



Chapter 1

Purpose and Need

The purpose of the Eastside Transit Corridor Phase 2 Project is to provide area residents, businesses, and transit-dependent populations with a convenient and reliable, high-capacity transit alternative and to connect them to the Metro Gold Line Eastside Extension and the regional rail system with the implementation of the Regional Connector Project. The project area is faced with increasing mobility challenges due in large part to an increase in travel demand, travel times, freeway and arterial congestion, and population and employment growth. The project study area, which was the area used during the Alternatives Analysis (AA) process to determine which alternatives to study in this Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR), is located in eastern Los Angeles County and is generally bounded by Interstate 10 (I-10) to the north, just east of I-605, I-5 to the south, and the Metro Gold Line Eastside Extension to the west (see **Figure 1-1**). This chapter summarizes the purpose and need for the project. Additional detail and supportive data are provided in the Purpose and Need Report, Appendix E, of this Draft EIS/EIR.

The jurisdictions in the project study area, as well as the more focused project area, are in the process of developing transit-supportive land use policies. In addition, a number of planned redevelopment projects and existing activity centers are located in areas that could leverage a rail transit investment and increase economic opportunities. These projects and the area's economic future would benefit from economic opportunities resulting from connections to the regional rail transit network.

Without significant improvements to increase capacity to meet existing and future demand, the project area's transportation network will be substantially overburdened and mobility further constrained. Furthermore, limited connectivity to

the Metro rail transit system impairs travel to and from the project area. There is a pressing need to improve transportation mobility and reliability in the project area.

Depending on which alternative is selected, the Eastside Transit Corridor Phase 2 Project would involve construction and operation of a light rail transit (LRT) project that would extend the Metro Gold Line Eastside Extension to the east 6.9 to 9.5 miles, beginning at the existing Metro Gold Line Eastside Extension Atlantic Station.

1.1 Project Purpose and Objectives

The purpose of the Eastside Transit Corridor Phase 2 Project is to provide area residents, businesses, and transit-dependent populations with a transit alternative connecting them to Metro Gold Line Eastside Extension and the regional rail system. In analyzing mobility issues, a number of themes have emerged that articulate the purpose for transit improvement in the Eastside Transit Corridor Phase 2 project area:

- Alleviate **peak-hour congestion on the roadway network** by providing transit alternatives to meet increased demand;
- Provide additional travel options, given the project area's **high travel demand and connectivity constraints**;
- Effectively get people to the **concentration of activity centers** that exists within and adjacent to the project area as shown in Figure 1-1;

- Address the demand for transit service and meet the needs of **transit-dependent populations**. Twelve percent of households in the project study area have no vehicles, and the project study area generates approximately 114,000 transit trips per day;
- Accommodate areas of increased **population and employment growth**;
- Encourage **transit-supportive land use** and economic development opportunities; and
- Increase **environmental benefits** to meet air quality mandates.

The project would improve mobility within the project area, offer a more sustainable transit alternative to address increased travel demand and projected growth, and meet the following objectives:

- Serve the large number of transit-dependent and low-income populations in the project area;
- Increase access to major employment centers, activity centers, and destinations in the project area and Los Angeles County;
- Provide regional transit connectivity with the Metro Gold Line Eastside Extension and Measure R projects; and
- Provide transit alternatives to alleviate roadway congestion, improve mobility options for enhanced quality of life, and provide a convenient and reliable alternative to the automobile.

1.2 Regional Transportation Objectives and Planning Context

Los Angeles has the distinction of being the second most congested urban area in the country, after

Washington, D.C., according to the most recent annual survey of traffic congestion levels conducted by the Texas Transportation Institute (*Urban Mobility Report December 2012*, National Congestion Tables).¹ The Eastside Transit Corridor Phase 2 project study area contains some of the most congested traffic conditions in Los Angeles, with limited east-west connectivity through East Los Angeles. Congestion is often characterized by slower speeds, longer trip times, and increased vehicular queuing. The Southern California Association of Governments (SCAG), along with Metro, local, state, and federal jurisdictions, have taken the initiative to improve mobility, access, sustainability, and air quality across the Los Angeles region. The Eastside Transit Corridor Phase 2 Project would support these objectives by providing a sustainable; environmentally-friendly alternative to driving that improves regional access and mobility.

1.2.1 Regional Plans - Mobility

1.2.1.1 Metro Long Range Transportation Plan and Measure R

The Eastside Transit Corridor Phase 2 Project is identified in Metro's *2009 Long Range Transportation Plan* and has been selected as one of many transit and highway projects to receive local Measure R funding. Measure R is a 30-year, half-cent sales tax measure approved by over two-thirds of Los Angeles County voters in November 2008. It includes funding to support a variety of transportation projects throughout Los Angeles County, including the Eastside Transit Corridor Phase 2 Project.

1.2.1.2 SCAG 2012-2035 Regional Transportation Plan

The Eastside Transit Corridor Phase 2 Project was included in the SCAG *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) adopted in April 2012. The RTP also describes projects and corridor concepts in and

¹ This survey compares traffic congestion levels in the 75 largest urban regions in the U.S. Los Angeles ranks second in Yearly Delay per Auto Commuter, first in the Travel Time Index, third in Excess Fuel per Auto Commuter, and second in Congestion Cost per Auto Commuter.

around the project study area aimed at maximizing the effectiveness, safety, and reliability of Southern California's transportation system. Near the project study area, there is funding to conduct planning and environmental studies for widening I-5 and adding one high-occupancy vehicle (HOV) lane in each direction from I-605 to I-710. However, as there are no plans to widen I-5 to the west approaching downtown Los Angeles, these improvements would not improve access to principal destinations for travel generated within the Eastside Transit Corridor Phase 2 project study area.

Future corridor concepts include the East-West Freight Corridor that would run parallel to the Union Pacific Railroad Los Angeles Subdivision before following a route adjacent to State Route 60 (SR 60) east of SR-57. Regional improvements to accommodate goods movement would not materially improve conditions for commuter and

other home-based trips generated to or from destinations within the project study area.

The RTP/SCS's Strategic Plan describes unfunded operational and capital improvements (financially unconstrained plans and projects). Near the project study area, the Strategic Plan lists HOV lanes on SR 60 from US 101 to I-605 and interchange improvements at SR 60/I-605.

Improvements along SR 60 may improve safety and access to principal destinations for travel generated within the Eastside Transit Corridor Phase 2 project study area in the future. However, since it is not listed under Metro's Long Range Transportation Plan (LRTP), the Strategic Plan describes these projects as unfunded with no anticipated date of implementation and no engineering efforts are underway. **Table 1-1** shows SCAG's regional transportation performance indicators and the projected year 2035 results.

Table 1-1. Regional Transportation Performance Indicators

Performance Indicator	Performance Measurement		2008 Base Year	2035 Baseline	2035 Plan Objectives
Mobility	Average daily speed (miles per hour)		32.5 mph	29.6 mph	34.7 mph
	Average daily delay per capita		17.3 minutes	23.8 minutes	13.1 minutes
Accessibility	Percent PM peak period work trips within 45 minutes of residence ¹	Autos:	79%	79%	85%
		Transit:	24%	22%	23%
Reliability	Percent variation in travel time ²	Weekday after 5:00 PM	38%	N/A	N/A
Safety	Accident rate per million VMT for highways ¹		1.5 (2009)	N/A	N/A

Source: SCAG, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, Highway and Arterials Appendix, Performance Measures Appendix.

Note:

¹ Estimated from graph.

² Percent variation in travel time means day-to-day change in travel time experienced by travelers. Variability results from accidents, weather, road closures, system problems, and other non-recurrent conditions. Reliability can only be monitored and not forecasted. This is because travel demand models cannot evaluate variations in travel times, but can only estimate average travel times and delay.

1.2.2 Local Plans – Access and Sustainability

The local jurisdictions in the project area all support enhanced transit access, pedestrian enhancements, and sustainable development practices. Many seek to balance the transportation needs of both commuters and local circulation, as expressed in the most recent general plans and applicable specific plans. Additionally, cities in the project area have expressed interest in coordinating with Metro on land use visioning as part of the urban design process that was initiated during the alternatives analysis for the Eastside Transit Corridor Phase 2 Project. For those jurisdictions currently involved in updating their general plans and specific plans, this process has led to consideration of including transit-supportive land use and redevelopment policies in support of Metro's proposed transit investments.

1.2.3 Air Quality

The Eastside Transit Corridor Phase 2 Project would contribute to improved air quality by providing an alternative to auto travel and thereby helping to reduce auto-related pollutants. The need for a transit solution that would improve air quality and be environmentally sustainable is important to the project area and the region as a whole.

The United States Environmental Protection Agency (USEPA) governs air quality across the United States and administers the Federal Clean Air Act (CAA). The CAA sets National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The USEPA has classified the South Coast Air Basin (SoCAB) as a maintenance area for carbon monoxide (CO) and a non-attainment area for ozone (O₃) and fine particulate matter (PM_{2.5} and PM₁₀).

In addition to being subject to CAA requirements, air quality in California is governed by the California Clean Air Act, which is enforced by the California Air Resources Board (CARB). CARB requires all air quality management districts in the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS). CAAQS define the maximum

amount of a pollutant that can be present in outdoor air without harm to the public's health. CARB also develops regional greenhouse gas (GHG) emission reduction targets as required by Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, and Senate Bill 375 (SB 375). AB 32 provides the statutory basis for statewide 2020 GHG emissions reduction goals, and SB 375 enhances California's ability to reach its AB 32 goals by establishing regional GHG reduction goals, including goals for the region managed by SCAG, and by promoting good planning with the goal of creating more sustainable communities.

1.3 Project Need

The Eastside Transit Corridor Phase 2 project study area is faced with increasing mobility challenges due in large part to population growth.

Currently, many residents within the Eastside Transit Corridor encounter long travel delays from the project study area to regional centers in downtown Los Angeles and beyond. If unaddressed, these mobility challenges pose a risk to future population and economic growth, commuter safety, existing infrastructure, goods movement, air quality, and environmental considerations. If no action is taken, transportation challenges within the project study area will continue to grow.

- **Increased travel demand** – The number of work trips taken to and from the project study area in 2006 is forecast to increase 32 percent by 2035.
- **Increasing travel times** – By 2035, the average peak-period travel time within the project study area is expected to increase by 25 percent and 34 percent for the morning and afternoon peak periods, respectively.
- **Continuing transit-dependent population** – The project study area has a significant transit-dependent population that needs convenient and reliable transit options to get them where they want and need to go; 38 percent of the project study area population is under age 18 or

over age 65, 16 percent of households are categorized as low-income, and 12 percent of all households have zero vehicles.

- **Increasing freeway congestion** – With no major freeway improvements planned, a growing population, and forecasted increases in travel demand, freeway congestion will continue to increase.
- **Increasing arterial congestion** – Major arterials in the project study area, including but not limited to Washington Boulevard and Garfield Avenue, experience heavy morning and evening peak period congestion, which negatively affects access for both automobiles and buses.
- **Heavy truck traffic** – The SR 60, I-5, and I-10 Freeways, along with project study area arterial streets such as Washington Boulevard, are subject to heavy truck traffic. Larger vehicles and slower movements of heavy truck traffic on freeway and arterial streets lead to a more congested environment in which both automobiles and buses must operate.
- **Increased population and employment growth** – Population densities, employment densities, and the concentration of activity centers in the project study area are expected to increase by 12 percent by 2035.
- **Limited travel options** – With limited regional rail system connections, residents of and visitors to the project study area can rely only on available bus systems operating on the same congested roadway network. Commuter rail options are limited to two Metrolink stations within the 82-square-mile project study area.

1.4 Project History

Studies of major rail transit infrastructure investments on the Eastside date back to the 1980s, and loose plans for a major east-west route through Los Angeles County exist from prior decades.

1.4.1 Eastside Transit Corridor Studies: Re-Evaluation Major Investment Study

Metro initially selected an extension of the Metro Red Line heavy-rail subway as the locally preferred alternative for the Eastside Corridor, but this project was suspended in 1998 due to funding shortfalls and a voter-approved ban on the use of Proposition A sales tax revenue for subway construction. Metro later adopted an extension of the Pasadena Blue Line light rail project (later named the Metro Gold Line) as the new locally preferred alternative for the Eastside following the 2000 *Eastside Transit Corridor Studies: Re-Evaluation Major Investment Study*.

1.4.2 Eastside Corridor Environmental Impact Statement/Environmental Impact Report

In 2001, Metro completed the *Draft Supplemental Environmental Impact Statement/Draft Subsequent Environmental Impact Report (Draft Supplemental EIS/Subsequent EIR)*, and subsequently a *Final Supplemental EIS/Subsequent EIR* in 2002, for the first phase of what is now known as the Metro Gold Line Eastside Extension. The Metro Gold Line Eastside Extension's first phase was completed in November 2009. Atlantic station is the terminus of the Metro Gold Line Eastside Extension, located on Pomona Boulevard between Beverly Boulevard and Atlantic Boulevard.

1.4.3 Eastside Transit Corridor Phase 2 Alternatives Analysis

In 2007, Metro initiated plans for a high-capacity transit connection to the Eastside Extension Phase 1 Project by conducting an Eastside Transit Corridor Phase 2 Alternatives Analysis Report (2009). During the alternatives analysis study process, 47 initial alternatives were evaluated and screened down to four feasible build alternatives.

In order to further refine the build alternatives for environmental analysis, Metro conducted the *Eastside Transit Corridor Phase 2 Alternatives Analysis Addendum* (2009), which applied additional evaluation criteria and conceptual level engineering. In October 2009, the Metro Board of Directors approved the advancement of two LRT build alternatives along with the No Build and transportation system management (TSM) alternatives to the EIS/EIR process for the Eastside Transit Corridor Phase 2 Project.

1.5 Project Study Area Overview

The Eastside Transit Corridor Phase 2 project study area is generally bounded by I-10 to the north, Peck Road and Painter Avenue to the east, Olympic and Washington boulevards to the south, and the Gold Line Eastside Extension to the west. The project study area consists of portions of eight jurisdictions, including the cities of Commerce, Montebello, Monterey Park, Pico Rivera, Rosemead, Santa Fe Springs, South El Monte, Whittier, and portions of unincorporated Los Angeles County, which include East Los Angeles and west Whittier-Los Nietos. The project study area is illustrated in **Figure 1-1**.

According to projections from SCAG, the project study area had reached a population of 720,850 in 2010, comprising approximately seven percent of the Los Angeles County population. The current project study area population surpasses that of several notable cities with mature transit networks, such as Boston (645,169)² and Washington D.C. (599,657), as reported by the U.S. Census Bureau's

² The Eastside Transit Corridor Phase 2 project area has a population larger than the cities of Boston and Washington D.C. The comparison for these two cities is based on total population. It is not intended to be a comparison of population densities (population per square mile). The Eastside Transit Corridor Phase 2 project area is also larger than both cities in terms of square miles. The Eastside Transit Corridor Phase 2 project area is 82 square miles compared to the size of Boston (48 square miles) and Washington D.C. (61 square miles). Information is based on the most recent data available, the 2009 Census Top Cities Index, which provides annual estimates of the resident population for incorporated places over 100,000. The land area is based on the U.S. Census Bureau State and County QuickFacts, 2000.

2009 Top Cities Index. By the year 2035, the project study area population is expected to increase by an additional five percent to approximately 759,992.

The project study area demographic and transit dependency factors are summarized below:

- Low-income households comprise 16 percent of the total households, which is higher than the county average of 13 percent.
- 38 percent of the population is age 18 and younger or age 65 and older.
- Approximately 12 percent of households in the project study area had zero vehicles in 2010; this is higher than the county average, with some of the highest concentrations in the western and central portions of the project study area.

1.5.1 Activity Centers and Destinations

The Eastside Transit Corridor Phase 2 project study area has a high concentration of activity centers and major attractions, which generate a greater demand for transit than adjacent areas. There are multiple regional activity centers, such as The Shops at Montebello, Montebello Golf Course, Pico Rivera Towne Center, Presbyterian Intercommunity Hospital, and Whittier Narrows Recreation area, and others

Figure 1-1 identifies the major activity centers in the project study area which can serve as potential travel markets.

1.5.2 Population and Employment Growth

The population of the project study area in 2010 was approximately 721,000, or seven percent of the population of Los Angeles County. SCAG projections estimate that by 2035, the population will grow by five percent to roughly 759,992.

Figure 1-2 illustrates the projected population growth in the project study area between 2010 and 2035.

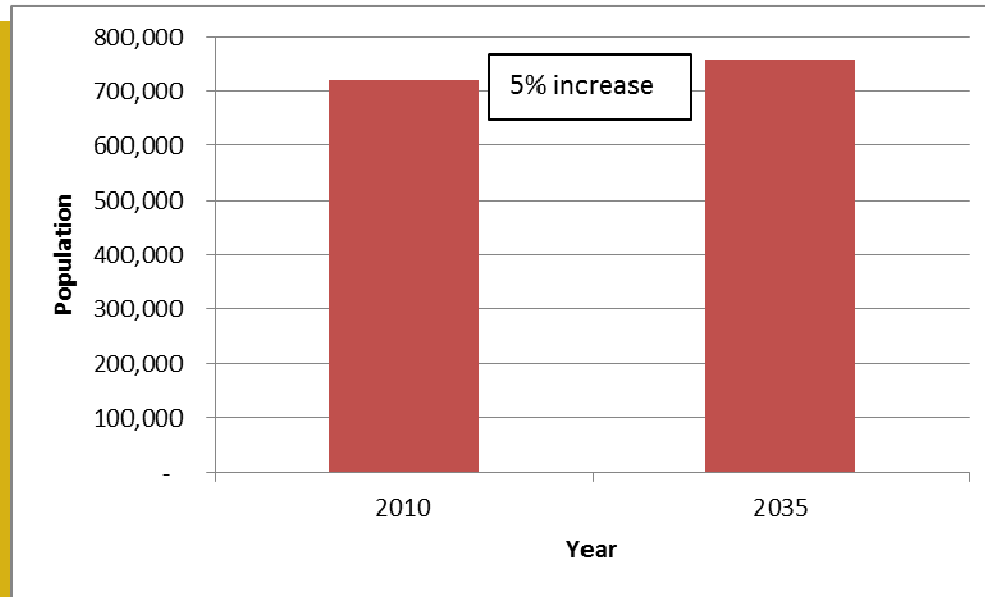


Source: Los Angeles County, Department of Regional Planning and Cities of Commerce, Montebello, Monterey Park, Pico Rivera, Rosemead, Santa Fe Springs, South El Monte, and Whittier, 2010; prepared by AECOM, CDM Smith 2010.

Figure 1-1. Major Activity Centers in Project Study Area

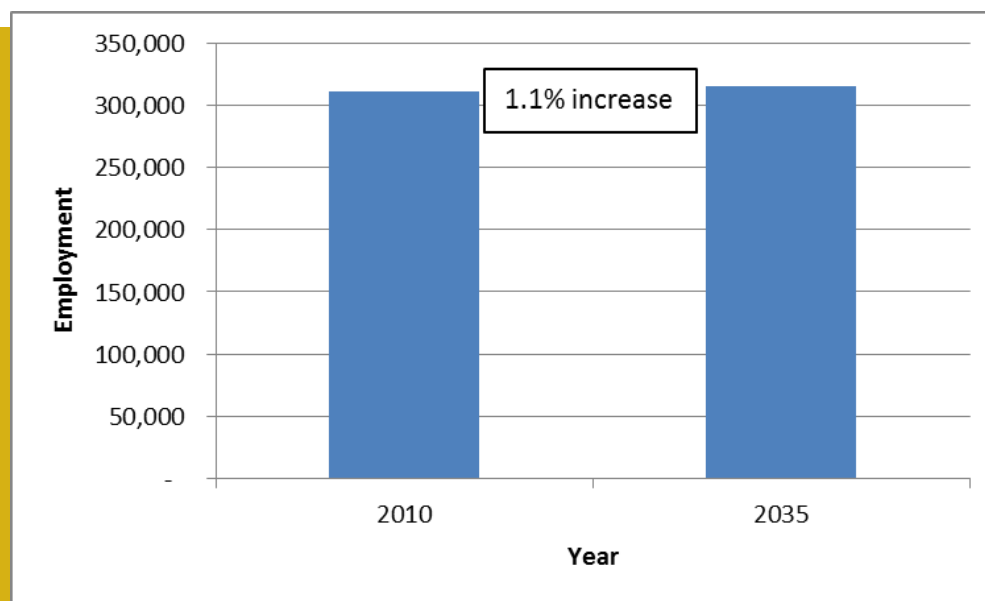
Recent figures indicate that there are approximately 311,000 jobs in the project study area. This number is projected to increase 1.1 percent to roughly 315,019 by 2035, as shown in **Figure 1-3**.

Figures 1-4 and 1-5 show the projected year 2035 population and employment densities in the project study area, respectively.



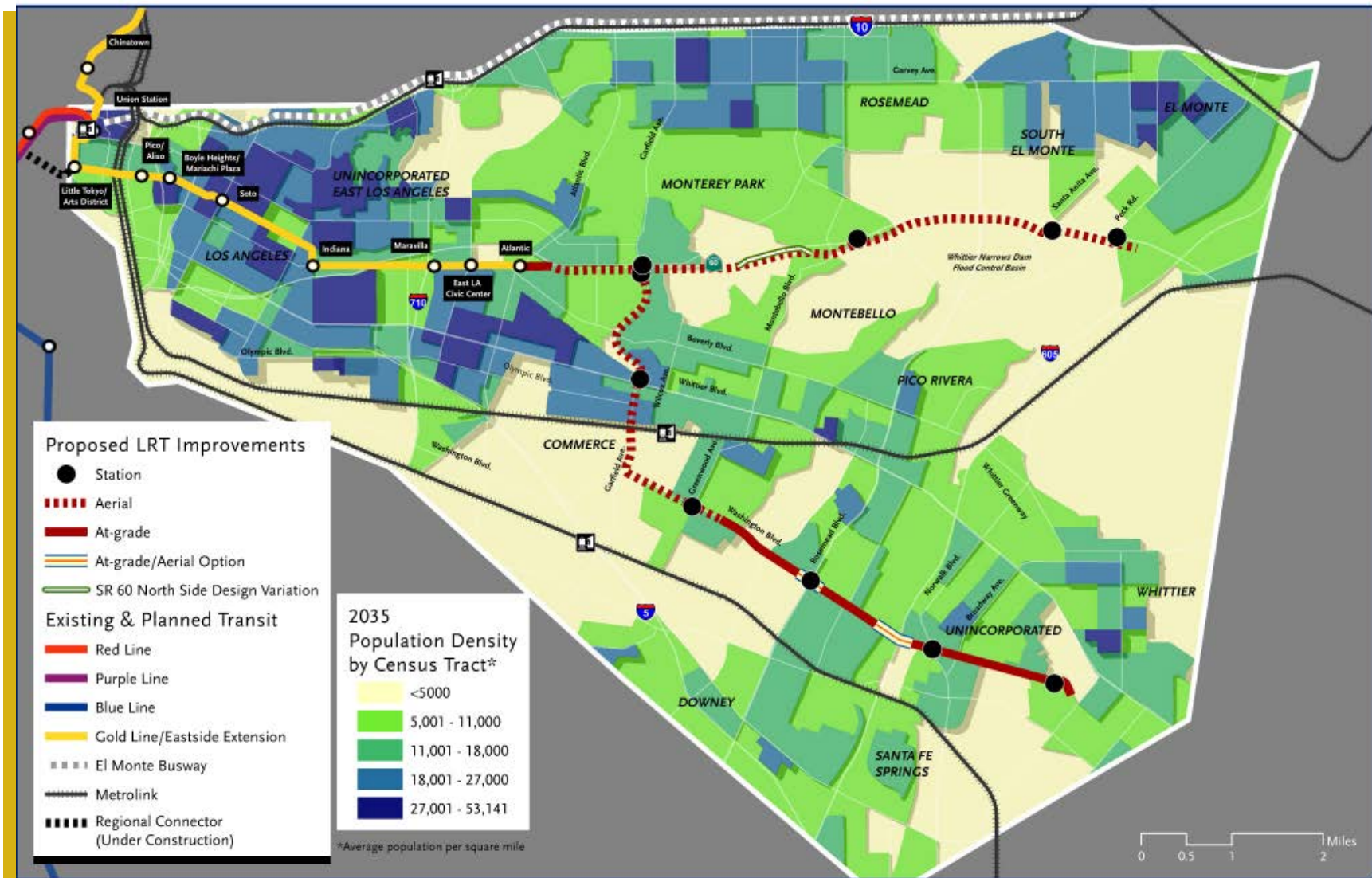
Source: SCAG 2012 RTP projections based on 2010 Census Data. Graphic prepared by AECOM, CDM Smith 2013.

Figure 1-2. Population Growth for Project Study Area 2010-2035



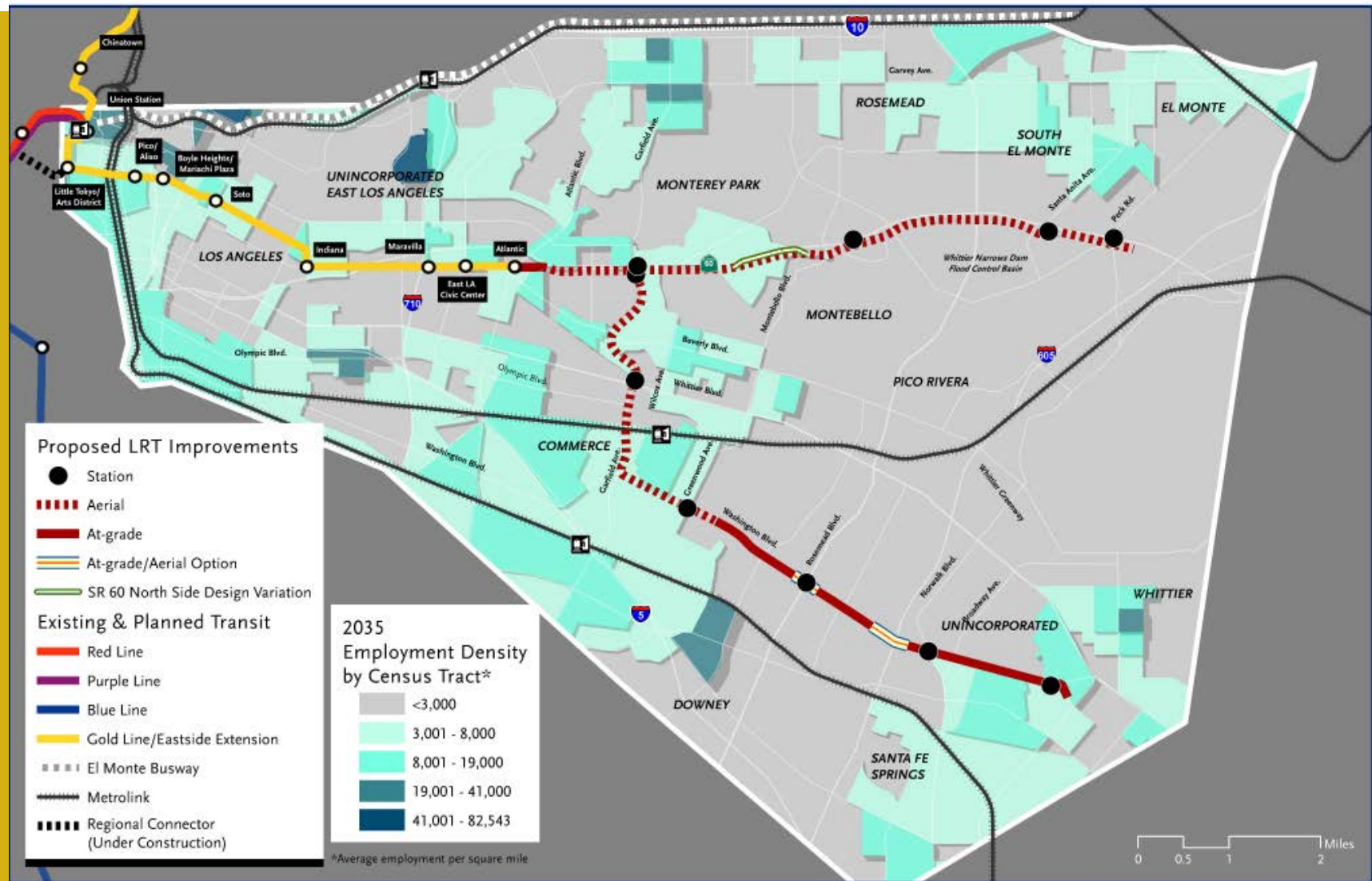
Source: SCAG 2012 RTP projections based on 2010 Census Data. Graphic prepared by AECOM, CDM Smith 2013.

Figure 1-3. Employment Growth for Project Study Area 2010-2035



Source: SCAG 2012 RTP projections based on 2010 Census Data, 2010; prepared by AECOM, CDM Smith 2013.

Figure 1-4. 2035 Population Density



Source: SCAG 2012 RTP projections based on 2010 Census Data, 2012; prepared by AECOM, CDM Smith 2013.

Figure 1-5. 2035 Employment Density

1.5.3 Traffic Congestion

Traffic congestion and commute times are forecast to increase in the county and in the project study area. Over the ten-year period from 1990 to 2000, residents of Los Angeles County experienced an 11 percent increase in travel time to and from work. Based on SCAG projections, travel times to and from work will increase 15 percent from 2003 to 2035 for Los Angeles County. The average travel speed will decrease from 27.4 miles per hour (mph) to 25.0 mph, representing the lowest average travel speed in the SCAG region. The following describes the conditions on freeways and arterial streets within the project study area.

Major arterials in the project study area operate at level of service (LOS) E or F conditions during morning and evening peak periods, which negatively impacts access to local destinations. As reported in the *2010 Los Angeles County Congestion Management Program*, nearly 25 percent of the arterial intersections in the project study area operate at unacceptable conditions (i.e., LOS E or F) during the morning peak period, and approximately 50 percent in the afternoon peak period. Peak period congestion also impacts local streets, as drivers detour to avoid travel delays, negatively impacting the project study area's neighborhoods. **Table 1-2** shows the projected increase in traffic on freeways in the project study area.

1.5.4 Transit Use and Potential Markets

Bus service is the primary public transportation option available to the communities within the project study area. Major travel corridors in the project study area include east-west corridors such as Whittier Boulevard, Beverly Boulevard, Olympic Boulevard, and Washington Boulevard, and north-south corridors such as Atlantic Boulevard, Garfield Avenue, Rosemead Boulevard, and Montebello Boulevard. Fixed route service in the project study area runs at high frequencies during typical working hours, with decreased service during the evenings and weekends. These bus routes provide transportation to most major shopping

areas, recreation facilities, and public schools within the project study area. Rail feeder bus routes provide direct connections to Metrolink and Amtrak rail stations.

Table 1-2. Existing and Projected Average Daily Traffic Volumes for Freeways in the Project Study Area

Freeway Name	Limits	2010 Average Daily Traffic	Projected 2035 Average Daily Traffic	Percent Change from 2010
SR 60	I-605 to I-5	215,000	231,000	7.4%
I-10	I-605 to I-5	225,000	292,000	30%
I-5	I-605 to I-10	259,000	291,000	12.3%
I-710	I-10 to I-5	185,000	193,000	4.3%
I-605	I-10 to I-5	243,000	299,000	23%

Source: Metro Model. Traffic volumes represent the average flows on several freeway links between the limits stated. The links used are only those between intersections; links within intersections (such as between freeway ramps) were not included.

Metro operates fixed guideway rail service throughout the Los Angeles metropolitan area. It provides over 79 miles of urban rail served by the Metro Red and Purple Line heavy rail subways, and the Blue, Green, and Gold Line light rail lines. The majority of Metro rail stations provide connections to additional public transportation options, including Metrolink commuter rail, Amtrak intercity rail, bus rapid transit, and bus service provided by Metro and various cities.

Commuter and intercity rail service within the project study area are provided by Metrolink and Amtrak, with a connection to Metro rail service (Red, Purple and Gold lines) at Union Station.

Within the project study area there are two Metrolink stations. The Commerce Station, at the intersection of Garfield Avenue and Telegraph Road, provides service south of Union Station via the Orange County Line. The Riverside Line stops at the Montebello/Commerce Station, situated near the intersection of Garfield Avenue and Flotilla Street. Stops adjacent to the project study area include the Cal State Los Angeles Station on the San Bernardino Line, adjacent to I-10, and the El Monte Station north of the project study area boundary.

In 2006, approximately 26 percent of transit trips that originated in the project study area remained in the area. This proportion is projected to increase to 30 percent by 2035. This reinforces the need for transit improvements within the project study area to capture both local and regional travel markets.

In 2006, the most popular destination for the remaining 74 percent of transit trips destined outside the project study area was Central Los Angeles (which includes the central business district); such trips accounted for more than 30 percent of transit trips outside the project study area, producing a major east-west travel pattern that the Eastside Transit Corridor Phase 2 Project would serve.

Portions of the project study area contain largely transit-dependent populations – including the young, elderly, low-income households, and households that do not own a vehicle – in proportions higher than those in Los Angeles County.

Of the households within one-half mile of the SR 60 LRT Alternative, approximately nine percent had no vehicles available in 2011, about five percent of workers over the age of 16 took public transportation to work, and 22 percent of the population had a disability. Of the 25 Census tracts within one-half mile of the SR 60 LRT Alternative, three had a zero-car household concentration of 20 percent or greater and six block groups exceeded the threshold (30 percent) for a high concentration of persons with a disability. Two Census tracts

exceeded 17 percent of workers taking public transportation to work.

Of the households within one-half mile of the Washington Boulevard LRT Alternative, approximately ten percent had no vehicles available in 2011 and about six percent of workers over the age of 16 took public transportation to work. Of the 39 Census tracts within one-half mile of the Washington Boulevard LRT Alternative, 15 had a zero-car household concentration of 20 percent or greater; three exceeded the 17 percent threshold for workers taking public transportation to work; and seven of the 95 block groups exceeded the 30 percent threshold of persons with a disability.

The size of these groups could increase with projected population growth. There is a need to provide reliable, high-capacity transit to meet the needs of both existing and future transit-dependent populations. Currently these populations are served by bus as the primary transit alternative in the project study area. Transit solutions should explore ways to meet demand by providing an alternative that does not add to the increasing congestion experienced on the roadway network in the project study area.

Current travel demand is expected to increase 32 percent by 2035 for the Eastside Transit Corridor Phase 2 project study area. Several travel markets would benefit from a transit investment:

- ***Trips produced/attracted to the project study area*** - The project study area attracted and produced approximately 3.7 million all-purpose trips in 2006. This is expected to grow significantly to 4.4 million daily trips by 2035. In 2006, a large share of these trips remained within the project study area (44 percent), a condition that is projected to continue. Population and employment growth are contributing factors.

- ***Transit trips produced/attracted to the project study area*** - In 2006, the project study area produced or attracted a total of 114,000 daily, all-purpose transit trips, and 26 percent remained within the project study area. This is forecast to increase to 30 percent by 2035. This trend can be attributed to the activity centers within the project study area.
- ***Trips from project study area to outside districts*** - According to 2035 projections, approximately 50,000 daily trips will be generated from the project study area to Central Los Angeles.

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