

Chapter 5

FINDINGS AND RECOMMENDATIONS

The objective of this technical study is to identify promising BRT concepts for the Vermont Avenue Corridor that meet the following project goals:

- Enhance the customer experience
 - Reduce passenger travel times
 - Improve service reliability
- Improve service performance
 - Create a cost-effective, long-term transit solution
 - Faster average bus speeds
 - Increased ridership
- Increase person throughput for the corridor

Findings

The study explored the feasibility of implementing BRT, including bus lanes and other BRT features, within the existing ROW of a heavily congested and constrained corridor. Four initial BRT concepts were identified in Chapter 3, with varying project benefits and impacts to existing facilities. Of these, Concept 1 and Concept 2 were determined to be the most promising options for improving bus service on Vermont primarily because they yield the largest improvement in operational performance, result in the highest increase in ridership, best improve the customer experience and minimize the impact on on-street parking.

Concept 1 and Concept 2 outperformed the other options by including end-to-end dedicated bus lanes. Figure 38 highlights how both concepts would implement these bus lanes.

Figure 39 shows a typical rendering for Concepts 1 and 2, illustrating how the dedicated BRT lanes would be integrated into the existing street ROW north of Gage Avenue.

Figure 38: Map of Concept 1 and Concept 2

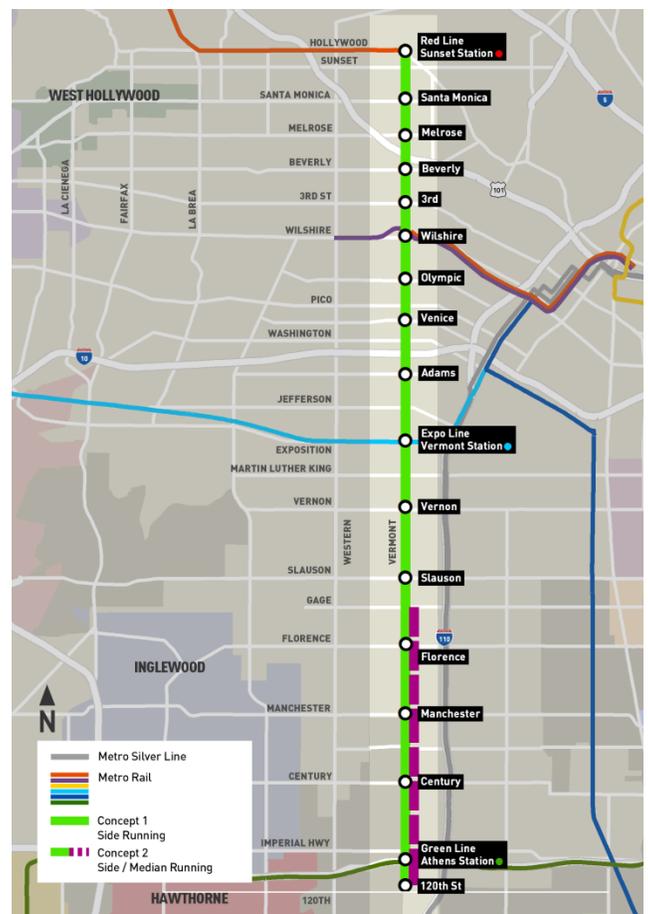
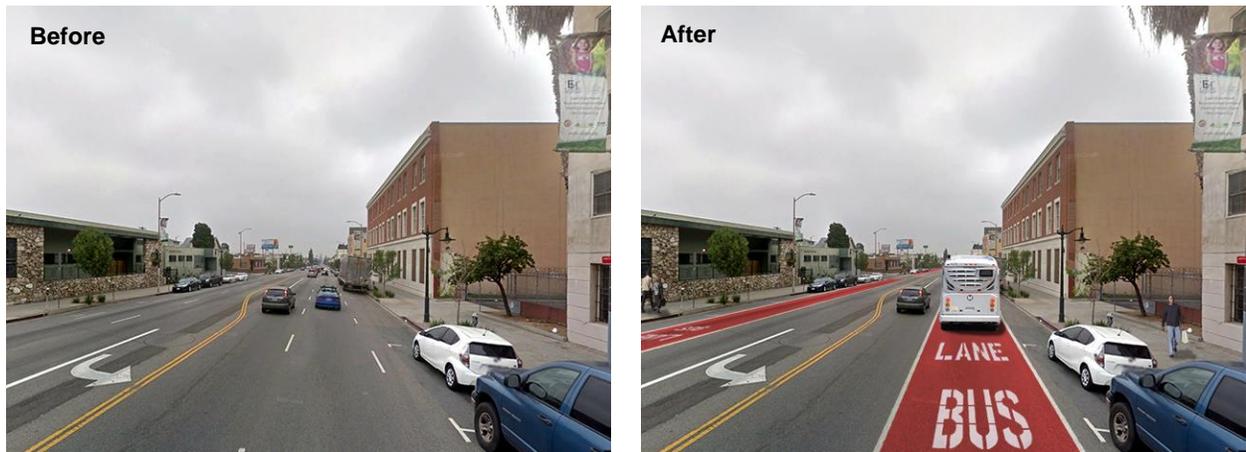


Figure 39 – Typical Rendering for Concept 1 and Concept 2 North of Gage Avenue



South of Gage Avenue, the available ROW is much wider, up to 200 feet. Figures 40 and 41 show typical renderings for Concept 1 and Concept 2, south of Gage Avenue.

Figure 40 – Typical Rendering for Concept 1 South of Gage Avenue



Figure 41 – Typical Rendering for Concept 2 South of Gage Avenue



Concept 1 and Concept 2 are similar in terms of Capital and Operating and Maintenance costs, travel time improvements, and ridership increases. However, with center-running bus lanes south of Gage Avenue, Concept 2 provides slightly better service improvements than Concept 1. Center-running BRTs typically operate slightly faster due to reduced interference with cars.

Both concepts convert general traffic lanes to dedicated bus lanes, which can carry more people than general travel lanes, therefore, increasing the person throughput in the corridor. Ridership forecasts indicate that Concept 1 and Concept 2 will attract new riders, including those shifting from personal vehicles. This mode shift will lead to a 34,000 reduction in overall VMT. Table 16 summarizes the potential benefits and impacts for Concept 1 and Concept 2. The impacts to traffic and parking supply on the corridor will require additional analysis.

Table 16 – Summary of Potential Benefits/Impacts for Concept 1 and Concept 2

Concepts	Average Travel Time (PM Peak, SB, in Minutes)		Total Corridor Ridership (weekday)			Person Throughput (per lane)			Parking Spaces		Project Costs (in Millions)	
	Post Project	% Change from Current Metro Rapid Line 754	No Build (2035)	Build (2035)	% Change	Current	Post Project	% Change	Parking Loss	% Change from Current Supply	Capital Cost (2016\$)	Annual O&M (2016\$)
Concept 1	51	27%	54,600	74,050	36%	900	1,400-1,600	56% - 78%	-446	-22%	322	3.4
Concept 2	50	28%		74,380	36%				-464	-23%		

Recommendations

Concept 1 and Concept 2 are the most promising options for implementing BRT on Vermont Avenue. It is recommended that both be advanced to the next level of analysis. Implementing either concept within the existing physical constraints of available ROW in the corridor will reduce vehicular travel lanes and some on-street parking capacity. These impacts should be further explored in more detail during environmental review.

Vermont BRT Corridor Technical Study – Phase II

Measure M, a half-cent sales tax measure, was passed by Los Angeles County voters in November 2016 after the initiation of this study effort. Based on ridership demand, Measure M also includes funding for future potential conversion to rail on the Vermont Corridor after FY 2067. To accommodate this, staff will proceed with a Phase II of the Vermont BRT Corridor Technical Study. Phase II of the technical study will consider how BRT on Vermont Avenue could be converted to rail in the future. It is recommended that this additional analysis identify feasible rail modes, consider ridership thresholds that inform the conversion of BRT to rail, and further refine the BRT concepts, as necessary, to ensure that the implementation of BRT does not preclude any potential conversion to rail in the future. Upon completion of Phase II, the intent is to proceed into environmental review.