

MEMORANDUM

To: TPB Task Force on Value Pricing

From: Ronald F. Kirby, Director of Transportation Planning

Re: Regional Value Pricing Study Draft Final Report

Date: February 25, 2008

TPB staff is nearing the completion of the Regional Value Pricing Study, funded under a grant from the Federal Highway Administration's Value Pricing Pilot Program. Attached is the latest update of the draft final report of the study. The previous version was dated December 5, 2007. This update contains several key updates to the December 5 version. Rather than highlight the updates in the document itself, this memo describes the updated content.

The majority of the updates to this report are the result of an updated toll search methodology being used. Previous results reported to the task force were based on a toll search algorithm that used vehicle speed as the criterion for "free flow." However, it was discovered that updating the toll search algorithm to use a volume-to-capacity (V/C) ratio range instead of a speed range provided better convergence to the appropriate usage levels on the toll lanes.

This change in toll search methodology required that all of the scenarios be rerun. As such, all model output has been updated in this report. All previous report content that documented toll rates, traffic volumes, transit or HOV use, or system revenue has been updated.

Another aspect of the study methodology that was updated since the December 5 draft was the accessibility analysis. It was determined that the TPB accessibility analysis tool being used for the assessment of land use impacts and benefit distribution needed to be updated to translate tolls into values of time when assessing the numbers of jobs and households accessible within 45 minutes. The update resulted in accessibility maps that showed some decreases in accessibility due to the tolls. These decreases were especially significant in Arlington, Alexandria and Anacostia, as the high bridge tolls increased the "effective travel time" between these locations and job sites in downtown Washington.

The changes described above resulted in significant updates to the model output reported in the following sections:

- 4.1: Potential Demand and Revenue
- 4.2: Scenario Financial Feasibility
- 4.3: Impact of Transit on Performance of the Scenarios
- 4.6: Evaluation of Potential Land Use Impacts

4.7: Connectivity to the Regional Core and Activity Centers

Other significant updates:

Since the December 5 draft report, the following sections were added or significantly updated:

Chapter 1: Executive Summary

An executive summary was added to the report. This section summarizes the technical results of the study at a general level.

Chapter 5: Impacts of Pricing Scenarios on Different Populations

The accessibility analysis results were combined with the Census Transportation Planning Package (CTPP) data to determine the accessibility changes on different population groups. In this analysis, no particular group experienced significant losses of accessibility in any of the three scenarios.

Section 6: Topics for Further Consideration

Section 6.2.4 has been updated to include a richer discussion of how individual VPL projects might be incorporated into the CLRP.

Chapter 8: Supplemental Maps and Figures

In the development of this report, it was determined that only a subset of the maps generated in this study would be presented in the body of the document, and that they would be presented in a small format. This decision was made to increase the readability of the report, and to prevent the document from becoming overwhelmed with full-page versions of every map and figure of potential interest. In certain sections, the body of the report contains only one example map, in a small format, illustrating a concept or analysis result. However, other maps and figures illustrating results for other scenarios are located in the Supplemental Maps and Figures chapter, towards the end of the report.