

3. FORECASTING APPLICATIONS

C. REGIONAL STUDIES

Regional Mobility and Accessibility Scenario Study

In September 2007, the TPB Scenario Study Task Force was established to provide policy-level stewardship for this study and related TPB activities, including consideration of opportunities for integration of the study findings into TPB planning processes and initiatives. Under the guidance of the task force in the first half of FY 2009, the "CLRP Aspirations" transportation and land use scenario was developed drawing upon the individual strategies reflected in the RMAS scenarios and the variably-priced lane scenario study. In addition, the "What Would It Take" scenario was developed to assess what scales and combination of interventions would be necessary to achieve significant reductions in CO₂ emissions reductions by 2020 and 2050. ~~In the second half of FY 2009, these scenarios were analyzed.~~

The American Recovery and Reinvestment Act of 2009 (ARRA), which included a new Transportation Investments Generating Economic Recovery (TIGER) Competitive Grant Program with \$1.5 billion to be awarded by the US Department of Transportation became law on February 7, 2009. Beginning in the spring of 2009, the TPB authorized its Scenario Study Task Force to develop a Federal Stimulus TIGER grant application to fund a regional network of priority bus corridors, bike-sharing and intermodal transit centers. This grant provides the region the opportunity to secure significant funding to implement a first phase of the "CLRP Aspirations" Scenario.

The following activities will be conducted in FY 2010:

Short-Range Implementation Studies

- **Through a process of regional coordination and collaboration, develop a regional package of priority bus corridors and other related projects for inclusion in the regional TIGER Grant application, to be submitted by September 15, 2009.**
- **Building on the TIGER grant application process described above, develop a regional network of priority bus corridors with phases for 3- and 5-year implementation from 2010 that expands the initial network, submitted for the TIGER grant, to include additional state, local and transit operator priorities. This arterial network of priority bus corridors will be developed through inter-agency coordination and will focus on complementing the Metrorail system, drawing from the WMATA Priority Corridor Network (PCN) and the CLRP Aspirations Scenario's regional network of rapid/express bus on managed lanes. The costs and benefits of implementing the 3- and 5-year phases of the regional priority corridor network will be assessed using the methodology developed for the TIGER grant application. Maps and advanced visualizations of this regional arterial priority corridor network will be developed to assist in communicating the benefits of the**

regional system to decision-makers, the public and developers.

- To further the momentum from the TPB's Regional Priority Bus Conference in June 2009, develop a set of implementation guidelines for prioritizing bus transit on arterials in the Washington region. A technical working group of staff from transit agencies and departments of transportation in the region will be established to guide a consultant in the preparation of report detailing these implementation steps. The report will describe and evaluate all feasible priority strategies, including bus stop locations, transit signal priority, queue jump lanes, and dedicated bus lanes. Beginning with a literature review of the experience of such strategies in the United States, the consultant will assess the applicability of these bus prioritizations strategies for the region, and identify the costs, benefits and how to address potential implementation barriers.

Long-Range Scenario Studies

- Conduct analysis of the "CLRP Aspirations" and "What Would It Take" scenarios.
- Conduct public outreach designed to inform possible implementation of regional strategies.
- Prepare report on public feedback on the scenarios and recommendations for incorporating scenario planning activities into the regional planning process.
- "Drill-down" to the community and project level within the CLRP Aspirations scenario to assess local level travel impacts and help identify where land use shifts are particularly crucial and transportation improvements may need to be focused.
- Based upon a review of the projects, land use forecasts and performance of the 2010 CLRP, revise and update the CLRP Aspirations scenario looking to 2040 to reflect an additional decade of growth.
- Review developments in strategies to reduce mobile CO2 emissions in the three categories of the "What Would It Take" scenario and update the assessment of scales and combination of interventions that would be necessary to achieve significant reductions in CO2 emissions reductions by 2020, 2030 and 2050.

Oversight: TPB Scenario Study Task Force

Cost Estimate: \$315,800 +\$300,000

Products: - **A TIGER grant application to fund a regional network of priority bus corridors, bike-sharing and intermodal transit centers.**

- **Regional Arterial Corridor Network with 3- and 5-year phases, including visualization and**

cost/benefit analysis.

- **Implementation Guidelines for Prioritizing Bus Transit on Arterials in the Washington region**
- Analysis of updated CLRP Aspirations scenario reflecting public feedback and looking to 2040.
- Update of the What would It Take scenario.

Schedule:

June 2010- Regional Arterial Corridor Network with 3- and 5-year phases; Implementation Guidelines for Prioritizing Bus Transit on Arterials in the Washington region.

June 2010 - Analysis of updated CLRP Aspirations scenario

January 2010 - Update of the What would It Take scenario.

From the Proposed FY 2010 UPWP Amendment to 3.C: Regional Studies:

“To further the momentum from the TPB’s Regional Priority Bus Conference in June 2009, develop a set of implementation guidelines for prioritizing bus transit on arterials in the Washington region. A technical working group of staff from transit agencies and departments of transportation in the region will be established to guide a consultant in the preparation of report detailing these implementation steps. The report will describe and evaluate all feasible priority strategies, including bus stop locations, transit signal priority, queue jump lanes, and dedicated bus lanes. Beginning with a literature review of the experience of such strategies in the United States, the consultant will assess the applicability of these bus prioritizations strategies for the region, and identify the costs, benefits and how to address potential implementation barriers.”

Consultant Study Work Activities–Outline:

- Project Background
 - WMATA Priority Corridor Network
 - Regional Priority Bus Conference
 - TIGER Grant Application
 - Study timeline: January–June 30, 2010.
- Purpose: develop a set of implementation guidelines for prioritizing bus transit on arterials in the Washington region:
 - Identify national best practices in implementing bus priority treatments on arterials, including:
 - Bus Lanes
 - Transit Signal Priority
 - Intermittent Bus Lanes
 - Queue Jump Lanes
 - Off-board Fare Payment Systems
 - All-door Boarding
 - Evaluate the feasibility of implementing the above-mentioned treatments in the Washington region, assessing costs, benefits and potential barriers to implementation.
 - Costs should include implementation and O&M costs.
 - Benefits to include user travel time benefits, new riders, lower operations costs.
 - Potential barriers should include physical and political constraints.
- Tasks and Schedule
 - Task 1: Establish working group: January, 2010
 - Task 2: Perform literature review: January–February, 2010
 - Task 3: Perform assessment of priority treatments for the Washington region: March–May, 2010
 - Perform assessment of different roadway typologies in the region.

- Work with agency staff, through interviews and meetings, to determine the applicability of bus priority treatments in all jurisdictions in the Washington region.
 - Task 4: Preparation of technical report. Draft - May 2010, Final - June 2010
- Project Oversight
 - A technical advisory group will be formed made up of bus transit operators and traffic engineers from all jurisdictions in the region. This group will provide input to the study as well as act as liaisons to their agencies, facilitating meetings and interviews between the consultant team and agency staff. Additionally, the group will receive periodic briefings as needed from the consultant team.
 - Consultant team will brief the TPB's Regional Bus Subcommittee with the study progress and findings.
- Skills Required
 - Knowledge and experience with bus rapid transit systems in the united states.
 - Traffic engineering and traffic signal operations, design and implementation.
 - Experience with evaluating benefits and costs of bus transit systems and service changes.
 - Experience in working with state and local Departments of Transportation (DOTs) and transit agencies.