ASPEN TECH POLICY HUB

OPERATIONAL PLAN

Bus Lane Metric Tool

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EXECUTIVE SUMMARY

The Los Angeles Metropolitan County Transportation Authority (LA Metro) prioritizes equity in public transit, as detailed in their 2018 Equity Platform. However, a standardized method to ensure equity in transit infrastructure, such as bus priority lanes (BPL), has not been established. We recommend that LA Metro use a Bus Lane Metric Tool (BLMT) that explicitly considers equity when determining where a BPL should be implemented. The BLMT would also consider usage factors such as ridership and bus frequency to ensure that established BPLs have a sufficient impact. The proposed BLMT would ensure the equitable implementation of BPLs throughout Los Angeles County by applying a standard equity measure to all potential BPL locations. This Operational Plan details the necessary steps to implement the Bus Lane Metric Tool at LA Metro.

Target Audience

This Operational Plan is for:

1. LA Metro staff in the relevant transportation and planning departments who determine where a BPL should be established; and
2. LA Metro data analysts who compile and process the necessary data for BLMT calculations.

Operational Plan Overview

This Operational Plan should serve as a guide for LA Metro to develop and implement the proposed BLMT. The plan includes 5 phases (outlined below), which should be completed within a 2-year timeframe to meet the goals of the NextGen Bus Plan.

LA Metro should pursue the 5 following phases of implementation:

1. Create a Metric Team and delegate tasks for BLMT implementation.
2. Train the Metric Team to compile data for BLMT calculations.
3. Prioritize possible locations for BPL implementation using the BLMT.
4. Coordinate with the Los Angeles Department of Transportation (LADOT) and stakeholders to implement BPLs with the BLMT.
5. Expand the BLMT based on initial review.

Goals of the Proposed Bus Lane Metric Tool

The primary goals of the BLMT are to:

1. Prioritize BPL implementation within an equity framework;
2. Decrease delay time and improve reliability for the greatest number of bus riders;
3. Reduce bus emissions in areas with poor air quality; and
4. Increase positive experiences with LA Metro bus systems.

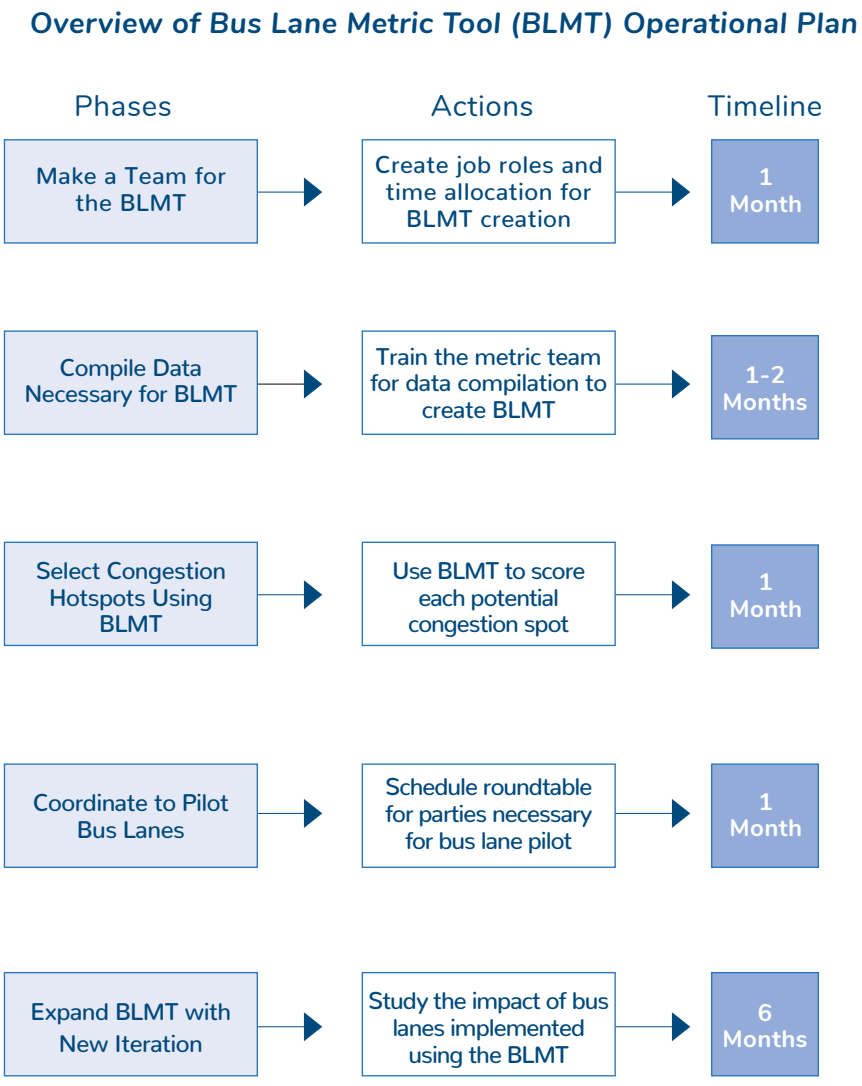

Figure 1: Summary of Bus Lane Metric Tool Operational Plan and Timeline

Phase 1: Create a Metric Team and delegate tasks for BLMT implementation

LA Metro should create a Metric Team composed of 3 transportation planners and a data analyst to implement the BLMT. No new staff is needed, as all roles should be designated to existing LA Metro staff. StreetsLA (formerly the Bureau of Street Services) previously teamed with LA Metro to create a metric to prioritize bus shelter locations, and this Operational Plan outlines an allocation of time and personnel based on that model.

LA Metro should designate tasks for the Metric Team to identify and extract data for BLMT parameter calculations. The team should meet weekly to discuss progress on the BLMT development and to plan for long-term meetings with stakeholders. Alongside this effort, LA Metro should seek external expert support for the BLMT's development, analysis, and implementation.

The roles of the Metric Team and their responsibilities (including time allocation) should be designated as follows:

- Lead Transportation Planner (1)
  - Time allocation: 10% of total work time
  - Role: Coordinate Metric Team to streamline development of the BLMT; facilitate cooperation between LA Metro and other stakeholders
- Transportation Planner (2)
  - Time allocation: 10–15% of total work time
  - Role: Analyze BLMT data to prioritize BPL locations; coordinate with the Principal Transportation Planner to discuss results
- Data Analyst (1)
  - Time allocation: 20% of total work time
  - Role: Source and collect data to calculate BLMT parameters; synthesize data collected

Due to the alignment with the NextGen Bus Plan, LA Metro staff from the Service Planning Agency of the Department of Service Development, Scheduling, and Analysis, who are already responsible for roles and tasks related to the NextGen Bus Plan, should be recruited.

Phase 2: Train the Metric Team to compile data for BLMT calculations

The Metric Team should be trained on how to apply the BLMT, including how to calculate each parameter. As part of the training, a central platform for compiling data should be set up and explained to its main users. The platform should incorporate all the parameters from the BLMT to create hotspot congestion overlays that will show high-priority locations for BPL implementation. Streets-LA can be a resource for thinking through the best training program for the BLMT because they have implemented a similar system to prioritize bus stop shelters.

Phase 3: Prioritize possible locations for BPL implementation using the BLMT

The Metric Team should prioritize potential BPL sites as follows:

1. Identify congestion zones where a BPL would be effective and logistically feasible;
2. Apply the BLMT to each possible BPL location and calculate a final score using the data collected in Phase 2;
3. Prioritize the potential BPL locations with the highest BLMT score; and
4. Discuss results with LA Metro and other necessary stakeholders to assess advocacy and implementation of the chosen BPL, e.g., LADOT.

Phase 4: Coordinate with LADOT and stakeholders to implement BPLs with the BLMT

Roundtable discussions with all interested parties should be hosted in order to help implement BPLs at the selected priority locations. The roundtable should go over the timeline for implementation, determine the advocacy plan for approving the BPLs, and coordinate with Los Angeles County to evaluate the optimal site for BPLs.

The following parties are possible participants in the roundtable discussion of the priority rankings and next steps for implementing BPLs:

- LA Metro
  - Department of Service Development, Scheduling, and Analysis
- LADOT

- City Councilmembers in the location of the possible BPL
- StreetsLA
- LA Metro Facilities Maintenance
- Community members and advocacy groups, e.g., ACT-LA

The roundtable should include multiple meetings over the course of 1–2 months. This timeline provides adequate time for reiterations of priorities, community input, and feasibility studies. After these conversations, the top-priority BPL can be built over the course of one year.

Phase 5: Expand the BLMT based on initial review

After BPLs are implemented, a 1-year analysis should be performed to understand how the BLMT affected the BPL's performance. This analysis should include monitoring ridership numbers and demographics, reductions in delay times, and improvements in air quality. The evaluation should inform new iterations of the BLMT for future projects. Upon a successful evaluation, LA Metro should continue to use the BLMT to prioritize BPL implementation.

To scale the BLMT, LA Metro should organize outreach to relevant stakeholders. To advocate for the BLMT, a policy brief, letter of support, and bus rider itinerary has been sent to Los Angeles councilmembers for review. The BLMT analysis, alongside advocacy, can help to persuade political leaders to support BPL implementation throughout Los Angeles County.