

link **BURBANK**

A Ground Transportation Access Planning Study for leveraging connectivity opportunities around the Bob Hope Airport



Metro

A joint study by Bob Hope Airport and the City of Burbank. This study was partially funded by Los Angeles County Metropolitan Transportation Authority

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EXECUTIVE SUMMARY

Executive Summary

The Burbank-Glendale-Pasadena Airport Authority (Authority), owner and operator of the Burbank Bob Hope Airport (Airport), and the City of Burbank, have established the Bob Hope Airport Multimodal Ground Access Planning Study (MGAPS), funded by the United States Department of Transportation, and Land Use Study, funded by the Los Angeles County Metropolitan Transportation Authority (Metro), to conduct two separate, but coordinated studies of transportation and land use development in the vicinity of Bob Hope Airport. The options presented in this report complement the transit oriented development (TOD) options presented in the Land Use Study.

The goal of MGAPS is to develop ground transportation improvements that will enable the Airport to serve as a multi-modal regional transportation hub. The separate Land Use Study is intended to identify TOD opportunities in the Airport area to take advantage of the Airport's transportation connections and assist City Planners and Elected Officials in creating land use policy that will foster development near transit centers.

With the presence of the Burbank Bob Hope Airport, Metrolink/Amtrak regional rail lines, and Metro local transit service, this area of Burbank is well situated to become a hub for local and regional transportation that can support a planned effort to incorporate TOD opportunities. For this reason there is a strong case for introducing new transportation services and land use improvements that will support this co-location of the Airport and the surrounding transit options.

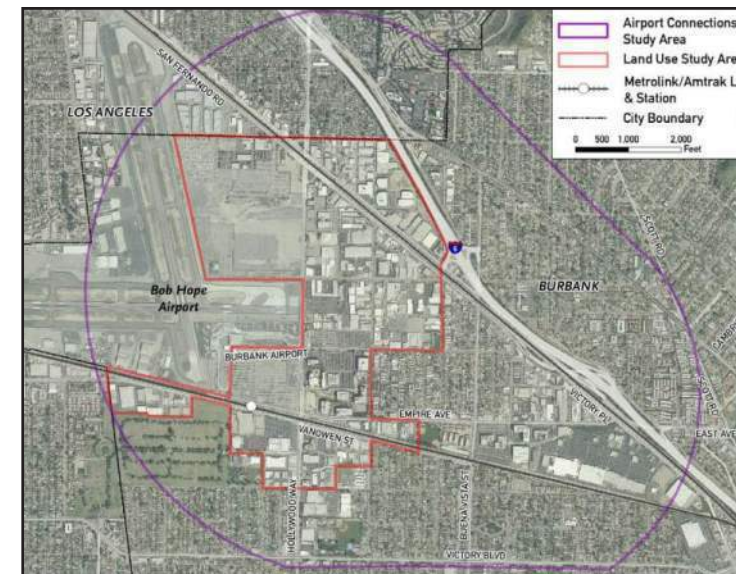
Feedback provided by stakeholders and the public

during meetings indicates a strong consensus that the Study Area is well suited for improved transit connectivity and supporting land uses. The transportation goal for this project is:

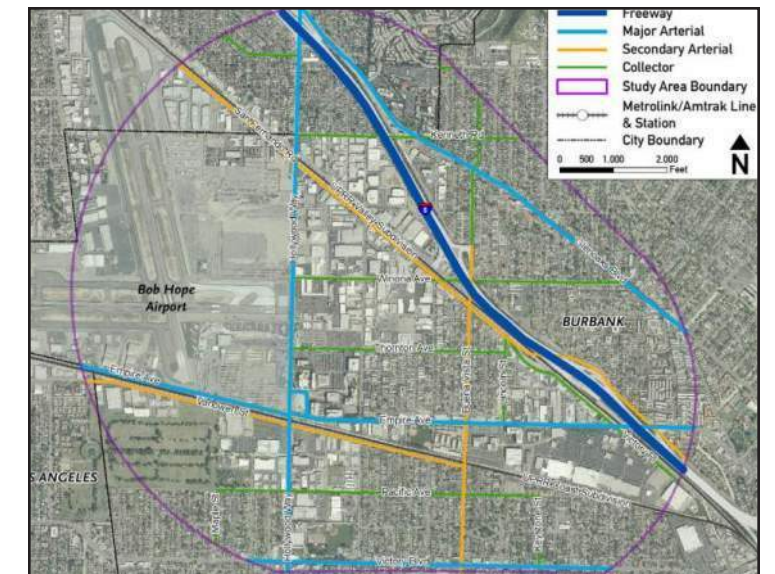
Project Goal: Develop ground transportation improvements that will enable Bob Hope Airport to serve as a multi-modal regional transportation hub.

The Study Area is currently served by several major transit operators, including BurbankBus, Los Angeles County Metropolitan Transportation Authority (Metro), Metrolink, and Amtrak. But even with this service, there are still several large gaps in the Study Area's transit network, most notably the lack of regional rail service during peak Airport employee and passenger travel times and no direct connection to the Metro subway, bus rapid transit (BRT) or light rail system. Due to this lack of service and connectivity to the larger system only two and seven percent of passengers and employees, respectively, use transit to access the Airport, respectively. The Airport presents an opportunity to improve transit ridership in the Study Area and region because it can act as a central hub for all transportation connections. From air, rail, subway, bus and private automobile the Airport is centrally located to be the epicenter for multi-modal connectivity for the San Fernando Valley.

This report identifies the existing deficiencies in the transportation system, defines key issues and objectives for the project, and outlines options to address the issues and meet the objectives. It then goes on to outline the alternatives, ranging from short-term/low-



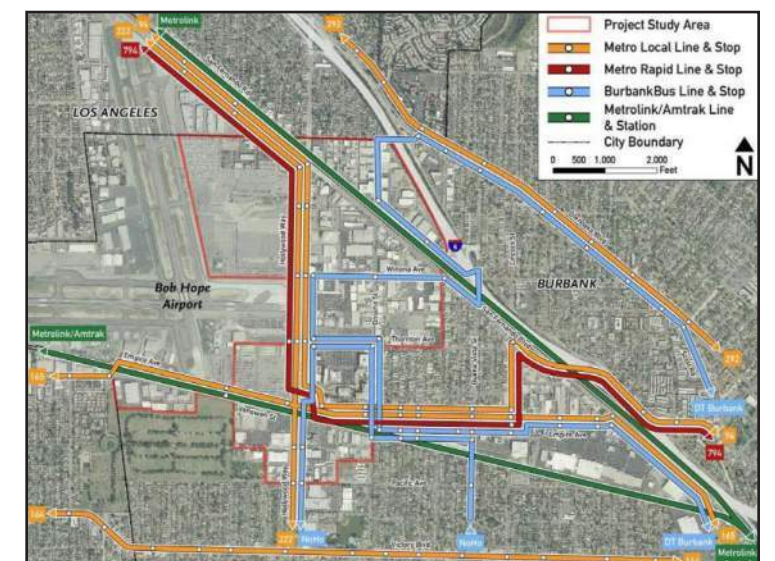
Land Use Study Area & Transportation Study Area



Study Area street classifications



Regional Connections Study Area



Study Area local and regional transit routes

cost to long-term/high cost, and discuss next steps and priorities.

The objectives for this project are:

1. Ease congestion on key Study Area roadways.
2. Enhance regional connectivity between Pasadena, Glendale and Bob Hope Airport.
3. Enhance regional connectivity between North Hollywood and Bob Hope Airport via Metro rail and local buses.
4. Improve intermodal transit connections in the Study Area.
5. Provide reliable, fast and convenient transit connections for Airport passengers and employees, especially via the Southern California Regional Rail Authority (Metrolink) corridors and Metro bus.
6. Improve transit connectivity in the Airport terminal area.
7. Improve air quality and reduce Greenhouse Gas (GHG) emissions in the Study Area.

Transportation improvement options were developed based on input from the Airport and City staff, stakeholder groups, and comments received from the public. The improvement options are grouped based on how they addressed specific project objectives as defined in this report.

This report focuses on developing specific alignments, potential station/stop locations, and/or implementation strategies for each of the transportation options. The package alternatives to meet each objective in-

cludes a short-term/low-cost alternative, mid-term/medium-cost alternative, mid-term/high-cost alternative, and a long-term/high-cost objective.

During the study effort, a number of strategic mobility projects have been initiated in the Airport area. These projects, in addition to those proposed in this study, will help achieve the over all project goal.



Project transportation goals are applicable to all or specific portions of the Study Area



RITC project was completed at the Bob Hope Airport Metrolink in 2014



The existing Bob Hope Airport Metrolink Station



Conceptual rendering of improvement option at the Bob Hope Airport Metrolink Station

1 INTRODUCTION

Bob Hope Burbank Airport As A Transit Hub

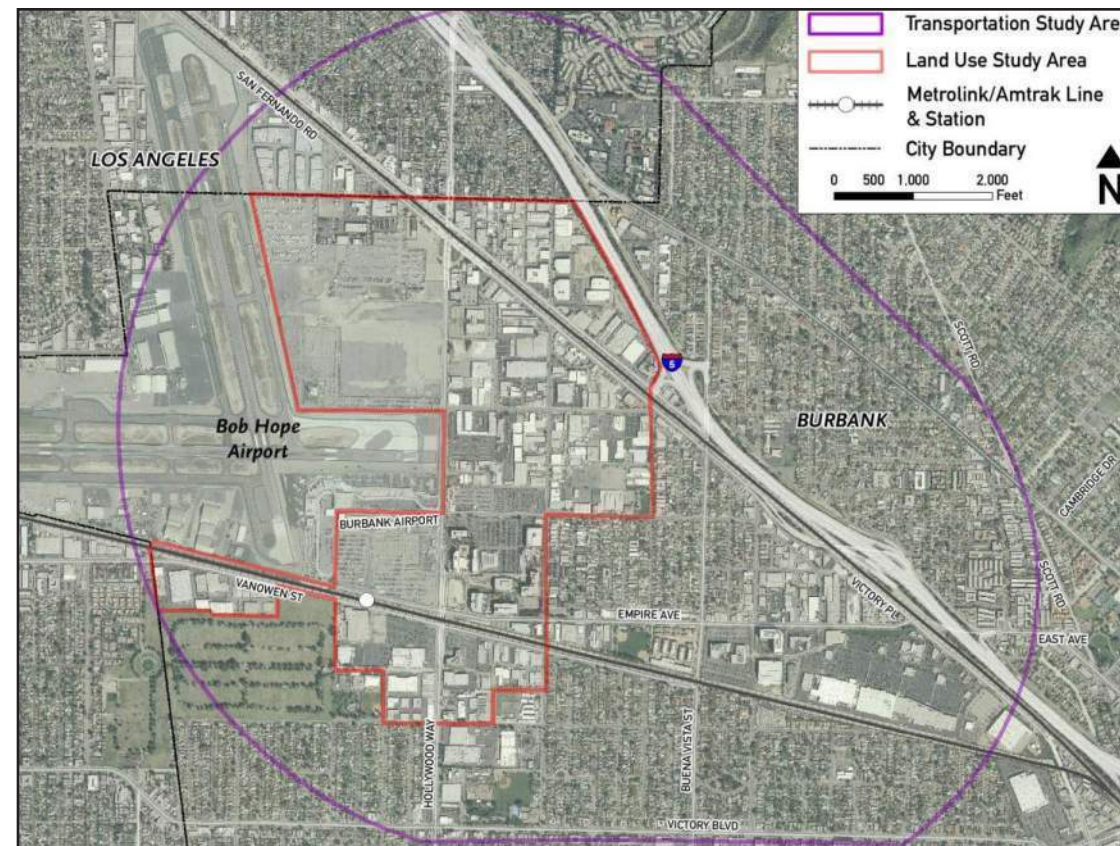
Travelers to and from the Bob Hope Burbank Airport, employees of the Airport, and those that live, work, or visit Burbank regularly can benefit from a central transportation hub in the area that can better facilitate or encourage their travel by transit. Feedback provided by stakeholders and the public indicates a strong consensus that the Study Area is well suited for improved transit connectivity.

With the presence of the Airport, Metrolink/Amtrak regional rail lines, and Metro local transit service, this area of Burbank is well situated to become a hub for local and regional transportation that can be supported by a planned effort to incorporate TOD opportunities. For this reason, there is a strong case for introducing new transportation services and land use improvements that will support this co-location of the Airport and the surrounding transit options.

Background

The Authority, owner and operator of the Burbank Bob Hope Airport (Airport), and the City of Burbank, have established the Bob Hope Airport Multimodal Ground Access Planning Study (MGAPS) and Land Use Study to conduct two separate, but co-operating studies of transportation and land use development in the vicinity of Bob Hope Airport.

The goal of MGAPS is to develop ground transportation improvements that will facilitate the Airport to serve as a multi-modal regional transportation hub. The MGAPS Study Area will include the Airport Connections Study Area (bottom left) and Regional Connections Study Area (bottom right). The Land Use Study is intended to identify TOD opportunities in the Airport area to take advantage of the Airport's transportation connections. The Land Use study Area is delineated in the bottom left map.

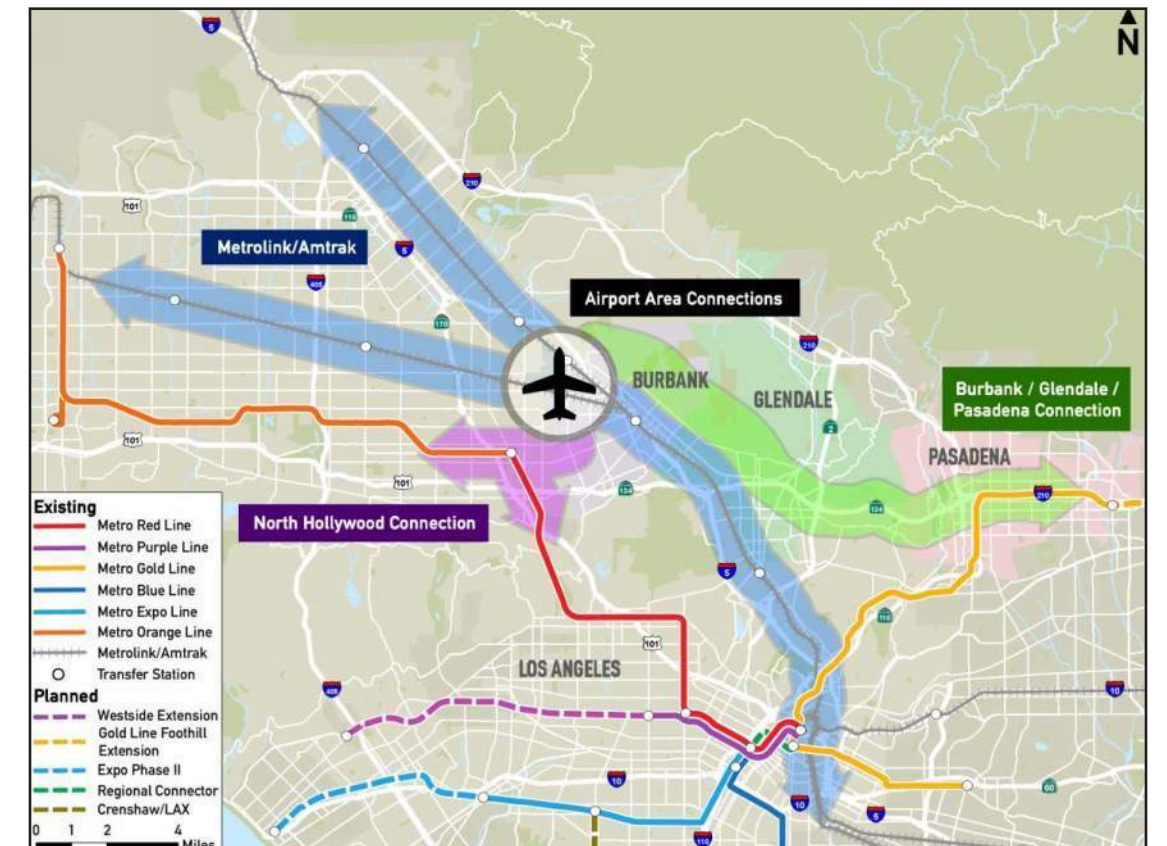


Land Use Study Area & Transportation Study Area

There are three related Study Areas where the main analysis was focused:

- The Land Use Study Area - Airport property adjacent to and west of Hollywood Way and commercial non-Airport property to the east of the Airport. Contains Airport land believed to be able to support TOD uses.
- The Airport Connections Study Area - Designed to capture all major transportation uses in the airport area. Contains the Land Use Study Area in its entirety.
- The Regional Connections Study Area - Connections between the Airport area and regional destinations.

The study area helps to define the limits of analysis and potential improvements. Because airports have broad areas of influence this study focuses on improvements in both the Burbank Bob Hope Airport Area and to regional transportation corridors.



Regional Connections Study Area

Recent and Near-Term Transportation Improvements

During the course of this study progress has already been made toward the goal to develop ground transportation improvements that will enable the Airport to serve as a multimodal transportation hub. Several projects are completed or in progress with funding acquired.

Regional Intermodal Transportation Center (RITC)



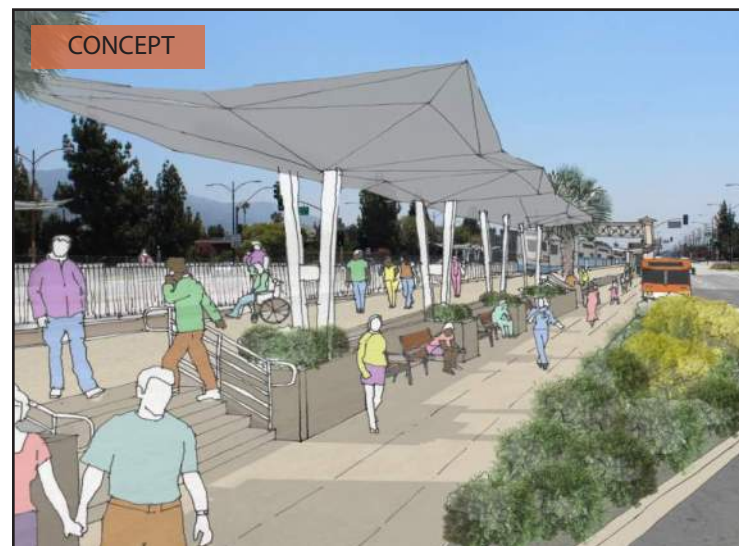
Overview of the recently completed RITC

Project: A new three-level structure housing a consolidated rental car facility and bus transit facility, which is also directly adjacent to the existing Metrolink/Amtrak Station.

Schedule: A Grand Opening ceremony was held on June 27, 2014, to mark the completion of the \$112 million transportation facility.

Airport Connection: An elevated moving walkway will convey rental car customers and rail and bus passengers between the Airport and the RITC.

Antelope Valley Line Bob Hope Airport Metrolink Station



Rendering of the new Airport Metrolink Station

Project: A new Metrolink station north of the Airport will provide better connections to northern Los Angeles County via the Antelope Valley Metrolink Line.

Schedule: Groundbreaking occurred on June 21, 2013, and construction is anticipated to be completed in early 2015.

Airport Connection: Once completed, regular shuttle service will be provided between the Airport and the new station.

The following are projects in the Study Area that have been approved, started, or completed. These improvements may bring additional funding to some of the actions recommended in this study.

Ventura County Line Station Improvements & Pedestrian Bridge



Rendering of the Empire Pedestrian Bridge

Project: New Empire Pedestrian Bridge and station improvements at existing Metrolink/Amtrak Station.

Schedule: Metro has secured \$14 million in State and local funding and \$3.5 million in Metro funding for the design and construction of the bridge. Bridge engineering and design is anticipated to begin in 2014, with some station improvements already completed.

Airport Connection: The new pedestrian bridge will connect the existing Metrolink station to RITC and the Airport terminal without the need to cross railroad tracks or roadways at-grade.

Interstate 5 Traffic Mitigation Measures



Map of I-5 project major mitigation measures

Project: Multi-year plan to mitigate impacts of I-5 construction projects.

Schedule: Metro Board authorized the development of a suite of I-5 construction mitigation measures to be considered by the Metro Board in Fall 2014.

Airport Connection: Possible mitigations to preserve Airport access include improving Metrolink service, incorporating Intelligent Transportation Systems (ITS), and increasing BurbankBus hours of operation.

2 PURPOSE AND NEED

Introduction

The objective of the Purpose and Need is to characterize the transportation problems in the Study Area and identify project objectives to improve mobility. Existing roadway, transit, and environmental conditions are assessed to help determine options for improvements that address these problems.

Existing Conditions

Freeways

- **I-5 (Golden State Freeway)** - A freeway connecting Northern and Southern California. Locally, the I-5 connects Burbank to Glendale, Downtown Los Angeles, and the San Fernando Valley.
- **SR-134 (Ventura Freeway)** - An east-west local freeway connecting Pasadena and North Hollywood.

Arterials

- **Hollywood Way** - A major north-south arterial, providing access to the Airport at its intersection with Thornton Avenue.
- **Buena Vista Street** - A secondary north-south arterial at the eastern edge of the Study Area.
- **Vineland Avenue** - A major north-south street on the western edge of the Airport.
- **Clybourn Avenue** - A north-south collector road, not continuous in the Study Area.
- **Lincoln Street** - A north-south collector road on the east side of the Study Area.
- **San Fernando Boulevard** - A major north-south arterial running parallel to the I-5 through the Study Area.
- **Victory Place** - A collector road running par-

allel to San Fernando Boulevard through the Study Area.

- **Winona Avenue** - An east-west collector road running through the middle of the Study Area.
- **Thornton Avenue** - An east-west collector road running between Lincoln Street and the Airport terminal.
- **Empire Avenue** - An east-west major arterial that services Airport facilities.
- **Avon Street** - A local street providing access from Empire Avenue to Hollywood Way.
- **Vanowen Street** - An east-west major arterial and collector with many regional destinations but limited connectivity to the Airport.
- **Pacific Avenue** - An east-west collector road at the southern edge of the Study Area.

Current Projects

- **I-5 HOV Expansion Project** - A part of the I-5 North Improvement Projects, adds an HOV lane in each direction through the segment of the I-5 in the Study Area.
- **I-5/Empire Avenue Interchange** - A part of the I-5 North Improvement Projects, it would create a new full service interchange with the I-5 and grade separate Empire Avenue from the UPRR tracks.
- **Buena Vista Street/San Fernando Road Grade Separation** - Grade separates Buena Vista Street and the UPRR tracks.

Future Projects

- **Clybourn Avenue Grade Separation** - Grade separates Clybourn Avenue and UPRR tracks to better connect Empire Avenue and Vanowen Street.
- **San Fernando Boulevard/Burbank Boulevard Intersection Improvement** - Increases the operational efficiency of the intersection and surrounding area.

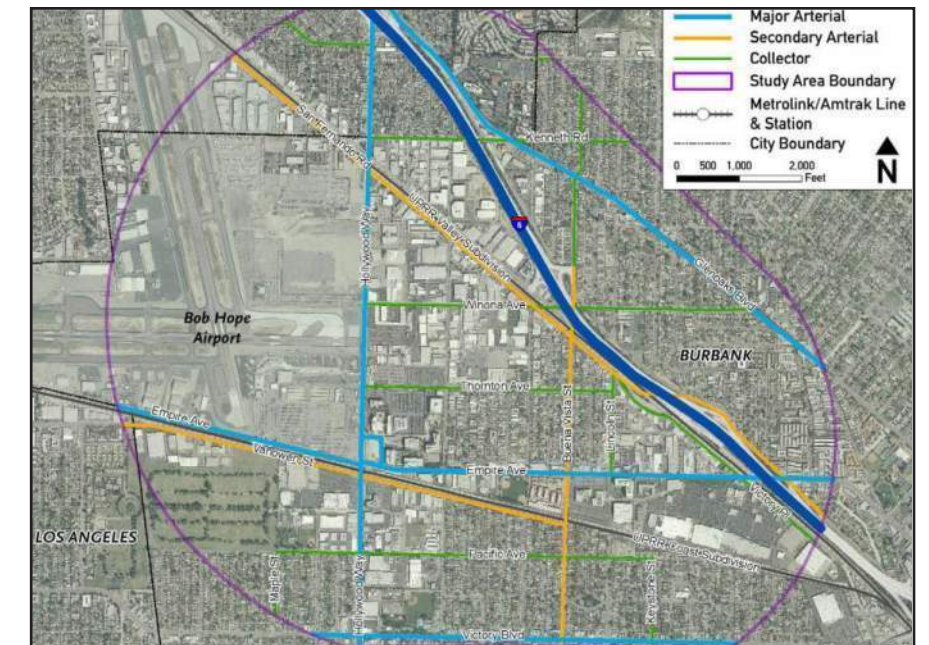
Roadway Conditions

Roadway System Performance

Daily traffic volumes can be used as a performance indicator of daily traffic within the Study Area. Based on standards from the 2009 *Florida Quality/Level of Service Handbook*, several key roadways are determined to experience Level-of-Service (LOS) degradation from existing conditions to 2035. Such roadways include Hollywood Way north of Tulare Avenue, Empire Avenue east of Buena Vista Street, and Empire Avenue west of San Fernando Boulevard. Access to the Airport will be impacted with additional congestion along these roadways in 2035.

Roadway Intersection Analysis

The City of Burbank has established LOS D as the minimum LOS for all signalized intersection during peak hours. The Critical Movement Analysis (CMA) methodology is used to determine LOS for intersections in Burbank and Los Angeles. Only the intersection of Hollywood Way and Victory Boulevard currently does not operate better than a LOS D during a peak hour.



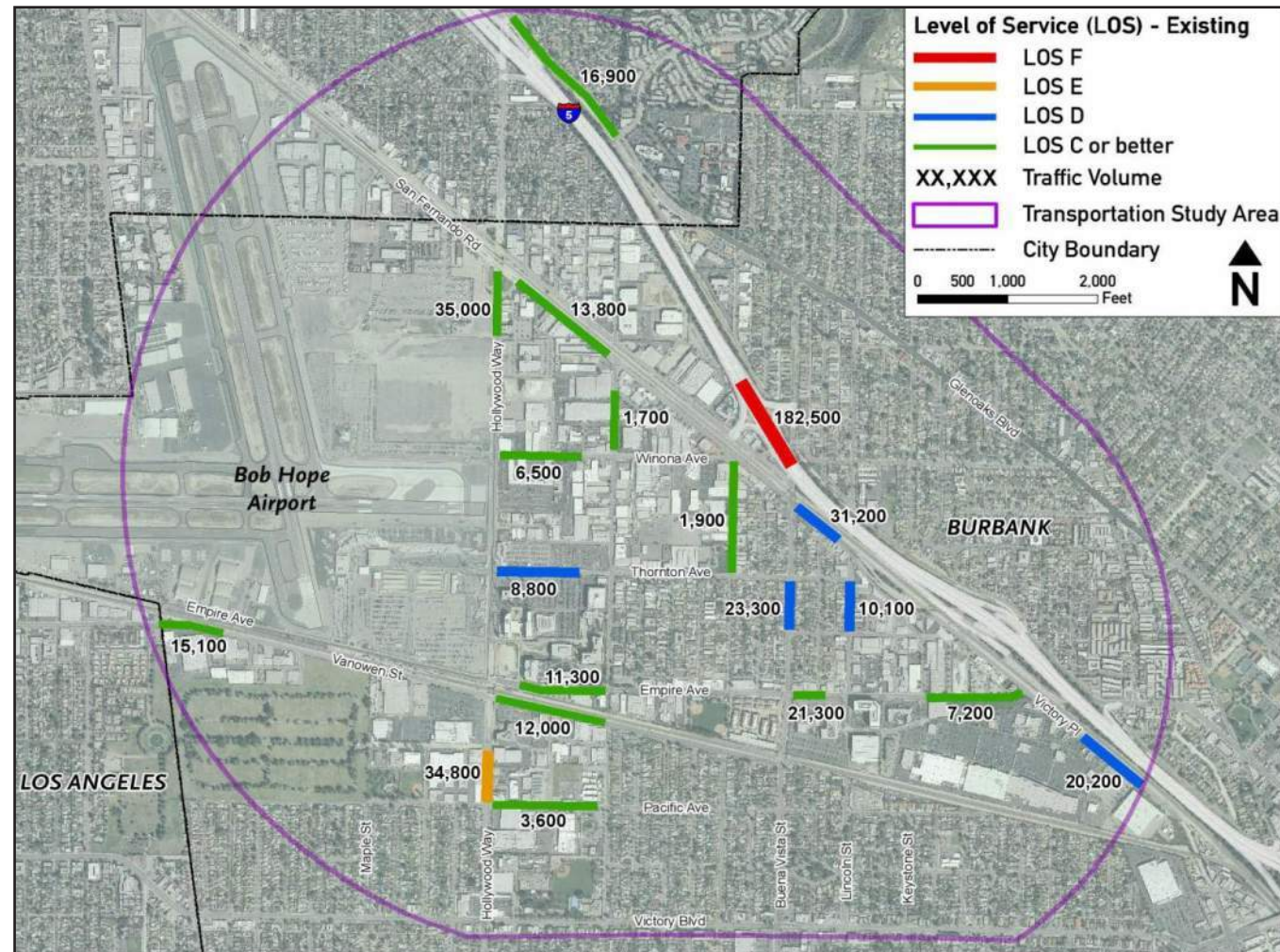
Study Area street classifications



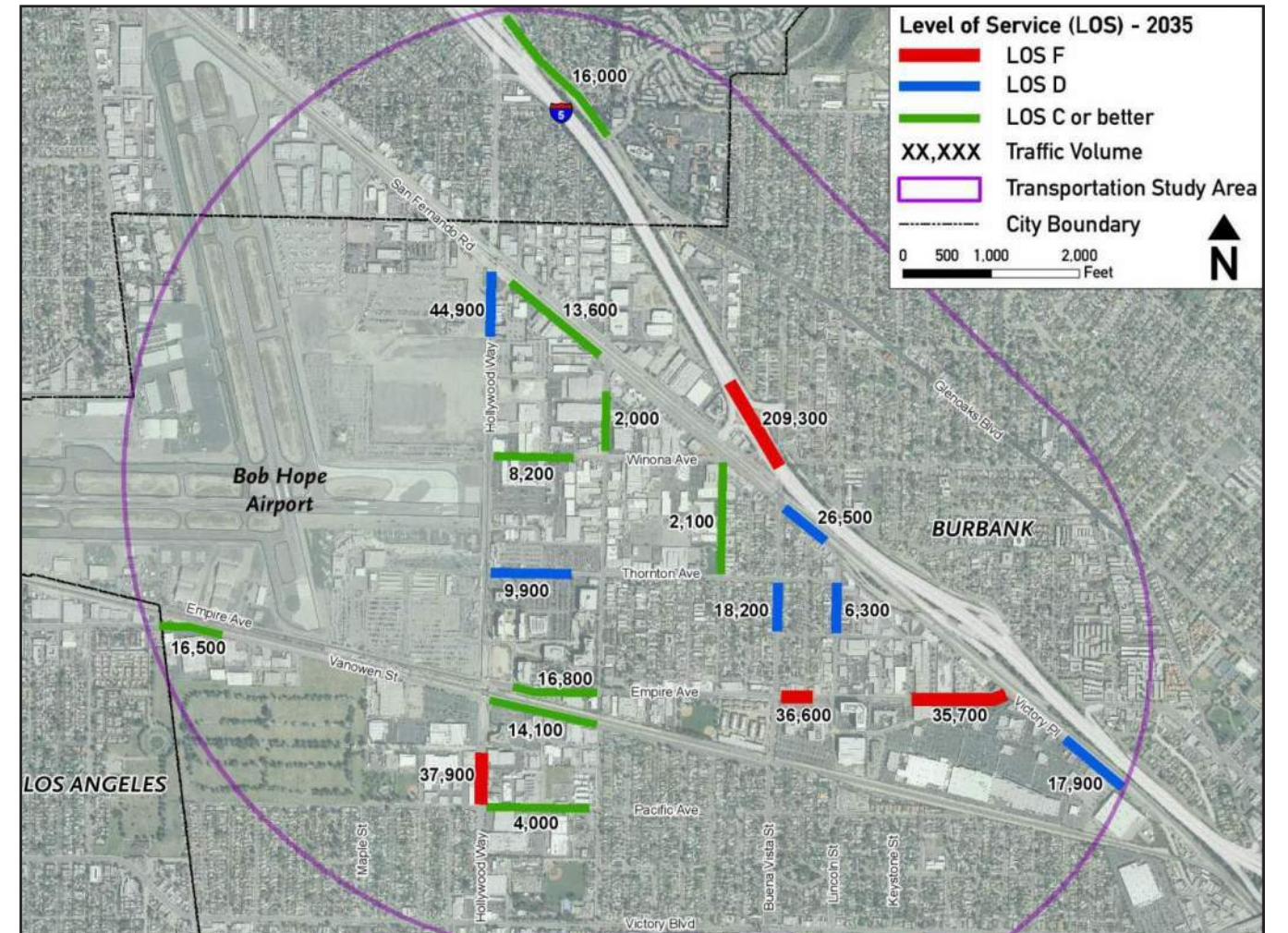
Roadway improvement projects in the Study Area

2.1 STUDY AREA ROADWAYS

Issues



Existing traffic volumes and Levels of Service (LOS)



Traffic volumes and Levels of service (LOS) in 2035

Key Issue: What can be done to address traffic congestion in the airport area?

While there are several highway projects in the Study Area that are working to ease congestion on I-5 and improve access between the freeway and local arterials, such as Hollywood Way and Empire Avenue. It is vital that future improvements look to ease congestion along these roadways that serve Airport facilities and adjacent development by encouraging travelers to use transportation modes other than the automobile.

Objective 1.1: Ease congestion on key Study Area roadways.



2.2 STUDY AREA TRANSIT

Existing Conditions

Transit Service Providers

BurbankBus - Four bus routes operated by the City of Burbank, two of which run through the Study Area, provide connection to Downtown Burbank Metrolink Station and North Hollywood Red Line Station.



Metro - Operates almost 200 bus lines in Los Angeles County, eight of which run in or near the Study Area. Connection to Metro Rail and Metro Bus Rapid Transit (BRT) at the North Hollywood Red Line Station is provided by Metro Local Routes 154 and 183.



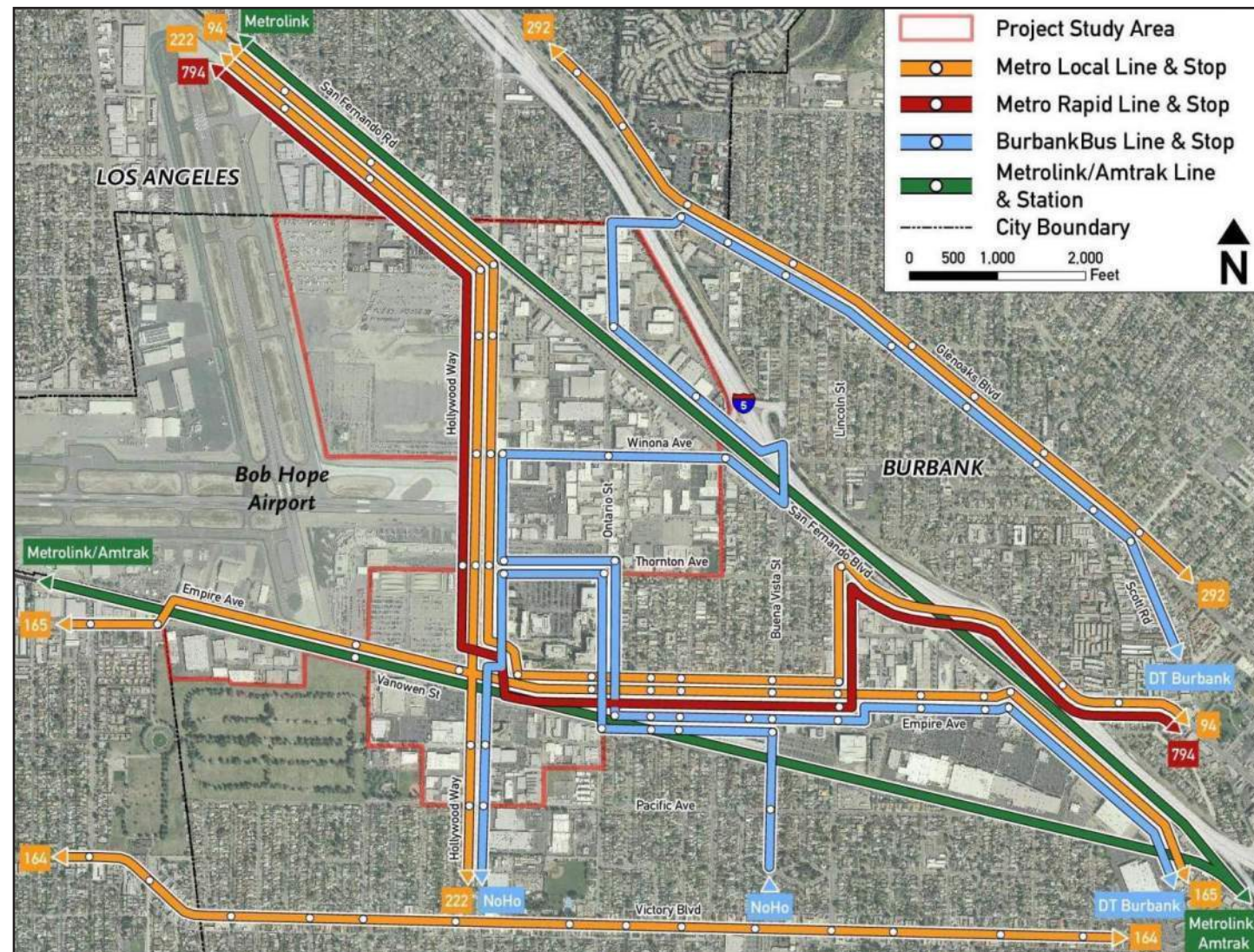
Metrolink - Operates eight commuter rail lines, two of which (Antelope Valley and Ventura) run adjacent to the Airport and through Burbank and serve the Downtown Burbank Metrolink Station and an existing Metrolink station at the Airport.



Transit Hub RITC

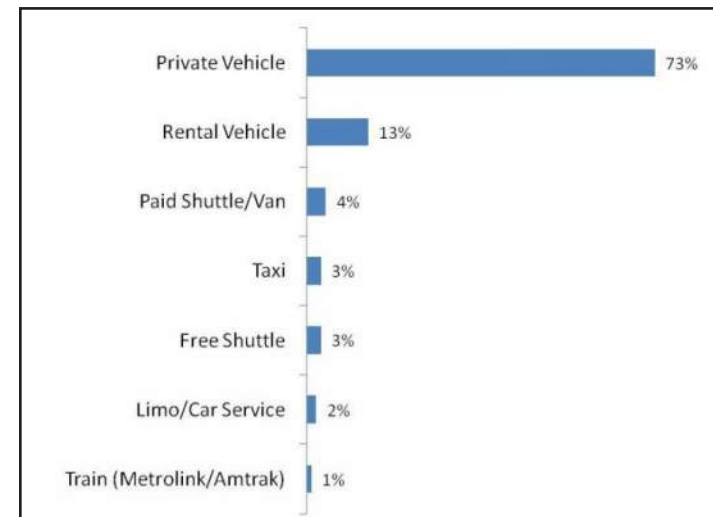
The new RITC currently serves as a central transit hub for several bus lines such as Metro 165, 169, and 222, Amtrak Bus, BurbankBus. It is possible that it may be expanded to serve Santa Clarita Transit in the future.

Amtrak - Operates inter-city rail within the Study Area. The Airport Metrolink Station is served by the Pacific Surfliner and Coast Starlight Amtrak trains.



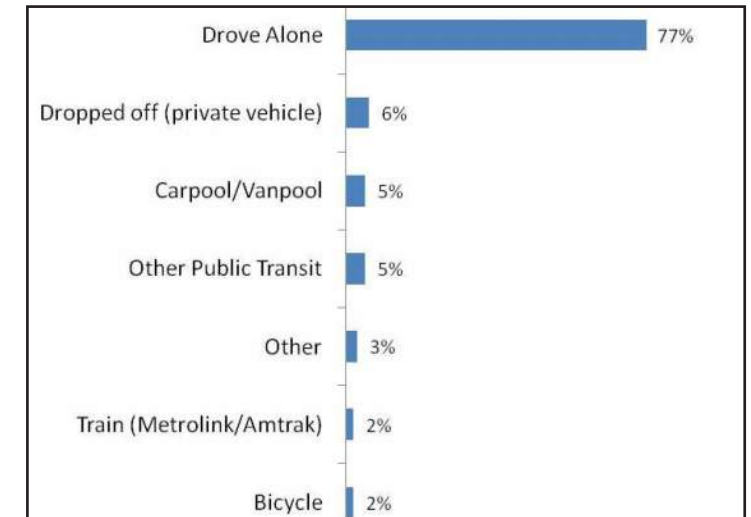
Study Area local and regional transit routes

Airport Employee Access to the Airport

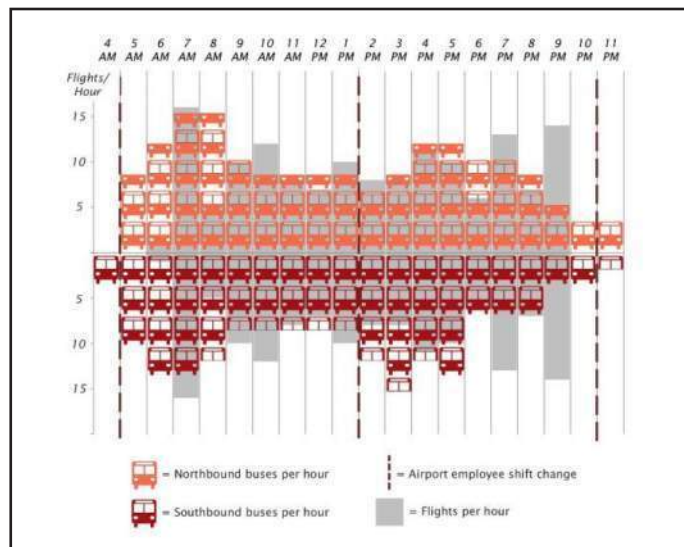


Source: Unison 2013

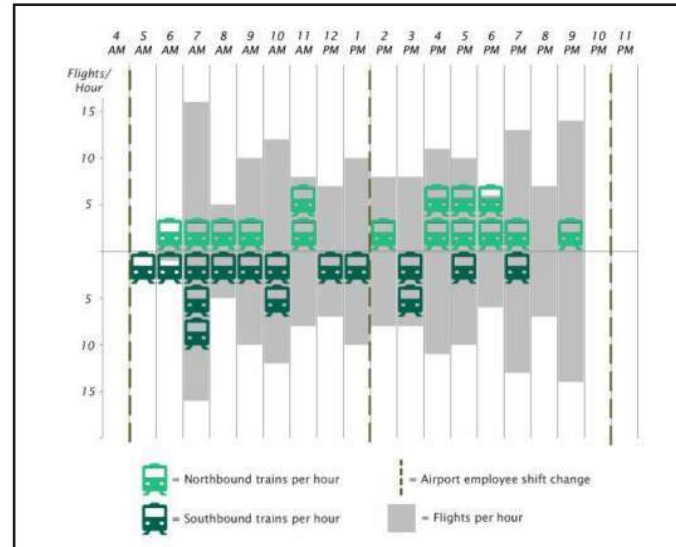
Airport Passenger Access to the Airport



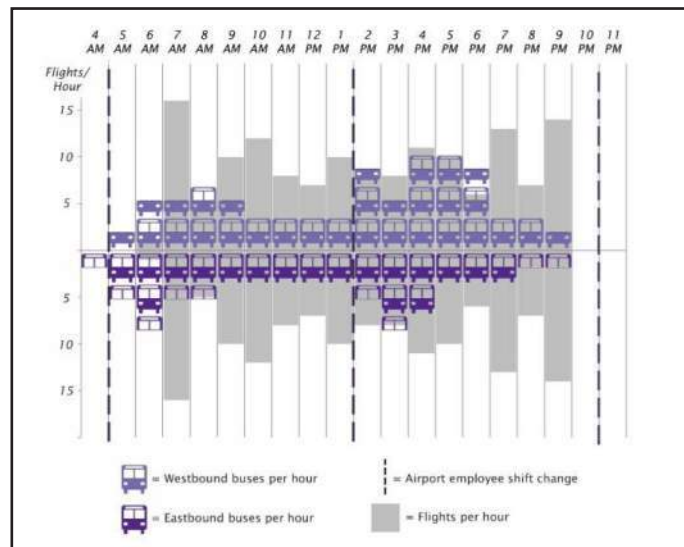
Source: Unison 2013



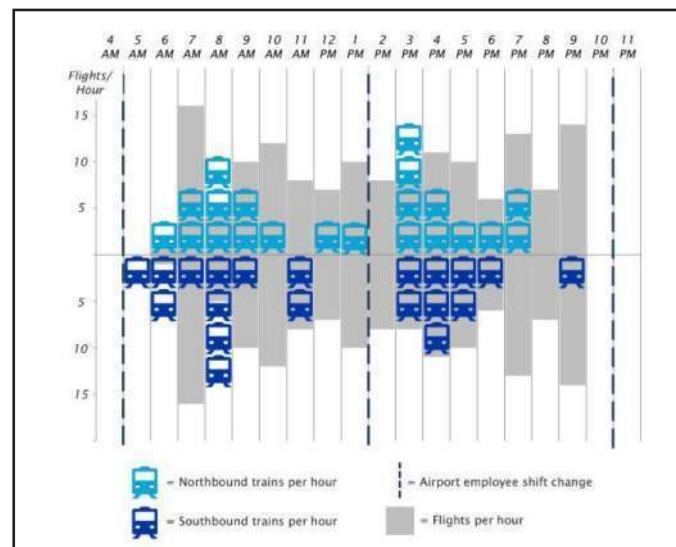
Existing N/S Metro Bus and flight schedules



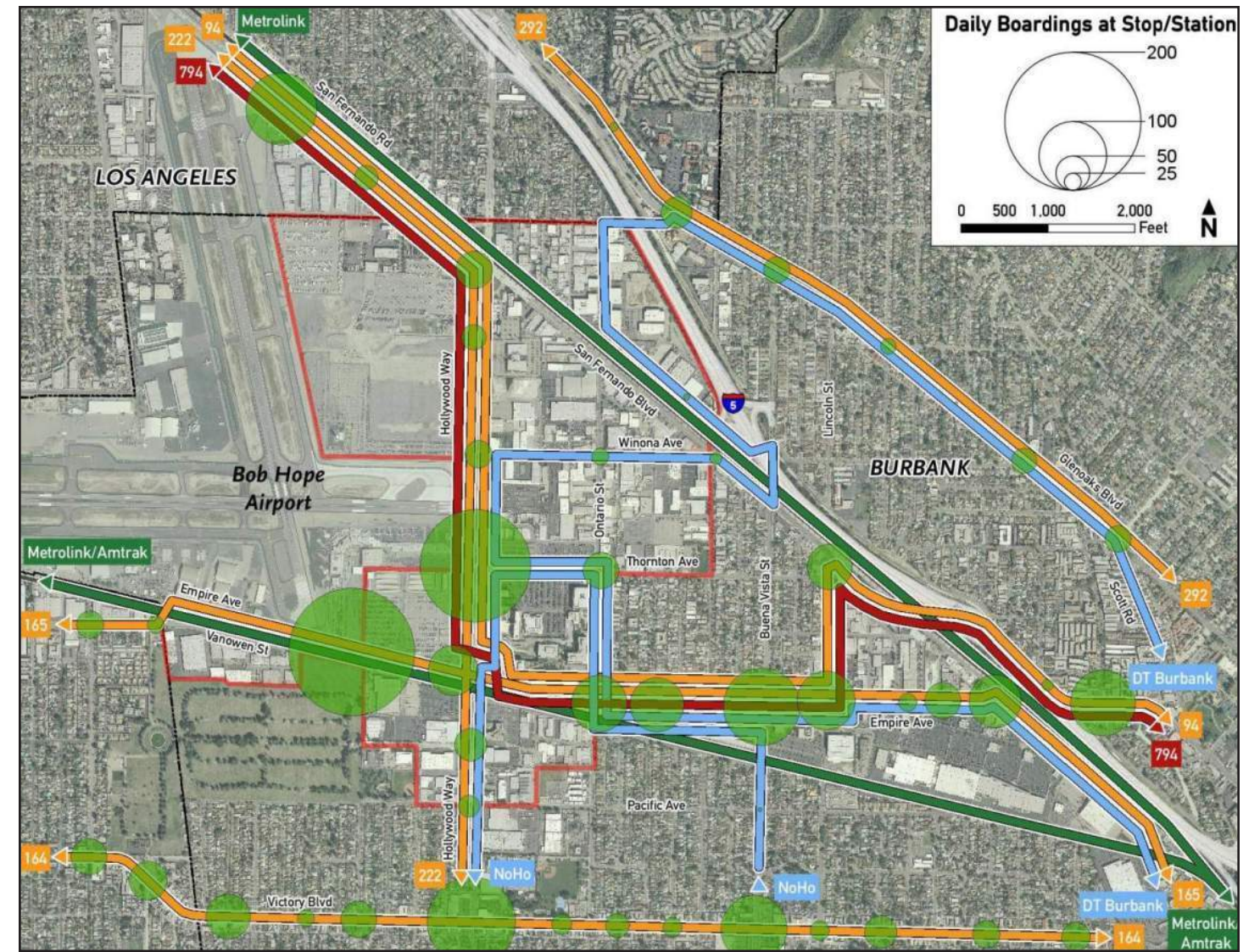
Existing E/W Metro Bus and flight schedules



Existing Antelope Valley Metrolink and flight schedules



Existing Ventura County Metrolink and flight schedules



Transit stop boardings per day

2.2 STUDY AREA TRANSIT

Issues

As described in Section 2.1, there is an extensive transit network in the Study Area. However, several key transit-related issues have been identified that limit the Airport's ability to fully capitalize on its potential as a transit hub. The following issues have been identified as barriers and objectives developed as a guide toward a solution.

Key Issue: How can airport area travelers connect more easily to the Metro Rail system at North Hollywood and the Cities of Burbank, Glendale, and Pasadena?

The lack of reliable and convenient connection to the Metro Rail and Bus Rapid Transit (BRT) transit systems has created a disconnect between the regional mass transit system and the Airport. Additionally, many parts of the cities of Burbank, Glendale, and Pasadena, which are members of the Airport Authority, do not have a convenient, direct transit connection to the Airport. Improving these connections and allowing for more trips via public transit in addition to private automobile travel will help to strengthen the airport as a regional hub for the transportation connections.

Objective 2: Enhance regional connectivity to Burbank, Glendale, and Pasadena.



Objective 3: Enhance regional connectivity to North Hollywood and Metro Rail and Busway System



Key Issue: How can the many bus transit lines in the area be better coordinated, enabling the airport to serve as a destination and transfer hub?

There are a multitude of transit lines in the airport area, with much of the ridership focused on an east-west axis that includes the existing Bob Hope Airport Metrolink station, the airport entrance along Hollywood Way, and destinations along Empire Avenue. However, there is not a central transfer point for bus and rail travelers in the vicinity of the Airport. To better connect all transit lines in the area, stops should be consolidated and coordinated at the RITC.

Objective 4: Better connect bus routes and Metrolink stations in the Study Area.



Key Issue: How can transit lines better serve airport passenger and employee schedules?

Existing Metrolink service is specifically designated to support peak commute times (7 to 9 am and 5 to 7 pm). Unfortunately, airport passenger and employee schedules do not always correspond with the current rail schedules. This causes the valuable rail system that is at the Airport's doorstep to be less useful for many employees and travelers. Therefore, it is necessary to add additional service and frequency during off-peak hours to better serve these schedules.

Objective 5: Provide reliable, fast, and convenient transit connections for Airport passengers and employees, especially via Metrolink and Amtrak.



Key Issue: How can transit lines better serve the Bob Hope Airport terminal?

Transit service in the area is concentrated at the major arterials (Hollywood Way and Empire Avenue) and not at the terminal. Not having a concentrated transit center discourages transit patronage. Instead, creating a single connection point for all transit users will improve the attractiveness of transit.

Objective 6: Improve transit connectivity in the Airport terminal area.



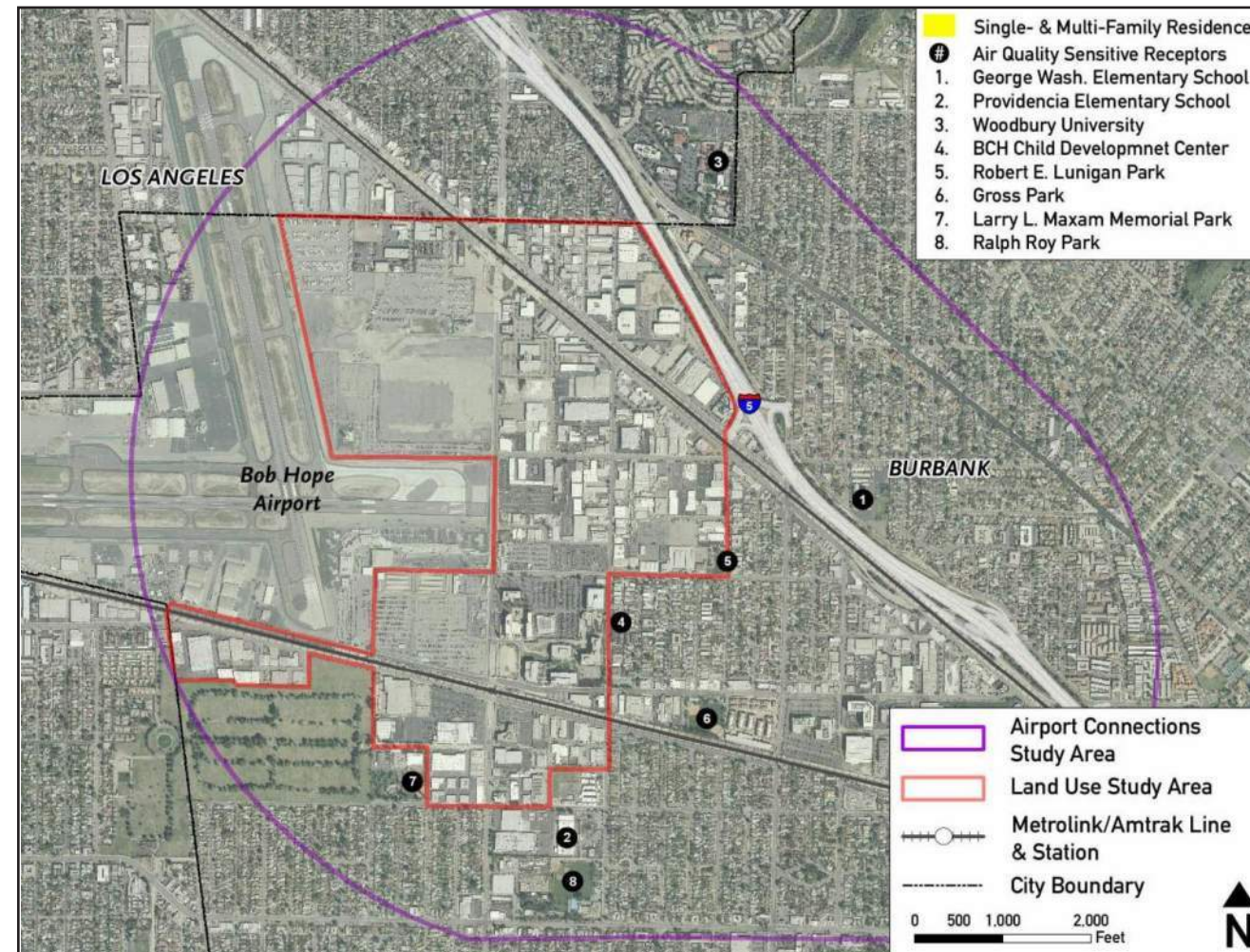
2.3 ENVIRONMENTAL CONDITIONS

Air Quality

The Study Area is located in the Los Angeles County portion of the South Coast Air Basin and suffers from poor air quality in part due to air pollution trapped by climate and topography. This portion of the Basin is classified a “nonattainment” area for the criteria pollutants O₃, PM_{2.5}, PM₁₀, and Pb by the United States Environmental Protection Agency (USEPA) and the California Clean Air Act.

The California Air Resources Board (CARB) has identified the following typical groups who are most likely to be affected by air pollution: children under 15, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. Land uses that are “sensitive receptors”, sensitive to increased air pollution, are shown on the map to the right. It include residential land uses, schools, and parks.

It is anticipated that transportation improvements and TOD could lessen the amount of vehicles from local roadways and potentially reduce localized pollutant concentrations.



Land uses in Study Area sensitive to increased air pollution

Greenhouse Gas Emissions

Greenhouse Gas Reduction Plan (GGRP)

The City of Burbank, through their GGRP, provides an inventory of GHG emissions in the City and emission reduction measures and actions to implement the climate change policies from their 2035 General Plan.

Airport Sustainability

The Airport has implemented sustainability features in addition to their 2005 Clean Air Program in order to reduce its carbon footprint, air and water pollution, and reduce energy usage.

Transportation

Pedestrian and Bicycle Facilities

There are currently eight designated bikeways, totaling 22.3 miles, in Burbank. The Burbank portion of the Study area contains 0.9 miles of Class I bike paths, 1.9 miles of Class II bike lanes, and the remainder are Class III routes. There also exists 250 bicycle parking racks throughout the City. The Los Angeles portion of the Study Area contains 0.5 miles of Class I bike paths and 0.6 miles of Class II bike lanes. The major bicycle corridors in the Study Area are Victory Boulevard and Glenoaks Boulevard. BurbankBus and Metro have bicycle racks on their buses and Amtrak and Metrolink permit the loading of bicycles onto their trains.

Most arterials and local streets include interconnected paved sidewalks. Victory Boulevard and Glenoaks Boulevard provide wide sidewalks to accommodate for significant pedestrian activity.

Key Issue: How can transportation and land use improvements minimize environmental impacts and help reduce GHG emissions?

Future projects must work to reduce harmful impacts to the environment. Therefore, options and alternatives that are developed to improve ground access should work with the objective to improve air quality and reduce GHG emissions in the area. This can be done through several avenues, which may include, encouraging a mode shift to public transit.

Objective 7: Improve air quality and reduce GHG emissions in the Study Area.



3 GOALS AND OBJECTIVES

Introduction

From the Purpose and Need study of Section 2, seven transportation-related objectives were developed to serve the overarching goal of making the Airport a multimodal regional transit hub. The transportation issues previously identified in the Study Area and the objectives born from them serve as a basis for the development of specific options to meet this project goal.

Project Goal:

Develop ground transportation improvements that will enable the Airport to serve as a multi-modal regional transportation hub.



Objective 1 - Ease congestion on key Study Area roadways. Ease congestion along roadways that serve Airport facilities and parking such as Hollywood Way and Empire Avenue by improving transportation modes other than the automobile.



Objective 2 - Enhance regional connectivity to Burbank, Glendale and Pasadena. Forge regional connections between the Airport and the cities which make up the Authority, and focus this service on airport passengers and employees.



Objective 3 - Enhance regional connectivity to North Hollywood and Metro Rail and Busway System. Improve regional connections between the Airport and North Hollywood, which is a key transfer center for Metro's extensive regional transit system.



Objective 4 - Better connect bus routes and Metro-link stations in Study Area. By improving connection between transit lines in the Airport area, the airport will be able to serve as a hub for transferring riders heading beyond the Study Area.



Objective 5 - Provide reliable, fast and convenient transit connections for Airport passengers and employees, especially via Metrolink. Improve frequencies and expand operating hours during the off-peak periods for both bus and rail services throughout the Study Area. Enhanced off-peak service will better serve Airport passengers and employees since peak flight times and shift changes occur during off-peak hours.



Objective 6 - Improve transit connectivity in the Airport terminal area. Improve connectivity between the terminal area and transit lines on the perimeter of the airport.



Objective 7 - Improve air quality and reduce GHG emissions in the Study Area. Improve air quality by reducing localized concentrations of criteria pollutants and toxic air contaminants via local roadways. Reducing vehicle miles traveled would also reduce GHG emissions.



There are seven major objectives identified for this project, some focus on specific portions of the Study Area while others apply throughout

4 INITIAL OPTIONS

Background

Transportation improvement options were developed based on input from Airport and City staff, stakeholder groups, and comments received from the public. The improvement options are grouped based on how they address specific project objectives as defined in the Purpose and Need and by their relative cost.



1. Ease Congestion on Study Roadways

Traffic congestion on the major arterials and roadways surround the Airport is expected to worsen between now and 2035. The options considered for this objective are shown in the below map. Improvements range from intersection improvements on local streets to the expansion of high-occupancy vehicle (HOV) lanes.



2. Enhance Regional Connectivity to Burbank, Glendale and Pasadena

Alternative	Option	Carried Forward/ Eliminated
Low-Cost	On-Demand Shuttle (freeway running)	Carried Forward
Low-Cost	Metro Rapid Bus Line Extension (Alignment 1: Empire Avenue to San Fernando Road)	Eliminated (redundant service)
Low-Cost	Metro Rapid Bus Line Extension (Alignment 2: Hollywood Way to San Fernando Road)	Eliminated (redundant service)
Low-Medium Cost	Freeway Express Bus (Alignment 1: I-5 to SR-134)	Carried Forward
Low-Medium Cost	Freeway Express Bus (Alignment 2: Lankershim Boulevard to SR-134)	Eliminated (slower travel time and more circuitous alignment)
Medium Cost	Street Running Express Bus (with dedicated ROW)	Eliminated (impact to city streets and travel time)
Medium Cost	Freeway Express Bus (with roadway improvements)	Carried Forward
High Cost	Light Rail Transit (Metro Gold/Red Line)	Carried Forward

Options carried forward are described further in Section 6.2.



3. Enhance Regional Connectivity to North Hollywood Metro Rail and Busway System

Alternative	Option	Carried Forward/ Eliminated
Low-Cost	Metro Rapid Bus Line Extension (Alignments 1-4)	Eliminated all (redundant service)
Low-Cost	BurbankBus Service Expansion	Carried Forward
Medium Cost	Metro Orange Line Extension Phase 1 (Street-Running) (Alignments 1-3)	Carried Forward Alignment 1, Eliminated Alignment 2-3 (impact to city streets and travel time)
Medium Cost	Metro Orange Line Extension Phase 2 (Street-Running) (Alignments 1-4)	Eliminated all (impact to city streets and travel time)
Medium-High Cost	Metro Orange Line Extension (dedicated ROW) (Alignments 1-4)	Carried Forward Alignment 2, Eliminated Alignments 1 & 3-4 (impact to city streets and travel time)
High Cost	Metro Red Line Extension (Alignments 1-3)	Carried Forward Alignment 2, Eliminated Alignments 1&3 (service)

Options carried forward are described further in Section 6.3.

4. Improve Transit Connectivity in the Airport Terminal Area



Alternative	Option	Carried Forward/ Eliminated
Low-Cost	Reroute Metro bus routes; Reroute BurbankBus service; Empire Pedestrian Bridge; Real-time Information / signage or mobile application	Carried Forward
Low-Medium Cost	Same as above plus San Fernando Road Pedestrian Bridge	Carried Forward
High Cost	Same as above	Carried Forward

Options carried forward are described further in Section 6.4.

5. Provide Reliable, Fast, and Convenient Transit Connections for Airport Passengers and Employees



Alternative	Option	Carried Forward/ Eliminated
Low-Medium Cost	Market / Branding	Carried Forward
Low-Medium Cost	Real Time Information	Carried Forward
Medium-High Cost	Extend Metro bus span of service	Carried Forward
Medium-High Cost	Create Direct Airport Bus (San Fernando Valley)	Eliminated (Redundant Service)
Medium-High Cost	Create Direct Airport Bus (Newhall)	Eliminated (Redundant Service)
Medium-High Cost	Create Direct Airport Bus (Ventura County)	Eliminated (Redundant Service)
Medium-High Cost	Create Direct Airport Bus (LA Union Station)	Eliminated (Redundant Service)
Medium-High Cost	Create Direct Airport Bus (Pasadena)	Eliminated (Redundant Service)
High Cost	Extend Metrolink rail span of service	Carried Forward
High Cost	Increase Metrolink Frequencies	Carried Forward

Options carried forward are described further in Section 6.5.

6. Facilitate Better Transit Connections (Bus to Metrolink)



Alternative	Option	Carried Forward/ Eliminated
Low-Medium Cost	Airport Bus Circulator	Carried Forward
High Cost	Automated People Mover	Carried Forward

Options carried forward are described further in Section 6.6.

7. Reduce Air Pollution in the Study Area



Alternative	Option	Carried Forward/ Eliminated
Low-Medium Cost	Class III Bike Route	Carried Forward
Medium Cost and Medium-High Cost	Class II In-street Bike Lane; Remove barriers to pedestrian travel at key locations	Carried Forward
High Cost	Class I Dedicated Bike Path	Carried Forward

Options carried forward are described further in Section 6.7.

5 PACKAGED ALTERNATIVES

Packaged Alternative Categories

A list of preferred ground transportation alternatives that will improve connectivity between the Study Area and regional transportation system and the surrounding land uses. Each alternative has a set of transportation improvements. The least capital intensive alternative does not include relocation of the existing terminal. All other alternatives assume relocation of the terminal. The movement of the terminal shifts the focus of the transportation improvements.

Each of the alternatives consists of a number of transportation options to meet project objectives. The alternatives vary from near term/low cost to long term/high cost.

Grouping the improvements by level of investment ensures that each alternative can be linked to prospective funding sources.



1. Ease Congestion on Study Roadways

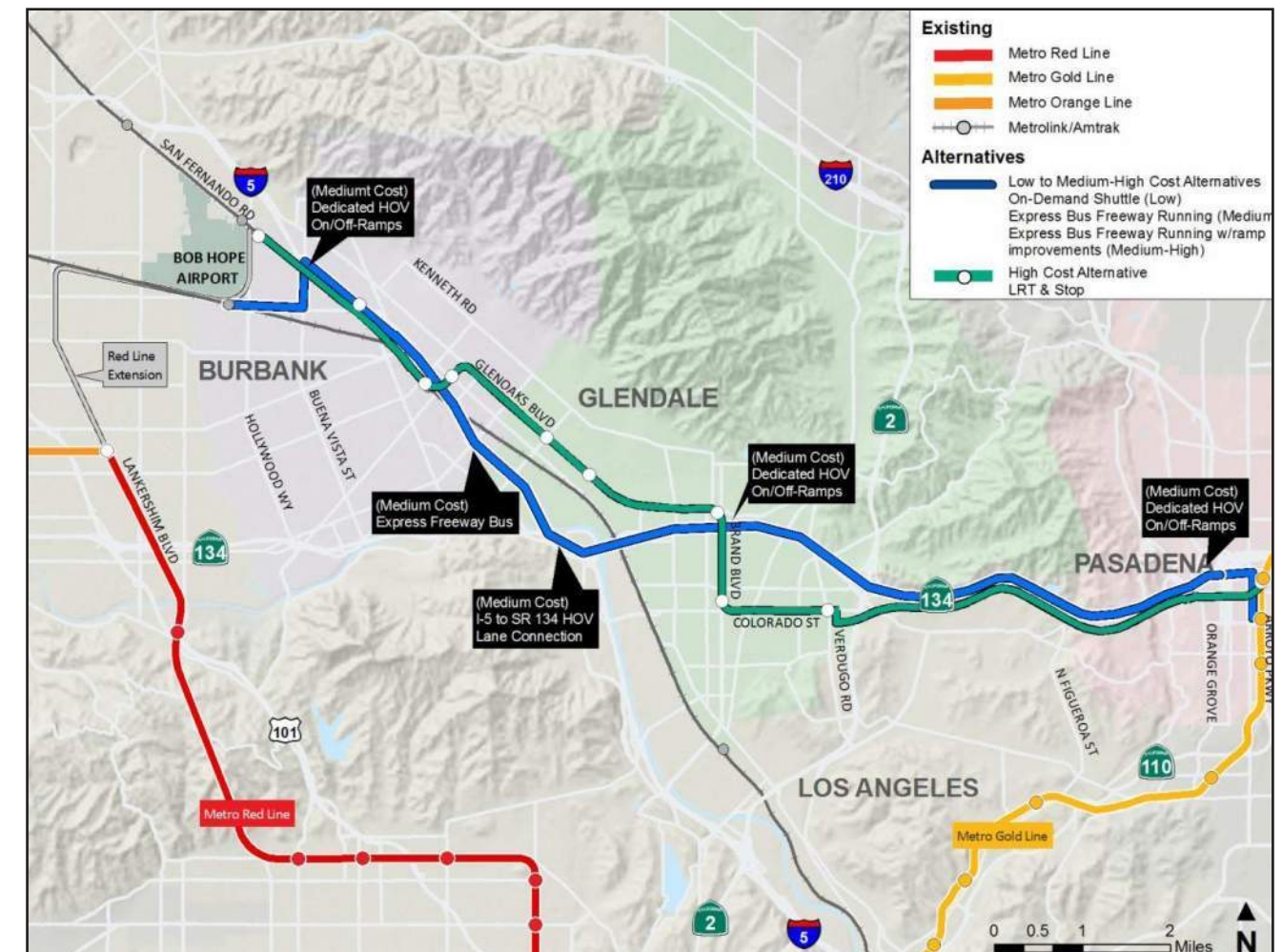
The map to the right shows the Alternatives being carried forward in the Study Area to meet goal to ease congestion on study roadways.

The only infrastructure project differing in these alternatives is the Winona Avenue crossing. Differences in cost and roadway conditions are due to different land use intensities (details of which can be found in the separate Land Use Study).

Further details on these alternatives can be found in Section 6.1.



2. Enhance Regional Connectivity to Burbank, Glendale and Pasadena

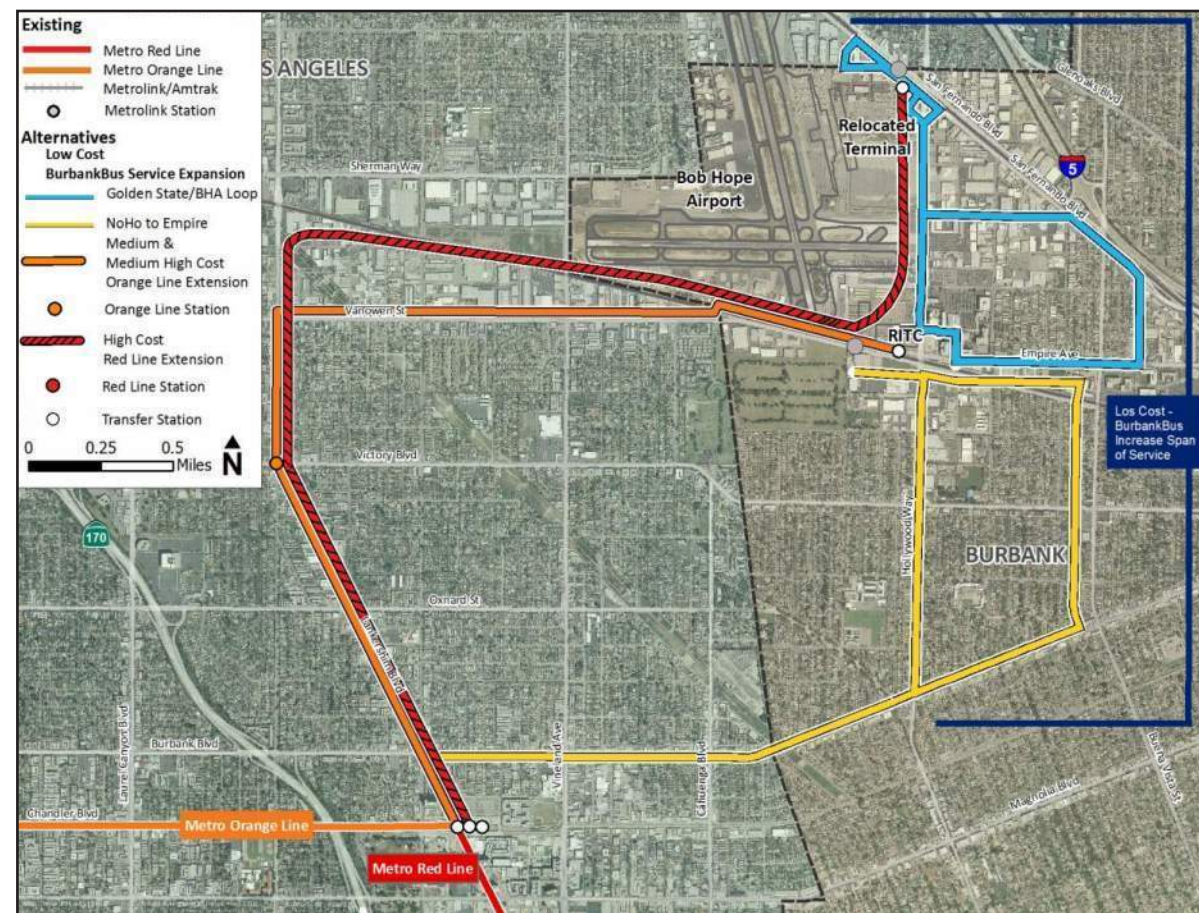


Alternative	Option	Action
Low-Cost	On-Demand Shuttle	Implement a freeway-running shuttle.
Low-Medium Cost	Freeway Express Bus	Implement a freeway-running express bus(Alignment 1: I-5 to SR-134).
Medium Cost	Freeway Express Bus	Implement a freeway-running express bus(Alignment 1: I-5 to SR-134) with ramp improvements to serve transit.
High Cost	Light Rail Transit	Light Rail Transit from Airport to Pasadena.

3. Enhance Regional Connectivity to North Hollywood Metro Rail and Busway System



Facilitate Better Transit Connections (Bus to Metrolink)



Alternative	Option	Action
Low-Cost	BurbankBus Service Expansion	Expand the span of BurbankBus service for routes connecting to the Airport.
Medium Cost	Metro Orange Line Extension	Metro Orange Line extension in mixed-traffic.
Medium-High Cost	Metro Orange Line Extension	Metro Orange Line extension with a dedicated right-of-way.
High Cost	Metro Red Line Extension	Extension of Metro Red Line to the Airport.

Alternative	Option	Action
Low-Cost	Bus reroute and infrastructure improvement	Reroute Metro bus and BurbankBus Empire and NoHo services to central transfer points; Empire Pedestrian Bridge; Real-time Information / signage or mobile application
Low-Medium Cost	Same as above plus San Fernando Road Pedestrian Bridge	Reroute Metro bus and BurbankBus Empire services to central transfer points; Empire Pedestrian Bridge; San Fernando Road Pedestrian Bridge; Real-time Information / signage or mobile application
High Cost	Same as above	Reroute Metro bus and BurbankBus Empire services to central transfer points; Empire Pedestrian Bridge; San Fernando Road Pedestrian Bridge; Real-time Information / signage or mobile application

5. Provide Reliable, Fast, and Convenient Transit Connections for Airport Passengers and Employees



Alternative	Option	Action
Low-Medium Cost	Improve Metro Bus - Metro Local Lines 94, 165, and 222 and Metro Rapid Line 794	Increase Metro Buses per hour during existing low frequency hours in the Study Area to accommodate flight schedules.
High Cost	Fill Metrolink Gaps - Antelope Valley Line	Add trains to time periods no trains currently run to accommodate for flight schedules (18 proposed additional per day).
High Cost	Fill Metrolink Gaps - Ventura Line	Add trains to time periods no trains currently run to accommodate for flight schedules (17 proposed additional per day).
High Cost	Increase Metrolink Frequency - Antelope Valley Line	Add trains to time periods no trains currently run and increase trains in time periods during which they do (54 additional per day).
High Cost	Increase Metrolink Frequency - Ventura Line	Add trains to time periods no trains currently run and increase trains in time periods during which they do (49 additional per day).

The table above shows the Alternatives being carried forward for the project goal to facilitate better transit connections for all airport passengers and employees. Further details on these alternatives can be found in section 6.5.

7. Reduce Air Pollution in the Study Area

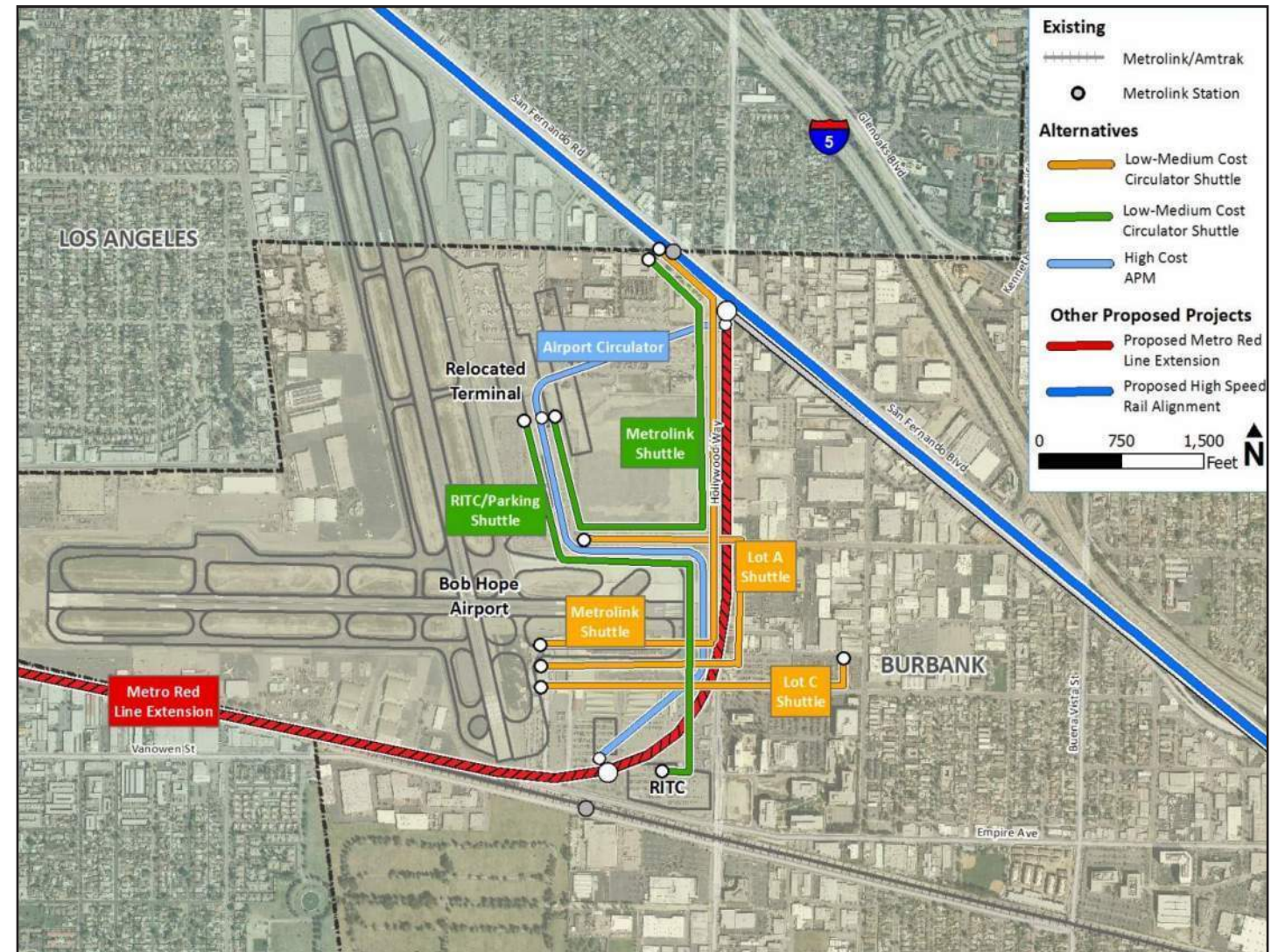


The table below shows the Alternatives being carried forward to meet the "Reduce Air Pollution in the Study Area" goal. All Alternatives include the installation of Class III Bike Routes and pedestrian amenities as defined in Burbank2035 and the bike parking and lockers.

Further details and a map of these alternatives can be found in section 6.7.

Alternative	Option	Action
Low-Medium Cost	Class III Bike Route	Class III Bike Routes; Short- and long-term parking at RITC and Bob Hope North Metrolink Station.
Medium Cost and Medium-High Cost	Class II In-street Bike Lane	Class II Bike Lanes; Remove barriers to pedestrian travel at key locations.
High Cost	Class I Dedicated Bike Path	Class I Bike Paths; Exclusive bike/pedestrian connection across Metro/Metrolink UPRR railroad tracks.

6. Improve Transit Connectivity in the Airport Terminal Area



Alternative	Option	Action
Low-Medium Cost	Airport Bus Circulator	Airport bus circulator along routes shown in yellow in the above map.
Low-Medium Cost	Airport Bus Circulator	Airport bus circulator along routes shown in green in the above map.
High Cost	Automated People Mover (APM)	APM along the route shown in light blue on the above map.

6 RESULTS

6.1 STUDY AREA ROADWAYS

All Alternatives



Proposed roadway improvements in the Study Area

Existing Conditions

Issue

What can be done to ensure traffic continues to flow in the airport area, especially along Hollywood Way? The following facilities will be examined:

Major Arterials

- Interstate 5 (I-5)
- State Route 134 (SR-134)
- Arterials:
 - Hollywood Way
 - Buena Vista Street
 - Vineland Avenue
 - Clybourn Avenue
 - Lincoln Street
 - San Fernando Boulevard
 - Victory Place
 - Winona Avenue
 - Thornton Avenue
 - Empire Avenue
 - Avon Street
 - Vanowen Street
 - Pacific Avenue
 - Sherman Way

Current Projects

- **Interstate 5 HOV Expansion Project.** The expansion of the I-5 High Occupancy (HOV) lanes and access ramps will improve traffic flow along this major freeway.
- **Empire Avenue Grade Separation.** This project will improve access to the airport by providing a more direct route between the freeway and the airport terminal.
- **Buena Vista Street/San Fernando Road Grade Separation -** Grade separates Buena Vista Street and the UPRR tracks.

Proposed Improvements

All Alternatives

- **Clybourn Avenue Grade Separation.** This would eliminate the at-grade crossing at this location, improving east-west traffic flow and improving accessibility to the airport.
- **San Fernando Boulevard/Burbank Boulevard Intersection Improvement.** The San Fernando Boulevard/Burbank Boulevard intersection Improvement includes intersection widening and improvements just east of the I-5 and north of downtown Burbank.

Medium-High and High Cost Alternatives

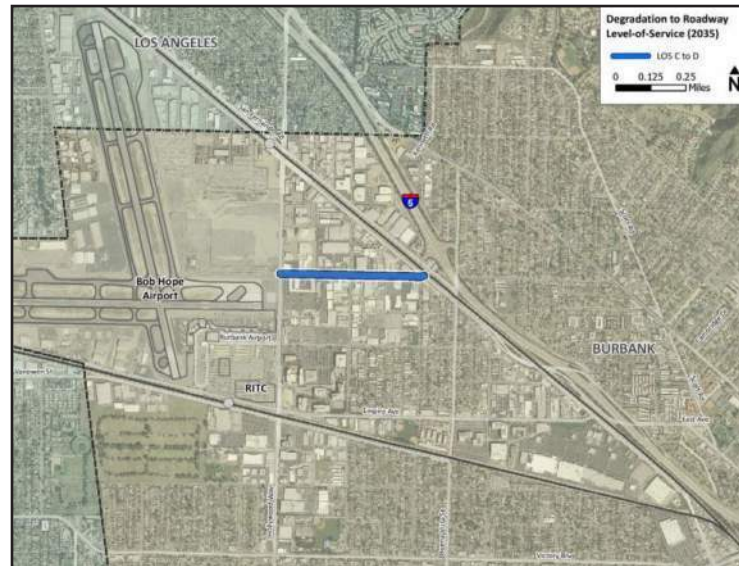
- **Winona Avenue Extension.** This grade separated extension under the railroad tracks will enable more direct access to the Airport from the I-5, particularly if the terminal is relocated to B-6.

Address Roadway Congestion Issues Near Airport



Resulting Changes in Level of Service from Alternatives

Low Cost



Under this Alternative, one segment of Winona Avenue will see degradation of service from LOS C to LOS D from present day to 2035.

Medium Cost



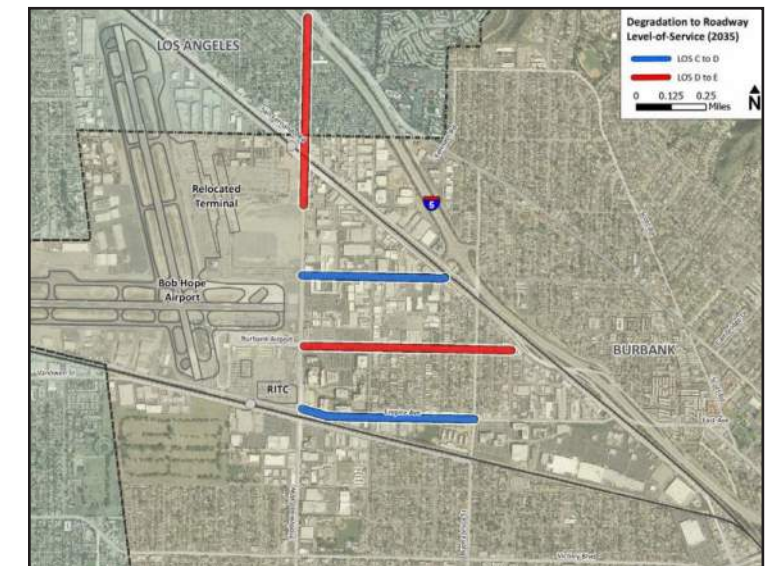
Under this Alternative, no road segments will see LOS degradation to a D or worse from present day to 2035.

Medium-High Cost



Under this Alternative, one segment of Winona Avenue will see degradation of service from LOS C to LOS D from present day to 2035.

High Cost



Under this Alternative, one road segment will see degradation from LOS C to LOS D and 2 road segments will see degradation from LOS D to LOS E from present day to 2035.

6.2 BURBANK/GLENDALE/PASADENA

On-Demand Shuttle (Low Cost)



Proposed route for On-Demand Shuttle



Super Shuttle used at Bob Hope Airport

Hours of Operation

14

(6AM to 10 PM)

Headway

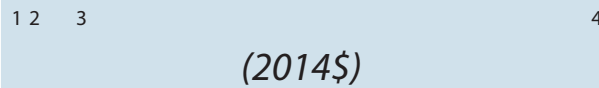
On Demand

Travel Time from Pasadena to RITC



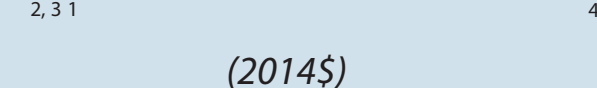
Capital Cost

\$0.5M



Operating Cost

\$2.3M



Total Ridership

10*

(Daily System Ridership)

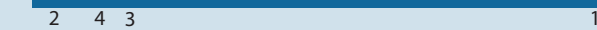
*If system was opened to all potential passengers, total daily ridership would be 440.



Cost per Additional Rider

\$735

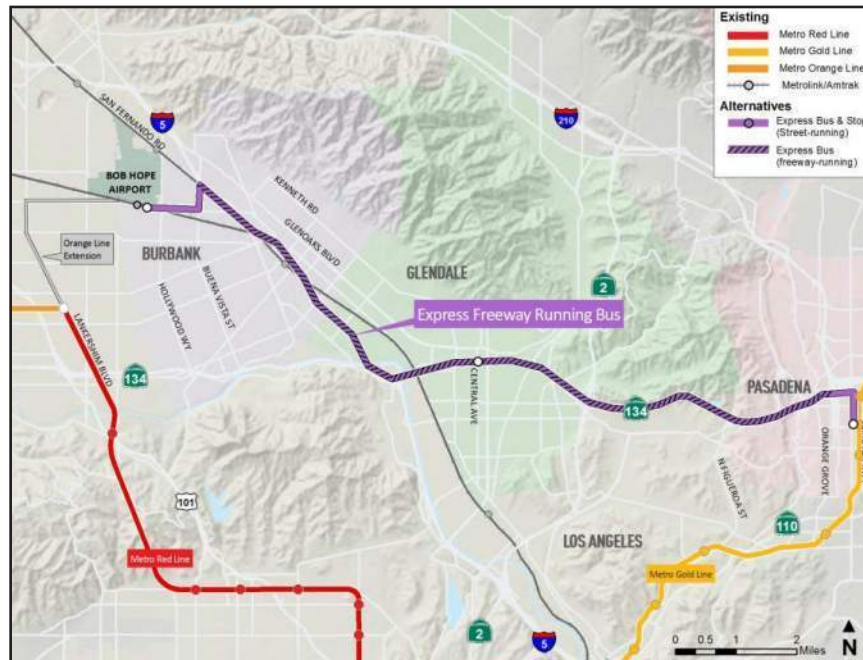
(Capital + Operating Cost/Riders, 2014\$)



CONNECTION

Improve Regional Connections to Airport

Express Bus (Low-Medium Cost)



Proposed route for Freeway Running Express Bus



Example of a Freeway Running Express Bus. This is the Commuter Express Bus used by LADOT

Hours of Operation

20
(4AM to 12 AM)

Headway

30
(Peak Hour)

Travel Time from Pasadena to RITC



Capital Cost

\$3.8M

(2014\$)

Operating Cost

\$1.5M

(2014\$)

Total Ridership

880*

(Daily System Ridership)

*Of the total ridership, 50 would be traveling to or from the airport.

Cost per Additional Rider

\$6

(Capital + Operating Cost/Riders, 2014\$)

6.2 BURBANK/GLENDALE/PASADENA

Express Bus w/ Ramps (Medium-High Cost)



Proposed route for Freeway Running Express Bus w/ roadway improvements



I-110/I-105 interchange has dedicated HOV connector ramps

Hours of Operation

20
(4AM to 12 AM)

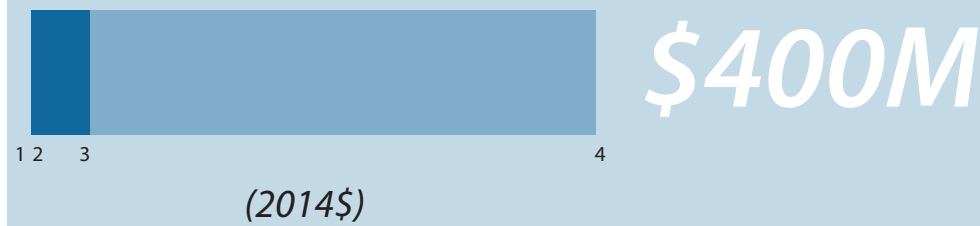
Headway

30
(Peak Hour)

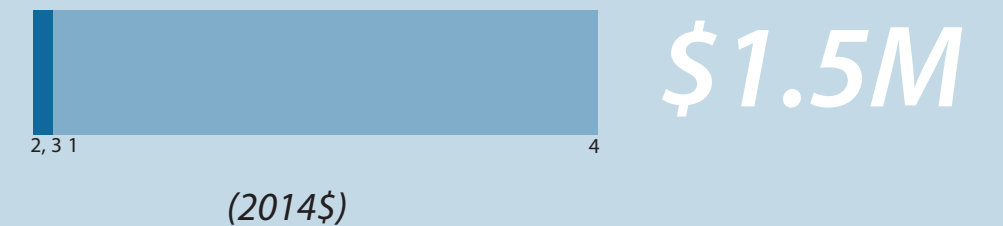
Travel Time from Pasadena to RITC



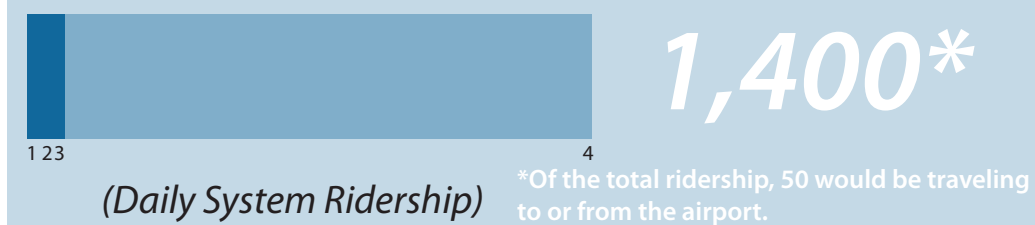
Capital Cost



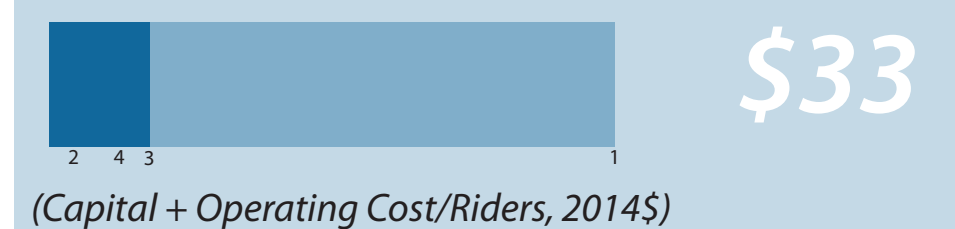
Operating Cost



Total Ridership



Cost per Additional Rider



CONNECTION

Improve Regional Connections to Airport

Light Rail (High Cost)



Proposed route for Light Rail Transit connection



Train in Metro's existing Light Rail Transit system

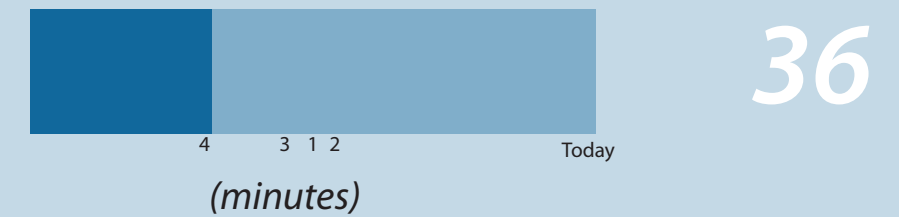
Hours of Operation

20
(4AM to 12 AM)

Headway

5
(Peak Hour)

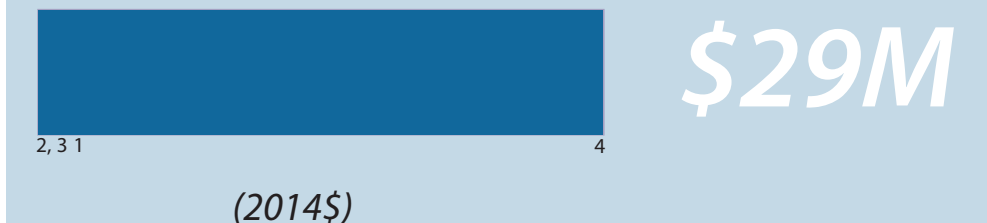
Travel Time from Pasadena to RITC



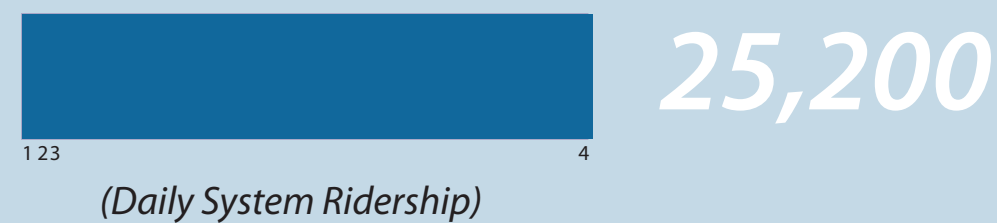
Capital Cost



Operating Cost



Total Ridership

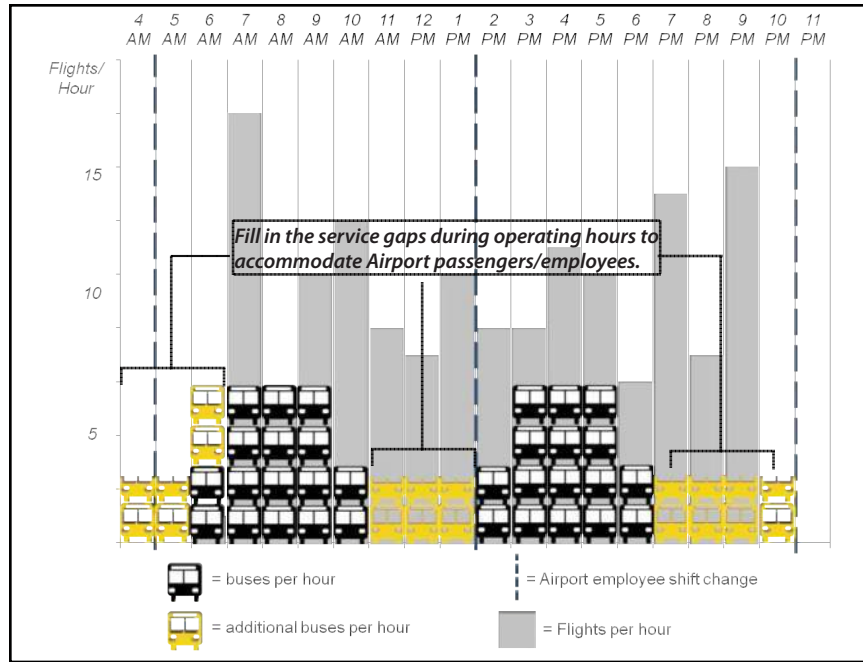


Cost per Additional Rider



6.3 NORTH HOLLYWOOD

Improve Burbank Bus (Low Cost)



Proposed BurbankBus schedule changes



Existing BurbankBus bus

Hours of Operation

20
(4AM to 12 AM)

Headway

16
(Peak Hour)

Travel Time from North Hollywood to RITC

23
Includes 1 Transfer (minutes)

Capital Cost

N/A

Additional Operating Cost

\$0.4M

Additional Ridership

940

Cost per Additional Rider

\$1

(Daily)

(Capital + Operating Cost/Riders, 2014\$)

CONNECTION

Improve Regional Connections to Airport

Orange Line (Mixed) (Low-Medium Cost)



Proposed route for Mixed-Traffic Orange Line extension



An existing Metro Rapid bus in mixed traffic lanes

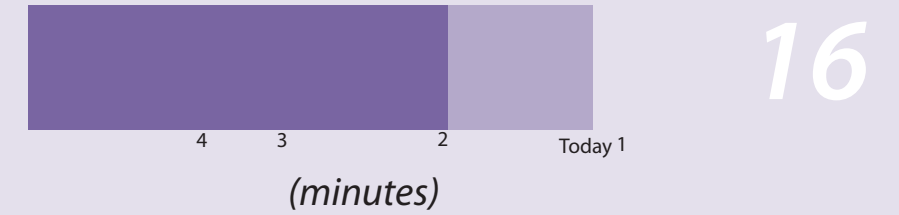
Hours of Operation

20
(4AM to 12 AM)

Headway

8
(Peak Hour)

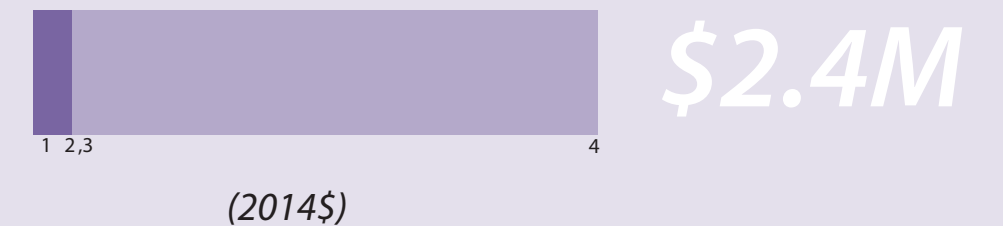
Travel Time from North Hollywood to RITC



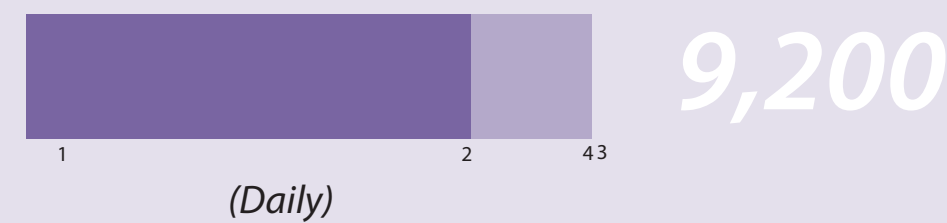
Capital Cost



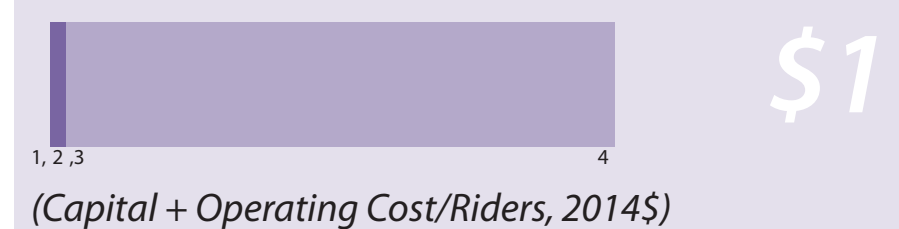
Additional Operating Cost



Additional Ridership



Cost per Additional Rider



6.3 NORTH HOLLYWOOD

Orange Line (Busway) (Medium-High Cost)



Proposed route for dedicated lane Metro Orange Line extension



Existing Metro Orange Line bus in dedicated busway

Hours of Operation

20
(4AM to 12 AM)

Headway

8
(Peak Hour)

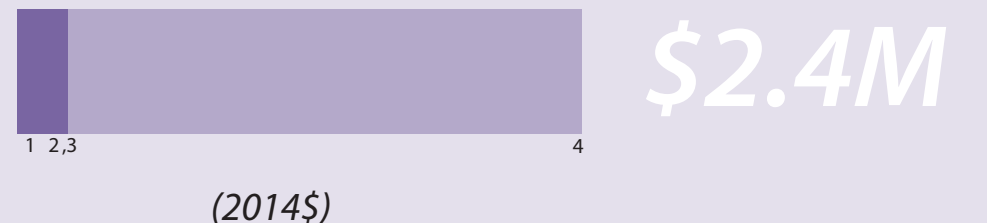
Travel Time from North Hollywood to RITC



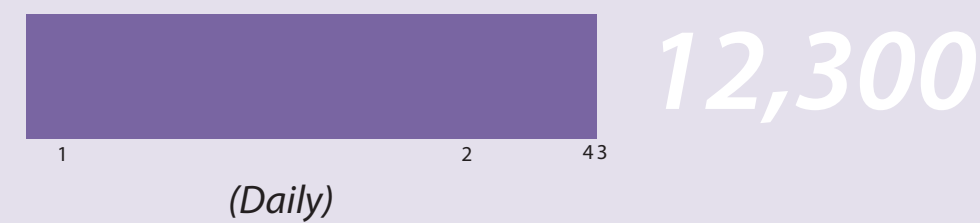
Capital Cost



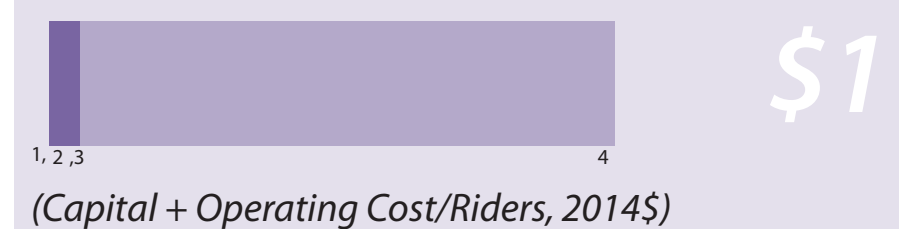
Additional Operating Cost



Additional Ridership



Cost per Additional Rider



CONNECTION

Improve Regional Connections to Airport

Red Line Extension (High Cost)



Proposed route for Metro Red Line extension



An existing Metro Red Line train

Hours of Operation

20

(4AM to 12 AM)

Headway

5

(Peak Hour)

Travel Time from North Hollywood to RITC



Capital Cost

\$2,220M

(2014\$)

Additional Operating Cost

\$27M

(2014\$)

Additional Ridership

11,900

(Daily)

Cost per Additional Rider

\$32

(Capital + Operating Cost/Riders, 2014\$)

6.4 CONSOLIDATED RAIL AND BUS

New Hollywood Way Metrolink Station - North Transit Hub

Background

There are a multitude of transportation services in the Airport area, including Metrolink rail service, local and regional bus service, and on-demand shuttle service. These alternatives aim to use and improve existing resources more efficiently by means of identifying and coordinating these services and facilitating intermodal transfers so that the Airport may serve as a destination and transfer hub. The alternatives include:

- Reroute Metro Buses
- Reroute BurbankBus service
- Pedestrian bridges
- Improved Airport branding and marketing

The following images show the existing conditions and proposed future conditions at proposed transit hubs. These improvements will help to create an easy transfer between public transit and the airport.

EXISTING

Site of the Hollywood Way Metrolink Station (North Transit Hub)



FUTURE

Rendering of the Hollywood Way Metrolink Station (North Transit Hub), which is currently under construction



CONNECTION

Bring Together Transit Lines for Easy Transfer

Enhanced Bob Hope Airport Metrolink/Amtrak Station - South Transit Hub

Real-Time Information at Airport Terminal   



EXISTING

Current Bob Hope Airport Metro-
link/Amtrak Station (South Transit
Hub)

EXISTING

Existing Bob Hope Burbank Airport
terminal



FUTURE

Rendering of future development
of the Bob Hope Airport Metrolink/
Amtrak Station (South Transit
Hub); funding for the aerial pedes-
trian bridge has been obtained

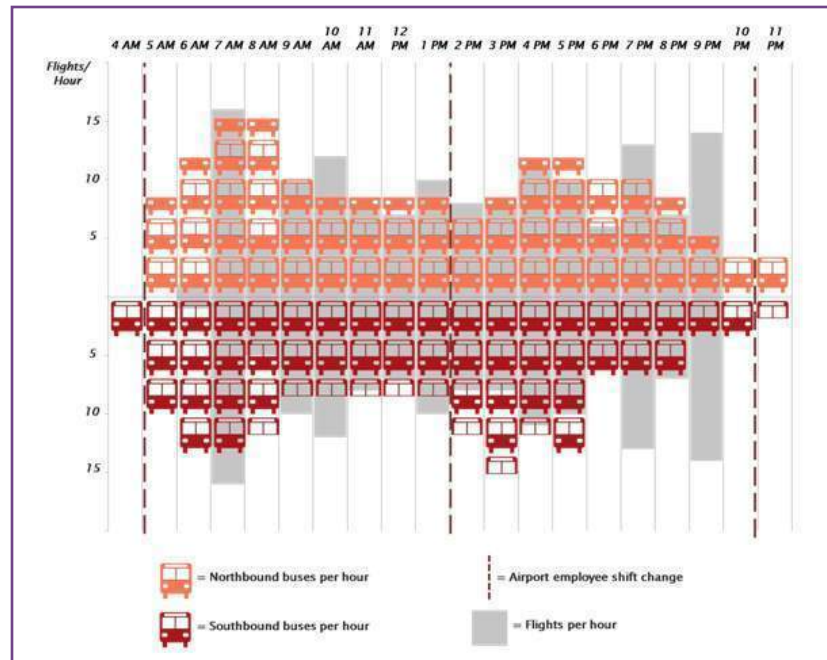
FUTURE

Rendering of future real-time
information at Bob Hope Burbank
Airport terminal



6.5 AIRPORT-FOCUSED TRANSIT

Existing Conditions

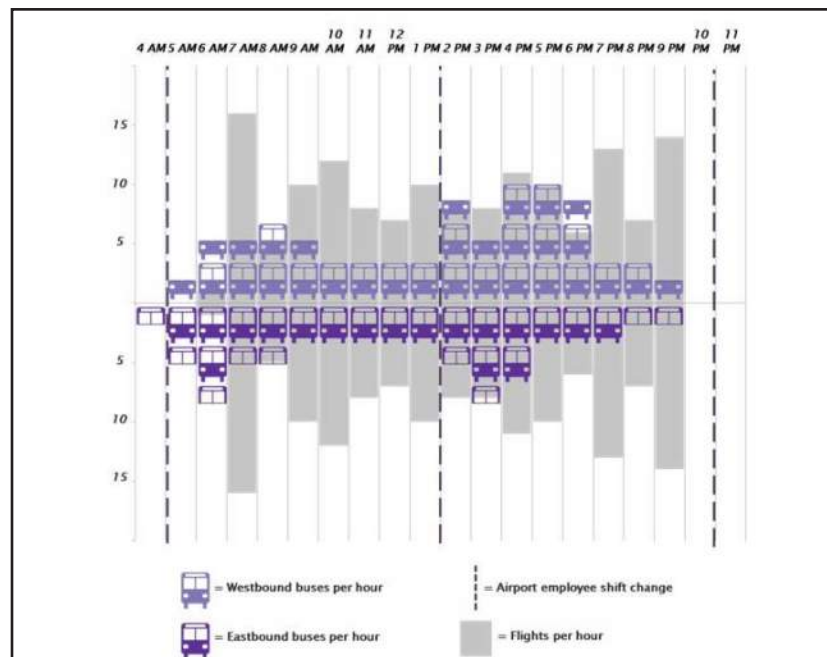
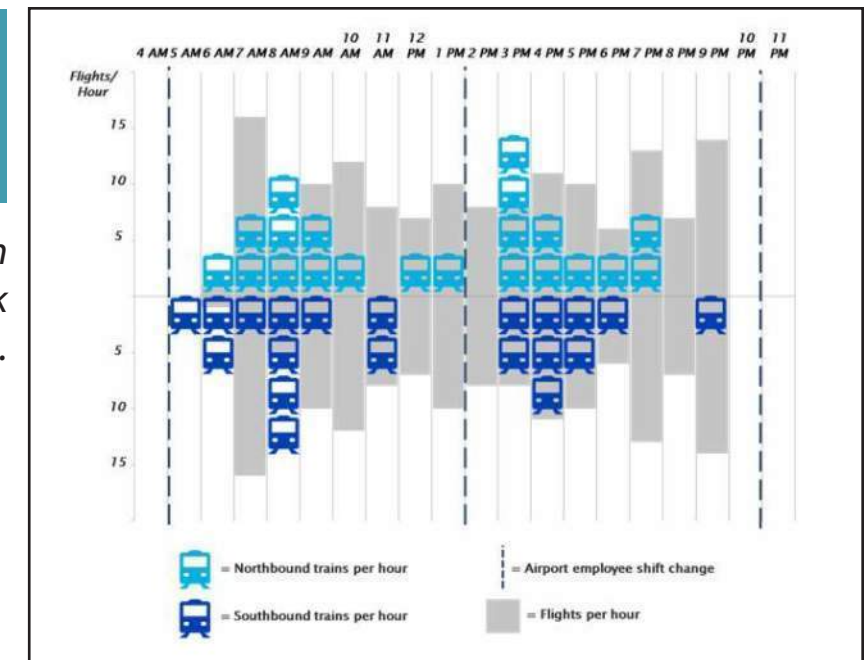


METRO BUS SERVICE NORTH/SOUTH

* Each bus symbol represents 2 buses.

METROLINK VENTURA COUNTY LINE/ AMTRAK PACIFIC SURFLINER

* Each train symbol represents 1 train
 * Ventura Line Trains include Amtrak operations serving BHA.

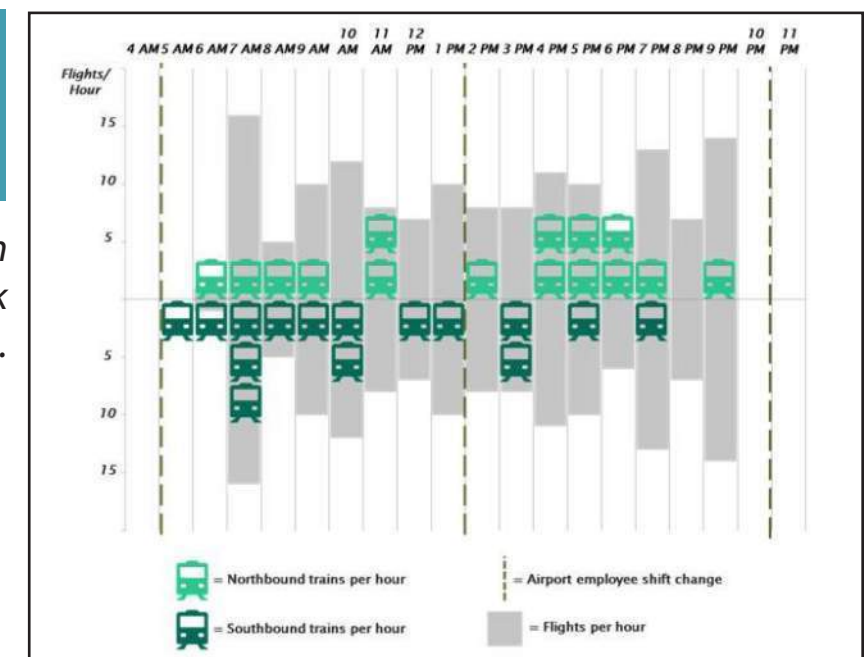


METRO BUS SERVICE EAST/WEST

* Each bus symbol represents 2 buses.

METROLINK ANTELOPE VALLEY LINE

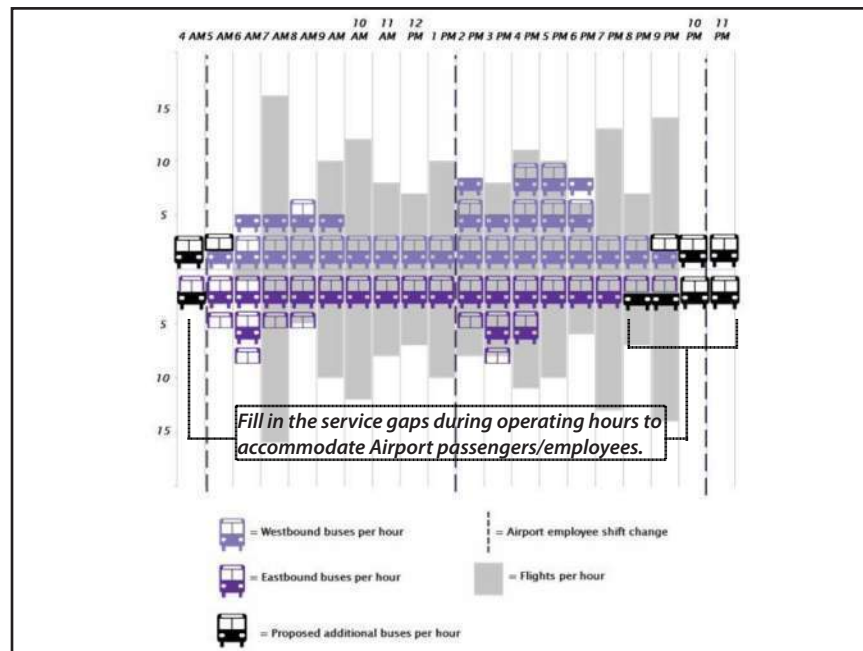
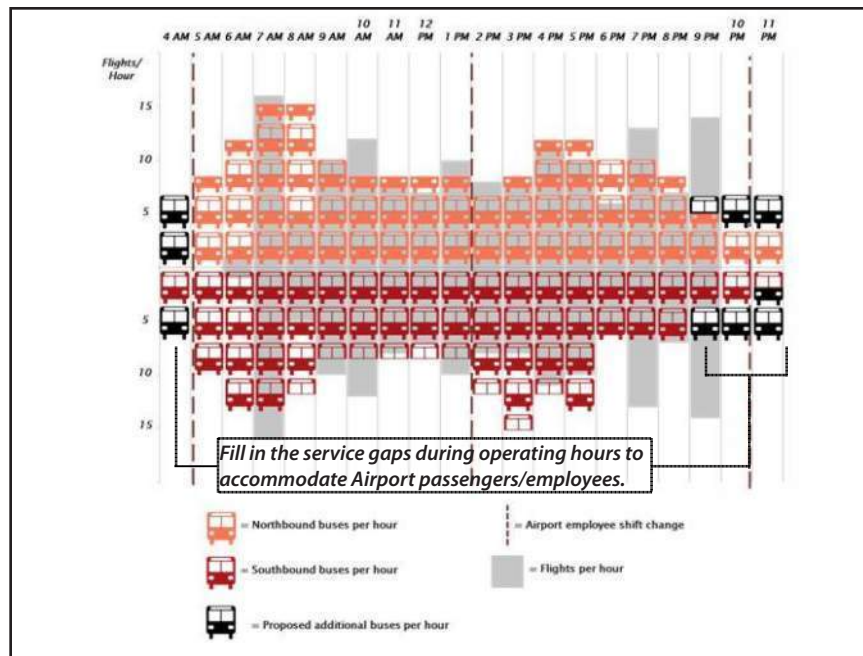
* Each train symbol represents 1 train
 * Ventura Line Trains include Amtrak operations serving BHA.



SCHEDULES

Coordinate Airport, Metro, and Metrolink Hours of Operation and Frequency

Improve Metro Bus (Medium-High Cost)



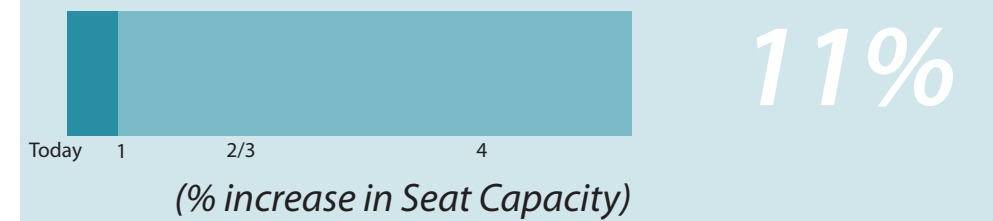
Hours of Operation

20
(4AM to 12 AM)

Headway

15
(Peak Hour)

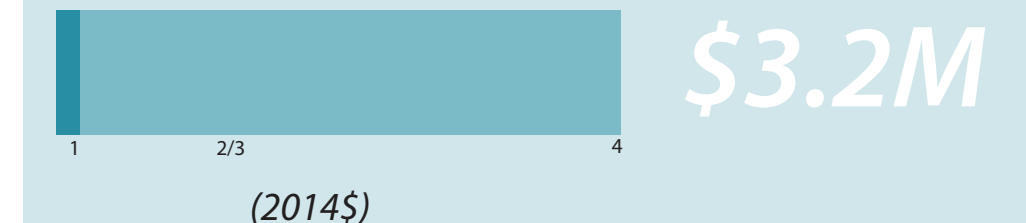
Additional Capacity



Capital Cost



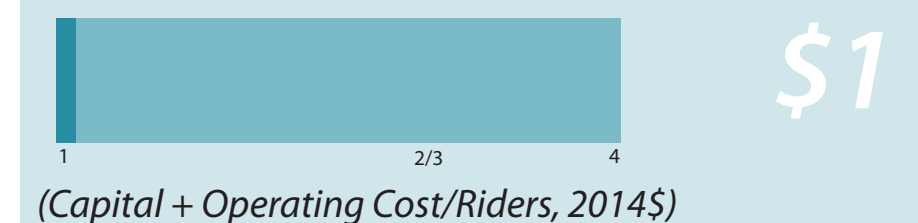
Additional Operating Cost



Additional Ridership

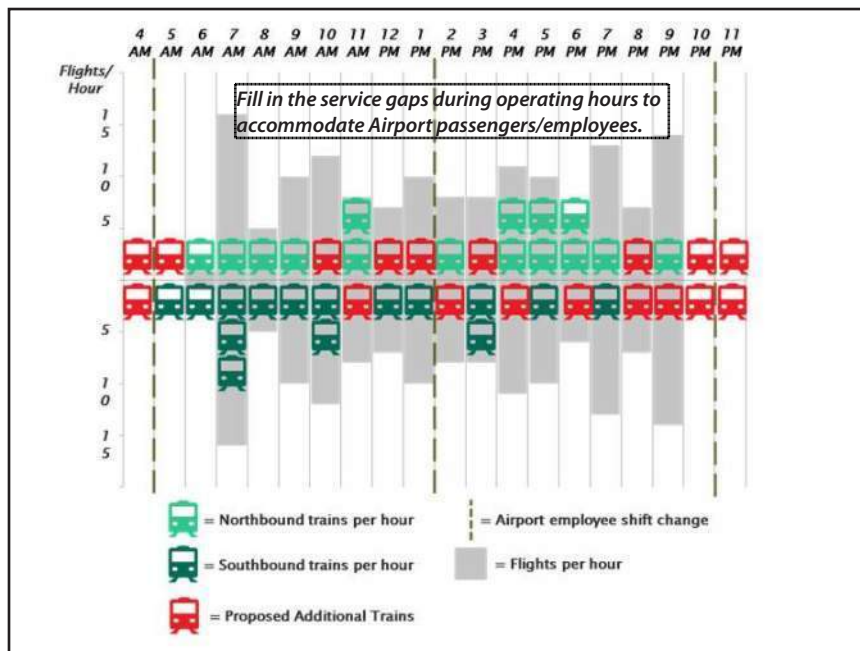
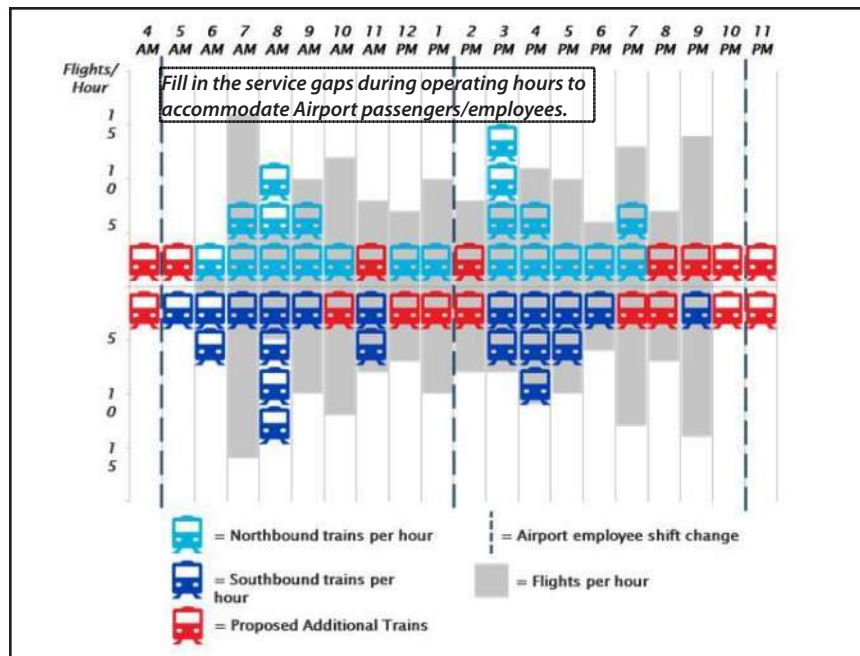


Cost per Additional Rider



6.5 AIRPORT-FOCUSED TRANSIT

Fill Metrolink Gaps in Service (High Cost)



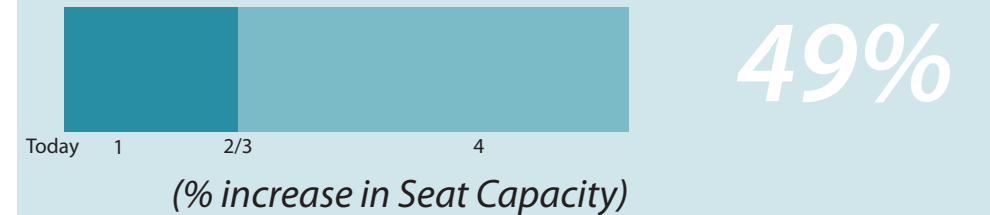
Hours of Operation

20
(4AM to 12 AM)

Headway

30
(Peak Hour)

Additional Capacity



Capital Cost

N/A

Additional Operating Cost

\$21M

Additional Ridership

3%

Cost per Additional Rider

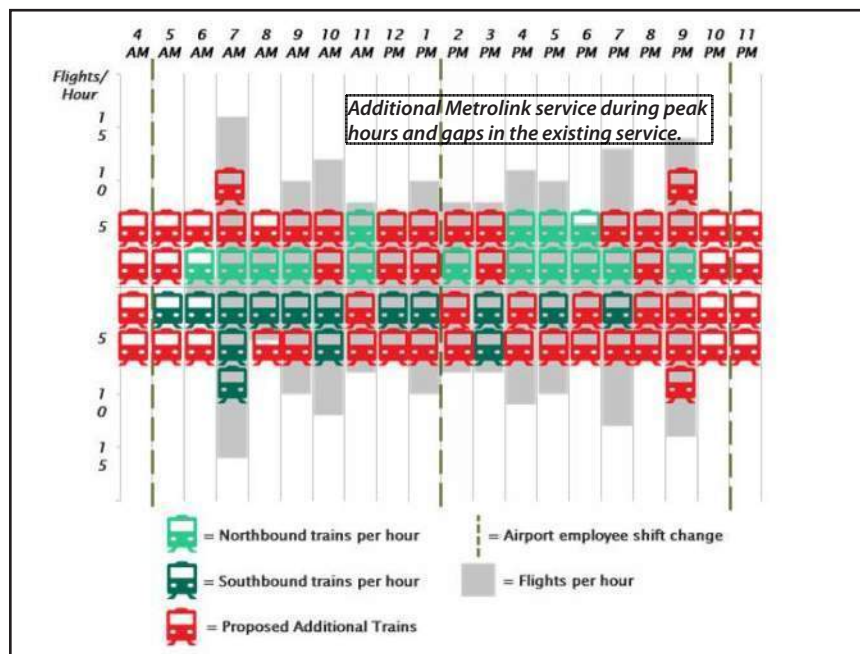
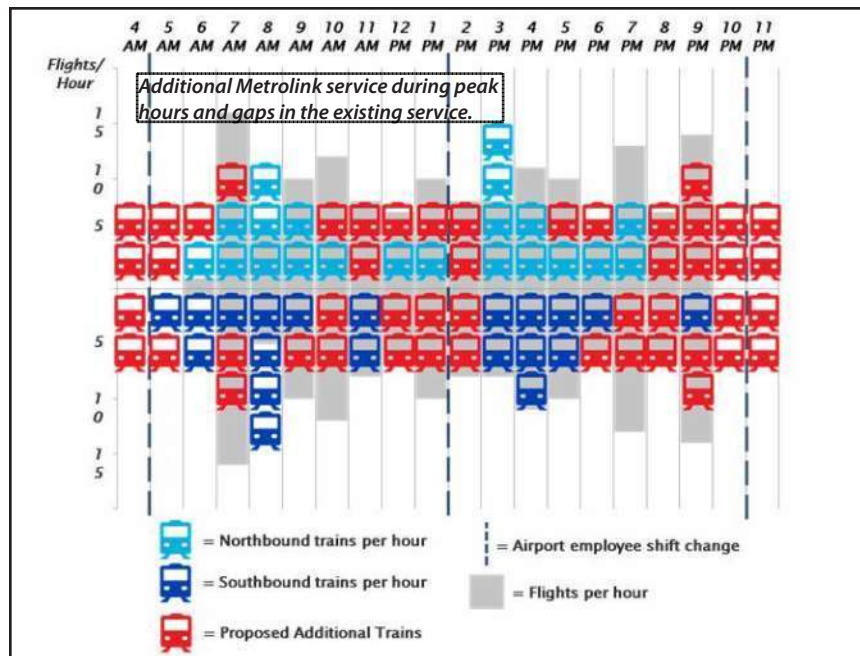
\$36



SCHEDULES

Coordinate Airport, Metro, and Metrolink Hours of Operation and Frequency

Increase Metrolink Frequency (High Cost)



Hours of Operation

20
(4AM to 12 AM)

Headway

15
(Peak Hour)

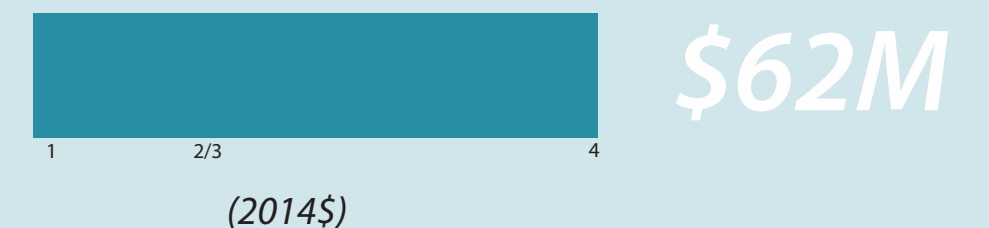
Additional Capacity



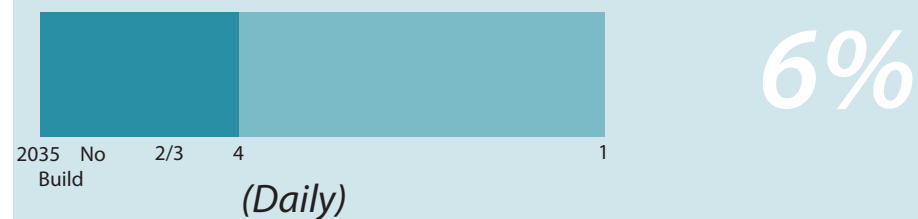
Capital Cost



Additional Operating Cost



Additional Ridership



Cost per Additional Rider



6.6 AIRPORT TERMINAL

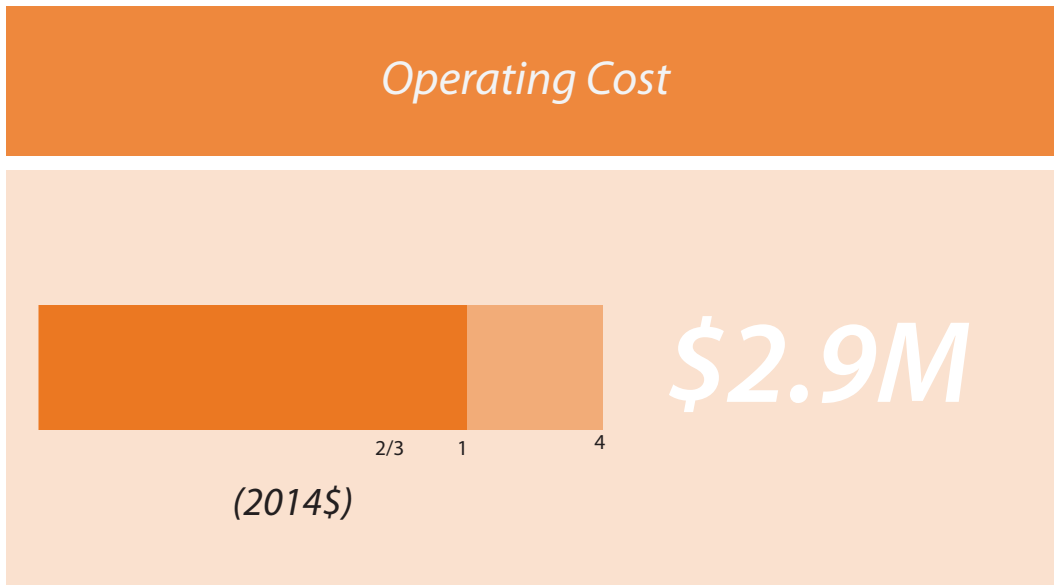
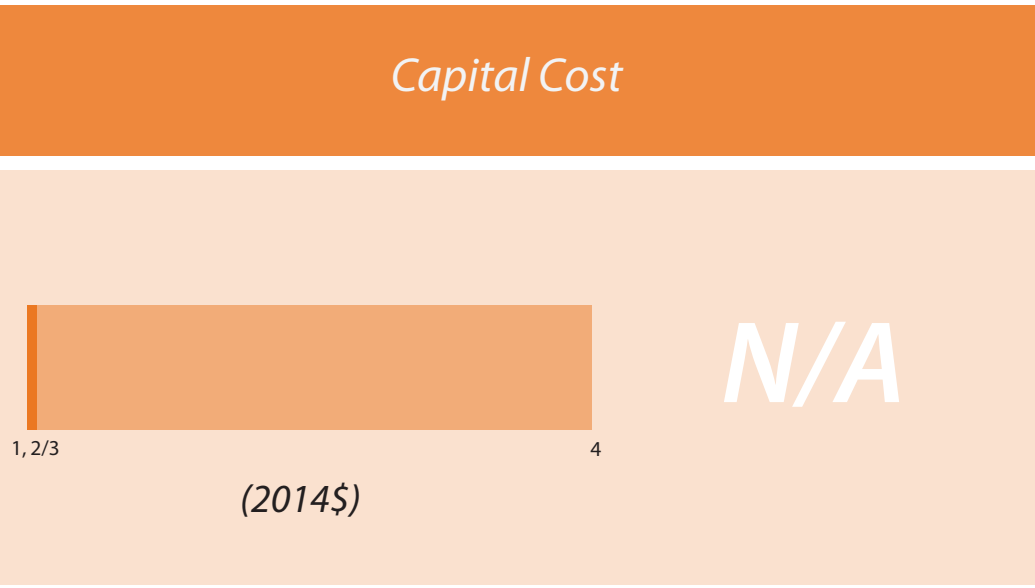
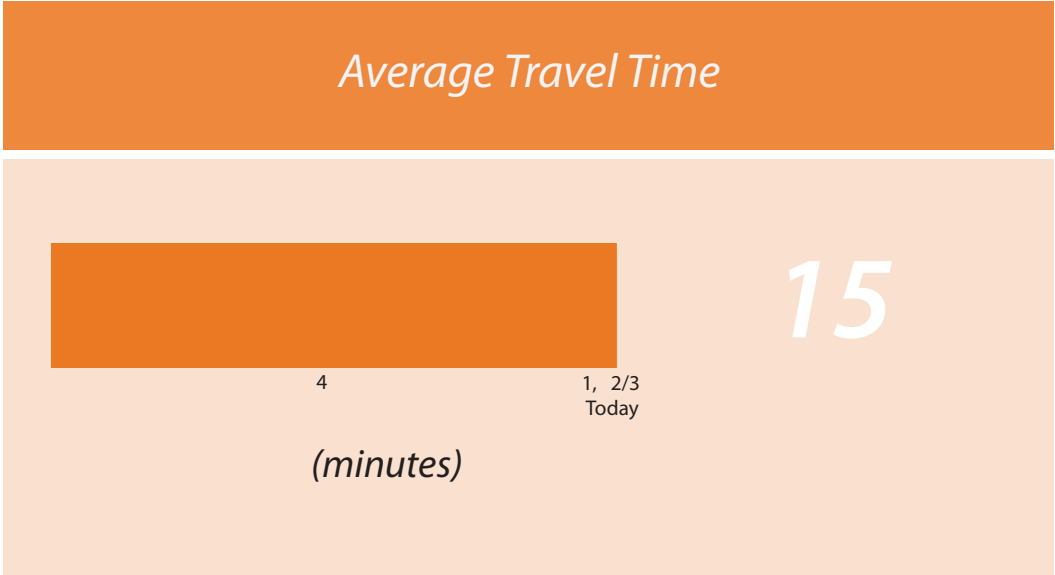
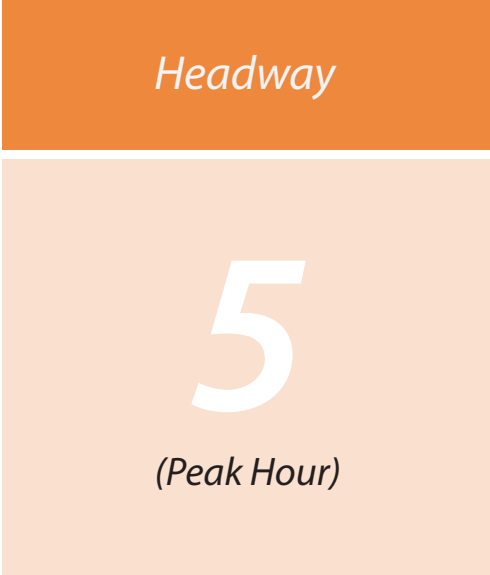
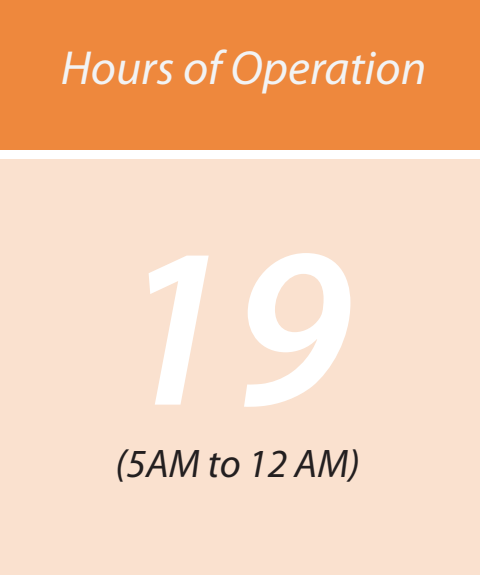
Existing Terminal Shuttle Service (Low Cost)



Planned circulator route in the Study Area



Existing circulator shuttle



CONNECTIVITY

Better Connect Terminal to Other Uses in Area

Relocated Terminal Shuttle Service (Low-Medium Cost)



Proposed relocated circulator route in the Study Area



Future North Transit Hub option to be served by circulator

Hours of Operation

19
(5AM to 12 AM)

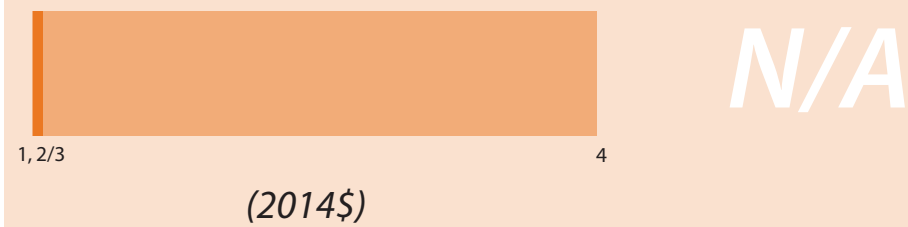
Headway

2.5
(Peak Hour)

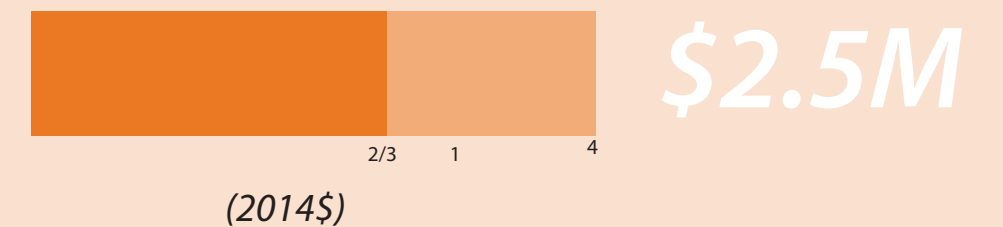
Average Travel Time



Capital Cost



Operating Cost



6.6 AIRPORT TERMINAL

Relocated Terminal Automated People Mover (APM) (High Cost)



Proposed route for Automated People Mover



Airport Automated People Mover

Hours of Operation

19

(5AM to 12 AM)

Headway

2.5

(Peak Hour)

Capital Cost

\$750M

1, 2/3

4

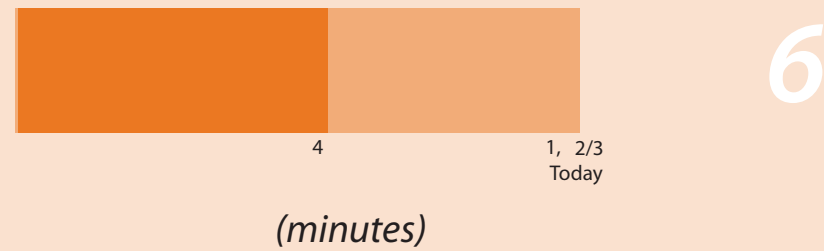
(2014\$)

CONNECTIVITY

Better Connect Terminal to Other Uses in Area



Average Travel Time



Operating Cost



Underground Airport Automated People Mover

6.7 PEDESTRIAN/BICYCLE

All Alternatives

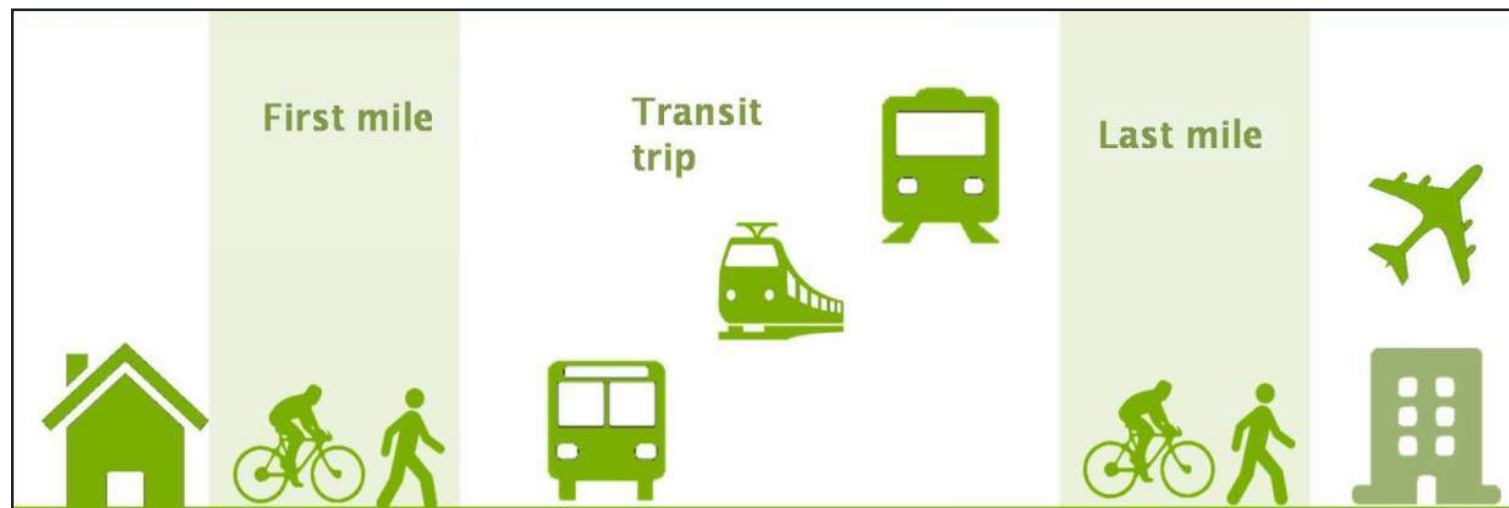
Introduction

Transit improvements throughout the region and pedestrian infrastructure improvements around the terminal can help airport passengers and employees reach their destinations.

Bicycle and pedestrian facilities in the communities surrounding the Airport can ease travel for employees who may cycle or use a combination of modes to reach the Airport.



Rendering of Buena Vista Street pedestrian improvements



First and Last Mile Strategies: Pedestrian and Bicycle Improvements

Pedestrian Improvements

- Implementation strategies consistent with the Burbank 2035 General Plan.
- Implement sidewalk standards identified in the Burbank 2035 General Plan Mobility Element.
- Remove barriers to pedestrian circulation at key locations, such as Hollywood Way crossings at the Ventura and Valley subdivisions, and the Buena Vista Street crossing at Interstate 5.

- Improve pedestrian circulation between the future B-6 development and Hollywood Way.

Bicycle Improvements

- In addition to the Burbank 2035 General Plan, the bicycle map on the following page depicts proposed bicycle infrastructure improvements in the study area.

Integrated Mobility Hubs at Airport Transit Centers

Enhance Accessibility to Transportation Services at the Airport's Key Transit Hubs (Metrolink AVL Station & RITC)

- Secure bike parking
- Bike sharing
- Fold-n-go bike leasing program
- Car sharing



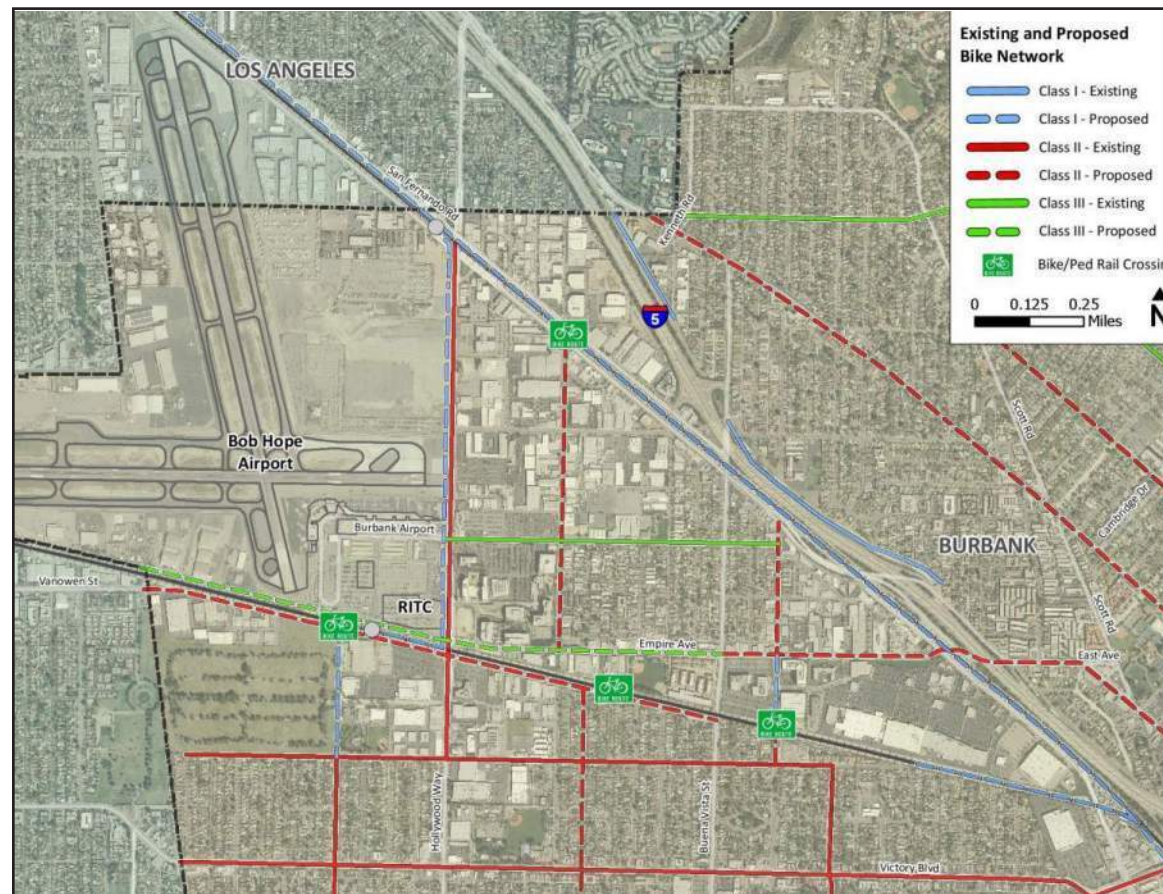
Secure bike parking and bike sharing centers/hubs

INFRASTRUCTURE

Enhance Multimodal Options to Reduce GHG Emissions



Proposed Bicycle Network



Proposed bicycle network in Study Area from Burbank 2035 General Plan

Type of Bicycle Routes

There are three common types of designated bike routes:

- Class I Bike Path - A bike path physically separated from automobile traffic.
- Class II Bike Lane - A lane designated solely for bicycle use on an arterial or local street.
- Class III Bike Route - An arterial or local street that is designated for bicycle use in lanes to be shared with automobiles.

Class 1 Bike Path



Class 2 Bike Lane



Class 3 Bike Route



Bike/Ped Bridge



6.8 SUMMARY OF RESULTS

Transportation Improvements

<div style="text-align: right;">Alternatives</div> <div style="text-align: left;">Objectives</div>	Low Cost / Short-Term	Medium Cost / Medium-Term	Medium Cost / Medium-Term	High Cost / Long-Term
1 <i>Ease Congestion on Study Area Roadways</i>	<ul style="list-style-type: none"> Burbank 2035 Area Improvements <p>Expected Lead Agency: (Burbank)</p>	<ul style="list-style-type: none"> Burbank 2035 Area Improvements <p>(Burbank)</p>	<ul style="list-style-type: none"> Burbank 2035 Area Improvements Winona Avenue Extension <p>(Burbank)</p>	<ul style="list-style-type: none"> Burbank 2035 Area Improvements Winona Avenue Extension <p>(Burbank)</p>
2 <i>Enhance Regional Connectivity to Burbank/ Glendale/ Pasadena</i>	<ul style="list-style-type: none"> On-demand Shuttle Service to Burbank, Glendale and Pasadena <p>(Various)</p>	<ul style="list-style-type: none"> Express Freeway Bus to Glendale and Pasadena <p>(Metro)</p>	<ul style="list-style-type: none"> Express Freeway Bus to Glendale and Pasadena (with roadway improvements) <p>(Metro)</p>	<ul style="list-style-type: none"> Light-Rail Transit linking the Airport to the Metro Gold Line <p>(Metro)</p>
3 <i>Enhance Regional Connectivity to North Hollywood</i>	<ul style="list-style-type: none"> BurbankBus reroutes and extended hours <p>(Burbank)</p>	<ul style="list-style-type: none"> Metro Orange Line Extension to the Airport (Mixed Traffic) <p>(Metro)</p>	<ul style="list-style-type: none"> Metro Orange Line Extension to the Airport (Dedicated Lanes) <p>(Metro)</p>	<ul style="list-style-type: none"> Metro Red Line Extension <p>(Metro)</p>

<p>4 <i>Facilitate Better Transit Connections</i></p>	<ul style="list-style-type: none"> • Reroute Metro Buses • Reroute BurbankBus service • Empire Pedestrian Bridge <p>(Various)</p>	<ul style="list-style-type: none"> • Reroute Metro Buses • Reroute BurbankBus service • Empire Pedestrian Bridge <p>(Various)</p>	<ul style="list-style-type: none"> • Reroute Metro Buses • Reroute BurbankBus service • Empire Pedestrian Bridge <p>(Various)</p>	<ul style="list-style-type: none"> • Reroute Metro Buses • Reroute BurbankBus service • Empire Pedestrian Bridge <p>(Various)</p>
<p>5 <i>Provide Reliable, Fast, and Convenient Transit Connections for Airport Passengers and Employees</i></p>	<ul style="list-style-type: none"> • Real Time information Improve Metrolink / Airport branding • Increase Metro Bus hours of operation <p>(Metro)</p>	<ul style="list-style-type: none"> • Real Time information Improve Metrolink / Airport branding • Increase Metro Bus and Metrolink hours of operation <p>(Metrolink)</p>	<ul style="list-style-type: none"> • Real Time information Improve Metrolink / Airport branding • Increase Metro Bus and Metrolink hours of operation <p>(Metrolink)</p>	<ul style="list-style-type: none"> • Real Time information Improve Metrolink / Airport branding • Increase Metro Bus and Metrolink hours of operation • Increase frequency of Metrolink trains <p>(Metrolink)</p>
<p>6 <i>Improve Transit Connectivity to Terminal Areas</i></p>	<ul style="list-style-type: none"> • Airport circulator bus <p>(Airport)</p>	<ul style="list-style-type: none"> • Airport circulator bus <p>(Airport)</p>	<ul style="list-style-type: none"> • Airport circulator bus <p>(Airport)</p>	<ul style="list-style-type: none"> • APM Airport Circulator <p>(Airport)</p>
<p>7 <i>Reduce Air Pollution in the Study Area</i></p>	<ul style="list-style-type: none"> • Implement Burbank Bike Plan Class III • Bike parking & lockers • Burbank 2035 pedestrian improvements <p>(Burbank)</p>	<ul style="list-style-type: none"> • Implement Burbank Bike Plan Class II and III • Bike parking & lockers • Burbank 2035 pedestrian improvements <p>(Burbank)</p>	<ul style="list-style-type: none"> • Implement Burbank Bike Plan Class II and III • Bike parking & lockers • Burbank 2035 pedestrian improvements <p>(Burbank)</p>	<ul style="list-style-type: none"> • Implement Burbank Bike Plan Class I, II and III • Bike parking & lockers • Burbank 2035 pedestrian improvements <p>(Burbank)</p>

7 NEXT STEPS AND

Moving Forward

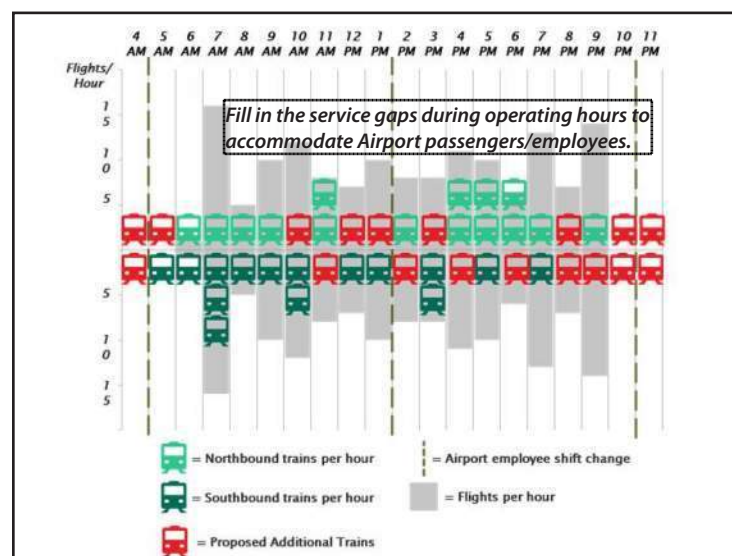
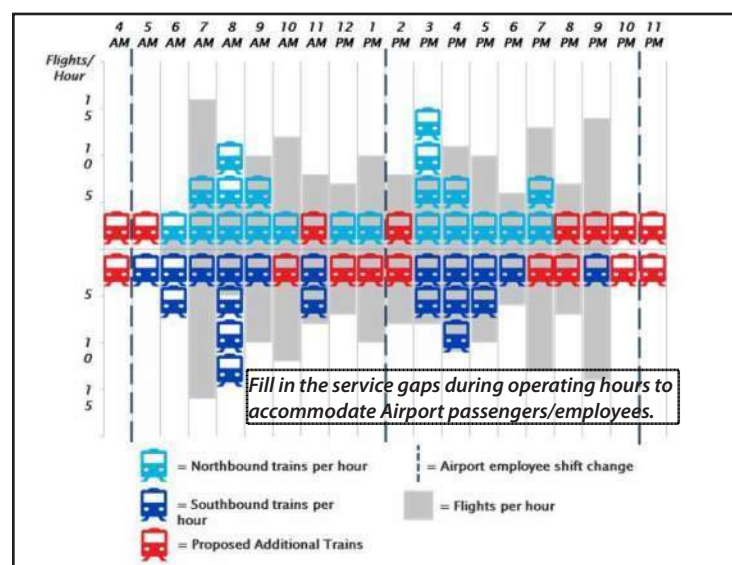
During this Study, and as a direct result of outreach and promotion of its objectives, progress has already been made in meeting the established objectives. Some of these accomplishments include:

- Metro has agreed to construct a new Metrolink Station on the Antelope Valley Line
- Metro has successfully applied for additional State funding to add to their own funds to construct a pedestrian bridge linking the RITC to the existing Train Station on the Ventura Line
- The Metro Board has authorized the development of an I-5 mitigation program.
 - Bus shuttle service in and around the I-5 Corridor
 - Traffic management operations
 - Intelligent Transportation Systems

This has happened while Metro is adopting a “Plane to Train” platform and on the heels of a motion calling for significant improvements to the Antelope Valley Metrolink Line. These improvements can serve as “bookends” of the proposed California High Speed Rail Project to improve local rail connectivity.

With these accomplishments in mind, the following early action transportation projects are being proposed as the most beneficial to achieve the goals and objectives of the projects. They are cost effective and allow for a phased implementation over time as the Airport and surrounding communities change.

Filling Gaps and Real-Time Information



Proposed added trains to fill in the service gaps for Ventura County Metrolink Line (top) and Antelope Valley Metrolink Line (bottom).



Because the Airport is so conveniently located between two major regional rail lines, an important early action improvement is to foster and improve this service. Adding additional Metrolink train service during the mid-day, early morning, and late night when employees and passengers are likely arriving/departing the Airport is an essential improvement to encourage transit ridership. This improvement can be made with minimal capital expenditures and can focus on using the existing infra-

structure to fill the gaps in service. Additionally, making travelers more aware of transit options and schedules via real-time travel information boards will encourage increased ridership. As Metrolink and Metro are the operators and funding agencies of this regional rail service, the Airport Authority will continue to coordinate with these regional agencies to ensure improved rail service can be achieved at the Airport’s train stations.

PRIORITIES

North Hollywood and Pasadena/Glendale Connection

Improving transit connections to Pasadena/Glendale (Medium-Low Cost: Express Freeway Bus) and North Hollywood (Low Cost: Burbank Bus Extended Hours), as seen on the map below, are recommended to be the most important early action improvements. As there is currently a gap in direct transit service between the Airport and Pasadena, Glendale and North Hollywood, these

improvements offer a relatively cheap solution to enable travelers and employees to access the Airport via public transit. These new or extended services would be operated by Metro or BurbankBus; therefore, the Airport Authority will work closely with these two agencies to implement these improvements.



Mobility Hubs

Building on the understanding that the Airport Metrolink Stations are valuable transit Airport transit centers, another early action recommendation is to create mobility hubs at the Metrolink stations that can ease travel for commuters in the area. Amenities such as bike lockers and bike share programs may support people who choose to bike, walk or use transit to get to work.



Winona Extension

The final early action improvement is supported by this study if the Airport terminal is relocated to the B6 property. This extension will provide an alternate route to accessing the relocated Airport terminal. An extension of Winona Avenue under the Antelope Valley Railroad Corridor to the I-5 on/off ramps will allow for a new direct access route. The Airport Authority is currently working with the City of Burbank to entitle the relocation of the terminal, and will continue to coordinate with the City and Caltrans to further develop this action item.



Prepared for Bob Hope Airport by:

