2008-2012 American Community Survey, Table B19001 - Household Income in the Past 12 Months (in 2012 Inflation-Adjusted Dollars). <http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2008-2012 American Community Survey, Table B19013 – Median Household Income in the Past 12 Months (in 2012 Inflation-Adjusted Dollars). <http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2008-2012 American Community, Table DP03 - Selected Economic Characteristics.
<http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2008-2012 American Community Survey, Table S2405 - Industry by Occupation for the Civilian Employed Population 16 Years and Older. <http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2010 Census. Table P1 - Total Population. <http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2010 Census, Table P5 - Hispanic or Latino by Race. <http://factfinder2.census.gov/> (accessed May 6, 2014).
- _____. 2010 Census, Table P12 - Sex by Age. <http://factfinder2.census.gov/> (accessed May 6, 2014).
- U.S. Department of Health and Human Services, 2014 Poverty Guidelines.
<http://aspe.hhs.gov/poverty/14poverty.cfm> (accessed May 20, 2014).
- U.S. Department of Justice. 2000. Executive Order 13166 Improving Access to Services for Persons with Limited English Proficiency. 11 Aug 2000.
<http://www.justice.gov/crt/about/cor/Pubs/eolep.php> (accessed May 6, 2014).
- U.S. Department of Transportation. 2012a. Department of Transportation Order 5610.2(a) Final DOT Environmental Justice Order. Federal Highway Administration. 7 May 2012.
http://www.fhwa.dot.gov/Environment/environmental_justice/ej_at_dot/order_56102a/index.cfm (accessed May 20, 2014).
- _____. 2012b. FHWA Order 6640.23A – FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. . Federal Highway Administration. 14 Jun 2012. <http://www.fhwa.dot.gov/legsregs/directives/orders/664023a.cfm> (accessed May 20, 2014).

US Government Printing Office. 40 CFR 1508.08. <http://www.ecfr.gov/cgi-bin/text-idx?SID=49e27d8ff6e08bdcd9f23cab301d6539&node=40:34.0.3.3.9&rqn=div5> (accessed May 6, 2014).

University of St. Augustine for Health Sciences. 2014. Texas Campus. <http://www.usa.edu/texas.aspx> (accessed May 20, 2014).

Veloway.com. 2014. About the Veloway. <http://www.veloway.com/#About> (accessed May 20, 2014).