

4.3 Economic and Fiscal Impacts

This section evaluates the potential economic, and fiscal impacts that could arise from the construction and long-term operation of the proposed East San Fernando Valley Transit Corridor Project.

4.3.1 Regulatory Framework and Methodology

4.3.1.1 Regulatory Framework

The applicable federal, state, and local regulations that are relevant to an analysis of the proposed East San Fernando Valley Transit Corridor Project's impacts are listed below. For additional information regarding these regulations, please see the Economic and Fiscal Impacts Report in Appendix V of this Draft EIS/EIR.

Federal

There are no specific federal regulations that are relevant to economic and fiscal impact analyses other than the requirements under NEPA.

State

Pursuant to the State CEQA Guidelines, economic or social effects of a project that are not related to physical changes in the environment shall not be treated as significant effects on the environment but may be used to determine the significance of physical changes caused by the project (Section 15131(b)).

Local

There are no local requirements or guidelines relevant to the discussion of fiscal and economic impacts in this section.

4.3.1.2 Methodology

The environmental impact analyses presented in Section 4.3.3 focus on the economic and fiscal impacts due to parcel acquisitions that could occur under the build alternatives and resulting loss in tax revenue, jobs, and labor income. The economic and fiscal analysis also considers the indirect and induced economic impacts and benefits due to the expenditure of funds to construct the proposed build alternatives. In order to assess and determine the extent of potential economic impacts, demographic, economic, Los Angeles County Assessor assessed valuation, property tax, sales tax, construction cost, and land use data were examined. Also, other socioeconomic data related to transit dependent population and SCAG forecasts from 2010 to 2035 were utilized to identify and/or evaluate potential transit supportive land uses, including jobs-generating and residential land uses by density.

Alignment alternatives for the transportation corridor were provided by KOA Corporation in the form of GIS shapefiles, which were then used as reference alignments, around which data for the socioeconomic indicators presented in this analysis were assembled. The basic unit of analysis used for estimating 2010 data for areas in the immediate vicinity of each route alignment alternatives is the

Tier 2 traffic analysis zone (TAZ) developed by SCAG for the RTP. The 2012 TAZ dataset was adopted on April 4, 2012. Tier 2 TAZs are the smallest units of geography developed by SCAG and these are a close approximation to Census Block-groups.

Transit dependent population was defined using the following socioeconomic variables: 1) by average household income, 2) persons in poverty, 3) by indicators of transit dependency using age structure (i.e. population less than 18 years old and 65 years and older), and 4) ownership of vehicles per household developed from the 2009–2013 American Community Survey 5-year estimate at the census tract level for each alignment alternative. Estimates of population and household variables for each sub-category of analysis were calculated by applying the Census Tract level percentage distribution for each variable to the 2010 Tier 2 population and household control totals.

Total employment estimates for 2008, 2010, and 2035 were obtained directly from the assembled Tier 2 datasets for each alignment alternative. Estimates for total employment in 2010 were developed by applying an area-wide adjustment that reflected the decline (in Los Angeles County) in employment over the 2008 to 2010 time period due to the major recession and economic downturn that began in late 2007. This decline was estimated at around 4.6 percent based on countywide datasets prepared by SCAG for the 2012 RTP.

Annual average wages by employment categories were obtained from the California Employment Development Department for 2010, on an area-wide basis for a selection of ZIP codes approximating the study area. The distribution of employment for various categories for 2010 was provided by the SCAG 2012 RTP Tier 1 socioeconomic data.

Los Angeles County Assessor parcel data, in GIS format, were provided for the total study area by Parcel Quest, a data vendor used by Metro. This parcel information was supplemented by more recent 2014 Los Angeles County Assessor parcel data for the study area and the 0.25-mile buffer area along the transit corridor alignment.

Construction Cost Impacts

In order to determine construction cost impacts/benefits (see Section 4.3.3, below), estimates were made of employment generated, labor income, value added, and total output. The total construction economic impacts for each alternative include direct construction cost impacts plus those from indirect and induced economic impacts. For each alternative, total labor income is about 42 percent of total output, and value added is about 53 percent of total output. Value added is the combination of labor income, property type income, and indirect business taxes.

Definition and Derivation of Economic Impact Multipliers

The total construction cost impacts discussed in Section 4.3.3 were derived from running the IMPLAN economic impact model developed by IMPLAN Group, LLC using the estimates of initial direct construction cost impacts provided by KOA Corporation. IMPLAN is an acronym for IMpact analysis for PLANing and is an input-output model that can be run for regional areas. In this case, the IMPLAN model was run using the Los Angeles County 2012 data set.

Based on the initial direct construction cost impacts of building each of the alternatives, the IMPLAN model estimates the indirect and induced economic impacts using a set of multipliers based on the model's regional data. The primary sources of the data include 1) U.S. Bureau of Labor Statistics (BLS), 2) U.S. Bureau of Economic Analysis (BEA), 3) BLS Consumer Expenditure Survey, 4) U.S. Census Bureau County Business Patterns (CBP) programs, 5) U.S. Census Bureau Decennial Census and Populations Surveys, 6) U.S. Census Bureau Economic Censuses and Surveys, and 7) the U.S. Department of Agriculture Census.

Indirect expenditures are the effects of local inter-industry expenditures as a result of the direct construction expenditures. Induced expenditures are the result of the spending of employee's wages that stem from both the direct and indirect industry expenditures. Labor income is composed of two components: 1) the wages and benefits paid to wage and salary employees; and 2) proprietor income – the profits earned by self-employed individuals. Value added is the combination of labor income, other property type income and indirect business taxes.

Detailed economic impacts are presented by various industry groups in Appendix A of the Economic and Fiscal Impacts Report (see Appendix V of this EIS/EIR), but in summary, the total impact multipliers are:

- One (1) direct employee yields 1.68 total employment;
- One (1) dollar of labor income yields 1.71 total dollars of labor income;
- One (1) dollar of direct expenditure yields 1.87 total dollars of total output; and
- One (1) dollar of direct value added yields 2.09 dollars of total value added.

4.3.1.3 CEQA Significance Thresholds

Significance thresholds are required by CEQA, and are used to determine whether a project may have a significant environmental effect.

Pursuant to Section 15131(a) of the State CEQA Guidelines, economic or social effects of a project shall not be treated as significant effects on the environment. However, pursuant to Section 15131(b) of the State CEQA Guidelines, economic and social effects of a project may be used to determine the significance of physical changes caused by the project. In addition, as directed by Section 15131(c) of the State CEQA Guidelines, economic and social factors (with a particular emphasis on housing factors) shall be considered, along with technological and environmental factors, if it is feasible to modify a project in order to reduce or avoid significant effects on the environment identified through the environmental review process.

The following analysis is intended to document economic effects due to construction and operation of rail transit in the project study area as well as potential fiscal effects associated with losses to the tax base due to property acquisitions required to construct the project. Also, economic impact analysis includes the potential for the proposed alternatives to facilitate greater development of jobs and housing in proximity to one another and encourage the use of transit versus the automobile.

L.A. CEQA Thresholds Guide

The *L.A. CEQA Thresholds Guide* does not include specific thresholds for economic and fiscal impacts.

City of San Fernando

The City of San Fernando does not have specific CEQA thresholds, but instead uses the potentially significant effects listed in Appendix G of the State CEQA Guidelines as a guide for conducting environmental analyses. However, as noted earlier, CEQA does not specifically require an analysis of a project's economic and fiscal impacts.

4.3.2 Affected Environment/Existing Conditions

Socioeconomic indicators include: average household income, low income households, low vehicle ownership households, and transit dependent population per acre (see below for definitions). These indicators were based on the 2009-2013 American Community Survey (ACS) 5-year characteristics at the census tract level. These distributions were then applied to 2010 population and household SCAG Tier 2 control totals. Economic data including employment, and wage and payroll distribution estimates for 2010 were obtained from the SCAG RTP and the California EDD.

Complete Tier 2 TAZs that intersected quarter mile buffer areas on either side of the transit corridor and East San Fernando Valley (ESFV) study area were selected, as shown in Figures 4.3-1 through 4.3-3.

Information developed by SCAG for the Tier 2 TAZs includes total population, household and employment numbers for 2010.¹

The following section includes a discussion of population, household, and employment estimates for the transit corridor and the ESFV study area.

4.3.2.1 Estimated Population

As shown in Figure 4.3-1 and Table 4.3-1, in 2010, the transit corridor's total population (167,834) was about 37 percent of the ESFV study area's total population (458,379). The estimated household population (excluding group quarters population) for the transit corridor (167,093) and for the ESFV study area (454,525) was relatively close to the total population estimates for these two areas, indicating a very small estimate for Group Quarters population. As shown on Figure 4.3-1, the highest concentrations of population tend to focus in Panorama City north of Roscoe Boulevard on either side of Van Nuys Boulevard. The transit corridor is identified by the SCAG Tier 2 TAZs outlined in blue on Figure 4.3-1.

4.3.2.2 Estimated Households

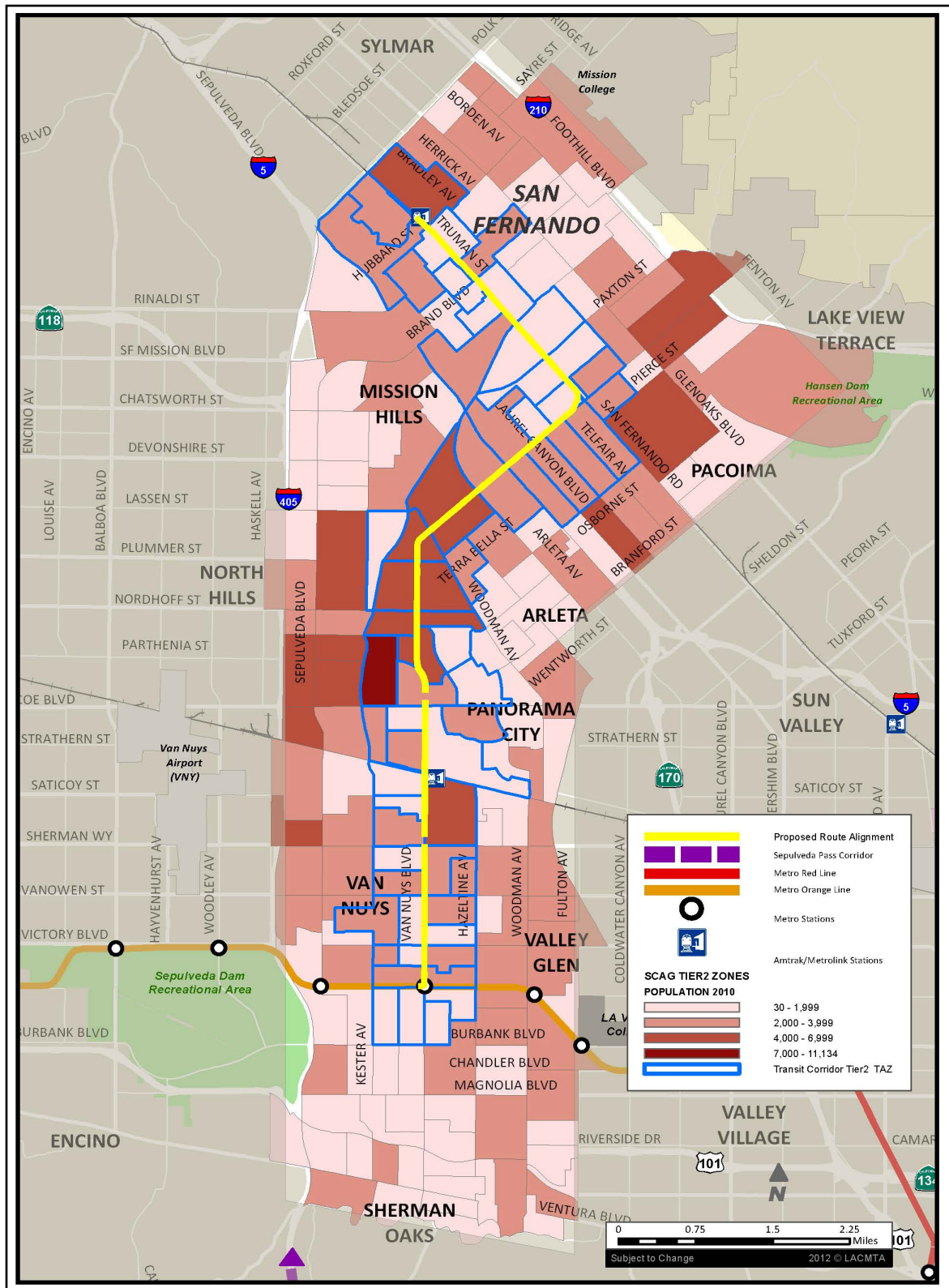
As shown in Figure 4.3-2 and Table 4.3-1, in 2010, the transit corridor household count (42,859) was about 32 percent of the study area's household count (134,023). However, the persons per household estimate was slightly higher for the transit corridor, at about 3.90, compared to the ESFV study area, which was about 3.39, with the highest household concentrations similar to those for the population north of Roscoe Boulevard along either side of Van Nuys Boulevard. The transit corridor is similarly identified by the Tier 2 TAZs outlined in blue on Figure 4.3-2.

4.3.2.3 Estimated Employment

As shown in Figure 4.3-3 and Table 4.3-1, in 2010, employment in the transit corridor (41,610) was about 30 percent of the employment in the ESFV study area (140,915). The estimated jobs per household were slightly lower for the transit corridor at about 0.97 compared to the ESFV study area's estimate of 1.05. Along the transit corridor—again outlined in blue in Figure 4.3-3—the highest concentrations of employment were within the Van Nuys Civic Center, along Van Nuys Boulevard just north of the Orange Bus Line, and also within the Panorama City area adjacent and near the intersection of Van Nuys Boulevard and Roscoe Boulevard. Additionally, there are relatively higher concentrations of employment at the northern end of the route alignment in the downtown area of the City of San Fernando.

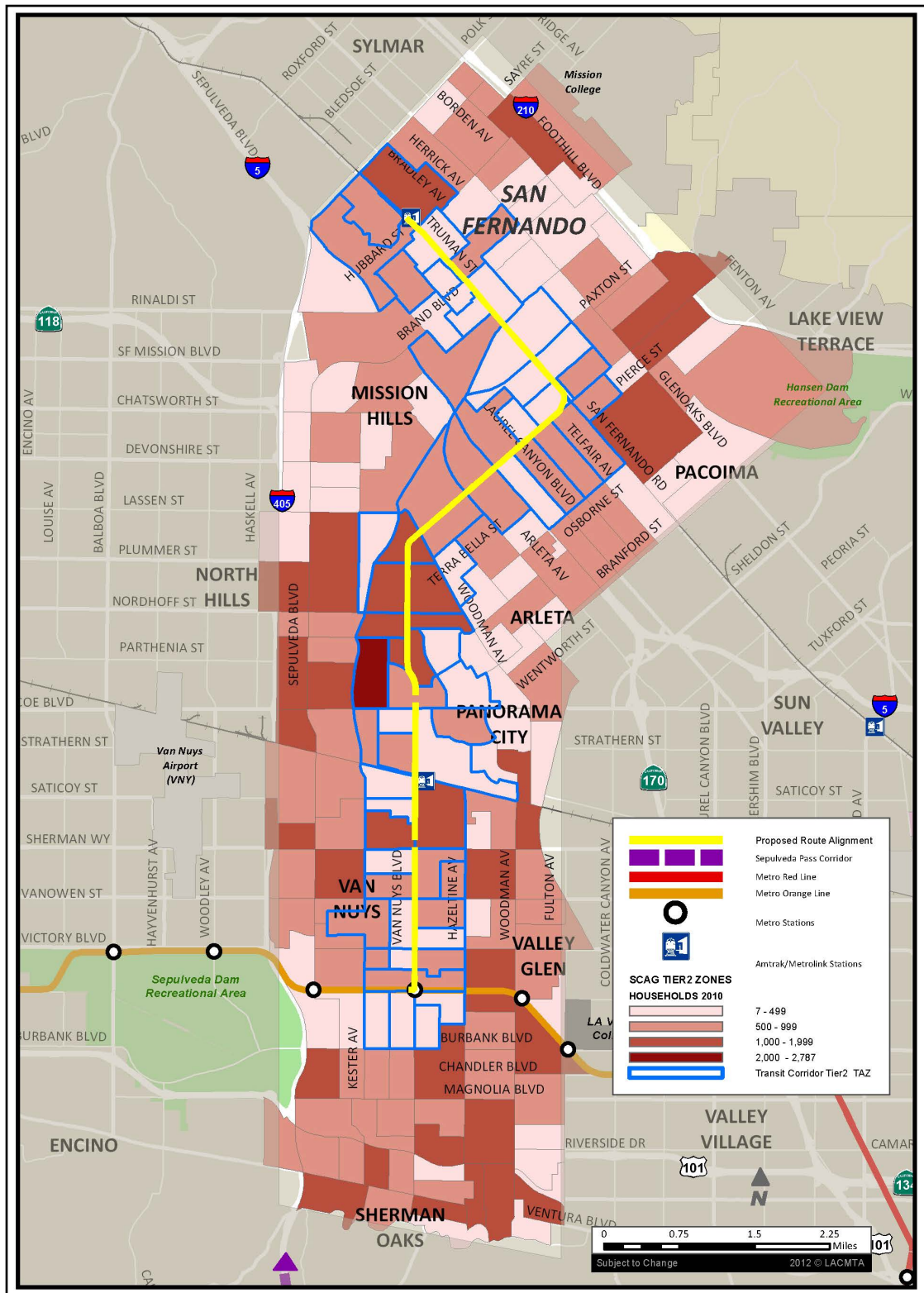
¹ Southern California Association of Governments, *2012 Regional Transportation Plan*. Available: <<http://rtpscs.scag.ca.gov>>. Accessed: March 25, 2013.

Figure 4.3-1: Population Concentrations in Transit Corridor (2010)



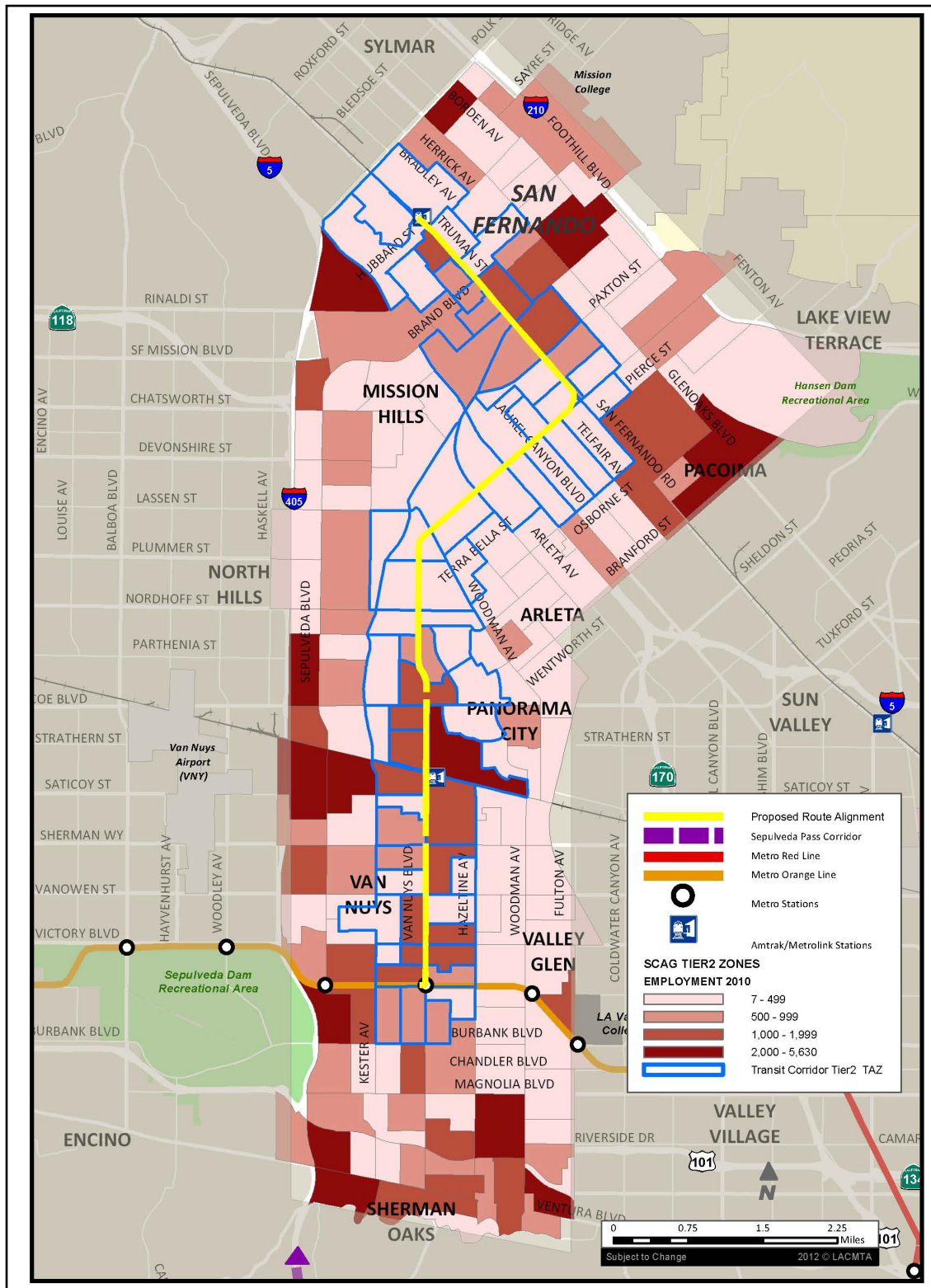
Sources: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012 Regional Transportation Plan.

Figure 4.3-2: Households Concentrations in Transit Corridor (2010)



Sources: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012 Regional Transportation Plan.

Figure 4.3-3: Employment Concentrations in Transit Corridor (2010)



Sources: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012 Regional Transportation Plan.

Table 4.3-1: Population, Households, and Employment (2010)

	Transit Corridor	ESFV Study Area	Corridor as % of Study Area
Estimated Population	167,834	458,379	36.6%
Estimated Household Population	167,093	454,525	36.8%
Estimated Households	42,859	134,023	32.0%
Estimated Employment	41,610	140,915	29.5%
Estimated Persons per Household	3.90	3.39	115.0%
Estimated Jobs per Household	0.97	1.05	92.3%

Sources: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012 *Regional Transportation Plan, Tier 2 Socioeconomic Data*.

4.3.2.4 Transit-Dependent Populations

As mentioned above in Section 4.3.1.2, socioeconomic variables, including average household income, persons in poverty, and indicators of transit dependency (by age structure) and ownership of vehicles per household were developed from the 2009-2013 American Community Survey 5-year estimate at the census tract level for each alignment. Census tracts that closely matched the SCAG Tier 2 selections were assembled for the transit corridor and the study area to develop these variables.² Density and ratio calculations were based on the acreage information at the census tract level.

Low-Income Households

Average Household Income

As shown in Part A of Table 4.3-2, average household income across the transit corridor and ESFV study area ranges from \$53,224 (transit corridor) to \$64,038 (ESFV study area), in constant 2010 dollars, based on the 2010 ACS 5-year Estimates. The transit corridor’s average household income was about 83.1 percent of the ESFV study area’s household income. In contrast, the average household income for urbanized Los Angeles County is higher than both of these, at about \$79,658.

Adult Persons below Poverty Line

Adult persons are defined as persons 18 years and over. As shown in Part A of Table 4.3-2, the ESFV study area had a lower proportion of its population in poverty at an estimated 13.8 percent (63,093 persons) compared to the transit corridor at about 15.4 percent (25,846 persons). The persons below the poverty line in the transit corridor were about 12 percent higher than the percentage in the ESFV study area.

² Southern California Association of Governments. 2012 *Regional Transportation Plan*. Available: <<http://rtpscs.scag.ca.gov>>. Accessed: March 25, 2013.

Table 4.3-2: Transit-Dependent Populations (2010)

	Transit Corridor	ESFV Study Area	Corridor as % of Study Area
A. Low Income Households			
Average Household Income	\$53,224	\$64,038	83.1%
Adult Persons below Poverty Line	25,846	63,093	41.0%
Percent of Population in Poverty	15.4%	13.8%	111.9%
Adult Persons below Poverty Line per Census Tract Acre ^a	3.5	2.7	128.5%
B. Low Vehicle Ownership Households			
Vehicles per Household	1.76	1.75	99.6%
Zero Vehicle Households per Census Tract Acre ^a	0.4	0.3	120.3%
C. Transit Dependent Population			
Transit Dependent Population	62,390	164,506	37.9%
Transit Dependent Population as Percent of Population	37.2%	35.9%	103.6%
Transit Dependent Population per Census Tract Acre ^a	8.5	7.1	119.0%
^a . Intensity measures for adult persons below poverty line, zero vehicle households, and transit dependent population per census tract acre are measured against total acreage of census tracts. Sources: Stanley R. Hoffman Associates, Inc.; American Community Survey 2009–2013, 5-Year Estimates.			

Adult Persons below Poverty Line per Census Tract Acre

As shown in Part A of Table 4.3-2, the transit corridor had a higher concentration of persons below the poverty line per census tract acre estimated at 3.5 compared to the ESFV study area’s estimate of 2.7. In contrast, there were an estimated 1.08 adult persons below the poverty line per census tract acre in urbanized Los Angeles County.

Low Vehicle Ownership Households

Vehicles per Household

As shown in Part B of Table 4.3-2, the transit corridor and the ESFV study area have almost equal estimates for vehicles per household of 1.76 (transit corridor) and 1.75 (ESFV study area). These averages are similar to urbanized Los Angeles County at 1.67.

Zero-Vehicle Households per Census Tract Acre

This intensity measure for zero vehicle households per census tract acre is also measured against total acreage of census tracts. As shown in Part B of Table 4.3-2, the transit corridor has an estimated 0.4 zero vehicle households per census tract acre, while the ESFV study area has 0.3 zero vehicle households per acre. These estimates are very similar to the average for urbanized Los Angeles County, which averages 0.3 zero vehicle households per census tract acre.

Transit-Dependent Population

The transit dependent population is defined by the U.S. Census as persons equal to or below the age of 18 years and 65 years and older. For the transit corridor, the transit dependent population (62,390) is about 38 percent of the ESFV study area's transit dependent population (164,506), as shown in Part C of Table 4.3-2 and in Figure 4.3-4. The transit-dependent population is evenly distributed at about 37 percent of the study area population and about 36 percent of the transit corridor population.

Transit-Dependent Population per Census Tract Acre

This intensity measure for transit dependent population per census tract acre is measured against total acreage of census tracts within each route alternative. Transit dependent population per census tract acre ranges from 8.5 in the transit corridor compared to 7.1 in the ESFV study area, as shown in Part C of Table 4.3-2 and Figure 4.3-5. In comparison, these averages are greater than the urbanized Los Angeles County average of 3.2 transit dependent population per census tract acre.

4.3.2.5 Economic Context

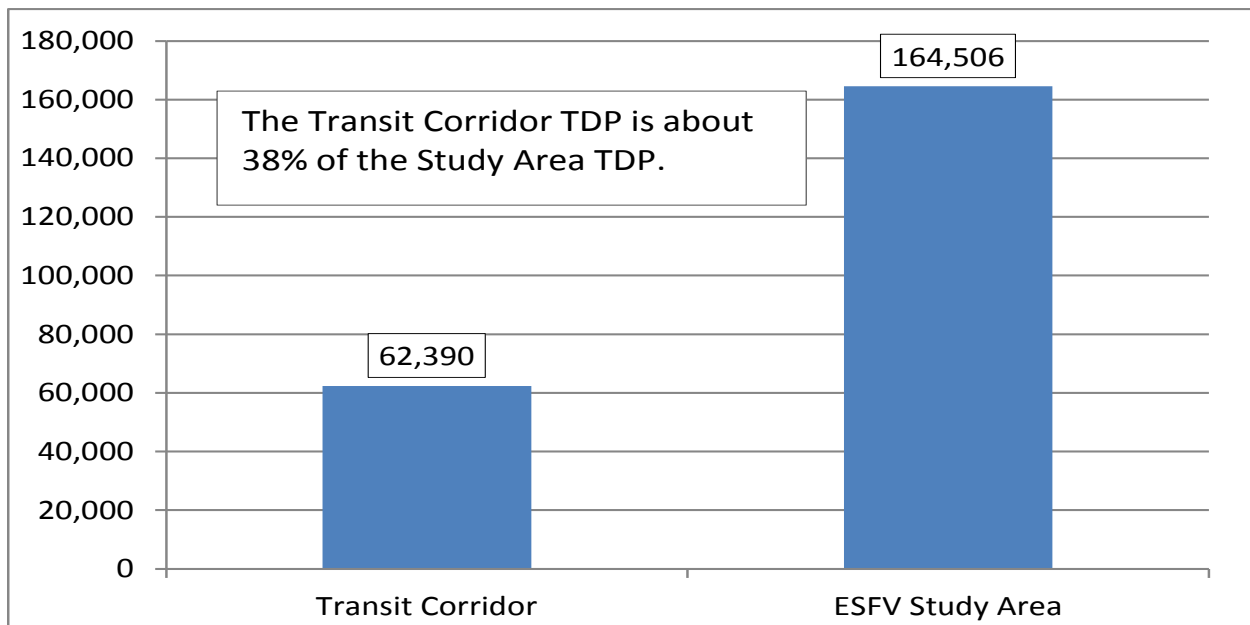
Employment Distribution

Table 4.3-3 shows employment distribution by industry categories for the transit corridor and the ESFV study area for 2010.³ The total estimated employment in the transit corridor (41,610) is about 30 percent of the total estimated employment in the ESFV study area (140,915). Education and Health jobs constitute the largest share of employment in each area at about 28 percent for the transit corridor and about 25 percent for the ESFV study area. The next two largest employment sectors in the transit corridor are Professional Services (12.8 percent) and Retail (12.4 percent). The next two largest employment sectors in the ESFV study area are also Professional Services (14.8 percent) and Retail Trade (12.6 percent). Together these three employment sectors—Education and Health, Professional Services and Retail—constitute about 52–53 percent of the total employment in both areas.

Table 4.3-4 shows the percentage of each employment sector for the transit corridor as a percentage of the ESFV study area to show relative employment concentrations. These percentages are then compared against the total employment percentage estimate for the transit corridor, about 30 percent of the ESFV study area. As shown in Table 4.3-4, Public Administration is relatively concentrated in the transit corridor—representing primarily the Van Nuys government center—and has about 60 percent of the total Public Administration employment in the study area. The Information sector is about 37 percent of Information employment in the ESFV study area. For the other sectors above the 30 percent overall average for the study area, Manufacturing (34 percent), and Education and Health (33 percent), and Other Services (33 percent) are only slightly higher. For Agriculture and Mining (84 percent), this higher percentage is out-weighted by the relatively small size of this sector in the study area.

³ Southern California Association of Governments, *2012 Regional Transportation Plan*. Available: <<http://rtpscs.scag.ca.gov>>. Accessed: March 25, 2013.

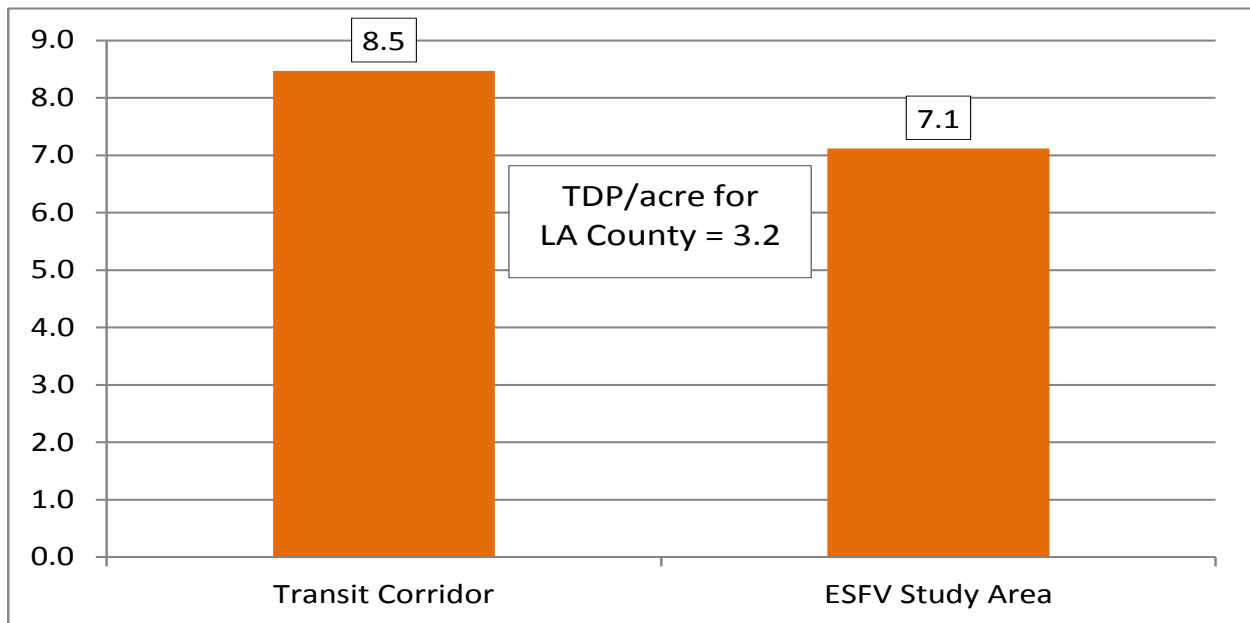
Figure 4.3-4: Transit-Dependent Population (TDP)^a (2010)



^a. TDP is defined as persons < 18 or > 65 years old.

Sources: Stanley R. Hoffman Associates, Inc.; American Community Survey, 2009–2013, 5-Year Estimates; Southern California Association of Governments, 2012 Regional Transportation Plan, Tier 2 Socioeconomic Data.

Figure 4.3-5: Transit-Dependent Population per Acre (2010)



Sources: Stanley R. Hoffman Associates, Inc.; American Community Survey, 2009–2013, 5-Year Estimates; Southern California Association of Governments, 2012 Regional Transportation Plan, Tier 2 Socioeconomic Data.

Table 4.3-3: Distribution of Employment by Sector (2010)

	Transit Corridor	% Distribution	ESFV Study Area	% Distribution
Agriculture and Mining	234	0.6%	277	0.2%
Construction	2,119	5.1%	7,443	5.3%
Manufacturing	3,652	8.8%	10,636	7.5%
Wholesale Trade	1,723	4.1%	9,524	6.8%
Retail Trade	5,141	12.4%	17,724	12.6%
Transportation, Warehousing, Utilities	1,758	4.2%	5,929	4.2%
Information	1,741	4.2%	4,725	3.4%
FIRE	1,807	4.3%	7,716	5.5%
Professional Services	5,310	12.8%	20,890	14.8%
Education and Health	11,470	27.6%	35,079	24.9%
Arts, Ent, Recr, Accom, and Food	3,163	7.6%	12,154	8.6%
Other Services	2,160	5.2%	6,612	4.7%
Public Administration	1,332	3.2%	2,206	1.6%
Total	41,610	100.0%	140,915	100.0%

Source: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012
Regional Transportation Plan, Tier 2 Socioeconomic Data.

Table 4.3-4: Employment by Sector as Percent of Study Area (2010)

	Transit Corridor	ESFV Study Area	Corridor as % of Study Area
Agriculture and Mining	234	277	84%
Construction	2,119	7,443	28%
Manufacturing	3,652	10,636	34%
Wholesale Trade	1,723	9,524	18%
Retail Trade	5,141	17,724	29%
Transportation, Warehousing and Utilities	1,758	5,929	30%
Information	1,741	4,725	37%
FIRE	1,807	7,716	23%
Professional Services	5,310	20,890	25%
Education and Health	11,470	35,079	33%
Arts, Ent, Recr, Accom and Food	3,163	12,154	26%
Other Services	2,160	6,612	33%
Public Administration	1,332	2,206	60%
Total	41,610	140,915	30%

Source: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012
Regional Transportation Plan, Tier 2 Socioeconomic Data.

Average Wages and Payroll Distribution

Table 4.3-5 shows average wages by employment category for 2010 based on California Employment Development Department data for the study area. Table 4.3-6 shows total payroll by employment categories (the product of average wages and employment by sector) in thousands of constant 2010 dollars for the transit corridor and ESFV study area.⁴

As shown in Table 4.3-5, the average wages at the study area level range from a low of \$17,858 for Arts, Entertainment, Recreation, Accommodations and Food and \$18,367 for Other Services to a high of \$62,746 for Manufacturing and \$61,738 for Information. When these average wages by sector are multiplied by the estimated employment by each sector, the total payroll for the transit corridor is estimated at \$1.79 billion, about 30 percent of the total payroll of \$5.97 billion estimated for the ESFV study area. The largest payroll sector for the transit corridor is Education and Health at about \$572.7 million, or about 32 percent of the total estimated payroll in the transit corridor. Similarly, the largest payroll sector for the ESFV study area is also Education and Health at about \$1.75 billion, or about 29 percent of the total estimated payroll in the study area. The estimated average wage for the transit corridor (\$43,198) and the ESFV study area (\$42,467) are very similar.

4.3.2.6 Parcel Data

Property Valuation and Acreage

Part A of Table 4.3-7 and Figure 4.3-6 show assessed valuation for the study area (\$30.8 billion) and parcels identified within the quarter-mile SCAG Tier 2 zones (\$8.1 billion). Figure 4.3-6 displays a comparison of commercial, industrial and residential development assessed valuation. Residential valuation for the study area (\$22.3 billion) represents about 72 percent of the total study area valuation, and residential valuation for the transit corridor (\$5.6 billion) represents about 69 percent of the total transit corridor valuation. While the transit corridor represents an average of 26.4 percent of the total valuation of the study area, it also comprises a comparatively higher percentage of valuation for commercial, industrial, and multi-family residential parcels.

As shown in Part B of Table 4.3-7, the transit corridor comprised 26.6 percent of the total acreage within the study area. Multi-family land uses were relatively more concentrated at about 34.1 percent of the study area. As shown in Figure 4.3-7, examining the land use distributions, single-family residential acreage comprised the majority of the land uses in both the transit corridor (about 57 percent) and the study area (about 53 percent).

As shown in Part C of Table 4.3-7, the average assessed valuation per acre was estimated at \$1,551,259 per acre in the transit corridor, which was similar to the average for the study area at \$1,560,656 per acre. Also, valuation per acre was higher in the transit corridor compared to the study area for both commercial (1.17 times) and industrial land use (1.20 times), as shown in Table 4.3-7, Panel C.

⁴ California Employment Development Department, *2010 Quarterly Census of Employment and Wages*. Available: <<http://www.labormarketinfo.edd.ca.gov/qcew/>>. Accessed: March 25, 2013.

Table 4.3-5: Los Angeles County Annual Average Wages (2010)

Employment Category	Amount
Agriculture and Mining	N/A
Construction	\$43,989
Manufacturing	\$62,746
Wholesale Trade	\$41,927
Retail Trade	\$27,569
Transportation, Warehousing and Utilities	\$45,941
Information	\$61,738
FIRE	\$48,914
Professional Services	\$45,659
Education and Health	\$49,932
Arts, Ent, Recr, Accom and Food	\$17,858
Other Services	\$18,367
Public Administration	\$47,340
Sources: Stanley R. Hoffman Associates, Inc.; California Employment Development Department, 2010 Quarterly Census of Employment and Wages.	

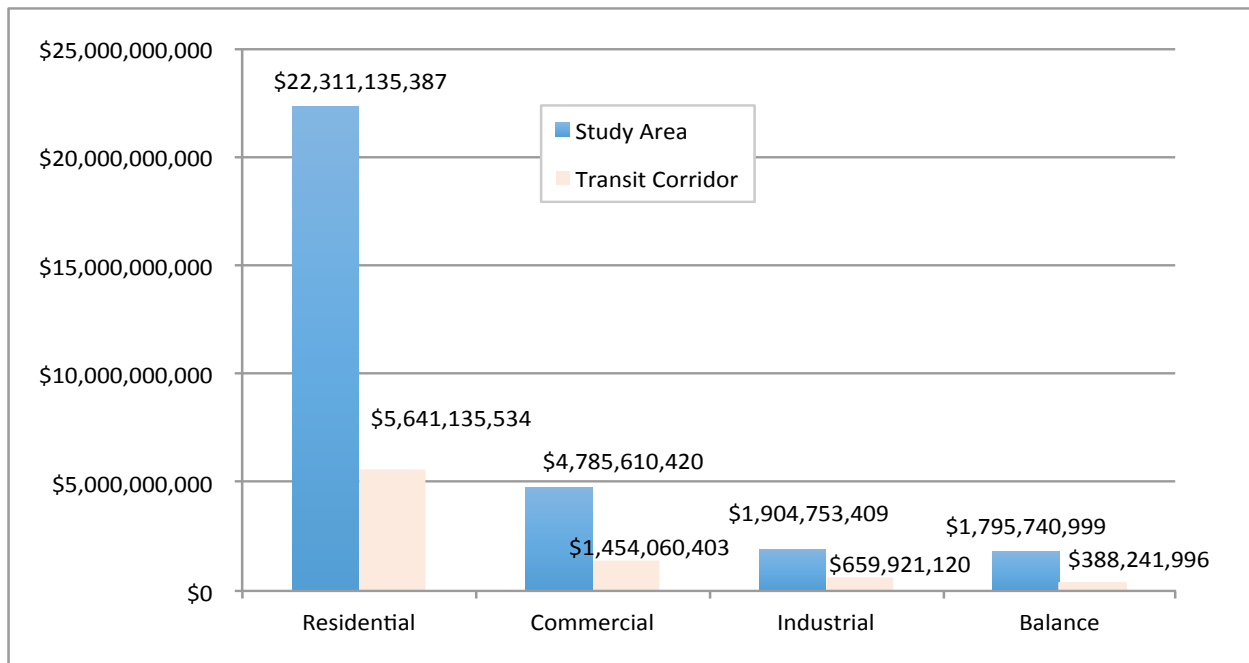
Table 4.3-6: Total Payroll Distribution (2010)

	Transit Corridor	ESFV Study Area
Agriculture and Mining	N/A	N/A
Construction	\$93,212,691	\$327,410,127
Manufacturing	\$229,148,392	\$667,366,456
Wholesale Trade	\$72,240,221	\$399,312,748
Retail Trade	\$141,732,229	\$488,632,956
Transportation, Warehousing and Utilities	\$80,764,278	\$272,384,189
Information	\$107,485,858	\$291,712,050
FIRE	\$88,387,598	\$377,420,424
Professional Services	\$242,449,290	\$953,816,510
Education and Health	\$572,720,040	\$1,751,564,628
Arts, Ent, Recr, Accom and Food	\$56,484,854	\$217,046,132
Other Services	\$39,672,720	\$121,442,604
Public Administration	\$63,056,880	\$104,432,040
Total	\$1,787,355,051	\$5,972,540,864
Estimated Average Wage	\$43,198	\$42,467
Source: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012 Regional Transportation Plan, Tier 2 Socioeconomic Data.		

Table 4.3-7: Property Valuation (2014)

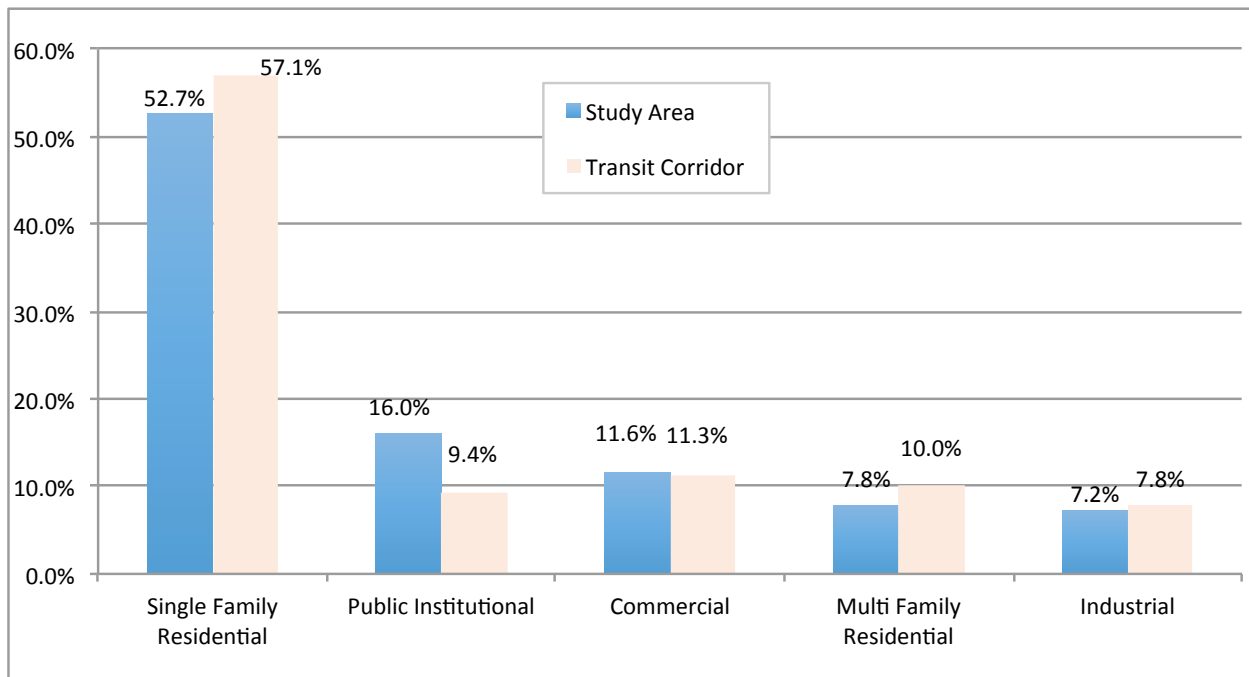
Performance Measures	ESFV Study Area	Transit Corridor	Corridor as percent of Study Area
A. Assessed Valuation by Land Use			
Commercial	\$4,785,610,420	\$1,454,060,403	30.4%
Industrial	\$1,904,753,409	\$659,921,120	34.6%
Single-Family Residential	\$17,006,966,690	\$4,112,513,706	24.2%
Multiple-Family Residential	\$5,304,168,697	\$1,528,621,828	28.8%
Public/Institutional	\$1,014,783,181	\$220,443,976	21.7%
Miscellaneous	\$20,222,957	\$2,653,434	13.1%
Vacant	\$760,734,861	\$165,144,586	21.7%
Total	\$30,797,240,215	\$8,143,359,053	26.4%
B. Total Acres by Land Use			
Commercial	2,281	591	25.9%
Industrial	1,422	410	28.8%
Single-Family Residential	10,390	2,998	28.9%
Multiple-Family Residential	1,545	527	34.1%
Public/Institutional	3,166	493	15.6%
Miscellaneous	213	18	8.3%
Vacant	717	213	29.8%
Total	19,734	5,250	26.6%
C. Assessed Valuation per Acre			
Commercial	\$2,098,258	\$2,460,021	1.17
Industrial	\$1,339,588	\$1,609,712	1.20
Single-Family Residential	\$1,636,866	\$1,371,923	0.84
Multiple-Family Residential	\$3,432,759	\$2,899,460	0.84
Public/Institutional	\$320,499	\$447,445	1.40
Miscellaneous	\$95,017	\$151,019	1.59
Vacant	\$1,061,495	\$773,880	0.73
Average	\$1,560,656	\$1,551,259	0.99
D. Vacant Acres by Land Use			
Commercial	288	84	29.3%
Industrial	80	30	38.2%
Single-Family Residential	301	95	31.7%
Multiple-Family Residential	5	2	36.3%
Public/Institutional	27	0	1.2%
Miscellaneous	16	1	5.2%
Total	717	213	29.8%
Sources: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, 2012 Regional Transportation Plan, Tier 2 Socioeconomic Data; Los Angeles County Assessor's Parcel Data, 2014.			

Figure 4.3-6: Assessed Valuation (2014)



Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor's Parcel Data, 2014.

Figure 4.3-7: Distribution of Land Use Acres (2014)



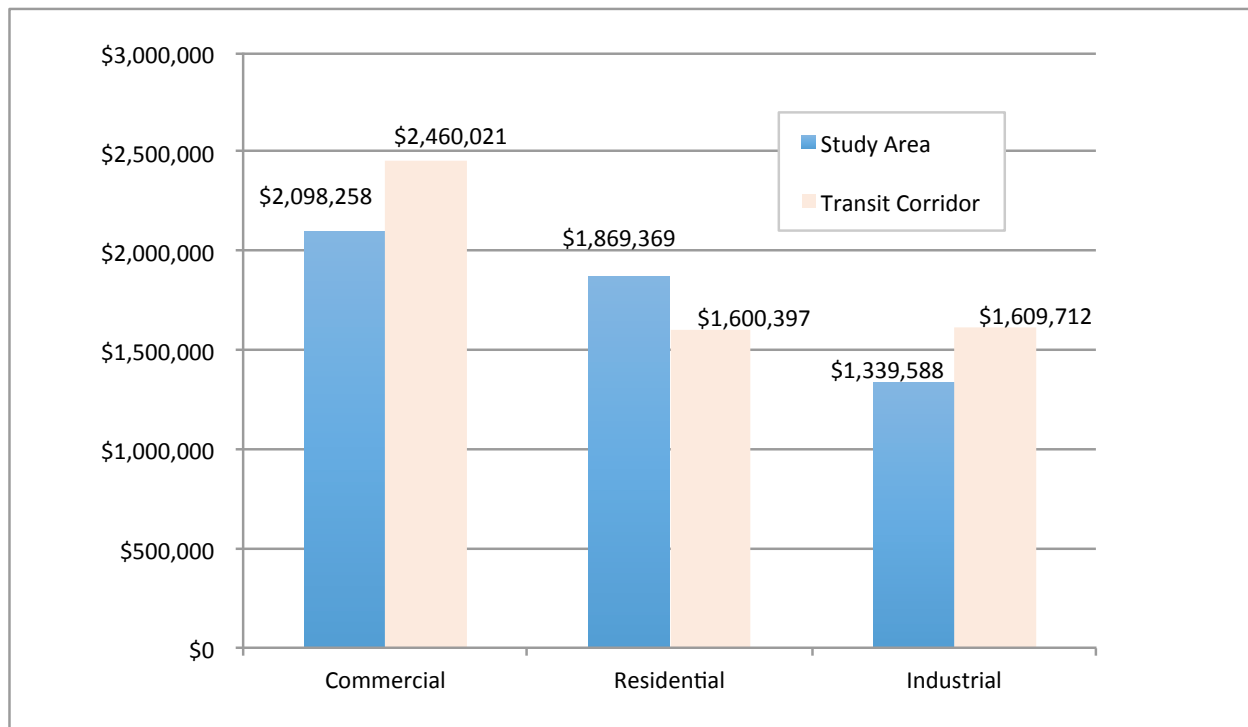
Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor's Parcel Data, 2014.

As shown in Part D of Table 4.3-7, vacant land in the transit corridor comprised almost 30 percent of the vacant land in the study area. Over 80 percent of the vacant land is within two categories in the study area: single-family residential (42 percent of total vacant) and commercial (40 percent of total vacant). This is very similar to the transit corridor with residential (45 percent of total vacant) and commercial (39 percent of total vacant).

Property Valuation of Non-Residential Development

As shown in Figure 4.3-8, on a valuation per acre basis, commercial land use was estimated the highest at about \$2.4 million per acre within the transit corridor; it was estimated about 14 percent lower at \$2.1 million within the study area. Similarly, industrial land valuation was also estimated higher at \$1.6 million per acre within the transit corridor, compared with about \$1.3 million per acre within the study area. Residential land valuation had a different relationship with the estimated \$1.6 million per acre valuation within the transit corridor actually about 16 percent lower than the estimate of about \$1.9 million per acre within the study area.

Figure 4.3-8: Assessed Valuation per Acre (2014)

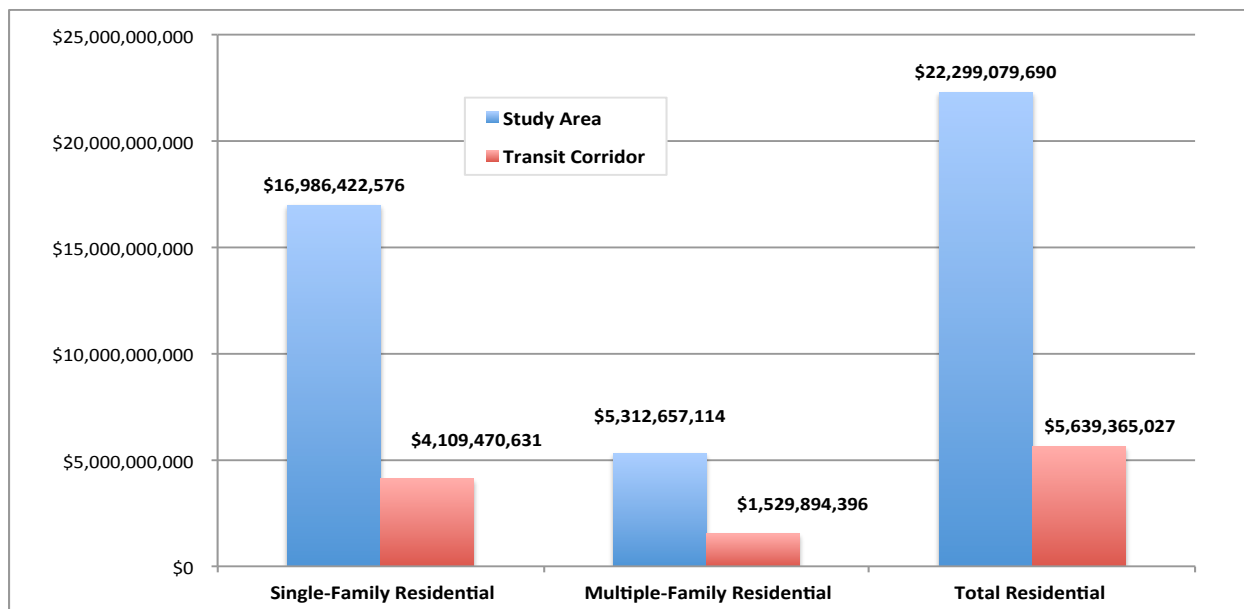


Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor’s Parcel Data, 2014.

Property Valuation of Residential Development

Figure 4.3-9 shows assessed valuation for single- and multiple-family residential development within the transit corridor and the study area. The estimated transit corridor total residential valuation of \$5.6 billion comprised about 25 percent of the study area total valuation of \$22.2 billion in 2014. As a percent of the total residential valuation, single-family residential land uses comprised about 73 to 76 percent of the total residential valuation for the study area and the transit corridor, respectively.

Figure 4.3-9: Assessed Valuation of Residential Development (2014)



Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor’s Parcel Data, 2014.

4.3.2.7 Transit Supportive Land Use

Table 4.3-8 shows indicators for jobs-generating (Part A) land uses and residential (Part B) land uses by density; the indicators are discussed below.⁵

Jobs-Generating Land Uses by Density

In 2010, commercial employment density for the transit corridor at 32.7 jobs per developed acre was slightly higher than that for the study area at 30.6 jobs per developed acre. Similarly, industrial employment density for the transit corridor at 18.4 jobs per developed acre was slightly lower compared to that for the study area at 19.4 jobs per developed acre.

In 2010, the transit corridor had an estimated jobs per household ratio of about 1.0, very similar to the study area ratio of 1.1 jobs per household.

Residential Land Uses by Density

In 2010, population density, estimated as a ratio of residential population per developed residential acre, was estimated relatively higher at 47.4 persons per acre within the transit corridor compared to 38.1 persons per acre in the study area.

In 2010, household size within the corridor at 3.9 persons per household was relatively higher compared to the study area at 3.4 persons per household.

In 2010, households per developed residential acre were slightly higher within the transit corridor at 12.2 households per acre compared to 11.2 households per acre within the study area.

⁵ Land use data for this section obtained from Los Angeles County Assessor’s Parcel data for 2014, while demographic and employment information was obtained from the SCAG 2012 RTP Tier 2 dataset.

Table 4.3-8: Job-Generating and Residential Land Uses by Density (2010)

	ESFV Study Area	Transit Corridor
A. Jobs-Generating Land Uses by Density		
Commercial Employment Density (jobs per commercial acre)	30.6	32.7
Industrial Employment Density (jobs per industrial acre)	19.4	18.4
Total Jobs per Household	1.1	1.0
B. Residential Land Uses by Density		
Population Density (persons per residential acre)	38.1	47.4
Persons per Household	3.4	3.9
Households per Acre	11.2	12.2
Sources: Stanley R. Hoffman Associates, Inc.; Southern California Association of Governments, <i>2012 Regional Transportation Plan, Tier 2 Socioeconomic Data</i> ; Los Angeles County Assessor’s Parcel Data, 2014.		

4.3.3 Environmental Consequences, Impacts, and Mitigation Measures

The impacts of each of the project alternatives are discussed in detail below. For a summary of impacts by alternative, please see Table 4.3-15 at the end of this section.

4.3.3.1 No-Build Alternative

Construction Impacts

Under the No-Build Alternative, no project improvements are proposed. Therefore, no parcel acquisitions would be required and no construction costs would occur under this alternative.

Operational Impacts

No project improvements are proposed under this alternative and consequently no operational impacts would occur under the No-Build Alternative.

Cumulative Impacts

The No-Build Alternative would not require acquisition of properties and consequently would not result in direct adverse effects that could contribute to cumulative adverse economic and fiscal impacts.

Mitigation Measures

Construction Mitigation Measures

None Required.

Operational Mitigation Measures

None Required.

Impacts Remaining After Mitigation

NEPA Finding

No adverse effects would occur.

CEQA Determination

According to CEQA, social and economic impacts are not considered environmental impacts.

4.3.3.2 TSM Alternative

Construction Impacts

The TSM Alternative would require no parcel acquisitions and consequently construction would result in no adverse economic or fiscal impacts or effects.

The estimated cost to construct the relatively minor physical improvements (e.g., bus stop improvements and minor modifications to the roadway network including traffic signal improvements) proposed under the TSM Alternative is \$8.6 million. The TSM Alternative would generate an estimated 111 jobs based on this estimated construction cost. Of these jobs, 66 would be generated directly by construction and 19 would be generated indirectly. An additional 26 jobs would be induced through increased household spending by direct and indirect employees.

Total labor income for the TSM Alternative would be about \$6.8 million, with \$4 million of this being the result of direct construction impacts. Labor income for jobs created via indirect impacts would be about \$1.4 million. Labor income for induced jobs would also be about \$1.4 million.

Total output for this alternative would be just over \$16 million, \$8.6 million of which would be generated directly by construction. Output generated by indirect impacts amounts to about \$3.7 million. Induced impacts of construction could generate nearly \$3.8 million of output.

The TSM Alternative would generate an estimated \$8.5 million in value added, with about \$4.1 million resulting from the direct impacts of construction. Indirect impacts would generate an estimated \$2.1 million in value added. Induced value added would amount to about \$2.4.

Operational Impacts

The TSM Alternative would result in no adverse operational economic or fiscal impacts. Minor beneficial impacts could occur as result of a minor increase in the number of bus drivers that would be required to provide the increased bus frequencies.

Cumulative Impacts

The TSM Alternative would not require acquisition of properties and consequently would not result in direct adverse effects that could contribute to cumulative adverse economic and fiscal impacts.

Mitigation Measures

No negative impacts on the region's economy have been identified for this alternative; therefore, no mitigation would be required.

Construction Mitigation Measures

None required.

Operational Mitigation Measures

None required.

Impacts Remaining After Mitigation

NEPA Finding

No adverse effects would occur.

CEQA Determination

According to CEQA, social and economic impacts are not considered environmental impacts.

4.3.3.3 BRT Alternatives (Build Alternatives 1 and 2)

Alternative 1 – Curb-Running BRT

Construction Impacts

Alternative 1 – Curb-Running BRT would require no parcel acquisitions. Other than potential minor economic impacts on local businesses due to reduced visibility (due to sign blockage) and diminished access resulting from temporary sidewalk or lane closures, loss of on-street parking during construction, and permanent removal of on-street parking to accommodate the Alternative 1 alignment, no adverse fiscal and economic impacts would occur.

The construction costs for Alternative 1 are estimated at \$260.0 million. Alternative 1 would generate an estimated 3,368 jobs. Of these jobs, an estimated 2,000 would be generated directly by construction and 577 would be generated indirectly. An additional 791 jobs would be induced through increased household spending by direct and indirect employees.

Total labor income for Alternative 1 would be about \$206.6 million, with \$120.8 million of this being the result of direct construction impacts. Labor income for jobs created via indirect impacts would be about \$43.4 million.

Total economic output for this alternative would be about \$486.8 million, \$259.8 million of which would be generated directly by construction. Output generated by indirect impacts would amount to approximately \$112.7 million. Induced impacts of construction would generate nearly \$114.3 million of output.

Alternative 1 would generate about \$257.7 million in value added, with about \$123.4 million coming from direct impacts of construction. Indirect impacts would generate approximately \$62.2 million in value added. Induced value added would amount to about \$72.1 million.

Operational Impacts

Operational economic and fiscal impacts would be limited to the potential indirect impacts on local businesses due to diminished access that could occur where on-street parking would be removed to accommodate the Curb-Running BRT Alternative. No other adverse operational economic and fiscal impacts would occur.

Cumulative Impacts

The Curb-Running BRT Alternative would not require acquisition of properties and consequently would not result in direct adverse effects that could contribute to cumulative adverse economic and fiscal impacts. The indirect economic and fiscal effects due to Curb-Running Build Alternative would be minimal and can be further reduced with implementation of mitigation measures; therefore, the Curb-Running Alternative would not contribute to any significant adverse cumulative fiscal and economic impacts.

Mitigation Measures

No negative impacts on the region's economy have been identified for any of the build alternatives; therefore, no mitigation would be required. Nevertheless, the following mitigation measures would reduce impacts.

Construction Mitigation Measures

Construction would have temporary impacts on commercial and industrial businesses, particularly those near or adjacent to construction sites. Sidewalks or adjacent roadway lanes may be temporarily closed, thereby reducing business access. Business impacts could also include reduced visibility of commercial signs and businesses. These construction impacts could in turn have minor economic impacts on commercial establishments. A number of short-term measures would be undertaken to temper these impacts (please see Mitigation Measures MM-TRA-1 and MM-TRA-5 in the Executive Summary or Chapter 3 of this EIS/EIR).

Operational Mitigation Measures

None required.

Impacts Remaining After Mitigation

NEPA Finding

Potential effects would not be adverse.

CEQA Determination

According to CEQA, social and economic impacts are not considered environmental impacts.

Alternative 2 – Median-Running BRT

Construction Impacts

Alternative 2 – Median-Running BRT would not require the acquisition of any parcels. Therefore, adverse economic and fiscal impacts would be limited to potential impacts on local businesses due to reduced visibility (e.g., sign blockage) and diminished access resulting from sidewalk or lane closures, loss of on-street parking during construction, and permanent removal of on-street parking spaces to accommodate the Alternative 2 alignment.

The estimated construction cost for Alternative 2 is approximately \$362 million. Alternative 2 would generate an estimated 4,693 jobs. Of these jobs, 2,788 would be generated directly by construction and 804 would be generated indirectly. An additional 1,101 jobs would be induced through increased household spending by direct and indirect employees.

Total labor income for Alternative 2 would be about \$287.9 million, with \$168.4 million of this being the result of direct construction impacts. Labor income for jobs created via indirect impacts would be about \$60.5 million. Labor income for induced jobs would be about \$59.1 million. Total Output for this alternative would be about \$678.4 million, \$362.0 million of which would be generated directly by construction. Output generated by indirect impacts would amount to about \$157.1 million. Induced impacts of construction generate about \$159.2 million of output.

The Median-Running BRT Alternative would generate an estimated \$359.2 million in value added, with about \$172.0 million coming from direct impacts of construction. Indirect impacts would generate about \$86.7 million in value added.

Operational Impacts

Operational impacts would be the same as those described above for Alternative 1.

Cumulative Impacts

The Median-Running BRT Alternative would not require acquisition of properties and consequently would not result in direct adverse effects that could contribute to cumulative adverse economic and fiscal impacts. The indirect economic and fiscal effects due to the Median-Running Alternative would be minimal and can be further reduced with implementation of mitigation measures; therefore, this alternative would not contribute to any significant adverse cumulative fiscal and economic impacts.

Mitigation Measures

Construction Mitigation Measures

Construction would have temporary impacts on commercial and industrial businesses, particularly those near or adjacent to construction sites. Sidewalks or adjacent roadway lanes may be temporarily closed, thereby reducing business access. Business impacts could also include reduced visibility of commercial signs and businesses. These construction impacts could in turn have minor economic impacts on commercial establishments. A number of short-term measures would be undertaken to temper these impacts (please see Mitigation Measures MM-TRA-1 and MM-TRA-5 in the Executive Summary or Chapter 3 of this EIS/EIR).

Operational Mitigation Measures

None required.

Impacts Remaining After Mitigation

NEPA Finding

Potential effects would not be adverse.

CEQA Determination

According to CEQA, social and economic impacts are not considered environmental impacts.

4.3.3.4 Rail Alternatives (Alternatives 3 and 4)

Alternative 3 – Low-Floor LRT Tram

Construction Impacts

Alternative 3 could result in potential minor economic impacts on local businesses due to reduced visibility (e.g., sign blockage) and diminished access resulting from sidewalk or lane closures, loss of on-street parking during construction, and permanent removal of on-street parking spaces to accommodate the Alternative 3 alignment.

The parcel acquisitions and the economic and fiscal impacts resulting from those acquisitions that could occur under this alternative are discussed below.

Parcel Acquisitions

Guideway, Stations, and TPSS

Alternative 3 would require full or partial acquisition of approximately 28 parcels to construct the guideway, stations, and TPSS. The acquisitions would consist of 25 full acquisitions and three partial acquisitions. Eleven property acquisitions would be required along the alignment to accommodate the TPSS facilities, which would be spaced approximately 1 to 1.5 miles apart. In addition, full acquisitions of 15 parcels would be required to accommodate the Low-Floor LRT/Tram guideway at the southwest corner of San Fernando Road and Van Nuys Boulevard and provide the necessary curve to transition the alignment to San Fernando Road. These parcels contain commercial retail businesses, which would require relocation. Two parcels between Weidner Street and the SR-118 on/off-ramp at San Fernando Road would be acquired to accommodate a station platform.

MSF Sites

In addition to ROW acquisitions required to construct the track and TPSS facilities associated with the rail alternatives, a number of parcels would be acquired to accommodate the MSF. The MSF site would require approximately 25 to 30 acres to provide enough space for storage of the maximum number of train vehicles and accommodate the associated operational needs, such as staff offices, dispatcher workstations, employee break rooms, operator areas, collision/body repair areas, paint booths, and wheel truing machines. Because of the space needs for the MSF, acquisition of between 37 and 61 parcels, depending on the MSF site selected, would be required. A discussion of the ROW acquisition requirements for each of the three proposed alternative MSF sites is presented below.

MSF Option A: MSF Option A would fully acquire 58 parcels between Calvert Street to the north, Oxnard Street to the south, and Kester Avenue to the west. The majority of the property that would be acquired consists of light manufacturing and commercial property, most of which contains businesses oriented toward automobile repair and supplies and other general commercial retail uses. Three parcels would also be fully acquired that are zoned for residential use but are currently developed as a single parking lot serving an adjacent warehouse business. One parcel (2241-024-014) zoned for industrial use appears to include approximately four housing units. Accordingly, residential displacement would occur under MSF Option A.

MSF Option B: MSF Option B would require 37 full acquisitions along Keswick Street and Raymer Street. A majority of the property that would be acquired consists of light manufacturing and commercial property, most of which contains businesses oriented toward automobile repair and supplies or raw materials supply and manufacturing.

MSF Option C: MSF Option C would require the acquisition of 42 parcels including 41 full acquisitions along Arminta Street and Cabrito Road. As with Option B, a majority of the property that would be acquired consists of light manufacturing and commercial property oriented toward automobile repair and raw materials supply and manufacturing.

Economic and Fiscal Impacts of Parcel Acquisitions

The economic and fiscal impacts of Alternative 3, including the MSF site options, are summarized in Tables 4.3- 9 through 4.3-11 below and described in greater detail in the text that follows the tables. As shown in Table 4.3-9, the Total Assessed Value for Alternative 3 Option A, Option B, and Option C range from a low of about \$40.6 million (MSF Option C) to a high of \$45.9 million (MSF Option B), requiring potentially 32.1 acres (MSF Option A) to 36.7 acres (MSF Option B) of land.

As shown in Table 4.3-10, the number of parcels to be acquired ranges from 63 (MSF Option B) to 87 (MSF Option A) and the total acquisitions square footage ranges from 1.2 million square feet (MSF Option A) to 1.4 million square feet (MSF Option B). Table 4.3-11 summarizes the economic impacts and identifies the affected number of firms, employment, output, value-added, and labor compensation, as well as the potential losses in property and sales tax revenue due to the parcel acquisitions.

Table 4.3-9: Alternative 3 – Summary of Assessed Valuation and Parcel Acquisition Statistics

ALT 3	Assessed Land Value	Assessed Improvement Value	Total Assessed Value	Building Sq. Ft.	Parcel Sq. Ft.	Acres	FAR	Value Per Acre
Option A	\$23,602,035	\$17,312,249	\$40,914,284	460,223	1,397,068	32.1	0.33	\$1,275,691
Option B	\$26,943,151	\$19,044,182	\$45,987,333	405,371	1,599,168	36.7	0.25	\$1,252,656
Option C	\$24,285,429	\$16,282,455	\$40,567,884	485,528	1,433,459	32.9	0.34	\$1,232,778

Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor’s File, 2014.

Table 4.3-10: Alternative 3 – Summary of Total Parcel Square Footage and Estimated Acquired Square Footage

ALT 3	No. of Parcels	Parcel Square Footage	KOA Parcel Acquisition Square Footage ^a	Difference	Percentage of Parcels Acquired
Option A	90	1,397,068	1,232,118	164,950	88.2%
Option B	63	1,599,168	1,430,828	168,340	89.5%
Option C	68	1,433,459	1,273,168	160,291	88.8%

^a. This is the parcel square footage estimated by KOA Corporation to be acquired.
Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor’s File, 2014.

Table 4.3-11: Alternative 3 – Summary of Estimated Employment and Fiscal Impacts

ALT 3	Firms	Jobs	Output	Value Added	Labor Income	Property Tax	Sales Tax
Option A	79	413	\$73,905,065	\$38,009,745	\$22,731,044	\$409,143	\$41,798
Option B	54	580	\$87,838,069	\$50,789,184	\$29,280,634	\$459,873	\$184,639
Option C	79	576	\$162,736,261	\$66,597,176	\$37,810,922	\$405,679	\$62,851

Sources: Stanley R. Hoffman Associates, Inc.; IMPLAN Group, LLC, IMPLAN System (data and software), Copyright 2013.

Alternative 3, MSF Option A

Property Tax Loss Analysis: For Alternative 3, including MSF Option A, about \$409,000 is estimated to be lost in property taxes from potential parcel acquisitions (under the 1 percent basic property tax levy). The loss would affect the operating budgets of local jurisdictions, special districts, and agencies. Almost 28 percent of the study area’s property tax loss would be from the Los Angeles County General Fund, with about 26 percent of the estimated loss from the Los Angeles City General Fund. When the property revenues loss to the Los Angeles County Unified School District is combined with other K-12 educational revenue funds, approximately 40 percent of the total of \$409,000 would be lost from their operating budget. The loss in tax revenue to other districts and agencies comprises a relatively small proportion of the total.

When property taxes lost are compared with the ¼ mile transit corridor and the study area, the loss ranges from only 0.5 percent of the overall property taxes generated in the transit corridor, to 0.4 to 0.6 percent for the fund categories. Similarly, when the estimated property tax lost is compared against the property taxes in the larger study area, the loss is even less at 0.1 percent for both the study area and the fund categories.

Economic Impacts of Parcel Acquisitions: Alternative 3, including MSF Option A’s parcel acquisitions, would affect 413 jobs divided among 79 firms, which have a total output of about \$73.9 million. Total labor income generated by the 413 jobs is about \$22.7 million, which is 31 percent of the total output. Jobs are concentrated mostly in six industries, with Other Services (except Public Administration) accounting for the highest number of estimated employees at 102. The next largest sector in terms of employment is Manufacturing with an estimated 62 employees. Manufacturing also accounts for the highest level of output with nearly \$30 million, over twice as much as the second highest output for Wholesale Trade at about \$13 million. Value added, which is the combination of labor income, property type income, and indirect business taxes, is estimated at \$38 million.

Estimated Retail and Food Services Sales Tax Impact: The estimated local sales tax lost by the potential parcel acquisitions for Alternative 3, including MSF Option A, is estimated at \$41,798. This is based on the estimated employment lost from the associated parcel acquisitions that include employment from three main employment categories that generate taxable sales transactions. These employment categories are shown as follows with the average output per worker shown in parentheses: 1) food and beverage stores (\$71,993); 2) food services, including restaurants and fast food establishments (\$63,437); and 3) all other retail activities (\$87,724). The total average output per store type was then multiplied by the number of estimated workers lost in each category to generate estimated total taxable sales transactions. The Food and Beverage Category was further

factored by 30 percent to estimate the taxable transactions for grocery and convenience food stores. The resultant taxable retail sales transactions were then factored by 1 percent to estimate the local sales tax lost.

Construction Cost Impacts: The construction costs for Alternative 3, including MSF Option A, are estimated to be over \$1.0 billion. Alternative 3 Option A would generate an estimated 13,134 jobs. Of these jobs, 7,802 would be generated directly by construction and 2,250 would be generated indirectly. An additional 3,082 jobs would be induced through increased household spending by direct and indirect employees.

Total Output for this alternative would be about \$1.9 billion, \$1.0 billion of which would be generated directly by construction. Output generated by indirect impacts would amount to about \$439.7 million. Induced impacts of construction could generate nearly \$445.7 million of output.

Alternative 3, MSF Option B

Property Tax Loss Analysis: For Alternative 3, including MSF Option B, potential property acquisitions would result in a loss of about \$460,000 (under the 1 percent basic property tax levy) from the operating budgets of local jurisdictions, special districts, and agencies. Almost 28 percent of the study area's property tax loss would be from the Los Angeles County General Fund, with about 26 percent of the estimated loss from the Los Angeles City General Fund. When the property revenues loss to the Los Angeles County Unified School District is combined with other K-12 educational revenue funds, approximately 40 percent of the total property tax loss would be from their operating budgets. Other districts and agencies make up a relatively small proportion of the total.

When property taxes lost are compared with the ¼ mile transit corridor and the study area, the loss ranges from only 0.6 percent of the property taxes generated in the transit corridor, to 0.4 to 0.7 percent for the fund categories. Similarly, when the estimated property tax lost is compared against the study area, the loss is even less at 0.1 percent of the overall property taxes, and ranges between 0.1 to 0.2 percent for the fund categories.

Economic Impacts of Parcel Acquisitions: Parcel acquisitions to construct Alternative 3, including MSF Option B, would affect 580 jobs in 54 firms. Labor income generated by the lost jobs amounts to about \$29.3 million, which is almost exactly a third of these firms' total output of \$87.8 million. Employment is dominated by Accommodation and Food Services at 242 employees and Whole Sale Trade at 142 employees. Together these industries provide over two thirds of the jobs affected by this alternative. In terms of output, Wholesale Trade is the largest industry, as its output of about \$33 million is about twice as high as Manufacturing, which is the second largest in this regard. Value added is estimated at \$50.8 million.

Estimated Retail and Food Services Sales Tax Impact: The estimated local sales tax lost by the potential parcel acquisitions required to construct Alternative 3, including MSF Option B, is estimated at \$184,639.

Construction Cost Impacts: The construction costs for Alternative 3, including MSF Option B, are estimated to be about \$1.0 billion. Alternative 3 Option B would generate an estimated 13,419 total jobs or slightly more than Alternative 3 Option A. Of these jobs, 7,971 would be generated directly by construction and 2,299 would be generated indirectly. An additional 3,149 jobs would be induced through increased household spending by direct and indirect employees.

Total Output for this alternative would be just over \$1.9 billion, about \$1.0 billion of which would be generated directly by construction. Output generated by indirect impacts would amount to about \$449.2 million. Induced impacts of construction would generate over \$455.3 million of output.

Alternative 3, MSF Option C

Property Tax Loss Analysis: For Alternative 3, including MSF Option C, the parcel acquisitions would result in the loss of an estimated \$406,000 in property taxes (under the 1 percent basic property tax levy) from the operating budgets of local jurisdictions, special districts and agencies. Almost 28 percent of the study area's property tax loss would be from the Los Angeles County General Fund, with about 26 percent from the Los Angeles City General Fund. When the property revenues loss to the Los Angeles County Unified School District is combined with other K-12 educational revenue funds, approximately 40 percent of the total property tax loss would be from their operating budgets. Other districts and agencies would make up a relatively small proportion of the total.

When property taxes lost are compared with the 0.25-mile transit corridor and the study area, the loss ranges from only 0.5 percent of the overall property taxes generated in the transit corridor, to 0.0 to 0.7 percent for the fund categories. Similarly, when the estimated property tax loss is compared against the study area, the loss is even less at 0.1 percent of the overall property taxes generated, and ranges between 0.0 to 0.2 percent for the fund categories.

Economic Impacts of Parcel Acquisitions: Alternative 3, including MSF Option C, would affect 576 jobs spread among 79 firms. The total output of these firms is \$162.7 million. The labor income generated by the jobs lost under this option is just over \$37.8 million, representing a much smaller portion (about 23 percent) of the total output than the other options. Manufacturing accounts for about 40 percent of all jobs affected by this option with 231, and also accounts for nearly 70 percent of the option's dollar output. For total employment, Wholesale Trade is the second largest industry with 74 workers and Retail Trade is third with 69. Value added is \$66.6 million.

Estimated Retail and Food Services Sales Tax Impact: The estimated local sales tax that could be lost by the potential parcel acquisitions for Alternative 3, including MSF Option C, is estimated at \$62,851.

Construction Cost Impacts: The construction costs for Alternative 3, including MSF Option C, are estimated to be about \$1.0 billion. Alternative 3, including MSF Option C, would generate an estimated 13,165 jobs. Of these jobs, 7,820 would be generated directly by construction and 2,255 would be generated indirectly. An additional 3,090 jobs would be induced through increased household spending by direct and indirect employees.

Total Output for this alternative would be about \$1.9 billion, \$1.0 billion of which would be generated directly by construction. Output generated by indirect impacts would amount to approximately \$440.7 million. Induced impacts of construction could generate \$446.7 million of output.

Operational Impacts

Operational economic and fiscal impacts would be limited to the potential indirect impacts on local businesses due to diminished access that could occur where on-street parking would be removed to accommodate the Alternative 3 – Low Floor LRT/Tram alignment. The loss of on-street parking spaces may mean that drivers would have to park on adjacent streets or in off-street lots or garages. While that may be an inconvenience, it does not constitute a substantial adverse effect under NEPA or a significant impact under CEQA. No other adverse operational economic and fiscal impacts would occur.

Cumulative Impacts

Alternative 3 in conjunction with other related projects that require the acquisition of parcels and result in the long-term loss of income-generating jobs and tax revenue could potentially result in adverse cumulative economic and fiscal impacts under NEPA. However, the related projects identified within the study area (see Table 2-3 in Chapter 2) do not include any other major public infrastructure projects that would result in permanent loss of tax revenue or jobs. The vast majority of the related projects are residential, commercial, or industrial development projects that would generate long-term jobs and tax revenue.

Alternative 3 – Low Floor LRT/Tram Alternatives, Options A, B and C could potentially spur more significant increased mixed use development because of its more permanent, major investment into a fixed rail system that may incentivize the private sector to invest in more significant mixed use development projects at key station locations. However, due to the more localized nature of a Low-Floor LRT/Tram system, compared with a more regional serving LRT, it is not expected that this alternative would generate significant cumulative growth inducement impacts.

Mitigation Measures

Construction Mitigation Measures

Construction would have temporary impacts on commercial and industrial businesses, particularly those near or adjacent to construction sites. Sidewalks or adjacent roadway lanes may be temporarily closed, thereby reducing business access. Business impacts could also include reduced visibility of commercial signs and businesses. These construction impacts could in turn have minor economic impacts on commercial establishments. A number of short-term measures would be undertaken to temper these impacts (please see Mitigation Measures MM-TRA-1 and MM-TRA-5 in the Executive Summary or Chapter 3 of this EIS/EIR).

Operational Mitigation Measures

None required.

Impacts Remaining After Mitigation

NEPA Finding

The potential effects would not be adverse under NEPA.

CEQA Determination

According to CEQA, social and economic impacts are not considered environmental impacts.

Alternative 4 – LRT

Construction Impacts

Alternative 4 could also result in potential minor economic impacts on local businesses due to reduced visibility (e.g., sign blockage) and diminished access resulting from sidewalk or lane closures, loss of on-street parking during construction, and permanent removal of on-street parking spaces to accommodate the Alternative 4 alignment.

Parcel Acquisitions

Guideway, Stations, and TPSS

Alternative 4 would require the full or partial acquisition of approximately 55 parcels to construct the guideway, stations, and TPSS facilities. Of these 55 acquisitions, 44 would be full acquisitions and 11 would be partial acquisitions. TPSS facilities would be dispersed along the project alignment and require 13 property acquisitions, of which 12 would be full acquisitions and one would be a partial acquisition of a grocery store parking lot. The remaining 42 property acquisitions would be required to accommodate the project guideway and station platforms. Twenty-one such acquisitions, including 10 acquisitions in the City of San Fernando, would be located near the Alternative 4 terminus and would be required due to the partial relocation of Metrolink tracks to accommodate the Alternative 4 guideway and station platform at the Sylmar/San Fernando Metrolink Station. Within the City of San Fernando, land uses abut the existing Metrolink ROW, which is relatively narrow between Jessie Street and the Sylmar/San Fernando Metrolink Station. Additional space would be required to fully accommodate both the Metrolink and tracks/guideway. As such, small partial acquisitions of seven properties and three full acquisitions would be required in this location. As would occur under Alternative 3, full acquisitions of 16 parcels containing commercial properties would be required to accommodate the LRT guideway at the southwest corner of San Fernando Road and Van Nuys Boulevard to provide the necessary curve to transition the alignment to San Fernando Road. Two station platforms, the Roscoe Station and the Sherman Way Station, would require the acquisition of several commercial properties.

MSF Sites

In addition to ROW acquisitions required to construct the track and TPSS facilities associated with the LRT Alternative, a number of parcels would be acquired to accommodate the MSF. The MSF site would require approximately 25 to 30 acres to provide enough space for storage of the maximum number of train vehicles and accommodate the associated operational needs, such as staff offices, dispatcher workstations, employee break rooms, operator areas, collision/body repair areas, paint booths, and wheel truing machines. Because of the space needs for the MSF, acquisition of between 37 and 61 parcels, depending on the MSF site selected, would be required. A discussion of the ROW acquisition requirements for each of the three proposed alternative MSF sites is presented below.

MSF Option A: As described above under Alternative 3, MSF Option A would require acquisition of 58 parcels between Calvert Street to the north, Oxnard Street to the south, and Kester Avenue to the west. Two additional full acquisitions would be required where Van Nuys Boulevard crosses the Metro Orange Line Busway in order to provide the necessary curve to transition the Alternative 4 guideway onto the Orange Line Busway ROW. Because the MSF Option A site would be located at the southern terminus of Alternative 4, as opposed to the areas surrounding the Van Nuys Metrolink Station under MSF Options B and C, a key difference in MSF Option A is the Van Nuys Metrolink station platform would only require partial acquisition of parcel 2215-001-912 at Keswick Street as opposed to the full acquisition under MSF Options B and C.

MSF Option B: MSF Option B would require 37 full acquisitions, as described above under Alternative 3. In order to connect Alternative 4 to the MSF Option B site, the Alternative 4 guideway would curve east off of Van Nuys Boulevard through a row of commercial buildings requiring 11 full acquisitions. This is required to provide a perpendicular crossing of Van Nuys Boulevard to access the MSF Option B site. In addition, partial acquisition and permanent underground easements below six private properties would be required where tunnel portions of the alignment would not be within public road ROW. No displacements would be required as a result of these underground easements.

MSF Option C: MSF Option C, as described above under Alternative 3, would require the acquisition of 42 properties, 41 of which would be full acquisitions. The MSF Option C connection for Alternative 4 would require the full acquisition of 11 commercial properties. The primary difference between the MSF Option C connection and the MSF Option B connection is there would be additional underground easements required below two additional properties for MSF Option C, as the tunnel portion of the alignment would be extended below these two private properties.

Economic and Fiscal Impacts of Parcel Acquisitions

The economic and fiscal impacts due to the parcel acquisitions required to construct Alternative 4, including the MSF site options, are summarized in Tables 4.3- 12 through and 4.3-14 below and described in greater detail in the text that follows the tables. As shown in Table 4.3-12, the Total Assessed Value for Alternative 4 Option A, Option B, and Option C range from a low of about \$65.8 million (MSF Option A) to a high of \$94.0 million (MSF Option B), requiring potentially 60.5 acres (MSF Option A) to 72.2 acres (MSF Option B). Table 4.3-13 identifies the number of parcels that would be affected, which ranges from 102 (MSF Option B) to 118 (MSF Option A) and total square footage of the properties to be acquired, which ranges from 1.8 million square feet (MSF Option A) to 2.2 million square feet (MSF Option B). Table 4.3-14 identifies the affected number of firms, employment, output, value-added, and labor compensation and identifies the potential property and sales tax losses due to parcel acquisitions.

Table 4.3-12: Alternative 4 – Summary of Assessed Valuation and Parcel Acquisition Statistics

Land Use	Assessed Land Value	Assessed Improvement Value	Total Assessed Value	Building Sq. Ft.	Parcel Sq. Ft.	Acres	FAR	Value Per Acre
Option A	\$37,750,237	\$28,072,207	\$65,822,444	869,681	2,633,345	60.5	0.33	\$1,088,815
Option B	\$52,272,725	\$41,684,988	\$93,957,713	943,959	3,146,251	72.2	0.30	\$1,300,849
Option C	\$48,923,971	\$38,392,032	\$87,316,003	1,023,712	2,954,449	67.8	0.35	\$1,287,376

Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor’s File, 2014.

Table 4-13: Alternative 4 – Summary of Total Parcel Square Footage and Estimated Acquired Square Footage

ALT	No. of Parcels	Parcel Sq. Ft.	KOA Parcel Acquisition Sq. Ft. ^a	Difference	Percentage of Parcels Acquired
Option A	118	2,633,345	1,755,281	878,064	66.7%
Option B	102	3,146,251	2,245,671	900,580	71.4%
Option C	106	2,954,449	2,060,321	894,128	69.7%

^a. This is the parcel square footage estimated by KOA Corporation to be acquired.
Sources: Stanley R. Hoffman Associates, Inc.; Los Angeles County Assessor’s File, 2014.

Table 4.3-14: Alternative 4 – Summary of Estimated Employment and Fiscal Impacts

ALT 4	Firms	Jobs	Output	Value-Added	Labor Income	Property Tax	Sales Tax
Option A	106	974	\$215,034,217	\$91,240,338	\$57,126,873	\$658,000	\$66,632
Option B	126	1,285	\$248,514,020	\$115,093,588	\$70,330,356	\$940,000	\$236,438
Option C	147	1,280	\$325,433,391	\$131,861,261	\$79,294,826	\$873,000	\$113,774

Sources: Stanley R. Hoffman Associates, Inc.; IMPLAN Group, LLC, IMPLAN System (data and software), Copyright 2013.

Alternative 4, MSF Option A

Property Tax Loss Analysis: Under Alternative 4, including MSF Option A, it’s estimated that property acquisitions would result in the loss of about \$658,000 in property taxes (under the 1 percent basic property tax levy). The loss in property taxes would affect the operating budgets of local jurisdictions, special districts, and agencies. Almost 28 percent of the study area’s property tax loss would be from the Los Angeles County General Fund, with about 26 percent of the estimated loss from the Los Angeles City General Fund. When the property revenues loss to the Los Angeles County Unified School District is combined with other K-12 educational revenue funds, approximately 40 percent of the total of \$658,000 would be lost from their operating budgets.

When property taxes lost are compared with the ¼ mile transit corridor and the study area, the loss ranges from only 0.8 percent overall for the transit corridor, to 0.7 to 1.1 percent for the fund categories. Similarly, when the estimated property tax lost is compared against the study area, the loss is even less at 0.2 percent overall, and ranges between 0.2 and 0.3 percent for the fund categories.

Economic Impacts of Parcel Acquisitions: Alternative 4, including MSF Option A, would affect 106 firms containing a total of 974 jobs. Total labor income generated by the 974 jobs is about \$57.1 million, which is about a quarter of the total output of \$215 million. Manufacturing is the most significant industry in terms of both employment, with 289 jobs, and output, with \$138.4 million. Educational Services provide the second highest number of jobs with 249, and also has the second highest output at \$19.5 million. Value added is \$91.2 million.

Estimated Retail and Food Services Sales Tax Impact: The estimated local sales tax lost by the potential parcel acquisitions for Alternative 4, including MSF Option A, is estimated at \$66,632.

Construction Cost Impacts: The construction costs for Alternative 4, including MSF Option A, are estimated to be about \$2.5 billion. The direct, indirect, and induced impacts of this construction work would generate an estimated 33,157 jobs. Of these jobs, 19,798 would be generated directly by construction and 5,637 would be generated indirectly. An additional 7,722 jobs would be induced through increased household spending by direct and indirect employees,

Total Output for this alternative would be about \$4.8 billion, about \$2.5 billion of which would be generated directly by construction. Output generated by indirect impacts would amount to about \$1.1 billion. Induced impacts of construction would also generate about \$1.1 billion of output.

Alternative 4, MSF Option B

Property Tax Loss Analysis: Alternative 4, including MSF Option B, could result in the loss of an estimated \$940,000 in property taxes due to potential parcel acquisitions. The lost property taxes would affect the operating budgets of local jurisdictions, special districts, and agencies. Almost 28

percent of the study area's property tax loss would be from the Los Angeles County General Fund, with about 26 percent from the Los Angeles City General Fund. When the property revenues loss to the Los Angeles County Unified School District is combined with other K-12 educational revenue funds, approximately 40 percent of the total of \$940,000 would be lost from their operating budgets.

When property taxes loss is compared with the ¼ mile transit corridor and the study area, the loss ranges from only 1.2 percent overall, for the transit corridor, to 1.1 to 1.4 percent for the fund categories. Similarly, when the estimated property tax lost is compared against the study area, the loss is even less at 0.3 percent overall, and ranges between 0.3 and 0.4 percent for the fund categories.

Economic Impacts of Parcel Acquisitions: Alternative 4, including MSF Option B, would affect 1,285 jobs (the highest among the three MSF options for Alternative 4) and 126 firms. The total labor income generated by the 1,285 jobs would be about \$70.3 million, which is 28 percent of the option's total output. Manufacturing is again the most significant industry in terms of both employment, with 276 jobs, and output at about \$132.2 million. Food Services has the second highest number of employees with 267, while Educational Services is third with 245. Value added is estimated at \$115.1 million.

Estimated Retail and Food Services Sales Tax Impact: The estimated local sales tax lost by the potential parcel acquisitions for Alternative 4, including MSF Option B, is estimated at \$236,438.

Construction Cost Impacts: The construction costs for Alternative 4, including MSF Option B, are estimated to be about \$2.7 billion. The direct, indirect, and induced impacts of this construction work would generate an estimated 35,518 jobs. Of these jobs, 21,098 would be generated directly by construction and 6,085 would be generated indirectly. An additional 8,336 jobs would be induced through increased household spending by direct and indirect employees.

Alternative 4, including MSF Option B, would generate an estimated \$2.7 billion in value added, with about \$1.3 billion coming from direct impacts of construction. Indirect impacts would generate about \$656.4 million in value added. Induced value added would amount to about \$760.6 million.

Alternative 4, MSF Option C

Property Tax Loss Analysis: Alternative 4, including MSF Option C, could result in about \$873,000 in lost property taxes, which would affect the operating budgets of local jurisdictions, special districts, and agencies. Almost 28 percent of the study area's property tax loss would be from the Los Angeles County General Fund, with about 26 percent from the Los Angeles City General Fund. When the property revenues loss to the Los Angeles County Unified School District is combined with other K-12 educational revenue funds, approximately 40 percent of the total of \$873,000 would be lost to their operating budgets.

When property taxes lost are compared with the ¼ mile transit corridor and the study area, the loss ranges from only 0.5 percent overall, for the transit corridor, to 0.5 to 1.4 percent for the fund categories. Similarly, when the estimated property tax lost is compared against the study area, the loss is even less at 0.3 percent overall, and ranges between 0.1 and 0.4 percent for the fund categories.

Economic Impacts of Parcel Acquisitions: Alternative 4, including MSF Option C, could affect 1,280 jobs spread among 147 firms. Labor income for the option would total just under \$79.3 million, which is about a quarter of the option's total output of roughly \$325.4 million. This is the largest output among the three Alternative 4 options. Manufacturing is again the leading employer with 473 jobs, and has the highest output at about \$226.6 million. Educational Services is the second leading employer with 246 workers, while Retail Trade is third with 120 workers. Value added is estimated at \$131.9 million.

Estimated Retail and Food Services Sales Tax Impact: The estimated local sales tax lost by the potential parcel acquisitions for Alternative 4, including MSF Option C, is estimated at \$113,774.

Construction Cost Impacts: The construction cost for Alternative 4 Option C is estimated to be just under \$2.7 billion. The direct, indirect and induced impacts of this construction work would generate an estimated 34,372 jobs. Of these jobs, 20,417 would be generated directly by construction and 5,888 would be generated indirectly. An additional 8,067 jobs would be induced through increased household spending by direct and indirect employees.

Total Output for this alternative would be just under \$5.0 billion, about \$2.7 billion of which would be generated directly by construction. Output generated by indirect impacts amounts to about \$1.2 billion. Induced impacts of construction would generate about \$1.2 billion of output.

Operational Impacts

Operational economic and fiscal impacts would be limited to the potential indirect impacts on local businesses due to diminished access that could occur where on-street parking would be removed to accommodate the Alternative 4 –LRT alignment. No other adverse operational economic and fiscal impacts would occur.

Cumulative Impacts

The cumulative impacts would be to the same as those described above for Alternative 3, with the exception being that Alternative 4 has a greater potential to be growth inducing due to its higher carrying capacity, faster average speed, and generally higher per capita transit ridership.

Mitigation Measures

Construction Mitigation Measures

Construction would have temporary impacts on commercial and industrial businesses, particularly those near or adjacent to construction sites. Sidewalks or adjacent roadway lanes may be temporarily closed, thereby reducing business access. Business impacts could also include reduced visibility of commercial signs and businesses. These construction impacts could in turn have minor economic impacts on commercial establishments. A number of short-term measures would be undertaken to temper these impacts (please see Mitigation Measures MM-TRA-1 and MM-TRA-5 in the Executive Summary or Chapter 3 of this EIS/EIR).

Operational Mitigation Measures

None required.

Impacts Remaining After Mitigation

NEPA Finding

The potential effects would not be adverse under NEPA.

CEQA Determination

According to CEQA, social and economic impacts are not considered environmental impacts.

4.3.3.5 Summary of Impacts by Alternative

A summary of the economic and fiscal impacts that would occur under each alternative is provided below in Table 4.3-15.

Table 4.3-15: Summary of Potential Economic and Fiscal Impacts

Alternative	Effect on Property Tax Base	Economic Impacts of Parcel Acquisitions	Effect on Sales Tax Base	Construction Impacts
No Build	None	None	None	None
TSM	None	None	None	Construction costs of \$8.6 million, total direct, indirect & induced jobs of 111/short-term benefit
Alt. 1 – Curb Running BRT	None	None	None	Construction costs of \$260.0 million, total direct, indirect & induced jobs of 3,368/short-term benefit
Alt. 2 – Median Running BRT	None	None	None	Construction costs of \$362.0 million, total direct, indirect & induced jobs of 4,693/short-term benefit
Alt. 3 – Low-Floor LRT/ Tram (MSF Option A)	Loss of \$409,000 annually/less than significant	Loss of 413 jobs, 79 firms, and \$22.7 million labor income/less than significant	Loss of \$41,798 annually/ less than significant	Construction costs of \$1.0 billion, total direct, indirect & induced jobs of 13,134/short-term benefit
Alt. 3 – Low-Floor LRT/ Tram (MSF Option B)	Loss of \$460,000 annually/less than significant	Loss of 580 jobs, 54 firms, \$29.3 million labor income/less than significant	Loss of \$184,639 annually/ less than significant	Construction costs of \$1.0 billion, total direct, indirect & induced jobs of 13,419/short-term benefit
Alt. 3 – Low-Floor LRT/ Tram (MSF Option C)	Loss of \$406,000 annually/less than significant	Loss of 576 jobs, 79 firms, \$37.8 million labor income/less than significant	Loss of \$62,851 annually/ less than significant	Construction costs of \$1.0 billion, total direct, indirect & induced jobs of 13,165/short-term benefit
Alt. 4 – LRT (MSF Option A)	Loss of \$875,000 annually/less than significant	Loss of 1,280 jobs, 147 firms, \$79.3 million labor income/less than significant	Loss of \$113,774 annually/ less than significant	Construction costs of \$2.5 billion, total direct, indirect & induced jobs of 33,157/short-term benefit
Alt. 4 – LRT (MSF Option B)	Loss of \$940,000 annually/less than significant	Loss of 1,285 jobs, 126 firms, \$70.3 million labor income/less than significant	Loss of \$236,438 annually/ less than significant	Construction costs of \$2.7 billion, total direct, indirect & induced jobs of 35,518/short-term benefit
Alt. 4 – LRT (MSF Option C)	Loss of \$658,000 annually/less than significant	Loss of 974 jobs, 106 firms, \$57.1 million labor income/less than significant	Loss of \$66,632 annually/ less than significant	Construction costs of \$2.7 billion, total direct, indirect & induced jobs of 34,372/short-term benefit

Sources: Stanley R. Hoffman Associates, Inc., 2015.