# NVTC STAFF OBSERVATIONS ON IMPACT OF CHANGE FROM NET COST TO GROSS COST IN CALCULATING STATE SHARE

## Proposal Summary

As stated in the DRPT memo posted on October 9th "capital asset tier categories and definitions" memo to the TSDAC, DRPT and TSDAC "has been charged with evaluating a tiered approach to distributing funds for capital purposes based on asset needs and available revenues. The purpose of the tiered approach is to incentivize investment in categories of assets that the Commonwealth Transportation Board views as the most important to transit in Virginia."

The DRPT memo contains proposals regarding what asset basis to use for allocating the funding, establishing a capital reserve, multi-year funding, tiering percentages, and required local match.

Two of the more significant changes between this and the previous proposal are that the new proposal increases the required local match from 1% to 4%, and eliminates the concept of allowing grantees to receive allocations based on their application, but then apply that state funding as they desire among those assets (e.g., receive funds for Asset X and apply those fund to Asset Y). Based on data provided by DRPT and subject to the assumptions discussed below, if the required local match were increased to 10 percent, then the amount of state assistance that NVTC would receive would be approximately the same under the gross-tiered method and net-tiered method.(Note DRPT has changed terminology from gross to total cost and net to non-federal share.)

## Assumptions

By necessity, DRPT had to make many assumptions in developing the tables for assessing the impact of the capital funding proposals. Many of these assumptions will have a material impact on how much assistance each grantee receives under each funding scenario. These include:

1. The tables assume grantees will not maximize their state funds by moving federal assistance between assets. The ability to do so is available to some, but not all systems. This could have a significant impact on the results of the funding models.
2. Assumes all 5307 funding will be moved out of the capital program. The extent that systems may actually do this is not known, since some may not have the ability or desire to do so for several reasons.
3. Data on future capital needs may not be complete or accurate, especially in further out years.
4. The assignment of certain assets to tiers may not be correct. For example, the tables, by default, appear to place debt service in Tier 3 when it may belong in Tier 1 or 2, depending on the asset.

5. Many systems must make assumptions regarding future federal funding levels to plan their capital purchases. The actual federal funding levels may be significantly different than assumptions made.
6. The federal funding sources for FY15-19 are estimated in preparing the tables.
7. If any change to the capital funding mechanism is put in place and is successful in incentivizing certain investments, which is the stated goal, this will in of itself cause a change in the analysis results.
8. The percentages used for the tiering categories can greatly impact the results.
9. The required local share can greatly impact the results.

Incentivizing Investments

The stated purpose behind the tiered approach is to incentivize investment in certain assets that the CTB views as most important to transit in Virginia. NVTC staff has determined the proposal does not accomplish this goal, and where the incentives might be created, they are not spread equitably among regions within Virginia.

As the attached schedule prepared by NVTC staff illustrates, using the DRPT FY15 schedule of gross (total cost) basis allocations and related assumptions, assigning assets to tiers has no impact on the amount of state funding a grantee receives for the majority of the assets statewide. The schedule shows that 65% of the asset lines reported receive the maximum state funding (up to the 4% local share), while 35% do not. Assuming all assets are funded at the Tier 3 rate of 17%, 64% of the assets still receive the maximum funding; only a 1% point change. In other words, the proposal does not provide any incentive for 64% of the assets in Virginia since the bottom tier percentage still provides the maximum funding for those assets.

Breaking out the above calculations between NOVA and the rest of the state shows that the proposal to allocate assistance based on asset tiers is really only being done in NOVA, while the rest of the state is largely immune to this concept. Once again assuming all assets are funded at the proposed lowest level of 17%, only 20% of the assets in NOVA are still funded at the maximum level, while 94% of the remaining statewide assets are funded at the maximum level. So the goal of tiering to incentivize the investment in certain assets applies to 80% of NOVA assets, and only 6% of the assets in the rest of the state.

Using gross (total) cost as a basis for calculating assistance completely undermines the tiering concept since there is no impact on such a large percentage of assets. Using the tiering approach on cost net of federal funds, however, will impact the state funding level for all assets in all tiers and for all regions, and will achieve the goal of incentivizing investment. This goal cannot be accomplished if assistance is allocated on a gross cost basis.

Local Contribution

Shifting the asset basis on which assistance is allocated from the present non-federal share (net cost) to total (gross) cost will drive up local costs for jurisdictions that do not have federal funding, while minimizing the local contribution for many who do. In addition, accommodating increased state share by spreading federal funds to new assets poses significant institutional issues, is not practical, and would drive up the costs of capital for WMATA. In order for local jurisdictions to retain their federal share, the regional federal formula funding agreements would have to be renegotiated and the operating and capital costs of local systems will increase. The cost of WMATA capital projects would increase if forced to federalize more assets. The incentive should be to consolidate federal funds to minimize costs, not to spread federal funds and increase costs.

The use of gross cost will dramatically increase the local contributions required of those jurisdictions that do not have federal funds, namely, NVTC jurisdictions. NVTC jurisdictions already, as a matter of practice and priority, invest significant local funds in transit. According to the FY14 DRPT capital budget analysis prepared by DRPT, local contributions for NVTC jurisdictions would be increase from $52.3M to $56.4M, a $4.1M increase. NVTC jurisdictions already make the largest local contributions. In 2012 these local contributions for operating and capital amount to 9 times more per capita in NVTC than in jurisdictions outside of NVTC's boundaries, and over 12 times if including operating revenue in the calculations. Looking at the entire NOVA region, the attached table shows the local contribution for 79% of capital assets exceeds DRPT's proposed 4% minimum local contribution. Outside of NOVA, only 5% of capital assets exceed the proposed 4% minimum.

Increased Costs of Capital Projects

Spreading federal funds would have the effect of federalizing more capital projects -- as would happen if the capital participation rate became a percentage of gross – and would have unintended, adverse consequences for the entire Commonwealth. That's because projects with federal participation cost more, since they have to abide by federal rules (e.g. Buy America requirements; longer procurements and review processes; limited competition because some contractors are not equipped to deal with federal contracting requirements; etc.). Better to consolidate federal funds and limit the number of federally participating projects so the higher cost exposure is contained, as WMATA and Maryland currently do so that the NOVA Compact Members and Montgomery County's Ride-On bus system can undertake their capital projects at lesser cost.

By way of illustration of the challenges, consider capital funding for a bus at WMATA. We offer the typical example of a WMATA capital project—a bus (replacement) at a hypothetical cost of $1 million of which 80 percent qualifies for federal funding. Under net costs, the state participation would be 55% of $200,000 or $110,000. If gross costs are employed, the bus purchase qualifies for $800,000 in federal funds and

$450,000 in state funds. In sum, the purchase would technically qualify for federal and state funds in excess of the cost of the bus.

This would then require WMATA to spread its federal funds, assuming it could, to other capital projects or for the local jurisdiction to retain their share. Both options will drive up the costs of capital and in the case of shifting federal share to local jurisdictions will drive up operating costs. There are also tremendous practical problems with moving federal share among projects and from WMATA to local governments.

Federal Limits on Spreading Federal Funds at WMATA

MAP-21 and the FTA inhibit WMATA from "shifting" FTA funds from one project to another. Under MAP-21, FTA priorities encourage funding for certain types of assets, and WMATA and FTA partner together to determine which projects should be federally funded. WMATA may not have enough eligible projects to which federal dollars can be "shifted."

Region Constrained in Shifting Federal Share from WMATA

Longstanding regional agreements limit the ability to shift federal funds from WMATA to the localities. The region has in place a long-standing agreement concerning the distribution of federal formula funds through the National Capital Region Transportation Planning Board (TPB), the region's designated MPO, to WMATA, MTA, Virginia Railway Express (VRE), and Potomac and Rappahannock Transportation Commission (PRTC). A reconsideration of this long-standing agreement would involve at best difficult and time consuming negotiations, and is likely not practicable.

Increased Operating Costs from Shift Federal Share

Northern Virginia transit agencies that do not receive federal formula funds cost less to operate. On the operating side they have greater flexibility and are able to achieve greater efficiency in key inputs and on the margin as well. NVTC transit agencies cost efficiencies that, by means of DRPT, are to be passed along to the remainder of the state by decreasing the draw on state operating funds. It would not make sense for NOVA jurisdictions to federalize either from the perspective of the Commonwealth as a whole or for individual jurisdictions.

**Information pulled from DRPT's FY15 calculation of capital funding on a gross and non-federal basis.**

**Number of assets per tier, broken down between those funded at the maximum state level to equal 4% local match, and those funded below this level.**

| | NOVA | ROS | Total |
|---|---|---|---|
| Tier 1, 4% local (maximum funding) | 1 | 26 | 27 |
| Tier 2, 4% local (maximum funding) | 5 | 13 | 18 |
| Tier 3, 4% local (maximum funding) | 6 | 38 | 44 |
| Tier 1, > 4% local | 12 | 2 | 14 |
| Tier 2, > 4% local | 17 | 1 | 18 |
| Tier 3, > 4% local | 15 | 1 | 16 |
| | 56 | 81 | 137 |
| % of Assets Funded at Maximum | 21% | 95% | 65% |
| % of Assets Funded Below Maximum | 79% | 5% | 35% |

**Assuming the state percentage for all tiers is 17%, which is the tier 3 funding level assumed in DRPT calculations.**

| | NOVA | ROS | Total |
|---|---|---|---|
| Tier 1, 4% local (maximum funding) | 0 | 26 | 26 |
| Tier 2, 4% local (maximum funding) | 5 | 12 | 17 |
| Tier 3, 4% local (maximum funding) | 6 | 38 | 44 |
| Tier 1, > 4% local | 13 | 2 | 15 |
| Tier 2, > 4% local | 17 | 2 | 19 |
| Tier 3, > 4% local | 15 | 1 | 16 |
| | 56 | 81 | 137 |
| % of Assets Funded at Maximum | 20% | 94% | 64% |
| % of Assets Funded Below Maximum | 80% | 6% | 36% |

**Increase (Decrease)**

| | NOVA | ROS | Total |
|---|---|---|---|
| Tier 1, 4% local (maximum funding) | -1 | 0 | -1 |
| Tier 2, 4% local (maximum funding) | 0 | -1 | -1 |
| Tier 3, 4% local (maximum funding) | 0 | 0 | 0 |
| Tier 1, > 4% local | 1 | 0 | 1 |
| Tier 2, > 4% local | 0 | 1 | 1 |
| Tier 3, > 4% local | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| % of Assets Funded at Maximum | -1% | -1% | -1% |

| | | | |
|---|---|---|---|
| % of Assets Funded Below Maximum | 1% | 1% | 1% |

**TABLES FROM 10/4/13 DRPT MEMO TO TSDAC**
**Restated only to provide additional detail**

**Restatement of Table in DRPT Memo Showing NOVA Detail and Variance by Year**

**Table 2a: Summary of Capital grants by Scenario by District, FY15-FY19, Total Costs vs. Non-Federal Share ($000)**
(Positve = more funding under non-federal, Negative = more funding under gross)

| District | 2015 | 2016 | 2017 | 2018 | 2019 | 2015-2019 |
|---|---|---|---|---|---|---|
| **Bristol** | (1) | (2) | (1) | (1) | (2) | **(6)** |
| **Culpeper** | (10) | (16) | (18) | (24) | (18) | **(86)** |
| **Fredericksburg** | (9) | (21) | (23) | (11) | (9) | **(73)** |
| **Hampton Roads** | (420) | (493) | (730) | (344) | (508) | **(2,495)** |
| **Lynchburg** | (539) | (770) | (306) | (121) | (135) | **(1,869)** |
| **Northern Virginia** | 6,469 | 4,280 | 2,234 | (694) | (3,460) | **8,829** |
| **Richmond** | (231) | (188) | (159) | (181) | (200) | **(959)** |
| **Salem** | (980) | (984) | (402) | (419) | (364) | **(3,150)** |
| **Staunton** | (22) | (51) | (28) | (28) | (20) | **(148)** |
| **TOTAL** | **4,258** | **1,755** | **568** | **(1,822)** | **(4,716)** | **43** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **NVTC WMATA Jurisdictions** | 8,315 | 4,275 | 3,599 | 2,163 | (1,103) | 17,248 |
| **Loudoun** | - | - | - | - | - | - |
| **VRE** | (2,743) | (2,557) | (2,749) | (3,018) | (3,029) | (14,096) |
| **PRTC** | 897 | 2,562 | 1,385 | 161 | 673 | 5,677 |
| **Total NOVA** | 6,469 | 4,280 | 2,234 | (694) | (3,460) | 8,829 |

**Table 2b: Estimated Funding Percentage by Tier by Scenario, FY15 – FY19**

| Capital Tier | Estimated Percentage: Total Project Costs | Estimated Percentage: Non-Federal Costs |
|---|---|---|
| Tier 1: Vehicles | 64% | 75% |
| Tier 2: Infrastructure/Facilities | 33% | 50% |
| Tier 3: Other | 17% | 25% |