

## **ITEM 8 – Action**

June 16, 2021

### Proposed Alternative Build Scenario

**Action:** Discuss proposed resolution.

**Background:** At the May 19, 2021 meeting, Board Member Mr. Evan Glass requested the Board to consider adopting a resolution which proposes conducting an alternative conformity analyses, alongside the one for the Visualize 2045 long-range transportation plan's constrained element, with a different set of projects designed to achieve the region's GHG reduction goals. Mr. Glass sent a revised resolution on June 9. The board will be briefed on questions staff has received from TPB and Technical Committee members and other supporting information related to the proposed work activity will be provided.

The following documents related to the matter are attached:

- 1) Staff Memo with Schedule for updating the plan
- 2) May 19, 2021 proposed resolution
- 3) June 9, 2021 Revised proposed resolution
- 4) Letter from Loudoun County
- 5) Northern Virginia Transportation Authority Staff Memo



## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Kanti Srikanth, TPB Staff Director  
**SUBJECT:** Proposal for an Alternative Long-Range Transportation Plan Update and Additional Scenarios for the Air Quality Conformity Analysis  
**DATE:** June 10, 2021

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At the May 19, 2021 meeting of the Transportation Planning Board (TPB), board member Evan Glass requested the board to consider adopting a resolution that would require the TPB to conduct an alternative air quality conformity analysis alongside the one the TPB is currently conducting for the Visualize 2045 long-range transportation plan's (LRTP) constrained element. This alternative analysis would include a set of projects different from those officially submitted by the TPB member agencies for the planned update and is designed to achieve, or at least improve achievement of, the region's greenhouse gas (GHG) reduction goals. This resolution was shared with the members of the board and discussed by the TPB Technical and Steering committees earlier in June. Staff received several questions and requests for information on this proposed additional work item from committee and board members.

This memorandum provides staff comments and additional information related to the May 19 proposal, which was to have the TPB develop and analyze alternative scenarios to the federally mandated update of the region's LRTP, Visualize 2045. The update of the LRTP began last year and is currently under way. This memorandum also provides information about questions staff has received from members of the TPB and its Technical Committee. The goal of this memorandum is to provide information to board members regarding updating Visualize 2045, including how to proceed with the update.

On June 9, Mr. Glass informed TPB staff of revisions that he intends to make to his May 19 resolution and provided staff with a revised resolution for TPB's consideration at its June 16 meeting. Many aspects of this staff informational memo are applicable to the revised June 9 proposed resolution as well.

The current Visualize 2045 schedule, the revised (June 9, 2021) proposed resolution, the original (May 19, 2021) proposed resolution, and two sets of comments/questions communications received by staff are attached.

## **BACKGROUND**

The TPB adopted an updated LRTP, as required by federal regulations, in 2018 and named the plan "Visualize 2045." The LRTP was amended in March of 2020.

Federal metropolitan transportation planning regulations govern the process and, in most cases, what is to be included in the plan/products, and require that the regional LRTP be updated at least

once every 4 years. Additionally, federal metropolitan planning regulations require that, for areas that are not in attainment of federal clean air standards (for specific pollutants that do not include greenhouse gases), the projects in the LRTP must be fiscally constrained (i.e., funding must have been identified) and undergo a regional air quality analysis to determine whether the anticipated emissions (of specific pollutants) conform to the limits (emissions budgets) approved by the U.S. Environmental Protection Agency (EPA).

Accordingly, the TPB began its quadrennial update of Visualize 2045 at the beginning of 2020 (initiating the update to the plan's financial assumptions) and, in December 2020, took action to approve a schedule (Attachment 1) and formally request updates to the projects to be included in the regional air quality conformity analysis. The approved schedule was designed to accommodate the federal review and approval of the plan update, including the revised financial assumptions and air quality conformity analysis, on or before the mandated four-year deadline (December 13, 2022).

The December 2020 solicitation of updates to the technical inputs resulted in a list of transportation projects, programs, and policies to be reflected in the revisions to the regional air quality conformity analysis, which were released for a 30-day public comment period on April 2, 2021. The TPB held two work sessions (April 21 and May 19) to review and discuss the proposed updates and comments received. The plan update schedule adopted by the TPB has the TPB taking action to approve the inputs and scope of work at its June 21, 2021 meeting, allowing the TPB staff to begin the air quality conformity analysis. The adopted plan update schedule provides the time needed for the technical and time-consuming air quality conformity analysis to be completed in accordance with federal regulations on how to conduct such analyses. The schedule also provides time for the subsequent public review of the analysis, approval of the analysis by the TPB, and subsequently securing formal approval by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), based on their review, as well as a review by the EPA, ahead of the December 2022 deadline. Failure to have a federally approved and updated plan, TIP, and associated air quality conformity analysis by December 2022 will lead to the region's plan, TIP, and conformity lapsing and triggering a series of federal actions that would impact the local, regional, and state transportation (highway and transit) agencies, including project development and implementation.

At the May 19, 2021 TPB meeting, board member Glass proposed a resolution requiring the TPB to undertake additional work activities, including an additional air quality conformity analysis, in parallel to the ongoing Visualize 2045 update work described previously. The proposed resolution is included in Attachment 2. The proposed resolution notes:

1. "The TPB shall develop and include an alternative Build scenario in its conformity modeling process that aims to achieve TPB climate and equity goals through the use of transportation demand management, transit, and land use strategies consistent with regional policy goals, a modified regional project list that reduces the number and scale of road capacity expansion projects in accordance with the anticipated reduced travel demand, and with particular focus on public transportation and pedestrian/bicycle improvements needed to serve mobility disadvantaged populations; and
2. The conformity modeling for the No-Build and two Build scenarios will measure the impact of induced demand, and use updated telecommuting patterns, and, as needed, sensitivity testing for a range of plausible post-pandemic telecommuting scenarios: and

3. The alternative Build scenario will meet federal conformity requirements such that TPB would have the option of adopting the scenario as its Long-Range Transportation Plan following the conformity modeling process and subsequent public comment period.”

## STAFF COMMENTS

Unfortunately, the TPB’s adopted budget, work program, and available staff resources will not permit undertaking any additional sets of air quality conformity analyses, including sensitivity tests on the additional scenarios, within the next 12 months, beyond the originally budgeted and resourced single set. The TPB budgetary and staffing resources are currently fully deployed to complete, sequentially, two urgent tasks needed to meet federal requirements: (1) updating Visualize 2045, developing the FY 2023-2026 TIP and the associated air quality conformity analysis as adopted through the December 2020 TPB action; and (2) assisting the state air agencies and the Metropolitan Washington Air Quality Committee (MWAQC) develop a state implementation plan (SIP) to attain the new and tougher 2015 ozone standards, which preliminary data shows the region has failed to attain. Both tasks are time consuming, utilize the same staff, and are subject to very tight time frames. The Visualize 2045 update, FY 2023-2026 TIP, and associated conformity analysis must be federally approved by December 2022 and the 2015 ozone SIP must be submitted to the EPA by January 2023.

The revised June 9, 2021 resolution retains this proposal to have the TPB conduct alternative build scenarios analysis alongside the official plan update and conformity analysis. Additionally, the revised resolution appears to call for a total of three additional scenarios with an undefined number of sensitivity tests to be performed as well. As noted above the TPB does not have the resources, including funding for consultants, to perform any additional scenario analysis simultaneously with the plan update and air quality planning activities scheduled for this year and the next fiscal year. Additional comments on the idea of greenhouse gas reduction scenario analysis is provided in later sections of the memo (page 4). TPB modeling staff, with consultant assistance, is currently working on a scenario study, called the TPB Climate Change Mitigation Study of 2021 (CCMS), which began in April and is to conclude in December 2021.<sup>1</sup> It is the TPB staff position that any alternative-build modeling scenario could be addressed, partially or entirely, as one or more of the scenarios to be analyzed in the CCMS. The next presentation regarding the CCMS is scheduled for the July TPB meeting.

The May 19, 2021 resolution notes that the additional alternative-build scenario that would be analyzed “will meet federal conformity requirements such that the TPB would have the option of adopting the scenario as its Long-Range Transportation Plan.” Staff has received many questions on this notion and asked to provide input. Based on the staff knowledge of federal regulations, staff does not find that the alternative-build scenario would meet the federal requirements.

**Projects, programs and policies without agency ownership and funding that have not advanced through a local planning process cannot be added to the constrained element of the plan.** Federal regulations that govern the development of LRTPs, TIPs and conducting air quality conformity

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<sup>1</sup> Michael Grant, “TPB Climate Change Mitigation Study of 2021 - Work Plan,” <https://www.mwcog.org/events/2021/4/2/tpb-technical-committee/>.

analyses<sup>2</sup> require that projects included in the official LRTP be associated with an agency committing to fully fund to build/implement the project, operate it, and maintain it in a state of good repair. The TPB has relied on official actions taken by the local, regional, sub-regional and state entities in the form of a budget document (Capital Improvement Program, Six-Year Improvement Programs, etc.) and planning documents (Master Plan, Comprehensive Plans, Statewide Plans, etc.) to document the commitment to implement the projects, programs and policies reflected in the official LRTP.

The proposed development of an alternative-build scenario, which would assume not just transportation projects and programs, but also land use (much of which would likely not have the supporting official actions at the appropriate governing levels and entities and not be consistent with adopted local comprehensive plans) will not meet the basic federal requirements for a constrained LRTP, TIP and air quality conformity analysis. The land use inputs to the plan, COG's Cooperative Forecasts of Population, Households, and Employment, are developed by the local jurisdiction planning staff to reflect adopted land use plans and policies, and then are submitted to COG for inclusion in the region's Cooperative Forecasts, which TPB receives from COG. If the proposal intends to secure the above commitments before OR in parallel with conducting the analysis, staff understands from feedback from the TPB member agency staff that not only is the outcome of such an effort uncertain, the timeframe to secure these actions is difficult to estimate.

The revised June 9, 2021 resolution drops the requirement to develop the alternative build scenario to meet air quality conformity requirements and the TPB adopting the alternative build scenario as the official updated long-range transportation plan for the region. Staff believes this change is most prudent and allows the TPB to complete and adopt a federally compliant LRTP, TIP and associated air quality conformity within the federally prescribed timeframe. Also, as noted earlier, the TPB staff believe the CCMS will be the best mechanism to address the issues raised as part of the alternative-build resolution.

With respect to conducting scenario analyses to serve as a better alternate to the official long-range transportation (and land use) plan, staff notes that the TPB has conducted a number of such alternative-build scenarios in the past, envisioning different sets of land use, travel demand management (TDM) and transportation projects, programs and policies to substantively change the performance outcomes of the region's transportation system over the long-term. The most recent such scenario analysis was conducted by the TPB's Long-Range Plan Task Force, over a two-year period completing in 2017. The TPB staff analyzed 10 alternative build scenarios.<sup>3</sup> All of the scenarios assumed transportation projects, programs and policies that were not part of any TPB member jurisdictions' official plans, and which did not have commitment funding, plans for implementation, or maintenance. The purpose of this analysis was to identify an alternative transportation planning programming vision that TPB members jurisdictions could adopt and use in their transportation investment decision making. These scenarios did estimate the potential improvement in the performance outcomes including reductions in vehicle miles traveled (VMT), greenhouse gases (GHGs) and ozone-related pollutants. Five of these 10 scenarios were adopted by

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<sup>2</sup> Including ([23 U.S.C. 134](#) and [135](#); [49 U.S.C. 5303](#), and [42 U.S.C. 7410](#)), (23 CFR 450.324(c), (23 CFR 450.324(f)(11), (40 CFR Parts 51 and 93)

<sup>3</sup> ICF et al., "An Assessment of Regional Initiatives for the National Capital Region: Technical Report on Phase II of the TPB Long-Range Plan Task Force" (Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board, December 20, 2017), <https://www.mwco.org/documents/2017/12/20/long-range-plan-task-force-reports-projects-regional-transportation-priorities-plan-scenario-planning-tpb/>.

the TPB as its Aspirational Initiatives and included in Visualize 2045, as were two additional bike/walk initiatives. All Aspirational Initiatives call for reducing single-occupant vehicular travel and/or increasing transit ridership and non-motorized travel and enhanced TDM strategies. Several projects in the updated Visualize 2045 plan advance some of the Aspirational Initiatives helping to improve the performance outcomes of the system. Many projects are multimodal in nature. The critical actions needed to realize the many TPB policy goals and priorities, by adding them to the constrained LRTP, are decisions at the local, sub-regional, regional and state levels to approve projects, programs and policy proposals and fund their implementation, maintenance and operations.

The previously analyzed scenarios provide a stark sense of the type and magnitude of transportation projects, programs and policies needed to reduce the region's GHGs while also providing improved performance on other goals such as mobility and accessibility. As noted earlier, the TPB is currently conducting the Climate Change Mitigation Study (CCMS) that will provide information on the level of outcomes the region will need from a range of strategies to achieve GHG reductions commensurate with the region's climate goals.<sup>4</sup> The results of this study will serve to inform the type and magnitude of changes in transportation projects, programs and policies that would be needed to achieve greenhouse gas reductions in the transportation sector commensurate with the region's climate goals.

Staff advise that the TPB would be best served to undertake a more deliberative and informed process to develop and analyze an "aspirational long-range transportation plan" reflecting projects, programs and policies that is informed by the TPB's CCMS and recommended by all members of the TPB, which when adopted would serve as the guide for TPB members to take official actions on the projects that would meet federal planning requirements and could be included in future official constrained long range plan(s). If such a process begins upon completion of the scheduled official update of the LRTP, TIP and air quality conformity analysis, the scenario work can be planned so as to manage the staff times in this fiscal year and plan for staff time and budget in the next fiscal year.

Based on past climate change focused scenario analyses conducted by the TPB, as well as others at the national and international level, it is likely that the TPB's CCMS will show that, no single category of actions or strategy will realistically be able to provide the GHG reductions in the transportation sector consistent with the regional goals (e.g., 50% reduction in GHGs by 2030, compared to 2005 levels). Rather, multiple categories of actions and strategies will likely be needed and there will likely be multiple pathways within each category that will have to be pursued, given the diverse nature of our region. Past climate change focused scenarios have shown that, in addition to the fuel economy improvements and electrification of the fleet, the most effective GHG reduction strategies, that are based on reductions in vehicle miles of travel (VMT), will be different types of policy solutions including VMT fees, pricing, and telework, and not simply grouping transportation infrastructure projects. Many of the strategies that TPB has identified through past studies as the most successful are not types of projects that are found in the constrained element of the LRTP. Although projects focused on transit and non-motorized travel can generally be expected to push the region in the right direction in advancing the climate goals, even the most aggressive transit expansion scenarios previously analyzed were found to provide GHG savings of less than 3% at the regional level relative

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<sup>4</sup> See, for example, Grant, "TPB Climate Change Mitigation Study of 2021 - Work Plan"; Michael Grant and Adam Agalloco, "TPB Climate Change Mitigation Study of 2021 - Literature Review," <https://www.mwcog.org/events/2021/6/4/tpb-technical-committee/>.

to a future baseline forecast.<sup>5</sup> Nonetheless, such projects are important and have been recognized as a priority by the TPB for the multiple co-benefits pertaining to equity, mobility, and economic development, in spite of the modest impact on GHG reductions.

With the region's aggressive aspirational goal of reducing greenhouse gases emissions by 50% relative to 2005 levels in just nine years, i.e., by 2030, among the non-fuel-focused, on-road transportation sector strategies, a policy-heavy approach focused on VMT fees, pricing, and telework, would likely be most effective in achieving these goals. These types of policies and other projects and programs informed by the TPB's Climate Change Mitigation Study could be added to the aspirational element, outside of federal fiscal constraint requirement, and could be championed by the TPB members for enactment at local, sub-regional, regional, state and federal levels.

## **OTHER QUESTIONS FROM TPB MEMBERSHIP**

While the above information responds to most of the questions raised by the TPB's Technical and Steering Committee members, staff received additional questions from Loudoun County (Attachment 4), and the Northern Virginia Transportation Authority shared a memo with a set of questions scheduled to be discussed at its meeting on June 10 (Attachment 5). The following general topics/questions are included:

- Processes for project selection and selection criteria
- Evaluation metrics
- Maintaining federal compliance
- Contracting/legal funding issues
- Enforcement of areas outside of the TPB's purview, such as land use

## **ATTACHMENTS**

1. Schedule for updating Visualize 2045
2. Original (May 19, 2021) Proposed alternative-build scenario
3. Revised (June 9, 2021) Proposed alternative-build scenario
4. Loudoun County June 8, 2021 letter
5. NVTa memo dated June 3, 2021, to be discussed at the June 10 NVTa meeting

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<sup>5</sup> See, for example, Initiative 7 in ICF et al., "An Assessment of Regional Initiatives for the National Capital Region: Technical Report on Phase II of the TPB Long-Range Plan Task Force."



## Plan and TIP Update Schedule

2020	12/16/20	The TPB will be asked to approve the Technical Input Solicitation document to initiate the Call for Projects.
	2/12/21	<b>Project inputs for the LRTP and Air Quality Conformity (AQC) analysis due to TPB staff.</b>
	3/5/21, 4/2/21	The TPB Technical Committee will review the conformity project inputs table in March and the draft inputs to the Plan and the draft AQC scope of work in April.
	4/2/21- 5/3/21	Public comment period on inputs to the Plan/AQC analysis, and AQC scope of work. MWAQC TAC will review this information during the April meeting.
	4/21/2021	TPB will receive a briefing on the draft inputs to the Plan/AQC analysis and the draft AQC scope of work.
	5/19/21	The TPB will receive a summary of the public comments on the draft inputs to the Plan and AQC analysis. The TPB and the agencies sponsoring the projects will have the opportunity to discuss and advise staff on responses.
	6/16/21	The TPB will review responses to comments and updates to inputs to the Plan and scope of work for the AQC analysis. The TPB will be asked to approve the inputs and scope, authorizing staff to begin analysis.
2022	3/11/22	<b>Transportation Improvement Program (TIP) inputs due for the FY 2023-2026 TIP</b>
	4/1/22	The TPB Technical Committee will review the draft results of AQC analysis for the updated Plan and FY 2023-2026 TIP.
	4/1/22 - 5/1/22	Public comment period on the results of AQC analysis Determination for the updated Plan and FY 2023-2026 TIP.
	4/2022	MWAQC and MWAQC TAC will review the draft results of the AQC analysis during their meetings.
	4/20/22	The TPB will review the draft Plan, draft TIP, and AQC analysis and Determination.
	5/18/22	The TPB will review the draft results of the AQC analysis for the Plan and FY 2023-2026 TIP. The TPB will also receive a summary of the comments received on the analysis. The TPB and the agencies sponsoring the projects will have the opportunity to discuss and advise staff on responses to comments.
	6/15/22	The TPB will review the responses to the comments and the results of the AQC analysis. The TPB will be asked to approve the results of the AQC analysis and adopt the updated Plan and the FY 2023-2026 TIP.



## ATTACHMENT 2 - ORIGINAL RESOLUTION DISTRIBUTED MAY 2021

1 **WHEREAS**, in December, the board of TPB voted 22 to 0 (with 8 abstentions) to "require its member agencies to prioritize investments on projects, programs, and policies to reduce greenhouse gas emissions, prioritize the aspirational strategies, and achieve COG's land use and equity goals..." and further recognized in the Technical Inputs Solicitation that meeting adopted greenhouse gas emissions targets "...will require a reduction in vehicle miles traveled and associated emissions in Visualize 2045;" and

2 **WHEREAS**, the draft Visualize 2045 project list is largely the same as the 2018 plan, which included \$40 billion in highway expansion but only \$24 billion in transit expansion. While transit operating investments are higher than those for highways, this is partially due to the fact that the costs of driving are not fully accounted for by TPB. Other costs include police/fire/emergency response for highways which are not counted as part of the highway agency budgets, nor are the negative health care costs of vehicle pollution, or the much higher personal household costs of driving compared to transit/walk/bike; and

3 **WHEREAS**, public input for Visualize 2045 showed that 84% of the region's residents agree that "elected officials need to consider the impacts of climate change when planning transportation in the future." The survey results also showed that the region's residents want to walk and bike more, drive less, and support transit if it is frequent and reliable; and

4 **WHEREAS**, while the currently proposed conformity analysis would use 2014 telecommuting rates, 2019 telecommuting rates were already noticeably higher than 2014 rates and post-pandemic rates are expected to be even higher than 2019 levels, possibly significantly so. Just a 5% decline in peak hour traffic can return congested roadways to free-flow conditions; And

5 **WHEREAS**, the pandemic has demonstrated how critical transit is for our essential workforce in such fields as health care, grocery, shipping, maintenance, and more. It also showed that lower-income households live on very thin financial margins and that more transit along with free fares are investments that will help these families save money, buy food, pay rent, and build savings; and

6 **WHEREAS**, the urgency of the climate crisis means that the TPB region cannot put off creating a Visualize 2045 plan that commits to meeting greenhouse gas and vehicle miles reduction targets until the next long-range plan cycle. TPB and COG have the expertise, staff capacity, resources, time, and stakeholders at the table to develop a plan that adequately addresses the region's sustainability and equity goals now.

7 **WHEREAS**, the Council of Governments and TPB have been working to promote more mixed-use, walkable communities, affordable housing, and the extension of bus rapid transit.

**NOW, THEREFORE**, the TPB shall develop and include an alternative Build scenario in its conformity modeling process that aims to achieve TPB climate and equity goals through the use of transportation demand management, transit, and land use strategies consistent with regional policy goals, a modified regional project list that reduces the number and scale of road capacity expansion projects in accordance with the anticipated reduced travel demand, and with particular focus on public transportation and pedestrian/bicycle improvements needed to serve mobility disadvantaged populations; and

The conformity modeling for the No-Build and two Build scenarios will measure the impact of induced demand, and use updated telecommuting patterns, and, as needed, sensitivity testing

for a range of plausible post-pandemic telecommuting scenarios; and  
The alternative Build scenario will meet federal conformity requirements such that TPB would have the option of adopting the scenario as its Long-Range Transportation Plan following the conformity modeling process and subsequent public comment period.

**ATTACHMENT 3 - REVISED  
RESOLUTION DISTRIBUTED  
JUNE 9, 2021**



**MONTGOMERY COUNTY COUNCIL  
ROCKVILLE, MARYLAND**

**EVAN GLASS**  
COUNCILMEMBER  
AT-LARGE

TRANSPORTATION & ENVIRONMENT COMMITTEE  
HEALTH AND HUMAN SERVICES COMMITTEE

**M E M O R A N D U M**

**TO:** Transportation Planning Board  
**FROM:** Evan Glass, Montgomery County Councilmember  
**DATE:** June 9, 2021  
**SUBJECT:** Resolution

The purpose of this resolution is to ensure that the Transportation Planning Board (TPB) has the information it needs to make decisions congruent with our adopted climate goals as we consider Visualize 2045.

Since introduction of the resolution at the TPB's May meeting, I have amended the resolution text to reflect input from stakeholders and TPB colleagues.

The attached updated resolution text includes the following revisions:

1. Language stating that the Alternative No-Build and Alternative Build scenarios will be modeled using the regional travel model, which is a lower threshold than the federal conformity requirements.
2. Language clarifying that TPB members will not be required to remove projects from the current draft project list.
3. Added language calling for an Alternative No-Build scenario that applies additional transportation demand management (TDM) and land use measures to TPB staff's No-Build scenario.
4. Additional language calling for an Alternative Build scenario that incorporates TDM and land use measures in conjunction with new transit projects, while omitting road expansions.
5. A recommendation to test a range of telecommuting scenarios.

The TPB put transit-oriented development at the center of its regional vision 11 years ago. As we consider Visualize 2045 goals today, *we must continue prioritizing sustainable regional mobility and land use patterns to meet our aggressive targets for greenhouse gas and vehicle miles travelled reduction.*

In 2018, TPB led various models analyzing green transit investments and their impact on travel. We need to build on these efforts and develop a more comprehensive analysis that works in tandem with Visualize 2045. Those prior efforts were different in scope than the Build model being considered by TPB staff for Visualize 2045. In order to create an equal comparison between the existing build scenarios in Visualize 2045's transportation and land use models and a climate-friendly alternative, TPB will have the basis for a decision that reflects our shared regional goals of reducing carbon pollution from transportation and cutting emissions.

I ask for your consideration of this resolution so that we may make an informed decision about our environmental and transportation priorities for the future of the region.

1

**WHEREAS**, in December, the board of TPB voted 22 to 0 (with 8 abstentions) to "require its member agencies to prioritize investments on projects, programs, and policies to reduce greenhouse gas emissions, prioritize the aspirational strategies, and achieve COG's land use and equity goals..." and further recognized in the Technical Inputs Solicitation that meeting adopted greenhouse gas emissions targets "...will require a reduction in vehicle miles traveled and associated emissions in Visualize 2045;" and

2

**WHEREAS**, the draft Visualize 2045 project list is largely the same as the 2018 plan, which included \$40 billion in highway expansion but only \$24 billion in transit expansion. While transit operating investments are higher than those for highways, this is partially due to the fact that the costs of driving are not fully accounted for by TPB. Other costs include police/fire/emergency response for highways which are not counted as part of the highway agency budgets, nor are the negative health care costs of vehicle pollution, or the much higher personal household costs of driving compared to transit/walk/bike; and

3

**WHEREAS**, public input for Visualize 2045 showed that 84% of the region's residents agree that "elected officials need to consider the impacts of climate change when planning transportation in the future." The survey results also showed that the region's residents want to walk and bike more, drive less, and support transit if it is frequent and reliable; and

4

**WHEREAS**, while the currently proposed conformity analysis would use 2014 telecommuting rates, 2019 telecommuting rates were already noticeably higher than 2014 rates and post-pandemic rates are expected to be even higher than 2019 levels, possibly significantly so. Just a 5% decline in peak hour traffic can return congested roadways to free-flow conditions; and

5

**WHEREAS**, the pandemic has demonstrated how critical transit is for our essential workforce in such fields as health care, grocery, shipping, maintenance, and more. It also showed that lower-income households live on very thin financial margins and that more transit along with free fares are investments that will help these families save money, buy food, pay rent, and build savings; and

6

**WHEREAS**, the urgency of the climate crisis means that the TPB region cannot put off creating a Visualize 2045 plan that commits to meeting greenhouse gas and vehicle miles reduction targets until the next long-range plan cycle. TPB and COG have the expertise, staff capacity, resources, time, and stakeholders at the table to develop a plan that adequately addresses the region's sustainability and equity goals now.

**WHEREAS**, the Council of Governments and TPB have been working to promote more mixed-use, walkable communities, affordable housing, and the extension of bus rapid transit.

**NOW, THEREFORE**, the TPB shall develop and model Alternative No-Build and Alternative Build scenarios during its conformity modeling process that aim to achieve TPB climate and equity goals; and

The alternative No-Build scenario will use transportation demand management and land use strategies with the existing base year transit and road network, similar to the regular No-Build scenario, such that the Alternative No-Build scenario would show improvements in per-capita vehicle miles traveled (VMT), non-auto mode share, greenhouse gas (GHG) emissions, and job accessibility compared to the regular No-Build scenario and potentially the regular Build scenario; and

In addition to applying the transportation demand management and land use strategies, the Alternative Build scenario will include a modified regional project list that increases transit investment and reduces the number and scale of road capacity expansion projects in accordance with the anticipated reduced peak travel demand, and with particular focus on public transportation and pedestrian/bicycle improvements needed to serve mobility disadvantaged populations. The Alternative Build scenario will be prepared to show improvements in per-capita VMT, non-auto mode share, GHG emissions, and job accessibility compared to the regular No-Build and Build scenarios. The Alternative No-Build and Build scenarios are also anticipated to show improved travel times and reduced delay relative to the regular scenarios, based on findings from past TPB studies; and

The modeling for the regular No-Build and Build scenarios and the Alternative No-Build and Build scenarios will apply sensitivity testing, outside of the official conformity modeling, for a range of plausible post-pandemic telecommuting scenarios; and

The Alternative No-Build and Alternative Build scenarios will be modeled using the regional travel model but are not intended to meet federal conformity requirements. The Alternative scenarios and telecommuting sensitivity testing are intended to inform TPB Board review and possible revisions to the proposed Long-Range Transportation Plan, consistent with federal requirements, following the conformity modeling process and subsequent public comment period.



June 8, 2021

Dear Chair Allen and Deputy Executive Director Srikanth,

The TPB will be asked to consider a proposed resolution at our June 16, 2021 meeting. After reading Councilmember Glass' proposed resolution text that was distributed by TPB staff, there remain several outstanding questions on the impact that passing such a resolution would have on the next Long-Range Plan, as well as our own jurisdictional programs. These questions have been provided on the staff level and we want to make sure that members of the TPB have them for consideration prior to evaluating the proposed resolution.

1. The resolution states that "the TPB shall develop and include an alternative build scenario in its conformity modeling process":
  - a. Is the TPB staff developing an alternative build scenario, or will that responsibility fall to the TPB members?
  - b. How would this be conducted? Would there be a subcommittee that develops a list of projects to propose for TPB review and approval?
  - c. How much time will be needed to develop a new alternative build scenario and still meet the schedule for completion in time to avoid being "out of conformity" with federal requirements?
  - d. What is the impact of the development of the alternative build scenario on the FY 2022 Unified Planning Work Program and the Work Activity Budgets?
2. The resolution states that the alternative build scenario would aim "to achieve TPB climate and equity goals":
  - a. What are the metrics of these goals that the alternative build scenario seeks to achieve?
  - b. What is the year that these need to be achieved?
3. The resolution references "land use strategies consistent with regional policy goals":
  - a. In less developed parts of the region, new roads are required to implement land use strategies consistent with regional goals. How would such roads be considered in an alternate scenario?
4. The resolution references "a modified regional project list that reduces the number and scale of road capacity expansion projects":
  - a. Who is modifying the list and what criteria would be used?
  - c. Will TPB members have an opportunity to provide input on this modified regional project list?
5. The resolution states that the modified project list should be "in accordance with the anticipated reduced travel demand":
  - a. What is meant by this statement and how would this be determined?



6. The resolution calls for the modeling to “measure the impact of induced demand”:
  - a. What impact will need to be determined?
  - b. Can the model perform this task for specific projects?
  - c. We need to see consensus on a definition. Are there examples from other MPO’s or studies showing the measurement of induced demand?
  
7. The resolution calls for the modeling to “use updated telecommuting patterns”:
  - a. Telecommuting patterns have been rapidly changing during the pandemic and will continue to during the recovery. We are planning for an uptick in more traditional commuting patterns around Labor Day, for instance. At what time and when will telecommuting patterns be considered “updated for the purpose of this modeling”?
  
8. The resolution states that “The alternative Build scenario will meet federal conformity requirements”:
  - a. How can it be said that the alternative Build plan that is created will meet federal conformity requirements before it is even analyzed by TPB staff?
  - b. Can a plan that does not include regionally significant projects that are in the jurisdictional plans meet federal conformity requirements?
  
9. “TPB would have the option of adopting the scenario as its Long-Range Transportation Plan following the conformity modeling process and subsequent public comment period.”:
  - a. What metrics will be utilized for evaluation of the plans?
  - b. Can TPB staff confirm that the development of the alternative Build scenario will have no impact on the federal timeline requirements to approve the Long-Range Transportation Plan?
  - c. Will there be impacts to the other elements of the plan, such as the Transportation Improvement Program?

Sincerely,



Matthew F. Letourneau  
Dulles District Supervisor



Kristen C. Umstatt  
Leesburg District Supervisor

## NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

MEMORANDUM

**TO:** Chair Phyllis J. Randall and Members  
Northern Virginia Transportation Authority

**FROM:** Monica Backmon, Executive Director

**DATE:** June 3, 2021

**SUBJECT:** National Capital Region Transportation Planning Board Proposed Resolution

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**Purpose:** To inform the Northern Virginia Transportation Authority (NVTA) of the National Capital Region Transportation Planning Board (TPB) Resolution to be considered at their June 16, 2021, meeting.

**Background:** The TPB is responsible for developing/updating the National Capital Region's Constrained Long Range Plan (CLRP) called Visualize 2045, and conducting the air quality conformity determination on the plan every four years. The current Visualize 2045 plan was adopted by the TPB in November 2018, is set to expire in December 2022. The TPB has initiated the update to Visualize 2045. As part of this update; in December 2020, the TPB adopted the Visualize 2045 Update: Technical Inputs Solicitation which requires:

- A reduction in vehicle miles traveled and associated emissions in Visualize 2045 to achieve new interim GHG reduction goals and new climate resiliency goals.

At their June 16<sup>th</sup> meeting, the TPB is scheduled to take action on Resolution R19-2021, to approve the project submissions for inclusion in, and the scope of work for, the Air Quality Conformity Analysis for the 2022 Update to Visualize 2045.

Additionally, the TPB will also consider a resolution which suggests an alternative conformity analyses, alongside the one for Visualize 2045 long-range transportation plan's constrained element, with a different set of projects designed to achieve the region's GHG reduction goals as well as, develop and include an Alternative Build Scenario as part of the current Visualize 2045 update process.

Per the draft resolution submitted by Montgomery County (see attachment), the proposed Alternate Build Scenario would aim to achieve TPB climate and equity goals through the use of transportation demand management, transit, and land use strategies consistent with regional policy goals, a modified regional project list that reduces the number and scale of road capacity expansion projects in accordance with anticipated reduced travel demand, and with particular focus on public transportation and pedestrian/bicycle improvements needed to serve mobility disadvantaged populations.

The Authority, which is supportive of the TPB's climate and equity goals, has already invested or committed \$2.5 billion in regional multimodal transportation projects that will accomplish the following goals: Enhance quality of life and economic strength of Northern Virginia through transportation; Enable optimal use of the transportation network and leverage the existing network; Reduce negative impacts of transportation on communities and the environment. These goals are accomplished through:

- Reduce congestion and crowding experienced by travelers in the region;
- Improve travel time reliability;
- Improve access to jobs, employees, markets and destinations;
- Improve connections among and within areas of concentrated growth;
- Improve the safety of the transportation network;
- Provide more route and mode options to expand travel choices and improve resiliency of the system;
- Sustain and improve operation of the regional system;
- Reduce transportation-related emissions

The deadline for approval of the conformity determination for the Visual 2045 update by the Federal Highway (FHWA) and Federal Transit Administration (FTA), is December 2022. There are significant questions regarding the recently proposed Alternative Build Scenario impact on this schedule/deadline. The TPB Chair sent a letter to the FHWA and FTA requesting an extension of this deadline.

If the joint federal agency approval is not received by December 2022, or an extension, the flow of funding (federal, state, regional, local, etc.) for regionally significant projects could be impacted

Projects funded by the Authority are regionally significant in nature and are submitted to the TPB to be included in an air quality conformity assessment. In addition to NVTA regional revenues, these projects usually have other funding sources including federal funds. As such, NVTA staff have questions about the ability of these projects to advance if the TPB does not meet the December 2022 deadline, or receive an extension.

**Next Steps:** Given that NVTA is not a member of the TPB but the primary funding entity of regionally significant projects in Northern Virginia, many of which are in active stages of implementation, it is important to understand the potential impacts of the proposed Alternate Build Scenario on already adopted and potential future projects given the Authority's mandate to reduce congestion.

NVTA staff will continue to coordinate with TPB staff and other relevant agencies as well as NVTA member jurisdictions to understand and report the impacts of the TPB Alternate Build Scenario on projects adopted in current and future Authority funded Six Year Programs that are submitted to the TPB for air quality conformity analysis. As a Region, Northern Virginia needs to the answers to the following questions:

1. Will the TPB create a new process to determine the selection criteria for the Alternate Build Scenario or will the same process currently used for Visualize 2045 be implemented?
2. Can a project be deleted from the Visualize 2045 Plan if a contract is already in place or if some expenditures have already be made, e.g. for PE/design and/or Right of Way, construction phases? Does this create any potential legal contract/legal issues? What are the impacts on NVTA member jurisdictions as well as current and future NVTA funding programs?
3. As the FHWA and FTA require that regionally significant projects be included in the air quality conformity determination, would the TPB adoption of the Alternate Build Scenario be considered a planning exercise or one in which the TPB would like to implement? Are there concerns regarding federal requirements?
4. Since the TPB is not a funding entity, and projects in the CLRP are required to demonstrate a "reasonable expectation of funding," how will the TPB seek concurrence from project sponsors on their commitment to advance projects identified in the Alternate Build Scenario?

Attachment: Draft TPB Resolution

**WHEREAS**, in December, the board of TPB voted 22 to 0 (with 8 abstentions) to "require its member agencies to prioritize investments on projects, programs, and policies to reduce greenhouse gas emissions, prioritize the aspirational strategies, and achieve COG's land use and equity goals..." and further recognized in the Technical Inputs Solicitation that meeting adopted greenhouse gas emissions targets "...will require a reduction in vehicle miles traveled and associated emissions in Visualize 2045;" and

**WHEREAS**, the draft Visualize 2045 project list is largely the same as the 2018 plan, which included \$40 billion in highway expansion but only \$24 billion in transit expansion. While transit operating investments are higher than those for highways, this is partially due to the fact that the costs of driving are not fully accounted for by TPB. Other costs include police/fire/emergency response for highways which are not counted as part of the highway agency budgets, nor are the negative health care costs of vehicle pollution, or the much higher personal household costs of driving compared to transit/walk/bike; and

**WHEREAS**, public input for Visualize 2045 showed that 84% of the region's residents agree that "elected officials need to consider the impacts of climate change when planning transportation in the future." The survey results also showed that the region's residents want to walk and bike more, drive less, and support transit if it is frequent and reliable; and

**WHEREAS**, while the currently proposed conformity analysis would use 2014 telecommuting rates, 2019 telecommuting rates were already noticeably higher than 2014 rates and post-pandemic rates are expected to be even higher than 2019 levels, possibly significantly so. Just a 5% decline in peak-hour traffic can return congested roadways to free-flow conditions; and

**WHEREAS**, the pandemic has demonstrated how critical transit is for our essential workforce in such fields as health care, grocery, shipping, maintenance, and more. It also showed that lower-income households live on very thin financial margins and that more transit along with free fares are investments that will help these families save money, buy food, pay rent, and build savings; and

**WHEREAS**, the urgency of the climate crisis means that the TPB region cannot put off creating a Visualize 2045 plan that commits to meeting greenhouse gas and vehicle miles reduction targets until the next long-range plan cycle. TPB and COG have the expertise, staff capacity, resources, time, and stakeholders at the table to develop a plan that adequately addresses the region's sustainability and equity goals now.

**WHEREAS**, the Council of Governments and TPB have been working to promote more mixed-use, walkable communities, affordable housing, and the extension of bus rapid transit.

**NOW, THEREFORE**, the TPB shall develop and include an alternative Build scenario in its conformity modeling process that aims to achieve TPB climate and equity goals through the use of transportation demand management, transit, and land use strategies consistent with regional

policy goals, a modified regional project list that reduces the number and scale of road capacity expansion projects in accordance with the anticipated reduced travel demand, and with particular focus on public transportation and pedestrian/bicycle improvements needed to serve mobility disadvantaged populations; and

The conformity modeling for the No-Build and two Build scenarios will measure the impact of induced demand, and use updated telecommuting patterns, and, as needed, sensitivity testing for a range of plausible post-pandemic telecommuting scenarios; and

The alternative Build scenario will meet federal conformity requirements such that TPB would have the option of adopting the scenario as its Long-Range Transportation Plan following the conformity modeling process and subsequent public comment period.

DRAFT