

Metro

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA



Board Report

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AD HOC SUSTAINABILITY COMMITTEE
MAY 20, 2015

SUBJECT: ORAL REPORT ON PEDESTRIAN MODEL DEVELOPMENT PROJECT

Receive Oral Report on the Pedestrian Model Development Project

DISCUSSION

On October 15, 2014, the Board passed a motion directing the CEO to modify the existing contract of the Bicycle Model Development Project to develop the technical travel demand modeling capability to estimate travel demand by pedestrians and to explore the potential of modeling slow lane vehicles and the sharing of bike lanes. Attachment A contains the Board motion.

During the past several years, Metro and other transportation agencies and jurisdictions have been investing more in the Active Transportation mode of travel. In order to quantify the benefit of Active Transportation investment, analytical tools such as travel demand models are needed to measure the performance of transportation investment. To this end, the Board took the initiative several years ago and directed us to develop the modeling capability for the bicycle mode of travel.

Today, we have a forecasting/modeling tool that jurisdictions can use to quantify the benefit of bicycle investment at the jurisdiction level. Also, we are nearing completion of integrating our travel demand model with a bicycle modeling component. Due to this progress with the bicycle model, the Board took further action and directed us to develop a similar modeling capability for measuring the performance of pedestrian infrastructure investment.

We are currently working to finalize a work scope that we will share with an Advisory Panel with experts in the field of transportation modeling and pedestrian transportation investment to provide guidance on our approach to developing this modeling capability. Since developing a pedestrian model for Los Angeles County is a technical and complex undertaking, we are taking a phased work plan approach to comply with the Board motion, which also provided for \$1.5 million to be budgeted to fund this work effort.

The phased work plan consist of developing a web-based platform similar to that of the Bicycle Sketch Plan Tool which would utilize a mapping function allowing jurisdictions to map out the project locations and evaluate pedestrian projects based on project attributes, land use, socioeconomic conditions, and transportation network data. This analytical forecasting tool shall be designed to be used by staff at jurisdictions such as city planners and city engineers as a menu driven, hands-on website that jurisdictions can access to conduct their own analyses of a single pedestrian project, or a package of projects.

During the second year of the work plan we shall investigate whether there are potential linkages

between the developed pedestrian modeling capabilities and Metro's travel demand model and, if deemed feasible and appropriate, demonstrate such linkages. The cost to conduct the work for the Pedestrian Model Development Project shall not exceed the \$1.5 million authorized by the Board.

We are preparing a list of potential candidates for an Advisory Panel of national experts similar to the process we took to conduct the work plan for Bicycle Model Development Project. We will also form a panel of local users consisting of jurisdictions, agencies, and others to provide input to help guide the work of the Pedestrian Model Development Project.

We are finalizing the work plan and we expect to execute the contract modification in July 2015 to initiate the work for the first year of the work plan.

ATTACHMENTS

Attachment A - October 15, 2014 Board Motion

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Attachment A

Ad-Hoc Sustainability Committee Item No. 11 October 15, 2014
Motion by Directors O'Connor, DuBois

DEVELOP ACTIVE TRANSPORTATION TRAVEL DEMAND MODELING FOR PEDESRIAN, BICYCLE, AND SLOW SPEED LANES

On two previous Board meetings in January 2012 and July 2014, the Metro Board passed motions directing the CEO to develop the technical travel demand modeling capability to estimate travel demand by bicycle and walking. In addition, the Board directed the CEO to develop a phased work plan that includes investigating the state of the practice and best practices in this field, identifying performance measures, developing off-modeling approaches and collecting the necessary data to develop this modeling capability for all trips not just commute data.

Although a Sketch Planning Tool has been developed providing estimates of travel demand by bicycle at the jurisdiction level, it is clear more needs to be done to evaluate the full spectrum of Active Transportation such as bicycling, walking, and slow lane vehicles for local neighborhood trips, as well as connectivity with sub-regions and regional centers on the multi-modal transportation network to accommodate the needs of an aging demographic.

We, THEREFORE, MOVE that the Metro Board direct the CEO to do the following:

- 1. Modify the existing contract of the Bicycle Model Development Project with the additional tasks to develop the technical travel demand modeling capability to estimate travel demand by pedestrian and other active transportation travel, including exploring the potential of modeling slow lane vehicles and the sharing of bike lanes.** This technical travel demand modeling capability could be utilized to model pedestrian, bicycle, slow lane vehicle related investments in other major Metro activities such as the First and Last Mile Policy, Mobility Matrix Studies, Long Range Transportation Plan, Short Range Transportation Plan, Call For Projects, Transit Corridor Planning, Joint Development, SB 375 GHG compliance, and other critically important transportation activities carried out by Metro; and,
- 2. Amend the Metro Budget to provide the necessary funding for the remainder of FY15 and future years to develop the modeling capability for pedestrian, bicycle, and slow lane vehicle travel; and, concurrently, execute the contract modification to the existing contract of the Bicycle Model Development Contract to an amount of approximately \$1.5 million, with appropriate contract contingency.**
- 3. Develop a phased work plan to develop the modeling capability for pedestrian travel that includes investigating the state of the practice in this field, identifying performance measures; and collecting the necessary data to develop the technical**

travel demand modeling capability for pedestrian travel that works for Los Angeles County.

4. Coordinate with the appropriate stakeholders that would provide the input to develop a technical travel demand model for pedestrian, bicycle, and slow lane vehicle travel, and other related Active Transportation that reflects the complexity and diversity of Metro's transportation initiatives across Los Angeles County.