



Los Angeles County
Metropolitan Transportation Authority
Countywide ExpressLanes
Strategic Plan
Executive Summary

PREPARED FOR:



ONE GATEWAY PLAZA
LOS ANGELES, CA 90012

Prepared by:



444 SOUTH FLOWER STREET, SUITE 800
LOS ANGELES, CA 90071

January 6, 2017

EXECUTIVE SUMMARY

This Countywide ExpressLanes Strategic Plan builds on the success of the I-110 and I-10 Congestion Reduction Demonstration pilot program (also known as ExpressLanes) by establishing a vision for Metro to deliver a system of Express Lanes for Los Angeles County using a network approach to maximize regional benefits. A countywide ExpressLanes network will create a more reliable, faster travel option that makes better use of existing vehicle capacity in carpool lanes - also known as high occupancy vehicle (HOV) lanes. The plan also aims to address the degradation in HOV lane performance already experienced on many freeway corridors in the county, and provide Express Lanes users with a seamless customer experience.

The Strategic Plan identifies the most promising Express Lane corridors and potential funding sources needed to implement the plan. The Metro Countywide ExpressLanes Strategic Plan was prepared as an extension of *Southern California Association of Governments (SCAG's) Express Travel Choices Phase II Study - Regional Express/HOT Lanes Implementation Plan and Concept of Operations*. The Metro Strategic Plan is consistent with the analysis methodology used in the SCAG study to estimate the potential mobility benefits and revenue generated by Express Lane projects. This approach ensured that the Metro Countywide ExpressLanes Strategic Plan is consistent with the SCAG regional study and minimized duplication of effort.

The Strategic Plan is intended to be updated periodically to reflect changes in project costs, revenues, economic conditions, and project priorities that will undoubtedly occur over the next 30+ years.

The primary objectives of Metro's Countywide ExpressLanes Strategic Plan are to:

- Identify and recommend potential corridors that can benefit from HOV to High Occupancy Toll (HOT) or Express Lane conversion;
- Develop a resource plan for existing and future Express Lane corridors;
- Respond to degraded HOV facilities across Los Angeles County as well as transportation needs which have outpaced traditional revenue sources;
- Provide recommendations regarding tiers of projects, phasing, planning-level costs and revenue forecasts, and a timetable for implementation;
- Provide a high-level assessment of vehicle occupancy requirements on existing and planned HOV/Express Lane facilities.

The Countywide ExpressLanes Strategic Plan screened all planned, in construction, and existing carpool lanes in Los Angeles to assess the potential benefits and costs of conversion to ExpressLanes operation. The individual corridors included in the Strategic Plan were evaluated using a two-phased screening process assessing their mobility benefits and financial feasibility.

The screening process utilized the SCAG Regional Travel Demand model and the Rapid Toll Optimization Model (RapidTOM) to quantify the mobility benefits of potential ExpressLanes based on available capacity in the HOT lanes, congestion in the general purpose lanes (GPLs),

and the value of time savings by using the HOT lanes. This analysis also provided a general indication of the financial feasibility of an Express Lane.

The corridors were ranked according to their mobility and financial feasibility score and then qualitative factors were applied including connectivity with other Express Lane corridors, transit benefits, funding availability, and the potential ability to accommodate two Express Lanes in each direction. Project segments in Tier 1 had the highest combined mobility and financial screening scores and tended to exhibit the most robust forecasts of traffic and revenue. Segments in Tiers 2 and 3 exhibited comparatively lower screening results and, as such, tended to have less robust traffic and revenue performance.

Recognizing that the implementation of a Countywide ExpressLanes network would require substantial investment and time to plan and construct, it was assumed that the individual segments comprising the network would be implemented in tiers approximately ten-years apart as follows:

- Tier 1 — near-term (within 5-10 years)
- Tier 2 — mid-term (within 15 years)
- Tier 3 — longer-term (within 25 years)

Following the identification of the three project tiers, a preliminary, high level ExpressLanes Resource Plan was prepared to estimate the cost of the strategic plan projects and identify existing and potential funding sources.

The analysis led to the recommendation to develop a 621 lane-mile Express Lane network, mostly comprised of single lane facilities but dual lane facilities are preferred where right-of-way allows. The proposed Express Lane network is shown in **Figure 1** and is made up of the existing I-110 and I-10 ExpressLanes and the Tier 1, 2, and 3 projects.

Some of the proposed ExpressLanes projects are funded through Measure M (**Table 1**). For projects without identified funding, staff will attempt to secure other sources of funding including bonds, Transportation Infrastructure Financing and Innovation Act (TIFIA) loans, grants, and net toll revenue loans from other ExpressLanes within the County if permitted.

In order to move forward with a system of Express Lanes in Los Angeles County, Metro will submit Tier 1 projects as a network to the California Transportation Commission to request tolling authority for those corridors; begin planning studies for Tier 1 projects to analyze the mobility benefits, cost, and right-of-way requirements of single and dual ExpressLanes, prepare traffic and revenue studies, develop preliminary concept of operations reports, and prepare a comprehensive financial plan. In addition, Metro will conduct a detailed analysis to identify locations and configurations of HOV direct connectors.



Figure 1: Los Angeles County Strategic Buildout Express Lanes Network

Table 1: Express Lane Projects Funded through Measure M

Tier 1	Measure M Funding
I-10 between I-605 & LA/SB county line	None identified*
I-105 between I-405 and I-605	\$175,000,000
I-110 ExpressLane extension south to I-405/I-110 interchange	\$51,500,000
I-405/I-110 Int. HOV Connect Ramps and Interchange Improvements	\$250,000,000
I-405 between US-101 & I-10	\$260,000,000
I-405 between I-10 and LA/OC county line	None identified*
I-605 between I-10 & LA/OC county line	None identified*
I-605/SR-60 Interchange HOV Direct Connectors	\$130,000,000
Tier 2	
I-5 between I-605 & LA/OC county line	None identified*
I-5 between SR-170 & SR-134	None identified*
SR-57 between SR-60 & LA/OC county line	None identified*
SR-91 between I-110 and LA/OC county line	None identified*
SR-134 between I-210 & SR-170	None identified*
I-405 between US-101 and I-5	None identified*
Tier 3	
I-5 between SR-170 and Parker Road	None identified*
SR-14 between Avenue P8 & I-5	None identified*
SR-60 between I-605 & LA/SB county line	None identified*
SR-118 between I-5 & LA/Ventura county line	None identified*
SR-170 between I-5 & SR-134	None identified*

* May be eligible for Measure M Highway Funds