



National Capital Region  
**Transportation Planning Board**

**MEMORANDUM**

**TO:** Unfunded Capital Needs Working Group Technical Staff  
**FROM:** Dusan Vuksan, Principal Transportation Engineer  
**SUBJECT:** All Build Scenario Project Specification Needs  
**DATE:** February 22, 2016

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This technical memorandum highlights the information needed for completion of network development process for All-Build Scenario in conjunction with the Unfunded Capital Needs Working Group.

**PROJECT BACKGROUND**

As stated in the January 14, 2016 Memorandum by Kanti Srikanth and John Swanson to the Transportation Planning Board, Phase I of Unfunded Capital Needs Working Group, which aims to develop a baseline report, will consist of evaluating three scenarios:

- 1) No Build - system performance with growth in demand (Population and Employment) but without any of the capital improvements in the current (2015) CLRP;
- 2) Planned Build - system performance with growth in demand and capital improvements in the current (2015) CLRP; and
- 3) All Build - system performance with growth in demand and capital improvements in the current 2015 CLRP plus all of the currently unfunded capital improvements inventoried by the TPB Network development

**ALL BUILD GENERAL NETWORK DEVELOPMENT APPROACH**

Input assumptions for analyzing No Build (Scenario 1) and Planned Build (Scenario 2) have been established, but TPB staff will need additional information for the submitted transit and highway projects to complete the All Build analysis. Member DOT / jurisdiction / transit provider staff and TPB staff have put in a significant amount of effort to identify, submit and summarize the projects for the All Build scenario. However, in order to specify the projects in the travel demand networks, additional information may be needed for most of the new project entries. Given the large number of projects (over 500), TPB staff understands that it may take a significant amount of time to obtain this level of information from the members. In order to adhere to the proposed project schedule, TPB staff is proposing to create travel demand model inputs using the following two steps:

1. Members / project sponsors will be asked to provide the missing information as indicated in Tables 1 and 2 (attached) by March 7, 2016. TPB staff will use this information as an input to the travel demand modeling process; examples of information that is being requested include:
  - a.) Number of lanes
  - b.) Roadway facility type
  - c.) Transit service characteristics (e.g., headway, run time, etc.)
2. If members do not provide the information requested, TPB staff will use “default criteria and rules” to develop the missing project specifications (e.g., number of lanes, transit route headways and run times, etc.).

The default criteria and rules (number 2 above) that staff will use are described below. These assumptions are provided separately for transit and highway projects. It is important to keep in mind that these rules would pertain only to missing data.

### **ALL BUILD HIGHWAY DEFAULT ASSUMPTIONS FOR PROJECTS WITH MISSING DATA**

If project information is missing, TPB staff will assume the following:

1. For any facility widening / lane removal, or what is referred to as reconstruction for the project submittals from Maryland, if the number of additional / removed lanes is not specified, staff will assume that one lane is added / removed in each direction.
2. Unless otherwise specified, staff will not assume that any roadway capacity is being removed in conjunction with the implementation of bicycle and pedestrian projects.
3. For facility upgrade, staff will assume a “one level upgrade” – for example, a minor arterial will become a major arterial (not an expressway or a freeway).
4. If staff is able to locate any missing information on the project website or by using other official resources, a determination / judgement call will be made as to whether this information will be considered.
5. Given the regional nature of the roadway and transit networks in the travel demand model, improvements to certain small scale projects will not be included in the analysis.

### **ALL BUILD TRANSIT DEFAULT ASSUMPTIONS FOR PROJECTS WITH MISSING DATA**

If project information is missing, TPB staff will assume the following:

1. If transit route stop information is not specified, staff will assume that the service stops at every intersection represented in TPB’s networks; buses will not make any stops on the freeways, and professional judgment will be used in regards to limited stops service.
2. If transit route speed or run time is not specified, staff will use average speed assumptions for the appropriate mode derived from the model for similar service; different average speeds will be developed for local bus, express bus, BRT, streetcar, heavy rail, commuter rail and light rail.

3. If headway information is not specified, staff will assume:
  - a.) 10 minute peak and 15 minute off-peak headways for new local bus service
  - b.) 6 minute peak and 10 minute off-peak headways for new BRT, Streetcar, LRT and Metrorail service
  - c.) 15 minute peak and 60 minute off-peak headways for new Commuter Rail and long-haul express bus service
4. If staff is able to locate any missing information on the project website or by using other official resources, a determination will be made as to whether this information will be considered

It is important to note that, while the above rules will apply to many projects, professional judgement will likely need to be used by TPB staff throughout the network development process. Therefore, depending on the level of information that has been provided by the members, some of the projects with missing information may differ in some ways from what the project sponsors have envisioned. Projects with insufficient information may end up not being included in the networks.

## **NEXT STEPS**

**TPB staff is asking that stakeholders review the highway and transit project specifications in the attached tables, correct the existing and add the missing information, where applicable, and provide the revisions to TPB staff by March 7, 2016. TPB staff also welcomes any additional information as attachments, such as reports, summaries or maps of transit stops.** If TPB staff does not receive the missing information by the specified deadline, default criteria and rules will be applied in the network development process. A final project listing, including complete technical specifications, will be issued to the working group for their review prior to travel demand modeling.