

## Chapter 1

# INTRODUCTION AND BACKGROUND

### Study Purpose

The purpose of this technical study is to identify strategies for improving transit service and regional connectivity along the North Hollywood to Pasadena Corridor. This report focuses on the feasibility of implementing Bus Rapid Transit (BRT), which could include a number of elements such as dedicated bus lanes, enhanced station stops, all-door boarding and transit signal priority (TSP) – that have demonstrated the ability to improve bus service and attract new riders. BRT can attract a larger travel market share by enhancing regional connectivity and improving the link between major employment and activity centers, such as hospitals, entertainment studios, and shopping districts, within the Cities of Burbank, Glendale, Pasadena, and Los Angeles. This report also discusses the benefits of potential BRT concepts.



There are five key study objectives:

There are five key study objectives:

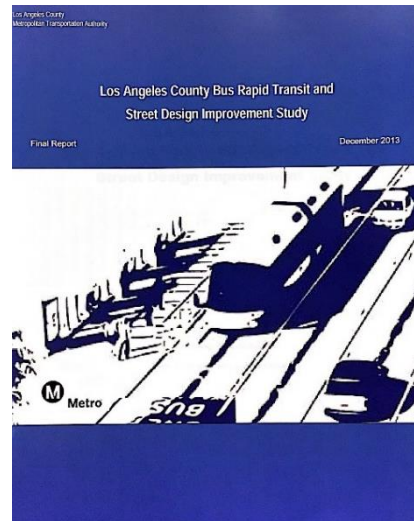
1. Characterize existing conditions of community characteristics and the transportation setting, and establish the case for bus service improvement strategies;
2. Describe conditions and constraints of BRT planning and design;
3. Evaluate the feasibility and challenges associated with potential BRT concepts in the corridor, including regional connectivity;
4. Estimate project benefits and key tradeoffs associated with potential BRT options; and
5. Identify promising BRT concepts to carry forward into environmental study and more detailed design.

### Study Background

The North Hollywood to Pasadena Corridor was identified in the 2013 Countywide Bus Rapid Transit (CBRT) and Street Design Improvement Study. The CBRT study's primary focus was to advance Metro's goal of developing a countywide BRT system featuring innovative BRT elements proven to improve bus transit performance and attract new transit riders, including dedicated bus lanes, signal priority and enhanced station stops.

The North Hollywood to Pasadena Corridor was chosen as one of the first to be studied given its importance as a key regional connection between the San Fernando and San Gabriel Valleys. In May 2014, the Metro Board directed staff to conduct advanced technical analysis of the North Hollywood to Pasadena Corridor, culminating in this study effort.

In November 2016, voters in Los Angeles County passed the “Los Angeles County Traffic Improvement Plan,” otherwise referred to as Measure M, which provides funding for the implementation of BRT service from North Hollywood to Pasadena. The corridor is slated for a groundbreaking date of 2020 and an opening date of 2022.



## Study Area

The North Hollywood to Pasadena Corridor is a heavily traveled corridor that is approximately 16 miles long and includes the Cities of Burbank, Glendale, and Pasadena and a portion of the City of Los Angeles that is associated with North Hollywood and Eagle Rock. The study area is bounded on the west by the North Hollywood Metro Red/Orange Line Station, on the east by Altadena Drive in Pasadena, on the north by the City of Burbank, and on the south by Eagle Rock. Major freeways within the study area include Interstate 5 (I-5), State Route 134 (SR-134), State Route 2 (SR-2), and Interstate 210 (I-210). Figure 1-1 shows a map of the study area, which for purposes of this study, was divided into three segments – West Segment, Center Segment, and East Segment.

## West Segment

The West Segment is bounded between the North Hollywood Metro Red/Orange Line Station and I-5. The western most portion of the study area lies in the City of Los Angeles and comprises of the North Hollywood community. The major transit hub in North Hollywood is the Metro Red/Orange Line Station, which allows riders to transfer to entertainment districts in Hollywood, Toluca Lake, and South Burbank. These entertainment districts include major studios and popular attractions, such as Universal Studios, Hollywood Bowl, Hollywood Walk of Fame, and Pantages Theatre. Directly adjacent to the North Hollywood Metro



**North Hollywood Metro Red/Orange Line Station**

Red/Orange Line Station are transit-oriented developments, such as the Lofts at NoHo Commons, a mixed-use complex with commercial and retail on the first level and apartments on higher levels. There are also shops, art galleries, and fine dining restaurants along Lankershim Boulevard in the NoHo Arts District, all within walking distance.

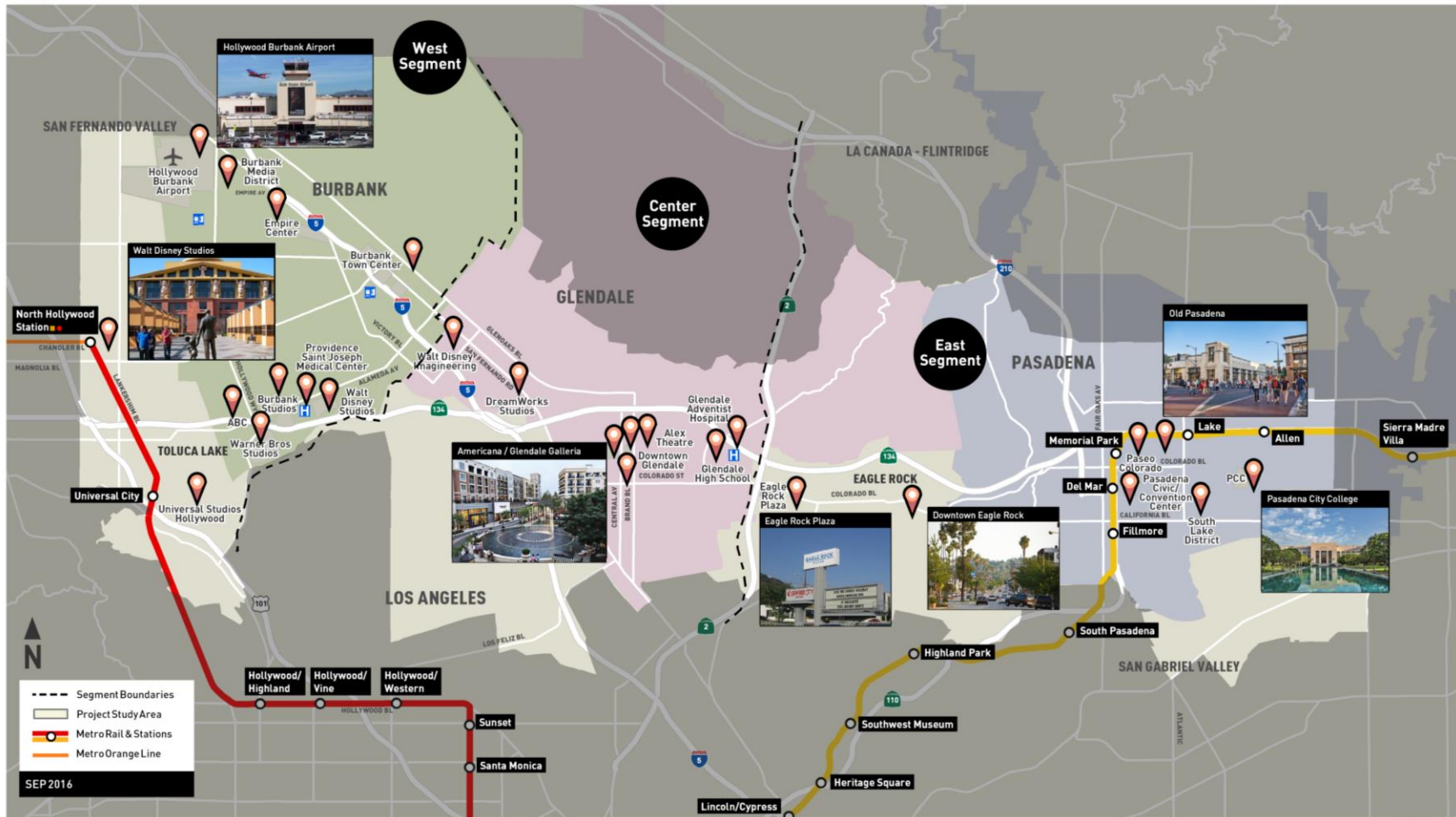


Figure 1-1: North Hollywood to Pasadena Corridor Study Area

The West Segment also includes the City of Burbank, a city with a daytime population that nearly doubles because of its prominence as a major employment hub and numerous attractions. Major employment centers along the corridor include the Burbank Media District and production studios, such as Warner Bros. Studios and Walt Disney Studios. Burbank is also very historic in the entertainment industry and serves as a transportation hub that includes the Hollywood Burbank Airport, Amtrak, Metrolink, and local bus lines.



*Burbank Media District*

### Center Segment



*Americana at Brand*

The Center Segment is bounded between I-5 and SR-2 and consists of the City of Glendale. In Glendale, the corridor runs through two popular shopping centers: the Americana at Brand and the Glendale Galleria. Major employment centers along the corridor in Glendale include Walt Disney Imagineering, DreamWorks Studios, and Glendale Adventist Hospital. Glendale's financial center is also located close to Downtown Glendale.

### East Segment

The East Segment lies between SR-2 and Altadena Drive, near Pasadena City College. In the East Segment, the corridor traverses through Downtown Eagle Rock, a community in the City of Los Angeles that is characterized by eclectic storefronts and a mix of old and new developments along Colorado Boulevard. Eagle Rock Plaza, a shopping mall and major activity center in the area, is also located on Colorado Boulevard. Eagle Rock is an ethnically diverse community and is also home to Occidental College, a private liberal arts college that serves as a major employment center for the neighborhood.



*Eagle Rock Plaza*

The East Segment includes Pasadena. Among the many attractions in Pasadena are Old Pasadena, a shopping and dining district that includes the Norton Simon Museum, Paseo Colorado, the South Lake District, the Pasadena Civic and Convention Centers, and Pasadena City College. Pasadena is also well known for its annual Tournament of Roses Parade, which is seen around the world each New Year's Day.



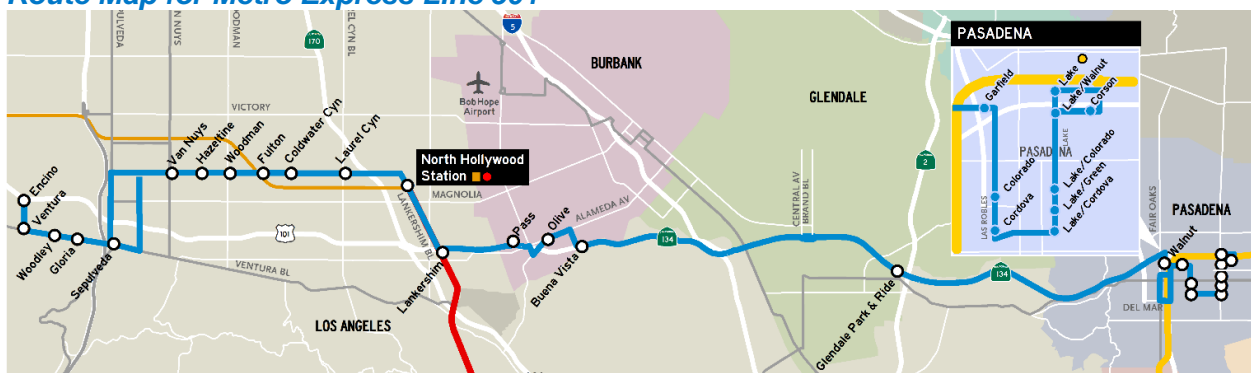
**Existing Transit Service**

*Old Pasadena*

The corridor is currently served end-to-end by Metro freeway Express Line 501 and Commuter Express Line 549. Line 501, operated by Metro, is a relatively new service that opened in March 2016 and is gaining ridership as public awareness increases. Commuter Express Line 549 is a freeway peak-hour commuter service that is operated by the Los Angeles Department of Transportation (LADOT). Both services operate on SR-134. Despite these existing transit services, bus ridership in the corridor is relatively low. Neither route connects to the many activity centers on the corridor. There is evidence that a premium bus service can more directly serve key activity centers in the Cities of Burbank, Glendale, Pasadena, and Los Angeles, and can capture more of the untapped transit market.



**Route Map for Metro Express Line 501**



**Route Map for LADOT Commuter Express Line 549**

## The Transportation Problem

The North Hollywood to Pasadena Corridor is a heavily traveled corridor with more than 700,000 daily trips (automobile and transit trips combined), mostly originating from the San Fernando and San Gabriel Valleys. However, these trips are overwhelmingly single-occupant auto trips, of which 68 percent are commuters traveling from home to work. The use of the existing transit bus lines that serve the corridor – Metro Express Line 501, Commuter Express Line 549, and other local services – constitutes only a small portion of the 700,000 daily trips within the corridor.



***A significant proportion of the 700,000 daily trips along the North Hollywood to Pasadena Corridor are single-occupant auto trips***

There are three reasons behind transit's inability to capture a larger share of the travel market in this corridor:

- First, the existing transit system in the corridor lacks convenient access to key activity centers. The two existing regional bus lines, Metro Express Line 501 and Commuter Express Line 549, predominantly run along SR-134 and, as a result, bypass numerous key activity centers.
- Second, the existing transit system does not offer competitive travel times to the automobile because of the multiple transfers required for passengers making regional trips via local bus services and the many stops buses need to make to pick up and drop off passengers.
- Third, there is not a large transit-dependent population within this corridor area. The profile of a typical traveler along the North Hollywood to Pasadena Corridor is a middle-income professional belonging to a household with high automobile ownership.

The primary challenge for the North Hollywood to Pasadena Corridor will be to attract travelers who typically drive but might consider transit. To do so, a premium transit service that better connects to major activity centers and is competitive with the automobile is necessary. These efforts are needed to help balance the overall transportation system in the corridor.

## Stakeholder Engagement

The study process included a Technical Advisory Committee (TAC), which consisted of representatives from the Cities of Burbank, Glendale, Pasadena, Los Angeles and several Metro departments. The role of the TAC was to provide technical feedback on the planning and design of BRT concepts and identify ways to identify and address key project challenges. In addition, the TAC provided an important role in establishing the following project goals:

- Design a premium transit service that is more competitive with auto travel to attract choice riders
- Improve transit access to major activity centers and employment sites

- Enhance connectivity to Metro and regional rail services
- Provide improved passenger comfort and convenience
- Support community plans and transit-oriented development goals

Metro also conducted a round of key stakeholder roundtable meetings in the study area followed by a stakeholder Open House. Invitees included businesses, religious institutions, schools, hospitals, community/neighborhood groups, major cultural centers, neighborhood councils, and Chambers of Commerce. The purpose of these meetings was to provide general overview of the study, solicit feedback that might help inform alternatives development, identify community concerns and/or corridor challenges, and discuss next steps. In addition to the key stakeholder meetings described above, Metro also provided project briefings to affected City Councils and met individually with City representatives from Burbank, Glendale and Pasadena.

## Document Overview

The remainder of the study consists of the following chapters:

**Chapter 2 – Existing Community/Transportation Setting:** Discussion of the existing community characteristics (e.g., land use, neighborhoods, consistency with regional and local plans, demographics, and socioeconomic) transportation setting (e.g., transit travel markets, trip origins and destinations, transit service ridership, and transit service); and corridor challenges.

**Chapter 3 – BRT Concepts:** Discussion of the initial BRT concepts, preliminary screening process and description of the two preferred BRT concepts.

**Chapter 4 – Assessment of Primary BRT Concepts:** An assessment of the two preferred BRT in terms of performance, benefits, and challenges (e.g. travel time, ridership, cost, and right-of-way (ROW) constraints).

**Chapter 5 – Findings and Recommendations:** Summary of study findings and recommendations.