

TO: Chairman Fisetta and NVTC Commissioners
FROM: Kate Mattice, Patricia Happ and Dan Goldfarb
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SUBJECT: Regional Transit Performance

A. NVTC FY2016 Yearly and 4th Quarter Ridership Reports

The following chart details ridership for FY2015 and FY2016 for Northern Virginia’s transit systems. Most systems experienced decreased ridership in FY2016, resulting in an overall 6.1 percent decline from FY2015 to FY2016. The Commission will be provided more details regarding ridership trends for FY2016 at the meeting.

| Ridership in Virginia by System FY2015- FY2016 | | | |
|---|--------------------|--------------------|-----------------------------|
| System | FY2015 | FY2016 | Percent Change FY15-FY16 |
| Fairfax County Connector | 9,764,166 | 8,984,057 | -8.0% |
| PRTC OmniRide & OmniLink | 3,075,038 | 2,560,812 | -16.7% |
| Virginia Railway Express (VRE) | 4,505,063 | 4,352,814 | -3.4% |
| Alexandria DASH | 4,275,682 | 4,164,896 | -2.6% |
| Fairfax City CUE | 771,254 | 678,967 | -12.0% |
| Arlington Transit (ART) | 2,823,346 | 3,214,075 | 13.8% |
| Loudoun County Transit (LCT) | 1,739,802 | 1,754,694 | 0.9% |
| Metrobus | 21,019,621 | 20,061,350 | -4.6% |
| Metrorail | 110,146,165 | 102,723,985 | -6.7% |
| Total | 158,120,437 | 148,495,650 | -6.1% |

The following chart details average weekday ridership for FY2016 by quarter for Metrorail and Metrobus in Virginia. As a reminder, SafeTrack Metrorail closures started on June 4, 2016.

| Average Weekday Ridership in Virginia 4th Quarter FY2016 | | | | | | | |
|---|---------|---------|---------|----------|----------|----------|---------|
| System | Q1 FY16 | Q2 FY16 | Q3 FY16 | Apr 2016 | May 2016 | Jun 2016 | Q4 FY16 |
| Metrorail | 324,490 | 298,586 | 306,033 | 320,822 | 304,821 | 297,601 | 307,748 |
| Metrobus | 72,202 | 68,682 | 64,672 | 72,782 | 67,814 | 69,246 | 69,947 |

The following chart provides a detailed breakdown of ridership by Metrorail station in Virginia for 1st through 4th Quarters FY2015 and FY2016.

Metrorail Ridership by Station in Virginia – FY2015 - FY2016

| Line/Station | Year | Q1 Total | Q2 Total | Q3 Total | April | May | June | Q4 Total | % Change YTD FY15-16 |
|--------------------------------|-------------|----------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|-------------------------|
| Silver | | | | | | | | | |
| Greensboro | FY15 | 91,560.00 | 138,633 | 131,160 | 54,180 | 51,270 | 56,864 | 162,314 | |
| | FY16 | 160,609.83 | 151,239 | 154,064 | 53,858 | 52,646 | 51,552 | 158,056 | 5.3% |
| McLean | FY15 | 147,621.07 | 223,778 | 193,112 | 82,140 | 79,581 | 88,338 | 250,059 | |
| | FY16 | 248,787.34 | 226,961 | 223,494 | 76,184 | 76,701 | 74,636 | 227,521 | 1.2% |
| Spring Hill | FY15 | 137,054.72 | 193,778 | 167,094 | 75,032 | 72,303 | 73,414 | 220,749 | |
| | FY16 | 208,951.73 | 176,968 | 166,171 | 64,906 | 65,473 | 61,986 | 192,365 | -5.8% |
| Tysons Corner | FY15 | 349,862.59 | 508,728 | 417,444 | 174,344 | 176,543 | 185,522 | 536,409 | |
| | FY16 | 549,066.91 | 532,007 | 467,929 | 171,312 | 166,978 | 158,872 | 497,162 | 1.7% |
| Wiehle-Reston East | FY15 | 875,098.40 | 1,199,893 | 1,067,666 | 455,760 | 432,229 | 459,992 | 1,347,981 | |
| | FY16 | 1,275,357.10 | 1,128,147 | 1,094,891 | 383,940 | 377,740 | 342,796 | 1,104,476 | -5.9% |
| Total Silver Line | FY15 | 1,601,196.78 | 2,264,810 | 1,976,476 | 841,456 | 811,926 | 864,130 | 2,517,512 | |
| | FY16 | 2,442,772.91 | 2,215,322 | 2,106,549 | 750,200 | 739,538 | 689,842 | 2,179,580 | -2.8% |
| Orange | | | | | | | | | |
| Dunn Loring | FY15 | 748,694.57 | 641,095 | 587,278 | 239,280 | 214,818 | 222,220 | 676,318 | |
| | FY16 | 615,048.99 | 571,147 | 593,043 | 207,896 | 193,812 | 173,668 | 575,376 | -6.6% |
| West Falls Church | FY15 | 818,225.66 | 466,709 | 408,652 | 162,100 | 146,764 | 152,168 | 461,032 | |
| | FY16 | 410,369.43 | 375,393 | 387,285 | 133,892 | 125,293 | 103,824 | 363,009 | -12.1% |
| Vienna | FY15 | 1,884,375.97 | 1,670,661 | 1,504,416 | 621,536 | 560,386 | 578,636 | 1,760,558 | |
| | FY16 | 1,607,251.14 | 1,446,883 | 1,449,098 | 509,142 | 467,141 | 427,256 | 1,403,539 | -9.7% |
| Total Orange Line | FY15 | 3,451,296.21 | 2,778,465 | 2,500,346 | 1,022,916 | 921,968 | 953,024 | 2,897,908 | |
| | FY16 | 2,632,669.57 | 2,393,424 | 2,429,426 | 850,930 | 786,246 | 704,748 | 2,341,924 | -9.4% |
| Silver/Orange | | | | | | | | | |
| Ballston | FY15 | 1,764,722.30 | 1,683,360 | 1,597,354 | 618,584 | 566,967 | 587,650 | 1,773,201 | |
| | FY16 | 1,660,200.18 | 1,544,064 | 1,570,932 | 527,846 | 501,164 | 470,368 | 1,499,378 | -6.5% |
| Clarendon | FY15 | 754,099.58 | 733,925 | 698,098 | 267,844 | 253,044 | 255,846 | 776,734 | |
| | FY16 | 726,353.06 | 661,574 | 674,605 | 219,880 | 205,365 | 186,792 | 612,037 | -8.9% |
| Court House | FY15 | 1,157,779.52 | 1,104,692 | 1,051,572 | 393,396 | 365,518 | 379,950 | 1,138,864 | |
| | FY16 | 1,075,945.76 | 985,086 | 1,023,337 | 342,922 | 325,772 | 302,960 | 971,654 | -7.2% |
| East Falls Church | FY15 | 676,214.66 | 639,226 | 578,638 | 236,324 | 223,049 | 230,266 | 689,639 | |
| | FY16 | 639,171.73 | 610,902 | 587,421 | 188,044 | 182,708 | 216,669 | 587,421 | -4.8% |
| Rosslyn | FY15 | 2,387,113.22 | 2,202,154 | 2,040,504 | 795,408 | 728,987 | 761,254 | 2,285,649 | |
| | FY16 | 2,175,060.11 | 1,992,678 | 1,997,969 | 683,416 | 658,062 | 628,668 | 1,970,146 | -6.5% |
| Virginia Square | FY15 | 576,732.42 | 561,764 | 549,112 | 209,000 | 193,818 | 208,078 | 610,896 | |
| | FY16 | 583,746.73 | 539,438 | 552,748 | 186,770 | 176,618 | 175,292 | 538,680 | -3.9% |
| Total | FY15 | 7,316,661.70 | 6,925,121 | 6,515,278 | 2,520,556 | 2,331,384 | 2,423,044 | 7,274,984 | |
| | FY16 | 6,860,477.56 | 6,333,742 | 6,407,012 | 2,148,878 | 2,049,688 | 1,980,749 | 6,179,315 | -6.5% |
| Blue | | | | | | | | | |
| Arlington Cemetery | FY15 | 359,136.21 | 197,555 | 136,938 | 148,600 | 148,018 | 143,580 | 440,198 | |
| | FY16 | 360,858.47 | 207,414 | 173,007 | 112,070 | 119,332 | 121,652 | 353,054 | -3.6% |
| Franconia Springfield | FY15 | 1,262,635.08 | 1,141,555 | 1,007,056 | 436,684 | 393,479 | 410,396 | 1,240,559 | |
| | FY16 | 1,174,651.87 | 1,057,381 | 1,040,870 | 364,676 | 358,724 | 354,964 | 1,078,364 | -4.7% |
| Van Dorn | FY15 | 524,790.30 | 480,160 | 421,380 | 168,892 | 160,555 | 166,170 | 495,617 | |
| | FY16 | 487,811.61 | 447,566 | 441,178 | 152,018 | 152,658 | 148,766 | 453,442 | -2.9% |
| Total | FY15 | 2,146,561.59 | 1,819,270 | 1,565,374 | 754,176 | 702,052 | 720,146 | 2,176,374 | |
| | FY16 | 2,023,321.95 | 1,712,361 | 1,655,054 | 628,764 | 630,713 | 625,382 | 1,884,859 | -4.1% |
| Yellow | | | | | | | | | |
| Eisenhower Avenue | FY15 | 297,759.74 | 250,672 | 223,824 | 94,544 | 86,948 | 88,486 | 269,978 | |
| | FY16 | 263,435.47 | 227,578 | 228,614 | 83,728 | 82,500 | 88,748 | 254,976 | -3.3% |
| Huntington | FY15 | 1,257,767.74 | 1,158,062 | 1,048,074 | 415,968 | 378,413 | 396,936 | 1,191,317 | |
| | FY16 | 1,144,440.54 | 1,043,621 | 1,036,062 | 362,564 | 357,682 | 365,664 | 1,085,910 | -5.1% |
| Total | FY15 | 1,555,527.48 | 1,408,735 | 1,271,898 | 510,512 | 465,361 | 485,422 | 1,461,295 | |
| | FY16 | 1,407,876.01 | 1,271,199 | 1,264,676 | 446,292 | 440,182 | 454,412 | 1,340,886 | -4.8% |
| Blue/Yellow | | | | | | | | | |
| Braddock Road | FY15 | 704,761.28 | 677,007 | 633,576 | 246,900 | 231,783 | 238,940 | 717,623 | |
| | FY16 | 688,046.36 | 655,132 | 671,229 | 229,544 | 227,603 | 220,558 | 677,705 | -0.9% |
| Crystal City | FY15 | 1,833,065.71 | 1,705,550 | 1,655,778 | 676,424 | 595,861 | 624,132 | 1,896,417 | |
| | FY16 | 1,777,917.29 | 1,632,265 | 1,690,698 | 599,218 | 562,131 | 567,242 | 1,728,591 | -2.9% |
| King Street | FY15 | 1,454,023.38 | 1,270,607 | 1,121,088 | 489,284 | 470,124 | 479,198 | 1,438,606 | |
| | FY16 | 1,323,249.30 | 1,185,891 | 1,151,490 | 426,822 | 409,751 | 415,884 | 1,252,457 | -4.7% |
| National Airport | FY15 | 1,457,735.09 | 1,357,867 | 1,225,648 | 492,732 | 487,601 | 494,534 | 1,474,867 | |
| | FY16 | 1,400,474.10 | 1,268,756 | 1,230,796 | 442,966 | 443,322 | 435,182 | 1,321,470 | -4.3% |
| Pentagon | FY15 | 2,173,053.22 | 2,093,133 | 1,947,700 | 705,568 | 674,492 | 707,098 | 2,087,158 | |
| | FY16 | 2,023,542.62 | 1,934,774 | 1,942,867 | 633,150 | 645,090 | 636,444 | 1,914,684 | -4.1% |
| Pentagon City | FY15 | 2,460,140.19 | 2,316,677 | 2,011,576 | 815,364 | 765,091 | 752,860 | 2,333,315 | |
| | FY16 | 2,174,387.96 | 2,045,101 | 1,989,031 | 708,054 | 700,469 | 674,574 | 2,083,097 | -6.2% |
| Total | FY15 | 10,082,778.87 | 9,420,841 | 8,595,366 | 3,426,272 | 3,224,952 | 3,296,762 | 9,947,986 | |
| | FY16 | 9,387,617.64 | 8,721,919 | 8,676,110 | 3,039,754 | 2,988,366 | 2,949,884 | 8,978,004 | -4.3% |
| Total Virginia Stations | FY15 | 26,154,022.63 | 24,617,242 | 22,424,738 | 9,075,888 | 8,457,644 | 8,742,528 | 26,276,060 | |
| | FY16 | 24,754,735.63 | 22,647,968 | 22,538,827 | 7,864,818 | 7,634,733 | 7,405,017 | 22,904,568 | -5.3% |

C. Regional Bus Agenda Baseline Report on Performance

Overview: NVTC's Regional Bus Agenda is aimed at providing an understanding of bus operations in Northern Virginia across jurisdictional boundaries. The goal is to identify opportunities within the region for bus, including high quality modes such as Bus Rapid Transit (BRT). The material presented here provides a quick glimpse of information designed to support future studies and opportunities for new high-quality transit and to further the data sources and information available to the local jurisdictions for their future TDPs and other short- and long-term planning efforts.

As part of the ongoing work to evaluate bus performance at the regional level in Northern Virginia, NVTC staff is developing a comprehensive database of bus service in Northern Virginia. At this initial stage, staff has completed a preliminary analysis of daily bus service levels for each of the bus systems in NVTC's jurisdictions, WMATA, PRTC, and other private operators of commuter services that serve employment destinations in Northern Virginia. This preliminary analysis categorizes bus service by service type (e.g., commuter, express, local, etc.) and geography. The overall goal of the regional bus effort is to identify regional opportunities and further collaboration between the jurisdictional providers.

This preliminary analysis is based on the current geo-database of bus routes developed using MWCOG Clearinghouse. NVTC staff supplemented the data with jurisdictional staff assistance, as well as with open source web-based information and operator schedules. The current database includes over 700 transit routes, representing weekday bus service, as well as land use at the transportation analysis zone level. Future enhancements to the database may look at parcel level data, but currently NVTC staff has been incorporating the latest MWCOG Cooperative Land Use Forecast. Staff will update the land use data as new forecasts are published.

Service Supplies Metrics: Northern Virginia has a comprehensive network of bus service, which includes primary routes operated by WMATA as well as substantial local service provided by the jurisdictions. Below are highlights of the bus service supplied in the region:

- Over 75 percent of the weekday service hours are within the peak periods and approximately 60 percent of the service miles occur within the peak periods.
- WMATA service contributes roughly 55 percent of the daily service hours and 45 percent of the daily miles in Northern Virginia.
- The inner local bus systems (i.e., Fairfax Connector, ART, DASH, and CUE) represent about 30 percent of the daily service hours and 40 percent of the service miles.
- The outer jurisdictions, including Loudoun County and PRTC's service area, operate approximately 15 percent of the weekday service hours and 25 percent of the weekday miles.
- The outer jurisdictions operate more commuter and express services at higher speeds, which contribute to higher service miles and fewer hours.

- WMATA and the inner jurisdictions operate on more congested roads with lower speeds resulting in service hours that are relatively more balanced with service miles.
- In Northern Virginia, the local jurisdictions operate over 500 buses a day, which is about 40 percent of WMATA's total bus fleet – a considerable number of vehicles.

Summary Tables C-1 and C-2 show the daily service hours and miles by type of service and by operator respectively.

Table C-1

| Service Type | Total Weekday Service | | Percent of Total | |
|-----------------------|-----------------------|--------|------------------|-------|
| | Hours | Miles | Hours | Miles |
| Local WMATA | 6,400 | 40,500 | 46% | 34% |
| Express WMATA | 1,100 | 11,800 | 8% | 10% |
| Local Bus (inner) | 4,000 | 37,000 | 29% | 31% |
| Local Express (inner) | 250 | 2,500 | 2% | 2% |
| Local (outer) | 600 | 6,100 | 5% | 5% |
| Commuter Bus | 1,500 | 21,600 | 11% | 18% |

Table C-2

| Operator | Total Weekday Service | | Percent of Total | |
|-------------------|-----------------------|--------|------------------|-------|
| | Hours | Miles | Hours | Miles |
| ART | 500 | 3,600 | 4% | 3% |
| DASH | 700 | 4,000 | 5% | 3% |
| Fairfax Connector | 3,000 | 32,300 | 22% | 27% |
| Loudoun | 600 | 6,700 | 4% | 6% |
| PRTC | 1,300 | 16,800 | 9% | 14% |
| CUE | 200 | 1,200 | 1% | 1% |
| WMATA | 7,300 | 50,300 | 53% | 42% |
| Private Commuter | 300 | 4,600 | 2% | 4% |

Market Analysis: Transit is an important transportation mode in Northern Virginia. It provides mobility and access to many residents in and visitors to the region. The transit system provides comprehensive coverage across the region and throughout the day, but the vast majority of transit trips are taken by commuters getting to and from work. Below are highlights of mobility and access across the region for commuting trips:

- Arlington has the highest use with approximately 50 percent of the residents using transit to get to work and approximately 40 percent of workers in the county using transit to get to work destinations in Arlington.
- The City of Alexandria has approximately 40 percent of residents using transit for commuting and over 20 percent of workers destined for jobs in the city via transit.
- Both Arlington and Alexandria have denser development across their jurisdictions, which adds to transit's viability.
- Fairfax County, which is larger and has more diverse development patterns, has about 20 percent of residents using transit for their commute.

- The percentage of workers in Fairfax County using transit to commute is smaller than Alexandria and Arlington, but the number is important given how many jobs are in the county. Included in the county's mode share are the cities of Falls Church and Fairfax.
- The majority of commuters in Loudoun County work in Loudoun or Fairfax counties. These commuters primarily use their cars to get to work. Only 10 percent of the commuters from Loudoun County work in Arlington or Washington, D.C. The vast majority of Loudoun commuters traveling to the regional core areas in Arlington and D.C. use transit.

The market data comes from the MWCOG/TPB household travel survey.

The purpose of NVTC's regional bus performance effort is to focus on how bus serves the region. Below are highlights of bus commuting trends in the region:

- Approximately 20 percent of the transit commuting trips in Arlington are only on bus.
- For Alexandria, approximately 30 percent of the commuting transit trips are only on bus. There are similar percentages for both jurisdictions with respect to residents and workers commuting on transit who use bus to access Metrorail.
- Fairfax County has a similar residential pattern but far more commuters using only bus to get to jobs within the county than using bus to connect to Metrorail.
- Loudoun County has the highest percentage of transit trips that use only bus as the primary transit commuting mode.

Next Steps: The goal of this work is to identify opportunities within the region for bus, including high quality bus modes such as BRT. This work will provide information that may support studies and opportunities for new high-quality transit, such as the Envision Route 7 study, and further the data sources and information available to local jurisdictions for their future TDPs and other short- and long-term planning efforts.

The analysis and data reported here are preliminary and serve as the foundation for future analytical efforts. NVTC staff is building and reviewing the database for accuracy. Staff will work with the local jurisdictions to incorporate recently completed Transit Development Plans (TDP). To that end, NVTC is planning a series of meetings to present a summary overview and highlights to the Management Advisory Committee and transit providers. Along with the TDPs, transit service, as identified in the region's Constrained Long Range Plan (CLRP), and future land use forecast data will be incorporated into the database.

NVTC's next technical analysis activity is to develop accessibility measures, including accessibility by income level. Previous transit accessibility analysis in Northern Virginia has focused on jobs within a certain timeframe rather than how accessibility impacts different income groups or an evaluation of accessibility by different transit mode.