NORTHERN VIRGINIA TRANSPORTATION COMMISSION

2020 Commuter Choice Annual Report Technical Memorandum

Table of Contents

1. Introduction

This memorandum describes how the Northern Virginia Transportation Commission (NVTC) calculated the person throughput increases for projects funded to date by the Commuter Choice program as identified in the Performance Look Back portion of the 2020 Commuter Choice Annual Report. It also discusses the resulting figures and provides context for the Lessons Learned portion of the report, specifically the measurability challenges that NVTC encountered with certain types of projects in conducting this analysis and how NVTC plans to address them.

Commuter Choice projects must support the corridor improvement goals of maximizing person throughput and implementing multimodal improvements that improve mobility, support new and diverse travel choices, and enhance transportation safety and travel reliability. NVTC's Commuter Choice evaluation process assigns most of the possible points to how well proposed projects advance these goals. For the analysis in this memorandum, NVTC focuses on the person throughput increases achieved by funded projects since maximizing person throughput is one of the improvement goals. The measure serves as a reasonable proxy for the attractiveness and effectiveness of the multimodal improvements created. However, the benefits of Commuter Choice projects expand beyond increased transit ridership by improving connections between 30 regional activity centers, making I-66 and I-395/95 commuters more aware of their alternatives to driving alone and enhancing linkages between driving, transit, bicycling and walking throughout the region.

In the 34 months that the overall program has had active projects on the road, the Commuter Choice program has funded 24 (22 operational and two complete) transit and access to transit projects to date that resulted in about 2,200 more people moving inbound through the I-66 and I-395/95 corridors each morning. This performance represents 86% of the 24 projects' collective throughput goal.

On the I-66 corridor, 16 (14 operational and two complete) transit and access to transit projects moved about 1,500 people inbound each morning, representing 77% of these 16 projects' collective throughput goal. Of these 16 projects, 69% recorded throughput increases that exceeded or were close to (within 30%) their respective throughput targets. Besides supporting these projects' operations, Commuter Choice has funded the purchase of 24 buses that will continue to serve I-66 corridor commuters throughout their useful life cycle of 12 years. The program's support was also vital to the construction of a 250-space park-and-ride lot as well as access and amenity improvements to more than 30 bus stops served by busy local routes that connect commuters with job centers and Metrorail stations.

On the I-395/95 corridor, eight operational transit and access to transit projects moved about 700 people inbound each morning, representing 117% of these eight projects' collective throughput goal. Of these eight projects, 75% recorded throughput increases that exceeded or were close to (within 30%) their respective throughput targets. Beyond supporting operating expenses of these services, Commuter Choice funds have funded the purchase of 13 buses and the installation of real-time passenger information signs at 20 busy bus stops.

However, NVTC encountered challenges in collecting credible quantitative data for both transportation demand management and roadway operations projects. As a result, NVTC staff were not able to calculate the benefits of these projects for this report. The memorandum details the reasons for the difficulties and, as noted above, how NVTC plans to address them for future look-back reports.

2. Background

The Commuter Choice program uses toll revenues from two regional expressway corridors – specifically the Express Lanes on I-66 Inside the Beltway and I-395/95 – to provide funding for multimodal transportation projects that benefit toll road users by moving more people and expanding transportation options. NVTC manages the Commuter Choice program in partnership with the Commonwealth of Virginia and, on the I-395/95 corridor, the Potomac and Rappahannock Transportation Commission (PRTC).

Projects Funded To-Date

The Commuter Choice program was established in 2017; the program has funded 36 projects, some of which have received multiple installments of funding support, totaling over $60.4 million of reinvestment of toll revenues into multimodal improvements. About half of this amount ($27.4 million) has been for long-lived capital assets, including bus purchases, park-and-ride construction and capital improvements to bus stops, that will continue to benefit commuters even after operations support ends. Commuter Choice on the I-66 Corridor has funded 26 projects in three rounds of funding, while Commuter Choice on the I-395/95 Corridor has funded 10 projects in one round of funding. Projects funded under Commuter Choice generally represent one of four categories:

- **New or Enhanced Bus Service** – Capital funding and up to 24 months of operating subsidies for new commuter, local and on-demand bus routes or improvements, such as more frequent service or route extensions, to such routes that were already in place.
- **Access to Transit** – Pedestrian and bicycle access improvements from residential areas to nearby transit stations, hubs and stops.
- **Transportation Demand Management (TDM) –** Strategies to reduce drive-alone commute trips through education and outreach on alternative options and incentives to entice changes in travel behavior. Includes traditional employer-based campaigns and newer more audience focused strategies (by geographic area or target transportation mode, such as vanpools).
- **Roadway Operations –** Operational and safety strategies and capital improvements to roadways that parallel or connect with I-66 inside the Beltway or I-395/95.

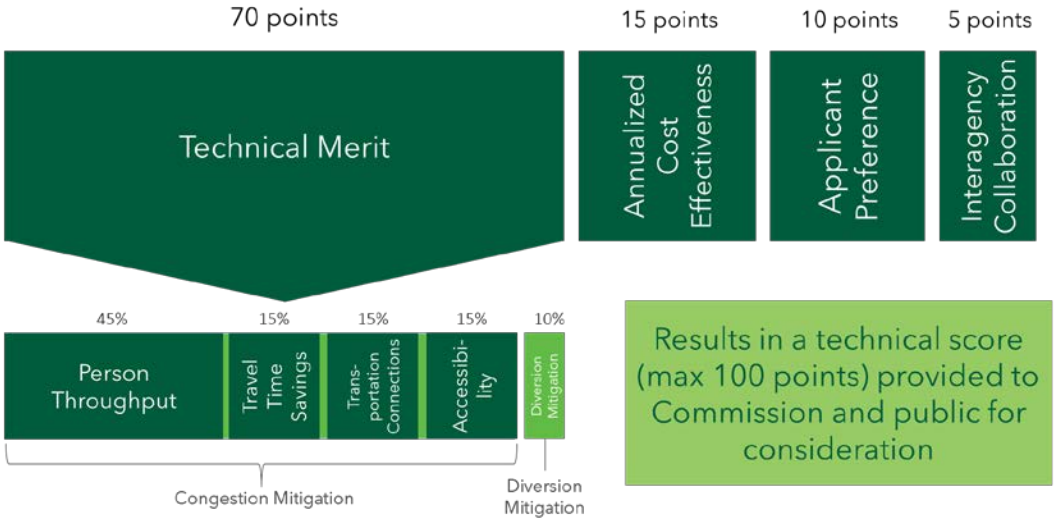
Projects were selected for funding based substantially on the outcomes of a multiple-measure technical evaluation approach. NVTC's current Commuter Choice technical evaluation

process[1] (Figure 1 below) allots 70 of the 100 possible points to factors related to how well proposed projects meet the corridor improvement goals. The factors capture:

- The efficiency by which the project would move more people,
- The travel time savings that commuters would realize from using the project relative to a non-tolled driving trip,
- The extent to which the project would improve connections between modes of transportation,
- The extent to which the project would improve access to regional activity centers, and
- The ability of the project to absorb car trips that might be diverted onto parallel streets due to tolling or high-occupancy vehicle restrictions.

Other criteria in the process capture the project's cost effectiveness (in terms of the technical merit score relative to the funding request, taking the useful life of project elements into account), whether the proposed project is the applicant's top priority out of those that they submitted for funding consideration and whether the project has been discussed with other jurisdictions or agencies in the region that may be affected by it.

Figure 1: Current Commuter Choice Technical Evaluation Process



NVTC now limits operations projects of any type – not just transit services, but also bike share operations and TDM campaigns – to a maximum of 24 months of support at a time. Projects must successfully recompete under a subsequent call for projects to receive a further installment of operating support. This approach helps NVTC address the risk of underperforming projects: 24 months provides a reasonable amount of time to develop a viable service but limits the program's commitments where services cannot meet performance expectations despite good-faith efforts by recipients.

[1] NVTC has refined the technical evaluation process over successive rounds of Commuter Choice funding, but the Technical Merit factors that relate to corridor improvement goals have consistently been the most significant aspect of the process.

Annual Performance Requirement

The Memoranda of Agreement (MOA) that govern the Commuter Choice program (dated 2020 for the I-66 corridor program and dated 2017 and 2019 for the I-395/95 corridor) require NVTC and, for the I-395/95 corridor program, PRTC, to submit an annual report on Commuter Choice to the Commonwealth Transportation Board. The MOAs for both corridors require the report to address the following:

1. *A description of projects selected for funding in the past fiscal year and the benefits that were the basis for evaluation and selection of each such project;*

2. *A review of projects funded in past fiscal years describing the degree to which the expected benefits were realized or are being realized, beginning in 2020 for the I-66 corridor program and 2022 for the I-395/95 corridor program;*

3. *For any project that is not providing substantially similar benefits to those that were the basis for its evaluation and selection, an evaluation of the viability of a plan to modify the project or redeploy the assets to other eligible projects that are expected to provide greater benefits; and*

4. *Proposed uses of residual, unobligated balances of program funds carried over from prior years and interest earned on such funds.*

The summary figures in the Performance Look Back portion of NVTC's 2020 Commuter Choice Annual Report reflect the actual performance of 24 of the 36 total projects funded to date.[2] As noted above, NVTC focused on the increase in person throughput that could be attributed to each project as the best single metric of each project's performance out of the range of benefits that Commuter Choice projects offer. For Commuter Choice, person throughput is defined as the number of people moving through the corridor, including the expressway, parallel commuter routes and rail transit lines, across all modes of travel in the inbound (toward Washington, D.C.) direction during the morning peak period. NVTC chose to focus on person throughput increases for the following reasons:

- Maximizing person throughput is one of the two overarching improvement goals for each corridor's program.

- For the other goal – implementing multimodal transportation improvements that improve mobility, expand transportation options and enhance transportation safety and travel reliability – the increase in person throughput serves as a reasonable proxy for effectiveness in the absence of a single catch-all measure.

- Each project's anticipated person throughput increase[3] is a significant part of the eligibility review (in terms of assuring that the project will benefit toll payers) and

[2]NVTC opted to begin reporting on projects funded under the I-395/95 corridor program this year rather than in 2022 since performance data was available for most of the funded projects.
[3]NVTC has worked progressively more closely with applicants to ensure that the throughput estimates carried into the eligibility review and technical evaluation are reasonable, using transit ridership forecasting tools, past project performance and professional judgment.

technical evaluation. For funded projects, the throughput increase is specified in the project agreement as the project's key performance target.

- Person-throughput improvements have been the key performance figures provided to the Commissions and Commonwealth Transportation Board as part of the approval of programs of projects for funding.

Project Performance Reporting Requirement

Program recipients (grantees) are required to provide performance data to NVTC annually to determine the actual increase in person throughput for each funded project. Each project agreement identifies specific performance measures that will allow NVTC to compute the throughput increase, as well as days for which to report data to provide a representative picture of usage of the project. Where possible, the performance reporting parameters are consistent among similar projects. An example of typical performance reporting parameters for a new or enhanced bus service is as follows:

- Performance Measures: report average weekday ridership.
- Collection Period: report average weekday daily boardings collected for a two-week period in March or April. Chosen period should not include any holiday periods and the average should be calculated from Tuesdays, Wednesdays, and Thursdays during the period.
- Reporting: technical memorandum outlining data collection methodology, data collection dates, and results.

Most projects, regardless of category, specify a similar data collection period. Mid-week (Tuesday, Wednesday, or Thursday) days in March and April generally represent commute travel at its peak, given schools in session and no major holidays. In 2020, the COVID-19 public health emergency began to impact travel patterns significantly in mid-March. NVTC therefore advised grantees to collect data from the first two weeks of March for sake of a reasonably representative picture of travel conditions, prior to the implementation of large-scale stay-at-home and safer-at-home orders.

Limitations

The Commuter Choice program funds a variety of multimodal project types. Some project types, namely new and enhanced bus services and access to transit projects, have readily measurable ridership impacts that can be converted into a person throughput increase. The performance of these two types of project are captured in NVTC's performance look-back for 2020. For sake of providing a straightforward, conservative estimate, NVTC assessed data for only the most recent year that each project was operational.[4] Five bus service and access to

[4]The estimated program-wide person throughput increases presented in prior annual reports inadvertently captured the anticipated ridership associated with each installment of funding for new and enhanced transit services, meaning that some riders were counted twice.

transit projects that Commuter Choice has funded had not begun service as of the end of fiscal year 2020.

Other project types, namely TDM and roadway operations, have more nuanced impacts on throughput that often require a more complex measurement system. NVTC learned that the original performance measures that it had identified for these types of project did not allow for determining the throughput impacts of Commuter Choice funding.[5] Taken together, the TDM projects that NVTC has supported to date in the two corridors were anticipated to increase total person throughput by about 5,000 people, according to the throughput targets in the projects' agreements. The lack of a computable actual throughput increase for these projects accounts for much of the gap between the 2,200 additional people moved on Commuter Choice-funded transit and access to transit projects each morning and the total of 9,000 additional people that NVTC had estimated that Commuter Choice funding would move across all projects funded to date.[6] To help address the issue, NVTC will work with current recipients of funding for TDM and roadway operations projects over the next year to identify alternate, readily available data sources. Going forward, NVTC will exclusively support[7] standalone TDM strategies that can be targeted specifically to toll payers and that have directly measurable usage outcomes that do not require surveying.

A further limitation to this year's reporting has to do with the ongoing COVID-19 public health emergency, which has altered travel patterns in Northern Virginia. Transit ridership began to decline significantly in early- to mid-March 2020, and many Commuter Choice funded routes were temporarily suspended or operating under reduced schedules. This is relevant because project performance data is typically collected in March or April each year. As a result, some of the 2020 performance data reported by recipients reflected lower than expected transit use and person throughput increases. Specific adjustments to account for this are described in the sections below.

Summary Findings

The summary person throughout findings as presented in the 2020 Commuter Choice Annual Report are shown in Table 1 and Table 2.

[5]For example, the project agreements for most Commuter Choice-supported TDM projects require annual travel behavior surveys of samples of the commuters that are receiving incentives for and information on alternatives to driving alone. NVTC realized the importance of a consistent set of respondents from year to year – which can be difficult for recipients to obtain – when one project's survey results showed a significant increase in the share of drive-alone trips from one year to the next. Even if the share of drive-alone trips had decreased as per expectation, the impacts of Commuter Choice funding would have been difficult to separate from other typical factors behind travel behavior changes (e.g., new home, new job).

[6]See the 2019 Commuter Choice Annual Report (8,300 people across the first three rounds of I-66 corridor program funding) and the I-395/95 Round One project profiles (700 people).

[7]NVTC and PRTC approved this policy change in November 2020.

Table 1: Projects Meeting or Exceeding Individual Person Throughput Goals

Metric	All Operational and Complete Transit and Access to Transit Projects	I-66 Corridor Projects Only	I-395/95 Corridor Projects Only
Number of Operational and Completed Projects	24	16	8
Number of Projects Exceeding Throughput Goal	10	4	6
Number of Projects Meeting Throughput Goal (Actual between 70% and 100% of Goal)	7	7	0
Total Number *(and Percentage)* of Projects meeting or exceeding throughput goal	17 *(71%)*	11 *(69%)*	6 *(75%)*

Table 2: Person Throughput Goal and Actual Increase in People Moved, Inbound, During the AM Peak Period

Metric	All Operational and Complete Transit and Access to Transit Projects	I-66 Corridor Projects Only	I-395/95 Corridor Projects Only
Total Goal Throughput (Operational and Completed Projects)	2,534	1,969	565
Total Actual Throughput (Operational and Completed Projects)	2,182	1,518	664
Percent of Goal Throughput Achieved (Operational and Completed Projects)	86%	77%	117%

3. Throughput Computation Methodology and Results

NVTC computed the person throughput increase for each project based on the project type, performance target/reporting requirements specific to the project, and nuances of the data provided by each grantee.

New Bus Service Projects

All new bus service projects were required to report average weekday ridership. All the new bus service projects currently supported by Commuter Choice provide only peak-period, peak-direction service (i.e., inbound toward D.C. during the morning rush hours and outbound from D.C. in the afternoon rush hours). Therefore, the person throughput increase was calculated as either half of the daily average ridership for the route or the full average ridership on just the morning trips, depending on the data that the grantee provided. In a few cases, the trip-level data provided was incomplete, so monthly averages were used as the basis of computation instead.

There are seven operational and completed new bus service projects funded by the Commuter Choice program for which data is available.[8] The calculation methodology, actual throughput, and goal throughput for each new bus service project are shown in Table 3.

Overall, the operational and completed new bus services performed very well – achieving from roughly 75 percent of to roughly twice their throughput targets. All the new bus services were express or commuter routes, which in general perform strongly as they provide nonstop point-to-point service between park and ride lots and major job sites via Express Lanes facilities that offer reliable and quick travel times. NVTC will continue to work with recipients to identify ways to market these services, especially since ridership on most transit services in the region has fallen sharply since the COVID-19 public health emergency began in March 2020.

Table 3: New Bus Service Projects Person Throughput Goal and Actual Increase in People Moved, inbound, during the AM Peak Period

Project	Grantee	Corridor	Calculation Method	Person Throughput	
				Actual	Goal
Fairfax Connector Express Bus Service between Vienna/Fairfax -GMU and Pentagon Metrorail	Fairfax County	I-66	50 % of Average Daily Ridership based on February 2020 data	160	170

[8]The ridership on two further bus services that were begun with Commuter Choice funding, the Loudoun County Stone Ridge to D.C. service and OmniRide Gainesville to Pentagon service, are captured under Enhanced Bus Services, which is how these services were categorized when they received continued funding from the program.

Project	Grantee	Corridor	Calculation Method	Person Throughput	
				Actual	Goal
Enhanced Bus Service from Government Center to DC	Fairfax County	I-66	50 % of Average Daily Ridership based on February 2020 data	295	142
New Bus Service from Haymarket to Rosslyn	OmniRide	I-66	AM peak period weekday ridership average, March 3-5 and 10-12	151	202
Loudoun County Transit Metro Connection from New Purcellville Park and Ride	Loudoun County	I-66	AM peak period weekday ridership average, all Tue., Wed. & Thu. in February	53	30
New Bus Service to the Pentagon with Gambrill and Backlick North Park and Ride Improvements	Fairfax County	I-395/95	50 % of Average Daily Ridership based on February 2020 data	145	125
New Bus Service from Staffordboro to Downtown D.C.	OmniRide	I-395/95	AM peak period weekday ridership average, March 3-5 and 10-12	123	76
New Bus Service from Staffordboro to the Pentagon	OmniRide	I-395/95	AM peak period weekday ridership average, March 3-5 and 10-12	104	60

Enhanced Bus Service Projects

Generally, all enhanced bus service projects were required to report average weekday ridership. However, Commuter Choice supports a range of bus service enhancements, including:

- Route extensions to existing bus routes
- Discrete additional trips on existing commuter bus routes (e.g., two additional morning peak-period trips and two additional afternoon peak-period trips)
- Shorter headways on existing bus routes (e.g., buses arrive every 10 minutes during rush hours rather than every 15 minutes)

The throughput computation approach therefore varied depending on the nature of the enhancements and the data that grantees provided (**see Appendix for nature of the service enhancements**). The nature of the service enhancement, calculation methodology, actual throughput, and goal throughput for the 15 enhanced bus service projects for which data is available are summarized in Table 4.

The performance of the enhanced bus service projects varied significantly, from as little as 14 percent of the target throughput to well over twice the target. Enhancements to commuter and express bus services tended to perform close to target, like with new bus services. As for local service enhancements, the more substantial the service expansion and/or stronger the existing ridership demand on the route, generally the better the performance.

The strongest performers among local service improvements were DASH's service improvements to two local routes in Alexandria. The projects significantly improved service levels and hours throughout the week for portions of the city that include high concentrations of transit-dependent populations. The routes registered large ridership increases accordingly, including during weekday peak periods.

The peak-period Metrobus 3T extension through the City of Falls Church recorded the largest gap between target and actual throughput. The extension had been expected to attract a large base of riders, partly as a function of other service changes in the area; it did not, despite marketing efforts by the City of Falls Church. Service is now slated to end by the end of 2020. Two OmniRide service expansions in the I-395/95 corridor, along Route 1 and on an express bus route linking shopping centers in the Potomac Mills area with the Franconia-Springfield Metrorail station, registered low additional ridership relative to their targets, though these expansions only took effect in late 2019 along with the other I-395/95 enhancements. Ridership can also take longer to respond to service improvements along some routes than others. In the case of the Potomac Mills route, the person throughput increase is also likely greater in the afternoon peak, when the shopping centers are open, than in the morning peak.

Table 4: Enhanced Bus Service Projects Person Throughput Goal and Actual Increase in People Moved, inbound, during the AM Peak Period

Project	Grantee	Corridor	Calculation Method	Person Throughput	
				Actual	Goal
ART Bus Route 55 Peak Period Service Expansion	Arlington County	I-66	50% of the average daily ridership on the trips operated by the extra bus needed for the expanded service, March 5-7 and 12-14, 2019[9]	147	175
Peak Period Service Expansion to Metrobus 2A, Washington Boulevard – Dunn Loring	Arlington County	I-66	Net (2019-2017) change in average AM peak ridership on the route comparing Tue. Wed., Thu. in March[9]	46	125
Bus Stop Consolidation	Arlington County	I-66	Based on ridership increase at three bus stops for which before-and-after (March 2018-spring 2020) data was available[10]	25	20[10]
Enhanced Bus Service on Metrobus 3Y: Lee Highway-Farragut Square	Arlington County	I-66	50% of the net (2020-2019) change in ridership on the route using January and February data	91	97

[9] Commuter Choice funding support for the expanded service ended in 2019.
[10] Project agreement identified a 15% target ridership increase for the set of improved bus stops.

Project	Grantee	Corridor	Calculation Method	Person Throughput	
				Actual	Goal
Metrobus Route 3T Extension and Service Expansion	City of Falls Church	I-66	50% of average daily ridership on the extension using Jan-Mar 2020 data for days that service was provided	57	400
Loudoun County Transit Metro Connection Route 88X Extension to Dulles South	Loudoun County	I-66	AM peak period weekday ridership average, all Tue., Wed. & Thu. in February, only counting trips on additional bus needed for extension	47	50
OmniRide Linton Hall Metro Direct Bus Service Enhancement	OmniRide	I-66	AM peak period weekday ridership average on the additional trips, March 3-5 and 10-12	12	15
Enhanced Bus Service from Gainesville to DC	OmniRide	I-66	AM peak period weekday ridership average on the additional trips, March 3-5 and 10-12	63	94
Enhanced Bus Service from Gainesville to Pentagon	OmniRide	I-66	AM peak period weekday ridership on the nine trips, March 3-5 and 10-12	287	332

Project	Grantee	Corridor	Calculation Method	Person Throughput	
				Actual	Goal
Enhanced Bus Service from Stone Ridge to DC	Loudoun County	I-66	AM peak period weekday ridership average, all Tue., Wed. & Thu. in February	79	76
Enhanced Bus Service from Dale City to Ballston	OmniRide	I-395/95	AM peak period weekday ridership average on the additional trips, March 3-5 and 10-11	67	50
Enhanced Bus Service on Prince William Metro Express	OmniRide	I-395/95	AM peak period weekday ridership average on additional bus needed for expanded service, March 3-5 and 10-12	28	80
Enhanced Bus Service on Route 1 Local	OmniRide	I-395/95	AM peak period weekday ridership average on additional bus needed for expanded service, March 3-5 and 10-12	19	75

Project	Grantee	Corridor	Calculation Method	Person Throughput	
				Actual	Goal
Enhanced Bus Service on AT-1 Plus: West End to Van Dorn Metro	City of Alexandria / DASH	I-395/95	21% of net (2020-2019) average daily ridership increase for Tue., Wed. and Thu. in the first two weeks of March[11]	113	71
Enhanced Bus Service on AT-9: Mark Center to Potomac Yard	City of Alexandria / DASH	I-395/95	26% of net (2020-2019) average daily ridership increase for Tue., Wed. and Thu. in the first two weeks of March[11]	66	28

Access to Transit

The two operational access to transit projects were required to report information regarding the number of bicycle trips to transit stations. The calculation methodology, actual throughput, and goal throughput for each access to transit project is shown in Table 5.

The low throughput figure for the City of Falls Church bike share project, which is supporting the per-station operating fees for new bike share stations in the City that allow residents to access Metrorail stations and work sites adjacent to the City, is partly a function of the time of year that the data was collected. Overall City-wide ridership was roughly two to three times as great in June and September 2019, when weather was likely more ideal for bicycling, as in March 2020. However, the throughput increase, if it had been measured in one of those months, would still likely be a small fraction of the target. NVTC will work with the City of Falls Church to identify additional ways to promote the service.

The bicycle counts for the new parking facilities at the VRE station in downtown Manassas reflect installation of a portion of the planned facilities. Future counts will capture completion of the full scope.

[11] These projects improved service levels throughout the day, which is allowed for the I-395/95 corridor because tolls are collected at all times of day. The percentage applied to the net daily ridership increase reflects the portion of trips that occur during the morning rush hour for the route, as estimated by the grantee.

Table 5: Access to Transit Projects

Project	Grantee	Corridor	Calculation Method	Person Throughout	
				Actual	Goal
Expanded Transit Access, Bike Share	City of Falls Church	I-66	Average number of AM weekday peak period bikeshare trips that start in the City of Falls Church and end at a Metrorail station or in Arlington or D.C., March 3-5 and 10-12	4	36
Bicycle Parking Improvements at Manassas VRE Station	City of Manassas	I-66	Average number of parked bicycles at the new facilities on weekday mornings, Oct. 28-Nov. 1, 2019	3	5

4. Conclusion

This technical memorandum documents NVTC's methodology to monitor, report, and evaluate person throughput performance for Commuter Choice projects to support the figures included in the Performance Look Back portion of the 2020 Commuter Choice Annual Report. NVTC focused on projects' person throughput performance for the sake of a single straightforward measure that aligns with the corridor improvement goals that any Commuter Choice project must support – specifically, maximizing person throughput and implementing multimodal improvements that improve mobility, support new and diverse travel choices, and enhance transportation safety and travel reliability. Thus, Commuter Choice projects provide a range of benefits beyond increased person throughput, including travel time savings for commuters and improved connections between transportation modes and 30 regional activity centers. NVTC's multiple-measure Commuter Choice technical evaluation process captures this range of benefits.

NVTC found that the 24 Commuter Choice transit and access to transit projects that were operational or had been completed as of early 2020 moved about 2,200 people inbound (toward D.C.) through the I-66 Inside the Beltway and I-395/95 corridors each morning. This

figure represents 86% of these projects' cumulative goal of moving 2,500 people each morning. The ridership and usage figures that grantees reported to NVTC for these types of projects can be readily converted into a verifiable throughput increase for each such project. Many of these projects include capital elements – including bus purchases, park-and-ride lot construction and bus stop improvements – that will benefit I-66 and I-395/95 corridors well beyond the projects' current two-year installments of Commuter Choice operating support.

NVTC found that the performance measures that it had identified initially for TDM and roadway operations projects did not allow for the computation of an actual throughput increase for these types of projects. For such projects, the connection between Commuter Choice funding and throughput changes is less direct than, for instance, that associated with the provision of a new bus service. NVTC is now working with current recipients to identify alternate data sources. From now on, NVTC will exclusively support standalone TDM strategies that have directly measurable usage outcomes that do not rely on surveying the public and where benefits can be targeted to toll payers.

The strong performance of transit and access to transit projects relative to their throughput goals indicates that the Commuter Choice program identifies and funds projects that directly and positively address the corridors' improvement goals and enhance travel quality and efficiency in the I-66 and I-395/95 corridors. Overall, Commuter Choice moves more people through the two corridors in fewer vehicles during peak travel periods. As noted in the 2020 Commuter Choice Annual Report, for instance, the share of drive-alone commute trips in the I-66 corridor decreased by 1.7% between 2015 and 2019 – thereby reducing traffic congestion and improving the quality of life of Northern Virginians that commute using the I-66 and I-395/95 corridors.

Appendix

Table 6: Nature of Service Enhancement for Enhanced Bus Service Projects

Project	Grantee	Corridor	Nature of Service Enhancement
ART Bus Route 55 Peak Period Service Expansion	Arlington County	I-66	Added a sixth bus to the route during the AM and PM peak periods to allow for service every 12 minutes rather than every 15 minutes.
Peak Period Service Expansion to Metrobus 2A, Washington Boulevard – Dunn Loring	Arlington County	I-66	Increased peak-period frequency to allow the route to run every 10 minutes instead of every 15 minutes
Bus Stop Consolidation	Arlington County	I-66	Consolidated and improved underutilized and closely spaced bus stops along Lee Hwy. and Washington Blvd. to improve travel time and accessibility.
Enhanced Bus Service on Metrobus 3Y: Lee Highway-Farragut Square	Arlington County	I-66	Increased the frequency on this peak period-only route
Metrobus Route 3T Extension and Service Expansion	City of Falls Church	I-66	Extended the route to operate between the West Falls Church-VT/UVA and East Falls Church Metrorail stations during peak periods
Loudoun County Transit Metro Connection Route 88X Extension to Dulles South	Loudoun County	I-66	Extended the route to serve an additional park & ride lot and added one bus to the route to maintain the same frequencies
OmniRide Linton Hall Metro Direct Bus Service Enhancement	OmniRide	I-66	Added an additional morning and evening trip between Linton Hall and the Tysons Corner Metrorail station

Project	Grantee	Corridor	Nature of Service Enhancement
Enhanced Bus Service from Gainesville to DC	OmniRide	I-66	Added two morning and two evening peak-direction trips
Enhanced Bus Service from Gainesville to Pentagon	OmniRide	I-66	Total of nine morning inbound trips and nine afternoon outbound trips
Enhanced Bus Service from Stone Ridge to DC	Loudoun County	I-66	Total of two morning inbound trips and two evening outbound trips
Enhanced Bus Service from Dale City to Ballston	OmniRide / PRTC	I-395/95	Added two morning and two evening trips
Enhanced Bus Service on Prince William Metro Express	OmniRide / PRTC	I-395/95	Increased rush-hour service frequency
Enhanced Bus Service on Route 1 Local	OmniRide / PRTC	I-395/95	Increased rush-hour service frequency
Enhanced Bus Service on AT-1 Plus: West End to Van Dorn Metro	City of Alexandria / DASH	I-395/95	Increased frequency and extended hours of service throughout the week
Enhanced Bus Service on AT-9: Mark Center to Potomac Yard	City of Alexandria / DASH	I-395/95	Improved service frequency and extended hours of service throughout the week