

TPB TECHNICAL COMMITTEE ITEM #1



National Capital Region  
**Transportation Planning Board**

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Technical Committee Minutes

**For meeting of  
July 8, 2016**

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TRANSPORTATION PLANNING BOARD  
Technical Committee Meeting

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Minutes

**1. Welcome and Approval of Minutes from the July 8 Technical Committee Meeting**

A motion was made to approve the minutes. The motion was seconded and was approved unanimously.

**2. Briefing on Regional Car-Free Day 2016**

Mr. Franklin provided background on Car Free Day which started in Europe more than twenty years ago, and is now celebrated in cities throughout the world. Car Free Day promotes sustainable transportation measures as alternatives to single occupant car use. In Europe, Car Free Day is a culmination of Mobility Week where on September 22, participating cities set aside areas solely for pedestrians, cyclists and public transportation for the entire day. In an effort to reduce automobile pollution, one Sunday each month the city of Paris closes off its major boulevard, the Champs Élysées, to vehicular traffic. Within dozens of neighborhoods in London, a movement called 'Playing Out' blocks off traffic for three hours once each month to allow children to play outside on the streets. City officials have streamlined the permitting process to make starting a 'Playing Out' easy for neighborhoods to implement.

In the Washington D.C. region, Commuter Connections has been hosting the Car Free Day event since 2008. It is open to more than just commuters; anyone who ordinarily travels by single-occupant vehicle (SOV ) for errands, school or other purposes is welcome to participate. Car Free Day aims to encourage less driving and fewer trips by single-occupant vehicles, by asking participants to use travel alternatives including transit, bicycling, walking, ridesharing, or teleworking. In the Washington D.C. region, Car Free Day refers to carpooling and vanpooling, as "car-lite." Those who take the Car Free Day online pledge are entered to win raffle prizes, including Capital Bikeshare memberships, and SmarTrip cards loaded with fares. Commuter Connections members within various jurisdictions around the region host a number of Car Free Day events and promotions. For example, in Frederick County all buses and shuttles are free for the day. The Capital Area Car Free College Campus Challenge is a friendly competition between area colleges and universities, who are asked to spread the word to students, administration, and faculty to take the Car Free Day pledge. The Car Free Day proclamation will be signed at the TPB meeting on July 20, and the jurisdictions are encouraged to do the same.

Ms. Meredith Hill, MDSHA asked if any coordination takes place with elementary schools, to organize walking groups to school.

Mr. Franklin said that Commuter Connections has worked with elementary schools for its Guaranteed Ride Home program for parents who commute to a job outside the home. Outreach to schools for Car Free Day is a good suggestion.

Pierre Holloman, City of Alexandria asked how many jurisdictions plan to shut down a street. Mr. Franklin answered that none will have true street closures. He said that jurisdictions tend to include the Car Free Day message into existing street fairs, and farmers markets.

### **3. Briefing on the Draft National Capital Region Freight Plan**

Mr. Meese briefed the committee on the status of the Draft Regional Freight Plan. At the June 15 TPB meeting, TPB staff presented the draft plan and anticipated recommending board approval at the July meeting. The draft plan was open for public comment through July 9 and as of this time no comments had been received. Also, board members neither raised concerns nor asked questions at last month's meeting. Therefore, while formatting updates were underway, no substantive changes to the content of the draft plan had been made. Staff anticipated approval at the July 20 TPB meeting.

### **4. Briefing on Projects Recommended for Funding under the FY 2017 Surface Transportation Block Grant Set Aside program for suburban Maryland TPB Jurisdictions**

Lamont Cobb presented on the projects recommended for the FY 2017 Transportation Alternatives Program (TAP) in Suburban Maryland. Transportation Alternatives, formerly under MAP-21 federal legislation, falls under the Surface Transportation Block Grant program as a set aside through the 2015 FAST Act. The TPB uses TAP/STP Block Grant funds to complement the activities of the Transportation/Land Use Connections program, as well as promote regional goals and priorities of the Regional Transportation Priorities Plan. TPB staff worked with the Maryland State Highway Administration (SHA) and a selection panel of local transportation planners from Virginia and the District of Columbia. The panel recommended five projects for \$1,100,114 in funding. Two statewide TAP committees will decide on additional TAP/STP Block Grant funding in August. He stated that the TPB will review resolution R2-2017 and will be asked to approve the recommendations at the board meeting on July 20 meeting.

Mr. Orleans asked for more information regarding the Maryland Statewide TAP committees. Ms. Erickson responded that the state committees meet in Baltimore, including an executive committee with several senior officials in MDOT and other Maryland agencies. She stated that the executive committee was used for the Transportation Enhancements program and continues to work on TAP/STP Block Grant projects. She stated that Maryland has seen increased competition for TAP/STP Block Grant funds.

Mr. Swanson also stated that this was the second year that Maryland has had a competitive set of applications in the National Capital Region.

Mr. Cobb said he would provide Mr. Orleans with the TAP/STP Block Grant contacts in SHA.

### **5. Briefing on Regional Analysis on the Impacts and Communication Action TPB Staff WMATA SafeTrak Work Plan**

Speaking to a presentation, Mr. Pu reported the traffic conditions during the WMATA's SafeTrak Safety Surge 1, which took place during June 4-16, 2016. Based on the INRIX speed/travel time data provided by the I-95 Corridor Coalition Vehicle Probe Project, the analysis focused on regional overall traffic condition changes and identified the most-impacted time periods, geographic areas, highway routes and road segments. The analysis found that the regional overall congestion increased during Safety Surge 1 compared to the average conditions in May 2016. Freeways saw the largest increases: an 11% increase between 7:00-8:00 AM and a 6% increase between 4:00-5:00 PM. Arterials roadways also experienced increased travel times but the overall increase was less than 3% throughout the day. During Safety Surge 1, both the AM and PM peak periods were longer and worse than normal. A new traffic condition pattern was noticeable between 7:00-8:00 AM on the area's

freeways, especially during the first week of Safety Surge 1, as the congestion was noticeably higher than both May 2016 and the same time last year. Congestion patterns changed in notable ways over the course of Safety Surge 1 and they might be an indication of traveler's adjustments to the new travel pattern: during the first four weekdays, the AM peak period saw much larger congestion increases than the PM peak period; during the next three weekdays (weekends excluded), the pattern reversed and the PM peak period saw the greatest increases in congestion; for the last two weekdays, the AM peak period again had larger congestion increases than the PM peak period, but still less than in the first four weekdays of the Surge. A map comparing traffic conditions during Safety Surge 1 to typical May 2016 conditions was shown and the most significant congestion increases were found in the triangle formed by I-66 EB inside I-495, George Washington Parkway, I-495 and VA-267. At the end of this presentation, Mr. Pu also showed some preliminary results of traffic analysis for Safety Surges 2 and 3, which had less congestion increases than Surge 1 did.

Ms. Erickson asked if there is any way to capture where people are parking during SafeTrack.

Mr. Pu replied that he does not have the data sources for this information but mentioned the University of Maryland National Transportation Center (<http://eng.umd.edu/media/safetrack>), which is conducting on-going SafeTrack analysis, might have some useful information.

Mr. Randall briefed the committee on the preparation of the SafeTrack agenda item for the next TPB meeting. Staff is going to reach out to affected jurisdictions and transportation agencies and ask them to provide two PowerPoint slides: one slide about agency actions, plans, and mitigation activities for past, ongoing, and upcoming surges; another slide on lessons learned, findings, impacts, or recommendations from past surges. Specific emphasis on lessons for sharing and what can be done to improve travel alternatives and impact mitigation for future surges. Staff will compile agency inputs into one presentation and invite representatives of agencies to present to the TPB.

## **6. Briefing on the strategic plan for development of the regional travel demand And Model**

Mr. Milone introduced the item, noting the interest that has been shown by various members of the TPB regarding making improvements to the regional travel demand model.

Mr. Moran briefed the committee on the strategic plan for development and improvement of the regional travel demand forecasting model. This is the third presentation on this subject to the Technical Committee and this item is scheduled to be presented, as an information item, to the TPB for the first time at its July meeting. Handouts included the presentation slides and a memorandum dated June 30, 2016. The strategic plan, which is contained in three reports, dated October 15, 2015, covers a seven-year period and includes three phases: 1) Updates to the existing trip-based, four-step model (FY 16-17); 2) Development of an activity-based model (ABM) with existing data (FY 18-20); and 3) Development of an ABM with new data, such as the new household travel survey (FY 21-20).

Mr. Srikanth noted that TPB staff provides the travel demand model free of charge to those who request it and noted that consultants will often let TPB staff know about any problems they encounter while using the model, so that these can be fixed in future releases of the model.

Mr. Holloman asked whether ABMs are more expensive to develop. Mr. Moran said that they are and Mr. Milone noted that they can take longer to run than the trip-based models.

Nonetheless, staff does not expect a dramatic increase in models development costs. The strategic plan estimates costs of about \$350k per year, which is only slightly above the budget that staff has allocated for the current on-call consultant for models development (\$285k in FY 16). Additionally, any increases in costs associated with developing an ABM are expected to be offset by decreases in costs for further development of the trip-based model, since, beyond Phase 1, staff does not plan any updates to old model while the new model is developed.

Mr. Emerine noted that TPB staff has had its on-call consultant contract for models development for over 10 years and wondered if that was the mechanism that would be used to develop the new ABM. TPB staff noted that that is yet to be determined. One option would be to continue with the current arrangement (re-bidding the contract every three years; next re-bid in FY 18), but other options are being considered. Mr. Emerine mentioned that it might not be advantageous to have a re-bid occur in the middle of Phase 2 (developing the first ABM) or Phase 3 (developing the second ABM with new data).

Mr. Brown noted there would likely be a transitional period where TPB staff is maintaining two models (the trip-based model and the first-generation ABM). However, after that, TPB staff will likely move to supporting just the ABM, which means that the stakeholders would begin transitioning to the new model, and would thus need to garner resources for the change. Thus, he stressed the importance of keeping all the regional modeling stakeholders in the loop about development plans so that they can plan accordingly for possibly buying new software or hardware. Mr. Milone noted that a core principal of the TPB models development program is that the new model must be something that can be used by both TPB staff and other modelers in the region.

Ms. Snyder suggested that it would be better to move slide 6 ("Current uses of the travel model") earlier in the presentation to give TPB members that context earlier on. Staff thanked Ms. Snyder for her suggestion.

Ms. Massie asked what the FTA thinks about ABMs, as compared to the more traditional trip-based, four-step models. Mr. Moran said that his understanding is that the FTA is officially agnostic on what type of travel demand model you use and noted that there had been cases where cities had used an ABM for their New Starts application.<sup>1</sup>

## **7. BRIEFING ON A TLC-FUNDED STUDY ON PARKING UTILIZATION IN THE DISTRICT OF COLUMBIA**

Mr. Emerine presented the results from a TLC funded program which began in FY 14 to study how parking availability and pricing affects travel behavior. The research goal was to examine how much parking is utilized, which could help address deficiencies in ITE parking generation rates. Data collection involved surveying a sample of multifamily properties with 10+ units by counting the vehicles parked during overnight hours. The main results demonstrated that the dense core downtown area had lower amount of parked cars per dwelling unit, with the same pattern radiating out across the city, and that overall, only 60% of parking stalls are being used on average. Parking utilization correlated significantly with parking supply, parking price, average rent and unit size (each increased utilization). Higher transit frequency, walkability and access to jobs via transit correlated strongly with lower parking utilization

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<sup>1</sup> See, for example, Joel Freedman, Joe Castiglione, and Billy Charlton, "Analysis of New Starts Project by Using Tour-Based Model of San Francisco, California," *Transportation Research Record: Journal of the Transportation Research Board*, no. 1981 (2006): 24–33, doi:10.3141/1981-06.

rates. Mr. Emerine stated that as parking requirements are updated in the future, the results from this study will be looked to as a resource and he demonstrated the <http://parkrightdc.org> interactive tool.

Mr. Hollomon asked if the study team collected data on car ownership rates of the building residents. Mr. Emerine said that they have that data at the tract level from the American Community Survey, but that they didn't collect this data at the building level. Mr. Hollomon followed up asking if there is a per unit ratio parking requirement in the zoning code. Mr. Emerine responded that yes there is, and it varies significantly across the city. In the new code there are no parking requirements for the downtown zone; beyond that, it varies between 1 space per 3 units in most areas, and 1 space per 6 units in Metro station walksheds and adjacent to WMATA's Priority Corridor Network.

Mr. Whitaker asked if there are any maximums for parking. Mr. Emerine responded that big box shopping and commercial sites have an acreage limit, and if they go above 125% of the requirement the excess parking must be mitigated through TDM measures.

Ms. Hill asked if the study team collected information about the building residents. Mr. Emerine responded that they collected information about the units such as the rent prices, but that they didn't survey the residents themselves.

Mr. Milone asked how the study team determined parking demand for buildings in the sample without parking facilities. Mr. Emerine responded that those buildings were not included in the model because of that issue, and those buildings' data were only used for calibration.

Mr. Orleans asks if the study team is also looking at commercial parking generation. Mr. Emerine responded that they are not at this time, but that he knows of some other trip generation study that DDOT is doing. He also noted that Takoma Park and Fairfax County are doing similar studies through other TLC projects, and he said he hoped that the information he shared will help generate interest in this type of work across the region.

Mr. Roseboom noted that it is always great to see how COG programs are being put to work and that this presentation demonstrates excellent work.

## **8. BRIEFING ON THE TPB'S DRAFT 2016 CONGESTION MANAGEMENT PROCESS (CMP) TECHNICAL REPORT**

Mr. Pu briefed the committee on the 2016 Congestion Management Process Technical Report, speaking to a presentation. He began the presentation with the updated definition of the Congestion Management Process found in the new federal planning final rule released on May 27, 2016. The CMP has evolved since its inception in 1991 and the latest federal regulation adds a list of examples of travel demand reduction strategies, adds job access projects as a new CMP strategy, and suggests optional Congestion Management Plan that could be developed to advance the integration between the CMP and the Transportation Improvement Program (TIP). The TPB's CMP has three components: 1) the official CMP – fully integrated into the CLRP and is available at [www.mwcog.org/cmp](http://www.mwcog.org/cmp); 2) the CMP Technical Report – background document to the official CLRP/CMP, providing detailed information on data, strategies, and regional programs involved in congestion management; and 3) the Congestion Dashboard – quarterly updated congestion report providing timely regional overall congestion, travel time reliability, top bottlenecks information. The 2016 CMP Technical Report has about 300 pages and 6 chapters and it serves as a one-stop shop for data, congestion and related performance measures, and congestion management

strategies. Mr. Pu presented the highlights of the findings. Peak period congestion and travel time unreliability in the Washington region decreased between 2010 and 2012, but more recently has increased moderately (still below the 2010 level). He also presented the monthly, and day of week variations of congestion, top 10 bottlenecks from both INRIX data and the Skycomp aerial photography survey of freeways, and travel time changes along 18 major freeway commute routes. After briefly summarizing this region's various congestion management strategies, Mr. Pu concluded his presentation with 8 key findings and 17 technical recommendations. The committee is asked to review the draft 2016 CMP Technical Report and provide comments, if any, by August 8, 2016.

Ms. Erickson mentioned that in the past once a Skycomp survey finalized the information such as the top 10 bottlenecks would be presented to the Board and rolled out to the media. She asked what is the plan for rolling out the top bottlenecks information from this CMP Technical Report, given different methodologies have produced two different list of bottlenecks. In response, Mr. Sivasailam briefly recaptured the methodology of the Skycomp survey in producing the top 10 bottlenecks and the longest delay corridors. Mr. Meese added that a historical bottleneck analysis from 2010 is possible since we have the vehicle probe data, although there is no plan for another aerial photography survey in the foreseeable future. Mr. Srikanth reminded that the CMP is a federal requirement and the CMP Technical Report is part of the efforts in fulfilling the mandate. The 2016 CMP Technical Report is still in its draft version and is seeking comments from the committee. There is a lot of information in the report and staff expects that there will be multiple messages and takeaways to the Board and the media once the report is finalized.

Mr. Brown said Loudoun County has no interstates but does have freeways and asked how those two types of highways are categorized in the report. Mr. Pu replied that the non-Interstate freeways is the non-Interstate NHS in the report.

## **9. BRIEFING ON THE IMPLEMENTATION OF THE TPB REGIONAL PRIORITY BUS PROJECT UNDER THE TRANSPORTATION INVESTMENTS GENERATING ECONOMIC RECOVERY (TIGER) PROGRAM**

Mr. Randall briefed the committee on the progress of the TPB's TIGER Grant. He noted that only 70 days remain in the grant period, which has been in progress for five and half years.

Approximately \$50.6 million of the grant, or 86%, has been invoiced and has been or is in the process of being reimbursed. Most of the remaining funds have been spent, it's just getting the invoices from the implementing agencies. Mr. Randall reiterated that the grant is reimbursable only; any agency that does not get its invoices submitted in time for review will be at risk of not receiving reimbursement. The final project management meeting will be on July 25.

Eleven of the 15 projects are essentially complete, including PRTC's buses, the Potomac Yard Transitway, the real-time passenger information signs, and traffic signal optimization in downtown DC. Project to be completed in the next few weeks include the Takoma Langley Transit Center, the Georgia Avenue Bus Lane, and WMATA projects at the Pentagon and Franconia Springfield stations. WMATA has done a good job at getting in recent invoices. However, some \$400,000 of technology items may not be installed in time at the Transit Center due to the timing of the operational hand-off between MTA and WMATA. Transit Signal Priority is now installed on the corridor projects in DC and Virginia, though testing will continue as part of ongoing operations.

An update memo will be provided to the board this month, and then they will be briefed in September in response to their request last year for periodic updates. This briefing will also note that the TIGER project is serving as a catalyst for further real-time info and transit signal priority projects in the region.

#### **10. UPDATE ON FEDERAL RULEMAKING AND THE PERFORMANCE-BASED PLANNING AND PROGRAMMING REQUIREMENTS**

Mr. Randall briefed the committee on federal rulemaking, specifically the rulemaking on performance based planning and programming started under MAP-21 and continued in FAST, speaking to a presentation.

He opened the presentation with the schedule for publication of the proposed and/or final rulemakings for the five categories of performance rules. The final Statewide and Metropolitan Planning rule was published in May and the System Performance draft rule was published in April. Comments on the latter are due in August, as was mentioned during previous agenda items. The next anticipated rulemaking is the transit asset management final rule in July. However, publication of the final rules could be accelerated or delayed until after a new administration takes office. He then spoke to the schedule for state and MPO actions in adopting targets, with the first action the targets for transit assets in early 2017.

Proposed formal comments on the Performance draft rule were presented. One will be administrative, on rules for measures for metropolitan areas versus those for urbanized areas. Three are more technical, on how to calculate average traffic speeds, the freight congestion speed threshold, and excessive delay speed threshold. He mentioned the ongoing coordination with the State DOT and association organizations on development of formal comments, and invited any additional comments from members.

Mr. Randall then turned to a newly published proposed rulemaking on MPO planning area reform. Published on June 27, this rulemaking would revise transportation planning regulations to “promote more effective regional planning by States and metropolitan planning organizations (MPO)”, by re-writing sections of the recent final MPO and State Planning Rule. However, the biggest change would be a new focus on the statutory language for metropolitan planning areas for MPOs. Per statute, the planning area must include the entire Urbanized Area (UZA), as set by the Census Bureau, as well as the contiguous area expected to become urbanized within 20 years, either within a single MPO, or through exception by multiple MPOs in a single planning area if the size and complexity of the area make multiple MPOs appropriate.

Mr. Randall then showed centered on Washington DC with nearby urbanized areas and MPO boundaries on it, including Baltimore, the Maryland Panhandle, etc. Pieces of the Washington urbanized area reach into the Baltimore planning area, and vice-versa. Changes could either require MPO boundaries to change or jurisdictions belonging to multiple MPOs. If this federal rulemaking was advanced, this could lead to significant changes in MPO areas, membership, and other consequences.

Alternatively, he noted that the proposed rule would require multiple MPOs in a single planning area to jointly prepare the unified planning products, including a single metropolitan transportation plan (i.e., CLRP), a single transportation improvement program (TIP) and a jointly established set of performance targets. The proposed rules would also require



metropolitan planning agreements to include coordination strategies and dispute resolution procedures between the States and MPOs, and between multiple MPOs in a single MPA.

There would also have to be planning data consistency among States and MPOs agreement on a process for a single conformity determination. All of these things would have to be agreed upon and documented. He noted this could lead to a continuing line of MPOs agreeing on products up the entire Northeast corridor to Boston. He closed by noting that comments are due August 26.

Mr. Whitaker asked if there would have to be a single air quality conformity determination if there were multiple MPOs in a single planning area. Mr. Randall responded that this is an exception; there would only have to be agreed upon coordination on the process for determination for each area.

Mr. Srikanth then stated that the concept is that everyone is encouraged to have a single MPO for an urban area, looking twenty years into the future. It is conceivable that several urbanized areas would grow to merge with each other, and then all the MPOs of a contiguous urbanized area would either have to merge, or through exception agree on there being multiple MPOs, but then have a joint long-range plan, TIP, and performance measures and targets. This would be up to the Governors and the MPOs to determine. What would happen with conformity determination and any lapse for part of an area is not known.

Mr. Srikanth went on to note that many MPOs and association organizations are already discussing this rule, and there will be further discussion. There is a lot of confusion about the timing, purpose, and legal basis of this proposed ruling, and many organizations will likely be submitting comments. TPB staff is continuing evaluation of the rule will work to coordinate comments with other MPOs. One particular issue is how the forecast the urbanized area in twenty years, and what methodology would be used for this. He asked for any interested members to go ahead and send TPB staff any comments.

Other questions included how the Census area determines these urbanized areas, and members were referred to a September 2012 presentation by Mr. Roisman. The upcoming webinar by the federal agencies on July 15 was also discussed.

## **11. Adjourn.**

The meeting was adjourned at 12:00 p.m.

**TPB TECHNICAL COMMITTEE MEMBERS AND ALTERNATES  
ATTENDANCE – July 8, 2016**

DISTRICT OF COLUMBIA

DDOT                      Mark Rawlings  
DCOP                      Dan Emerine

MARYLAND

Charles County            Ben Yeckley  
Frederick County        James Gugel  
City of Frederick        -----  
Gaithersburg            -----  
Montgomery County     -----  
Prince George's County -----  
Rockville                -----  
M-NCPPC  
  Montgomery County    -----  
  Prince George's County -----  
MDOT                    Lyn Erickson  
                              Kari Snyder  
                              Meredith Hill  
  
Takoma Park             -----

VIRGINIA

Alexandria                Pierre Holloman  
Arlington County        -----  
City of Fairfax            -----  
Fairfax County            Mike Lake  
                              Malcolm Watson  
  
Falls Church             -----  
Fauquier County         -----  
Loudoun County          Robert Brown  
Manassas                 -----  
NVTA                      Sree Nampoothiri  
NVTC                      Patricia Happ  
Prince William County   James Davenport  
PRTC                      Betsy Massie  
VRE                        Sonali Soneji  
VDOT                      Norman Whitaker  
VDRPT                    Tim Roseboom  
NVPDC                    -----  
VDOA                      -----

WMATA

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FEDERAL/REGIONAL

FHWA-DC                 -----  
FHWA-VA                -----  
FTA                        -----  
NCPC                      -----  
NPS                        -----  
MWAQC                  -----  
MWAA                    -----

COG STAFF

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Ron Milone, DTP  
Andrew Meese, DTP  
Lamont Cobb, DTP  
Michael Farrell, DTP  
Douglas Franklin, DTP  
Ben Hampton, DTP  
Bryan Hayes, DTP  
Martha Kile, DTP  
Jessica Mirr, DTP  
Mark Moran, DTP  
Erin Morrow, DTP  
Dzung Ngo, DTP  
Jane Posey, DTP  
Wenjing Pu, DTP  
Eric Randall, DTP  
Sergio Ritacco, DTP  
Rich Roisman, DTP  
Daivamani Sivasailam, DTP  
John Swanson, DTP  
Marco Trigueros, DTP  
Dusan Vuksan, DTP  
Feng Xie, DTP  
Lori Zeller, DTP  
Patrick Zilliacus, DTP  
Steve Walz, DEP  
Paul DesJardin, DCPS

OTHER

Alex Brun, MDE  
Bill Orleans