APPENDIX A: MD 200 DIVERSION ALTERNATIVE ANALYSIS RESULTS PAPER

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I. Introduction

The Maryland Department of Transportation State Highway Administration (MDOT SHA), as the Local Project Sponsor, along with the Federal Highway Administration (FHWA), as the Lead Federal Agency, evaluated an additional alternative for the I-495 & I-270 Managed Lanes Study called the MD 200 Diversion Alternative. The purpose of this analysis was to evaluate the MD 200 Diversion Alternative to the same level of detail as the Screened Alternatives to determine if it would meet the Purpose and Need of the Study, and thus be considered a reasonable alternative to be carried forward for detailed study in the Draft Environmental Impact Statement (DEIS).

The analyses for the Screened Alternatives (Alternatives 1, 5, 8, 9, 10, 13B and 13C) were completed in Spring 2019 and presented to the public and agencies through a series of Public Workshops and agency meetings. Following the Public Workshops and agency meetings, a few Cooperating and Participating agencies requested that MDOT SHA evaluate an alternative, through the NEPA process, that would provide an alternative route for travelers to use MD 200 (Intercounty Connector) instead of the top side of I-495 between I-270 and I-95 to avoid or reduce impacts to significant, regulated resources and residential displacements. In compliance with Section 4(f) of the United States Department of Transportation Act of 1966, the alternative was also evaluated to determine if it could be a feasible and prudent alternative that would provide the least overall harm to park resources along the topside of I-495, including Rock Creek Park, Sligo Creek Stream Valley Park, Northwest Branch Stream Valley Park, and other smaller parks.

MDOT SHA completed the following analyses to the same level of detail as the Screened Alternatives to determine if the alternative could address the Study's Purpose and Need and be carried forward as an Alternatives Retained for Detailed Study (ARDS):

- Preliminary engineering to develop a limit of disturbance (LOD) along I-95 between I-495 and MD 200;
- Quantification of environmental impacts based on the LOD;
- Traffic modeling to determine the 2040 projected traffic volumes;
- Traffic analysis using the VISSIM traffic simulation software to determine the traffic operations; and
- Financial analysis to estimate the cashflow at financial close.

This document includes the methodology and the results for the analyses that were completed, along with the conclusions.

II. Description

As shown in **Figure 1**, the MD 200 Diversion Alternative would consist of the following elements:

- No widening or capacity improvements along I-495 between the I-270 West Spur and I-95.
- Consideration of Transportation System Management/Transportation Demand Management (TSM/TDM) improvements along I-495 between the I-270 East Spur and I-95.
- Two managed lanes added in each direction on I-495 between the study limits south of George Washington Parkway, at the Virginia Department of Transportation HOT lane extension south of the American Legion Bridge (ALB), and the I-270 West Spur.
- Two managed lanes added in each direction on I-495 between I-95 and the study limits west of MD 5.
- Conversion of the one existing high-occupancy vehicle (HOV) lane in each direction to a HOT managed lane on I-270 and the addition of one HOT managed lane in each direction on I-270, resulting in a two-lane managed lanes network on I-270.
- Two managed lanes[1] added in each direction of I-95 between the MD 200 and I-495.

MDOT SHA reviewed a detailed description of this alternative with FHWA, Prince George's County Department of Public Works and Transportation, Montgomery County Department of Transportation, National Capital Planning Commission, and Maryland-National Capital Park and Planning Commission via conference call on July 19, 2019. The purpose of the call was to ensure all agencies had a clear understanding of how the alternative was defined: no capacity improvements on the top-side of I-495, but TSM/TDM improvements would be considered on I-495, the Alternative 9 footprint would be assumed along I-270 and along I-495 outside of the top-side within the Study limits, and no improvements on MD 200. Also, the methodology was discussed; the MD 200 Diversion Alternative would be analyzed to the same level of detail and criteria used for the Screened Alternatives. Lastly, it was stated that if this alternative did not meet the Study's Purpose and Need, it would not be carried forward as an ARDS.

The proposed LOD for the MD 200 Diversion Alternative was developed using the same engineering approach and impact minimization process as was completed for the Screened Alternatives. While additional minimization efforts are continuing, the MD 200 Diversion Alternative was compared to the LOD and impacts identified for the Screened Alternatives in June 2019.

The intent of the MD 200 Diversion Alternative, from a traffic standpoint, would be to provide an alternative route for travelers to use MD 200 instead of the top side of I-495 between I-270 and I-95. There are several diversions routes that could occur in this alternative and are shown on **Figure 2**.

[1] For the purposes of the traffic, environmental or financial analysis, the tolling operation whether HOT or Express Toll Lanes, would not be a differentiating factor.

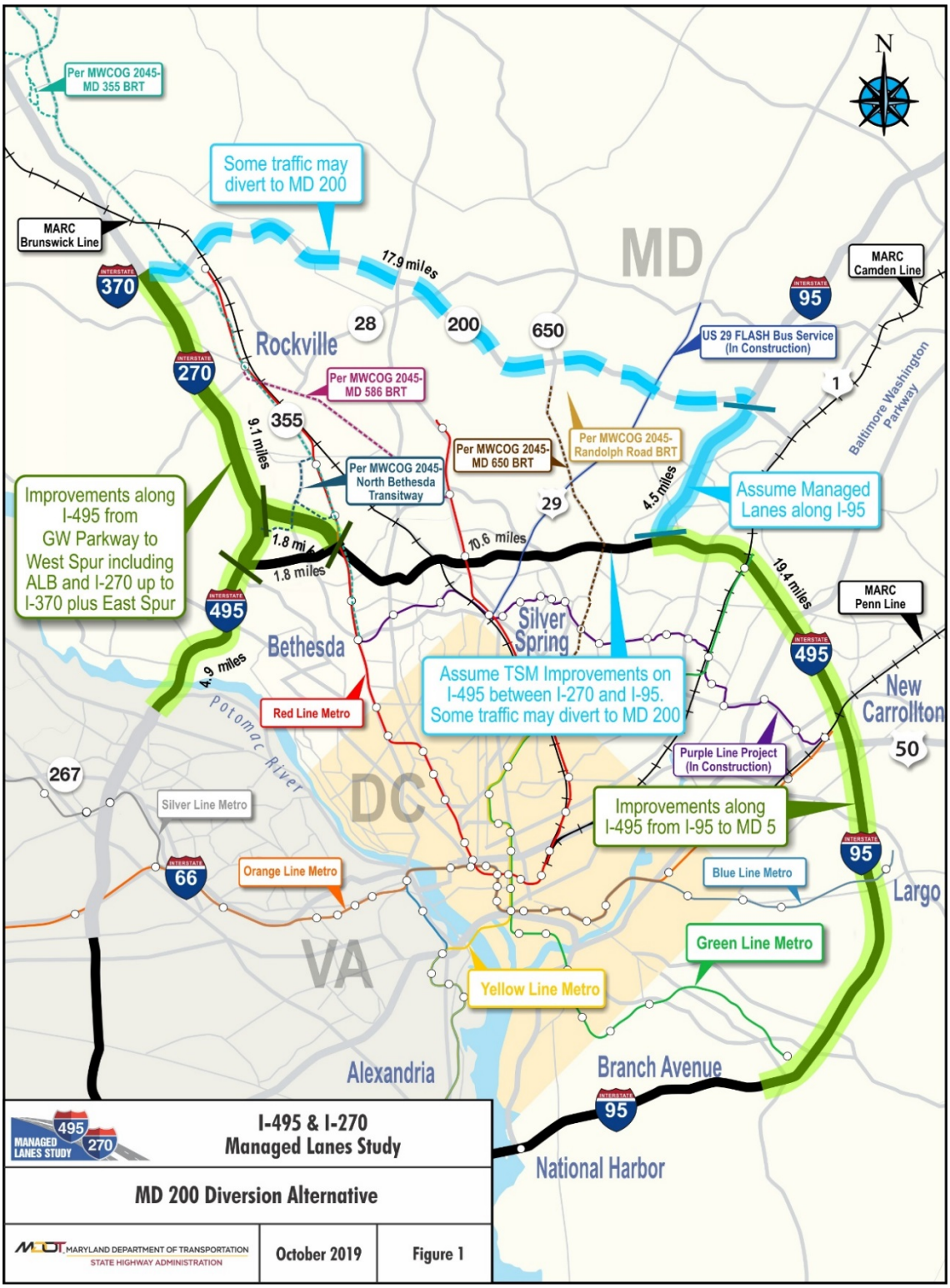
Southbound traffic on I-95, coming from north of MD 200, that is destined for points west and south of the I-495 and the I-270 West Spur interchange would use MD 200 and I-270 instead of I-95 and I-495 (**Route A, Figure 2**). The same diversion route could occur in the opposite direction heading from Virginia to points north of I-95. This diversion route would be 10.1 miles longer than using I-495 (**Route B, Figure 2**).

Based on the origin-destination data[2] in the heaviest peak direction, approximately 15 percent of the AM peak traffic on the Outer Loop travels from points north on I-95 to the ALB and approximately 11 percent of the PM peak traffic on the Inner Loop travels from points south of the ALB to north on I-95. These are the vehicles that could consider using the partial diversion on MD 200.

Westbound traffic on I-495, coming from points east of the I-95 and I-495 interchange that is destined for points south of the I-495 and I-270 West Spur interchange would use I-95, MD 200, and I-270 instead of the top side of I-495 (**Route C, Figure 2**). The same full diversion route could occur in the opposite direction heading from Virginia to points east of I-95. This full diversion would be 19.1 miles longer than using I-495 (**Route D, Figure 2**).

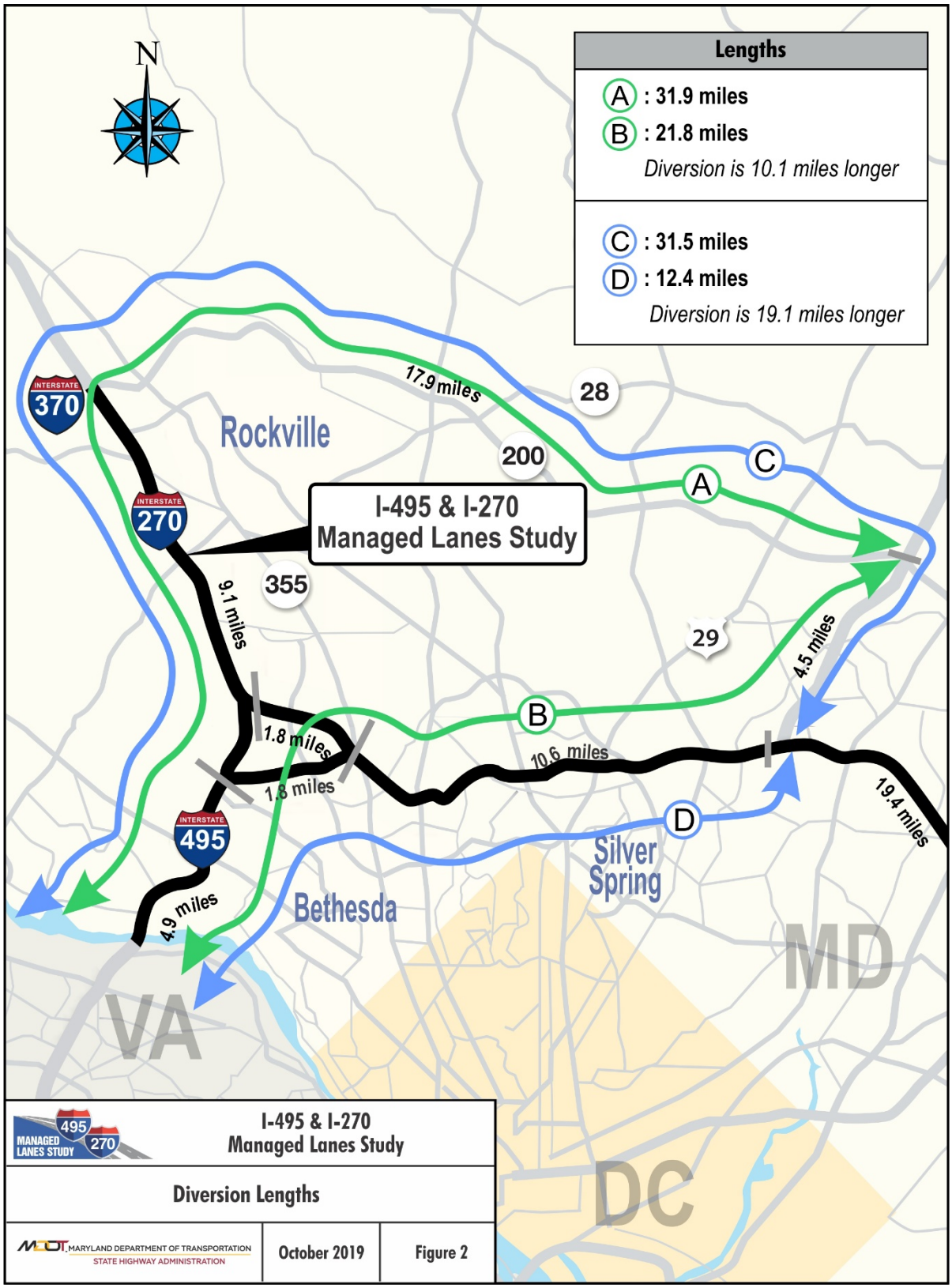
[2] Streetlight Data Analysis for I-495 and I-270 Managed Lanes Study, March 2019

Figure 1: MD 200 Diversion Alternative



Note: The proposed Bus Rapid Transit Lines on the map indicate which Metropolitan Washington Council of Governments (MWCOG) model included them, either 2040 or 2045. The traffic analysis in support of the MD 200 Diversion Alternative and ARDS was based on the 2040 MWCOG model.

Figure 2: Diversion Lengths



A. Capacity Improvements

The capacity improvements would provide a two-lane managed network per direction along I-495 from south of the George Washington Memorial Parkway in Virginia to the I-270 West Spur and between I-95 and west of MD 5. Along I-270, a two-lane managed network between I-495 and I-370, including the Spurs, would be provided by converting the HOV lane to a managed lane and adding a managed lane. A two-lane managed network would also be provided along I-95 between I-495 and MD 200.

MD 200 would not be modified, but would provide a tolled, managed lanes connection between I-270 and I-95. No managed lanes or new capacity would be added to I-495 between the I-270 West Spur and I-95. Along I-95, two new managed lanes would be added in each direction. The widening would generally occur in the existing median of I-95. Buses would be permitted to use the managed lanes.

The build elements, including managed lane access locations and interchange improvements, would be the same as the Screened Alternatives except along the top side of I-495 where no interchange reconstruction would occur. The direct access interchanges from the ARDS are at the limits of the managed lanes; however, they would not change I-270 at I-370 and the I-270 Split at the Spurs. The following direct access interchanges would be modified from the ARDS because the number or configuration of the direct access ramps would change:

- I-495 and the West Spur – eliminate direct access ramps to and from the east side;
- I-495 and the East Spur – modify direct access ramps to and from the east side; and
- I-495 and I-95 – add direct access ramps to and from the north.

Additionally, two, new direct access managed lane sets of interchange ramps would be provided along I-95 at MD 200 (to/from the west on MD 200 and to/from the south on I-95) and at the MD 212 Interchange.

B. Transportation System Management/Transportation Demand Management

A range of TSM/TDM improvements was considered for inclusion in the MD 200 Diversion Alternative. Some of the improvements were included and some were found to be not feasible from a traffic operations, impact, and safety standpoint.

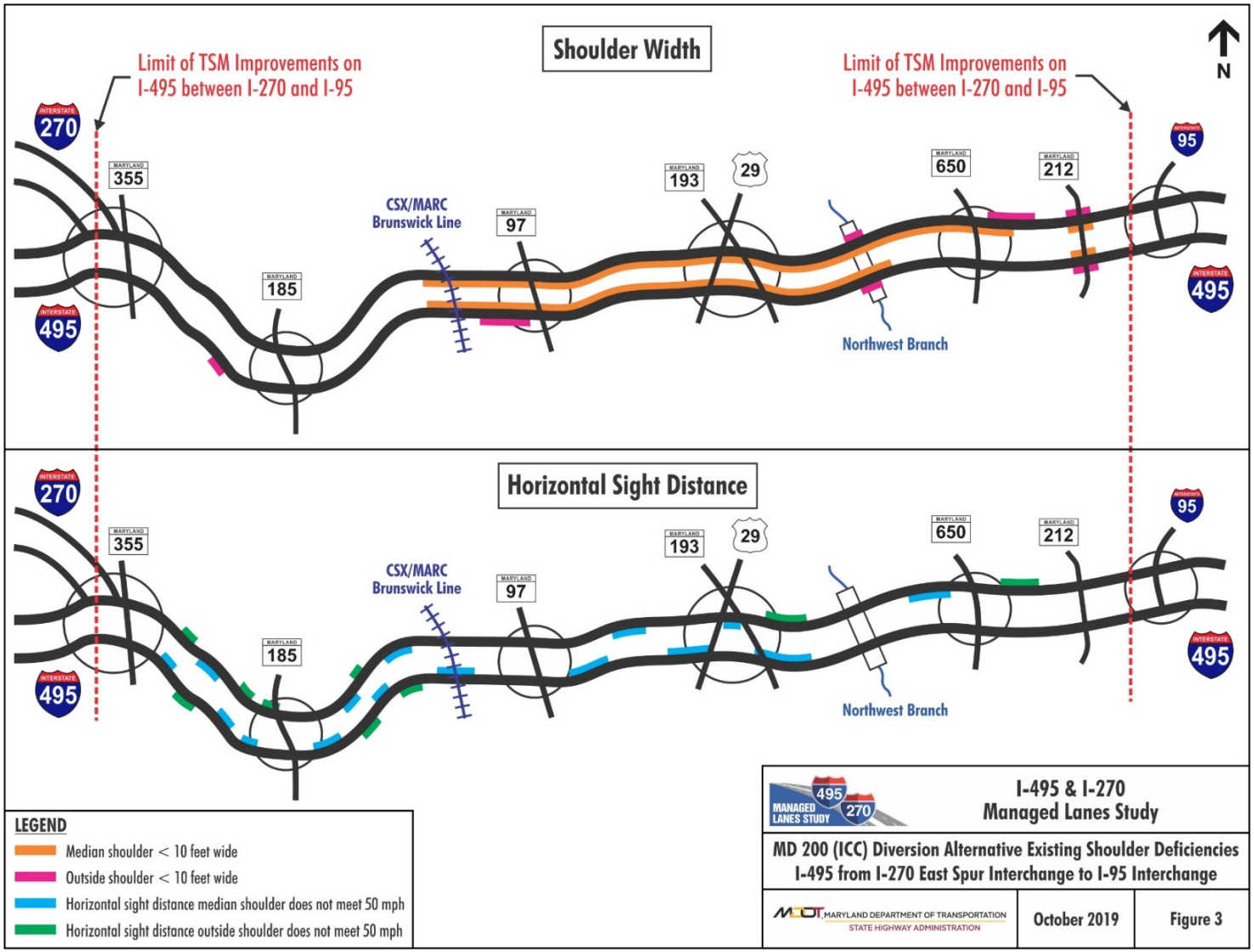
Adaptive ramp metering was evaluated along the segment of I-495 between the I-270 West Spur and I-95 in an attempt to optimize the traffic operations where no managed lanes would be provided. Adaptive ramp metering would be included on all entrance ramps for the MD 355, MD 185, MD 97, US 29, MD 193, and MD 650 interchanges. This system would be intended to regulate the flow of traffic onto the mainline based on real-time mainline operations to prevent congestion associated with the heavy ramp merging volumes. The system would be designed to limit impacts to arterials by increasing the flow rate onto the freeway when the queues increase on the entrance ramps to prevent or limit queuing back onto the arterials. This strategy was deemed feasible and effective and therefore, it was included in the evaluation of the MD 200 Diversion Alternative.

Another TSM/TDM improvement included in the MD 200 Diversion Alternative was signal timing optimization to best accommodate the anticipated traffic patterns resulting from implementation of this alternative. This strategy reduces vehicle wait times at intersections within the study area without requiring physical widening or impacts by adjusting the length of green lights to match demand.

Other potential TSM/TDM improvement were deemed infeasible for the following reasons:

- **Hard shoulder running** was not considered feasible because the width of existing median shoulder between the I-270 West Spur and I-95 is less than 12 feet for a significant portion of the segment, preventing its use as a peak period lane. The outside shoulder was also not considered acceptable as a shoulder through lane because it would require widening to provide additional auxiliary lanes for the interchanges within the segment. This widening would result in environmental and property impacts. Further, the roadway geometry within these limits is not conducive to hard shoulder running. The horizontal curvature in many portions of this segment, such as between the I-270 East Spur interchange and MD 97, would result in sight distances within the shoulder lane that would be less than American Association of State Highway and Transportation Officials design guidelines for a 50-mph interstate. **Figure 3** graphically shows the shoulder limitations and the horizontal sight distance limitations.
- Preliminary traffic analysis indicates that **lengthening the inner loop deceleration lane** for the eastbound exit to MD 97 would improve traffic operations. However, this improvement was not considered feasible because it would require widening that would impact residential properties along the inner loop west of MD 97.
- **Interchange reconfigurations** to improve traffic operations were not considered feasible because the modifications would require new/widened ramps, arterial modifications, and auxiliary lane widening. These improvements would result in additional environmental and property impacts, such as impacts to parks, natural resources, and historic properties.

Figure 3: MD 200 Diversion Alternative Existing Shoulder Deficiencies I-495 from I-270 East Spur Interchange to I-95 Interchange



III. Traffic

MDOT SHA completed a thorough traffic evaluation of the MD 200 Diversion Alternative. Background information for the top side of I-495 between the I-270 Spur and I-95 was reviewed based on key traffic statistics in the 2018 Maryland State Highway Mobility Report. Additionally, historical volumes and projected available capacities for MD 200 were reviewed to understand the purpose for that highway and the toll structure. Both of these elements are beneficial to understanding the full context for the MD 200 Diversion Alternative.

Additionally, detailed traffic operational analyses were performed on the MD 200 Diversion Alternative to assist in evaluating its ability to meet the Study's Purpose and Need, using the same methodology that was used for the Screened Alternatives. The methodology included a three-step process:

- First, a regional forecasting model was developed for the MD 200 Diversion Alternative using the Metropolitan Washington Council of Governments Travel Demand Model (MWCOG model), which is the model typically used by MDOT SHA and other transportation agencies to evaluate projects in the Washington, DC metro area.
- Next, the outputs from the MWCOG model were used to develop balanced traffic volume projections for the design year of 2040 for each roadway segment and ramp movement within the Study limits.
- Finally, traffic simulation models for the MD 200 Diversion Alternative were developed using VISSIM software to determine the projected operational performance in several key metrics.

The following sections of this report provide additional details regarding existing congestion on I-495, discuss the projected volumes on MD 200, and present the travel forecasting and the traffic analysis methodology and results for the MD 200 Diversion Alternative.

A. Existing Traffic

1. I-495 Between I-270 and I-95

The section of I-495 between the I-270 East Spur and I-95 carries the second highest average daily traffic (ADT) volume in Maryland with 254,000 vehicles per day per the 2018 Maryland State Highway Mobility Report.[3] The Outer Loop from I-95 to US 29 was ranked the #1 most congested freeway section in Maryland during the AM peak on an average weekday in 2017. The section of I-495 Inner Loop from the I-270 East Spur to MD 97 was ranked the third most congested freeway section in Maryland during the PM peak on an average weekday in 2017.

Additionally, the top three most unreliable freeway segments in Maryland during the AM peak are all located on the I-495 Outer Loop between I-95 and MD 193, based on the Planning Time Index (PTI) for the years 2017 and 2016. During the PM peak, I-495 Inner Loop at MD 355 ranks as the sixth most unreliable freeway segment in Maryland.

Therefore, eliminating capacity improvements within the middle of the study limits would not improve the most highly congested and unreliable freeway segment in all of Maryland. Further, and as discussed below in more detail, proposed managed lanes on I-495 and I-270 would act as a system and creating two

[3] https://www.roads.maryland.gov/OPPEN/2018%20Mobility%20Report.pdf

separate managed lanes systems (I-495 and I-270 on the west, and I-95/I-495 on the east) would not provide cohesive traffic relief within the study limits.

The information provided in this section came from the 2018 Maryland State Highway Mobility Report[4].

2. MD 200 / Intercounty Connector

MD 200 or the Intercounty Connector (ICC) is a time-of-day tolled highway that provides an east/west connection between I-95 and I-270. The purpose of the highway is to provide free-flow uncongested trip between Montgomery County and Prince George's County and to remove traffic from the local roadway network through Montgomery County. In the ICC Final Environmental Impact Statement, there was an alternative that would have improved I-495 instead of the ICC. However, that alternative was dropped from further consideration because it did not meet the Study's Purpose and Need of addressing congestion on the local routes in the study area, it did not connect the growth centers, and it did not connect the planned residential areas of Montgomery County with Prince George's County nor the existing development. Consequently, the overall purpose for the ICC was not to remove traffic, and thus congestion, from I-495.

Currently, MD 200 has available capacity to accommodate additional traffic. During the typical peak hours in 2018, MD 200 carried approximately 3,600 vehicles per hour eastbound and approximately 4,200 vehicles per hour westbound. Because MD 200 is a managed tolled facility that is intended to always operate at free-flow speeds, it has a set capacity at Level of Service (LOS) D that cannot be exceeded (see Section III.C.3). Therefore, the approximate capacity of MD 200 is 5,725 vehicles per hour in each direction.[5]

Traffic volumes on MD 200 are growing rapidly, and there will be little, or no, spare capacity by the design year of 2040. Traffic growth on MD 200 is occurring at a higher rate than regional traffic growth, which indicates that more motorists are willing to pay a toll to avoid severe congestion and delays on alternative routes. This means that there will be a limited amount of additional capacity available on MD 200 to accommodate traffic that may divert from I-495. As MD 200 is designed to maintain the free-flow LOS D conditions into the future, toll rates will need to be raised to ensure the traffic demand on the ICC does not exceed its capacity and additional traffic would divert to alternative routes.

The ADT served on MD 200 in 2018 was more than double the ADT in 2012.[6] The annual growth rate varies based on the time of day and the segment, but count data indicates that the annual growth rate between October 2016 and October 2018 was between three to four percent per year on the heaviest-used segments.[7] The first segments of MD 200 that are projected to reach capacity would do so in the year 2027. By 2040, most of the segments of MD 200 will have reached capacity during the peak hours.[7] Overall, MD 200 may be able to accommodate some additional traffic in 2040 in certain segments and during certain times of day, but it will not offset the need for capacity improvements on I-495.

[4] https://www.roads.maryland.gov/OPPEN/2018%20Mobility%20Report.pdf
[5] Internal Maryland Transportation Authority (MDTA) memo ICC Traffic Volumes (Update #1), January 17, 2019.
[6] MDOT SHA Count Database
[7] MDTA Study, January 2019.

B. Travel Forecasting for MD 200 Diversion

The MD 200 Diversion Alternative traffic forecasts were developed using a four-step process to incorporate MWCOG model traffic trends between Alternative 1 No Build, Alternative 9 (two-lane HOT), and the MD 200 Diversion Alternative. Key steps included the following:

- Step 1: Apply MWCOG model trends to mainline General Purpose (GP) and Managed Lane volumes;
- Step 2: Adjust ramp volumes to balance mainline volumes;
- Step 3: Apply MWCOG model trends to cross road volumes; and
- Step 4: Review of volumes vs. MWCOG model trends; repeat steps, as needed.

1. Forecasting Methodology Steps

Step 1 – Mainline General Purpose and Managed Lane Volumes

Generalized growth rates along mainline I-495 and I-270 were developed based on MWCOG model traffic trends, using the same MWCOG models that were used for the ARDS (i.e., Version 2.3.71). (Refer to the Draft Traffic Technical Report[8] for additional information on the MWCOG model.) Using Alternative 9 forecasts as the baseline (because the geometry of the MD 200 Diversion Alternative matches the Alternative 9 improvements on I-270 and on the west and east sides of I-495), peak hour volumes in the GP lanes and managed lanes were adjusted according to growth rates from the MWCOG model results (i.e., rates from Alternative 9 were compared to rates from the MD 200 Alternative and the differences were applied to the Alternative 9 peak hour volumes to develop the MD 200 Alternative peak hour volumes). Additional refinements were made in specific locations where needed, to ensure mainline volumes followed MWCOG model trends in comparison to Alternative 1.

Step 2 – Ramp Volume Adjustments and Balancing

Once the generalized growth rates were applied to the mainline, GP and managed lane ramp volumes were adjusted from Alternative 9 ramp volumes to balance the mainline volumes between each interchange, which were established in Step 1. The adjustments were made proportionately, based on the Alternative 9 distributions. Fundamentally, the mainline volume difference/imbalance between upstream and downstream segments along I-495 and I-270 was calculated, then that imbalance was distributed proportionally to the corresponding on- and off-ramps. Maximum capacities for managed lane ramps, particularly those at the I-495 at I-95 interchange, were also taken into consideration to ensure operational requirements were met in the managed lane sections.

Step 3 – Cross Street Volume Adjustments and Balancing

Ramp volumes developed in Step 2 were distributed and carried through to the end of each crossroad that had an interchange with I-270 and I-495 within the study limits. The entering volume on the cross road (i.e., the volume upstream of the interchange) was calculated by adjusting the Alternative 9 volumes based on MWCOG model trends (positive or negative growth), while the exiting volume on the cross road (i.e., the volume downstream of the interchange) was adjusted to maintain balancing along the arterial. Additional volume adjustments were incorporated as necessary to reflect the appropriate arterial growth while maintaining balanced volumes along the I-495 and I-270 corridors. Along I-95, additional volume

[8] The Draft Traffic Technical Report is being finalized and will be made available with the DEIS.

adjustments were required to incorporate maximum managed lane capacity assumptions (approximately 3,400 vehicles/hour in each direction along the managed lanes).

Step 4 – Network Review and Additional Refinements

After completing Steps 1, 2, and 3, mainline, ramp, and crossroad volumes were reviewed again against MWCOG model trends. This is an important step because refinements made to one area, to more closely match MWCOG model trends, often have a ripple effect that needs to be carried throughout the network. Through this review step, areas with significant discrepancies were identified and refined. Steps 1 through 3 were then repeated to reach a convergence, where forecasted volumes across the system were closely matching MWCOG model trends.

2. Travel Forecasting Summary and Findings

The travel forecasting trends for the MD 200 Diversion Alternative are summarized below:

- During the AM peak hour, traffic volumes along I-495 between I-270 (west spur) and I-95 are projected to remain relatively the same as the No Build Alternative.
- During the PM peak hour, traffic volumes along I-495 between I-270 (west spur) and I-95 are projected to increase by approximately three percent compared to the No Build Alternative. This increase may be attributed to the fact that the managed lanes on I-495 and I-270 provide significant operational benefits, that allow traffic to reach the top side of I-495 faster.
- During both the AM and PM peak hours, total traffic volumes along I-495 between I-270 West spur and I-95 are expected to decrease compared to other Build Alternatives with two managed lanes in each direction, such as Alternative 9 and 10. GP traffic volumes are higher than Alternative 9, but total volumes are lower.
- The results indicate that MD 200 would be projected to carry approximately 13 percent more daily traffic under the MD 200 Diversion Alternative compared to Alternative 9 because it becomes a more desirable route due to the constraints on the parallel route of I-495 between I-95 and I-270. However, MD 200 would only carry approximately two percent more daily traffic than the No Build Alternative, because the additional traffic that can be accommodated on MD 200 is limited due to several sections of MD 200 operating at capacity under the No Build condition during the peak hours.

The resulting 2040 MD 200 Diversion Alternative projected traffic volumes for the AM peak period (6:00 AM to 10:00 AM) and the PM peak period (3:00 PM to 7:00 PM) are shown in **Attachment A**. These volumes were used in the VISSIM modeling to generate the traffic analysis results for the MD 200 Diversion Alternative presented in the following section. The data is also summarized by link in the table in **Attachment B**.

C. Traffic Analysis for MD 200 Diversion

Traffic simulation models for the MD 200 Diversion Alternative were developed using VISSIM software, Version 10.00-09. As with the Screened Alternatives, separate models were created for the projected 2040 AM peak and the 2040 PM peak. The VISSIM models included the proposed geometric configurations described in Section II and were populated with the traffic volumes developed during the previous step from the MWCOG model.

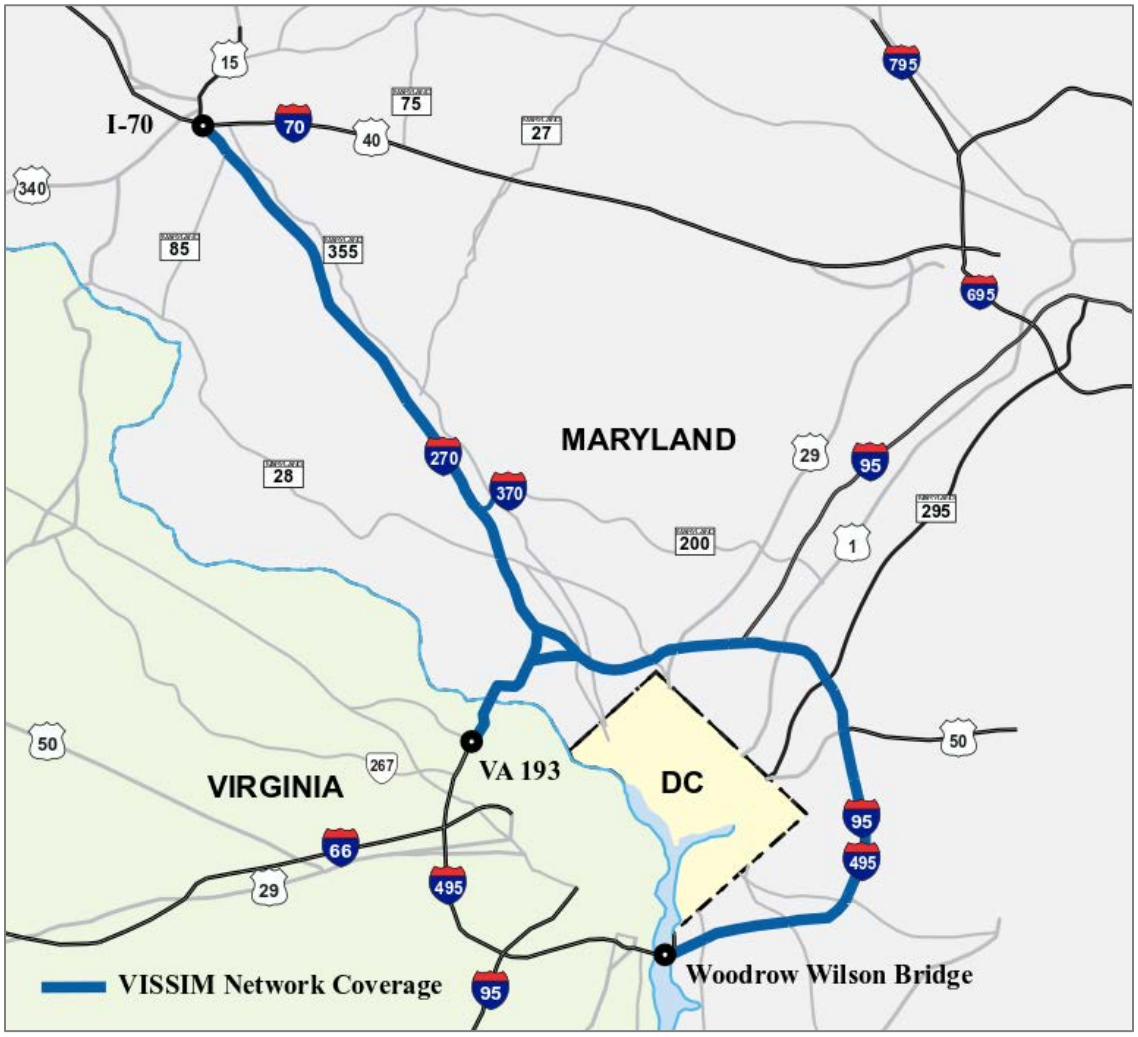
The VISSIM model covers the same limits as were used to evaluate the Screened Alternatives, as shown in **Figure 4**. While the VISSIM model does not explicitly include MD 200 or the section of I-95 north of I-495, the traffic volumes coded into the model do account for the proposed geometric changes on I-95 (i.e., the addition of two managed lanes in each direction between I-495 and MD 200) and the VISSIM model does include the proposed additional direct access ramps within the I-95/I-495 interchange to accommodate movements to and from the proposed I-95 managed lanes.

The VISSIM model includes the TSM/TDM strategies outlined in Section II, including adaptive ramp metering on all entrance ramps for the MD 355, MD 185, MD 97, US 29, MD 193, and MD 650 interchanges and traffic signal timing optimization at ramp terminal intersections. Additional TSM/TDM strategies were tested in VISSIM but ultimately were not included in the final MD 200 Diversion Alternative VISSIM model due to geometric infeasibility, as described in Section II. B.

As with the Screened Alternatives, the MD 200 Diversion Alternative was evaluated using six key traffic operational metrics:

- System-Wide Delay;
- Corridor Travel Time and Speed;
- Density and Level of Service (LOS);
- Travel Time Index (TTI – reference Section III. C. 4.);
- Vehicle Throughput; and
- Effect on Local Roadway Network.

Figure 4: VISSIM Network Coverage



The following sections summarize the performance of the MD 200 Diversion Alternative compared to the Screened Alternatives for each metric, as they relate to the Study's Purpose and Need screening criteria.

1. System-Wide Delay

This metric was used to assist in evaluating the criterion of Existing Traffic and Long-Term Traffic Growth. System-wide delay reflects the average amount of time each vehicle in the VISSIM simulation model is delayed while trying to reach its destination. Delay can be caused by slow travel due to congestion or when vehicles must yield to right-of-way at a stop-controlled or signalized intersection. System-wide delay is reported in the unit of seconds per vehicle and minutes per vehicle. The results for the MD 200 Diversion Alternative are shown in **Table 1** and were generated from the VISSIM outputs. For the raw delay values, lower numbers are better, reflecting a reduction in congestion. For the percent improvement compared to the No Build Alternative, higher numbers are better, reflecting a greater benefit.

For this metric, the MD 200 Diversion Alternative performed the worst of all the Screened Alternatives studied. It would reduce the average delay per vehicle in the system by three percent during the AM peak period and by seven percent during the PM peak period compared to the No Build Alternative, while the other Screened Alternatives provide delay savings between 20 percent and 35 percent. This result can be

attributed to congestion caused by constraints in the middle of the study area due to not widening I-495 between I-95 and I-270 and the residual effects of this congestion propagating throughout the network.

2. Corridor Travel Time and Speed

This metric was also used to assist in the evaluation of the criterion of Existing Traffic and Long-Term Traffic Growth. Corridor travel time represents the amount of time it would take a vehicle to travel from one end of the study limits to the other along either I-495 or I-270 during the peak hour in the design year of 2040. Similarly, corridor speed represents the average speed during the trip. Results were generated for the I-495 Outer Loop from MD 5 to George Washington Memorial Parkway, the I-495 Inner Loop from George Washington Memorial Parkway to MD 5, I-270 Northbound from I-495 to I-370, and I-270 Southbound from I-370 to I-495. Results were also generated separately for travel in the GP lanes and the high-occupancy toll (HOT) or express toll lanes (ETLs). For alternatives that maintained the existing HOV lanes on I-270 in addition to buffer-separated, limited access ETL lanes, the corridor travel time and speed results for the GP lanes included the non-tolled HOV lanes. The results for the MD 200 Diversion Alternative are shown in **Table 2** and were generated from the VISSIM outputs. For travel times, lower numbers are better, reflecting more efficient travel. For speeds, higher numbers are better. More detailed information is provided in **Attachment C** (Speed Maps), **Attachment D** (Travel Time Matrices), and **Attachment E** (Travel Time Savings Charts).

The results of the corridor travel time analysis indicated that the MD 200 Diversion Alternative would be projected to significantly improve travel times along the I-495 Outer Loop GP lanes during the AM peak period (53 minutes versus 101 minutes under the No Build Alternative), but would result in an increase in travel times for vehicles on the I-495 Inner Loop GP lanes during the AM peak period compared to the No Build Alternative (81 minutes versus 68 minutes for the No Build Alternative) because more traffic would be funneled into the bottleneck between I-270 and I-95. During the PM peak period, the MD 200 Diversion Alternative would improve travel times along I-495 in both directions compared to the No Build Alternative, but it would perform worst of all the Screened Alternatives studied, particularly along the Outer Loop (travel time of 108 minutes versus 50 minutes or less for all other Screened Alternatives).

The weighted average speed was calculated for the study area by taking the average speed for vehicles traveling in the GP lanes on each segment of I-495 and I-270 within the study area, weighed by segment length. The results indicate that the weighted average speed throughout the study area is only 32 miles per hour under the MD 200 Diversion Alternative, which is the worst of all the Screened Alternatives studied. Additionally, the MD 200 Diversion Alternative would result in average speeds of less than the minimum average operating speed for HOT lanes under federal law[9] of 45 miles per hour along the I-495 Inner Loop HOT lanes during both the AM and PM peak periods, due to spillback from the GP lanes where the HOT lanes tie back into the mainline.

[9] 23 U.S.C 166(d)(2)

Table 1: Summary of System-Wide Delay Results from VISSIM Model

CRITERIA	PEAK PERIOD	METRIC	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	MD 200 DIVERSION ALTERNATIVE
Accommodate Long-Term Traffic Growth	AM Peak	Average Delay (sec/veh)	267	526	421	404	346	341	384	389	510
		Average Delay (min/veh)	4.45	8.77	7.02	6.73	5.77	5.68	6.40	6.48	8.50
		Percent Improvement vs. No Build	**N/A**	**0%**	**20%**	**23%**	**34%**	**35%**	**27%**	**26%**	**3%**
	PM Peak	Average Delay (sec/veh)	240	707	549	474	472	464	550	464	655
		Average Delay (min/veh)	4.00	11.78	9.15	7.90	7.87	7.73	9.17	7.73	10.92
		Percent Improvement vs. No Build	**N/A**	**0%**	**22%**	**33%**	**33%**	**34%**	**22%**	**34%**	**7%**

Legend: Green ≥ 30%; Yellow 25-30%; Orange 20-25%; Red < 20%

Table 2: Summary of Corridor Travel Time Results from VISSIM Model

CRITERIA	METRIC	PEAK PERIOD	CORRIDOR	TRAVEL LANES	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	MD 200 DIVERSION ALTERNATIVE
Accommodate Long-Term Traffic Growth	Average Travel Time (minutes)	AM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	65	101	74	64	64	63	71	73	53
				HOT/Express Toll Lane	N/A	N/A	38	37	38	38	38	38	45
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	44	68	61	58	56	58	57	57	81
				HOT/Express Toll Lane	N/A	N/A	43	43	43	44	43	46	62
			I-270 Northbound from I-495 to I-370	General Purpose	9	9	9	9	9	9	9	9	9
				HOT/Express Toll Lane	N/A	N/A	9	9	9	9	N/A	N/A	10
			I-270 Southbound from I-370 to I-495	General Purpose	29	16	16	15	12	19	12	24	15
				HOT/Express Toll Lane	N/A	N/A	10	10	10	10	10	10	10
		PM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	76	123	50	45	45	48	45	47	108
				HOT/Express Toll Lane	N/A	N/A	38	38	38	38	38	38	46
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	89	156	89	93	80	60	75	62	92
				HOT/Express Toll Lane	N/A	N/A	38	45	42	49	42	42	68
			I-270 Northbound from I-495 to I-370	General Purpose	15	10	14	11	12	16	13	12	11
				HOT/Express Toll Lane	N/A	N/A	10	10	12	9	14	9	10
			I-270 Southbound from I-370 to I-495	General Purpose	11	12	40	22	15	14	28	15	10
				HOT/Express Toll Lane	N/A	N/A	10	10	10	9	N/A	N/A	10
	Average Speed (mph)	AM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	36	23	31	36	37	37	33	32	44
				HOT/Express Toll Lane	N/A	N/A	62	62	62	62	62	62	52
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	53	34	38	40	41	40	41	41	29
				HOT/Express Toll Lane	N/A	N/A	54	54	54	52	54	50	37
			I-270 Northbound from I-495 to I-370	General Purpose	63	63	61	61	61	61	61	61	61
				HOT/Express Toll Lane	N/A	N/A	63	63	63	64	N/A	N/A	52
			I-270 Southbound from I-370 to I-495	General Purpose	21	38	37	41	50	32	51	25	40
				HOT/Express Toll Lane	N/A	N/A	61	58	59	60	61	60	59
		PM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	31	19	46	52	52	49	52	50	22
				HOT/Express Toll Lane	N/A	N/A	62	62	62	61	62	62	50
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	26	15	26	25	29	38	31	37	25
				HOT/Express Toll Lane	N/A	N/A	62	52	55	47	55	55	34
			I-270 Northbound from I-495 to I-370	General Purpose	36	53	39	51	44	35	43	45	49
				HOT/Express Toll Lane	N/A	N/A	53	56	50	61	40	58	57
			I-270 Southbound from I-370 to I-495	General Purpose	54	50	15	27	41	42	21	40	57
				HOT/Express Toll Lane	N/A	N/A	63	60	63	64	N/A	N/A	63
		Weighted Average Speed		**General Purpose**	**36**	**25**	**36**	**39**	**41**	**40**	**40**	**39**	**32**

Legend: Green ≥ 40 mph; Yellow 35-40 mph; Orange 30-35 mph; Red < 30 mph

3. Density and Level of Service (LOS)

This metric was used to assist in the evaluation of the criterion of Existing Traffic and Long-Term Traffic Growth. Density is the number of vehicles occupying a given length of a roadway at a particular instant. Density is averaged over time and is expressed in passenger car equivalents per mile per lane (pc/mi/ln). Higher density values are indicative of more friction in the system and more congestion. LOS is a letter grade assigned to a section of roadway that measures the quality of traffic flow, ranging from LOS A to LOS F. LOS A represents optimal, free-flow conditions, while LOS F represents failing conditions where demand exceeds capacity. For freeway segments, the Highway Capacity Manual assigns LOS grades based on density. Urban freeway segments reach failing (LOS F) conditions when the density exceeds 45 pc/mi/ln.

For this metric, the percentage of lane-miles operating at LOS F was calculated within the study limits during the AM peak period and the PM peak period. The results are shown in **Table 3** and were generated from the VISSIM outputs. Lower percentages are better, reflecting fewer failing roadway segments. Full details of the LOS and density for every link in the study area are shown in **Attachment F**.

The results indicated that the MD 200 Diversion Alternative would be projected to have the highest number of failing lane miles during both the AM peak period and the PM peak period compared to the Screened Alternatives. It would also have the highest average percentage of lane-miles operating at LOS F, and therefore would perform the worst of all the Screened Alternatives studied.

4. Travel Time Index (TTI)

While corridor travel time and speed provide another way to compare alternatives, few vehicles will travel from one end to the other during their trip, particularly along I-495. Therefore, the metric of TTI was also evaluated along shorter trip segments. This metric was used to assist in the evaluation of the criterion of Trip Reliability. TTI is a metric used by MDOT SHA to quantify congestion levels on highways and expressways. It is defined as the average (50^{th} percentile) travel time on a segment of highway/expressway for a particular hour compared to the travel time of the same trip during free-flow or uncongested conditions. The higher the TTI, the longer the travel times. For example, a TTI of 2.0 indicates that a trip that would take 15 minutes in light traffic, but would take 30 minutes in the peak hour due to congestion. TTI values were calculated for the GP lanes for eight total highway segments, including four segments in each direction: I-495 from George Washington Memorial Parkway to I-270, I-495 from I-270 to I-95, I-495 from I-95 to MD 5, and I-270 from I-495 to I-370. The results for the MD 200 Diversion Alternative are shown in **Table 4** and were generated from the VISSIM outputs. MDOT SHA defines various levels of congestion in four categories based on TTI as follows:

- Uncongested (TTI < 1.15)
- Moderate Congestion (1.15 < TTI < 1.3)
- Heavy Congestion (1.3 < TTI < 2.0)
- Severe Congestion (TTI > 2.0)

The results indicated that the MD 200 Diversion Alternative would not be expected to have any segments with “severe” congestion during the 2040 AM peak period, but would have one “uncongested” segment (I-270 northbound, which is uncongested during the AM peak period for all alternatives, including the No Build). During the PM peak period, two segments of the Inner Loop would be projected to operate in the “severe congestion” category under the MD 200 Diversion Alternative. Overall, the MD 200 Diversion Alternative only outperforms Alternative 5 (one HOT lane) in the metric of TTI with an average TTI value of 1.61.

It should be noted when reviewing the TTI results for individual segments, the values can be influenced by congestion within the model and sometimes give misleading results when viewed independently. For example, for the I-495 Inner Loop from I-270 to I-95, the TTI value for the MD 200 Diversion Alternative during the PM peak period is 2.2, which is lower than the other Screened Alternatives despite having no widening in this segment. This makes it seem that the MD 200 Diversion Alternative performs the best for this segment. However, the relatively low TTI value is due to an upstream bottleneck that meters the flow of traffic through this segment under the MD 200 Diversion Alternative. This is evident when reviewing the results for the upstream segment (I-495 Inner Loop from George Washington Memorial Parkway to I-270), which has a TTI of 4.5, highest amongst the Screened Alternatives. The remaining segments generally perform poorly under the MD 200 Diversion Alternative based on TTI values, except for segments where the managed lanes are provided and travel is occurring away from the bottleneck on I-495 (for example, I-270 Northbound and I-495 Outer Loop from I-270 to the George Washington Memorial Parkway).

5. Vehicle Throughput

This metric was used to assist in the evaluation of the criterion for Movement of Goods and Services. Throughput represents the number of vehicles and/or people that pass by a given point in the roadway network in a set amount of time. Throughput quantifies the efficiency of the roadway network in getting people, goods, and services to their destinations. Benefits of increased throughput on the highway include reduced peak spreading (i.e., less congestion in the off-peak hours) and reduced burden on the surrounding roadway network.

The results are shown in **Table 5** and were generated from the VISSIM outputs. While the VISSIM model can calculate the vehicle throughput at every single location in the model, this evaluation focused on throughput at four key, representative locations. These locations cover the four main segments of the study corridors, separated by major freeway junctions and therefore representative of the study corridors as a whole. The four representative locations are: I-495 crossing the ALB, I-495 west of I-95, I-495 at MD 5, and I-270 at Montrose Road. Results are reported in terms of percent increase in vehicle throughput for each Screened Alternative compared to the No Build Alternative, rounded to the nearest five percent. Detailed throughput information for all roadway segments can be found in **Attachment G**. A comparison of throughput and demand is provided in **Attachment H** (in table form) and **Attachment I** (in chart form).

The MD 200 Diversion Alternative would add capacity along I-270 and along the west side and east side of I-495 but would not provide any physical widening on I-495 between I-270 and I-95. The results of the throughput analysis indicated that there is a correlation between increased capacity and increased throughput. On I-495 west of I-95, where no additional capacity would be provided, the MD 200 Diversion Alternative would not provide additional throughput compared to the No Build Alternative during the AM peak period and only 10 percent additional throughput during the PM peak period. The PM peak throughput gains in this area could be attributed to the TSM/TDM improvements (ramp metering and signal timing optimization). At the other locations where additional capacity would be provided under the MD 200 Diversion Alternative, the results indicated that additional throughput would be expected. However, the total throughput lags behind the other alternatives that provide two managed lanes in each direction, due to the system inefficiencies with the gap in improvements in the middle of the study limits. For example, at the ALB, the MD 200 Diversion Alternative only increases throughput by 15 percent compared to 35 percent for Alternative 9 and Alternative 10. Overall, the MD 200 Diversion Alternative would only outperform Alternative 5 in the metric of vehicle throughput with an average value of 17,145 vehicles per hour.

6. Effect on Local Roadway Network

This metric was used to assist in the evaluation of the criterion for Movement of Goods and Services. While the focus of the study is to provide benefits to travelers using I-495 and I-270, the study will also have impacts on the surrounding local roadway network. This impact was quantified to assist in the evaluation of the Screened Alternatives by calculating the projected reduction in delay on the local road network. The results were generated from the MWCOG regional model outputs and are shown in **Table 6**. Values are presented in terms of total vehicle hours of delay each day on all arterials in Montgomery County, Maryland; Prince George's County, Maryland; and the District of Columbia. Other regions in Maryland and Virginia showed negligible change in local delay. Lower values are better, representing less delay for local travelers. **Table 6** also shows the percent reduction in delay versus the No Build Alternative to help compare the relative merit of the Screened Alternatives for this metric. Higher values are better, reflecting greater benefit.

The results indicated that the MD 200 Diversion Alternative would be expected to reduce delay on the arterials in Prince George's County more than the Screened Alternatives (except for the No Build Alternative). This is due to the proposed widening along I-95 that is included in this alternative, but not in any of the other Screened Alternatives, primarily on north-south routes such as US 1 and MD 212. Conversely, by eliminating the widening on the top side of I-495, the MD 200 Diversion Alternative negatively impacts operations on arterials in the District of Columbia and other east-west roads in the study area compared to the other Screened Alternatives. In Montgomery County, the MD 200 Diversion Alternative would be projected to provide net benefits similar to Alternative 9, but the benefits would be felt more on north-south routes (US 29 and MD 650) than east-west routes (MD 28, Montrose Parkway, Randolph Road, and MD 410).

Overall, the MD 200 Diversion Alternative performs similarly to the other Screened Alternatives in this metric (except for Alternative 5, which performs the worst) with an overall daily delay savings of 7 percent on the local arterials compared to the No Build. However, the results of a sensitivity analysis indicate that the benefits of the MD 200 Diversion Alternative would be reduced if the widening along I-95 were removed from the alternative. In that case, the overall reduction in local network delay would drop from 7.0 percent to 4.9 percent, and the MD 200 Diversion Alternative would rank next-to-last in this metric.

Table 3: Summary of Density and Level of Service (LOS) Results from VISSIM Model

CRITERIA	PEAK PERIOD	METRIC	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	MD 200 DIVERSION ALTERNATIVE
Accommodate Long-Term Traffic Growth	AM Peak	Total Lane-Miles	465	475	560	660	660	675	630	650	650
		Lane-Miles Operating at LOS F based on Density*	100	133	116	94	81	99	89	115	121
		Percent of Lane-Miles Operating at LOS F based on Density*	22%	28%	21%	14%	12%	15%	14%	18%	19%
	PM Peak	Total Lane-Miles	465	475	560	660	660	675	630	650	650
		Lane-Miles Operating at LOS F based on Density*	177	252	111	93	82	94	74	77	149
		Percent of Lane-Miles Operating at LOS F based on Density*	38%	53%	20%	14%	12%	14%	12%	12%	23%
	Average Percent of Lane-Miles Operating at LOS F based on Density*		**30%**	**41%**	**20%**	**14%**	**12%**	**14%**	**13%**	**15%**	**21%**

* LOS F is reached at a density of 45.0 passenger cars per mile per lane (pc/mi/ln)

Legend: Green < 15%; Yellow 15-20%; Orange 20-25%; Red ≥ 25%

Table 4: Summary of Travel Time Index (TTI) Results for General Purpose (GP) Lanes from VISSIM Model

CRITERIA	METRIC	PEAK PERIOD	CORRIDOR	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	MD 200 DIVERSION ALTERNATIVE
Provide a Reliable Travel Time	Travel Time Index (TTI)* in General Purpose (GP) Lanes**	AM Peak	I-495 Inner Loop from George Washington Memorial Parkway to I-270	1.4	2.1	1.6	1.6	1.3	1.3	1.8	1.6	1.6
			I-495 Outer Loop from I-270 to George Washington Memorial Parkway	1.2	1.2	1.7	1.3	1.7	1.7	1.7	1.6	1.4
			I-495 Inner Loop from I-270 to I-95	1.0	1.0	1.5	1.2	1.3	1.2	1.2	1.2	1.3
			I-495 Outer Loop from I-95 to I-270	2.8	4.3	1.6	1.5	1.6	1.3	2.1	1.8	1.5
			I-495 Inner Loop from I-95 to MD 5	1.0	1.8	1.5	1.5	1.4	1.5	1.3	1.4	1.9
			I-495 Outer Loop from MD 5 to I-95	1.2	1.5	1.2	1.0	1.0	1.0	1.0	1.0	1.2
			I-270 Northbound from I-495 to I-370	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
			I-270 Southbound from I-370 to I-495	2.6	1.5	1.5	1.4	1.1	1.7	1.1	2.2	1.4
		PM Peak	I-495 Inner Loop from George Washington Memorial Parkway to I-270	3.7	5.5	2.7	4.5	2.6	1.2	1.6	1.6	4.5
			I-495 Outer Loop from I-270 to George Washington Memorial Parkway	2.8	2.4	1.4	1.0	1.0	1.0	1.0	1.0	1.0
			I-495 Inner Loop from I-270 to I-95	2.7	5.0	3.2	2.5	2.6	2.4	2.4	2.6	2.2
			I-495 Outer Loop from I-95 to I-270	1.1	2.7	1.2	1.1	1.1	1.4	1.1	1.3	1.5
			I-495 Inner Loop from I-95 to MD 5	1.5	1.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
			I-495 Outer Loop from MD 5 to I-95	1.9	2.5	1.2	1.0	1.0	1.0	1.0	1.0	1.9
			I-270 Northbound from I-495 to I-370	1.5	1.0	1.4	1.1	1.3	1.6	1.3	1.2	1.1
			I-270 Southbound from I-370 to I-495	1.0	1.1	3.7	2.0	1.3	1.3	2.6	1.4	1.0
		Overall Average Travel Time Index (TTI)* in General Purpose (GP) Lanes**		**1.78**	**2.28**	**1.69**	**1.54**	**1.40**	**1.36**	**1.46**	**1.44**	**1.61**

* Note: MDOT SHA defines various levels of congestion based on TTI: Uncongested (green) – TTI ≤ 1.15; Moderate Congestion (yellow) – 1.15 < TTI ≤ 1.3; Heavy Congestion (orange) – 1.3 < TTI < 2.0; and, Severe Congestion (red) – TTI ≥ 2.0.
**Note: This table summarizes TTI in the GP lanes. All HOT/Express Toll Lanes would have TTI values in the uncongested range (TTI less than 1.15).

Table 5: Summary of Vehicle-Throughput Results from VISSIM Model

CRITERIA	METRIC	PEAK PERIOD	LOCATION	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	MD 200 DIVERSION ALTERNATIVE
Improve Movement of Goods and Services	Vehicle-Throughput (veh/hr)	AM Peak	I-495 at American Legion Bridge	17,105	17,405	20,113	22,240	22,343	22,770	21,788	22,442	21,376
			I-495 west of I-95	14,591	13,910	15,977	18,994	19,189	19,052	19,000	19,679	13,606
			I-495 at MD 5	12,377	12,606	12,789	15,640	14,002	14,145	14,525	15,258	13,349
			I-270 at Montrose Rd	16,225	17,087	17,985	20,951	18,975	21,374	18,310	19,675	19,071
		PM Peak	I-495 at American Legion Bridge	16,299	15,421	18,776	18,817	20,906	20,801	20,035	20,288	17,932
			I-495 west of I-95	15,561	15,420	19,101	21,524	21,312	21,489	20,170	21,474	16,585
			I-495 at MD 5	13,609	13,916	15,132	13,868	15,715	15,725	15,652	15,853	16,154
			I-270 at Montrose Rd	18,375	17,972	16,098	18,540	20,156	22,305	16,946	19,989	19,090
		Average Vehicle-Throughput (veh/hr)		**15,518**	**15,467**	**16,996**	**18,822**	**19,075**	**19,708**	**18,303**	**19,332**	**17,145**
	Percent Change in Vehicle-Throughput vs. 2040 No Build	AM Peak	I-495 at American Legion Bridge	N/A	0%	15%	30%	30%	30%	25%	30%	25%
			I-495 west of I-95	N/A	0%	15%	35%	40%	35%	35%	40%	< 0%
			I-495 at MD 5	N/A	0%	0%	25%	10%	10%	15%	20%	5%
			I-270 at Montrose Rd	N/A	0%	5%	25%	10%	25%	5%	15%	10%
		PM Peak	I-495 at American Legion Bridge	N/A	0%	20%	20%	35%	35%	30%	30%	15%
			I-495 west of I-95	N/A	0%	25%	40%	40%	40%	30%	40%	10%
			I-495 at MD 5	N/A	0%	10%	< 0%	15%	15%	10%	15%	15%
			I-270 at Montrose Rd	N/A	0%	< 0%	5%	10%	25%	< 0%	10%	5%

Legend: Green ≥ 19,000 veh/hr; Yellow 18,000-19,000 veh/hr; Orange 17,000-18,000 veh/hr; Red < 17,000 veh/hr

Table 6: Summary of the Effects on the Local Roadway Network from MWCOG Model

CRITERIA	PERIOD	METRIC	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	MD 200 DIVERSION ALTERNATIVE
Improve Movement of Goods and Services	Daily	Daily Delay (vehicle-hours) for All Arterials in Montgomery County*	144,028	247,462	241,601	233,725	231,608	233,139	233,448	234,352	230,277
		Percent Reduction vs. No Build (Montgomery County)	**N/A**	0%	2.4%	5.6%	6.4%	5.8%	5.7%	5.3%	6.9%
		Daily Delay (vehicle-hours) for All Arterials in Prince George's County*	98,421	171,265	163,660	158,725	158,606	158,831	158,798	158,505	152,391
		Percent Reduction vs. No Build (Prince George's County)	**N/A**	0%	4.4%	7.3%	7.4%	7.3%	7.3%	7.5%	11.0%
		Daily Delay (vehicle-hours) for All Arterials in District of Columbia (DC)	105,257	178,074	169,630	165,184	164,571	165,931	163,978	165,851	172,504
		Percent Reduction vs. No Build (District of Columbia)	**N/A**	0%	4.7%	7.2%	7.6%	6.8%	7.9%	6.9%	3.1%
		Total Daily Delay (vehicle-hours) for All Arterials in Montgomery County, Prince George's County, and District of Columbia (DC)	347,706	596,801	574,891	557,634	554,785	557,901	556,224	558,708	555,172
		Percent Reduction vs. No Build (Total)	**N/A**	**0%**	**3.7%**	**6.6%**	**7.0%**	**6.5%**	**6.8%**	**6.4%**	**7.0%**

* Note: All other Counties in Maryland and Virginia are expected to experience negligible changes in daily delay (less than 3% for all alternatives).
Legend: Green ≥ 5%; Yellow 0-5%; Red 0%

IV. Environmental

The MD 200 Diversion Alternative was suggested by a few agencies as an alternative to avoid the environmental resources along the top side of I-495, specifically the park impacts and property displacements. The LOD for the MD 200 Diversion Alternative for the I-495 west and east sections were the same limits as Alternatives 8, 9, 10, 13B and 13C, and on I-270, the limits were the same used for Alternatives 8 and 9. This is because those alternatives considered the addition of two managed lanes in each direction. The LODs and associated impacts for the MD 200 Diversion Alternative and the Screened Alternatives are from June 2019 and do not reflect the ongoing coordination on avoidance and minimization efforts with the resource agencies.

There is a 4.2-mile portion of I-95 that is part of the MD 200 Diversion Alternative that is not included in the Screened Alternatives. To calculate environmental impacts for the section of I-95, readily available Geographic Information System data from state and local data sources was used; these resources have not been field verified. **Table 7** presents the preliminary effects comparison between the Screened Alternatives and the MD 200 Diversion Alternative.

In general, some environmental impacts would be avoided or decreased under the MD 200 Diversion Alternative compared to the Screened Alternatives, which is a result of no widening or capacity improvements for approximately 10.5 miles along the top side of I-495. In comparison to the Screened Alternatives, the MD 200 Diversion Alternative would avoid 12 park properties because there are no impacts along the top side of I-495. Specifically, this alternative would also avoid park properties including: Rock Creek Park, Sligo Stream Valley Park, Northwest Branch Stream Valley Park, and other smaller parks. However, the MD 200 Diversion Alternative is not a complete avoidance alternative as there are 35 other park properties along the I-495 and I-270 sections that would still be impacted by this alternative. There are no park properties impacted in the I-95 section of this alternative.

Under the MD 200 Diversion Alternative, only the Sensitive Species Project Review Area (SSPRA) would result in greater impacts over the Screened Alternative impacts (153 acres). Approximately 271 acres of impacts to SSPRA would occur under the MD 200 Diversion Alternative, which is due to the I-95 section of LOD resulting in an additional 164 acres of SSPRA and 107 acres remaining in the I-495 sections.

Regarding the other natural environmental resources, the MD 200 Diversion Alternative would result in one acre less to wetland impacts; there were no new, known wetland features along the I-95 section of this alternative. Overall there would be a reduction in linear feet of Waters of the US features under the MD 200 Diversion Alternative, by approximately 30,000 linear feet. However, a section of Paint Branch traverses on both sides of I-95 resulting in 42 linear feet of *new* impacts not previously included in any of the Screened Alternatives. There was also an overall reduction in forest impacts with the MD 200 Diversion Alternative by approximately 250 acres. However, the I-95 section results in 62 acres of forest impacts not previously impacted by the Screened Alternatives.

The MD 200 Diversion Alternative would avoid the residential property displacements under the Screened Alternatives as these displacements were all along the top-side of I-495. Three business displacements along the top-side of I-495 would also be avoided, but one business displacement remains on the east side of I-495 under the MD 200 Diversion Alternative. There is less right-of-way required under the MD 200 Diversion Alternative compared to the Screened Alternatives, also resulting in a fewer number of properties directly affected, approximately 369 few properties. Along the I-95 section of the MD 200 Diversion Alternative, there are nine new properties directly affected and 15 acres of new right-of-way required, mainly due to stormwater management features.

Table 7: Preliminary Effects Comparison of the Screened Alternatives (June 2019 impacts) and the MD 200 Diversion Alternative

	Resource	Alternative 1 No Build	Alternative 5	Alternative 8	Alternative 9	Alternative 10	Alternative 13B	Alternative 13C	MD 200 Diversion Alt
Environmental	Number of Parks	0	46	47	47	47	47	47	35
	Potential Use of Section 4(f) Properties* {Potential Use of Historic BW Parkway in acres}	0	170 {63}	176 {63}	176 {63}	177 {63}	175 {63}	177 {63}	136 {63}
	Number of Known Previously Recorded National Register Historic Properties	0	20	21	21	21	21	21	12
	100-Year Floodplain (acres)	0	123	127	127	128	127	127	80
	Unique and Sensitive Areas (acres)	0	404	414	414	417	414	416	405
	Sensitive Species Project Review Area (acres)	0	150	153	153	153	153	153	271
	Forest canopy (acres)	0	1,452	1,507	1,507	1,519	1,507	1,514	1,258
	Wetlands of Special State Concern (acres)	0	0	0	0	0	0	0	0
	Wetlands – Field Verified (acres)	0	18	19	19	19	19	19	18
	Waters of the US (linear feet)	0	147,468	150,049	150,049	150,658	150,074	150,285	121,097
	Tier II Catchments (acres)	0	54	54	54	54	54	54	54
	Noise Receptors Impacted	0	3,661	4,470	4,470	4,581	4,411	4,461	Not Avail
Traffic	Annual Average Hours of Savings per Commuter	0	45	59	73	72	65	64	19
Engineering	Total Right-of-way Required (acres)	0	301	335	335	344	335	341	273
	Number of Properties Directly Effected	0	1,222	1,445	1,445	1,485	1,446	1,462	1,076
	Number of Residential Displacements	0	25	34	34	34	34	34	0
	Number of Business Displacements	0	4	4	4	4	4	4	1
	Width of Pavement on I-495 (feet)	138–146	170–174	194–198	194–198	194–198	194–198	194–198	194–198
	Width of Pavement on I-270 (feet)	228–256	194–198	218–222	218–222	242–248	202–206	226–230	218–222
	Width of Pavement on I-95 (feet)	144	N/A	N/A	N/A	N/A	N/A	N/A	196
	Capital Costs (billions)	N/A	$7.7 – $8.6	$8.7 – $9.7	$8.7 – $9.6	$9.0 – $10.0	$8.6 – $9.5	$8.9 –- $9.9	$7.2 - $7.9

Notes: * Potential Section 4(f) Properties includes total acres of potential impacts to parks and known historic properties and does not reflect additional avoidance and minimizations efforts coordinated with the resource agencies in July and August 2019.

- All of the alternatives follow the existing highways; therefore, the quantity of impacts is similar.
- Detailed analyses, including further avoidance, minimization and private sector incentives, will be prioritized to reduce the property and environmental impacts.
- Preliminary impacts represented above assume total impacts; temporary and permanent impacts will be differentiated in the FEIS.
- Noise receptors are noise-sensitive land uses which include residences, schools, places of worship, and parks, among others. Noise analysis along the I-95 portion of the MD 200 Diversion Alternative was not available

V. Financial Analysis

A financial analysis was completed for all of the Screened Alternatives in June 2019; subsequently, a financial analysis was completed for the MD 200 Diversion Alternative at the same level as the Screened Alternatives to assess its potential to be financially viable. This analysis considered the preliminary capital costs, initial revenue projections, and preliminary operations and maintenance costs. Estimates were developed for net cashflows to the state from delivery of the project as a toll revenue concession over the course of a 50-year P3 agreement to indicate the comparative financial viability of each of the Screened Alternatives and the MD 200 Diversion Alternative. The actual cashflows will depend on details of solicitation, phasing, technical scope along with many other factors that would impact each alternative similarly. The assumptions made to enable a comparison of the alternative's financial viability for the entire study corridor included the following:

- The entire project is delivered as a single design, build, finance, operate, and maintain package with a five-year construction period and a 50-year concession term.
- Costs and revenues were adjusted for inflation and financing was modeled based on market precedents for similar transactions.
- Positive and negative cashflows are addressed at financial close. (For negative cashflows it assumes that the state or a public subsidy provides funds.)

The results indicated that the MD 200 Diversion Alternative would not be financially viable and would require a payment by the state of approximately $310 million. The revenue shortfall for the MD 200 Diversion Alternative would be larger than all alternatives except for Alternative 5, which would have a shortfall of $580M. As a comparison, Alternatives 10, 8, and 9 could be expected to generate positive cashflows of $120M, $310M, and $320M, respectively.

The financial analysis is preliminary, and it is possible that the inputs used to compute the financial viability of the MD 200 Diversion Alternative could change. However, if any of the inputs change it is anticipated that it would result in a consistent change for all of the Screened Alternatives. Therefore, any changes in the inputs would result in a consistent change in the financial viability for all Screened Alternatives, resulting in the same comparative difference between the Screened Alternatives. The conclusion is that the MD 200 Diversion Alternative would always be less financially viable than all Screened Alternatives except for Alternative 5.

VI. Conclusions

MDOT SHA performed a thorough study of the MD 200 Diversion Alternative to the same level of detail as the Screened Alternatives to determine if it would meet the Study's Purpose and Need, and thus be considered a reasonable alternative to be carried forward for detailed analysis in the DEIS.

In the near term, the premise of this alternative has merit due to the currently available capacity on MD 200, an MDTA facility. As such, MDOT SHA is working with MDTA to encourage through traffic from points north on I-95 that is destined for the ALB or beyond (and the reverse movement) to utilize MD 200 to take advantage of the near term, spare capacity and potentially provide some relief to the top side of I-495. In an attempt to divert some of this traffic, MDOT SHA is proposing to MDTA to provide travel times for I-495 and MD 200 through the use of the existing dynamic messaging signs. If the travel times show the trip is shorter on MD 200 and the toll is amenable to travelers, then they may choose to divert to MD 200.

However, in addressing the Study's Purpose and Need, the MD 200 Diversion Alternative must also accommodate *long-term* traffic growth, enhance trip reliability, and improve the movement of goods and services. In the design year of 2040, the traffic analysis results indicate that the MD 200 Diversion Alternative would perform worse than most of the Screened Alternatives in many metrics used to evaluate the reasonableness of the alternatives. The following summarizes the results of these metrics:

- For ***system-wide delay***, along I-495 and I-270, the alternative would perform the worst of all Screened Alternatives and would only save 3 to 7 percent in delay compared to the No Build Alternative (with 20 to 35 percent for the retained build alternatives).
- For ***corridor travel time and speed***, the alternative would have the lowest average speed compared to the Screened Alternatives. Additionally, there would be a 15 percent decrease in speed along the I-495 Inner Loop during the morning peak period compared to the No Build, and the HOT lanes on the I-495 Inner Loop would not achieve the federally-mandated average speed of 45 miles per hour.
- For ***density and Level of Service (LOS)***, the alternative would have the highest number of lane miles operating at LOS F and the highest percentage of failing lane-miles amongst the Screened Alternatives, except for the No Build Alternative.
- For ***travel time index*** **(TTI),** the average TTI on the GP lanes within the study area would be 1.6, which is the second worst of the Screened Alternatives. Two segments of the I-495 Inner Loop would be projected to have TTI values that exceed 2.0 during the PM peak period and therefore would be considered "severe" congestion based on MDOT SHA criteria.
- For ***vehicle throughput***, the alternative would have similar average throughput to Alternative 5. Additionally, the top side of I-495 would perform worse than the No Build in the morning peak period and would have approximately half of the throughput benefit of the ARDS across the ALB (15 percent with the MD 200 Diversion Alternative compared to 35 percent in the PM peak under Alternative 9 and 10).
- For the ***effect on the local roadway network***, the MD 200 Diversion Alternative would be projected to reduce delay on north-south arterials due to the additional proposed widening along I-95, particularly in Prince George's County. However, it would reduce the benefit on east-west arterials in Montgomery County and the District of Columbia compared to the Screened Alternatives.

For ***annual average hours of savings per commuter,***[10] the MD 200 Diversion Alternative would save approximately 19 hours in comparison to Alternatives 9 and 10 that would save commuters 73 and 72 hours, respectively, at a cost of $7.2 to $7.9 Billion compared to $8.7 to $10.0 Billion.

Regarding environmental impacts, the MD 200 Diversion Alternative would include the No Build on the topside of I-495, therefore, it would avoid resources within this area. However, it would include improvements to I-95, which would add to the overall potential environmental impacts for this alternative. While the MD 200 Diversion Alternative would avoid the use of important resources along the topside of I-495, it would still impact significant environmental resources in other areas and would not address the significant congestion issues, despite the cost of $7.2 to $7.9 Billion.

[10] Average annual hours saving per commuter was not a metric used in assessing the Screened Alternatives.

For financial viability, the MD 200 Diversion Alternative would require a subsidy of public funding, which means that even with the toll revenues, the State would have to pay over $310 Million.

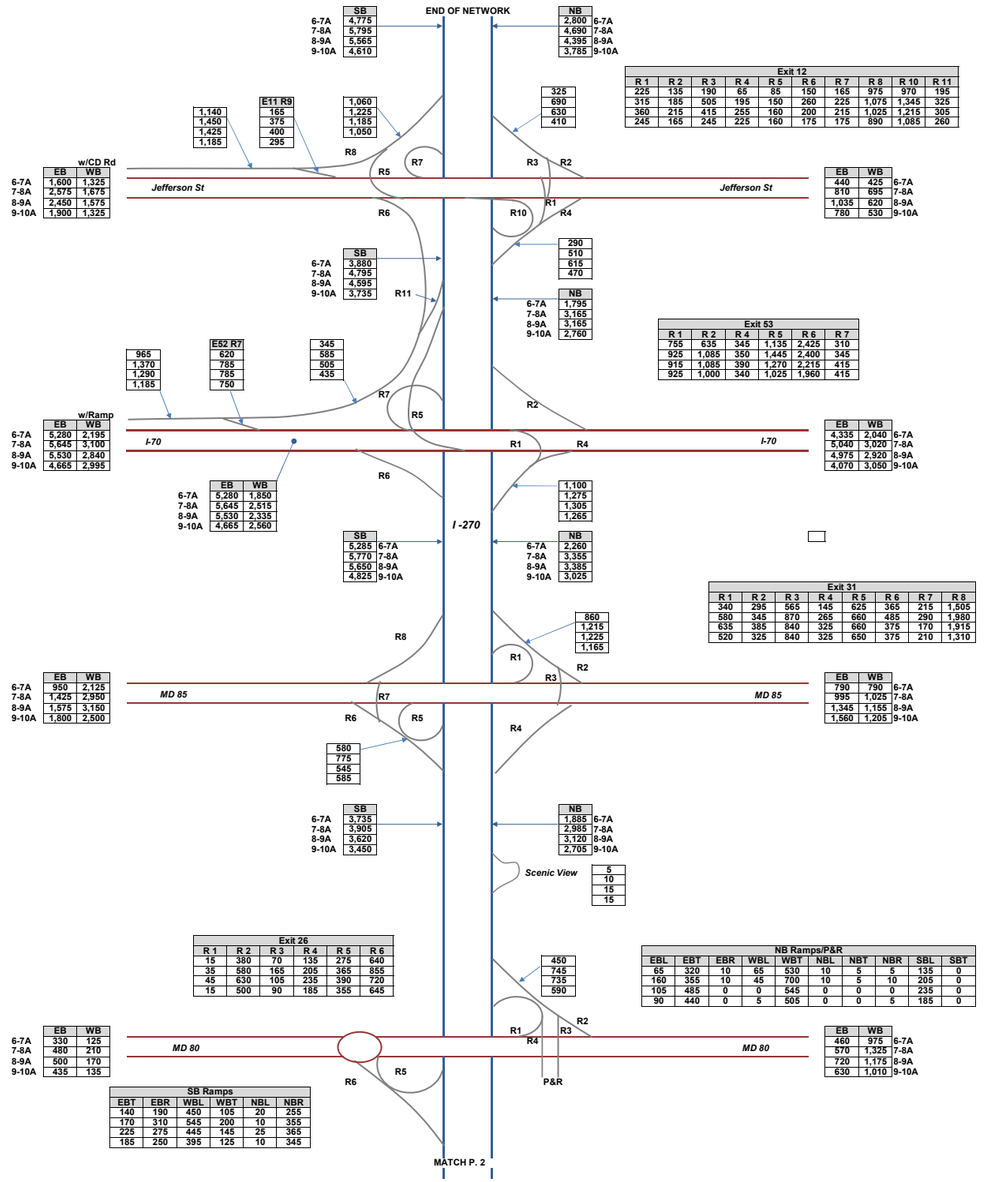
In summary, the MD 200 Diversion Alternative would not address the Study's Purpose and Need of accommodating long-term traffic growth, enhancing trip reliability or improving the movement of goods and services. The long-term traffic needs on I-495 could not be met by the MD 200 Diversion Alternative including TSM/TDM improvements because MD 200 will not have adequate spare capacity by design year 2040 and the viable TSM/TDM solutions would not provide adequate congestion relief on I-495.

Overall, the operational analyses show that a continuous, unbroken network of managed lanes along I-495 is necessary to meet the Study's Purpose and Need (specifically accommodating long-term traffic growth and enhancing trip reliability) and for the project to be financially viable. As mentioned previously, the section of I-495 between the I-270 East Spur and I-95 carries the *second highest* ADT volume in Maryland and the Outer Loop from I-95 to US 29 was ranked the *#1 most congested freeway section* in Maryland during the AM peak. In addition, the section of I-495 Inner Loop from the I-270 East Spur to MD 97 was ranked the *third most congested freeway section* in Maryland during the PM peak on an average weekday in 2017. Finally, the *top three most unreliable* freeway segments in Maryland during the AM peak are all located on the I-495 Outer Loop between I-95 and MD 193 and during the PM peak, I-495 Inner Loop at MD 355 ranks as the *sixth most unreliable* freeway segment in Maryland. FHWA and MDOT SHA would not retain an alternative (MD 200 Diversion Alternative) for detailed study that would not address the worst traffic deficiencies in Maryland, nor meet the Study's Purpose and Need.

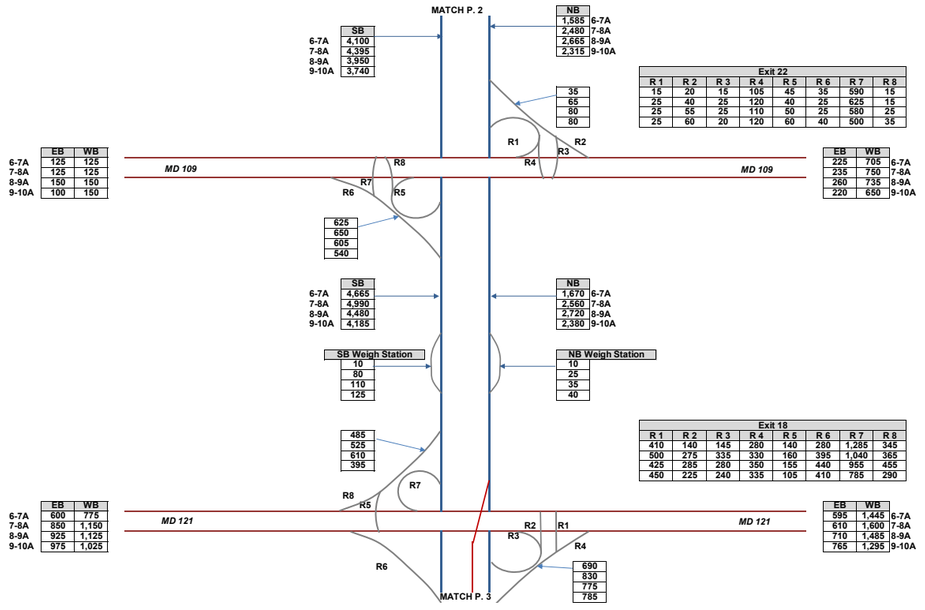
Based on the results described in this paper, the MD 200 Diversion Alternative will not be carried forward as an ARDS for the I-495 and I-270 Managed Lanes Study as it does not meet the Study's Purpose and Need. However, MDOT SHA is committed to continuing to work with the resource agencies and stakeholders to minimize impacts to the important resources and properties on the top side of I-495 as the Study progresses.

ATTACHMENT A – PEAK PERIOD VOLUMES

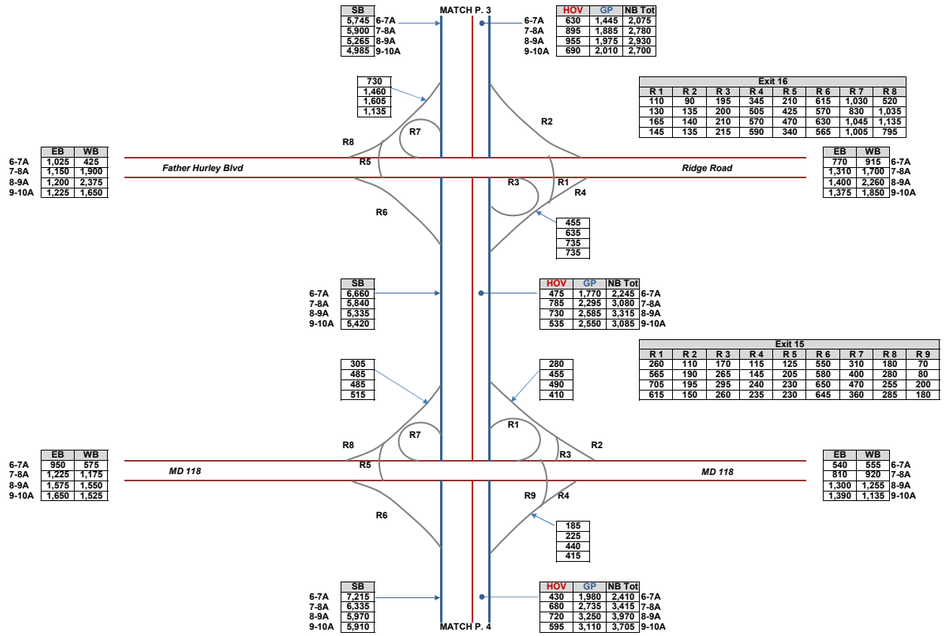
I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



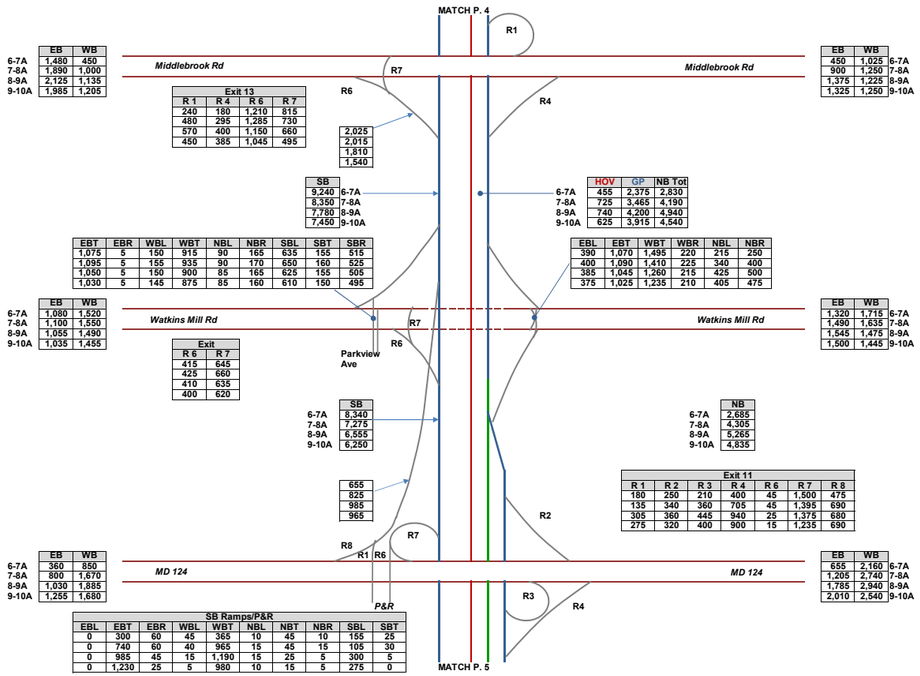
I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



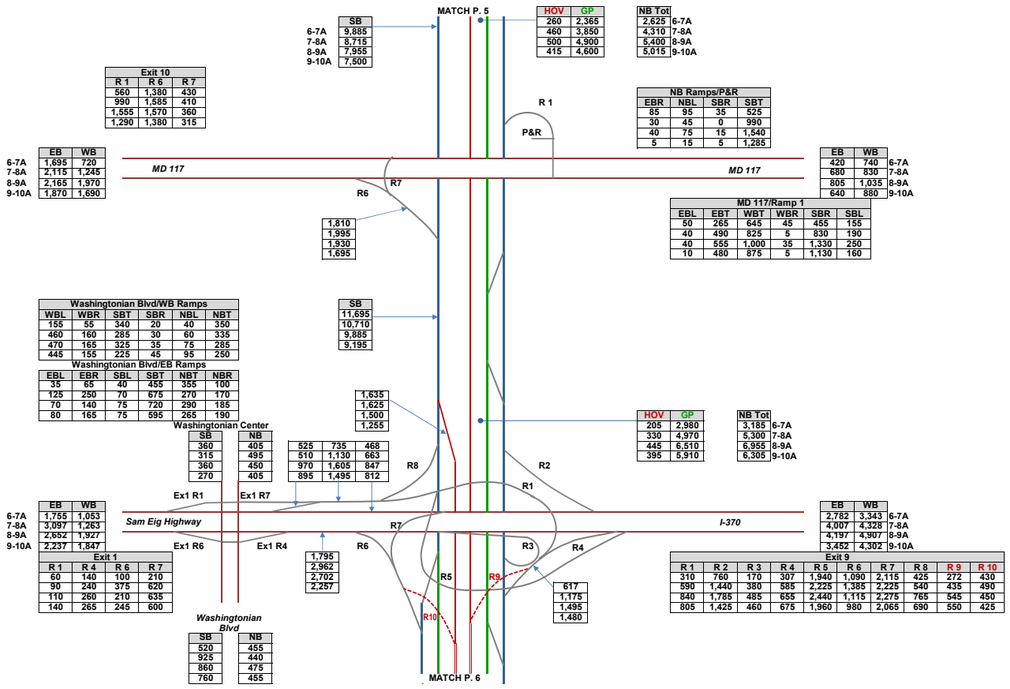
I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



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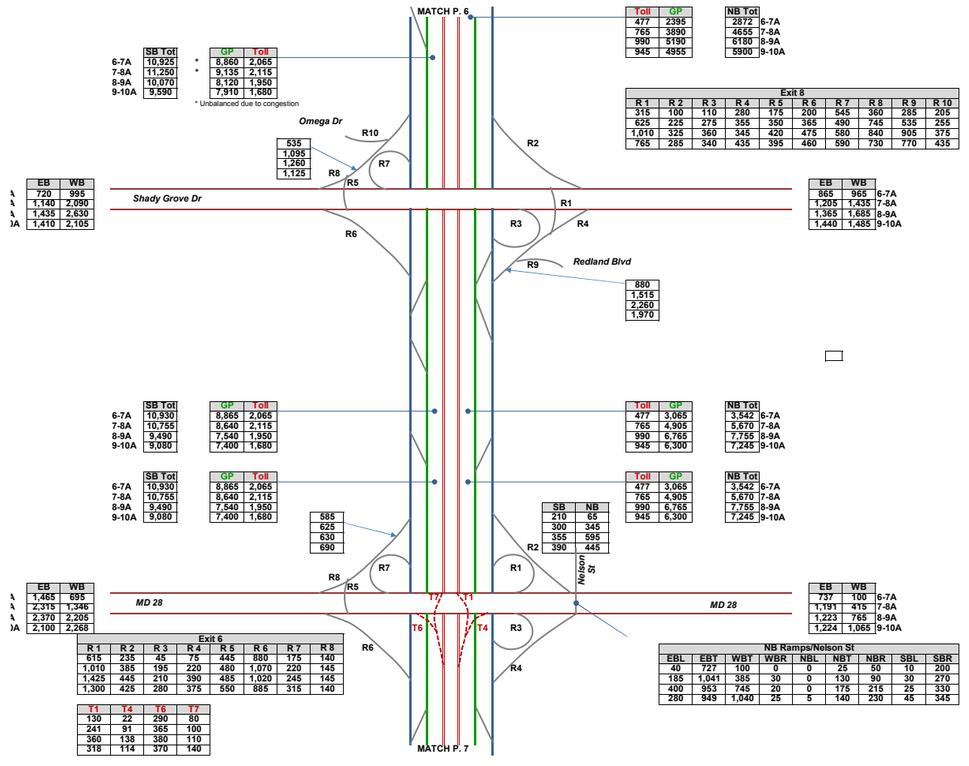
Future Diversion Alternative Peak Period Volumes



	SB Tot		GP	Toll
6-7A	10,325	*	8,860	2,065
7-8A	11,250	*	9,135	2,115
8-9A	10,070		8,120	1,950
9-10A	9,590		7,910	1,680

Toll	GP
477	2395
765	3890
990	5190
945	4955

NB Tot	
2872	6-7A
4655	7-8A
6180	8-9A
5900	9-10A

Exit 8									
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10
315	100	110	280	175	200	545	360	285	205
625	225	275	355	350	365	490	745	535	255
1,010	325	360	345	420	475	580	840	905	375
765	285	340	435	395	460	590	730	770	435

EB	WB
720	995
1,140	2,090
1,435	2,630
1,410	2,105

EB	WB	
865	965	6-7A
1,205	1,435	7-8A
1,365	1,685	8-9A
1,440	1,485	9-10A

535
1,095
1,260
1,125

880
1,515
2,260
1,970

SB Tot		GP	Toll
10,930		8,865	2,065
10,755		8,640	2,115
9,490		7,540	1,950
9,080		7,400	1,680

Toll	GP
477	3,065
765	4,905
990	6,765
945	6,300

NB Tot	
3,542	6-7A
5,670	7-8A
7,755	8-9A
7,245	9-10A

SB Tot		GP	Toll
10,930		8,865	2,065
10,755		8,640	2,115
9,490		7,540	1,950
9,080		7,400	1,680

Toll	GP
477	3,065
765	4,905
990	6,765
945	6,300

NB Tot	
3,542	6-7A
5,670	7-8A
7,755	8-9A
7,245	9-10A

585
625
630
690

SB	NB
210	65
300	345
355	595
390	445

EB	WB	
1,465	695	
2,315	1,346	
2,370	2,205	
2,100	2,268	

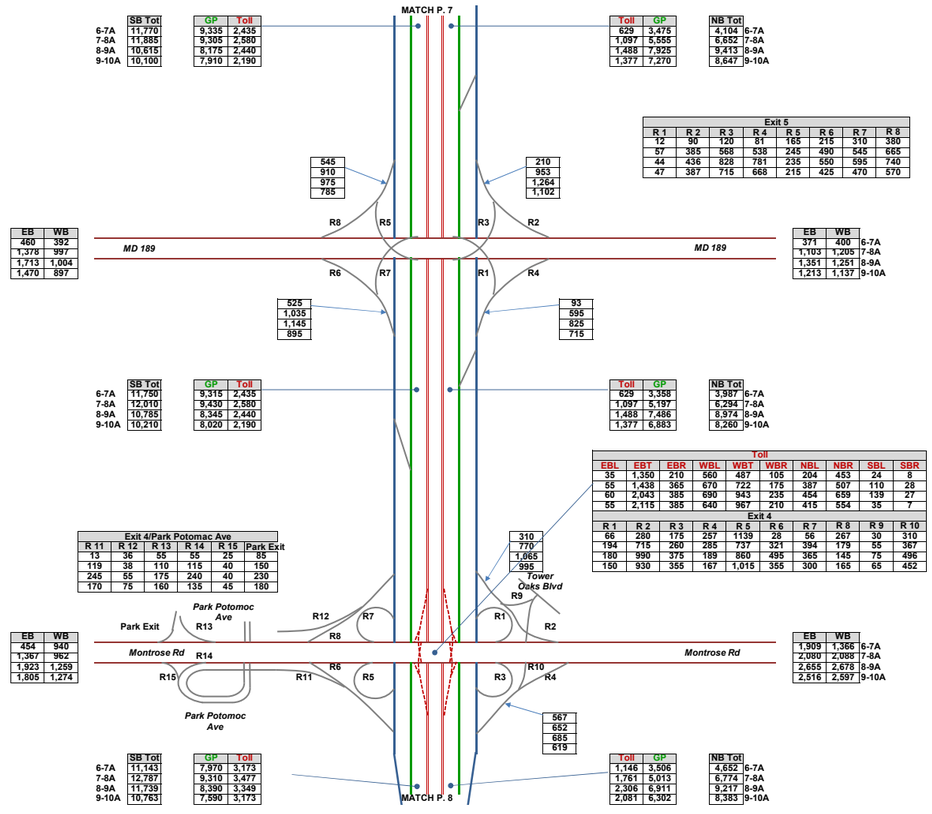
EB	WB	
737	100	6-7A
1,191	415	7-8A
1,223	765	8-9A
1,224	1,065	9-10A

Exit 6							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
615	235	45	75	445	880	175	140
1,010	385	195	220	480	1,070	220	145
1,425	445	210	390	485	1,020	245	145
1,300	425	280	375	550	885	315	140

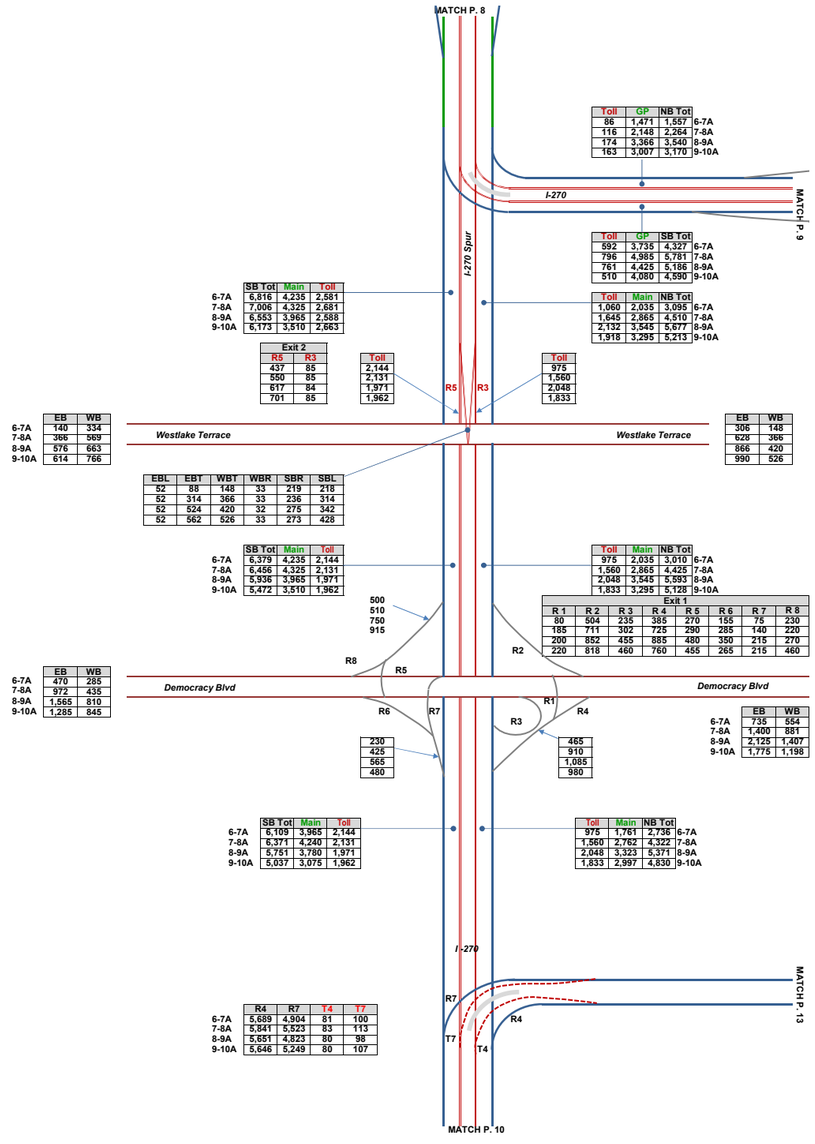
NB Ramps/Nelson St							
EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR
40	727	100	0	0	25	50	10	200
185	1,041	385	30	0	130	90	30	270
400	953	745	20	0	175	215	25	330
280	949	1,040	25	5	140	230	45	345

T1	T4	T6	T7
130	22	290	80
241	91	365	100
360	138	380	110
318	114	370	140

I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



	Toll	GP	NB Tot
6-7A	86	1,471	1,557
7-8A	116	2,148	2,264
8-9A	174	3,366	3,540
9-10A	163	3,007	3,170

	Toll	GP	SB Tot
6-7A	592	3,735	4,327
7-8A	796	4,985	5,781
8-9A	761	4,425	5,186
9-10A	510	4,080	4,590

	SB Tot	Main	Toll
6-7A	6,816	4,235	2,581
7-8A	7,006	4,325	2,681
8-9A	6,553	3,965	2,588
9-10A	6,173	3,510	2,663

	Toll	Main	NB Tot
6-7A	1,060	2,035	3,095
7-8A	1,645	2,865	4,510
8-9A	2,132	3,545	5,677
9-10A	1,918	3,295	5,213

Exit 2		
	R5	R3
6-7A	437	85
7-8A	550	85
8-9A	517	84
9-10A	701	85

	Toll
6-7A	2,144
7-8A	2,131
8-9A	1,971
9-10A	1,962

	Toll
6-7A	975
7-8A	1,560
8-9A	2,048
9-10A	1,833

	EB	WB
6-7A	140	334
7-8A	365	589
8-9A	576	663
9-10A	614	766

	EB	WB
6-7A	306	148
7-8A	625	365
8-9A	866	420
9-10A	990	526

EBL	EBT	WBT	WBR	SBR	SBL
52	88	148	33	219	218
52	314	366	33	236	314
52	524	420	32	275	342
52	562	526	33	273	428

	SB Tot	Main	Toll
6-7A	6,379	4,235	2,144
7-8A	6,456	4,325	2,131
8-9A	5,936	3,965	1,971
9-10A	5,472	3,510	1,962

	Toll	Main	NB Tot
6-7A	975	2,035	3,010
7-8A	1,560	2,865	4,425
8-9A	2,048	3,545	5,593
9-10A	1,833	3,295	5,128

Exit 1							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
80	504	235	385	270	155	75	230
185	711	302	725	290	285	140	220
200	852	455	885	480	350	215	270
220	818	460	760	455	265	215	460

500	
510	
750	
915	

	EB	WB
6-7A	470	285
7-8A	972	435
8-9A	1,565	810
9-10A	1,285	845

	EB	WB
6-7A	735	554
7-8A	1,400	881
8-9A	2,125	1,407
9-10A	1,775	1,198

230	
425	
565	
480	

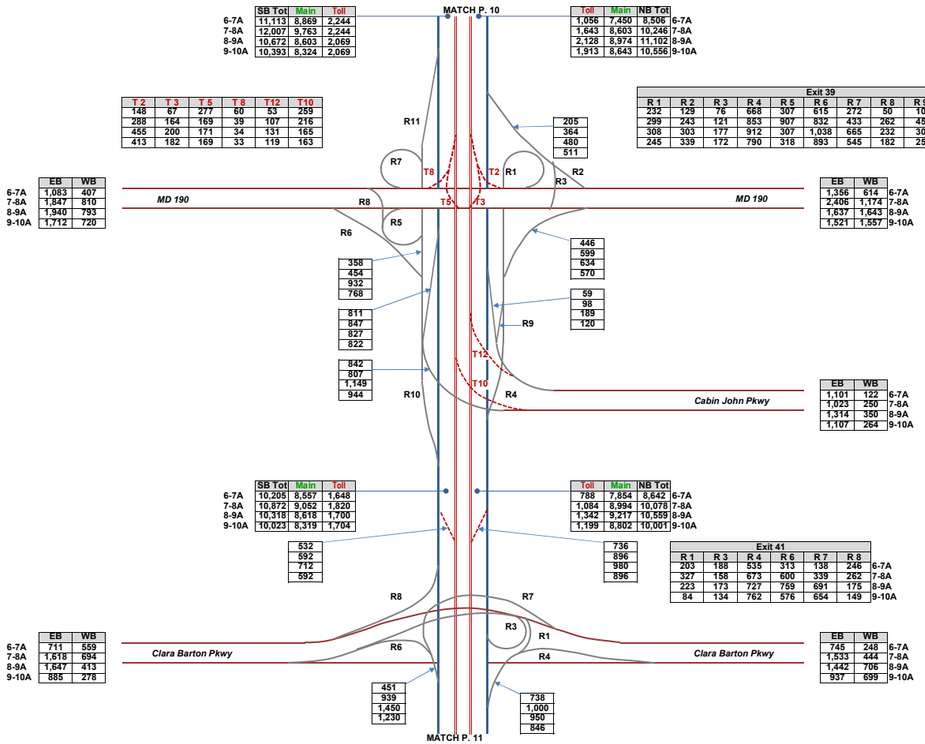
465	
910	
1,085	
980	

	SB Tot	Main	Toll
6-7A	6,109	3,965	2,144
7-8A	6,371	4,240	2,131
8-9A	5,751	3,780	1,971
9-10A	5,037	3,075	1,962

	Toll	Main	NB Tot
6-7A	975	1,761	2,736
7-8A	1,560	2,762	4,322
8-9A	2,048	3,323	5,371
9-10A	1,833	2,997	4,830

	R4	R7	T4	T7
6-7A	5,689	4,904	81	100
7-8A	5,841	5,523	83	113
8-9A	5,651	4,823	80	98
9-10A	5,646	5,249	80	107

I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



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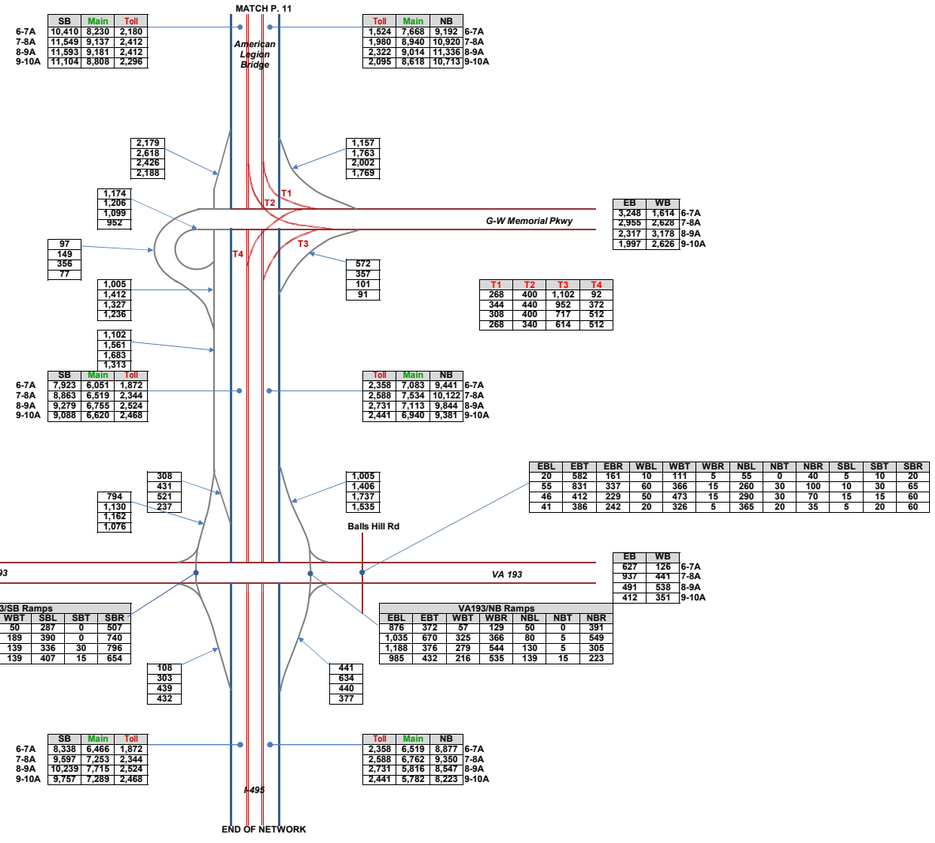


	SB Main	SB Toll
6-7A	10,410	2,180
7-8A	11,549	2,412
8-9A	11,593	2,412
9-10A	11,104	2,296

	Toll	Main	NB
6-7A	1,524	7,668	9,192
7-8A	1,980	8,940	10,920
8-9A	2,322	9,014	11,336
9-10A	2,095	8,618	10,713

	EB	WB
6-7A	3,248	1,614
7-8A	2,955	2,628
8-9A	2,317	3,178
9-10A	1,997	2,626

T1	T2	T3	T4
268	400	1,102	92
344	440	952	372
308	400	717	512
288	340	614	512

	SB Main	SB Toll
6-7A	7,923	1,872
7-8A	8,863	2,344
8-9A	9,279	2,524
9-10A	9,088	2,468

	Toll	Main	NB
6-7A	2,358	7,083	9,441
7-8A	2,588	7,534	10,122
8-9A	2,731	7,113	9,844
9-10A	2,441	6,940	9,381

	EB	WB
6-7A	1,012	557
7-8A	1,402	929
8-9A	1,367	935
9-10A	1,211	793

	EB	WB
6-7A	627	126
7-8A	937	441
8-9A	491	538
9-10A	412	351

VA193/SB Ramps						
EBT	EBR	WBL	WBT	SBL	SBT	SBR
961	51	57	50	287	0	507
1,315	87	216	189	390	0	740
1,228	139	270	139	336	30	796
1,010	201	216	139	407	15	654

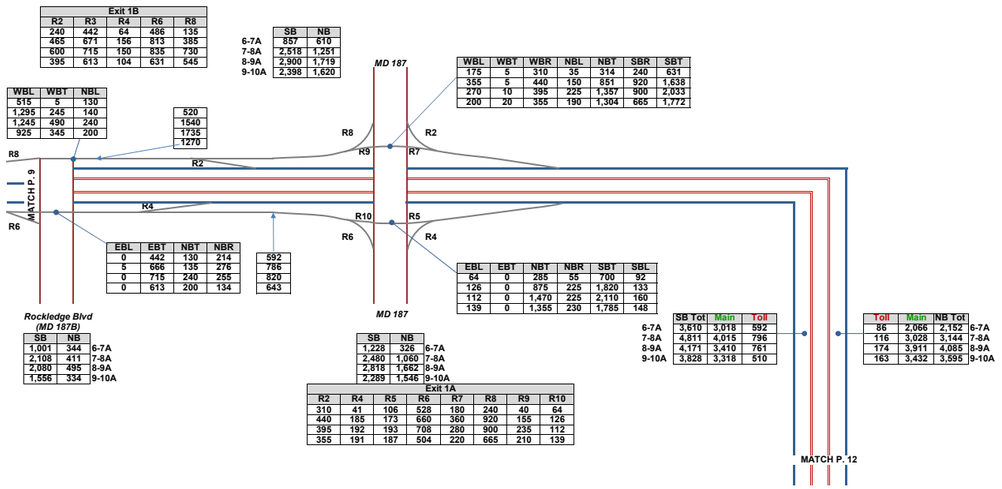
VA193/NB Ramps						
EBL	EBT	WBT	WBR	NBL	NBT	NBR
876	372	57	129	50	0	391
1,035	670	325	366	80	5	549
1,188	376	279	544	130	5	305
985	432	216	535	139	15	223

	SB Main	SB Toll
6-7A	8,338	1,872
7-8A	9,597	2,344
8-9A	10,239	2,524
9-10A	9,757	2,468

	Toll	Main	NB
6-7A	2,358	6,519	8,877
7-8A	2,588	6,762	9,350
8-9A	2,731	5,816	8,547
9-10A	2,441	5,782	8,223

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
6-7A	20	582	161	10	111	5	55	0	40	5	10	20
7-8A	55	831	337	60	366	15	260	30	100	10	30	65
8-9A	46	412	229	50	473	15	290	30	70	15	15	60
9-10A	41	386	242	20	326	5	365	20	35	5	20	60

I-270 & I-495 West Side AM
Future Diversion Alternative Peak Period Volumes



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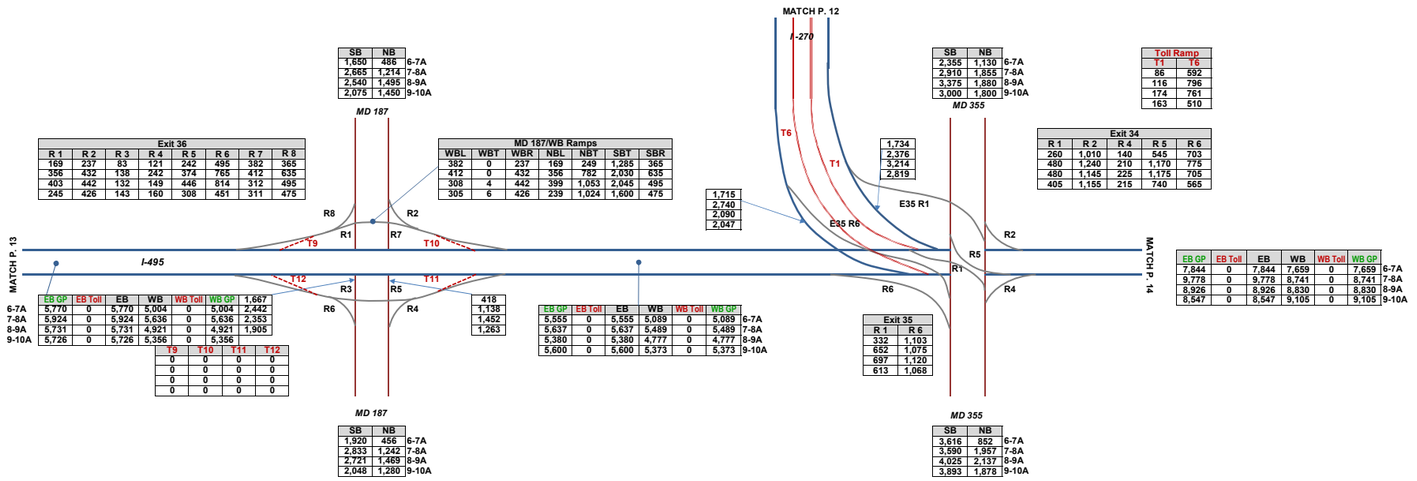


SB	NB	
1,650	485	6-7A
2,665	1,214	7-8A
2,540	1,495	8-9A
2,075	1,450	9-10A

Exit 36							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
169	237	83	121	242	495	382	365
356	432	138	242	374	765	412	635
403	442	132	149	446	814	312	495
245	426	143	160	308	451	311	475

MD 187/WB Ramps						
WBL	WBT	WBR	NBL	NBT	SBT	SBR
382	0	237	169	249	1,285	365
412	0	432	356	782	2,030	635
308	4	442	399	1,053	2,045	495
305	6	426	239	1,024	1,600	475

SB	NB	
2,355	1,130	6-7A
2,910	1,855	7-8A
3,375	1,880	8-9A
3,000	1,800	9-10A

Toll Ramp	
T1	T6
86	592
116	796
174	761
163	510

Exit 34				
R 1	R 2	R 4	R 5	R 6
260	1,010	140	545	703
480	1,240	210	1,170	775
480	1,145	225	1,175	705
405	1,155	215	740	565

EB GP	EB Toll	EB	WB	WB Toll	WB GP	
5,770	0	5,770	5,004	0	5,004	2,442
5,924	0	5,924	5,636	0	5,636	2,353
5,731	0	5,731	4,921	0	4,921	1,905
5,726	0	5,726	5,356	0	5,356	

T9	T10	T11	T12
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

1,667	6-7A
2,442	7-8A
2,353	8-9A
1,905	9-10A

418
1,138
1,452
1,263

EB GP	EB Toll	EB	WB	WB Toll	WB GP	
5,555	0	5,555	5,089	0	5,089	6-7A
5,637	0	5,637	5,489	0	5,489	7-8A
5,380	0	5,380	4,777	0	4,777	8-9A
5,600	0	5,600	5,373	0	5,373	9-10A

1,715
2,740
2,090
2,047

1,734
2,376
3,214
2,819

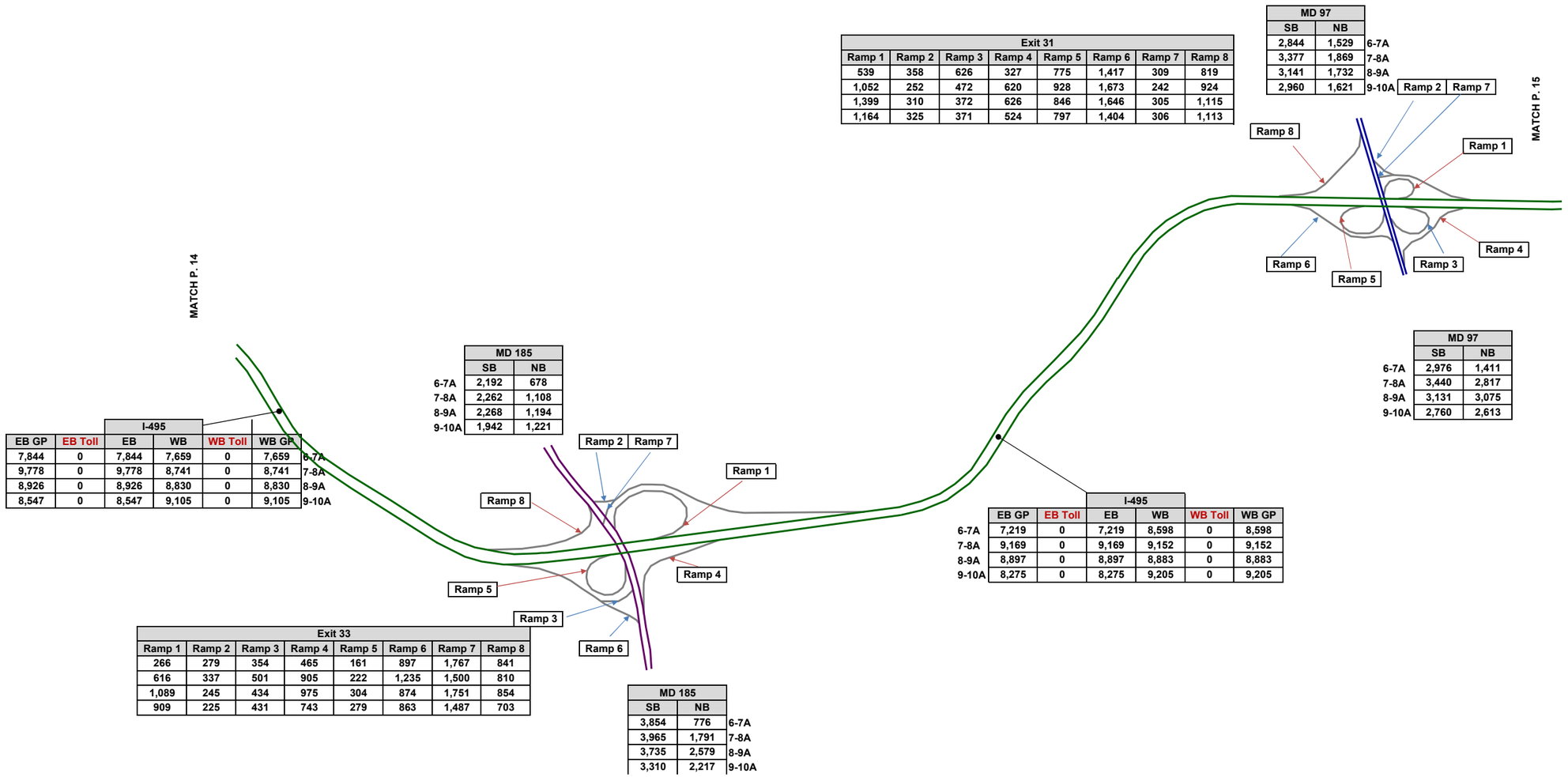
Exit 35	
R 1	R 6
332	1,103
652	1,075
697	1,120
613	1,068

EB GP	EB Toll	EB	WB	WB Toll	WB GP	
7,844	0	7,844	7,659	0	7,659	6-7A
9,778	0	9,778	8,741	0	8,741	7-8A
8,926	0	8,926	8,830	0	8,830	8-9A
8,547	0	8,547	9,105	0	9,105	9-10A

SB	NB	
1,920	456	6-7A
2,833	1,242	7-8A
2,721	1,469	8-9A
2,048	1,280	9-10A

SB	NB	
3,616	852	6-7A
3,590	1,957	7-8A
4,025	2,137	8-9A
3,893	1,878	9-10A

I-495 North Side AM
Future Diversion Alternative Peak Period Volumes



Exit 31							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
539	358	626	327	775	1,417	309	819
1,052	252	472	620	928	1,673	242	924
1,399	310	372	626	846	1,646	305	1,115
1,164	325	371	524	797	1,404	306	1,113

MD 97		
SB	NB	
2,844	1,529	6-7A
3,377	1,869	7-8A
3,141	1,732	8-9A
2,960	1,621	9-10A

MD 97		
SB	NB	
2,976	1,411	6-7A
3,440	2,817	7-8A
3,131	3,075	8-9A
2,760	2,613	9-10A

	I-495				
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
7,844	0	7,844	7,659	0	7,659	6-7A
9,778	0	9,778	8,741	0	8,741	7-8A
8,926	0	8,926	8,830	0	8,830	8-9A
8,547	0	8,547	9,105	0	9,105	9-10A

MD 185		
SB	NB	
2,192	678	6-7A
2,262	1,108	7-8A
2,268	1,194	8-9A
1,942	1,221	9-10A

	I-495				
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
7,219	0	7,219	8,598	0	8,598	6-7A
9,169	0	9,169	9,152	0	9,152	7-8A
8,897	0	8,897	8,883	0	8,883	8-9A
8,275	0	8,275	9,205	0	9,205	9-10A

Exit 33							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
266	279	354	465	161	897	1,767	841
616	337	501	905	222	1,235	1,500	810
1,089	245	434	975	304	874	1,751	854
909	225	431	743	279	863	1,487	703

MD 185		
SB	NB	
3,854	776	6-7A
3,965	1,791	7-8A
3,735	2,579	8-9A
3,310	2,217	9-10A

I-495 North Side AM
Future Diversion Alternative Peak Period Volumes

MATCH P. 15

Exit 30					
Ramp 1	Ramp 3	Ramp 4	Ramp 6	Ramp 7	Ramp 8
78	481	239	209	183	885
189	818	424	299	57	823
260	870	578	363	149	770
353	773	488	419	192	757

	US 29	
	SB	NB
6-7A	2,750	771
7-8A	3,389	1,728
8-9A	4,017	2,040
9-10A	2,945	1,553

	MD 193	
	SB	NB
6-7A	1,380	579
7-8A	1,839	862
8-9A	1,694	829
9-10A	1,324	758

Exit 29					
Ramp 1	Ramp 2	Ramp 4	Ramp 5	Ramp 6	Ramp 7
1,025	463	294	495	544	113
1,128	382	430	629	789	113
1,049	398	454	624	712	113
911	385	357	479	708	173

Ramp 8
Ramp 7
Ramp 1
Ramp 4
Ramp 6
Ramp 3

Rm 7 WBL | Rm 2 WBR | Rm 1 NBR

Ramp 6
Ramp 5
Ramp 4

MATCH P. 16

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	6,278	0	6,278	7,907	0	7,907
7-8A	8,572	0	8,572	7,670	0	7,670
8-9A	8,351	0	8,351	6,984	0	6,984
9-10A	7,821	0	7,821	7,559	0	7,559

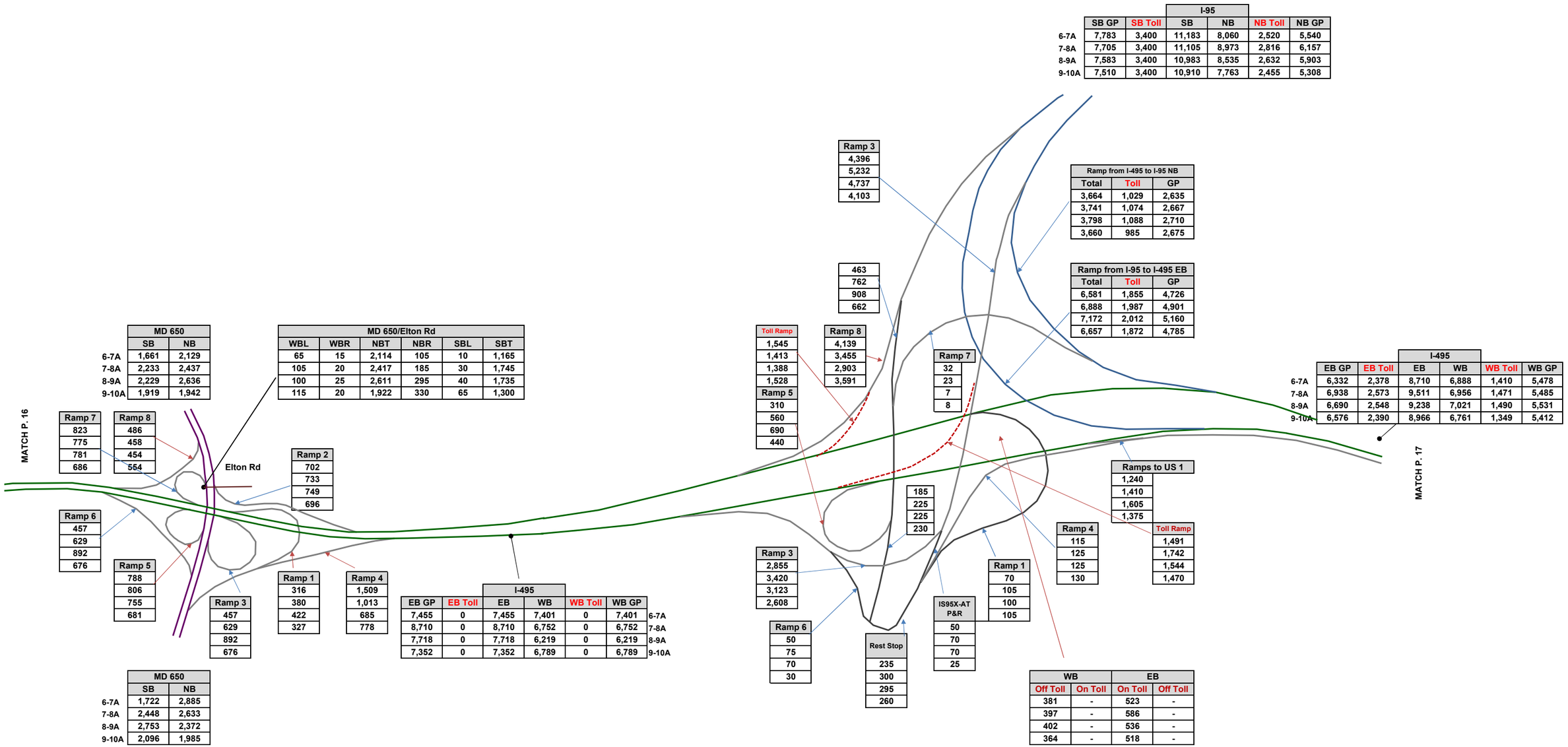
	US 29	
	SB	NB
6-7A	2,257	607
7-8A	2,922	1,523
8-9A	3,759	2,008
9-10A	2,799	1,621

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	5,827	0	5,827	7,127	0	7,127
7-8A	7,879	0	7,879	6,715	0	6,715
8-9A	7,696	0	7,696	6,103	0	6,103
9-10A	7,117	0	7,117	6,641	0	6,641

	MD 193	
	SB	NB
6-7A	1,542	1,435
7-8A	2,112	2,038
8-9A	1,895	1,934
9-10A	1,726	1,641

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	6,072	0	6,072	6,678	0	6,678
7-8A	8,149	0	8,149	6,082	0	6,082
8-9A	8,062	0	8,062	5,565	0	5,565
9-10A	7,245	0	7,245	6,288	0	6,288

I-495 North Side AM
Future Diversion Alternative Peak Period Volumes



	I-95					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,783	3,400	11,183	8,060	2,520	5,540
7-8A	7,705	3,400	11,105	8,973	2,816	6,157
8-9A	7,583	3,400	10,983	8,535	2,632	5,903
9-10A	7,510	3,400	10,910	7,763	2,455	5,308

Ramp 3
4,396
5,232
4,737
4,103

Ramp from I-495 to I-95 NB		
Total	Toll	GP
3,664	1,029	2,635
3,741	1,074	2,667
3,798	1,088	2,710
3,660	985	2,675

463
762
908
662

Ramp from I-95 to I-495 EB		
Total	Toll	GP
6,581	1,855	4,726
6,888	1,987	4,901
7,172	2,012	5,160
6,657	1,872	4,785

Toll Ramp
1,545
1,413
1,388
1,528

Ramp 8
4,139
3,455
2,903
3,591

Ramp 7
32
23
7
8

Ramp 5
310
560
690
440

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	6,332	2,378	8,710	6,888	1,410	5,478
7-8A	6,938	2,573	9,511	6,956	1,471	5,485
8-9A	6,690	2,548	9,238	7,021	1,490	5,531
9-10A	6,576	2,390	8,966	6,761	1,349	5,412

MD 650		
	SB	NB
6-7A	1,661	2,129
7-8A	2,233	2,437
8-9A	2,229	2,636
9-10A	1,919	1,942

MD 650/Elton Rd						
WBL	WBR	NBT	NBR	SBL	SBT	
65	15	2,114	105	10	1,165	6-7A
105	20	2,417	185	30	1,745	7-8A
100	25	2,611	295	40	1,735	8-9A
115	20	1,922	330	65	1,300	9-10A

Ramp 7
823
775
781
686

Ramp 8
486
458
454
554

Ramp 2
702
733
749
696

Ramp 6
457
629
892
676

Ramp 5
788
806
755
681

Ramp 3
457
629
892
676

Ramp 1
316
380
422
327

Ramp 4
1,509
1,013
685
778

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	7,455	0	7,455	7,401	0	7,401
7-8A	8,710	0	8,710	6,752	0	6,752
8-9A	7,718	0	7,718	6,219	0	6,219
9-10A	7,352	0	7,352	6,789	0	6,789

MD 650		
	SB	NB
6-7A	1,722	2,885
7-8A	2,448	2,633
8-9A	2,753	2,372
9-10A	2,096	1,985

185
225
225
230

Ramp 3
2,855
3,420
3,123
2,608

Ramp 6
50
75
70
30

Rest Stop
235
300
295
260

IS95X-AT P&R
50
70
70
25

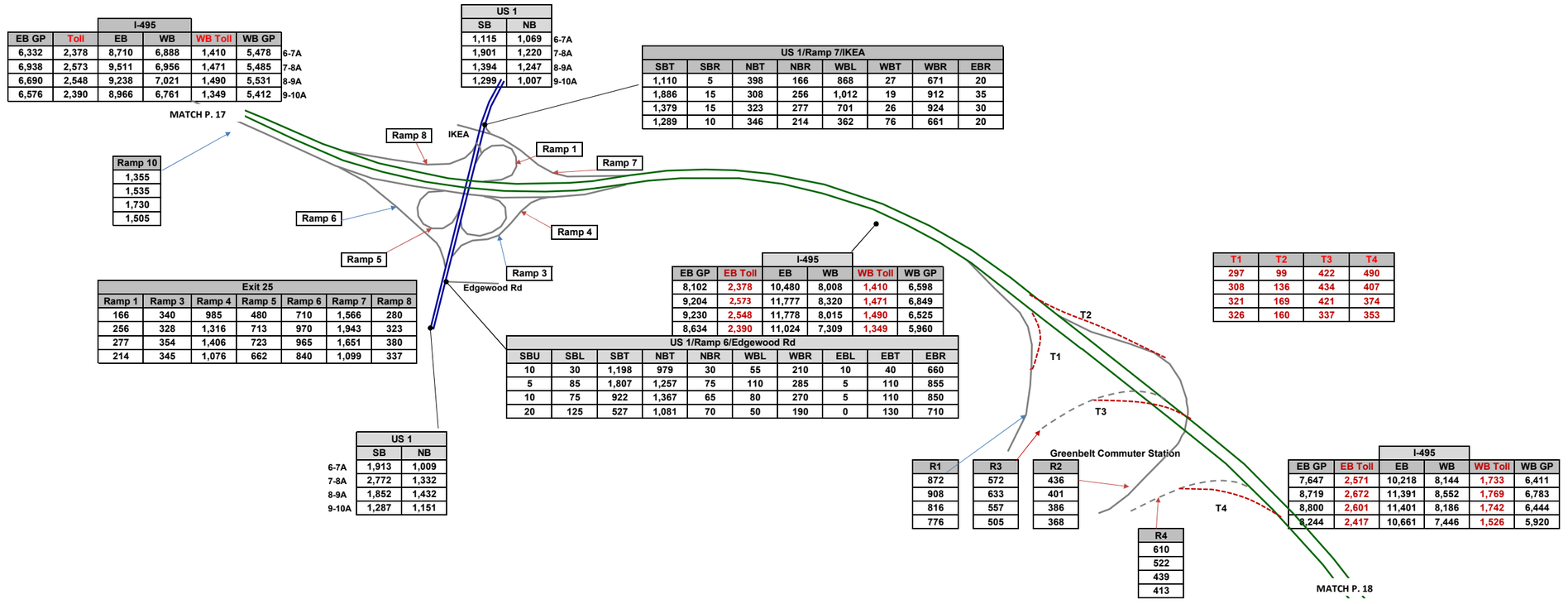
Ramp 1
70
105
100
105

Ramp 4
115
125
125
130

Ramps to US 1	
1,240	
1,410	
1,605	
1,375	Toll Ramp
	1,491
	1,742
	1,544
	1,470

WB		EB	
Off Toll	On Toll	On Toll	Off Toll
381	-	523	-
397	-	586	-
402	-	536	-
364	-	518	-

I-495 North East Side AM
Future Diversion Alternative Peak Period Volumes



I-495						
EB GP	Toll	EB	WB	WB Toll	WB GP	
6,332	2,378	8,710	6,888	1,410	5,478	6-7A
6,938	2,573	9,511	6,956	1,471	5,485	7-8A
6,690	2,548	9,238	7,021	1,490	5,531	8-9A
6,576	2,390	8,966	6,761	1,349	5,412	9-10A

Ramp 10
1,355
1,535
1,730
1,505

US 1		
SB	NB	
1,115	1,069	6-7A
1,901	1,220	7-8A
1,394	1,247	8-9A
1,299	1,007	9-10A

US 1/Ramp 7/IKEA							
SBT	SBR	NBT	NBR	WBL	WBT	WBR	EBR
1,110	5	398	166	868	27	671	20
1,886	15	308	256	1,012	19	912	35
1,379	15	323	277	701	26	924	30
1,289	10	346	214	362	76	661	20

Exit 25						
Ramp 1	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
166	340	985	480	710	1,566	280
256	328	1,316	713	970	1,943	323
277	354	1,406	723	965	1,651	380
214	345	1,076	662	840	1,099	337

I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP
8,102	2,378	10,480	8,008	1,410	6,598
9,204	2,573	11,777	8,320	1,471	6,849
9,230	2,548	11,778	8,015	1,490	6,525
8,634	2,390	11,024	7,309	1,349	5,960

US 1/Ramp 6/Edgewood Rd									
SBU	SBL	SBT	NBT	NBR	WBL	WBR	EBL	EBT	EBR
10	30	1,198	979	30	55	210	10	40	660
5	85	1,807	1,257	75	110	285	5	110	855
10	75	922	1,367	65	80	270	5	110	850
20	125	527	1,081	70	50	190	0	130	710

	US 1	
	SB	NB
6-7A	1,913	1,009
7-8A	2,772	1,332
8-9A	1,852	1,432
9-10A	1,287	1,151

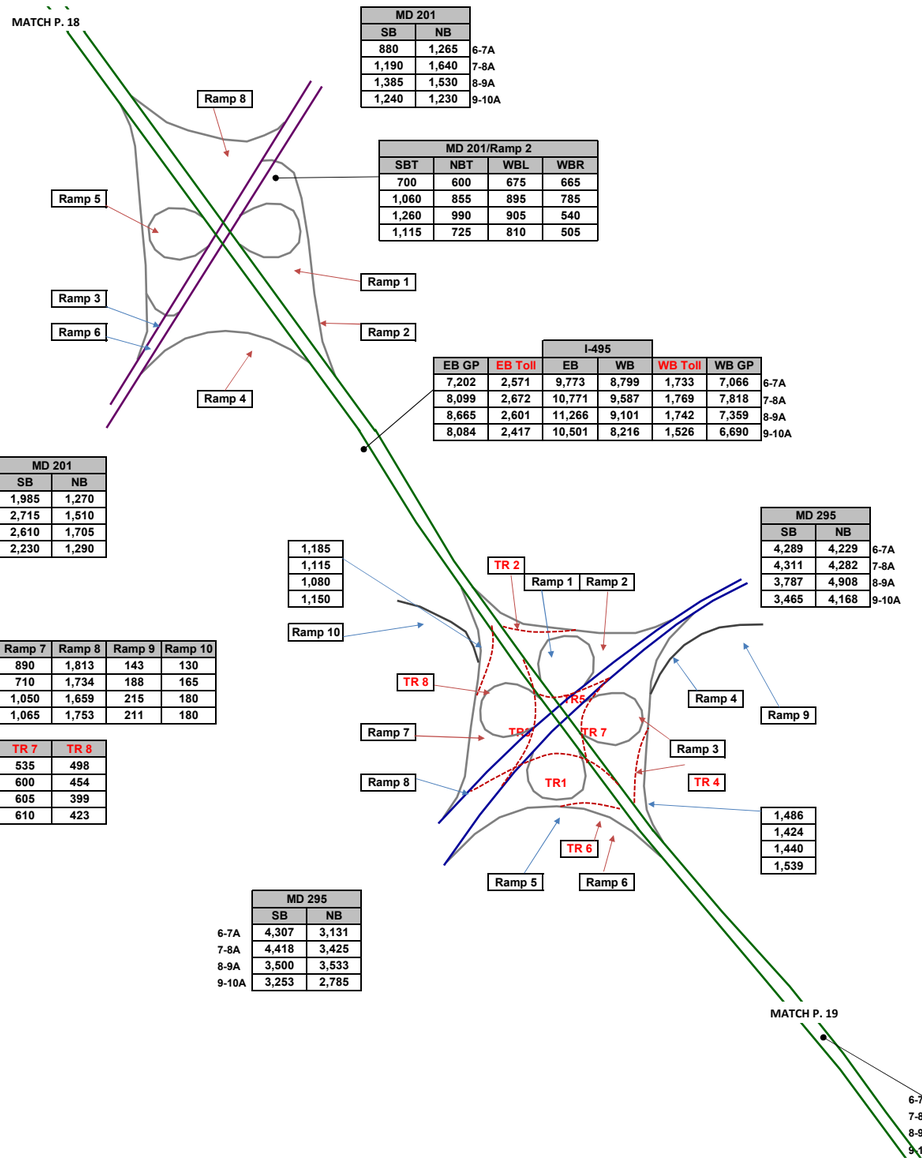
R1	R3	R2
872	572	436
908	633	401
816	557	386
776	505	368

R4
610
522
439
413

T1	T2	T3	T4
297	99	422	490
308	136	434	407
321	169	421	374
326	160	337	353

I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP
7,647	2,571	10,218	8,144	1,733	6,411
8,719	2,672	11,391	8,552	1,769	6,783
8,800	2,601	11,401	8,186	1,742	6,444
8,244	2,417	10,661	7,446	1,526	5,920

I-495 North East Side AM
Future Diversion Alternative Peak Period Volumes



Exit 23						
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8
505	1,340	260	425	410	1,020	180
515	1,680	335	475	420	1,180	130
405	1,445	370	680	605	1,050	125
420	1,315	435	580	580	885	125

MD 201		
SB	NB	
880	1,265	6-7A
1,190	1,640	7-8A
1,385	1,530	8-9A
1,240	1,230	9-10A

MD 201/Ramp 2			
SBT	NBT	WBL	WBR
700	600	675	665
1,060	855	895	785
1,260	990	905	540
1,115	725	810	505

	I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
7,202	2,571	9,773	8,799	1,733	7,066	6-7A
8,099	2,672	10,771	9,587	1,769	7,818	7-8A
8,665	2,601	11,266	9,101	1,742	7,359	8-9A
8,084	2,417	10,501	8,216	1,526	6,690	9-10A

	MD 201	
	SB	NB
6-7A	1,985	1,270
7-8A	2,715	1,510
8-9A	2,610	1,705
9-10A	2,230	1,290

MD 295		
SB	NB	
4,289	4,229	6-7A
4,311	4,282	7-8A
3,787	4,908	8-9A
3,465	4,168	9-10A

1,185
1,115
1,080
1,150

1,486
1,424
1,440
1,539

Exit 22

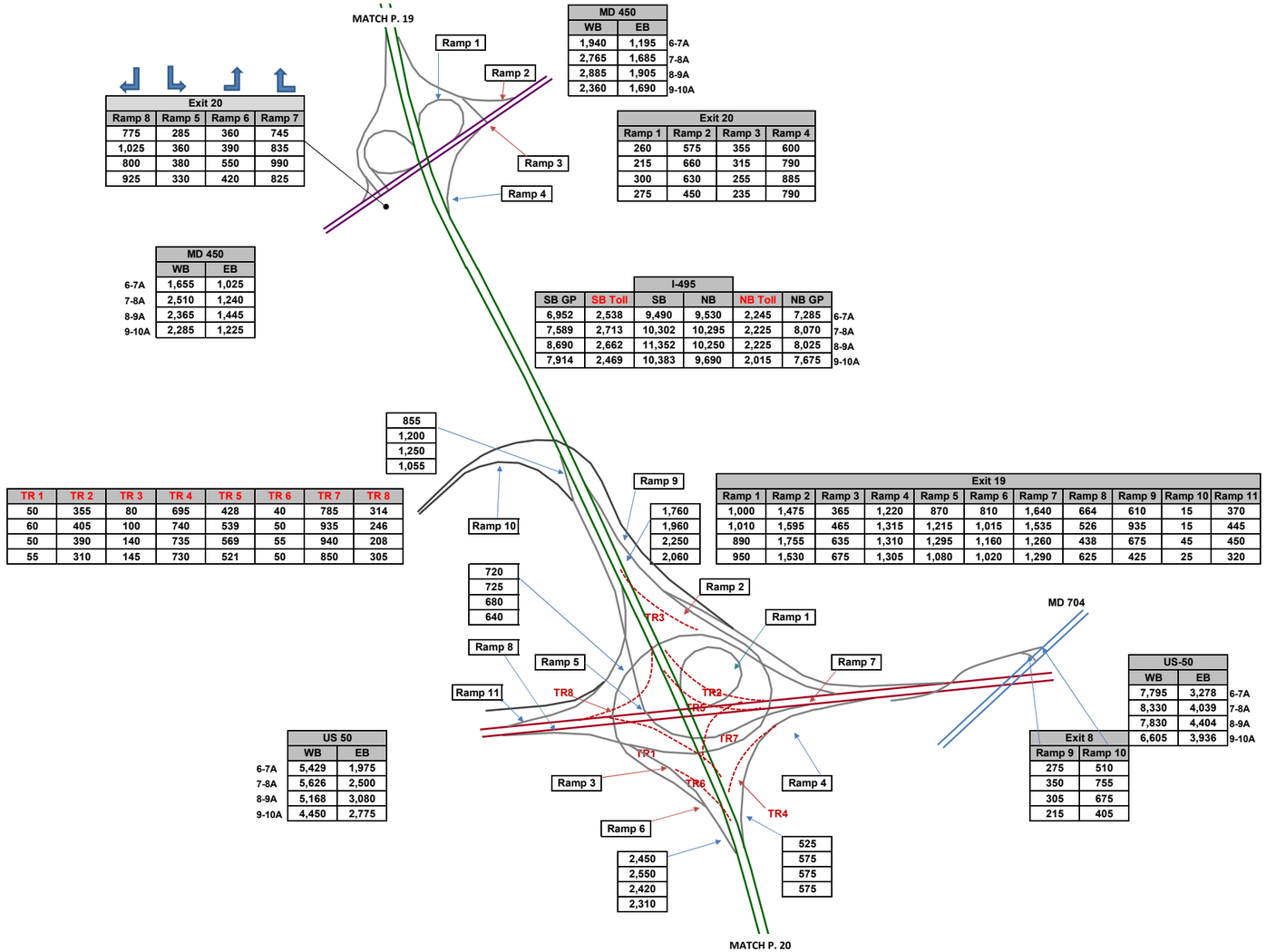
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
24	414	917	2,095	410	410	890	1,813	143	130
56	421	952	1,914	560	615	710	1,734	188	165
75	407	852	1,917	715	410	1,050	1,659	215	180
71	400	710	1,993	690	615	1,065	1,753	211	180

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
20	110	150	752	80	10	535	498
48	115	155	678	120	15	600	454
41	110	140	692	160	15	605	399
39	105	110	665	150	15	610	423

	MD 295	
	SB	NB
6-7A	4,307	3,131
7-8A	4,418	3,425
8-9A	3,500	3,533
9-10A	3,253	2,785

			I-495			
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	6,907	2,538	9,445	9,600	2,245	7,355
7-8A	7,749	2,713	10,462	10,265	2,225	8,040
8-9A	8,330	2,662	10,992	9,950	2,225	7,725
9-10A	7,924	2,469	10,393	9,310	2,015	7,295

I-495 North East Side AM
Future Diversion Alternative Peak Period Volumes



Exit 20			
Ramp 8	Ramp 5	Ramp 6	Ramp 7
775	285	360	745
1,025	360	390	835
800	380	550	990
925	330	420	825

MD 450		
WB	EB	
1,940	1,195	6-7A
2,765	1,685	7-8A
2,885	1,905	8-9A
2,360	1,690	9-10A

Exit 20			
Ramp 1	Ramp 2	Ramp 3	Ramp 4
260	575	355	600
215	660	315	790
300	630	255	885
275	450	235	790

	MD 450	
	WB	EB
6-7A	1,655	1,025
7-8A	2,510	1,240
8-9A	2,365	1,445
9-10A	2,285	1,225

			I-495				
SB GP	SB Toll	SB	NB	NB Toll	NB GP	
6,952	2,538	9,490	9,530	2,245	7,285	6-7A
7,589	2,713	10,302	10,295	2,225	8,070	7-8A
8,690	2,662	11,352	10,250	2,225	8,025	8-9A
7,914	2,469	10,383	9,690	2,015	7,675	9-10A

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
50	355	80	695	428	40	785	314
60	405	100	740	539	50	935	246
50	390	140	735	569	55	940	208
55	310	145	730	521	50	850	305

855
1,200
1,250
1,055

1,760
1,960
2,250
2,060

Exit 19										
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10	Ramp 11
1,000	1,475	365	1,220	870	810	1,640	664	610	15	370
1,010	1,595	465	1,315	1,215	1,015	1,535	526	935	15	445
890	1,755	635	1,310	1,295	1,160	1,260	438	675	45	450
950	1,530	675	1,305	1,080	1,020	1,290	625	425	25	320

720
725
680
640

2,450
2,550
2,420
2,310

525
575
575
575

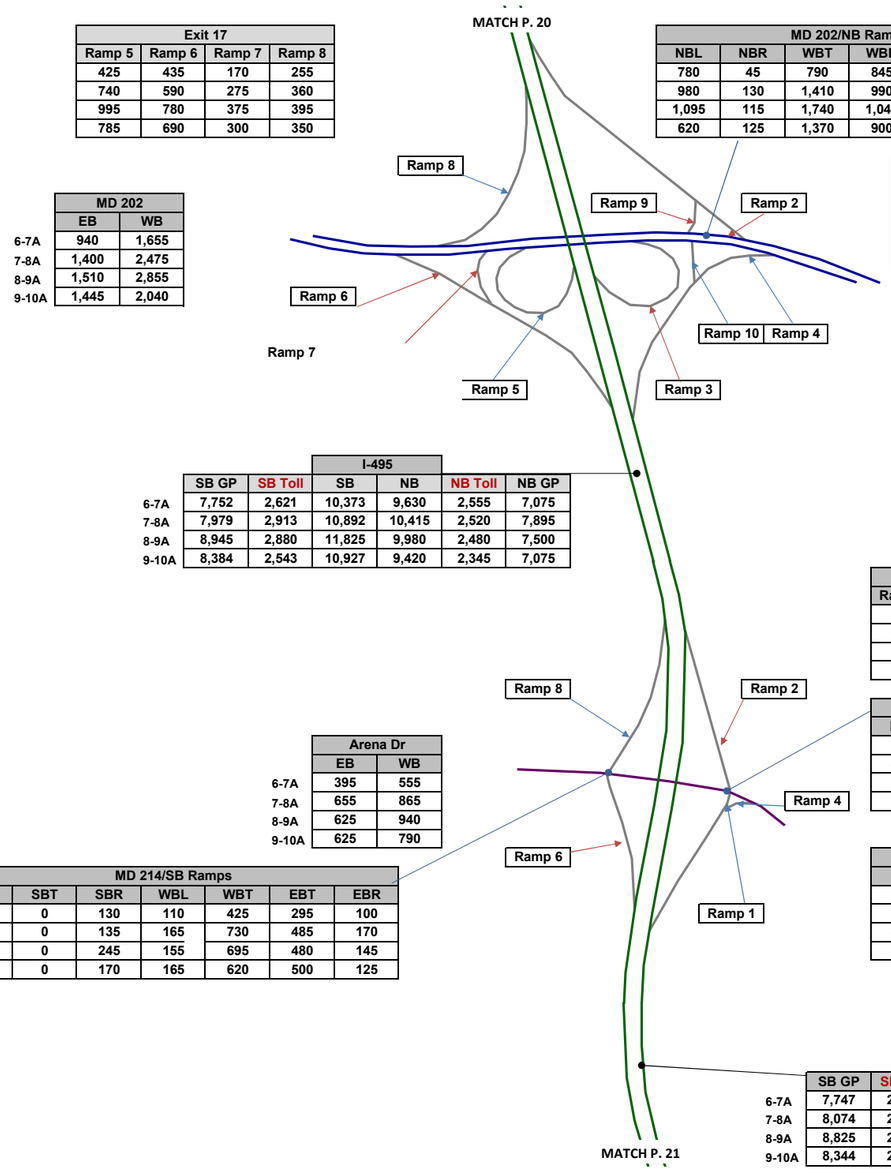
US 50		
WB	EB	
5,429	1,975	6-7A
5,626	2,500	7-8A
5,168	3,080	8-9A
4,450	2,775	9-10A

US-50		
WB	EB	
7,795	3,278	6-7A
8,330	4,039	7-8A
7,830	4,404	8-9A
6,605	3,936	9-10A

Exit 8	
Ramp 9	Ramp 10
275	510
350	755
305	675
215	405

			I-495			
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,827	2,621	10,448	9,605	2,555	7,050
7-8A	8,214	2,913	11,127	10,215	2,520	7,695
8-9A	9,180	2,880	12,060	9,720	2,480	7,240
9-10A	8,529	2,543	11,072	9,485	2,345	7,140

I-495 East Side AM
Future Diversion Alternative Peak Period Volumes



Exit 17			
Ramp 5	Ramp 6	Ramp 7	Ramp 8
425	435	170	255
740	590	275	360
995	780	375	395
785	690	300	350

MD 202		
	EB	WB
6-7A	940	1,655
7-8A	1,400	2,475
8-9A	1,510	2,855
9-10A	1,445	2,040

MD 202/NB Ramps					
NBL	NBR	WBT	WBR	EBL	EBT
780	45	790	845	10	700
980	130	1,410	990	15	1,335
1,095	115	1,740	1,045	5	1,470
620	125	1,370	900	15	1,305

Exit 17				
Ramp 2	Ramp 3	Ramp 4	Ramp 9	Ramp 10
845	220	275	10	825
990	200	295	15	1,110
1,045	250	350	5	1,210
900	220	325	15	745

MD 202		
SB	NB	
1,020	1,635	6-7A
1,760	2,400	7-8A
1,935	2,785	8-9A
1,755	2,270	9-10A

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,752	2,621	10,373	9,630	2,555	7,075
7-8A	7,979	2,913	10,892	10,415	2,520	7,895
8-9A	8,945	2,880	11,825	9,980	2,480	7,500
9-10A	8,384	2,543	10,927	9,420	2,345	7,075

Exit 16				
Ramp 1	Ramp 2	Ramp 4	Ramp 6	Ramp 8
300	405	325	210	215
445	460	400	335	240
360	415	425	300	420
330	395	345	290	330

Arena Dr		
	EB	WB
6-7A	395	555
7-8A	655	865
8-9A	625	940
9-10A	625	790

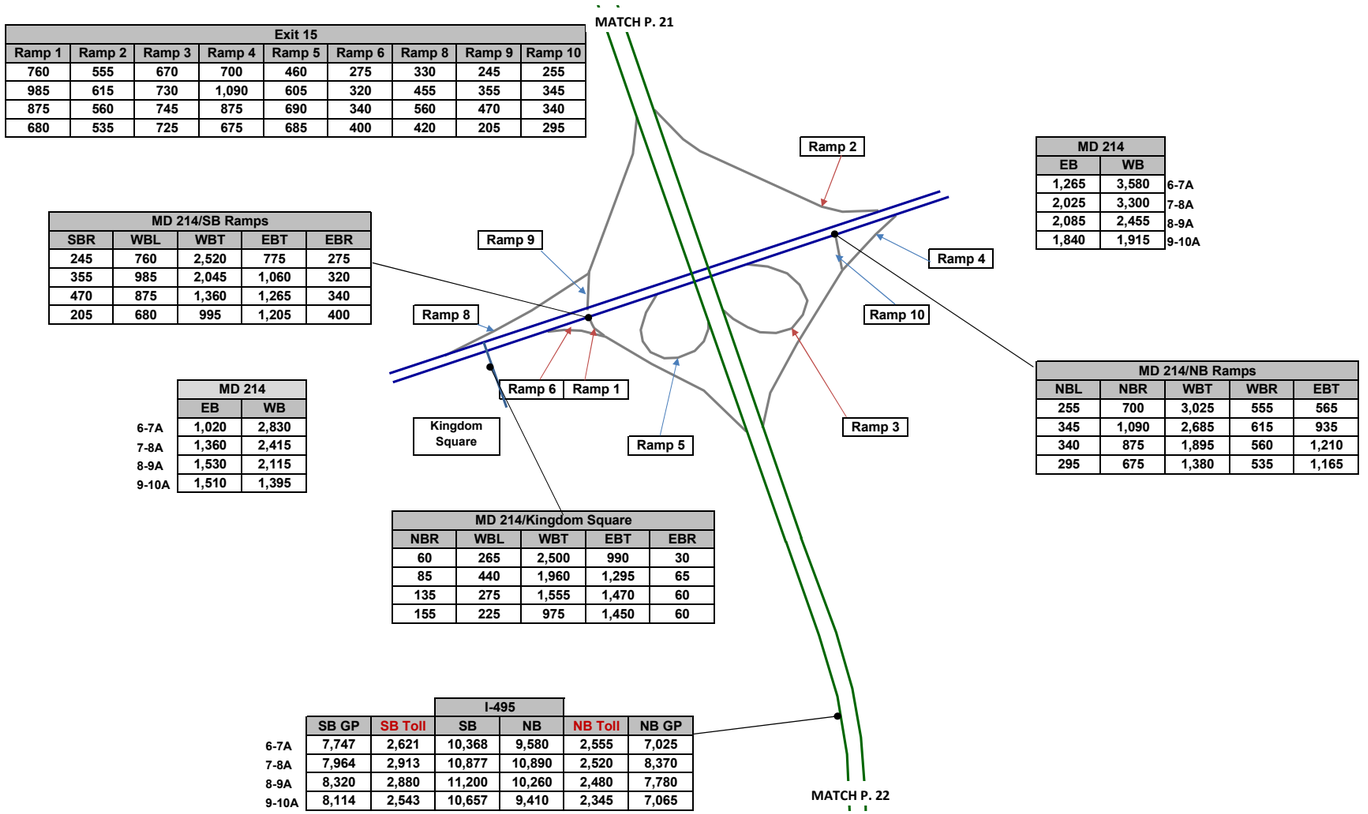
MD 214/NB Ramps						
NBL	NBT	NBR	WBT	WBR	EBL	EBT
300	0	325	235	200	205	175
445	0	400	450	235	225	365
355	5	425	495	220	190	465
330	0	345	455	190	205	455

MD 214/SB Ramps						
SBL	SBT	SBR	WBL	WBT	EBT	EBR
85	0	130	110	425	295	100
105	0	135	165	730	485	170
175	0	245	155	695	480	145
160	0	170	165	620	500	125

Arena Dr		
EB	WB	
500	435	6-7A
765	685	7-8A
890	715	8-9A
800	645	9-10A

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,747	2,621	10,368	9,850	2,555	7,295
7-8A	8,074	2,913	10,987	10,800	2,520	8,280
8-9A	8,825	2,880	11,705	10,350	2,480	7,870
9-10A	8,344	2,543	10,887	9,700	2,345	7,355

I-495 East Side AM
Future Diversion Alternative Peak Period Volumes



Exit 15								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8	Ramp 9	Ramp 10
760	555	670	700	460	275	330	245	255
985	615	730	1,090	605	320	455	355	345
875	560	745	875	690	340	560	470	340
680	535	725	675	685	400	420	205	295

MD 214		
EB	WB	
1,265	3,580	6-7A
2,025	3,300	7-8A
2,085	2,455	8-9A
1,840	1,915	9-10A

MD 214/SB Ramps				
SBR	WBL	WBT	EBT	EBR
245	760	2,520	775	275
355	985	2,045	1,060	320
470	875	1,360	1,265	340
205	680	995	1,205	400

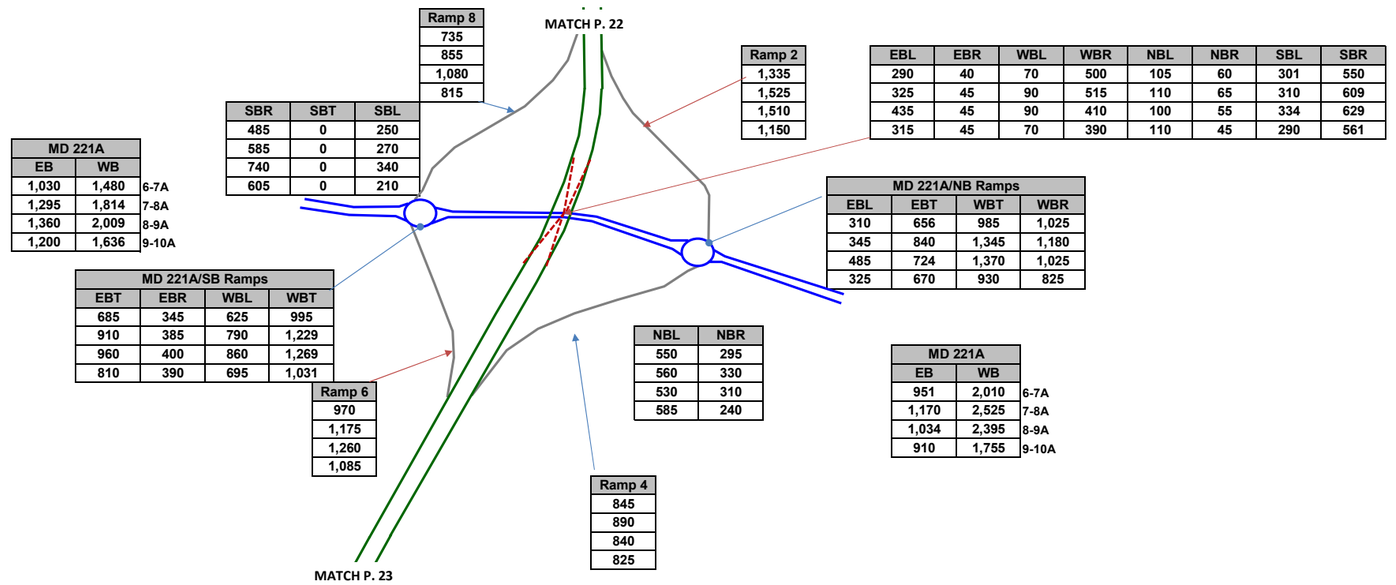
MD 214/NB Ramps				
NBL	NBR	WBT	WBR	EBT
255	700	3,025	555	565
345	1,090	2,685	615	935
340	875	1,895	560	1,210
295	675	1,380	535	1,165

	MD 214	
	EB	WB
6-7A	1,020	2,830
7-8A	1,360	2,415
8-9A	1,530	2,115
9-10A	1,510	1,395

MD 214/Kingdom Square				
NBR	WBL	WBT	EBT	EBR
60	265	2,500	990	30
85	440	1,960	1,295	65
135	275	1,555	1,470	60
155	225	975	1,450	60

			I-495			
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,747	2,621	10,368	9,580	2,555	7,025
7-8A	7,964	2,913	10,877	10,890	2,520	8,370
8-9A	8,320	2,880	11,200	10,260	2,480	7,780
9-10A	8,114	2,543	10,657	9,410	2,345	7,065

I-495 East Side AM
Future Diversion Alternative Peak Period Volumes



Ramp 8
735
855
1,080
815

SBR	SBT	SBL
485	0	250
585	0	270
740	0	340
605	0	210

MD 221A		
EB	WB	
1,030	1,480	6-7A
1,295	1,814	7-8A
1,360	2,009	8-9A
1,200	1,636	9-10A

MD 221A/SB Ramps			
EBT	EBR	WBL	WBT
685	345	625	995
910	385	790	1,229
960	400	860	1,269
810	390	695	1,031

Ramp 6
970
1,175
1,260
1,085

Ramp 2
1,335
1,525
1,510
1,150

EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
290	40	70	500	105	60	301	550
325	45	90	515	110	65	310	609
435	45	90	410	100	55	334	629
315	45	70	390	110	45	290	561

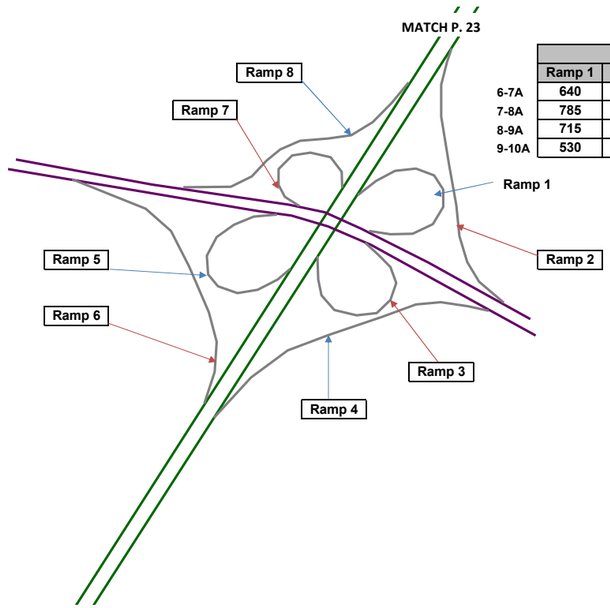
MD 221A/NB Ramps			
EBL	EBT	WBT	WBR
310	656	985	1,025
345	840	1,345	1,180
485	724	1,370	1,025
325	670	930	825

NBL	NBR
550	295
560	330
530	310
585	240

Ramp 4
845
890
840
825

MD 221A		
EB	WB	
951	2,010	6-7A
1,170	2,525	7-8A
1,034	2,395	8-9A
910	1,755	9-10A

I-495 East Side AM
Future Diversion Alternative Peak Period Volumes



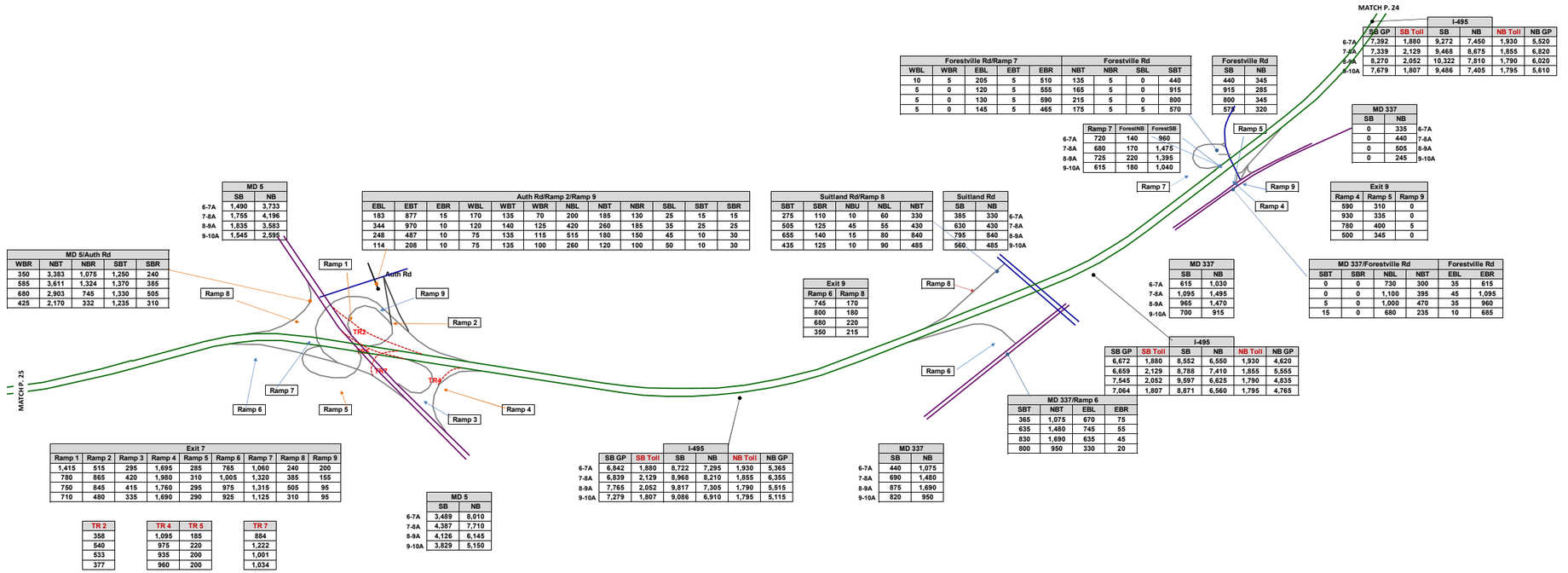
	Exit 11							
	Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
6-7A	640	1,600	625	570	940	465	1,135	1,250
7-8A	785	1,525	725	550	830	410	930	1,455
8-9A	715	1,625	730	550	675	450	845	850
9-10A	530	1,465	680	485	785	375	605	900

MD 4		
SB	NB	
1,335	2,325	6-7A
1,665	3,110	7-8A
1,580	2,120	8-9A
1,450	1,570	9-10A

MD 4		
SB	NB	
1,755	3,170	6-7A
1,910	3,325	7-8A
1,625	3,025	8-9A
1,665	2,210	9-10A

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,392	1,880	9,272	7,450	1,930	5,520
7-8A	7,339	2,129	9,468	8,675	1,855	6,820
8-9A	8,270	2,052	10,322	7,810	1,790	6,020
9-10A	7,679	1,807	9,486	7,405	1,795	5,610

I-495 South Side AM
Future Diversion Alternative Peak Period Volumes



Forestville Rd/Ramp 7					Forestville Rd			
WBL	WBR	EBL	EBT	EBR	NBT	NBR	SBL	SBT
10	5	205	5	510	135	5	0	440
5	0	120	5	555	165	5	0	915
5	0	130	5	590	215	5	0	800
5	0	145	5	465	175	5	5	570

Forestville Rd		
	SB	NB
6-7A	440	345
7-8A	915	285
8-9A	800	345
9-10A	575	320

	Ramp 7	ForestNB	ForestSB
6-7A	720	140	960
7-8A	680	170	1,475
8-9A	725	220	1,395
9-10A	615	180	1,040

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,392	1,880	9,272	7,450	1,930	5,520
7-8A	7,339	2,129	9,468	8,675	1,855	6,820
8-9A	8,270	2,052	10,322	7,810	1,790	6,020
9-10A	7,679	1,807	9,486	7,405	1,795	5,610

MD 337		
SB	NB	
0	335	6-7A
0	440	7-8A
0	505	8-9A
0	245	9-10A

Exit 9		
Ramp 4	Ramp 5	Ramp 9
590	310	0
930	335	0
780	400	5
500	345	0

MD 5		
SB	NB	
1,490	3,733	6-7A
1,755	4,196	7-8A
1,835	3,583	8-9A
1,545	2,595	9-10A

Auth Rd/Ramp 2/Ramp 9											
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
183	877	15	170	135	70	200	185	130	25	15	15
344	970	10	120	140	125	420	260	185	35	25	25
248	487	10	75	135	115	515	180	150	45	10	30
114	208	10	75	135	100	260	120	100	50	10	30

Suitland Rd/Ramp 8				
SBT	SBR	NBU	NBL	NBT
275	110	10	60	330
505	125	45	55	430
655	140	15	80	840
435	125	10	90	485

Suitland Rd		
SB	NB	
385	330	6-7A
630	430	7-8A
795	840	8-9A
560	485	9-10A

MD 337		
SB	NB	
615	1,030	6-7A
1,095	1,495	7-8A
965	1,470	8-9A
700	915	9-10A

MD 337/Forestville Rd				Forestville Rd	
SBT	SBR	NBL	NBT	EBL	EBR
0	0	730	300	35	615
0	0	1,100	395	45	1,095
5	0	1,000	470	35	960
15	0	680	235	10	685

MD 5/Auth Rd				
WBR	NBT	NBR	SBT	SBR
350	3,383	1,075	1,250	240
585	3,611	1,324	1,370	385
680	2,903	745	1,330	505
425	2,170	332	1,235	310

Exit 9	
Ramp 8	Ramp 8
745	170
800	180
680	220
350	215

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
6,672	1,880	8,552	6,550	1,930	4,620
6,659	2,129	8,788	7,410	1,855	5,555
7,545	2,052	9,597	6,625	1,790	4,835
7,064	1,807	8,871	6,560	1,795	4,765

MD 337/Ramp 6			
SBT	NBT	EBL	EBR
365	1,075	670	75
635	1,480	745	55
830	1,690	635	45
800	950	330	20

Exit 7								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9
1,415	515	295	1,695	285	765	1,060	240	200
780	865	420	1,980	310	1,005	1,320	385	155
750	845	415	1,760	295	975	1,315	505	95
710	480	335	1,690	290	925	1,125	310	95

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
6,842	1,880	8,722	7,295	1,930	5,365
6,839	2,129	8,968	8,210	1,855	6,355
7,765	2,052	9,817	7,305	1,790	5,515
7,279	1,807	9,086	6,910	1,795	5,115

MD 337		
SB	NB	
440	1,075	6-7A
690	1,480	7-8A
875	1,690	8-9A
820	950	9-10A

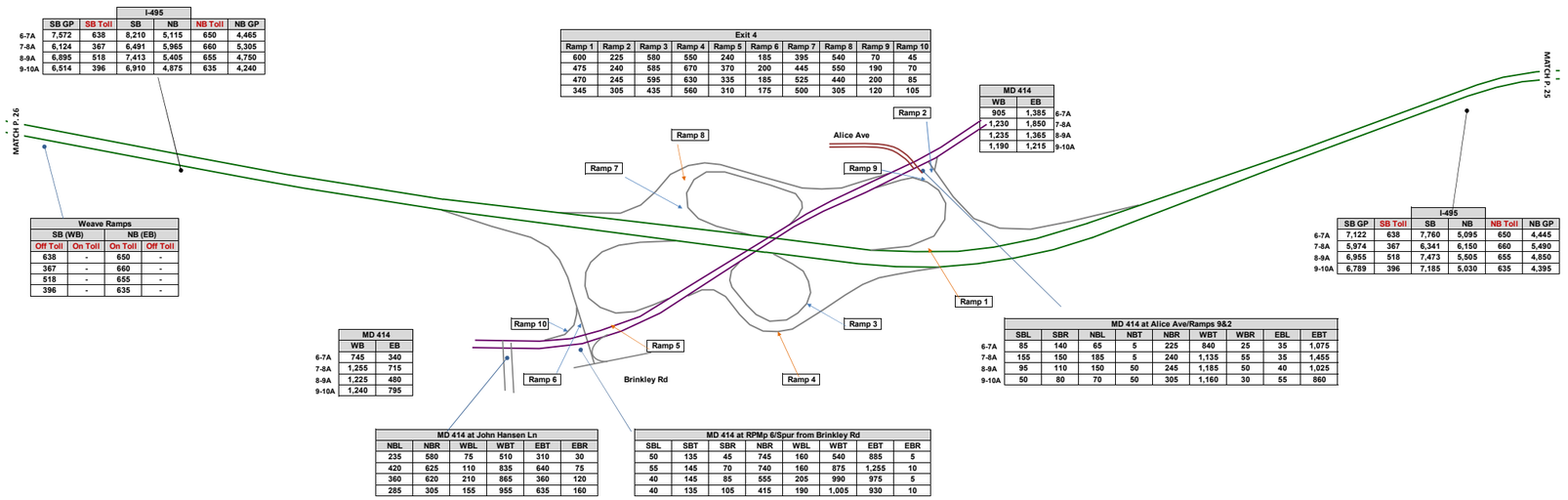
MD 5		
SB	NB	
3,489	8,010	6-7A
4,387	7,710	7-8A
4,126	6,145	8-9A
3,829	5,150	9-10A

TR 2
358
540
533
377

TR 4	TR 5
1,095	185
975	220
935	200
960	200

TR 7
884
1,222
1,001
1,034

I-495 South Side AM
Future Diversion Alternative Peak Period Volumes



I-495						
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,572	638	8,210	5,115	650	4,465
7-8A	6,124	367	6,491	5,965	660	5,305
8-9A	6,895	518	7,413	5,405	655	4,750
9-10A	6,514	396	6,910	4,875	635	4,240

Weave Ramps			
SB (WB)		NB (EB)	
Off Toll	On Toll	On Toll	Off Toll
638	-	650	-
367	-	660	-
518	-	655	-
396	-	635	-

Exit 4									
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
600	225	580	550	240	185	395	540	70	45
475	240	585	670	370	200	445	550	190	70
470	245	595	630	335	185	525	440	200	85
345	305	435	560	310	175	500	305	120	105

MD 414		
WB	EB	
905	1,385	6-7A
1,230	1,850	7-8A
1,235	1,365	8-9A
1,190	1,215	9-10A

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
7,122	638	7,760	5,095	650	4,445
5,974	367	6,341	6,150	660	5,490
6,955	518	7,473	5,505	655	4,850
6,789	396	7,185	5,030	635	4,395

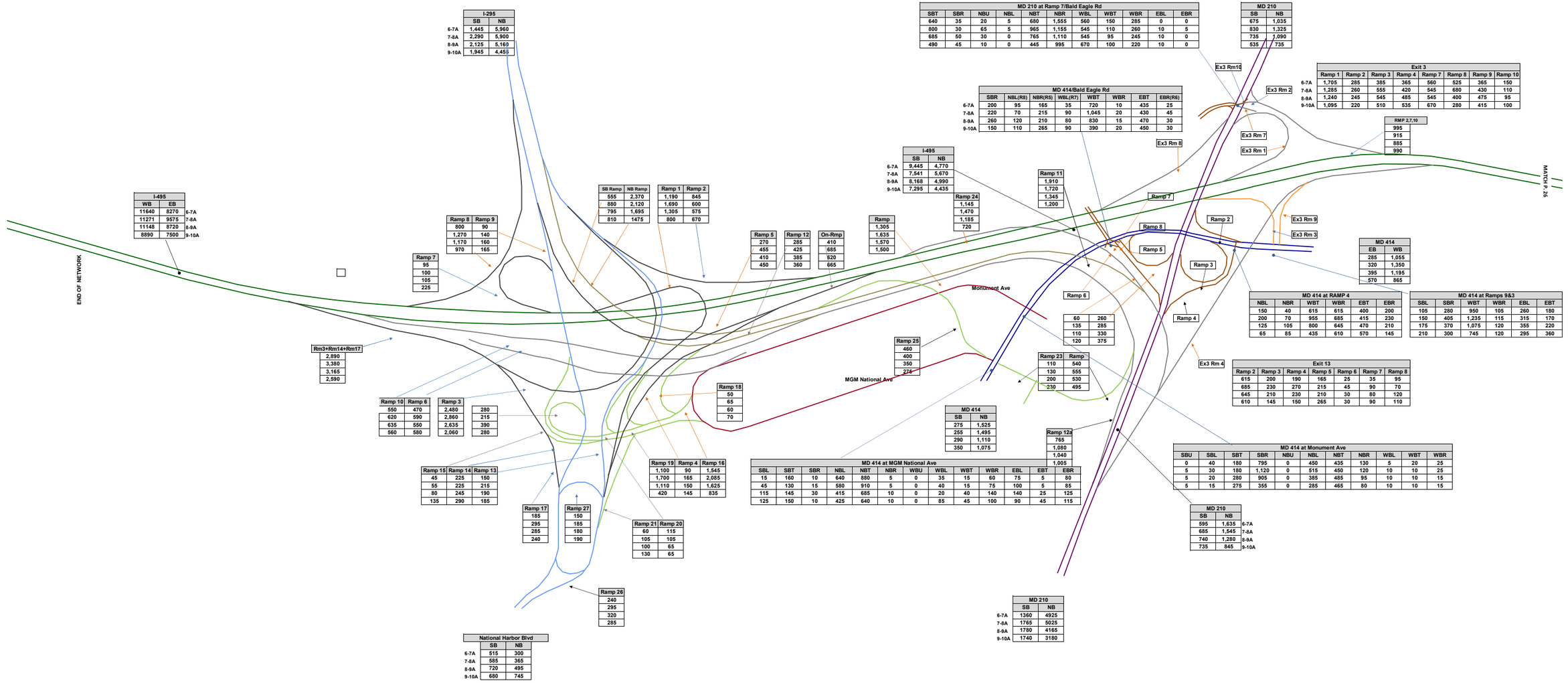
MD 414		
WB	EB	
745	340	6-7A
1,255	715	7-8A
1,225	480	8-9A
1,240	795	9-10A

MD 414 at Alice Ave/Ramps 9&2								
SBL	SBR	NBL	NBT	NBR	WBT	WBR	EBL	EBT
85	140	65	5	225	840	25	35	1,075
155	150	185	5	240	1,135	55	35	1,455
95	110	150	50	245	1,185	50	40	1,025
50	80	70	50	305	1,160	30	55	860

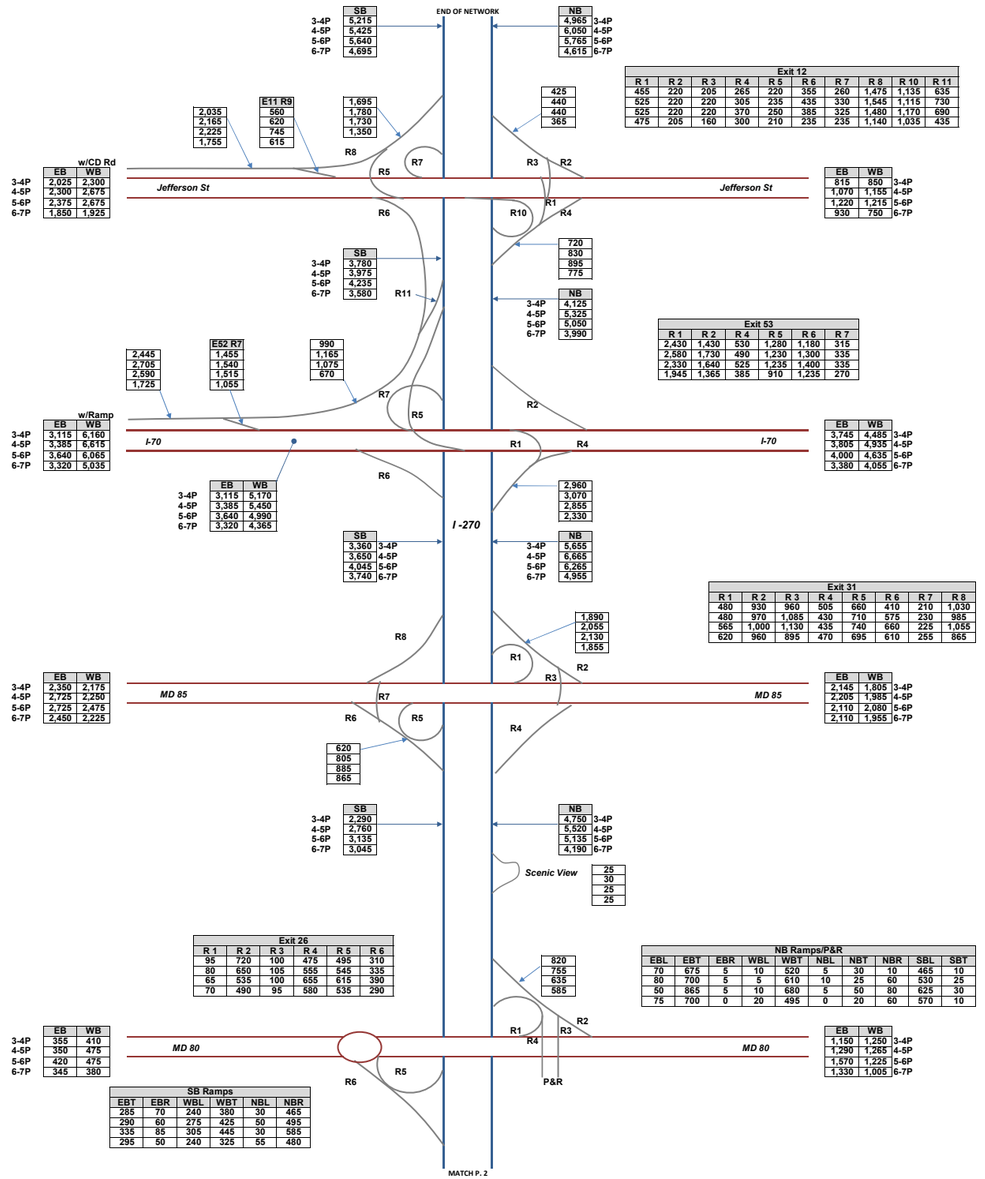
MD 414 at John Hansen Ln					
NBL	NBR	WBL	WBT	EBT	EBR
235	580	75	510	310	30
420	625	110	835	640	75
360	620	210	865	360	120
285	305	155	955	635	160

MD 414 at RPMp 6/Spur from Brinkley Rd							
SBL	SBT	SBR	NBR	WBL	WBT	EBT	EBR
50	135	45	745	160	540	885	5
55	145	70	740	160	875	1,255	10
40	145	85	555	205	990	975	5
40	135	105	415	190	1,005	930	10

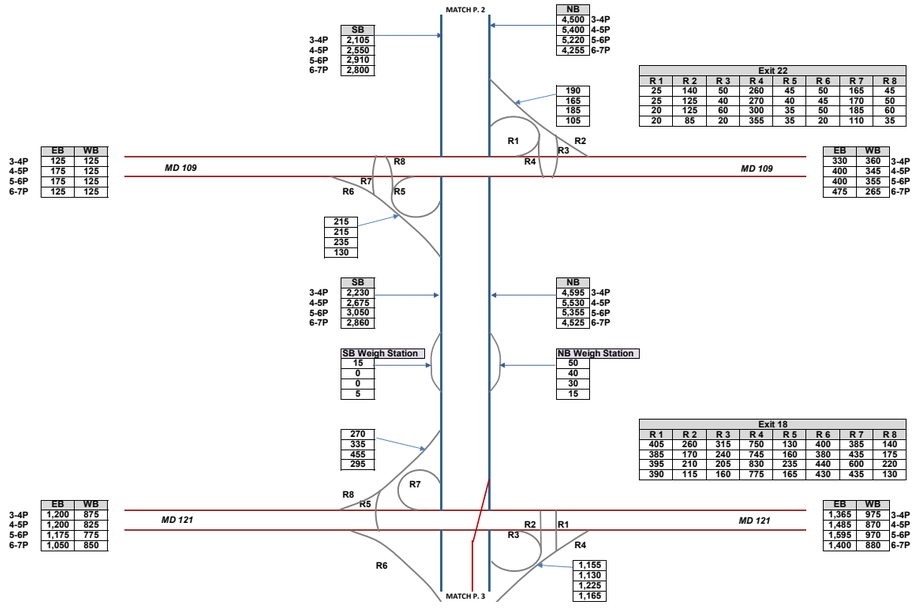
I-495 South Side AM
Future Diversion Alternative Peak Period Volumes



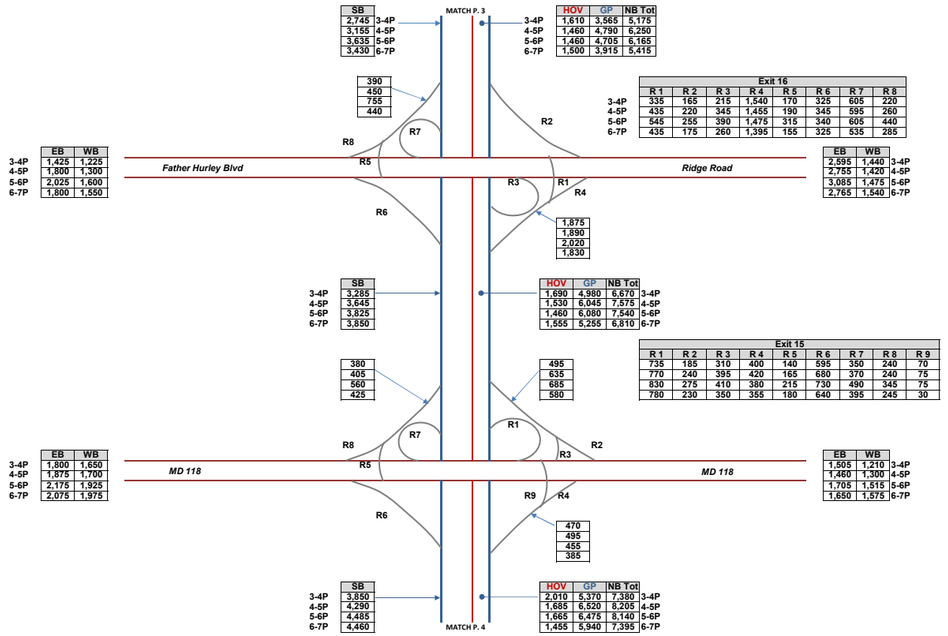
I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



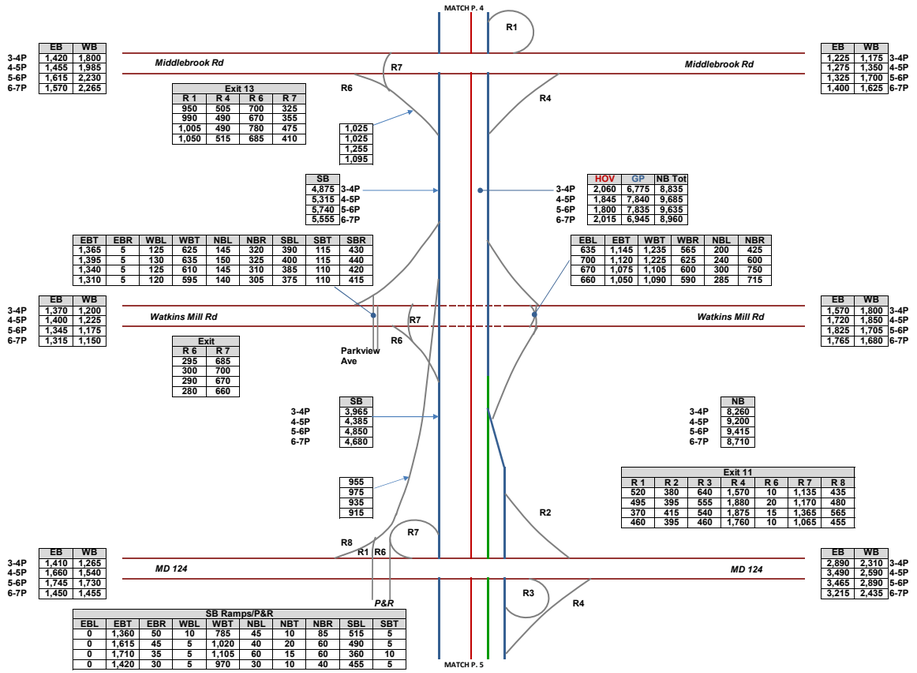
I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



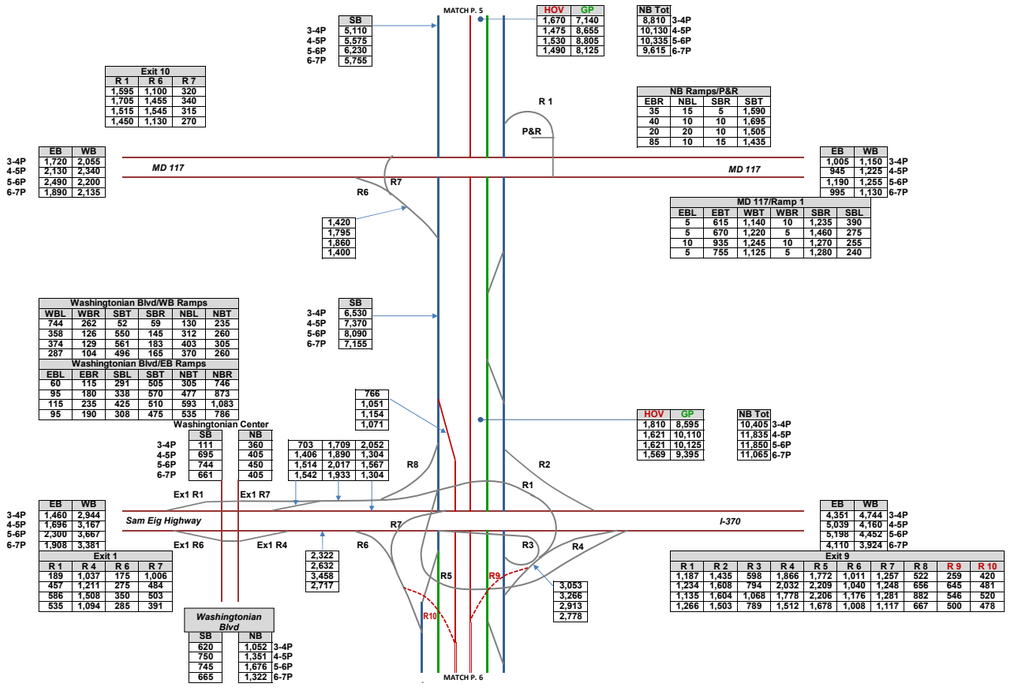
I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



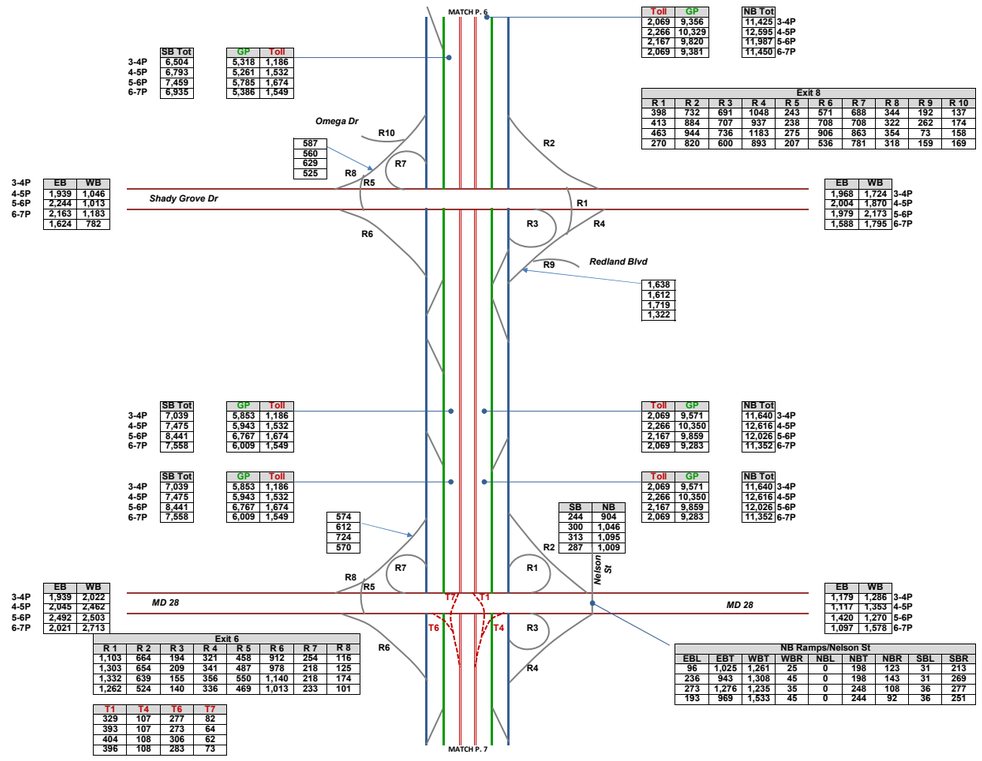
I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



	SB Tot
3-4P	6,504
4-5P	6,793
5-6P	7,459
6-7P	6,935

GP	Toll
5,318	1,186
5,261	1,532
5,785	1,674
5,386	1,549

Toll	GP
2,069	9,356
2,266	10,329
2,167	9,820
2,069	9,381

NB Tot	
11,425	3-4P
12,595	4-5P
11,987	5-6P
11,450	6-7P

587
560
529
525

Exit 8									
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10
398	732	691	1048	243	571	688	344	192	137
413	884	707	937	238	708	708	322	262	174
463	944	736	1183	275	906	863	354	73	158
270	820	600	893	207	536	781	318	159	169

	EB	WB
3-4P	1,939	1,046
4-5P	2,244	1,013
5-6P	2,163	1,183
6-7P	1,624	782

EB	WB	
1,968	1,724	3-4P
2,004	1,870	4-5P
1,979	2,173	5-6P
1,588	1,795	6-7P

1,638
1,612
1,719
1,322

	SB Tot
3-4P	7,039
4-5P	7,475
5-6P	8,441
6-7P	7,558

GP	Toll
5,853	1,186
5,943	1,532
6,767	1,674
6,009	1,549

Toll	GP
2,069	9,571
2,266	10,350
2,167	9,859
2,069	9,283

NB Tot	
11,640	3-4P
12,616	4-5P
12,026	5-6P
11,352	6-7P

574
612
724
570

SB	NB
244	904
300	1,046
313	1,095
287	1,009

EB	WB	
1,939	2,022	3-4P
2,045	2,462	4-5P
2,492	2,503	5-6P
2,021	2,713	6-7P

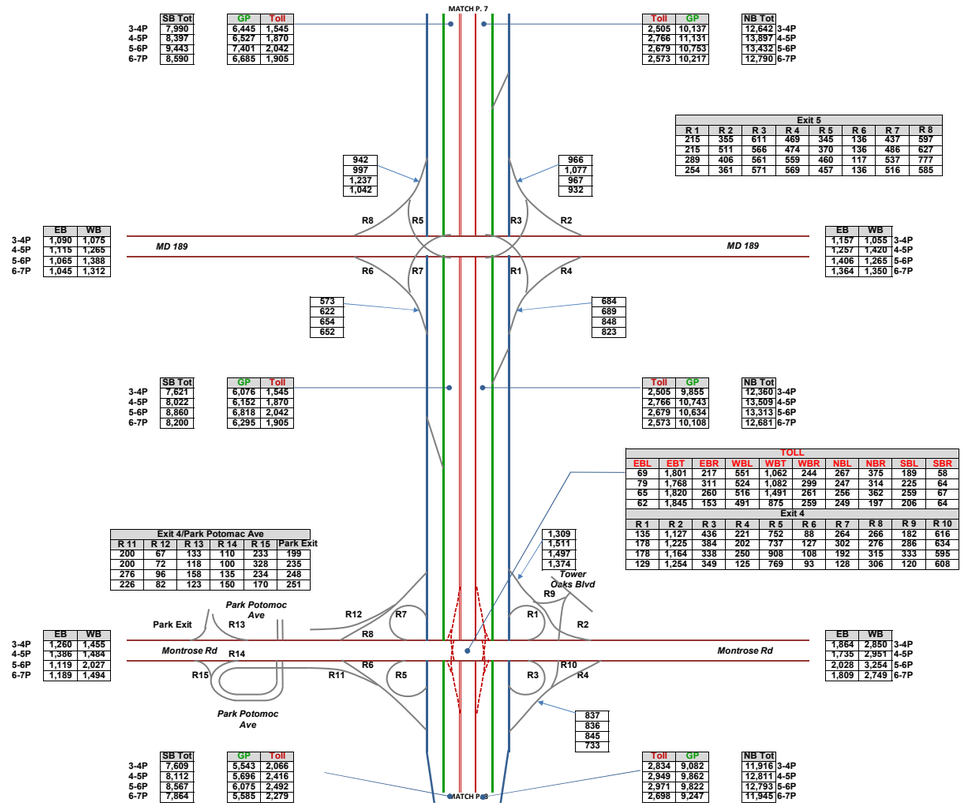
EB	WB	
1,179	1,286	3-4P
1,117	1,353	4-5P
1,420	1,270	5-6P
1,097	1,578	6-7P

Exit 6							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
1,103	664	194	321	458	912	254	116
1,303	654	209	341	487	978	218	125
1,332	639	155	356	550	1,140	218	174
1,262	524	140	336	469	1,013	233	101

T1	T4	T6	T7
329	107	277	82
393	107	273	64
404	108	306	62
396	108	283	73

NB Ramps/Nelson St								
EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR
96	1,025	1,261	25	0	198	123	31	213
236	943	1,308	45	0	198	143	31	269
273	1,276	1,235	35	0	248	108	36	277
193	969	1,533	45	0	244	92	36	251

I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



	SB Tot
3-4P	7,990
4-5P	8,397
5-6P	9,443
6-7P	8,590

GP	Toll
6,445	1,545
6,527	1,870
7,401	2,042
6,685	1,905

Toll	GP
2,505	10,137
2,766	11,131
2,679	10,753
2,573	10,217

NB Tot	
12,642	3-4P
13,897	4-5P
13,432	5-6P
12,790	6-7P

Exit 5							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
215	355	611	469	345	136	437	597
215	511	566	474	370	136	486	627
289	406	561	559	460	117	537	777
254	361	571	569	457	136	516	585

942
997
1,237
1,042

966
1,077
967
932

	EB	WB
3-4P	1,090	1,075
4-5P	1,115	1,265
5-6P	1,065	1,388
6-7P	1,045	1,312

EB	WB	
1,157	1,055	3-4P
1,257	1,420	4-5P
1,406	1,265	5-6P
1,364	1,350	6-7P

573
622
654
652

684
689
848
823

	SB Tot
3-4P	7,621
4-5P	8,022
5-6P	8,560
6-7P	8,200

GP	Toll
6,076	1,545
6,152	1,870
6,818	2,042
6,295	1,905

Toll	GP
2,505	9,855
2,766	10,743
2,679	10,634
2,573	10,108

NB Tot	
12,360	3-4P
13,509	4-5P
13,313	5-6P
12,681	6-7P

TOLL									
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
69	1,801	217	551	1,062	244	267	375	189	58
79	1,768	311	524	1,082	299	247	314	225	64
65	1,820	260	516	1,491	261	256	362	259	67
62	1,845	153	491	875	259	249	197	206	64

Exit 4									
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10
135	1,127	436	221	752	88	264	266	182	616
178	1,225	384	202	737	127	302	276	286	634
178	1,164	338	250	908	106	192	315	333	595
129	1,254	349	125	769	93	128	306	120	608

Exit 4/Park Potomac Ave					
R 11	R 12	R 13	R 14	R 15	Park Exit
200	67	133	110	233	199
200	72	118	100	328	235
276	96	158	135	234	248
226	82	123	150	170	251

1,309
1,511
1,497
1,374

	EB	WB
3-4P	1,260	1,455
4-5P	1,386	1,484
5-6P	1,119	2,027
6-7P	1,189	1,494

EB	WB	
1,864	2,850	3-4P
1,735	2,951	4-5P
2,028	3,254	5-6P
1,809	2,749	6-7P

837
836
845
733

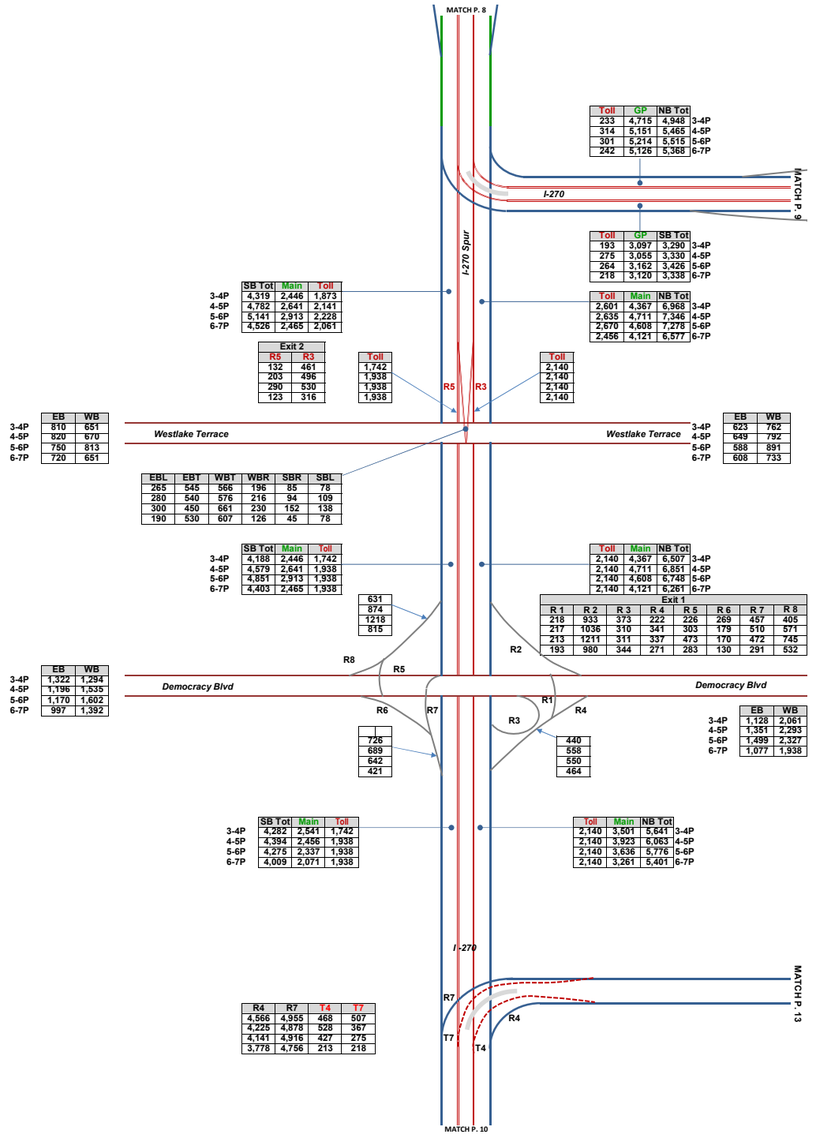
	SB Tot
3-4P	7,609
4-5P	8,112
5-6P	8,567
6-7P	7,864

GP	Toll
5,543	2,066
5,696	2,416
6,075	2,492
5,585	2,279

Toll	GP
2,834	9,082
2,949	9,862
2,971	9,822
2,698	9,247

NB Tot	
11,916	3-4P
12,811	4-5P
12,793	5-6P
11,945	6-7P

I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



	Toll	GP	NB Tot
3-4P	233	4,715	4,948
4-5P	314	5,151	5,465
5-6P	301	5,214	5,515
6-7P	242	5,126	5,368

	Toll	GP	SB Tot
3-4P	193	3,097	3,290
4-5P	275	3,055	3,330
5-6P	264	3,162	3,426
6-7P	218	3,120	3,338

	SB Tot	Main	Toll
3-4P	4,319	2,446	1,873
4-5P	4,782	2,641	2,141
5-6P	5,141	2,913	2,228
6-7P	4,526	2,465	2,061

	Toll	Main	NB Tot
3-4P	2,601	4,367	6,968
4-5P	2,635	4,711	7,346
5-6P	2,670	4,608	7,278
6-7P	2,456	4,121	6,577

Exit 2	
R5	R3
132	461
203	496
290	530
123	316

Toll
1,742
1,938
1,938
1,938

Toll
2,140
2,140
2,140
2,140

	EB	WB
3-4P	810	651
4-5P	820	670
5-6P	750	813
6-7P	720	651

	EB	WB
3-4P	623	762
4-5P	649	792
5-6P	588	891
6-7P	608	733

EBL	EBT	WBT	WBR	SBR	SBL
265	545	566	196	85	78
280	540	576	216	94	109
300	450	661	230	152	138
190	530	607	126	45	78

	SB Tot	Main	Toll
3-4P	4,188	2,446	1,742
4-5P	4,579	2,641	1,938
5-6P	4,851	2,913	1,938
6-7P	4,403	2,465	1,938

	Toll	Main	NB Tot
3-4P	2,140	4,367	6,507
4-5P	2,140	4,711	6,851
5-6P	2,140	4,608	6,748
6-7P	2,140	4,121	6,261

	EB	WB
3-4P	1,322	1,294
4-5P	1,196	1,535
5-6P	1,170	1,602
6-7P	997	1,392

	631	
	874	
	1218	
	815	

	726	
	689	
	642	
	421	

	440	
	558	
	550	
	464	

Exit 1							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
218	933	373	222	226	269	457	405
217	1036	310	341	303	179	510	571
213	1211	311	337	473	170	472	745
193	980	344	271	283	130	291	532

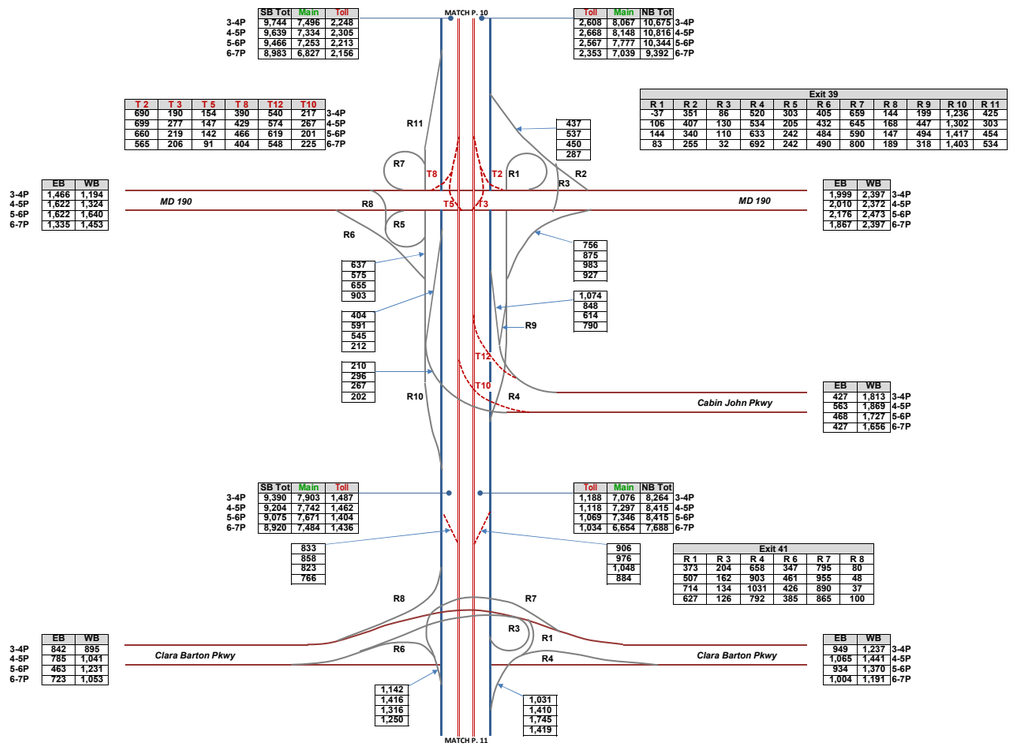
	EB	WB
3-4P	1,128	2,061
4-5P	1,351	2,293
5-6P	1,499	2,327
6-7P	1,077	1,938

	SB Tot	Main	Toll
3-4P	4,282	2,541	1,742
4-5P	4,394	2,456	1,938
5-6P	4,275	2,337	1,938
6-7P	4,009	2,071	1,938

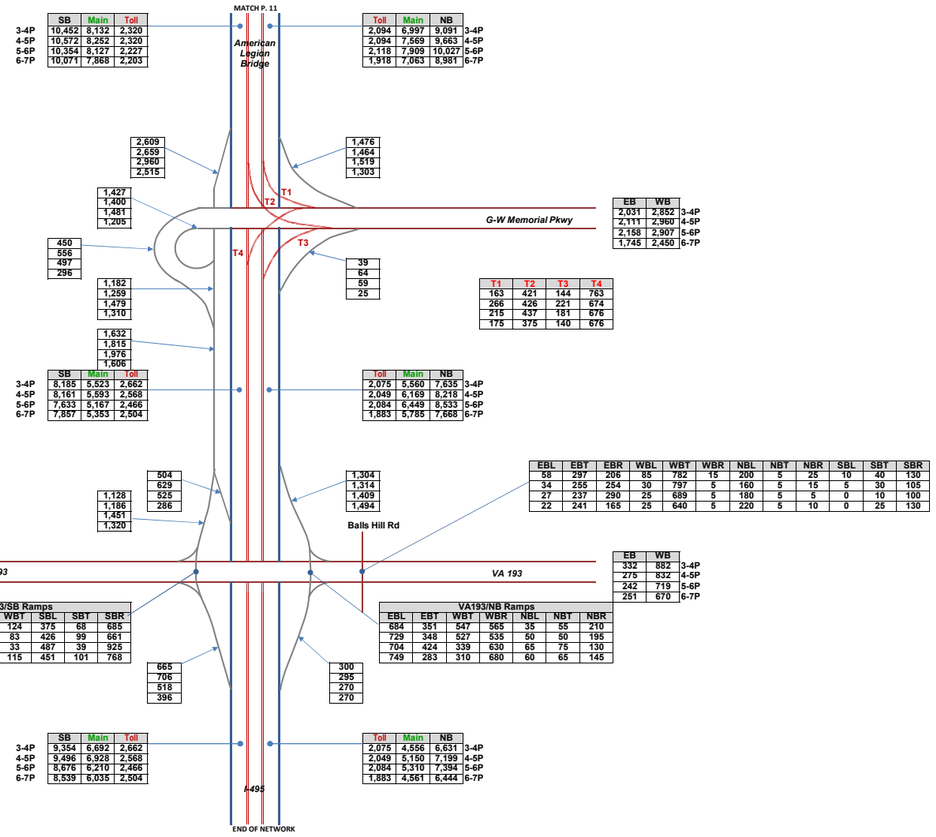
	Toll	Main	NB Tot
3-4P	2,140	3,001	5,641
4-5P	2,140	3,923	6,063
5-6P	2,140	3,636	5,776
6-7P	2,140	3,261	5,401

R4	R7	T4	T7
4,566	4,955	468	507
4,225	4,876	528	397
4,141	4,916	427	275
3,778	4,756	213	218

I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



	SB Main	SB Toll
3-4P	10,452	2,320
4-5P	10,572	2,320
5-6P	10,354	2,227
6-7P	10,071	2,203

	NB Toll	NB Main	NB
3-4P	2,094	6,997	9,091
4-5P	2,094	7,569	9,663
5-6P	2,118	7,909	10,027
6-7P	1,918	7,063	8,981

	SB Main	SB Toll
3-4P	8,185	2,662
4-5P	8,161	2,568
5-6P	7,633	2,466
6-7P	7,857	2,504

	NB Toll	NB Main	NB
3-4P	2,075	5,560	7,635
4-5P	2,049	6,169	8,218
5-6P	2,084	6,449	8,533
6-7P	1,883	5,785	7,668

	SB Main	SB Toll
3-4P	9,354	2,662
4-5P	9,496	2,568
5-6P	8,676	2,466
6-7P	8,339	2,504

	NB Toll	NB Main	NB
3-4P	2,075	4,556	6,631
4-5P	2,049	5,150	7,199
5-6P	2,084	5,310	7,394
6-7P	1,883	4,561	6,444

	EB	WB
3-4P	2,031	2,852
4-5P	2,111	2,960
5-6P	2,158	2,907
6-7P	1,745	2,450

	EB	WB
3-4P	332	882
4-5P	275	832
5-6P	242	719
6-7P	251	670

	EB	WB
3-4P	799	809
4-5P	764	744
5-6P	749	958
6-7P	621	883

T1	T2	T3	T4
163	421	144	763
266	426	221	674
215	437	181	676
175	375	140	676

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
58	297	206	85	782	15	200	5	25	10	40	130
34	255	254	30	797	5	160	5	15	5	30	105
27	237	290	25	689	5	180	5	5	0	10	100
22	241	165	25	640	5	220	5	10	0	25	130

VA193/SB Ramps

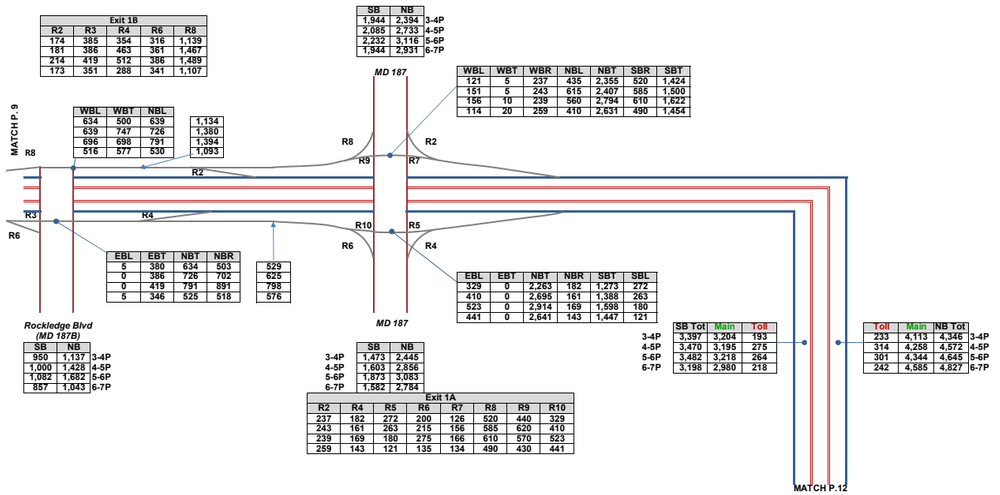
EBT	EBR	WBL	WBT	SBL	SBT	SBR
660	139	458	124	375	68	685
651	113	494	83	426	99	661
641	108	371	33	487	39	925
581	40	255	115	451	101	768

VA193/NB Ramps

EBL	EBT	WBT	WBR	NBL	NBT	NBR
684	351	547	565	35	55	210
729	348	527	535	50	50	195
704	424	339	630	65	75	130
749	283	310	680	60	65	145

2,609	2,659	2,960	2,515
1,476	1,464	1,519	1,303
1,427	1,400	1,481	1,205
450	556	497	296
39	64	59	25
1,182	1,259	1,479	1,310
1,632	1,815	1,976	1,606
504	629	525	286
1,304	1,314	1,409	1,494
1,128	1,186	1,451	1,320
665	706	518	396
300	295	270	270

I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



Exit 1B				
R2	R3	R4	R6	R8
174	385	354	316	1,139
181	386	463	361	1,467
214	419	512	386	1,489
173	351	288	341	1,107

WBL	WBT	NBL	
634	500	639	1,134
639	747	726	1,380
696	698	791	1,394
516	577	530	1,093

SB	NB	
1,944	2,394	3-4P
2,085	2,733	4-5P
2,232	3,116	5-6P
1,944	2,931	6-7P

WBL	WBT	WBR	NBL	NBT	SBR	SBT
121	5	237	435	2,355	520	1,424
151	5	243	615	2,407	585	1,500
156	10	239	560	2,794	610	1,622
114	20	259	410	2,631	490	1,454

EBL	EBT	NBT	NBR
5	380	634	503
0	386	726	702
0	419	791	891
5	346	525	518

529
625
798
576

EBL	EBT	NBT	NBR	SBT	SBL
329	0	2,263	182	1,273	272
410	0	2,695	161	1,388	263
523	0	2,914	169	1,598	180
441	0	2,641	143	1,447	121

	SB Tot	Main	Toll
3-4P	3,397	3,204	193
4-5P	3,470	3,195	275
5-6P	3,482	3,218	264
6-7P	3,198	2,980	218

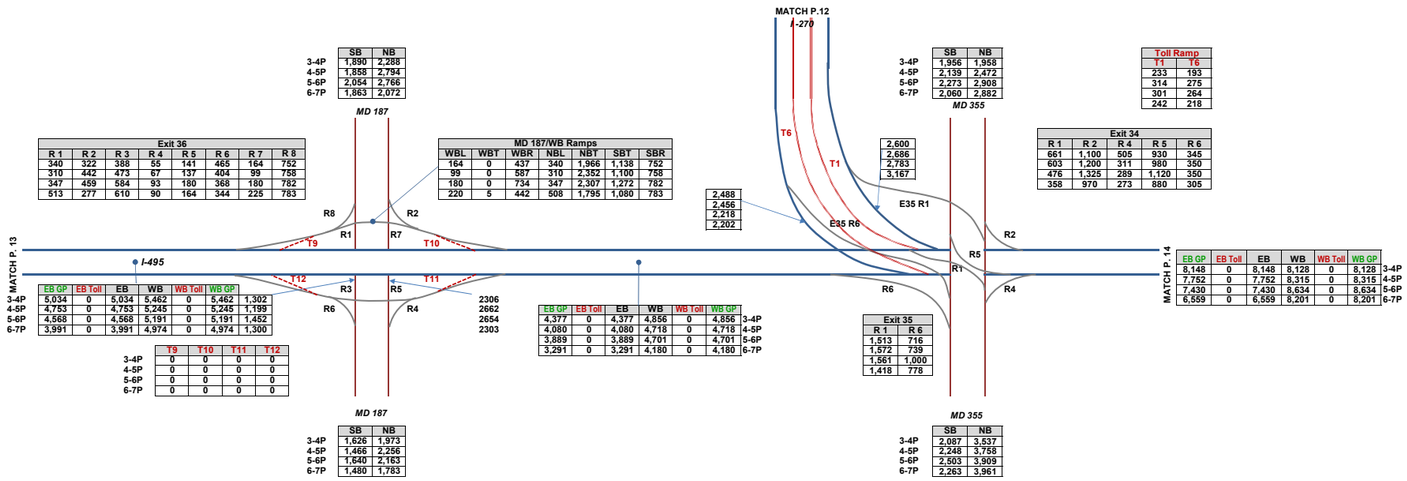
Toll	Main	NB Tot	
233	4,113	4,346	3-4P
314	4,258	4,572	4-5P
301	4,344	4,645	5-6P
242	4,585	4,827	6-7P

SB	NB	
950	1,137	3-4P
1,000	1,428	4-5P
1,082	1,682	5-6P
857	1,043	6-7P

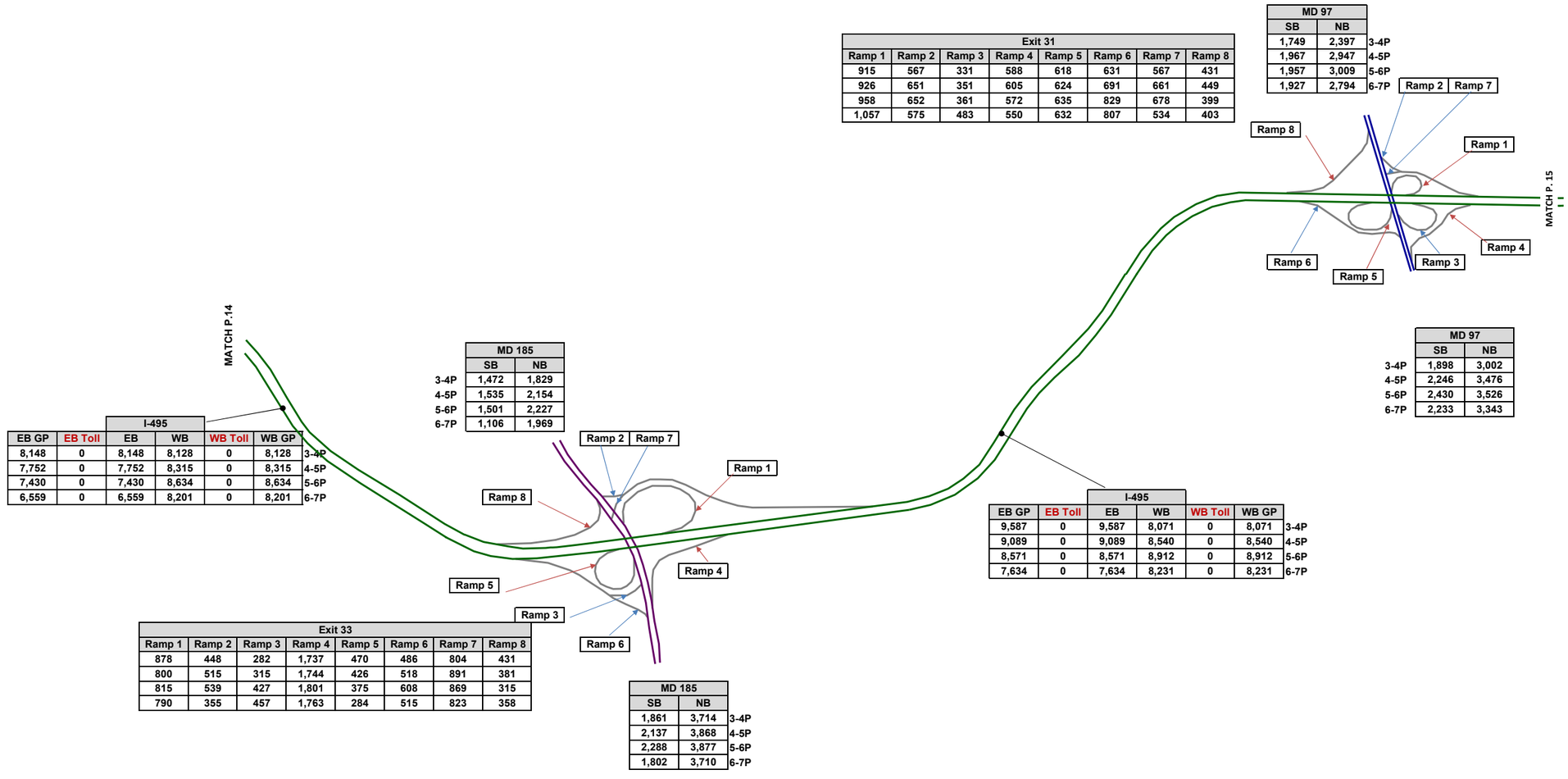
	SB	NB
3-4P	1,473	2,445
4-5P	1,603	2,856
5-6P	1,873	3,083
6-7P	1,582	2,784

Exit 1A							
R2	R4	R5	R6	R7	R8	R9	R10
237	182	272	200	126	520	440	329
243	161	263	215	156	585	620	410
239	169	180	275	166	610	570	523
259	143	121	135	134	490	430	441

I-270 & I-495 West Side PM
Future Diversion Alternative Peak Period Volumes



I-495 North Side PM
Future Diversion Alternative Peak Period Volumes



Exit 31							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
915	567	331	588	618	631	567	431
926	651	351	605	624	691	661	449
958	652	361	572	635	829	678	399
1,057	575	483	550	632	807	534	403

	MD 97	
	SB	NB
3-4P	1,749	2,397
4-5P	1,967	2,947
5-6P	1,957	3,009
6-7P	1,927	2,794

	I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
8,148	0	8,148	8,128	0	8,128	3-4P
7,752	0	7,752	8,315	0	8,315	4-5P
7,430	0	7,430	8,634	0	8,634	5-6P
6,559	0	6,559	8,201	0	8,201	6-7P

	MD 185	
	SB	NB
3-4P	1,472	1,829
4-5P	1,535	2,154
5-6P	1,501	2,227
6-7P	1,106	1,969

Exit 33							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
878	448	282	1,737	470	486	804	431
800	515	315	1,744	426	518	891	381
815	539	427	1,801	375	608	869	315
790	355	457	1,763	284	515	823	358

	MD 185	
	SB	NB
3-4P	1,861	3,714
4-5P	2,137	3,868
5-6P	2,288	3,877
6-7P	1,802	3,710

	MD 97	
	SB	NB
3-4P	1,898	3,002
4-5P	2,246	3,476
5-6P	2,430	3,526
6-7P	2,233	3,343

	I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
9,587	0	9,587	8,071	0	8,071	3-4P
9,089	0	9,089	8,540	0	8,540	4-5P
8,571	0	8,571	8,912	0	8,912	5-6P
7,634	0	7,634	8,231	0	8,231	6-7P

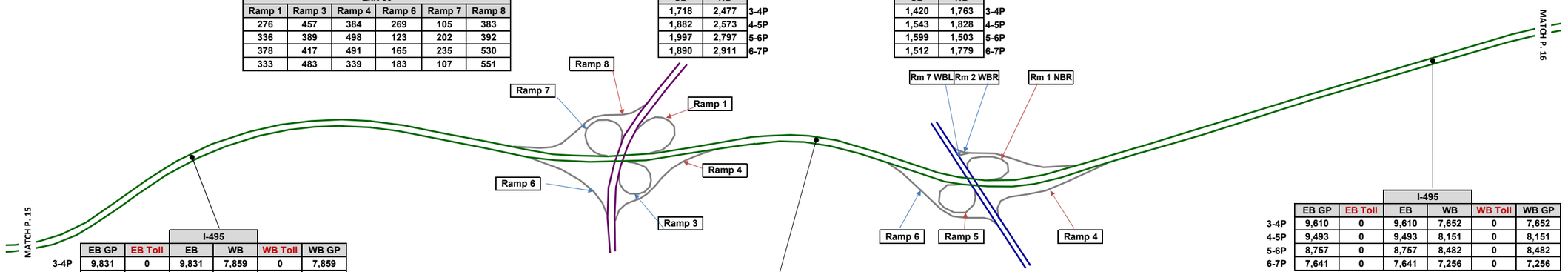
I-495 North Side PM
Future Diversion Alternative Peak Period Volumes

Exit 29					
Ramp 1	Ramp 2	Ramp 4	Ramp 5	Ramp 6	Ramp 7
512	396	518	465	862	463
740	467	561	493	823	473
787	509	524	503	767	548
757	413	460	513	531	497

Exit 30					
Ramp 1	Ramp 3	Ramp 4	Ramp 6	Ramp 7	Ramp 8
276	457	384	269	105	383
336	389	498	123	202	392
378	417	491	165	235	530
333	483	339	183	107	551

US 29		
SB	NB	
1,718	2,477	3-4P
1,882	2,573	4-5P
1,997	2,797	5-6P
1,890	2,911	6-7P

MD 193		
SB	NB	
1,420	1,763	3-4P
1,543	1,828	4-5P
1,599	1,503	5-6P
1,512	1,779	6-7P



	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,831	0	9,831	7,859	0	7,859
4-5P	9,276	0	9,276	8,477	0	8,477
5-6P	8,588	0	8,588	8,885	0	8,885
6-7P	7,526	0	7,526	7,880	0	7,880

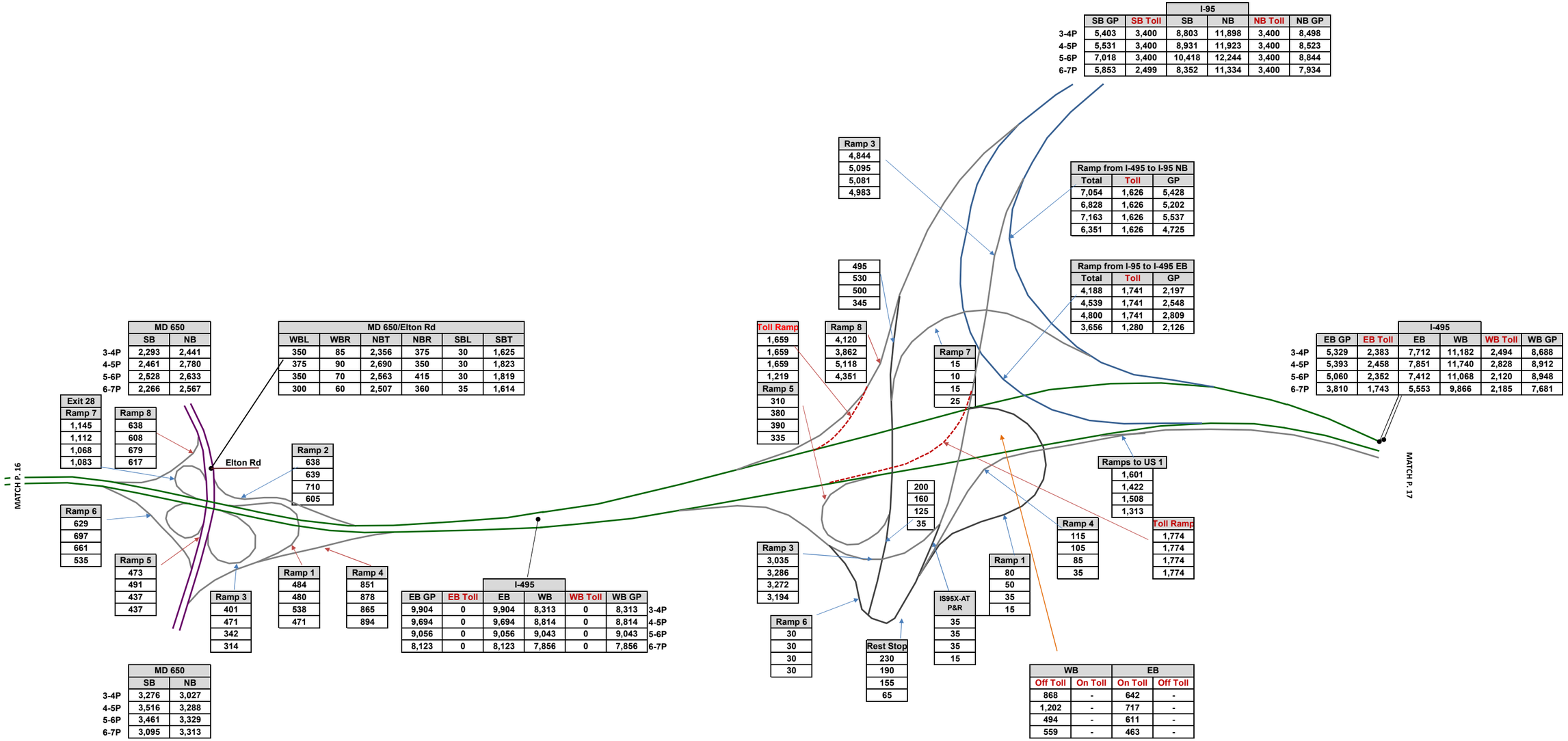
	US 29	
	SB	NB
3-4P	1,709	2,680
4-5P	1,815	3,018
5-6P	1,867	3,249
6-7P	1,629	3,100

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,489	0	9,489	7,305	0	7,305
4-5P	9,262	0	9,262	7,951	0	7,951
5-6P	8,497	0	8,497	8,212	0	8,212
6-7P	7,199	0	7,199	7,103	0	7,103

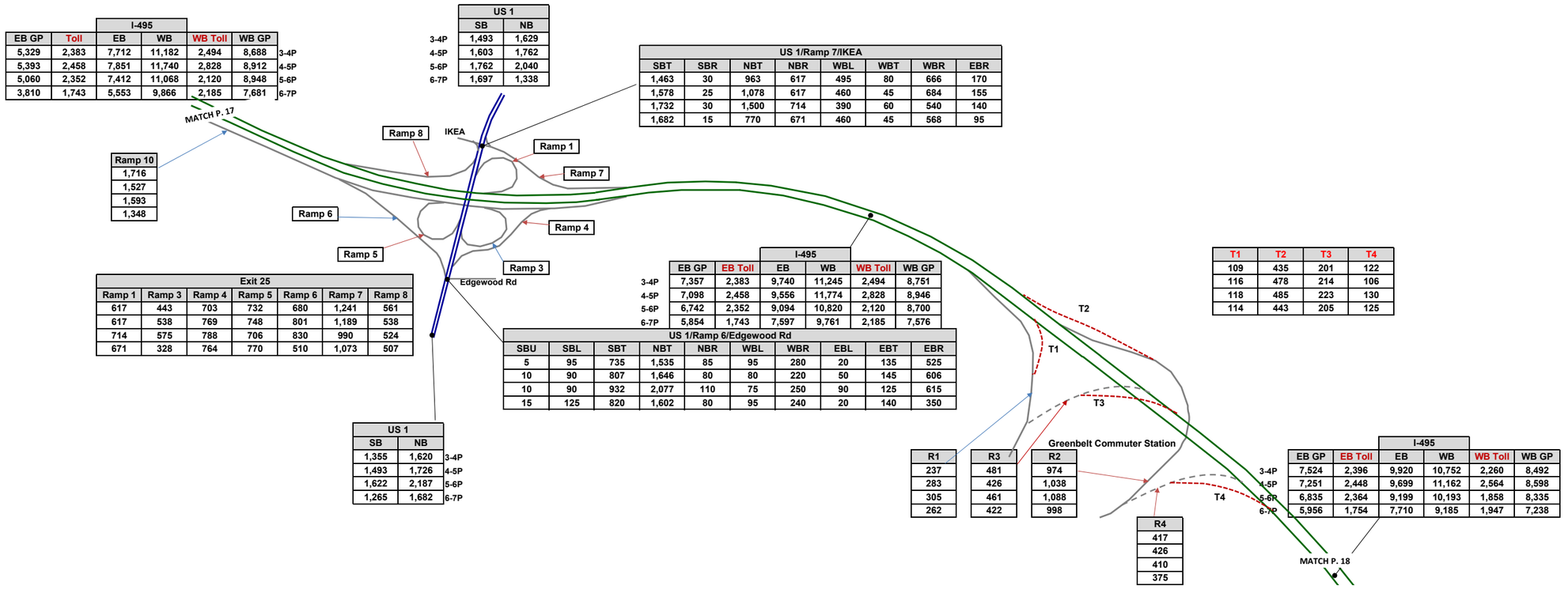
	MD 193	
	SB	NB
3-4P	2,280	2,397
4-5P	2,346	2,662
5-6P	2,411	2,305
6-7P	2,027	2,583

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,610	0	9,610	7,652	0	7,652
4-5P	9,493	0	9,493	8,151	0	8,151
5-6P	8,757	0	8,757	8,482	0	8,482
6-7P	7,641	0	7,641	7,256	0	7,256

I-495 North Side PM
Future Diversion Alternative Peak Period Volumes



I-495 North East Side PM
Future Diversion Alternative Peak Period Volumes



	I-495				
EB GP	Toll	EB	WB	WB Toll	WB GP	
5,329	2,383	7,712	11,182	2,494	8,688	3-4P
5,393	2,458	7,851	11,740	2,828	8,912	4-5P
5,060	2,352	7,412	11,068	2,120	8,948	5-6P
3,810	1,743	5,553	9,866	2,185	7,681	6-7P

	US 1	
	SB	NB
3-4P	1,493	1,629
4-5P	1,603	1,762
5-6P	1,762	2,040
6-7P	1,697	1,338

US 1/Ramp 7/IKEA							
SBT	SBR	NBT	NBR	WBL	WBT	WBR	EBR
1,463	30	963	617	495	80	666	170
1,578	25	1,078	617	460	45	684	155
1,732	30	1,500	714	390	60	540	140
1,682	15	770	671	460	45	568	95

Exit 25						
Ramp 1	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
617	443	703	732	680	1,241	561
617	538	769	748	801	1,189	538
714	575	788	706	830	990	524
671	328	764	770	510	1,073	507

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	7,357	2,383	9,740	11,245	2,494	8,751
4-5P	7,098	2,458	9,556	11,774	2,828	8,946
5-6P	6,742	2,352	9,094	10,820	2,120	8,700
6-7P	5,854	1,743	7,597	9,761	2,185	7,576

US 1/Ramp 6/Edgewood Rd									
SBU	SBL	SBT	NBT	NBR	WBL	WBR	EBL	EBT	EBR
5	95	735	1,535	85	95	280	20	135	525
10	90	807	1,646	80	80	220	50	145	606
10	90	932	2,077	110	75	250	90	125	615
15	125	820	1,602	80	95	240	20	140	350

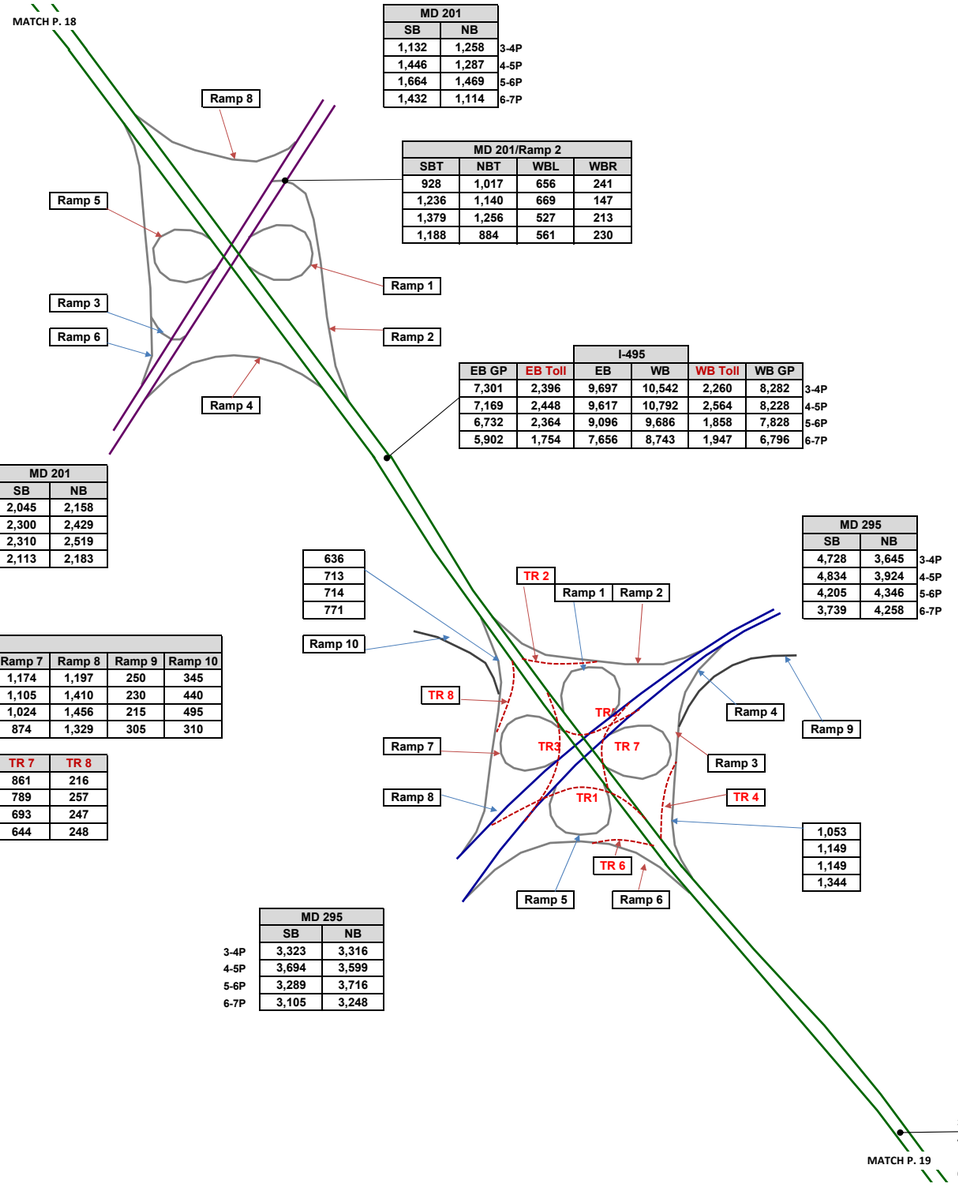
	US 1	
SB	NB	
1,355	1,620	3-4P
1,493	1,726	4-5P
1,622	2,187	5-6P
1,265	1,682	6-7P

T1	T2	T3	T4
109	435	201	122
116	478	214	106
118	485	223	130
114	443	205	125

R1	R3	R2
237	481	974
283	426	1,038
305	461	1,088
262	422	998

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	7,524	2,396	9,920	10,752	2,260	8,492
4-5P	7,251	2,448	9,699	11,162	2,564	8,598
5-6P	6,835	2,364	9,199	10,193	1,858	8,335
6-7P	5,956	1,754	7,710	9,185	1,947	7,238

I-495 North East Side PM
Future Diversion Alternative Peak Period Volumes



Exit 23						
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8
903	897	405	643	529	990	204
976	816	378	691	599	994	210
962	740	328	629	602	1,006	285
989	791	250	560	569	933	244

MD 201		
	SB	NB
3-4P	2,045	2,158
4-5P	2,300	2,429
5-6P	2,310	2,519
6-7P	2,113	2,183

Exit 22									
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
34	615	1,174	1,030	620	126	1,174	1,197	250	345
25	692	1,391	1,181	685	119	1,105	1,410	230	440
20	687	1,186	1,228	684	115	1,024	1,456	215	495
25	486	955	1,320	740	119	874	1,329	305	310

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
14	149	162	227	189	48	861	216
11	170	195	262	200	36	789	257
12	161	155	294	210	36	693	247
16	109	145	281	205	36	644	248

MD 295		
	SB	NB
3-4P	3,323	3,316
4-5P	3,694	3,599
5-6P	3,289	3,716
6-7P	3,105	3,248

MD 201		
SB	NB	
1,132	1,258	3-4P
1,446	1,287	4-5P
1,664	1,469	5-6P
1,432	1,114	6-7P

MD 201/Ramp 2			
SBT	NBT	WBL	WBR
928	1,017	656	241
1,236	1,140	669	147
1,379	1,256	527	213
1,188	884	561	230

	I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
7,301	2,396	9,697	10,542	2,260	8,282	3-4P
7,169	2,448	9,617	10,792	2,564	8,228	4-5P
6,732	2,364	9,096	9,686	1,858	7,828	5-6P
5,902	1,754	7,656	8,743	1,947	6,796	6-7P

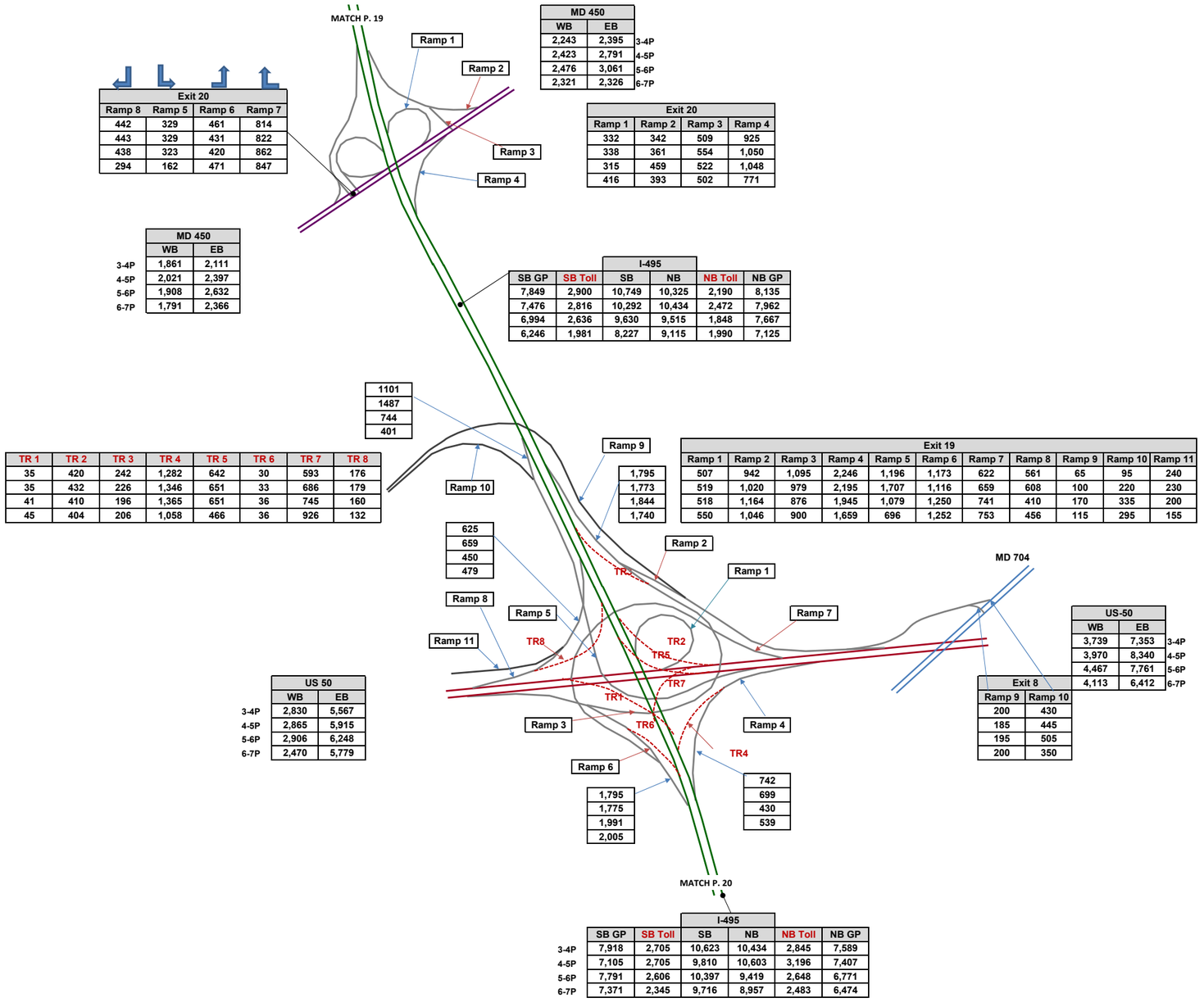
MD 295		
SB	NB	
4,728	3,645	3-4P
4,834	3,924	4-5P
4,205	4,346	5-6P
3,739	4,258	6-7P

1,053
1,149
1,149
1,344

	I-495				
SB GP	SB Toll	SB	NB	NB Toll	NB GP
7,345	2,900	10,245	9,919	2,190	7,729
6,995	2,816	9,811	9,961	2,472	7,489
6,473	2,636	9,109	9,133	1,848	7,285
5,384	1,981	7,365	8,823	1,990	6,833

3-4P
4-5P
6-7P

I-495 North East Side PM
Future Diversion Alternative Peak Period Volumes



Exit 20			
Ramp 8	Ramp 5	Ramp 6	Ramp 7
442	329	461	814
443	329	431	822
438	323	420	862
294	162	471	847

MD 450		
	WB	EB
3-4P	2,243	2,395
4-5P	2,423	2,791
5-6P	2,476	3,061
6-7P	2,321	2,326

Exit 20			
Ramp 1	Ramp 2	Ramp 3	Ramp 4
332	342	509	925
338	361	554	1,050
315	459	522	1,048
416	393	502	771

MD 450		
	WB	EB
3-4P	1,861	2,111
4-5P	2,021	2,397
5-6P	1,908	2,632
6-7P	1,791	2,366

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
7,849	2,900	10,749	10,325	2,190	8,135
7,476	2,816	10,292	10,434	2,472	7,962
6,994	2,636	9,630	9,515	1,848	7,667
6,246	1,981	8,227	9,115	1,990	7,125

1101
1487
744
401

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
35	420	242	1,282	642	30	593	176
35	432	226	1,346	651	33	686	179
41	410	196	1,365	651	36	745	160
45	404	206	1,058	466	36	926	132

1,795
1,773
1,844
1,740

Exit 19										
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10	Ramp 11
507	942	1,095	2,246	1,196	1,173	622	561	65	95	240
519	1,020	979	2,195	1,707	1,116	659	608	100	220	230
518	1,164	876	1,945	1,079	1,250	741	410	170	335	200
550	1,046	900	1,659	696	1,252	753	456	115	295	155

625
659
450
479

US 50		
	WB	EB
3-4P	2,830	5,567
4-5P	2,865	5,915
5-6P	2,906	6,248
6-7P	2,470	5,779

US-50		
WB	EB	
3,739	7,353	3-4P
3,970	8,340	4-5P
4,467	7,761	5-6P
4,113	6,412	6-7P

Exit 8	
Ramp 9	Ramp 10
200	430
185	445
195	505
200	350

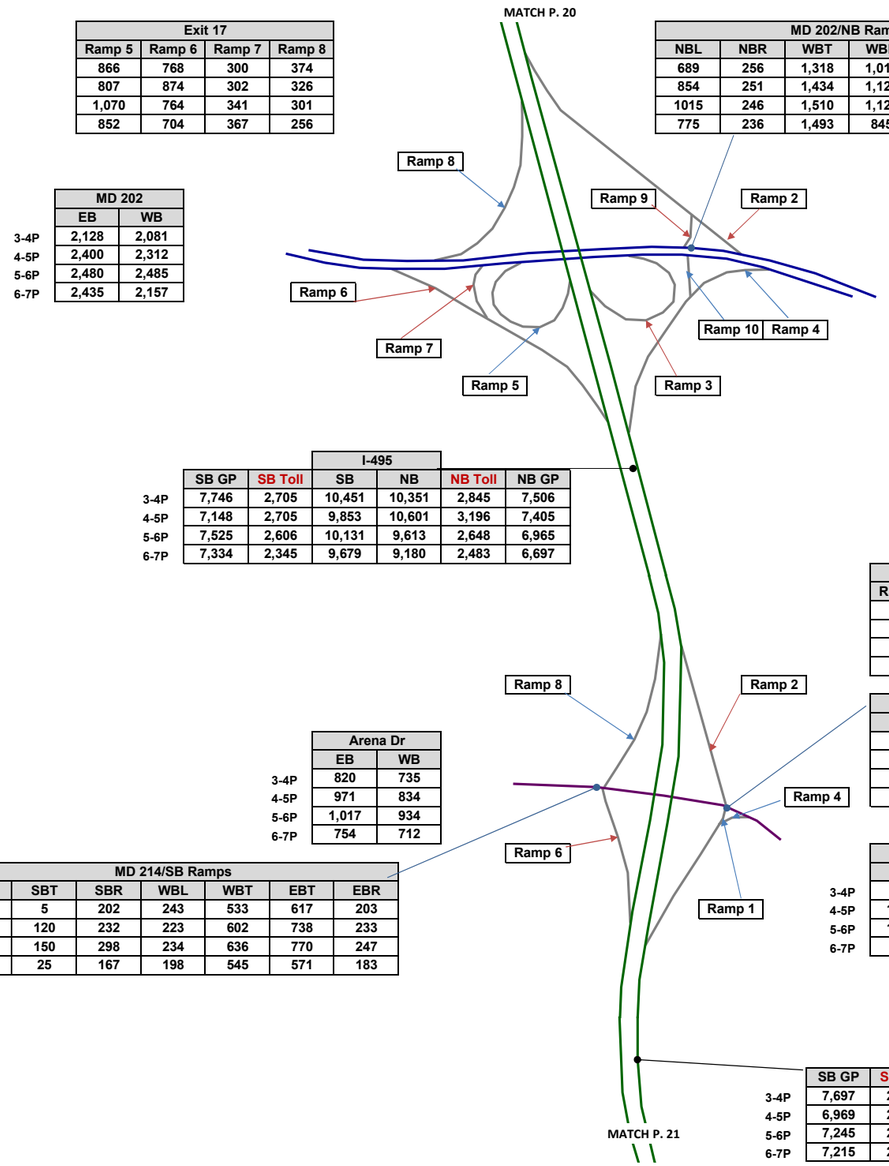
1,795
1,775
1,991
2,005

742
699
430
539

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
7,918	2,705	10,623	10,434	2,845	7,589
7,105	2,705	9,810	10,603	3,196	7,407
7,791	2,606	10,397	9,419	2,648	6,771
7,371	2,345	9,716	8,957	2,483	6,474

3-4P
4-5P
5-6P
6-7P

I-495 East Side PM
Future Diversion Alternative Peak Period Volumes



Exit 17			
Ramp 5	Ramp 6	Ramp 7	Ramp 8
866	768	300	374
807	874	302	326
1,070	764	341	301
852	704	367	256

MD 202/NB Ramps					
NBL	NBR	WBT	WBR	EBL	EBT
689	256	1,318	1,010	15	1,952
854	251	1,434	1,125	10	2,100
1015	246	1,510	1,124	20	2,597
775	236	1,493	845	15	2,404

Exit 17				
Ramp 2	Ramp 3	Ramp 4	Ramp 9	Ramp 10
1,010	259	256	15	945
1,125	223	251	10	1,105
1,124	169	246	20	1,261
845	164	236	15	1,011

	MD 202	
	EB	WB
3-4P	2,128	2,081
4-5P	2,400	2,312
5-6P	2,480	2,485
6-7P	2,435	2,157

MD 202		
SB	NB	
2,464	2,328	3-4P
2,602	2,559	4-5P
3,089	2,634	5-6P
2,876	2,338	6-7P

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	7,746	2,705	10,451	10,351	2,845	7,506
4-5P	7,148	2,705	9,853	10,601	3,196	7,405
5-6P	7,525	2,606	10,131	9,613	2,648	6,965
6-7P	7,334	2,345	9,679	9,180	2,483	6,697

Exit 16				
Ramp 1	Ramp 2	Ramp 4	Ramp 6	Ramp 8
162	464	235	446	500
172	484	245	456	755
177	452	280	481	911
177	413	221	381	525

MD 214/NB Ramps						
NBL	NBT	NBR	WBT	WBR	EBL	EBT
162	0	235	614	235	229	681
172	0	245	653	229	255	886
167	10	280	703	208	234	999
172	5	221	571	168	240	664

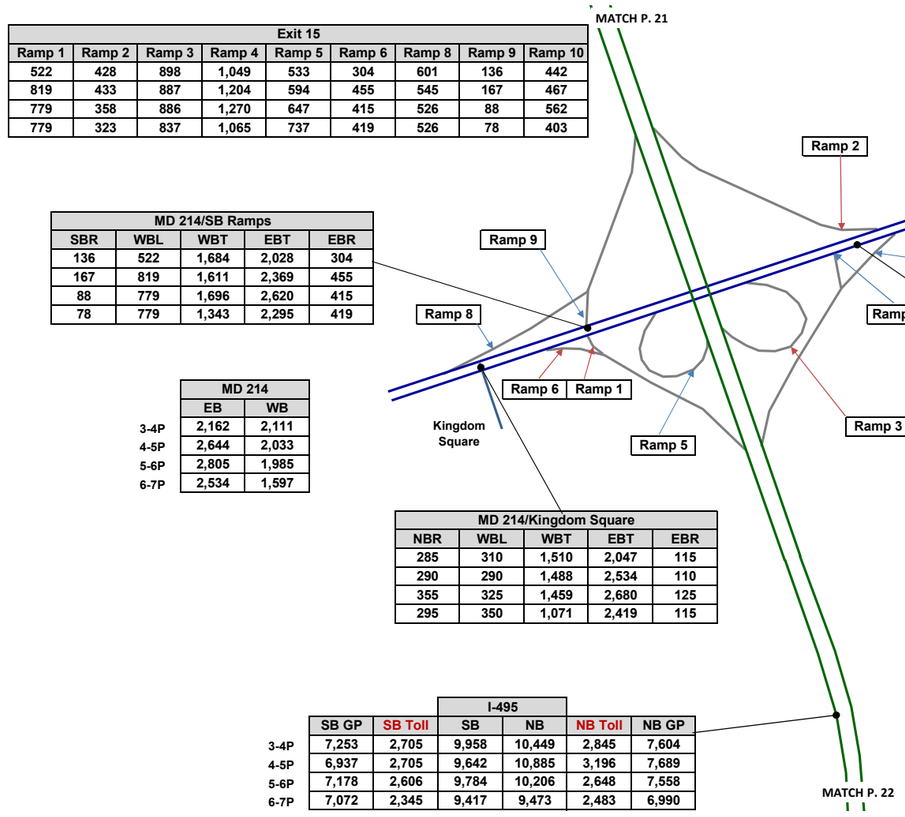
	Arena Dr	
	EB	WB
3-4P	820	735
4-5P	971	834
5-6P	1,017	934
6-7P	754	712

Arena Dr		
EB	WB	
916	849	3-4P
1,131	882	4-5P
1,279	911	5-6P
885	739	6-7P

MD 214/SB Ramps						
SBL	SBT	SBR	WBL	WBT	EBT	EBR
293	5	202	243	533	617	203
403	120	232	223	602	738	233
463	150	298	234	636	770	247
333	25	167	198	545	571	183

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	7,697	2,705	10,402	10,284	2,845	7,439
4-5P	6,969	2,705	9,674	10,534	3,196	7,338
5-6P	7,245	2,606	9,851	9,618	2,648	6,970
6-7P	7,215	2,345	9,560	9,165	2,483	6,682

I-495 East Side PM
Future Diversion Alternative Peak Period Volumes



Exit 15								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8	Ramp 9	Ramp 10
522	428	898	1,049	533	304	601	136	442
819	433	887	1,204	594	455	545	167	467
779	358	886	1,270	647	415	526	88	562
779	323	837	1,065	737	419	526	78	403

MD 214/SB Ramps				
SBR	WBL	WBT	EBT	EBR
136	522	1,684	2,028	304
167	819	1,611	2,369	455
88	779	1,696	2,620	415
78	779	1,343	2,295	419

MD 214		
EB	WB	
2,712	2,192	3-4P
3,280	2,396	4-5P
3,651	2,271	5-6P
3,260	2,042	6-7P

MD 214/NB Ramps				
NBL	NBR	WBT	WBR	EBT
442	1,049	1,764	428	1,663
467	1,204	1,963	433	2,076
562	1,270	1,913	358	2,381
403	1,065	1,719	323	2,195

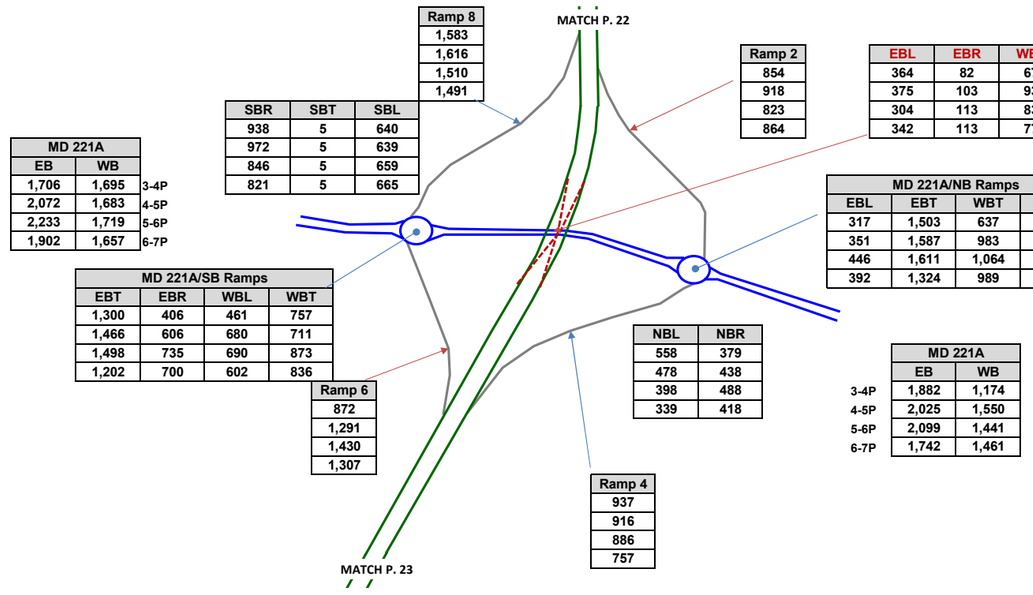
MD 214		
EB	WB	
2,162	2,111	3-4P
2,644	2,033	4-5P
2,805	1,985	5-6P
2,534	1,597	6-7P

MD 214/Kingdom Square				
NBR	WBL	WBT	EBT	EBR
285	310	1,510	2,047	115
290	290	1,488	2,534	110
355	325	1,459	2,680	125
295	350	1,071	2,419	115

	I-495				
SB GP	SB Toll	SB	NB	NB Toll	NB GP
7,253	2,705	9,958	10,449	2,845	7,604
6,937	2,705	9,642	10,885	3,196	7,689
7,178	2,606	9,784	10,206	2,648	7,558
7,072	2,345	9,417	9,473	2,483	6,990

3-4P
4-5P
5-6P
6-7P

I-495 East Side PM
Future Diversion Alternative Peak Period Volumes



Ramp 8
1,583
1,616
1,510
1,491

SBR	SBT	SBL
938	5	640
972	5	639
846	5	659
821	5	665

MD 221A		
EB	WB	
1,706	1,695	3-4P
2,072	1,683	4-5P
2,233	1,719	5-6P
1,902	1,657	6-7P

MD 221A/SB Ramps			
EBT	EBR	WBL	WBT
1,300	406	461	757
1,466	606	680	711
1,498	735	690	873
1,202	700	602	836

Ramp 6
872
1,291
1,430
1,307

Ramp 2
854
918
823
864

EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
364	82	67	461	89	69	257	462
375	103	93	526	84	69	242	465
304	113	83	317	65	70	247	436
342	113	77	311	60	70	234	438

MD 221A/NB Ramps			
EBL	EBT	WBT	WBR
317	1,503	637	537
351	1,587	983	567
446	1,611	1,064	377
392	1,324	989	472

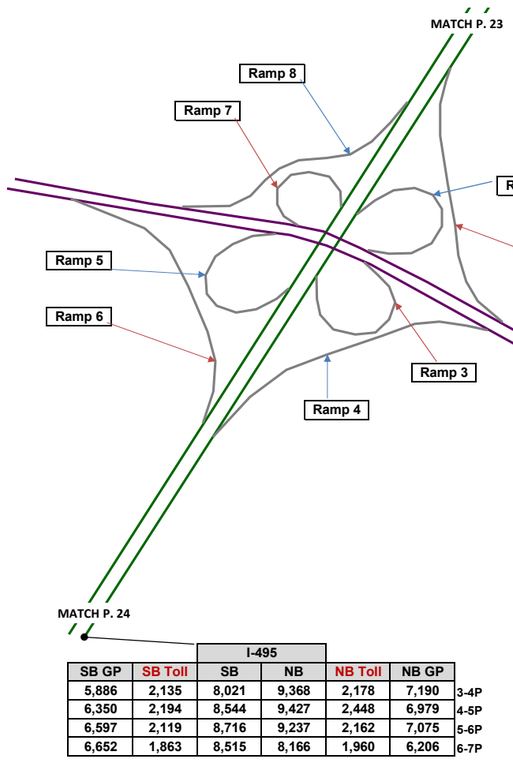
NBL	NBR
558	379
478	438
398	488
339	418

Ramp 4
937
916
886
757

MD 221A		
EB	WB	
1,882	1,174	3-4P
2,025	1,550	4-5P
2,099	1,441	5-6P
1,742	1,461	6-7P

I-495 East Side PM
Future Diversion Alternative Peak Period Volumes

MD 4		
SB	NB	
`	1,776	3-4P
2,685	1,906	4-5P
2,735	1,874	5-6P
2,559	1,674	6-7P

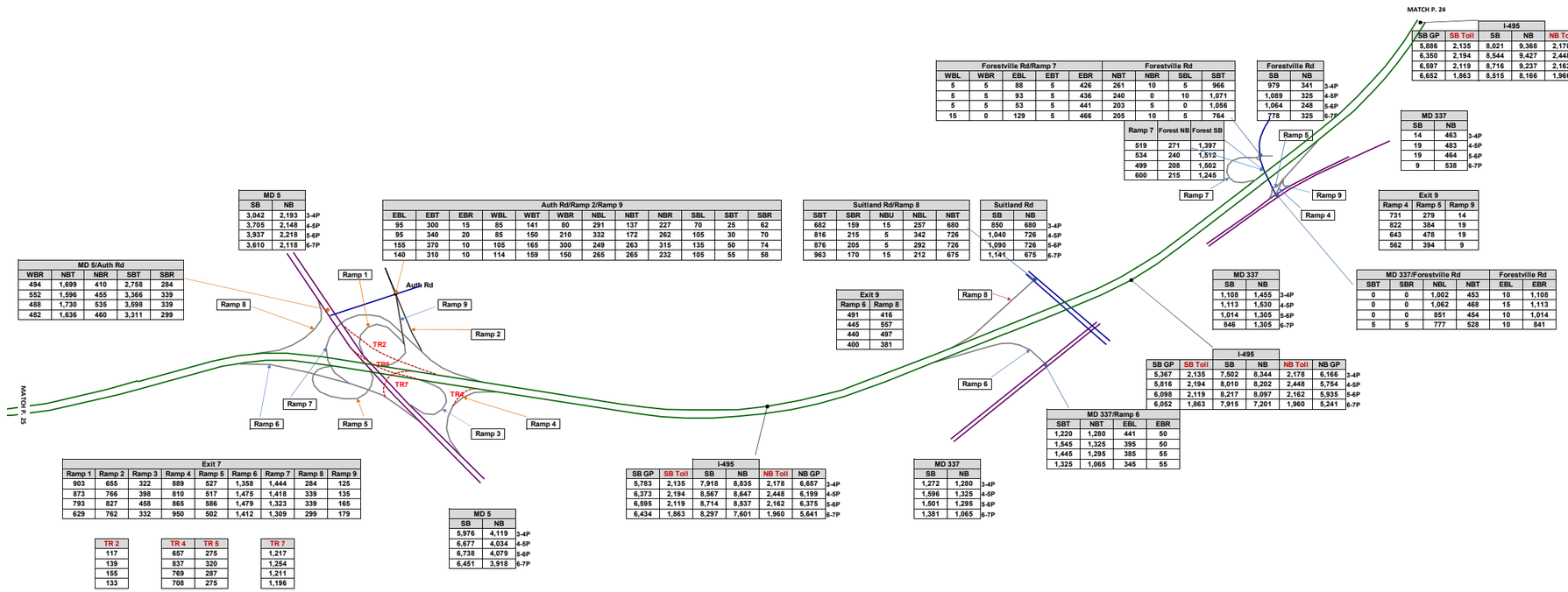


Exit 11							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
695	1,266	950	1,024	1,172	530	723	737
764	1,265	1,026	819	1,108	774	829	757
745	1,091	1,000	800	1,032	633	693	795
690	986	1,096	715	919	815	663	795

MD 4		
SB	NB	
3,058	2,333	3-4P
2,812	2,479	4-5P
2,934	2,118	5-6P
2,282	1,838	6-7P

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP	
5,886	2,135	8,021	9,368	2,178	7,190	3-4P
6,350	2,194	8,544	9,427	2,448	6,979	4-5P
6,597	2,119	8,716	9,237	2,162	7,075	5-6P
6,652	1,863	8,515	8,166	1,960	6,206	6-7P

I-495 South Side PM
Future Diversion Alternative Peak Period Volumes



MD 5	
SB	NB
3,042	2,193
3,705	2,148
3,937	2,218
3,610	2,118

3-4P 4-5P 5-6P 6-7P

MD 5/Auth Rd				
WBR	NBT	NBR	SBT	SBR
494	1,699	410	2,758	284
552	1,596	455	3,366	339
488	1,730	535	3,598	339
482	1,636	460	3,311	299

Auth Rd/Ramp 2/Ramp 9											
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
95	300	15	85	141	80	291	137	227	70	25	62
95	340	20	85	150	210	332	172	262	105	30	70
155	370	10	105	165	300	249	263	315	135	50	74
140	310	10	114	159	150	265	265	232	105	55	58

Suitland Rd/Ramp 8				
SBT	SBR	NBU	NBL	NBT
682	159	15	257	680
816	215	5	342	726
876	205	5	292	726
963	170	15	212	675

Suitland Rd	
SB	NB
850	680
1,040	726
1,090	726
1,141	675

3-4P 4-5P 5-6P 6-7P

Forestville Rd/Ramp 7					Forestville Rd			
WBL	WBR	EBL	EBT	EBR	NBT	NBR	SBL	SBT
5	5	88	5	426	261	10	5	966
5	5	93	5	436	240	0	10	1,071
5	5	53	5	441	203	5	0	1,056
15	0	129	5	466	205	10	5	764

Ramp 7	Forest NB	Forest SB
519	271	1,397
534	240	1,512
499	208	1,502
600	215	1,245

Forestville Rd	
SB	NB
979	341
1,089	325
1,064	248
778	325

3-4P 4-5P 5-6P 6-7P

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
5,886	2,135	8,021	9,368	2,178	7,190
6,350	2,194	8,544	9,427	2,448	6,979
6,597	2,119	8,716	9,237	2,162	7,075
6,652	1,863	8,515	8,166	1,960	6,206

3-4P 4-5P 5-6P 6-7P

MD 337	
SB	NB
14	463
19	483
19	464
9	538

3-4P 4-5P 5-6P 6-7P

Exit 9		
Ramp 4	Ramp 5	Ramp 9
731	279	14
822	384	19
643	478	19
562	394	9

Exit 9	
Ramp 6	Ramp 8
491	416
445	557
440	497
400	381

MD 337	
SB	NB
1,108	1,455
1,113	1,530
1,014	1,305
846	1,305

3-4P 4-5P 5-6P 6-7P

MD 337/Forestville Rd				Forestville Rd	
SBT	SBR	NBL	NBT	EBL	EBR
0	0	1,002	453	10	1,108
0	0	1,062	468	15	1,113
0	0	851	454	10	1,014
5	5	777	528	10	841

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
5,367	2,135	7,502	8,344	2,178	6,166
5,816	2,194	8,010	8,202	2,448	5,754
6,098	2,119	8,217	8,097	2,162	5,935
6,052	1,863	7,915	7,201	1,960	5,241

3-4P 4-5P 5-6P 6-7P

MD 337/Ramp 6			
SBT	NBT	EBL	EBR
1,220	1,280	441	50
1,545	1,325	395	50
1,445	1,295	385	55
1,325	1,065	345	55

Exit 7								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9
903	655	322	889	527	1,358	1,444	284	125
873	766	398	810	517	1,475	1,418	339	135
793	827	458	865	586	1,479	1,323	339	165
629	762	332	950	502	1,412	1,309	299	179

TR 2
117
139
155
133

TR 4	TR 5
657	275
837	320
769	287
708	275

TR 7
1,217
1,254
1,211
1,196

MD 5	
SB	NB
5,976	4,119
6,677	4,034
6,738	4,079
6,451	3,918

3-4P 4-5P 5-6P 6-7P

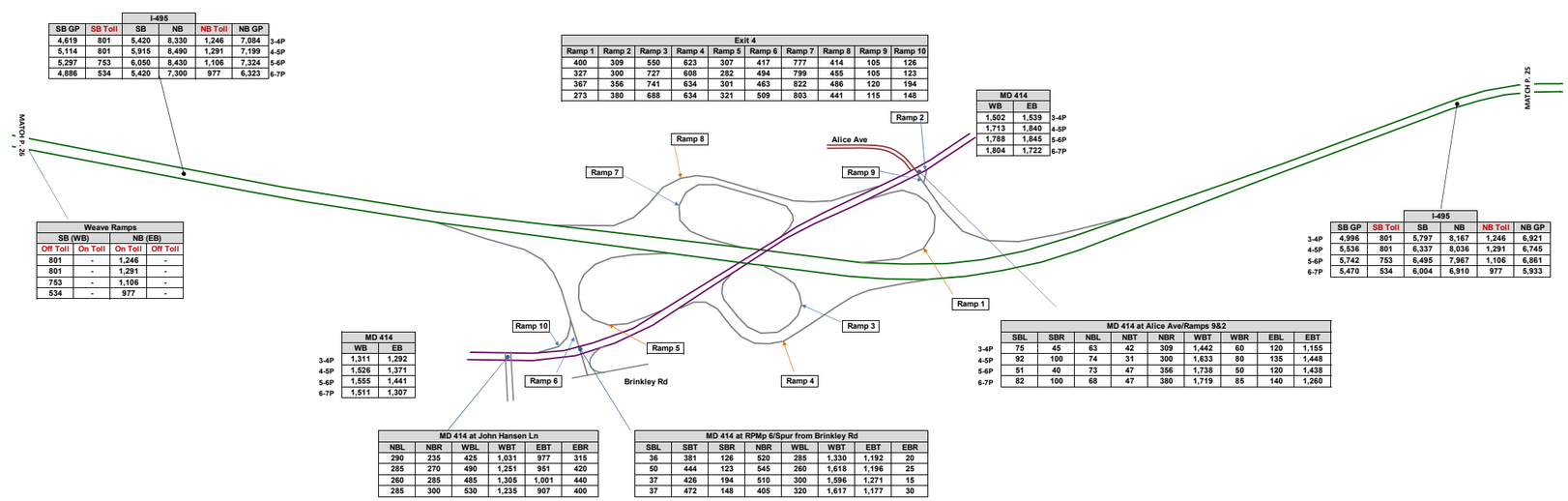
I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
5,783	2,135	7,918	8,835	2,178	6,657
6,373	2,194	8,567	8,647	2,448	6,199
6,595	2,119	8,714	8,537	2,162	6,375
6,434	1,863	8,297	7,601	1,960	5,641

3-4P 4-5P 5-6P 6-7P

MD 337	
SB	NB
1,272	1,280
1,596	1,325
1,501	1,295
1,381	1,065

3-4P 4-5P 5-6P 6-7P

I-495 South Side PM
Future Diversion Alternative Peak Period Volumes



	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	4,619	801	5,420	8,330	1,246	7,084
4-5P	5,114	801	5,915	8,490	1,291	7,199
5-6P	5,297	753	6,050	8,430	1,106	7,324
6-7P	4,886	534	5,420	7,300	977	6,323

Exit 4									
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
400	309	550	623	307	417	777	414	105	126
327	300	727	608	282	494	799	455	105	123
367	356	741	634	301	463	822	486	120	194
273	380	688	634	321	509	803	441	115	148

MD 414		
WB	EB	
1,502	1,539	3-4P
1,713	1,840	4-5P
1,788	1,845	5-6P
1,804	1,722	6-7P

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	4,996	801	5,797	8,167	1,246	6,921
4-5P	5,536	801	6,337	8,036	1,291	6,745
5-6P	5,742	753	6,495	7,967	1,106	6,861
6-7P	5,470	534	6,004	6,910	977	5,933

Weave Ramps			
SB (WB)		NB (EB)	
Off Toll	On Toll	On Toll	Off Toll
801	-	1,246	-
801	-	1,291	-
753	-	1,106	-
534	-	977	-

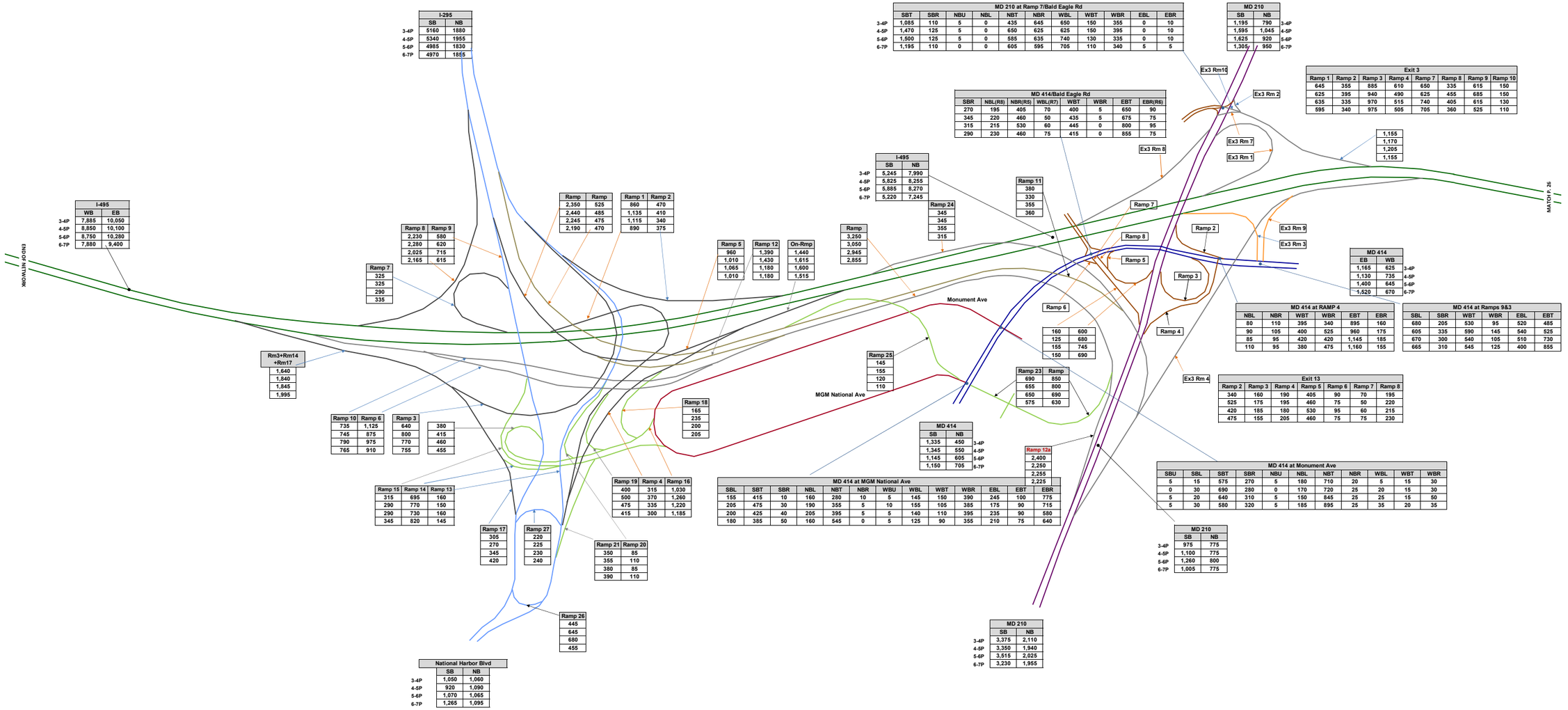
MD 414		
WB	EB	
1,311	1,292	3-4P
1,526	1,371	4-5P
1,555	1,441	5-6P
1,511	1,307	6-7P

MD 414 at Alice Ave/Ramps 9&2								
SBL	SBR	NBL	NBT	NBR	WBT	WBR	EBL	EBT
75	45	63	42	309	1,442	60	120	1,155
92	100	74	31	300	1,633	80	135	1,448
51	40	73	47	356	1,738	50	120	1,438
82	100	68	47	380	1,719	85	140	1,260

MD 414 at John Hansen Ln					
NBL	NBR	WBL	WBT	EBT	EBR
290	235	425	1,031	977	315
285	270	490	1,251	951	420
260	285	485	1,305	1,001	440
285	300	530	1,235	907	400

MD 414 at RPMp 6/Spur from Brinkley Rd							
SBL	SBT	SBR	NBR	WBL	WBT	EBT	EBR
36	381	126	520	285	1,330	1,192	20
50	444	123	545	260	1,618	1,196	25
37	426	194	510	300	1,596	1,271	15
37	472	148	405	320	1,617	1,177	30

I-495 South Side PM
Future Diversion Alternative Peak Period Volumes



ATTACHMENT B – TRAVEL DEMAND TABLE

2040 Diversion Alternative Travel Demand

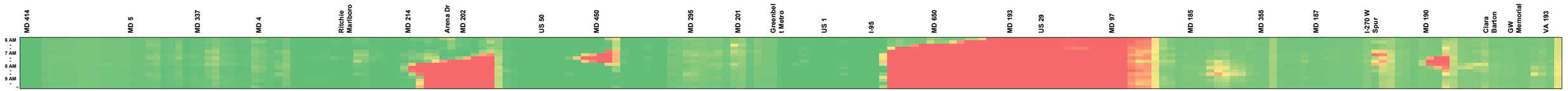
I-495 2040 Diversion Alt Demand	AM Peak								PM Peak							
	Inner Loop				Outer Loop				Inner Loop				Outer Loop			
	6-7 AM	7-8 AM	8-9 AM	9-10AM	6-7 AM	7-8 AM	8-9 AM	9-10AM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN VA-193 AND GW MEMORIAL PKWY	10013	10570	10062	9714	7922.55	8863	9279	9088	7635	8218	8533	7668	8185	8161	7633	7857
AMERICAN LEGION BRIDGE	9764	11368	11554	11046	10409.55	11549	11593	11104	9091	9663	10027	8981	10452	10572	10354	10071
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	9214	10526	10777	10334	10204.55	10872	10318	10023	8264	8415	8415	7688	9390	9204	9075	8920
BETWEEN MD 190 AND I-270	8506	10246	11102	10556	11113	12007	10672	10393	10675	10816	10344	9392	9744	9639	9466	8983
BETWEEN I-270 WEST AND MD 187	5770	5924	5731	5726	5004	5636	4921	5356	5034	4753	4568	3991	5462	5245	5191	4974
BETWEEN I-270 EAST AND MD 187	5555	5637	5380	5600	5089	5489	4777	5373	4377	4080	3889	3291	4856	4718	4701	4180
BETWEEN MD 355 AND MD 185	7844	9778	8926	8547	7659	8741	8830	9105	8148	7752	7430	6559	8128	8315	8634	8201
BETWEEN MD 185 AND MD 97	7219	9169	8897	8275	8598	9152	8883	9205	9587	9089	8571	7634	8071	8540	8912	8231
BETWEEN MD 97 AND US 29	6278	8572	8351	7821	7907	7670	6984	7559	9831	9276	8588	7526	7859	8477	8885	7880
BETWEEN MD US 29 AND MD 193	5827	7879	7696	7117	7127	6715	6103	6641	9489	9262	8497	7199	7305	7951	8212	7103
BETWEEN MD 193 AND MD 650	6072	8149	8062	7245	6678	6082	5565	6288	9610	9493	8757	7641	7652	8151	8482	7256
BETWEEN MD 650 AND I-95	7455	8710	7718	7352	7401	6752	6219	6789	9904	9694	9056	8123	8313	8814	9043	7856
BETWEEN US 1 AND I-95	8710	9511	9238	8966	6888	6956	7021	6761	7712	7851	7412	5553	11182	11740	11068	9866
BETWEEN GREENBELT STATION AND US 1	10480	11777	11778	11024	8008	8320	8015	7309	9740	9556	9094	7597	11245	11774	10820	9761
BETWEEN GREENBELT STATION AND MD 201	10218	11391	11401	10661	8144	8552	8186	7446	9920	9699	9199	7710	10752	11162	10193	9185
BETWEEN MD 201 AND MD 295	9773	10771	11266	10501	8799	9587	9101	8216	9697	9617	9096	7656	10542	10792	9686	8743
BETWEEN MD 295 AND MD 450	9445	10462	10992	10393	9600	10265	9950	9310	10245	9811	9109	7365	9919	9961	9133	8823
BETWEEN MD 450 AND US 50	9490	10302	11352	10383	9530	10295	10250	9690	10749	10292	9630	8227	10325	10434	9515	9115
BETWEEN US 50 AND MD 202	10448	11127	12060	11072	9605	10215	9720	9485	10623	9810	10397	9716	10434	10603	9419	8957
BETWEEN MD 202 AND ARENA DR	10373	10892	11825	10927	9630	10415	9980	9420	10451	9853	10131	9679	10351	10601	9613	9180
BETWEEN ARENA DR AND MD 214	10368	10987	11705	10887	9850	10800	10350	9700	10402	9674	9851	9560	10284	10534	9618	9165
BETWEEN MD 214 AND RITCHIE MARLBORO RD	10368	10877	11200	10657	9580	10890	10260	9410	9958	9642	9784	9417	10449	10885	10206	9473
BETWEEN RITCHIE MARLBORO AND MD 4	9862	10413	10552	10191	8465	9590	8900	8535	8677	8806	9217	8751	9865	10135	9783	8843
BETWEEN MD 4 AND FORESTVILLE RD	9272	9468	10322	9486	7450	8675	7810	7405	8021	8544	8716	8515	9368	9427	9237	8166
BETWEEN FORESTVILLE AND MD 218	8552	8788	9597	8871	6550	7410	6625	6560	7502	8010	8217	7915	8344	8202	8097	7202
BETWEEN MD 218 AND MD 5	8722	8968	9817	9086	7295	8210	7305	6910	7918	8567	8714	8297	8835	8647	8537	7601
BETWEEN MD 5 AND MD 414	7760	6341	7473	7185	5095	6150	5505	5030	5797	6337	6495	6004	8167	8036	7967	6910
BETWEEN MD 414 AND MD 210	8210	6491	7413	6910	5115	5965	5405	4875	5420	5915	6050	5420	8330	8490	8430	7300
BETWEEN MD 210 AND I-295	9445	7541	8168	7295	4770	5670	4990	4435	5245	5825	5885	5220	7990	8255	8270	7245
WOODROW WILSON BRIDGE	11640	11271	11148	8890	8270	9575	8720	7500	7885	8850	8750	7880	10050	10100	10280	9400

I-270 2040 Diversion Alt Demand	AM Peak								PM Peak							
	Southbound				Northbound				Southbound				Northbound			
	6-7 AM	7-8 AM	8-9 AM	9-10AM	6-7 AM	7-8 AM	8-9 AM	9-10AM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN MD 85 AND MD 80	3735	3905	3620	3450	1885	2985	3120	2705	2290	2760	3135	3045	4750	5520	5135	4190
BETWEEN MD 80 AND MD 109	4100	4395	3950	3740	1585	2480	2665	2315	2105	2550	2910	2800	4500	5400	5220	4255
BETWEEN MD 109 AND MD 121	4665	4990	4480	4185	1670	2560	2720	2380	2230	2675	3050	2860	4595	5530	5355	4525
BETWEEN MD 121 AND MD 27	5745	5900	5265	4985	2075	2780	2930	2700	2745	3155	3635	3430	5175	6250	6165	5415
BETWEEN MD 27 AND MD 118	6660	5840	5335	5420	2075	2780	2930	2700	3285	3645	3825	3850	5175	6250	6165	5415
BETWEEN MD 118 AND MIDDLEBROOK RD	7215	6335	5970	5910	2410	3415	3970	3705	3850	4290	4485	4460	7380	8205	8140	7395
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	9240	8350	7780	7450	2830	4190	4940	4540	4875	5315	5740	5555	8835	9685	9635	8960
BETWEEN WATKINS MILL AND MD 124	7990	7075	6555	6250	2685	4305	5265	4835	3965	4385	4850	4680	8260	9200	9415	8710
BETWEEN MD 124 AND MD 117	9885	8715	7955	7500	2625	4310	5400	5015	5110	5575	6230	5755	8810	10130	10335	9615
BETWEEN MD 117 AND I-370	11695	10710	9885	9195	3185	5300	6955	6305	6530	7370	8090	7155	10405	11835	11850	11065
BETWEEN I-370 AND SHADY GROVE RD	10925	11250	10070	9590	2872	4655	6180	5900	6504	6793	7459	6935	11425	12595	11987	11450
BETWEEN SHADY GROVE RD AND MD 28	10930	10755	9490	9080	3542	5670	7755	7245	7039	7475	8441	7558	11640	12616	12026	11352
BETWEEN MD 28 AND MD 189	11770	11885	10615	10100	4104	6652	9413	8647	7990	8397	9443	8590	12642	13897	13432	12790
BETWEEN MD 189 AND MONTROSE RD	11750	12010	10785	10210	3987	6294	8974	8260	7621	8022	8860	8200	12360	13509	13313	12681
BETWEEN MONTROSE RD AND I-270 SPLIT	11143	12787	11739	10763	4652	6774	9217	8383	7609	8112	8567	7864	11916	12811	12793	11945
BETWEEN I-270 SPLIT AND MD 187	4327	5781	5186	4590	1557	2264	3540	3170	3290	3330	3426	3338	4948	5465	5515	5368
BETWEEN MD 187 AND I-495	3610	4811	4171	3828	2152	3144	4085	3595	3397	3470	3482	3198	4346	4572	4645	4827
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	6816	7006	6553	6173	3095	4510	5677	5213	4319	4782	5141	4526	6968	7346	7278	6577
BETWEEN DEMOCRACY BLVD AND I-495	6109	6371	5751	5037	2736	4322	5371	4830	4282	4394	4275	4009	5641	6063	5776	5401

ATTACHMENT C – SPEED MAPS

I-495 OL Speed AM

Existing AM - I-495 OL Speed Map



2040 No-Build AM - I-495 OL Speed Map

2040 Alt-5 AM - I-495 OL Speed Map

2040 Alt-8 AM - I-495 OL Speed Map

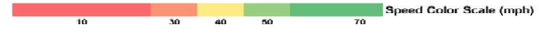
2040 Alt-9 AM - I-495 OL Speed Map

2040 Alt-10 AM - I-495 OL Speed Map

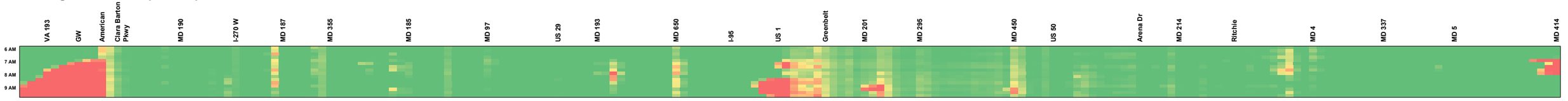
2040 Alt 13B AM - I-495 OL Speed Map

2040 Alt-13C AM - I-495 OL Speed Map

2040 Diversion Alternative AM - I-495 OL Speed Map



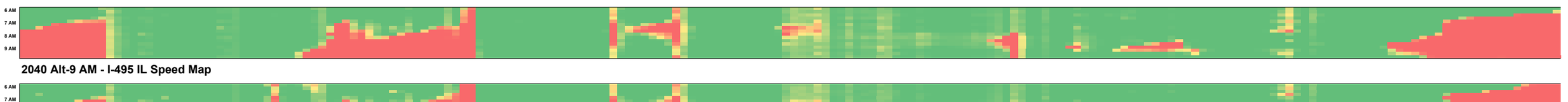
Existing AM - I-495 IL Speed Map



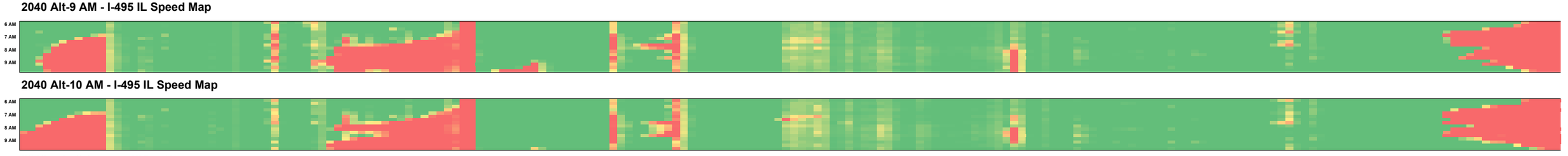
2040 No-Build AM - I-495 IL Speed Map

2040 Alt-5 AM - I-495 IL Speed Map

2040 Alt-8 AM - I-495 IL Speed Map



2040 Alt-9 AM - I-495 IL Speed Map

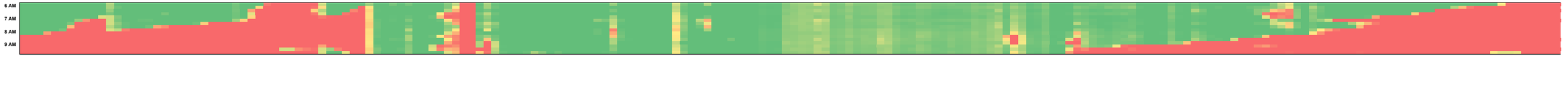


2040 Alt-10 AM - I-495 IL Speed Map

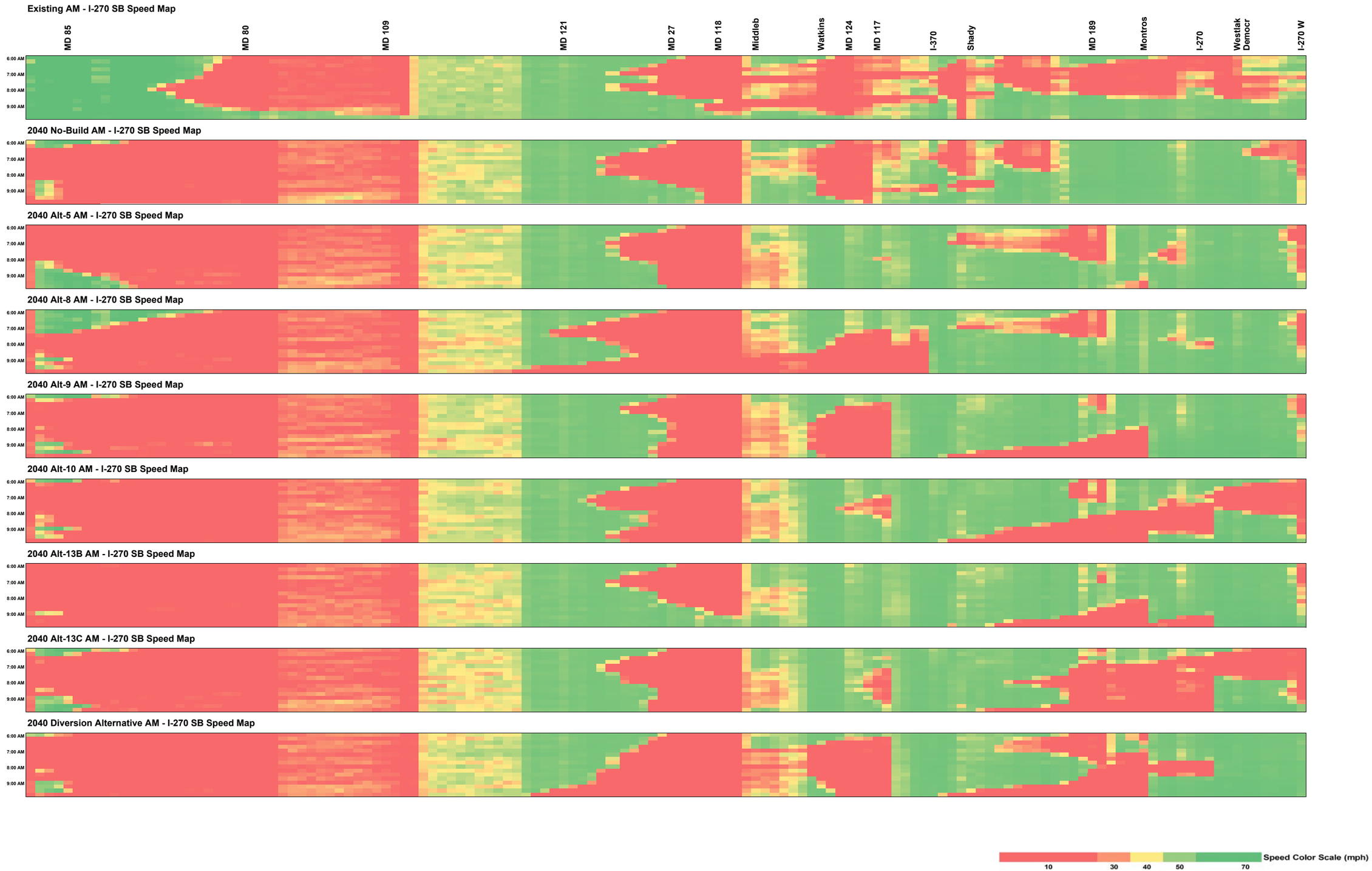
2040 Alt-13B AM - I-495 IL Speed Map

2040 Alt-13C AM - I-495 IL Speed Map

2040 Diversion Alternative AM - I-495 IL Speed Map

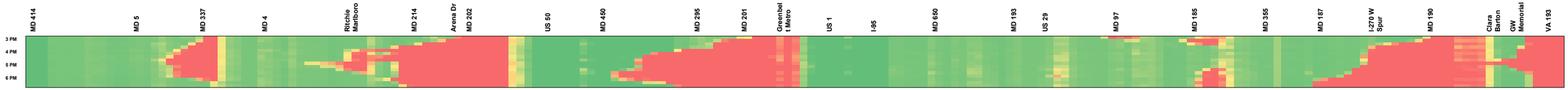


I-270 SB Speed AM

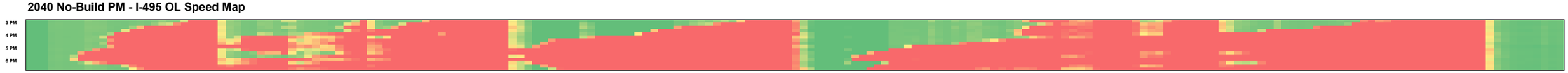


I-495 OL Speed PM

Existing PM - I-495 OL Speed Map



2040 No-Build PM - I-495 OL Speed Map



2040 Alt 5 PM - I-495 OL Speed Map

2040 Alt 8 PM - I-495 OL Speed Map

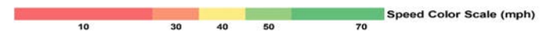
2040 Alt 9 PM - I-495 OL Speed Map

2040 Alt 10 PM - I-495 OL Speed Map

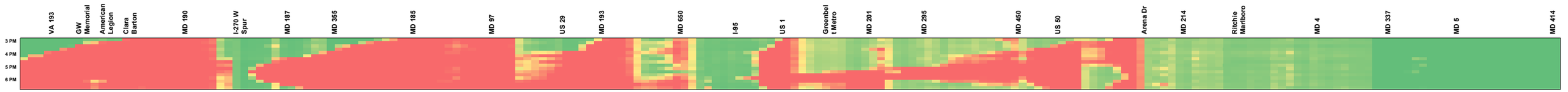
2040 Alt 13B PM - I-495 OL Speed Map

2040 Alt 13C PM - I-495 OL Speed Map

2040 Diversion Alternative PM - I-495 OL Speed Map



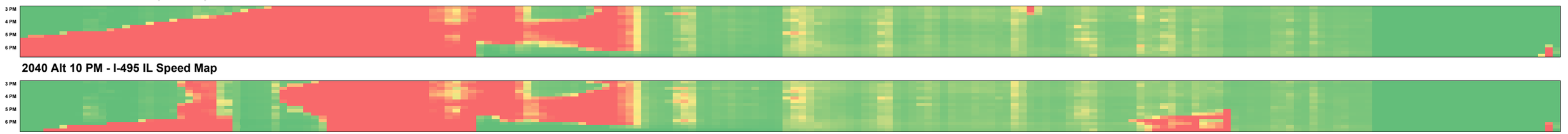
Existing PM - I-495 IL Speed Map



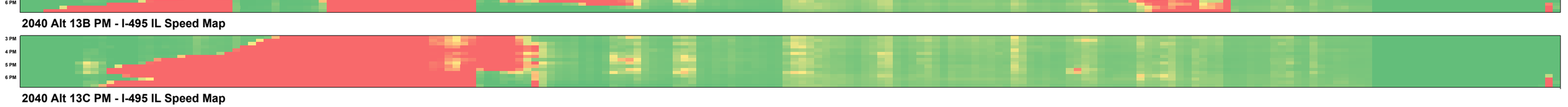
2040 No-Build PM - I-495 IL Speed Map

2040 Alt 5 PM - I-495 IL Speed Map

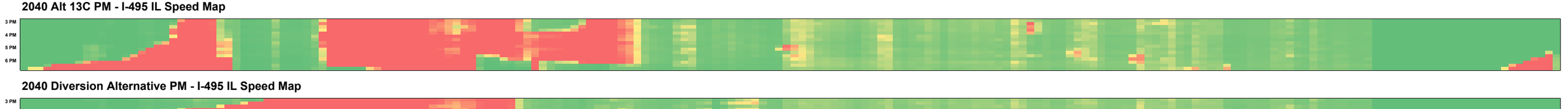
2040 Alt 8 PM - I-495 IL Speed Map



2040 Alt 9 PM - I-495 IL Speed Map



2040 Alt 10 PM - I-495 IL Speed Map



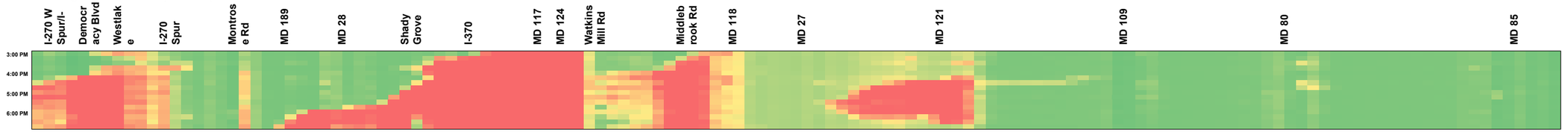
2040 Alt 13B PM - I-495 IL Speed Map

2040 Alt 13C PM - I-495 IL Speed Map

2040 Diversion Alternative PM - I-495 IL Speed Map

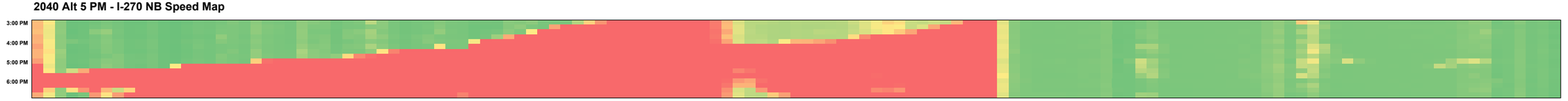
I-270 NB Speed PM

Existing PM - I-270 NB Speed Map



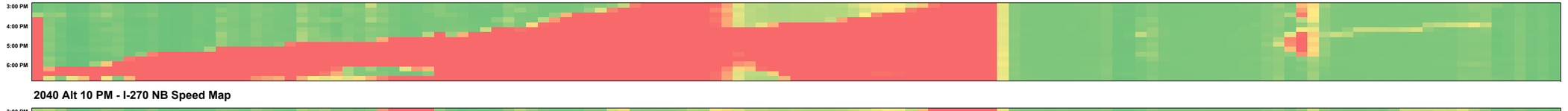
2040 No-Build PM - I-270 NB Speed Map

2040 Alt 5 PM - I-270 NB Speed Map



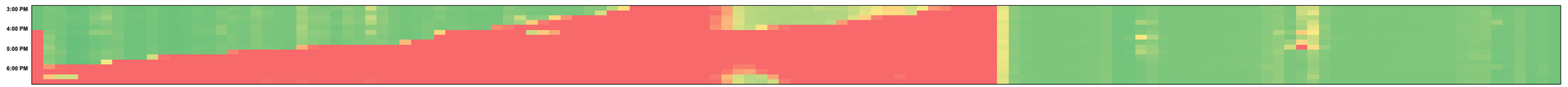
2040 Alt 8 PM - I-270 NB Speed Map

2040 Alt 9 PM - I-270 NB Speed Map

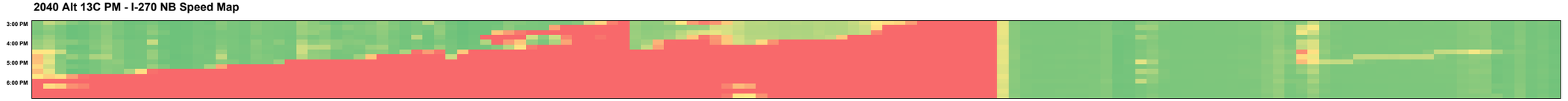


2040 Alt 10 PM - I-270 NB Speed Map

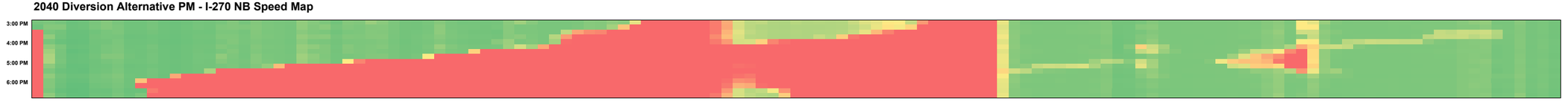
2040 Alt 13B PM - I-270 NB Speed Map



2040 Alt 13C PM - I-270 NB Speed Map



2040 Diversion Alternative PM - I-270 NB Speed Map



ATTACHMENT D – TRAVEL TIME MATRICES

Travel Time Matrix - Diversion Alternative - GP Lane (AM Peak)

Unit: Minute

From	To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	1.1	4.0	6.4	8.4	10.5	11.4	11.9	11.6	14.0	20.8	19.6	18.8	16.6	15.2	12.8	N/A	18.0	19.4	22.9
Shady Grove Rd	I-270 Exit 8	0.9	0	2.9	5.3	7.3	9.5	10.3	10.9	10.6	12.9	19.7	18.5	17.8	15.6	14.1	11.7	N/A	17.0	18.3	21.9
MD 28 (W Montgomery Ave)	I-270 Exit 6	2.9	2.0	0	2.4	4.4	6.6	7.4	8.0	7.7	10.0	16.8	15.6	14.8	12.6	11.2	8.8	N/A	14.1	15.4	18.9
MD 189 (Falls Rd)	I-270 Exit 5	3.8	2.9	0.9	0	2.0	4.2	5.0	5.5	5.2	7.6	14.4	13.2	12.4	10.2	8.8	6.4	N/A	11.7	13.0	16.5
Montrose Rd	I-270 Exit 4	5.1	4.1	2.1	1.3	0	2.2	3.0	3.5	3.2	5.6	12.4	11.2	10.4	8.2	6.8	4.4	N/A	9.7	11.0	14.5
Split	I-270	6.3	5.4	3.4	2.5	1.3	0	0.9	1.4	1.1	3.4	10.2	9.0	8.3	6.1	4.6	2.2	N/A	7.5	8.8	12.4
Westlake Terrace	I-270 W Spur	7.2	6.3	4.2	3.4	2.1	0.8	0	0.5	N/A	N/A	9.4	8.2	7.4	5.2	3.8	1.4	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	7.6	6.6	4.6	3.8	2.5	1.2	0.4	0	N/A	N/A	8.9	7.7	6.9	4.7	3.3	0.9	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	6.9	6.0	4.0	3.1	1.8	0.6	N/A	N/A	0	2.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.4	7.7	11.3
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	7.6	6.6	4.6	3.8	2.5	1.2	N/A	N/A	0.7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.1	5.4	9.0
VA 193 (Georgetown Pike)	I-495 Exit 44	17.6	16.7	14.6	13.8	12.5	11.2	10.4	10.0	N/A	N/A	0	1.7	3.1	5.1	5.7	9.2	18.7	22.0	23.3	26.9
George Washington Memorial Pkwy	I-495 Exit 43	15.9	15.0	13.0	12.1	10.8	9.6	8.7	8.3	N/A	N/A	1.2	0	1.4	3.4	4.0	7.5	17.0	20.3	21.6	25.2
Clara Barton Pkwy	I-495 Exit 41	14.5	13.6	11.6	10.7	9.4	8.2	7.3	6.9	N/A	N/A	2.0	0.8	0	2.0	2.6	6.1	15.6	18.9	20.2	23.8
Cabin John Pkwy	I-495 Exit 40	12.5	11.6	9.5	8.7	7.4	6.1	5.3	4.9	N/A	N/A	4.2	3.0	2.2	0	0.6	4.1	13.6	16.9	18.2	21.8
MD 190 (River Rd)	I-495 Exit 39	11.9	11.0	8.9	8.1	6.8	5.5	4.7	4.3	N/A	N/A	5.6	4.4	3.6	1.4	0	3.5	13.0	16.3	17.6	21.2
I-270 West Spur	I-495 Exit 38	8.4	7.5	5.5	4.6	3.3	2.0	1.2	0.8	N/A	N/A	8.0	6.8	6.0	3.8	2.4	0	9.5	12.8	14.1	17.7
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.1	8.9	8.2	5.9	4.5	2.1	0	3.3	4.6	8.1
I-270 East Spur	I-495 Exit 35	8.9	8.0	6.0	5.1	3.9	2.6	N/A	N/A	2.0	1.4	12.1	10.9	10.1	7.9	6.5	4.1	2.0	0	1.3	4.9
MD 355 (Rockville Pike)	I-495 Exit 34	9.5	8.6	6.6	5.7	4.4	3.2	N/A	N/A	2.6	1.9	12.6	11.4	10.7	8.5	7.0	4.6	2.5	0.6	0	3.6
MD 185 (Connecticut Ave)	I-495 Exit 33	11.3	10.4	8.4	7.5	6.3	5.0	N/A	N/A	4.4	3.8	14.5	13.3	12.5	10.3	8.9	6.5	4.4	2.4	1.8	0
MD 97 (Georgia Ave)	I-495 Exit 31	15.2	14.2	12.2	11.3	10.1	8.8	N/A	N/A	8.3	7.6	18.3	17.1	16.3	14.1	12.7	10.3	8.2	6.2	5.7	3.8
US 29 (Colesville Rd)	I-495 Exit 30	17.8	16.9	14.9	14.0	12.8	11.5	N/A	N/A	10.9	10.3	21.0	19.8	19.0	16.8	15.4	13.0	10.9	8.9	8.3	6.5
MD 193 (University Blvd E)	I-495 Exit 29	18.7	17.8	15.8	14.9	13.7	12.4	N/A	N/A	11.8	11.2	21.9	20.7	19.9	17.7	16.3	13.9	11.8	9.8	9.2	7.4
MD 650 (New Hampshire Ave)	I-495 Exit 28	22.9	22.0	20.0	19.1	17.9	16.6	N/A	N/A	16.0	15.4	26.1	24.9	24.1	21.9	20.5	18.1	16.0	14.0	13.4	11.6
I-95	I-495 Exit 27	24.0	23.1	21.0	20.2	18.9	17.6	N/A	N/A	17.1	16.4	27.1	25.9	25.2	22.9	21.5	19.1	17.0	15.0	14.5	12.7
US 1 (Baltimore Ave)	I-495 Exit 25	25.0	24.1	22.1	21.2	19.9	18.7	N/A	N/A	18.1	17.4	28.1	26.9	26.2	24.0	22.6	20.1	18.0	16.1	15.5	13.7
Greenbelt Metro Station	I-495 Exit 24	26.4	25.4	23.4	22.6	21.3	20.0	N/A	N/A	19.5	18.8	29.5	28.3	27.6	25.3	23.9	21.5	19.4	17.4	16.9	15.0
MD 201 (Kenilworth Ave)	I-495 Exit 23	29.5	28.6	26.6	25.7	24.4	23.2	N/A	N/A	22.6	22.0	32.7	31.5	30.7	28.5	27.1	24.7	22.5	20.6	20.0	18.2
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	30.6	29.7	27.7	26.8	25.5	24.3	N/A	N/A	23.7	23.0	33.8	32.6	31.8	29.6	28.2	25.8	23.6	21.7	21.1	19.3
MD 450 (Annapolis Rd)	I-495 Exit 20	33.3	32.3	30.3	29.5	28.2	26.9	N/A	N/A	26.4	25.7	36.4	35.2	34.5	32.2	30.8	28.4	26.3	24.3	23.8	21.9
US 50 (John Hanson Hwy)	I-495 Exit 19	34.8	33.9	31.9	31.0	29.8	28.5	N/A	N/A	27.9	27.3	38.0	36.8	36.0	33.8	32.4	30.0	27.9	25.9	25.3	23.5
MD 202 (Landover Rd)	I-495 Exit 17	37.0	36.1	34.1	33.2	31.9	30.6	N/A	N/A	30.1	29.4	40.1	38.9	38.2	36.0	34.5	32.1	30.0	28.0	27.5	25.7
Arena Dr	I-495 Exit 16	37.7	36.8	34.8	33.9	32.6	31.4	N/A	N/A	30.8	30.1	40.8	39.6	38.9	36.7	35.3	32.8	30.7	28.8	28.2	26.4
MD 214 (Central Ave)	I-495 Exit 15	38.8	37.8	35.8	35.0	33.7	32.4	N/A	N/A	31.9	31.2	41.9	40.7	40.0	37.7	36.3	33.9	31.8	29.8	29.3	27.4
Ritchie-Marlboro Rd	I-495 Exit 13	40.5	39.6	37.5	36.7	35.4	34.1	N/A	N/A	33.6	32.9	43.6	42.4	41.7	39.5	38.0	35.6	33.5	31.5	31.0	29.2
MD 4 (Pennsylvania Ave)	I-495 Exit 11	43.1	42.1	40.1	39.2	38.0	36.7	N/A	N/A	36.2	35.5	46.2	45.0	44.2	42.0	40.6	38.2	36.1	34.1	33.6	31.7
MD 337 (Suitland Pkwy)	I-495 Exit 9	44.4	43.5	41.5	40.6	39.4	38.1	N/A	N/A	37.5	36.9	47.6	46.4	45.6	43.4	42.0	39.6	37.4	35.5	34.9	33.1
MD 5 (Branch Ave)	I-495 Exit 7	46.6	45.7	43.7	42.8	41.6	40.3	N/A	N/A	39.7	39.1	49.8	48.6	47.8	45.6	44.2	41.8	39.6	37.7	37.1	35.3
MD 414 (St Barnabas Rd)	I-495 Exit 4	49.7	48.7	46.7	45.9	44.6	43.3	N/A	N/A	42.8	42.1	52.8	51.6	50.8	48.6	47.2	44.8	42.7	40.7	40.2	38.3

Unit: Minute

From	To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	I-270 Exit 9	25.8	27.3	28.0	29.8	31.6	32.6	33.6	35.2	36.2	38.8	40.3	42.4	43.1	44.3	46.1	49.1	51.7	62.4	77.3
Shady Grove Rd	I-270 Exit 8	24.8	26.3	27.0	28.8	30.5	31.6	32.5	34.2	35.2	37.7	39.2	41.4	42.1	43.3	45.1	48.0	50.6	61.3	76.2
MD 28 (W Montgomery Ave)	I-270 Exit 6	21.9	23.3	24.1	25.8	27.6	28.7	29.6	31.2	32.3	34.8	36.3	38.4	39.2	40.4	42.2	45.1	47.7	58.4	73.3
MD 189 (Falls Rd)	I-270 Exit 5	19.4	20.9	21.6	23.4	25.2	26.2	27.2	28.8	29.9	32.4	33.9	36.0	36.7	38.0	39.8	42.7	45.3	56.0	70.9
Montrose Rd	I-270 Exit 4	17.4	18.9	19.6	21.4	23.2	24.2	25.2	26.8	27.9	30.4	31.9	34.0	34.7	36.0	37.8	40.7	43.3	54.0	68.9
Split	I-270	15.3	16.8	17.5	19.3	21.0	22.1	23.0	24.7	25.7	28.2	29.7	31.9	32.6	33.8	35.6	38.5	41.1	51.8	66.7
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	14.2	15.7	16.4	18.2	20.0	21.0	22.0	23.6	24.6	27.1	28.6	30.8	31.5	32.7	34.5	37.4	40.0	50.7	65.7
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	11.9	13.4	14.1	15.8	17.6	18.7	19.6	21.2	22.3	24.8	26.3	28.5	29.2	30.4	32.2	35.1	37.7	48.4	63.3
VA 193 (Georgetown Pike)	I-495 Exit 44	29.8	31.3	32.0	33.8	35.5	36.6	37.5	39.2	40.2	42.7	44.2	46.4	47.1	48.3	50.1	53.0	55.6	66.3	81.2
George Washington Memorial Pkwy	I-495 Exit 43	28.1	29.6	30.3	32.1	33.9	34.9	35.9	37.5	38.5	41.1	42.5	44.7	45.4	46.6	48.4	51.3	53.9	64.6	79.6
Clara Barton Pkwy	I-495 Exit 41	26.7	28.2	28.9	30.7	32.5	33.5	34.5	36.1	37.1	39.7	41.1	43.3	44.0	45.2	47.0	49.9	52.5	63.2	78.2
Cabin John Pkwy	I-495 Exit 40	24.7	26.2	26.9	28.7	30.4	31.5	32.4	34.1	35.1	37.6	39.1	41.3	42.0	43.2	45.0	47.9	50.5	61.2	76.1
MD 190 (River Rd)	I-495 Exit 39	24.1	25.6	26.3	28.1	29.8	30.9	31.8	33.5	34.5	37.0	38.5	40.7	41.4	42.6	44.4	47.3	49.9	60.6	75.5
I-270 West Spur	I-495 Exit 38	20.6	22.1	22.8	24.6	26.3	27.4	28.3	30.0	31.0	33.5	35.0	37.2	37.9	39.1	40.9	43.8	46.4	57.1	72.0
MD 187 (Old Georgetown Rd)	I-495 Exit 36	11.1	12.6	13.3	15.0	16.8	17.9	18.8	20.4	21.5	24.0	25.5	27.7	28.4	29.6	31.4	34.3	36.9	47.6	62.5
I-270 East Spur	I-495 Exit 35	7.8	9.3	10.0	11.8	13.5	14.6	15.5	17.2	18.2	20.7	22.2	24.4	25.1	26.3	28.1	31.0	33.6	44.3	59.2
MD 355 (Rockville Pike)	I-495 Exit 34	6.5	8.0	8.7	10.4	12.2	13.3	14.2	15.9	16.9	19.4	20.9	23.1	23.8	25.0	26.8	29.7	32.3	43.0	57.9
MD 185 (Connecticut Ave)	I-495 Exit 33	2.9	4.4	5.1	6.9	8.7	9.7	10.7	12.3	13.3	15.9	17.3	19.5	20.2	21.4	23.2	26.1	28.7	39.4	54.4
MD 97 (Georgia Ave)	I-495 Exit 31	0	1.5	2.2	4.0	5.7	6.8	7.7	9.4	10.4	12.9	14.4	16.6	17.3	18.5	20.3	23.2	25.8	36.5	51.4
US 29 (Colesville Rd)	I-495 Exit 30	4.4	0	0.7	2.5	4.3	5.3	6.3	7.9	8.9	11.5	12.9	15.1	15.8	17.0	18.8	21.7	24.3	35.0	50.0
MD 193 (University Blvd E)	I-495 Exit 29	5.3	0.9	0	1.8	3.5	4.6	5.5	7.2	8.2	10.7	12.2	14.4	15.1	16.3	18.1	21.0	23.6	34.3	49.2
MD 650 (New Hampshire Ave)	I-495 Exit 28	9.5	5.1	1.7	0	1.8	2.8	3.8	5.4	6.4	9.0	10.4	12.6	13.3	14.5	16.3	19.2	21.9	32.5	47.5
I-95	I-495 Exit 27	10.5	6.2	2.7	1.8	0	1.1	2.0	3.6	4.7	7.2	8.7	10.8	11.6	12.8	14.6	17.5	20.1	30.8	45.7
US 1 (Baltimore Ave)	I-495 Exit 25	11.5	7.2	3.7	2.9	1.0	0	0.9	2.6	3.6	6.1	7.6	9.8	10.5	11.7	13.5	16.4	19.0	29.7	44.6
Greenbelt Metro Station	I-495 Exit 24	12.9	8.5	5.1	4.2	2.4	1.4	0	1.6	2.7	5.2	6.7	8.8	9.6	10.8	12.6	15.5	18.1	28.8	43.7
MD 201 (Kenilworth Ave)	I-495 Exit 23	16.1	11.7	8.2	7.4	5.5	4.5	3.2	0	1.0	3.6	5.0	7.2	7.9	9.1	10.9	13.8	16.5	27.1	42.1
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	17.1	12.8	9.3	8.5	6.6	5.6	4.2	1.1	0	2.5	4.0	6.2	6.9	8.1	9.9	12.8	15.4	26.1	41.0
MD 450 (Annapolis Rd)	I-495 Exit 20	19.8	15.4	12.0	11.1	9.3	8.3	6.9	3.7	2.7	0	1.5	3.6	4.4	5.6	7.4	10.3	12.9	23.6	38.5
US 50 (John Hanson Hwy)	I-495 Exit 19	21.4	17.0	13.6	12.7	10.9	9.8	8.5	5.3	4.2	1.6	0	2.2	2.9	4.1	5.9	8.8	11.4	22.1	37.0
MD 202 (Landover Rd)	I-495 Exit 17	23.5	19.2	15.7	14.8	13.0	12.0	10.6	7.5	6.4	3.7	2.1	0	0.7	1.9	3.7	6.6	9.2	19.9	34.9
Arena Dr	I-495 Exit 16	24.2	19.9	16.4	15.6	13.7	12.7	11.3	8.2	7.1	4.4	2.9	0.7	0	1.2	3.0	5.9	8.5	19.2	34.1
MD 214 (Central Ave)	I-495 Exit 15	25.3	21.0	17.5	16.6	14.8	13.8	12.4	9.3	8.2	5.5	3.9	1.8	1.1	0	1.8	4.7	7.3	18.0	32.9
Ritchie-Marlboro Rd	I-495 Exit 13	27.0	22.7	19.2	18.3	16.5	15.5	14.1	11.0	9.9	7.2	5.6	3.5	2.8	1.7	0	2.9	5.5	16.2	31.1
MD 4 (Pennsylvania Ave)	I-495 Exit 11	29.6	25.2	21.8	20.9	19.1	18.1	16.7	13.5	12.4	9.8	8.2	6.1	5.4	4.3	2.6	0	2.6	13.3	28.2
MD 337 (Suitland Pkwy)	I-495 Exit 9	31.0	26.6	23.1	22.3	20.4	19.4	18.1	14.9	13.8	11.2	9.6	7.4	6.7	5.7	3.9	1.4	0	10.7	25.6
MD 5 (Branch Ave)	I-495 Exit 7	33.2	28.8	25.3	24.5	22.6	21.6	20.3	17.1	16.0	13.4	11.8	9.6	8.9	7.8	6.1	3.6	2.2	0	14.9
MD 414 (St Barnabas Rd)	I-495 Exit 4	36.2	31.8	28.4	27.5	25.7	24.7	23.3	20.1	19.1	16.4	14.8	12.7	12.0	10.9	9.2	6.6	5.2	3.0	0

Travel Time Matrix - Diversion Alternative - ETL (AM Peak)

Unit: Minute

From \ To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	0.9	2.8	3.7	4.8	6.0	6.9	7.4	7.1	9.4	13.0	11.9	11.3	9.9	9.4	8.1	N/A	13.5	14.8	18.4
Shady Grove Rd	I-270 Exit 8	0.9	0	1.9	2.9	4.0	5.2	6.1	6.5	6.2	8.6	12.1	11.1	10.4	9.0	8.5	7.2	N/A	12.7	14.0	17.5
MD 28 (W Montgomery Ave)	I-270 Exit 6	2.9	2.0	0	1.0	2.0	3.2	4.1	4.6	4.3	6.7	10.2	9.2	8.5	7.1	6.6	5.3	N/A	10.7	12.1	15.6
MD 189 (Falls Rd)	I-270 Exit 5	3.7	2.9	0.8	0	1.1	2.3	3.2	3.6	3.4	5.7	9.2	8.2	7.6	6.1	5.6	4.4	N/A	9.8	11.1	14.7
Montrose Rd	I-270 Exit 4	5.8	4.9	2.9	2.1	0	1.2	2.1	2.6	2.3	4.6	8.1	7.1	6.5	5.1	4.6	3.3	N/A	8.7	10.0	13.6
Split	I-270	7.9	7.0	5.0	4.1	2.1	0	0.9	1.3	1.1	3.4	6.9	5.9	5.3	3.9	3.4	2.1	N/A	7.5	8.8	12.4
Westlake Terrace	I-270 W Spur	8.7	7.9	5.8	5.0	2.9	0.9	0	0.4	N/A	N/A	6.0	5.0	4.4	3.0	2.5	1.2	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	9.1	8.2	6.2	5.4	3.3	1.3	0.4	0	N/A	N/A	5.6	4.6	3.9	2.5	2.0	0.7	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	8.4	7.5	5.5	4.7	2.6	0.6	N/A	N/A	0	2.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.4	7.7	11.3
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	9.1	8.2	6.2	5.4	3.3	1.2	N/A	N/A	0.7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.1	5.4	9.0
VA 193 (Georgetown Pike)	I-495 Exit 44	15.8	14.9	12.9	12.0	10.0	7.9	7.0	6.7	N/A	N/A	0	1.4	2.1	3.7	4.0	5.9	15.4	18.7	20.0	23.6
George Washington Memorial Pkwy	I-495 Exit 43	14.4	13.5	11.5	10.6	8.6	6.5	5.6	5.2	N/A	N/A	1.0	0	0.7	2.3	2.6	4.5	14.0	17.3	18.6	22.1
Clara Barton Pkwy	I-495 Exit 41	13.6	12.8	10.8	9.9	7.9	5.8	4.9	4.5	N/A	N/A	1.7	0.6	0	1.6	1.9	3.8	13.3	16.6	17.9	21.4
Cabin John Pkwy	I-495 Exit 40	12.0	11.2	9.1	8.3	6.2	4.2	3.3	2.9	N/A	N/A	3.1	2.1	1.4	0	0.3	2.1	11.7	14.9	16.3	19.8
MD 190 (River Rd)	I-495 Exit 39	11.7	10.9	8.8	8.0	6.0	3.9	3.0	2.6	N/A	N/A	3.6	2.6	1.9	0.5	0	1.8	11.4	14.7	16.0	19.5
I-270 West Spur	I-495 Exit 38	9.9	9.0	7.0	6.2	4.1	2.0	1.2	0.8	N/A	N/A	4.9	3.9	3.2	1.8	1.3	0	9.5	12.8	14.1	17.7
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.0	6.0	5.3	3.9	3.4	2.1	0	3.3	4.6	8.1
I-270 East Spur	I-495 Exit 35	10.5	9.6	7.6	6.7	4.7	2.6	N/A	N/A	2.0	1.4	8.9	7.9	7.3	5.9	5.4	4.1	2.0	0	1.3	4.9
MD 355 (Rockville Pike)	I-495 Exit 34	11.0	10.1	8.1	7.3	5.2	3.2	N/A	N/A	2.6	1.9	9.5	8.5	7.8	6.4	5.9	4.6	2.5	0.6	0	3.6
MD 185 (Connecticut Ave)	I-495 Exit 33	12.8	12.0	10.0	9.1	7.1	5.0	N/A	N/A	4.4	3.8	11.3	10.3	9.7	8.3	7.8	6.5	4.4	2.4	1.8	0
MD 97 (Georgia Ave)	I-495 Exit 31	16.7	15.8	13.8	12.9	10.9	8.8	N/A	N/A	8.3	7.6	15.2	14.1	13.5	12.1	11.6	10.3	8.2	6.2	5.7	3.8
US 29 (Colesville Rd)	I-495 Exit 30	19.3	18.5	16.5	15.6	13.6	11.5	N/A	N/A	10.9	10.3	17.8	16.8	16.2	14.8	14.3	13.0	10.9	8.9	8.3	6.5
MD 193 (University Blvd E)	I-495 Exit 29	20.2	19.4	17.4	16.5	14.5	12.4	N/A	N/A	11.8	11.2	18.7	17.7	17.1	15.7	15.2	13.9	11.8	9.8	9.2	7.4
MD 650 (New Hampshire Ave)	I-495 Exit 28	24.4	23.6	21.6	20.7	18.7	16.6	N/A	N/A	16.0	15.4	22.9	21.9	21.3	19.9	19.4	18.1	16.0	14.0	13.4	11.6
I-95	I-495 Exit 27	25.5	24.6	22.6	21.7	19.7	17.6	N/A	N/A	17.1	16.4	24.0	22.9	22.3	20.9	20.4	19.1	17.0	15.0	14.5	12.6
US 1 (Baltimore Ave)	I-495 Exit 25	26.4	25.5	23.5	22.7	20.6	18.6	N/A	N/A	18.0	17.3	24.9	23.9	23.2	21.8	21.3	20.0	17.9	16.0	15.4	13.6
Greenbelt Metro Station	I-495 Exit 24	27.3	26.4	24.4	23.6	21.5	19.4	N/A	N/A	18.9	18.2	25.8	24.8	24.1	22.7	22.2	20.9	18.8	16.8	16.3	14.4
MD 201 (Kenilworth Ave)	I-495 Exit 23	28.5	27.6	25.6	24.8	22.7	20.6	N/A	N/A	20.1	19.4	27.0	26.0	25.3	23.9	23.4	22.1	20.0	18.0	17.5	15.6
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	29.4	28.5	26.5	25.7	23.6	21.5	N/A	N/A	21.0	20.3	27.9	26.9	26.2	24.8	24.3	23.0	20.9	18.9	18.4	16.5
MD 450 (Annapolis Rd)	I-495 Exit 20	31.8	30.9	28.9	28.1	26.0	23.9	N/A	N/A	23.4	22.7	30.3	29.3	28.6	27.2	26.7	25.4	23.3	21.3	20.8	18.9
US 50 (John Hanson Hwy)	I-495 Exit 19	33.2	32.3	30.3	29.5	27.4	25.4	N/A	N/A	24.8	24.1	31.7	30.7	30.0	28.6	28.1	26.8	24.7	22.8	22.2	20.4
MD 202 (Landover Rd)	I-495 Exit 17	35.2	34.3	32.3	31.5	29.4	27.3	N/A	N/A	26.8	26.1	33.7	32.7	32.0	30.6	30.1	28.8	26.7	24.7	24.2	22.3
Arena Dr	I-495 Exit 16	35.8	35.0	32.9	32.1	30.0	28.0	N/A	N/A	27.4	26.7	34.3	33.3	32.7	31.2	30.7	29.5	27.3	25.4	24.8	23.0
MD 214 (Central Ave)	I-495 Exit 15	36.8	35.9	33.9	33.1	31.0	28.9	N/A	N/A	28.4	27.7	35.3	34.3	33.6	32.2	31.7	30.4	28.3	26.3	25.8	24.0
Ritchie-Marlboro Rd	I-495 Exit 13	38.3	37.5	35.5	34.6	32.6	30.5	N/A	N/A	29.9	29.3	36.8	35.8	35.2	33.8	33.3	32.0	29.9	27.9	27.3	25.5
MD 4 (Pennsylvania Ave)	I-495 Exit 11	40.7	39.8	37.8	36.9	34.9	32.8	N/A	N/A	32.2	31.6	39.1	38.1	37.5	36.1	35.6	34.3	32.2	30.2	29.6	27.8
MD 337 (Suitland Pkwy)	I-495 Exit 9	41.8	40.9	38.9	38.1	36.0	34.0	N/A	N/A	33.4	32.7	40.3	39.3	38.6	37.2	36.7	35.4	33.3	31.4	30.8	29.0
MD 5 (Branch Ave)	I-495 Exit 7	43.6	42.8	40.8	39.9	37.9	35.8	N/A	N/A	35.2	34.6	42.1	41.1	40.5	39.1	38.6	37.3	35.1	33.2	32.6	30.8
MD 414 (St Barnabas Rd)	I-495 Exit 4	46.5	45.7	43.6	42.8	40.7	38.7	N/A	N/A	38.1	37.4	45.0	44.0	43.4	41.9	41.4	40.2	38.0	36.1	35.5	33.7

Unit: Minute

From \ To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	I-270 Exit 9	21.3	22.8	23.5	25.3	27.1	28.0	28.8	30.2	31.0	33.2	34.4	36.3	36.9	38.1	41.8	44.0	45.1	48.3	57.0
Shady Grove Rd	I-270 Exit 8	20.5	21.9	22.6	24.4	26.2	27.2	27.9	29.3	30.1	32.3	33.6	35.4	36.1	37.2	40.9	43.1	44.2	47.4	56.2
MD 28 (W Montgomery Ave)	I-270 Exit 6	18.5	20.0	20.7	22.5	24.3	25.3	26.0	27.4	28.2	30.4	31.6	33.5	34.2	35.3	39.0	41.2	42.3	45.5	54.3
MD 189 (Falls Rd)	I-270 Exit 5	17.6	19.1	19.8	21.6	23.3	24.3	25.0	26.4	27.3	29.4	30.7	32.6	33.2	34.3	38.0	40.3	41.3	44.5	53.3
Montrose Rd	I-270 Exit 4	16.5	18.0	18.7	20.5	22.2	23.2	24.0	25.3	26.2	28.3	29.6	31.5	32.1	33.3	37.0	39.2	40.3	43.4	52.2
Split	I-270	15.3	16.8	17.5	19.3	21.0	22.0	22.8	24.1	25.0	27.1	28.4	30.3	30.9	32.0	35.7	38.0	39.1	42.2	51.0
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	14.2	15.7	16.4	18.2	20.0	20.9	21.7	23.0	23.9	26.0	27.3	29.2	29.8	31.0	34.7	36.9	38.0	41.1	49.9
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	11.9	13.4	14.1	15.8	17.6	18.6	19.3	20.7	21.6	23.7	25.0	26.9	27.5	28.6	32.3	34.6	35.6	38.8	47.6
VA 193 (Georgetown Pike)	I-495 Exit 44	26.5	28.0	28.7	30.4	32.2	33.2	33.9	35.3	36.2	38.3	39.6	41.5	42.1	43.2	46.9	49.2	50.2	53.4	62.2
George Washington Memorial Pkwy	I-495 Exit 43	25.1	26.5	27.3	29.0	30.8	31.8	32.5	33.9	34.8	36.9	38.2	40.1	40.7	41.8	45.5	47.7	48.8	52.0	60.8
Clara Barton Pkwy	I-495 Exit 41	24.4	25.8	26.6	28.3	30.1	31.1	31.8	33.2	34.0	36.2	37.5	39.4	40.0	41.1	44.8	47.0	48.1	51.3	60.1
Cabin John Pkwy	I-495 Exit 40	22.7	24.2	24.9	26.7	28.5	29.5	30.2	31.6	32.4	34.6	35.8	37.7	38.3	39.5	43.2	45.4	46.5	49.7	58.5
MD 190 (River Rd)	I-495 Exit 39	22.4	23.9	24.6	26.4	28.2	29.2	29.9	31.3	32.1	34.3	35.6	37.4	38.1	39.2	42.9	45.1	46.2	49.4	58.2
I-270 West Spur	I-495 Exit 38	20.6	22.1	22.8	24.6	26.3	27.3	28.1	29.4	30.3	32.4	33.7	35.6	36.2	37.4	41.1	43.3	44.4	47.5	56.3
MD 187 (Old Georgetown Rd)	I-495 Exit 36	11.1	12.6	13.3	15.0	16.8	17.8	18.5	19.9	20.8	22.9	24.2	26.1	26.7	27.8	31.5	33.8	34.8	38.0	46.8
I-270 East Spur	I-495 Exit 35	7.8	9.3	10.0	11.8	13.5	14.5	15.3	16.6	17.5	19.6	20.9	22.8	23.4	24.5	28.2	30.5	31.5	34.7	43.5
MD 355 (Rockville Pike)	I-495 Exit 34	6.5	8.0	8.7	10.4	12.2	13.2	13.9	15.3	16.2	18.3	19.6	21.5	22.1	23.2	26.9	29.2	30.2	33.4	42.2
MD 185 (Connecticut Ave)	I-495 Exit 33	2.9	4.4	5.1	6.9	8.7	9.6	10.4	11.8	12.6	14.8	16.0	17.9	18.5	19.7	23.4	25.6	26.7	29.9	38.6
MD 97 (Georgia Ave)	I-495 Exit 31	0	1.5	2.2	4.0	5.7	6.7	7.5	8.8	9.7	11.8	13.1	15.0	15.6	16.8	20.5	22.7	23.8	26.9	35.7
US 29 (Colesville Rd)	I-495 Exit 30	4.4	0	0.7	2.5	4.3	5.2	6.0	7.3	8.2	10.4	11.6	13.5	14.1	15.3	19.0	21.2	22.3	25.5	34.2
MD 193 (University Blvd E)	I-495 Exit 29	5.3	0.9	0	1.8	3.5	4.5	5.3	6.6	7.5	9.6	10.9	12.8	13.4	14.6	18.3	20.5	21.6	24.7	33.5
MD 650 (New Hampshire Ave)	I-495 Exit 28	9.5	5.1	1.7	0	1.8	2.8	3.5	4.9	5.7	7.9	9.1	11.0	11.6	12.8	16.5	18.7	19.8	23.0	31.7
I-95	I-495 Exit 27	10.5	6.1	2.7	1.8	0	1.0	1.7	3.1	3.9	6.1	7.4	9.3	9.9	11.0	14.7	16.9	18.0	21.2	30.0
US 1 (Baltimore Ave)	I-495 Exit 25	11.4	7.1	3.6	2.8	1.0	0	0.7	2.1	3.0	5.1	6.4	8.3	8.9	10.0	13.7	16.0	17.0	20.2	29.0
Greenbelt Metro Station	I-495 Exit 24	12.3	7.9	4.5	3.6	1.8	0.9	0	1.4	2.2	4.4	5.6	7.5	8.1	9.3	13.0	15.2	16.3	19.5	28.3
MD 201 (Kenilworth Ave)	I-495 Exit 23	13.5	9.1	5.7	4.8	3.0	2.1	1.2	0	0.9	3.0	4.3	6.2	6.8	7.9	11.6	13.9	14.9	18.1	26.9
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	14.4	10.0	6.6	5.7	3.9	3.0	2.1	0.9	0	2.2	3.4	5.3	5.9	7.1	10.8	13.0	14.1	17.3	26.0
MD 450 (Annapolis Rd)	I-495 Exit 20	16.8	12.4	9.0	8.1	6.3	5.4	4.5	3.3	2.4	0	1.3	3.2	3.8	4.9	8.6	10.8	11.9	15.1	23.9
US 50 (John Hanson Hwy)	I-495 Exit 19	18.2	13.9	10.4	9.5	7.7	6.8	5.9	4.7	3.8	1.4	0	1.9	2.5	3.6	7.3	9.6	10.6	13.8	22.6
MD 202 (Landover Rd)	I-495 Exit 17	20.2	15.8	12.4	11.5	9.7	8.8	7.9	6.7	5.8	3.4	2.0	0	0.6	1.8	5.5	7.7	8.8	11.9	20.7
Arena Dr	I-495 Exit 16	20.8	16.5	13.0	12.2	10.4	9.4	8.6	7.4	6.4	4.1	2.6	0.7	0	1.1	4.8	7.1	8.1	11.3	20.1
MD 214 (Central Ave)	I-495 Exit 15	21.8	17.5	14.0	13.1	11.3	10.4	9.5	8.3	7.4	5.0	3.6	1.6	1.0	0	3.7	5.9	7.0	10.2	19.0
Ritchie-Marlboro Rd	I-495 Exit 13	23.4	19.0	15.6	14.7	12.9	11.9	11.1	9.9	9.0	6.6	5.1	3.2	2.5	1.5	0	2.2	3.3	6.5	15.3
MD 4 (Pennsylvania Ave)	I-495 Exit 11	25.7	21.3	17.9	17.0	15.2	14.2	13.4	12.2	11.3	8.9	7.4	5.5	4.8	3.9	2.3	0	1.1	4.3	13.0
MD 337 (Suitland Pkwy)	I-495 Exit 9	26.8	22.5	19.0	18.1	16.3	15.4	14.5	13.3	12.4	10.0	8.6	6.6	6.0	5.0	3.5	1.2	0	3.2	12.0
MD 5 (Branch Ave)	I-495 Exit 7	28.7	24.3	20.8	20.0	18.2	17.2	16.4	15.2	14.3	11.9	10.4	8.5	7.8	6.8	5.3	3.0	1.8	0	8.8
MD 414 (St Barnabas Rd)	I-495 Exit 4	31.5	27.2	23.7	22.9	21.1	20.1	19.3	18.1	17.1	14.8	13.3	11.4	10.7	9.7	8.2	5.9	4.7	2.9	0

Travel Time Matrix - Diversion Alternative - GP Lane (PM Peak)

Unit: Minute

From	To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	0.9	3.0	4.1	5.3	6.9	7.7	8.2	8.4	13.4	14.8	13.6	12.8	11.1	10.5	9.0	N/A	21.0	23.1	28.7
Shady Grove Rd	I-270 Exit 8	1.2	0	2.1	3.2	4.4	6.0	6.8	7.3	7.5	12.5	13.9	12.7	11.9	10.2	9.6	8.1	N/A	20.1	22.1	27.8
MD 28 (W Montgomery Ave)	I-270 Exit 6	3.4	2.2	0	1.1	2.3	3.9	4.7	5.2	5.4	10.4	11.7	10.6	9.8	8.1	7.5	6.0	N/A	18.0	20.0	25.7
MD 189 (Falls Rd)	I-270 Exit 5	4.4	3.3	1.0	0	1.2	2.8	3.6	4.1	4.3	9.3	10.7	9.5	8.7	7.0	6.4	4.9	N/A	16.9	19.0	24.6
Montrose Rd	I-270 Exit 4	5.9	4.7	2.5	1.5	0	1.6	2.4	2.9	3.1	8.1	9.4	8.2	7.5	5.7	5.2	3.7	N/A	15.7	17.7	23.4
Split	I-270	7.4	6.3	4.0	3.0	1.5	0	0.8	1.3	1.5	6.5	7.8	6.6	5.9	4.1	3.6	2.1	N/A	14.1	16.1	21.8
Westlake Terrace	I-270 W Spur	8.4	7.2	5.0	4.0	2.5	1.0	0	0.5	N/A	N/A	7.0	5.9	5.1	3.4	2.8	1.3	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	8.9	7.7	5.5	4.4	3.0	1.4	0.5	0	N/A	N/A	6.6	5.4	4.6	2.9	2.3	0.8	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	8.1	6.9	4.6	3.6	2.1	0.6	N/A	N/A	0	5.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.6	14.7	20.3
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	8.8	7.6	5.4	4.3	2.9	1.3	N/A	N/A	0.7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.6	9.6	15.3
VA 193 (Georgetown Pike)	I-495 Exit 44	36.2	35.1	32.8	31.8	30.3	28.8	27.8	27.4	N/A	N/A	0	2.3	4.9	14.8	17.3	26.4	41.9	46.2	48.2	53.9
George Washington Memorial Pkwy	I-495 Exit 43	33.9	32.7	30.5	29.5	28.0	26.5	25.5	25.1	N/A	N/A	1.2	0	2.6	12.4	14.9	24.1	39.6	43.9	45.9	51.6
Clara Barton Pkwy	I-495 Exit 41	31.3	30.1	27.9	26.9	25.4	23.9	22.9	22.4	N/A	N/A	1.9	0.8	0	9.8	12.3	21.5	36.9	41.2	43.3	49.0
Cabin John Pkwy	I-495 Exit 40	21.5	20.3	18.1	17.0	15.6	14.0	13.1	12.6	N/A	N/A	3.7	2.5	1.7	0	2.5	11.7	27.1	31.4	33.5	39.1
MD 190 (River Rd)	I-495 Exit 39	19.0	17.8	15.6	14.6	13.1	11.6	10.6	10.1	N/A	N/A	4.2	3.0	2.3	0.6	0	9.2	24.6	28.9	31.0	36.6
I-270 West Spur	I-495 Exit 38	9.8	8.6	6.4	5.4	3.9	2.4	1.4	0.9	N/A	N/A	5.8	4.6	3.8	2.1	1.5	0	15.5	19.8	21.8	27.5
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.8	6.6	5.8	4.1	3.5	2.0	0	4.3	6.3	12.0
I-270 East Spur	I-495 Exit 35	10.4	9.2	6.9	5.9	4.4	2.9	N/A	N/A	2.3	1.6	10.4	9.2	8.5	6.7	6.2	4.6	2.6	0	2.0	7.7
MD 355 (Rockville Pike)	I-495 Exit 34	11.9	10.7	8.4	7.4	5.9	4.4	N/A	N/A	3.8	3.1	11.9	10.7	10.0	8.2	7.7	6.1	4.1	1.5	0	5.7
MD 185 (Connecticut Ave)	I-495 Exit 33	15.0	13.8	11.5	10.5	9.0	7.5	N/A	N/A	6.9	6.2	15.0	13.8	13.1	11.3	10.8	9.2	7.2	4.6	3.1	0
MD 97 (Georgia Ave)	I-495 Exit 31	18.3	17.1	14.9	13.9	12.4	10.9	N/A	N/A	10.3	9.5	18.3	17.2	16.4	14.7	14.1	12.6	10.6	7.9	6.4	3.3
US 29 (Colesville Rd)	I-495 Exit 30	20.8	19.6	17.3	16.3	14.9	13.3	N/A	N/A	12.7	12.0	20.8	19.6	18.9	17.1	16.6	15.1	13.1	10.4	8.9	5.8
MD 193 (University Blvd E)	I-495 Exit 29	22.6	21.4	19.2	18.2	16.7	15.2	N/A	N/A	14.6	13.9	22.7	21.5	20.7	19.0	18.5	16.9	14.9	12.3	10.8	7.7
MD 650 (New Hampshire Ave)	I-495 Exit 28	25.5	24.3	22.0	21.0	19.5	18.0	N/A	N/A	17.4	16.7	25.5	24.3	23.6	21.8	21.3	19.7	17.7	15.1	13.6	10.5
I-95	I-495 Exit 27	26.7	25.5	23.2	22.2	20.7	19.2	N/A	N/A	18.6	17.9	26.7	25.5	24.8	23.0	22.5	21.0	19.0	16.3	14.8	11.7
US 1 (Baltimore Ave)	I-495 Exit 25	27.7	26.5	24.3	23.3	21.8	20.3	N/A	N/A	19.7	18.9	27.8	26.6	25.8	24.1	23.5	22.0	20.0	17.4	15.9	12.8
Greenbelt Metro Station	I-495 Exit 24	29.1	27.9	25.6	24.6	23.1	21.6	N/A	N/A	21.0	20.3	29.1	27.9	27.2	25.4	24.9	23.3	21.3	18.7	17.2	14.1
MD 201 (Kenilworth Ave)	I-495 Exit 23	33.3	32.1	29.9	28.8	27.4	25.8	N/A	N/A	25.2	24.5	33.3	32.1	31.4	29.7	29.1	27.6	25.6	22.9	21.4	18.3
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	38.5	37.3	35.1	34.0	32.6	31.0	N/A	N/A	30.4	29.7	38.5	37.4	36.6	34.9	34.3	32.8	30.8	28.1	26.6	23.5
MD 450 (Annapolis Rd)	I-495 Exit 20	52.4	51.2	49.0	47.9	46.5	44.9	N/A	N/A	44.3	43.6	52.4	51.3	50.5	48.8	48.2	46.7	44.7	42.0	40.5	37.4
US 50 (John Hanson Hwy)	I-495 Exit 19	66.1	64.9	62.7	61.7	60.2	58.7	N/A	N/A	58.1	57.4	66.2	65.0	64.2	62.5	62.0	60.4	58.4	55.8	54.3	51.2
MD 202 (Landover Rd)	I-495 Exit 17	83.2	82.0	79.8	78.8	77.3	75.8	N/A	N/A	75.2	74.4	83.3	82.1	81.3	79.6	79.0	77.5	75.5	72.9	71.4	68.3
Arena Dr	I-495 Exit 16	87.9	86.7	84.5	83.5	82.0	80.5	N/A	N/A	79.9	79.1	88.0	86.8	86.0	84.3	83.7	82.2	80.2	77.6	76.1	73.0
MD 214 (Central Ave)	I-495 Exit 15	93.6	92.4	90.1	89.1	87.6	86.1	N/A	N/A	85.5	84.8	93.6	92.4	91.7	89.9	89.4	87.8	85.8	83.2	81.7	78.6
Ritchie-Marlboro Rd	I-495 Exit 13	98.0	96.8	94.6	93.5	92.1	90.5	N/A	N/A	89.9	89.2	98.0	96.8	96.1	94.4	93.8	92.3	90.3	87.6	86.1	83.0
MD 4 (Pennsylvania Ave)	I-495 Exit 11	101.2	100.0	97.8	96.8	95.3	93.7	N/A	N/A	93.1	92.4	101.2	100.1	99.3	97.6	97.0	95.5	93.5	90.8	89.3	86.2
MD 337 (Suitland Pkwy)	I-495 Exit 9	103.0	101.8	99.6	98.6	97.1	95.6	N/A	N/A	95.0	94.3	103.1	101.9	101.1	99.4	98.9	97.3	95.3	92.7	91.2	88.1
MD 5 (Branch Ave)	I-495 Exit 7	105.3	104.1	101.8	100.8	99.3	97.8	N/A	N/A	97.2	96.5	105.3	104.1	103.4	101.6	101.1	99.5	97.5	94.9	93.4	90.3
MD 414 (St Barnabas Rd)	I-495 Exit 4	108.3	107.1	104.9	103.9	102.4	100.9	N/A	N/A	100.3	99.5	108.4	107.2	106.4	104.7	104.1	102.6	100.6	98.0	96.5	93.4

Unit: Minute

From	To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	I-270 Exit 9	33.9	36.3	37.8	40.8	43.1	44.3	45.2	46.8	47.9	50.5	52.0	54.3	55.0	56.4	58.4	61.0	62.3	64.3	66.7
Shady Grove Rd	I-270 Exit 8	33.0	35.4	36.9	39.9	42.2	43.4	44.3	45.9	47.0	49.6	51.1	53.4	54.1	55.5	57.5	60.1	61.4	63.4	65.8
MD 28 (W Montgomery Ave)	I-270 Exit 6	30.9	33.3	34.8	37.8	40.1	41.3	42.2	43.8	44.9	47.5	49.0	51.3	52.0	53.4	55.3	58.0	59.2	61.2	63.6
MD 189 (Falls Rd)	I-270 Exit 5	29.8	32.2	33.7	36.7	39.0	40.2	41.1	42.7	43.8	46.4	47.9	50.2	50.9	52.3	54.3	56.9	58.2	60.2	62.6
Montrose Rd	I-270 Exit 4	28.6	30.9	32.5	35.5	37.8	39.0	39.9	41.5	42.6	45.1	46.7	49.0	49.7	51.1	53.0	55.7	56.9	58.9	61.3
Split	I-270	27.0	29.3	30.9	33.9	36.2	37.4	38.3	39.9	41.0	43.5	45.1	47.4	48.1	49.5	51.4	54.1	55.3	57.3	59.7
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	25.5	27.9	29.4	32.4	34.7	35.9	36.8	38.4	39.5	42.1	43.6	45.9	46.6	48.0	50.0	52.6	53.9	55.9	58.3
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	20.5	22.8	24.4	27.4	29.7	30.9	31.8	33.4	34.5	37.1	38.6	40.9	41.6	43.0	44.9	47.6	48.8	50.8	53.2
VA 193 (Georgetown Pike)	I-495 Exit 44	59.1	61.4	63.0	66.0	68.3	69.5	70.4	72.0	73.1	75.6	77.2	79.5	80.2	81.6	83.5	86.2	87.4	89.4	91.8
George Washington Memorial Pkwy	I-495 Exit 43	56.8	59.1	60.6	63.6	66.0	67.2	68.0	69.7	70.7	73.3	74.9	77.1	77.9	79.3	81.2	83.9	85.1	87.1	89.5
Clara Barton Pkwy	I-495 Exit 41	54.1	56.5	58.0	61.0	63.4	64.5	65.4	67.1	68.1	70.7	72.3	74.5	75.3	76.6	78.6	81.3	82.5	84.5	86.9
Cabin John Pkwy	I-495 Exit 40	44.3	46.7	48.2	51.2	53.6	54.7	55.6	57.2	58.3	60.9	62.4	64.7	65.5	66.8	68.8	71.4	72.7	74.7	77.1
MD 190 (River Rd)	I-495 Exit 39	41.8	44.2	45.7	48.7	51.1	52.2	53.1	54.7	55.8	58.4	59.9	62.2	63.0	64.3	66.3	68.9	70.2	72.2	74.6
I-270 West Spur	I-495 Exit 38	32.6	35.0	36.5	39.5	41.9	43.0	43.9	45.6	46.6	49.2	50.8	53.0	53.8	55.1	57.1	59.8	61.0	63.0	65.4
MD 187 (Old Georgetown Rd)	I-495 Exit 36	17.2	19.6	21.1	24.1	26.4	27.6	28.5	30.1	31.2	33.8	35.3	37.6	38.3	39.7	41.6	44.3	45.5	47.5	49.9
I-270 East Spur	I-495 Exit 35	12.9	15.3	16.8	19.8	22.1	23.3	24.2	25.8	26.9	29.5	31.0	33.3	34.0	35.4	37.3	40.0	41.2	43.2	45.6
MD 355 (Rockville Pike)	I-495 Exit 34	10.9	13.2	14.7	17.7	20.1	21.3	22.2	23.8	24.8	27.4	29.0	31.2	32.0	33.4	35.3	38.0	39.2	41.2	43.6
MD 185 (Connecticut Ave)	I-495 Exit 33	5.2	7.6	9.1	12.1	14.4	15.6	16.5	18.1	19.2	21.8	23.3	25.6	26.3	27.7	29.6	32.3	33.5	35.5	37.9
MD 97 (Georgia Ave)	I-495 Exit 31	0	2.4	3.9	6.9	9.2	10.4	11.3	12.9	14.0	16.6	18.1	20.4	21.1	22.5	24.4	27.1	28.4	30.4	32.7
US 29 (Colesville Rd)	I-495 Exit 30	2.7	0	1.5	4.5	6.9	8.0	8.9	10.6	11.6	14.2	15.8	18.0	18.8	20.1	22.1	24.8	26.0	28.0	30.4
MD 193 (University Blvd E)	I-495 Exit 29	4.5	1.3	0	3.0	5.3	6.5	7.4	9.0	10.1	12.7	14.2	16.5	17.2	18.6	20.6	23.2	24.5	26.5	28.9
MD 650 (New Hampshire Ave)	I-495 Exit 28	7.3	4.1	1.8	0	2.3	3.5	4.4	6.0	7.1	9.7	11.2	13.5	14.3	15.6	17.6	20.2	21.5	23.5	25.9
I-95	I-495 Exit 27	8.6	5.3	3.0	1.8	0	1.2	2.1	3.7	4.7	7.3	8.9	11.2	11.9	13.3	15.2	17.9	19.1	21.1	23.5
US 1 (Baltimore Ave)	I-495 Exit 25	9.6	6.3	4.1	2.9	1.0	0	0.9	2.5	3.6	6.2	7.7	10.0	10.7	12.1	14.1	16.7	18.0	20.0	22.3
Greenbelt Metro Station	I-495 Exit 24	11.0	7.7	5.4	4.2	2.4	1.4	0	1.6	2.7	5.3	6.8	9.1	9.8	11.2	13.2	15.8	17.1	19.1	21.5
MD 201 (Kenilworth Ave)	I-495 Exit 23	15.2	11.9	9.6	8.5	6.6	5.6	4.2	0	1.1	3.6	5.2	7.5	8.2	9.6	11.5	14.2	15.4	17.4	19.8
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	20.4	17.1	14.9	13.7	11.8	10.8	9.4	5.2	0	2.6	4.1	6.4	7.2	8.5	10.5	13.1	14.4	16.4	18.8
MD 450 (Annapolis Rd)	I-495 Exit 20	34.3	31.0	28.8	27.6	25.7	24.7	23.3	19.1	13.9	0	1.5	3.8	4.6	5.9	7.9	10.6	11.8	13.8	16.2
US 50 (John Hanson Hwy)	I-495 Exit 19	48.0	44.8	42.5	41.3	39.5	38.4	37.1	32.9	27.6	13.7	0	2.3	3.0	4.4	6.3	9.0	10.2	12.2	14.6
MD 202 (Landover Rd)	I-495 Exit 17	65.1	61.8	59.6	58.4	56.6	55.5	54.2	49.9	44.7	30.8	17.1	0	0.7	2.1	4.1	6.7	8.0	10.0	12.4
Arena Dr	I-495 Exit 16	69.8	66.5	64.3	63.1	61.3	60.2	58.9	54.6	49.4	35.5	21.8	4.7	0	1.4	3.3	6.0	7.2	9.2	11.6
MD 214 (Central Ave)	I-495 Exit 15	75.5	72.2	69.9	68.7	66.9	65.8	64.5	60.3	55.1	41.2	27.4	10.3	5.6	0	1.9	4.6	5.9	7.8	10.2
Ritchie-Marlboro Rd	I-495 Exit 13	79.9	76.6	74.3	73.2	71.3	70.3	68.9	64.7	59.5	45.6	31.8	14.8	10.1	4.4	0	2.7	3.9	5.9	8.3
MD 4 (Pennsylvania Ave)	I-495 Exit 11	83.1	79.8	77.6	76.4	74.5	73.5	72.1	67.9	62.7	48.8	35.1	18.0	13.3	7.6	3.2	0	1.2	3.2	5.6
MD 337 (Suitland Pkwy)	I-495 Exit 9	84.9	81.6	79.4	78.2	76.4	75.3	74.0	69.7	64.5	50.6	36.9	19.8	15.1	9.5	5.1	1.8	0	2.0	4.4
MD 5 (Branch Ave)	I-495 Exit 7	87.2	83.9	81.6	80.4	78.6	77.5	76.2	72.0	66.8	52.9	39.1	22.0	17.3	11.7	7.3	4.1	2.2	0	2.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	90.2	86.9	84.7	83.5	81.7	80.6	79.3	75.0	69.8	55.9	42.2	25.1	20.4	14.8	10.3	7.1	5.3	3.1	0

Travel Time Matrix - Diversion Alternative - ETL (PM Peak)

Unit: Minute

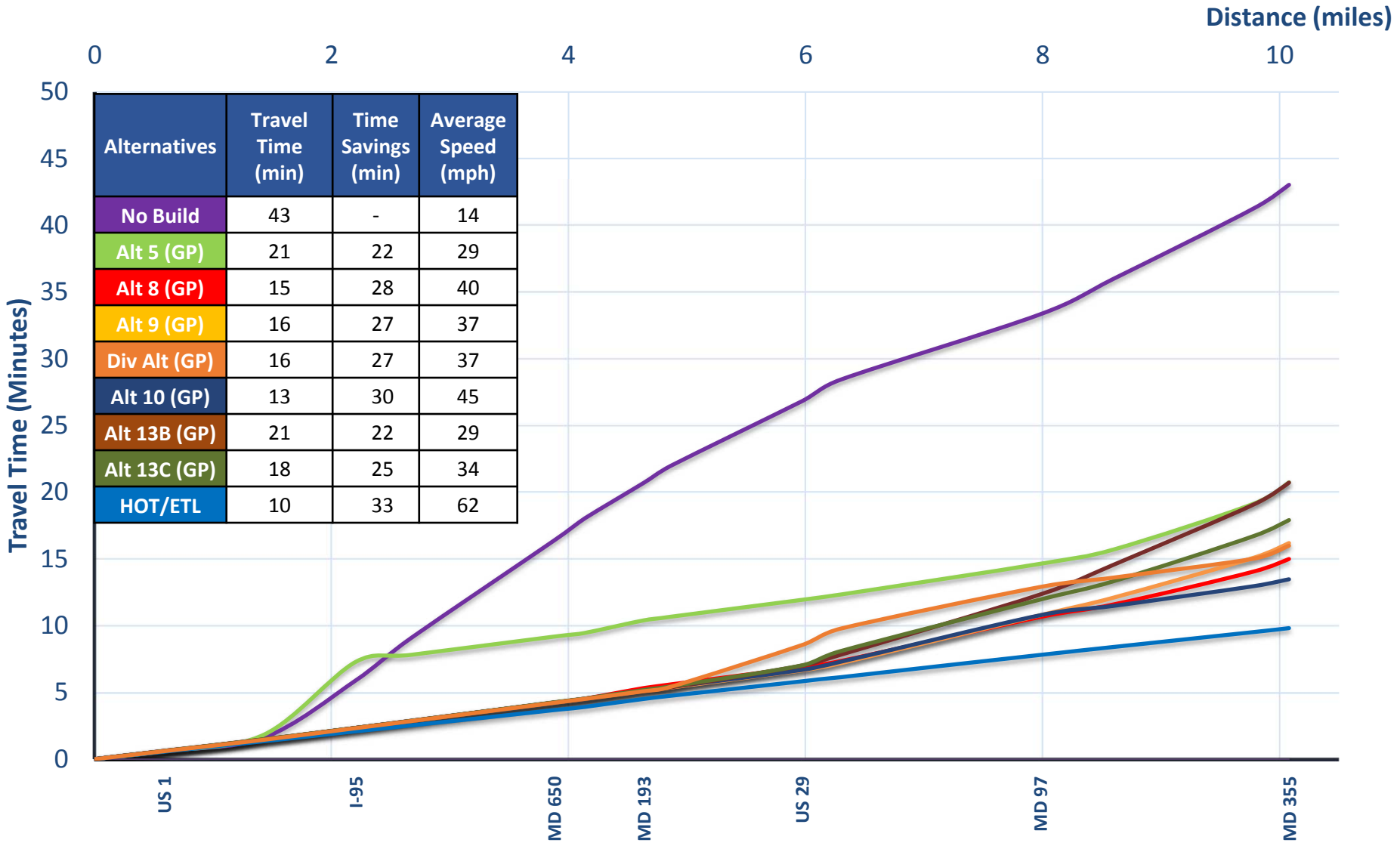
From \ To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	0.9	2.8	3.7	4.8	6.0	6.9	7.3	7.5	12.5	13.0	12.0	11.3	9.8	9.4	8.0	N/A	20.1	22.1	27.8
Shady Grove Rd	I-270 Exit 8	1.0	0	1.9	2.9	3.9	5.1	6.0	6.5	6.6	11.6	12.1	11.1	10.4	9.0	8.5	7.2	N/A	19.2	21.2	26.9
MD 28 (W Montgomery Ave)	I-270 Exit 6	2.9	1.9	0	0.9	2.0	3.2	4.1	4.5	4.7	9.7	10.2	9.2	8.5	7.1	6.6	5.2	N/A	17.3	19.3	25.0
MD 189 (Falls Rd)	I-270 Exit 5	3.7	2.7	0.8	0	1.0	2.3	3.1	3.6	3.7	8.8	9.3	8.2	7.6	6.1	5.6	4.3	N/A	16.3	18.4	24.1
Montrose Rd	I-270 Exit 4	5.0	4.0	2.1	1.3	0	1.2	2.1	2.5	2.7	7.7	8.2	7.2	6.5	5.1	4.6	3.3	N/A	15.3	17.3	23.0
Split	I-270	6.2	5.3	3.4	2.5	1.3	0	0.9	1.3	1.5	6.5	7.0	6.0	5.3	3.9	3.4	2.0	N/A	14.1	16.1	21.8
Westlake Terrace	I-270 W Spur	7.1	6.1	4.2	3.4	2.1	0.9	0	0.5	N/A	N/A	6.1	5.1	4.4	3.0	2.5	1.2	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	7.5	6.5	4.6	3.8	2.5	1.3	0.4	0	N/A	N/A	5.7	4.6	4.0	2.5	2.0	0.7	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	6.8	5.9	4.0	3.1	1.9	0.6	N/A	N/A	0	5.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.6	14.7	20.3
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	7.6	6.6	4.7	3.9	2.6	1.3	N/A	N/A	0.7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.6	9.6	15.3
VA 193 (Georgetown Pike)	I-495 Exit 44	15.5	14.6	12.7	11.8	10.6	9.3	8.4	8.0	N/A	N/A	0	1.1	1.9	3.9	4.2	7.3	22.7	27.0	29.0	34.7
George Washington Memorial Pkwy	I-495 Exit 43	14.4	13.4	11.5	10.7	9.4	8.2	7.3	6.9	N/A	N/A	1.0	0	0.7	2.7	3.0	6.1	21.6	25.9	27.9	33.6
Clara Barton Pkwy	I-495 Exit 41	13.7	12.7	10.8	10.0	8.7	7.4	6.6	6.2	N/A	N/A	1.7	0.7	0	2.0	2.3	5.4	20.8	25.1	27.2	32.9
Cabin John Pkwy	I-495 Exit 40	11.7	10.7	8.8	7.9	6.7	5.4	4.6	4.2	N/A	N/A	3.1	2.1	1.4	0	0.3	3.4	18.8	23.1	25.2	30.9
MD 190 (River Rd)	I-495 Exit 39	11.4	10.4	8.5	7.7	6.4	5.1	4.3	3.9	N/A	N/A	3.6	2.6	1.9	0.5	0	3.1	18.5	22.8	24.9	30.6
I-270 West Spur	I-495 Exit 38	8.3	7.3	5.4	4.6	3.3	2.0	1.2	0.8	N/A	N/A	5.0	3.9	3.3	1.8	1.3	0	15.5	19.8	21.8	27.5
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.0	5.9	5.3	3.8	3.3	2.0	0	4.3	6.3	12.0
I-270 East Spur	I-495 Exit 35	9.1	8.2	6.3	5.4	4.2	2.9	N/A	N/A	2.3	1.6	9.6	8.6	7.9	6.5	6.0	4.6	2.6	0	2.0	7.7
MD 355 (Rockville Pike)	I-495 Exit 34	10.6	9.7	7.8	6.9	5.7	4.4	N/A	N/A	3.8	3.1	11.1	10.1	9.4	8.0	7.5	6.1	4.1	1.5	0	5.7
MD 185 (Connecticut Ave)	I-495 Exit 33	13.7	12.8	10.9	10.0	8.8	7.5	N/A	N/A	6.9	6.2	14.2	13.2	12.5	11.1	10.6	9.2	7.2	4.6	3.1	0
MD 97 (Georgia Ave)	I-495 Exit 31	17.1	16.1	14.2	13.4	12.1	10.9	N/A	N/A	10.3	9.5	17.5	16.5	15.9	14.4	13.9	12.6	10.6	7.9	6.4	3.3
US 29 (Colesville Rd)	I-495 Exit 30	19.6	18.6	16.7	15.8	14.6	13.3	N/A	N/A	12.7	12.0	20.0	19.0	18.3	16.9	16.4	15.1	13.1	10.4	8.9	5.8
MD 193 (University Blvd E)	I-495 Exit 29	21.4	20.5	18.6	17.7	16.5	15.2	N/A	N/A	14.6	13.9	21.9	20.8	20.2	18.7	18.2	16.9	14.9	12.3	10.8	7.7
MD 650 (New Hampshire Ave)	I-495 Exit 28	24.2	23.3	21.4	20.5	19.3	18.0	N/A	N/A	17.4	16.7	24.7	23.7	23.0	21.6	21.1	19.7	17.7	15.1	13.6	10.5
I-95	I-495 Exit 27	25.4	24.5	22.6	21.7	20.5	19.2	N/A	N/A	18.6	17.9	25.9	24.8	24.2	22.7	22.2	20.9	18.9	16.3	14.8	11.7
US 1 (Baltimore Ave)	I-495 Exit 25	26.4	25.4	23.5	22.7	21.4	20.2	N/A	N/A	19.6	18.8	26.8	25.8	25.2	23.7	23.2	21.9	19.9	17.2	15.7	12.6
Greenbelt Metro Station	I-495 Exit 24	27.3	26.3	24.4	23.5	22.3	21.0	N/A	N/A	20.4	19.7	27.7	26.7	26.0	24.6	24.1	22.8	20.8	18.1	16.6	13.5
MD 201 (Kenilworth Ave)	I-495 Exit 23	28.5	27.5	25.6	24.8	23.5	22.2	N/A	N/A	21.6	20.9	28.9	27.9	27.2	25.8	25.3	24.0	22.0	19.3	17.8	14.7
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	29.4	28.4	26.5	25.7	24.4	23.2	N/A	N/A	22.6	21.8	29.8	28.8	28.2	26.7	26.2	24.9	22.9	20.2	18.7	15.6
MD 450 (Annapolis Rd)	I-495 Exit 20	31.8	30.8	28.9	28.1	26.8	25.6	N/A	N/A	25.0	24.2	32.2	31.2	30.6	29.1	28.6	27.3	25.3	22.6	21.1	18.0
US 50 (John Hanson Hwy)	I-495 Exit 19	33.2	32.3	30.4	29.5	28.3	27.0	N/A	N/A	26.4	25.7	33.7	32.7	32.0	30.5	30.1	28.7	26.7	24.1	22.6	19.5
MD 202 (Landover Rd)	I-495 Exit 17	35.2	34.2	32.3	31.5	30.2	29.0	N/A	N/A	28.4	27.6	35.7	34.6	34.0	32.5	32.0	30.7	28.7	26.1	24.6	21.5
Arena Dr	I-495 Exit 16	35.9	34.9	33.0	32.1	30.9	29.6	N/A	N/A	29.0	28.3	36.3	35.3	34.6	33.2	32.7	31.4	29.4	26.7	25.2	22.1
MD 214 (Central Ave)	I-495 Exit 15	36.8	35.9	34.0	33.1	31.9	30.6	N/A	N/A	30.0	29.3	37.3	36.3	35.6	34.2	33.7	32.3	30.3	27.7	26.2	23.1
Ritchie-Marlboro Rd	I-495 Exit 13	38.4	37.4	35.5	34.7	33.4	32.2	N/A	N/A	31.6	30.8	38.9	37.8	37.2	35.7	35.2	33.9	31.9	29.3	27.8	24.7
MD 4 (Pennsylvania Ave)	I-495 Exit 11	40.7	39.8	37.9	37.0	35.8	34.5	N/A	N/A	33.9	33.2	41.2	40.2	39.5	38.1	37.6	36.2	34.2	31.6	30.1	27.0
MD 337 (Suitland Pkwy)	I-495 Exit 9	41.9	40.9	39.0	38.2	36.9	35.7	N/A	N/A	35.1	34.3	42.4	41.3	40.7	39.2	38.7	37.4	35.4	32.7	31.2	28.2
MD 5 (Branch Ave)	I-495 Exit 7	43.7	42.8	40.9	40.0	38.8	37.5	N/A	N/A	36.9	36.2	44.2	43.2	42.5	41.1	40.6	39.2	37.2	34.6	33.1	30.0
MD 414 (St Barnabas Rd)	I-495 Exit 4	46.7	45.7	43.8	43.0	41.7	40.4	N/A	N/A	39.8	39.1	47.1	46.1	45.4	44.0	43.5	42.2	40.2	37.5	36.0	32.9

Unit: Minute

From \ To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	33.0	35.3	36.9	39.9	42.2	43.2	44.0	45.4	46.3	48.6	49.9	51.9	52.5	53.6	55.3	57.6	58.7	60.8	63.2
Shady Grove Rd	I-270 Exit 8	32.1	34.5	36.0	39.0	41.3	42.4	43.1	44.6	45.5	47.7	49.0	51.0	51.6	52.8	54.5	56.8	57.9	59.9	62.3
MD 28 (W Montgomery Ave)	I-270 Exit 6	30.2	32.6	34.1	37.1	39.4	40.4	41.2	42.6	43.5	45.8	47.1	49.1	49.7	50.8	52.6	54.8	56.0	58.0	60.4
MD 189 (Falls Rd)	I-270 Exit 5	29.2	31.6	33.1	36.1	38.5	39.5	40.3	41.7	42.6	44.8	46.2	48.1	48.8	49.9	51.6	53.9	55.0	57.1	59.5
Montrose Rd	I-270 Exit 4	28.2	30.6	32.1	35.1	37.4	38.5	39.2	40.7	41.5	43.8	45.1	47.1	47.7	48.8	50.6	52.9	54.0	56.0	58.4
Split	I-270	27.0	29.3	30.9	33.9	36.2	37.2	38.0	39.4	40.3	42.6	43.9	45.9	46.5	47.6	49.3	51.6	52.7	54.8	57.2
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	25.5	27.9	29.4	32.4	34.7	35.8	36.5	38.0	38.9	41.1	42.5	44.4	45.0	46.2	47.9	50.2	51.3	53.3	55.7
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	20.5	22.8	24.4	27.4	29.7	30.7	31.5	32.9	33.8	36.1	37.4	39.4	40.0	41.1	42.9	45.1	46.2	48.3	50.7
VA 193 (Georgetown Pike)	I-495 Exit 44	39.9	42.3	43.8	46.8	49.1	50.2	50.9	52.4	53.3	55.5	56.8	58.8	59.4	60.6	62.3	64.6	65.7	67.7	70.1
George Washington Memorial Pkwy	I-495 Exit 43	38.8	41.1	42.6	45.6	48.0	49.0	49.8	51.2	52.1	54.4	55.7	57.6	58.3	59.4	61.1	63.4	64.5	66.6	69.0
Clara Barton Pkwy	I-495 Exit 41	38.0	40.4	41.9	44.9	47.3	48.3	49.1	50.5	51.4	53.6	55.0	56.9	57.6	58.7	60.4	62.7	63.8	65.9	68.3
Cabin John Pkwy	I-495 Exit 40	36.0	38.4	39.9	42.9	45.3	46.3	47.1	48.5	49.4	51.6	53.0	54.9	55.6	56.7	58.4	60.7	61.8	63.9	66.3
MD 190 (River Rd)	I-495 Exit 39	35.7	38.1	39.6	42.6	45.0	46.0	46.8	48.2	49.1	51.3	52.7	54.6	55.3	56.4	58.1	60.4	61.5	63.6	66.0
I-270 West Spur	I-495 Exit 38	32.6	35.0	36.5	39.5	41.9	42.9	43.7	45.1	46.0	48.3	49.6	51.5	52.2	53.3	55.0	57.3	58.4	60.5	62.9
MD 187 (Old Georgetown Rd)	I-495 Exit 36	17.2	19.6	21.1	24.1	26.4	27.5	28.2	29.7	30.6	32.8	34.1	36.1	36.7	37.9	39.6	41.9	43.0	45.0	47.4
I-270 East Spur	I-495 Exit 35	12.9	15.3	16.8	19.8	22.1	23.2	23.9	25.3	26.2	28.5	29.8	31.8	32.4	33.5	35.3	37.6	38.7	40.7	43.1
MD 355 (Rockville Pike)	I-495 Exit 34	10.9	13.2	14.7	17.7	20.1	21.1	21.9	23.3	24.2	26.5	27.8	29.7	30.4	31.5	33.2	35.5	36.6	38.7	41.1
MD 185 (Connecticut Ave)	I-495 Exit 33	5.2	7.6	9.1	12.1	14.4	15.4	16.2	17.6	18.5	20.8	22.1	24.1	24.7	25.8	27.6	29.8	31.0	33.0	35.4
MD 97 (Georgia Ave)	I-495 Exit 31	0	2.4	3.9	6.9	9.2	10.3	11.0	12.5	13.4	15.6	16.9	18.9	19.5	20.7	22.4	24.7	25.8	27.8	30.2
US 29 (Colesville Rd)	I-495 Exit 30	2.7	0	1.5	4.5	6.9	7.9	8.7	10.1	11.0	13.2	14.6	16.5	17.2	18.3	20.0	22.3	23.4	25.5	27.9
MD 193 (University Blvd E)	I-495 Exit 29	4.5	1.3	0	3.0	5.3	6.4	7.1	8.6	9.5	11.7	13.0	15.0	15.6	16.8	18.5	20.8	21.9	23.9	26.3
MD 650 (New Hampshire Ave)	I-495 Exit 28	7.3	4.1	1.8	0	2.3	3.4	4.2	5.6	6.5	8.7	10.1	12.0	12.6	13.8	15.5	17.8	18.9	20.9	23.3
I-95	I-495 Exit 27	8.5	5.3	3.0	1.8	0	1.0	1.8	3.2	4.1	6.4	7.7	9.7	10.3	11.4	13.1	15.4	16.5	18.6	21.0
US 1 (Baltimore Ave)	I-495 Exit 25	9.5	6.2	4.0	2.8	1.0	0	0.8	2.2	3.1	5.3	6.7	8.6	9.3	10.4	12.1	14.4	15.5	17.6	20.0
Greenbelt Metro Station	I-495 Exit 24	10.4	7.1	4.8	3.6	1.8	0.9	0	1.4	2.3	4.6	5.9	7.9	8.5	9.6	11.3	13.6	14.7	16.8	19.2
MD 201 (Kenilworth Ave)	I-495 Exit 23	11.6	8.3	6.0	4.9	3.0	2.1	1.2	0	0.9	3.1	4.5	6.4	7.1	8.2	9.9	12.2	13.3	15.4	17.8
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	12.5	9.2	7.0	5.8	4.0	3.0	2.1	0.9	0	2.2	3.6	5.5	6.2	7.3	9.0	11.3	12.4	14.5	16.9
MD 450 (Annapolis Rd)	I-495 Exit 20	14.9	11.6	9.4	8.2	6.4	5.4	4.5	3.3	2.4	0	1.3	3.3	3.9	5.1	6.8	9.1	10.2	12.2	14.6
US 50 (John Hanson Hwy)	I-495 Exit 19	16.3	13.1	10.8	9.6	7.8	6.8	6.0	4.8	3.8	1.4	0	1.9	2.6	3.7	5.4	7.7	8.8	10.9	13.3
MD 202 (Landover Rd)	I-495 Exit 17	18.3	15.0	12.8	11.6	9.8	8.8	7.9	6.7	5.8	3.4	2.0	0	0.6	1.8	3.5	5.8	6.9	8.9	11.3
Arena Dr	I-495 Exit 16	19.0	15.7	13.4	12.2	10.4	9.5	8.6	7.4	6.5	4.1	2.6	0.7	0	1.1	2.8	5.1	6.2	8.3	10.7
MD 214 (Central Ave)	I-495 Exit 15	20.0	16.7	14.4	13.2	11.4	10.5	9.6	8.4	7.5	5.1	3.6	1.6	1.0	0	1.7	4.0	5.1	7.2	9.6
Ritchie-Marlboro Rd	I-495 Exit 13	21.5	18.2	16.0	14.8	13.0	12.0	11.1	9.9	9.0	6.6	5.2	3.2	2.5	1.6	0	2.3	3.4	5.4	7.9
MD 4 (Pennsylvania Ave)	I-495 Exit 11	23.8	20.6	18.3	17.1	15.3	14.3	13.5	12.3	11.3	8.9	7.5	5.5	4.9	3.9	2.3	0	1.1	3.2	5.6
MD 337 (Suitland Pkwy)	I-495 Exit 9	25.0	21.7	19.5	18.3	16.5	15.5	14.6	13.4	12.5	10.1	8.7	6.7	6.0	5.0	3.5	1.2	0	2.1	4.5
MD 5 (Branch Ave)	I-495 Exit 7	26.9	23.6	21.3	20.1	18.3	17.4	16.5	15.3	14.4	12.0	10.5	8.5	7.9	6.9	5.3	3.0	1.8	0	2.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	29.8	26.5	24.2	23.1	21.2	20.3	19.4	18.2	17.3	14.9	13.4	11.5	10.8	9.8	8.3	5.9	4.8	2.9	0

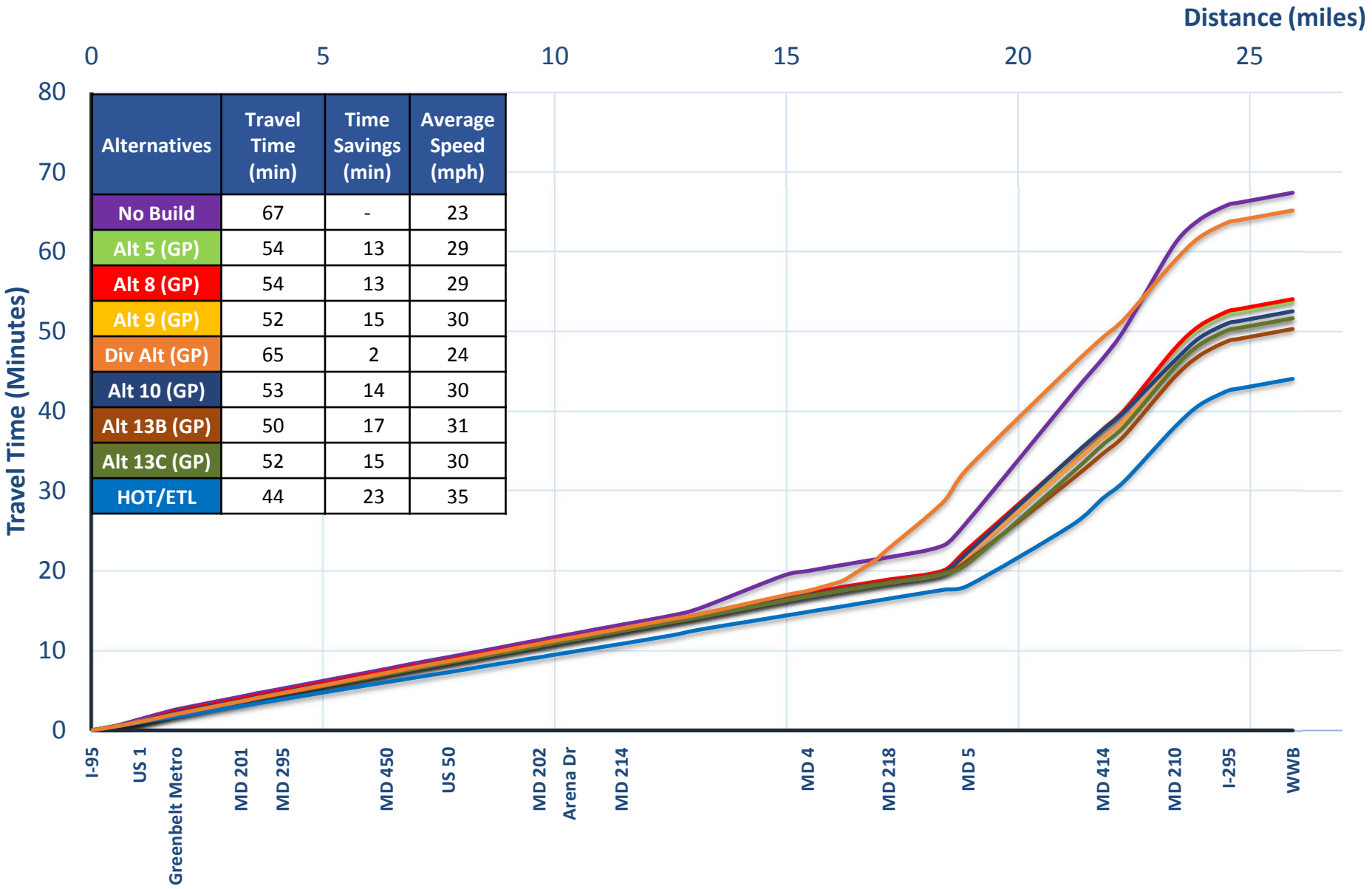
ATTACHMENT E – TRAVEL TIME SAVINGS CHARTS

Commute from College Park to Bethesda (AM)



Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	43	-	14
Alt 5 (GP)	21	22	29
Alt 8 (GP)	15	28	40
Alt 9 (GP)	16	27	37
Div Alt (GP)	16	27	37
Alt 10 (GP)	13	30	45
Alt 13B (GP)	21	22	29
Alt 13C (GP)	18	25	34
HOT/ETL	10	33	62

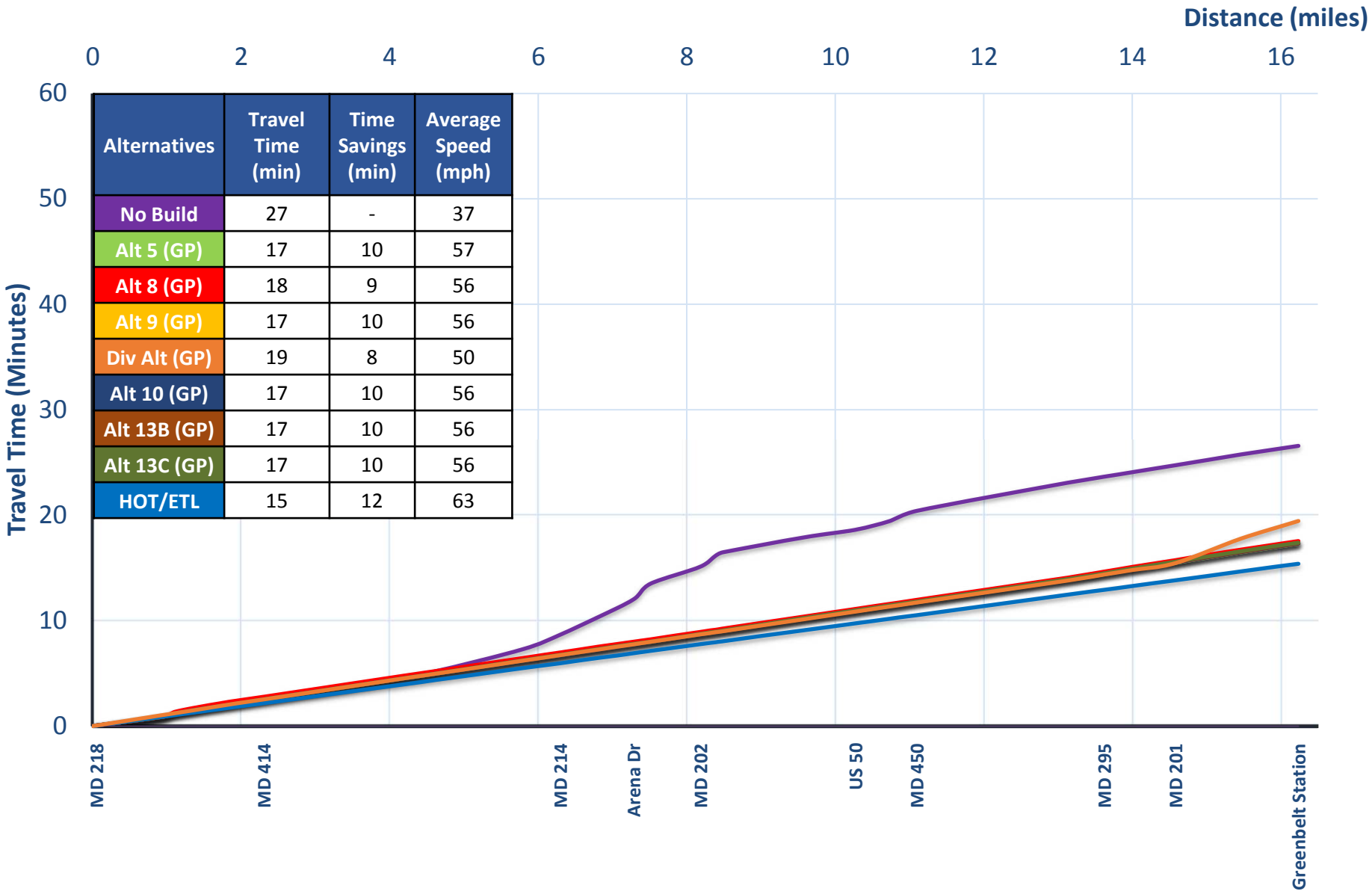
Commute from I-95 to Woodrow Wilson Bridge (AM)



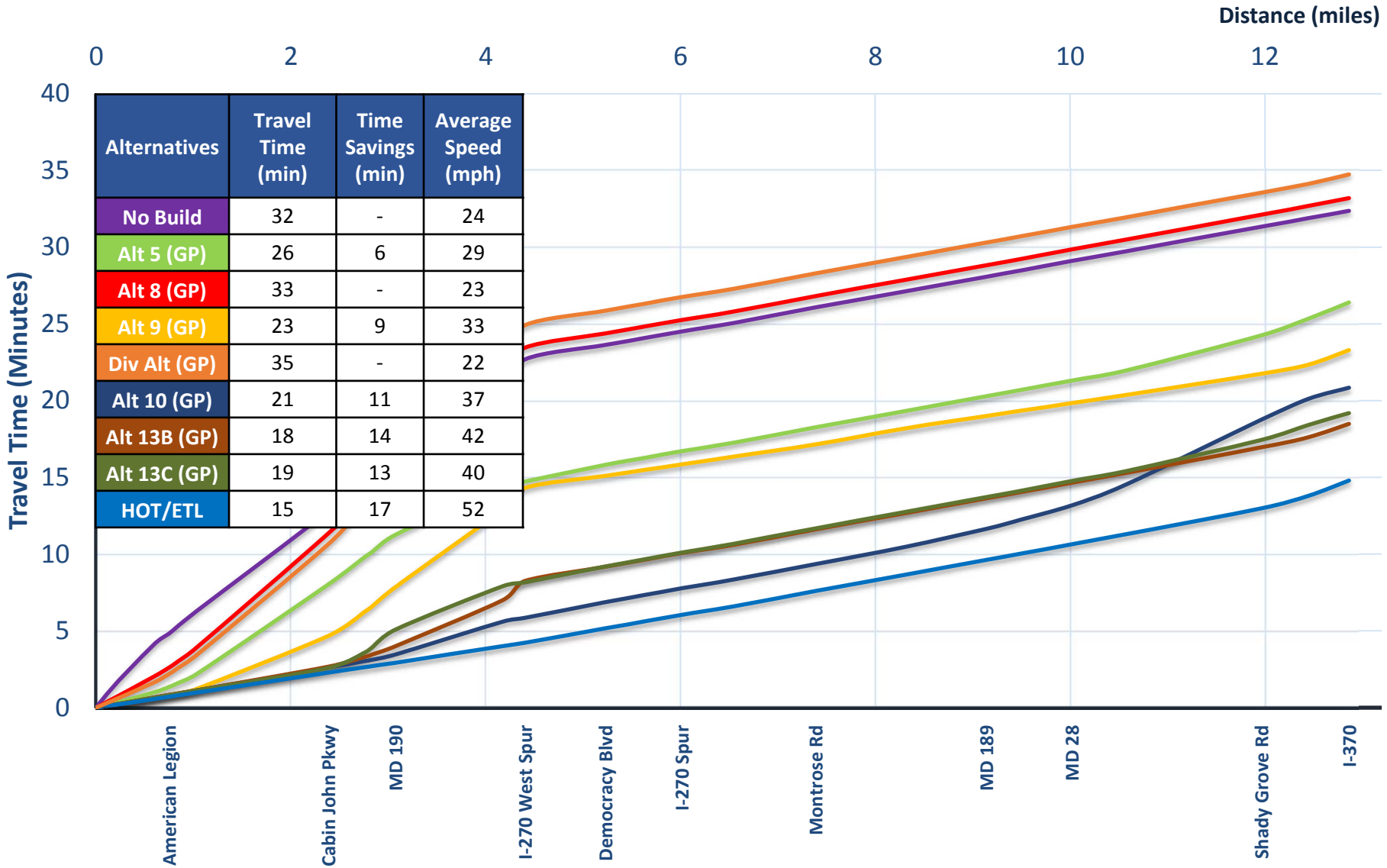
Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	67	-	23
Alt 5 (GP)	54	13	29
Alt 8 (GP)	54	13	29
Alt 9 (GP)	52	15	30
Div Alt (GP)	65	2	24
Alt 10 (GP)	53	14	30
Alt 13B (GP)	50	17	31
Alt 13C (GP)	52	15	30
HOT/ETL	44	23	35

Commute from Suitland to Greenbelt Metro Station (AM)

Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	27	-	37
Alt 5 (GP)	17	10	57
Alt 8 (GP)	18	9	56
Alt 9 (GP)	17	10	56
Div Alt (GP)	19	8	50
Alt 10 (GP)	17	10	56
Alt 13B (GP)	17	10	56
Alt 13C (GP)	17	10	56
HOT/ETL	15	12	63

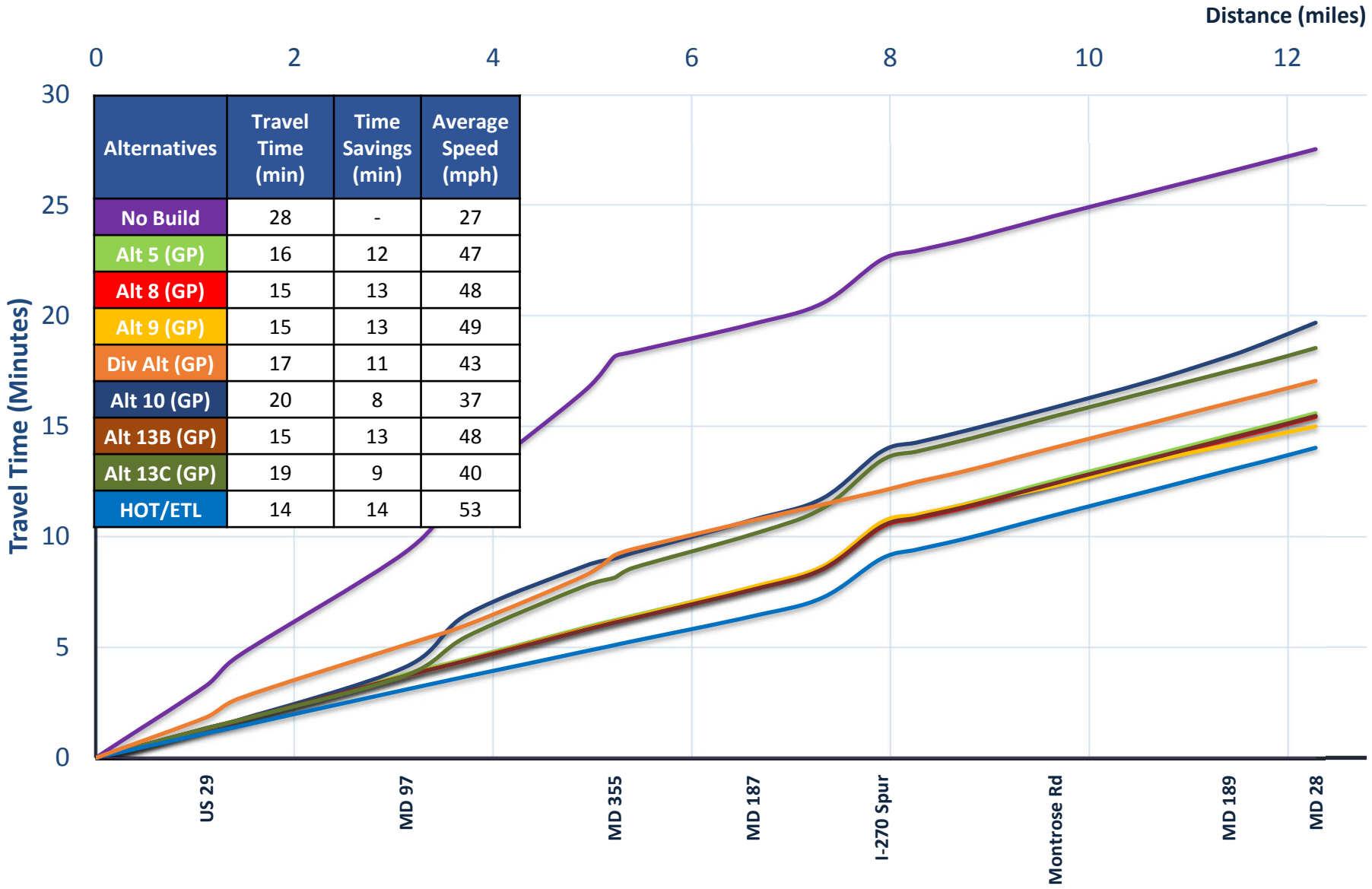


Commute from American Legion Bridge to ICC (PM)



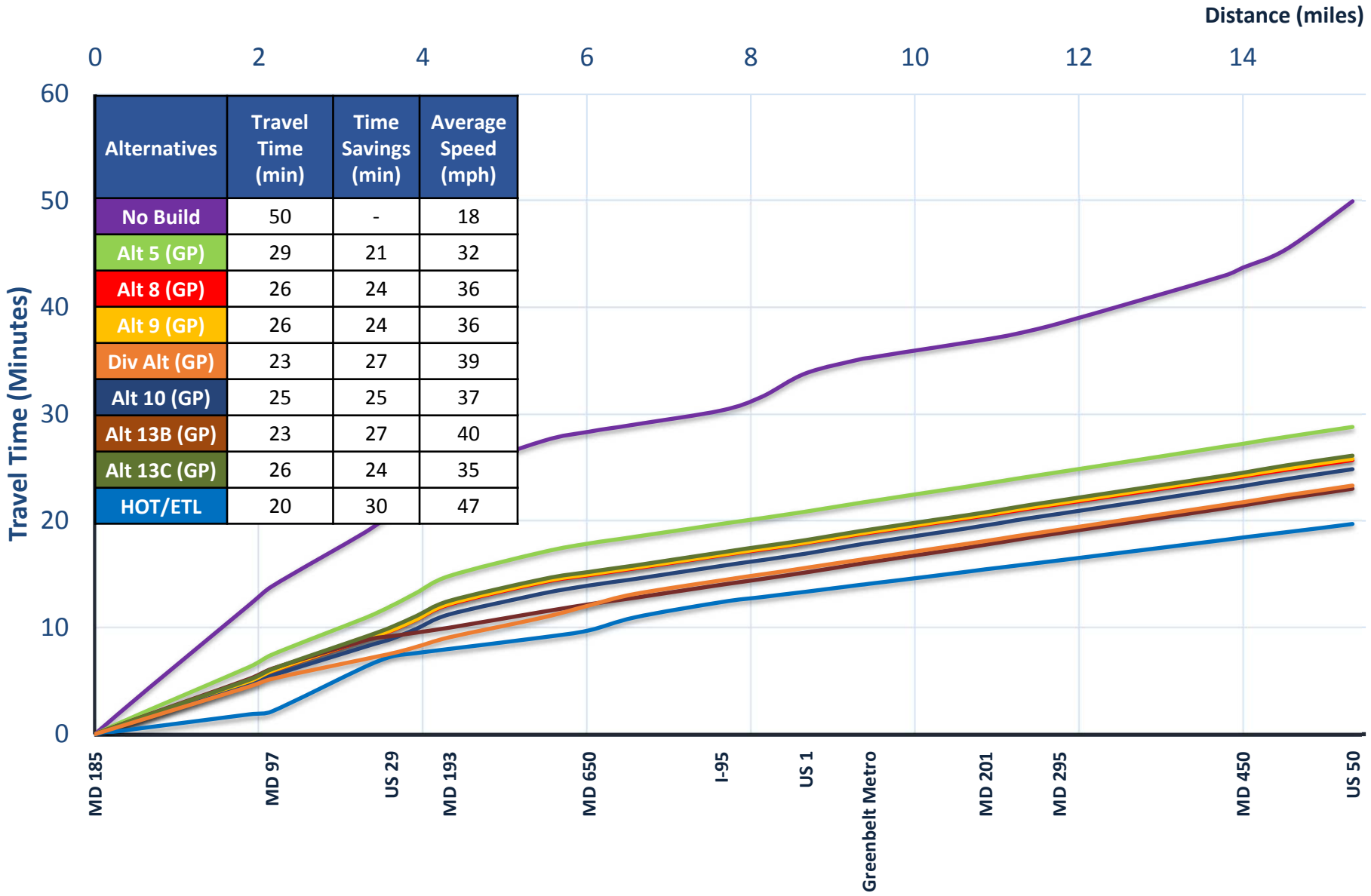
Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	32	-	24
Alt 5 (GP)	26	6	29
Alt 8 (GP)	33	-	23
Alt 9 (GP)	23	9	33
Div Alt (GP)	35	-	22
Alt 10 (GP)	21	11	37
Alt 13B (GP)	18	14	42
Alt 13C (GP)	19	13	40
HOT/ETL	15	17	52

Commute from Silver Spring to Rockville (PM)



Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	28	-	27
Alt 5 (GP)	16	12	47
Alt 8 (GP)	15	13	48
Alt 9 (GP)	15	13	49
Div Alt (GP)	17	11	43
Alt 10 (GP)	20	8	37
Alt 13B (GP)	15	13	48
Alt 13C (GP)	19	9	40
HOT/ETL	14	14	53

Commute from Chevy Chase to Landover (PM)



Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	50	-	18
Alt 5 (GP)	29	21	32
Alt 8 (GP)	26	24	36
Alt 9 (GP)	26	24	36
Div Alt (GP)	23	27	39
Alt 10 (GP)	25	25	37
Alt 13B (GP)	23	27	40
Alt 13C (GP)	26	24	35
HOT/ETL	20	30	47

ATTACHMENT F – LINK EVALUATION (SPEED, DENSITY, AND LOS)

2040 Diversion Alternative AM - I-495 OL Link Evaluation Results 3/18/2020

2040 Diversion Alternative AM I-495 OL

	WWB								Exit 2 I-295			Exit 3 MD 210										Exit 4 MD 414											
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	16	15	23	51	56	57	59	59	59	58	59	59	59	59	59	58	59	59	59	59	58	59	59	54	53	53	53	53	53	53	53	53	52	39
Density	102	108	77	34	31	31	21	14	16	16	15	15	18	18	17	22	21	17	20	20	18	20	20	19	23	24	24	24	24	21	21	17	18	24
LOS	F	F	F	D	D	D	C	B	B	B	B	B	C	C	B	C	C	B	C	C	B	C	C	C	C	C	C	C	C	C	C	B	B	C
Volume	8183	8014	5249	5260	5263	5256	2407	2408	1918	1921	2600	2602	2143	4328	5041	5051	5047	5022	4797	4814	5201	4694	4690	5086	4978	5120	5127	5134	5100	4526	4516	4496	3710	3677
Lanes	5	5	3	3	3	3	2	3	2	2	3	3	2	4	5	4	4	5	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4
Length	2000	2000	2000	2000	2000	195	1182	890	2000	1282	2000	1297	1256	824	1314	1054	1042	448	914	495	674	410	694	1037	428	2000	2000	2000	2000	1655	912	602	710	514
LinkID	1	1	218503	218503	218503	218503	218507	218508	218509	218509	318105	318105	217308	217315	217316	971	972	217318	216105	973	216107	216110	974	216112	216115	979	979	979	979	979	980	216114	215901	981
SegmentID	1	2	1	2	3	4	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1	1

Speed Color Scale (mph)

10 30 40 50 70

	Exit 7 MD 5									Exit 9 MD 337									Exit 11 MD 4												Exit 13 Ritchie Marlboro Rd					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	14	53	54	54	54	54	54	52	55	54	55	49	52	55	55	56	56	56	51	55	57	56	54	58	58	57	57	57	58	58	58	57	57	58
Density	58	17	17	16	20	20	20	21	17	17	17	20	24	23	23	20	20	20	21	20	22	28	26	26	26	26	26	26	21	23	23	23	29	28	28
LOS	F	B	B	B	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	C	C	C	C	D	D	D
Volume	3979	3492	3614	4394	4349	4393	4401	4389	3753	3758	3743	4932	5007	4975	5001	4495	4501	5221	4544	4537	6027	6015	6039	6046	6050	6040	5993	6003	5294	5305	6527	6512	6502	6377
Lanes	5	4	4	5	4	4	4	4	4	4	4	5	4	4	4	4	4	5	4	4	5	4	4	4	4	4	4	5	4	4	5	4	4	4
Length	1080	495	659	677	798	2000	773	1497	2000	2000	1589	712	783	514	1391	727	497	445	549	549	462	1023	2000	2000	2000	924	536	944	2000	552	1346	2000	1038	208
LinkID	215904	215905	982	215907	215908	983	983	984	214702	214702	214702	213501	213502	985	986	212301	992	212303	212305	1003	212307	212308	1004	1004	1004	1004	1005	212309	211206	211206	211212	1006	1006	1020
SegmentID	1	1	1	1	1	1	2	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	2	1	1	2	1

	Exit 15 MD 214							Exit 16 Arena Dr		Exit 17 MD 202											Exit 19 US 50								Exit 20 MD 450						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	59	59	57	58	57	57	58	59	57	58	58	60	59	59	54	57	58	60	57	58	58	58	58	60	58	58	58	59	58	54	54	58	59	59	57
Density	22	23	21	27	24	24	26	21	27	26	26	18	23	22	30	28	28	22	27	21	22	22	22	19	25	28	22	26	25	33	31	31	31	32
LOS	C	C	C	D	C	C	C	C	D	D	D	C	C	C	D	D	D	C	D	C	C	C	C	C	C	D	C	D	C	D	D	D	D	D
Volume	6512	5418	6146	6169	6740	6750	6002	6080	4558	4549	4523	6574	6637	6633	6611	6522	6574	6561	6104	6111	5225	5216	5185	6967	7094	6429	6349	6213	7201	7165	7196	7213	7207	7206
Lanes	5	4	5	4	5	5	4	5	3	3	3	6	5	5	4	4	4	5	4	5	4	4	4	6	5	4	5	4	5	4	4	4	4	4
Length	1288	1155	805	737	1300	1328	646	1500	2000	2000	993	1003	493	720	2000	1537	793	705	785	562	2000	273	501	576	1391	716	276	949	1041	440	2000	2000	2000	1849
LinkID	211214	210903	210905	210906	210909	1022	209703	209704	209710	209710	209710	208515	208516	1023	326	326	1024	208518	207302	207303	207305	207305	1025	207306	207307	206101	206102	206104	206108	206109	1027	1027	1027	1027
SegmentID	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	3	4

	Exit 22 MD 295										Exit 23 MD 201										Exit 25 US 1									Exit 27 I-95						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	58	54	53	53	53	53	52	52	54	53	54	46	32	21	17	9	15	18	54	58	58	59	59	59	60	60	58	58	59	59	54	52	53
Density	31	25	27	28	24	29	30	26	24	23	20	20	20	35	52	77	117	88	73	17	16	14	12	12	12	9	9	8	10	13	16	16	16	20
LOS	D	C	D	D	C	D	D	C	C	C	C	C	C	D	F	F	F	F	F	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C
Volume	7169	7178	5860	5869	6449	6072	6396	6653	5044	4991	5440	5472	5622	5510	5390	5091	5271	5241	5221	3649	3602	3998	4338	4303	4306	2232	2192	2323	2295	3701	3704	5931	5898	5355
Lanes	4	5	4	4	5	4	4	5	4	4	5	5	6	5	5	4	5	4	4	4	4	5	6	6	6	4	4	5	4	5	4	7	7	5
Length	903	583	562	541	439	493	685	1823	571	829	434	995	461	993	1102	1980	1297	1225	1251	249	950	1128	1517	679	1496	2000	359	1012	491	825	768	736	894	814
LinkID	1029	206110	205903	1030	205905	205907	1031	205909	204704	1032	204706	204707	204709	204710	1033	2530009	203501	1034	1036	20020	202306	202308	202311	1035	1038	201103	201103	201104	201105	1039	201106	93	11316	211306
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1

2040 Diversion Alternative AM I-495 OL

Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	46	52	53	52	53	53	52	53	52	53	51	51	53	53	51	37	20	23	21	20	19	16	14	15	18	15	28	32	31	42	50	50	53
Density	20	21	20	19	18	21	21	27	27	22	24	24	31	30	29	25	43	72	76	83	85	89	87	114	101	99	108	72	64	66	49	41	33	31
LOS	C	C	C	C	B	C	C	D	D	C	C	C	D	D	D	C	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	D	D
Volume	5324	5777	5110	5112	5600	5616	5618	5617	5612	5640	5143	6226	6183	6232	6213	6417	6317	7092	7041	7028	6975	6894	6895	6426	7363	7275	8156	8154	8222	8251	8261	8246	6577	6557
Lanes	5	6	5	5	6	5	5	4	4	5	4	5	4	4	4	5	4	5	4	4	4	4	5	4	5	4	5	4	4	4	4	4	4	4
Length	509	450	501	284	347	1136	1629	1881	1185	301	793	713	805	1020	517	277	854	787	704	2000	832	1091	449	621	594	336	957	536	2000	2000	1795	1336	311	1657
LinkID	11318	17603	2011023	11320	17604	17608	11319	17606	11321	2010961	2010958	2010956	2010955	11322	11323	505501	505502	505503	505504	11324	11324	11325	17223	17225	17227	17228	17230	505515	11326	11326	11326	11327	1980211	505538
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	3	1	1	1

Exit 39 — MD 190

	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	53	52	50	49	50	49	48	45	39	31	25	22	19	16	11	52	53	53	53	53	53	51	41	52	47	48	45	41	28	21	22	21	25
Density	27	34	30	39	41	40	40	41	35	42	47	49	73	82	97	110	25	22	21	28	28	28	22	36	27	36	35	38	41	52	74	80	82	67
LOS	D	D	D	E	E	E	E	E	D	E	F	F	F	F	F	F	C	C	C	D	D	D	C	E	D	E	E	E	E	F	F	F	F	F
Volume	7119	7083	7927	7887	7927	7895	7851	7832	7784	6581	4382	4836	4819	4765	4682	4622	3905	3483	4464	4462	4481	4494	4511	4429	8529	8516	8485	8560	8419	8626	7667	6958	6980	8271
Lanes	5	4	5	4	4	4	4	4	5	4	3	4	3	3	3	4	3	3	4	3	3	3	4	3	6	5	5	5	5	6	5	4	4	5
Length	752	746	998	526	1257	2000	87	1045	402	1593	283	910	492	913	1192	325	2000	22	406	1085	2000	1326	1306	2000	551	937	2000	672	439	1037	1584	2000	604	1765
LinkID	1963509	1963510	1963511	1963512	11328	11455	11455	11329	11457	11461	11463	11492	11495	11330	11332	11491	11494	11494	11493	505572	1063	1063	64	59	495375	495392	1064	1064	1066	495408	495407	495406	495406	495401
SegmentID	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	2	1	1	1	1	2	1

Exit 41 — Clara Barton Pkwy; Bridge — American Legion; Exit 43 — GW Memorial Pkwy; Exit 44 — VA 193

	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	44	51	53	52	52	53	53	53	53	53	53	53	53	52
Density	47	33	36	30	37	33	31	31	31	31	24	31	26	33
LOS	F	D	E	D	E	D	D	D	D	D	C	D	C	D
Volume	8340	8385	7493	7852	7601	8576	6473	6433	6471	6477	6459	6476	6846	6858
Lanes	4	5	4	5	4	5	4	4	4	4	5	4	5	4
Length	1628	978	521	921	1716	1561	272	1408	2000	1763	728	1048	1410	610
LinkID	495415	2541710	1067	495416	495417	495418	11230	1069	2530014	2530014	1083	1084	1101	1114
SegmentID	1	1	1	1	1	1	1	1	1	2	1	1	1	1

2040 Diversion Alternative AM - I-495 IL Link Evaluation Results 3/18/2020

2040 Diversion Alternative AM I-495 IL

	Exit 44 VA 193							Exit 43 GW Memorial Pkwy			Bridge American Legion		Exit 41 Clara Barton Pkwy								Exit 39 MD 190							I-270 W Spur						
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	58	58	58	58	56	48	28	25	23	24	45	52	55	57	55	55	47	46	42	31	27	26	24	22	20	20	18	17	11	12	11	11	9	
Density	29	29	23	26	26	26	30	60	67	72	68	38	34	27	26	30	38	43	35	43	46	51	48	59	64	68	68	85	89	105	122	128	96	138	
LOS	D	D	C	D	D	C	D	F	F	F	F	E	D	D	C	D	E	E	E	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
Volume	6818	6685	6802	6127	6127	7289	7254	6850	6636	6735	8210	6938	7158	7354	7389	8275	8259	8108	8066	7245	7176	6981	7341	7101	7129	6920	6866	4531	4447	4443	4385	4312	4326	3687	
Lanes	4	4	5	4	4	5	5	4	4	4	5	4	4	5	5	5	4	4	5	4	5	5	6	5	5	5	5	3	3	4	3	3	4	3	
Length	2000	183	1499	2000	93	1502	1539	645	688	506	641	500	705	1499	761	1010	2000	1064	400	1958	1492	620	1122	398	1767	740	1503	2000	728	1322	2000	1179	305	2000	
LinkID	1100	1100	1037	495411	495411	1089	1054	1080	1079	1113	1073	495412	1062	495413	1057	495414	2541704	1115	495402	495403	495404	1116	495405	495409	1117	495391	1118	495371	495371	7	40	11333	11474	11486	
SegmentID	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	

Speed Color Scale (mph)

10 30 40 50 70

	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	9	8	12	12	16	17	14	14	15	15	38	54	57	56	57	54	58	58	57	49	38	32	16	18	53	49	53	56	59	58	59	59	59	59	
Density	138	119	114	105	106	96	92	106	104	105	51	35	27	27	27	24	28	25	32	37	49	58	93	82	28	28	31	25	29	30	30	30	29	29	
LOS	F	F	F	F	F	F	F	F	F	F	F	E	D	D	D	C	D	C	D	E	F	F	F	F	D	D	D	C	D	D	D	D	D	D	
Volume	3687	3955	3954	3933	3458	6492	7616	7654	7664	7662	7649	7668	7671	7643	6233	6427	6413	7385	7384	7314	7397	7451	7470	7469	6011	6898	6525	7014	6944	7039	7043	7027	6824	6783	
Lanes	3	4	3	3	2	4	6	5	5	5	4	4	5	5	4	5	4	5	4	4	4	4	5	5	4	5	4	5	4	4	4	4	4	4	
Length	2000	439	659	1113	1519	1951	516	1013	1002	521	1603	252	526	658	913	228	793	1635	2000	164	2000	1786	2000	50	837	411	323	1131	452	2000	1086	1248	248	500	
LinkID	11486	11487	11468	11335	11469	11462	11471	11472	11334	11473	505530	11336	505531	2010228	505532	505533	505534	505535	505516	505516	2010221	2010221	17214	17214	17216	17218	17220	17222	1963312	11337	11337	11338	2000213	505506	
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	2	1	1	1	

																							Exit 27 I-95						Exit 25 US 1					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	56	60	61	60	61	56	56	46	55	58	60	61	60	61	61	41	51	59	52	39	62	63	60	60	61	63	55	55	55	51	50	49	50	48	
Density	24	25	25	22	24	23	29	30	31	30	29	28	23	26	26	35	32	28	30	33	10	10	10	12	12	7	21	26	26	30	38	39	39	33	
LOS	C	C	C	C	C	C	D	D	D	D	D	D	C	D	D	E	D	D	D	D	A	A	A	B	B	A	C	D	D	D	E	E	E	D	
Volume	6824	6120	6136	6569	5829	6518	6542	6913	6936	6953	6957	6933	6924	6380	6324	7173	6593	6599	7675	7596	2492	2503	2989	2992	2976	1329	5775	5780	5766	7748	7707	7773	7691	7771	
Lanes	5	4	4	5	4	5	4	5	4	4	4	4	5	4	4	5	4	4	5	6	4	4	5	4	4	3	5	4	4	5	4	4	4	5	
Length	260	499	524	1562	808	422	768	284	1222	2000	1072	1153	356	352	505	464	500	1046	1496	1492	1028	536	347	2000	140	1527	1466	2000	1612	673	845	625	481	1017	
LinkID	505507	505508	11339	505494	2110286	2010441	2010963	2010969	2010970	11341	11341	11342	17609	2211299	11344	17611	111299	11345	111310	11340	101104	1138	101106	101107	101107	1137	101110	102301	102301	102312	102313	1135	1136	102314	
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	

	Exit 24 Greenbelt Metro Station				Exit 23 MD 201							Exit 22 MD 295									Exit 20 MD 450						Exit 19 US 50								
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	49	53	53	51	53	52	52	51	50	53	53	53	53	53	54	53	53	53	53	52	52	51	48	54	48	51	55	55	53	56	56	55	52	53	
Density	37	28	28	29	29	25	31	27	34	26	28	28	25	29	29	25	32	32	32	33	32	33	27	26	28	33	24	26	22	23	23	22	29	35	
LOS	E	D	D	D	D	C	D	D	D	C	D	D	C	D	D	C	D	D	D	D	D	D	D	C	D	D	C	D	C	C	C	C	D	E	
Volume	7262	7394	7369	7393	6106	6494	6459	6949	6932	6814	5897	5882	6694	6185	6160	6748	6768	6767	6775	6769	6743	6706	6556	5512	6718	6689	6683	5695	5709	5042	5046	7386	7515	7517	
Lanes	4	5	5	5	4	5	4	5	4	5	4	4	5	4	4	5	4	4	4	4	4	4	5	4	5	4	5	4	5	4	4	6	5	4	
Length	2000	1540	1039	440	1150	761	810	740	929	454	507	559	554	497	516	779	706	2000	2000	2000	1629	1217	263	1109	984	561	1359	1365	195	2000	608	1453	754	2000	
LinkID	103501	2530003	1139	103502	104704	104706	104707	104709	104710	104711	105902	1140	105904	105906	1141	105908	105909	1142	1142	1142	1142	1143	105910	106105	106108	106109	106110	107301	107302	107307	107307	107309	1144	107311	
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	1	1	

2040 Diversion Alternative
AM
I-495 IL

							Exit 16						Exit 15						Exit 13										Exit 11					
							Arena Dr						MD 214						Ritchie Marlboro Rd										MD 4					
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	55	55	55	55	54	54	55	56	57	56	53	55	57	54	55	56	56	57	57	57	56	56	51	39	41	36	53	57	52	54	53	42	38	36
Density	34	27	27	34	34	35	32	27	27	27	32	25	28	28	34	33	33	26	29	29	27	34	37	49	48	54	30	28	28	30	30	33	45	49
LOS	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	E	F	F	F	D	D	D	D	D	D	F	F
Volume	7467	7472	7485	5580	5613	5613	7132	7484	7493	7491	6795	6825	6271	7538	7541	7525	7437	7515	6663	6708	7618	7610	7639	7701	7732	7762	6430	6441	7364	6473	6501	6947	6941	6936
Lanes	4	5	5	3	3	3	4	5	5	5	4	5	4	5	4	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4	5	4	4
Length	190	855	1495	2000	2000	1908	1069	1470	249	1490	1056	692	986	1397	2000	796	480	997	2000	1038	1492	2000	2000	2000	764	1366	456	482	565	512	527	1147	344	1293
LinkID	107311	107312	1145	108500	108500	108500	109704	109707	1146	1148	110904	110905	110907	110913	1147	1147	1149	110915	111105	111105	111111	111112	111112	111112	111112	1150	112301	1151	112303	112305	1152	112307	112308	1153
SegmentID	2	1	1	1	2	3	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	3	4	1	1	1	1	1	1	1	1	1

				Exit 9									Exit 7												Exit 4								
				MD 337									MD 5												MD 414								
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	31	24	17	13	12	12	13	15	14	11	9	7	6	9	9	10	10	11	13	12	12	12	12	11	11	10	12	12	10	15	14	16	12	8
Density	55	57	89	111	121	101	110	97	108	116	130	153	151	143	121	134	134	110	115	123	124	124	104	129	128	119	117	112	124	101	109	92	79	124
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	6809	6763	6060	5889	5796	5954	5905	5982	6046	6125	6146	4311	4899	4910	5345	5489	5521	5820	5859	5928	5988	5977	6016	5668	5639	6056	5558	5492	6018	6054	5936	2915	2872	1944
Lanes	4	5	4	4	4	5	4	4	4	5	5	4	5	4	5	4	4	5	4	4	4	4	5	4	4	5	4	4	5	4	4	2	3	2
Length	896	625	2000	2000	770	663	808	2000	725	736	1473	1134	787	706	691	802	1093	808	2000	2000	2000	860	617	1155	507	909	508	589	349	2000	55	1054	1707	1386
LinkID	1154	112309	113503	113503	113503	114701	114702	1155	1155	114703	1157	115905	115910	115911	115913	115914	1158	2541555	2541557	2541557	2541557	1159	115915	116102	1161	116104	116106	1162	116108	116109	116109	116110	116111	117305
SegmentID	1	1	1	2	3	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	2	1	1	1

	Exit 3						Exit 2				WWB			
	MD 210						I-295							
	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	6	7	8	11	13	14	18	45	57	58	58	54	46	57
Density	128	137	112	105	92	104	85	51	34	34	34	36	44	36
LOS	F	F	F	F	F	F	F	F	D	D	D	E	E	E
Volume	2968	2926	3611	3573	3550	2991	4655	4582	5831	5834	5836	5796	10027	10054
Lanes	4	3	4	3	3	2	3	2	3	3	3	3	5	5
Length	907	581	640	2000	598	1132	851	1030	2000	2000	2000	1329	2000	1262
LinkID	117307	117308	117310	117311	117311	118503	118504	118506	118508	118508	118508	118508	44	44
SegmentID	1	1	1	1	2	1	1	1	1	2	3	4	1	2

2040 Diversion Alternative AM - I-270 NB Link Evaluation Results **3/18/2020**

2040 Diversion Alternative AM I-270 NB

		Exit 1																	Exit 4				Exit 5					Exit 6								Exit 8
		I-270 W Spur/I-495				Democracy Blvd		Westlake Terrace					I-270 Spur						Montrose Rd				MD 189					MD 28								Shady Grove Rd
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	20	57	62	62	64	61	63	60	63	64	64	64	64	64	64	64	64	61	63	60	60	60	61	58	58	58	58	59	58	58	57	57	58	59
Density	68	19	18	12	12	10	14	14	13	13	13	12	12	12	12	12	10	11	13	16	16	13	14	15	15	15	17	14	12	15	16	16	13	11
LOS	F	C	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
Volume	6866	2219	2222	2211	1465	1782	1766	2528	2522	2523	2505	4526	4528	4523	4496	4500	4460	4189	4048	4810	4811	4758	4280	5144	5124	5110	4886	4244	4378	4480	4462	4459	4443	3096
Lanes	5	2	2	3	2	3	2	3	3	3	3	6	6	6	6	6	7	6	5	5	5	6	5	6	6	6	5	5	6	5	5	5	6	5
Length	1503	2000	1418	897	788	886	453	816	1169	730	1875	430	1464	1957	783	980	769	698	801	2000	2000	517	742	1343	526	657	425	789	598	1189	1474	1474	991	2000
LinkID	1118	495372	495372	232	234	235	237	134	241	242	243	274	275	738	739	280	2541643	428	742	289	289	251	743	300	744	304	305	316	745	2541654	320	741	747	327
SegmentID	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1

Speed Color Scale (mph)

10 30 40 50 70

		Exit 9								Exit 10		Exit 11												Exit 13				Exit 15							Exit 16	
		I-370								MD 117		MD 124				Watkins Mill Rd								Middlebrook Rd				MD 118							MD 27	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	59	50	59	59	59	58	58	60	60	60	61	61	61	61	61	61	60	61	61	61	61	61	60	61	61	61	60	60	60	60	61	62	61	61
Density	11	12	8	8	8	8	9	10	10	11	11	11	11	11	11	13	13	13	13	13	11	12	12	13	13	10	12	13	13	12	12	12	10	13
LOS	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	A	B	B	B	B	A	B	B	B	B	B	B	A	B
Volume	3089	3541	1409	1394	1409	1763	3065	3079	3071	2600	2598	2597	2588	3266	3231	3262	3911	3910	3905	3874	3888	3542	3585	3165	3132	3133	2944	2423	2420	2858	2249	2258	2487	2467
Lanes	5	6	3	3	3	4	6	5	5	4	4	4	4	5	5	4	5	5	5	5	6	5	5	4	4	5	4	3	3	4	3	3	4	3
Length	118	441	1059	630	836	2000	531	843	1357	2000	2000	2000	1479	584	745	611	1112	2000	2000	725	763	636	672	865	676	821	1564	1084	527	1716	520	1157	771	687
LinkID	327	335	339	749	411	2541578	347	348	754	350	350	350	350	362	363	762	2430241	2430244	2430244	763	364	365	367	369	764	370	372	374	765	376	378	766	380	381
SegmentID	2	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

		Exit 18																									Exit 22									
		MD 121																									MD 109									
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	62	62	62	62	62	62	61	61	61	62	58	61	62	62	62	61	61	61	61	61	61	61	61	61	61	60	60	61	60	60	60	60	60	60	60	60
Density	10	14	14	14	14	14	14	14	11	10	10	10	13	13	13	13	19	19	19	19	20	19	19	19	20	20	13	18	13	19	19	19	19	19	19	19
LOS	A	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C	C	C	C	C	C	C	C	C	C	B	C	B	C	C	C	C	C	C	C
Volume	2576	2588	2599	2598	2598	2593	2590	2577	2578	1784	2356	2362	2353	2372	2367	2362	2364	2372	2368	2354	2376	2351	2352	2363	2365	2352	2346	2198	2274	2264	2269	2268	2253	2231
Lanes	4	3	3	3	3	3	3	3	4	3	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2
Length	457	1044	2000	2000	2000	2000	718	756	736	920	211	877	400	1727	2000	1731	2000	2000	905	482	2000	383	1176	2000	1202	1164	340	1049	291	1204	2000	2000	2000	2000	2000	2000
LinkID	383	384	767	767	767	767	767	768	385	387	389	1001	390	769	391	391	272	272	272	392	394	394	395	396	396	750	397	399	401	402	771	771	771	771	771	771
SegmentID	1	1	1	2	3	4	5	1	1	1	1	1	1	1	1	2	1	2	3	1	1	2	1	1	2	1	1	1	1	1	1	2	3	4	5	6

		Exit 26																									Exit 31									
		MD 80																									MD 85									
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	60	60	60	60	60	59	57	61	57	58	61	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	57	63	61	63	63	63	63	63	63
Density	19	19	18	18	18	19	13	16	16	23	22	22	22	21	22	22	22	21	22	21	21	21	21	21	21	14	19	14	15	12	11	11	11	11	11	11
LOS	C	C	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	B	B	B	B	B	B	B	B	B
Volume	2230	2228	2205	2214	2217	2215	2190	1993	2732	2718	2723	2720	2712	2704	2714	2713	2716	2680	2706	2696	2688	2680	2665	2663	2647	2653	2392	2360	1864	2912	2904	2904	2904	2904	2904	2904
Lanes	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	4	4	4	4	4	4	4
Length	1502	2000	1497	2000	698	1279	214	773	615	868	2000	2000	2000	2000	1813	539	1225	391	2000	2000	2000	2000	2000	178	1025	473	1416	241	945	1115	392	392	392	392	392	392
LinkID	771	412	412	446	446	783	403	405	407	408	784	784	784	784	784	1010	1017	1007	869	869	869	869	869	869	785	415	417	421	423	425	577	577	577	577	577	577
SegmentID	5	1	2	1	2	1	1	1	1	1	1	2	3	4	5	1	1	1	1	2	3	4	5	6	1	1	1	1	1	1	1	2	3	4	5	6

2040 Diversion Alternative AM - I-270 SB Link Evaluation Results 3/18/2020

2040 Diversion Alternative AM I-270 SB

	Exit 31 MD 85																						Exit 26 MD 80											
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	17	17	15	12	12	11	8	9	17	18	18	18	17	18	18	18	18	18	18	18	18	18	14	14	15	18	27	29	27	27	27	27	27	
Density	89	88	98	126	126	91	140	124	90	88	89	90	90	90	88	87	87	88	88	87	88	88	88	75	104	81	99	68	63	66	67	66	66	67
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	4441	4436	4459	2920	2904	2884	2377	3177	3138	3176	3162	3146	3144	3151	3145	3181	3173	3150	3136	3118	3132	3140	3137	3096	2838	3638	3642	3655	3626	3647	3648	3573	3635	3648
Lanes	3	3	3	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2
Length	931	404	446	474	1052	294	849	378	1140	2000	2000	2000	2000	2000	262	2000	2000	2000	2000	2000	2000	548	1088	376	654	1400	110	1849	565	2000	2000	57	2000	2000
LinkID	683	2000012	157	2000014	699	2000016	2000017	2000020	2000021	703	703	703	703	703	703	448	448	448	448	448	448	448	704	201	2000022	2000025	2000026	705	447	455	455	455	453	453
SegmentID	1	1	1	1	1	1	1	1	1	1	2	3	4	5	6	1	2	3	4	5	6	7	1	1	1	1	1	1	1	1	2	3	1	2

Speed Color Scale (mph)

10 30 40 50 70

	Exit 22 MD 109																						Exit 18 MD 121											
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	27	27	28	26	26	25	23	25	38	42	42	43	44	43	44	45	42	45	46	52	53	52	52	51	52	52	53	53	45	24	19	17	13	9
Density	67	67	65	69	47	72	61	83	55	50	50	48	47	48	47	47	49	46	45	27	26	20	24	23	30	25	32	32	38	72	89	98	98	138
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	D	D	C	C	C	D	C	D	D	E	F	F	F	F	F
Volume	3659	3663	3664	3639	3617	3575	4187	4107	4190	4164	4150	4180	4177	4154	4195	4189	4154	4168	4152	4164	4161	4151	3718	4729	4729	5145	5144	5140	5139	5115	5078	5039	5048	3826
Lanes	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	3	4	3	4	3	3	3	3	3	3	4	3
Length	453	453	410	706	2000027	2000029	2000031	2000032	707	707	2000033	2000034	2000034	2000036	2000037	2000037	2000037	260	260	2000038	708	2000039	2000041	1002	2000044	709	2020578	2020578	2020578	2020578	2020578	710	2000045	2000047
SegmentID	3	4	1	1	1	1	1	1	1	2	1	1	2	1	1	2	3	1	2	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1

	Exit 16 MD 27					Exit 15 MD 118			Exit 13 Middlebrook Rd							Exit 11 Watkins Mill Rd			Exit 10 MD 124			Exit 9 MD 117				Exit 8 I-370				Shady Grove Rd		
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	9	13	12	13	14	15	16	17	28	31	29	28	34	36	32	19	13	13	14	16	23	23	22	24	49	50	53	53	53	53	53	49	50	50
Density	134	119	112	104	115	89	107	85	68	62	65	68	55	52	59	85	108	109	113	100	85	86	91	80	33	31	26	26	21	22	24	26	31	27
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	D	C	C	C	C	C	C	D	D
Volume	4648	4625	5269	5258	4843	5216	5158	5754	5753	5741	5736	7517	7514	7504	7536	6362	5558	5558	6574	8011	7974	8020	7991	9518	9551	9459	9568	9593	5702	5750	8903	8896	7712	8136
Lanes	4	3	4	4	3	4	3	4	3	3	3	4	4	4	4	4	4	4	4	5	4	4	4	5	6	6	7	7	5	5	7	7	5	6
Length	684	1035	1007	1058	1713	543	751	500	1025	2000	719	1566	1324	2000	658	992	1581	593	1167	838	658	2000	1062	1569	1152	431	1058	1250	1271	1633	1783	599	731	480
LinkID	2000049	2000050	2000052	711	2000054	2000056	2000057	2000059	2000060	712	712	2000062	713	1026	1026	2531003	2000063	718	2000064	2000067	2000068	720	720	2000070	2000097	721	2000071	2000072	2000074	2000075	2541660	2000081	2000082	723
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1

	Exit 5 MD 189															Exit 4 Montrose Rd							Exit 1 I-270 Spur			Westlake Terrace	Democracy Blvd						I-270 W Spur/I-495
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	52	47	47	45	44	44	43	38	36	27	25	25	18	34	29	25	20	48	42	38	33	33	33	32	53	53	53	53	53	53	53	53	53	52
Density	32	37	37	39	40	40	34	43	46	59	64	71	90	58	56	71	83	39	37	41	46	46	45	47	20	20	20	23	23	15	19	26	26	27
LOS	D	E	E	E	E	E	D	E	F	F	F	F	F	F	F	F	F	E	E	E	F	F	F	F	C	C	C	C	C	B	C	C	C	D
Volume	8171	8628	8660	8648	8697	8778	8690	8160	8391	9538	9638	8785	9872	9945	9847	8970	9750	9227	9426	9281	9135	9056	8876	9001	4201	4200	4214	3687	3684	4084	4082	4111	4123	8529
Lanes	5	5	5	5	5	5	6	5	5	6	6	5	6	5	6	5	6	5	6	6	6	6	6	6	4	4	4	3	3	5	4	3	3	6
Length	795	2000	1661	469	1017	935	444	935	998	608	1801	1637	697	2000	449	900	640	885	1395	2000	1704	716	393	325	2000	999	940	2000	450	517	937	2000	520	551
LinkID	724	2000093	2000093	2000098	2000099	725	2000115	2000120	727	2000124	2541718	159	194	2541716	2000134	2000135	728	239	2541712	129	129	730	443	442	133	133	137	138	138	141	2020142	2115374	2115374	495375
SegmentID	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	2	1	1	1	2	1

2040 Diversion Alternative PM - I-495 OL Link Evaluation Results 3/18/2020

2040 Diversion Alternative PM
I-495 OL

									Exit 2			Exit 3											Exit 4													
									I-295			MD 210											MD 414													
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	18	21	23	50	56	56	58	58	58	58	57	58	58	58	50	48	56	57	58	58	57	58	58	53	53	53	52	52	52	52	52	53	53	53	
Density	102	90	77	35	32	31	31	21	24	24	25	25	30	29	31	41	35	27	31	31	26	29	28	27	33	34	35	35	35	29	29	23	22	22	
LOS	F	F	F	D	D	D	D	C	C	C	C	C	D	D	D	E	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	C	C	C	
Volume	9293	9295	5266	5272	5277	5278	3609	3609	2784	2786	4283	4296	3434	6690	7788	7807	7799	7752	7100	7112	7384	6596	6595	7177	7017	7229	7232	7246	7207	6032	6032	5993	4648	4616	
Lanes	5	5	3	3	3	3	2	3	2	2	3	3	2	4	5	4	4	5	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4	
Length	2000	2000	2000	2000	2000	195	1182	890	2000	1282	2000	1297	1256	824	1314	1054	1042	448	914	495	674	410	694	1037	428	2000	2000	2000	2000	1655	906	601	711	503	
LinkID	1	1	218503	218503	218503	218503	218507	218508	218509	218509	318105	318105	217308	217315	217316	971	972	217318	216105	973	216107	216110	974	216112	216115	979	979	979	979	979	980	216114	215901	981	
SegmentID	1	2	1	2	3	4	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1	1	

Speed Color Scale (mph)

10 30 40 50 70

											Exit 7							Exit 9							Exit 11										Exit 13		
											MD 5							MD 337							MD 4										Ritchie Marlboro Rd		
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	53	53	52	51	52	53	53	53	53	38	19	43	51	52	53	53	53	53	49	46	39	34	32	29	27	22	20	17	20	18	17			
Density	20	23	23	22	27	27	27	27	25	25	34	67	37	32	31	27	27	27	29	28	28	36	39	44	49	52	55	48	62	67	72	72	80	86	
LOS	C	C	C	C	D	D	D	D	C	C	D	F	E	D	D	D	D	D	D	D	D	E	E	E	F	F	F	F	F	F	F	F	F	F	
Volume	5149	4788	4808	5627	5592	5628	5628	5623	5246	5248	5242	6426	6438	6441	6432	5636	5637	6656	5947	5930	7192	7149	7055	6918	6737	6605	6479	6463	5528	5447	6084	5894	5728	5664	
Lanes	5	4	4	5	4	4	4	4	4	4	4	5	4	4	4	4	4	5	4	4	5	4	4	4	4	4	4	5	4	4	5	4	4	4	
Length	1083	480	634	675	794	2000	763	1486	2000	2000	1592	691	785	496	1388	717	498	448	540	549	461	1023	2000	2000	2000	922	531	937	2000	484	1349	2000	1038	201	
LinkID	215904	215905	982	215907	215908	983	983	984	214702	214702	214702	213501	213502	985	986	212301	992	212303	212305	1003	212307	212308	1004	1004	1004	1004	1005	212309	211206	211206	211212	1006	1006	1020	
SegmentID	1	1	1	1	1	1	2	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	2	1	1	2	1		

			Exit 15					Exit 16			Exit 17										Exit 19								Exit 20							
			MD 214					Arena Dr			MD 202										US 50								MD 450							
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	14	10	9	11	10	10	10	10	8	7	7	4	6	6	8	9	8	7	6	6	6	6	6	8	8	8	8	7	7	11	13	12	12	12	
Density	79	103	105	108	103	103	114	85	136	144	152	166	154	144	131	128	136	125	161	132	166	165	163	140	132	146	118	151	146	120	107	112	114	114	
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
Volume	5605	4219	4857	4759	5136	4976	4553	4478	3327	3191	3053	4459	4353	4333	4397	4458	4417	4369	3972	3945	3684	3695	3677	5293	5363	4742	4686	4456	5342	5397	5457	5435	5496	5475	
Lanes	5	4	5	4	5	5	4	5	3	3	3	6	5	5	4	4	4	5	4	5	4	4	4	6	5	4	5	4	5	4	4	4	4	4	
Length	1282	1142	804	696	1370	1318	634	1492	2000	2000	987	959	499	722	2000	1520	763	699	785	561	2000	232	498	571	1393	714	276	949	1024	430	2000	2000	2000	1849	
LinkID	211214	210903	210905	210906	210909	1022	209703	209704	209710	209710	209710	208515	208516	1023	326	326	1024	208518	207302	207303	207305	207305	1025	207306	207307	206101	206102	206104	206108	206109	1027	1027	1027	1027	
SegmentID	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	3	4	

					Exit 22						Exit 23											Exit 25							Exit 27							
					MD 295						MD 201											US 1							I-95							
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	12	10	9	9	8	12	13	11	11	12	10	11	10	12	15	20	17	26	48	55	57	57	57	58	55	59	59	59	59	60	60	51	52	53	
Density	114	111	132	128	134	116	108	113	119	113	128	121	111	111	89	79	82	67	37	28	27	23	21	21	22	12	12	10	13	15	19	23	27	30	
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	D	D	C	C	C	C	B	B	A	B	B	C	C	D	D	
Volume	5405	5367	4649	4647	5699	5632	5615	6214	5464	5434	6330	6395	6700	6653	6703	6436	7086	7103	7104	6144	6071	6686	7270	7266	7241	2908	2878	2931	2952	4533	4534	8210	8377	7802	
Lanes	4	5	4	4	4	5	4	4	5	4	4	5	5	6	5	5	4	5	4	4	4	5	6	6	6	4	4	5	4	5	4	7	6	5	
Length	889	603	553	533	437	498	700	1797	577	830	434	995	461	987	1090	1980	1294	1224	1251	249	957	1109	1517	660	1474	2000	355	1017	490	825	766	841	1513	814	
LinkID	1029	206110	205903	1030	205905	205907	1031	205909	204704	1032	204706	204707	204709	204710	1033	2530009	203501	1034	1036	20020	202306	202308	202311	1035	1038	201103	201103	201104	201105	1039	201106	11317	11318	211303	
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	

2040 Diversion Alternative PM I-495 OL

Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	49	52	53	52	53	49	47	52	50	50	45	36	36	32	29	34	34	34	38	38	37	33	24	19	26	18	30	48	50	51	53	53	48
Density	29	28	28	27	25	30	32	41	38	31	31	38	42	52	58	54	56	47	58	53	52	53	47	70	80	74	92	67	42	40	39	38	32	35
LOS	D	D	D	D	C	D	D	E	E	D	D	E	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	E	D	D
Volume	7757	8255	7244	7242	7820	7833	7827	7829	7796	7822	7822	6888	7629	7550	7490	7824	7594	7971	7942	7952	7910	7857	7855	6706	7637	7542	8011	7974	8022	8030	8041	8032	6725	6694
Lanes	5	6	5	5	6	5	5	4	4	5	5	4	5	4	4	5	4	5	4	4	4	4	5	4	5	4	5	4	4	4	4	4	4	4
Length	509	450	501	284	347	1136	1629	1881	1185	301	301	793	713	1020	517	277	854	787	704	2000	832	1091	449	719	500	336	957	536	2000	2000	1795	1336	311	1657
LinkID	11319	17600	2011020	11321	17601	17605	11320	17603	11322	2010960	2010960	2010959	2010956	11323	11324	505498	505499	505500	505501	11325	11325	11326	17220	17222	17224	17225	17227	505512	11327	11327	11327	11328	1980208	505535
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	3	1	1	1

Exit 39: MD 190

	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	37	34	31	31	33	34	32	30	26	19	12	9	12	12	11	8	51	53	53	53	53	53	53	49	52	53	54	54	54	54	54	54	54	53
Density	38	52	49	61	57	55	58	62	58	84	97	112	117	117	120	129	21	18	21	27	27	27	20	27	21	24	24	24	23	20	22	26	26	26
LOS	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C	C	C	D	D	D	C	D	C	C	C	C	C	C	C	C	C	C
Volume	7168	7111	7553	7485	7505	7499	7516	7508	7490	6334	3542	4147	4136	4091	4093	4094	3267	2912	4339	4217	4334	4244	4295	4028	6432	6419	6438	6432	6322	6430	6005	5544	5550	6802
Lanes	5	4	5	4	4	4	4	4	5	4	3	4	3	3	3	4	3	3	4	3	3	3	4	3	6	5	5	5	5	6	5	4	4	5
Length	752	746	998	526	1257	2000	87	1045	402	1593	282	910	494	913	1192	325	2000	22	406	1085	2000	1144	1316	2000	551	937	2000	655	442	1021	1587	2000	575	1737
LinkID	1963506	1963507	1963508	1963509	11329	11443	11443	11330	11444	11445	11457	11494	11497	11332	11333	11493	11496	11496	11495	505569	1063	1063	24	4	495375	495392	1064	1064	1066	495408	495407	495406	495406	495401
SegmentID	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	2	1	1	1	1	2	1

Exit 41: Clara Barton Pkwy

Bridge: American Legion

Exit 43: GW Memorial Pkwy

Exit 44: VA 193

	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	54	54	50	47	52	53	54	54	54	54	53	53	53
Density	32	25	28	24	32	28	24	24	24	24	21	27	24	30
LOS	D	C	D	C	D	D	C	C	C	C	C	D	C	D
Volume	6818	6832	6008	5996	6015	7310	5205	5202	5208	5216	5760	5751	6407	6425
Lanes	4	5	4	5	4	5	4	4	4	4	5	4	5	4
Length	1466	999	843	931	1715	1529	320	1385	2000	1725	732	1051	1414	601
LinkID	495415	2541579	1067	495416	495417	495418	11138	1069	2530014	2530014	1083	1084	1101	1114
SegmentID	1	1	1	1	1	1	1	1	1	2	1	1	1	1

2040 Diversion Alternative PM - I-495 IL Link Evaluation Results 3/18/2020

2040 Diversion Alternative PM I-495 IL

				Exit 44				Exit 43			Bridge		Exit 41									Exit 39													
				VA 193				GW Memorial Pkwy			American Legion		Clara Barton Pkwy									MD 190							I-270 W Spur						
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	59	58	58	41	32	25	20	20	21	20	18	14	14	10	9	10	12	10	10	9	8	8	10	10	10	10	10	7	7	6	8	9	8	7	
Density	22	18	18	29	36	45	54	64	61	64	72	90	93	106	107	115	119	105	108	139	142	137	101	117	121	119	119	156	155	161	144	139	109	154	
LOS	C	B	B	D	E	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
Volume	5154	5147	5147	4706	4591	5633	5381	5205	5098	5148	6441	5097	5094	5101	4955	5804	5647	5471	5426	4909	5337	5334	5917	5825	5950	5999	6010	3164	3164	3653	3650	3655	3698	3053	
Lanes	4	5	5	4	4	5	5	4	4	4	5	4	4	5	5	5	4	5	5	4	5	5	6	5	5	5	5	3	3	4	3	3	4	3	
Length	2000	1499	1499	2000	93	1457	1556	642	679	466	602	477	685	1486	775	989	2000	1045	395	1944	1491	616	1108	391	1767	724	1508	2000	850	1337	2000	1173	305	2000	
LinkID	1100	1037	1037	495411	495411	1089	1054	1080	1079	1113	1073	495412	1062	495413	1057	495414	2541577	1115	495402	495403	495404	1116	495405	495409	1117	495391	1118	495371	495371	7	40	11334	11471	11491	
SegmentID	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	

Speed Color Scale (mph)

10 30 40 50 70

	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	7	7	8	11	12	11	12	14	14	14	19	20	19	18	16	15	18	16	26	27	29	31	28	27	24	20	23	23	25	42	47	44	42	41	
Density	118	118	135	99	123	127	93	97	99	96	89	86	73	77	96	93	94	97	77	74	69	64	57	59	76	80	85	72	80	50	45	47	48	49	
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	F	F	F	
Volume	3233	3233	3210	3246	2963	5623	6946	6950	6913	6840	6906	6936	6929	6906	6356	6732	6728	7986	7996	7905	7941	7946	7949	7954	7269	7981	7722	8286	8198	8311	8302	8213	8093	8033	
Lanes	4	4	3	3	2	4	6	5	5	5	4	4	5	5	4	5	4	5	4	4	4	4	5	5	4	5	4	5	4	4	4	4	4	4	
Length	439	439	659	1113	1519	1951	513	1013	1002	522	1603	252	526	658	913	228	793	1635	2000	164	2000	1786	2000	50	837	411	323	1131	452	2000	1086	1248	248	500	
LinkID	11492	11492	11465	11336	11466	11455	11468	11469	11335	11470	505527	11337	505528	2010228	505529	505530	505531	505532	505513	505513	2010221	2010221	17211	17211	17213	17215	17217	17219	1963309	11338	11338	11339	2000210	505503	
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	2	1	1	1	

																							Exit 27						Exit 25						
																							I-95						US 1						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	40	37	36	29	27	24	27	25	33	38	40	41	40	37	33	26	27	28	27	35	54	54	52	51	51	50	52	53	53	51	52	50	51	51	
Density	40	52	54	57	66	65	72	67	62	55	51	51	42	52	57	63	71	66	63	40	15	16	14	18	18	14	18	22	22	25	31	32	31	25	
LOS	E	F	F	F	F	F	F	F	F	F	F	F	E	F	F	F	F	F	F	E	B	B	B	C	C	B	B	C	C	C	D	D	D	C	
Volume	8080	7711	7730	8139	7183	7729	7737	8280	8291	8288	8282	8259	8239	7638	7551	8063	7570	7560	8375	8295	3331	3343	3742	3756	3737	2151	4669	4658	4668	6397	6353	6411	6342	6403	
Lanes	5	4	4	5	4	5	4	5	4	4	4	4	5	4	4	5	4	4	5	6	4	4	5	4	4	3	5	4	4	5	4	4	4	5	
Length	260	499	524	1562	808	422	768	284	1222	2000	1072	1153	356	352	505	464	500	1046	1488	1491	1028	536	347	2000	140	1527	1464	2000	1607	668	846	610	481	1016	
LinkID	505504	505505	11340	505491	2110283	2010441	2010961	2010966	2010967	11342	11342	11344	17606	2211296	11345	17608	111296	11346	111307	11341	101104	1138	101106	101107	101107	1137	101110	102301	102301	102312	102313	1135	1136	102314	
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	

	Exit 24					Exit 23							Exit 22											Exit 20						Exit 19						
	Greenbelt Metro Station					MD 201							MD 295											MD 450						US 50						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	51	51	52	52	53	52	51	51	49	52	53	52	47	50	52	53	52	52	52	51	52	51	52	52	48	50	52	52	51	53	53	52	52	49	
Density	31	27	25	25	25	23	29	26	34	25	28	28	30	32	31	24	31	31	31	32	31	32	24	28	29	35	27	27	22	24	24	22	26	35	
LOS	D	D	C	C	C	C	D	C	D	C	D	D	D	D	D	C	D	D	D	D	D	D	C	D	D	E	D	D	C	C	C	C	D	D	
Volume	6284	5647	6590	6555	5332	5946	5917	6595	6585	6553	5915	5924	7012	6363	6338	6453	6445	6464	6467	6483	6496	6492	6356	5790	7016	6977	6984	5676	5683	5052	5055	6830	6848	6848	
Lanes	4	4	5	5	4	5	4	5	4	5	4	4	5	4	4	5	4	4	4	4	4	4	5	4	5	4	5	4	5	4	4	6	5	4	
Length	2000	23	1042	442	1150	761	810	734	928	447	512	554	554	497	516	754	706	2000	2000	2000	1629	1217	263	1180	915	561	1358	1369	213	2000	603	1423	754	2000	
LinkID	103501	103501	1139	103502	104704	104706	104707	104709	104710	104711	105902	1140	105904	105906	1141	105908	105909	1142	1142	1142	1142	1143	105910	106105	106108	106109	106110	107301	107302	107307	107307	107309	1144	107311	
SegmentID	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	1	1	

2040 Diversion Alternative
PM
I-495 IL

							Exit 16 Arena Dr						Exit 15 MD 214							Exit 13 Ritchie Marlboro Rd									Exit 11 MD 4					
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	49	52	53	53	53	52	50	51	51	50	48	51	48	44	50	51	51	53	53	53	52	53	53	52	51	51	52	53	50	52	53	52	52	53
Density	35	26	26	28	28	28	31	27	26	27	32	24	29	31	34	33	33	26	25	25	24	30	30	30	30	31	26	26	25	25	25	23	29	29
LOS	D	D	C	D	D	D	D	D	D	D	D	C	D	D	D	D	D	C	C	C	C	D	D	D	D	D	D	D	C	C	C	C	D	D
Volume	6803	6813	6836	4423	4444	4445	6196	6743	6748	6748	6093	6095	5524	6781	6778	6784	6700	6771	5211	5223	6267	6258	6254	6240	6237	6236	5516	5500	6308	5285	5239	6031	6025	6024
Lanes	4	5	5	3	3	3	4	5	5	5	4	5	4	5	4	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4	5	4	4
Length	190	855	1495	2000	2000	1908	1069	1470	249	1490	1056	692	986	1397	2000	796	480	997	2000	1053	1469	2000	2000	2000	761	1366	456	479	560	505	526	1147	344	1293
LinkID	107311	107312	1145	108500	108500	108500	109704	109707	1146	1148	110904	110905	110907	110913	1147	1147	1149	110915	111105	111105	111111	111112	111112	111112	111112	1150	112301	1151	112303	112305	1152	112307	112308	1153
SegmentID	2	1	1	1	2	3	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	3	4	1	1	1	1	1	1	1	1	1

				Exit 9 MD 337									Exit 7 MD 5													Exit 4 MD 414								
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	53	61	63	63	62	61	61	61	63	62	63	61	63	63	63	63	63	63	63	63	62	63	63	63	62	63	63	62	61	54	59	63	63
Density	28	23	22	22	22	19	25	25	25	19	19	16	16	20	17	21	19	24	24	24	24	24	19	22	22	19	20	20	18	22	25	31	20	19
LOS	D	C	C	C	C	C	C	C	C	C	C	B	B	C	B	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	D	C	C
Volume	6009	6007	5508	5518	5497	6054	6078	6075	6081	6081	6083	3984	4955	4975	5304	5340	6039	6116	6104	6099	6091	6061	6055	5623	5575	5951	5071	5055	5477	5497	5401	3726	3749	2424
Lanes	4	5	4	4	4	5	4	4	4	5	5	4	5	4	5	4	5	4	4	4	4	4	5	4	4	5	4	4	5	4	4	2	3	2
Length	896	625	2000	2000	770	663	810	2000	681	757	1486	1142	789	703	680	1827	799	2000	2000	2000	708	860	617	1155	507	909	508	589	349	2000	55	1054	1707	1386
LinkID	1154	112309	113503	113503	113503	114701	114702	1155	1155	114703	1157	115905	115910	115911	115913	115914	1158	2541545	2541545	2541545	2541545	1159	115915	116102	1161	116104	116106	1162	116108	116109	116109	116110	116111	117305
SegmentID	1	1	1	2	3	1	1	1	2	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	1	1

	Exit 3 MD 210					Exit 2 I-295			WWB					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	59	60	59	57	57	48	25	45	49	53	53	53	56	56
Density	13	17	15	21	21	32	62	48	43	40	40	39	30	30
LOS	B	B	B	C	C	D	F	F	E	E	E	E	D	D
Volume	3055	3037	3486	3484	3490	3073	4634	4284	6286	6280	6266	6219	8321	8326
Lanes	4	3	4	3	3	2	3	2	3	3	3	3	5	5
Length	907	581	640	2000	598	1132	851	1030	2000	2000	2000	1329	2000	1262
LinkID	117307	117308	117310	117311	117311	118503	118504	118506	118508	118508	118508	118508	44	44
SegmentID	1	1	1	1	2	1	1	1	1	2	3	4	1	2

2040 Diversion Alternative PM - I-270 NB Link Evaluation Results 3/18/2020

2040 Diversion Alternative PM I-270 NB

		Exit 1																	Exit 4				Exit 5					Exit 6							
		I-270 W Spur/I-495				Democracy Blvd		Westlake Terrace				I-270 Spur							Montrose Rd				MD 189					MD 28							
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	10	50	53	55	54	54	53	52	54	54	53	54	54	54	53	53	52	52	53	52	53	53	53	50	52	52	53	52	52	52	52	53	53	53
Density	119	28	27	17	22	17	26	24	23	24	24	26	26	26	26	26	23	25	29	34	34	34	31	31	30	30	34	31	28	34	34	33	28	24
LOS	F	D	D	B	C	B	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C
Volume	6010	2830	2820	2814	2421	2730	2718	3793	3781	3799	3800	8327	8344	8326	8313	8303	8277	7915	7786	8937	8937	8938	8348	9362	9395	9397	9130	8043	8866	8863	8849	8830	8827	8792
Lanes	5	2	2	3	2	3	2	3	3	3	3	6	6	6	6	6	7	6	5	5	5	5	5	6	6	6	5	5	6	5	5	5	6	7
Length	1508	2000	1339	894	788	886	450	793	1166	705	1845	431	1520	1204	1533	999	769	702	531	2000	1343	799	690	1389	530	634	406	872	598	2000	1459	1474	998	515
LinkID	1118	495372	495372	232	234	235	237	134	241	242	243	274	275	738	739	280	2541645	428	742	289	289	251	743	300	744	304	305	316	745	2541657	320	741	747	2541659
SegmentID	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1

Speed Color Scale (mph): 10 | 30 | 40 | 50 | 70

		Exit 8		Exit 9							Exit 10		Exit 11												Exit 13				Exit 15						Exit 16	
		Shady Grove Rd		I-370							MD 117		MD 124				Watkins Mill Rd								Middlebrook Rd				MD 118						MD 27	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	49	30	26	22	19	17	16	21	21	20	19	17	15	14	13	15	13	12	12	15	15	14	15	14	15	17	19	21	21	18	16	16	16	17
Density	30	46	44	50	59	65	61	57	56	67	72	77	86	88	90	98	110	116	115	90	75	89	87	100	99	66	72	75	76	73	88	90	73	88
LOS	D	F	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	7344	8401	3414	3329	4588	4470	5997	5956	5855	5424	5338	5235	5167	6061	6042	6011	6964	6999	6960	6861	6848	6390	6452	5769	5742	5714	5415	4851	4818	5399	4238	4237	4545	4455
Lanes	5	6	3	3	4	4	6	5	5	4	4	4	4	5	5	4	5	5	5	5	6	5	5	4	4	5	4	3	3	4	3	3	4	3
Length	726	481	1026	634	2000	749	531	843	1357	2000	2000	2000	1479	584	913	444	1112	258	2000	725	763	636	665	872	672	820	1561	1090	527	1717	520	1157	771	687
LinkID	323	336	339	749	411	411	347	348	754	350	350	350	350	362	363	762	2430241	2430244	10040808	763	364	365	367	369	764	370	372	374	765	376	378	766	380	381
SegmentID	1	1	1	1	1	2	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

		Exit 18																	Exit 22																	
		MD 121																	MD 109																	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	17	18	18	17	17	18	17	18	16	13	13	12	12	11	12	22	42	51	52	52	52	52	52	52	52	52	54	53	46	47	51	52	52	52
Density	69	86	87	88	89	87	88	84	73	99	82	86	122	130	117	64	50	41	40	40	40	40	40	40	40	41	26	38	30	44	41	40	40	40
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	E	E	E	E	E	E	D	E	D	E	E	E	E	E
Volume	4603	4613	4605	4596	4613	4604	4569	4581	4608	3785	4192	4206	4212	4232	4207	4225	4223	4234	4221	4195	4233	4207	4209	4220	4232	4216	4225	4019	4196	4180	4192	4189	4189	4199
Lanes	4	3	3	3	3	3	3	3	4	3	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2
Length	457	1044	2000	2000	2000	2000	718	756	736	920	211	877	400	1727	2000	1731	2000	2000	905	482	2000	383	1176	2000	1202	1164	340	1049	291	1204	2000	2000	2000	2000
LinkID	383	384	767	767	767	767	767	768	385	387	389	1001	390	769	391	391	272	272	272	392	394	394	395	396	396	750	397	399	401	402	771	771	771	771
SegmentID	1	1	1	2	3	4	5	1	1	1	1	1	1	1	1	2	1	2	3	1	1	2	1	1	2	1	1	1	1	1	1	2	3	4

		Exit 26																								Exit 31					
		MD 80																								MD 85					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	52	52	52	49	45	43	41	34	25	38	49	50	49	51	50	51	50	51	51	52	52	52	52	52	52	53	53	52	53	53	53
Density	40	40	41	43	46	48	33	53	56	56	44	43	44	43	43	42	43	42	43	42	42	41	42	42	42	27	38	25	34	25	25
LOS	E	E	E	E	F	F	D	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	E	C	D	C	C
Volume	4198	4203	4199	4202	4190	4158	4101	3593	4311	4285	4306	4300	4309	4315	4312	4290	4296	4256	4317	4341	4342	4345	4344	4344	4326	4344	3991	3938	3558	5364	5357
Lanes	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	4	4
Length	1502	2000	1497	2000	698	1279	214	773	615	868	2000	2000	2000	2000	1813	539	1225	391	2000	2000	2000	2000	2000	178	1025	473	1416	241	945	1115	392
LinkID	771	412	412	446	446	783	403	405	407	408	784	784	784	784	784	1010	1017	1007	869	869	869	869	869	869	785	415	417	421	423	425	577
SegmentID	5	1	2	1	2	1	1	1	1	1	1	2	3	4	5	1	1	1	1	2	3	4	5	6	1	1	1	1	1	1	1

2040 Diversion Alternative PM - I-270 SB Link Evaluation Results 3/18/2020

2040 Diversion Alternative PM I-270 SB

					Exit 31																				Exit 26										
					MD 85																				MD 80										
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	58	58	58	58	56	59	55	59	62	63	63	63	63	63	63	62	61	60	59	58	58	57	58	60	58	57	57	59	59	59	59	59	58
Density	21	21	21	23	23	16	17	16	22	21	21	21	21	21	20	21	21	21	21	22	22	22	22	15	17	13	21	20	20	20	20	20	20	20
LOS	C	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C
Volume	3616	3604	3625	2683	2685	2666	1965	2610	2600	2608	2597	2591	2591	2599	2571	2598	2595	2585	2581	2578	2579	2572	2571	2559	2076	2344	2347	2345	2331	2347	2354	2303	2347	2357
Lanes	3	3	3	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2
Length	931	404	446	474	1052	294	849	378	1140	2000	2000	2000	2000	2000	262	2000	2000	2000	2000	2000	2000	548	1088	377	654	1399	88	1849	565	2000	2000	57	2000	2000
LinkID	683	2000012	157	2000014	699	2000016	2000017	2000020	2000021	703	703	703	703	703	703	448	448	448	448	448	448	448	704	201	2000022	2000025	2000026	705	447	455	455	455	453	453
SegmentID	1	1	1	1	1	1	1	1	1	1	2	3	4	5	6	1	2	3	4	5	6	7	1	1	1	1	1	1	1	1	2	3	1	2

Speed Color Scale (mph)

10 30 40 50 70

					Exit 22																				Exit 18										
					MD 109																				MD 121										
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	57	58	58	58	58	58	56	57	58	58	58	58	58	58	58	58	59	58	61	62	62	62	61	63	62	63	63	64	63	63	63	63	64
Density	20	20	20	20	13	19	14	22	21	21	21	21	21	21	21	21	21	21	20	13	13	10	11	10	13	12	15	15	15	15	15	15	11	13
LOS	C	C	C	C	B	C	B	C	C	C	C	C	C	C	C	C	C	C	C	B	B	A	B	A	B	B	B	B	B	B	B	B	B	B
Volume	2356	2356	2346	2341	2330	2243	2454	2458	2454	2434	2430	2448	2444	2429	2443	2423	2400	2407	2386	2386	2382	2377	2068	2488	2483	2872	2874	2874	2870	2864	2866	2846	2851	2454
Lanes	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	3	4	3	4	3	3	3	3	3	3	4	3
Length	453	453	410	706	2000027	2000029	2000031	2000032	707	707	2000033	2000034	2000034	2000036	2000037	2000037	2000037	260	260	2000038	708	2000039	2000041	1002	2000044	709	2020578	2020578	2020578	2020578	2020578	710	2000045	2000047
LinkID	3	4	1	1	1	1	1	1	1	2	1	1	2	1	1	2	3	1	2	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1

					Exit 16				Exit 15				Exit 13						Exit 11				Exit 10				Exit 9						Exit 8		
					MD 27				MD 118				Middlebrook Rd						Watkins Mill Rd				MD 124				MD 117				I-370				Shady Grove Rd		
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	62	63	63	63	63	62	63	61	61	63	63	63	62	61	61	63	64	64	63	59	62	63	63	60	61	59	62	63	64	59	59	59	57	57
Density	13	16	14	14	16	14	18	17	22	22	22	20	21	21	21	13	13	12	15	17	21	20	20	23	19	19	16	16	10	12	12	15	15	17
LOS	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	B	B	B	B	B	C	C	C	C	C	C	B	B	A	B	B	B	B	B
Volume	3095	3081	3445	3447	3066	3430	3394	4085	4092	4107	4101	5103	5128	5105	5113	4179	3189	3170	3851	5132	5094	5127	5130	6839	6865	6881	6856	6876	3211	5055	5059	4362	5068	5838
Lanes	4	3	4	4	3	4	3	4	3	3	3	4	4	4	4	5	4	4	4	5	4	4	4	5	6	6	7	7	5	7	7	5	6	6
Length	684	1035	1007	1058	1713	543	751	500	1025	2000	723	1566	1324	2000	655	527	1503	595	1167	838	658	2000	1062	1569	1152	411	1058	1257	1243	795	1607	706	478	708
LinkID	2000049	2000050	2000052	711	2000054	2000056	2000057	2000059	2000060	712	712	2000062	713	1026	1026	2541402	2000063	718	2000064	2000067	2000068	720	720	2000070	2000097	721	2000071	2000072	2000074	2000078	2000080	2000083	2000086	2000089
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1

						Exit 6						Exit 5						Exit 4							Exit 1										
						MD 28						MD 189						Montrose Rd						I-270 Spur				Westlake Terrace	Democracy Blvd						I-270 W Spur/I-495
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	57	57	57	56	57	57	56	57	57	56	55	56	56	47	33	13	54	55	55	54	55	55	55	58	59	58	59	59	57	57	57	57	52
Density	20	20	20	21	17	18	19	19	19	19	19	20	19	18	21	35	74	20	17	17	17	17	17	17	11	11	11	10	10	8	10	14	14	21
LOS	C	C	C	C	B	C	C	C	C	C	C	C	C	C	C	D	F	C	B	B	B	B	B	B	B	A	A	A	A	A	A	B	B	C
Volume	5811	5832	5805	5825	5811	5245	5464	6434	6472	6454	6434	5495	5495	6061	6045	5753	5843	5236	5563	5546	5541	5461	5540	5539	2563	2558	2558	1706	1692	2380	2372	2382	2377	6432
Lanes	5	5	5	5	6	5	5	6	6	6	6	5	5	6	6	5	6	5	6	6	6	6	6	6	4	4	4	3	3	5	4	3	3	6
Length	1085	607	1508	2000	291	896	986	575	1050	610	836	816	1571	691	452	809	650	937	415	2000	1709	719	387	330	2000	983	955	2000	442	498	934	2000	506	551
LinkID	2000091	2000094	2000095	2000109	449	2000110	2000118	2000121	2000122	2000125	2000126	160	740	130	445	2000137	2000139	2000141	2000143	129	129	730	443	442	133	133	137	138	138	141	2020142	2115374	2115374	495375
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	2	1	1	1	2	1

ATTACHMENT G – THROUGHPUT TABLES

I-495 Throughput	Inner Loop				Outer Loop			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
BETWEEN VA-193 AND GW MEMORIAL PKWY	9551	10319	8464	7739	7924	8514	8379	7810
AMERICAN LEGION BRIDGE	9458	10584	8859	8484	10183	10792	10404	9570
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	8056	8830	7049	7304	9934	9927	9064	8348
BETWEEN MD 190 AND I-270	8606	9138	8329	8877	11120	10610	9290	8558
BETWEEN I-270 WEST AND MD 187	5517	4531	3931	4526	4835	4481	3791	4574
BETWEEN I-270 EAST AND MD 187	5182	3954	3614	4434	4964	4765	4024	4922
BETWEEN MD 355 AND MD 185	7896	7649	7877	7901	7368	7927	6826	8240
BETWEEN MD 185 AND MD 97	7281	7384	7724	7896	8111	8154	7267	7567
BETWEEN MD 97 AND US 29	6328	7039	6935	7110	7613	7041	6450	6359
BETWEEN MD US 29 AND MD 193	5891	6569	6483	6453	6760	6183	5848	5438
BETWEEN MD 193 AND MD 650	6076	6953	6950	6562	6332	5616	5363	5964
BETWEEN MD 650 AND I-95	7312	7675	7027	6815	7043	5931	5820	6501
BETWEEN US 1 AND I-95	7124	6934	6627	6931	7424	6912	7394	7582
BETWEEN GREENBELT STATION AND US 1	8758	8876	8571	8887	8473	7815	8478	8323
BETWEEN GREENBELT STATION AND MD 201	9566	10026	9472	9667	7705	6865	7353	7004
BETWEEN MD 201 AND MD 295	9132	9523	9657	9503	8263	7990	8244	7727
BETWEEN MD 295 AND MD 450	8843	9514	9825	9696	9333	8755	9359	9108
BETWEEN MD 450 AND US 50	8903	9435	10188	9858	9307	8694	9623	9385
BETWEEN US 50 AND MD 202	9997	10441	11154	10565	9173	8267	8945	9051
BETWEEN MD 202 AND ARENA DR	9967	10261	11022	9922	8909	8175	8876	8864
BETWEEN ARENA DR AND MD 214	10016	10410	10911	9453	9092	8396	9169	9090
BETWEEN MD 214 AND RITCHIE MARLBORO RD	10050	10180	10838	8994	8781	8174	8932	8683
BETWEEN RITCHIE MARLBORO AND MD 4	9454	9525	9515	8426	7688	7131	8053	8168
BETWEEN MD 4 AND FORESTVILLE RD	8870	8875	8654	8778	6496	6168	6859	7175
BETWEEN FORESTVILLE AND MD 218	8174	7994	8016	8411	5537	4914	5677	6354
BETWEEN MD 218 AND MD 5	8277	7839	8223	8540	6149	5510	6281	6673
BETWEEN MD 5 AND MD 414	6134	5825	6185	7107	5314	5575	5269	5609
BETWEEN MD 414 AND MD 210	5678	6054	6009	6987	5077	5051	4989	5186
BETWEEN MD 210 AND I-295	7197	6671	6889	7604	4762	4803	4582	4701
WOODROW WILSON BRIDGE	9625	10027	9985	9641	8253	8183	7831	8123

I-270 Throughput	Southbound				Northbound			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
BETWEEN MD 85 AND MD 80	3264	3138	3187	3405	1870	2718	2976	2718
BETWEEN MD 80 AND MD 109	3664	3642	3628	3729	1618	2264	2500	2362
BETWEEN MD 109 AND MD 121	4075	4107	4075	4097	1697	2353	2606	2346
BETWEEN MD 121 AND MD 27	5096	5144	5009	4874	2089	2588	2761	2567
BETWEEN MD 27 AND MD 118	5624	5269	4917	5394	2297	2858	3053	2908
BETWEEN MD 118 AND MIDDLEBROOK RD	6153	5753	5526	5935	2388	3165	3615	3461
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	8161	7517	7389	7699	2798	3874	4494	4200
BETWEEN WATKINS MILL AND MD 124	7087	6576	6539	6595	2637	3975	4695	4411
BETWEEN MD 124 AND MD 117	8385	7974	7873	8006	2521	3967	4671	4490
BETWEEN MD 117 AND I-370	10138	9518	9387	9569	3041	4884	5970	5624
BETWEEN I-370 AND SHADY GROVE RD	11821	10880	9840	9294	2936	4381	5200	5179
BETWEEN SHADY GROVE RD AND MD 28	12266	11110	9739	8082	3663	5596	6718	6500
BETWEEN MD 28 AND MD 189	12291	11946	10339	7611	4278	6385	7592	7338
BETWEEN MD 189 AND MONTROSE RD	12196	12287	9710	7110	4159	6038	7425	7647
BETWEEN MONTROSE RD AND I-270 SPLIT	11575	12433	10884	7944	5051	6638	7941	8100
BETWEEN I-270 SPLIT AND MD 187	4539	5425	5130	3173	1618	2116	2917	3111
BETWEEN MD 187 AND I-495	3791	4191	4325	3093	2075	2744	3152	3354
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	6999	6659	6184	4815	3453	4542	5089	5021
BETWEEN DEMOCRACY BLVD AND I-495	6274	6069	5495	3962	3084	4172	4468	4508

I-495 Throughput	Inner Loop				Outer Loop			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN VA-193 AND GW MEMORIAL PKWY	7570	7686	6388	5525	7798	7520	6606	6627
AMERICAN LEGION BRIDGE	9115	8545	7472	6680	9690	9387	8694	8290
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	7326	6179	5401	4907	8808	8129	7520	7317
BETWEEN MD 190 AND I-270	9987	8508	8171	6934	8985	8543	7616	7108
BETWEEN I-270 WEST AND MD 187	3906	3164	2904	2417	4782	4217	3810	3489
BETWEEN I-270 EAST AND MD 187	3009	3246	2717	2356	4750	4091	3629	3130
BETWEEN MD 355 AND MD 185	6717	6913	6129	5704	7833	7499	6436	5215
BETWEEN MD 185 AND MD 97	7964	7996	6884	6638	8121	8022	7366	5175
BETWEEN MD 97 AND US 29	8351	8311	6923	6428	7695	7952	7185	5324
BETWEEN MD US 29 AND MD 193	8169	8139	6895	6178	7089	7550	6707	4703
BETWEEN MD 193 AND MD 650	8377	8288	7247	6590	7395	7829	7058	4886
BETWEEN MD 650 AND I-95	8811	8375	7630	7054	7833	8210	8057	5214
BETWEEN US 1 AND I-95	8782	8850	8277	5078	9386	9721	9349	8801
BETWEEN GREENBELT STATION AND US 1	8944	8797	8142	5821	9220	9575	8913	8561
BETWEEN GREENBELT STATION AND MD 201	9190	9036	8348	6077	8705	8920	8281	8116
BETWEEN MD 201 AND MD 295	8998	8961	8462	6329	8292	8469	7634	7720
BETWEEN MD 295 AND MD 450	9564	9216	8708	6420	7925	7607	7012	7159
BETWEEN MD 450 AND US 50	10055	9748	9238	7150	8420	7589	7103	7051
BETWEEN US 50 AND MD 202	10062	9510	9540	8374	9405	7283	6574	6099
BETWEEN MD 202 AND ARENA DR	9936	9563	8618	7782	9931	7703	6856	5891
BETWEEN ARENA DR AND MD 214	9945	9405	8184	7182	9787	8022	6560	5609
BETWEEN MD 214 AND RITCHIE MARLBORO RD	9712	9430	8152	5718	10023	8795	6442	5389
BETWEEN RITCHIE MARLBORO AND MD 4	8269	8423	7433	4558	9539	9449	6008	4837
BETWEEN MD 4 AND FORESTVILLE RD	7704	8170	6448	4215	8943	8751	5871	4911
BETWEEN FORESTVILLE AND MD 218	7219	7671	6184	3884	7896	7567	5702	4773
BETWEEN MD 218 AND MD 5	7627	8241	6767	4270	8280	7913	6407	5068
BETWEEN MD 5 AND MD 414	5572	6127	5327	3470	8429	8231	8066	5335
BETWEEN MD 414 AND MD 210	5025	5497	5014	3390	7721	7807	7784	5555
BETWEEN MD 210 AND I-295	4752	5235	4955	3576	7316	7583	7626	6121
WOODROW WILSON BRIDGE	7640	8321	8272	6841	9271	9293	9340	9030

I-270 Throughput	Southbound				Northbound			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN MD 85 AND MD 80	2315	2600	2887	3010	4392	4285	4204	3948
BETWEEN MD 80 AND MD 109	2078	2345	2687	2770	4143	4180	4103	3976
BETWEEN MD 109 AND MD 121	2221	2454	2791	2845	4214	4212	4139	4184
BETWEEN MD 121 AND MD 27	2727	2874	3403	3400	5085	4613	4634	4916
BETWEEN MD 27 AND MD 118	3304	3445	3585	3815	6252	5399	5172	5942
BETWEEN MD 118 AND MIDDLEBROOK RD	3819	4092	4284	4370	6832	5769	5172	6291
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	4832	5103	5572	5422	8151	6861	5965	7539
BETWEEN WATKINS MILL AND MD 124	3949	3851	4249	4429	7989	6969	5663	6928
BETWEEN MD 124 AND MD 117	5100	5094	5575	5533	8487	7582	5723	7570
BETWEEN MD 117 AND I-370	6547	6839	7472	7003	10017	9188	6474	8633
BETWEEN I-370 AND SHADY GROVE RD	6600	6579	6309	6510	11228	11035	6493	8050
BETWEEN SHADY GROVE RD AND MD 28	7514	7659	7387	7617	11644	11546	7498	8413
BETWEEN MD 28 AND MD 189	8034	8300	8026	8245	12077	12046	8517	8778
BETWEEN MD 189 AND MONTROSE RD	7677	7920	7425	7435	11781	11621	9408	7961
BETWEEN MONTROSE RD AND I-270 SPLIT	7234	7793	7309	6869	11629	11297	10860	7530
BETWEEN I-270 SPLIT AND MD 187	3039	3005	2989	2863	4823	4827	4369	2722
BETWEEN MD 187 AND I-495	3440	3421	3369	3005	4228	4152	3732	2912
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	4089	4560	4348	3894	6766	6462	6549	5393
BETWEEN DEMOCRACY BLVD AND I-495	4070	4172	3736	3467	5322	5018	4886	4276

ATTACHMENT H – PERCENT DEMAND MET

Throughput and Percent Demand Met
2040 Diversion Alternative

I-495 2040 Diversion Alternative AM Percent Demand Met	Inner Loop				Outer Loop			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
Between VA 193 and GW Memorial Pkwy	95%	98%	84%	80%	100%	96%	90%	86%
American Legion Bridge	97%	93%	77%	77%	98%	93%	90%	86%
Between Clara Barton Pkwy and Cabin John Pkwy	87%	84%	65%	71%	97%	91%	88%	83%
Between MD 190 and I-270	100%	89%	75%	84%	100%	88%	87%	82%
Between I-270 West and MD 187	96%	76%	69%	79%	97%	80%	77%	85%
Between I-270 East and MD 187	93%	70%	67%	79%	98%	87%	84%	92%
Between MD 355 and MD 185	100%	78%	88%	92%	96%	91%	77%	90%
Between MD 185 and MD 97	100%	81%	87%	95%	94%	89%	82%	82%
Between MD 97 and US 29	100%	82%	83%	91%	96%	92%	92%	84%
Between MD US 29 and MD 193	100%	83%	84%	91%	95%	92%	96%	82%
Between MD 193 and MD 650	100%	85%	86%	91%	95%	92%	96%	95%
Between MD 650 and I-95	98%	88%	91%	93%	95%	88%	94%	96%
Between US 1 and I-95	82%	73%	72%	77%	100%	99%	100%	100%
Between Greenbelt Station and US1	84%	75%	73%	81%	100%	94%	100%	100%
Between Greenbelt Station and MD 201	94%	88%	83%	91%	95%	80%	90%	94%
Between MD 201 and MD 295	93%	88%	86%	90%	94%	83%	91%	94%
Between MD 295 and MD 450	94%	91%	89%	93%	97%	85%	94%	98%
Between MD 450 and US 50	94%	92%	90%	95%	98%	84%	94%	97%
Between US 50 and MD 202	96%	94%	92%	95%	96%	81%	92%	95%
Between MD 202 and Arena Dr	96%	94%	93%	91%	93%	78%	89%	94%
Between Arena Dr and MD 214	97%	95%	93%	87%	92%	78%	89%	94%
Between MD 214 and Ritchie Marlboro Rd	97%	94%	97%	84%	92%	75%	87%	92%
Between Ritchie Marlboro Rd and MD 4	96%	91%	90%	83%	91%	74%	90%	96%
Between MD 4 and Forestville Rd	96%	94%	84%	93%	87%	71%	88%	97%
Between Forestville Rd and MD 218	96%	91%	84%	95%	85%	66%	86%	97%
Between MD 218 and MD 5	95%	87%	84%	94%	84%	67%	86%	97%
Between MD 5 and MD 414	79%	92%	83%	99%	100%	91%	96%	100%
Between MD 414 and MD 210	69%	93%	81%	100%	99%	85%	92%	100%
Between MD 210 and I-295	76%	88%	84%	100%	100%	85%	92%	100%
Woodrow Wilson Bridge	83%	89%	90%	100%	100%	85%	90%	100%

I-270 2040 Diversion Alternative AM Percent Demand Met	Southbound				Northbound			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
Between MD 85 and MD 80	87%	80%	88%	99%	99%	91%	95%	100%
Between MD 80 and MD 109	89%	83%	92%	100%	100%	91%	94%	100%
Between MD 109 and MD 121	87%	82%	91%	98%	100%	92%	96%	99%
Between MD 121 and MD 27	89%	87%	95%	98%	100%	93%	94%	95%
Between MD 27 and MD 118	84%	90%	92%	100%	100%	100%	100%	100%
Between MD 118 and Middlebrook Rd	85%	91%	93%	100%	99%	93%	91%	93%
Between Middlebrook Rd and Watkins Mill	88%	90%	95%	100%	99%	92%	91%	93%
Between Watkins Mill and MD 124	89%	93%	100%	100%	98%	92%	89%	91%
Between MD 124 and MD 117	85%	91%	99%	100%	96%	92%	87%	90%
Between MD 117 and I-370	87%	89%	95%	100%	95%	92%	86%	89%
Between I-370 and Shady Grove Rd	100%	97%	98%	97%	100%	94%	84%	88%
Between Shady Grove Rd and MD 28	100%	100%	100%	89%	100%	99%	87%	90%
Between MD 28 and MD 189	100%	100%	97%	75%	100%	96%	81%	85%
Between MD 189 and Montrose Rd	100%	100%	90%	70%	100%	96%	83%	93%
Between Montrose Rd and I-270 Split	100%	97%	93%	74%	100%	98%	86%	97%
Between I-270 Split and MD 187	100%	94%	99%	69%	100%	93%	82%	98%
Between MD 187 and I-495	100%	87%	100%	81%	96%	87%	77%	93%
Between I-270 Split and Democracy Blvd	100%	95%	94%	78%	100%	100%	90%	96%
Between Democracy Blvd and I-495	100%	95%	96%	79%	100%	97%	83%	93%

<90%	>90%	100%

Throughput and Percent Demand Met
2040 Diversion Alternative

I-495 2040 Diversion Alternative PM Percent Demand Met	Inner Loop				Outer Loop			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Between VA 193 and GW Memorial Pkwy	99%	94%	75%	72%	95%	92%	87%	84%
PMerican Legion Bridge	100%	88%	75%	74%	93%	89%	84%	82%
Between Clara Barton Pkwy and Cabin John Pkwy	89%	73%	64%	64%	94%	88%	83%	82%
Between MD 190 and I-270	94%	79%	79%	74%	92%	89%	80%	79%
Between I-270 West and MD 187	78%	67%	64%	61%	88%	80%	73%	70%
Between I-270 East and MD 187	69%	80%	70%	72%	98%	87%	77%	75%
Between MD 355 and MD 185	82%	89%	82%	87%	96%	90%	75%	64%
Between MD 185 and MD 97	83%	88%	80%	87%	100%	94%	83%	63%
Between MD 97 and US 29	85%	90%	81%	85%	98%	94%	81%	68%
Between MD US 29 and MD 193	86%	88%	81%	86%	97%	95%	82%	66%
Between MD 193 and MD 650	87%	87%	83%	86%	97%	96%	83%	67%
Between MD 650 and I-95	89%	86%	84%	87%	94%	93%	89%	66%
Between US 1 and I-95	93%	94%	92%	74%	84%	83%	84%	89%
Between Greenbelt Station and US1	92%	92%	90%	77%	82%	81%	82%	88%
Between Greenbelt Station and MD 201	93%	93%	91%	79%	81%	80%	81%	88%
Between MD 201 and MD 295	93%	93%	93%	83%	79%	78%	79%	88%
Between MD 295 and MD 450	93%	94%	96%	87%	80%	76%	77%	81%
Between MD 450 and US 50	94%	95%	96%	87%	82%	73%	75%	77%
Between US 50 and MD 202	95%	97%	92%	86%	90%	69%	70%	68%
Between MD 202 and Arena Dr	95%	97%	85%	80%	96%	73%	71%	64%
Between Arena Dr and MD 214	96%	97%	83%	75%	95%	76%	68%	61%
Between MD 214 and Ritchie Marlboro Rd	98%	98%	83%	61%	96%	81%	63%	57%
Between Ritchie Marlboro Rd and MD 4	95%	96%	81%	52%	97%	93%	61%	55%
Between MD 4 and Forestville Rd	96%	96%	74%	50%	95%	93%	64%	60%
Between Forestville Rd and MD 218	96%	96%	75%	49%	95%	92%	70%	66%
Between MD 218 and MD 5	96%	96%	78%	51%	94%	92%	75%	67%
Between MD 5 and MD 414	96%	97%	82%	58%	100%	100%	100%	77%
Between MD 414 and MD 210	93%	93%	83%	63%	93%	92%	92%	76%
Between MD 210 and I-295	91%	90%	84%	69%	92%	92%	92%	84%
Woodrow Wilson Bridge	97%	94%	95%	87%	92%	92%	91%	96%

I-270 2040 Diversion Alternative PM Percent Demand Met	Southbound				Northbound			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Between MD 85 and MD 80	100%	94%	92%	99%	92%	78%	82%	94%
Between MD 80 and MD 109	99%	92%	92%	99%	92%	77%	79%	93%
Between MD 109 and MD 121	100%	92%	92%	99%	92%	76%	77%	92%
Between MD 121 and MD 27	99%	91%	94%	99%	98%	74%	75%	91%
Between MD 27 and MD 118	100%	95%	94%	99%	100%	86%	84%	100%
Between MD 118 and Middlebrook Rd	99%	95%	96%	98%	93%	70%	64%	85%
Between Middlebrook Rd and Watkins Mill	99%	96%	97%	98%	92%	71%	62%	84%
Between Watkins Mill and MD 124	100%	88%	88%	95%	97%	76%	60%	80%
Between MD 124 and MD 117	100%	91%	89%	96%	96%	75%	55%	79%
Between MD 117 and I-370	100%	93%	92%	98%	96%	78%	55%	78%
Between I-370 and Shady Grove Rd	100%	97%	85%	94%	98%	88%	54%	70%
Between Shady Grove Rd and MD 28	100%	100%	88%	100%	100%	92%	62%	74%
Between MD 28 and MD 189	100%	99%	85%	96%	96%	87%	63%	69%
Between MD 189 and Montrose Rd	100%	99%	84%	91%	95%	86%	71%	63%
Between Montrose Rd and I-270 Split	95%	96%	85%	87%	98%	88%	85%	63%
Between I-270 Split and MD 187	92%	90%	87%	86%	97%	88%	79%	51%
Between MD 187 and I-495	100%	99%	97%	94%	97%	91%	80%	60%
Between I-270 Split and Democracy Blvd	95%	95%	85%	86%	97%	88%	90%	82%
Between Democracy Blvd and I-495	95%	95%	87%	86%	94%	83%	85%	79%

<90%	>90%	100%

ATTACHMENT I – DEMAND VS. THROUGHPUT CHARTS

Figure 1: I-495 2040 Diversion Alternative 7-8 AM Inner Loop Demand vs. Throughput and Percent Demand Unserved

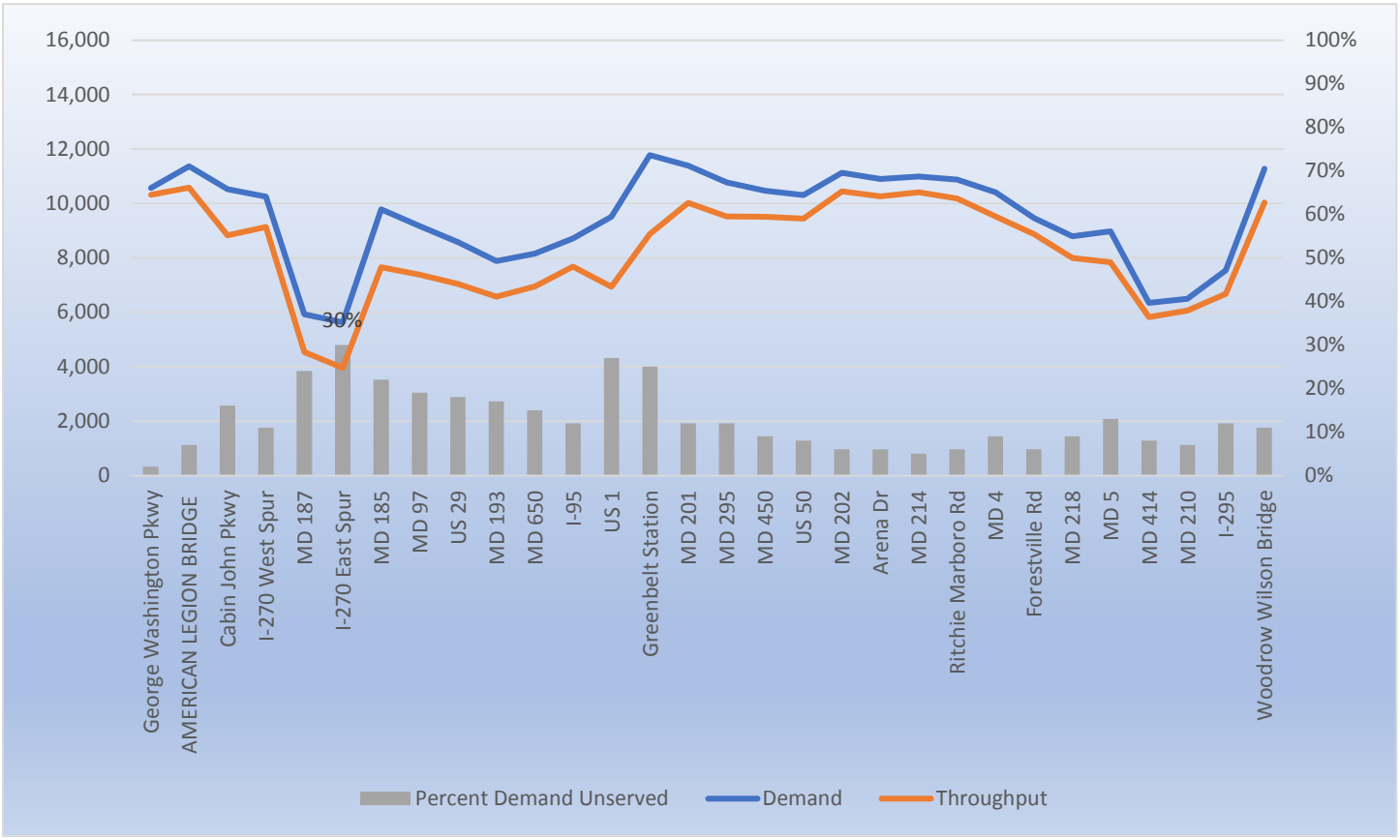


Figure 2: I-495 2040 Diversion Alternative 7-8 AM Outer Loop Demand vs. Throughput and Percent Demand Unserved

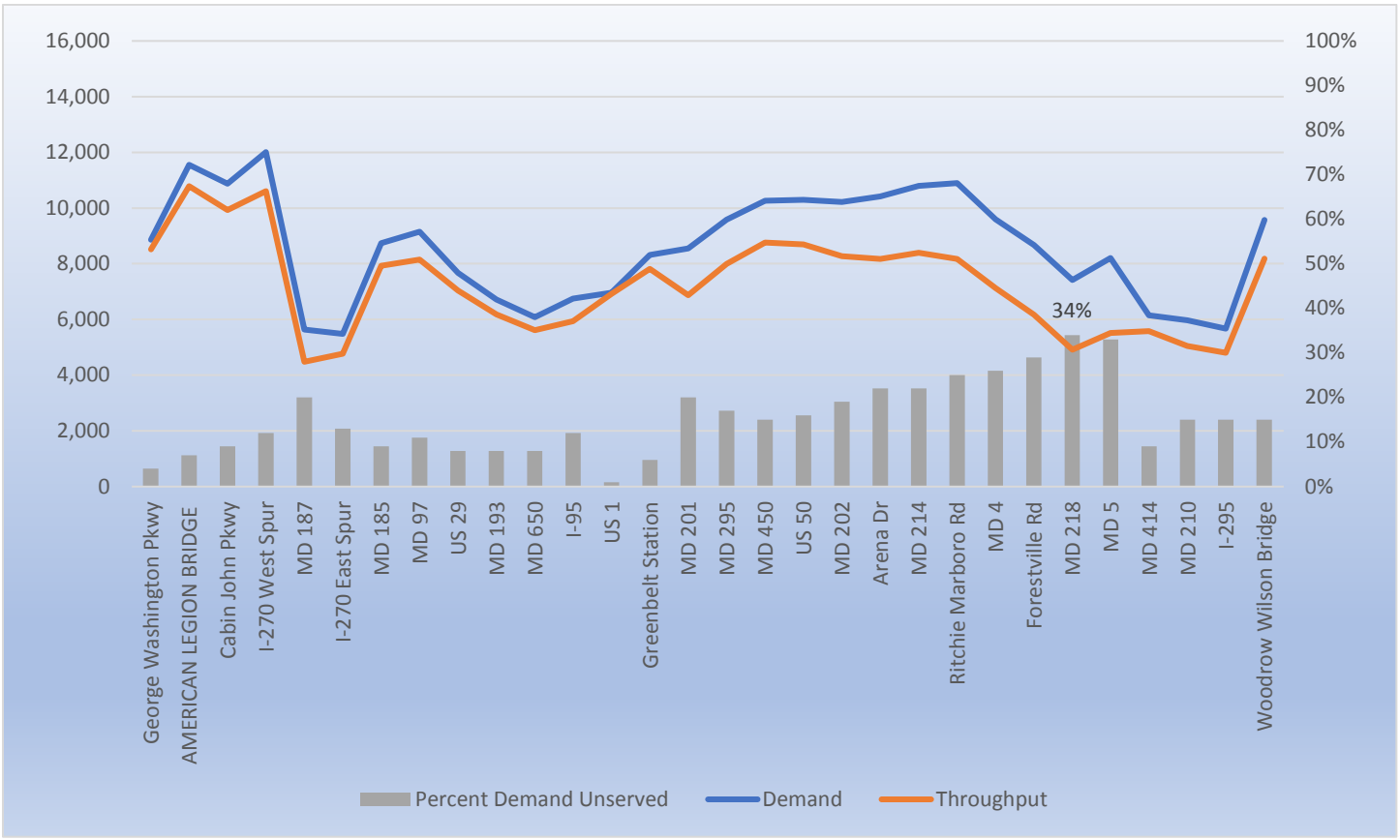


Figure 3: I-270 2040 Diversion Alternative 7-8AM Southbound Demand vs. Throughput and Percent Demand Unserved

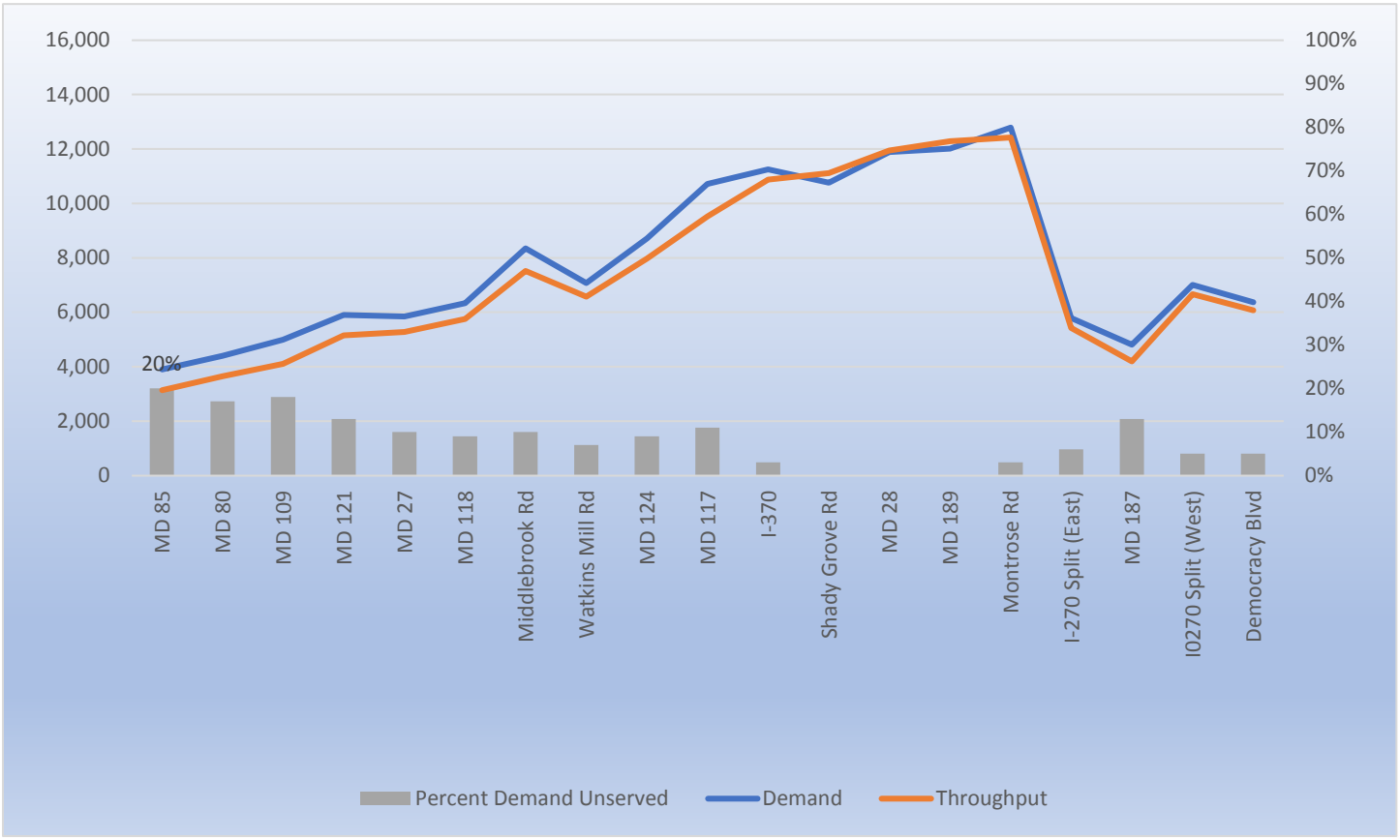


Figure 4: I-270 2040 Diversion Alternative 7-8AM Northbound Demand vs. Throughput and Percent Demand Unserved

Figure 5: I-495 2040 Diversion Alternative 4-5 PM Inner Loop Demand vs. Throughput and Percent Demand Unserved

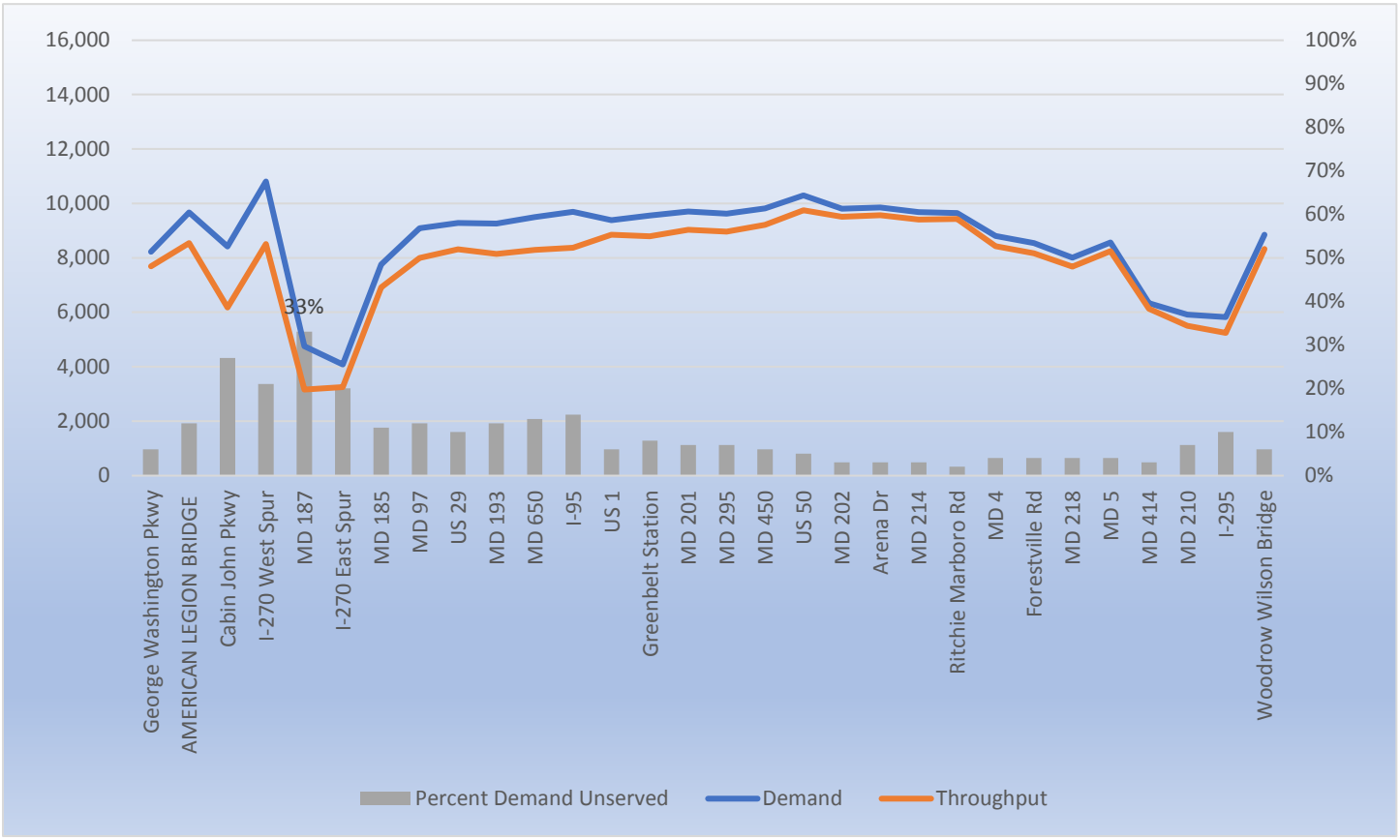


Figure 6: I-495 2040 Diversion Alternative 4-5 PM Outer Loop Demand vs. Throughput and Percent Demand Unserved

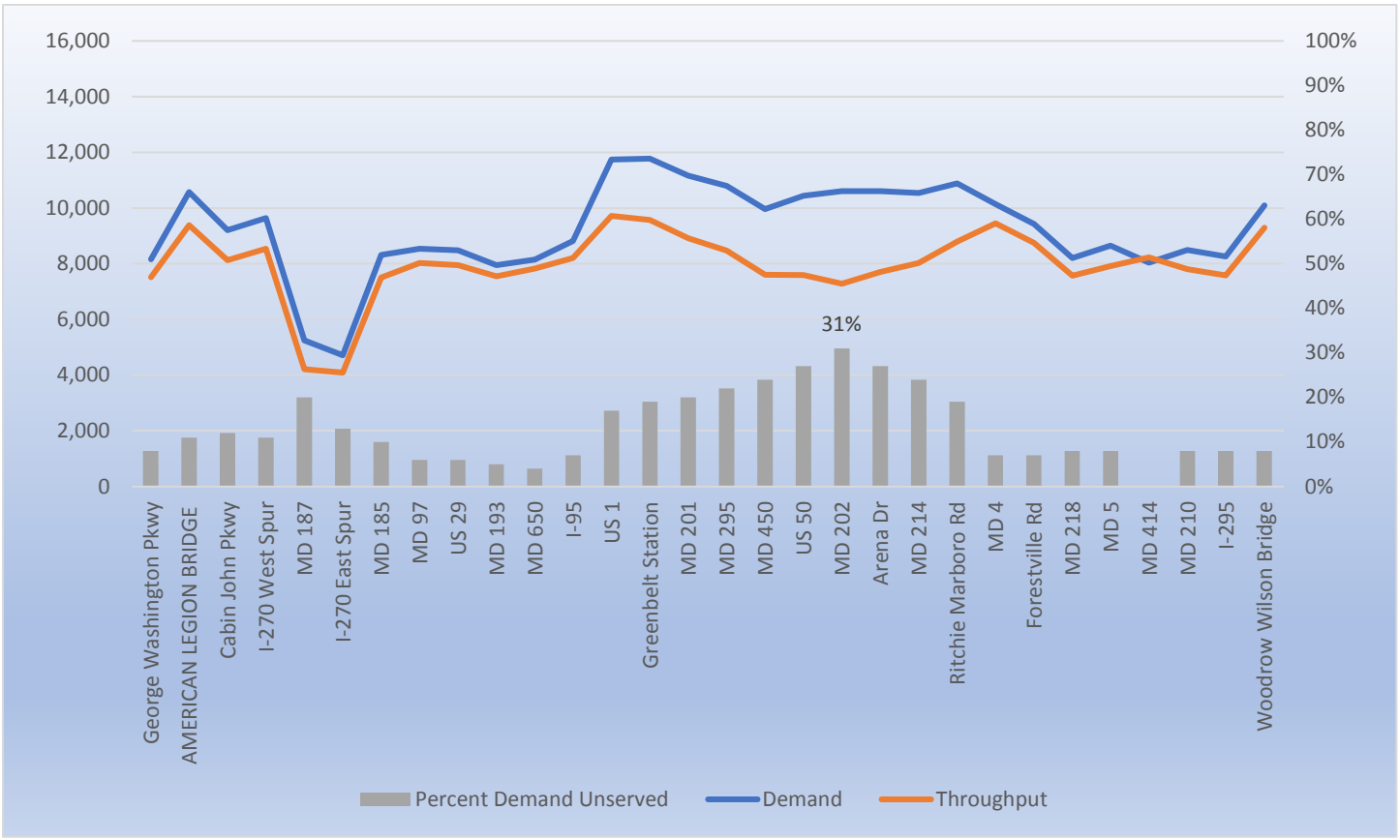


Figure 7: I-270 2040 Diversion Alternative 4-5 PM Southbound Demand vs. Throughput and Percent Demand Unserved

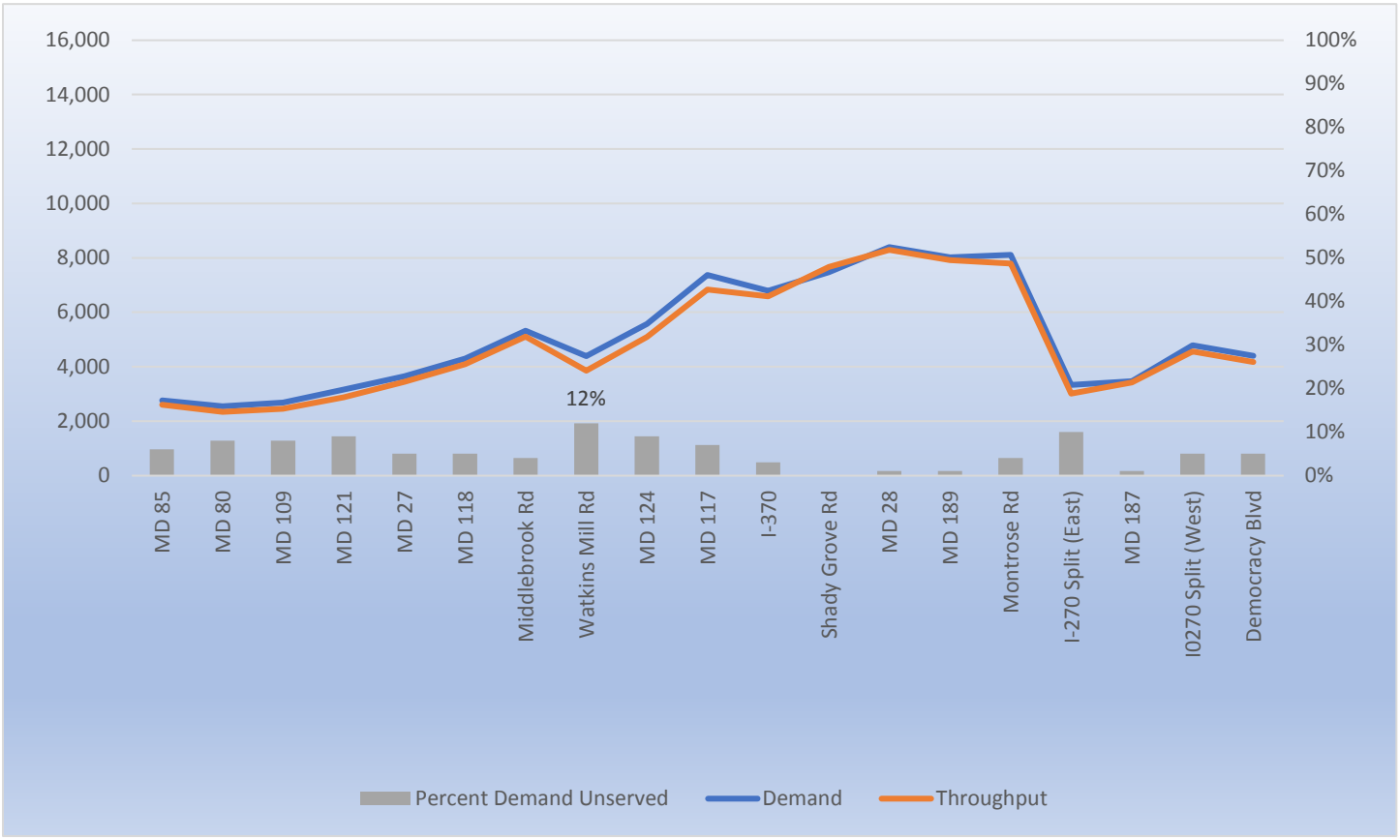
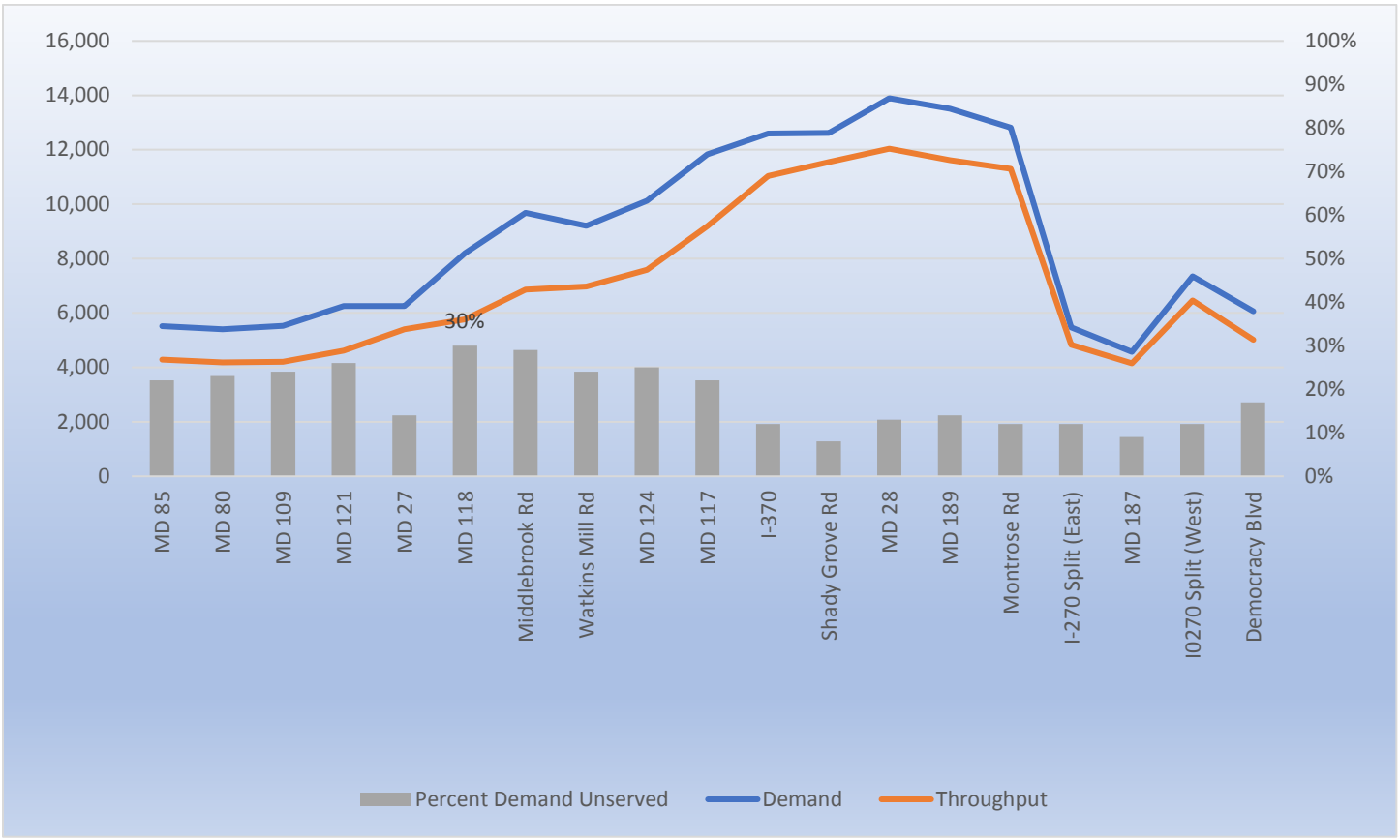


Figure 8: I-270 2040 Diversion Alternative 4-5 PM Northbound Demand vs. Throughput and Percent Demand Unserved



APPENDIX B: ALTERNATIVE 9 MODIFIED PRELIMINARY EVALUATION MEMORANDUM

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Attachment G – Throughput Tables
Attachment H – Percent Demand Met
Attachment I – Demand vs. Throughput Charts

I. Introduction

The Maryland Department of Transportation State Highway Administration (MDOT SHA), as the Local Project Sponsor, along with the Federal Highway Administration (FHWA), as the Lead Federal Agency, evaluated an additional alternative for the I-495 & I-270 Managed Lanes Study (MLS) called Alternative 9 Modified (Alternative 9M) in response to public and agency comments.

The purpose of this analysis was to evaluate Alternative 9M to the same level of detail as the Screened Alternatives to determine if it would meet the Purpose and Need of the Study, and thus be considered a reasonable alternative to be carried forward for detailed study in the Draft Environmental Impact Statement (DEIS).

The analyses for the Screened Alternatives (Alternatives 1, 5, 8, 9, 10, 13B and 13C) were completed in Spring 2019 and presented to the public and agencies through a series of public workshops and agency meetings. Through late fall 2019 and winter 2020, MDOT SHA completed the following analyses to the same level of detail as these Screened Alternatives and the MD 200 (ICC) Diversion Alternative (described below) to determine if Alternative 9M would be carried forward into the DEIS:

- Preliminary engineering to develop a limit of disturbance (LOD) that combined Alternative 5 and 9 and provided appropriate transitions between the two-lane and the one-lane improvements,
- Quantification of environmental impacts based on the LOD,
- Traffic modeling to determine the 2040 projected traffic volumes,
- Traffic analysis using the VISSIM traffic simulation software to determine the traffic operations, and
- Financial analysis to estimate the cashflow at financial close.

This document includes the methodology and the results for these analyses, along with the conclusions.

II. Description

Alternative 9M would consist of a blend of Alternative 5 and Alternative 9 in an effort to avoid or reduce impacts to sensitive environmental resources and property relocations on the top side of I-495. The analysis was completed to determine if the alternative, which includes a reduction of lanes on the top side of I-495, would sufficiently meet the Study's Purpose and Need. For purposes of this analysis, the portion of I-495 between the I-270 West Spur and I-95 is considered to be the "top side".

Alternative 5 would add one high-occupancy toll (HOT)-managed lane in each direction on I-495 and convert one existing high-occupancy vehicle (HOV) lane in each direction to a HOT-managed lane on I-270. Alternative 5 did not meet the Study's Purpose and Need and performed the worst of the six Screened Alternatives. Alternative 5 is *not* being carried forward as a reasonable alternative in the DEIS.

Alternative 9 would add two HOT-managed lanes in each direction on I-495 and convert one existing HOV lane to a HOT-managed lane and add one HOT managed lane in each direction on I-270. When compared to the Screened Alternatives, this alternative would perform consistently well when evaluating traffic metrics related to the ability of the alternatives to accommodate existing and long-term traffic growth, perform the best when evaluating average speed and corridor travel times, provide the largest reduction

in delay on the local roadway network, and would have the highest probability to be delivered without the need for a subsidy from traditional funding sources. Alternative 9 is being carried forward as a reasonable alternative in the DEIS.

Alternative 9M (**Figure 1**) would be a blend of Alternatives 5 and 9 as described below and shown in **Figure 2**:

- Two HOT managed lanes added in each direction on I-495 on the west side – between the Study limits south of the George Washington Memorial Parkway and the I-270 West Spur, including the American Legion Bridge. (Similar to Alternative 9, shown in orange on **Figure 2**).
- Conversion of the one existing HOV lane in each direction to a HOT managed lane on I-270 and the West Spur, and the addition of one HOT managed lane in each direction on I-270 and the West Spur, resulting in a two-lane managed lanes network. (Similar to Alternative 9, shown in purple on **Figure 2**).
- Conversion of the one existing HOV lane in each direction to a HOT managed lane on the I-270 East Spur. (Similar to Alternative 5, shown in blue on **Figure** 2**2**).
- One HOT managed lane in each direction on I-495 between the I-270 West Spur and I-95. (Similar to Alternative 5, shown in blue on **Figure 2**).
- Two HOT managed lanes added in each direction on I-495 on the east side – between I-95 and the study limits west of MD 5. (Similar to Alternative 9, shown in green on **Figure 2**).

The build elements, including managed lane access locations and interchange improvements, would be the same as proposed for Alternatives 5 and 9, where the typical section is consistent with each of those alternatives; however, the managed lanes would need to transition from one to two lanes in each direction and vice versa. These transitions are described below.

- At the I-270 West Spur interchange, one northbound managed lane would continue along I-495 to the east and two northbound managed lanes would continue north on the I-270 West Spur. Two southbound managed lanes would come from the I-270 West Spur to join one southbound managed lane from I-495.
- At the I-270 Y-split, one northbound managed lane would come from the East Spur to join two northbound managed lanes from the West Spur. The three southbound managed lanes on I-270 would split so that one managed lane would go to the East Spur and two would go to the West Spur.
- At the I-95 interchange on I-495, the southbound I-95 managed lane ramp would join with one eastbound managed lane from I-495 to the west and would continue eastbound as two managed lanes. The two westbound managed lanes on I-495 east of the interchange would split so that one lane would exit to I-95 northbound and one managed lane would continue westbound on I-495.

Figure 1: Alternative 9 Modified Typical Sections

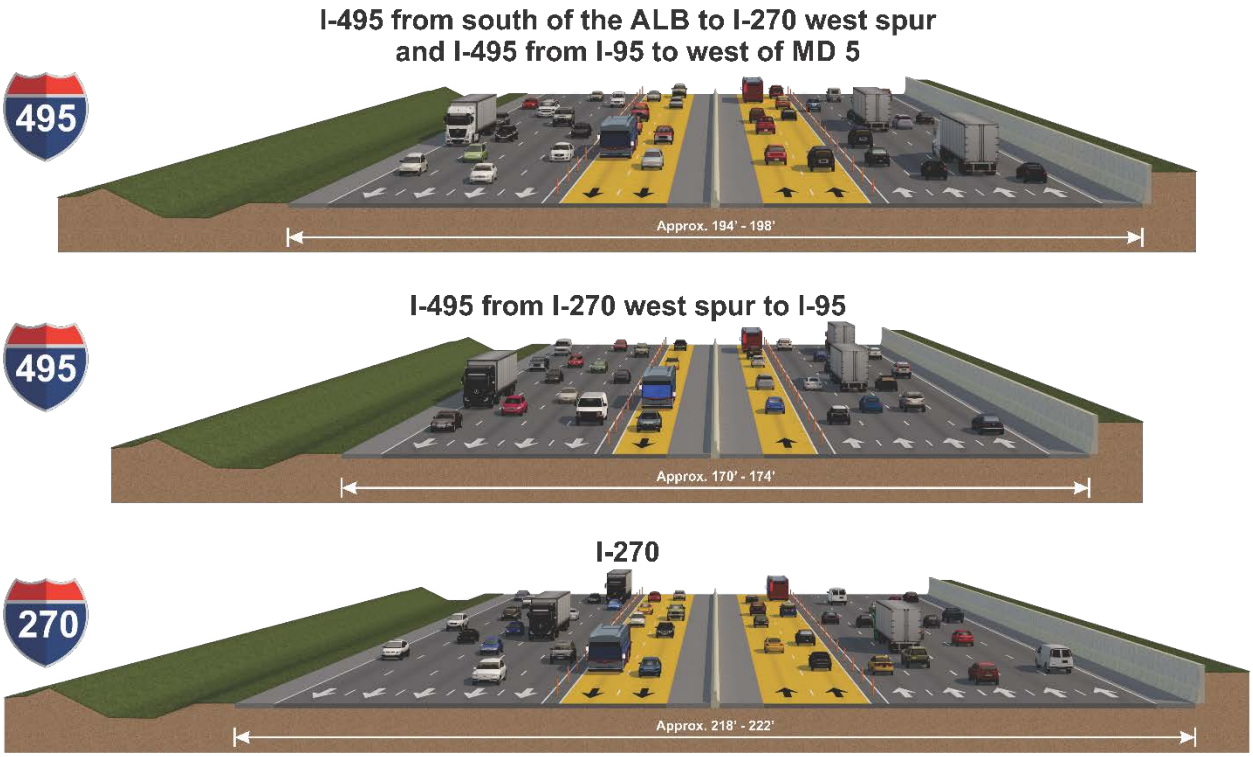
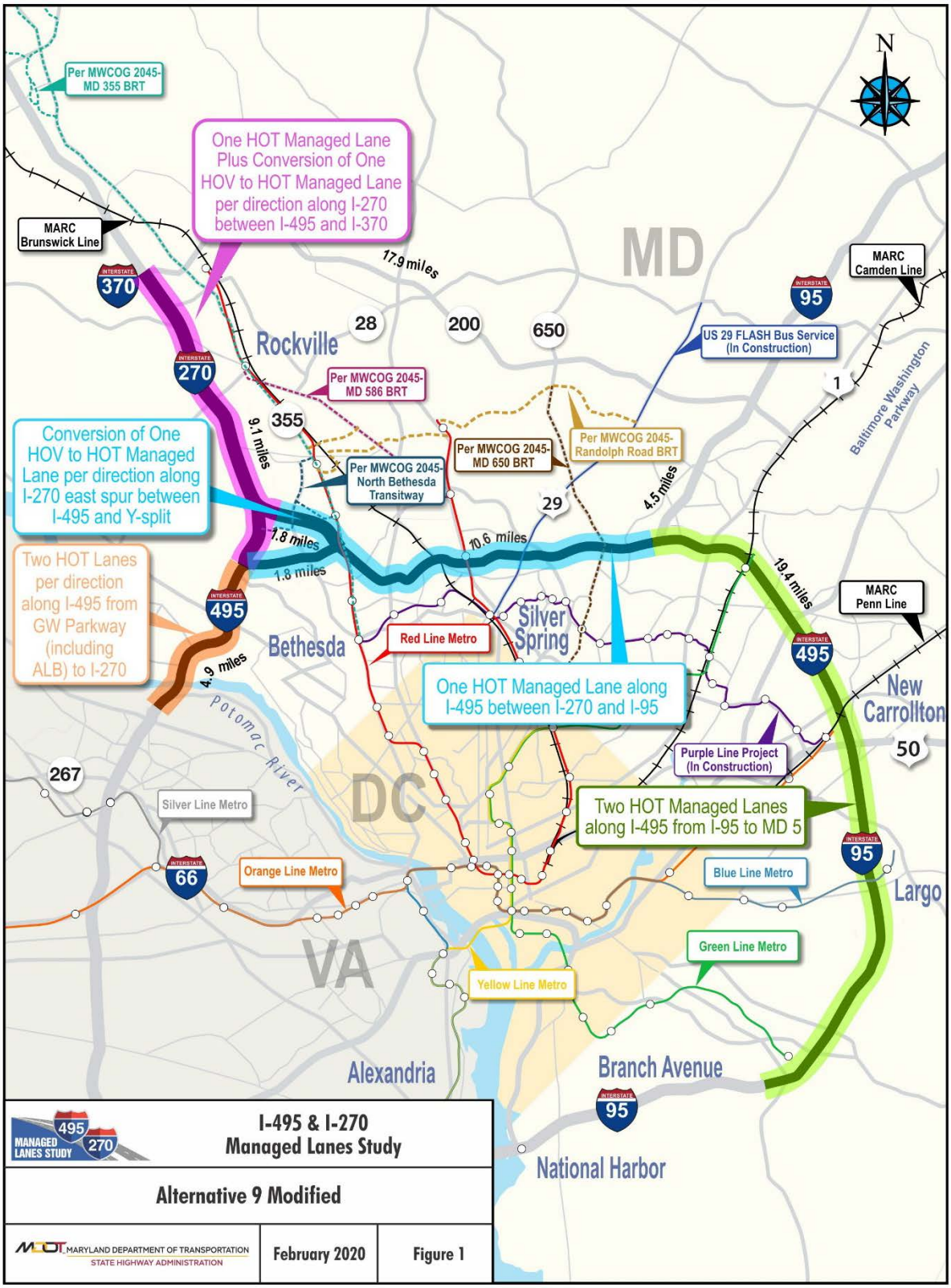


Figure 2: Alternative 9 Modified



A. Existing Congestion on Top Side of I-495

The existing traffic on I-495 from I-270 to the I-95 Interchange (often referred as the "top side") experiences some of the worst congestion in the State of Maryland, as documented in the 2018 Maryland State Highway Mobility Report[1] that is based on 2017 data:

- The top side of I-495 carries the 2nd highest average daily traffic volume in Maryland with 254,000 vehicles per day. This is the section of highway in which the managed lane system would be reduced from two lanes to one lane per direction under Alternative 9M.
- The section of the top side along the Outer Loop from the I-95 Interchange to the US 29 Interchange was ranked the #1 most congested freeway section in Maryland during the AM peak on an average weekday in 2017.
- The section of the top side along the Inner Loop from the I-270 East Spur to the MD 97 Interchange was ranked the 3rd most congested freeway section in Maryland during the PM peak on an average weekday in 2017.
- The top three most unreliable freeway segments in Maryland during the AM peak are all located on the top side along the Outer Loop between I-95 and MD 193, based on the Planning Time Index (PTI) for the years 2017 and 2016.
- The I-495 Inner Loop at MD 355 ranks as the sixth most unreliable freeway location in Maryland during the PM peak.

Additionally, FHWA Office of Freight Management and Operations monitors interstates as part of the Freight Performance Measures Initiative. Through this, the nation's worst 100 bottlenecks for freight movements are identified, which include four in Maryland and two of which are along I-495 from the American Legion Bridge to I-95 (I-495 at I-95 and I-270).

Alternative 9M would provide the minimal capacity improvements of one managed lane per direction in the most highly congested and unreliable freeway segment in Maryland, while providing a two-lane managed lane system elsewhere in the network. As discussed in more detail below, proposed managed lanes on I-495 and I-270 are intended to act as a system providing cohesive and reliable traffic relief. Reducing the middle of the system that currently experiences high demand and the worst congestion within the Study area would limit the operational effectiveness of Alternative 9M.

B. Travel Forecasting for Alternative 9M

As noted in Section II, Alternative 9M is a hybrid option that would include a single managed lane in each direction along the top side of I-495 (similar to Alternative 5), while providing two HOT lanes in each direction for the remaining portions of the Study area (similar to Alternative 9). To develop year 2040 traffic volume forecasts for Alternative 9M, the following process was followed:

- MDOT SHA reviewed the forecasts prepared previously for Alternative 5 and Alternative 9. The forecasts for these alternatives (and all Screened Alternatives) started with a travel demand model from the Metropolitan Washington Council of Governments (MWCOG), Version 2.3.71,

[1] https://www.roads.maryland.gov/OPPEN/2018%20Mobility%20Report.pdf

which was used to develop traffic volume projections for the design year of 2040 for each roadway segment and ramp movement within the study limits. The study limits cover all of I-495 in Maryland from the Woodrow Wilson Bridge to across the American Legion Bridge into Virginia (ending at Virginia 193) and I-270 from north of I-70 in Frederick to I-495, including both spurs.

- Then, MDOT SHA created a base volume network for Alternative 9M by starting with the forecast volumes for Alternative 5 on the top side (I-495 between I-95 and I-270) and using the forecast volumes for Alternative 9 for the remaining portions of the network.

- Because Alternative 9 serves more demand than Alternative 5, the base volumes did not balance at the transition areas. Therefore, in the next step, MDOT SHA reviewed the growth projections for each roadway segment from the Alternative 9M MWCOG model run and adjusted the volumes in the base volume network until a balanced network was created that remained consistent with the outputs from the MWCOG model run.

- Next, the projected volumes were entered into the VISSIM simulation model, and the operations in the managed lanes were evaluated, particularly at the transition areas from two HOT lanes to one HOT lane. VISSIM is a traffic microscopic simulation model frequently used by MDOT SHA and FHWA to evaluate operations on freeways and arterials, and it was the primary operational analysis tool used for the I-495 & I-270 Managed Lanes Study.

- Through an iterative process, excess traffic volumes from the HOT lanes were reassigned to the adjacent general purpose lanes to ensure that speeds in the HOT lanes remained above 45 mph.

It should be noted that this methodology assumed that the demand volume in the HOT lanes could be effectively controlled through dynamic tolling policies (i.e., not become oversaturated due to demand). In reality, there could be some congestion where the HOT lanes reduce from two lanes to one lane if the toll rates do not sufficiently limit the demand. However, for the purposes of this Study at this stage of the planning process (and to be consistent with the methodology applied for the other Alternatives), the forecasts assume that any excess traffic would shift to the general purpose lanes.

The resulting 2040 Alternative 9M projected traffic volumes for the AM peak period (6:00 AM to 10:00 AM) and the PM peak period (3:00 PM to 7:00 PM) are shown in **Attachment A**. These volumes were used in the VISSIM modeling to generate the traffic analysis results for Alternative 9M presented in the following section. The data is also summarized by link in the table in **Attachment B**.

C. Traffic Analysis Results for Alternative 9M

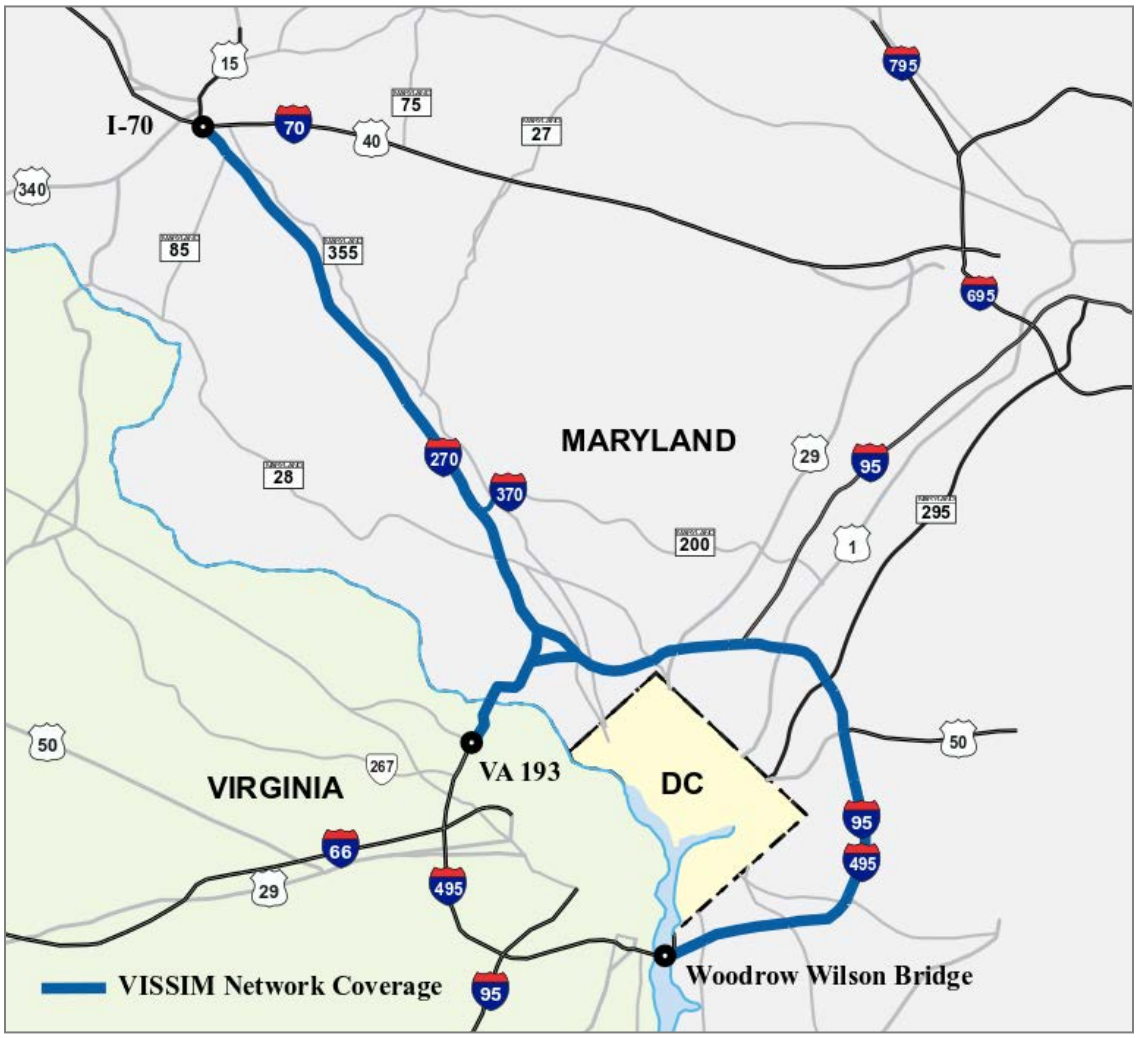
Traffic simulation models for Alternative 9M were developed using VISSIM software, Version 10.00-09. As with the Screened Alternatives, separate models were created for the projected 2040 AM peak and the 2040 PM peak. The VISSIM models included the proposed geometric configurations described in Section II and were populated with the traffic volumes developed during the previous step from the MWCOG model. The VISSIM model covers the same limits as were used to evaluate the Screened Alternatives, as shown in **Figure 3**.

As with the Screened Alternatives, Alternative 9M was evaluated using six key traffic operational metrics. These included:

- System-Wide Delay
- Corridor Travel Time and Speed
- Density and Level of Service (LOS)
- Travel Time Index (TTI)
- Vehicle Throughput
- Effect on Local Roadway Network

The following sections summarize the performance of Alternative 9M compared to the Screened Alternatives for each metric, as they relate to the Study's Purpose and Need screening criteria.

Figure 3: VISSIM Network Coverage



1. System-Wide Delay

This metric was used to assist in evaluating the criterion of Existing Traffic and Long-Term Traffic Growth. System-wide delay reflects the average amount of time each vehicle in the VISSIM simulation model is delayed while trying to reach its destination. Delay can be caused by slow travel due to congestion or when vehicles must yield right-of-way at a stop-controlled or signalized intersection. System-wide delay

is reported in the unit of seconds per vehicle and minutes per vehicle. The results for Alternative 9M are shown in **Table 1** and were generated from the VISSIM outputs. For the raw delay values, lower numbers are better, reflecting a reduction in congestion. For the percent improvement compared to the No Build Alternative, higher numbers are better, reflecting a greater benefit.

For this metric, Alternative 9M would reduce the average delay per vehicle in the system by approximately 30 percent during both the AM and the PM peak periods compared to the No Build Alternative. During the AM peak period, the benefits are less than the benefits of Alternative 9 and Alternative 10, which would provide delay savings of approximately 35 percent, but indicate greater delay savings than other Screened Alternatives. During the PM peak period, the performance of Alternative 9M is worse compared to the other Screened Alternatives, only providing greater delay savings than Alternative 5 and Alternative 13B. This result can be attributed to congestion caused by constraints on the top side due the reduction from two managed lanes to one on I-495 between I-95 and I-270, and the residual effects of this congestion propagating throughout the network.

2. Corridor Travel Time and Speed

This metric was also used to assist in the evaluation of the criterion of Existing Traffic and Long-Term Traffic Growth. Corridor travel time represents the amount of time it would take a vehicle to travel from one end of the Study limits to the other along either I-495 or I-270 during the peak hour in the design year of 2040. Similarly, corridor speed represents the average speed during the trip. Results were generated for the I-495 Outer Loop from MD 5 to George Washington Memorial Parkway, the I-495 Inner Loop from George Washington Memorial Parkway to MD 5, I-270 Northbound from I-495 to I-370, and I-270 Southbound from I-370 to I-495. Results were also generated separately for travel in the general purpose lanes and the managed lanes. For alternatives that maintained the existing HOV lanes on I-270 in addition to buffer-separated, limited access ETL lanes, the corridor travel time and speed results for the general purpose lanes included the non-tolled HOV lanes. The results for Alternative 9M are shown in **Table 2** and were generated from the VISSIM outputs. For travel times, lower numbers are better, reflecting more efficient travel. For speeds, higher numbers are better. More detailed information is provided in **Attachment C** (Speed Maps), **Attachment D** (Travel Time Matrices), and **Attachment E** (Travel Time Savings Charts).

The results of the corridor travel time analysis indicated that Alternative 9M would be projected to improve travel times along I-495 in both directions during both the AM and the PM peak periods compared to No Build conditions, but travel time savings would be less than most other Screened Alternatives. Considering travel along both the Inner and Outer Loop, during the AM peak period and PM peak period, Alternative 9M provides consistently greater travel time savings than Alternative 5. However, all other Screened Alternatives perform better in one or both directions during one or both peak periods than Alternative 9M.

The weighted average speed was calculated for the Study area by taking the average speed for vehicles traveling in the general purpose lanes on each segment of I-495 and I-270 within the Study area, weighed by segment length. The results indicated that the weighted average speed throughout the Study area is 38 miles per hour under Alternative 9M, which is slightly higher than the weighted average speed under Alternative 5 of 36 miles per hour. The other Screened Alternatives have faster weighted average speeds with Alternatives 8 and 13C having a speed of 39 miles per hour and Alternative 9, 10, and 13B having a speed of 40 to 41 miles per hour.

3. Density and Level of Service (LOS)

This metric was used to assist in the evaluation of the criterion of Existing Traffic and Long-Term Traffic Growth. Density is the number of vehicles occupying a given length of a roadway at a particular instant. Density is averaged over time and is expressed in passenger car equivalents per mile per lane (pc/mi/ln). Higher density values are indicative of more friction in the system and more congestion. Level of Service (LOS) is a letter grade assigned to a section of roadway that measures the quality of traffic flow, ranging from LOS A to LOS F. LOS A represents optimal, free-flow conditions, while LOS F represents failing conditions where demand exceeds capacity. For freeway segments, the Highway Capacity Manual assigns LOS grades based on density. Urban freeway segments reach failing (LOS F) conditions when the density exceeds 45 pc/mi/ln.

For this metric, the percentage of lane-miles operating at LOS F was calculated within the Study limits during the AM peak period and the PM peak period. The results are shown in **Table 3** and were generated from the VISSIM outputs. Lower percentages are better, reflecting fewer failing roadway segments. Full details of the level of service and density for every link in the Study area are shown in **Attachment F**.

The results indicated that Alternative 9M would be projected to have a lower number of failing lane miles during both the AM peak period and the PM peak period compared to the No Build conditions but would have a higher percentage of failing lane miles compared to Alternatives 8, 9, 10, and 13B. During the AM peak period, Alternative 9M would have a lower percentage of failing lane miles than Alternative 5 and Alternative 13C. During the PM peak period, Alternative 9M would have a lower percentage of failing lane miles than Alternative 5. Alternative 9M is also projected to perform better than Alternative 5, and similar to Alternative 13C, in terms of the average percentage of lane-miles operating at LOS F.

4. Travel Time Index (TTI)

While corridor travel time and speed provide one way to compare alternatives, few vehicles will travel from one end to the other during their trip, particularly along I-495. Therefore, the metric of TTI was also evaluated along shorter trip segments. This metric was used to assist in the evaluation of the criterion of Trip Reliability. TTI is a metric used by MDOT SHA to quantify congestion levels on highways and expressways. It is defined as the average (50^{th} percentile) travel time on a segment of highway/ expressway for a particular hour compared to the travel time of the same trip during free-flow or uncongested conditions. The higher the TTI, the longer the travel times. For example, a TTI of 2.0 indicates that a trip that would normally take 15 minutes in light traffic would take 30 minutes in the peak hour due to congestion. TTI values were calculated for the general purpose lanes for eight total highway segments, including four segments in each direction: I-495 from George Washington Memorial Parkway to I-270, I-495 from I-270 to I-95, I-495 from I-95 to MD 5, and I-270 from I-495 to I-370. The results for Alternative 9M are shown in **Table 4** and were generated from the VISSIM outputs. MDOT SHA defines various levels of congestion in four categories based on TTI as follows:

- Uncongested (TTI < 1.15)
- Moderate Congestion (1.15 < TTI < 1.3)
- Heavy Congestion (1.3 < TTI < 2.0)
- Severe Congestion (TTI > 2.0)

The results indicated that Alternative 9M would not be expected to have any segments with “severe” congestion during the 2040 AM peak period and it would have one “uncongested” segment: I-270

northbound, which is uncongested during the AM peak period for all alternatives, including the No Build. During the PM peak period, two segments of the Inner Loop would be projected to operate in the "severe congestion" category under Alternative 9M, from George Washington Memorial Parkway to I-270 and from I-270 to I-95. The segment of the I-495 Inner Loop from I-270 to I-95 would experience severe congestion due to minimal capacity improvements along this currently congested and unreliable freeway segment. The adjacent segment of the I-495 Inner Loop from George Washington Memorial Parkway to I-270 would experience severe congestion due to the propagation of congestion and queue spillback where the managed lanes would transition from one lane to two. Similarly, the segment of I-270 southbound from I-370 to I-495 would also be expected to operate in the "severe congestion" category under Alternative 9M due to the propagation of congestion and queue spillback where the managed lanes cross-section would change. Overall, Alternative 9M outperforms Alternative 5 in the metric of TTI with an average TTI value of 1.58 compared to 1.69 but does not outperform any of the other Screened Alternatives.

5. Vehicle Throughput

This metric was used to assist in the evaluation of the criterion of Movement of Goods and Services. Throughput represents the number of vehicles and/or people that pass by a given point in the roadway network in a set amount of time. Throughput quantifies the efficiency of the roadway network in getting people, goods, and services to their destinations. Benefits of increased throughput on the highway include reduced peak spreading (i.e., less congestion in the off-peak hours) and reduced burden on the surrounding roadway network.

The combined vehicle throughput results generated from the VISSIM outputs for the general purpose lanes and the managed lanes, are shown in **Table 5**. While the VISSIM model can calculate the vehicle throughput at every single location in the model, this evaluation focused on throughput at four key, representative locations. These locations cover the four main segments of the Study corridors, separated by major freeway junctions and are therefore representative of the Study corridors as a whole. The four representative locations are I-495 crossing the American Legion Bridge, I-495 west of I-95, I-495 at MD 5, and I-270 at Montrose Road. Results are reported in terms of percent increase in vehicle-throughput for each Screened Alternative compared to the No Build Alternative, rounded to the nearest five percent. Detailed throughput information for all roadway segments can be found in **Attachment G**. A comparison of throughput and demand is provided in **Attachment H** (in table form) and **Attachment I** (in chart form).

Alternative 9M would add capacity along I-270 and along the west side and east side of I-495 via two managed lanes but would provide less improvement on I-495 between I-270 and I-95 where only one managed lane would be provided. The results of the throughput analysis indicated that there is a correlation between increased capacity and increased throughput. On I-495 west of I-95, where a single managed lane would be provided, Alternative 9M would provide additional throughput compared to the No Build Alternative during the AM peak period and PM peak period but would provide 10 to 15 percent less additional throughput compared to other Screened Alternatives that include two managed lanes along this segment. At other locations where additional capacity would be provided under Alternative 9M, the results indicated that additional throughput would be similar to, but still less than under other Screened Alternatives that maintained two managed lanes throughout the entire network. This result could be attributed to congested conditions along the top side of I-495 that would prevent vehicles from accessing sections with additional capacity in the two managed lanes. Overall, Alternative 9M would outperform Alternative 5 in the metric of vehicle throughput with an average value of 17,850 vehicles per

hour compared to 16,996 vehicles per hour, but it would not outperform any of the other Screened Alternatives.

6. Effect on Local Roadway Network

This metric was used to assist in the evaluation of the criterion of Movement of Goods and Services. While the focus of the Study is to provide benefits to travelers using I-495 and I-270, the Study would also have impacts on the surrounding local roadway network. This impact was quantified to assist in the evaluation of the Screened Alternatives by calculating the projected reduction in delay on the local road network. The results are shown in **Table 6** and were generated from the MWCOG regional model outputs. Values are presented in terms of total vehicle hours of delay each day on all arterials in Montgomery County, Maryland; Prince George's County, Maryland; and the District of Columbia. Other regions in Maryland and Virginia showed negligible change in local delay. Lower values are better, representing less delay for local travelers. **Table 6** also shows the percent reduction in delay versus the No Build Alternative to help compare the relative merit of the Screened Alternatives for this metric. Higher values of the percent reduction in delay are better, reflecting greater benefit.

The results indicated that Alternative 9M would be expected to reduce delay on the arterials in Montgomery and Prince George's counties and the District of Columbia compared to the No Build conditions. The expected reductions in delay are greater than Alternative 5, but less than the other Screened Alternatives. Traffic congestion levels on the local roadways would be higher under Alternative 9M compared to the Screened Alternatives with two managed lanes on the top side of the Beltway because the overflow of vehicles that could not be accommodated in the single managed lane would shift to either the general purpose lanes or the arterials and local roadways in central Montgomery County and the District of Columbia. The additional delay on the arterials in Prince George's County under Alternative 9M could be attributed to the residual effects of queue spillback where the managed lanes transition from two lanes to one and congestion would propagate throughout the network.

Overall, Alternative 9M would perform similar to the other Screened Alternatives for this metric (except for Alternative 5, which performs the worst) with an overall daily delay savings of approximately six percent on the local arterials compared to the No Build.

Table 1: Summary of System-Wide Delay Results from VISSIM Model

CRITERIA	PEAK PERIOD	METRIC	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5[1]	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	ALTERNATIVE 9M
Accommodate Long-Term Traffic Growth	AM Peak	Average Delay (sec/veh)	267	526	421	404	346	341	384	389	367
		Average Delay (min/veh)	4.45	8.77	7.02	6.73	5.77	5.68	6.40	6.48	6.12
		Percent Improvement vs. No Build	**N/A**	**0%**	**20%**	**23%**	**34%**	**35%**	**27%**	**26%**	**30%**
	PM Peak	Average Delay (sec/veh)	240	707	549	474	472	464	550	464	493
		Average Delay (min/veh)	4.00	11.78	9.15	7.90	7.87	7.73	9.17	7.73	8.22
		Percent Improvement vs. No Build	**N/A**	**0%**	**22%**	**33%**	**33%**	**34%**	**22%**	**34%**	**30%**

Legend: Green ≥ 30%; Yellow 25-30%; Orange 20-25%; Red < 20%
Notes: [1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.

Table 2: Summary of Corridor Travel Time Results from VISSIM Model

CRITERIA	METRIC	PEAK PERIOD	CORRIDOR	TRAVEL LANES	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5[1]	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	ALTERNATIVE 9M
Accommodate Long-Term Traffic Growth	Average Travel Time (minutes)	AM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	65	101	74	64	64	63	71	73	67
				HOT/Express Toll Lane	N/A	N/A	38	37	38	38	38	38	38
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	44	68	61	58	56	58	57	57	59
				HOT/Express Toll Lane	N/A	N/A	43	43	43	44	43	46	43
			I-270 Northbound from I-495 to I-370	General Purpose	9	9	9	9	9	9	9	9	9
				HOT/Express Toll Lane	N/A	N/A	9	9	9	9	N/A	N/A	9
			I-270 Southbound from I-370 to I-495	General Purpose	29	16	16	15	12	19	12	24	13
				HOT/Express Toll Lane	N/A	N/A	10	10	10	10	10	10	10
		PM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	76	123	50	45	45	48	45	47	45
				HOT/Express Toll Lane	N/A	N/A	38	38	38	38	38	38	38
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	89	156	89	93	80	60	75	62	91
				HOT/Express Toll Lane	N/A	N/A	38	45	42	49	42	42	38
			I-270 Northbound from I-495 to I-370	General Purpose	15	10	14	11	12	16	13	12	13
				HOT/Express Toll Lane	N/A	N/A	10	10	12	9	14	9	11
			I-270 Southbound from I-370 to I-495	General Purpose	11	12	40	22	15	14	28	15	34
				HOT/Express Toll Lane	N/A	N/A	10	10	10	9	N/A	N/A	9
	Average Speed (mph)	AM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	36	23	31	36	37	37	33	32	35
				HOT/Express Toll Lane	N/A	N/A	62	62	62	62	62	62	62
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	53	34	38	40	41	40	41	41	39
				HOT/Express Toll Lane	N/A	N/A	54	54	54	52	54	50	54
			I-270 Northbound from I-495 to I-370	General Purpose	63	63	61	61	61	61	61	61	61
				HOT/Express Toll Lane	N/A	N/A	63	63	63	64	N/A	N/A	64
			I-270 Southbound from I-370 to I-495	General Purpose	21	38	37	41	50	32	51	25	47
				HOT/Express Toll Lane	N/A	N/A	61	58	59	60	61	60	59
		PM Peak	I-495 Outer Loop from MD 5 to George Washington Memorial Parkway	General Purpose	31	19	46	52	52	49	52	50	51
				HOT/Express Toll Lane	N/A	N/A	62	62	62	61	62	62	62
			I-495 Inner Loop from George Washington Memorial Parkway to MD 5	General Purpose	26	15	26	25	29	38	31	37	25
				HOT/Express Toll Lane	N/A	N/A	62	52	55	47	55	55	62
			I-270 Northbound from I-495 to I-370	General Purpose	36	53	39	51	44	35	43	45	41
				HOT/Express Toll Lane	N/A	N/A	53	56	50	61	40	58	51
			I-270 Southbound from I-370 to I-495	General Purpose	54	50	15	27	41	42	21	40	18
				HOT/Express Toll Lane	N/A	N/A	63	60	63	64	N/A	N/A	63
		Weighted Average Speed		**General Purpose**	**36**	**25**	**36**	**39**	**41**	**40**	**40**	**39**	**38**

Legend: Green ≥ 40 mph; Yellow 35-40 mph; Orange 30-35 mph; Red < 30 mph

Notes: [1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.

Table 3: Summary of Density and Level of Service (LOS) Results from VISSIM Model

CRITERIA	PEAK PERIOD	METRIC	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5[1]	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	ALTERNATIVE 9M
Accommodate Long-Term Traffic Growth	AM Peak	Total Lane-Miles	465	475	560	660	660	675	630	650	630
		Lane-Miles Operating at LOS F based on Density*	100	133	116	94	81	99	89	115	97
		Percent of Lane-Miles Operating at LOS F based on Density*	22%	28%	21%	14%	12%	15%	14%	18%	15%
	PM Peak	Total Lane-Miles	465	475	560	660	660	675	630	650	630
		Lane-Miles Operating at LOS F based on Density*	177	252	111	93	82	94	74	77	95
		Percent of Lane-Miles Operating at LOS F based on Density*	38%	53%	20%	14%	12%	14%	12%	12%	15%
	Average Percent of Lane-Miles Operating at LOS F based on Density*		**30%**	**41%**	**20%**	**14%**	**12%**	**14%**	**13%**	**15%**	**15%**

* LOS F is reached at a density of 45.0 passenger cars per mile per lane (pc/mi/ln)
Legend: Green < 15%; Yellow 15-20%; Orange 20-25%; Red ≥ 25%
Notes: [1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.

Table 4: Summary of Travel Time Index (TTI) Results for General Purpose (GP) Lanes from VISSIM Model

CRITERIA	METRIC	PEAK PERIOD	CORRIDOR	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5[1]	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	ALTERNATIVE 9M
Provide a Reliable Travel Time	Travel Time Index (TTI)* in General Purpose (GP) Lanes**	AM Peak	I-495 Inner Loop from Virginia 193 to I-270	1.4	2.1	1.6	1.6	1.3	1.3	1.8	1.6	1.4
			I-495 Outer Loop from I-270 to Virginia 193	1.2	1.2	1.7	1.3	1.7	1.7	1.7	1.6	1.7
			I-495 Inner Loop from I-270 to I-95	1.0	1.0	1.5	1.2	1.3	1.2	1.2	1.2	1.5
			I-495 Outer Loop from I-95 to I-270	2.8	4.3	1.6	1.5	1.6	1.3	2.1	1.8	1.5
			I-495 Inner Loop from I-95 to MD 5	1.0	1.8	1.5	1.5	1.4	1.5	1.3	1.4	1.4
			I-495 Outer Loop from MD 5 to I-95	1.2	1.5	1.2	1.0	1.0	1.0	1.0	1.0	1.2
			I-270 Northbound from I-495 to I-370	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
			I-270 Southbound from I-370 to I-495	2.6	1.5	1.5	1.4	1.1	1.7	1.1	2.2	1.2
		PM Peak	I-495 Inner Loop from Virginia 193 to I-270	3.7	5.5	2.7	4.5	2.6	1.2	1.6	1.6	2.6
			I-495 Outer Loop from I-270 to Virginia 193	2.8	2.4	1.4	1.0	1.0	1.0	1.0	1.0	1.0
			I-495 Inner Loop from I-270 to I-95	2.7	5.0	3.2	2.5	2.6	2.4	2.4	2.6	3.1
			I-495 Outer Loop from I-95 to I-270	1.1	2.7	1.2	1.1	1.1	1.4	1.1	1.3	1.1
			I-495 Inner Loop from I-95 to MD 5	1.5	1.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
			I-495 Outer Loop from MD 5 to I-95	1.9	2.5	1.2	1.0	1.0	1.0	1.0	1.0	1.1
			I-270 Northbound from I-495 to I-370	1.5	1.0	1.4	1.1	1.3	1.6	1.3	1.2	1.3
			I-270 Southbound from I-370 to I-495	1.0	1.1	3.7	2.0	1.3	1.3	2.6	1.4	3.1
		Overall Average Travel Time Index (TTI)* in General Purpose (GP) Lanes**		**1.78**	**2.28**	**1.69**	**1.54**	**1.40**	**1.36**	**1.46**	**1.44**	**1.58**

* Note: MDOT SHA defines various levels of congestion based on TTI: Uncongested (green) – TTI ≤ 1.15; Moderate Congestion (yellow) – 1.15 < TTI ≤ 1.3; Heavy Congestion (orange) – 1.3 < TTI < 2.0; and, Severe Congestion (red) – TTI ≥ 2.0.

**Note: This table summarizes TTI in the GP lanes. All HOT/Express Toll Lanes would have TTI values in the uncongested range (TTI less than 1.15).

[1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.

Table 5: Summary of Vehicle-Throughput Results from VISSIM Model

CRITERIA	METRIC	PEAK PERIOD	LOCATION	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5[1]	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	ALTERNATIVE 9M
Improve Movement of Goods and Services	Vehicle-Throughput (veh/hr)	AM Peak	I-495 at American Legion Bridge	17,105	17,405	20,113	22,240	22,343	22,770	21,788	22,442	21,368
			I-495 west of I-95	14,591	13,910	15,977	18,994	19,189	19,052	19,000	19,679	17,307
			I-495 at MD 5	12,377	12,606	12,789	15,640	14,002	14,145	14,525	15,258	13,630
			I-270 at Montrose Rd	16,225	17,087	17,985	20,951	18,975	21,374	18,310	19,675	18,586
		PM Peak	I-495 at American Legion Bridge	16,299	15,421	18,776	18,817	20,906	20,801	20,035	20,288	19,681
			I-495 west of I-95	15,561	15,420	19,101	21,524	21,312	21,489	20,170	21,474	19,763
			I-495 at MD 5	13,609	13,916	15,132	13,868	15,715	15,725	15,652	15,853	15,647
			I-270 at Montrose Rd	18,375	17,972	16,098	18,540	20,156	22,305	16,946	19,989	16,848
		Average Vehicle-Throughput (veh/hr)		**15,518**	**15,467**	**16,996**	**18,822**	**19,075**	**19,708**	**18,303**	**19,332**	**17,854**
	Percent Change in Vehicle-Throughput vs. 2040 No Build	AM Peak	I-495 at American Legion Bridge	N/A	0%	15%	30%	30%	30%	25%	30%	25%
			I-495 west of I-95	N/A	0%	15%	35%	40%	35%	35%	40%	25%
			I-495 at MD 5	N/A	0%	0%	25%	10%	10%	15%	20%	10%
			I-270 at Montrose Rd	N/A	0%	5%	25%	10%	25%	5%	15%	10%
		PM Peak	I-495 at American Legion Bridge	N/A	0%	20%	20%	35%	35%	30%	30%	30%
			I-495 west of I-95	N/A	0%	25%	40%	40%	40%	30%	40%	30%
			I-495 at MD 5	N/A	0%	10%	< 0%	15%	15%	10%	15%	10%
			I-270 at Montrose Rd	N/A	0%	< 0%	5%	10%	25%	< 0%	10%	< 0%

Legend: Green ≥ 19,000 veh/hr; Yellow 18,000-19,000 veh/hr; Orange 17,000-18,000 veh/hr; Red < 17,000 veh/hr

Notes: [1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.

Table 6: Summary of the Effects on the Local Roadway Network from MWCOG Model

CRITERIA	PERIOD	METRIC	EXISTING	ALTERNATIVE 1	ALTERNATIVE 5[1]	ALTERNATIVE 8	ALTERNATIVE 9	ALTERNATIVE 10	ALTERNATIVE 13B	ALTERNATIVE 13C	ALTERNATIVE 9M
Improve Movement of Goods and Services	Daily	Daily Delay (vehicle-hours) for All Arterials in Montgomery County*	144,028	247,462	241,601	233,725	231,608	233,139	233,448	234,352	234,681
		Percent Reduction vs. No Build (Montgomery County)	**N/A**	0%	2.4%	5.6%	6.4%	5.8%	5.7%	5.3%	5.2%
		Daily Delay (vehicle-hours) for All Arterials in Prince George's County*	98,421	171,265	163,660	158,725	158,606	158,831	158,798	158,505	159,709
		Percent Reduction vs. No Build (Prince George's County)	**N/A**	0%	4.4%	7.3%	7.4%	7.3%	7.3%	7.5%	6.7%
		Daily Delay (vehicle-hours) for All Arterials in District of Columbia (DC)	105,257	178,074	169,630	165,184	164,571	165,931	163,978	165,851	167,262
		Percent Reduction vs. No Build (District of Columbia)	**N/A**	0%	4.7%	7.2%	7.6%	6.8%	7.9%	6.9%	6.1%
		Total Daily Delay (vehicle-hours) for All Arterials in Montgomery County, Prince George's County, and District of Columbia (DC)	347,706	596,801	574,891	557,634	554,785	557,901	556,224	558,708	561,652
		Percent Reduction vs. No Build (Total)	**N/A**	**0%**	**3.7%**	**6.6%**	**7.0%**	**6.5%**	**6.8%**	**6.4%**	**5.9%**

* Note: All other Counties in Maryland and Virginia are expected to experience negligible changes in daily delay (less than 3% for all alternatives).
[1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.
Legend: Green ≥ 5%; Yellow 0-5%; Red 0%

D. Additional Traffic, Toll and Safety Considerations

Below are additional traffic, toll and safety considerations associated with a one managed lane system. While the below are additional considerations, tolling and safety were not used to determine the ability of the alternative to meet the Study's Purpose and Need as they were not used in the evaluation of the other Screened Alternatives.

1. One-Lane System

In general, separated single-lane highway systems, similar to the proposed one-lane system on the top side in Alternative 9M have several drawbacks, including the following:

- "Snail" effect will occur – this is a generally accepted traffic principle that the operations and speed on a given single lane roadway is governed by the slowest moving vehicle because there is no ability to pass a vehicle; bus and truck usage in the managed lanes would increase this effect (capacity reduction due to buses and trucks in a single-lane system would be 3% or more, depending on the amount of truck traffic).

- Overall, "snail" effect will result in slower speeds on the one lane section compared to the two-lane section.

- A bottleneck will occur at the transition from the two-lane section to the one-lane section because of the lane drop.

- Single lane operations offer less flexibility to adapt to highway incidents, crashes, and maintenance activities.

- All of the above will lead to less reliable travel times.

One example analyzed included the Katy Freeway in Houston. The Katy Freeway was initially constructed as a single managed lane system. However, the facility experienced congestion in the one lane and was expanded to two lanes in both directions since the single-lane system was not able to meet future traffic demands. This was done after other attempts to improve service, including changing the HOV requirement from 2+ to 3+ carpools.

2. Increased Toll Rates

As a result of the high demand along the top side of I-495, if only one HOT lane is provided per direction, it would result in higher toll rates within that segment to meet performance requirements such as the minimum operating speed of 45 mph. Therefore, the toll rate would be higher for any of the users on the system on the top side to control the congestion in the one HOT lane. The higher toll rate on the top side would have the following consequences:

- Would make accessing the managed lanes via the interchanges along the top side less desirable for the local residents near those interchanges due to the higher toll rates. This would include direct access interchanges at MD 187, MD 185, US 29, and MD 650.

- Would make the managed lanes less desirable for users with significant portions of their trip on the top side. For example, those who would access them between I-270 West Spur and I-95 or for those entering the managed lanes from I-95 southbound.

3. Crash Analysis

As noted above, traffic conditions could worsen where the managed lanes reduce from two lanes to one lane in each direction. Through these transition areas, the following safety implications would be likely:

- Merge conditions could result in operational degradations that have the potential to create safety concerns due to the increase in the number of conflict points, reduction in overall corridor capacity, and increased driver frustration.

- Based on data provided in the Crash Modification Factor Clearinghouse, a lane reduction transition could be expected to increase the crash frequency by more than 25 percent.

III. Environmental

Similar to the MD 200 (ICC) Diversion Alternative, Alternative 9M was suggested by a few agencies as an alternative to avoid and minimize the environmental and community impacts along the top side of I-495, specifically wetland/waterway and park impacts and property relocations. The LOD for Alternative 9M for the I-495 west and east sections and along I-270 was the same LOD as Alternative 9. The LOD on the top side of I-495 was the same as Alternative 5, generally on I-495 from the west spur to west of the I-495/I-95 interchange. The LODs and associated impacts for Alternative 9M are from January 2020 and reflect the latest, ongoing coordination on avoidance and minimization efforts with the resource agencies. The impacts for Alternatives 5 and Alternative 9 are from November 2019. The comparison of the impacts is presented in **Table 7**.

In general, there is a marginal difference in the environmental impacts between Alternatives 5 and 9, which occurs along the top side of I-495 and represents the differences for Alternative 9M. Alternative 9M may avoid up to nine residential displacements compared to Alternative 9. Environmental impacts associated with Alternative 9M are less than Alternative 9 but the same as or greater than Alternative 5. Under Alternative 9M, there would be:

- 3.5 acres more Section 4(f) impacts than Alternative 5, but 2.1 acres less than Alternative 9;
- 0.9 acres more wetland impacts than Alternative 5, but 0.2 acres less than Alternative 9;
- 43.4 acres more forest impacts than Alternative 5, but 20.2 acres less than Alternative 9; and
- 2.2 acres more floodplain impact than Alternative 5, but 3.0 acres less than Alternative 9.

Specifically, the difference in impacts at Rock Creek Stream Valley Park, Sligo Creek Park and Northwest Branch Park, the three largest park properties in the top side of I-495, are summarized below in **Table 8**. For all three park properties, the impacts between Alternative 5 and Alternative 9M are the same.

Table 7: Resource Impacts for Alternatives 5, 9M, and 9

Resource	Alternative 5	Alternative 9M	Alternative 9
Rock Creek Stream Valley Park, Units 2 and 3	2.7 acres	2.7 acres	3.7 acres
Sligo Creek Parkway Park	2.4 acres	2.4 acres	3.2 acres
Northwest Branch Stream Valley Park, Unit 3	3.2 acres	3.2 acres	3.2 acres

Table 8: Summary of Effects Comparison of Alternatives

	Resource	Alternative 1 No Build	Alt 5[1]	Alt 8	Alt 9	Alt 9M	Alt 10	Alt 13B	Alt 13C
Environmental	Total Potential Impacts to Section 4(f) Properties including park and historic properties (acres)	0	140.7	146.3	146.3	144.2	148.3	145.0	146.1
	Number of Known Architectural Resources	0	20	21	21	21	21	21	21
	100-Year Floodplain (acres)	0	114.3	119.5	119.5	116.5	120.0	119.5	119.9
	Unique and Sensitive Areas (acres)	0	395.3	408.2	408.2	401.8	410.8	406.7	408.6
	Sensitive Species Project Review Area (ac)	0	0	0	0	0	0	0	0
	Forest canopy (acres)	0	1,433.8	1,497.4	1,497.4	1,477.2	1,514.5	1,488.8	1,503.2
	Wetlands of Special State Concern	0	0	0	0	0	0	0	0
	Wetlands (acres)	0	14.9	16.0	16.0	15.8	16.2	16.0	16.2
	Waters of the US (linear feet)	0	149,781.5	152,004.1	152,004.1	151,289.5	152,945.0	151,879.2	152,643.0
	Tier II Catchments (acres)	55.2	55.3	55.3	55.3	55.3	55.3	55.3	55.3
	Noise Receptors Impacted	0	3,661	4,470	4,470	4,249	4,581	4,411	4,461
Traffic	Annual Average Hours of Savings per Commuter	0	45	59	73	58	72	65	64
Engineering	Total Right-of-way Required (acres)	0	284.9	323.5	323.5	313.4	337.3	318.9	329.3
	Number of Properties Directly Effected	0	1,240	1,475	1,475	1,392	1,518	1,447	1,479
	Number of Residential Relocations	0	25	34	34	25	34	34	34
	Number of Business Relocations	0	4	4	4	4	4	4	4
	Width of Pavement on I-495 (feet)	138–146	170–174	194–198	194–198	170-198	194–198	194–198	194–198
	Width of Pavement on I-270 (feet)	228–256	194–198	218–222	218–222	218-222	242–248	202–206	226–230
	Capital Cost Range [Construction & ROW] (billions)	N/A	$7.8–$8.5	$8.7 – $9.6	$8.7 – $9.6	$8.5 - $9.4	$9.0 – $10.0	$8.7 - $9.6	$8.8 - $9.7

Notes: [1] MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in this table for comparison purposes only.

- Preliminary impacts represented above assume total impacts; permanent and temporary impacts will be distinguished in the Final Environmental Impact Statement (FEIS).
- The right-of-way is based on State records research and filled in with county right-of-way, as necessary. With the Section 4(f) properties, some boundaries vary based on the presence of easements and differences in the size and location of historic and park boundaries.
- Noise receptors are noise-sensitive land uses which include residences, schools, places of worship, and parks, among other uses. Note that these numbers include receptors that do not have an existing noise wall as well as receptors that have an existing noise wall which is expected to be replaced.

IV. Financial Evaluation

A preliminary financial analysis was completed for all of the Screened Alternatives to determine financial viability. This analysis considered multiple factors including the preliminary capital costs and mitigation (a high and low range of ±5 percent of the base cost), initial revenue projections, preliminary operations and maintenance costs, the likely methods for how construction would be financed, and the capital costs. The key input of interest rates considered a high and low range of ±0.50 percent from the base assumptions.

The results indicated that Alternative 9M cashflow estimates would be less likely to be financially self-sufficient than Alternatives 8, 9, and 10 with lower overall revenue potential. In the base case scenario, positive excess cashflows would be approximately $459 million. As shown in Table 9, **under** a lower construction price and lower interest rate scenario, the positive excess cashflows would be estimated at $2,190 million, compared to the result for a higher construction price and higher interest rate scenario, which indicate negative cashflows where the State may be required to provide a subsidy of approximately $827 million.

Table 9: Range of Cashflows at Financial Close for Alternative 9 Modified (in millions)

Cashflows		Capital Cost Range (in millions)		
		Low (-5%)	Mid	High (+5%)
Interest Rate Range	Low (-50 basis points)	$2,190	$1,723	$1,258
	Mid	$924	$459	-$4
	High (+50 basis points)	$0	-$414	-$827

In comparison, Alternative 9 could provide a net payment to the State of up to of $2,762 million which is the largest estimated net payment compared to the other Screened Alternatives. Alternative 9M could provide a higher net payment to the State than Alternatives 5, 13B, and 13C, but less than Alternatives 8, 9, and 10.

The financial analysis is preliminary because the value of numerous input assumptions used to compute the financial viability of the alternatives could change. Key input factors include capital costs, operations and maintenance costs, revenue forecasts, and financing assumptions, as noted above. If any of the inputs change, however, it is anticipated that the result of the financial analyses would change in a consistent direction for all Build Alternatives. For example, capital costs for all alternatives would generally go up or down proportionally since the same baseline assumptions were used to develop the capital costs. Similarly, a consistent methodology was used to estimate the revenue and consistent financial assumptions were used for all Build Alternatives. Therefore, any changes in the inputs (i.e., interest rates), are expected to result in a similar comparative difference between the alternatives. The conclusion is that Alternative 9M would always be less financially viable than Alternatives 8, 9 and 10, but more financially viable than Alternatives 5, 13B and 13C.

V. Conclusions

MDOT SHA evaluated Alternative 9M to the same level of detail as the Screened Alternatives to determine if it would meet the Study's Purpose and Need, and thus be considered a reasonable alternative for inclusion in the DEIS.

The traffic analysis results indicated that Alternative 9M would be expected to provide operational benefits compared to the No Build alternative and other alternatives that were studied and dropped from consideration, such as Alternative 5. However, the effectiveness of Alternative 9M is limited because this alternative provides less additional capacity (one HOT lane per direction) in the area of the greatest need (top side of I-495) compared to the other Build Alternatives, which each provide two managed lanes per direction along I-495 within the Study limits. As a result, Alternative 9M ranks behind all the Build Alternatives (Alternatives 8, 9, 10, 13B, and 13C) in many of the traffic metrics studied, including throughput, TTI, and local network delay. Additionally, Alternative 9M was near the bottom of the rankings compared to the Build Alternatives in the metrics of average speed (tied with Alternatives 8 and 13C for lowest), and LOS (tied with Alternative 13C for lowest). Alternative 9M would also introduce safety and operational challenges due to the inconsistent cross-section along I-495.

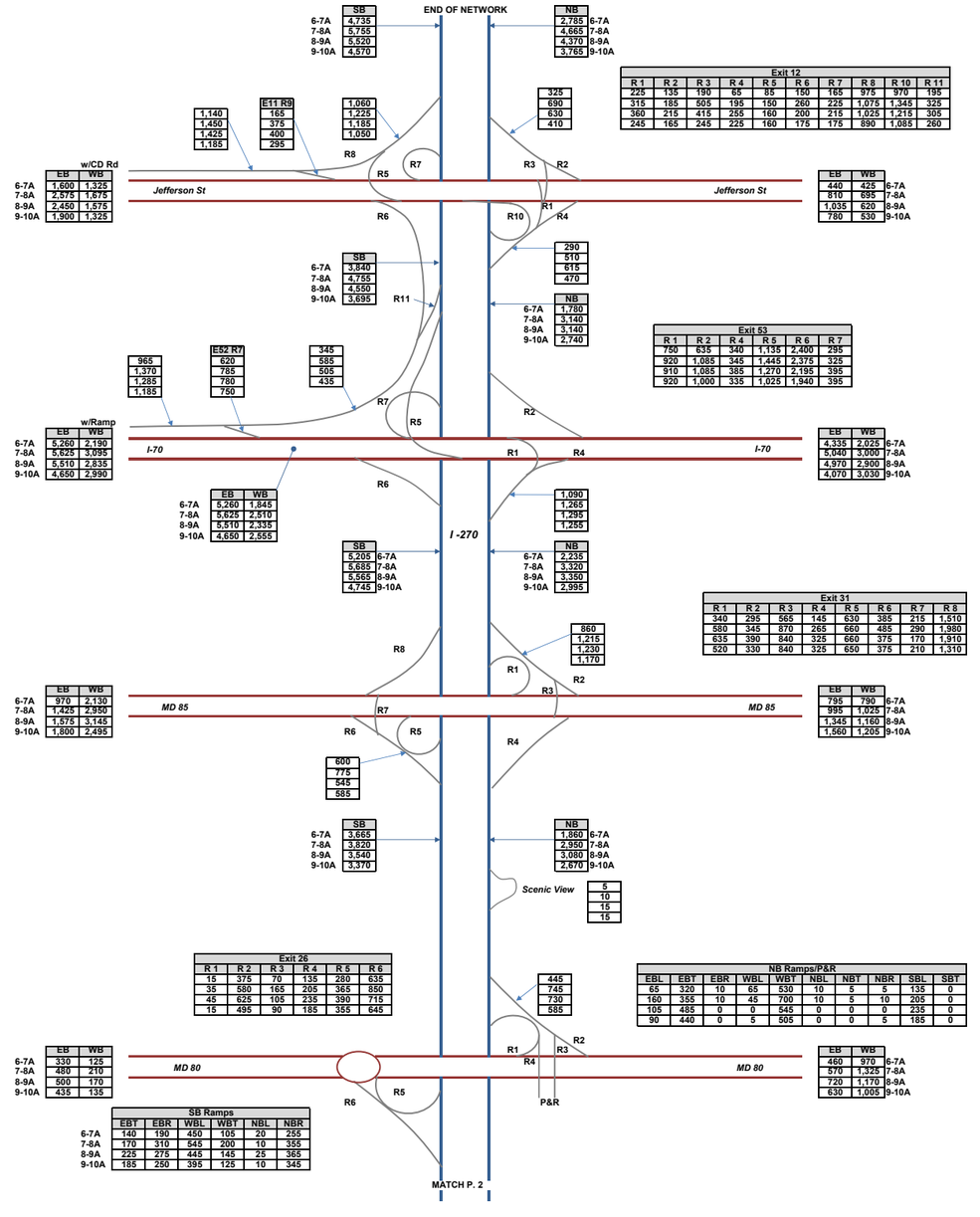
Regarding environmental impacts, there are relatively small differences between Alternatives 5 and 9 compared to the overall total amount of impacts. In turn, the environmental impacts for Alternative 9M would be less than Alternative 9, but the same as or greater than Alternative 5. While Alternative 9M would reduce environmental and property impacts, it would still impact significant environmental resources in other areas and would not address the congestion issues, despite an estimated cost range between $8.5 and $9.4 Billion.

For financial viability, assuming the mid-range results for capital cost and interest rates, the cash flows indicate that Alternative 9M would be expected to generate revenues higher than Alternatives 5, 13B, and 13C, but lower than Alternatives 8, 9, and 10.

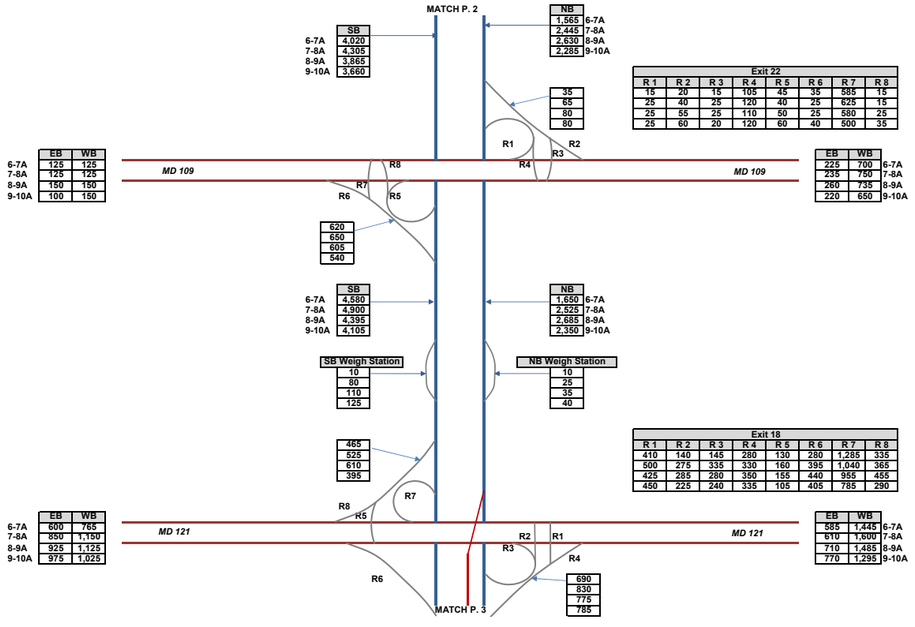
In summary, Alternative 9M would meet the Study's Purpose and Need better than Alternative 5, but not as well as Alternatives 8, 9, and 10. Further investigation will be required as the Study moves into the FEIS stage to evaluate the safety and operational impacts of Alternative 9M, particularly in the transition areas where capacity in the managed lanes drops from two lanes to one lane. Further, an evaluation of the toll rate implications of Alternative 9M will need to be performed.

ATTACHMENT A – PEAK PERIOD VOLUMES

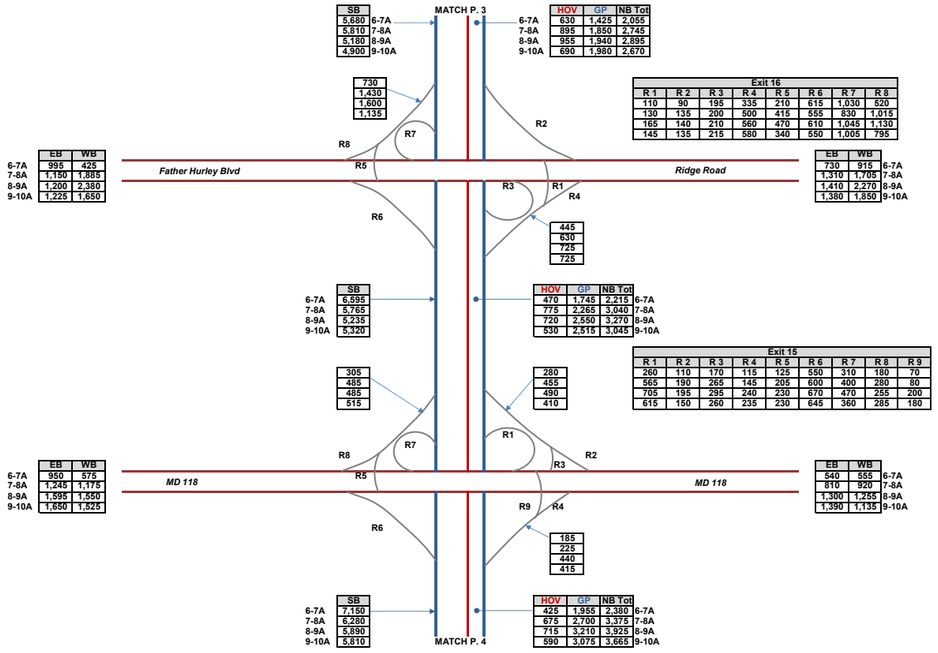
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



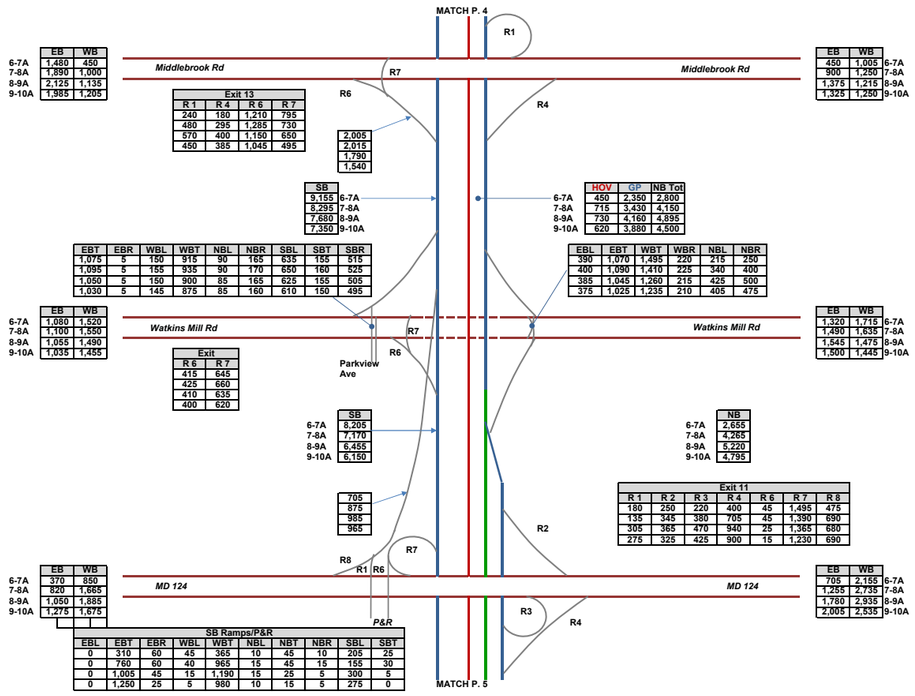
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



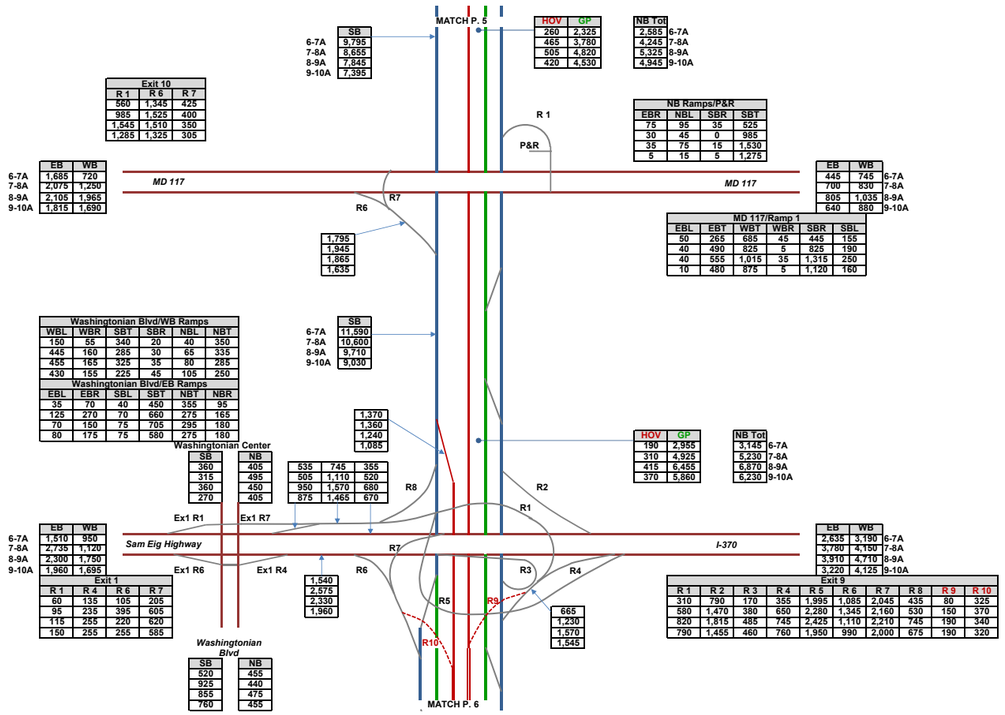
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



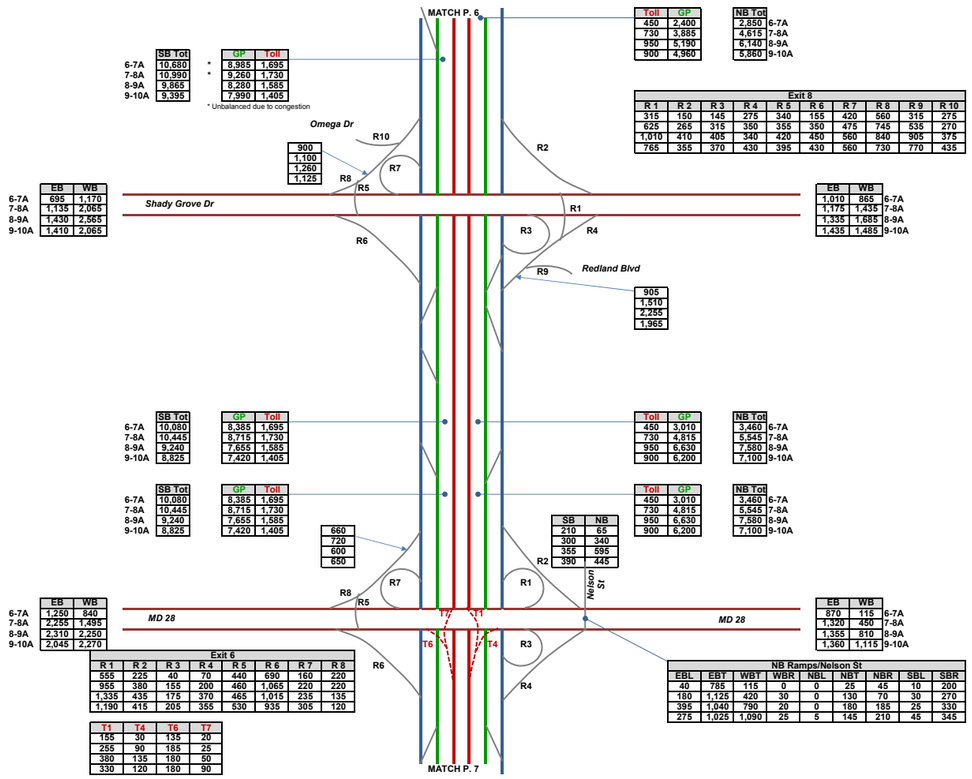
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



	SB Tot
6-7A	10,680
7-8A	10,990
8-9A	9,865
9-10A	9,395

	GP	Toll
*	8,985	1,695
*	9,260	1,730
	8,280	1,585
	7,990	1,405

* Unbalanced due to congestion

Toll	GP
450	2,400
730	3,885
950	5,190
900	4,960

NB Tot	
2,850	6-7A
4,615	7-8A
6,140	8-9A
5,860	9-10A

Exit 8									
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10
315	150	145	275	340	155	420	560	315	275
625	265	315	350	355	350	475	745	535	270
1,010	410	405	340	420	450	560	840	905	375
765	355	370	430	395	430	560	730	770	435

	EB	WB
6-7A	695	1,170
7-8A	1,135	2,065
8-9A	1,430	2,565
9-10A	1,410	2,065

EB	WB	
1,010	865	6-7A
1,175	1,435	7-8A
1,335	1,685	8-9A
1,435	1,485	9-10A

	SB Tot
6-7A	10,080
7-8A	10,445
8-9A	9,240
9-10A	8,825

GP	Toll
8,385	1,695
8,715	1,730
7,655	1,585
7,420	1,405

Toll	GP
450	3,010
730	4,815
950	6,630
900	6,200

NB Tot	
3,460	6-7A
5,545	7-8A
7,580	8-9A
7,100	9-10A

	SB Tot
6-7A	10,080
7-8A	10,445
8-9A	9,240
9-10A	8,825

GP	Toll
8,385	1,695
8,715	1,730
7,655	1,585
7,420	1,405

Toll	GP
450	3,010
730	4,815
950	6,630
900	6,200

NB Tot	
3,460	6-7A
5,545	7-8A
7,580	8-9A
7,100	9-10A

	EB	WB
6-7A	1,250	840
7-8A	2,255	1,495
8-9A	2,310	2,250
9-10A	2,045	2,270

EB	WB	
870	115	6-7A
1,320	450	7-8A
1,355	810	8-9A
1,360	1,115	9-10A

Exit 6							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
555	225	40	70	440	690	160	220
955	380	155	200	460	1,065	220	220
1,335	435	175	370	465	1,015	235	135
1,190	415	205	355	530	935	305	120

T1	T4	T6	T7
155	30	135	20
255	90	185	25
380	135	180	50
330	120	180	90

NB Ramps/Nelson St								
EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR
40	785	115	0	0	25	45	10	200
180	1,125	420	30	0	130	70	30	270
395	1,040	790	20	0	180	185	25	330
275	1,025	1,090	25	5	145	210	45	345

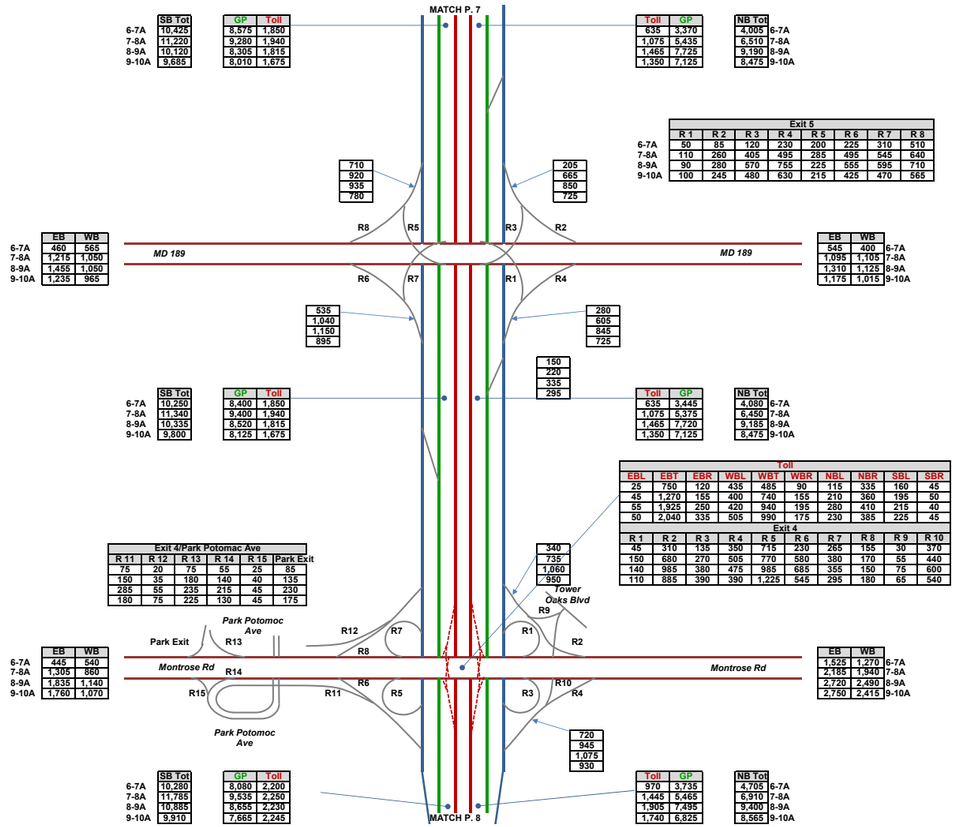
	SB
	660
	720
	600
	650

SB	NB
210	65
300	340
355	595
390	445

900	
1,100	
1,260	
1,125	

905	
1,510	
2,255	
1,965	

I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



	SB Tot
6-7A	10,425
7-8A	11,220
8-9A	10,120
9-10A	9,685

GP	Toll
8,575	1,850
9,280	1,940
8,305	1,815
8,010	1,675

Toll	GP
635	3,370
1,075	5,435
1,465	7,725
1,350	7,125

NB Tot	
4,005	6-7A
6,510	7-8A
9,190	8-9A
8,475	9-10A

Exit 5							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
50	85	120	230	200	225	310	510
110	260	405	495	285	495	545	640
90	280	570	755	225	555	595	710
100	245	480	630	215	425	470	565

710	R8
920	R5
935	R6
780	R7

205	R3
665	R2
850	R1
725	R4

	EB	WB
6-7A	460	565
7-8A	1,215	1,050
8-9A	1,455	1,050
9-10A	1,235	965

EB	WB	
545	400	6-7A
1,095	1,105	7-8A
1,310	1,125	8-9A
1,175	1,015	9-10A

535	R6
1,040	R7
1,150	R1
895	R4

280	R1
605	R4
845	R3
725	R2

150	R5
220	R6
335	R7
295	R8

	SB Tot
6-7A	10,250
7-8A	11,340
8-9A	10,335
9-10A	9,800

GP	Toll
8,400	1,850
9,400	1,940
8,520	1,815
8,125	1,675

Toll	GP
635	3,445
1,075	5,375
1,465	7,720
1,350	7,125

NB Tot	
4,080	6-7A
6,450	7-8A
9,185	8-9A
8,475	9-10A

Toll									
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
25	750	120	435	485	90	115	335	160	45
45	1,270	155	400	740	155	210	360	195	50
55	1,925	250	420	940	195	280	410	215	40
50	2,040	335	505	990	175	230	385	225	45

Exit 4									
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10
45	310	135	350	715	230	265	155	30	370
150	680	270	505	770	580	380	170	55	440
140	985	380	475	985	685	355	150	75	600
110	885	390	390	1,225	545	295	180	65	540

Exit 4/Park Potomac Ave					
R 11	R 12	R 13	R 14	R 15	Park Exit
75	20	75	55	25	85
150	35	180	140	40	135
285	55	235	215	45	230
180	75	225	130	45	175

340	R1
735	R2
1,060	R3
950	R4

720	R5
945	R6
1,075	R7
930	R8

	EB	WB
6-7A	445	540
7-8A	1,305	860
8-9A	1,835	1,140
9-10A	1,760	1,070

EB	WB	
1,525	1,270	6-7A
2,185	1,940	7-8A
2,720	2,490	8-9A
2,750	2,415	9-10A

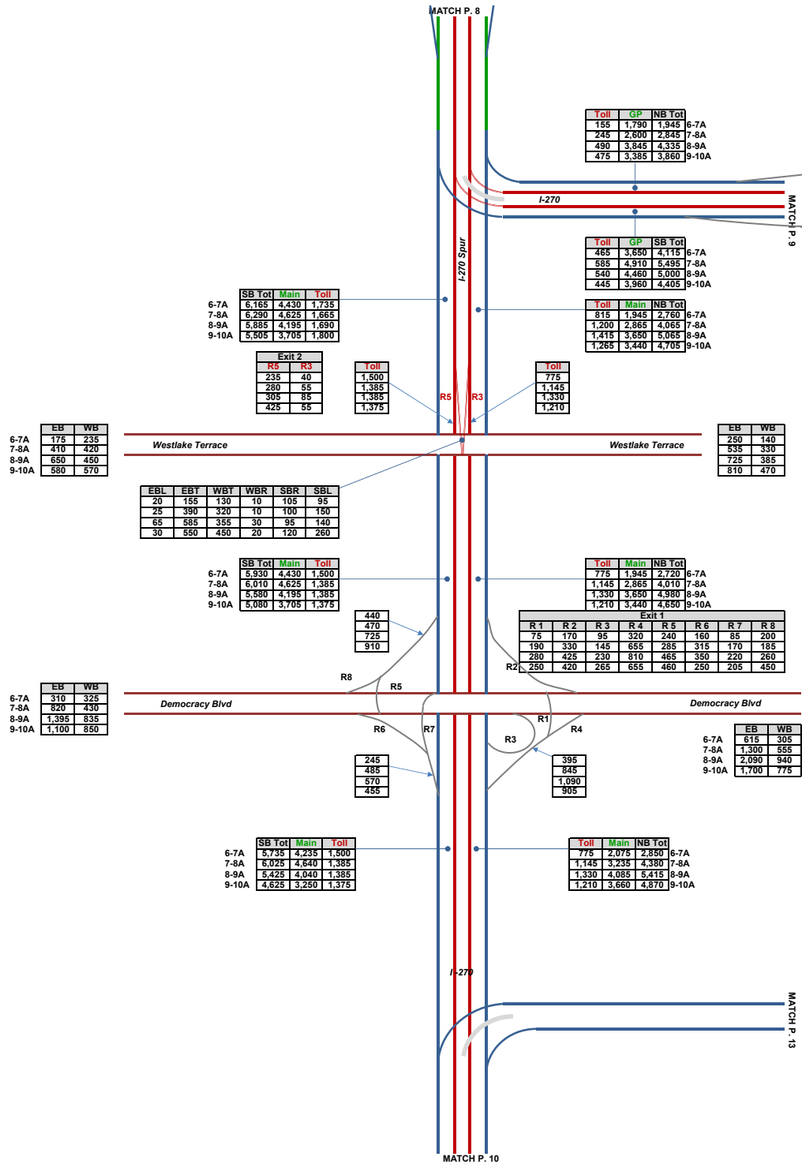
	SB Tot
6-7A	10,280
7-8A	11,785
8-9A	10,885
9-10A	9,910

GP	Toll
8,080	2,200
9,535	2,250
8,655	2,230
7,665	2,245

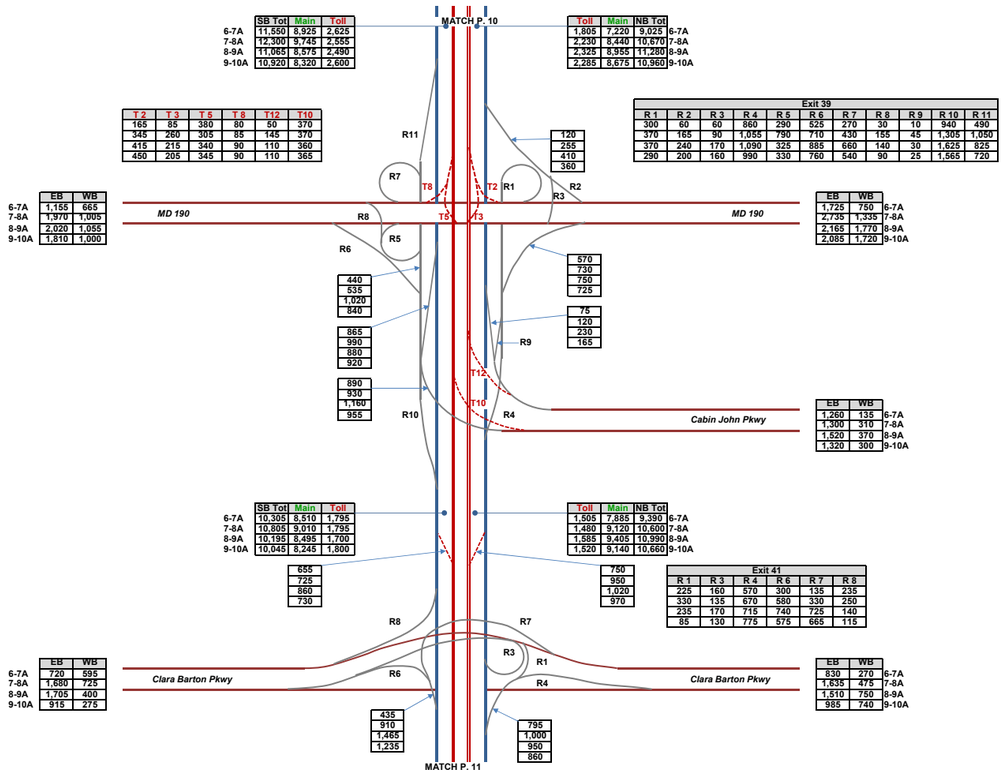
Toll	GP
970	3,735
1,445	5,465
1,905	7,495
1,740	6,825

NB Tot	
4,705	6-7A
6,910	7-8A
9,400	8-9A
8,565	9-10A

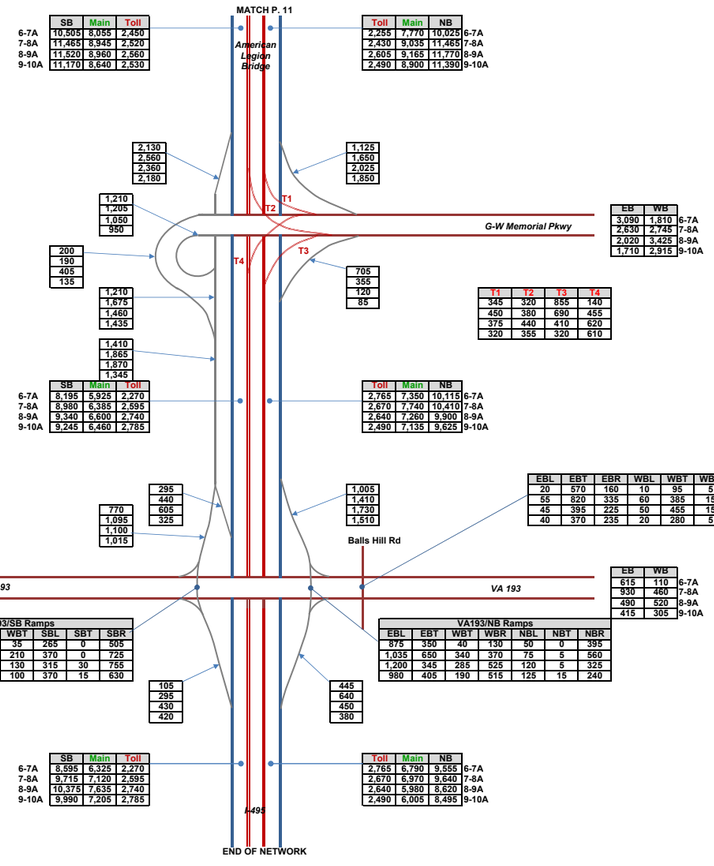
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



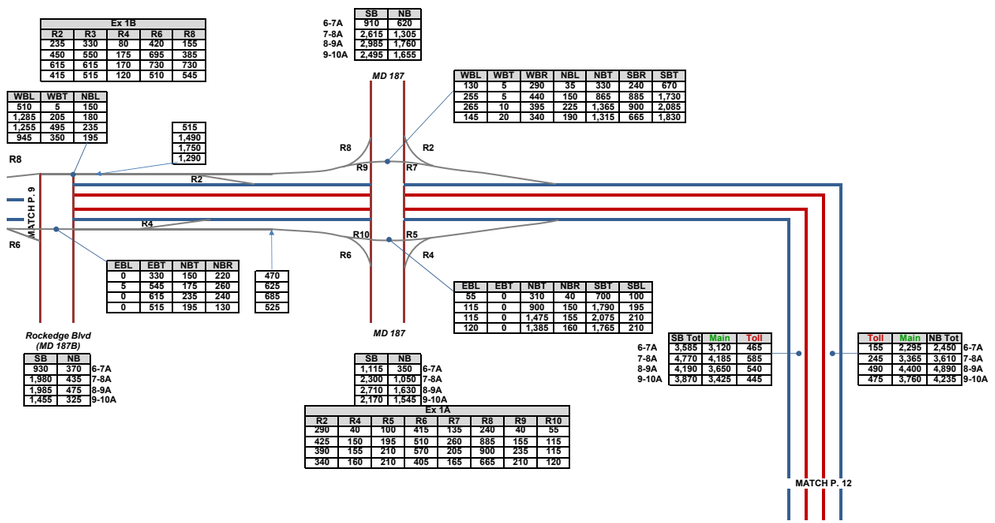
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



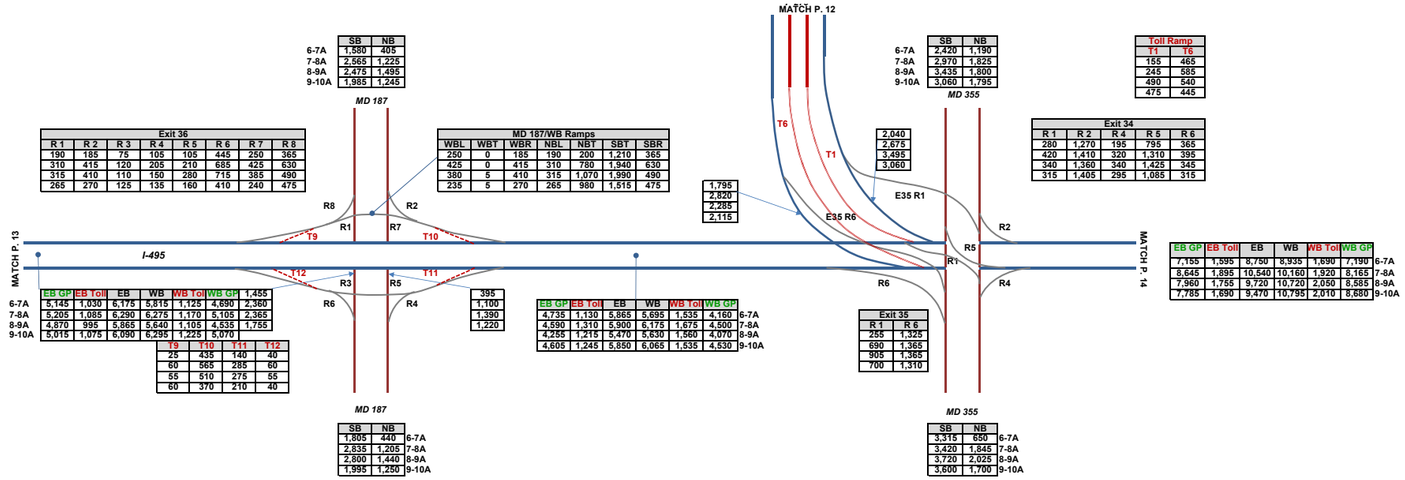
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



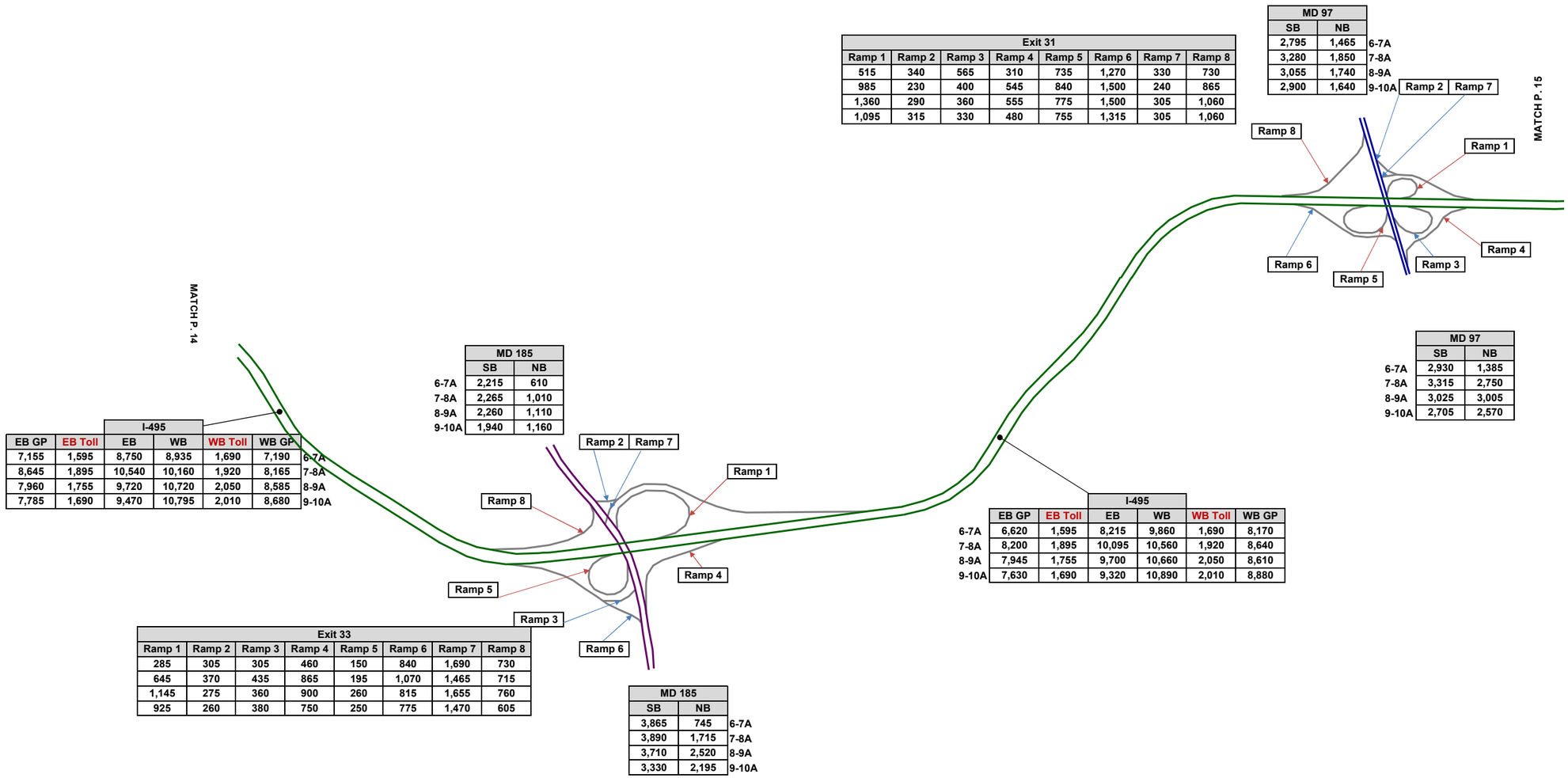
I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side AM
Future Alternative 9 Modified Peak Period Volumes



I-495 North Side AM
Future Alternative 9 ModifiedPeak Period Volumes



Exit 31							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
515	340	565	310	735	1,270	330	730
985	230	400	545	840	1,500	240	865
1,360	290	360	555	775	1,500	305	1,060
1,095	315	330	480	755	1,315	305	1,060

	MD 97	
	SB	NB
6-7A	2,795	1,465
7-8A	3,280	1,850
8-9A	3,055	1,740
9-10A	2,900	1,640

	MD 97	
	SB	NB
6-7A	2,930	1,385
7-8A	3,315	2,750
8-9A	3,025	3,005
9-10A	2,705	2,570

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	7,155	1,595	8,750	8,935	1,690	7,190
7-8A	8,645	1,895	10,540	10,160	1,920	8,165
8-9A	7,960	1,755	9,720	10,720	2,050	8,585
9-10A	7,785	1,690	9,470	10,795	2,010	8,680

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	6,620	1,595	8,215	9,860	1,690	8,170
7-8A	8,200	1,895	10,095	10,560	1,920	8,640
8-9A	7,945	1,755	9,700	10,660	2,050	8,610
9-10A	7,630	1,690	9,320	10,890	2,010	8,880

	MD 185	
	SB	NB
6-7A	2,215	610
7-8A	2,265	1,010
8-9A	2,260	1,110
9-10A	1,940	1,160

Exit 33							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
285	305	305	460	150	840	1,690	730
645	370	435	865	195	1,070	1,465	715
1,145	275	360	900	260	815	1,655	760
925	260	380	750	250	775	1,470	605

	MD 185	
	SB	NB
6-7A	3,865	745
7-8A	3,890	1,715
8-9A	3,710	2,520
9-10A	3,330	2,195

I-495 North Side AM
Future Alternative 9 ModifiedPeak Period Volumes

T1	T2	T3	T4	T5	T6	T7	T8
30	215	235	115	200	45	400	380
80	190	360	240	295	70	315	440
100	195	320	265	265	80	295	530
115	190	285	225	235	100	320	515

Exit 30					
Ramp 1	Ramp 3	Ramp 4	Ramp 6	Ramp 7	Ramp 8
155	280	220	110	310	1,220
235	510	320	210	195	1,225
370	605	420	180	210	1,175
410	540	425	250	250	1,060

	US 29	
	SB	NB
6-7A	3,440	880
7-8A	4,240	1,740
8-9A	5,025	1,865
9-10A	3,685	1,420

Exit 29					
Ramp 1	Ramp 2	Ramp 4	Ramp 5	Ramp 6	Ramp 7
930	425	200	540	470	170
1,015	315	320	640	695	175
950	330	390	650	610	175
835	355	295	515	625	245

	MD 193	
	SB	NB
6-7A	1,355	985
7-8A	1,795	1,385
8-9A	1,655	1,320
9-10A	1,310	1,190

MATCH P. 16

MATCH P. 15

Ramp 8
Ramp 7
Ramp 1
T8
T2
T3
T5
T7
T6
T1
T4
Ramp 4
Ramp 6
Ramp 3

Rm 7 WBL
Rm 2 WBR
Rm 1 NBR
Ramp 6
Ramp 5
Ramp 4

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	5,830	1,595	7,425	9,285	1,690	7,595
7-8A	7,685	1,895	9,580	9,180	1,920	7,260
8-9A	7,415	1,755	9,170	8,835	2,050	6,785
9-10A	7,220	1,690	8,910	9,355	2,010	7,345

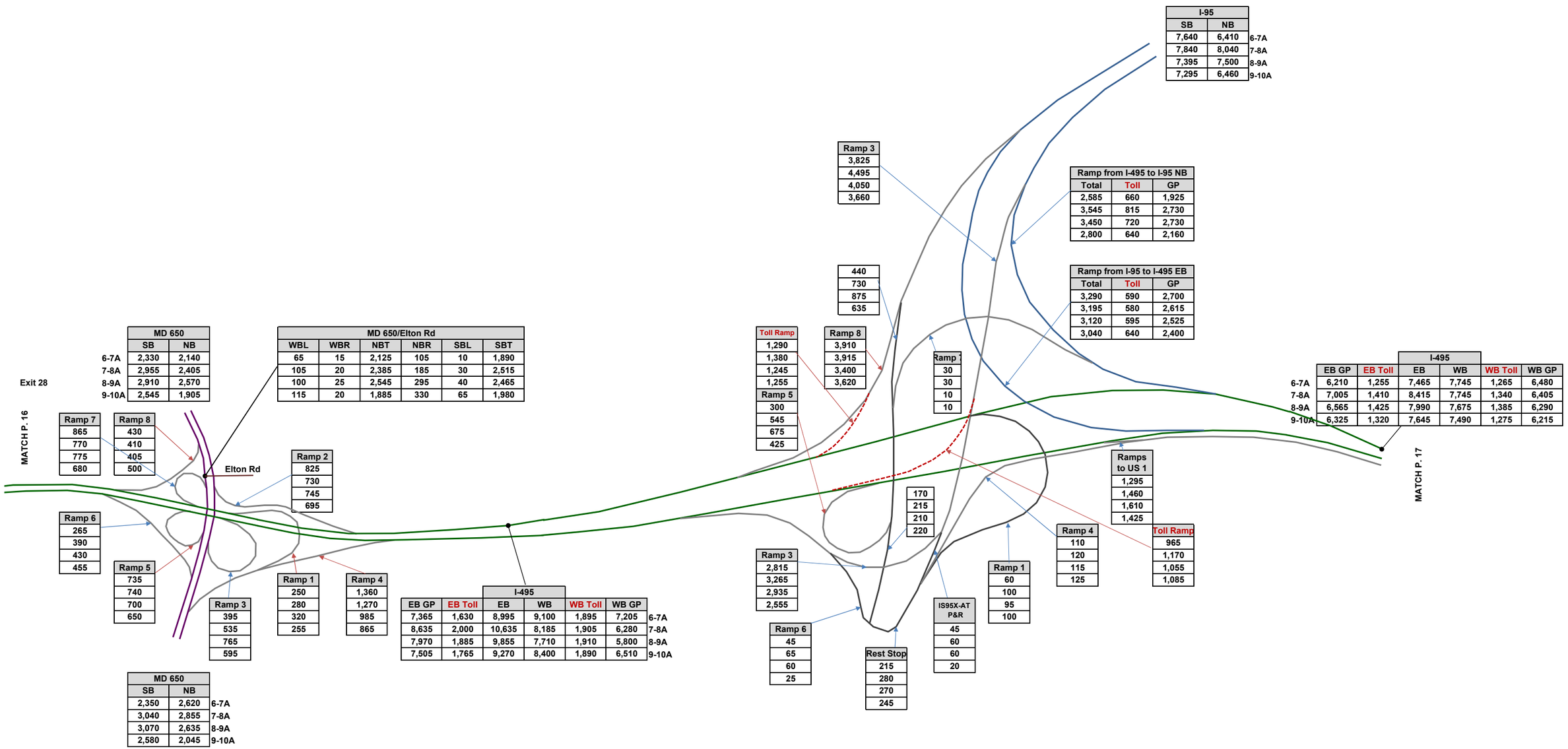
	US 29	
	SB	NB
6-7A	2,505	670
7-8A	3,070	1,555
8-9A	3,820	1,900
9-10A	2,795	1,580

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	5,660	1,630	7,290	8,425	1,895	6,530
7-8A	7,285	2,000	9,285	7,900	1,905	5,995
8-9A	7,050	1,885	8,935	7,360	1,910	5,450
9-10A	6,855	1,765	8,620	8,015	1,890	6,125

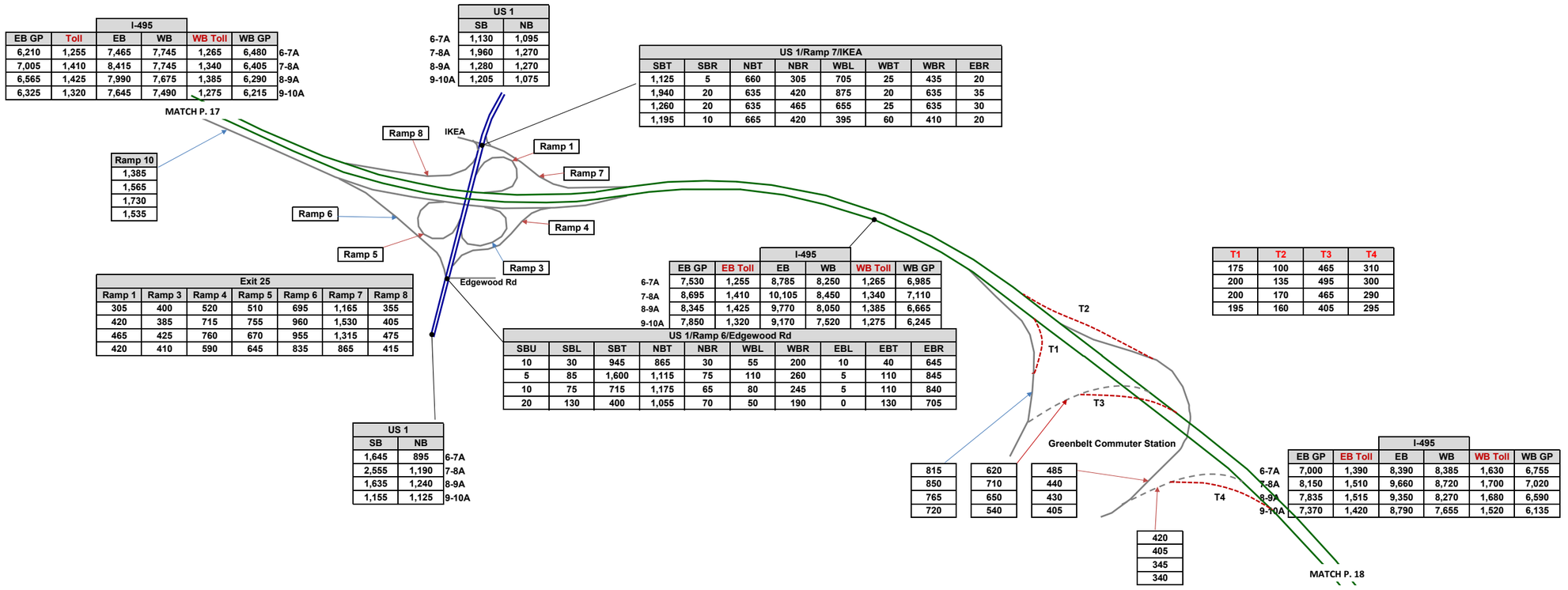
MD 193		
SB	NB	
1,455	1,690	6-7A
2,025	2,405	7-8A
1,790	2,330	8-9A
1,665	1,965	9-10A

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	5,930	1,630	7,560	8,090	1,895	6,195
7-8A	7,550	2,000	9,550	7,375	1,905	5,470
8-9A	7,480	1,885	9,365	6,915	1,910	5,005
9-10A	7,040	1,765	8,805	7,780	1,890	5,890

I-495 North Side AM
Future Alternative 9 ModifiedPeak Period Volumes



I-495 North East Side AM
Future Alternative 9 Modified Peak Period Volumes



	I-495					
EB GP	Toll	EB	WB	WB Toll	WB GP	
6,210	1,255	7,465	7,745	1,265	6,480	6-7A
7,005	1,410	8,415	7,745	1,340	6,405	7-8A
6,565	1,425	7,990	7,675	1,385	6,290	8-9A
6,325	1,320	7,645	7,490	1,275	6,215	9-10A

	US 1	
	SB	NB
6-7A	1,130	1,095
7-8A	1,960	1,270
8-9A	1,280	1,270
9-10A	1,205	1,075

US 1/Ramp 7/IKEA							
SBT	SBR	NBT	NBR	WBL	WBT	WBR	EBR
1,125	5	660	305	705	25	435	20
1,940	20	635	420	875	20	635	35
1,260	20	635	465	655	25	635	30
1,195	10	665	420	395	60	410	20

Ramp 10
1,385
1,565
1,730
1,535

Exit 25						
Ramp 1	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
305	400	520	510	695	1,165	355
420	385	715	755	960	1,530	405
465	425	760	670	955	1,315	475
420	410	590	645	835	865	415

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	7,530	1,255	8,785	8,250	1,265	6,985
7-8A	8,695	1,410	10,105	8,450	1,340	7,110
8-9A	8,345	1,425	9,770	8,050	1,385	6,665
9-10A	7,850	1,320	9,170	7,520	1,275	6,245

US 1/Ramp 6/Edgewood Rd									
SBU	SBL	SBT	NBT	NBR	WBL	WBR	EBL	EBT	EBR
10	30	945	865	30	55	200	10	40	645
5	85	1,600	1,115	75	110	260	5	110	845
10	75	715	1,175	65	80	245	5	110	840
20	130	400	1,055	70	50	190	0	130	705

	US 1	
	SB	NB
6-7A	1,645	895
7-8A	2,555	1,190
8-9A	1,635	1,240
9-10A	1,155	1,125

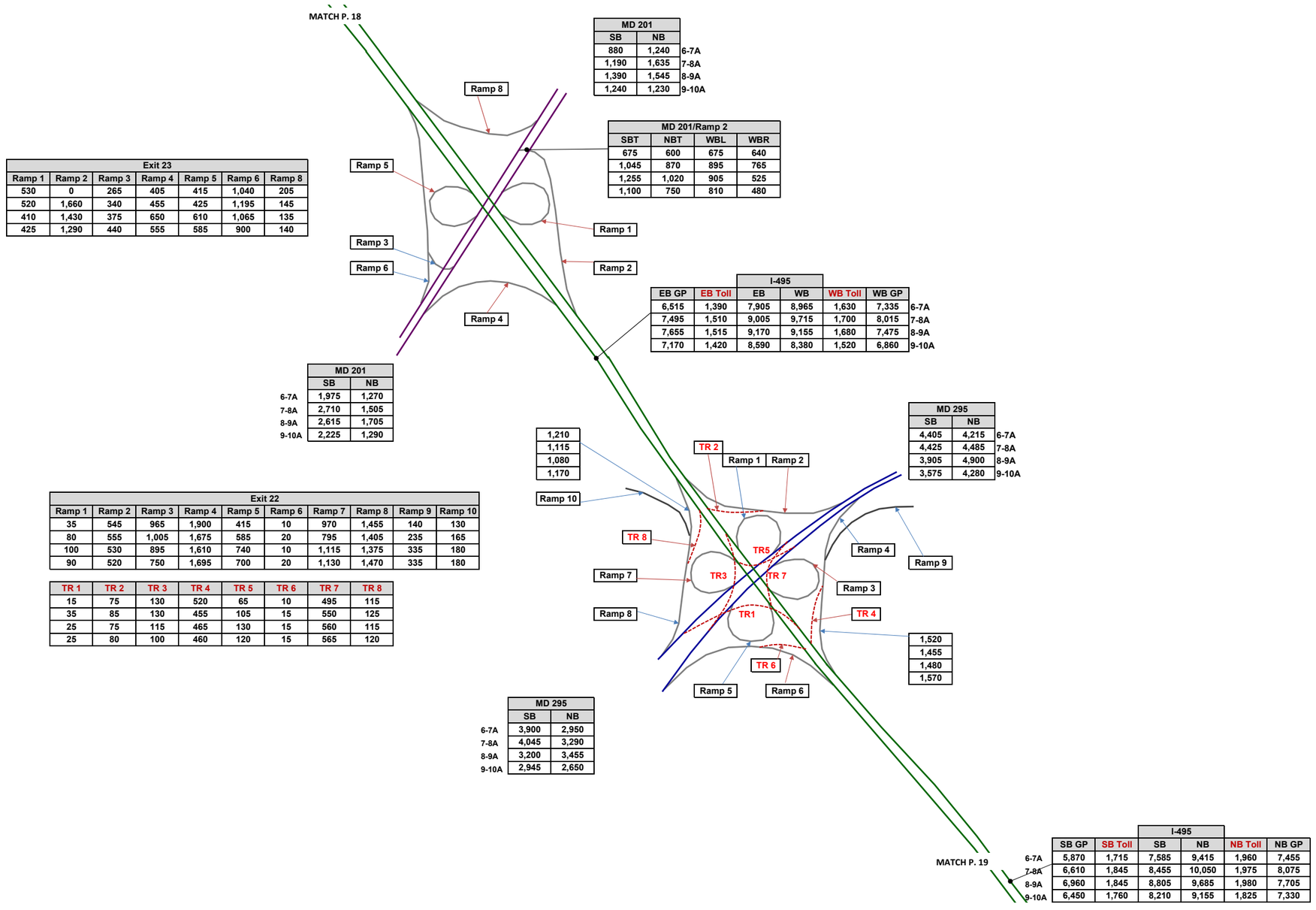
T1	T2	T3	T4
175	100	465	310
200	135	495	300
200	170	465	290
195	160	405	295

815	620	485
850	710	440
765	650	430
720	540	405

420
405
345
340

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
6-7A	7,000	1,390	8,390	8,385	1,630	6,755
7-8A	8,150	1,510	9,660	8,720	1,700	7,020
8-9A	7,835	1,515	9,350	8,270	1,680	6,590
9-10A	7,370	1,420	8,790	7,655	1,520	6,135

I-495 North East Side AM
Future Alternative 9 Modified Peak Period Volumes



Exit 23						
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8
530	0	265	405	415	1,040	205
520	1,660	340	455	425	1,195	145
410	1,430	375	650	610	1,065	135
425	1,290	440	555	585	900	140

MD 201		
SB	NB	
880	1,240	6-7A
1,190	1,635	7-8A
1,390	1,545	8-9A
1,240	1,230	9-10A

MD 201/Ramp 2			
SBT	NBT	WBL	WBR
675	600	675	640
1,045	870	895	765
1,255	1,020	905	525
1,100	750	810	480

	I-495					
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
6,515	1,390	7,905	8,965	1,630	7,335	6-7A
7,495	1,510	9,005	9,715	1,700	8,015	7-8A
7,655	1,515	9,170	9,155	1,680	7,475	8-9A
7,170	1,420	8,590	8,380	1,520	6,860	9-10A

MD 201		
SB	NB	
1,975	1,270	6-7A
2,710	1,505	7-8A
2,615	1,705	8-9A
2,225	1,290	9-10A

MD 295		
SB	NB	
4,405	4,215	6-7A
4,425	4,485	7-8A
3,905	4,900	8-9A
3,575	4,280	9-10A

Exit 22									
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
35	545	965	1,900	415	10	970	1,455	140	130
80	555	1,005	1,675	585	20	795	1,405	235	165
100	530	895	1,610	740	10	1,115	1,375	335	180
90	520	750	1,695	700	20	1,130	1,470	335	180

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
15	75	130	520	65	10	495	115
35	85	130	455	105	15	550	125
25	75	115	465	130	15	560	115
25	80	100	460	120	15	565	120

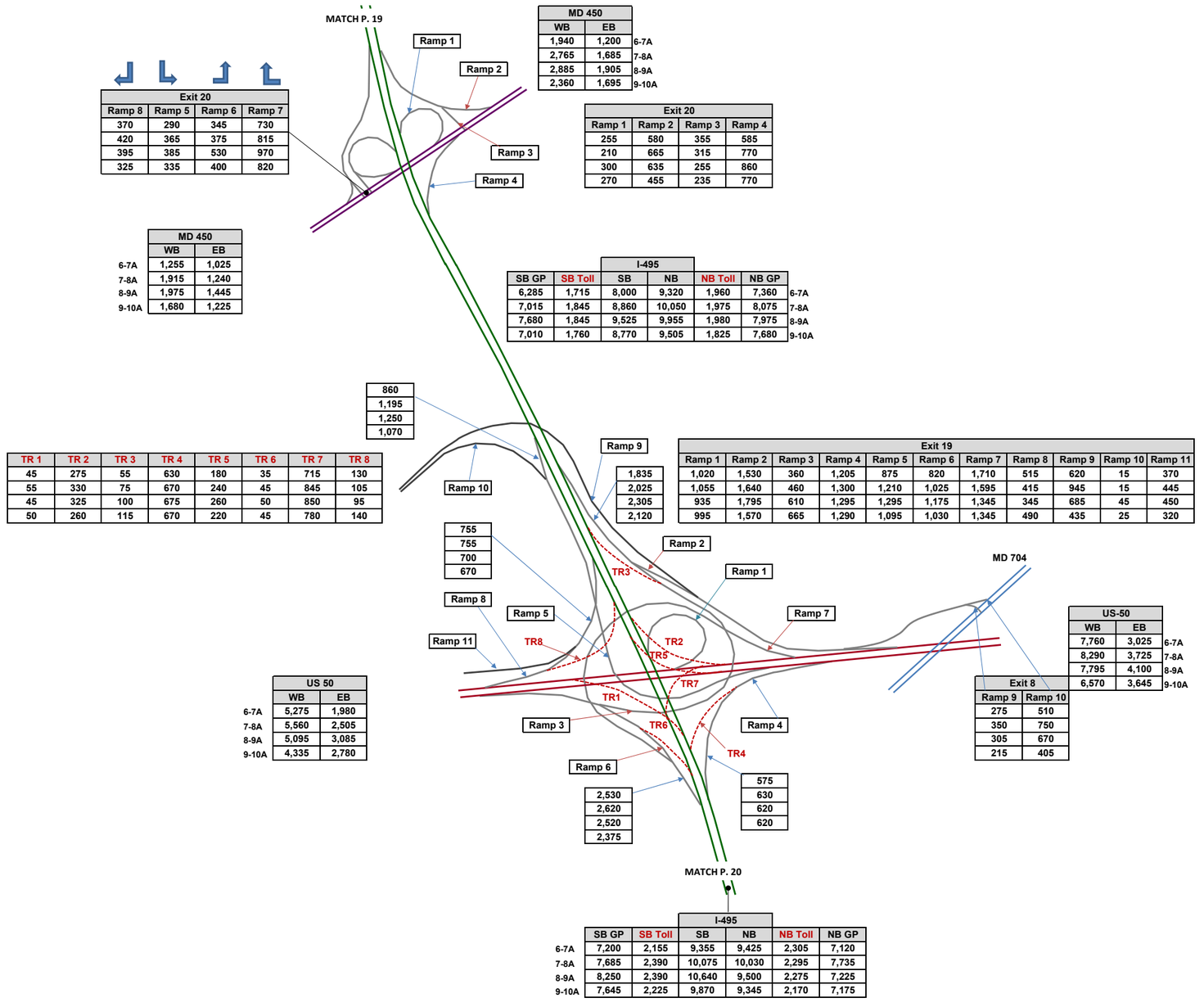
1,210
1,115
1,080
1,170

1,520
1,455
1,480
1,570

MD 295		
SB	NB	
3,900	2,950	6-7A
4,045	3,290	7-8A
3,200	3,455	8-9A
2,945	2,650	9-10A

	I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP	
5,870	1,715	7,585	9,415	1,960	7,455	6-7A
6,610	1,845	8,455	10,050	1,975	8,075	7-8A
6,960	1,845	8,805	9,685	1,980	7,705	8-9A
6,450	1,760	8,210	9,155	1,825	7,330	9-10A

I-495 North East Side AM
Future Alternative 9 Modified Peak Period Volumes



Exit 20			
Ramp 8	Ramp 5	Ramp 6	Ramp 7
370	290	345	730
420	365	375	815
395	385	530	970
325	335	400	820

MD 450		
WB	EB	
1,940	1,200	6-7A
2,765	1,685	7-8A
2,885	1,905	8-9A
2,360	1,695	9-10A

Exit 20			
Ramp 1	Ramp 2	Ramp 3	Ramp 4
255	580	355	585
210	665	315	770
300	635	255	860
270	455	235	770

MD 450		
WB	EB	
1,255	1,025	6-7A
1,915	1,240	7-8A
1,975	1,445	8-9A
1,680	1,225	9-10A

I-495						
SB GP	SB Toll	SB	NB	NB Toll	NB GP	
6,285	1,715	8,000	9,320	1,960	7,360	6-7A
7,015	1,845	8,860	10,050	1,975	8,075	7-8A
7,680	1,845	9,525	9,955	1,980	7,975	8-9A
7,010	1,760	8,770	9,505	1,825	7,680	9-10A

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
45	275	55	630	180	35	715	130
55	330	75	670	240	45	845	105
45	325	100	675	260	50	850	95
50	260	115	670	220	45	780	140

860
1,195
1,250
1,070

1,835
2,025
2,305
2,120

Exit 19										
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10	Ramp 11
1,020	1,530	360	1,205	875	820	1,710	515	620	15	370
1,055	1,640	460	1,300	1,210	1,025	1,595	415	945	15	445
935	1,795	610	1,295	1,295	1,175	1,345	345	685	45	450
995	1,570	665	1,290	1,095	1,030	1,345	490	435	25	320

755
755
700
670

2,530
2,620
2,520
2,375

575
630
620
620

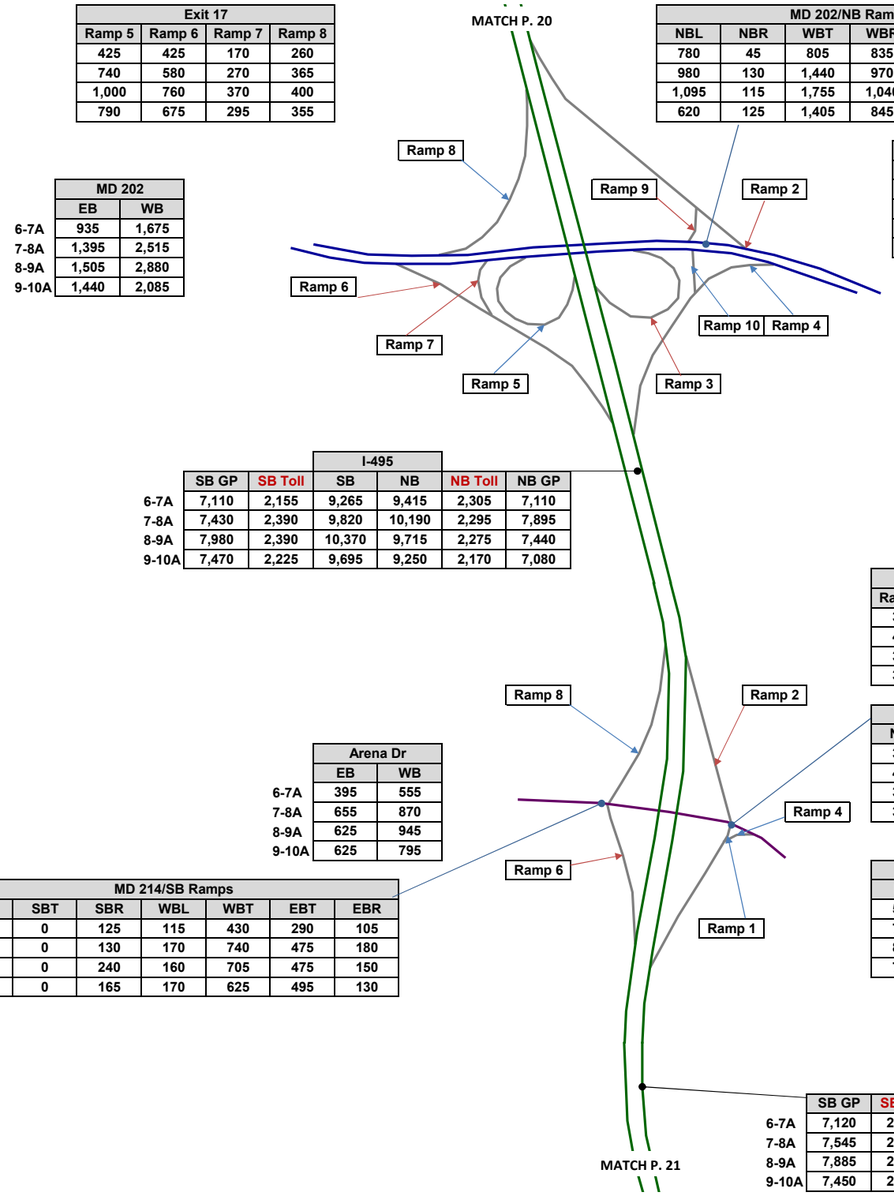
US 50		
WB	EB	
5,275	1,980	6-7A
5,560	2,505	7-8A
5,095	3,085	8-9A
4,335	2,780	9-10A

US-50		
WB	EB	
7,760	3,025	6-7A
8,290	3,725	7-8A
7,795	4,100	8-9A
6,570	3,645	9-10A

Exit 8	
Ramp 9	Ramp 10
275	510
350	750
305	670
215	405

I-495						
SB GP	SB Toll	SB	NB	NB Toll	NB GP	
7,200	2,155	9,355	9,425	2,305	7,120	6-7A
7,685	2,390	10,075	10,030	2,295	7,735	7-8A
8,250	2,390	10,640	9,500	2,275	7,225	8-9A
7,645	2,225	9,870	9,345	2,170	7,175	9-10A

I-495 East Side AM
Future Alternative 9 ModifiedPeak Period Volumes



Exit 17			
Ramp 5	Ramp 6	Ramp 7	Ramp 8
425	425	170	260
740	580	270	365
1,000	760	370	400
790	675	295	355

MD 202		
	EB	WB
6-7A	935	1,675
7-8A	1,395	2,515
8-9A	1,505	2,880
9-10A	1,440	2,085

	I-495				
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,110	2,155	9,265	9,415	2,305	7,110
7-8A	7,430	2,390	9,820	10,190	2,295	7,895
8-9A	7,980	2,390	10,370	9,715	2,275	7,440
9-10A	7,470	2,225	9,695	9,250	2,170	7,080

MD 202/NB Ramps					
NBL	NBR	WBT	WBR	EBL	EBT
780	45	805	835	10	725
980	130	1,440	970	15	1,355
1,095	115	1,755	1,040	5	1,510
620	125	1,405	845	15	1,320

Exit 17				
Ramp 2	Ramp 3	Ramp 4	Ramp 9	Ramp 10
835	200	210	10	825
970	185	220	15	1,110
1,040	230	280	5	1,210
845	220	240	15	745

MD 202		
EB	WB	
980	1,640	6-7A
1,705	2,410	7-8A
1,905	2,795	8-9A
1,685	2,250	9-10A

Exit 16				
Ramp 1	Ramp 2	Ramp 4	Ramp 6	Ramp 8
305	400	330	220	210
455	455	405	350	235
370	410	440	310	405
335	390	350	300	320

Arena Dr		
	EB	WB
6-7A	395	555
7-8A	655	870
8-9A	625	945
9-10A	625	795

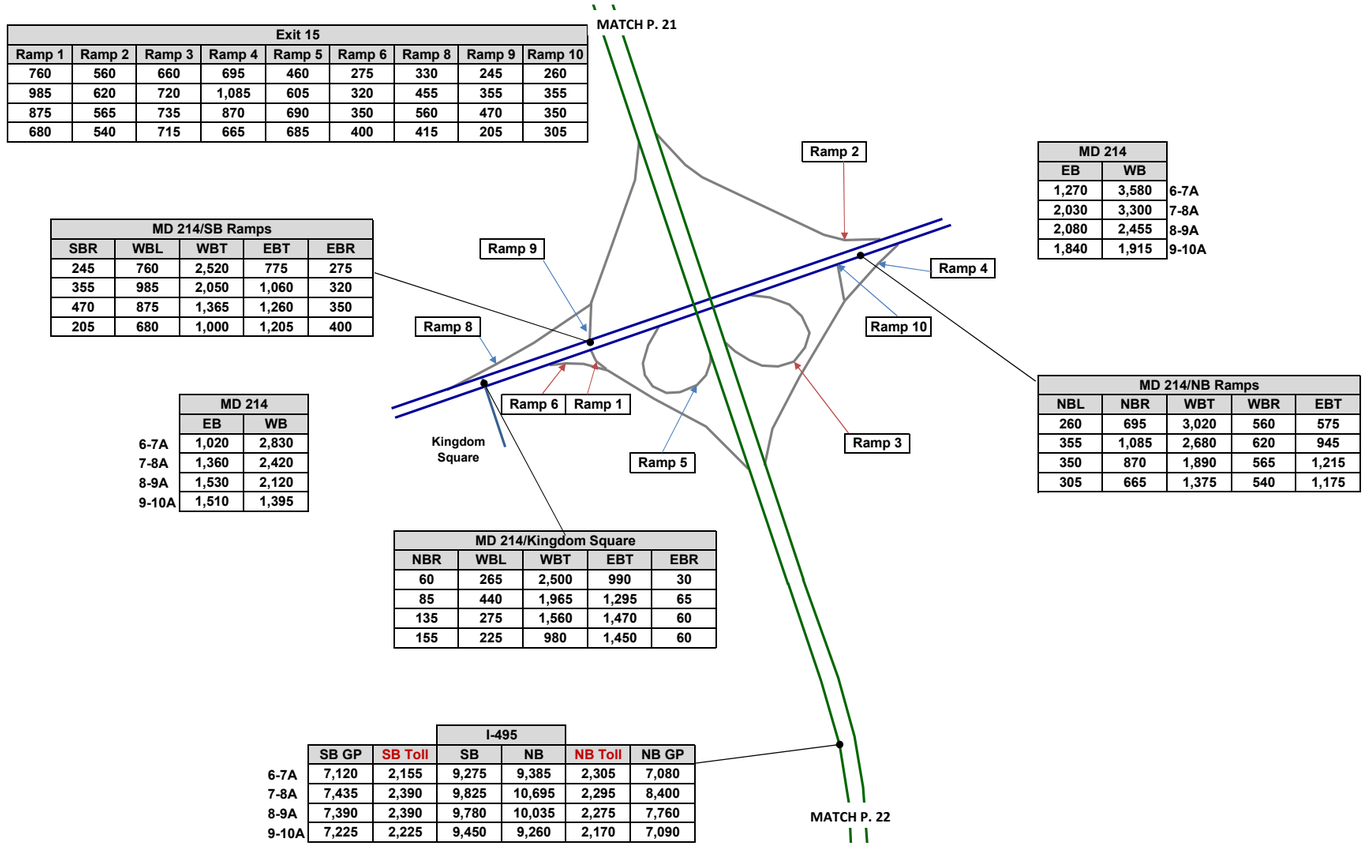
MD 214/SB Ramps						
SBL	SBT	SBR	WBL	WBT	EBT	EBR
85	0	125	115	430	290	105
105	0	130	170	740	475	180
165	0	240	160	705	475	150
155	0	165	170	625	495	130

MD 214/NB Ramps						
NBL	NBT	NBR	WBT	WBR	EBL	EBT
305	0	330	240	195	205	170
455	0	405	455	230	225	355
365	5	440	500	215	190	450
335	0	350	460	185	205	445

Arena Dr		
EB	WB	
500	435	6-7A
760	685	7-8A
890	715	8-9A
795	650	9-10A

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,120	2,155	9,275	9,650	2,305	7,345
7-8A	7,545	2,390	9,935	10,595	2,295	8,300
8-9A	7,885	2,390	10,275	10,115	2,275	7,840
9-10A	7,450	2,225	9,675	9,545	2,170	7,375

I-495 East Side AM
Future Alternative 9 ModifiedPeak Period Volumes



Exit 15								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8	Ramp 9	Ramp 10
760	560	660	695	460	275	330	245	260
985	620	720	1,085	605	320	455	355	355
875	565	735	870	690	350	560	470	350
680	540	715	665	685	400	415	205	305

MD 214/SB Ramps				
SBR	WBL	WBT	EBT	EBR
245	760	2,520	775	275
355	985	2,050	1,060	320
470	875	1,365	1,260	350
205	680	1,000	1,205	400

	MD 214	
	EB	WB
6-7A	1,020	2,830
7-8A	1,360	2,420
8-9A	1,530	2,120
9-10A	1,510	1,395

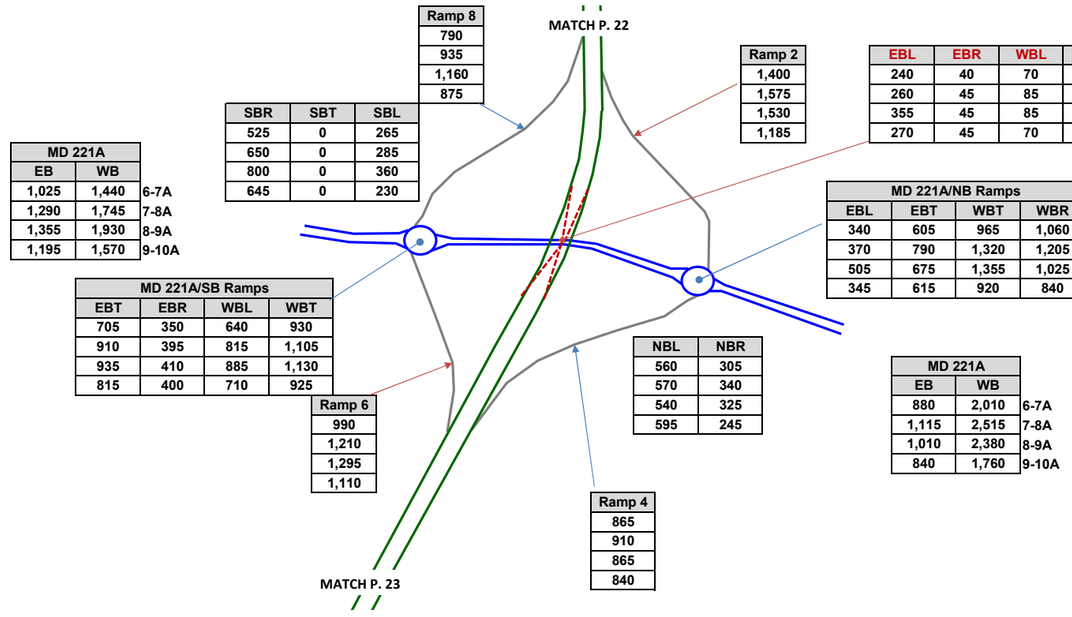
MD 214/Kingdom Square				
NBR	WBL	WBT	EBT	EBR
60	265	2,500	990	30
85	440	1,965	1,295	65
135	275	1,560	1,470	60
155	225	980	1,450	60

	I-495				
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	7,120	2,155	9,275	9,385	2,305	7,080
7-8A	7,435	2,390	9,825	10,695	2,295	8,400
8-9A	7,390	2,390	9,780	10,035	2,275	7,760
9-10A	7,225	2,225	9,450	9,260	2,170	7,090

MD 214		
EB	WB	
1,270	3,580	6-7A
2,030	3,300	7-8A
2,080	2,455	8-9A
1,840	1,915	9-10A

MD 214/NB Ramps				
NBL	NBR	WBT	WBR	EBT
260	695	3,020	560	575
355	1,085	2,680	620	945
350	870	1,890	565	1,215
305	665	1,375	540	1,175

I-495 East Side AM
Future Alternative 9 ModifiedPeak Period Volumes



Ramp 8
790
935
1,160
875

SBR	SBT	SBL
525	0	265
650	0	285
800	0	360
645	0	230

MD 221A		
EB	WB	
1,025	1,440	6-7A
1,290	1,745	7-8A
1,355	1,930	8-9A
1,195	1,570	9-10A

MD 221A/SB Ramps			
EBT	EBR	WBL	WBT
705	350	640	930
910	395	815	1,105
935	410	885	1,130
815	400	710	925

Ramp 6
990
1,210
1,295
1,110

Ramp 2
1,400
1,575
1,530
1,185

EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
240	40	70	375	100	55	200	390
260	45	85	410	105	60	210	420
355	45	85	340	95	55	230	450
270	45	70	315	105	45	185	400

MD 221A/NB Ramps			
EBL	EBT	WBT	WBR
340	605	965	1,060
370	790	1,320	1,205
505	675	1,355	1,025
345	615	920	840

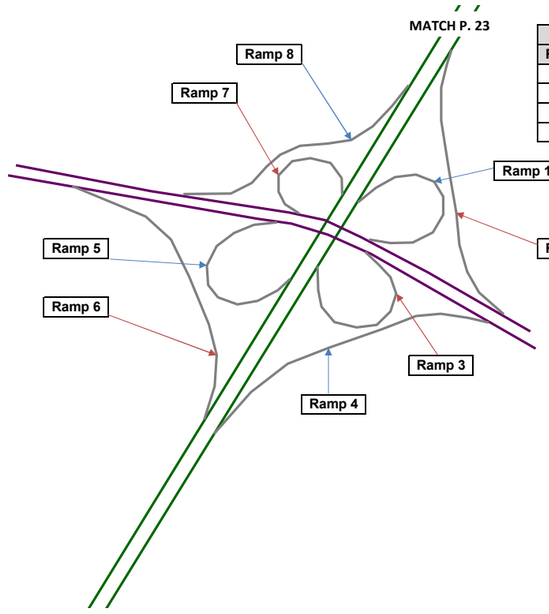
NBL	NBR
560	305
570	340
540	325
595	245

Ramp 4
865
910
865
840

MD 221A		
EB	WB	
880	2,010	6-7A
1,115	2,515	7-8A
1,010	2,380	8-9A
840	1,760	9-10A

I-495 East Side AM
Future Alternative 9 ModifiedPeak Period Volumes

MD 4		
SB	NB	
1,335	2,330	6-7A
1,665	3,105	7-8A
1,580	2,125	8-9A
1,450	1,565	9-10A

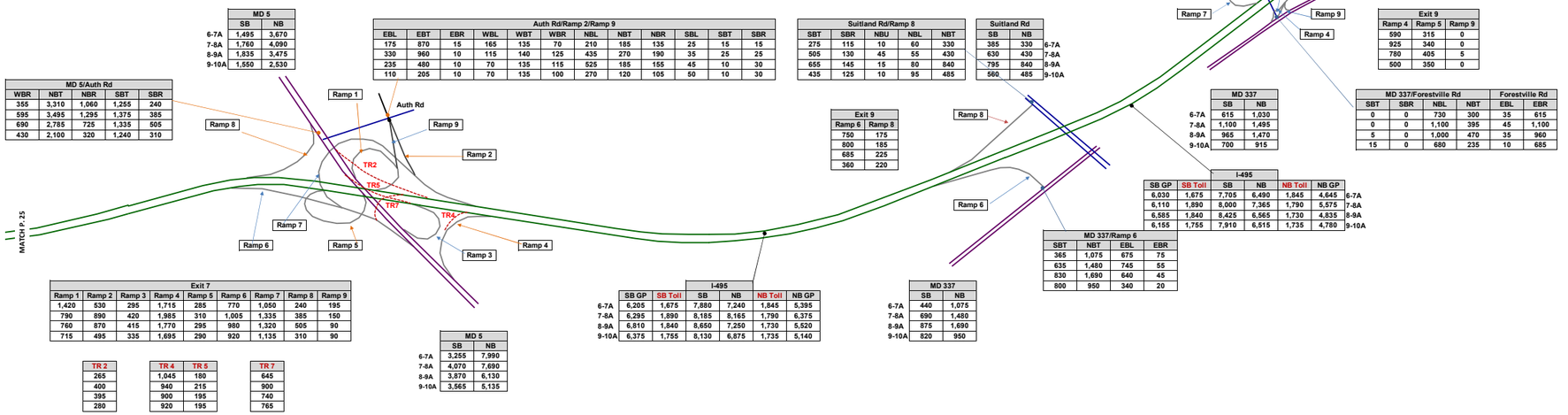


Exit 11							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
640	1,585	620	570	930	470	1,135	1,240
785	1,515	720	555	820	415	935	1,445
715	1,610	725	550	670	455	845	840
530	1,455	675	485	780	375	610	890

MD 4		
SB	NB	
1,745	3,170	6-7A
1,905	3,325	7-8A
1,620	3,025	8-9A
1,665	2,210	9-10A

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	6,755	1,675	8,430	7,395	1,845	5,550
7-8A	6,795	1,890	8,685	8,630	1,790	6,840
8-9A	7,315	1,840	9,155	7,755	1,730	6,025
9-10A	6,775	1,755	8,530	7,365	1,735	5,630

I-495 South Side AM
Future Alternative 9 Modified Peak Period Volumes



MD 5	
SB	NB
1,495	3,670
1,760	4,090
1,835	3,475
1,550	2,530

6-7A
7-8A
8-9A
9-10A

MD 5/Auth Rd				
WBR	NBT	NBR	SBT	SBR
355	3,310	1,060	1,255	240
595	3,495	1,295	1,375	385
690	2,785	725	1,335	505
430	2,100	320	1,240	310

Auth Rd/Ramp 2/Ramp 9											
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
175	870	15	165	135	70	210	185	135	25	15	15
330	960	10	115	140	125	435	270	190	35	25	25
235	480	10	70	135	115	525	185	155	45	10	30
110	205	10	70	135	100	270	120	105	50	10	30

Suitland Rd/Ramp 8				
SBT	SBR	NBU	NBL	NBT
275	115	10	60	330
505	130	45	55	430
655	145	15	80	840
435	125	10	95	485

Suitland Rd	
SB	NB
385	330
630	430
795	840
560	485

6-7A
7-8A
8-9A
9-10A

Forestville Rd/Ramp 7					Forestville Rd			
WBL	WBR	EBL	EBT	EBR	NBT	NBR	SBL	SBT
10	5	205	5	515	135	5	0	440
5	0	120	5	560	165	5	0	915
5	0	130	5	595	215	5	0	800
5	0	145	5	470	175	5	5	570

Ramp 7	Forest. NB	Forest. SB
725	140	965
685	170	1,480
730	220	1,400
620	180	1,045

Forestville Rd	
SB	NB
440	345
915	285
800	345
575	320

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
6,755	1,675	8,430	7,395	1,845	5,550
6,795	1,890	8,685	8,630	1,790	6,840
7,315	1,840	9,155	7,755	1,730	6,025
6,775	1,755	8,530	7,365	1,735	5,630

6-7A
7-8A
8-9A
9-10A

MD 337	
SB	NB
0	335
0	440
0	505
0	245

6-7A
7-8A
8-9A
9-10A

Exit 9		
Ramp 4	Ramp 5	Ramp 9
590	315	0
925	340	0
780	405	5
500	350	0

Exit 9	
Ramp 6	Ramp 8
750	175
800	185
685	225
360	220

MD 337	
SB	NB
615	1,030
1,100	1,495
965	1,470
700	915

6-7A
7-8A
8-9A
9-10A

MD 337/Forestville Rd				Forestville Rd	
SBT	SBR	NBL	NBT	EBL	EBR
0	0	730	300	35	615
0	0	1,100	395	45	1,100
5	0	1,000	470	35	960
15	0	680	235	10	685

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
6,030	1,675	7,705	6,490	1,845	4,645
6,110	1,890	8,000	7,365	1,790	5,575
6,585	1,840	8,425	6,565	1,730	4,835
6,155	1,755	7,910	6,515	1,735	4,780

6-7A
7-8A
8-9A
9-10A

MD 337/Ramp 6			
SBT	NBT	EBL	EBR
365	1,075	675	75
635	1,480	745	55
830	1,690	640	45
800	950	340	20

Exit 7								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9
1,420	530	295	1,715	285	770	1,050	240	195
790	890	420	1,985	310	1,005	1,335	385	150
760	870	415	1,770	295	980	1,320	505	90
715	495	335	1,695	290	920	1,135	310	90

TR 2
265
400
395
280

TR 4	TR 5
1,045	180
940	215
900	195
920	195

TR 7
645
900
740
765

MD 5	
SB	NB
3,255	7,990
4,070	7,690
3,870	6,130
3,565	5,135

6-7A
7-8A
8-9A
9-10A

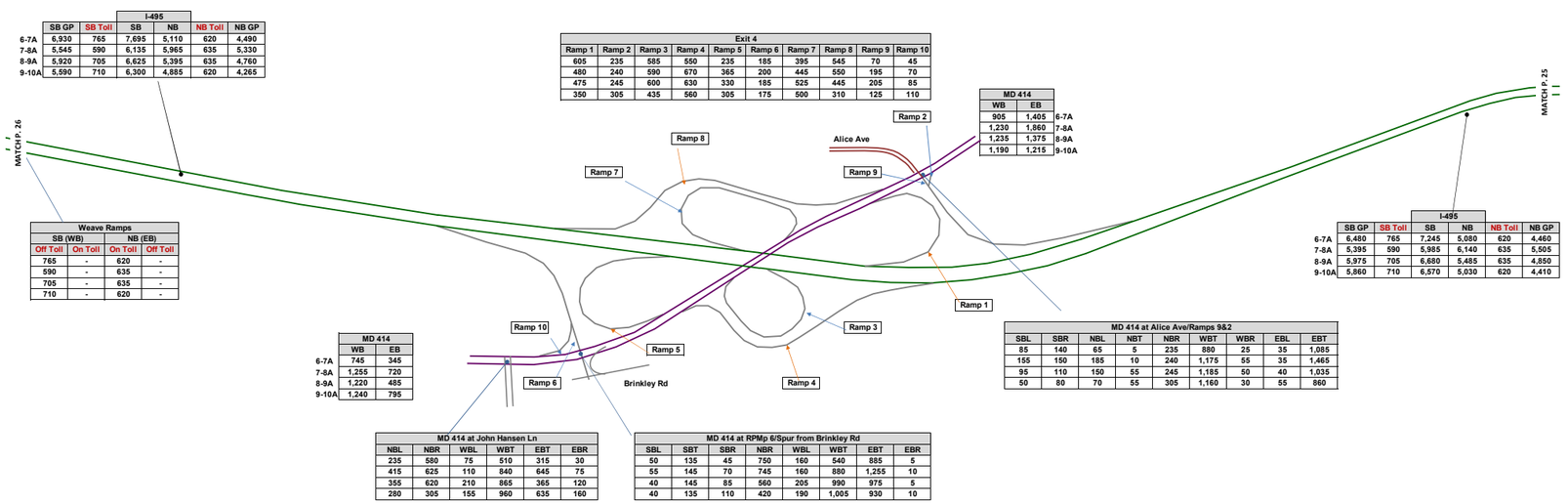
I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
6,205	1,675	7,880	7,240	1,845	5,395
6,295	1,890	8,185	8,165	1,790	6,375
6,810	1,840	8,650	7,250	1,730	5,520
6,375	1,755	8,130	6,875	1,735	5,140

6-7A
7-8A
8-9A
9-10A

MD 337	
SB	NB
440	1,075
690	1,480
875	1,690
820	950

6-7A
7-8A
8-9A
9-10A

I-495 South Side AM
Future Alternative 9 Modified Peak Period Volumes



I-495						
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
6-7A	6,930	765	7,695	5,110	620	4,490
7-8A	5,545	590	6,135	5,965	635	5,330
8-9A	5,920	705	6,625	5,395	635	4,760
9-10A	5,590	710	6,300	4,885	620	4,265

Weave Ramps			
SB (WB)		NB (EB)	
Off Toll	On Toll	On Toll	Off Toll
765	-	620	-
590	-	635	-
705	-	635	-
710	-	620	-

Exit 4									
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
605	235	585	550	235	185	395	545	70	45
480	240	590	670	365	200	445	550	195	70
475	245	600	630	330	185	525	445	205	85
350	305	435	560	305	175	500	310	125	110

MD 414		
WB	EB	
905	1,405	6-7A
1,230	1,860	7-8A
1,235	1,375	8-9A
1,190	1,215	9-10A

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
6,480	765	7,245	5,080	620	4,460
5,395	590	5,985	6,140	635	5,505
5,975	705	6,680	5,485	635	4,850
5,860	710	6,570	5,030	620	4,410

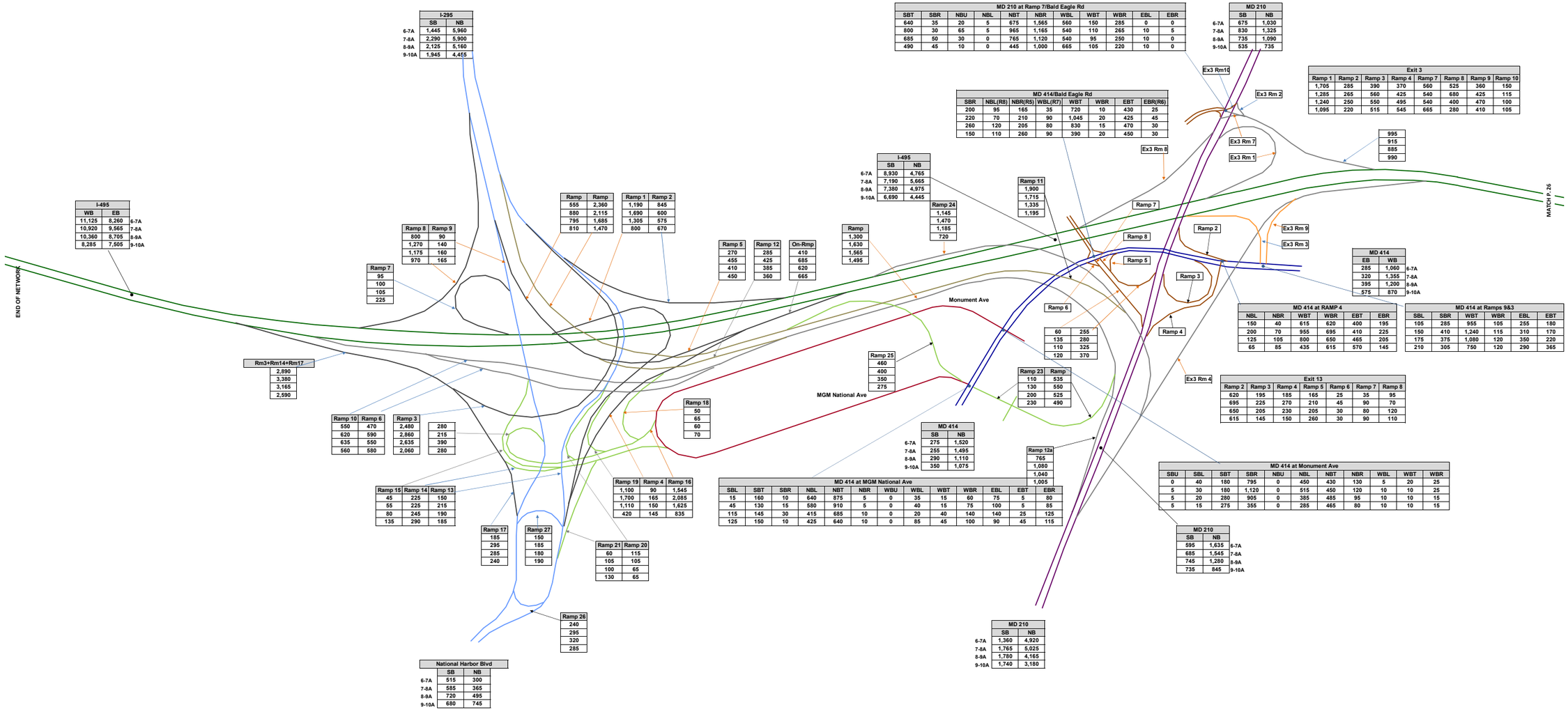
MD 414		
WB	EB	
745	345	6-7A
1,255	720	7-8A
1,220	485	8-9A
1,240	795	9-10A

MD 414 at Alice Ave/Ramps 9&2								
SBL	SBR	NBL	NBT	NBR	WBT	WBR	EBL	EBT
85	140	65	5	235	880	25	35	1,085
155	150	185	10	240	1,175	55	35	1,465
95	110	150	55	245	1,185	50	40	1,035
50	80	70	55	305	1,160	30	55	860

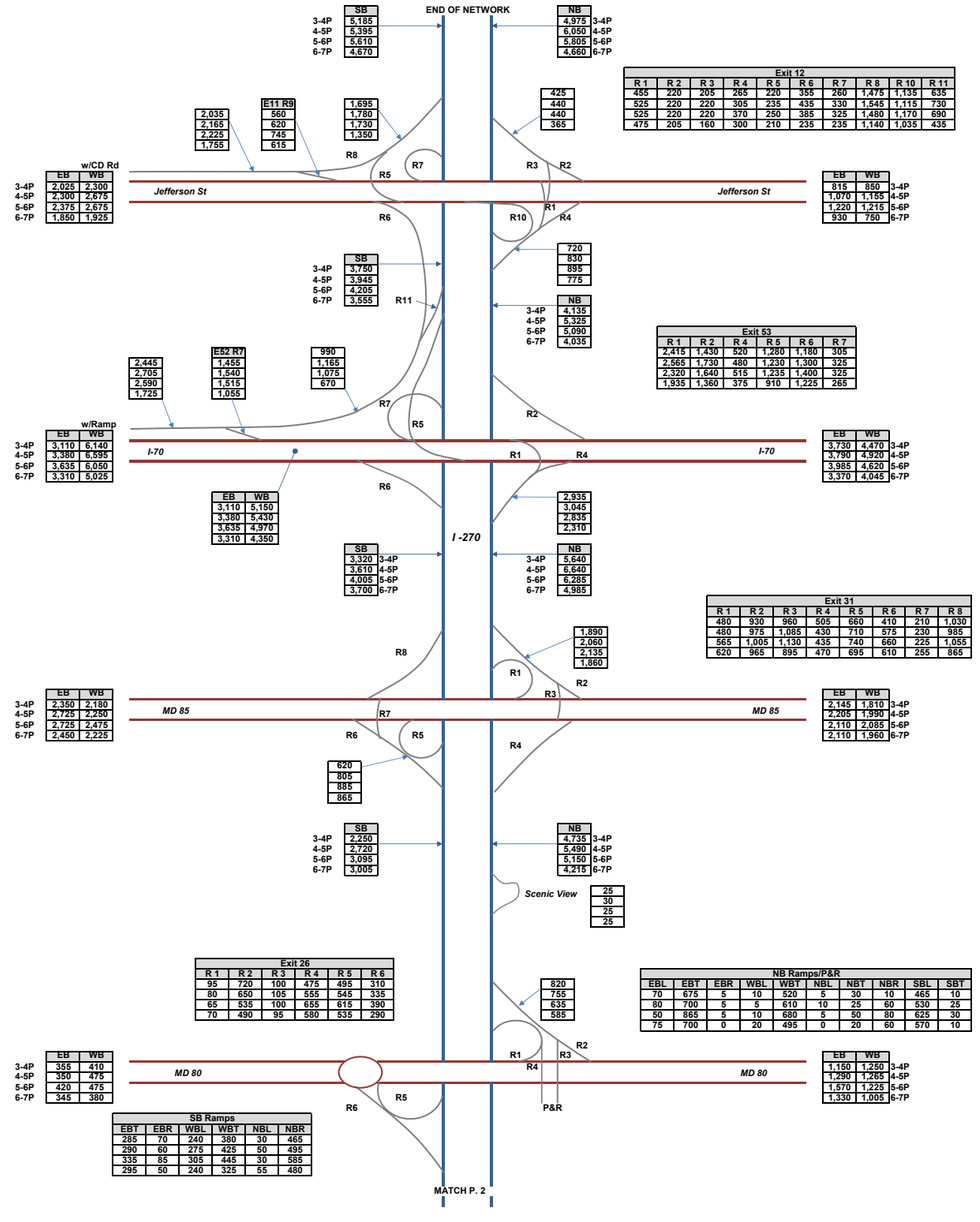
MD 414 at John Hansen Ln					
NBL	NBR	WBL	WBT	EBT	EBR
235	580	75	510	315	30
415	625	110	840	645	75
355	620	210	865	365	120
280	305	155	960	635	160

MD 414 at RPMp 6/Spur from Brinkley Rd							
SBL	SBT	SBR	NBR	WBL	WBT	EBT	EBR
50	135	45	750	160	540	885	5
55	145	70	745	160	880	1,255	10
40	145	85	560	205	990	975	5
40	135	110	420	190	1,005	930	10

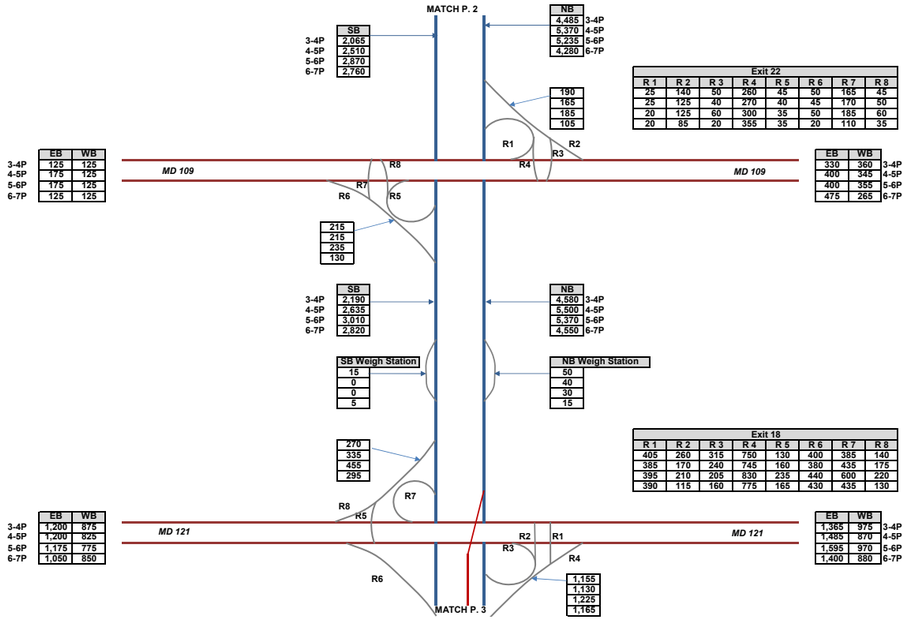
I-495 South Side AM
Future Alternative 9 Modified Peak Period Volumes



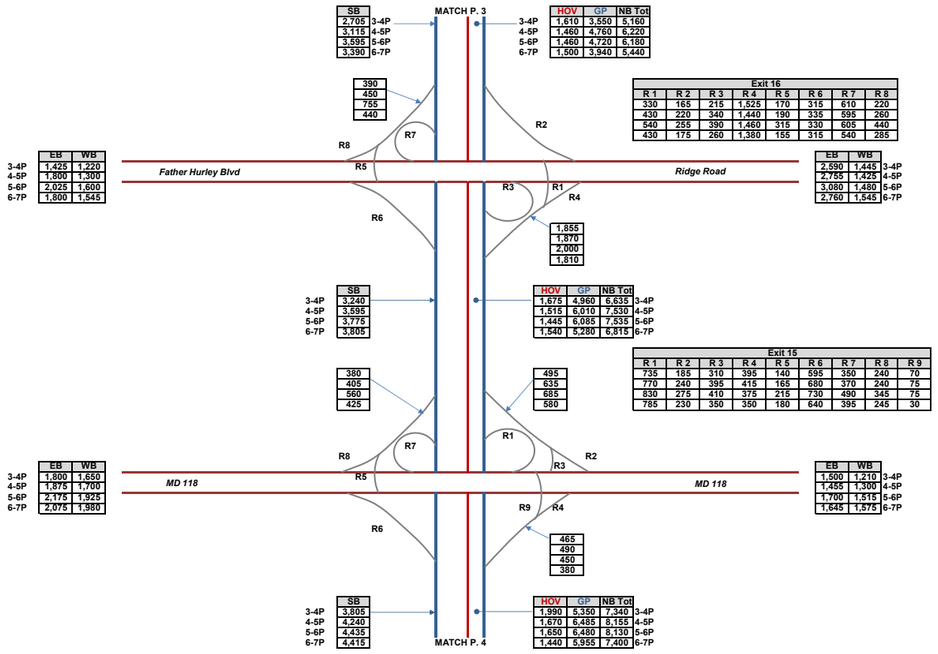
I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



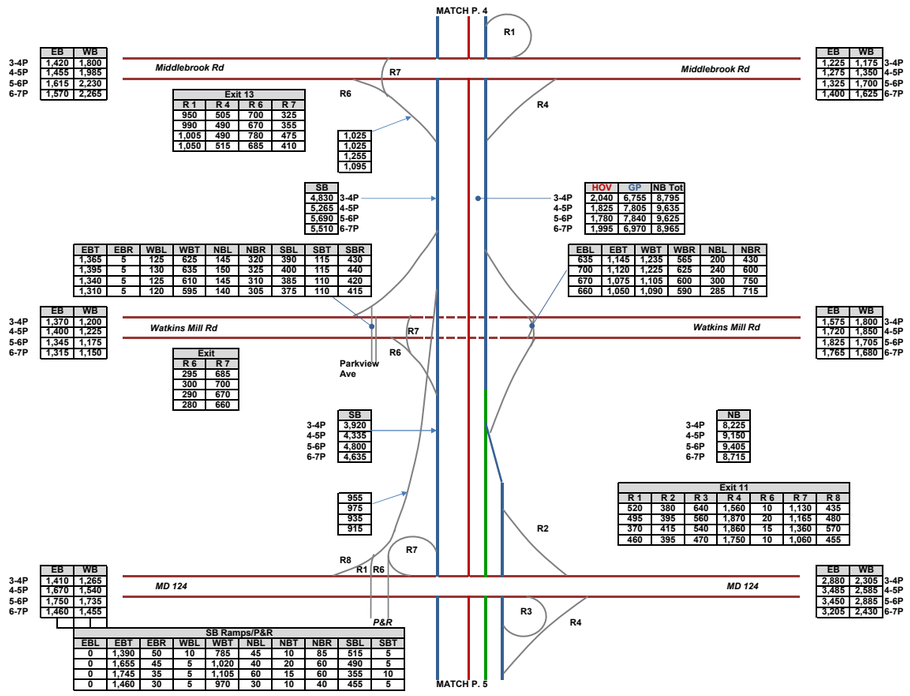
I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



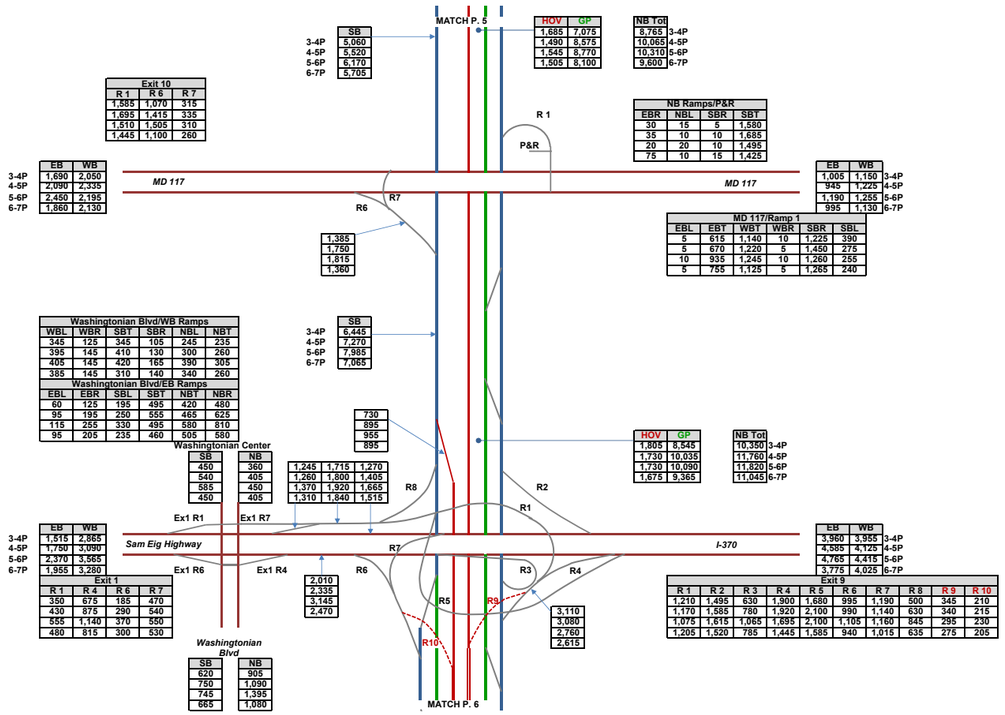
I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



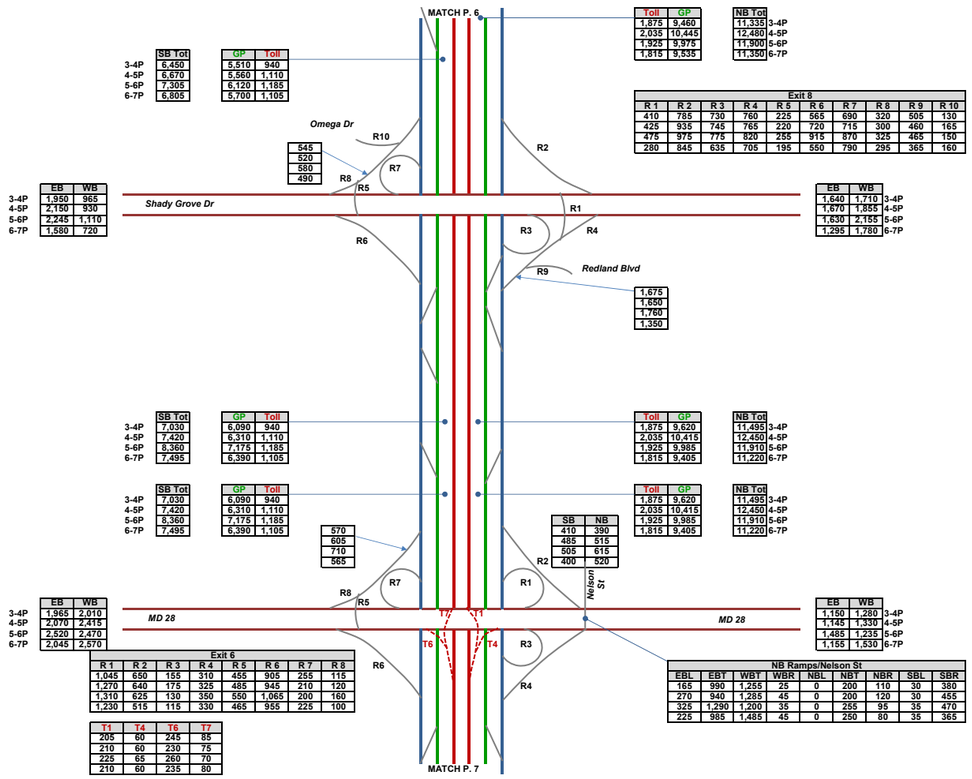
I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



	SB Tot
3-4P	6,450
4-5P	6,670
5-6P	7,305
6-7P	6,805

GP	Toll
5,510	940
5,560	1,110
5,120	1,185
5,700	1,105

Toll	GP
1,875	9,460
2,035	10,445
1,925	9,975
1,815	9,535

NB Tot	
11,335	3-4P
12,480	4-5P
11,900	5-6P
11,350	6-7P

Exit 8									
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10
410	785	730	760	225	565	690	320	505	130
425	935	745	765	220	720	715	300	460	165
475	975	775	820	255	915	870	325	465	150
280	845	635	705	195	550	790	295	365	160

	EB	WB
3-4P	1,950	965
4-5P	2,150	930
5-6P	2,245	1,110
6-7P	1,580	720

EB	WB	
1,640	1,710	3-4P
1,670	1,855	4-5P
1,630	2,155	5-6P
1,295	1,780	6-7P

545
620
580
490

1,675
1,650
1,760
1,350

SB Tot	
7,030	3-4P
7,420	4-5P
8,360	5-6P
7,495	6-7P

GP	Toll
6,090	940
6,310	1,110
7,175	1,185
6,390	1,105

Toll	GP
1,875	9,620
2,035	10,415
1,925	9,985
1,815	9,405

NB Tot	
12,450	3-4P
12,450	4-5P
11,910	5-6P
11,220	6-7P

SB Tot	
7,030	3-4P
7,420	4-5P
8,360	5-6P
7,495	6-7P

GP	Toll
6,090	940
6,310	1,110
7,175	1,185
6,390	1,105

Toll	GP
1,875	9,620
2,035	10,415
1,925	9,985
1,815	9,405

NB Tot	
11,495	3-4P
12,450	4-5P
11,910	5-6P
11,220	6-7P

SB	NB
410	390
485	515
505	615
400	520

570
605
710
565

	EB	WB
3-4P	1,965	2,010
4-5P	2,070	2,415
5-6P	2,520	2,470
6-7P	2,045	2,570

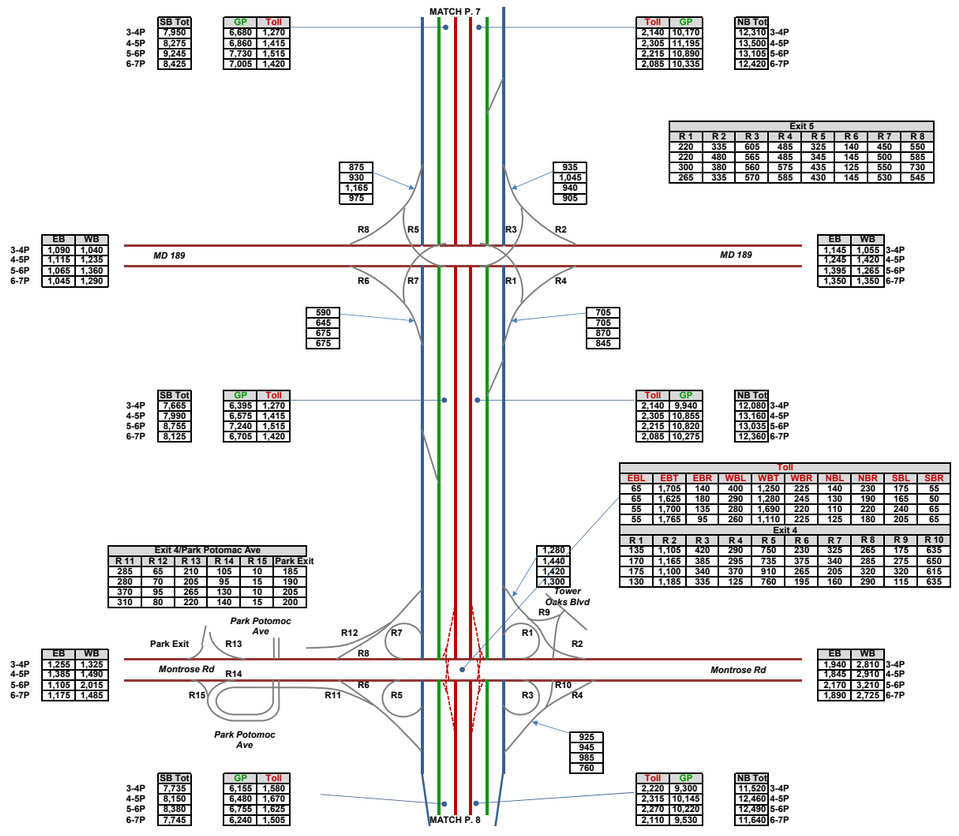
EB	WB	
1,150	1,280	3-4P
1,145	1,330	4-5P
1,485	1,235	5-6P
1,155	1,530	6-7P

Exit 6							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
1,045	650	155	310	455	905	255	115
1,270	640	175	325	485	945	210	120
1,310	625	130	350	550	1,065	200	160
1,230	515	115	330	465	955	225	100

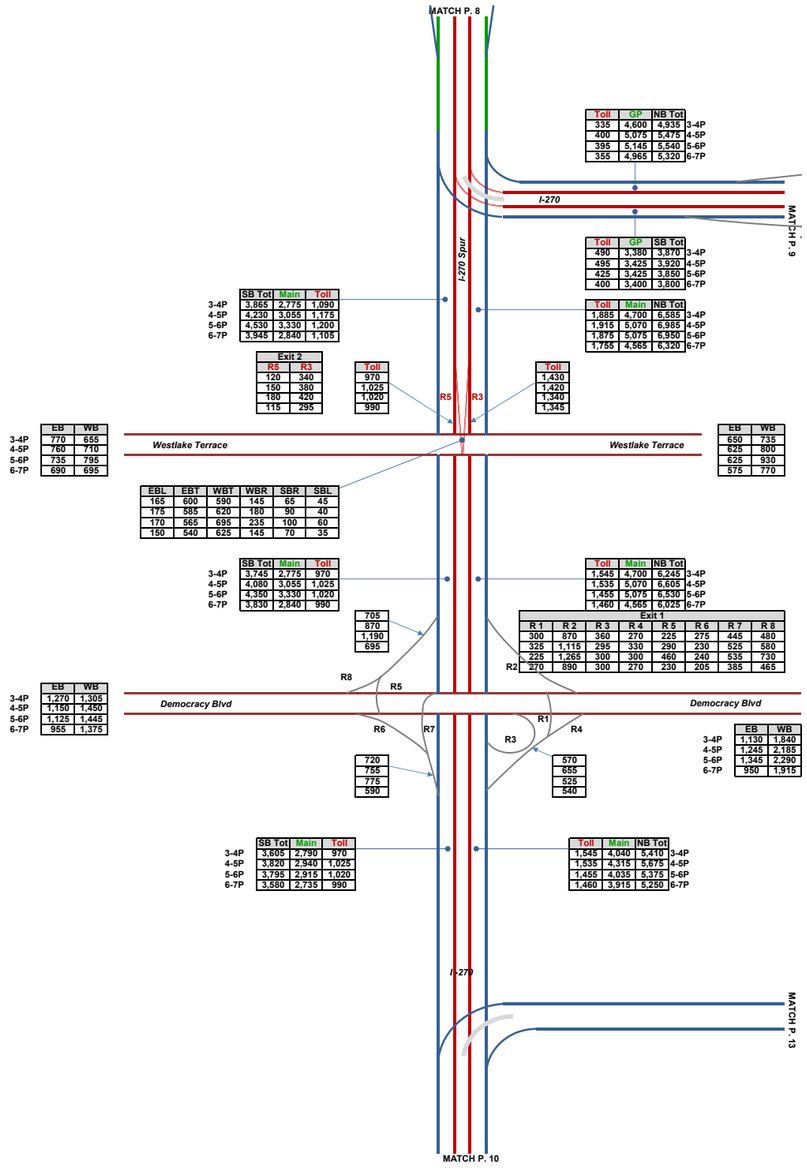
NB Ramps/Nelson St								
EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR
165	990	1,255	25	0	200	110	30	380
270	940	1,285	45	0	200	120	30	455
325	1,290	1,200	35	0	255	95	35	470
225	985	1,485	45	0	250	80	35	365

T1	T4	T6	T7
205	60	245	85
210	60	230	75
225	65	260	70
210	60	235	80

I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



	Toll	GP	NB Tot
3-4P	335	4,600	4,935
4-5P	400	5,075	5,475
5-6P	395	5,145	5,540
6-7P	355	4,965	5,320

	Toll	GP	SB Tot
3-4P	490	3,380	3,870
4-5P	495	3,425	3,920
5-6P	425	3,425	3,850
6-7P	400	3,400	3,800

	SB Tot	Main	Toll
3-4P	3,865	2,775	1,090
4-5P	4,230	3,055	1,175
5-6P	4,530	3,330	1,200
6-7P	3,945	2,840	1,105

	Toll	Main	NB Tot
3-4P	1,885	4,700	6,585
4-5P	1,915	5,070	6,985
5-6P	1,875	5,075	6,950
6-7P	1,755	4,565	6,320

Exit 2	
R5	R3
120	340
150	380
180	420
115	295

Toll
970
1,025
1,020
990

Toll
1,430
1,420
1,340
1,345

	EB	WB
3-4P	770	655
4-5P	760	710
5-6P	735	795
6-7P	690	695

EB	WB
650	735
625	800
625	930
575	770

EBL	EBT	WBT	WBR	SBR	SBL
165	600	590	145	65	45
175	585	620	180	90	40
170	565	695	235	100	60
150	540	625	145	70	35

	SB Tot	Main	Toll
3-4P	3,745	2,775	970
4-5P	4,080	3,055	1,025
5-6P	4,350	3,330	1,020
6-7P	3,830	2,840	990

	Toll	Main	NB Tot
3-4P	1,545	4,700	6,245
4-5P	1,535	5,070	6,605
5-6P	1,455	5,075	6,530
6-7P	1,460	4,565	6,025

Exit 1							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
300	870	360	270	225	275	445	480
325	1,115	295	330	290	230	525	580
225	1,265	300	300	460	240	535	730
270	890	300	270	230	205	385	465

705
870
1,190
695

	EB	WB
3-4P	1,270	1,305
4-5P	1,150	1,450
5-6P	1,125	1,445
6-7P	955	1,375

720
755
775
590

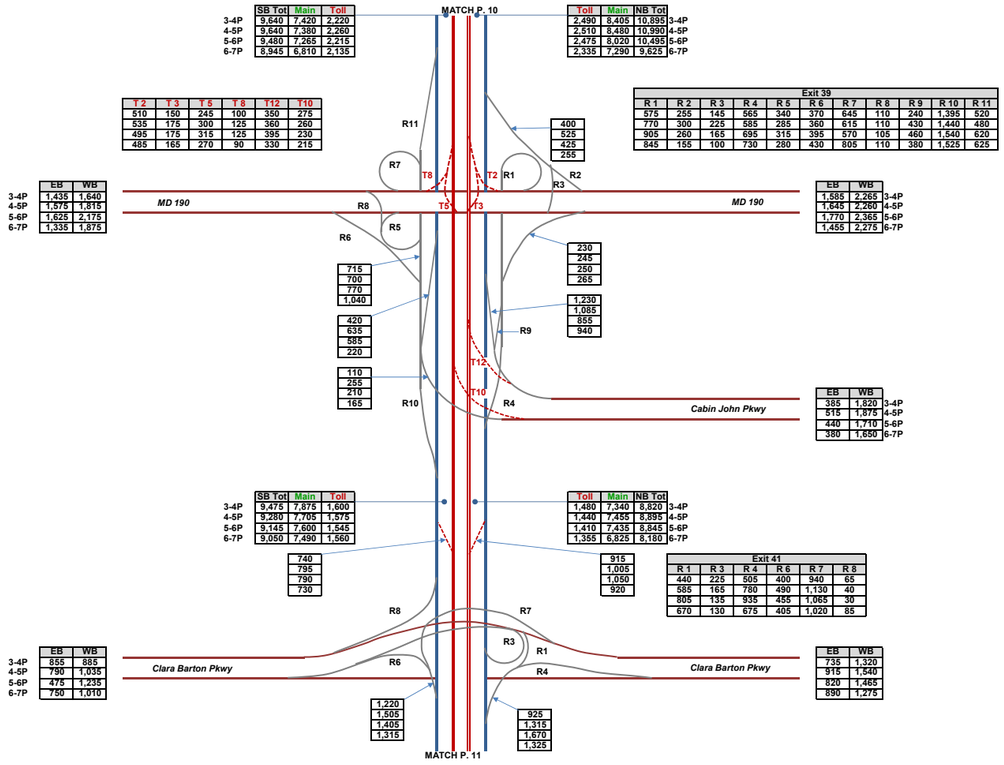
570
655
525
540

	EB	WB
3-4P	1,130	1,840
4-5P	1,245	2,185
5-6P	1,345	2,290
6-7P	950	1,915

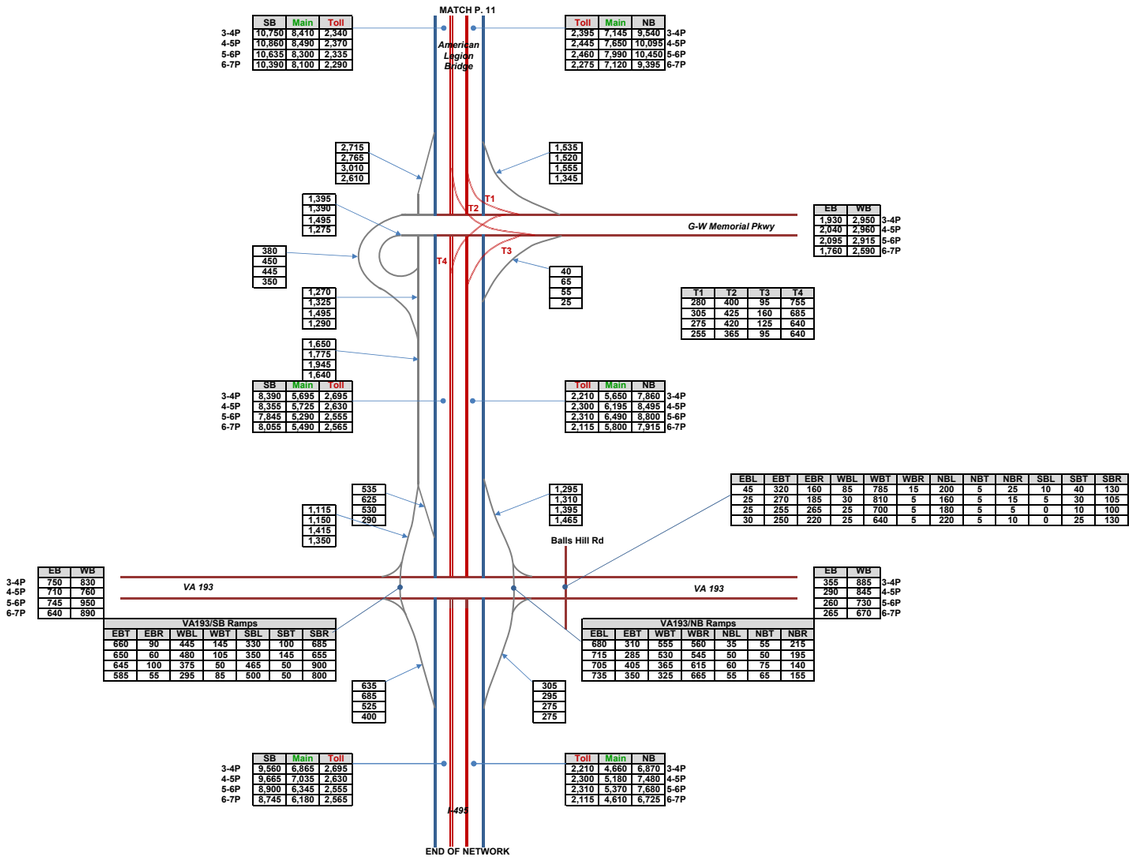
	SB Tot	Main	Toll
3-4P	3,605	2,790	970
4-5P	3,820	2,940	1,025
5-6P	3,795	2,915	1,020
6-7P	3,580	2,735	990

	Toll	Main	NB Tot
3-4P	1,545	4,040	5,410
4-5P	1,535	4,315	5,675
5-6P	1,455	4,035	5,375
6-7P	1,460	3,915	5,250

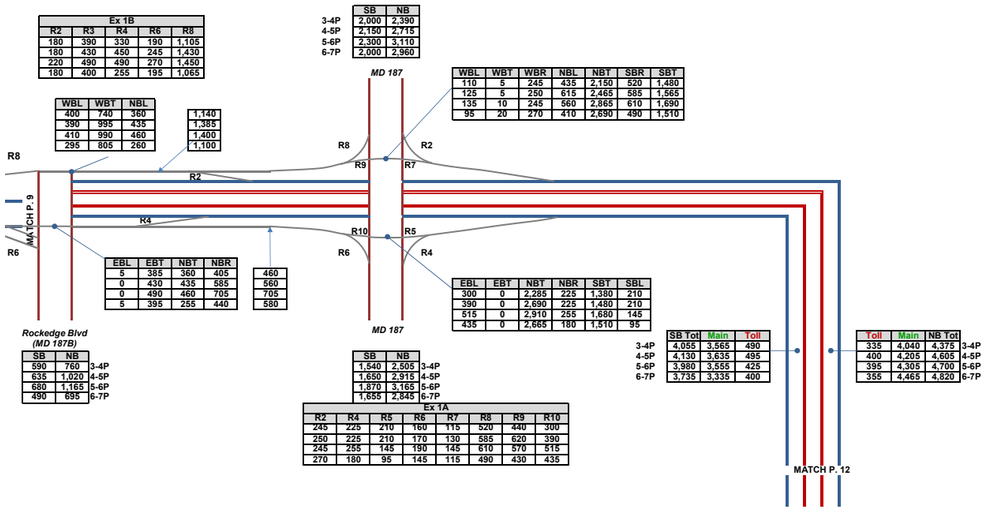
I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



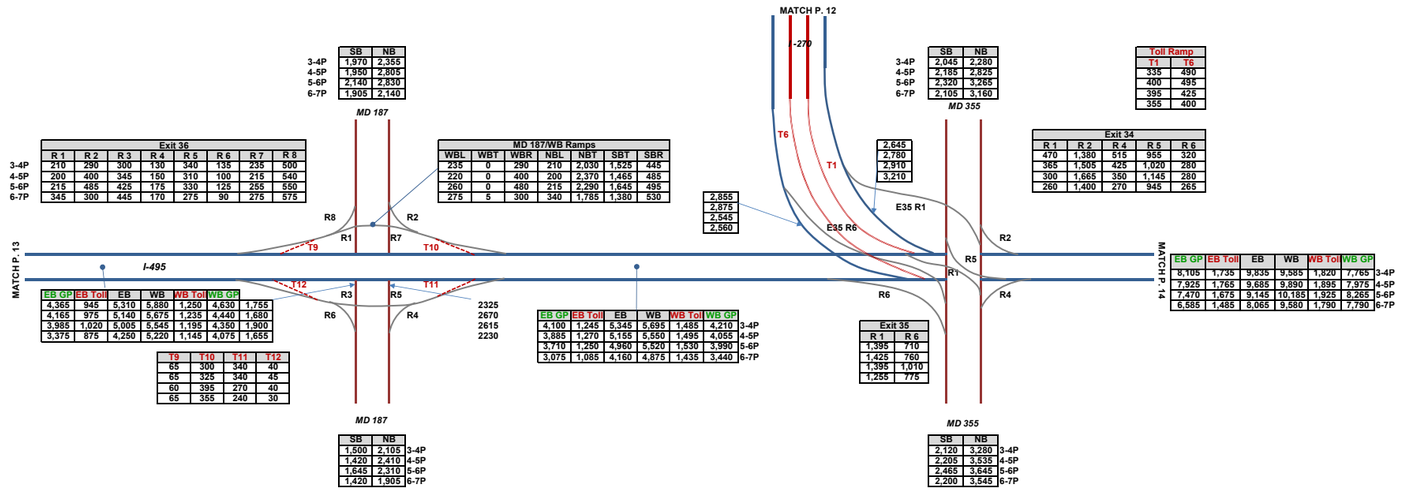
I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



I-270 & I-495 West Side PM
Future Alternative 9 Modified Peak Period Volumes



	SB	NB
3-4P	1,970	2,355
4-5P	1,950	2,805
5-6P	2,140	2,830
6-7P	1,905	2,140

	SB	NB
3-4P	2,045	2,280
4-5P	2,185	2,825
5-6P	2,320	3,265
6-7P	2,105	3,160

Toll Ramp	
T1	T6
335	490
400	495
395	425
355	400

Exit 36							
R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8
210	290	300	130	340	135	235	500
200	400	345	150	310	100	215	540
215	485	425	175	330	125	255	550
345	300	445	170	275	90	275	575

MD 187/WB Ramps						
WBL	WBT	WBR	NBL	NBT	SBT	SBR
235	0	290	210	2,030	1,525	445
220	0	400	200	2,370	1,465	485
260	0	480	215	2,290	1,645	495
275	5	300	340	1,785	1,380	530

Exit 34				
R 1	R 2	R 4	R 5	R 6
470	1,380	515	955	320
365	1,505	425	1,020	280
300	1,665	350	1,145	280
260	1,400	270	945	265

2,645
2,780
2,910
3,210

2,855
2,875
2,545
2,560

EB GP	EB Toll	EB	WB	WB Toll	WB GP	
4,365	945	5,310	5,880	1,250	4,630	1,755
4,165	975	5,140	5,675	1,235	4,440	1,680
3,985	1,020	5,005	5,545	1,195	4,350	1,900
3,375	875	4,250	5,220	1,145	4,075	1,655

T9	T10	T11	T12
65	300	340	40
55	325	340	45
60	395	270	40
65	355	240	30

EB GP	EB Toll	EB	WB	WB Toll	WB GP	
4,100	1,245	5,345	5,695	1,485	4,210	3-4P
3,885	1,270	5,155	5,550	1,495	4,055	4-5P
3,710	1,250	4,960	5,520	1,530	3,990	5-6P
3,075	1,085	4,160	4,875	1,435	3,440	6-7P

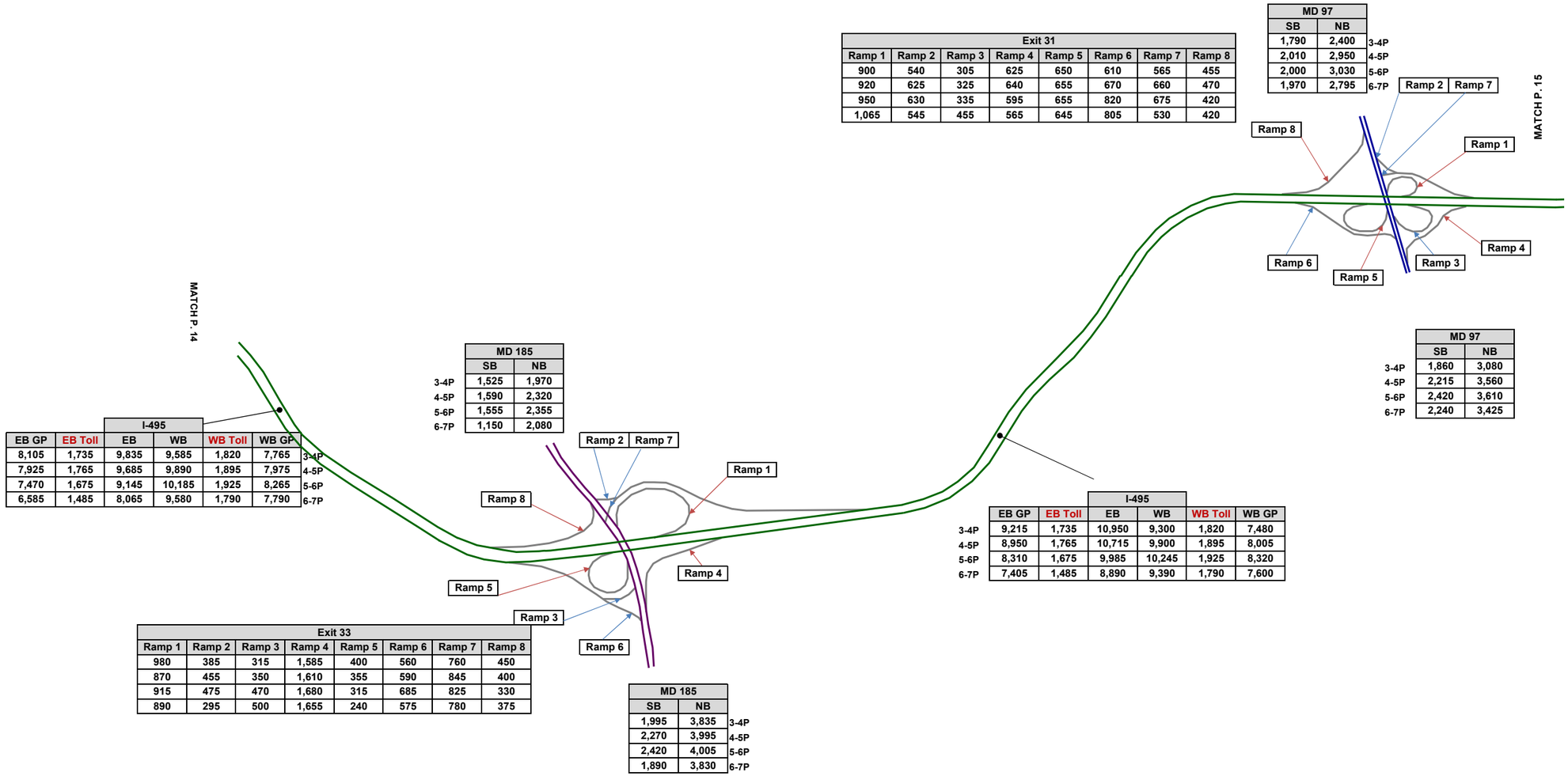
Exit 35	
R 1	R 6
1,395	710
1,425	760
1,395	1,010
1,255	775

EB GP	EB Toll	EB	WB	WB Toll	WB GP	
8,105	1,735	9,835	9,585	1,820	7,765	3-4P
7,925	1,765	9,685	9,890	1,895	7,975	4-5P
7,470	1,675	9,145	10,185	1,925	8,265	5-6P
6,585	1,485	8,065	9,580	1,790	7,790	6-7P

	SB	NB
3-4P	1,500	2,105
4-5P	1,420	2,410
5-6P	1,645	2,310
6-7P	1,420	1,905

	SB	NB
3-4P	2,120	3,280
4-5P	2,205	3,535
5-6P	2,465	3,645
6-7P	2,200	3,545

I-495 North Side PM
Future Alternative 9 ModifiedPeak Period Volumes



Exit 31							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
900	540	305	625	650	610	565	455
920	625	325	640	655	670	660	470
950	630	335	595	655	820	675	420
1,065	545	455	565	645	805	530	420

	MD 97	
	SB	NB
3-4P	1,790	2,400
4-5P	2,010	2,950
5-6P	2,000	3,030
6-7P	1,970	2,795

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	8,105	1,735	9,835	9,585	1,820	7,765
4-5P	7,925	1,765	9,685	9,890	1,895	7,975
5-6P	7,470	1,675	9,145	10,185	1,925	8,265
6-7P	6,585	1,485	8,065	9,580	1,790	7,790

	MD 185	
	SB	NB
3-4P	1,525	1,970
4-5P	1,590	2,320
5-6P	1,555	2,355
6-7P	1,150	2,080

Exit 33							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
980	385	315	1,585	400	560	760	450
870	455	350	1,610	355	590	845	400
915	475	470	1,680	315	685	825	330
890	295	500	1,655	240	575	780	375

	MD 185	
	SB	NB
3-4P	1,995	3,835
4-5P	2,270	3,995
5-6P	2,420	4,005
6-7P	1,890	3,830

	MD 97	
	SB	NB
3-4P	1,860	3,080
4-5P	2,215	3,560
5-6P	2,420	3,610
6-7P	2,240	3,425

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,215	1,735	10,950	9,300	1,820	7,480
4-5P	8,950	1,765	10,715	9,900	1,895	8,005
5-6P	8,310	1,675	9,985	10,245	1,925	8,320
6-7P	7,405	1,485	8,890	9,390	1,790	7,600

I-495 North Side PM
Future Alternative 9 ModifiedPeak Period Volumes

T1	T2	T3	T4	T5	T6	T7	T8
100	245	365	450	215	80	220	305
105	275	405	500	225	85	250	315
120	290	440	510	230	85	190	340
120	295	450	465	225	65	245	380

Exit 30					
Ramp 1	Ramp 3	Ramp 4	Ramp 6	Ramp 7	Ramp 8
275	720	575	335	290	600
315	775	570	255	280	620
375	760	585	315	275	725
355	810	500	250	255	785

	US 29	
	SB	NB
3-4P	2,040	2,730
4-5P	2,235	3,115
5-6P	2,370	3,295
6-7P	2,245	3,355

	MD 193	
	SB	NB
3-4P	1,400	1,915
4-5P	1,520	2,055
5-6P	1,550	1,740
6-7P	1,470	1,985

Exit 29					
Ramp 1	Ramp 2	Ramp 4	Ramp 5	Ramp 6	Ramp 7
490	510	560	460	920	360
690	635	610	485	870	375
730	680	565	485	815	455
705	570	525	510	580	400

MATCH P. 15

MATCH P. 16

Ramp 8
Ramp 7
Ramp 1
Ramp 4
Ramp 6
Ramp 3
T8
T3
T2
T5
T7
T6
T1
T4

Rm 7 WBL
Rm 2 WBR
Rm 1 NBR
Ramp 6
Ramp 5
Ramp 4

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,575	1,735	11,310	9,050	1,820	7,230
4-5P	9,250	1,765	11,015	9,795	1,895	7,900
5-6P	8,405	1,675	10,080	10,180	1,925	8,255
6-7P	7,355	1,485	8,840	8,980	1,790	7,190

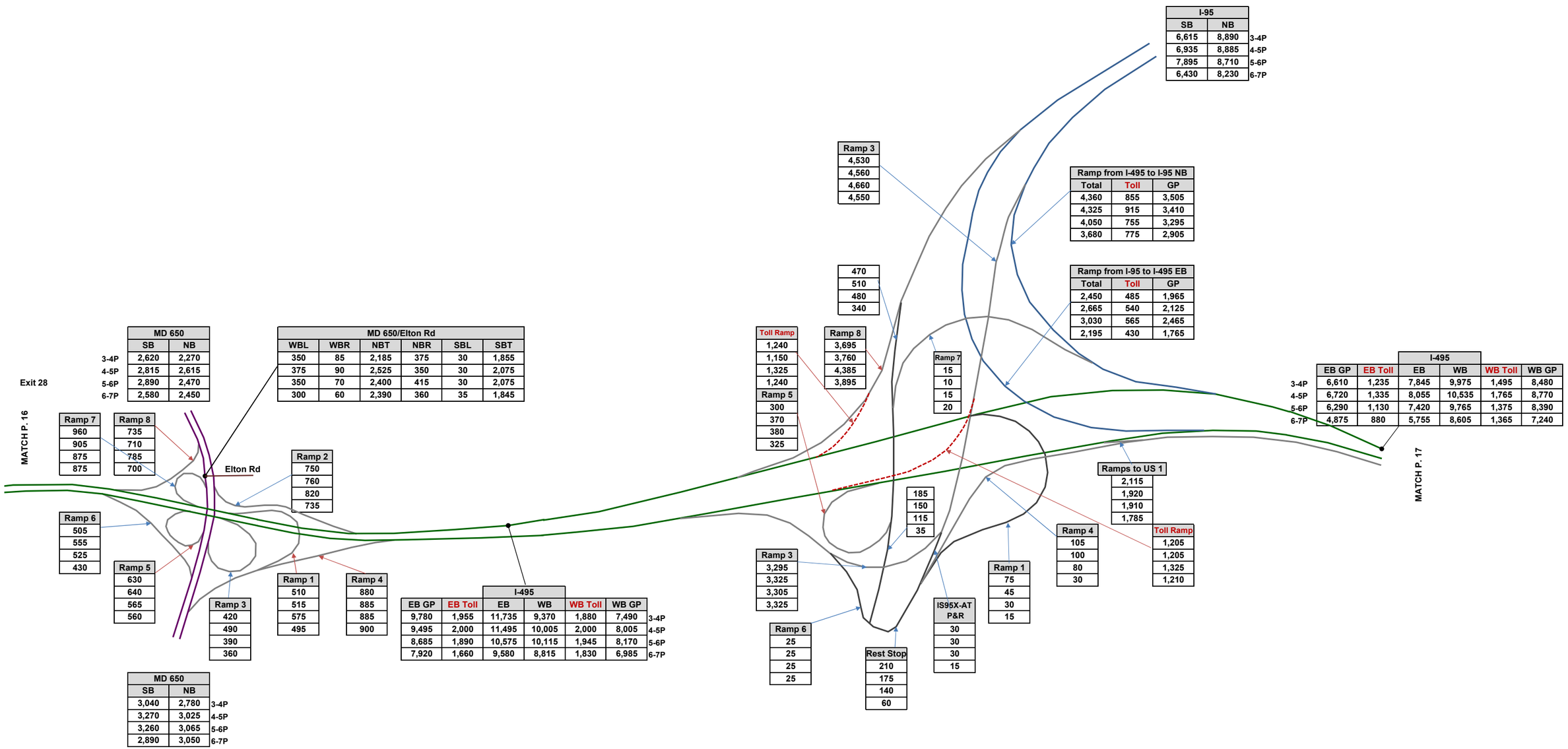
	US 29	
	SB	NB
3-4P	1,845	2,800
4-5P	1,945	3,150
5-6P	1,940	3,395
6-7P	1,670	3,240

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,095	1,955	11,050	8,525	1,880	6,645
4-5P	8,790	2,000	10,790	9,245	2,000	7,245
5-6P	7,915	1,890	9,805	9,375	1,945	7,430
6-7P	6,795	1,660	8,455	8,135	1,830	6,305

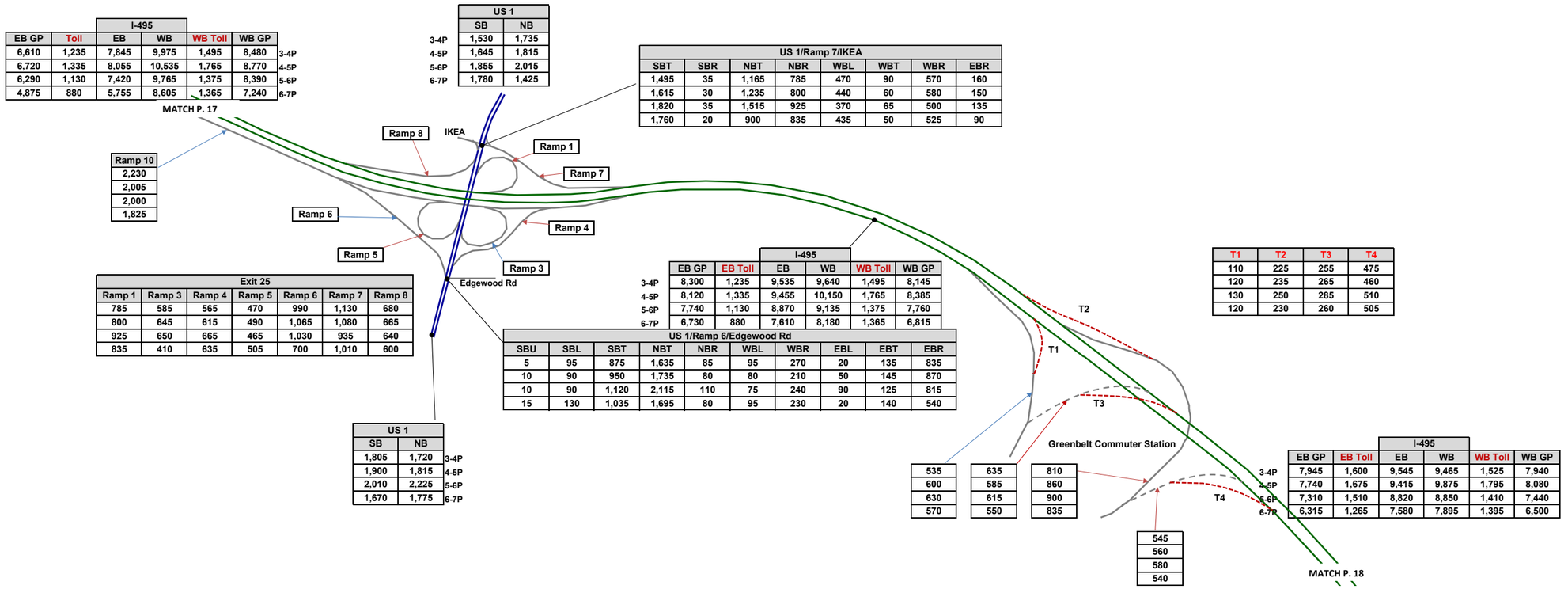
	MD 193	
	SB	NB
3-4P	2,220	2,455
4-5P	2,280	2,720
5-6P	2,335	2,355
6-7P	1,940	2,645

	I-495					
	EB GP	EB Toll	EB	WB	WB Toll	WB GP
3-4P	9,195	1,955	11,150	8,905	1,880	7,025
4-5P	9,015	2,000	11,015	9,565	2,000	7,565
5-6P	8,150	1,890	10,040	9,780	1,945	7,835
6-7P	7,250	1,660	8,910	8,400	1,830	6,570

I-495 North Side PM
Future Alternative 9 ModifiedPeak Period Volumes



I-495 North East Side PM
Future Alternative 9 Modified Peak Period Volumes



I-495						
EB GP	Toll	EB	WB	WB Toll	WB GP	
6,610	1,235	7,845	9,975	1,495	8,480	3-4P
6,720	1,335	8,055	10,535	1,765	8,770	4-5P
6,290	1,130	7,420	9,765	1,375	8,390	5-6P
4,875	880	5,755	8,605	1,365	7,240	6-7P

US 1		
	SB	NB
3-4P	1,530	1,735
4-5P	1,645	1,815
5-6P	1,855	2,015
6-7P	1,780	1,425

US 1/Ramp 7/IKEA							
SBT	SBR	NBT	NBR	WBL	WBT	WBR	EBR
1,495	35	1,165	785	470	90	570	160
1,615	30	1,235	800	440	60	580	150
1,820	35	1,515	925	370	65	500	135
1,760	20	900	835	435	50	525	90

Ramp 10
2,230
2,005
2,000
1,825

Exit 25						
Ramp 1	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
785	585	565	470	990	1,130	680
800	645	615	490	1,065	1,080	665
925	650	665	465	1,030	935	640
835	410	635	505	700	1,010	600

I-495						
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
8,300	1,235	9,535	9,640	1,495	8,145	3-4P
8,120	1,335	9,455	10,150	1,765	8,385	4-5P
7,740	1,130	8,870	9,135	1,375	7,760	5-6P
6,730	880	7,610	8,180	1,365	6,815	6-7P

US 1/Ramp 6/Edgewood Rd									
SBU	SBL	SBT	NBT	NBR	WBL	WBR	EBL	EBT	EBR
5	95	875	1,635	85	95	270	20	135	835
10	90	950	1,735	80	80	210	50	145	870
10	90	1,120	2,115	110	75	240	90	125	815
15	130	1,035	1,695	80	95	230	20	140	540

US 1		
SB	NB	
1,805	1,720	3-4P
1,900	1,815	4-5P
2,010	2,225	5-6P
1,670	1,775	6-7P

T1	T2	T3	T4
110	225	255	475
120	235	265	460
130	250	285	510
120	230	260	505

535
600
630
570

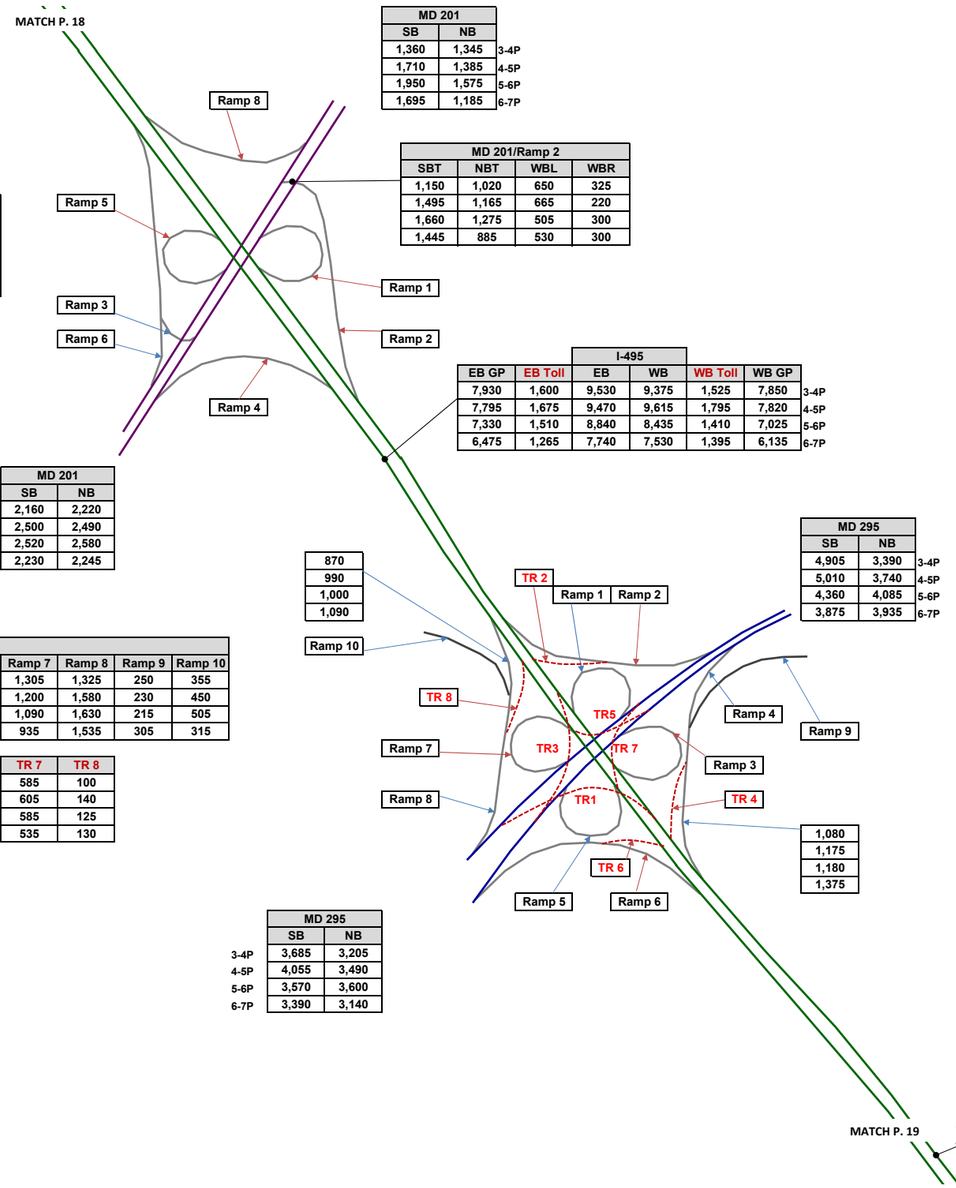
635
585
615
550

810
860
900
835

545
560
580
540

I-495						
EB GP	EB Toll	EB	WB	WB Toll	WB GP	
7,945	1,600	9,545	9,465	1,525	7,940	3-4P
7,740	1,675	9,415	9,875	1,795	8,080	4-5P
7,310	1,510	8,820	8,850	1,410	7,440	5-6P
6,315	1,265	7,580	7,895	1,395	6,500	6-7P

I-495 North East Side PM
Future Alternative 9 Modified Peak Period Volumes



Exit 23

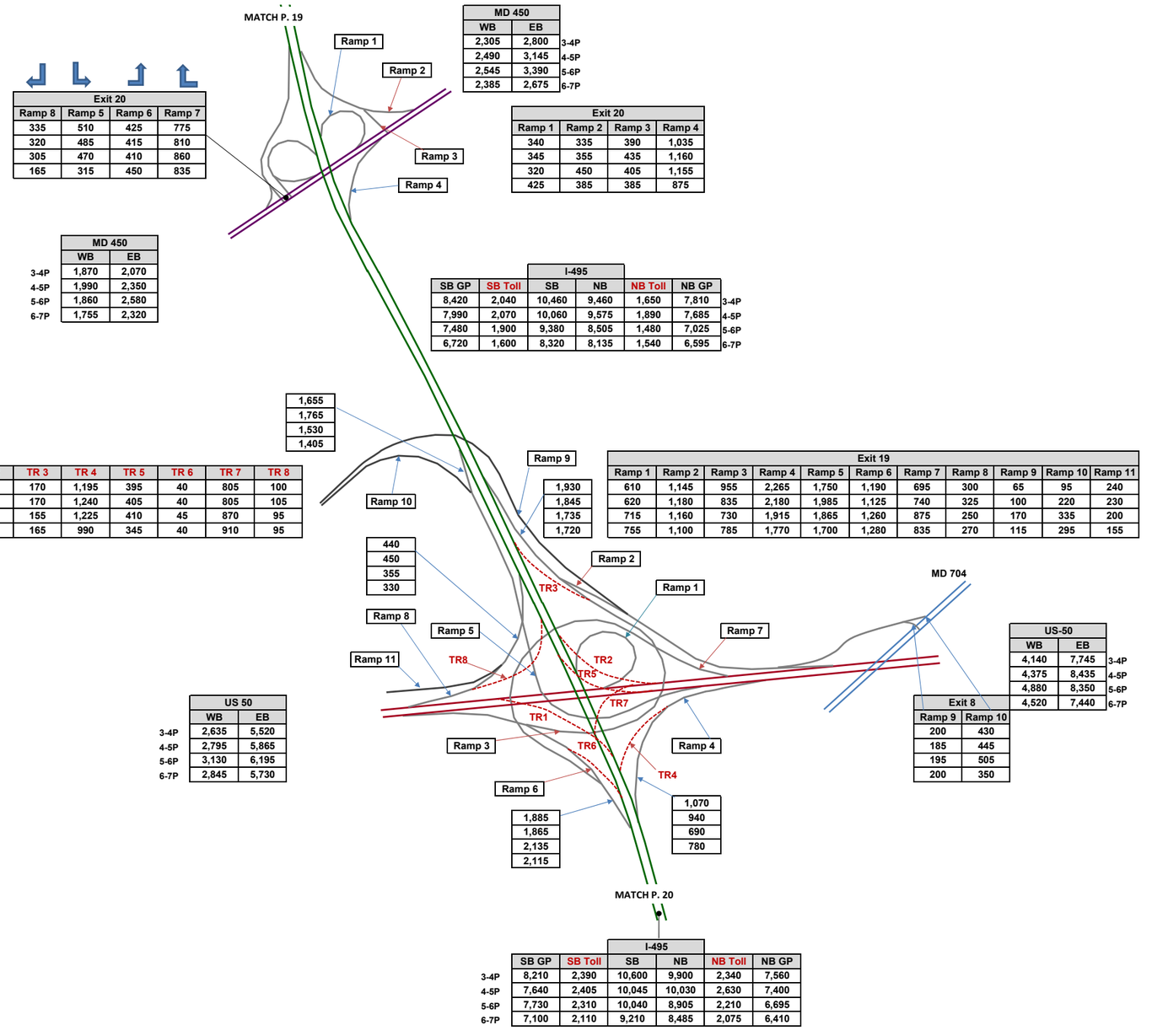
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8
855	975	410	755	640	1,000	210
930	885	395	790	700	1,040	215
930	805	345	720	700	1,055	290
945	830	255	670	685	940	250

Exit 22

Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
40	715	1,205	1,175	325	25	1,305	1,325	250	355
35	780	1,425	1,335	455	20	1,200	1,580	230	450
30	790	1,215	1,360	450	15	1,090	1,630	215	505
40	605	990	1,455	425	20	935	1,535	305	315

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
20	110	130	345	65	20	585	100
15	145	165	390	85	15	605	140
15	175	165	395	85	15	585	125
15	110	145	385	80	10	535	130

I-495 North East Side PM
Future Alternative 9 Modified Peak Period Volumes



MD 450	
WB	EB
2,305	2,800
2,490	3,145
2,545	3,390
2,385	2,675

3-4P 4-5P 5-6P 6-7P

Exit 20			
Ramp 8	Ramp 5	Ramp 6	Ramp 7
335	510	425	775
320	485	415	810
305	470	410	860
165	315	450	835

Exit 20			
Ramp 1	Ramp 2	Ramp 3	Ramp 4
340	335	390	1,035
345	355	435	1,160
320	450	405	1,155
425	385	385	875

MD 450	
WB	EB
1,870	2,070
1,990	2,350
1,860	2,580
1,755	2,320

3-4P 4-5P 5-6P 6-7P

	I-495				
SB GP	SB Toll	SB	NB	NB Toll	NB GP
8,420	2,040	10,460	9,460	1,650	7,810
7,990	2,070	10,060	9,575	1,890	7,685
7,480	1,900	9,380	8,505	1,480	7,025
6,720	1,600	8,320	8,135	1,540	6,595

3-4P 4-5P 5-6P 6-7P

1,655
1,765
1,530
1,405

TR 1	TR 2	TR 3	TR 4	TR 5	TR 6	TR 7	TR 8
30	365	170	1,195	395	40	805	100
30	360	170	1,240	405	40	805	105
35	375	155	1,225	410	45	870	95
40	330	165	990	345	40	910	95

1,930
1,845
1,735
1,720

Exit 19										
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10	Ramp 11
610	1,145	955	2,265	1,750	1,190	695	300	65	95	240
620	1,180	835	2,180	1,985	1,125	740	325	100	220	230
715	1,160	730	1,915	1,865	1,260	875	250	170	335	200
755	1,100	785	1,770	1,700	1,280	835	270	115	295	155

440
450
355
330

US 50	
WB	EB
2,635	5,520
2,795	5,865
3,130	6,195
2,845	5,730

3-4P 4-5P 5-6P 6-7P

US-50	
WB	EB
4,140	7,745
4,375	8,435
4,880	8,350
4,520	7,440

3-4P 4-5P 5-6P 6-7P

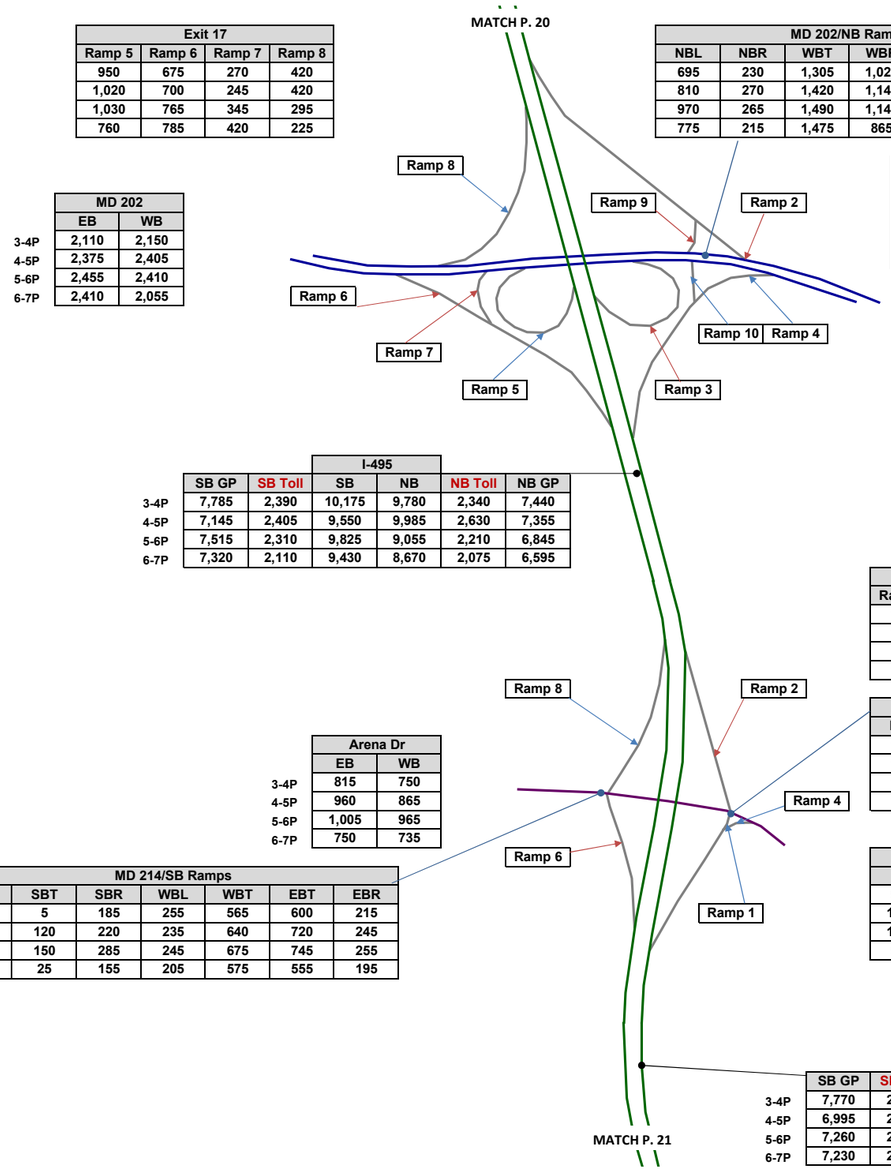
Exit 8	
Ramp 9	Ramp 10
200	430
185	445
195	505
200	350

1,885
1,865
2,135
2,115

1,070
940
690
780

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	8,210	2,390	10,600	9,900	2,340	7,560
4-5P	7,640	2,405	10,045	10,030	2,630	7,400
5-6P	7,730	2,310	10,040	8,905	2,210	6,695
6-7P	7,100	2,110	9,210	8,485	2,075	6,410

I-495 East Side PM
Future Alternative 9 Modified Peak Period Volumes



Exit 17			
Ramp 5	Ramp 6	Ramp 7	Ramp 8
950	675	270	420
1,020	700	245	420
1,030	765	345	295
760	785	420	225

	MD 202	
	EB	WB
3-4P	2,110	2,150
4-5P	2,375	2,405
5-6P	2,455	2,410
6-7P	2,410	2,055

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	7,785	2,390	10,175	9,780	2,340	7,440
4-5P	7,145	2,405	9,550	9,985	2,630	7,355
5-6P	7,515	2,310	9,825	9,055	2,210	6,845
6-7P	7,320	2,110	9,430	8,670	2,075	6,595

MD 202/NB Ramps					
NBL	NBR	WBT	WBR	EBL	EBT
695	230	1,305	1,025	15	2,115
810	270	1,420	1,140	10	2,465
970	265	1,490	1,145	20	2,535
775	215	1,475	865	15	2,210

Exit 17				
Ramp 2	Ramp 3	Ramp 4	Ramp 9	Ramp 10
1,025	255	250	15	925
1,140	220	245	10	1,080
1,145	165	245	20	1,235
865	160	235	15	990

MD 202		
SB	NB	
2,595	2,330	3-4P
2,980	2,560	4-5P
3,045	2,635	5-6P
2,660	2,340	6-7P

Exit 16				
Ramp 1	Ramp 2	Ramp 4	Ramp 6	Ramp 8
155	450	265	475	490
170	465	270	600	750
175	435	305	650	905
175	395	245	425	515

MD 214/NB Ramps						
NBL	NBT	NBR	WBT	WBR	EBL	EBT
155	0	265	665	225	225	675
170	0	270	705	215	250	880
165	10	305	755	195	230	985
170	5	245	610	160	230	660

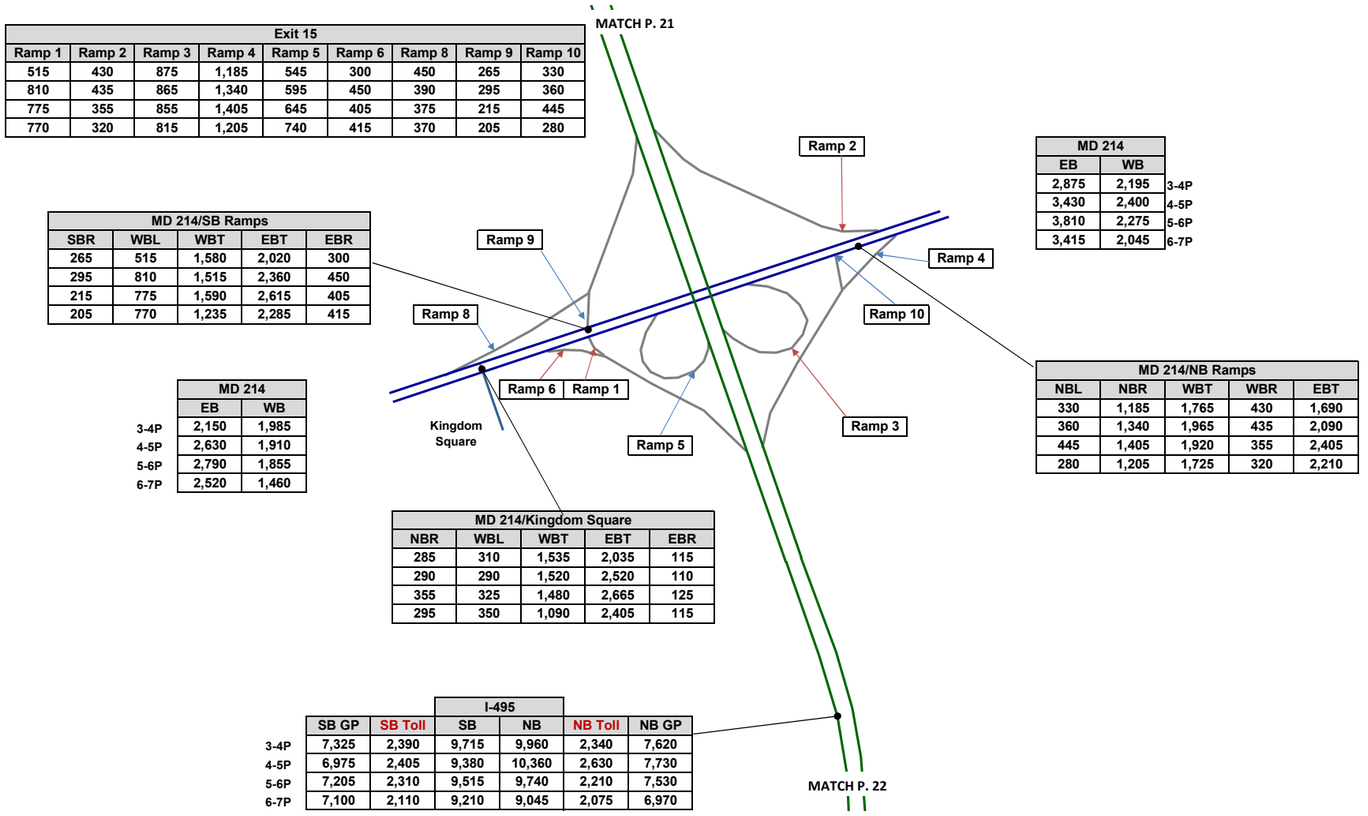
	Arena Dr	
	EB	WB
3-4P	815	750
4-5P	960	865
5-6P	1,005	965
6-7P	750	735

MD 214/SB Ramps						
SBL	SBT	SBR	WBL	WBT	EBT	EBR
300	5	185	255	565	600	215
410	120	220	235	640	720	245
470	150	285	245	675	745	255
335	25	155	205	575	555	195

Arena Dr		
EB	WB	
940	890	3-4P
1,145	925	4-5P
1,295	955	5-6P
905	775	6-7P

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	7,770	2,390	10,160	9,750	2,340	7,410
4-5P	6,995	2,405	9,400	9,960	2,630	7,330
5-6P	7,260	2,310	9,570	9,100	2,210	6,890
6-7P	7,230	2,110	9,340	8,695	2,075	6,620

I-495 East Side PM
Future Alternative 9 Modified Peak Period Volumes



Exit 15								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 8	Ramp 9	Ramp 10
515	430	875	1,185	545	300	450	265	330
810	435	865	1,340	595	450	390	295	360
775	355	855	1,405	645	405	375	215	445
770	320	815	1,205	740	415	370	205	280

MD 214/SB Ramps				
SBR	WBL	WBT	EBT	EBR
265	515	1,580	2,020	300
295	810	1,515	2,360	450
215	775	1,590	2,615	405
205	770	1,235	2,285	415

MD 214		
EB	WB	
2,875	2,195	3-4P
3,430	2,400	4-5P
3,810	2,275	5-6P
3,415	2,045	6-7P

MD 214		
EB	WB	
2,150	1,985	3-4P
2,630	1,910	4-5P
2,790	1,855	5-6P
2,520	1,460	6-7P

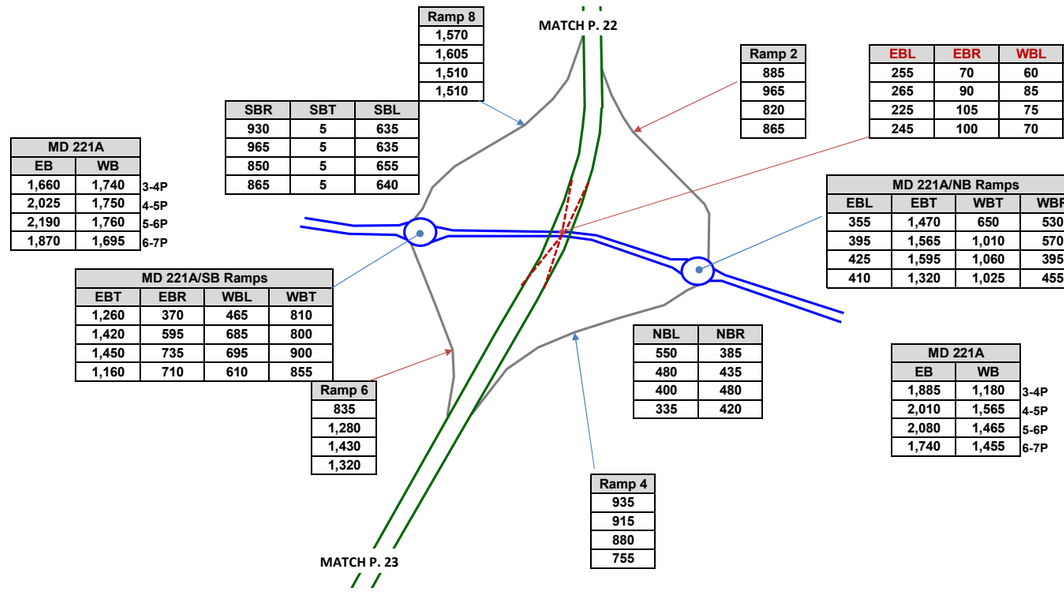
MD 214/NB Ramps				
NBL	NBR	WBT	WBR	EBT
330	1,185	1,765	430	1,690
360	1,340	1,965	435	2,090
445	1,405	1,920	355	2,405
280	1,205	1,725	320	2,210

MD 214/Kingdom Square				
NBR	WBL	WBT	EBT	EBR
285	310	1,535	2,035	115
290	290	1,520	2,520	110
355	325	1,480	2,665	125
295	350	1,090	2,405	115

	I-495				
SB GP	SB Toll	SB	NB	NB Toll	NB GP
7,325	2,390	9,715	9,960	2,340	7,620
6,975	2,405	9,380	10,360	2,630	7,730
7,205	2,310	9,515	9,740	2,210	7,530
7,100	2,110	9,210	9,045	2,075	6,970

3-4P
4-5P
5-6P
6-7P

I-495 East Side PM
Future Alternative 9 Modified Peak Period Volumes



Ramp 8
1,570
1,605
1,510
1,510

SBR	SBT	SBL
930	5	635
965	5	635
850	5	655
865	5	640

MD 221A		
EB	WB	
1,660	1,740	3-4P
2,025	1,750	4-5P
2,190	1,760	5-6P
1,870	1,695	6-7P

MD 221A/SB Ramps			
EBT	EBR	WBL	WBT
1,260	370	465	810
1,420	595	685	800
1,450	735	695	900
1,160	710	610	855

Ramp 6
835
1,280
1,430
1,320

Ramp 2
885
965
820
865

EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
255	70	60	365	85	65	190	415
265	90	85	410	80	65	195	410
225	105	75	250	60	65	180	400
245	100	70	260	55	65	210	380

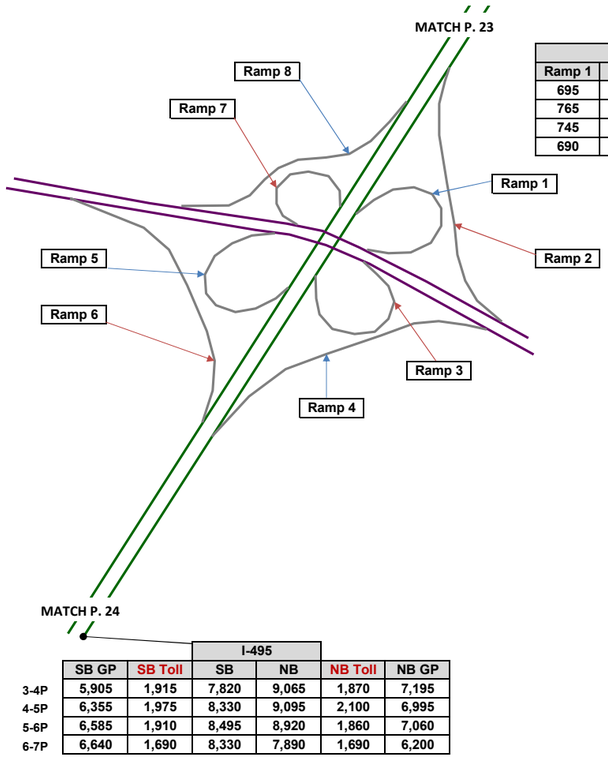
MD 221A/NB Ramps			
EBL	EBT	WBT	WBR
355	1,470	650	530
395	1,565	1,010	570
425	1,595	1,060	395
410	1,320	1,025	455

NBL	NBR
550	385
480	435
400	480
335	420

Ramp 4
935
915
880
755

MD 221A		
EB	WB	
1,885	1,180	3-4P
2,010	1,565	4-5P
2,080	1,465	5-6P
1,740	1,455	6-7P

I-495 East Side PM
Future Alternative 9 Modified Peak Period Volumes



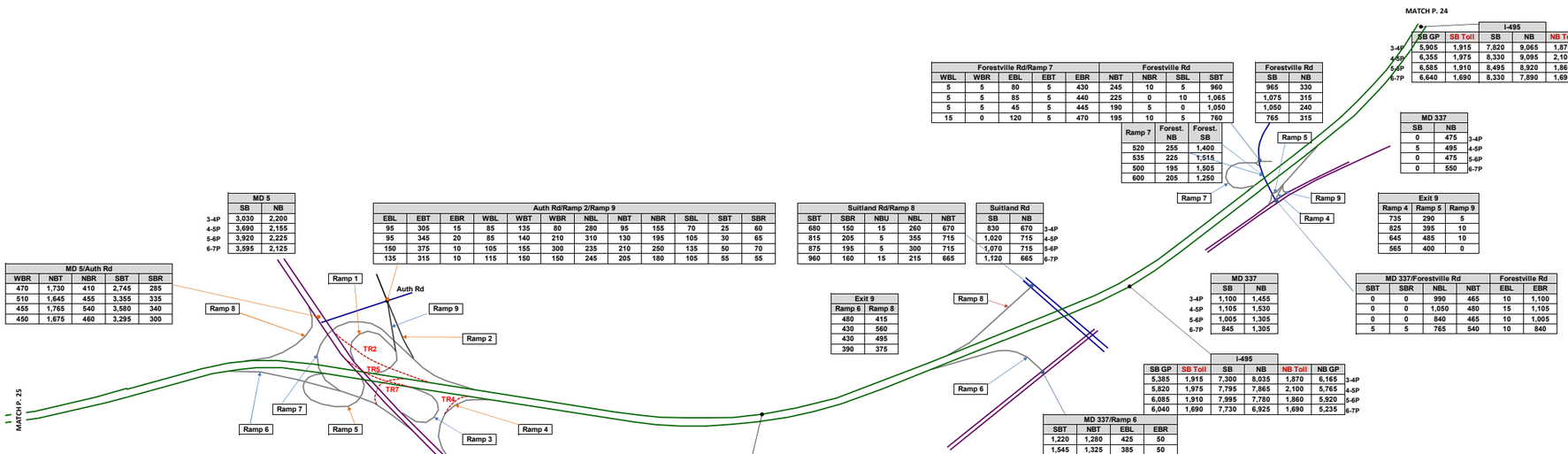
MD 4		
SB	NB	
2,325	1,760	3-4P
2,665	1,890	4-5P
2,715	1,865	5-6P
2,540	1,660	6-7P

Exit 11							
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8
695	1,300	895	1,025	1,180	530	715	750
765	1,300	970	820	1,115	770	825	775
745	1,125	950	800	1,040	630	685	815
690	1,020	1,045	715	925	810	660	815

MD 4		
SB	NB	
3,105	2,330	3-4P
2,860	2,475	4-5P
2,975	2,115	5-6P
2,325	1,835	6-7P

	I-495				
SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	5,905	1,915	7,820	9,065	1,870	7,195
4-5P	6,355	1,975	8,330	9,095	2,100	6,995
5-6P	6,585	1,910	8,495	8,920	1,860	7,060
6-7P	6,640	1,690	8,330	7,890	1,690	6,200

I-495 South Side PM
Future Alternative 9 Modified Peak Period Volumes



MD 5		
	SB	NB
3-4P	3,030	2,200
4-5P	3,690	2,155
5-6P	3,920	2,225
6-7P	3,595	2,125

MD 5/Auth Rd				
WBR	NBT	NBR	SBT	SBR
470	1,730	410	2,745	285
510	1,645	455	3,355	335
455	1,765	540	3,580	340
450	1,675	460	3,295	300

Auth Rd/Ramp 2/Ramp 9												
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
95	305	15	85	135	80	280	95	155	70	25	60
95	345	20	85	140	210	310	130	195	105	30	65
150	375	10	105	155	300	235	210	250	135	50	70
135	315	10	115	150	150	245	205	180	105	55	55

Exit 7								
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9
905	525	320	890	520	1,345	1,580	285	125
875	635	395	825	515	1,460	1,570	335	135
795	695	455	875	575	1,470	1,475	340	165
630	630	330	955	500	1,405	1,460	300	180

TR 2
115
130
150
130

TR 4	TR 5
580	240
725	280
670	250
620	240

TR 7
1,080
1,110
1,075
1,060

MD 5		
	SB	NB
3-4P	6,005	4,085
4-5P	6,720	4,000
5-6P	6,790	4,045
6-7P	6,495	3,885

Suitland Rd/Ramp 8				
SBT	SBR	NBU	NBL	NBT
680	150	15	260	670
815	205	5	355	715
875	195	5	300	715
960	160	15	215	665

Suitland Rd		
SB	NB	
830	670	3-4P
1,020	715	4-5P
1,070	715	5-6P
1,120	665	6-7P

Exit 9	
Ramp 8	Ramp 8
480	415
430	560
430	495
390	375

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
5,795	1,915	7,710	8,510	1,870	6,640
6,380	1,975	8,355	8,300	2,100	6,200
6,580	1,910	8,490	8,205	1,860	6,345
6,415	1,690	8,105	7,315	1,690	5,625

MD 337		
	SB	NB
3-4P	1,270	1,280
4-5P	1,595	1,325
5-6P	1,500	1,295
6-7P	1,380	1,065

Forestville Rd/Ramp 7								
WBL	WBR	EBL	EBT	EBR	NBT	NBR	SBL	SBT
5	5	80	5	430	245	10	5	960
5	5	85	5	440	225	0	10	1,065
5	5	45	5	445	190	5	0	1,050
15	0	120	5	470	195	10	5	760

Ramp 7	Forest. NB	Forest. SB
520	255	1,400
535	225	1,515
500	195	1,505
600	205	1,250

Forestville Rd	
SB	NB
965	330
1,075	315
1,050	240
765	315

I-495					
EB GP	SB Toll	SB	NB	NB Toll	NB GP
5,905	1,915	7,820	9,065	1,870	7,195
6,355	1,975	8,330	9,095	2,100	6,995
6,585	1,910	8,495	8,920	1,860	7,060
6,640	1,690	8,330	7,890	1,690	6,200

MD 337		
SB	NB	
0	475	3-4P
5	495	4-5P
0	475	5-6P
0	550	6-7P

Exit 9		
Ramp 4	Ramp 5	Ramp 9
735	290	5
825	395	10
645	485	10
565	400	0

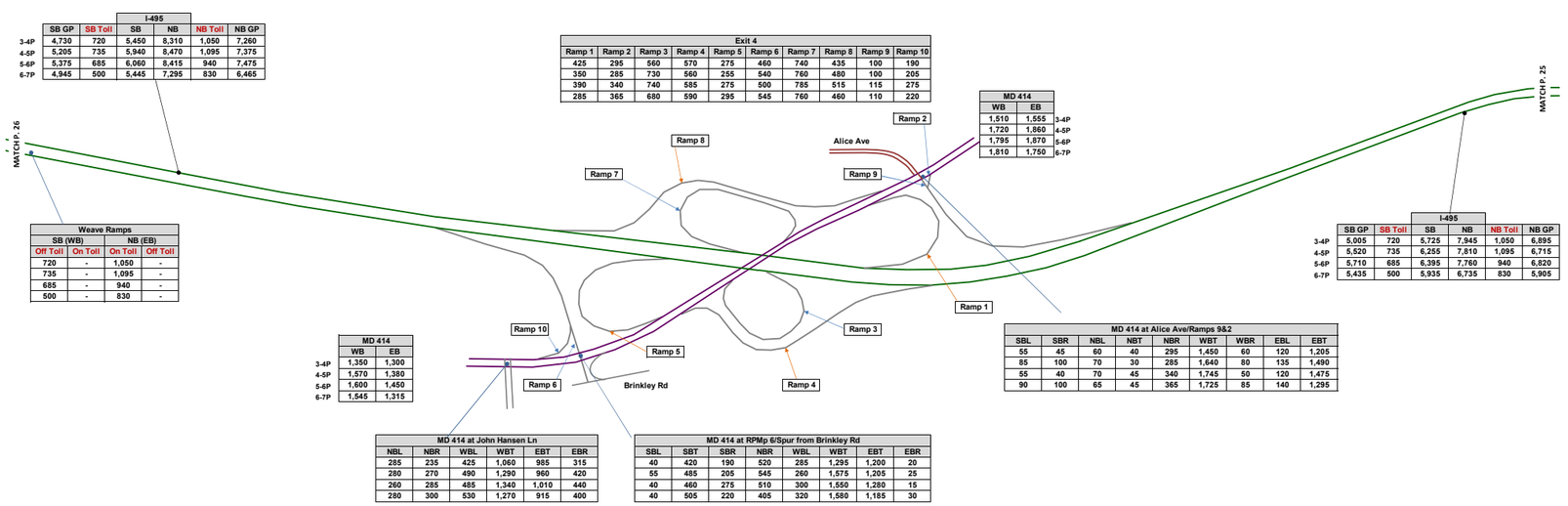
MD 337		
SB	NB	
1,100	1,455	3-4P
1,105	1,530	4-5P
1,005	1,305	5-6P
845	1,305	6-7P

MD 337/Forestville Rd				Forestville Rd	
SBT	SBR	NBL	NBT	EBL	EBR
0	0	990	465	10	1,100
0	0	1,050	480	15	1,105
0	0	840	465	10	1,005
5	5	765	540	10	840

I-495					
SB GP	SB Toll	SB	NB	NB Toll	NB GP
5,385	1,915	7,300	8,035	1,870	6,165
5,820	1,975	7,795	7,865	2,100	5,765
6,085	1,910	7,995	7,780	1,860	5,920
6,040	1,690	7,730	6,925	1,690	5,235

MD 337/Ramp 6			
SBT	NBT	EBL	EBR
1,220	1,280	425	50
1,545	1,325	385	50
1,445	1,295	370	55
1,325	1,065	335	55

I-495 South Side PM
Future Alternative 9 Modified Peak Period Volumes



	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	4,730	720	5,450	8,310	1,050	7,260
4-5P	5,205	735	5,940	8,470	1,095	7,375
5-6P	5,375	685	6,060	8,415	940	7,475
6-7P	4,945	500	5,445	7,295	830	6,465

Weave Ramps			
SB (WB)		NB (EB)	
Off Toll	On Toll	On Toll	Off Toll
720	-	1,050	-
735	-	1,095	-
685	-	940	-
500	-	830	-

Exit 4									
Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5	Ramp 6	Ramp 7	Ramp 8	Ramp 9	Ramp 10
425	295	560	570	275	460	740	435	100	190
350	285	730	560	255	540	760	480	100	205
390	340	740	585	275	500	785	515	115	275
285	365	680	590	295	545	760	460	110	220

MD 414		
WB	EB	
1,510	1,555	3-4P
1,720	1,860	4-5P
1,795	1,870	5-6P
1,810	1,750	6-7P

	I-495					
	SB GP	SB Toll	SB	NB	NB Toll	NB GP
3-4P	5,005	720	5,725	7,945	1,050	6,895
4-5P	5,520	735	6,255	7,810	1,095	6,715
5-6P	5,710	685	6,395	7,760	940	6,820
6-7P	5,435	500	5,935	6,735	830	5,905

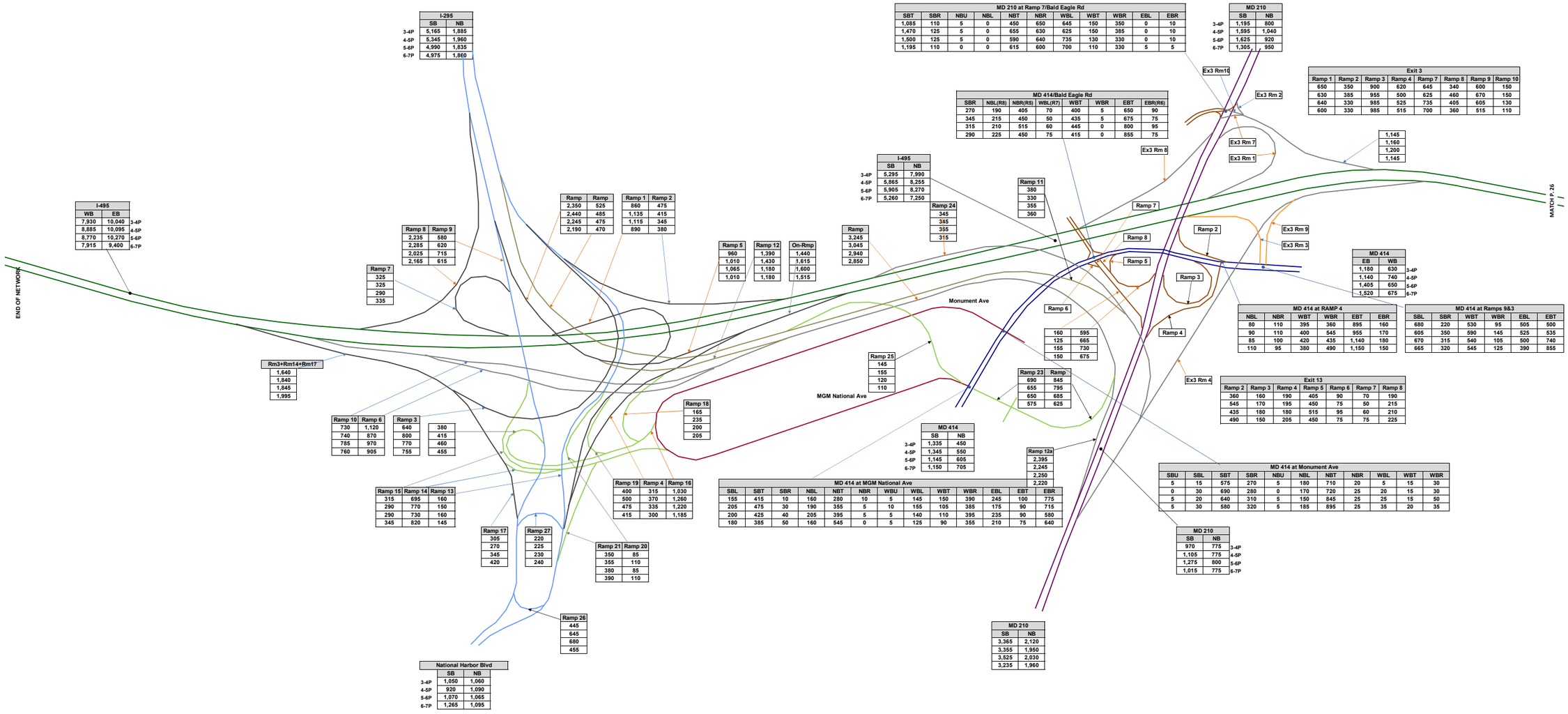
MD 414		
WB	EB	
1,350	1,300	3-4P
1,570	1,380	4-5P
1,600	1,450	5-6P
1,545	1,315	6-7P

MD 414 at Alice Ave/Ramps 9&2								
SBL	SBR	NBL	NBT	NBR	WBT	WBR	EBL	EBT
55	45	60	40	295	1,450	60	120	1,205
85	100	70	30	285	1,640	80	135	1,490
55	40	70	45	340	1,745	50	120	1,475
90	100	65	45	365	1,725	85	140	1,295

MD 414 at John Hansen Ln					
NBL	NBR	WBL	WBT	EBT	EBR
285	235	425	1,060	985	315
280	270	490	1,290	960	420
260	285	485	1,340	1,010	440
280	300	530	1,270	915	400

MD 414 at RPMp 6/Spur from Brinkley Rd							
SBL	SBT	SBR	NBR	WBL	WBT	EBT	EBR
40	420	190	520	285	1,295	1,200	20
55	485	205	545	260	1,575	1,205	25
40	460	275	510	300	1,550	1,280	15
40	505	220	405	320	1,580	1,185	30

I-495 South Side PM
Future Alternative 9 Modified Peak Period Volumes



ATTACHMENT B – TRAVEL DEMAND TABLE

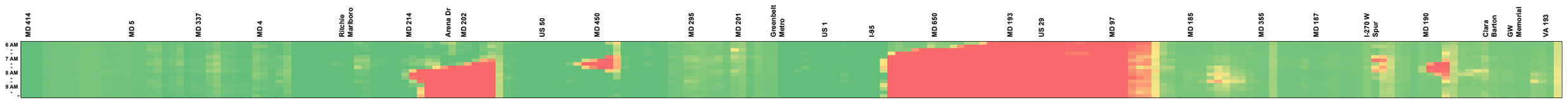
2040 Alt 9M Travel Demand

I-495 2040 Alt 9M Demand	AM Peak								PM Peak							
	Inner Loop				Outer Loop				Inner Loop				Outer Loop			
	6-7 AM	7-8 AM	8-9 AM	9-10AM	6-7 AM	7-8 AM	8-9 AM	9-10AM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN VA-193 AND GW MEMORIAL PKWY	10115	10410	9900	9625	8195	8980	9340	9245	7860	8495	8800	7915	8390	8355	7845	8055
AMERICAN LEGION BRIDGE	10025	11465	11770	11390	10505	11465	11520	11170	9540	10095	10450	9395	10750	10860	10635	10390
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	9390	10600	10990	10660	10305	10805	10195	10045	8820	8895	8845	8180	9475	9280	9145	9050
BETWEEN MD 190 AND I-270	9025	10670	11280	10960	11550	12300	11065	10920	10895	10990	10495	9625	9640	9640	9480	8945
BETWEEN I-270 WEST AND MD 187	6175	6290	5865	6090	5815	6275	5640	6295	5310	5140	5005	4250	5880	5675	5545	5220
BETWEEN I-270 EAST AND MD 187	5865	5900	5470	5850	5695	6175	5630	6065	5345	5155	4960	4160	5695	5550	5520	4875
BETWEEN MD 355 AND MD 185	8750	10540	9720	9470	8935	10160	10720	10795	9835	9685	9145	8065	9585	9890	10185	9580
BETWEEN MD 185 AND MD 97	8215	10095	9700	9320	9860	10560	10660	10890	10950	10715	9985	8890	9300	9900	10245	9390
BETWEEN MD 97 AND US 29	7425	9580	9170	8910	9285	9180	8835	9355	11310	11015	10080	8840	9050	9795	10180	8980
BETWEEN MD US 29 AND MD 193	7290	9285	8935	8620	8425	7900	7360	8015	11050	10790	9805	8455	8525	9245	9375	8135
BETWEEN MD 193 AND MD 650	7560	9550	9365	8805	8090	7375	6915	7780	11150	11015	10040	8910	8905	9565	9780	8400
BETWEEN MD 650 AND I-95	8995	10635	9855	9270	9100	8185	7710	8400	11735	11495	10575	9580	9370	10005	10115	8815
BETWEEN US 1 AND I-95	7465	8415	7990	7645	7745	7745	7675	7490	7845	8055	7420	5755	9975	10535	9765	8605
BETWEEN GREENBELT STATION AND US 1	8785	10105	9770	9170	8250	8450	8050	7520	9535	9455	8870	7610	9640	10150	9135	8180
BETWEEN GREENBELT STATION AND MD 201	8390	9660	9350	8790	8385	8720	8270	7655	9545	9415	8820	7580	9465	9875	8850	7895
BETWEEN MD 201 AND MD 295	7905	9005	9170	8590	8965	9715	9155	8380	9530	9470	8840	7740	9375	9615	8435	7530
BETWEEN MD 295 AND MD 450	7585	8455	8805	8210	9415	10050	9685	9155	10105	9640	8885	7515	8810	8860	7885	7605
BETWEEN MD 450 AND US 50	8000	8860	9525	8770	9320	10050	9955	9505	10460	10060	9380	8320	9460	9575	8505	8135
BETWEEN US 50 AND MD 202	9355	10075	10640	9870	9425	10030	9500	9345	10600	10045	10040	9210	9900	10030	8905	8485
BETWEEN MD 202 AND ARENA DR	9265	9820	10370	9695	9415	10190	9715	9250	10175	9550	9825	9430	9780	9985	9055	8670
BETWEEN ARENA DR AND MD 214	9275	9935	10275	9675	9650	10595	10115	9545	10160	9400	9570	9340	9750	9960	9100	8695
BETWEEN MD 214 AND RITCHIE MARLBORO RD	9275	9825	9780	9450	9385	10695	10035	9260	9715	9380	9515	9210	9960	10360	9740	9045
BETWEEN RITCHIE MARLBORO AND MD 4	8995	9600	9365	9215	8390	9525	8825	8480	8505	8625	9035	8600	9540	9780	9450	8550
BETWEEN MD 4 AND FORESTVILLE RD	8430	8685	9155	8530	7395	8630	7755	7365	7820	8330	8495	8330	9065	9095	8920	7890
BETWEEN FORESTVILLE AND MD 218	7705	8000	8425	7910	6490	7365	6565	6515	7300	7795	7995	7730	8035	7865	7780	6925
BETWEEN MD 218 AND MD 5	7880	8185	8650	8130	7240	8165	7250	6875	7710	8355	8490	8105	8510	8300	8205	7315
BETWEEN MD 5 AND MD 414	7245	5985	6680	6570	5080	6140	5485	5030	5725	6255	6395	5935	7945	7810	7760	6735
BETWEEN MD 414 AND MD 210	7695	6135	6625	6300	5110	5965	5395	4885	5450	5940	6060	5445	8310	8470	8415	7295
BETWEEN MD 210 AND I-295	8930	7190	7380	6690	4765	5665	4975	4445	5295	5865	5905	5260	7990	8255	8270	7250
WOODROW WILSON BRIDGE	11125	10920	10360	8285	8260	9565	8705	7505	7930	8885	8770	7915	10040	10095	10270	9400

I-270 2040 Alt 9M Demand	AM Peak								PM Peak							
	Southbound				Northbound				Southbound				Northbound			
	6-7 AM	7-8 AM	8-9 AM	9-10AM	6-7 AM	7-8 AM	8-9 AM	9-10AM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN MD 85 AND MD 80	3665	3820	3540	3370	1860	2950	3080	2670	2250	2720	3095	3005	4735	5490	5150	4215
BETWEEN MD 80 AND MD 109	4020	4305	3865	3660	1565	2445	2630	2285	2065	2510	2870	2760	4485	5370	5235	4280
BETWEEN MD 109 AND MD 121	4580	4900	4395	4105	1650	2525	2685	2350	2190	2635	3010	2820	4580	5500	5370	4550
BETWEEN MD 121 AND MD 27	5680	5810	5180	4900	2055	2745	2895	2670	2705	3115	3595	3390	5160	6220	6180	5440
BETWEEN MD 27 AND MD 118	6595	5765	5235	5320	2055	2745	2895	2670	3240	3595	3775	3805	5160	6220	6180	5440
BETWEEN MD 118 AND MIDDLEBROOK RD	7150	6280	5890	5810	2380	3375	3925	3665	3805	4240	4435	4415	7340	8155	8130	7400
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	9155	8295	7680	7350	2800	4150	4895	4500	4830	5265	5690	5510	8795	9635	9625	8965
BETWEEN WATKINS MILL AND MD 124	8205	7170	6455	6150	2655	4265	5220	4795	3920	4335	4800	4635	8225	9150	9405	8715
BETWEEN MD 124 AND MD 117	9795	8655	7845	7395	2585	4245	5325	4945	5060	5520	6170	5705	8765	10065	10310	9600
BETWEEN MD 117 AND I-370	11590	10600	9710	9030	3145	5230	6870	6230	6445	7270	7985	7065	10350	11760	11820	11045
BETWEEN I-370 AND SHADY GROVE RD	10680	10990	9865	9395	2850	4615	6140	5860	6450	6670	7305	6805	11335	12480	11900	11350
BETWEEN SHADY GROVE RD AND MD 28	10605	10445	9240	8825	3460	5545	7580	7100	7030	7420	8360	7495	11495	12450	11910	11220
BETWEEN MD 28 AND MD 189	11200	11320	10120	9685	4005	6510	9190	8475	7950	8275	9245	8425	12310	13500	13105	12420
BETWEEN MD 189 AND MONTROSE RD	11225	11490	10335	9800	4080	6450	9185	8475	7665	7990	8755	8125	12080	13160	13035	12360
BETWEEN MONTROSE RD AND I-270 SPLIT	10280	11785	10885	9910	4705	6910	9400	8565	7735	8150	8380	7745	11520	12460	12490	11640
BETWEEN I-270 SPLIT AND MD 187	4115	5495	5000	4405	1945	2845	4335	3860	3870	3920	3850	3800	4935	5475	5540	5320
BETWEEN MD 187 AND I-495	3585	4770	4190	3870	2450	3610	4890	4235	4055	4130	3980	3735	4375	4605	4700	4820
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	6165	6290	5885	5505	2760	4065	5065	4705	3865	4230	4530	3945	6585	6985	6950	6320
BETWEEN DEMOCRACY BLVD AND I-495	5735	6025	5425	4625	2850	4380	5415	4870	3605	3820	3795	3580	5410	5675	5375	5250

ATTACHMENT C – SPEED MAPS

Existing AM - I-495 OL Speed Map



2040 No-Build AM - I-495 OL Speed Map

2040 Alt-5 AM - I-495 OL Speed Map

2040 Alt-8 AM - I-495 OL Speed Map

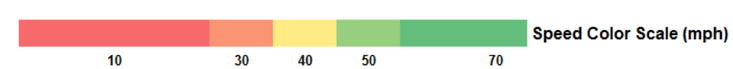
2040 Alt-9 AM - I-495 OL Speed Map

2040 Alt-9M AM - I-495 OL Speed Map

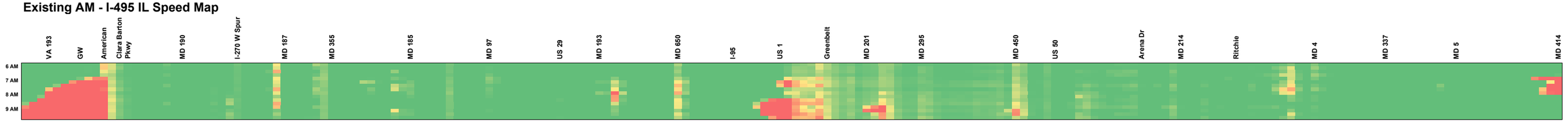
2040 Alt-10 AM - I-495 OL Speed Map

2040 Alt 13B AM - I-495 OL Speed Map

2040 Alt-13C AM - I-495 OL Speed Map

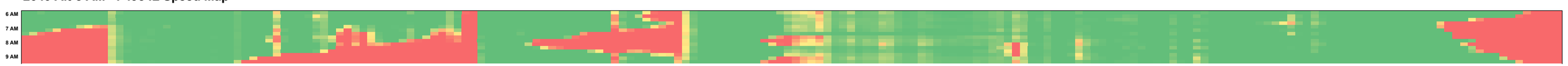


Existing AM - I-495 IL Speed Map



2040 No-Build AM - I-495 IL Speed Map

2040 Alt-5 AM - I-495 IL Speed Map



2040 Alt-8 AM - I-495 IL Speed Map

2040 Alt-9 AM - I-495 IL Speed Map

2040 Alt-9M AM - I-495 IL Speed Map

2040 Alt-10 AM - I-495 IL Speed Map

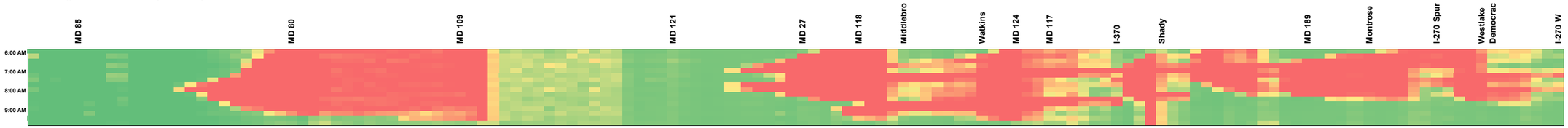
2040 Alt-13B AM - I-495 IL Speed Map

2040 Alt-13C AM - I-495 IL Speed Map

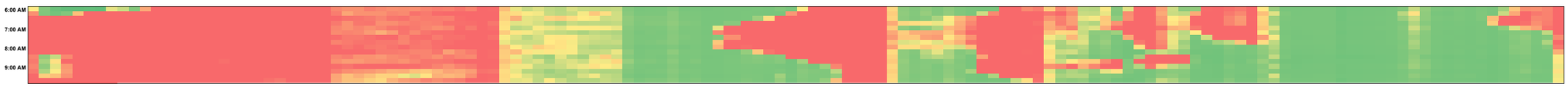
I-270 SB Speed AM

3/6/2020

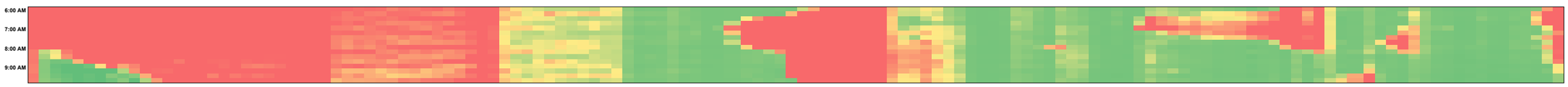
Existing AM - I-270 SB Speed Map



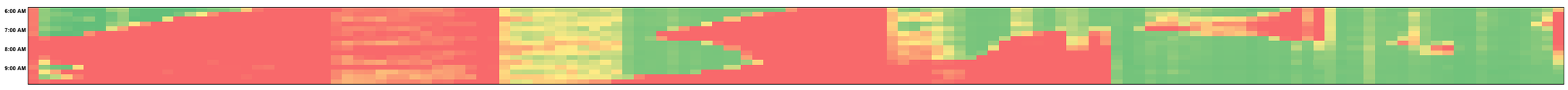
2040 No-Build AM - I-270 SB Speed Map



2040 Alt-5 AM - I-270 SB Speed Map

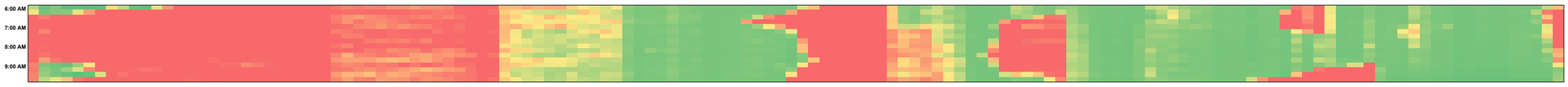


2040 Alt-8 AM - I-270 SB Speed Map



2040 Alt-9 AM - I-270 SB Speed Map

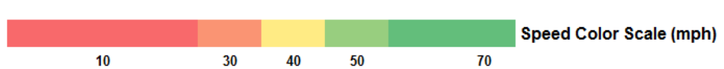
2040 Alt-9M AM - I-270 SB Speed Map



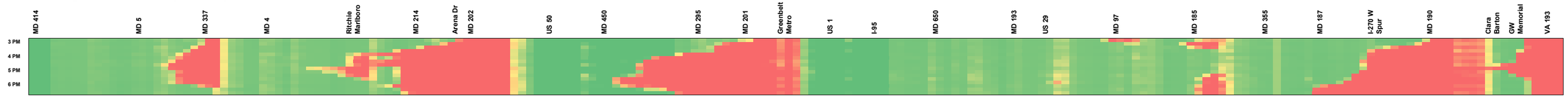
2040 Alt-10 AM - I-270 SB Speed Map

2040 Alt-13B AM - I-270 SB Speed Map

2040 Alt-13C AM - I-270 SB Speed Map



Existing PM - I-495 OL Speed Map



2040 No-Build PM - I-495 OL Speed Map

2040 Alt 5 PM - I-495 OL Speed Map

2040 Alt 8 PM - I-495 OL Speed Map

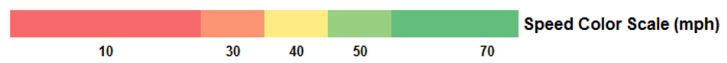
2040 Alt 9 PM - I-495 OL Speed Map

2040 Alt 9M PM - I-495 OL Speed Map

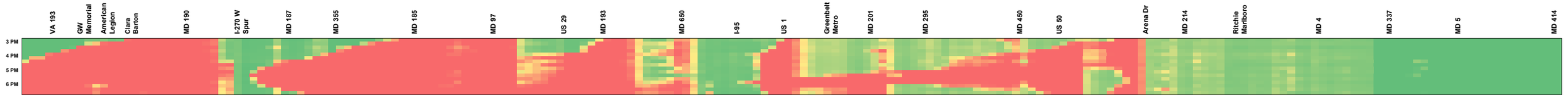
2040 Alt 10 PM - I-495 OL Speed Map

2040 Alt 13B PM - I-495 OL Speed Map

2040 Alt 13C PM - I-495 OL Speed Map



Existing PM - I-495 IL Speed Map



2040 No-Build PM - I-495 IL Speed Map

2040 Alt 5 PM - I-495 IL Speed Map

2040 Alt 8 PM - I-495 IL Speed Map

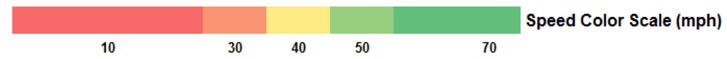
2040 Alt 9 PM - I-495 IL Speed Map

2040 Alt 9M PM - I-495 IL Speed Map

2040 Alt 10 PM - I-495 IL Speed Map

2040 Alt 13B PM - I-495 IL Speed Map

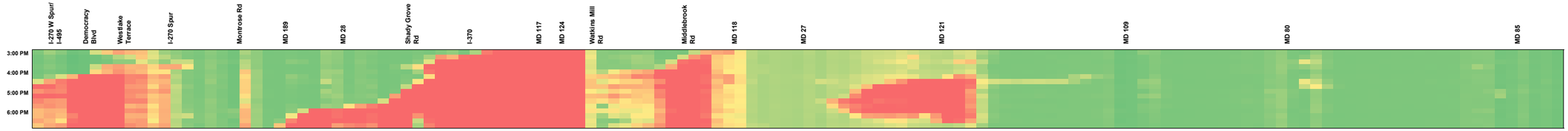
2040 Alt 13C PM - I-495 IL Speed Map



I-270 NB Speed PM

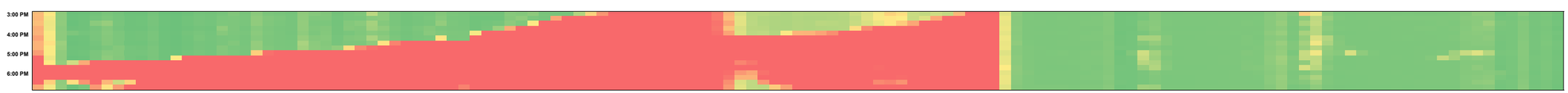
3/6/2020

Existing PM - I-270 NB Speed Map

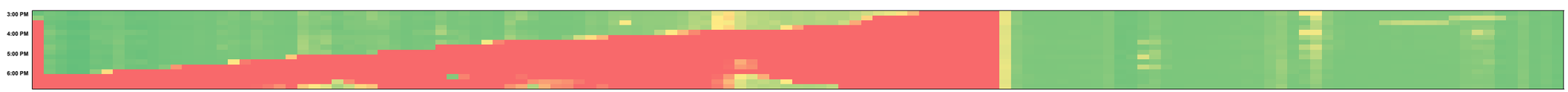


2040 No-Build PM - I-270 NB Speed Map

2040 Alt 5 PM - I-270 NB Speed Map



2040 Alt 8 PM - I-270 NB Speed Map

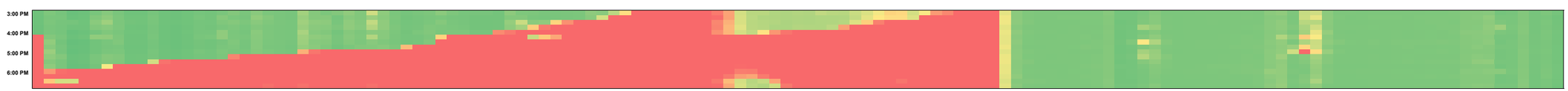


2040 Alt 9 PM - I-270 NB Speed Map

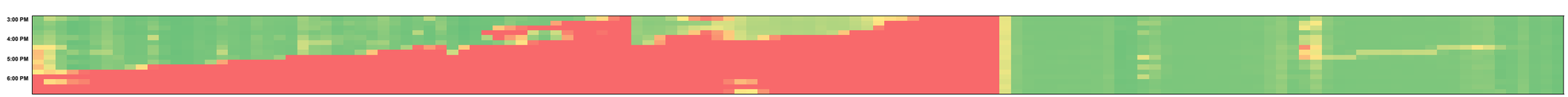
2040 Alt 9M PM - I-270 NB Speed Map

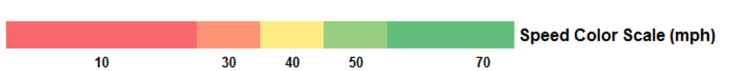
2040 Alt 10 PM - I-270 NB Speed Map

2040 Alt 13B PM - I-270 NB Speed Map



2040 Alt 13C PM - I-270 NB Speed Map





ATTACHMENT D – TRAVEL TIME MATRICES

Travel Time Matrix - Alternative 9M - GP Lane (AM Peak)

Unit: Minute

From \ To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	1.1	3.4	5.1	6.5	8.3	9.1	9.7	8.8	9.6	20.3	19.1	18.3	16.1	14.6	10.6	N/A	11.3	11.8	14.5
Shady Grove Rd	I-270 Exit 8	0.9	0	2.3	4.0	5.5	7.2	8.1	8.6	7.8	8.6	19.2	18.0	17.2	15.0	13.6	9.5	N/A	10.3	10.7	13.4
MD 28 (W Montgomery Ave)	I-270 Exit 6	2.9	2.0	0	1.7	3.2	4.9	5.8	6.3	5.5	6.3	16.9	15.7	14.9	12.7	11.3	7.2	N/A	7.9	8.4	11.1
MD 189 (Falls Rd)	I-270 Exit 5	3.8	2.9	0.9	0	1.5	3.2	4.1	4.6	3.8	4.6	15.2	14.0	13.2	11.0	9.6	5.5	N/A	6.2	6.7	9.4
Montrose Rd	I-270 Exit 4	5.1	4.1	2.1	1.3	0	1.8	2.6	3.1	2.3	3.1	13.7	12.5	11.8	9.6	8.1	4.0	N/A	4.8	5.2	7.9
Split	I-270	6.3	5.4	3.4	2.5	1.3	0	0.9	1.4	0.5	1.3	12.0	10.8	10.0	7.8	6.4	2.3	N/A	3.0	3.5	6.2
Westlake Terrace	I-270 W Spur	7.2	6.2	4.2	3.4	2.1	0.8	0	0.5	N/A	N/A	11.1	9.9	9.2	6.9	5.5	1.4	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	7.6	6.6	4.6	3.8	2.5	1.2	0.4	0	N/A	N/A	10.6	9.4	8.6	6.4	5.0	0.9	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	6.9	6.0	4.0	3.1	1.8	0.6	N/A	N/A	0	0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.5	2.9	5.6
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	7.6	6.6	4.6	3.8	2.5	1.2	N/A	N/A	0.7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.7	2.1	4.8
VA 193 (Georgetown Pike)	I-495 Exit 44	16.3	15.4	13.4	12.5	11.2	10.0	9.1	8.7	N/A	N/A	0	2.7	4.3	6.1	6.5	7.9	10.1	10.9	11.3	14.0
George Washington Memorial Pkwy	I-495 Exit 43	13.6	12.7	10.7	9.8	8.5	7.2	6.4	6.0	N/A	N/A	1.2	0	1.6	3.4	3.7	5.2	7.3	8.2	8.6	11.3
Clara Barton Pkwy	I-495 Exit 41	12.0	11.1	9.1	8.2	7.0	5.7	4.9	4.5	N/A	N/A	2.0	0.8	0	1.9	2.2	3.6	5.8	6.6	7.1	9.7
Cabin John Pkwy	I-495 Exit 40	10.2	9.2	7.2	6.4	5.1	3.8	3.0	2.6	N/A	N/A	4.2	3.0	2.2	0	0.3	1.8	3.9	4.7	5.2	7.9
MD 190 (River Rd)	I-495 Exit 39	9.8	8.9	6.9	6.0	4.8	3.5	2.7	2.3	N/A	N/A	5.6	4.4	3.7	1.5	0	1.5	3.6	4.4	4.9	7.6
I-270 West Spur	I-495 Exit 38	8.4	7.5	5.5	4.6	3.3	2.0	1.2	0.8	N/A	N/A	9.7	8.5	7.7	5.5	4.1	0	2.1	3.0	3.4	6.1
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20.0	18.8	18.1	15.9	14.4	10.3	0	0.8	1.3	4.0
I-270 East Spur	I-495 Exit 35	8.9	8.0	6.0	5.1	3.9	2.6	N/A	N/A	2.0	1.4	26.6	25.4	24.6	22.4	21.0	16.9	6.5	0	0.5	3.1
MD 355 (Rockville Pike)	I-495 Exit 34	10.5	9.5	7.5	6.7	5.4	4.1	N/A	N/A	3.6	2.9	28.1	26.9	26.2	24.0	22.5	18.4	8.1	1.5	0	2.7
MD 185 (Connecticut Ave)	I-495 Exit 33	13.7	12.8	10.8	9.9	8.7	7.4	N/A	N/A	6.8	6.2	31.4	30.2	29.4	27.2	25.8	21.7	11.3	4.8	3.3	0
MD 97 (Georgia Ave)	I-495 Exit 31	18.0	17.0	15.0	14.2	12.9	11.6	N/A	N/A	11.1	10.4	35.6	34.4	33.7	31.5	30.0	25.9	15.6	9.1	7.5	4.2
US 29 (Colesville Rd)	I-495 Exit 30	18.8	17.9	15.9	15.0	13.8	12.5	N/A	N/A	12.0	11.3	36.5	35.3	34.5	32.3	30.9	26.8	16.5	9.9	8.4	5.1
MD 193 (University Blvd E)	I-495 Exit 29	21.8	20.9	18.9	18.0	16.8	15.5	N/A	N/A	15.0	14.3	39.5	38.3	37.5	35.3	33.9	29.8	19.5	12.9	11.4	8.1
MD 650 (New Hampshire Ave)	I-495 Exit 28	24.1	23.2	21.2	20.3	19.1	17.8	N/A	N/A	17.2	16.6	41.8	40.6	39.8	37.6	36.2	32.1	21.7	15.2	13.7	10.4
I-95	I-495 Exit 27	27.0	26.0	24.0	23.2	21.9	20.6	N/A	N/A	20.1	19.4	44.6	43.4	42.6	40.4	39.0	34.9	24.6	18.0	16.5	13.2
US 1 (Baltimore Ave)	I-495 Exit 25	28.0	27.1	25.1	24.2	22.9	21.7	N/A	N/A	21.1	20.4	45.6	44.4	43.7	41.5	40.0	36.0	25.6	19.1	17.5	14.3
Greenbelt Metro Station	I-495 Exit 24	28.9	28.0	26.0	25.1	23.9	22.6	N/A	N/A	22.0	21.4	46.6	45.4	44.6	42.4	41.0	36.9	26.5	20.0	18.5	15.2
MD 201 (Kenilworth Ave)	I-495 Exit 23	30.3	29.4	27.4	26.5	25.3	24.0	N/A	N/A	23.4	22.8	48.0	46.8	46.0	43.8	42.4	38.3	27.9	21.4	19.9	16.6
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	31.4	30.5	28.5	27.6	26.4	25.1	N/A	N/A	24.5	23.9	49.1	47.9	47.1	44.9	43.4	39.4	29.0	22.5	20.9	17.7
MD 450 (Annapolis Rd)	I-495 Exit 20	34.1	33.1	31.1	30.3	29.0	27.7	N/A	N/A	27.2	26.5	51.7	50.5	49.7	47.5	46.1	42.0	31.7	25.1	23.6	20.3
US 50 (John Hanson Hwy)	I-495 Exit 19	35.6	34.7	32.7	31.8	30.6	29.3	N/A	N/A	28.7	28.1	53.3	52.1	51.3	49.1	47.7	43.6	33.2	26.7	25.2	21.9
MD 202 (Landover Rd)	I-495 Exit 17	37.8	36.8	34.8	34.0	32.7	31.4	N/A	N/A	30.9	30.2	55.4	54.2	53.4	51.2	49.8	45.7	35.4	28.8	27.3	24.0
Arena Dr	I-495 Exit 16	38.5	37.6	35.6	34.7	33.4	32.1	N/A	N/A	31.6	30.9	56.1	54.9	54.2	52.0	50.5	46.4	36.1	29.6	28.0	24.8
MD 214 (Central Ave)	I-495 Exit 15	39.6	38.6	36.6	35.8	34.5	33.2	N/A	N/A	32.7	32.0	57.2	56.0	55.3	53.1	51.6	47.5	37.2	30.6	29.1	25.8
Ritchie-Marlboro Rd	I-495 Exit 13	41.3	40.4	38.4	37.5	36.2	35.0	N/A	N/A	34.4	33.7	58.9	57.7	57.0	54.8	53.3	49.3	38.9	32.4	30.8	27.6
MD 4 (Pennsylvania Ave)	I-495 Exit 11	43.9	43.0	41.0	40.1	38.8	37.6	N/A	N/A	37.0	36.3	61.5	60.3	59.6	57.4	55.9	51.9	41.5	35.0	33.4	30.2
MD 337 (Suitland Pkwy)	I-495 Exit 9	45.2	44.3	42.3	41.4	40.2	38.9	N/A	N/A	38.4	37.7	62.9	61.7	60.9	58.7	57.3	53.2	42.9	36.3	34.8	31.5
MD 5 (Branch Ave)	I-495 Exit 7	47.4	46.5	44.5	43.6	42.4	41.1	N/A	N/A	40.6	39.9	65.1	63.9	63.1	60.9	59.5	55.4	45.1	38.5	37.0	33.7
MD 414 (St Barnabas Rd)	I-495 Exit 4	50.5	49.5	47.5	46.7	45.4	44.1	N/A	N/A	43.6	42.9	68.1	66.9	66.2	64.0	62.5	58.4	48.1	41.5	40.0	36.7

Unit: Minute

From \ To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	I-270 Exit 9	18.2	19.7	20.6	24.3	25.9	27.0	28.2	29.8	30.8	33.3	34.8	36.9	37.6	38.8	40.5	43.1	44.2	47.0	59.3
Shady Grove Rd	I-270 Exit 8	17.2	18.7	19.5	23.3	24.9	25.9	27.2	28.8	29.8	32.2	33.7	35.8	36.5	37.7	39.5	42.1	43.2	45.9	58.2
MD 28 (W Montgomery Ave)	I-270 Exit 6	14.9	16.4	17.2	21.0	22.5	23.6	24.8	26.5	27.5	29.9	31.4	33.5	34.2	35.4	37.1	39.7	40.9	43.6	55.9
MD 189 (Falls Rd)	I-270 Exit 5	13.2	14.7	15.5	19.3	20.8	21.9	23.1	24.8	25.8	28.2	29.7	31.8	32.5	33.7	35.4	38.0	39.2	41.9	54.2
Montrose Rd	I-270 Exit 4	11.7	13.2	14.0	17.8	19.4	20.5	21.7	23.3	24.3	26.8	28.2	30.3	31.0	32.2	34.0	36.6	37.7	40.4	52.7
Split	I-270	9.9	11.4	12.3	16.0	17.6	18.7	19.9	21.5	22.5	25.0	26.5	28.6	29.3	30.5	32.2	34.8	35.9	38.7	51.0
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	9.4	10.9	11.7	15.5	17.1	18.2	19.4	21.0	22.0	24.5	25.9	28.0	28.7	29.9	31.7	34.3	35.4	38.1	50.4
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	8.6	10.1	10.9	14.7	16.3	17.4	18.6	20.2	21.2	23.7	25.1	27.2	27.9	29.1	30.9	33.5	34.6	37.3	49.6
VA 193 (Georgetown Pike)	I-495 Exit 44	17.8	19.3	20.1	23.9	25.5	26.6	27.8	29.4	30.4	32.9	34.3	36.4	37.1	38.3	40.1	42.7	43.8	46.5	58.8
George Washington Memorial Pkwy	I-495 Exit 43	15.1	16.6	17.4	21.2	22.8	23.8	25.1	26.7	27.7	30.1	31.6	33.7	34.4	35.6	37.4	40.0	41.1	43.8	56.1
Clara Barton Pkwy	I-495 Exit 41	13.5	15.0	15.9	19.6	21.2	22.3	23.5	25.1	26.1	28.6	30.0	32.2	32.8	34.0	35.8	38.4	39.5	42.3	54.6
Cabin John Pkwy	I-495 Exit 40	11.7	13.2	14.0	17.8	19.3	20.4	21.6	23.3	24.3	26.7	28.2	30.3	31.0	32.2	33.9	36.5	37.7	40.4	52.7
MD 190 (River Rd)	I-495 Exit 39	11.3	12.8	13.7	17.4	19.0	20.1	21.3	22.9	23.9	26.4	27.8	30.0	30.7	31.9	33.6	36.2	37.3	40.1	52.4
I-270 West Spur	I-495 Exit 38	9.9	11.4	12.2	16.0	17.6	18.6	19.9	21.5	22.5	24.9	26.4	28.5	29.2	30.4	32.2	34.8	35.9	38.6	50.9
MD 187 (Old Georgetown Rd)	I-495 Exit 36	7.7	9.2	10.1	13.8	15.4	16.5	17.7	19.3	20.3	22.8	24.3	26.4	27.1	28.3	30.0	32.6	33.7	36.5	48.8
I-270 East Spur	I-495 Exit 35	6.9	8.4	9.2	13.0	14.6	15.7	16.9	18.5	19.5	22.0	23.4	25.5	26.2	27.4	29.2	31.8	32.9	35.6	48.0
MD 355 (Rockville Pike)	I-495 Exit 34	6.5	8.0	8.8	12.6	14.1	15.2	16.4	18.1	19.1	21.5	23.0	25.1	25.8	27.0	28.7	31.3	32.5	35.2	47.5
MD 185 (Connecticut Ave)	I-495 Exit 33	3.8	5.3	6.1	9.9	11.5	12.5	13.8	15.4	16.4	18.8	20.3	22.4	23.1	24.3	26.1	28.7	29.8	32.5	44.8
MD 97 (Georgia Ave)	I-495 Exit 31	0	1.5	2.3	6.1	7.7	8.8	10.0	11.6	12.6	15.1	16.5	18.6	19.3	20.5	22.3	24.9	26.0	28.7	41.0
US 29 (Colesville Rd)	I-495 Exit 30	1.9	0	0.8	4.6	6.2	7.3	8.5	10.1	11.1	13.6	15.0	17.1	17.8	19.0	20.8	23.4	24.5	27.2	39.5
MD 193 (University Blvd E)	I-495 Exit 29	4.9	0.9	0	3.8	5.4	6.4	7.6	9.3	10.3	12.7	14.2	16.3	17.0	18.2	19.9	22.5	23.7	26.4	38.7
MD 650 (New Hampshire Ave)	I-495 Exit 28	7.1	3.2	1.6	0	1.6	2.7	3.9	5.5	6.5	9.0	10.4	12.5	13.2	14.4	16.2	18.8	19.9	22.6	34.9
I-95	I-495 Exit 27	10.0	6.0	4.5	3.5	0	1.1	2.3	3.9	4.9	7.4	8.8	10.9	11.6	12.8	14.6	17.2	18.3	21.0	33.4
US 1 (Baltimore Ave)	I-495 Exit 25	11.0	7.0	5.5	4.6	1.0	0	1.2	2.8	3.9	6.3	7.8	9.9	10.6	11.8	13.5	16.1	17.2	20.0	32.3
Greenbelt Metro Station	I-495 Exit 24	11.9	8.0	6.4	5.5	2.0	0.9	0	1.6	2.6	5.1	6.5	8.6	9.3	10.5	12.3	14.9	16.0	18.8	31.1
MD 201 (Kenilworth Ave)	I-495 Exit 23	13.3	9.4	7.8	6.9	3.4	2.3	1.4	0	1.0	3.5	4.9	7.0	7.7	8.9	10.7	13.3	14.4	17.1	29.4
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	14.4	10.5	8.9	8.0	4.5	3.4	2.5	1.1	0	2.5	3.9	6.0	6.7	7.9	9.7	12.3	13.4	16.1	28.4
MD 450 (Annapolis Rd)	I-495 Exit 20	17.1	13.1	11.6	10.7	7.1	6.1	5.1	3.7	2.7	0	1.5	3.6	4.3	5.5	7.2	9.8	10.9	13.7	26.0
US 50 (John Hanson Hwy)	I-495 Exit 19	18.6	14.7	13.1	12.2	8.7	7.6	6.7	5.3	4.2	1.6	0	2.1	2.8	4.0	5.8	8.4	9.5	12.2	24.5
MD 202 (Landover Rd)	I-495 Exit 17	20.8	16.8	15.3	14.3	10.8	9.8	8.8	7.4	6.3	3.7	2.1	0	0.7	1.9	3.7	6.3	7.4	10.1	22.4
Arena Dr	I-495 Exit 16	21.5	17.5	16.0	15.1	11.5	10.5	9.5	8.2	7.1	4.4	2.8	0.7	0	1.2	3.0	5.6	6.7	9.4	21.7
MD 214 (Central Ave)	I-495 Exit 15	22.6	18.6	17.1	16.2	12.6	11.6	10.6	9.2	8.2	5.5	3.9	1.8	1.1	0	1.8	4.4	5.5	8.2	20.5
Ritchie-Marlboro Rd	I-495 Exit 13	24.3	20.3	18.8	17.9	14.3	13.3	12.4	11.0	9.9	7.2	5.7	3.5	2.8	1.7	0	2.6	3.7	6.5	18.8
MD 4 (Pennsylvania Ave)	I-495 Exit 11	26.9	22.9	21.4	20.5	16.9	15.9	15.0	13.6	12.5	9.8	8.3	6.1	5.4	4.3	2.6	0	1.1	3.9	16.2
MD 337 (Suitland Pkwy)	I-495 Exit 9	28.3	24.3	22.8	21.8	18.3	17.3	16.3	14.9	13.8	11.2	9.6	7.5	6.8	5.7	4.0	1.4	0	2.7	15.0
MD 5 (Branch Ave)	I-495 Exit 7	30.5	26.5	24.9	24.0	20.5	19.4	18.5	17.1	16.0	13.4	11.8	9.7	9.0	7.9	6.1	3.6	2.2	0	12.3
MD 414 (St Barnabas Rd)	I-495 Exit 4	33.5	29.5	28.0	27.1	23.5	22.5	21.5	20.1	19.1	16.4	14.8	12.7	12.0	10.9	9.2	6.6	5.2	3.0	0

Travel Time Matrix - Alternative 9M - ETL (AM Peak)

Unit: Minute

From \ To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	0.9	2.8	3.7	4.8	6.0	6.9	7.3	6.6	6.6	12.9	11.9	11.2	9.8	9.3	8.0	N/A	6.6	7.0	9.7
Shady Grove Rd	I-270 Exit 8	0.9	0	1.9	2.9	3.9	5.1	6.0	6.5	5.7	5.7	12.0	11.0	10.4	9.0	8.5	7.2	N/A	5.7	6.1	8.8
MD 28 (W Montgomery Ave)	I-270 Exit 6	2.7	1.9	0	1.0	2.0	3.2	4.1	4.5	3.8	3.8	10.1	9.1	8.4	7.0	6.5	5.3	N/A	3.8	4.2	6.9
MD 189 (Falls Rd)	I-270 Exit 5	3.5	2.7	0.8	0	1.1	2.3	3.1	3.6	2.8	2.8	9.1	8.1	7.5	6.1	5.6	4.3	N/A	2.8	3.3	6.0
Montrose Rd	I-270 Exit 4	4.8	3.9	2.0	1.2	0	1.2	2.1	2.5	1.7	1.7	8.1	7.1	6.4	5.0	4.5	3.2	N/A	1.7	2.2	4.9
Split	I-270	6.0	5.1	3.3	2.4	1.2	0	0.9	1.3	0.5	0.5	6.9	5.9	5.2	3.8	3.3	2.0	N/A	0.5	1.0	3.7
Westlake Terrace	I-270 W Spur	6.8	6.0	4.1	3.3	2.1	0.9	0	0.4	N/A	N/A	6.0	5.0	4.4	2.9	2.4	1.2	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	7.2	6.4	4.5	3.7	2.5	1.2	0.4	0	N/A	N/A	5.6	4.5	3.9	2.5	2.0	0.7	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	6.0	5.1	3.3	2.4	1.2	0.0	N/A	N/A	0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.5	3.1
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	6.0	5.1	3.3	2.4	1.2	0.0	N/A	N/A	0.0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.5	3.1
VA 193 (Georgetown Pike)	I-495 Exit 44	13.2	12.3	10.5	9.6	8.4	7.2	6.3	5.9	N/A	N/A	0	1.2	1.9	3.5	3.8	5.2	7.3	8.1	8.6	11.3
George Washington Memorial Pkwy	I-495 Exit 43	12.0	11.1	9.2	8.4	7.2	6.0	5.1	4.7	N/A	N/A	1.0	0	0.7	2.3	2.6	3.9	6.1	6.9	7.4	10.0
Clara Barton Pkwy	I-495 Exit 41	11.3	10.4	8.5	7.7	6.5	5.3	4.4	4.0	N/A	N/A	1.6	0.6	0	1.6	1.9	3.2	5.4	6.2	6.7	9.3
Cabin John Pkwy	I-495 Exit 40	9.6	8.8	6.9	6.1	4.9	3.6	2.8	2.4	N/A	N/A	3.1	2.0	1.4	0	0.3	1.6	3.8	4.6	5.0	7.7
MD 190 (River Rd)	I-495 Exit 39	9.3	8.5	6.6	5.8	4.6	3.4	2.5	2.1	N/A	N/A	3.6	2.5	1.9	0.5	0	1.3	3.5	4.3	4.7	7.4
I-270 West Spur	I-495 Exit 38	8.0	7.2	5.3	4.5	3.3	2.0	1.2	0.8	N/A	N/A	4.8	3.8	3.2	1.8	1.3	0	2.1	3.0	3.4	6.1
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.2	14.2	13.5	12.1	11.6	10.3	0	0.8	1.3	4.0
I-270 East Spur	I-495 Exit 35	6.0	5.1	3.3	2.4	1.2	0.0	N/A	N/A	0.0	0.0	21.7	20.7	20.1	18.7	18.2	16.9	6.5	0	0.5	3.1
MD 355 (Rockville Pike)	I-495 Exit 34	7.5	6.7	4.8	4.0	2.8	1.5	N/A	N/A	1.5	1.5	23.3	22.3	21.6	20.2	19.7	18.4	8.1	1.5	0	2.7
MD 185 (Connecticut Ave)	I-495 Exit 33	10.8	9.9	8.1	7.2	6.0	4.8	N/A	N/A	4.8	4.8	26.5	25.5	24.9	23.5	23.0	21.7	11.3	4.8	3.3	0
MD 97 (Georgia Ave)	I-495 Exit 31	15.0	14.2	12.3	11.5	10.3	9.1	N/A	N/A	9.1	9.1	30.8	29.8	29.1	27.7	27.2	25.9	15.6	9.1	7.5	4.2
US 29 (Colesville Rd)	I-495 Exit 30	15.9	15.1	13.2	12.4	11.2	9.9	N/A	N/A	9.9	9.9	31.7	30.6	30.0	28.6	28.1	26.8	16.5	9.9	8.4	5.1
MD 193 (University Blvd E)	I-495 Exit 29	18.9	18.1	16.2	15.4	14.2	12.9	N/A	N/A	12.9	12.9	34.6	33.6	33.0	31.6	31.1	29.8	19.5	12.9	11.4	8.1
MD 650 (New Hampshire Ave)	I-495 Exit 28	21.2	20.3	18.5	17.6	16.4	15.2	N/A	N/A	15.2	15.2	36.9	35.9	35.3	33.9	33.4	32.1	21.7	15.2	13.7	10.4
I-95	I-495 Exit 27	24.0	23.1	21.3	20.4	19.2	18.0	N/A	N/A	18.0	18.0	39.7	38.7	38.1	36.7	36.2	34.9	24.5	18.0	16.5	13.2
US 1 (Baltimore Ave)	I-495 Exit 25	24.9	24.1	22.2	21.4	20.2	19.0	N/A	N/A	19.0	19.0	40.7	39.7	39.0	37.6	37.1	35.8	25.5	19.0	17.4	14.2
Greenbelt Metro Station	I-495 Exit 24	25.8	24.9	23.1	22.3	21.0	19.8	N/A	N/A	19.8	19.8	41.5	40.5	39.9	38.5	38.0	36.7	26.4	19.8	18.3	15.0
MD 201 (Kenilworth Ave)	I-495 Exit 23	27.0	26.1	24.3	23.5	22.2	21.0	N/A	N/A	21.0	21.0	42.7	41.7	41.1	39.7	39.2	37.9	27.6	21.0	19.5	16.2
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	27.9	27.0	25.2	24.4	23.2	21.9	N/A	N/A	21.9	21.9	43.6	42.6	42.0	40.6	40.1	38.8	28.5	21.9	20.4	17.1
MD 450 (Annapolis Rd)	I-495 Exit 20	30.3	29.4	27.6	26.8	25.5	24.3	N/A	N/A	24.3	24.3	46.0	45.0	44.4	43.0	42.5	41.2	30.9	24.3	22.8	19.5
US 50 (John Hanson Hwy)	I-495 Exit 19	31.7	30.9	29.0	28.2	27.0	25.8	N/A	N/A	25.8	25.8	47.5	46.5	45.8	44.4	43.9	42.6	32.3	25.8	24.2	20.9
MD 202 (Landover Rd)	I-495 Exit 17	33.7	32.8	31.0	30.1	28.9	27.7	N/A	N/A	27.7	27.7	49.4	48.4	47.8	46.4	45.9	44.6	34.2	27.7	26.2	22.9
Arena Dr	I-495 Exit 16	34.3	33.5	31.6	30.8	29.6	28.4	N/A	N/A	28.4	28.4	50.1	49.1	48.4	47.0	46.5	45.2	34.9	28.4	26.8	23.6
MD 214 (Central Ave)	I-495 Exit 15	35.3	34.5	32.6	31.8	30.6	29.3	N/A	N/A	29.3	29.3	51.1	50.1	49.4	48.0	47.5	46.2	35.9	29.3	27.8	24.5
Ritchie-Marlboro Rd	I-495 Exit 13	36.9	36.0	34.2	33.3	32.1	30.9	N/A	N/A	30.9	30.9	52.6	51.6	51.0	49.6	49.1	47.8	37.4	30.9	29.3	26.1
MD 4 (Pennsylvania Ave)	I-495 Exit 11	39.2	38.3	36.5	35.6	34.4	33.2	N/A	N/A	33.2	33.2	54.9	53.9	53.3	51.9	51.4	50.1	39.7	33.2	31.6	28.4
MD 337 (Suitland Pkwy)	I-495 Exit 9	40.3	39.5	37.6	36.8	35.6	34.4	N/A	N/A	34.4	34.4	56.1	55.1	54.4	53.0	52.5	51.2	40.9	34.4	32.8	29.6
MD 5 (Branch Ave)	I-495 Exit 7	42.2	41.3	39.5	38.6	37.4	36.2	N/A	N/A	36.2	36.2	57.9	56.9	56.3	54.9	54.4	53.1	42.7	36.2	34.6	31.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	45.1	44.2	42.3	41.5	40.3	39.1	N/A	N/A	39.1	39.1	60.8	59.8	59.1	57.7	57.2	56.0	45.6	39.1	37.5	34.3

Unit: Minute

From \ To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	13.5	15.0	15.8	19.6	21.2	22.1	22.9	24.2	25.0	27.2	28.4	30.3	30.9	32.0	33.6	35.8	36.9	38.9	47.1
Shady Grove Rd	12.6	14.1	14.9	18.7	20.3	21.3	22.0	23.3	24.2	26.3	27.6	29.4	30.1	31.1	32.8	35.0	36.0	38.0	46.2
MD 28 (W Montgomery Ave)	10.7	12.2	13.0	16.8	18.4	19.4	20.1	21.4	22.3	24.4	25.7	27.5	28.1	29.2	30.8	33.1	34.1	36.1	44.3
MD 189 (Falls Rd)	9.7	11.2	12.1	15.8	17.4	18.4	19.1	20.5	21.3	23.4	24.7	26.6	27.2	28.3	29.9	32.1	33.2	35.2	43.3
Montrose Rd	8.7	10.2	11.0	14.8	16.3	17.3	18.1	19.4	20.2	22.4	23.6	25.5	26.1	27.2	28.8	31.0	32.1	34.1	42.3
Split	7.5	9.0	9.8	13.6	15.2	16.1	16.9	18.2	19.0	21.2	22.4	24.3	24.9	26.0	27.6	29.8	30.9	32.9	41.1
Westlake Terrace	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	6.9	8.4	9.2	13.0	14.6	15.6	16.3	17.6	18.5	20.6	21.9	23.8	24.4	25.4	27.1	29.3	30.4	32.3	40.5
MD 187 (Old Georgetown Rd)	6.9	8.4	9.2	13.0	14.6	15.6	16.3	17.6	18.5	20.6	21.9	23.8	24.4	25.4	27.1	29.3	30.4	32.3	40.5
VA 193 (Georgetown Pike)	15.0	16.5	17.4	21.1	22.7	23.7	24.4	25.8	26.6	28.7	30.0	31.9	32.5	33.6	35.2	37.4	38.5	40.5	48.6
George Washington Memorial Pkwy	13.8	15.3	16.2	19.9	21.5	22.5	23.2	24.6	25.4	27.5	28.8	30.7	31.3	32.3	34.0	36.2	37.3	39.2	47.4
Clara Barton Pkwy	13.1	14.6	15.5	19.2	20.8	21.8	22.5	23.9	24.7	26.8	28.1	30.0	30.6	31.7	33.3	35.5	36.6	38.6	46.7
Cabin John Pkwy	11.5	13.0	13.8	17.6	19.2	20.2	20.9	22.2	23.1	25.2	26.5	28.3	29.0	30.0	31.6	33.9	34.9	36.9	45.1
MD 190 (River Rd)	11.2	12.7	13.5	17.3	18.9	19.9	20.6	21.9	22.8	24.9	26.2	28.0	28.7	29.7	31.4	33.6	34.6	36.6	44.8
I-270 West Spur	9.9	11.4	12.2	16.0	17.6	18.5	19.3	20.6	21.5	23.6	24.9	26.7	27.3	28.4	30.0	32.2	33.3	35.3	43.5
MD 187 (Old Georgetown Rd)	7.7	9.2	10.1	13.8	15.4	16.4	17.1	18.5	19.3	21.4	22.7	24.6	25.2	26.3	27.9	30.1	31.2	33.2	41.3
I-270 East Spur	6.9	8.4	9.2	13.0	14.6	15.6	16.3	17.6	18.5	20.6	21.9	23.8	24.4	25.4	27.1	29.3	30.4	32.3	40.5
MD 355 (Rockville Pike)	6.5	8.0	8.8	12.6	14.1	15.1	15.9	17.2	18.0	20.2	21.4	23.3	23.9	25.0	26.6	28.8	29.9	31.9	40.1
MD 185 (Connecticut Ave)	3.8	5.3	6.1	9.9	11.5	12.4	13.2	14.5	15.4	17.5	18.8	20.6	21.2	22.3	23.9	26.1	27.2	29.2	37.4
MD 97 (Georgia Ave)	0	1.5	2.3	6.1	7.7	8.7	9.4	10.7	11.6	13.7	15.0	16.8	17.5	18.5	20.1	22.4	23.4	25.4	33.6
US 29 (Colesville Rd)	1.9	0	0.8	4.6	6.2	7.2	7.9	9.2	10.1	12.2	13.5	15.3	16.0	17.0	18.7	20.9	21.9	23.9	32.1
MD 193 (University Blvd E)	4.9	0.9	0	3.8	5.4	6.3	7.1	8.4	9.2	11.4	12.6	14.5	15.1	16.2	17.8	20.0	21.1	23.1	31.3
MD 650 (New Hampshire Ave)	7.1	3.2	1.6	0	1.6	2.6	3.3	4.6	5.5	7.6	8.9	10.7	11.4	12.4	14.1	16.3	17.3	19.3	27.5
I-95	9.9	6.0	4.4	3.5	0	1.0	1.7	3.0	3.9	6.0	7.3	9.2	9.8	10.8	12.5	14.7	15.7	17.7	25.9
US 1 (Baltimore Ave)	10.9	6.9	5.4	4.5	1.0	0	0.7	2.1	2.9	5.0	6.3	8.2	8.8	9.9	11.5	13.7	14.8	16.8	24.9
Greenbelt Metro Station	11.8	7.8	6.2	5.3	1.8	0.9	0	1.3	2.2	4.3	5.6	7.4	8.1	9.1	10.8	13.0	14.0	16.0	24.2
MD 201 (Kenilworth Ave)	12.9	9.0	7.4	6.5	3.0	2.1	1.2	0	0.8	3.0	4.2	6.1	6.7	7.8	9.4	11.6	12.7	14.7	22.9
MD 295 (Baltimore-Washington Pkwy)	13.9	9.9	8.4	7.4	3.9	3.0	2.1	0.9	0	2.1	3.4	5.3	5.9	7.0	8.6	10.8	11.9	13.8	22.0
MD 450 (Annapolis Rd)	16.2	12.3	10.7	9.8	6.3	5.4	4.5	3.3	2.4	0	1.3	3.1	3.7	4.8	6.4	8.7	9.7	11.7	19.9
US 50 (John Hanson Hwy)	17.7	13.7	12.2	11.3	7.7	6.8	5.9	4.7	3.8	1.4	0	1.9	2.5	3.6	5.2	7.4	8.5	10.5	18.6
MD 202 (Landover Rd)	19.6	15.7	14.1	13.2	9.7	8.8	7.9	6.7	5.8	3.4	2.0	0	0.6	1.7	3.3	5.5	6.6	8.6	16.8
Arena Dr	20.3	16.3	14.8	13.9	10.4	9.4	8.5	7.3	6.4	4.0	2.6	0.7	0	1.1	2.7	4.9	6.0	8.0	16.1
MD 214 (Central Ave)	21.3	17.3	15.8	14.8	11.3	10.4	9.5	8.3	7.4	5.0	3.6	1.6	1.0	0	1.6	3.8	4.9	6.9	15.1
Ritchie-Marlboro Rd	22.8	18.9	17.3	16.4	12.9	11.9	11.1	9.9	9.0	6.6	5.1	3.2	2.5	1.5	0	2.2	3.3	5.3	13.5
MD 4 (Pennsylvania Ave)	25.1	21.2	19.6	18.7	15.2	14.2	13.4	12.2	11.3	8.9	7.4	5.5	4.8	3.9	2.3	0	1.1	3.1	11.2
MD 337 (Suitland Pkwy)	26.3	22.3	20.8	19.9	16.3	15.4	14.5	13.3	12.4	10.0	8.6	6.6	6.0	5.0	3.5	1.2	0	2.0	10.2
MD 5 (Branch Ave)	28.1	24.2	22.6	21.7	18.2	17.2	16.4	15.2	14.3	11.9	10.4	8.5	7.8	6.8	5.3	3.0	1.8	0	8.2
MD 414 (St Barnabas Rd)	31.0	27.0	25.5	24.6	21.1	20.1	19.3	18.1	17.1	14.8	13.3	11.4	10.7	9.7	8.2	5.9	4.7	2.9	0

Travel Time Matrix - Alternative 9M - GP Lane (PM Peak)

Unit: Minute

From	To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	0.9	3.0	5.6	13.3	30.5	31.3	31.8	37.1	47.5	38.3	37.1	36.4	34.6	34.1	32.6	N/A	61.0	63.9	72.0
Shady Grove Rd	I-270 Exit 8	2.2	0	2.1	4.7	12.4	29.6	30.4	30.9	36.2	46.6	37.4	36.2	35.5	33.7	33.2	31.7	N/A	60.1	63.0	71.1
MD 28 (W Montgomery Ave)	I-270 Exit 6	4.7	2.5	0	2.5	10.3	27.4	28.2	28.7	34.1	44.4	35.3	34.1	33.3	31.6	31.0	29.5	N/A	57.9	60.9	69.0
MD 189 (Falls Rd)	I-270 Exit 5	5.7	3.5	1.0	0	7.7	24.9	25.7	26.2	31.5	41.9	32.7	31.5	30.8	29.1	28.5	27.0	N/A	55.4	58.3	66.4
Montrose Rd	I-270 Exit 4	7.2	5.0	2.5	1.5	0	17.2	18.0	18.4	23.8	34.2	25.0	23.8	23.1	21.3	20.8	19.2	N/A	47.6	50.6	58.7
Split	I-270	8.8	6.6	4.1	3.0	1.5	0	0.8	1.3	6.6	17.0	7.8	6.7	5.9	4.2	3.6	2.1	N/A	30.5	33.4	41.6
Westlake Terrace	I-270 W Spur	9.7	7.5	5.0	4.0	2.5	1.0	0	0.5	N/A	N/A	7.0	5.8	5.1	3.4	2.8	1.3	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	10.2	8.0	5.5	4.5	3.0	1.4	0.5	0	N/A	N/A	6.6	5.4	4.6	2.9	2.3	0.8	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	9.4	7.2	4.7	3.6	2.2	0.6	N/A	N/A	0	10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23.8	26.8	34.9
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	10.1	7.9	5.4	4.4	2.9	1.4	N/A	N/A	0.7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.5	16.4	24.6
VA 193 (Georgetown Pike)	I-495 Exit 44	26.5	24.3	21.8	20.8	19.3	17.7	16.8	16.3	N/A	N/A	0	1.3	2.4	6.9	8.3	15.3	31.6	36.6	39.5	47.7
George Washington Memorial Pkwy	I-495 Exit 43	25.2	23.0	20.5	19.4	18.0	16.4	15.4	15.0	N/A	N/A	1.2	0	1.1	5.6	7.0	14.0	30.3	35.3	38.2	46.4
Clara Barton Pkwy	I-495 Exit 41	24.1	21.9	19.4	18.4	16.9	15.4	14.4	13.9	N/A	N/A	1.9	0.8	0	4.6	6.0	13.0	29.2	34.2	37.2	45.3
Cabin John Pkwy	I-495 Exit 40	19.6	17.4	14.9	13.8	12.3	10.8	9.8	9.4	N/A	N/A	3.7	2.5	1.7	0	1.4	8.4	24.7	29.7	32.6	40.7
MD 190 (River Rd)	I-495 Exit 39	18.2	15.9	13.4	12.4	10.9	9.4	8.4	8.0	N/A	N/A	4.2	3.0	2.3	0.6	0	7.0	23.2	28.3	31.2	39.3
I-270 West Spur	I-495 Exit 38	11.2	8.9	6.4	5.4	3.9	2.4	1.4	1.0	N/A	N/A	5.8	4.6	3.8	2.1	1.5	0	16.2	21.3	24.2	32.3
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.8	6.6	5.8	4.1	3.5	2.0	0	5.0	8.0	16.1
I-270 East Spur	I-495 Exit 35	11.6	9.4	6.9	5.9	4.4	2.9	N/A	N/A	2.2	1.5	8.8	7.6	6.9	5.2	4.6	3.1	1.1	0	2.9	11.1
MD 355 (Rockville Pike)	I-495 Exit 34	11.9	9.7	7.2	6.2	4.7	3.2	N/A	N/A	2.5	1.8	9.1	7.9	7.2	5.5	4.9	3.4	1.4	0.3	0	8.1
MD 185 (Connecticut Ave)	I-495 Exit 33	13.6	11.4	8.9	7.9	6.4	4.9	N/A	N/A	4.3	3.5	10.9	9.7	8.9	7.2	6.6	5.1	3.1	2.0	1.7	0
MD 97 (Georgia Ave)	I-495 Exit 31	16.4	14.2	11.7	10.7	9.2	7.7	N/A	N/A	7.0	6.3	13.6	12.4	11.7	10.0	9.4	7.9	5.9	4.8	4.5	2.8
US 29 (Colesville Rd)	I-495 Exit 30	17.5	15.2	12.7	11.7	10.2	8.7	N/A	N/A	8.1	7.3	14.7	13.5	12.7	11.0	10.4	8.9	6.9	5.8	5.5	3.8
MD 193 (University Blvd E)	I-495 Exit 29	19.4	17.2	14.7	13.7	12.2	10.6	N/A	N/A	10.0	9.3	16.6	15.4	14.7	12.9	12.4	10.8	8.8	7.8	7.5	5.8
MD 650 (New Hampshire Ave)	I-495 Exit 28	21.7	19.5	17.0	16.0	14.5	12.9	N/A	N/A	12.3	11.6	18.9	17.7	17.0	15.2	14.7	13.2	11.1	10.1	9.8	8.1
I-95	I-495 Exit 27	22.8	20.6	18.1	17.1	15.6	14.1	N/A	N/A	13.5	12.7	20.1	18.9	18.1	16.4	15.8	14.3	12.3	11.2	10.9	9.2
US 1 (Baltimore Ave)	I-495 Exit 25	23.9	21.7	19.2	18.2	16.7	15.1	N/A	N/A	14.5	13.8	21.1	19.9	19.2	17.4	16.9	15.4	13.3	12.3	12.0	10.3
Greenbelt Metro Station	I-495 Exit 24	24.9	22.7	20.2	19.2	17.7	16.2	N/A	N/A	15.5	14.8	22.1	21.0	20.2	18.5	17.9	16.4	14.4	13.3	13.0	11.3
MD 201 (Kenilworth Ave)	I-495 Exit 23	26.5	24.3	21.8	20.7	19.2	17.7	N/A	N/A	17.1	16.3	23.7	22.5	21.7	20.0	19.4	17.9	15.9	14.8	14.5	12.8
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	27.6	25.4	22.9	21.8	20.4	18.8	N/A	N/A	18.2	17.5	24.8	23.6	22.8	21.1	20.6	19.0	17.0	16.0	15.7	13.9
MD 450 (Annapolis Rd)	I-495 Exit 20	30.3	28.1	25.6	24.5	23.0	21.5	N/A	N/A	20.9	20.2	27.5	26.3	25.5	23.8	23.3	21.7	19.7	18.7	18.4	16.6
US 50 (John Hanson Hwy)	I-495 Exit 19	31.9	29.7	27.2	26.2	24.7	23.1	N/A	N/A	22.5	21.8	29.1	27.9	27.2	25.4	24.9	23.3	21.3	20.3	20.0	18.2
MD 202 (Landover Rd)	I-495 Exit 17	34.3	32.0	29.5	28.5	27.0	25.5	N/A	N/A	24.9	24.1	31.5	30.3	29.5	27.8	27.2	25.7	23.7	22.6	22.3	20.6
Arena Dr	I-495 Exit 16	35.0	32.8	30.3	29.3	27.8	26.3	N/A	N/A	25.7	24.9	32.3	31.1	30.3	28.6	28.0	26.5	24.5	23.4	23.1	21.4
MD 214 (Central Ave)	I-495 Exit 15	36.2	34.0	31.5	30.5	29.0	27.5	N/A	N/A	26.9	26.1	33.4	32.3	31.5	29.8	29.2	27.7	25.7	24.6	24.3	22.6
Ritchie-Marlboro Rd	I-495 Exit 13	38.1	35.9	33.4	32.4	30.9	29.3	N/A	N/A	28.7	28.0	35.3	34.1	33.4	31.7	31.1	29.6	27.6	26.5	26.2	24.5
MD 4 (Pennsylvania Ave)	I-495 Exit 11	40.9	38.7	36.2	35.2	33.7	32.2	N/A	N/A	31.5	30.8	38.1	36.9	36.2	34.5	33.9	32.4	30.4	29.3	29.0	27.3
MD 337 (Suitland Pkwy)	I-495 Exit 9	42.8	40.6	38.1	37.1	35.6	34.0	N/A	N/A	33.4	32.7	40.0	38.8	38.1	36.3	35.8	34.2	32.2	31.2	30.9	29.2
MD 5 (Branch Ave)	I-495 Exit 7	45.0	42.8	40.3	39.3	37.8	36.3	N/A	N/A	35.6	34.9	42.2	41.0	40.3	38.6	38.0	36.5	34.5	33.4	33.1	31.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	48.1	45.9	43.4	42.4	40.9	39.3	N/A	N/A	38.7	38.0	45.3	44.1	43.4	41.6	41.1	39.5	37.5	36.5	36.2	34.4

Unit: Minute

From	To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	I-270 Exit 9	79.4	84.0	86.8	89.9	91.7	92.9	93.8	95.5	96.5	99.2	100.7	103.0	103.8	105.2	107.1	109.8	111.0	113.0	115.4
Shady Grove Rd	I-270 Exit 8	78.5	83.1	85.9	89.0	90.8	92.0	92.9	94.6	95.6	98.3	99.8	102.1	102.9	104.3	106.2	108.9	110.1	112.1	114.5
MD 28 (W Montgomery Ave)	I-270 Exit 6	76.4	81.0	83.8	86.8	88.7	89.8	90.8	92.4	93.5	96.1	97.7	100.0	100.7	102.1	104.0	106.7	107.9	109.9	112.3
MD 189 (Falls Rd)	I-270 Exit 5	73.8	78.4	81.3	84.3	86.1	87.3	88.2	89.9	91.0	93.6	95.2	97.4	98.2	99.6	101.5	104.2	105.4	107.4	109.8
Montrose Rd	I-270 Exit 4	66.1	70.7	73.5	76.6	78.4	79.6	80.5	82.1	83.2	85.9	87.4	89.7	90.5	91.8	93.8	96.5	97.7	99.7	102.1
Split	I-270	48.9	53.6	56.4	59.4	61.2	62.4	63.3	65.0	66.1	68.7	70.3	72.6	73.3	74.7	76.6	79.3	80.5	82.5	84.9
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	42.3	46.9	49.7	52.8	54.6	55.8	56.7	58.3	59.4	62.1	63.6	65.9	66.7	68.0	70.0	72.7	73.9	75.9	78.3
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	31.9	36.6	39.4	42.4	44.2	45.4	46.3	48.0	49.1	51.7	53.3	55.6	56.3	57.7	59.6	62.3	63.5	65.5	67.9
VA 193 (Georgetown Pike)	I-495 Exit 44	55.0	59.7	62.5	65.5	67.3	68.5	69.4	71.1	72.2	74.8	76.4	78.7	79.4	80.8	82.7	85.4	86.6	88.6	91.0
George Washington Memorial Pkwy	I-495 Exit 43	53.7	58.4	61.2	64.2	66.0	67.2	68.1	69.8	70.9	73.5	75.1	77.4	78.1	79.5	81.4	84.1	85.3	87.3	89.7
Clara Barton Pkwy	I-495 Exit 41	52.7	57.3	60.1	63.2	65.0	66.1	67.1	68.7	69.8	72.4	74.0	76.3	77.1	78.4	80.4	83.0	84.3	86.3	88.7
Cabin John Pkwy	I-495 Exit 40	48.1	52.7	55.6	58.6	60.4	61.6	62.5	64.2	65.3	67.9	69.5	71.7	72.5	73.9	75.8	78.5	79.7	81.7	84.1
MD 190 (River Rd)	I-495 Exit 39	46.7	51.3	54.1	57.2	59.0	60.2	61.1	62.8	63.8	66.5	68.0	70.3	71.1	72.5	74.4	77.1	78.3	80.3	82.7
I-270 West Spur	I-495 Exit 38	39.7	44.3	47.2	50.2	52.0	53.2	54.1	55.8	56.9	59.5	61.0	63.3	64.1	65.5	67.4	70.1	71.3	73.3	75.7
MD 187 (Old Georgetown Rd)	I-495 Exit 36	23.5	28.1	30.9	33.9	35.8	36.9	37.9	39.5	40.6	43.2	44.8	47.1	47.8	49.2	51.2	53.8	55.1	57.0	59.4
I-270 East Spur	I-495 Exit 35	18.4	23.1	25.9	28.9	30.8	31.9	32.9	34.5	35.6	38.2	39.8	42.1	42.8	44.2	46.1	48.8	50.0	52.0	54.4
MD 355 (Rockville Pike)	I-495 Exit 34	15.5	20.1	22.9	26.0	27.8	29.0	29.9	31.6	32.6	35.3	36.8	39.1	39.9	41.3	43.2	45.9	47.1	49.1	51.5
MD 185 (Connecticut Ave)	I-495 Exit 33	7.4	12.0	14.8	17.8	19.7	20.8	21.8	23.4	24.5	27.1	28.7	31.0	31.8	33.1	35.1	37.7	39.0	41.0	43.3
MD 97 (Georgia Ave)	I-495 Exit 31	0	4.6	7.4	10.5	12.3	13.5	14.4	16.1	17.1	19.8	21.3	23.6	24.4	25.8	27.7	30.4	31.6	33.6	36.0
US 29 (Colesville Rd)	I-495 Exit 30	1.7	0	2.8	5.9	7.7	8.8	9.8	11.4	12.5	15.1	16.7	19.0	19.8	21.1	23.1	25.7	27.0	29.0	31.4
MD 193 (University Blvd E)	I-495 Exit 29	3.6	1.2	0	3.0	4.9	6.0	7.0	8.6	9.7	12.3	13.9	16.2	16.9	18.3	20.2	22.9	24.2	26.1	28.5
MD 650 (New Hampshire Ave)	I-495 Exit 28	5.9	3.5	1.9	0	1.8	3.0	3.9	5.6	6.7	9.3	10.9	13.1	13.9	15.3	17.2	19.9	21.1	23.1	25.5
I-95	I-495 Exit 27	7.1	4.6	3.1	1.8	0	1.2	2.1	3.8	4.8	7.5	9.0	11.3	12.1	13.5	15.4	18.1	19.3	21.3	23.7
US 1 (Baltimore Ave)	I-495 Exit 25	8.1	5.7	4.1	2.9	1.1	0	0.9	2.6	3.7	6.3	7.9	10.2	10.9	12.3	14.2	16.9	18.1	20.1	22.5
Greenbelt Metro Station	I-495 Exit 24	9.2	6.7	5.1	3.9	2.1	1.0	0	1.7	2.7	5.4	6.9	9.2	10.0	11.4	13.3	16.0	17.2	19.2	21.6
MD 201 (Kenilworth Ave)	I-495 Exit 23	10.7	8.3	6.7	5.5	3.6	2.6	1.5	0	1.1	3.7	5.3	7.6	8.3	9.7	11.6	14.3	15.5	17.5	19.9
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	11.8	9.4	7.8	6.6	4.7	3.7	2.6	1.1	0	2.6	4.2	6.5	7.2	8.6	10.6	13.2	14.5	16.4	18.8
MD 450 (Annapolis Rd)	I-495 Exit 20	14.5	12.1	10.5	9.3	7.4	6.4	5.3	3.8	2.7	0	1.6	3.9	4.6	6.0	7.9	10.6	11.8	13.8	16.2
US 50 (John Hanson Hwy)	I-495 Exit 19	16.1	13.7	12.1	10.9	9.0	8.0	7.0	5.4	4.3	1.6	0	2.3	3.0	4.4	6.4	9.0	10.3	12.2	14.6
MD 202 (Landover Rd)	I-495 Exit 17	18.5	16.0	14.5	13.3	11.4	10.4	9.3	7.8	6.7	4.0	2.4	0	0.8	2.1	4.1	6.7	8.0	10.0	12.4
Arena Dr	I-495 Exit 16	19.3	16.8	15.3	14.0	12.2	11.1	10.1	8.6	7.5	4.8	3.2	0.8	0	1.4	3.3	6.0	7.2	9.2	11.6
MD 214 (Central Ave)	I-495 Exit 15	20.5	18.0	16.5	15.2	13.4	12.3	11.3	9.8	8.7	6.0	4.3	2.0	1.2	0	1.9	4.6	5.8	7.8	10.2
Ritchie-Marlboro Rd	I-495 Exit 13	22.3	19.9	18.3	17.1	15.3	14.2	13.2	11.6	10.5	7.8	6.2	3.9	3.1	1.9	0	2.7	3.9	5.9	8.3
MD 4 (Pennsylvania Ave)	I-495 Exit 11	25.1	22.7	21.1	19.9	18.1	17.0	16.0	14.5	13.3	10.6	9.0	6.7	5.9	4.7	2.8	0	1.2	3.2	5.6
MD 337 (Suitland Pkwy)	I-495 Exit 9	27.0	24.6	23.0	21.8	19.9	18.9	17.9	16.3	15.2	12.5	10.9	8.5	7.7	6.6	4.7	1.9	0	2.0	4.4
MD 5 (Branch Ave)	I-495 Exit 7	29.3	26.8	25.2	24.0	22.2	21.1	20.1	18.6	17.4	14.8	13.1	10.8	10.0	8.8	6.9	4.1	2.2	0	2.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	32.3	29.9	28.3	27.1	25.2	24.2	23.2	21.6	20.5	17.8	16.2	13.8	13.0	11.8	10.0	7.2	5.3	3.1	0

Travel Time Matrix - Alternative 9M - ETL (PM Peak)

Unit: Minute

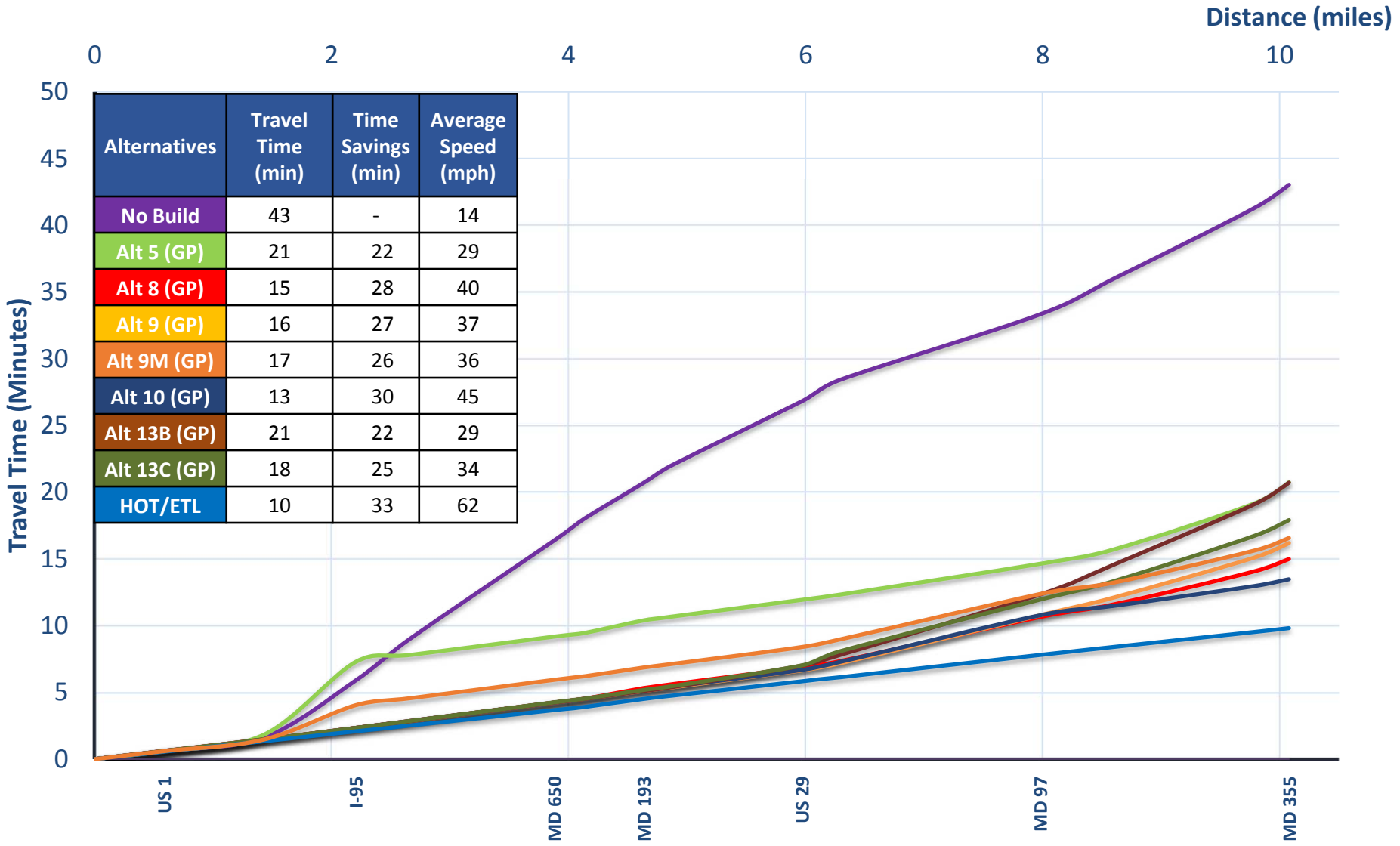
From	To	I-270 Exit 9	I-270 Exit 8	I-270 Exit 6	I-270 Exit 5	I-270 Exit 4	I-270 Split	Westlake Terr	I-270 Exit 1	I-270 Exit 1B	I-270 Exit 1A	I-495 Exit 44	I-495 Exit 43	I-495 Exit 41	I-495 Exit 40	I-495 Exit 39	I-495 Exit 38	I-495 Exit 36	I-495 Exit 35	I-495 Exit 34	I-495 Exit 33
I-370	I-270 Exit 9	0	0.9	2.8	3.7	4.8	6.0	6.8	7.3	6.5	6.5	12.8	11.8	11.2	9.8	9.3	8.0	N/A	6.5	9.5	17.6
Shady Grove Rd	I-270 Exit 8	1.5	0	1.9	2.9	3.9	5.1	6.0	6.4	5.7	5.7	11.9	10.9	10.3	8.9	8.4	7.1	N/A	5.7	8.6	16.7
MD 28 (W Montgomery Ave)	I-270 Exit 6	3.4	1.9	0	0.9	2.0	3.2	4.1	4.5	3.8	3.8	10.0	9.0	8.4	7.0	6.5	5.2	N/A	3.8	6.7	14.8
MD 189 (Falls Rd)	I-270 Exit 5	4.2	2.7	0.8	0	1.0	2.3	3.1	3.6	2.8	2.8	9.1	8.1	7.4	6.0	5.6	4.3	N/A	2.8	5.8	13.9
Montrose Rd	I-270 Exit 4	5.5	3.9	2.1	1.2	0	1.2	2.1	2.5	1.8	1.8	8.1	7.0	6.4	5.0	4.5	3.2	N/A	1.8	4.7	12.8
Split	I-270	6.7	5.2	3.3	2.5	1.2	0	0.9	1.3	0.5	0.5	6.8	5.8	5.2	3.8	3.3	2.0	N/A	0.5	3.5	11.6
Westlake Terrace	I-270 W Spur	7.6	6.0	4.2	3.3	2.1	0.9	0	0.4	N/A	N/A	6.0	5.0	4.3	2.9	2.4	1.2	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	7.9	6.4	4.5	3.7	2.5	1.3	0.4	0	N/A	N/A	5.5	4.5	3.9	2.5	2.0	0.7	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	6.7	5.2	3.3	2.5	1.2	0.0	N/A	N/A	0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	2.9	11.1
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	6.7	5.2	3.3	2.5	1.2	0.0	N/A	N/A	0.0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	2.9	11.1
VA 193 (Georgetown Pike)	I-495 Exit 44	15.5	14.0	12.2	11.3	10.1	8.9	8.0	7.6	N/A	N/A	0	1.2	1.9	3.6	3.9	6.8	23.1	28.1	31.0	39.2
George Washington Memorial Pkwy	I-495 Exit 43	14.4	12.9	11.0	10.2	8.9	7.7	6.8	6.5	N/A	N/A	1.0	0	0.7	2.4	2.7	5.7	21.9	26.9	29.9	38.0
Clara Barton Pkwy	I-495 Exit 41	13.7	12.2	10.3	9.5	8.2	7.0	6.1	5.7	N/A	N/A	1.6	0.6	0	1.7	2.0	5.0	21.2	26.2	29.2	37.3
Cabin John Pkwy	I-495 Exit 40	12.0	10.5	8.6	7.8	6.5	5.3	4.4	4.0	N/A	N/A	3.0	2.0	1.4	0	0.3	3.3	19.5	24.5	27.5	35.6
MD 190 (River Rd)	I-495 Exit 39	11.7	10.2	8.3	7.5	6.2	5.0	4.1	3.8	N/A	N/A	3.5	2.5	1.9	0.5	0	3.0	19.2	24.2	27.2	35.3
I-270 West Spur	I-495 Exit 38	8.7	7.2	5.3	4.5	3.3	2.0	1.2	0.8	N/A	N/A	4.8	3.8	3.2	1.8	1.3	0	16.2	21.3	24.2	32.3
MD 187 (Old Georgetown Rd)	I-495 Exit 36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.8	5.8	5.2	3.8	3.3	2.0	0	5.0	8.0	16.1
I-270 East Spur	I-495 Exit 35	6.7	5.2	3.3	2.5	1.2	0.0	N/A	N/A	0.0	0.0	7.9	6.9	6.2	4.8	4.4	3.1	1.1	0	2.9	11.1
MD 355 (Rockville Pike)	I-495 Exit 34	7.0	5.5	3.6	2.8	1.5	0.3	N/A	N/A	0.3	0.3	8.2	7.2	6.5	5.1	4.7	3.4	1.4	0.3	0	8.1
MD 185 (Connecticut Ave)	I-495 Exit 33	8.7	7.2	5.3	4.5	3.3	2.0	N/A	N/A	2.0	2.0	9.9	8.9	8.3	6.9	6.4	5.1	3.1	2.0	1.7	0
MD 97 (Georgia Ave)	I-495 Exit 31	11.5	10.0	8.1	7.3	6.0	4.8	N/A	N/A	4.8	4.8	12.7	11.7	11.0	9.6	9.2	7.9	5.9	4.8	4.5	2.8
US 29 (Colesville Rd)	I-495 Exit 30	12.5	11.0	9.1	8.3	7.1	5.8	N/A	N/A	5.8	5.8	13.7	12.7	12.1	10.7	10.2	8.9	6.9	5.8	5.5	3.8
MD 193 (University Blvd E)	I-495 Exit 29	14.5	12.9	11.1	10.2	9.0	7.8	N/A	N/A	7.8	7.8	15.7	14.7	14.0	12.6	12.1	10.8	8.8	7.8	7.5	5.8
MD 650 (New Hampshire Ave)	I-495 Exit 28	16.8	15.2	13.4	12.5	11.3	10.1	N/A	N/A	10.1	10.1	18.0	17.0	16.3	14.9	14.4	13.2	11.1	10.1	9.8	8.1
I-95	I-495 Exit 27	17.9	16.4	14.5	13.7	12.4	11.2	N/A	N/A	11.2	11.2	19.1	18.1	17.4	16.0	15.6	14.3	12.3	11.2	10.9	9.2
US 1 (Baltimore Ave)	I-495 Exit 25	18.8	17.3	15.4	14.6	13.4	12.2	N/A	N/A	12.2	12.2	20.0	19.0	18.4	17.0	16.5	15.2	13.2	12.2	11.8	10.1
Greenbelt Metro Station	I-495 Exit 24	19.7	18.2	16.3	15.5	14.2	13.0	N/A	N/A	13.0	13.0	20.9	19.9	19.3	17.9	17.4	16.1	14.1	13.0	12.7	11.0
MD 201 (Kenilworth Ave)	I-495 Exit 23	20.9	19.4	17.5	16.7	15.5	14.2	N/A	N/A	14.2	14.2	22.1	21.1	20.5	19.1	18.6	17.3	15.3	14.2	13.9	12.2
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	21.8	20.3	18.4	17.6	16.4	15.1	N/A	N/A	15.1	15.1	23.0	22.0	21.4	20.0	19.5	18.2	16.2	15.1	14.8	13.1
MD 450 (Annapolis Rd)	I-495 Exit 20	24.2	22.7	20.8	20.0	18.8	17.5	N/A	N/A	17.5	17.5	25.4	24.4	23.8	22.4	21.9	20.6	18.6	17.5	17.2	15.5
US 50 (John Hanson Hwy)	I-495 Exit 19	25.6	24.1	22.3	21.4	20.2	19.0	N/A	N/A	19.0	19.0	26.8	25.8	25.2	23.8	23.3	22.0	20.0	19.0	18.7	16.9
MD 202 (Landover Rd)	I-495 Exit 17	27.6	26.1	24.2	23.4	22.2	20.9	N/A	N/A	20.9	20.9	28.8	27.8	27.2	25.8	25.3	24.0	22.0	20.9	20.6	18.9
Arena Dr	I-495 Exit 16	28.3	26.7	24.9	24.0	22.8	21.6	N/A	N/A	21.6	21.6	29.5	28.5	27.8	26.4	25.9	24.7	22.6	21.6	21.3	19.6
MD 214 (Central Ave)	I-495 Exit 15	29.3	27.7	25.9	25.0	23.8	22.6	N/A	N/A	22.6	22.6	30.5	29.4	28.8	27.4	26.9	25.6	23.6	22.6	22.3	20.5
Ritchie-Marlboro Rd	I-495 Exit 13	30.8	29.3	27.4	26.6	25.3	24.1	N/A	N/A	24.1	24.1	32.0	31.0	30.4	28.9	28.5	27.2	25.2	24.1	23.8	22.1
MD 4 (Pennsylvania Ave)	I-495 Exit 11	33.1	31.6	29.7	28.9	27.7	26.4	N/A	N/A	26.4	26.4	34.3	33.3	32.7	31.3	30.8	29.5	27.5	26.4	26.1	24.4
MD 337 (Suitland Pkwy)	I-495 Exit 9	34.3	32.8	30.9	30.1	28.8	27.6	N/A	N/A	27.6	27.6	35.5	34.5	33.8	32.4	32.0	30.7	28.7	27.6	27.3	25.6
MD 5 (Branch Ave)	I-495 Exit 7	36.1	34.6	32.7	31.9	30.7	29.4	N/A	N/A	29.4	29.4	37.3	36.3	35.7	34.3	33.8	32.5	30.5	29.4	29.1	27.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	39.1	37.5	35.7	34.8	33.6	32.4	N/A	N/A	32.4	32.4	40.3	39.2	38.6	37.2	36.7	35.4	33.4	32.4	32.1	30.3

Unit: Minute

From	To	I-495 Exit 31	I-495 Exit 30	I-495 Exit 29	I-495 Exit 28	I-495 Exit 27	I-495 Exit 25	I-495 Exit 24	I-495 Exit 23	I-495 Exit 22	I-495 Exit 20	I-495 Exit 19	I-495 Exit 17	I-495 Exit 16	I-495 Exit 15	I-495 Exit 13	I-495 Exit 11	I-495 Exit 9	I-495 Exit 7	I-495 Exit 4
I-370	I-270 Exit 9	25.0	29.6	32.4	35.4	37.3	38.2	39.0	40.3	41.2	43.3	44.6	46.4	47.0	48.1	49.8	52.1	53.1	55.1	57.5
Shady Grove Rd	I-270 Exit 8	24.1	28.7	31.6	34.6	36.4	37.4	38.1	39.5	40.3	42.4	43.7	45.6	46.2	47.3	49.0	51.2	52.3	54.3	56.7
MD 28 (W Montgomery Ave)	I-270 Exit 6	22.2	26.8	29.6	32.7	34.5	35.5	36.2	37.5	38.4	40.5	41.8	43.7	44.3	45.3	47.1	49.3	50.4	52.4	54.7
MD 189 (Falls Rd)	I-270 Exit 5	21.3	25.9	28.7	31.7	33.6	34.5	35.3	36.6	37.5	39.6	40.9	42.7	43.3	44.4	46.1	48.3	49.4	51.4	53.8
Montrose Rd	I-270 Exit 4	20.2	24.8	27.7	30.7	32.5	33.5	34.2	35.6	36.4	38.5	39.8	41.7	42.3	43.4	45.1	47.3	48.4	50.4	52.8
Split	I-270	19.0	23.6	26.4	29.5	31.3	32.3	33.0	34.3	35.2	37.3	38.6	40.5	41.1	42.1	43.9	46.1	47.1	49.1	51.5
Westlake Terrace	I-270 W Spur	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Democracy Blvd	I-270 Exit 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rockledge Dr	I-270 Exit 1B	18.4	23.1	25.9	28.9	30.8	31.7	32.5	33.8	34.6	36.8	38.0	39.9	40.5	41.6	43.3	45.5	46.6	48.6	51.0
MD 187 (Old Georgetown Rd)	I-270 Exit 1A	18.4	23.1	25.9	28.9	30.8	31.7	32.5	33.8	34.6	36.8	38.0	39.9	40.5	41.6	43.3	45.5	46.6	48.6	51.0
VA 193 (Georgetown Pike)	I-495 Exit 44	46.5	51.2	54.0	57.0	58.8	59.8	60.5	61.9	62.7	64.9	66.1	68.0	68.6	69.7	71.4	73.6	74.7	76.7	79.1
George Washington Memorial Pkwy	I-495 Exit 43	45.4	50.0	52.8	55.9	57.7	58.7	59.4	60.7	61.6	63.7	65.0	66.8	67.5	68.5	70.3	72.5	73.5	75.5	77.9
Clara Barton Pkwy	I-495 Exit 41	44.7	49.3	52.1	55.2	57.0	58.0	58.7	60.0	60.9	63.0	64.3	66.1	66.7	67.8	69.5	71.8	72.8	74.8	77.2
Cabin John Pkwy	I-495 Exit 40	43.0	47.6	50.4	53.5	55.3	56.3	57.0	58.3	59.2	61.3	62.6	64.4	65.1	66.1	67.8	70.1	71.1	73.1	75.5
MD 190 (River Rd)	I-495 Exit 39	42.7	47.3	50.1	53.2	55.0	56.0	56.7	58.0	58.9	61.0	62.3	64.1	64.8	65.8	67.6	69.8	70.8	72.8	75.2
I-270 West Spur	I-495 Exit 38	39.7	44.3	47.2	50.2	52.0	53.0	53.7	55.1	55.9	58.0	59.3	61.2	61.8	62.9	64.6	66.8	67.9	69.9	72.3
MD 187 (Old Georgetown Rd)	I-495 Exit 36	23.5	28.1	30.9	33.9	35.8	36.7	37.5	38.8	39.7	41.8	43.1	44.9	45.5	46.6	48.3	50.5	51.6	53.6	56.0
I-270 East Spur	I-495 Exit 35	18.4	23.1	25.9	28.9	30.8	31.7	32.5	33.8	34.6	36.8	38.0	39.9	40.5	41.6	43.3	45.5	46.6	48.6	51.0
MD 355 (Rockville Pike)	I-495 Exit 34	15.5	20.1	22.9	26.0	27.8	28.8	29.5	30.9	31.7	33.8	35.1	37.0	37.6	38.6	40.4	42.6	43.7	45.7	48.1
MD 185 (Connecticut Ave)	I-495 Exit 33	7.4	12.0	14.8	17.8	19.7	20.6	21.4	22.7	23.6	25.7	27.0	28.8	29.4	30.5	32.2	34.5	35.5	37.5	39.9
MD 97 (Georgia Ave)	I-495 Exit 31	0	4.6	7.4	10.5	12.3	13.3	14.0	15.4	16.2	18.3	19.6	21.5	22.1	23.1	24.9	27.1	28.2	30.2	32.5
US 29 (Colesville Rd)	I-495 Exit 30	1.7	0	2.8	5.9	7.7	8.7	9.4	10.7	11.6	13.7	15.0	16.8	17.4	18.5	20.2	22.5	23.5	25.5	27.9
MD 193 (University Blvd E)	I-495 Exit 29	3.6	1.2	0	3.0	4.9	5.8	6.6	7.9	8.8	10.9	12.2	14.0	14.6	15.7	17.4	19.6	20.7	22.7	25.1
MD 650 (New Hampshire Ave)	I-495 Exit 28	5.9	3.5	1.9	0	1.8	2.8	3.5	4.9	5.7	7.9	9.1	11.0	11.6	12.7	14.4	16.6	17.7	19.7	22.1
I-95	I-495 Exit 27	7.0	4.6	3.0	1.8	0	1.0	1.7	3.0	3.9	6.0	7.3	9.1	9.8	10.8	12.6	14.8	15.8	17.8	20.2
US 1 (Baltimore Ave)	I-495 Exit 25	8.0	5.6	4.0	2.8	1.0	0	0.7	2.1	2.9	5.1	6.3	8.2	8.8	9.9	11.6	13.8	14.9	16.9	19.3
Greenbelt Metro Station	I-495 Exit 24	8.9	6.4	4.8	3.6	1.8	0.9	0	1.3	2.2	4.3	5.6	7.5	8.1	9.1	10.9	13.1	14.2	16.1	18.5
MD 201 (Kenilworth Ave)	I-495 Exit 23	10.1	7.6	6.1	4.8	3.0	2.1	1.2	0	0.9	3.0	4.3	6.1	6.7	7.8	9.5	11.7	12.8	14.8	17.2
MD 295 (Baltimore-Washington Pkwy)	I-495 Exit 22	11.0	8.5	7.0	5.7	3.9	3.0	2.1	0.9	0	2.1	3.4	5.3	5.9	6.9	8.7	10.9	12.0	14.0	16.3
MD 450 (Annapolis Rd)	I-495 Exit 20	13.4	10.9	9.4	8.1	6.3	5.4	4.5	3.3	2.4	0	1.3	3.1	3.7	4.8	6.5	8.8	9.8	11.8	14.2
US 50 (John Hanson Hwy)	I-495 Exit 19	14.8	12.4	10.8	9.6	7.8	6.8	5.9	4.7	3.8	1.4	0	1.9	2.5	3.5	5.3	7.5	8.6	10.6	12.9
MD 202 (Landover Rd)	I-495 Exit 17	16.8	14.3	12.8	11.5	9.7	8.8	7.9	6.7	5.8	3.4	2.0	0	0.6	1.7	3.4	5.6	6.7	8.7	11.1
Arena Dr	I-495 Exit 16	17.4	15.0	13.4	12.2	10.4	9.4	8.6	7.4	6.5	4.1	2.6	0.7	0	1.1	2.8	5.0	6.1	8.1	10.5
MD 214 (Central Ave)	I-495 Exit 15	18.4	16.0	14.4	13.2	11.4	10.4	9.6	8.3	7.4	5.0	3.6	1.6	1.0	0	1.7	3.9	5.0	7.0	9.4
Ritchie-Marlboro Rd	I-495 Exit 13	20.0	17.5	15.9	14.7	12.9	12.0	11.1	9.9	9.0	6.6	5.2	3.2	2.5	1.5	0	2.2	3.3	5.3	7.7
MD 4 (Pennsylvania Ave)	I-495 Exit 11	22.3	19.8	18.3	17.1	15.2	14.3	13.4	12.2	11.3	8.9	7.5	5.5	4.9	3.9	2.3	0	1.1	3.1	5.5
MD 337 (Suitland Pkwy)	I-495 Exit 9	23.5	21.0	19.4	18.2	16.4	15.4	14.6	13.4	12.5	10.1	8.6	6.7	6.0	5.0	3.5	1.2	0	2.0	4.4
MD 5 (Branch Ave)	I-495 Exit 7	25.3	22.9	21.3	20.1	18.3	17.3	16.4	15.2	14.3	11.9	10.5	8.5	7.9	6.9	5.3	3.0	1.8	0	2.4
MD 414 (St Barnabas Rd)	I-495 Exit 4	28.2	25.8	24.2	23.0	21.2	20.2	19.3	18.1	17.2	14.8	13.4	11.4	10.8	9.8	8.3	5.9	4.8	2.9	0

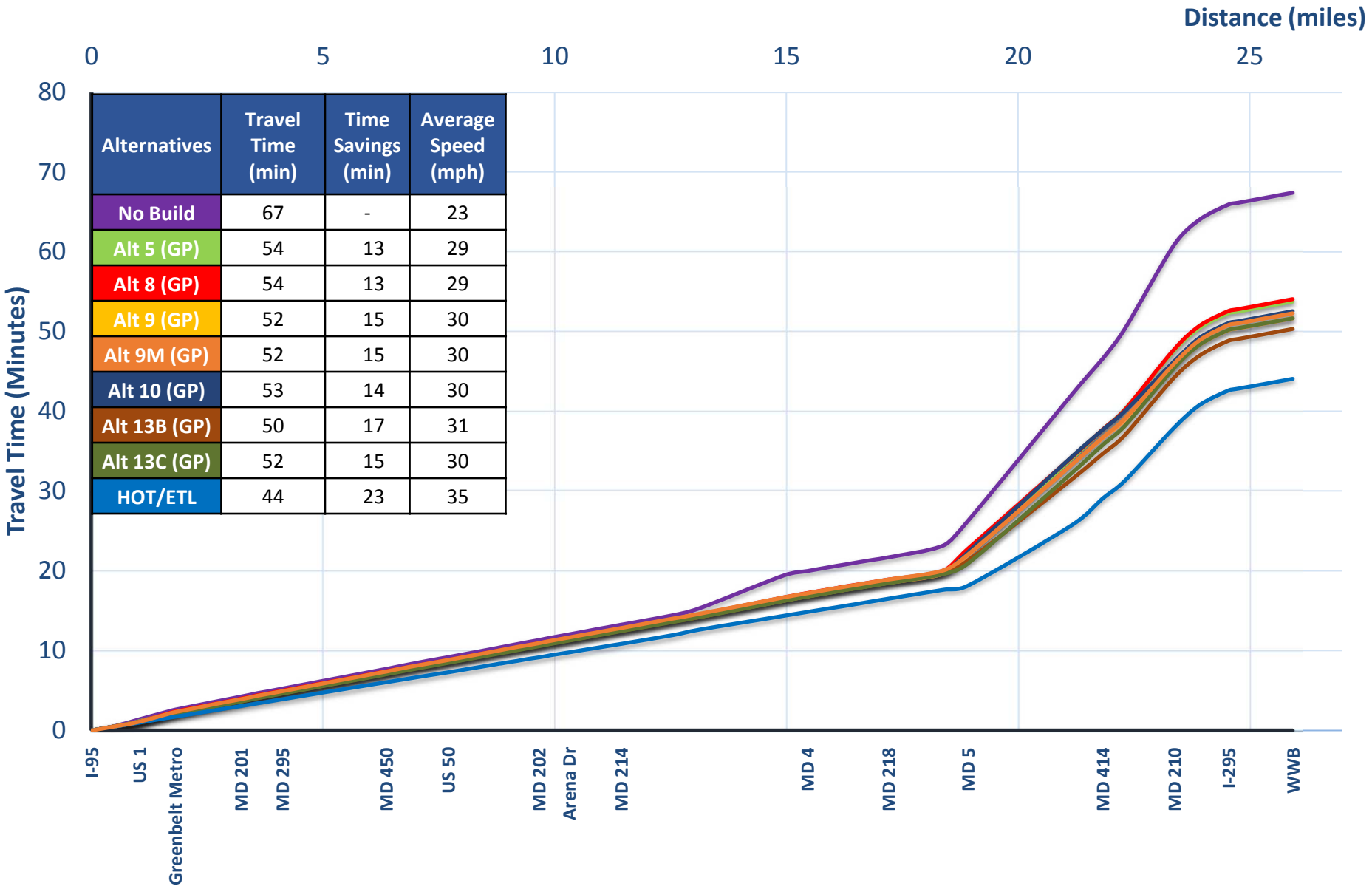
ATTACHMENT E – TRAVEL TIME SAVINGS CHARTS

Commute from College Park to Bethesda (AM)



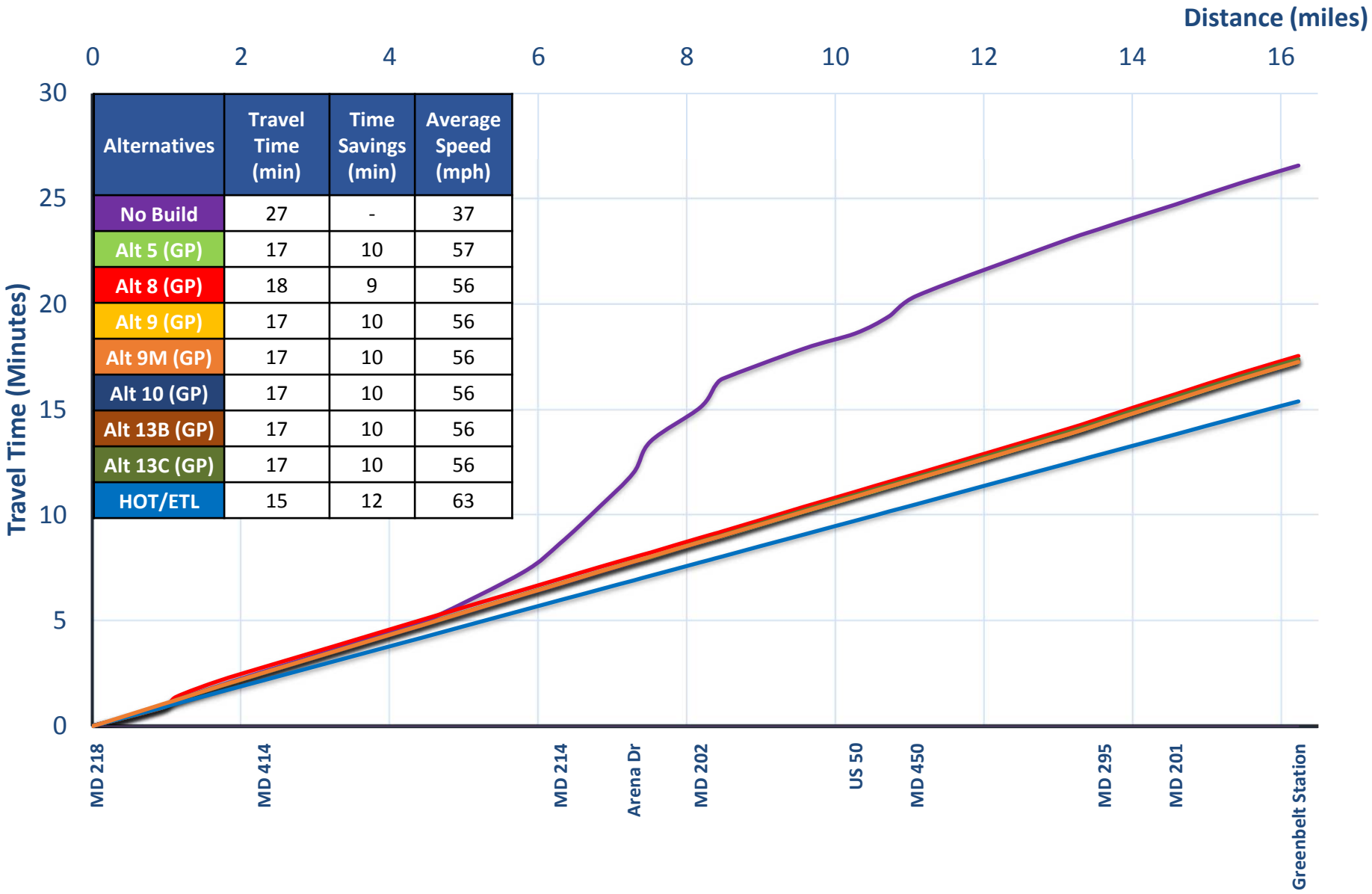
Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	43	-	14
Alt 5 (GP)	21	22	29
Alt 8 (GP)	15	28	40
Alt 9 (GP)	16	27	37
Alt 9M (GP)	17	26	36
Alt 10 (GP)	13	30	45
Alt 13B (GP)	21	22	29
Alt 13C (GP)	18	25	34
HOT/ETL	10	33	62

Commute from I-95 to Woodrow Wilson Bridge (AM)



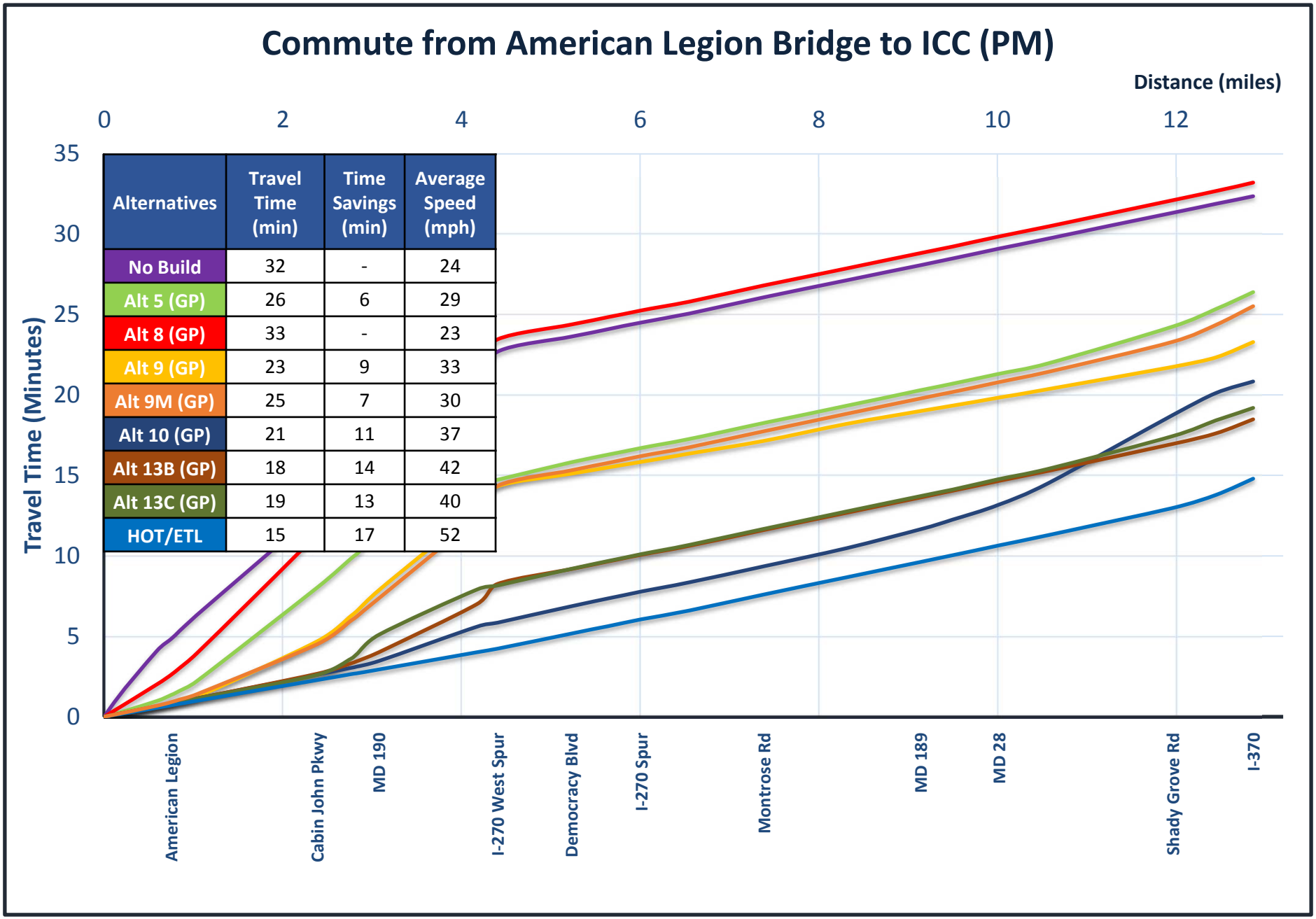
Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	67	-	23
Alt 5 (GP)	54	13	29
Alt 8 (GP)	54	13	29
Alt 9 (GP)	52	15	30
Alt 9M (GP)	52	15	30
Alt 10 (GP)	53	14	30
Alt 13B (GP)	50	17	31
Alt 13C (GP)	52	15	30
HOT/ETL	44	23	35

Commute from Suitland to Greenbelt Metro Station (AM)



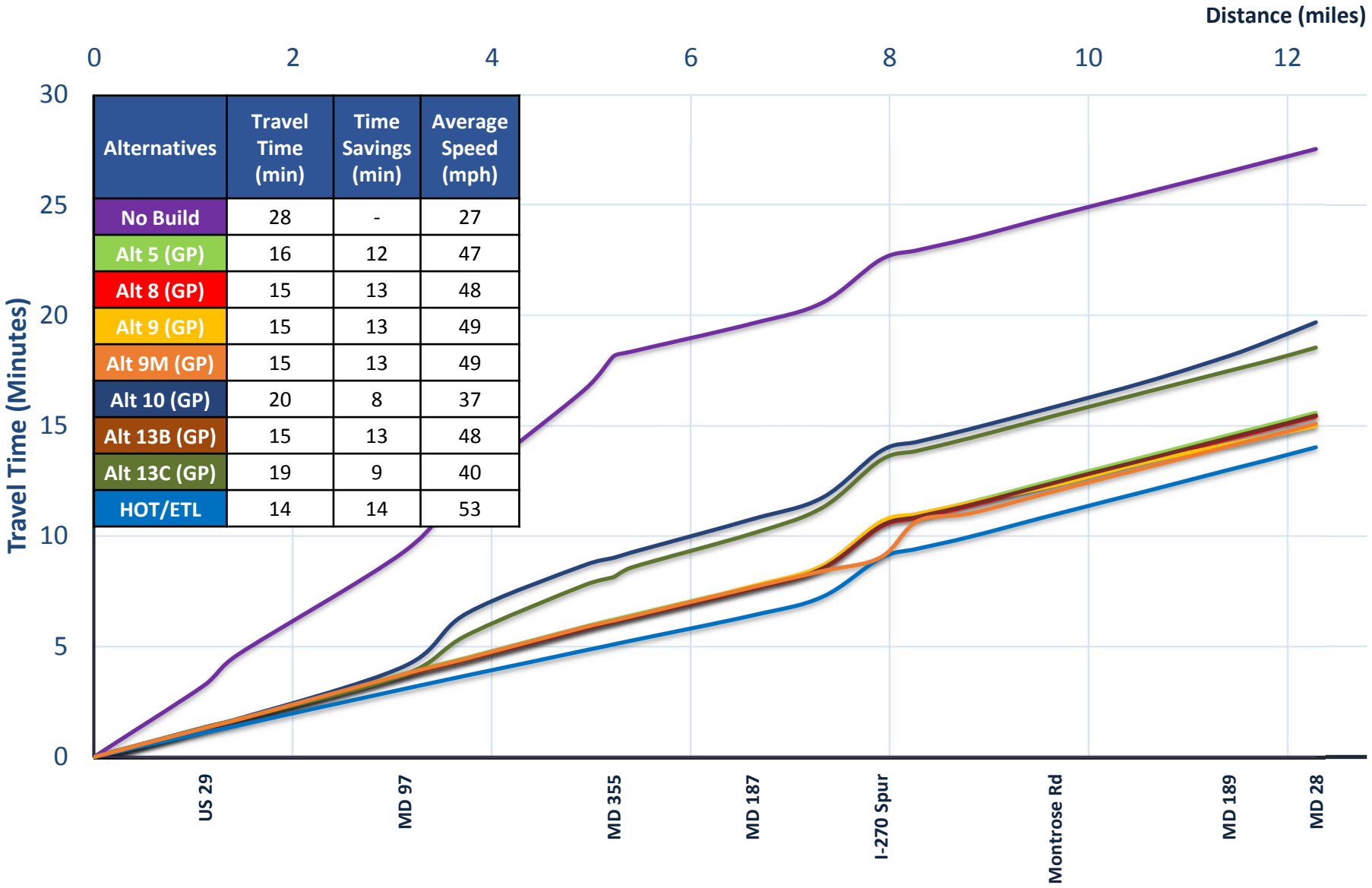
Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	27	-	37
Alt 5 (GP)	17	10	57
Alt 8 (GP)	18	9	56
Alt 9 (GP)	17	10	56
Alt 9M (GP)	17	10	56
Alt 10 (GP)	17	10	56
Alt 13B (GP)	17	10	56
Alt 13C (GP)	17	10	56
HOT/ETL	15	12	63

Commute from American Legion Bridge to ICC (PM)



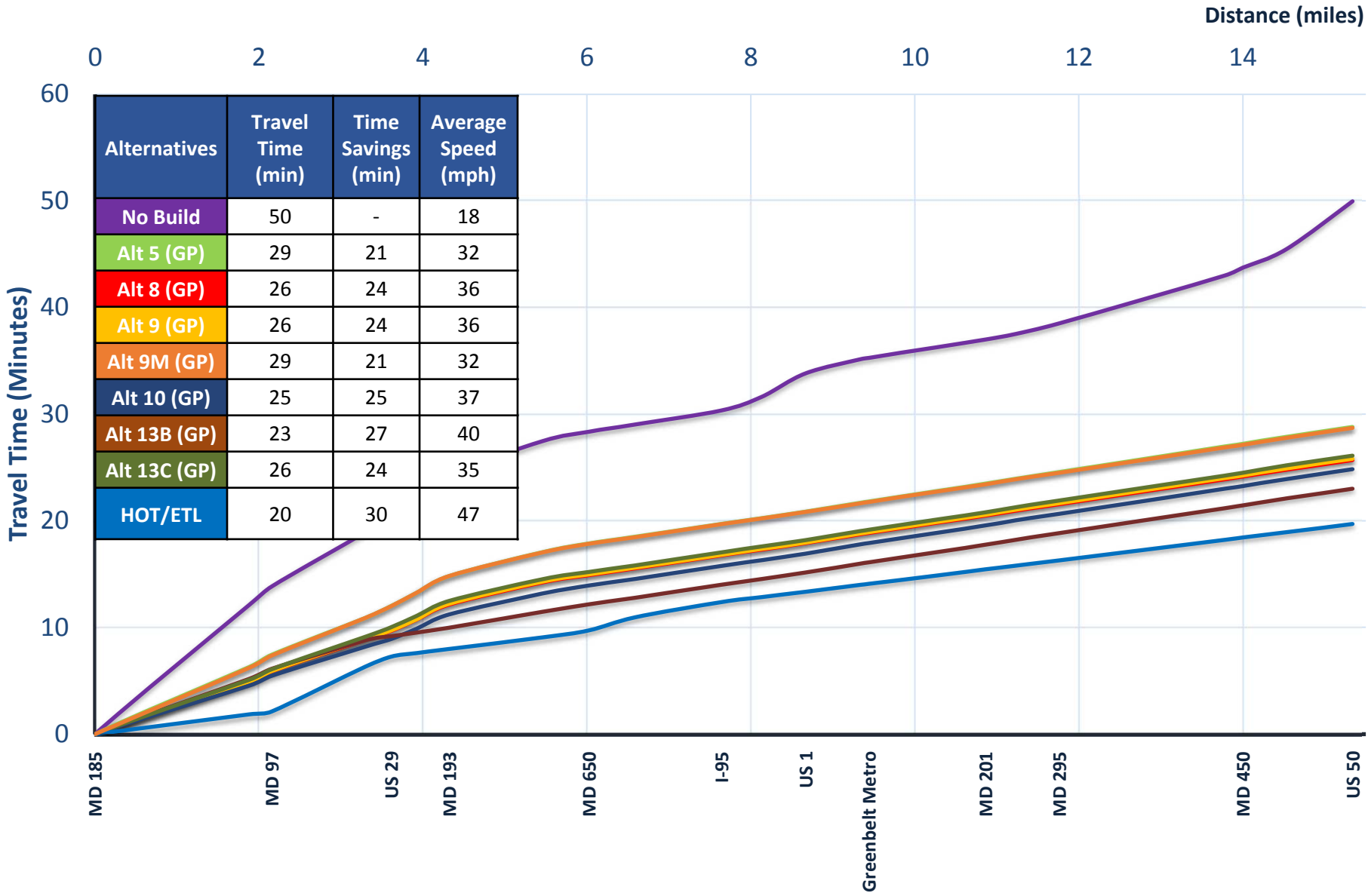
Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	32	-	24
Alt 5 (GP)	26	6	29
Alt 8 (GP)	33	-	23
Alt 9 (GP)	23	9	33
Alt 9M (GP)	25	7	30
Alt 10 (GP)	21	11	37
Alt 13B (GP)	18	14	42
Alt 13C (GP)	19	13	40
HOT/ETL	15	17	52

Commute from Silver Spring to Rockville (PM)



Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	28	-	27
Alt 5 (GP)	16	12	47
Alt 8 (GP)	15	13	48
Alt 9 (GP)	15	13	49
Alt 9M (GP)	15	13	49
Alt 10 (GP)	20	8	37
Alt 13B (GP)	15	13	48
Alt 13C (GP)	19	9	40
HOT/ETL	14	14	53

Commute from Chevy Chase to Landover (PM)



Alternatives	Travel Time (min)	Time Savings (min)	Average Speed (mph)
No Build	50	-	18
Alt 5 (GP)	29	21	32
Alt 8 (GP)	26	24	36
Alt 9 (GP)	26	24	36
Alt 9M (GP)	29	21	32
Alt 10 (GP)	25	25	37
Alt 13B (GP)	23	27	40
Alt 13C (GP)	26	24	35
HOT/ETL	20	30	47

ATTACHMENT F – LINK EVALUATION (SPEED, DENSITY, AND LOS)

2040 Alt-9M AM - I-495 OL Link Evaluation Results 3/6/2020

2040 Alt-9M AM
I-495 OL

	WWB								Exit 2 I-295			Exit 3 MD 210										Exit 4 MD 414											
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	16	15	24	50	56	55	58	59	59	58	59	59	59	59	59	58	59	59	59	59	58	59	59	54	53	53	53	53	53	53	53	53	53	53
Density	103	108	75	36	32	32	21	14	17	17	15	15	19	19	17	22	22	17	21	21	18	20	20	19	23	24	24	24	24	22	21	17	17	17
LOS	F	F	F	E	D	D	C	B	B	B	B	B	C	C	B	C	C	B	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	B
Volume	8301	8169	5412	5408	5405	5397	2488	2488	1995	1994	2680	2682	2205	4400	5105	5115	5107	5082	4850	4862	5255	4702	4692	5100	4996	5142	5138	5136	5110	4561	4546	4523	3737	3704
Lanes	5	5	3	3	3	3	2	3	2	2	3	3	2	4	5	4	4	5	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4
Length	2000	2000	2000	2000	2000	195	1182	890	2000	1282	2000	1297	1256	824	1314	1054	1042	448	914	495	674	410	694	1037	428	2000	2000	2000	2000	1655	912	602	710	514
LinkID	1	1	218503	218503	218503	218503	218507	218508	218509	218509	318105	318105	217308	217315	217316	971	972	217318	216105	973	216107	216110	974	216112	216115	979	979	979	979	979	980	216114	215901	981
SegmentID	1	2	1	2	3	4	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1	1

Speed Color Scale (mph)

10 30 40 50 70

	Exit 7 MD 5									Exit 9 MD 337										Exit 11 MD 4												Exit 13 Ritchie Marlboro Rd						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	36	54	54	53	53	54	54	52	55	55	55	55	52	52	55	55	56	56	56	52	54	56	53	53	58	57	57	57	57	57	58	58	58	56	56	57	57
Density	23	17	17	18	22	22	22	23	18	19	18	20	26	24	24	22	22	22	23	22	24	30	28	28	28	28	28	28	22	24	24	24	30	29	29
LOS	C	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	C	C	C	C	D	D	D
Volume	4047	3544	3671	4718	4661	4717	4716	4701	4045	4040	4049	5229	5323	5307	5339	4841	4862	5584	4889	4877	6348	6340	6366	6371	6346	6353	6310	6324	5562	5588	6692	6694	6701	6576
Lanes	5	4	4	5	4	4	4	4	4	4	4	5	4	4	4	4	4	5	4	4	5	4	4	4	4	4	4	5	4	4	5	4	4	4
Length	1080	495	659	677	798	2000	773	1497	2000	2000	1589	712	783	514	1391	727	497	445	549	549	462	1023	2000	2000	2000	924	536	944	2000	552	1346	2000	1038	208
LinkID	215904	215905	982	215907	215908	983	983	984	214702	214702	214702	213501	213502	985	986	212301	992	212303	212305	1003	212307	212308	1004	1004	1004	1004	1005	212309	211206	211206	211212	1006	1006	1020
SegmentID	1	1	1	1	1	1	2	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	2	1	1	2	1	1	1

	Exit 15 MD 214					Exit 16 Arena Dr			Exit 17 MD 202											Exit 19 US 50								Exit 20 MD 450							
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	58	57	58	57	54	55	47	58	58	58	60	59	59	56	58	58	60	57	58	58	58	60	58	58	58	58	59	58	55	59	59	59	57
Density	23	24	22	28	24	25	28	26	26	25	25	18	22	22	29	27	27	21	26	20	22	22	21	19	24	27	21	26	24	32	30	30	30	31
LOS	C	C	C	D	C	C	D	D	C	C	C	B	C	C	D	D	D	C	C	C	C	C	C	C	C	D	C	C	C	D	D	D	D	D
Volume	6704	5589	6316	6333	6921	6917	6134	6198	4418	4434	4413	6320	6402	6398	6369	6308	6371	6369	5902	5899	5007	5009	4980	6858	6995	6344	6258	6135	7127	7094	7118	7108	7092	7101
Lanes	5	4	5	4	5	5	4	5	3	3	3	6	5	5	4	4	4	5	4	5	4	4	4	6	5	4	5	4	5	4	4	4	4	4
Length	1288	1155	805	737	1300	1328	646	1500	2000	2000	993	1003	493	720	2000	1537	793	705	785	562	2000	273	501	576	1391	716	276	949	1041	440	2000	2000	2000	1849
LinkID	211214	210903	210905	210906	210909	1022	209703	209704	209710	209710	209710	208515	208516	1023	326	326	1024	208518	207302	207303	207305	207305	1025	207306	207307	206101	206102	206104	206108	206109	1027	1027	1027	1027
SegmentID	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	3	4

	Exit 22 MD 295								Exit 23 MD 201											Exit 25 US 1								Exit 27 I-95							
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	58	54	53	53	52	53	52	53	54	54	54	55	55	53	53	57	58	58	58	58	57	59	59	58	59	59	58	58	58	20	9	8	47
Density	30	24	27	27	25	30	31	27	26	25	22	22	18	22	23	28	22	27	27	21	21	19	16	16	16	14	14	12	15	15	50	113	123	22
LOS	D	C	D	D	C	D	D	D	C	C	C	C	C	C	C	D	C	D	D	C	C	C	B	B	B	B	B	B	B	B	F	F	F	C
Volume	7089	7096	5756	5762	6702	6307	6648	7067	5469	5418	5881	5933	6139	6113	6101	5923	6267	6255	6261	4922	4850	5354	5756	5700	5688	3324	3276	3438	3450	3443	5959	5873	5830	5195
Lanes	4	5	4	4	5	4	4	5	4	4	5	5	6	5	5	4	5	4	4	4	4	5	6	6	6	4	4	5	4	4	6	6	6	5
Length	903	583	562	541	439	493	685	1823	571	829	434	995	461	993	1102	1980	1297	1225	1251	249	950	1128	1517	679	1496	2000	359	1012	490	825	1506	839	1509	806
LinkID	1029	206110	205903	1030	205905	205907	1031	205909	204704	1032	204706	204707	204709	204710	1033	2530009	203501	1034	1036	20020	202306	202308	202311	1035	1038	201103	201103	201104	201105	1039	201106	1040	1042	201107
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1

2040 Alt-9M AM

I-495 OL

	Exit 28 MD 650											Exit 29 MD 193				Exit 30 US 29								Exit 31 MD 97									
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	46	35	52	53	54	53	54	53	53	53	54	53	50	41	48	53	52	52	48	52	52	53	53	50	36	23	12	18	34	31	41	50	49	43
Density	22	26	18	18	16	19	19	25	25	20	22	22	23	28	29	27	26	27	36	34	33	34	27	33	46	72	117	89	60	67	50	41	33	38
LOS	C	D	C	C	B	C	C	C	C	C	C	C	C	D	D	D	C	D	E	D	D	D	D	D	F	F	F	F	F	F	F	E	D	E
Volume	5178	5501	4809	4806	5056	5155	5217	5204	5217	5207	4758	4731	5701	5690	5608	5600	5413	7045	6919	7071	6967	7085	7110	6649	6655	6674	8259	8201	8233	8258	8184	8234	6531	6433
Lanes	5	6	5	5	6	5	5	4	4	5	4	4	5	5	4	4	4	5	4	4	4	4	5	4	4	4	6	5	4	4	4	4	4	4
Length	501	445	502	281	353	1135	1625	1875	1184	302	760	713	799	1025	506	268	819	787	716	2000	797	1091	449	621	594	321	955	536	2000	2000	1805	1336	311	1655
LinkID	1043	7404	2000824	1046	7405	7409	1044	7407	1047	2000762	2000759	2000753	2000752	1049	1050	495302	495303	495304	495305	1051	1051	1053	7024	7026	7028	7029	7031	495316	1055	1055	1055	1056	1970012	495339
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	3	1	1	1

	Exit 33 MD 185									Exit 34 MD 355							Exit 36 MD 187							I-270 W Spur							Exit 39 MD 190			
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	34	34	30	32	30	28	26	25	24	18	12	9	11	10	9	8	7	8	6	10	10	10	10	13	22	20	23	22	20	17	19	21	21	25
Density	41	50	50	57	61	63	69	71	59	77	93	102	108	117	127	106	150	141	153	137	136	135	126	99	68	90	78	83	86	85	85	85	86	67
LOS	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	6889	6781	7467	7350	7321	7116	7170	7106	7028	5681	3363	3729	3668	3627	3561	3524	3284	3164	3918	3933	3960	3962	3962	3973	8857	8831	8843	8924	8772	8907	8117	7184	7184	8319
Lanes	5	4	5	4	4	4	4	4	5	4	3	4	3	3	3	4	3	3	4	3	3	3	3	3	6	5	5	5	5	6	5	4	4	5
Length	752	733	998	526	1235	2000	113	1041	402	1589	295	910	494	911	1176	324	2000	30	407	1083	2000	2000	2000	1657	551	937	2000	672	439	1037	1584	2000	604	1765
LinkID	1953310	1953311	1953312	1953313	1058	1247	1247	1059	1248	1249	1251	1273	1276	1060	1061	1272	1275	1275	1274	495373	1063	1063	1063	1063	495375	495392	1064	1064	1066	495408	495407	495406	495406	495401
SegmentID	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	3	4	1	1	1	2	1	1	1	1	2	1

	Exit 41 Clara Barton Pkwy	Bridge American Legion	Exit 43 GW Memorial Pkwy	Exit 44 VA 193
	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	44	52	53	52	51	52	53	53	53	53	53	53	53	52
Density	47	32	35	29	36	32	30	30	30	30	24	30	25	32
LOS	F	D	D	D	E	D	D	D	D	D	C	D	C	D
Volume	8326	8366	7338	7680	7429	8361	6299	6266	6304	6293	6274	6279	6681	6700
Lanes	4	5	4	5	4	5	4	4	4	4	5	4	5	4
Length	1628	978	521	921	1716	1561	272	1408	2000	1763	728	1048	1410	610
LinkID	495415	2541710	1067	495416	495417	495418	11230	1069	2530014	2530014	1083	1084	1101	1114
SegmentID	1	1	1	1	1	1	1	1	1	2	1	1	1	1

2040 Alt-9M AM - I-495 IL Link Evaluation Results 3/6/2020

2040 Alt-9M AM
I-495 IL

	Exit 44 VA 193							Exit 43 GW Memorial Pkwy			Bridge American Legion		Exit 41 Clara Barton Pkwy								Exit 39 MD 190							I-270 W Spur						Exit 36 MD 187
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	58	57	43	34	25	22	20	21	21	21	46	52	55	57	55	55	56	56	56	57	57	57	57	55	57	57	54	57	57	57	48	26	54
Density	30	30	25	37	46	58	66	85	80	81	76	38	34	27	26	30	37	37	30	32	26	26	22	26	28	27	27	30	28	28	28	34	45	25
LOS	D	D	C	E	F	F	F	F	F	F	F	E	D	D	C	D	E	E	D	D	D	C	C	D	D	D	D	D	D	D	D	D	F	C
Volume	7029	6891	7017	6279	6217	7341	7208	6792	6589	6674	8134	6893	7107	7285	7313	8247	8255	8243	8218	7303	7462	7382	7710	7550	7697	7623	7697	4799	4792	4789	4790	4792	4791	4113
Lanes	4	4	5	4	4	5	5	4	4	4	5	4	4	5	5	5	4	4	5	4	5	5	6	5	5	5	5	3	3	3	3	3	4	3
Length	2000	183	1499	2000	93	1502	1539	645	688	506	641	500	705	1499	761	1010	2000	1064	400	1958	1492	620	1122	398	1767	740	1503	2000	2000	2000	1662	1172	303	2000
LinkID	1100	1100	1037	495411	495411	1089	1054	1080	1079	1113	1073	495412	1062	495413	1057	495414	2541704	1115	495402	495403	495404	1116	495405	495409	1117	495391	1118	495371	495371	495371	495371	1119	1263	1270
SegmentID	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1

Speed Color Scale (mph): 10 | 30 | 40 | 50 | 70

	Exit 34 MD 355													Exit 33 MD 185										Exit 31 MD 97									
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	57	56	50	49	49	24	21	42	47	46	48	47	39	31	25	27	24	27	24	29	30	16	18	56	59	59	57	59	56	58	60	60	60
Density	18	18	25	28	39	34	70	76	47	42	44	41	34	41	54	54	64	64	69	77	64	63	92	85	26	24	24	20	23	25	30	23	26	25
LOS	C	C	C	D	E	D	F	F	F	E	E	E	D	E	F	F	F	F	F	F	F	F	F	F	C	C	C	C	C	C	D	C	D	C
Volume	3151	4214	4216	4247	3871	6782	8177	8107	8033	7995	7972	7986	7977	7921	6699	6837	6806	7581	7568	7239	7482	7471	7460	7465	5708	5740	5763	6974	6885	7001	6998	6988	6321	6063
Lanes	3	4	3	3	2	4	5	5	4	4	4	4	5	5	4	5	4	5	4	4	4	4	5	5	4	4	4	6	5	5	4	5	4	4
Length	26	442	659	1105	1518	1927	494	1003	1000	522	1604	252	526	658	913	228	793	1661	2000	170	2000	1743	2000	50	837	411	323	1134	454	1031	2000	1238	243	518
LinkID	1270	1271	1257	1121	1258	1250	1260	1261	1120	1262	495331	1122	495332	2000004	495333	495334	495335	495336	495317	495317	2000003	2000003	7015	7015	7017	7019	7021	7023	1953113	1124	5021562	1125	1990014	495307
SegmentID	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1

	Exit 30 US 29					Exit 29 MD 193										Exit 28 MD 650							Exit 27 I-95					Exit 25 US 1					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	60	60	60	60	61	57	34	15	25	26	26	24	22	22	20	17	40	52	58	61	61	61	60	60	59	61	58	56	55	33	38	42	43	36
Density	25	26	26	22	24	21	44	88	66	62	62	67	59	68	72	78	40	30	26	25	19	19	17	22	22	21	23	29	29	48	53	49	47	46
LOS	C	D	C	C	C	C	E	F	F	F	F	F	F	F	F	F	E	D	D	C	C	C	B	C	C	C	C	D	D	F	F	F	F	F
Volume	6101	6274	6197	6618	5929	5963	5938	6620	6597	6529	6465	6376	6349	6018	5910	6750	6302	6304	7575	7548	4608	4634	5152	5162	5121	3844	6471	6464	6436	8095	8051	8128	8041	8119
Lanes	4	4	4	5	4	5	4	5	4	4	4	4	5	4	4	5	4	4	5	5	4	4	5	4	4	3	5	4	4	5	4	4	4	5
Length	270	498	522	1543	808	422	771	284	1222	2000	1068	1153	331	339	509	464	500	1048	1490	1493	1028	536	347	2000	140	1527	1466	2000	1612	673	845	625	481	1017
LinkID	495308	495309	1127	495295	2100087	2000197	2000764	2000770	2000771	1129	1129	1130	7410	2201100	1131	7412	101100	1132	101111	1128	101104	1138	101106	101107	101107	1137	101110	102301	102301	102312	102313	1135	1136	102314
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1

	Exit 24 Greenbelt Metro Station					Exit 23 MD 201							Exit 22 MD 295												Exit 20 MD 450					Exit 19 US 50				
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	47	54	53	51	54	53	53	50	51	54	55	55	54	54	55	55	55	55	55	54	55	53	52	55	47	51	56	56	54	57	57	56	53	55
Density	40	28	29	30	29	25	31	28	35	26	27	27	25	28	28	22	28	28	28	29	28	29	23	25	28	33	23	25	21	21	21	21	28	34
LOS	E	D	D	D	D	C	D	D	D	C	D	D	C	D	D	C	D	D	D	D	D	D	C	C	D	D	C	C	C	C	C	C	D	D
Volume	7504	7625	7588	7605	6159	6556	6523	6995	7000	6880	5881	5853	6760	6187	6158	6227	6234	6232	6232	6234	6222	6182	6037	5454	6623	6602	6591	5525	5525	4797	4798	7211	7333	7345
Lanes	4	5	5	5	4	5	4	5	4	5	4	4	5	4	4	5	4	4	4	4	4	4	5	4	5	4	5	4	5	4	4	6	5	4
Length	2000	1540	1039	440	1150	761	810	740	929	454	507	559	554	497	516	779	706	2000	2000	2000	1629	1217	263	1109	984	561	1359	1365	195	2000	608	1453	754	2000
LinkID	103501	2530003	1139	103502	104704	104706	104707	104709	104710	104711	105902	1140	105904	105906	1141	105908	105909	1142	1142	1142	1142	1143	105910	106105	106108	106109	106110	107301	107302	107307	107307	107309	1144	107311
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	1	1

2040 Alt-9M AM

I-495 IL

Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	56	56	57	56	56	55	56	57	58	57	54	57	58	56	56	57	57	58	58	58	57	57	56	51	45	41	54	58	54	57	59	59	59	60
Density	33	26	26	32	32	32	31	25	25	25	30	23	26	26	32	31	31	25	27	27	25	32	32	35	40	44	27	25	25	26	25	22	27	27
LOS	D	D	D	D	D	D	D	C	C	C	D	C	C	C	D	D	D	C	D	D	C	D	D	E	E	E	D	C	C	D	C	C	D	D
Volume	7313	7322	7367	5370	5376	5366	6929	7294	7313	7309	6552	6552	5980	7233	7206	7202	7124	7203	6289	6324	7193	7205	7226	7219	7214	7187	5818	5831	6764	5942	5975	6428	6430	6443
Lanes	4	5	5	3	3	3	4	5	5	5	4	5	4	5	4	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4	5	4	4
Length	190	855	1495	2000	2000	1908	1069	1470	249	1490	1056	692	986	1397	2000	796	480	997	2000	1038	1492	2000	2000	2000	764	1366	456	482	565	512	527	1147	344	1293
LinkID	107311	107312	1145	108500	108500	108500	109704	109707	1146	1148	110904	110905	110907	110913	1147	1147	1149	110915	111105	111105	111111	111112	111112	111112	111112	1150	112301	1151	112303	112305	1152	112307	112308	1153
SegmentID	2	1	1	1	2	3	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	3	4	1	1	1	1	1	1	1	1	1

	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	60	59	63	63	63	63	62	61	61	63	63	22	12	13	11	12	11	11	14	13	13	13	12	11	11	10	12	13	10	16	14	18	14	9
Density	27	22	23	23	23	19	24	25	25	19	19	44	79	97	96	114	126	109	107	118	120	122	101	129	127	119	114	108	122	96	104	85	73	113
LOS	D	C	C	C	C	C	C	C	C	C	C	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	6422	6424	5763	5772	5745	5950	5929	5970	5968	5984	5981	3920	4789	4916	5360	5508	5611	6194	6146	6167	6206	6107	6098	5668	5668	6071	5601	5589	6109	6145	6026	2991	2988	1996
Lanes	4	5	4	4	4	5	4	4	4	5	5	4	5	4	5	4	4	5	4	4	4	4	5	4	4	5	4	4	5	4	4	2	3	2
Length	896	625	2000	2000	770	663	808	2000	725	736	1473	1134	787	706	691	802	1093	808	2000	2000	2000	860	617	1155	507	909	508	589	349	2000	55	1054	1707	1386
LinkID	1154	112309	113503	113503	113503	114701	114702	1155	1155	114703	1157	115905	115910	115911	115913	115914	1158	2541555	2541557	2541557	2541557	1159	115915	116102	1161	116104	116106	1162	116108	116109	116109	116110	116111	117305
SegmentID	1	1	1	2	3	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	2	1	1	1

	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	6	8	9	12	13	15	18	44	57	57	58	55	46	56
Density	127	133	107	103	93	102	88	52	34	34	34	35	43	36
LOS	F	F	F	F	F	F	F	F	D	D	D	D	E	E
Volume	3031	3002	3666	3647	3643	3003	4657	4557	5808	5808	5816	5773	10002	10015
Lanes	4	3	4	3	3	2	3	2	3	3	3	3	5	5
Length	907	581	640	2000	598	1132	851	1030	2000	2000	2000	1329	2000	1262
LinkID	117307	117308	117310	117311	117311	118503	118504	118506	118508	118508	118508	118508	44	44
SegmentID	1	1	1	1	2	1	1	1	1	2	3	4	1	2

Exit 16 — Arena Dr

Exit 15 — MD 214

Exit 13 — Ritchie Marlboro Rd

Exit 11 — MD 4

Exit 9 — MD 337

Exit 7 — MD 5

Exit 4 — MD 414

Exit 3 — MD 210

Exit 2 — I-295

WWB

2040 Alt-9M AM - I-270 NB Link Evaluation Results 3/6/2020

2040 Alt-9M AM
I-270 NB

		I-270 W Spur/I-495				Exit 1 Democracy Blvd		Westlake Terrace				I-270 Spur						Exit 4 Montrose Rd				Exit 5 MD 189					Exit 6 MD 28							Exit 8 Shady Grove Rd
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	58	62	62	63	62	63	62	63	64	64	64	64	63	64	64	63	61	63	60	60	60	61	59	59	58	58	59	59	59	58	57	58	59
Density	27	25	23	15	17	12	18	14	13	13	13	13	13	13	13	13	11	12	13	17	17	14	15	14	14	14	17	14	12	15	15	15	13	10
LOS	D	C	C	B	B	B	B	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
Volume	7697	2876	2867	2847	2091	2236	2215	2555	2542	2539	2526	4827	4839	4835	4812	4819	4780	4306	4201	5005	5002	4942	4439	5049	5036	5025	4833	4181	4338	4432	4420	4426	4409	3048
Lanes	5	2	2	3	2	3	2	3	3	3	3	6	6	6	6	6	7	6	5	5	5	6	5	6	6	6	5	5	6	5	5	5	6	5
Length	1503	2000	1418	897	788	886	453	816	1169	730	1875	430	1464	1957	783	980	769	698	801	2000	2000	517	742	1343	526	657	425	789	598	1189	1474	1474	991	2000
LinkID	1118	495372	495372	232	234	235	237	134	241	242	243	274	275	738	739	280	2541643	428	742	289	289	251	743	300	744	304	305	316	745	2541654	320	741	747	327
SegmentID	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1

Speed Color Scale (mph): 10 | 30 | 40 | 50 | 70

			Exit 9 I-370							Exit 10 MD 117		Exit 11 MD 124			Watkins Mill Rd								Exit 13 Middlebrook Rd				Exit 15 MD 118						Exit 16 MD 27	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	59	48	60	60	60	58	59	60	60	60	60	60	60	60	60	61	60	61	61	61	61	61	59	61	61	61	61	61	61	61	61	62	61	62
Density	10	12	7	6	7	7	9	10	10	11	11	11	11	11	11	13	13	13	13	13	11	12	12	13	13	10	12	13	13	12	12	12	10	13
LOS	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	A	B	B	B	B	A	B	B	B	B	B	B	A	B
Volume	3043	3581	1176	1165	1174	1723	3015	3031	3028	2579	2574	2567	2565	3266	3220	3247	3911	3917	3915	3878	3886	3530	3566	3139	3110	3112	2917	2392	2391	2835	2233	2244	2472	2457
Lanes	5	6	3	3	3	4	6	5	5	4	4	4	4	5	5	4	5	5	5	5	6	5	5	4	4	5	4	3	3	4	3	3	4	3
Length	118	441	1059	630	836	2000	531	843	1357	2000	2000	2000	1479	584	745	611	1112	2000	2000	725	763	636	672	865	676	821	1564	1084	527	1716	520	1157	771	687
LinkID	327	335	339	749	411	2541578	347	348	754	350	350	350	350	362	363	762	2430241	2430244	2430244	763	364	365	367	369	764	370	372	374	765	376	378	766	380	381
SegmentID	2	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

											Exit 18 MD 121																Exit 22 MD 109							
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	62	62	62	62	62	61	61	61	61	62	57	61	62	62	62	61	61	61	61	61	61	61	61	60	61	60	59	61	60	60	60	60	60	60
Density	10	14	14	14	14	14	14	14	11	9	10	10	13	13	13	13	19	19	19	19	19	19	19	19	19	19	13	18	13	19	19	19	18	19
LOS	A	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C	C	C	C	C	C	C	C	C	C	B	B	B	C	C	C	C	C
Volume	2565	2579	2591	2580	2569	2572	2577	2568	2565	1759	2337	2350	2344	2366	2360	2359	2350	2352	2345	2325	2344	2321	2326	2338	2337	2330	2334	2188	2257	2246	2248	2228	2228	2235
Lanes	4	3	3	3	3	3	3	3	4	3	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2
Length	457	1044	2000	2000	2000	2000	718	756	736	920	211	877	400	1727	2000	1731	2000	2000	905	482	2000	383	1176	2000	1202	1164	340	1049	291	1204	2000	2000	2000	2000
LinkID	383	384	767	767	767	767	767	768	385	387	389	1001	390	769	391	391	272	272	272	392	394	394	395	396	396	750	397	399	401	402	771	771	771	771
SegmentID	1	1	1	2	3	4	5	1	1	1	1	1	1	1	1	2	1	2	3	1	1	2	1	1	2	1	1	1	1	1	1	2	3	4

							Exit 26 MD 80																				Exit 31 MD 85				
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	60	60	60	60	60	59	55	59	55	57	60	63	63	63	63	63	63	63	63	63	63	63	62	63	63	62	62	57	63	61	63
Density	19	19	19	19	19	19	13	17	16	24	23	22	21	21	21	21	21	21	21	21	21	21	21	21	21	14	19	14	15	12	11
LOS	C	C	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	B	B	B	B
Volume	2236	2233	2227	2231	2228	2218	2191	1994	2719	2714	2720	2709	2707	2705	2702	2683	2681	2648	2682	2680	2670	2663	2667	2659	2642	2642	2375	2341	1844	2878	2870
Lanes	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	4	4
Length	1502	2000	1497	2000	698	1279	214	773	615	868	2000	2000	2000	2000	1813	539	1225	391	2000	2000	2000	2000	2000	178	1025	473	1416	241	945	1115	392
LinkID	771	412	412	446	446	783	403	405	407	408	784	784	784	784	784	1010	1017	1007	869	869	869	869	869	869	785	415	417	421	423	425	577
SegmentID	5	1	2	1	2	1	1	1	1	1	1	2	3	4	5	1	1	1	1	2	3	4	5	6	1	1	1	1	1	1	1

2040 Alt-9M AM - I-270 SB Link Evaluation Results **3/6/2020**

2040 Alt-9M AM
I-270 SB

					Exit 31																															
					MD 85																															
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	18	19	17	13	12	11	9	8	18	18	18	17	17	17	17	18	18	18	17	18	18	17	17	13	13	14	18	26	26	26	26	27	27	27
Density	83	77	87	118	123	89	138	129	89	87	88	90	92	91	90	89	88	89	89	88	89	89	91	77	106	83	101	70	68	68	69	66	67	68
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	4488	4470	4511	2962	2977	2956	2423	3225	3206	3187	3207	3155	3109	3133	3090	3135	3137	3124	3112	3114	3105	3090	3073	3053	2785	3596	3610	3603	3576	3613	3624	3545	3618	3621
Lanes	3	3	3	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2
Length	931	404	446	474	1052	294	849	378	1140	2000	2000	2000	2000	2000	262	2000	2000	2000	2000	2000	2000	548	1088	376	654	1400	110	1849	565	2000	2000	57	2000	2000
LinkID	683	2000012	157	2000014	699	2000016	2000017	2000020	2000021	703	703	703	703	703	703	448	448	448	448	448	448	448	704	201	2000022	2000025	2000026	705	447	455	455	455	453	453
SegmentID	1	1	1	1	1	1	1	1	1	1	2	3	4	5	6	1	2	3	4	5	6	7	1	1	1	1	1	1	1	1	2	3	1	2

Speed Color Scale (mph)

10 30 40 50 70

					Exit 22																			Exit 18											
					MD 109																			MD 121											
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	26	27	25	25	25	24	22	24	35	39	43	43	43	42	43	43	43	41	43	51	53	52	52	51	53	52	53	53	53	52	51	49	45	30
Density	70	68	71	72	47	75	62	84	60	53	48	48	48	49	48	48	48	52	49	27	27	20	24	23	30	24	32	32	33	33	33	35	29	44
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	D	C	C	C	D	C	D	D	D	D	D	E	D	E
Volume	3611	3604	3586	3580	3577	3538	4137	4054	4140	4110	4097	4131	4130	4104	4133	4157	4175	4200	4180	4187	4182	4182	3733	4731	4725	5133	5133	5135	5146	5150	5147	5131	5165	3999
Lanes	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	3	4	3	4	3	3	3	3	3	3	4	3
Length	453	453	410	706	2000027	2000029	2000031	2000032	707	707	2000033	2000034	2000034	2000036	2000037	2000037	2000037	260	260	2000038	708	2000039	2000041	1002	2000044	709	2020578	2020578	2020578	2020578	2020578	710	2000045	2000047
LinkID	3	4	1	1	1	1	1	1	1	2	1	1	2	1	1	2	3	1	2	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1

					Exit 16					Exit 15				Exit 13						Exit 11			Exit 10				Exit 9						Exit 8		
					MD 27					MD 118				Middlebrook Rd						Watkins Mill Rd			MD 124				MD 117						I-370					Shady Grove Rd			
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	15	15	13	14	15	16	17	18	31	37	35	32	43	46	49	53	53	50	16	18	26	26	25	25	48	50	53	53	53	53	52	50	50	50
Density	80	110	107	100	110	85	103	82	63	54	56	60	45	42	39	31	27	29	108	94	80	80	84	78	35	33	27	27	23	23	25	26	32	28
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	D	D	D	F	F	F	F	F	F	D	D	D	D	C	C	C	D	D	D
Volume	4893	4891	5489	5483	5034	5390	5324	5906	5910	5933	5929	7806	7813	7790	7810	6567	5724	5730	6728	8240	8187	8246	8281	9889	9918	9811	9922	9941	6039	6067	9238	9209	7971	8382
Lanes	4	3	4	4	3	4	3	4	3	3	3	4	4	4	4	4	4	4	4	5	4	4	4	5	6	6	7	7	5	5	7	7	5	6
Length	684	1035	1007	1058	1713	543	751	500	1025	2000	719	1566	1324	2000	658	992	1581	593	1167	838	658	2000	1062	1569	1152	431	1058	1250	1271	1633	1783	599	731	480
LinkID	2000049	2000050	2000052	711	2000054	2000056	2000057	2000059	2000060	712	712	2000062	713	1026	1026	2531003	2000063	718	2000064	2000067	2000068	720	720	2000070	2000097	721	2000071	2000072	2000074	2000075	2541660	2000081	2000082	723
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1

											Exit 5						Exit 4										Exit 1								
											MD 189						Montrose Rd						I-270 Spur				Westlake Terrace	Democracy Blvd						I-270 W Spur/I-495	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	51	51	52	53	53	53	53	53	52	39	33	37	30	45	53	53	50	53	52	47	41	51	52	52	53	53	53	53	53	53	52	52	42	22
Density	33	34	34	34	34	34	27	31	32	41	49	48	55	45	31	34	33	36	32	36	42	33	32	33	23	23	23	28	28	18	23	31	39	68
LOS	D	D	D	D	D	D	D	D	D	E	F	F	F	E	D	D	D	E	D	E	E	D	D	D	C	C	C	D	D	C	C	D	E	F
Volume	8418	8831	8862	8841	8870	8874	8766	8285	8473	9531	9625	8763	9842	9919	9848	9028	9933	9423	10107	10143	10152	10113	9961	10143	4869	4866	4879	4383	4387	4849	4840	4881	4885	8857
Lanes	5	5	5	5	5	5	6	5	5	6	6	5	6	5	6	5	6	5	6	6	6	6	6	6	4	4	4	3	3	5	4	3	3	6
Length	795	2000	1661	469	1017	935	444	935	998	608	1801	1637	697	2000	449	900	640	885	1395	2000	1704	716	393	325	2000	999	940	2000	450	517	937	2000	520	551
LinkID	724	2000093	2000093	2000098	2000099	725	2000115	2000120	727	2000124	2541718	159	194	2541716	2000134	2000135	728	239	2541712	129	129	730	443	442	133	133	137	138	138	141	2020142	2115374	2115374	495375
SegmentID	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	2	1	1	1	2	1

2040 Alt 9M PM - I-495 OL Link Evaluation Results 3/6/2020

2040 Alt 9M PM
I-495 OL

	WWB								Exit 2 I-295			Exit 3 MD 210									Exit 4 MD 414											
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	18	20	23	50	55	55	58	58	58	58	56	57	58	58	52	48	56	57	58	58	57	57	58	53	53	53	53	52	52	52	53	53	53	53
Density	102	91	76	36	32	32	31	21	24	24	25	25	30	29	30	41	34	27	30	30	25	28	28	26	32	33	33	33	34	29	29	22	22	22
LOS	F	F	F	E	D	D	D	C	C	C	C	C	D	D	D	E	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	C	C	C
Volume	9289	9296	5326	5322	5308	5318	3652	3644	2810	2804	4293	4305	3429	6684	7764	7770	7752	7713	6949	6960	7203	6436	6423	6945	6795	6981	6977	6998	6976	5998	6013	5978	4655	4623
Lanes	5	5	3	3	3	3	2	3	2	2	3	3	2	4	5	4	4	5	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4
Length	2000	2000	2000	2000	2000	195	1182	890	2000	1282	2000	1297	1256	824	1314	1054	1042	448	914	495	674	410	694	1037	428	2000	2000	2000	2000	1655	906	601	711	503
LinkID	1	1	218503	218503	218503	218503	218507	218508	218509	218509	318105	318105	217308	217315	217316	971	972	217318	216105	973	216107	216110	974	216112	216115	979	979	979	979	979	980	216114	215901	981
SegmentID	1	2	1	2	3	4	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1	1

Speed Color Scale (mph)

10 30 40 50 70

	Exit 7 MD 5									Exit 9 MD 337								Exit 11 MD 4												Exit 13 Ritchie Marlboro Rd					
Speed	53	53	53	52	51	52	53	53	53	53	53	36	19	43	51	52	53	53	51	52	53	53	51	52	52	52	53	53	53	53	53	53	49	52	53
Density	20	23	23	22	27	27	27	27	25	25	37	70	38	32	31	27	27	26	29	28	27	35	35	35	34	34	34	27	30	30	27	37	35	34
LOS	C	C	C	C	D	D	D	D	C	C	E	F	E	D	D	D	D	D	D	D	D	E	D	D	D	D	D	D	D	D	D	E	D	D
Volume	5151	4812	4826	5643	5608	5641	5633	5630	5257	5260	5266	6490	6521	6532	6527	5712	5712	6672	5953	5934	7231	7205	7229	7224	7228	7227	7179	7225	6328	6352	7174	7182	7199	7185
Lanes	5	4	4	5	4	4	4	4	4	4	4	5	4	4	4	4	4	5	4	4	5	4	4	4	4	4	4	5	4	4	5	4	4	4
Length	1083	480	634	675	794	2000	763	1486	2000	2000	1592	691	785	496	1388	717	498	448	540	549	461	1023	2000	2000	2000	922	531	937	2000	484	1349	2000	1038	201
LinkID	215904	215905	982	215907	215908	983	983	984	214702	214702	214702	213501	213502	985	986	212301	992	212303	212305	1003	212307	212308	1004	1004	1004	1004	1005	212309	211206	211206	211212	1006	1006	1020
SegmentID	1	1	1	1	1	1	2	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	2	1	1	2	1

	Exit 15 MD 214							Exit 16 Arena Dr		Exit 17 MD 202											Exit 19 US 50								Exit 20 MD 450						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	53	52	52	53	48	52	53	53	53	53	53	53	53	53	52	51	52	53	57	58	58	58	58	58	49	54	57	58	57	56	56	57	58	58
Density	27	26	25	31	26	29	32	25	32	32	32	21	25	26	32	33	32	25	26	20	23	23	23	20	29	29	21	25	23	30	29	29	29	29
LOS	D	D	C	D	D	D	D	C	D	D	D	C	C	C	D	D	D	C	C	C	C	C	C	C	D	D	C	C	C	D	D	D	D	D
Volume	7208	5602	6478	6477	6940	6943	6509	6536	5128	5125	5113	6707	6685	6724	6721	6741	6735	6681	5880	5834	5312	5312	5267	7069	7153	6139	6056	5810	6616	6625	6636	6633	6618	6613
Lanes	5	4	5	4	5	5	4	5	3	3	3	6	5	5	4	4	4	5	4	5	4	4	4	6	5	4	5	4	5	4	4	4	4	4
Length	1282	1142	804	696	1370	1318	634	1492	2000	2000	987	959	499	722	2000	1520	763	699	785	561	2000	232	498	571	1393	714	276	949	1024	430	2000	2000	2000	1849
LinkID	211214	210903	210905	210906	210909	1022	209703	209704	209710	209710	209710	208515	208516	1023	326	326	1024	208518	207302	207303	207305	207305	1025	207306	207307	206101	206102	206104	206108	206109	1027	1027	1027	1027
SegmentID	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	3	4

	Exit 22 MD 295									Exit 23 MD 201											Exit 25 US 1								Exit 27 I-95						
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	58	58	53	53	52	50	52	51	50	53	53	53	53	53	50	50	44	44	52	56	57	57	57	58	57	58	58	58	58	58	53	53	53	53
Density	28	22	26	26	26	34	32	29	32	30	28	28	24	29	30	36	36	45	38	31	30	27	24	24	24	22	22	17	22	22	24	24	24	26
LOS	D	C	C	C	D	D	D	D	D	D	D	D	C	D	D	E	E	F	E	D	D	D	C	C	C	C	C	B	C	C	C	C	C	D
Volume	6592	6488	5478	5476	6793	6726	6674	7318	6400	6372	7252	7294	7549	7519	7555	7234	7915	7922	7942	6934	6857	7640	8359	8355	8337	5056	5018	5085	5112	5086	7646	7675	7661	6956
Lanes	4	5	4	4	5	4	4	5	4	4	5	5	6	5	5	4	5	4	4	4	4	5	6	6	6	4	4	5	4	4	6	6	6	5
Length	889	603	553	533	437	498	700	1797	577	830	434	995	461	987	1090	1980	1294	1224	1251	249	957	1109	1517	660	1474	2000	355	1017	490	825	1506	839	1489	806
LinkID	1029	206110	205903	1030	205905	205907	1031	205909	204704	1032	204706	204707	204709	204710	1033	2530009	203501	1034	1036	20020	202306	202308	202311	1035	1038	201103	201103	201104	201105	1039	201106	1040	1042	201107
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1

2040 Alt 9M PM

I-495 OL

Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
		Exit 28											Exit 29				Exit 30									Exit 31							
		MD 650											MD 193				US 29									MD 97							
Speed	53	51	52	53	52	53	49	43	37	26	52	53	45	21	43	51	51	51	47	49	52	52	53	53	54	53	52	35	45	50	51	53	53	53
Density	26	25	25	25	23	28	30	42	50	56	30	30	31	64	38	32	32	29	39	38	35	36	28	29	29	29	24	44	42	38	37	35	30	30
LOS	C	C	C	C	C	D	D	E	F	F	D	D	D	F	E	D	D	D	E	E	E	E	D	D	D	D	C	E	E	E	E	E	D	D
Volume	6905	7448	6584	6618	7133	7334	7320	7259	7234	7207	6282	6276	6886	6826	6484	6525	6549	7524	7435	7464	7338	7468	7496	6253	6270	6237	7577	7550	7578	7578	7541	7557	6369	6342
Lanes	5	6	5	5	6	5	5	4	4	5	4	4	5	5	4	4	4	5	4	4	4	4	5	4	4	4	6	5	4	4	4	4	4	4
Length	502	440	502	282	353	1133	1612	1881	1178	290	768	700	796	1021	515	267	830	785	702	2000	797	1092	447	706	491	334	956	536	2000	2000	1803	1336	309	1642
LinkID	1043	7404	2000824	1046	7405	7409	1044	7407	1047	2000762	2000759	2000753	2000752	1049	1050	495302	495303	495304	495305	1051	1051	1053	7024	7026	7028	7029	7031	495316	1055	1055	1055	1056	1970012	495339
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	3	1	1	1

	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
	Exit 33									Exit 34							Exit 36							I-270 W Spur						Exit 39			
	MD 185									MD 355							MD 187													MD 190			
Speed	52	52	52	50	47	49	51	52	53	53	53	49	53	53	53	53	53	53	53	52	53	53	50	49	52	53	53	53	54	54	54	54	54	53
Density	28	34	29	38	41	39	37	37	29	29	22	20	25	25	25	18	23	22	21	28	28	28	29	30	20	24	23	24	23	19	22	25	25	25
LOS	D	D	D	E	E	E	E	E	D	D	C	C	C	C	C	C	C	C	C	D	D	D	D	D	C	C	C	C	C	C	C	C	C	C
Volume	7216	7200	7620	7651	7635	7620	7590	7627	7602	6139	3563	3980	3994	4003	4009	3911	3737	3453	4370	4402	4387	4386	4393	4369	6291	6261	6272	6269	6163	6273	5869	5377	5382	6696
Lanes	5	4	5	4	4	4	4	4	5	4	3	4	3	3	3	4	3	3	4	3	3	3	3	3	6	5	5	5	5	6	5	4	4	5
Length	752	733	981	503	1240	2000	72	1034	386	1589	284	907	487	893	1176	325	2000	31	402	1081	2000	2000	2000	1642	551	937	2000	655	442	1021	1587	2000	575	1737
LinkID	1953310	1953311	1953312	1953313	1058	1247	1247	1059	1248	1249	1251	1273	1276	1060	1061	1272	1275	1275	1274	495373	1063	1063	1063	1063	495375	495392	1064	1064	1066	495408	495407	495406	495406	495401
SegmentID	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	3	4	1	1	1	2	1	1	1	1	2	1

	→	→	→	→	→	→	→	→	→	→	→	→	→	→
	Exit 41				Bridge		Exit 43					Exit 44		
	Clara Barton Pkwy				American Legion		GW Memorial Pkwy					VA 193		
Speed	53	54	54	51	48	52	53	53	54	53	54	53	53	53
Density	32	25	28	23	31	29	26	26	26	26	22	28	25	32
LOS	D	C	D	C	D	D	C	C	C	C	C	D	C	D
Volume	6711	6726	5987	5976	6037	7550	5477	5464	5472	5472	5939	5922	6652	6685
Lanes	4	5	4	5	4	5	4	4	4	4	5	4	5	4
Length	1466	999	843	931	1715	1529	320	1385	2000	1725	732	1051	1414	601
LinkID	495415	2541579	1067	495416	495417	495418	11138	1069	2530014	2530014	1083	1084	1101	1114
SegmentID	1	1	1	1	1	1	1	1	1	2	1	1	1	1

2040 Alt 9M PM - I-495 IL Link Evaluation Results 3/6/2020

2040 Alt 9M PM
I-495 IL

	Exit 44 VA 193							Exit 43 GW Memorial Pkwy			Bridge American Legion		Exit 41 Clara Barton Pkwy								Exit 39 MD 190							I-270 W Spur							Exit 36 MD 187
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	59	58	58	58	58	57	56	56	54	51	47	35	32	24	22	21	23	19	18	15	13	12	15	15	13	12	11	7	7	7	7	7	7	6
Density	22	18	18	21	21	21	22	27	28	30	32	42	46	49	53	64	72	66	70	91	99	103	77	91	101	110	115	153	154	152	151	149	113	158
LOS	C	B	B	C	C	C	C	D	D	D	D	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	5178	5174	5174	4843	4840	6088	6072	6029	5959	6043	7427	5926	5888	5923	5788	6657	6515	6347	6253	5636	6551	6423	6916	6727	6717	6674	6588	3275	3245	3271	3267	3238	3195	2905
Lanes	4	5	5	4	4	5	5	4	4	4	5	4	4	5	5	5	4	5	5	4	5	5	6	5	5	5	5	3	3	3	3	3	4	3
Length	2000	1499	1499	2000	93	1457	1556	642	679	466	602	477	685	1486	775	989	2000	1045	395	1944	1491	616	1108	391	1767	724	1508	2000	2000	2000	1582	1174	303	1996
LinkID	1100	1037	1037	495411	495411	1089	1054	1080	1079	1113	1073	495412	1062	495413	1057	495414	2541577	1115	495402	495403	495404	1116	495405	495409	1117	495391	1118	495371	495371	495371	495371	1119	1263	1270
SegmentID	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1

Speed Color Scale (mph)

10 30 40 50 70

	Exit 34 MD 355															Exit 33 MD 185										Exit 31 MD 97								
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	6	6	7	8	11	8	8	9	11	11	13	13	12	12	11	10	12	12	19	19	21	22	19	18	16	14	14	12	14	21	26	22	19	19
Density	117	117	143	121	130	147	133	123	128	127	110	108	93	95	115	114	114	112	94	93	82	79	74	77	98	113	109	106	107	72	73	67	90	86
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Volume	2972	2972	2962	2978	2748	4440	5655	5663	5664	5725	5782	5754	5732	5698	5177	5474	5473	7002	6997	6954	7022	7084	7010	7004	6198	6228	6250	7555	7365	7456	7461	7435	6661	6407
Lanes	4	4	3	3	2	4	5	5	4	4	4	4	5	5	4	5	4	5	4	4	4	4	5	5	4	4	4	6	5	5	4	5	4	4
Length	438	438	655	1105	1490	1944	514	1013	998	521	1600	252	526	658	913	228	788	1632	2000	163	2000	1753	2000	47	834	411	323	1125	454	1034	2000	1238	243	518
LinkID	1271	1271	1257	1121	1258	1250	1260	1261	1120	1262	495331	1122	495332	2000004	495333	495334	495335	495336	495317	495317	2000003	2000003	7015	7015	7017	7019	7021	7023	1953113	1124	2541504	1125	1990014	495307
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1

	Exit 30 US 29					Exit 29 MD 193										Exit 28 MD 650						Exit 27 I-95						Exit 25 US 1					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	18	17	18	14	16	14	16	14	24	27	40	50	52	52	47	35	35	41	52	53	53	53	52	53	53	53	53	53	53	51	48	46	48	50
Density	88	96	93	100	105	90	103	108	78	69	48	38	29	34	38	45	53	45	32	31	25	25	22	27	27	25	23	29	29	29	39	41	39	30
LOS	F	F	F	F	F	F	F	F	F	F	F	E	D	D	E	E	F	E	D	D	C	C	C	D	D	C	C	D	D	D	E	E	E	D
Volume	6476	6666	6690	7212	6495	6496	6544	7624	7637	7602	7603	7601	7603	7055	7073	7771	7357	7375	8263	8240	5252	5276	5668	5674	5633	3965	6102	6091	6104	7467	7417	7490	7411	7493
Lanes	4	4	4	5	4	5	4	5	4	4	4	4	5	4	4	5	4	4	5	5	4	4	5	4	4	3	5	4	4	5	4	4	4	5
Length	268	491	512	1554	785	422	765	283	1222	2000	1068	1127	346	339	505	457	500	1047	1493	1492	1028	536	347	2000	140	1527	1464	2000	1607	668	846	610	481	1016
LinkID	495308	495309	1127	495295	2100087	2000197	2000764	2000770	2000771	1129	1129	1130	7410	2201100	1131	7412	101100	1132	101111	1128	101104	1138	101106	101107	101107	1137	101110	102301	102301	102312	102313	1135	1136	102314
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1

	Exit 24 Greenbelt Metro Station					Exit 23 MD 201							Exit 22 MD 295												Exit 20 MD 450					Exit 19 US 50					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	50	51	51	52	52	51	50	48	47	52	52	52	50	49	51	52	51	51	51	50	51	51	52	52	46	48	52	52	52	53	53	51	50	49
Density	35	31	28	28	28	26	33	31	39	28	30	31	30	36	35	27	35	35	35	36	35	35	27	31	34	39	30	29	23	27	27	24	30	38
LOS	E	D	D	D	D	C	D	D	E	D	D	D	D	E	D	D	E	D	E	E	E	E	D	D	D	E	D	D	C	D	D	C	D	E
Volume	7075	6356	7196	7176	5863	6618	6586	7354	7318	7276	6380	6394	7546	7090	7056	7157	7147	7178	7185	7223	7207	7172	7014	6428	7638	7607	7614	5992	6002	5578	5587	7465	7458	7456
Lanes	4	4	5	5	4	5	4	5	4	5	4	4	5	4	4	5	4	4	4	4	4	4	5	4	5	4	5	4	5	4	4	6	5	4
Length	2000	23	1042	442	1150	761	810	734	928	447	512	554	554	497	516	754	706	2000	2000	2000	1629	1217	263	1180	915	561	1358	1369	213	2000	603	1423	754	2000
LinkID	103501	103501	1139	103502	104704	104706	104707	104709	104710	104711	105902	1140	105904	105906	1141	105908	105909	1142	1142	1142	1142	1143	105910	106105	106108	106109	106110	107301	107302	107307	107307	107309	1144	107311
SegmentID	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	1	1

2040 Alt 9M PM

I-495 IL

	Exit 16 Arena Dr											Exit 15 MD 214							Exit 13 Ritchie Marlboro Rd										Exit 11 MD 4					
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	50	52	52	52	52	52	48	50	51	48	47	51	52	49	50	51	50	53	53	53	53	53	53	52	51	51	51	53	53	48	52	53	52	53
Density	37	29	29	30	30	30	32	27	27	29	33	24	27	28	34	34	33	26	25	25	24	30	30	31	31	31	26	26	27	26	25	23	29	29
LOS	E	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	C	C	C	C	D	D	D	D	D	D	D	D	C	C	C	D	D
Volume	7416	7434	7478	4742	4742	4742	6293	6880	6892	6894	6222	6223	5610	6827	6824	6835	6759	6824	5252	5260	6322	6302	6315	6306	6300	6300	5551	5542	6360	5325	5281	6081	6067	6077
Lanes	4	5	5	3	3	3	4	5	5	5	4	5	4	5	4	4	4	5	4	4	5	4	4	4	4	4	4	4	5	4	4	5	4	4
Length	190	855	1495	2000	2000	1908	1069	1470	249	1490	1056	692	986	1397	2000	796	480	997	2000	1053	1469	2000	2000	2000	761	1366	456	479	560	505	526	1147	344	1293
LinkID	107311	107312	1145	108500	108500	108500	109704	109707	1146	1148	110904	110905	110907	110913	1147	1147	1149	110915	111105	111105	111111	111112	111112	111112	111112	1150	112301	1151	112303	112305	1152	112307	112308	1153
SegmentID	2	1	1	1	2	3	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	3	4	1	1	1	1	1	1	1	1	1

	Exit 9 MD 337											Exit 7 MD 5												Exit 4 MD 414									
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	53	53	62	63	63	62	62	61	61	63	63	64	61	63	63	63	63	63	63	63	63	63	62	63	63	62	63	63	62	61	58	60	63	63
Density	29	23	23	22	22	20	25	25	25	19	19	16	16	20	17	21	19	24	24	24	24	24	19	22	22	19	20	20	18	23	24	31	20	20
LOS	D	C	C	C	C	C	C	C	C	C	C	B	B	C	B	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	D	C	C
Volume	6071	6067	5550	5560	5539	6104	6137	6140	6133	6132	6130	3993	4967	4982	5309	5340	5922	6007	5994	5991	5993	5961	5954	5546	5505	5921	5095	5080	5540	5555	5449	3763	3788	2501
Lanes	4	5	4	4	4	5	4	4	4	5	5	4	5	4	5	4	5	4	4	4	4	4	5	4	4	5	4	4	5	4	4	2	3	2
Length	896	625	2000	2000	770	663	810	2000	681	757	1486	1142	789	703	680	1827	799	2000	2000	2000	708	860	617	1155	507	909	508	589	349	2000	55	1054	1707	1386
LinkID	1154	112309	113503	113503	113503	114701	114702	1155	1155	114703	1157	115905	115910	115911	115913	115914	1158	2541545	2541545	2541545	2541545	1159	115915	116102	1161	116104	116106	1162	116108	116109	116109	116110	116111	117305
SegmentID	1	1	1	2	3	1	1	1	2	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	2	1	1	1

	Exit 3 MD 210						Exit 2 I-295		WWB					
	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	60	60	59	57	57	55	30	44	49	53	53	53	56	56
Density	13	17	15	21	21	29	52	49	44	40	40	40	30	30
LOS	B	B	B	C	C	D	F	F	E	E	E	E	D	D
Volume	3147	3126	3574	3570	3574	3157	4728	4376	6391	6387	6364	6319	8422	8431
Lanes	4	3	4	3	3	2	3	2	3	3	3	3	5	5
Length	907	581	640	2000	598	1132	851	1030	2000	2000	2000	1329	2000	1262
LinkID	117307	117308	117310	117311	117311	118503	118504	118506	118508	118508	118508	118508	44	44
SegmentID	1	1	1	1	2	1	1	1	1	2	3	4	1	2

2040 Alt 9M PM - I-270 NB Link Evaluation Results **3/6/2020**

2040 Alt 9M PM
I-270 NB

						Exit 1															Exit 4			Exit 5						Exit 6							
		I-270 W Spur/I-495				Democracy Blvd		Westlake Terrace				I-270 Spur							Montrose Rd				MD 189						MD 28							
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	11	49	53	54	54	53	53	52	54	54	53	54	54	54	53	53	50	52	53	51	53	53	53	49	52	52	53	52	50	44	35	31	28	24		
Density	115	34	31	20	26	19	29	27	26	26	27	28	28	28	28	28	26	27	32	38	37	37	35	35	33	33	37	34	32	42	50	55	51	49		
LOS	F	D	D	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D	D	D	D	E	D	D	E	F	F	F	F		
Volume	6588	3303	3313	3314	2802	3098	3081	4231	4219	4241	4243	9031	9056	9062	9068	9076	9081	8583	8463	9850	9839	9845	9213	10171	10181	10174	9891	8697	9444	9284	8908	8701	8568	8433		
Lanes	5	2	2	3	2	3	2	3	3	3	3	6	6	6	6	6	7	6	5	5	5	5	5	6	6	6	5	5	6	5	5	5	6	7		
Length	1508	2000	1339	894	788	886	450	793	1166	705	1845	431	1520	1204	1533	999	769	702	531	2000	1343	799	690	1389	530	634	406	872	598	2000	1459	1474	998	515		
LinkID	1118	495372	495372	232	234	235	237	134	241	242	243	274	275	738	739	280	2541645	428	742	289	289	251	743	300	744	304	305	316	745	2541657	320	741	747	2541659		
SegmentID	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1		

Speed Color Scale (mph)

10 30 40 50 70

						Exit 8		Exit 9				Exit 10		Exit 11			Watkins Mill Rd							Exit 13				Exit 15							Exit 16		
						Shady Grove Rd		I-370				MD 117		MD 124										Middlebrook Rd				MD 118							MD 27		
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	21	17	16	15	13	12	11	15	16	15	14	13	13	12	12	14	12	11	11	13	13	12	13	12	13	15	16	18	17	15	14	13	13	15		
Density	66	77	67	72	82	86	84	75	70	82	88	93	95	92	97	102	115	120	121	100	85	97	92	108	106	73	80	85	87	84	98	101	80	95		
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		
Volume	6996	7957	3282	3227	4333	4234	5587	5551	5512	5067	4898	4818	4790	5731	5712	5682	6604	6607	6551	6401	6415	5995	6032	5377	5357	5328	5040	4510	4506	5049	3988	3973	4322	4260		
Lanes	5	6	3	3	4	4	6	5	5	4	4	4	4	5	5	4	5	5	5	5	6	5	5	4	4	5	4	3	3	4	3	3	4	3		
Length	726	481	1026	634	2000	749	531	843	1357	2000	2000	2000	1479	584	913	444	1112	258	2000	725	763	636	665	872	672	820	1561	1090	527	1717	520	1157	771	687		
LinkID	323	336	339	749	411	411	347	348	754	350	350	350	350	362	363	762	2430241	2430244	10040808	763	364	365	367	369	764	370	372	374	765	376	378	766	380	381		
SegmentID	1	1	1	1	1	2	1	1	1	1	2	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		

													Exit 18																Exit 22								
													MD 121																MD 109								
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	15	16	17	17	16	17	17	17	15	12	12	12	11	11	12	23	42	51	52	52	52	52	52	52	52	52	53	53	52	51	52	52	52	52		
Density	73	92	90	90	92	88	90	87	77	104	85	89	125	129	114	61	50	41	41	40	41	40	40	41	41	41	26	38	27	41	40	40	40	40		
LOS	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	E	E	E	E	E	E	D	E	D	E	E	E	E	E		
Volume	4419	4452	4484	4503	4518	4540	4574	4553	4549	3741	4186	4219	4247	4268	4245	4248	4238	4247	4232	4206	4248	4227	4231	4243	4253	4239	4244	4034	4216	4208	4218	4219	4213	4217		
Lanes	4	3	3	3	3	3	3	3	4	3	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2		
Length	457	1044	2000	2000	2000	2000	718	756	736	920	211	877	400	1727	2000	1731	2000	2000	905	482	2000	383	1176	2000	1202	1164	340	1049	291	1204	2000	2000	2000	2000		
LinkID	383	384	767	767	767	767	767	768	385	387	389	1001	390	769	391	391	272	272	272	392	394	394	395	396	396	750	397	399	401	402	771	771	771	771		
SegmentID	1	1	1	2	3	4	5	1	1	1	1	1	1	1	1	2	1	2	3	1	1	2	1	1	2	1	1	1	1	1	1	2	3	4		

							Exit 26																				Exit 31								
							MD 80																				MD 85								
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	52	52	52	52	52	51	50	52	47	44	51	52	52	52	52	52	52	52	52	52	52	52	52	51	51	53	53	52	53	53	53					
Density	40	40	40	40	40	41	27	35	31	50	43	42	42	42	42	42	42	41	42	42	42	42	42	43	43	28	38	26	34	26	25					
LOS	E	E	E	E	E	E	D	D	D	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	E	C	D	C	C					
Volume	4214	4222	4213	4218	4221	4201	4148	3641	4406	4385	4404	4403	4405	4407	4406	4387	4389	4344	4407	4406	4403	4399	4395	4397	4375	4393	4038	3985	3602	5412	5409					
Lanes	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	4	4					
Length	1502	2000	1497	2000	698	1279	214	773	615	868	2000	2000	2000	2000	1813	539	1225	391	2000	2000	2000	2000	2000	178	1025	473	1416	241	945	1115	392					
LinkID	771	412	412	446	446	783	403	405	407	408	784	784	784	784	784	1010	1017	1007	869	869	869	869	869	869	785	415	417	421	423	425	577					
SegmentID	5	1	2	1	2	1	1	1	1	1	1	2	3	4	5	1	1	1	1	2	3	4	5	6	1	1	1	1	1	1	1					

2040 Alt 9M PM - I-270 SB Link Evaluation Results **3/6/2020**

2040 Alt 9M PM
I-270 SB

	Exit 31 MD 85																						Exit 26 MD 80											
Direction of Travel	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	58	58	58	58	56	59	55	59	62	63	63	63	63	63	63	62	61	60	59	59	57	58	58	61	59	58	58	58	59	58	58	58	58
Density	21	21	21	23	23	16	16	15	21	20	20	20	20	20	20	20	20	21	21	21	21	22	22	14	17	13	20	20	20	20	20	19	20	20
LOS	C	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	B	C	C	C	C	C	C	C	C
Volume	3573	3554	3570	2631	2634	2616	1905	2541	2527	2545	2540	2538	2534	2533	2506	2530	2532	2526	2517	2509	2499	2500	2503	2491	2028	2305	2315	2318	2299	2314	2307	2252	2296	2304
Lanes	3	3	3	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2
Length	931	404	446	474	1052	294	849	378	1140	2000	2000	2000	2000	2000	262	2000	2000	2000	2000	2000	2000	548	1088	377	654	1399	88	1849	565	2000	2000	57	2000	2000
LinkID	683	2000012	157	2000014	699	2000016	2000017	2000020	2000021	703	703	703	703	703	703	448	448	448	448	448	448	448	704	201	2000022	2000025	2000026	705	447	455	455	455	453	453
SegmentID	1	1	1	1	1	1	1	1	1	1	2	3	4	5	6	1	2	3	4	5	6	7	1	1	1	1	1	1	1	1	2	3	1	2

Speed Color Scale (mph)

10 30 40 50 70

	Exit 22 MD 109																						Exit 18 MD 121											
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	57	57	56	57	58	57	53	55	56	56	56	56	56	56	56	56	56	56	60	62	61	62	61	62	62	63	63	63	63	63	63	63	64
Density	20	20	20	20	13	19	14	23	22	21	21	21	21	21	21	21	21	21	21	13	13	9	11	10	13	11	15	15	15	15	15	15	11	13
LOS	C	C	C	C	B	C	B	C	C	C	C	C	C	C	C	C	C	C	C	B	B	A	A	A	B	B	B	B	B	B	B	B	B	B
Volume	2304	2298	2292	2294	2286	2198	2401	2405	2404	2384	2377	2397	2389	2366	2366	2355	2338	2347	2341	2338	2336	2332	2019	2437	2433	2825	2836	2849	2860	2867	2858	2837	2839	2440
Lanes	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	3	4	3	4	3	3	3	3	3	3	4	3
Length	453	453	410	706	2000027	2000029	2000031	2000032	707	707	2000033	2000034	2000034	2000036	2000037	2000037	2000037	260	260	2000038	708	2000039	2000041	1002	2000044	709	2020578	2020578	2020578	2020578	2020578	710	2000045	2000047
LinkID	3	4	1	1	1	1	1	1	1	2	1	1	2	1	1	2	3	1	2	1	1	1	1	1	1	1	1	2	3	4	5	1	1	1

	Exit 16 MD 27					Exit 15 MD 118			Exit 13 Middlebrook Rd								Watkins Mill Rd			Exit 11 MD 124			Exit 10 MD 117					Exit 9 I-370					Exit 8 Shady Grove Rd	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	62	63	63	63	63	62	63	61	61	63	63	63	62	61	61	63	64	64	63	59	62	63	63	60	61	60	63	63	64	59	59	59	57	56
Density	12	16	13	13	16	14	18	16	22	22	21	20	20	21	21	13	12	12	15	17	20	20	20	22	18	19	15	15	10	13	13	16	15	17
LOS	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	B	B	B	B	B	C	C	C	C	C	C	B	B	A	B	B	B	B	B
Volume	3069	3048	3391	3391	3000	3367	3334	4021	4026	4037	4034	5036	5062	5037	5037	4107	3121	3108	3743	5011	4971	5004	4997	6625	6644	6666	6641	6651	3326	5280	5276	4625	5265	5886
Lanes	4	3	4	4	3	4	3	4	3	3	3	4	4	4	4	5	4	4	4	5	4	4	4	5	6	6	7	7	5	7	7	5	6	6
Length	684	1035	1007	1058	1713	543	751	500	1025	2000	723	1566	1324	2000	655	527	1503	595	1167	838	658	2000	1062	1569	1152	411	1058	1257	1243	795	1607	706	478	708
LinkID	2000049	2000050	2000052	711	2000054	2000056	2000057	2000059	2000060	712	712	2000062	713	1026	1026	2541402	2000063	718	2000064	2000067	2000068	720	720	2000070	2000097	721	2000071	2000072	2000074	2000078	2000080	2000083	2000086	2000089
SegmentID	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1

	Exit 6 MD 28									Exit 5 MD 189							Exit 4 Montrose Rd						I-270 Spur			Exit 1 Westlake Terrace	Democracy Blvd						I-270 W Spur/I-495	
	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Speed	57	57	57	57	57	58	55	42	31	25	21	16	13	10	8	7	6	6	5	4	4	4	4	4	54	59	59	59	59	56	56	57	57	52
Density	20	21	20	21	17	19	20	25	34	40	47	61	72	83	89	114	111	132	134	155	148	151	156	152	7	7	7	7	6	7	8	11	11	20
LOS	C	C	C	C	B	C	C	C	D	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	A	A	A	A	A	A	A	B	B	C
Volume	5856	5879	5859	5875	5860	5352	5549	6308	6180	6005	5831	4906	4722	4954	4489	4180	4300	3722	4198	3797	3619	3463	3451	3432	1611	1621	1626	1156	1151	1892	1884	1899	1909	6291
Lanes	5	5	5	5	6	5	5	6	6	6	6	5	5	6	6	5	6	5	6	6	6	6	6	6	4	4	4	3	3	5	4	3	3	6
Length	1085	607	1508	2000	291	896	986	575	1050	610	836	816	1571	691	452	809	650	937	415	2000	1709	719	387	330	2000	983	955	2000	442	498	934	2000	506	551
LinkID	2000091	2000094	2000095	2000109	449	2000110	2000118	2000121	2000122	2000125	2000126	160	740	130	445	2000137	2000139	2000141	2000143	129	129	730	443	442	133	133	137	138	138	141	2020142	2115374	2115374	495375
SegmentID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	2	1	1	1	2	1

ATTACHMENT G – THROUGHPUT TABLES

I-495 Throughput	Inner Loop				Outer Loop			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
BETWEEN VA-193 AND GW MEMORIAL PKWY	9599	10016	9097	9203	8372	8777	9324	9371
AMERICAN LEGION BRIDGE	9672	10512	10260	10401	10607	10856	11551	11399
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	8119	8725	8562	8664	10332	10130	10131	10138
BETWEEN MD 190 AND I-270	8511	9738	9816	9781	11607	11438	11102	10480
BETWEEN I-270 WEST AND MD 187	5947	5861	5127	5524	5393	5061	5479	6038
BETWEEN I-270 EAST AND MD 187	5554	5461	4782	5371	5565	5268	5413	5500
BETWEEN MD 355 AND MD 185	8764	9882	9075	8328	8783	9207	9330	10071
BETWEEN MD 185 AND MD 97	8391	9332	9104	8612	9702	10074	9013	9890
BETWEEN MD 97 AND US 29	7455	8653	8558	7820	8949	8793	7436	8880
BETWEEN MD US 29 AND MD 193	7368	8497	8176	8038	8226	7610	6359	7583
BETWEEN MD 193 AND MD 650	7642	8476	8118	8625	7716	7064	6017	7008
BETWEEN MD 650 AND I-95	8970	9444	8987	9274	8858	7863	6548	7703
BETWEEN US 1 AND I-95	7373	7640	6536	8121	7532	7118	6978	7203
BETWEEN GREENBELT STATION AND US 1	8656	9244	8176	9629	8021	7617	7265	7091
BETWEEN GREENBELT STATION AND MD 201	8419	9033	8019	9347	8007	7546	7303	7110
BETWEEN MD 201 AND MD 295	7845	8413	8141	8906	8541	8487	8105	7896
BETWEEN MD 295 AND MD 450	7521	8004	8178	8482	8867	8692	8378	8665
BETWEEN MD 450 AND US 50	7932	8372	8869	9010	8819	8562	8505	8890
BETWEEN US 50 AND MD 202	9283	9618	10163	10003	8801	8018	7693	8562
BETWEEN MD 202 AND ARENA DR	9197	9470	9870	9821	8963	8173	7652	8880
BETWEEN ARENA DR AND MD 214	9204	9579	9767	9770	9211	8570	8123	9092
BETWEEN MD 214 AND RITCHIE MARLBORO RD	9309	9429	9535	9542	8959	8318	8521	8315
BETWEEN RITCHIE MARLBORO AND MD 4	8907	8965	8660	9039	8180	7619	8297	8183
BETWEEN MD 4 AND FORESTVILLE RD	8263	8177	8697	8382	7140	6616	7077	7259
BETWEEN FORESTVILLE AND MD 218	7577	7510	7983	7749	6226	5338	5870	6427
BETWEEN MD 218 AND MD 5	7722	7676	8181	7898	6852	5954	6413	6765
BETWEEN MD 5 AND MD 414	6719	6059	6418	6418	5219	5567	5239	5626
BETWEEN MD 414 AND MD 210	5919	6145	6425	6522	5112	5115	4984	5253
BETWEEN MD 210 AND I-295	7299	6760	7008	7164	4785	4900	4610	4676
WOODROW WILSON BRIDGE	9561	10002	9997	9390	8241	8301	7911	8056

I-270 Throughput	Southbound				Northbound			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
BETWEEN MD 85 AND MD 80	3395	3206	3120	3436	1866	2714	2984	2785
BETWEEN MD 80 AND MD 109	3617	3610	3675	3739	1625	2246	2555	2382
BETWEEN MD 109 AND MD 121	4047	4054	4133	4106	1685	2344	2661	2386
BETWEEN MD 121 AND MD 27	5133	5133	5042	5093	2115	2579	2821	2686
BETWEEN MD 27 AND MD 118	5644	5489	5231	5406	2300	2835	3156	3041
BETWEEN MD 118 AND MIDDLEBROOK RD	6167	5910	5848	5950	2426	3139	3799	3627
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	8112	7806	7772	7585	2822	3878	4732	4395
BETWEEN WATKINS MILL AND MD 124	7405	6803	6516	6436	2664	3983	5008	4704
BETWEEN MD 124 AND MD 117	8738	8187	7882	7890	2554	3939	5013	4861
BETWEEN MD 117 AND I-370	10473	9889	9286	9738	3082	4878	6370	6113
BETWEEN I-370 AND SHADY GROVE RD	11933	10896	9789	9856	2754	4281	5634	5640
BETWEEN SHADY GROVE RD AND MD 28	12081	10723	9441	9431	3423	5366	7389	7149
BETWEEN MD 28 AND MD 189	12320	11386	10058	9394	4001	6086	8489	8084
BETWEEN MD 189 AND MONTROSE RD	12150	11698	10331	8545	4051	6052	8491	8081
BETWEEN MONTROSE RD AND I-270 SPLIT	12158	12365	10925	8825	4654	6221	8525	8003
BETWEEN I-270 SPLIT AND MD 187	4951	5777	5006	3909	2017	2558	3908	3722
BETWEEN MD 187 AND I-495	4139	4878	4231	3564	2490	3204	4396	4073
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	7172	6579	5952	4996	2662	3702	4672	4299
BETWEEN DEMOCRACY BLVD AND I-495	6687	6305	5562	4293	2725	3995	4871	4373

I-495 Throughput	Inner Loop				Outer Loop			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN VA-193 AND GW MEMORIAL PKWY	7794	8393	7278	7159	8460	7995	7059	6503
AMERICAN LEGION BRIDGE	9530	9885	8519	8757	10447	9796	9170	7795
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	7846	7341	6326	6872	9348	8256	7884	6552
BETWEEN MD 190 AND I-270	10763	9236	9264	9402	9433	8499	8013	6279
BETWEEN I-270 WEST AND MD 187	5110	4216	4496	4333	5786	5603	5296	3318
BETWEEN I-270 EAST AND MD 187	4396	4184	4520	4294	5661	5411	5212	2802
BETWEEN MD 355 AND MD 185	7837	7346	7631	7419	9600	9506	9576	5168
BETWEEN MD 185 AND MD 97	9005	8694	8873	7530	9215	9405	9441	6014
BETWEEN MD 97 AND US 29	9421	9086	9043	7240	8927	9288	9372	6872
BETWEEN MD US 29 AND MD 193	9484	9115	9131	7118	8439	8823	8594	7010
BETWEEN MD 193 AND MD 650	9697	9540	9383	8051	8903	9271	9015	8132
BETWEEN MD 650 AND I-95	10338	10158	9904	9100	9302	9605	9907	8272
BETWEEN US 1 AND I-95	7198	7382	7111	5501	9730	10016	9496	8308
BETWEEN GREENBELT STATION AND US 1	8729	8708	8465	7304	9377	9604	8858	7857
BETWEEN GREENBELT STATION AND MD 201	8794	8829	8471	7431	9199	9204	8499	7592
BETWEEN MD 201 AND MD 295	8806	8904	8571	7534	9104	8998	8054	7249
BETWEEN MD 295 AND MD 450	9303	9137	8893	7533	8400	8388	7419	7258
BETWEEN MD 450 AND US 50	9637	9597	9447	8339	8910	8908	7811	7574
BETWEEN US 50 AND MD 202	9911	9777	10126	9289	9182	9179	8060	7785
BETWEEN MD 202 AND ARENA DR	9565	9328	9902	9460	9434	9455	8170	8308
BETWEEN ARENA DR AND MD 214	9597	9199	9593	9448	9322	9398	8591	8334
BETWEEN MD 214 AND RITCHIE MARLBORO RD	9337	9116	9521	9384	9620	9646	9211	8985
BETWEEN RITCHIE MARLBORO AND MD 4	8103	8186	8881	8797	9255	9201	8924	8425
BETWEEN MD 4 AND FORESTVILLE RD	7465	7952	8412	8547	8661	8529	8298	7674
BETWEEN FORESTVILLE AND MD 218	6963	7446	7953	7902	7650	7263	7167	6708
BETWEEN MD 218 AND MD 5	7354	8033	8497	8295	8035	7614	7546	7063
BETWEEN MD 5 AND MD 414	5533	6016	6484	6078	8210	7830	7760	6945
BETWEEN MD 414 AND MD 210	5112	5555	5933	5369	7827	7770	7777	7072
BETWEEN MD 210 AND I-295	4833	5316	5700	5138	7496	7597	7628	7047
WOODROW WILSON BRIDGE	7757	8422	8775	8091	9539	9289	9351	9148

I-270 Throughput	Southbound				Northbound			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN MD 85 AND MD 80	2266	2527	2871	2938	4373	4385	4145	3959
BETWEEN MD 80 AND MD 109	2022	2318	2669	2713	4122	4208	4134	3986
BETWEEN MD 109 AND MD 121	2181	2404	2760	2767	4174	4247	4138	4186
BETWEEN MD 121 AND MD 27	2677	2836	3379	3350	5168	4452	4764	4894
BETWEEN MD 27 AND MD 118	3234	3391	3576	3748	6384	5049	5406	5898
BETWEEN MD 118 AND MIDDLEBROOK RD	3756	4026	4257	4327	6968	5377	5396	6264
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	4789	5036	5542	5371	8269	6401	6211	7499
BETWEEN WATKINS MILL AND MD 124	3868	3743	4184	4357	8165	6546	5865	6878
BETWEEN MD 124 AND MD 117	5013	4971	5497	5472	8709	7018	5918	7523
BETWEEN MD 117 AND I-370	6450	6625	7355	6918	10240	8453	6707	8596
BETWEEN I-370 AND SHADY GROVE RD	6451	6361	5691	5550	11394	9922	6055	7991
BETWEEN SHADY GROVE RD AND MD 28	7365	7255	4819	5852	11989	11766	5828	8389
BETWEEN MD 28 AND MD 189	7885	7559	4640	6198	12484	12505	6423	9145
BETWEEN MD 189 AND MONTROSE RD	7619	6201	4419	5694	12307	12184	7180	8740
BETWEEN MONTROSE RD AND I-270 SPLIT	7534	5429	4808	5775	11661	11419	9100	7405
BETWEEN I-270 SPLIT AND MD 187	3267	2263	2320	2651	4994	5226	3893	2863
BETWEEN MD 187 AND I-495	3183	2643	2548	2669	4468	4417	4058	2216
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	3722	2788	2755	2988	6654	6176	6009	4772
BETWEEN DEMOCRACY BLVD AND I-495	3633	2919	2670	2891	5682	4900	4992	4898

ATTACHMENT H – PERCENT DEMAND MET

I-495 Percent Vehicle Demand Met	Inner Loop				Outer Loop			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
BETWEEN VA-193 AND GW MEMORIAL PKWY	95%	96%	92%	96%	100%	98%	100%	100%
AMERICAN LEGION BRIDGE	96%	92%	87%	91%	100%	95%	100%	100%
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	86%	82%	78%	81%	100%	94%	99%	100%
BETWEEN MD 190 AND I-270	94%	91%	87%	89%	100%	93%	100%	96%
BETWEEN I-270 WEST AND MD 187	96%	93%	87%	91%	93%	81%	97%	96%
BETWEEN I-270 EAST AND MD 187	95%	93%	87%	92%	98%	85%	96%	91%
BETWEEN MD 355 AND MD 185	100%	94%	93%	88%	98%	91%	87%	93%
BETWEEN MD 185 AND MD 97	100%	92%	94%	92%	98%	95%	85%	91%
BETWEEN MD 97 AND US 29	100%	90%	93%	88%	96%	96%	84%	95%
BETWEEN MD US 29 AND MD 193	100%	92%	92%	93%	98%	96%	86%	95%
BETWEEN MD 193 AND MD 650	100%	89%	87%	98%	95%	96%	87%	90%
BETWEEN MD 650 AND I-95	100%	89%	91%	100%	97%	96%	85%	92%
BETWEEN US 1 AND I-95	99%	91%	82%	100%	97%	92%	91%	96%
BETWEEN GREENBELT STATION AND US 1	99%	91%	84%	100%	97%	90%	90%	94%
BETWEEN GREENBELT STATION AND MD 201	100%	94%	86%	100%	95%	87%	88%	93%
BETWEEN MD 201 AND MD 295	99%	93%	89%	100%	95%	87%	89%	94%
BETWEEN MD 295 AND MD 450	99%	95%	93%	100%	94%	86%	87%	95%
BETWEEN MD 450 AND US 50	99%	94%	93%	100%	95%	85%	85%	94%
BETWEEN US 50 AND MD 202	99%	95%	96%	100%	93%	80%	81%	92%
BETWEEN MD 202 AND ARENA DR	99%	96%	95%	100%	95%	80%	79%	96%
BETWEEN ARENA DR AND MD 214	99%	96%	95%	100%	95%	81%	80%	95%
BETWEEN MD 214 AND RITCHIE MARLBORO RD	100%	96%	97%	100%	95%	78%	85%	90%
BETWEEN RITCHIE MARLBORO AND MD 4	99%	93%	92%	98%	97%	80%	94%	96%
BETWEEN MD 4 AND FORESTVILLE RD	98%	94%	95%	98%	97%	77%	91%	99%
BETWEEN FORESTVILLE AND MD 218	98%	94%	95%	98%	96%	72%	89%	99%
BETWEEN MD 218 AND MD 5	98%	94%	95%	97%	95%	73%	88%	98%
BETWEEN MD 5 AND MD 414	93%	100%	96%	98%	100%	91%	96%	100%
BETWEEN MD 414 AND MD 210	77%	100%	97%	100%	100%	86%	92%	100%
BETWEEN MD 210 AND I-295	82%	94%	95%	100%	100%	86%	93%	100%
WOODROW WILSON BRIDGE	86%	92%	96%	100%	100%	87%	91%	100%

<90%	>90%	100%

I-270 Percent Vehicle Demand Met	Southbound				Northbound			
	6-7 AM	7-8 AM	8-9 AM	9-10 AM	6-7 AM	7-8 AM	8-9 AM	9-10 AM
BETWEEN MD 85 AND MD 80	93%	84%	88%	100%	100%	92%	97%	100%
BETWEEN MD 80 AND MD 109	90%	84%	95%	100%	100%	92%	97%	100%
BETWEEN MD 109 AND MD 121	88%	83%	94%	100%	100%	93%	99%	100%
BETWEEN MD 121 AND MD 27	90%	88%	97%	100%	100%	94%	97%	100%
BETWEEN MD 27 AND MD 118	86%	95%	100%	100%	100%	100%	100%	100%
BETWEEN MD 118 AND MIDDLEBROOK RD	86%	94%	99%	100%	100%	93%	97%	99%
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	89%	94%	100%	100%	100%	93%	97%	98%
BETWEEN WATKINS MILL AND MD 124	90%	95%	100%	100%	100%	93%	96%	98%
BETWEEN MD 124 AND MD 117	89%	95%	100%	100%	99%	93%	94%	98%
BETWEEN MD 117 AND I-370	90%	93%	96%	100%	98%	93%	93%	98%
BETWEEN I-370 AND SHADY GROVE RD	100%	99%	99%	100%	97%	93%	92%	96%
BETWEEN SHADY GROVE RD AND MD 28	100%	100%	100%	100%	99%	97%	97%	100%
BETWEEN MD 28 AND MD 189	100%	100%	99%	97%	100%	93%	92%	95%
BETWEEN MD 189 AND MONTROSE RD	100%	100%	100%	87%	99%	94%	92%	95%
BETWEEN MONTROSE RD AND I-270 SPLIT	100%	100%	100%	89%	99%	90%	91%	93%
BETWEEN I-270 SPLIT AND MD 187	100%	100%	100%	89%	100%	90%	90%	96%
BETWEEN MD 187 AND I-495	100%	100%	100%	92%	100%	89%	90%	96%
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	100%	100%	100%	91%	96%	91%	92%	91%
BETWEEN DEMOCRACY BLVD AND I-495	100%	100%	100%	93%	96%	91%	90%	90%

I-495 Percent Vehicle Demand Met	Inner Loop				Outer Loop			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN VA-193 AND GW MEMORIAL PKWY	99%	99%	83%	90%	100%	96%	90%	81%
AMERICAN LEGION BRIDGE	100%	98%	82%	93%	97%	90%	86%	75%
BETWEEN CLARA BARTON PARKWAY AND CABIN JOHN PARKWAY	89%	83%	72%	84%	99%	89%	86%	72%
BETWEEN MD 190 AND I-270	99%	84%	88%	98%	98%	88%	85%	70%
BETWEEN I-270 WEST AND MD 187	96%	82%	90%	100%	98%	99%	96%	64%
BETWEEN I-270 EAST AND MD 187	82%	81%	91%	100%	99%	97%	94%	57%
BETWEEN MD 355 AND MD 185	80%	76%	83%	92%	100%	96%	94%	54%
BETWEEN MD 185 AND MD 97	82%	81%	89%	85%	99%	95%	92%	64%
BETWEEN MD 97 AND US 29	83%	82%	90%	82%	99%	95%	92%	77%
BETWEEN MD US 29 AND MD 193	86%	84%	93%	84%	99%	95%	92%	86%
BETWEEN MD 193 AND MD 650	87%	87%	93%	90%	100%	97%	92%	97%
BETWEEN MD 650 AND I-95	88%	88%	94%	95%	99%	96%	98%	94%
BETWEEN US 1 AND I-95	92%	92%	96%	96%	98%	95%	97%	97%
BETWEEN GREENBELT STATION AND US 1	92%	92%	95%	96%	97%	95%	97%	96%
BETWEEN GREENBELT STATION AND MD 201	92%	94%	96%	98%	97%	93%	96%	96%
BETWEEN MD 201 AND MD 295	92%	94%	97%	97%	97%	94%	95%	96%
BETWEEN MD 295 AND MD 450	92%	95%	100%	100%	95%	95%	94%	95%
BETWEEN MD 450 AND US 50	92%	95%	100%	100%	94%	93%	92%	93%
BETWEEN US 50 AND MD 202	94%	97%	100%	100%	93%	92%	91%	92%
BETWEEN MD 202 AND ARENA DR	94%	98%	100%	100%	96%	95%	90%	96%
BETWEEN ARENA DR AND MD 214	94%	98%	100%	100%	96%	94%	94%	96%
BETWEEN MD 214 AND RITCHIE MARLBORO RD	96%	97%	100%	100%	97%	93%	95%	99%
BETWEEN RITCHIE MARLBORO AND MD 4	95%	95%	98%	100%	97%	94%	94%	99%
BETWEEN MD 4 AND FORESTVILLE RD	95%	95%	99%	100%	96%	94%	93%	97%
BETWEEN FORESTVILLE AND MD 218	95%	96%	99%	100%	95%	92%	92%	97%
BETWEEN MD 218 AND MD 5	95%	96%	100%	100%	94%	92%	92%	97%
BETWEEN MD 5 AND MD 414	97%	96%	100%	100%	100%	100%	100%	100%
BETWEEN MD 414 AND MD 210	94%	94%	98%	99%	94%	92%	92%	97%
BETWEEN MD 210 AND I-295	91%	91%	97%	98%	94%	92%	92%	97%
WOODROW WILSON BRIDGE	98%	95%	100%	100%	95%	92%	91%	97%

<90%	>90%	100%

I-270 Percent Vehicle Demand Met	Southbound				Northbound			
	3-4 PM	4-5 PM	5-6 PM	6-7 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
BETWEEN MD 85 AND MD 80	100%	93%	93%	98%	92%	80%	80%	94%
BETWEEN MD 80 AND MD 109	98%	92%	93%	98%	92%	78%	79%	93%
BETWEEN MD 109 AND MD 121	100%	91%	92%	98%	91%	77%	77%	92%
BETWEEN MD 121 AND MD 27	99%	91%	94%	99%	100%	72%	77%	90%
BETWEEN MD 27 AND MD 118	100%	94%	95%	99%	100%	81%	87%	100%
BETWEEN MD 118 AND MIDDLEBROOK RD	99%	95%	96%	98%	95%	66%	66%	85%
BETWEEN MIDDLEBROOK RD AND WATKINS MILL	99%	96%	97%	97%	94%	66%	65%	84%
BETWEEN WATKINS MILL AND MD 124	99%	86%	87%	94%	99%	72%	62%	79%
BETWEEN MD 124 AND MD 117	99%	90%	89%	96%	99%	70%	57%	78%
BETWEEN MD 117 AND I-370	100%	91%	92%	98%	99%	72%	57%	78%
BETWEEN I-370 AND SHADY GROVE RD	100%	95%	78%	82%	100%	80%	51%	70%
BETWEEN SHADY GROVE RD AND MD 28	100%	98%	58%	78%	100%	95%	49%	75%
BETWEEN MD 28 AND MD 189	99%	91%	50%	74%	100%	93%	49%	74%
BETWEEN MD 189 AND MONTROSE RD	99%	78%	50%	70%	100%	93%	55%	71%
BETWEEN MONTROSE RD AND I-270 SPLIT	97%	67%	57%	75%	100%	92%	73%	64%
BETWEEN I-270 SPLIT AND MD 187	84%	58%	60%	70%	100%	95%	70%	54%
BETWEEN MD 187 AND I-495	78%	64%	64%	71%	100%	96%	86%	46%
BETWEEN I-270 SPLIT AND DEMOCRACY BLVD	96%	66%	61%	76%	100%	88%	86%	76%
BETWEEN DEMOCRACY BLVD AND I-495	100%	76%	70%	81%	100%	86%	93%	93%

ATTACHMENT I – DEMAND VS. THROUGHPUT CHARTS

Figure 1: I-495 2040 Alternative 9M 7-8 AM Inner Loop Demand vs. Throughput and Percent Demand Unserved

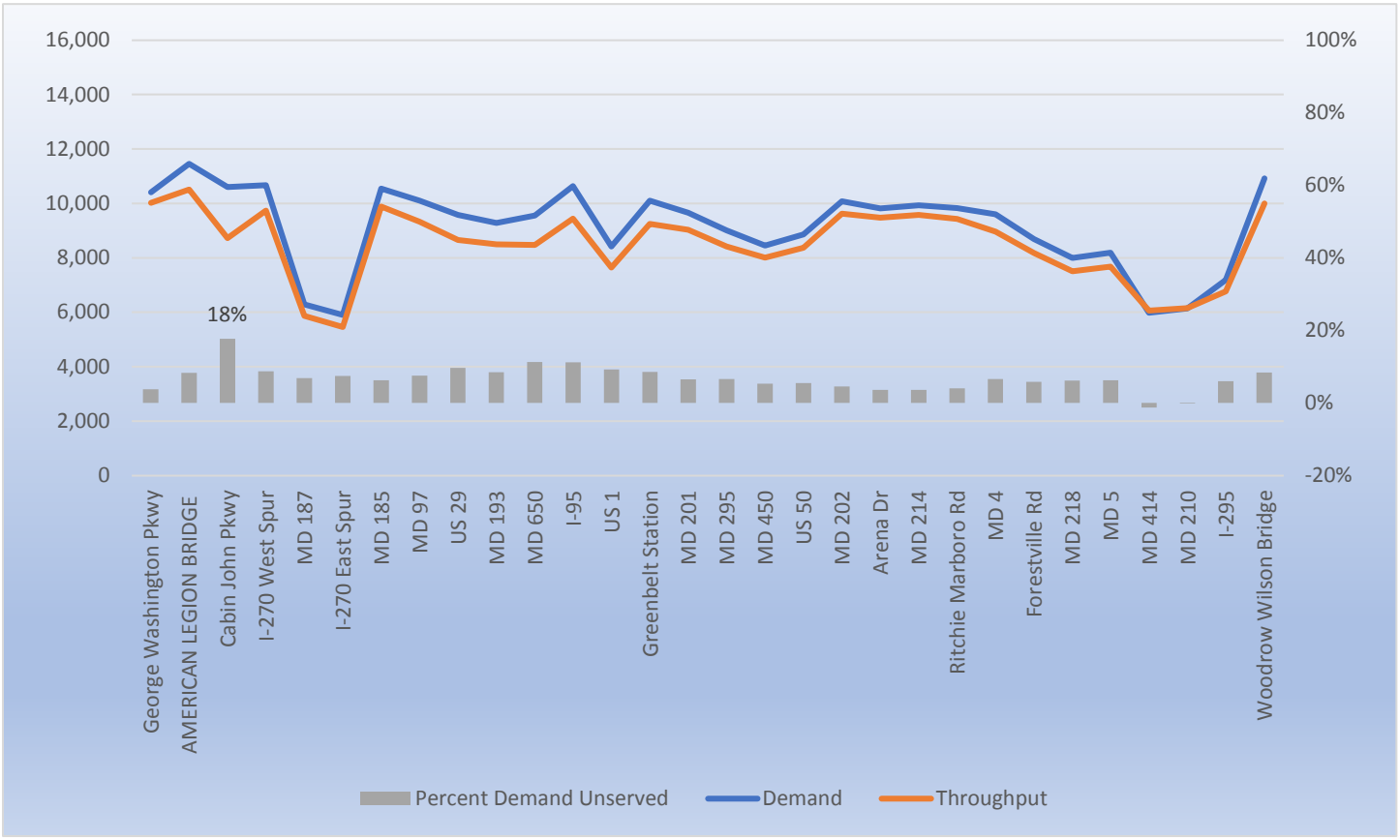


Figure 2: I-495 2040 Alternative 9M 7-8 AM Outer Loop Demand vs. Throughput and Percent Demand Unserved

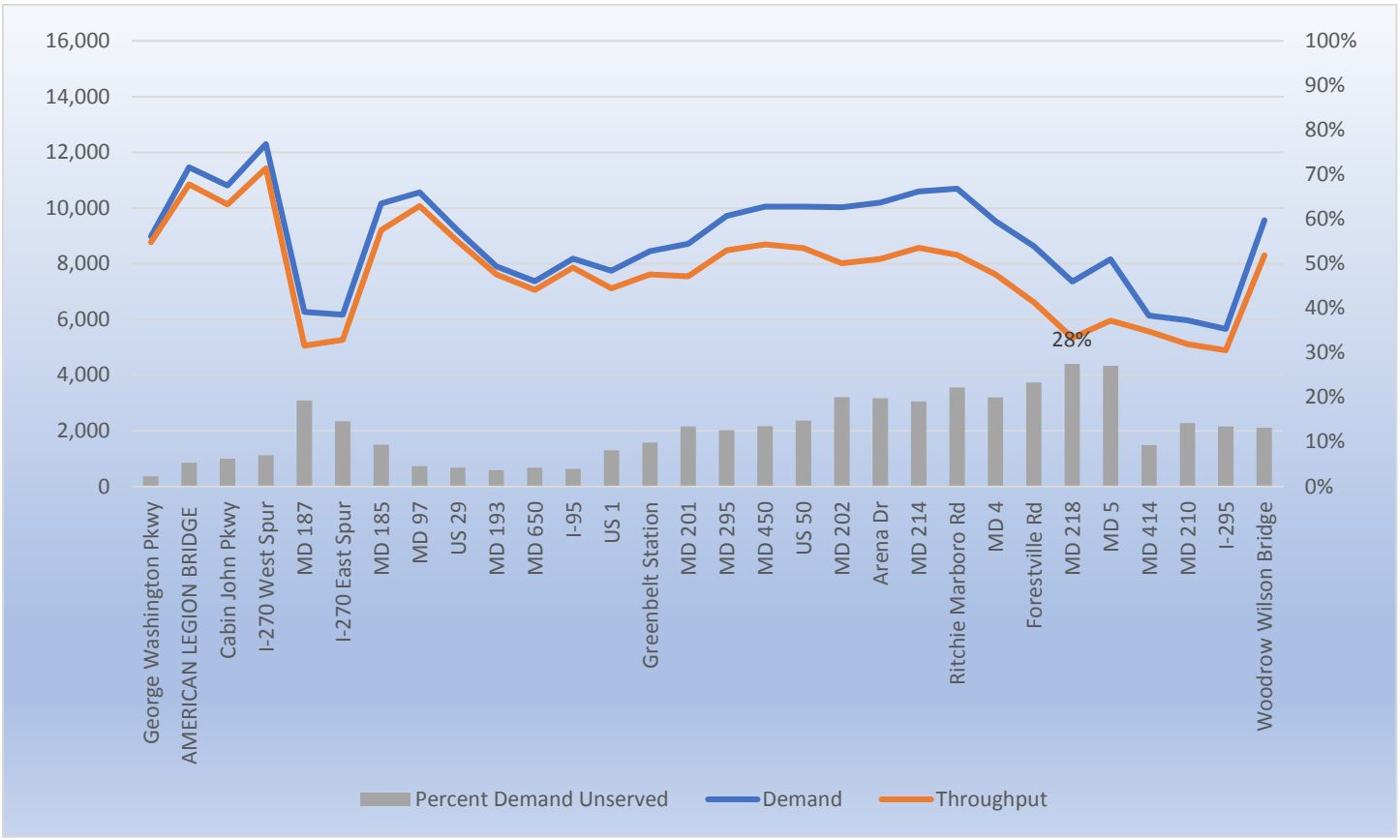


Figure 3: I-270 2040 Alternative 9M 7-8 AM Southbound Demand vs. Throughput and Percent Demand Unserved

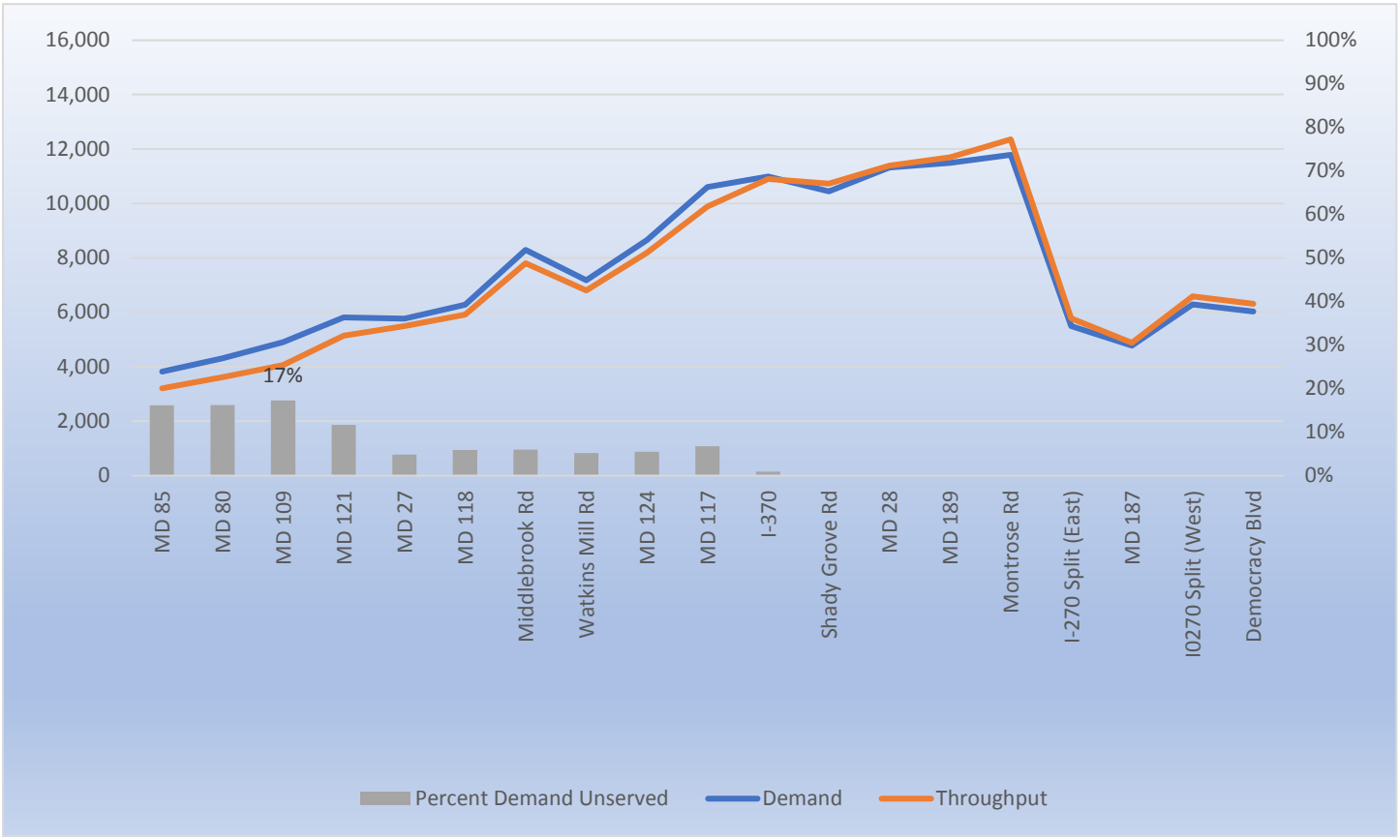


Figure 4: I-270 2040 Alternative 9M 7-8 AM Northbound Demand vs. Throughput and Percent Demand Unserved

Figure 5: I-495 2040 Alternative 9M 4-5 PM Inner Loop Demand vs. Throughput and Percent Demand Unserved

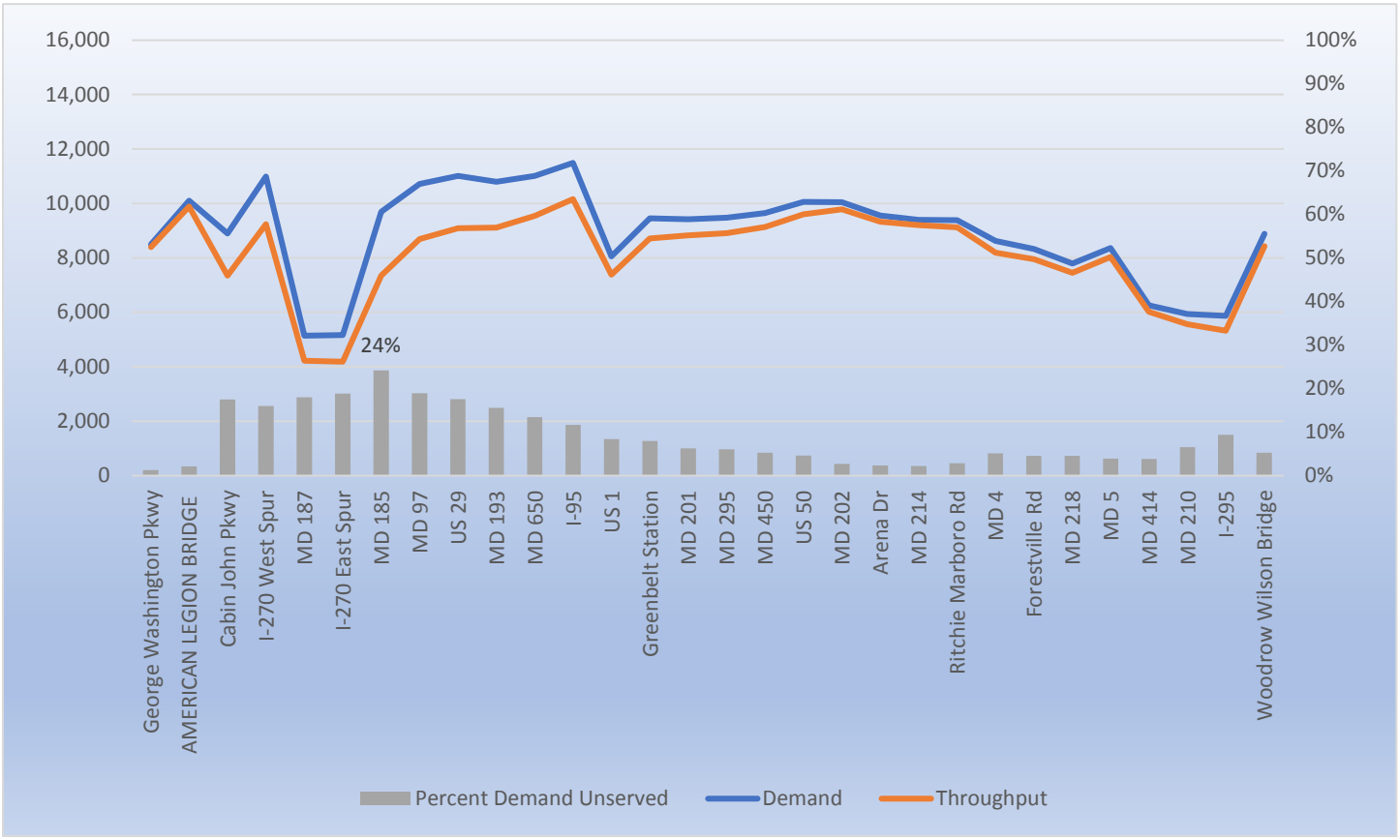


Figure 6: I-495 2040 Alternative 9M 4-5 PM Outer Loop Demand vs. Throughput and Percent Demand Unserved

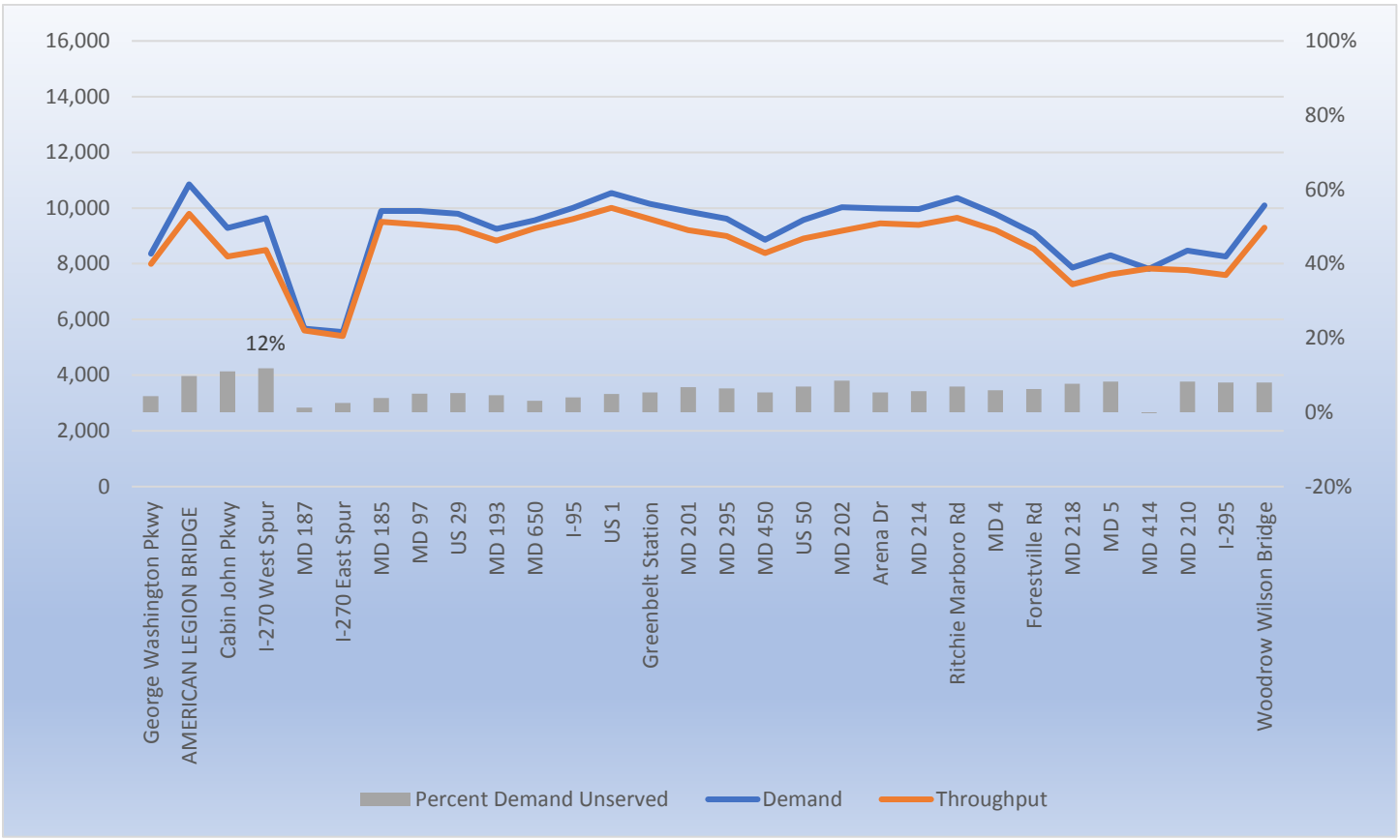


Figure 7: I-270 2040 Alternative 9M 4-5 PM Southbound Demand vs. Throughput and Percent Demand Unserved

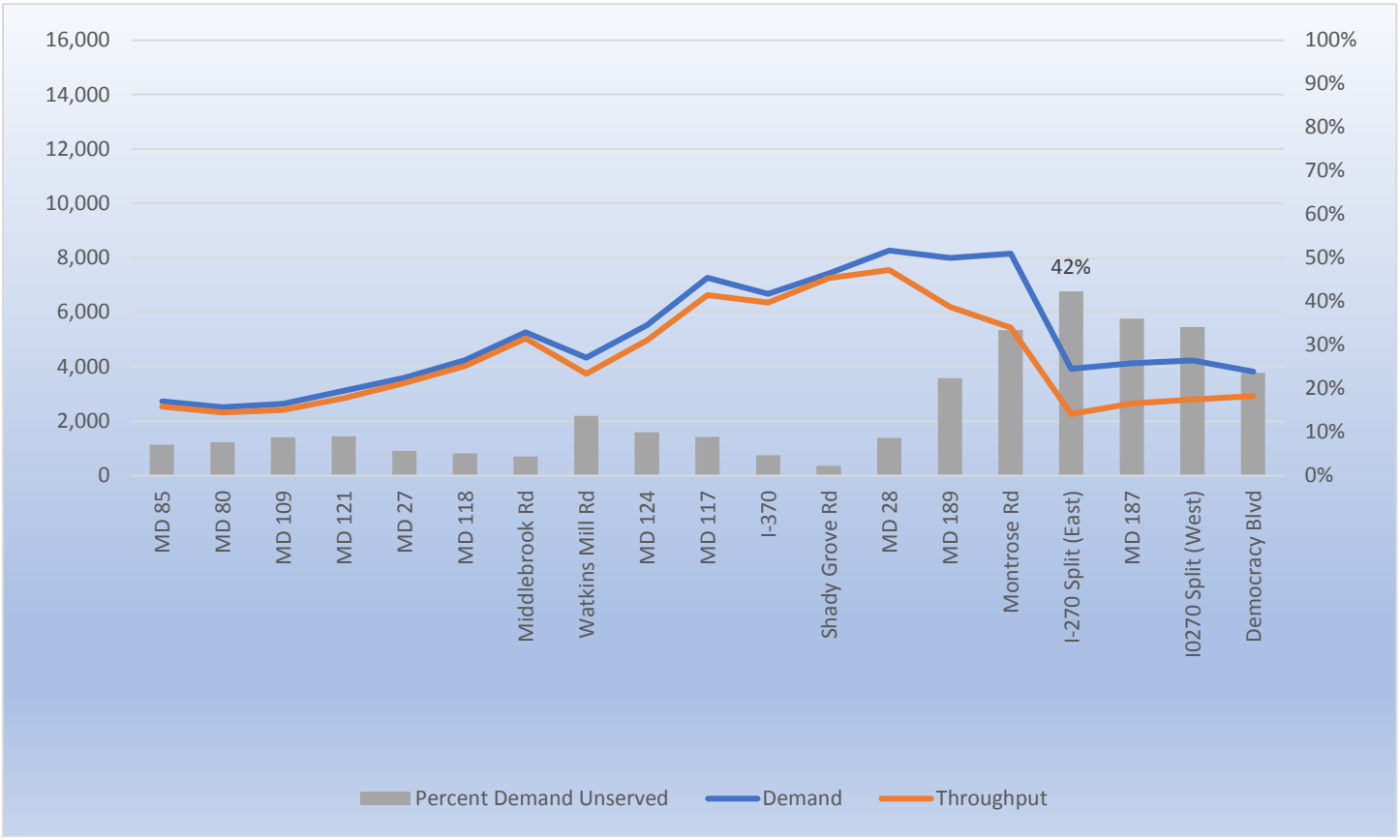


Figure 8: I-270 2040 Alternative 9M 4-5 PM Northbound Demand vs. Throughput and Percent Demand Unserved