

Bus Lane Programs

Bus lane programs improve travel time and reliability of transit service, which supports mode shift, climate change mitigation and more compact urban form. The many reported benefits of bus lanes include their ability to carry more riders than general traffic lanes, thereby increasing the total capacity (people per traffic lane), improving operational efficiency of transit, reducing travel times for bus passengers, supporting mode shift to transit and supporting more transit-oriented development¹.

Research shows transit ridership is most responsive to investments that improve service quality, with changes in travel time having a significant impact on demand². While bus lanes can improve bus travel speeds, congestion is only one source of delay. Other sources, such as time to access bus stops, time spent at bus stops, and intersection delays also play a role in overall bus service speed and reliability.

Cities have applied a wide variety of metrics to identify potential corridors for bus lanes. These range from more restrictive metrics focused on improving travel time for general traffic, to less restrictive metrics focused on reducing bus passenger travel time, to the broadest metrics that consider social equity and broader strategic goals. For example, the Australian Capital Territory established service for bus and high occupancy vehicle (HOV) lanes considers the total number of buses travelling in peak hour direction, and the impact of bus lanes on decreasing bus travel time and congestion for all road users. Similarly, Los Angeles Metro implements bus lanes on roads that meet defined standards related to bus volumes, passenger volumes, passenger time savings, and lane availability³. The Seattle Department of Transportation's Transit Lane Policy considers a broader set of criteria including demographics and area needs, passenger demand, amount of passenger delay and travel time variability, and equity-focused criteria⁴.

¹Litman, Todd. When are Bus Lanes Warranted? Considering Economic Efficiency, Social Equity and Strategic Planning Goals. Victoria Transport Policy Institute. November 25, 2016.

² Elasticity of demand for bus trips is -0.4 to -0.6, which means that a 10% decrease in travel time typically increases ridership by 4-6%

³ ibid

⁴ Seattle Department of Transportation.

<https://www.seattle.gov/transportation/projects-and-programs/programs/transit-program/transit-lanes>