

TPB TECHNICAL COMMITTEE ITEM #1



National Capital Region  
**Transportation Planning Board**

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Technical Committee Minutes

For the meeting of  
**OCTOBER 6, 2017**

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TRANSPORTATION PLANNING BOARD  
Technical Committee Meeting

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Minutes

**1. Welcome and Approval of Minutes from the September 8, 2017 Technical Committee Meeting**

Participants introduced themselves. The September minutes were approved unanimously.

**2. Visualize 2045 Constrained Element: Technical Inputs Solicitation and Air Quality Conformity Analysis**

Mr. Austin spoke to the Technical Inputs Solicitation document. He stated that the content had not changed significantly and described some minor changes since the previous month's draft. He noted that the correct due date for project submissions had been updated to November 15. Mr. Austin credited Ben Hampton with the development of the content and management of the design of the document. He added that staff was spending more time on design than had previously been done because this document would be the first in a suite of Visualize 2045-branded publications. Mr. Austin noted that a decision had been made to forgo the production of an accompanying brochure for the Solicitation document, as the new content structure and design accomplished most of the needs that the brochure had met for previous Call for Projects documents. The instructions for submitting project description data would be separated as a technical index posted online. He stated that the TPB would be asked to approve the Technical Inputs Solicitation at the October 18 meeting.

Ms. Massie asked if sample forms would be included in the final document. Mr. Austin said they would be included in the final version of the appendix.

Mr. Srikanth noted that since this was a quadrennial update of the region's long-range plan, it was very important to update the cost and completion dates of all projects already included in the plan and that the November 15 deadline was crucial to staying on schedule for the approval in 2018.

**3. Visualize 2045 Financial Element: Initial Financial Analysis**

Mr. Randall provided an update on the progress of the financial element of the Visualize 2045 long range plan, a federally required part of the long-range plan. He spoke to a memorandum distributed to the committee that reviewed the status of the initial or baseline financial analysis, which will inform the Technical Inputs Solicitation. He reported that the major agencies, including state DOTs, WMATA, and NVTA, have completed their revenue forecasts and their updates for currently planned projects and programs in the TIP/CLRP database in September. At this time, approximately \$235 billion in reasonably anticipated revenues has been forecast for the period 2019 through 2045. Staff are still working to refine those estimates, with information from the local jurisdictions anticipated in the new few weeks. In addition, staff will be watching the ongoing regional discussions on dedicated funding for WMATA's state of good repair program and state support for the Virginia local transit services. On the expenditure side, the major agencies in the region have calculated \$267 billion in currently planned or needed expenditures on the region's highway and transit systems through 2045. So, there is still a difference that will have to be reconciled to demonstrate financial constraint over the next several months. All financial information will have to be completed and assumptions finalized in December, when the conformity analysis process will start.

Mr. Srikanth emphasized the major pieces of outstanding information, including local jurisdiction funding for Metro and for highways. This information is needed to complete the analysis.

#### **4. Visualize 2045 Public Outreach: Public Input Survey Preliminary**

Mr. Hampton briefed the committee on some high-level preliminary findings from the Visualize 2045 public input survey, which took place over the summer and closed August 21. The survey results are meant to inform ongoing discussions related to the development of Visualize 2045 as well as to be included in the final plan to inform future planning and decision making processes in the region.

Mr. Hampton noted that “reliability” and “travel time” stood out as key factors that people said influenced their travel choices. He said that “traffic congestion,” “time spent in traffic,” and “need for rail transit options” all stood out as top issues affecting people’s daily travel experience. And he showed that respondents had shared nearly 17,000 suggestions for potential improvements to the region’s transportation system.

Mr. Srikanth highlighted some of the questions that staff will be seeking to answer in their more in-depth analysis of the survey results. Among those, he said, was how the responses differed between the “random” and “open survey” samples.

Mr. Erenrich pointed out that a high number of walking and bicycling ideas had been offered on the interactive map portion of the survey but that a need for walking and biking options had not been a top issue identified by respondents. Mr. Hampton noted that there were potential reasons for the high number of bicycling and walking ideas that staff would be investigating further.

Mr. Holloman asked whether any particular trends or projects stood out in the data from the interactive map of suggested transportation improvements. Mr. Hampton noted that staff have not yet looked that deep in the data but that that will definitely be one of the things they look for.

Mr. Lake asked how “rail transit” was defined in the survey, in particular, whether it specifically mentioned Metro, MARC, VRE, etc. Mr. Hampton said that in the interactive map portion, the drop-down menus for “rail transit” options identified the different options within that category and that respondents were prompted to specify which sub-mode they were interested in. In the earlier part of the survey, rail transit was only defined broadly.

#### **5. Briefing on the Air Quality Conformity Analysis of the VDOT and MDOT Off-Cycle Amendment to the 2016 CLRP**

Ms. Posey reminded the group that she went over the results of the conformity analysis last month and presented those results to the TPB. She noted that the draft conformity report was posted on the website in time for the beginning of the public comment period which started on September 14 and ends on October 14. She indicated that, no comments have been received as of yet and that she will be presenting the results to Metropolitan Washington Air Quality Committee (MWAQC) Technical Advisory Committee (TAC) next Tuesday. She said she expects that MWAQC will provide a comment letter. The board will be asked to approve the conformity analysis and the amendments to the 2016 CLRP at its October meeting. Ms. Posey reminded the group that VDOT had asked to include two options for the I-66 outside the Beltway project and had agreed to select either Option A or Option B before the TPB approval in October. She noted that VDOT has indicated that they are going with Option A, and will provide a letter indicating this in time for the TPB mailout next week.

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## **6. Approval of Projects Recommended for Funding Under the FY 2018 Transportation Alternatives Set Aside Program for the District of Columbia**

Referring to a handout document, Mr. Swanson briefed the committee on the projects that had been recommended for funding in the District of Columbia under the Transportation Alternatives Set-Aside Program. He described the purpose of this federal program and the process for developing recommendations for the funding. He said that the TPB had been sub-allocated \$1.15 million this fiscal year. He said that five applications had been received this year, totaling more than \$1.6 million in requested funding. He said the selection panel had recommended full or partial funding for all the applications. He said the TPB would be asked to approve the recommended projects at its October meeting.

## **7. Long-Range Plan Task Force Status Report**

Mr. Srikanth and Mr. Grant of ICF provided a status update summarizing the proceedings of the September 20, 2017, Long-Range Plan Task Force (LRPTF) meeting. Two memos were presented, the first summarizing the analysis and work conducted in the previous month, including the technical analysis, and a list of Measures of Effectiveness (MOEs) for LRPTF discussion at the November meeting. The memo concludes with the TPB and LRPTF meeting schedules. The schedule describes the steps to discuss the process of communicating results and selecting initiatives for recommendation to the TPB for endorsement of future action.

Mr. Holloman inquired if the LRPTF has reviewed the meeting schedule and if they have the option of selecting all ten initiatives for recommendation to the TPB for endorsement. Mr. Srikanth clarified that a discussion on selecting a limited set of, or all, initiatives is slated for the October 18 LRPTF meeting. Ms. Snyder asked if the November 29 meeting was described as a tentative date to the LRPTF members, Mr. Srikanth clarified that the information will be shared the week of October 9, 2017.

Mr. Grant presented the second memo, in draft form for TPB Technical Committee review and to be finalized prior to sending to the LRPTF next week for review. The memo describes the updated work to MOE's including revisions and updates in response to feedback received at the September LRPTF meeting. The memo goes on to describe how inputs not addressed as part of the MOEs will be considered.

Mr. Weissberg asked how land use was being used as a tool for managing congestion. Mr. Srikanth referred to Option 1 on page 5 of the first memo which is focused on land use and the job/housing balance in the region as well as it being used throughout other initiatives. Mr. Weissberg clarified it as a tool for managing congestion. Mr. Srikanth agreed and referred to the initial drivers and charges of the LRPTF stemming from congestion measures in the 2014 CLRP.

Mr. Erenrich asked if, on the rail transit crowding measure, quantifying increased crowding at max load points throughout the transit network could be used. Mr. Grant agreed that the information could be pulled and noted the technical team's approach of presenting the information qualitatively instead of with specific figures. Mr. Grant suggested the memo could be revised to make the indicator clearer. Mr. Milone added that the model itself knows where max load points are and considered it as part of considering this topic. Mr. Srikanth noted the challenges of analyzing all ten measures and going into in-depth technical detail on each one.

## **8. Critical Urban Freight Corridors**

Mr. Schermann presented on critical urban freight corridor (CUFC) segments for the Maryland, District of Columbia, and Virginia portions of the National Capital Region.

Critical urban freight corridors are one component of the National Highway Freight Network established through the FAST Act. Most of the mileage of the National Highway Freight Network was designated by Congress within the legislation itself, but states and MPOs are authorized to designate critical rural and critical urban freight corridors that, once approved by the FHWA, become part of the National Highway Freight Network. The FAST Act also provides limited dedicated federal funding for the national highway freight network for projects that contribute toward the efficient movement of freight. According to the FAST Act regulations, after December 4th of this year states will only be able to use national highway freight program funds on roadway locations on the approved national highway freight network. Maryland was allocated 75 miles of CUFCs of which 25 are available to the Maryland portion of the National Capital Region (NCR); Virginia was allocated 83.35 miles of CUFCs of which 17.8 are available to the Virginia portion of the NCR; and the District of Columbia was allocated 75 miles of CUFCs.

A data-driven methodology was used to identify the proposed CUFC segments for each state. The methodologies used for the Maryland and Virginia portions of the NCR were similar in that truck volumes, freight density, connections to intermodal terminals, and location of programmed projects were used to identify the proposed CUFC segments. The District of Columbia used the 2010 District truck and bus route designation analysis combined with consideration of additional factors to identify their 75 miles of proposed CUFC segments.

TPB staff will present proposed NCR CUFCs to the board as an information item at the October TPB meeting and will request board action to designate the proposed CUFCs at the November TPB meeting.

In response to a comment from Mr. Brown, Mr. Schermann agreed to double check the “to” and “from” points for the proposed Virginia CUFCs and use road names instead of route numbers on the table. In addition, Mr. Brown suggested that the funding source for projects on VA 28 should be checked because there is a special tax district to support that roadway and it might not need federal funds. Mr. Schermann agreed to check that and in response to another comment, Mr. Schermann noted that the CUFCs are not required to be contiguous. Mr. Burns asked about the level of federal funding available to the states through the National Highway Freight Program. Discussion on this topic revealed that there is roughly \$6 million per year for the District of Columbia, roughly \$20 million per year for Maryland, and about \$28 million per year for Virginia. It was also noted that this does not represent new money, but rather an apportionment of existing formula funds.

#### **9. Notice of Proposed Amendment to Update Projects and Funding in the District of Columbia Section of the FY 2017-2022 TIP**

Mr. Austin reported that the District Department of Transportation (DDOT) had requested an amendment to update all projects and funding to match their draft FY 2018-2022 STIP. He said that since it was a full section update, the amendment would be released for a 30-day public comment period on October 12 and then sent to the TPB for approval on November 15.

#### **10. 2017-2018 Regional Travel Survey Update**

Dr. Joh provided an update on the 2017-2018 Regional Travel Survey, a once-in-a-decade household travel survey for the National Capital Region that launched on October 3, 2017. He presented a brief overview of the survey, drawing comparisons with the 2007 Household Travel Survey. Dr. Joh gave a brief review of the pre-test survey results focusing on differences in response rates between smartphone app households and web survey households, discussed the modifications for the main survey, and the main survey schedule.

Mr. Holloman asked whether materials for survey recruitment and outreach would be available in languages other than English. Dr. Joh stated that the printed materials used for survey recruitment included a message for Spanish language speakers to call a number to take the survey in Spanish. He added that staff is working with a subcontractor to engage in targeted outreach that will develop specialized materials for these targeted groups. Mr. Holloman also asked how much data is currently available from cell phone providers and how this data could help with the analysis of the survey. Dr. Joh replied that the survey relies on a Google geocoder to record household trips and that since this data is proprietary, it may not be available for analysis. Mr. Srikanth added that the critical value of this survey is to capture a representative sample of the region's travel behavior that will be needed for developing travel models used by TPB.

Mr. Brown commented that he participated in the survey pre-test as a smartphone app household and acknowledged its issues. Dr. Joh replied that the smartphone app worked better for auto trips compared to transit, walking, and biking trips. Based on testing by staff, there was a lack of confidence in the quality of data captured by the smartphone app, which influenced the decision to not include the smartphone app in the survey. Mr. Lake asked whether 15,000 responses from the survey would be a statistically representative sample for the region. Dr. Joh responded that 15,000 would be sufficient to analyze regionwide as well as sub regions (e.g., core, inner/outer suburbs), but not enough for analysis in smaller jurisdictions.

Mr. Srikanth added that this survey is conducted every 10 years because it costs between \$2-3 million to conduct the survey.

Mr. Nampoothiri asked what efforts will be made to increase the response rate. Dr. Joh responded that modifications to the main survey such as increasing the incentive amount for participation, changing the mail recruitment protocol, and relying strictly on the web survey will likely increase the response rate.

## **11. Regional Transportation Demand Management Evaluation Report**

Mr. Ramfos, Transportation Operations Programs Director, first discussed the objective of the regional Transportation Demand Management (TDM) evaluation project. The effectiveness of the Commuter Connections TDM programs which were initially adopted by the TPB as Transportation Emissions Reduction Measures (TERMs) are calculated and include the Telework, Guaranteed Ride Home, Employer Outreach and Mass Marketing programs. Results are also documented for the long-standing Commuter Operations Center. The data collection and analysis period occurs over three years and is key to measuring the effectiveness of the overall program. TPB recognizes the importance and need of this program and the many benefits it provides including the reduction of congestion, supporting transit use and TOD, conserving energy, providing mobility options, and reducing emissions and improving air quality.

Mr. Ramfos then reviewed the impacts calculated as part of the evaluation including VT/VMT impacts, emission reductions, reduction in congestion through reduced hours of peak hour delay, reduction in fuel consumption through gasoline cost savings, improvement in health/safety through accidents reduced, and noise pollution reduction through reduced motor vehicle noise. The program also helps support mobility options. A detailed framework methodology which is a "blueprint" of how data is collected for the project was initially produced and is regularly updated as part of the three-year data collection cycle. The results are analyzed and used as part of the regional transportation planning process through the CMP and into the future as part of performance based planning activities. During the data collection period, there are several studies and reports produced including the State of the Commute, Placement Rate Study,

Retention Rate Survey, Guaranteed Ride Home participation survey, and an analysis of the regional Employer Outreach database to name a few.

The data produced helps the region to assess TDM contributions to regional goals and the documented benefits can demonstrate TDM's wider range of societal benefits and contribution to regional transportation system performance. Mr. Ramfos explained that in the most recent regional TDM Evaluation Project Framework Methodology document update efforts were expanded to collect data on societal benefits. These benefits included data from the 2016 State of the Commute survey and program user surveys that defined program user travel route and time and role of TDM in quality of life/livability and transportation satisfaction as well as performance based planning activities. New measurement tools were explored to estimate societal benefits such as accident reduction as a result of the program based on reduced VMT. The update of the document can also allow for use of data collected to be analyzed with travel movement data sources for location-specific analysis.

Mr. Ramfos stated that once the data results are packaged they are used to communicate not only the results but the associated benefits of the program. The data can be used for tracking purposes such as mode use, telework use, awareness of commuter services, perception of access to transit and regional transportation infrastructure. The data has proved to be valuable to Commuter Connections partners, funding agencies and other audiences such as the media and researchers. The overall program evaluation allows for the identification of the ROI of the program and helps the TPB to recognize the program's impacts. The Framework document update organizes the data to facilitate the communication of the regional TDM program results and its value to stakeholders. Results are also package for dissemination through social media channels, targeted emails and research briefs such as a recent White Paper that was written and released on the examination of Flextime Incentives.

Mr. Ramfos then reviewed the overall program results dating back to 1997 through 2017. The 2017 results are currently in draft format. Results shown in the charts include daily vehicle trips reduced, daily VMT reductions, daily tons of NOx and VOC reduced, annual tons of PM2.5 reduced, annual tons of PM 2.5 Precursor NOx reduced, and annual tons of CO2 reduced. In short, VT and VMT reductions have been increasing but air quality impacts have either decreased or have remained flat due to a cleaner vehicle fleet. Lastly, he showed a benefit cost savings chart illustrating the societal benefits of the program including air pollution reduction, greenhouse gas reductions, noise pollution reduction, congestion reduction, fuel savings and health/safety benefits. In total the daily cost savings of the program totals to \$1.2 million per day. Multiply this over 250 working days and the program's benefits are \$300 million dollars per year.

## **12. Regional Bus Lane Enforcement Study Report**

Mr. Roisman presented information on the subject study completed under the WMATA Technical Assistance Program of the FY17 UPWP. The study was completed under contract with Kittleson & Associates, Inc. (KAI) and Foursquare Integrated Transportation Planning (FITP). Mr. Roisman introduced Mr. Burak Cesme of KAI, representing the study contractor. The study aimed to answer four recurring questions about urban bus lanes: (1) how do we build bus lanes that are effective and safe (2) how do we educate all users of the right-of-way surrounding bus lanes (3) what kind of legislative initiatives should be introduced to enable enforcement of these lanes (4) what are the most effective bus lane enforcement strategies. The study identified strategies for effective bus lane management related to stakeholder coordination, enforcement, legislation, and education and outreach. The study also developed bus lane enforcement strategies for local jurisdictions and, a short term implementation plan (including monitoring), and undertook a benefit-cost analysis of various enforcement strategies. The full report was included with the

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Technical Committee mailout and all materials are available on the COG website. There were no questions from Committee members following Mr. Roisman's presentation.

### **13. Results of the VDOT I-66 Inside the Beltway Bus on Shoulder Pilot Project**

Mr. Roisman presented information on the subject project completed by VDOT with TPB staff support under the Virginia Technical Assistance Program of the UPWP. He provided background on the TPB's Bus on Shoulder Task Force that was active in 2012 and 2013 when VDOT began their pilot planning for I-66. Several bus on shoulder segments on I-66 inside the Beltway were identified in the planning study, which also developed the operating protocols and evaluation criteria for the pilot, as well as a monitoring and public outreach / education plan prior to activating the pilot. VDOT completed the shoulder upgrades, signs and markings, and other construction during its regular construction season in 2013 and 2014 at a cost of \$600,000. A bus operator training video was developed, as was a MOU between the Commonwealth and the four transit operators with service on I-66 inside the Beltway: WMATA, PRTC, Fairfax Connector, and Loudoun County Transit.

A final agreement could not be reached on indemnification language and terms of the MOU with three of the four transit operators, so when the pilot began on March 23, 2015 only PRTC participated. Secretary Layne announced plans for Transform 66 Inside the Beltway on March 12, 2015 – these improvements would obviate the need for bus on shoulder, and construction would impact the pilot locations. The pilot continued until July 15, 2016 and was mutually terminated at that time by VDOT and PRTC to allow for the start of construction for Transform 66. The results of the pilot were inconclusive due to only one operator participating, low utilization, the relatively short length of the bus on shoulder pilot segments, and limited data on other metrics. However, the pilot did demonstrate that low-cost improvements such as bus on shoulder are feasible and can be implemented. Project development and implementation takes longer than expected, even for a low-cost pilot. Risk management and legal staff should be engaged early in the planning process, and existing and planned operational conditions in a potential bus on shoulder corridor can change very quickly, and may supersede a pilot project while still meeting bus on shoulder goals.

Mr. Srikanth added that the short length and discontinuity of the pilot segments contributed to the low utilization and that factor should also be included with the lessons learned based on feedback VDOT received from the transit operators. Mr. Roisman agreed and noted that the segments were all one mile or less in length and since the buses still had to merge back into traffic at the end of the segment, the perceived time savings compared with the difficulty of the merge eventually resulted in bus drivers not using the shoulders. Ms. Massey echoed that point. Mr. Srikanth added that logical termini for the segments, such as a Metrorail station or other bus service point, would also have provided additional benefit and potential utilization.

### **14. Street Smart Annual Report**

Mr. Farrell spoke to a PowerPoint on the Street Smart pedestrian and bicycle safety program. He discussed the regional pedestrian safety problem, the program funding, and the Spring and Fall campaign activities, including paid advertising, press events, street teams, "pedestrian alert zones", and "enforcement activation" events, which are often conducted in tandem with the Street Teams. The enforcement activations are a scheduled time and location when police issue warnings and citations. The press is invited to observe.

Program evaluation is done through a pre- and post-campaign survey, which is carried out in the Spring. There are 300 respondents, including pedestrians and drivers. Awareness of the ads



has been building from year to year, as the same “tired faces” ads have been used for five years now. Pre-campaign awareness as of Spring 2017 was 71%, which is high, but it did not increase after the spring campaign. We attribute that to low expenditures in the Spring, due mostly to resources being spent on development of a new campaign, “Shattered Lives”. He said that typically the program spends about 2/3 of the funds for the fall campaign wave.

Mr. Farrell previewed the near-final ads for the Technical Committee. All ads will be in English and Spanish. Mr. Farrell also showed the schedule of planned activities, essentially all of which will take place in November. Fall months/early winter months are the worst months for pedestrian safety. The press event will take place at 10:30 a.m. on Friday, November 3<sup>rd</sup> in Old Town Square in the City of Fairfax. He said the program will also launch a new mobile-friendly web site. Smart phones are far more prevalent now than they were even five years ago. He said the program is also working with the public transit subcommittee to get pro bono placement on public transportation. “Unaided” awareness is now 30% - 30% of respondents are able to describe our ads to us without being shown first. He said the program achieved a good level of awareness with this campaign, and since it started it has closed an initial gap between drivers and pedestrians, using pumptopper and internet video ads.

Mr. Meese asked Mr. Farrell to describe the work of the advisory group. Mr. Farrell replied that the advisory group had worked together through many meetings to develop the new ads, with the assistance of professionally managed focus groups. He said that staff has tried to make the advisory group as inclusive as possible.

Mr. Erenrich noted that Mr. Dunckel of Montgomery County DOT had been very active on the advisory group. Mr. Dunckel will soon be working for Maryland Highway Safety Office, so he will still be involved. He has been a leader on all of these issues, including Street Smart. Another member asked about digital shelters. Mr. Farrell replied that they are shelters with electric posters that can be rotated digitally.

## **15. Other Business**

Mr. Ritacco briefly updated and reminded the TPB Technical Committee on the upcoming deadline for the 2017 Enhanced Mobility grant solicitation period. The deadline for applications is November 3, 2017 and more than \$5 million in Federal funding is available for projects serving older adults and persons with disabilities.

Mr. Schermann announced to the TPB Technical Committee on the upcoming Regional Freight Forum on October 31, 2017. Theme is “freight as an enabler of livability.” All TPB Technical Committee members should have received a save-the-date email and will receive an email invitation on Tuesday, October 10, 2017. Please share the information with anyone in your offices that would be interested.

## **16. Adjourn**