

# National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

## MEMORANDUM

TO: TPB Scenario Study Task Force

FROM: Ronald F. Kirby  
Director, Department of  
Transportation Planning

SUBJECT: Response to Comments on the TPB Scenario Study–CLRPs Aspirations Submitted  
by the TPB Citizens Advisory Committee

DATE: October 15, 2008

The following summarizes the six comments received from the TPB Citizens Advisory Committee with regard to the CLRPs Aspirations Scenario as presented to the TPB at their September 17<sup>th</sup> meeting, and the respective TPB staff responses.

### **1. Tie the development of the scenarios more explicitly to the TPB Vision.**

*“The previous RMAS study was borne out of CAC recommendations that there still existed significant gaps between the desired outcomes expressed in the TPB Vision and the forecasted outcomes of the CLRPs. While the current scenario study continues the work of RMAS and is largely based on the RMAS assumptions, there should be an explicit focus on achieving the vision goals.”*

The TPB Scenario Study is currently designed to reflect the principles and goals set forth by the TPB Vision. However, more explicit connection between the scenario and strategies outlined by the TPB Vision are possible particularly regarding the promotion of compact, walkable activity centers. Please refer to the TPB Response to Comment #1 in the memorandum addressing similar comments received from TPB member, Harriet Tregoning.

### **2. Transportation planning must take a more targeted approach for assigning land-use shifts among activity centers in both the CLRPs Aspirations and “What Would It Take?” (WWIT) scenarios based on an explicit connection to the TPB vision.**

*“Within the TPB Vision are various goals that should guide the development of the land use in the CLRPs Aspirations scenario. An example is under Goal #2 of the TPB Vision, there is an objective to create “economically strong regional activity centers with a mix of jobs, housing, services and recreation in a walkable environment.” In order to explicitly achieve this objective with the land use portion of the scenario, staff should develop “rules” to guide where expected growth should go.”*

Please refer to the TPB Response to Comment #1 in the memorandum addressing similar comments received from TPB member, Harriet Tregoning.

**3. The transportation component for the Aspirations scenario should focus highway and transit accessibility improvements on prioritized activity centers identified by a more targeted land-use development approach.**

*“The CAC recommends that dedicated access and egress points to the priced network are focused on major “magnet” activity centers.”*

In developing the CLRP Aspirations Transportation Component, TPB staff is currently studying the removal of interchanges outside of activity centers, which were previously included in the studied network of variably priced lanes.

**4. There should be a clearly articulated interaction between Aspirations and WWIT so that the conclusions from WWIT can be used to further explore options in the Aspirations scenario.**

*“The CAC recommends that the CLRP Aspirations and “What Would it Take” (WWIT) scenarios should be developed in concert, so that strategic interactions may occur.”*

The Scenario Study is currently following a timeline that allows for interaction between the scenarios. The CLRP Aspirations and WWIT scenarios will be done concurrently; however, they will follow slightly different schedules. Development of the CLRP Aspirations scenario, including finalization of the land use inputs and completion of transportation network coding, is expected to be completed by January 2009. Completion of scenario analysis and finalization of results is expected to be completed in June 2009, followed by public outreach in June and July 2009. Analysis of the WWIT scenario is expected to be completed prior to the CLRP Aspirations scenario in January 2009 since it will not be relying on the travel demand model for results. At this point, the results of the WWIT scenario can begin informing the analysis of the CLRP Aspirations scenario.

Both scenarios will also be analyzed using comprehensive cost-benefit analysis to compare alternatives including transit, highway, and “nonstructural” approaches—such as congestion pricing, parking policies and technology based investments. The results will provide a mix of investments from both scenarios most likely to deliver the maximum net economic value.

**5. External factors such as gas prices and housing issues must be addressed either through change to the model or by using other tools to analyze the potential effects of these factors.**

*“In the past year we have seen several major external factors that have and will continue to affect transportation and housing choice. For instance, the price of fuel has been rising at a far more rapid rate than we have seen before and driver behavior has changed in a similar, dramatic manner. The travel demand model, which currently is the primary analysis tool for the scenario study, is not currently equipped to predict such drastic changes.”*

Please refer to the TPB Response to Comment #5 in the memorandum addressing similar comments received from TPB member, Harriet Tregoning.

**6. Develop the Scenario Study process to support creation of a Financially Unconstrained Transportation Plan of regionally prioritized projects for consideration.**

*“The CAC has repeatedly advocated for more rigorous regional prioritization of transportation projects. The Scenario Study process offers a well structured and informed process for advancing this objective.”*

The TPB Scenario Study is intended to serve as a de facto unconstrained long range transportation plan that can directly inform the development of the CLRP, particularly the 2010 full CLRP update. The comprehensive cost-benefit analysis intended to be used in the scenario analysis also provides an opportunity to begin prioritizing the projects within the unconstrained plan.

## MEMORANDUM

**DATE:** September 17, 2008  
**TO:** TPB Scenario Study Task Force  
**FROM:** TPB Citizens Advisory Committee  
**SUBJECT:** Recommendations on the Development of the “CLRP Aspirations” and “What Would It Take?” Scenarios

### Introduction

In keeping with the mission and vision of the TPB and work underway in the Aspirations Scenario and the “What Would It Take?” Scenario, the TPB Citizens Advisory Committee (CAC) convened a subcommittee to:

- **Analyze** the design of the two new scenario studies;
- **Identify** relevant issues proposed in citizen comments; and,
- **Develop** recommendations for consideration by the Scenario Task Force.

The primary purpose of this document is to bring to the attention of the Task Force a variety of considerations for the design of the two scenarios that the CAC believes can affect results of the Travel Demand Forecast Model, and better bring into focus key differences in strategy leading to different outcomes; thereby improving the analysis possible from these forecasts. The CAC sincerely hopes this will contribute to a spirited discussion of scenario assumptions and findings – as we believe this is one of the most important outcomes of the Scenario process for supporting transportation planning in our region.

### Background

Throughout the 2008 calendar year, the TPB Citizens Advisory Committee (CAC) discussed newly emerging and ongoing initiatives of the TPB and identified several TPB work activities and national and regional issues of interest to committee members. A common focus of these discussions was how the committee could assist the TPB in implementing the TPB Vision to meet long- and short-term strategic goals and objectives. The connection between the construction of the scenarios and the TPB Vision is a central factor behind the CAC recommendations presented below.

The CAC recognizes the need for expanding capacity in the Region’s transportation network, but also appreciates the need to optimize existing transportation infrastructure, as it is likely to be the most cost-effective strategy for meeting our region’s demand for mobility. The escalating cost of new construction, increasing demands for maintenance of existing infrastructure, and the available funds that area jurisdictions dedicate to transportation all argue for leveraging more effective use of what we’ve already built and planned. Regardless of one’s preference for transit mode, the CAC believes that active use of the Scenario process by the TPB and area leaders can contribute to strategic planning of the DC Metro-area transportation network in the years ahead. The process can and should be used to enhance coordination, efficiency and prioritization of transportation projects.

### Recommendations

The CAC is hopeful that the TPB members use the scenarios under development to fully explore the priorities that will guide the build-out and development of our regional transportation

infrastructure over the next 10-20 years. The scenarios are tools that should productively inform strategic thinking and prioritization of regional mobility options by providing the TPB with contrasting outcomes resulting from emphasizing various strategies, including highway, transit, land use and urban form.

The CAC developed **six recommendations** to inform the development of the two scenarios:

1. Tie the development of the scenarios more explicitly to the TPB Vision.
2. Transportation planning must take a more targeted approach for assigning land-use shifts among activity centers in both the CLRP Aspirations and “What Would It Take?” (WWIT) scenarios based on an explicit connection to the TPB vision.
3. The transportation component for the Aspirations scenario should focus highway and transit accessibility improvements on prioritized activity centers identified by a more targeted land-use development approach.
4. There should be a clearly articulated interaction between Aspirations and WWIT so that the conclusions from WWIT can be used to further explore options in the Aspirations scenario.
5. External factors such as gas prices and housing issues must be addressed either through change to the model or by using other tools to analyze the potential effects of these factors.
6. Develop the Scenario Study process to support creation of a Financially Unconstrained Transportation Plan of regionally prioritized projects for consideration.

These six recommendations are explained in greater detail below.

#### Recommendation #1: Tie the Scenarios to the TPB Vision

The previous RMAS study was borne out of CAC recommendations that there still existed significant gaps between the desired outcomes expressed in the TPB Vision and the forecasted outcomes of the CLRP. While the current scenario study continues the work of RMAS and is largely based on the RMAS assumptions, there should be an explicit focus on achieving the vision goals. For instance, the sixth vision goal includes a proposed strategy to “plan for development to be located where it can be served by existing or planned infrastructure”. In order to link the scenario outcomes to this goal, the land use scenario could locate all future growth in prioritized regional activity centers and also adjust activity centers to reflect current and future transit infrastructure. By tying the CLRP Aspirations scenario to the TPB Vision, the CAC recommends that the goal of the Aspirations scenario be to shape a long-term, financially unconstrained multi-modal transportation plan that includes all highway, transit and land-use aspirations for our region; and that the plan serve as the framework for establishing transportation investment priorities directly tied to TPB goals.

#### Recommendation #2: Adopt a Targeted Approach for the Land Use Component

Within the TPB Vision are various goals that should guide the development of the land use in the CLRP Aspirations scenario. An example is under Goal #2 of the TPB Vision, there is an objective to create “economically strong regional activity centers with a mix of jobs, housing, services and recreation in a walkable environment.” In order to explicitly achieve this objective with the land use portion of the scenario, staff should develop “rules” to guide where expected

growth should go. The essential characteristics of the walkable, “compact community” is that there is: [a] a balance of households and employment opportunity; and, [b], benefits derived by virtue of a critical population threshold, for example, convenient shopping and entertainment. Such communities demonstratively reduce VMT and the use of the transportation network for daily trips. In order to provide a mixed use, walkable environment, the scenario approach could include achieving a jobs/housing balance in each activity center and a walkable density in the activity center, which can approximate proven regional models such as Rosslyn-Ballston corridor/Old Town Alexandria. It is important to note that since this may not be appropriate or possible in every activity center, a system of allocating growth to major “magnet” activity centers is needed. The CAC recommends that staff determine the appropriate density and jobs/housing balance for activity centers based on their current development patterns and projections and on the characteristics of their surrounding areas. The analysis of centers can be characterized using a set of evaluation criteria and conditions that support and substantiate recommendations (based on quantitative evidence) that it qualifies for consideration as an ideal candidate for a compact, walkable community. Examples of pre-decisional evaluation criteria include, but are not necessarily limited to, the following:

- Undeveloped land adjacent to a transit node
- Transit/HOT-lane connectivity
- Excess transit capacity
- Population density
- Linkages to one or more mass-transit options
- Area-types (i.e. street network(s))

#### Recommendation #3: Adopt a Targeted Approach for the Transportation Component

The CAC recommends that the Aspirations scenario incorporate the recommendations of the variable priced lane (VPL) third option to include VPLs on all major highways in the region with collected funds put toward the support of a comprehensive bus rapid transit (BRT) to augment and supplement the existing mass transit option presently provided. This is in support of many of the Vision goals, including goal 7, which calls for the development of enhanced funding mechanisms. This component needs to be fully explored to ensure that the most reasonable assumptions regarding actual construction and modification of existing roadways are used to design the scenario. There needs to be careful consideration of where VPLs will connect to the exiting highway network and the number of interchanges proposed. The CAC recommends that dedicated access and egress points to the priced network are focused on major “magnet” activity centers. This will reduce the cost of the VPL network; and reinforce the desired shift of jobs and households into targeted areas promoting the more compact, walkable communities desired to reduce transit demand. The CAC recommends that the BRT system under evaluation be focused on major “magnet” activity centers to reduce dependence on automobile trips.

#### Recommendation #4: Increase Integration Between The Scenarios

The CAC recommends that the CLRP Aspirations and “What Would it Take” (WWIT) scenarios should be developed in concert, so that strategic interactions may occur. For instance, the CLRP Aspirations scenario may need to be modified by an iterative process with the WWIT scenario in order to best represent the TPB Vision and realistic external concerns, such as climate change. Likewise, the WWIT scenario should be developed with the goals of the CLRP Aspirations scenario in mind by incorporating measures of VMT and congestion indicators as well as CO<sub>2</sub> to

highlight the different outcomes resulting from different strategies modeled (i.e. some strategies such as maximizing low-carbon fuels may reduce CO<sub>2</sub>, but not reduce VMT or congestion, others may serve to both reduce CO<sub>2</sub> and VMT, but have less affect on congestion, etc...)

#### Recommendation #5: Better Consider External Factors

In the past year we have seen several major external factors that have and will continue to affect transportation and housing choice. For instance, the price of fuel has been rising at a far more rapid rate than we have seen before and driver behavior has changed in a similar, dramatic manner. The travel demand model, which currently is the primary analysis tool for the scenario study, is not currently equipped to predict such drastic changes. Therefore, fuel prices continue in the forecasts to rise with inflation, which falls significantly short of what we're currently observing. Empirically we can see that this has likely been a contributor to a shift in housing/community design preferences. Robert Charles Lesser & Co. conducted a dozen consumer preference surveys for builders in suburban and urban locations to help design their developments. Each study found that about one-third of respondents prefer smart growth housing and communities. Other studies have corroborated these results, including the National Association of Homebuilders, the National Association of Realtors, and the Fannie Mae Foundation. Chris Leinberger of the Brookings Institution reports that because the demand for housing in compact, mixed-use neighborhoods is greater than the current supply, the value of such houses is substantially greater – from 40 to 100%, compared to houses in nearby single-use subdivisions. Households without children will account for close to 90 percent of new housing demand through 2025, and single person households will account for one third. Nationwide projections are that the demand for attached and compact housing will exceed the current supply by 35 million units (71 percent), while the demand for large-lot housing actually will fall short of the current supply. Indications are that the supply of traditional subdivision homes with large lots is overbuilt, and that demand for compact, walkable communities will only increase in coming years. The CAC recommends that staff develop a method to analyze for these factors in the demand model, either within the model or by other means.

#### Recommendation #6: Support creation of an Unconstrained Transportation Plan

The CAC has repeatedly advocated for more rigorous regional prioritization of transportation projects. The Scenario Study process offers a well structured and informed process for advancing this objective. Necessarily, TPB members should be actively engaged in the design of the scenarios for the project to successfully form the basis of a long range, regional, Financially Unconstrained Transportation Plan. Such a plan could sharpen the strategic thinking of the TPB, and invigorate a regional prioritization process for project selection. The CAC requested TPB staff to provide background on the value of unconstrained long range plans to other Metropolitan Planning Organizations, and based upon other MPO's experience, is impressed with the value such plans confer. Advantages include: informing a regional dialogue about transportation issues; creating a comprehensive vision for an interlocking transportation network; a plan for staging projects that do not yet comply with requirements for inclusion in the CLRP; and as a tool to advocate for funds.