

**Regional Connector Transit Corridor  
Draft Environmental Impact Statement/  
Draft Environmental Impact Report**

**APPENDIX BB**



**ECONOMIC AND FISCAL IMPACTS**



**Regional Connector Transit Corridor  
Economic and Fiscal Impacts  
Technical Memorandum**

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## ACRONYMS

BART	Bay Area Rapid Transit
CEQA	California Environmental Quality Act
CLACG	City of Los Angeles Council of Governments
DART	Dallas Area Rapid Transit
LRT	Light Rail Transit
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
NEPA	National Environmental Policy Act
SCAG	Southern California Association of Governments
TOD	Transit Oriented Development
TPSS	Traction power substations
TSM	Transportation Management System



## 1.0 SUMMARY

The proposed Regional Connector would be built in downtown Los Angeles. The area surrounding the proposed Regional Connector is substantially built out. Therefore, construction and operation of the transit system could result in impacts to land use including displacements. Such land use impacts could create economic and fiscal impacts.

Construction activities may impact local businesses along the project alignment. Construction spending may result in construction-related employment growth, and the Regional Connector Build Alternatives would result in improved accessibility and mobility and from downtown and other parts of the region by train in lieu of car. Increased public investment in infrastructure could result in overall employment growth in the region.

The analysis in this section identified the economic and fiscal impacts associated with construction and operation of the proposed project alternatives. The analysis assessed the significance of the potential impacts of each project alternative.

The project area for purposes of this study is a six-county region (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties). These counties belong to the Southern California Association of Governments (SCAG). The analysis of construction and property tax related impacts focused on properties that would abut the proposed alignments.

The alternatives under consideration for the Regional Connector are: the No Build Alternative, the Transportation Systems Management (TSM) Alternative, the At-Grade Emphasis Light Rail Transit (LRT) Alternative, the Underground Emphasis LRT Alternative, the Fully Underground Alternative – Little Tokyo Variation 1, and the Fully Underground Alternative – Little Tokyo Variation 2.

The No Build Alternative would include transit investments in the Metro 2009 Long-Range Transportation Plan with the exception of the Regional Connector Transit Corridor Project. The No Build Alternative would not substantially alter the physical environment and would not have significant, adverse economic impacts within the project area.

The Transportation System Management (TSM) Alternative includes the same transit improvements as the No Build Alternative and two new shuttles that would connect Union Station with the 7<sup>th</sup> Street/Metro Center Station. The TSM Alternative could permanently displace up to 24 parking spaces along its alignment to make way for new bus stops. The loss of parking spaces could impact some businesses. It is difficult to estimate the exact impact because the bus station locations have yet to be determined. However, like to the No Build Alternative, the TSM Alternative is not anticipated to have adverse impacts.

The At-Grade Emphasis LRT Alternative would require partial takes of five privately-owned parcels for station site construction and construction staging locations. Takes would result in an approximately 0.85 percent decrease in total property tax revenue from all privately-owned businesses that directly abut the proposed alignment. However, this loss in revenue could be offset by an increase in property values near station sites. Therefore, this alternative would not have an adverse impact to property tax revenues.

Adverse, but temporary, construction-related impacts could occur. Typical impacts could include disruption of access for adjacent land uses, increased levels of noise, vibration and dust, utility disruptions, the permanent displacement of up to 80 parking spaces, and a general disinterest in area businesses due to construction. These impacts could have the secondary effect of reducing area activity levels and, therefore, revenue for adjacent businesses.

Approximately 36 businesses along the At-Grade Emphasis LRT Alternative alignment could be adversely affected by construction. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could remain from construction.

The At-Grade Emphasis LRT Alternative is estimated to create approximately 13,800 direct and indirect employment opportunities and generate approximately \$1.9 billion in direct and indirect revenues. Such employment projections are consistent with estimated levels of growth for the project area. They would represent beneficial impacts.

The Underground Emphasis LRT Alternative would require acquisition of 20 privately-owned parcels for tunnel boring and station construction. Construction could significantly impact 38 businesses along the alignment due to street and sidewalk closures, the permanent displacement of up to 20 parking spaces, dust, and noise. This alternative proposes a pedestrian underpass and an automobile underpass at the intersection of 1<sup>st</sup> and Alameda Streets.

Temporary and intermittent street closures for 1<sup>st</sup> and Alameda Streets throughout the 24-36 month construction process could significantly impact businesses in Little Tokyo. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could remain during construction.

With property acquisitions under the Underground Emphasis LRT Alternative, property tax revenues would decrease by 1.2 percent of the property tax base of properties that directly

abut the proposed alignment. This would be a less than significant impact to revenues and offset by property value increases in the vicinity of stations.

This alternative would lead to a \$2.8 billion increase in regional economic output and would create 20,700 direct and indirect employment opportunities. This increase in employment opportunities is within projected levels of growth for the project area and would be a beneficial impact. Additionally, new job growth and spending could increase income and sales tax revenues by \$117 million.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would have similar construction impacts to businesses as the Underground Emphasis LRT Alternative. The exception would be businesses near the intersection of 1<sup>st</sup> and Alameda Streets. Neither a pedestrian overpass nor an automobile underpass would be built there under this alternative; thus, impacts to nearby businesses would be less significant than with the Underground Emphasis LRT Alternative.

However, approximately five businesses along the south side of 1<sup>st</sup> Street could be significantly impacted by street relocation during construction of the Fully Underground LRT Alternative – Little Tokyo Variation 1. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could remain during construction.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require removal of fewer parking spaces than the At-Grade Emphasis LRT Alternative and the Underground Emphasis LRT Alternative. Approximately seven parking spaces would be displaced under this alternative. This would cause less than significant impacts to businesses.

Additionally, this alternative would necessitate acquisition of 17 privately-owned parcels. The parcels located on the block bounded by 1<sup>st</sup>, 2<sup>nd</sup> and Alameda Streets and Central Avenue would be fully acquired as opposed to partial takes in the Underground Emphasis LRT Alternative. This acquisition is needed to stage construction and build a new underground station, station entrances, and ancillary facilities. However, Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1<sup>st</sup> and 2<sup>nd</sup> Streets that would not be directly impacted by construction activities. As a result, property tax loss for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would be slightly higher than the Underground Emphasis LRT Alternative. Property tax revenue losses would still equal 1.2 percent of the property tax base of properties that directly abut the proposed alignment. This loss would be a less than significant impact and offset by property values increases in the vicinity of stations.

Higher capital costs associated with this alternative could induce a total economic output of over \$3.2 billion and create 23,500 employment opportunities. This increase in employment opportunities is within projected levels of growth for the project area and would result in a beneficial impact.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would generally have the same construction and parking displacement impacts to businesses along the alignment as the Fully Underground LRT Alternative – Little Tokyo Variation 1. However, this alternative would require the acquisition of two additional, partial takes of privately-owned parcels on 1<sup>st</sup> Street between Hewitt and Garey Streets. These takes would be necessary for street widening purposes. This alternative would require a partial take of parcel #5161018020 (see Table 5-4) as opposed to a full take in Fully Underground LRT Alternative – Variation 1.

The total property tax loss associated with this alternative would be 1.1 percent of the total property tax base of properties that directly abut the proposed alignment. Such a loss in revenues would be a less than significant impact. This alternative could create a total economic output of approximate \$3.4 billion, including an increase of over \$143 million in sales and income taxes. Direct and indirect employment population is estimated to increase by over 25,400 jobs.

This increase in employment opportunities is within projected levels of growth for the project area and economic output would result in a beneficial impact. Mitigation measures for construction-related impacts to local businesses would include compensation to property owners for acquisitions, relocation subsidies for businesses, and assistance to business owners.



## 2.0 INTRODUCTION

The Regional Connector Transit Corridor project would be an important component of the transportation system for Los Angeles, enhancing regional and local connectivity and accessibility. This technical memorandum considered the impacts to local and regional economies during construction and operation of each project alternative. Economic and fiscal impacts of each alternative were evaluated by analyzing the following:

- Property Tax Revenue Impacts
- Construction-Related Economic Impacts
- Construction Spending on the Regional Economy
- Construction-Related Employment
- Regional Economic Impacts



## 3.0 METHODOLOGY FOR IMPACT EVALUATION

### 3.1 NEPA Guidelines

The National Environmental Policy Act (NEPA) requires an examination of indirect consequences, or secondary impacts, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future (40 CFR 1508.8). Consequences and impacts can include economic and fiscal changes due to a proposed project.

NEPA does not include specific guidelines on measuring adverse economic impacts, so this study measures impacts based on multipliers from the U.S. Department of Commerce. These multipliers were developed to estimate potential construction-related employment spending and economic impacts. The multipliers measure employment creation and total tax revenue generation.

### 3.2 CEQA Guidance

The draft EIS/EIR process must adhere to California Environmental Quality Act (CEQA) guidelines. CEQA guidelines state that economic changes resulting from a project shall not be treated as significant effects on the environment. Economic effects of a physical change, however, may be used to determine that the physical change is a significant change to the environment (CEQA 15358b). In the case of project alternatives, physical changes would result from construction; therefore, this section measures the effect construction would have on the existing economic environment.

In the absence of specific thresholds of significance for economic impacts, CEQA guidelines encourage each public agency to develop their own. The following thresholds of significance were applied in the analysis of economic and fiscal impacts of the Regional Connector Transit Corridor project alternatives.

- The alternative would substantially reduce the amount or value of taxable property in the study area.
- Construction of the alternative would have substantial, adverse effects on businesses along the alignment.

### 3.3 Methodology

#### 3.2.1 Tax Revenue Impacts

Using alignment maps, conceptual station plans, and potential construction staging maps, specific parcels or portions of parcels have been identified for possible acquisition. Using these same resources and historical data from similar developments, this analysis identified a

benefits area that will capture potential increases in property value and tax revenue due to station location.

Assessor's Parcel Number, land value, improvement value, square footage, 2009 tax payments, and owner's information were obtained from the Los Angeles County Tax Assessor's office. 2009 property tax records were used to estimate tax revenue loss for identified parcels that would be completely acquired.

Trends in property value increases were identified using historical data. They were used to analyze potential property tax and property value increases that could result from new station sites.

### **3.2.2 Construction-Related Economic Impacts**

For each build alternative, construction would last approximately 4 to 5 years. Surface streets would be impacted for approximately 24 to 36 months. The duration of the proposed construction and extent of impacts to surface streets could affect local businesses.

Construction-related impacts and areas that could be affected were identified using site maps, location of construction staging areas, and conceptual station designs. Windshield surveys were conducted to identify local businesses and categorize them by use. Vehicular and pedestrian access was identified for each business along the proposed alignments.

Historical data were gathered for similar transit projects completed in the downtown area. These data were used in a quantitative assessment of business viability to estimate the potential significance of construction impacts.

### **3.2.3 Construction Spending on the Regional Economy**

Direct investment in construction leads to investment from businesses in the area. Local businesses seek to take advantage of the increase in spending (purchases of supplies and equipment) and employment activity. Such investment is considered indirect investment.

Both direct and indirect investment streams provide businesses in the regional economy revenue and personal income. Income spent throughout the economy supports other jobs and related spending. Such effects are referred to as induced impacts. A multiplier developed by the U.S. Department of Commerce was used to quantify the impacts of construction-related spending on the regional economy.

### **3.2.4 Construction-Related Employment**

Investment in transportation, including direct investment in the form of capital construction and operations costs, provides economic benefits in two basic ways. It creates jobs and leads to investment or spending by suppliers whose goods and services are used in a project. This

analysis used the same multiplier to calculate impacts to employment as it used to calculate construction-related spending. The employment analysis was compared to SCAG employment projections for the same period.

### **3.2.5 Regional Economic Impacts**

Improved accessibility and mobility could lead to an increase in employment opportunities for the regional population. Improved mobility could result in decreases in regional hours of travel and costs associated with regional travel. Information from travel demand models was used to characterize potential shifts in regional travel behavior and transit ridership as a result of improved connectivity.



## 4.0 AFFECTED ENVIRONMENT

### 4.1 Project Area

The project area for purposes of evaluating economic and fiscal impacts is generally the same as in the Growth-Inducing Impacts Technical Memorandum. The analysis of direct and indirect regional economic and fiscal impacts focuses on downtown Los Angeles and areas served by transit lines that would connect to the Regional Connector in Los Angeles County (Long Beach, Pasadena, Culver City, and East Los Angeles).

The project area lies within the geographic scope of the City of Los Angeles Council of Governments (CLACG), a subregion of SCAG, which includes Los Angeles, San Fernando and portions of unincorporated areas of Los Angeles County. The analysis of potential property tax and construction-related impacts focuses on properties directly abutting the proposed alignments.

### 4.2 Regional Population and Employment Projections

As discussed in the Growth-Inducing Impacts Technical Memorandum, the region could have a population of more than 24 million persons with 10.2 million persons employed by 2035. This would represent an increase of approximately 26 percent over 2008 conditions. Population and employment in Los Angeles County are projected to increase by 1.8 million people and 542,574 jobs between 2008 and 2035.

This would represent an average annual increase of approximately 69,953 persons and 20,095 jobs. Los Angeles County is expected to experience the slowest rate of job growth in a five-county region (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial). The job growth rate in Los Angeles County is expected to increase 0.4 percent annually.

### 4.3 Local Population and Employment Projections

This section includes population, housing, and employment growth estimates for census tracts comprising the project area. For comparison purposes, this section includes data from the City of Los Angeles and the CLACG.

The City of Los Angeles is expected to increase by 274,285 households by the year 2035. The City would comprise approximately 21 percent of the region's total households. The project area is expected to increase by 2,552 households. This represents a minimal share of the City's total project household growth, but growth would occur at a similar rate (0.77 %) as in the City (0.76 %) and the CLACG subregion (0.75 %).

Table 4-1 shows employment growth for the project area, City of Los Angeles, and CLACG subregion. The table shows that the project area is expected to gain approximately 12,630

new jobs by 2035. This would be an increase in employment of approximately 0.26 percent per year between 2008 and 2035. The annual rate of growth for the project area would be similar to that in the City but lower than in the CLACG subregion.

<b>Area</b>	<b>2008</b>	<b>2035</b>	<b>2000-2008 Employment Change</b>	<b>2008-2035 Annual Average % Change</b>
CLACG	1,839,988	2,037,473	197,485	0.40
City of Los Angeles	1,879,666	1,994,137	114,471	0.23
Project Area	169,328	181,962	12,634	0.26

#### 4.4 Local Businesses and Privately-Owned Properties

Properties adjacent to proposed alignments are comprised of high-density multi-family, commercial, industrial, and government-related uses. Construction activities under build alternatives could affect the mix of business and government-related uses along the alignment. Approximately 112 businesses and commercial office buildings along the proposed alignments could be impacted.

Acquisitions of privately-owned properties would affect city, county and state property tax generation in this area. Under the At-Grade Emphasis LRT Alternative, 56 privately-owned properties would directly abut the alignment. These businesses represent a total tax base of \$21,867,759.

With the Underground Emphasis LRT Alternative, 82 privately-owned parcels would abut the alignment. This represents a property tax base of \$24,280,248. With the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2, 90 privately-owned properties would directly abut the alignment. These properties represent a property tax base of \$24,365,168.



## 5.0 IMPACTS

### 5.1 Property Tax Revenue Impacts

Project alternatives would use the public right-of-way for track construction and station sites, minimizing the need for land acquisition. However, some acquisitions would be required under each build alternative. Property tax losses would result. Property tax losses from the acquisition of privately-owned properties would likely be offset by increases in property values.

Property tax losses would not occur from acquisitions of government-owned parcels. Property tax losses would result strictly from acquisitions of privately-owned parcels where owners pay an annual property tax. Thus, section 5.1 only analyzed partial and full takes of privately-owned parcels. Using Los Angeles County Tax Assessor 2009 data, property tax loss was calculated based on the amount of square feet to be acquired (the impact area). The No Build and TSM Alternatives would not involve property acquisitions and would not have property tax revenue impacts.

#### 5.1.1 At-Grade Emphasis LRT Alternative

Five privately-owned parcels would be acquired with the At-Grade Emphasis LRT Alternative. The acquisitions would be partial takes. The impact area outlined in Table 5-1 shows the approximate size of property (square feet) that would be purchased. Acquisitions would be required for construction staging, new stations, a pedestrian overpass, and a Traction Power Substation (TPSS) site.

Total tax revenue loss due to land acquisitions with the At-Grade Emphasis LRT Alternative is estimated to be approximately \$186,734 (see Table 5-1). This loss would be approximately 0.85 percent of the \$21,867,759 property tax revenue base of all the properties that directly abut the alignment. The At-Grade Emphasis LRT Alternative would have a less than significant impact on property tax revenues for the area. Losses in property tax revenues could be offset by increases in property taxes in areas surrounding new stations.

#### 5.1.2 Underground Emphasis LRT Alternative

The Underground Emphasis LRT Alternative would require the acquisition of more privately-owned parcels than the At-Grade Emphasis LRT Alternative. Acquisitions would be required for construction staging, new stations, portals, a bridge pier, and a pedestrian overpass. Both partial and full takes would be required. Twenty privately-owned parcels would be impacted under this alternative.

Nine of these parcels are located in the Little Tokyo area, on the block bounded by 1<sup>st</sup>, 2<sup>nd</sup>, Alameda Streets and Central Avenue. Total tax revenue loss from acquisitions is estimated to be approximately \$286,847. Losses to property tax revenues would be approximately 1.2

percent of the area's \$24,280,248 tax revenue base of all the properties that directly abut the alignment. Property tax revenue loss would be a less than significant impact. Losses in property tax revenues could be offset by increases in property taxes in areas surrounding new stations.

### 5.1.3 Fully Underground LRT Alternative – Little Tokyo Variation 1

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would require acquisitions of 17 properties. Fewer parcels would be acquired under this alternative than the Underground Emphasis LRT Alternative. However, acquisitions of parcels bounded by 1<sup>st</sup>, 2<sup>nd</sup>, and Alameda Streets and Central Avenue would be full takes and not partial takes like in the Underground Emphasis LRT Alternative. Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1<sup>st</sup> and 2<sup>nd</sup> Streets that would not be directly impacted by construction activities.

Property tax losses for the Fully Underground LRT Alternative – Variation 1 would be approximately \$281,775. This is slightly less than the Underground Emphasis LRT Alternative. Property tax revenue losses would represent 1.2 percent of the area's \$24,365,168 tax revenue base of all the properties that directly abut the alignment. Property tax revenue loss would be a less than a significant impact. Losses in property tax revenues could be offset by increases in property taxes in areas surrounding new stations.

### 5.1.4 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would require acquisitions of generally the same properties as the Fully Underground LRT Alternative – Little Tokyo Variation 1. This alternative would require only a partial take of parcel #5161018020 but would require acquisitions of two additional parcels. The two additional properties are located on 1<sup>st</sup> Street between Hewitt and Garey Streets. The properties would be required for street relocation purposes.

The total property tax loss for the Fully Underground LRT Alternative – Little Tokyo Variation 2 would be \$278,556 or 1.1 percent of the area's \$24,365,168 property tax base of all the properties that directly abut the alignment. This would be less than significant impact to property tax revenues. Losses in property tax revenue could be offset by increases in property taxes in areas surrounding new stations.

**Table 5-1. Estimated Property Tax Revenue Loss  
 Due to Land Acquisition from Private Parties– At-Grade Emphasis LRT Alternative**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Revenue Loss
5151023400	525 S. Flower Street	2,339	City National Plaza	Station Entrance	\$576,349	\$44,187
5151014032	703 West 3 <sup>rd</sup> Street	16,927	Central Plant	Construction Staging/Station Site	\$2,318,604	\$51,151
5151014033	Parcel bounded by 3 <sup>rd</sup> /Hope/Flower Streets	39,363	Vacant Land	Construction Staging/Station Site	\$5,227,575	\$65,708
5151027256	Parcel Bounded by Figueroa/3 <sup>rd</sup> /Flower/ 2 <sup>nd</sup> Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008032	201 S. Spring Street	22,783	Parking Lot	TPSS Site	\$1,779,235	\$25,688
<b>Total:</b>					<b>\$9,901,763</b>	<b>\$186,734</b>

*Source: LA County Tax Assessor*

**Table 5-2. Estimated Property Tax Revenue Loss  
 Due to Land Acquisition from Private Parties – Underground Emphasis LRT Alternative**

<b>APN</b>	<b>Address</b>	<b>Impact Area (SF)</b>	<b>Current Use</b>	<b>Intended Use</b>	<b>Land Value of Impact Area</b>	<b>2009 Tax Amount</b>
5151014032	703 West 3 <sup>rd</sup> Street	16,927	Central Plant	Construction Staging/Station Site	\$2,318,604	\$51,151
5151014033	Parcel bounded by 3 <sup>rd</sup> /Hope/Flower Streets	39,549	Vacant Land	Construction Staging/Station Site	\$5,252,276	\$66,018
5151027256	Parcel Bounded by Figueroa/3 <sup>rd</sup> /Flower/ 2 <sup>nd</sup> Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008031	200 S Broadway	5,330	Parking Lot	Station Entrance	\$417,733	\$6,296
5149008030	208 S Broadway	8,340	Parking Lot	Station Entrance	\$656,442	\$9,558
5149008032	201 S. Spring Street	25,824	Parking Lot	Station Entrance	\$2,005,134	\$29,036
5149007006	206 S. Spring Street	18,561	Retail	Station Entrance	\$1,103,562	\$33,034
5149007005	212 S. Spring Street	12,740	Retail	Construction Staging	\$689,414	\$17,918
5161026033	Parcel at SW corner of Los Angeles/2 <sup>nd</sup> Street	4,128	Plaza	Station Entrance	\$250,186	\$4,852

**Table 5-2. Estimated Property Tax Revenue Loss  
 Due to Land Acquisition from Private Parties – Underground Emphasis LRT Alternative**

<b>APN</b>	<b>Address</b>	<b>Impact Area (SF)</b>	<b>Current Use</b>	<b>Intended Use</b>	<b>Land Value of Impact Area</b>	<b>2009 Tax Amount</b>
5161024014	Parcel at SE corner of Los Angeles/2 <sup>nd</sup> Streets	20,829	Parking Lot	Construction Staging/Station Entrance	\$2,403,732	\$14,573
5161024018	Parcel at SE corner of Los Angeles/2 <sup>nd</sup> Streets	9,151	Parking Lot	Construction Staging	\$2,272,560	\$2,997
5161018007	401 E. 2 <sup>nd</sup> Street	17,890	Parking Lot	Portal and Construction Staging	\$770,014	\$10,688
5161018020	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	24,967	Retail	Portal and Construction Staging	\$1,252,996	\$17,511
5161018011	437 E. 2 <sup>nd</sup> Street	26,239	Parking Lot	Portal and Construction Staging	\$1,485,467	\$20,010
5161018010	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	2,204	Parking Lot	Portal and Construction Staging	\$16,924	\$347
5161018009	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	1,834	Parking Lot	Portal and Construction Staging	\$13,960	\$311

**Table 5-2. Estimated Property Tax Revenue Loss  
 Due to Land Acquisition from Private Parties – Underground Emphasis LRT Alternative**

<b>APN</b>	<b>Address</b>	<b>Impact Area (SF)</b>	<b>Current Use</b>	<b>Intended Use</b>	<b>Land Value of Impact Area</b>	<b>2009 Tax Amount</b>
5161018008	105 S. Alameda Street	3,436	Retail	Portal/Bridge Pier	\$26,155	\$288
5161018001	416 E. 1 <sup>st</sup> Street	5,111	Retail	Portal and Construction Staging	\$82,224	\$1,606
5161018021	Parcel Bounded by 1 <sup>st</sup> / Alameda Streets and Central Avenue	1,618	Parking Lot	Portal and Construction Staging	\$16,664	\$508
5161018002	402 E. 1 <sup>st</sup> Street	459	Parking Lot	Portal and Construction Staging	\$4,727	\$144
<b>Total:</b>					<b>\$21,008,774</b>	<b>\$286,847</b>

*Source: LA County Tax Assessor*

**Table 5-3. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 1**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5151014032	703 West 3 <sup>rd</sup> Street	16,927	Central Plant	Construction Staging/Station Site	\$2,318,604	\$51,151
5151014033	Parcel bounded by 3 <sup>rd</sup> /Hope/Flower Streets	39,549	Vacant Land	Construction Staging/Station Site	\$5,252,276	\$66,018
5151027256	Parcel Bounded by Figueroa/3 <sup>rd</sup> /Flower/ 2 <sup>nd</sup> Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008031	200 S Broadway	5,330	Parking Lot	Station Entrance	\$417,733	\$6,296
5149008030	208 S Broadway	8,340	Parking Lot	Station Entrance	\$656,442	\$9,558
5149008032	201 S. Spring Street	25,824	Parking Lot	Station Entrance	\$2,005,134	\$29,036
5149007006	206 S. Spring Street	18,561	Retail	Station Entrance	\$1,103,562	\$33,034

**Table 5-3. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 1**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5149007005	212 S. Spring Street	12,740	Retail	Construction Staging	\$689,414	\$17,918
5161018007	401 E. 2 <sup>nd</sup> Street	17,890	Parking Lot	Portal and Construction Staging	\$770,014	\$10,688
5161018011	437 E. 2 <sup>nd</sup> Street	26,239	Parking Lot	Portal and Construction Staging	\$1,485,467	\$20,010
5161018001	416 E. 1 <sup>st</sup> Street	5,111	Retail	Portal and Construction Staging	\$82,224	\$1,606
5161018020	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	43,664	Retail	Portal and Construction Staging	\$2,191,324	\$30,624
5161018010	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	2,731	Parking Lot	Portal and Construction Staging	\$20,971	\$421
5161018009	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets.	2,119	Parking Lot	Portal and Construction	\$16,130	\$359



**Table 5-3. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 1**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
	and Central Avenue			Staging		
5161018008	105 S. Alameda Street	3,572	Retail	Portal/Bridge Pier	\$29,045	\$299
5161018021	Parcel Bounded by 1 <sup>st</sup> / Alameda Streets and Central Avenue	22,370	Parking Lot	Portal and Construction Staging	\$16,664	\$508
5161018002	402 E. 1 <sup>st</sup> Street	13,544	Parking Lot	Portal and Construction Staging	\$230,359	\$4,249
Total:					\$17,285,363	\$281,775

Source: LA County Tax Assessor

**Table 5-4. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 2**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5151014032	703 West 3 <sup>rd</sup> Street	16,927	Central Plant	Construction Staging/Station Site	\$2,318,604	\$51,151
5151014033	Parcel bounded by 3 <sup>rd</sup> /Hope/Flower Streets	39,549	Vacant Land	Construction Staging/Station Site	\$5,252,276	\$66,018
5151027256	Parcel Bounded by Figueroa/3 <sup>rd</sup> /Flower/ 2 <sup>nd</sup> Streets	5,348	Pool and Tennis Courts	Pedestrian Overpass	N/A	N/A
5149008031	200 S Broadway	5,330	Parking Lot	Station Entrance	\$417,733	\$6,296
5149008030	208 S Broadway	8,340	Parking Lot	Station Entrance	\$656,442	\$9,558
5149008032	201 S. Spring Street	25,824	Parking Lot	Station Entrance	\$2,005,134	\$29,036
5149007006	206 S. Spring Street	18,561	Retail	Station Entrance	\$1,103,562	\$33,034
5149007005	212 S. Spring Street	12,740	Retail	Construction Staging	\$689,414	\$17,918
5161018007	401 E. 2 <sup>nd</sup> Street	17,890	Parking Lot	Portal and Construction Staging	\$770,014	\$10,688
5161018011	437 E. 2 <sup>nd</sup> Street	26,239	Parking Lot	Portal and Construction	\$1,485,467	\$20,010

**Table 5-4. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 2**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
				Staging		
5161018001	416 E. 1 <sup>st</sup> Street	5,111	Retail	Portal and Construction Staging	\$82,224	\$1,606
5161018010	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	2,731	Parking Lot	Portal and Construction Staging	\$20,971	\$421
5161018009	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	2,119	Parking Lot	Portal and Construction Staging	\$16,130	\$359
5161018008	105 S. Alameda Street	3,572	Retail	Portal/Bridge Pier	\$29,045	\$299
5161018021	Parcel Bounded by 1 <sup>st</sup> / Alameda Streets and Central Avenue	22,370	Parking Lot	Portal and Construction Staging	\$16,664	\$508
5161018002	402 E. 1 <sup>st</sup> Street	13,544	Parking Lot	Portal and Construction Staging	\$230,359	\$4,249
5161018020	Parcel Bounded by 1 <sup>st</sup> /2 <sup>nd</sup> /Alameda Streets. and Central Avenue	38,712	Retail	Portal and Construction Staging	\$1,942,802	\$27,151

**Table 5-4. Estimated Property Tax Revenue Loss Due to Land Acquisition from Private Parties– Fully Underground LRT Alternative – Little Tokyo Variation 2**

APN	Address	Impact Area (SF)	Current Use	Intended Use	Land Value of Impact Area	2009 Tax Amount
5163003002	710 E. 1 <sup>st</sup> Street	401	Parking Lot	Street Relocation	\$6,820	\$125
5163003003	712 E. 1 <sup>st</sup> Street	411	Vacant	Street Relocation	\$6,990	\$128
Total:					\$17,050,651	\$278,556

Source: LA County Tax Assessor

### 5.1.5 Property Value Impacts

Loss in property tax revenue from land acquisitions would likely be offset by increases in overall property values as a result of new transit station sites. According to the 2001 study *The Effect of Rail Transit on Property Values* (Parsons-Brinckerhoff), the impact to commercial property values from new transit rail stations varies according to:

- How much the stations improve accessibility
- The relative attractiveness of locations near stations
- The real estate market in the region

The four build alternatives would increase connectivity between light rail lines. Accessibility and mobility by train in lieu of car would be improved regionally and especially for businesses and residential properties near new station sites. Based on current ridership models, the build alternatives could increase ridership by 12,300 to 17,500 new passengers.

Increased accessibility around station sites would significantly enhance the area for businesses and residents. The following are examples of benefits to property values from similar LRT projects:

- In the San Francisco Bay Area, in Alameda and Contra Costa counties, residential property values decline by \$3,200 to \$3,700 per square foot per mile as ones moves away from Bay Area Rapid Transit (BART) stations. Commercial property values also decrease as one moves further from stations (Transportation Research Board 1993).
- In Dallas, commercial property values near Dallas Area Rapid Transit (DART) rail stations increased 53 percent more than comparable commercial properties not near station sites (Center for Economic Development and Research University of Northern Texas September 2002).
- In Washington, DC and Atlanta, average office rents near station sites rose with system-wide ridership. Additionally, office vacancy rates were lower around station sites (Klosterman 1994).

## 5.2 Construction-Related Economic Impacts

Construction-related impacts to businesses could occur in areas adjacent to the proposed alignment. Impacts would likely be most significant near proposed station sites due to sidewalk closures. Businesses with at-grade, retail store fronts catering to pedestrians would be most directly impacted by construction.

A temporary decrease in business accessibility due to construction could lessen the competitiveness and attractiveness of businesses near construction sites. The No Build and TSM Alternatives would not involve construction that would impact businesses. However, the TSM alternative would require permanent removal of approximately 24 curb parking spaces from 2<sup>nd</sup> Street, Hill Street and Central Avenue.

Potential construction impacts of the build alternatives are as follows:

- Traffic disruption
- Increased noise, vibration, and dust
- Modified vehicular and pedestrian traffic patterns
- Modified parking areas
- Utility disruptions
- Reduction in business access/visibility of signs and businesses
- General disinterest in area businesses due to construction

The project would be fully implemented by 2018. Depending on the phasing schedule, businesses would be affected by construction at different intervals throughout the four to five year construction period. Figure 5-1 divides the project area into four distinct geographic areas for purposes of analyzing potential impacts.

**Flower Street:** Flower Street, between 3<sup>rd</sup> Street and Wilshire Boulevard, runs through the heart of downtown. The street is lined with hotels, street level retail space, and medium to high-density multi-family residential units.

**2<sup>nd</sup> Street:** Land uses along 2<sup>nd</sup> Street, between Los Angeles and Flower Streets, are largely commercial (retail and office buildings) and minimally high-density residential. Second Street, between Broadway and Figueroa Street, runs through a tunnel beneath Bunker Hill. The segment of 2<sup>nd</sup> Street through the tunnel consists of two lanes in each direction.

**Little Tokyo:** 2<sup>nd</sup> Street, between Los Angeles and Alameda Streets, runs through the heart of Little Tokyo. The street is lined with restaurants, hotels, Japanese markets, and retail stores. The area contains many recently-completed residential and mixed-use projects.

**Civic Center:** Government offices and employment are concentrated within the Civic Center area. Here, the Civic Center is defined as Temple Street between Main and Alameda Streets and Los Angeles and Main Streets between Temple and 2<sup>nd</sup> Streets. City Hall, City Hall East, the Caltrans Building, VA Hospital, Los Angeles Police Department Headquarters, Federal Building, and Courthouse are found in this area.

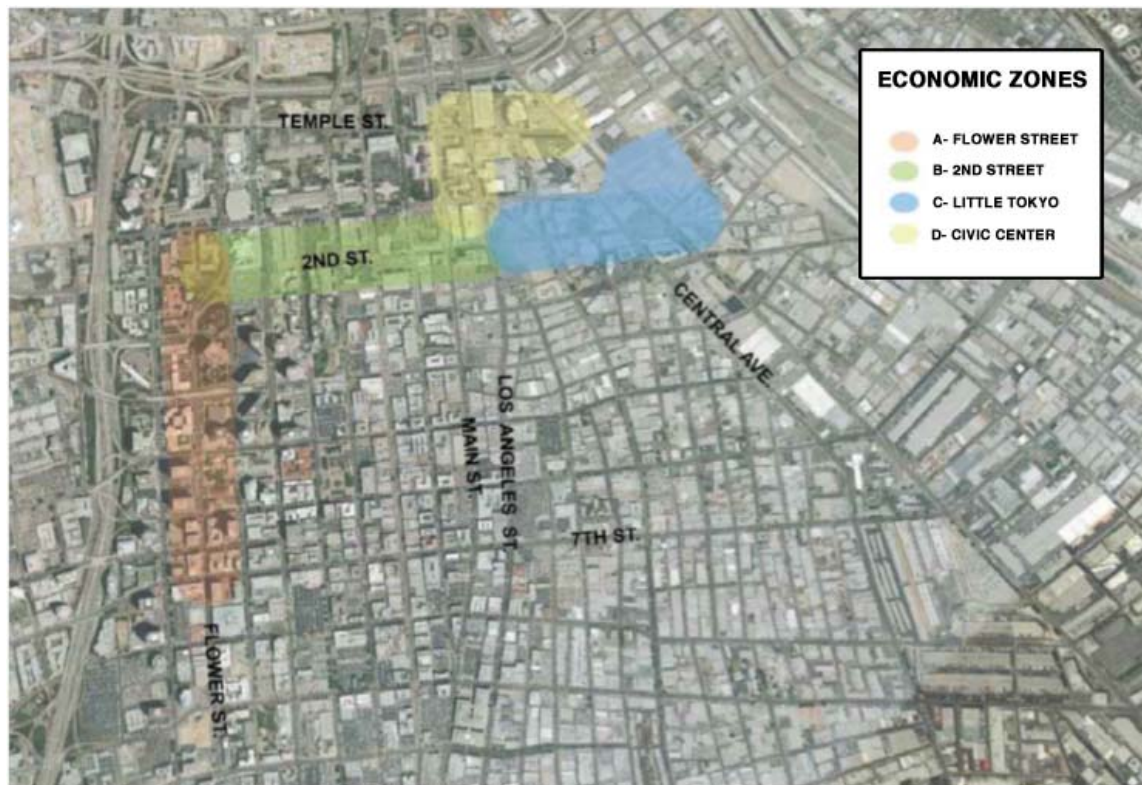


Figure 5-1. Economic Zone Map

### 5.2.1 Transportation System Management Alternative

The TSM Alternative would not require construction activities or have construction-related impacts to businesses. However, the TSM Alternative would require the permanent removal of approximately 24 curb parking spaces on 2<sup>nd</sup> Street between Hill Street and Central Avenue. Parking spots would be removed to accommodate six new bus stops. This analysis assumed that each new bus stop on 2<sup>nd</sup> Street would be 90 feet in length and displace up to four curb parking spaces.

Approximately 18 businesses between Hill Street and Central Avenue could be impacted by the loss of parking spaces. The exact locations of new bus stops has not been determined, so it is difficult to estimate the level of impacts parking displacements could have on businesses.

## 5.2.2 At-Grade Emphasis LRT Alternative

### 5.2.2.1 Flower Street

The At-Grade Emphasis LRT Alternative would have both at-grade and underground double track configurations. It would connect the 7<sup>th</sup> Street/Metro Center Station to the Metro Gold Line.

Under this alternative, tracks would run underground beneath Flower Street from the 7<sup>th</sup> Street/Metro Center Station to the 2<sup>nd</sup> Street tunnel. The alignment would briefly surface before 3<sup>rd</sup> Street and return underground after 3<sup>rd</sup> Street. This alternative would create two underground stations. One station would be between Hope and Flower Streets and one would be beneath Flower Street between 5<sup>th</sup> and 6<sup>th</sup> Streets.

During construction, street closures would be implemented in phases. Impacts to traffic disruptions would depend on tunneling techniques used and locations of exhaust vents. Construction effects that would disrupt business activities would be limited to areas of cut and cover construction. Such effects include noise, vibration, dust, decreased view of signage and overall disinterest in the area. Cut and cover construction would cause sidewalk and street closures near new station locations and have the greatest impacts to businesses located within close proximity.

Approximately 80 parking spaces would be permanently displaced for construction of the alternative. Such displacement of parking could have significant, adverse impacts to businesses. Of the 80 parking spaces, 12 are located on Flower Street between 3<sup>rd</sup> and 5<sup>th</sup> Streets. Seven of those 12 spaces are located on the east side of Flower Street, and five of them are located on the west side. Table 5-5 shows a detailed breakdown of the businesses that would be affected on Flower Street.



**Table 5-5. Businesses On Flower Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction**

<b>Business</b>	<b>Construction-Related Impacts</b>
World Trade Center Parking	The World Trade Center parking lot located near the corner of 3 <sup>rd</sup> and Flower Streets would have decreased access due to construction and possible street closure. The parking lot has alternate access on Figueroa Street that could alleviate some adverse impact.
World Trade Center Monthly Parking Entrance	The World Trade Center monthly parking lot located near the corner of 3 <sup>rd</sup> and Flower Streets would experience decreased access due to construction and possible street closure. The parking lot has alternate access on Figueroa Street that could alleviate some adverse impact.
Bank of America Plaza Parking	The Bank of America Plaza parking lot located near the corner of 3 <sup>rd</sup> and Flower Streets would experience decreased access due to construction and possible street closure. The parking lot has alternate access from Bunker Hill that could alleviate some adverse impact.
400 S. Flower Parking	The parking lot located at 400 S. Flower Street at the corner of 4 <sup>th</sup> and Flower Streets would experience decreased access due to construction and possible temporary, intermittent street closure.
City National Plaza Parking	The City National Plaza parking lot located near the corner of 4 <sup>th</sup> and Flower Streets would experience decreased access due to construction and possible temporary, intermittent street closure.
Westin Bonaventure	The entrance to the Westin Bonaventure is located on Flower Street in between 5 <sup>th</sup> and 4 <sup>th</sup> Streets. Construction would decrease access to the hotel from Flower Street and could decrease overall appeal of the hotel entrance from Flower Street. The Hotel has an entrance from Figueroa Street that could alleviate the significance of this impact.
Suede	The entrance to Suede Restaurant is located on Flower Street near the corner of 4 <sup>th</sup> and Flower Streets. Construction would decrease access to the restaurant from Flower Street and could decrease overall appeal of the restaurant. The restaurant has access from the Westin Bonaventure Hotel that could alleviate the severity of this impact.

**Table 5-5. Businesses On Flower Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction**

<b>Business</b>	<b>Construction-Related Impacts</b>
Citibank	The entrance to Citi Bank is located at the corner of Flower and 5 <sup>th</sup> Streets. Citi Bank could be affected by a decrease in accessibility by the loss of seven curb parking spaces Flower Street.
Westin Parking Entrance	The Westin Hotel parking lot at the corner of 5 <sup>th</sup> and Flower Streets would experience decreased access due to construction and possible temporary and intermittent street closure. The parking lot has alternate access on Figueroa Street that could alleviate some of the impact.
Standard Hotel Parking Entrance	The Standard Hotel parking lot near the corner of 6 <sup>th</sup> and Flower Streets would suffer decreased access due to construction and possible temporary and intermittent street closure.
Standard Hotel Entrance	The Standard Hotel Entrance on Flower Street would be affected by construction impacts; however, the main entrance to the hotel is on 6 <sup>th</sup> Street.
Floyd's Barbershop	Floyd's Barbershop, located on the ground floor of the Standard Hotel, has an entrance on Flower Street that would be affected. However, the barbershop can also be accessed from the hotel.
Pegasus	The Pegasus Apartments would be affected by street closures and construction in the area. Traffic disruptions would impact tenant mobility and could influence leasing activities.
Daily Grill	The entrance to the Daily Grill is located at the corner of Flower and 7 <sup>th</sup> Streets. Street closure in this area would make accessing the restaurant difficult from Flower Street; however, patrons would be able to access the restaurant from 7 <sup>th</sup> Street
Roosevelt Lofts	Access to the Roosevelt Lofts would be decreased due to street closure on Flower Street, but the development could be accessed from Hope Street. Depending on the tunnel construction technique used for the underground segment of the track in this area, tenants of the Roosevelt could be impacted by increased noise, vibration, and dust. This could impact vacancy rates in the high-density, residential development.

**Table 5-5. Businesses On Flower Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction**

<b>Business</b>	<b>Construction-Related Impacts</b>
City National Plaza Valet Entrance	Access to the City National Plaza valet entrance would be limited during construction due to possible street closure.
City National Plaza	A new underground station would be located at the City National Bank branch on the ground floor of the City National Plaza building.
800 W. 6 <sup>th</sup> Parking	Access to the 800 W. 6 <sup>th</sup> Street parking lot would be limited during construction due to possible street closure.
Cathay Bank	Access to the Bank would be limited during construction due to possible street closure.
Vieta Café	Access to the cafe would be limited during construction due to possible street closure.
Maria's Italian Kitchen	Access to the restaurant would be limited during construction due to possible street closure.
ABC Printing	Access to ABC printing would be limited during construction due to possible street closure.
Mail Box Etc.	Access to Mail Box Etc. would be limited during construction due to possible street closure.
PCS Printing	Access to PCS Select would be limited during construction due to possible street closure.
Big Mamma's Pizza	Access to Big Mamma's Pizza would be limited during construction due to possible street closure.

### 5.2.2.2 2<sup>nd</sup> Street

This segment of the alignment would run above ground with the At-Grade Emphasis LRT Alternative. This alternative would include new stations on 2<sup>nd</sup> Street. A portion of 2<sup>nd</sup> Street runs through a tunnel underneath Bunker Hill. The tunnel would likely be shut down during track construction. This would cause traffic disturbances on 2<sup>nd</sup> Street and throughout the area. However, constructing tracks here avoids impacts to businesses because none are located in the tunnel.

Construction of at-grade segments of the alignment would directly impact businesses on 2<sup>nd</sup> Street between Los Angeles and Hill Streets. Approximately 23 parking spaces on the south side of 2<sup>nd</sup> Street, between Hill and Los Angeles Streets, would be removed for construction. The new Los Angeles Police Department Headquarters and the Los Angeles Times office buildings are located along 2<sup>nd</sup> Street.

Construction impacts would be relatively significant in this area because retail businesses along 2<sup>nd</sup> Street, including Pitfire Pizza, China Bistro, and the Kawada Hotel, have greater dependence on pedestrian traffic for customers than other businesses along the alignment. Table 5-6 shows businesses along 2<sup>nd</sup> Street that could be affected by at-grade track and station construction.

### 5.2.2.3 Little Tokyo

The At-Grade Emphasis LRT Alternative does not run through Little Tokyo as it turns north from 2<sup>nd</sup> Street to Los Angeles Street. However, 2<sup>nd</sup> Street is the general access point for most businesses in Little Tokyo. Any decreased mobility on 2<sup>nd</sup> Street could cause adverse impacts in Little Tokyo. Businesses along 2<sup>nd</sup> Street, between Los Angeles Street and Central Avenue, could be significantly affected during track construction on the corner of 2<sup>nd</sup> Street and Los Angeles Street due to a decrease in accessibility.

### 5.2.2.4 Civic Center

In this segment, the At-Grade Emphasis LRT Alternative would run above ground. Dual track configurations would run in the majority of this section, with a single-track configuration on both Main and Los Angeles Streets between 2<sup>nd</sup> and Temple Streets. This alternative proposes a couplet station in the Civic Center area: a southbound platform on Los Angeles Street between Temple and 1<sup>st</sup> Streets, and a northbound platform on Main Street.

For the most part the alignment runs within the public right-of-way, limiting the need for land acquisition and pedestrian walkway closures during construction. Depending on the design, technology, and construction techniques employed, phased street closures would be required to complete track construction. Traffic disruption would decrease access to businesses in the area.

Government entities located within the Civic Center do not depend on pedestrian or automobile traffic to generate revenue. Therefore, economic impacts to this area would be relatively less significant than in other areas along the alignment. Traffic disruptions could decrease access to government offices for government employees and citizens seeking services.

The At-Grade Emphasis LRT Alternative would construct a pedestrian overpass and an automobile underpass at the intersection of Alameda and Temple Streets. However,

construction activities would not likely significantly impact businesses because the intersection is mostly surrounded by parking lots or buildings that do not have entrances near the intersection.

<b>Table 5-6. Businesses on 2<sup>nd</sup> Street Potentially Affected During At-Grade Emphasis LRT Alternative Construction</b>	
<b>Business</b>	<b>Construction-Related Impacts</b>
Pitfire Pizza	The main entrance to the restaurant is located at the corner of 2 <sup>nd</sup> and Main Streets and could be significantly impacted. Construction could cause increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area. Loss of parking spaces along 2 <sup>nd</sup> Street could cause significant impacts by reducing accessibility to the business.
China Bistro	China Bistro is located at 2 <sup>nd</sup> and Main Streets. Track construction could cause increased noise, vibration, particulate matter, decreased view of signage, and a general disinterest in the area. Loss of metered parking spaces directly in front of China Bistro could significantly impact its business by reducing accessibility.
Edison Bar	The Edison bar is located at 2 <sup>nd</sup> and Main Streets. The main entrance to the bar is located in an alley between Spring and Main Streets, alleviating some potential access issues on 2 <sup>nd</sup> Street. Impacts could include increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area.
Groundwork Coffee	Groundwork Coffee is located near the corner of 2 <sup>nd</sup> and Main Streets. Impacts could include increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area.
2 <sup>nd</sup> Street Cigar & Gallery	2 <sup>nd</sup> Street Cigar & Gallery is located near the corner of 2 <sup>nd</sup> and Spring Streets. Pedestrian access to the business from 2 <sup>nd</sup> Street would be removed for the duration of track construction for this phase of the project. Impacts could include increased noise, vibration, dust, decreased view of signage, and a general disinterest in the area. Loss of metered parking spaces directly in front of China Bistro could significantly impact its business by reducing accessibility.
Kawada Hotel	The Kawada Hotel is located at 2 <sup>nd</sup> Street and Broadway Impacts could include decreased access and overall attractiveness and increased noise, vibration, and dust. Increased vacancy rates would be likely.

Approximately 21 curb parking spaces would be removed in the Civic Center area for construction of the At-Grade Emphasis LRT Alternative. Eleven of those spaces are located on the east side of Main Street between 2<sup>nd</sup> and Temple Streets. The other 10 spaces are located on the east side of Los Angeles Street between 2<sup>nd</sup> and Temple Streets. Parking spaces along both these streets are mostly used by government employees, and losing these spaces would not have a significant impact to surrounding businesses.

Construction of at-grade stations would require pedestrian walkway closures that could cause significant temporary impacts near proposed station sites. Businesses in the area are predominately government-oriented and tend not to rely on traffic to generate customers. Table 5-7 shows a detailed breakdown of businesses in the area that could be temporarily affected by construction of the couplet station. Construction is estimated to last between 24-36 months in this area.

### 5.2.3 Underground Emphasis LRT Alternative

Construction of the Underground Emphasis LRT Alternative could have significant construction impacts to businesses near station sites. Depending on tunneling and construction techniques used to construct the tunnel, phrased street closures may be required. However, impacts would not be as significant as under the At-Grade Emphasis LRT Alternative. Boring of the tunnel could increase noise and vibration, but it would not be severe enough to economically impact business or inhabitants in the area.

Economic impacts caused by the Underground Emphasis LRT Alternative would mostly be limited to businesses surrounding station sites and cut-and-cover construction areas. However, these impacts could expand geographically due to a general decrease in the desirability of the area during construction. For this section of the report, it is assumed that a cut-and-cover technique would be used to construct new stations.

Cut-and-cover construction would generate temporary inconveniences like increased noise, vibration, and dust, decreased view of signage, limited or no access to business within close proximity of new station areas, and a general disinterest in the area. There are two station options proposed on 2<sup>nd</sup> Street, the 2<sup>nd</sup> Street station - Broadway Option and the 2<sup>nd</sup> Street station - Los Angeles Street Option.

Like the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative calls for construction of a pedestrian overpass and an automobile underpass. However, under this alternative, it would be constructed at the intersection of 1<sup>st</sup> and Alameda Streets. Construction of the overpass and underpass would necessitate additional pedestrian and roadway detours. This could cause significant impacts to businesses in the Little Tokyo area.

Approximately 20 curb parking spaces would be removed for construction of the Underground Emphasis LRT Alternative. Seven of those spaces are on the east side of Flower Street between 3<sup>rd</sup> and 5<sup>th</sup> Streets. The other 13 are on Alameda Street between Aliso and 2<sup>nd</sup> Streets. The loss in curb parking spaces could have significant impacts to businesses like Citibank on Flower Street, which currently depends on those spaces for some daytime customer parking needs.

**Table 5-7. Businesses in the Civic Center Potentially Affected During At-Grade Emphasis LRT Alternative Construction**

Business	Construction-Related Impacts
Geffen Contemporary	The main parking area for the museum is on Temple Street. Construction would very likely cause a decreased use of the parking lot and a loss in parking revenue. It would lead to parking difficulties for Geffen Contemporary patrons, which could reduce patronage. The main entrance for the museum is on 1 <sup>st</sup> Street, which reduces the noise, dust and vibration effects of construction.
Los Angeles Mall Entrance	The Los Angeles Mall is bounded by Main, Temple and Los Angeles Streets and would be impacted by construction of the LRT track. The entrance on Los Angeles Street is in close proximity to the proposed northbound couplet station. Pedestrian and vehicular access to the mall would decrease, which could have adverse impacts to businesses located inside the mall.
Kyoto Grand Hotel	The Kyoto Grand Hotel is located on Los Angeles Street between 1 <sup>st</sup> and 2 <sup>nd</sup> Streets. The main entrance to the hotel lobby and parking structure is on Los Angeles Street, so construction effects could be relatively significant. Impacts could include decreased access to the hotel, increased noise and vibration, decreased visibility of signs, and a general disinterest in the area.
Starbucks	Starbucks Coffee is on the corner of 1 <sup>st</sup> and Los Angeles Streets. It would be affected track and couplet station platform construction on Los Angeles Street. Starbucks would suffer the same impacts as the Kyoto Grand Hotel; however, Starbucks could be accessed from 1 <sup>st</sup> Street, alleviating some impacts.
Azalea Restaurant	Azalea Restaurant is near the corner of 1 <sup>st</sup> and Los Angeles Streets. It would be significantly impacted by construction of track and the couplet station platform on Los Angeles Street. Like Starbucks and the Kyoto Grand hotel, the restaurant would be significantly impacted by

**Table 5-7. Businesses in the Civic Center Potentially Affected During At-Grade Emphasis LRT Alternative Construction**

Business	Construction-Related Impacts
	construction activities.

If street closure is necessary to construct the tunnel and 2<sup>nd</sup> Street station - Broadway Option, the businesses mentioned in the previous section, except those located within the Civic Center area, would be negatively affected by decreased access. Table 5-8 shows a detailed breakdown of businesses in close proximity to proposed station sites.

**Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative**

Business	Construction-Related Impacts
<b>Flower Street</b>	
Westin Bonaventure	The entrance to the Westin Bonaventure is on Flower Street at the corner of 4 <sup>th</sup> and Flower Streets. Station construction would decrease access to the hotel from Flower Street, and construction impacts could decrease overall appeal of the hotel entrance from Flower Street. The hotel has an entrance from Figueroa Street that could alleviate the severity of this impact.
Suede	The entrance to Suede restaurant is on Flower Street near the corner of 4 <sup>th</sup> and Flower Streets. Station construction would decrease access to the restaurant from Flower Street, and construction impacts could decrease overall appeal of the restaurant. The restaurant has access from the Westin Bonaventure Hotel that could alleviate the severity of this impact.
Citi Parking Entrance	The entrance to the Citi parking lot located near the corner of 5 <sup>th</sup> and Flower Streets would have decreased access due to construction and could be impacted by temporary, intermittent street closures.
Starbucks	Starbucks, located on the ground floor of the Citi Bank Center, would be affected by construction of both tracks on Flower Street and the proposed underground station between 4 <sup>th</sup> and 5 <sup>th</sup> Streets. Starbucks is within the station construction area and would be affected by noise, vibration, and dust.



**Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative**

Business	Construction-Related Impacts
Citibank	Citibank, located on the ground floor of the Citi Bank Center, would be affected by construction of both tracks on Flower Street and the proposed underground station between 4 <sup>th</sup> and 5 <sup>th</sup> Streets. Citibank is located in the station construction area and would be affected by noise, vibration, and dust. Citibank could be affected by the loss of seven curb parking spaces directly in front of its entrance on Flower Street.
Uptown Drug Store	The proposed underground station between 4 <sup>th</sup> and 5 <sup>th</sup> Streets would affect Uptown Drug Store on the ground floor of the Citi Bank Center. Uptown Drug Store is located in the station construction area and would be affected by the noise, vibration, and dust.
California Computer Center	The California Computer Center, located on the ground floor of the Citi Bank Center, would be affected by construction of both tracks on Flower Street and the proposed underground station between 4 <sup>th</sup> and 5 <sup>th</sup> Streets. Although the Computer Center is not located in the station construction area, it is close to it, and might be affected by noise, vibration, and dust.
<b>2<sup>nd</sup> Street</b>	
Grand Kyoto Hotel	The Grand Kyoto Hotel would be affected by construction of the 2 <sup>nd</sup> Street station - Los Angeles Street Option. Although the hotel is not directly in the station construction area, the main entrance to the hotel lobby and parking structure are located on Los Angeles Street. Noise, dust, and vibration from construction could impact the hotel's business.
Starbucks	Starbucks would be affected by construction of the 2 <sup>nd</sup> Street station - Los Angeles Street Option. Although Starbucks is not directly in the station construction area, the entrance is located on Los Angeles Street, and noise, dust, and vibration from construction would impact business.
Azalea Restaurant	The Azalea Restaurant would be affected by construction of the 2 <sup>nd</sup> Street station - Los Angeles Street Option. Although the restaurant is not directly in the station construction area, the entrance is located on Los Angeles Street, and noise, dust, and vibration from construction would impact business.
<b>Little Tokyo</b>	

**Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative**

Business	Construction-Related Impacts
American Apparel	American Apparel is located on 2 <sup>nd</sup> Street between Azusa Street and Central Avenue. Cut and cover construction is proposed on 2 <sup>nd</sup> Street and would begin directly in front of American Apparel. This could cause significant impacts during construction. American Apparel and other businesses nearby depend mostly on foot traffic. Any heavy construction in this area would likely decrease accessibility and make the area less desirable for consumers to visit. The temporary removal of curb parking spaces in front of American Apparel along 2 <sup>nd</sup> Street would also likely lead to significant impacts. Cut and cover construction would likely last between 24-48 months and involve temporary, intermittent street closures.
EBISU	This retail store is located directly across from the American Apparel store and would be similarly impacted.
KIMSKImakes	This retail store is adjacent to American Apparel and would be similarly impacted.
SPITZ Doner Kebab	This restaurant is on 2 <sup>nd</sup> Street near businesses mentioned above and would be similarly impacted.
2 <sup>nd</sup> Street Jazz Bar & Grill	The 2 <sup>nd</sup> Street Jazz Bar & Grill is located on 2 <sup>nd</sup> near Central Avenue near other businesses mentioned above. It would likely be similarly impacted.
Subway	Subway is located adjacent to 2 <sup>nd</sup> Street Jazz Bar & Grill and would likely be similarly impacted.
City Hair	City Hair is located next to Subway near the corner of 2 <sup>nd</sup> Street and Central Avenue and would be similarly impacted.
FedEx Kinko's	FedEx Kinko's is located across from City Hair on the northwest corner of 2 <sup>nd</sup> Street and Central Avenue and would be similarly impacted. However, FedEx Kinko's is accessible from both 2 <sup>nd</sup> Street and Central Avenue, and impacts may not be as significant as those to previously mentioned businesses.
Honda Plaza	Honda Plaza is a strip mall bounded by 2 <sup>nd</sup> Street, Central Avenue, and Alameda Street. Nineteen businesses in this plaza could be impacted by cut and cover construction proposed on 2 <sup>nd</sup> Street. Access to the parking entrance on 2 <sup>nd</sup> Street would be decreased during construction, and construction noise and dust would decrease the general desirability of the area. Therefore, construction could result insignificant impacts. Honda Plaza has another parking entrance on Alameda Street that would not be

**Table 5-8. Businesses within Close Proximity to Station Sites Proposed for the Underground Emphasis LRT Alternative**

Business	Construction-Related Impacts
	impacted during construction. This entrance would alleviate some of the accessibility issues along 2 <sup>nd</sup> Street.

### 5.2.4 Fully Underground LRT Alternative – Little Tokyo Variation 1

West of Central Avenue, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would follow generally the same alignment as the Underground Emphasis LRT Alternative and would have similar construction-related impacts to local businesses. However, this alternative does not propose a pedestrian overpass or automobile underpass at the intersection of 1<sup>st</sup> and Alameda Streets. This would result in less significant impacts to nearby businesses than the Underground Emphasis LRT Alternative.

This alternative would remove the same seven curb parking spaces as the Underground Emphasis LRT Alternative on Flower Street between 5<sup>th</sup> and 3<sup>rd</sup> Streets but not the 13 spaces on Alameda Street between Aliso and 2<sup>nd</sup> Streets. This alternative would include extensive street relocation and roadway work east of Alameda Street along 1<sup>st</sup> Street. Most roadway work on 1<sup>st</sup> Street for the Fully Underground LRT Alternative – Little Tokyo Variation 1 would occur between Alameda and Vignes Streets. Table 5-9 shows businesses on the south side of 1<sup>st</sup> Street that could be impacted by construction.

**Table 5-9. Businesses within Close Proximity to Station Sites Proposed for the Fully Underground LRT Alternatives**

Business	Construction-Related Impacts
Kato's Sewing Machines	Kato's Sewing Machine is a retail store near the corner of 1 <sup>st</sup> and Rose Street that could be significantly impacted by construction activities. The only entrance for customers is on 1 <sup>st</sup> street, and any major construction activity would likely deter customers from visiting the store.
P.G. Motoring	P.G. Motoring is a retail store located just east of Kato's Sewing Machine and could also be significantly impacted by construction on 1 <sup>st</sup> Street. The only entrance for visitors is on 1 <sup>st</sup> Street. This entrance would be significantly impacted during temporary street closures as construction progresses.
District Healing	The District Healing Center's only parking entrance is on 1 <sup>st</sup> Street. It could be significantly impacted during temporary, intermittent street closures during

Center	construction. Visitors to the District Healing Center would have to park on Hewitt Street and enter the building from the secondary entrance on that street.
Hiroshima Building	The Hiroshima Building is a two-story office building that would be significantly impacted by construction on 1 <sup>st</sup> street. The hotel's only parking entrance fronts 1 <sup>st</sup> Street. However, the Hiroshima Building is attached to parking behind the building that is accessible from 2 <sup>nd</sup> and Garey Streets. This lot could be used as an alternative parking space during construction.
724 1 <sup>st</sup> Street	The parking entrance to the office building on the corner of 1 <sup>st</sup> and Garey Streets would not be significantly impacted during construction because it is located on the corner of 2 <sup>nd</sup> and Garey Streets. However, access to the entrance to the building on 1 <sup>st</sup> Street would be significantly limited during construction.

### 5.2.5 Fully Underground LRT Alternative – Little Tokyo Variation 2

The Fully Underground LRT Alternative – Little Tokyo Variation 2 follows generally the same alignment as Fully Underground LRT Alternative – Little Tokyo Variation 1 and would have similar construction-related impacts to local businesses.

## 5.3 Construction Spending on the Regional Economy

Investment in transportation, including direct investment in the form of capital construction and operations costs, provides economic benefits like direct and indirect job creation and investment or spending by suppliers whose goods and services are used in a project. To quantify the economic effects of construction spending, this analysis used 2008 multipliers from the Regional Input-Output Modeling System developed by the Bureau of Economic Analysis at the U.S. Department of Commerce. Los Angeles County Economic Development Corporation recently used this model for an Economic Impact Study report on the Metro Gold Line Foothill Extension Phase 2A.

Construction cost estimates for each build alternative, from which land acquisition and fees were excluded, were used to estimate total economic output, total employment, total earnings and total tax revenue. Direct investment in the form of capital construction cost can lead to investment from area business. Such businesses look to take advantage of the increase in employment activity and purchase of supplies and equipment. Such investment is considered indirect investment.

Both direct and indirect investment streams provide businesses revenue and personal income, and income spent throughout the economy supports other jobs and related spending. These secondary effects are referred to as induced impacts. Table 5-10 show the effects of the build alternatives on these forms of indirect investment.

Total output represents cumulative impacts associated with revenues of businesses involved in direct sales of the build alternatives or indirect sales from those businesses selling goods and services to workers who are directly involved in construction or operation activities of build alternatives. Total earnings include earnings from all direct and indirect workers associated with each build alternative. Total tax revenue includes income and sales taxes and local fees that would be generated as a result of increased job creation and spending from the build alternatives.

The At-Grade Emphasis LRT Alternative is estimated to generate the least amount of sales of the build alternatives. Its lower capital costs reflect the relatively low amount of materials and labor it would require.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have the most beneficial economic impact of the build alternatives. At a cost of \$1.54 billion, this alternative could generate increases in tax revenues of approximately \$143 million and increase earnings by approximately \$1.13 billion.

**Table 5-10. Regional Economic Effects of the Regional Connector**

<b>Alternative</b>	<b>Initial Spending</b>	<b>Total Output</b>	<b>Total Earnings</b>	<b>Total Tax Revenue</b>
At-Grade	\$885 million	\$1.9 billion	\$619 million	\$78 million
Underground	\$1.2 billion	\$2.8 billion	\$927 million	\$117 million
Fully Underground (Variation 1)	\$1.4 billion	\$3.2 billion	\$1.05 billion	\$132 million
Fully Underground (Variation 2)	\$1.5 billion	\$3.4 billion	\$1.13 billion	\$143 million

## 5.4 Construction-Related Employment Impacts

This analysis calculated direct and indirect impacts to employment from construction of the Regional Connector. The calculations used the same multipliers as in section 5.3.

Employment impacts would be felt by industries throughout the five-county region in Southern California. Direct employment includes people who work on construction and operation of the Regional Connector. Indirect jobs are those that result from construction-related purchases and spending.

Industries that would be impacted through indirect jobs include professional and scientific services, retail trade, accommodation, food services, and manufacturing. Most direct jobs would occur during construction, while indirect jobs would occur over the entire life of the project. Table 5-11 show the results for each build alternative.

The At-Grade Emphasis LRT Alternative would likely create the fewest jobs of the build alternatives with 13,800. The other three build alternatives could create between 20,800 and 25,400 jobs in the region. Such job creation would not be considered adverse or significant. It would be within SCAG’s estimates for job growth in the next decade.

**Table 5-11. Construction Related Employment Impacts**

Alternative	Direct Employment	Indirect Employment	Total
At-Grade	4,600	9,200	13,800
Underground	6,900	13,900	20,800
Fully Underground (Variation 1)	7,800	15,700	23,500
Fully Underground (Variation 2)	8,500	16,900	25,400

## 5.5 Regional Economic Impacts

Improved transit accessibility and mobility from downtown and other parts of the region would likely lead to an increase in employment and business opportunities for the regional population. Under each build alternative, transit market share increases (among all modes). Increases would be greatest under the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2.

Increases would range from 12,286 additional linked trips under the At-Grade Emphasis LRT Alternative to 17,479 under the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2. Compared to the TSM Alternative, the At-Grade Emphasis LRT Alternative would add an additional 6,999 linked trips. Compared to the TSM Alternative, the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2 would add an additional 12,210 linked trips. Regionally, more people would use light-rail transit if the Regional Connector Transit corridor were developed. Greater transit usage would enhance accessibility and attractiveness of businesses surrounding stations sites.

Under each proposed build alternative, urban rail transit market shares would increase compared to the No-Build and TSM Alternatives. The greatest increases would occur under the Fully Underground LRT Alternatives – Little Tokyo Variations 1 and 2. The Fully

Underground Alternatives – Little Tokyo Variations 1 and 2 would increase urban rail transit market share by 6.52 percent compared to the TSM Alternative. An increase in regional transit riders would increase efficiency in travel times and create region-wide, economic benefits for businesses and employees traveling to and from work.

Under each proposed build alternative, urban rail passenger transfers would decrease compared to the No-Build and TSM alternatives. Table 5-12 shows that urban rail transit boardings per linked trip would be reduced under the build alternatives compared to the No Build and TSM alternatives. Reducing urban rail transit transfers would decrease travel time and costs for employees and businesses. It would increase the overall attractiveness of using public transit.

Table 5-13 shows that urban rail passenger miles traveled would increase under each proposed build alternative compared to the No Build and TSM Alternatives. Longer trips would suggest that the average commute of transit riders using LRT lines would increase in distance. This would provide a larger, regional labor pool for employers and increase employment opportunities for workers.

**Table 5-12. Urban Rail Boardings per Linked Trip**

<b>Alternative</b>	<b>Peak</b>	<b>Off-Peak</b>	<b>Daily</b>
No Build	1.34	1.22	1.30
TSM	1.33	1.22	1.30
At-Grade Emphasis	1.27	1.17	1.24
Underground Emphasis	1.27	1.17	1.24
Fully Underground (Variation 1)	1.27	1.17	1.24
Fully Underground (Variation 2)	1.27	1.17	1.24

Under each proposed build alternative, urban rail passenger boardings for Green Lines and North-South and East-West Lines (currently called the Gold, Blue, and Expo Lines) would increase compared to the No Build and TSM Alternatives. The proposed project would promote urban rail ridership outside of the project area at the regional level.

In general, urban rail provides residents, commuting employees, and visitors a safer, faster, and more reliable transportation alternative to automobiles. Urban rail travel is less expensive and often more convenient for commuters than automobile travel, such as in downtown Los

Angeles where parking is constrained. The four build alternatives would increase accessibility and mobility from downtown and other parts of the region by train in lieu of car. Regional residents and businesses could access the downtown Los Angeles area, and other employment activity centers, more efficiently.

<b>Alternative</b>	<b>Peak</b>	<b>Off-Peak</b>	<b>Daily</b>
No Build	8.59	7.11	8.11
TSM	8.56	7.12	8.10
At-Grade Emphasis	8.88	7.62	8.47
Underground Emphasis	8.96	7.70	8.56
Fully Underground (Variation 1)	9.05	7.80	8.65
Fully Underground (Variation 2)	9.05	7.80	8.65

An increase in accessibility to downtown and other parts of the region would increase employment along routes. Residents along transit routes could work farther away, potentially increasing their employment opportunities. Over time, development patterns may concentrate along connected routes because of the increased mobility these locations would offer. Additionally, Transit Oriented Development (TOD) near stations along linked routes would become more attractive as accessibility is increased for transit riders. New TOD developments would beneficially impact regional and local economies.



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## 6.0 POTENTIAL MITIGATION MEASURES

The No Build and TSM alternatives are not anticipated to create adverse economic impacts and, therefore, would not require implementation of any mitigation measures.

Mitigation measures for the build alternatives would include:

- Compensation to property owners for acquisition of property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- Relocation assistance for affected property and business owners in compliance with the California Relocation Act
- Measures to assist business owners significantly impacted by temporary construction activity (temporary parking, marketing programs, and other measures to be identified by Metro working with the appropriate businesses).
- Replacement parking locations and strategies (Metro is committed to implementing a feasible parking replacement plan that would reduce parking impacts to a less than significant level).



## 7.0 CONCLUSIONS

### 7.1 No Build Alternative

#### 7.1.1 NEPA Findings

The No Build Alternative would include transit investments already planned in the Metro 2009 LRTP. It proposes no construction or physical changes to the study area. Therefore, this alternative would not create any adverse, economic or fiscal impacts. Given that an LRT system through downtown Los Angeles would not be constructed under the No Build Alternative, economic benefits would not occur in direct and indirect job creation and investment or spending by suppliers whose goods and services are used in a project. Since the No Build Alternative would forego beneficial economic impacts, such as increased employment opportunities or increased direct and indirect revenues that would occur with the development of the build alternatives, an adverse impact could occur on the regional economy.

#### 7.1.2 CEQA Determinations

CEQA guidelines state that the economic effects of a physical change may be used to determine if the change is a significant change to the environment.

The No Build Alternative would not include construction and would not substantially change the physical environment. Therefore, this alternative would have no adverse economic or fiscal impacts and no mitigation measures would be required.

### 7.2 TSM Alternative

#### 7.2.1 NEPA Findings

The TSM Alternative would include minor transportation improvements. It would not involve substantial physical changes to the environment and, therefore, would not have any adverse economic or fiscal impacts. However, the TSM Alternative would not result in beneficial economic impacts to the extent associated with the other build alternatives.

#### 7.2.2 CEQA Determinations

The TSM Alternative would not involve substantial physical changes and would not create a significant economic or fiscal impact. However, this alternative could permanently displace up to 24 parking spaces to make way for new bus stops. This parking displacement could impact some businesses. It is difficult to estimate the exact impact of the parking displacements because bus station locations have yet to be determined. However, with implementation of mitigation measures, impacts would be reduced to less than significant levels.

## 7.3 At-Grade Emphasis LRT Alternative

### 7.3.1 NEPA Findings

The At-Grade Emphasis LRT Alternative would improve transit accessibility and mobility in the region. This could increase economic activity and benefit businesses and employees traveling to and from work. This alternative would decrease transit transfers in the region. This would result in decreased travel times and costs for commuting employees.

Additionally, applying Regional Input-Output Modeling System multipliers, secondary economic impacts of the At-Grade Emphasis Alternative are estimated to produce over \$1.9 billion in economic output from construction and operations spending. Total economic output could increase employment by 13,859 jobs and tax revenues by \$78 million. This increase in employment and tax revenue would beneficially impact local and regional economies.

### 7.3.2 CEQA Determinations

Five privately-owned parcels would be acquired for construction of the At-Grade Emphasis LRT Alternative. Acquisition of these parcels would result in annual property tax revenue losses of \$186,734. This revenue loss would equal about 0.76 percent of the property tax base of properties that abut the alignment (\$24,381,100). Thus, property tax revenue losses would be a less than significant impact. Losses in property tax revenues would likely be offset by increased property values in areas surrounding new stations.

This alternative would have temporary construction-related impacts (between 24-48 months) to local businesses in the project area. These impacts would include dust, noise, street closures, the permanent displacement of up to 80 curb parking spaces and possible sidewalk closures. These impacts could reduce visibility, accessibility and attractiveness of local businesses. Construction impacts would have a significant impact to activity levels and revenue streams of businesses along the alignment.

Approximately 30 businesses could be impacted by construction activity. Implementation of mitigation measures, such as compensation to property for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

The At-Grade Emphasis LRT Alternative would create construction-related employment growth, adding up to 13,789 employees to the area economy. However, this growth in employment would be within planned levels and would not represent a significant impact to the economy.

## 7.4 Underground Emphasis LRT

### 7.4.1 NEPA Findings

Like the At-Grade Emphasis LRT Alternative, the Underground Emphasis LRT Alternative would improve accessibility and mobility and reduce travel time and costs in the region. This alternative could encourage greater economic activity and would provide benefits for businesses and commuting employees.

The Underground Emphasis LRT Alternative would result in an economic output of \$2.8 billion and would increase direct and indirect employment by over 20,789 jobs. This economic growth would be within planned levels for Los Angeles and Los Angeles County. Tax revenues are estimated to increase by \$117 million. Increased revenues would result from new jobs and spending on project construction and operations and have beneficial impacts to local and regional economies.

### 7.4.2 CEQA Determinations

The Underground Emphasis LRT Alternative would require land acquisitions for tunnel boring, station construction, and station sites. Twenty privately-owned parcels would be acquired. Land acquisitions could decrease annual property tax revenues by \$286,800 or 1.2% of the property tax base of businesses that abut the proposed alignment. This would be a less than significant impact. Decreased property tax revenues would likely be offset by increased property values in areas surrounding new stations.

The Underground Emphasis LRT Alternative would have temporary construction-related impacts including dust, noise, street closure, the permanent displacement of up to 20 parking spaces and possible sidewalk closures. This could reduce the visibility, accessibility and attractiveness of local businesses.

Construction could affect approximately 38 businesses along the alignment. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the

alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

## 7.5 Fully Underground LRT – Little Tokyo Variation 1

### 7.5.1 NEPA Findings

As with the other build alternatives, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would improve accessibility and mobility and reduce travel times and costs in the region. This could encourage greater economic activity and benefit businesses and commuting employees.

The Fully Underground LRT Alternative – Little Tokyo Variation 1 could create a total economic output of over \$3.2 billion and increase employment by 23,534 jobs. Such employment growth would be within growth estimates. Overall, an increase in employment and economic output would beneficially impact local and regional economies.

### 7.5.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 1 would generally require the same land acquisitions as the Underground Emphasis LRT Alternative. The exception would be businesses on the block bounded by 1st, Alameda and 2nd Streets, and Central Avenue, and business located on the south side of 1st Street east of Alameda Street. However, Metro intends to maintain some of the existing businesses acquired on Central Avenue between 1<sup>st</sup> and 2<sup>nd</sup> Streets that would not be directly impacted by construction activities.

Approximately five businesses along 1st Street could be impacted during construction from street relocation and road work. Implementation of mitigation measures, such as compensation to property owner for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Land acquisitions would result in property tax losses of approximately \$300,900, or 1.2 percent of the tax revenue base of properties abutting the alignment. This would be a less than significant impact. Property tax revenue losses would likely be offset by increases in property values in areas surrounding new stations.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.

## 7.6 Fully Underground LRT – Little Tokyo Variation 2

### 7.6.1 NEPA Findings

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have similar impacts and could utilize similar mitigation measures as the Fully Underground Emphasis LRT Alternative – Little Tokyo Variation 1. It would improve regional connectivity and mobility and reduce travel times and costs region-wide. This could encourage greater economic activity and benefit businesses and commuting employees.

This alternative could produce an economic output of \$3.4 billion and increase employment by 25,396 jobs. This alternative would have the greatest regional economic impact of the four build alternatives. Increases in employment and economic output would beneficially impact local and regional economies.

### 7.6.2 CEQA Determinations

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would require nearly the same land acquisitions as the Fully Underground LRT Alternative – Little Tokyo Variation 1. The exception would be acquisition of two additional parcels on 1st Street between Hewitt and Garey Streets. Property tax revenue losses with this alternative are estimated to be \$328,300 or 1.1 percent of the tax revenue base of properties that abut the alignment. This would be a less than significant impact. Losses to property tax revenue would likely be offset by increased property values in areas surrounding new stations.

The Fully Underground LRT Alternative – Little Tokyo Variation 2 would have similar construction-related impacts to local businesses as the Fully Underground LRT Alternative – Little Tokyo Variation 1 because they both generally follow the same alignment. Implementation of mitigation measures, such as compensation to property owners for acquisitions and assistance to business owners, would lessen construction impacts. Depending on the success of mitigation measures, some residual impacts could still occur during construction.

Related projects could be under construction during the same time as the proposed alternative. Therefore, construction of this alternative could result in a considerable contribute to cumulative impacts on activity levels and revenue of businesses along the alignment. Project operational impacts would be less than significant, so they would not contribute to cumulative, adverse, economic or fiscal operational impacts.





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