Holton-Arms School

Gorove Slade Exhibits

March 3, 2026

Proposed Changes

- School enrollment increases from 670 to 870
  - Increased busing targets and TDM
  - Intersection mitigations at Royal Dominion Drive
- Summer Camp enrollment increases from 665 to 970
  - Staggered arrival and dismissal
- Auxiliary Programming
  - Third-party use of outdoor facilities on Saturdays from 9-4
  - Third-party use from 5:30 – 7:30 PM two nights a week
  - Third-party use from 4:00 – 7:00 PM on summer nights
  - **Will not generate more traffic than School peak hours**

Use	Max Capacity	Restrictions	Operational Notes
Enrichment & Preparatory Classes	Maximum 6 sessions per year with 80 students per session	7:00-10:00pm Monday-Thursday, 9:00am-5:00pm Saturday 12:00-4:00 & 5:30-9:30pm Sunday	Preference given to Holton-Arms families No restrictions on number or capacity for SAT exams provided on Saturday mornings.
Auxiliary Programming – Music, Theater, & Sports	Up to 375 total participants in weekday classes & 75 in weekend classes; no more than 60 participants on campus at once	Must arrive and depart during non-peak hours: 2:15-8:30pm Monday-Friday 9:00am-5:00pm Saturday Make-up sessions allowed Sundays	Preference given to Holton-Arms families
Artistic Performances	Maximum 18 events annually	Performances allowed Friday evening or Saturday or Sunday	Seating is limited by facility capacity
Indoor Gym	Maximum 8 events weekday nights per month and 8 per weekend; Maximum 60 participants per event	Must be held outside peak hours	Preference given to Holton-Arms families

Use	Max Capacity	Restrictions	Operational Notes
Swimming Pool Use	Maximum 60 swimmers per session	Weekday: 1 morning session before 7:00am & 2 evening sessions 5:00-9:00pm 7:00am-5:00pm Saturday 12:00-7:30pm Sunday	Parent/driver of swimmer may use pool, not to exceed 60 total swimmers
Charitable Events	Maximum 3 events per year Maximum 60 participants per event		
Miscellaneous – Third-Party Use of Outdoor Athletic Facilities	Maximum 3 groups on campus at one time with up to 120 participants	Arrivals & departures must be outside peak 2 weekdays and Saturdays	Advance notice to community required
Holton-Arms Neighbor Access ("HANA") program	Capacity limited by venue/facility	Weekdays outside peak hours & weekends	Use of track, camps grounds, tennis courts, and other community events and programs for community residents

Auxiliary Programming

- Peak hours are analyzed because they represent the time-period when the most stress is placed on the transportation network
- Analysis is intended to provide mitigation for time periods with the highest traffic-stress, improving roadways even outside of peak hours
- As long as trips are arriving/departing outside of peak hour, there is no basis for differentiating trips between Holton-Arms and other organizations

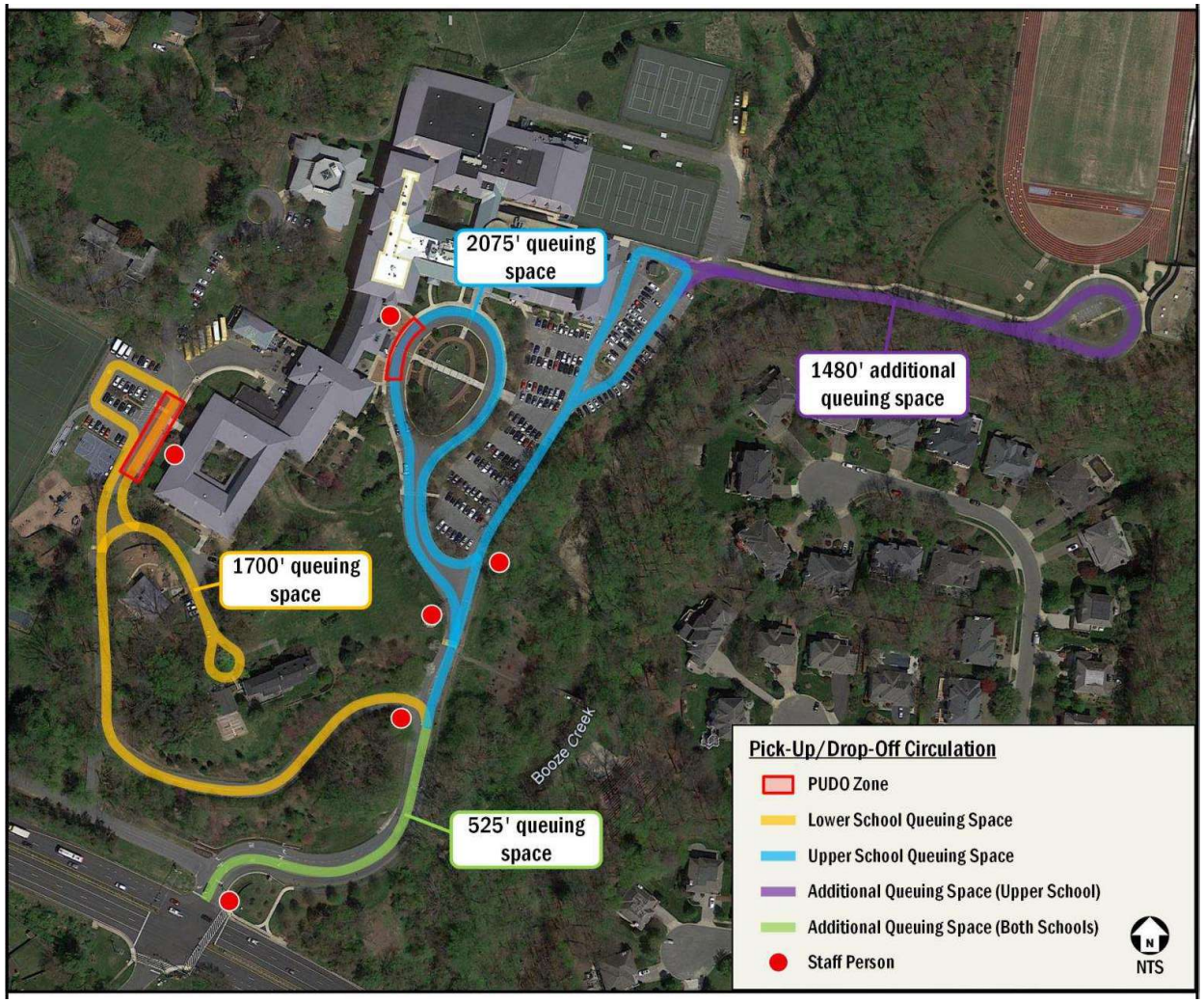
Table 1: Summer Program Operations

Summer Program	Existing Summer Operations			Proposed Modified Summer Operations		
	Existing Start Time	Existing Dismissal	Existing # of Campers	Future Start Time	Future Dismissal	Proposed Future # of Campers
Before/After Care Program						
Before/After Care	7:30 AM	6:00 PM	11% AM and 16% PM for full session enrollment. Weekly and drop-in service available.	7:30 AM	6:00 PM	Increase in participation anticipated with the staggered start/end times. At least 11% AM and 16% PM for full session enrollment. Weekly and drop-in service will continue to be offered.
Main Summer Camp Programming						
Creative Campers	9:00 AM	3:00 PM	500	9:00 AM	3:00 PM	615
Creative Kids	9:00 AM	3:00 PM	165	9:30 AM	3:30 PM	190
Sports Camps						
Sports and Discovery (full)	9:00 AM	3:00 PM	91*	9:30 AM	4:00 PM	100
Sports and Discovery (half)				9:00 AM	12:00 PM	25
Sports and Discovery (half)		N/A		9:30 AM	12:00 PM	25
Sports and Discovery (half)				12:00 PM	4:00 PM	15
Total	**Existing Summer Registration Cap**		**665**	**Proposed Summer Registration Cap**		**970**

* Existing sports and discovery summer programming does not overlap with the Creative Campers/Creative Kids sessions.

Summer Program Operations

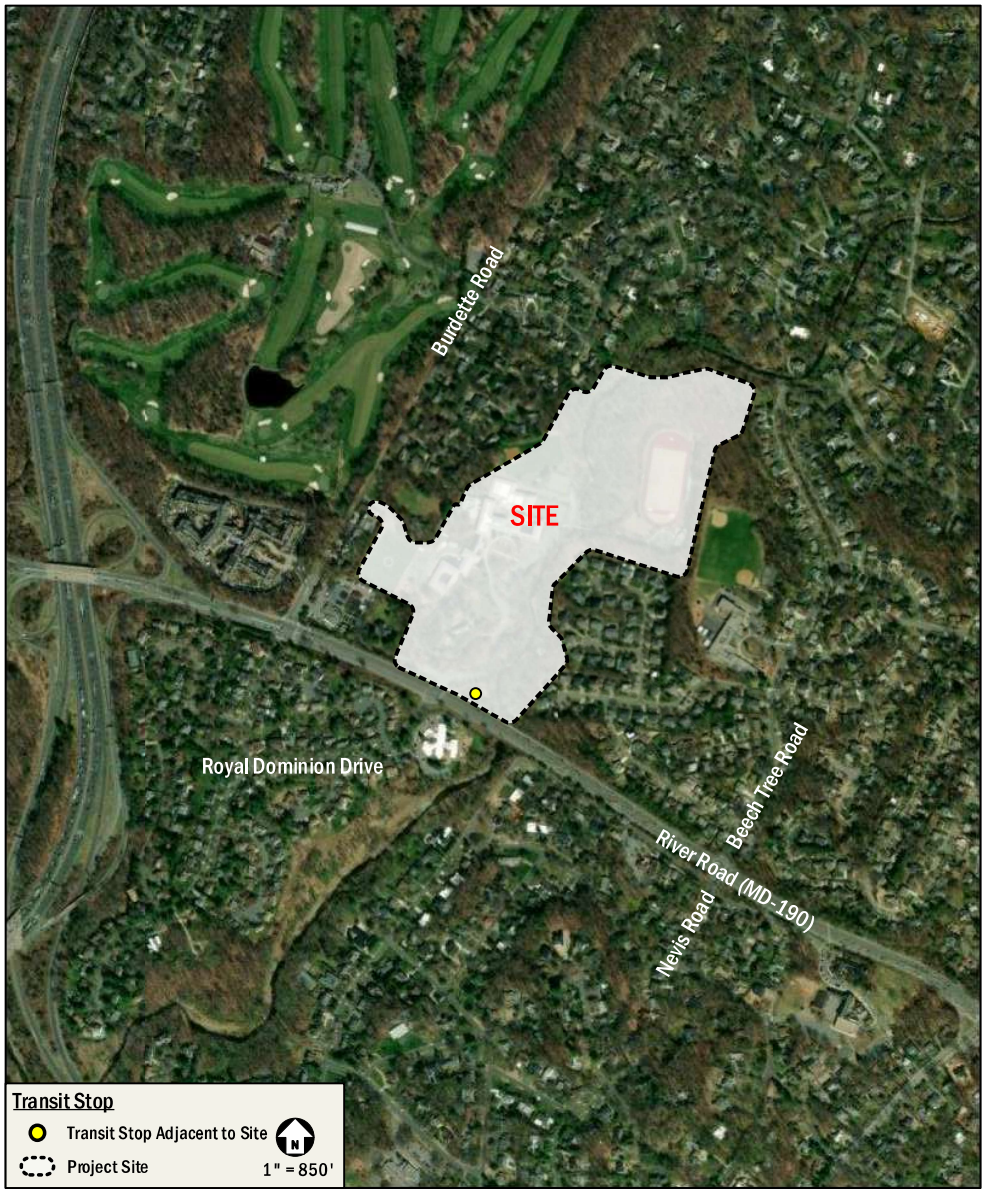
Exhibit 33 (a), Table 1, page 4



Site Circulation
Exhibit 33, Figure 3, page 13

Site Parking

Bus Stop Adjacent to Site



B. Applicability

These guidelines apply to any application for a preliminary plan, site plan, building permit, or other application that requires a finding of Adequate Public Facilities (APF) accepted on or after January 1, 2025. If an Applicant has a pending but unapproved preliminary or site plan application as of January 1, 2025, and completes the required analysis before approval, they can opt to use these guidelines rather than the previous version.

Applicants should use this document when preparing development applications and transportation analyses for submission to the Montgomery County Planning Board. Similarly, public agency staff should refer to these guidelines during the review of such applications and analyses.

An Applicant must submit a *Transportation Adequacy Form* to Montgomery Planning staff prior to filing a development application for any project that requires an APF finding.

Application Types

Project applications that require APF findings include:

- Preliminary plans (as part of a subdivision application) and amendments.
- Site plans not requiring subdivision.
- Public facility projects subject to Mandatory Referral.
- APF Review at Building Permit.[1]

These guidelines also apply to:

- Conditional use and zoning cases before the Board of Appeals and County Council.
- Limited Map Amendments.

Applicability Guidelines
2025 LATR Guidelines, page 2

a. Establish Trip Rates

Calculate trip generation estimates by using the trip equation or rate in the most recent version of ITE Trip Generation Manual or another source agreed upon with Planning Staff. Specify and justify the equations or rates used to calculate trips. Refer to the *ITE Trip Generation Manual* for additional guidance on selecting rates.

If ITE lacks a supported daily trip rate for a proposed land use, the Applicant may calculate daily weekday trips by dividing the average of the AM and PM peak-hour weekday trips by 0.12.

Projects with unique travel behavior, such as a school or daycare, or a specialized land use that does not easily fit with the ITE's category definitions should use an alternate source or method, such as trip counts at sites with similar characteristics. With Planning staff approval, the

Applicant may conduct the counts as part of the LATR Study. Planning staff must approve the special rates before the Applicant submits the study.

For daycares that are part of a mixed-use development, the trips generated by a daycare will not be included in the overall trip generation calculation if the daycare use generates fewer than 50 net new peak-hour weekday motor vehicle trips.

Trip Generation Guidelines
2025 LATR Guidelines, pages 9/10

For some specialized land uses, representative trip generation rates may not be available. In such cases, Planning Department staff may request that determining rates be a part of the transportation study, most likely by collecting existing driveway counts at similar specialized land uses. If special rates are to be used, staff must approve them prior to submission of the transportation study. An applicant should not avoid the intent of this requirement by submitting piecemeal applications or approval requests. However, an applicant may submit a plan of subdivision for fewer than 50 net new weekday peak-hour weekday person trips if agreeing in writing that, upon filing future applications, the applicant will comply with the requirements of these guidelines when the total number of site-generated net new weekday peak-hour person trips at one location has reached 50 or more. Then a transportation study will be required to evaluate the impact of the total number of site-generated trips in accordance with the guidelines.

2023 LATR Guidelines, page 28

In some cases, adjusting the trips derived from the process described above may be appropriate. For example, the effect of pass-by and diverted trips for retail, including fast food restaurants, child day care centers and automobile filling stations; and the total trips from mixed uses, such as office and retail, will be considered on a case-by-case basis, using the best available information. Deviations may also be appropriate for a particular site. Appropriate rates for these sites could be based on traffic counts of comparable facilities of vehicles both entering and leaving those sites, preferably in the county, and will be considered by Planning staff.

2023 LATR Guidelines, page 41

Trip Generation Guidelines

Exhibit 41.e, page 36

ITE 11th Edition PM Peak Hour Trip Generation

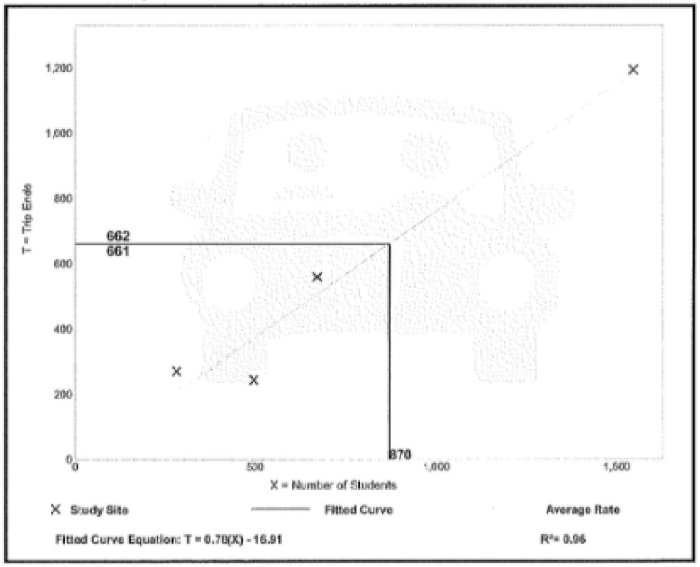
Private School (K-12)
(532)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Students: 748
Directional Distribution: 64% entering, 36% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.76	0.49 - 0.96	0.15

Data Plot and Equation *Caution – Small Sample Size*



Trip Gen Manual, 12th Edition • Institute of Transportation Engineers

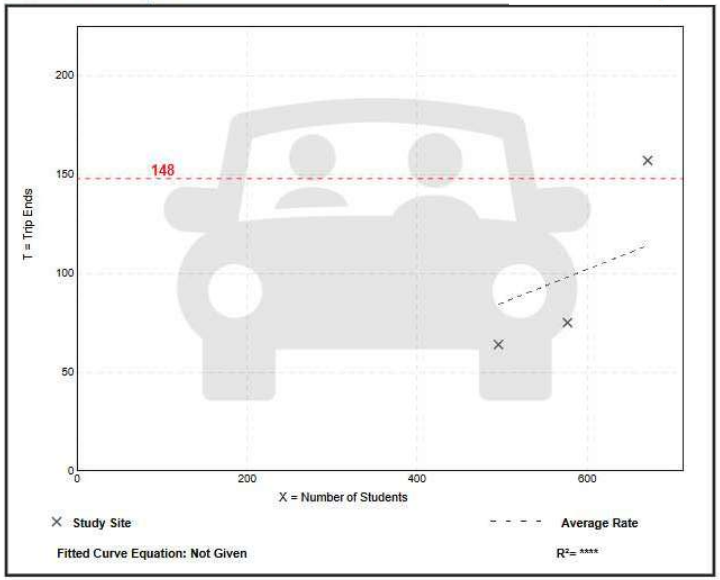
Private School (K-12)
(532)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. Num. of Students: 581
Directional Distribution: 43% entering, 57% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.17	0.13 - 0.23	0.06

Data Plot and Equation *Caution – Small Sample Size*



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

ITE Private School Trip Generation

Table 3: Trip Generation Summary

Condition	Enrollment	AM Peak In	AM Peak Out	AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total
Existing Trip Generation							
School Year Enrollment	670 students	537	331	868	161	311	472
Existing School Year Trip Generation Rate Per Student Based on January 2024 Counts		*0.80*	*0.50*	*1.30*	*0.24*	*0.46*	*0.70*
Summer Enrollment (Approved)	665 campers	430	340	770	281	333	614
Existing Summer Trip Generation Rate Per Camper Based on Summer 2024 Counts		*0.65*	*0.51*	*1.16*	*0.42*	*0.50*	*0.92*
Future Trip Generation without Proposed TDM Mitigation **							
Proposed School Year Enrollment	870 students	697	430	1,127	209	404	613
School Year Trip Generation Rate Based on January 2024 Counts		*0.80*	*0.50*	*1.30*	*0.24*	*0.46*	*0.70*
Net School Year Trips (Proposed School Year Trips No TDM - Existing School Year Trips)		*160*	*99*	*259*	*48*	*93*	*141*
Proposed Summer Enrollment	970 campers	627	496	1,123	338*	403*	741*
Summer Trip Generation Rate Based on Summer 2024 Counts and Staggered Dismissal		*0.65*	*0.51*	*1.16*	*0.35**	*0.41**	*0.76**
Net Summer Trips (Proposed Summer Trips No TDM - Existing Summer Year Trips)		*N/A*	*N/A*	*N/A*	*57**	*70**	*127**
Proposed Trip Generation with Trip-Reducing TDM Mitigation							
Proposed School Year Enrollment with TDM	**870 students**	**618**	**400**	**1,018**	**196**	**357**	**553**
Proposed Trip Generation Rate Per Student Based on Trip Generation Model w/ TDM		*0.71*	*0.46*	*1.17*	*0.23*	*0.41*	*0.64*
Net School Year Trips (Proposed School Year Trips- Existing School Year Trips)		***81***	***69***	***150***	***35***	***46***	***81***
Proposed Summer Enrollment with TDM	**970 campers**	***546***	***459***	**1,005**	***350***	***454***	***804***
Proposed Trip Generation Rate Per Camper Based on Trip Generation Model w/ TDM		*0.56*	*0.48*	*1.04*	*0.36*	*0.47*	*0.83*
Net Summer Trips (Proposed Summer Trips- Existing Summer Trips)		***N/A***	***N/A***	***N/A***	***69***	***121***	***190***

Notes:

** This approach has been superseded by the proposed trip generation with TDM as mitigation and the unmitigated trip generation is provided as reference for the purpose of the unmitigated total future scenario analysis.

* The unmitigated summer PM trip generation was modified to reflect staggered dismissals and the assumption that approximately 805 campers would be dismissed during the summer PM generator peak as detailed in previous submissions of this LATR.

Trip Generation Summary

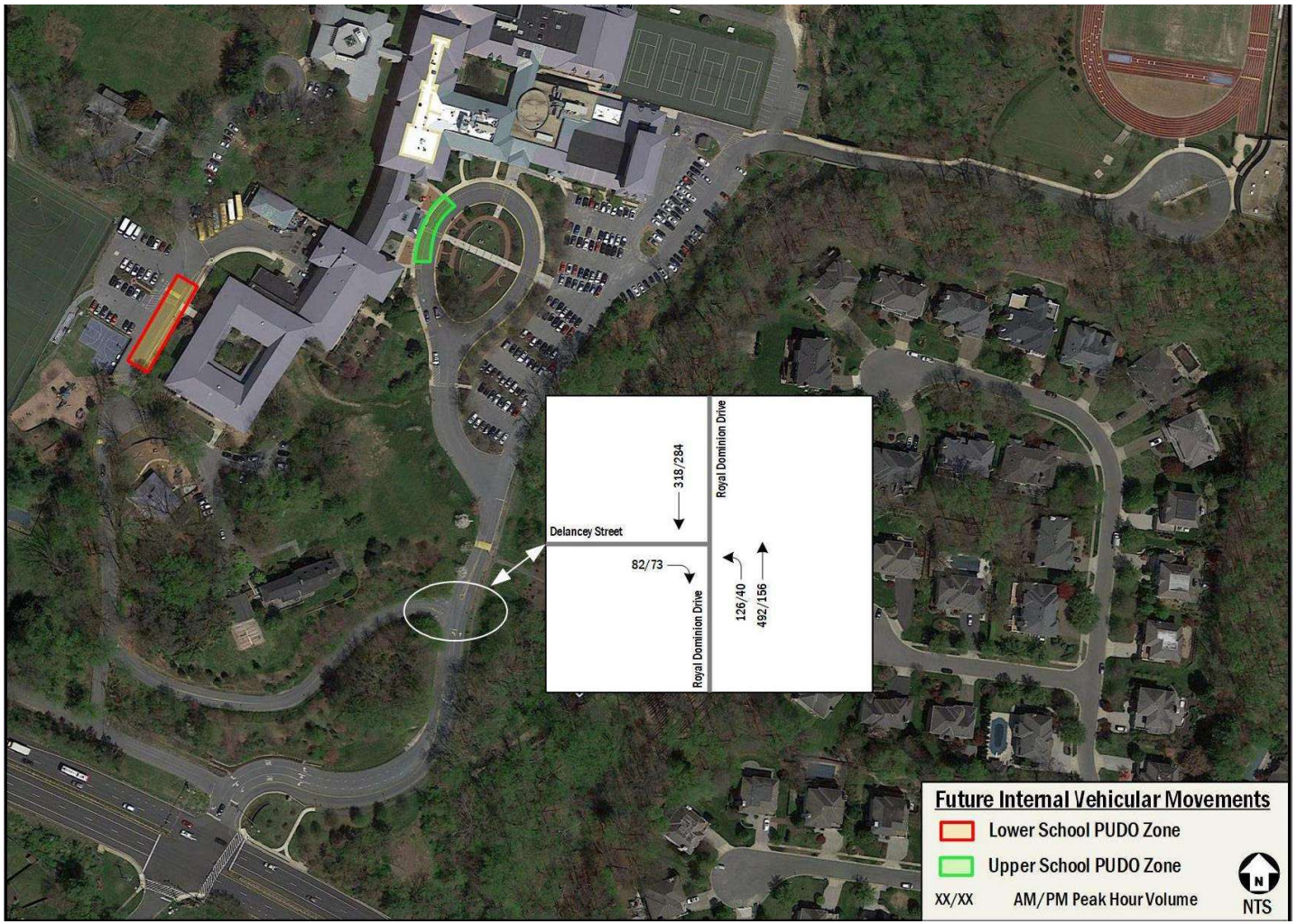
Exhibit 33, Table 3, page 12

Trip Generation with TDM vs. Trip Generation without TDM

Condition	Enrollment	AM Peak Hour			School PM Peak		
		In	Out	Total	In	Out	Total
Proposed School Year Enrollment	870 students	697	430	1,127	209	404	613
Proposed School Year Enrollment with TDM	*870 students*	*618*	*400*	*1,018*	*196*	*357*	*553*
Trips Generated with TDM - Trips Generated without TDM		**-79**	**-30**	**-109**	**-13**	**-47**	**-60**
Proposed Summer Enrollment	970 campers	627	496	1,123	338*	403*	741*
Proposed Summer Enrollment with TDM	*970 campers*	*546*	*459*	*1,005*	*350*	*454*	*804*
Trips Generated with TDM - Trips Generated without TDM		**-81**	**-37**	**-118**	**12**	**51**	**63**

* The unmitigated summer PM trip generation was modified to reflect staggered dismissals and the assumption that approximately 805 campers would be dismissed during the summer PM generator peak as detailed in previous submissions of this LATR.

Reduction in Trips from TDM



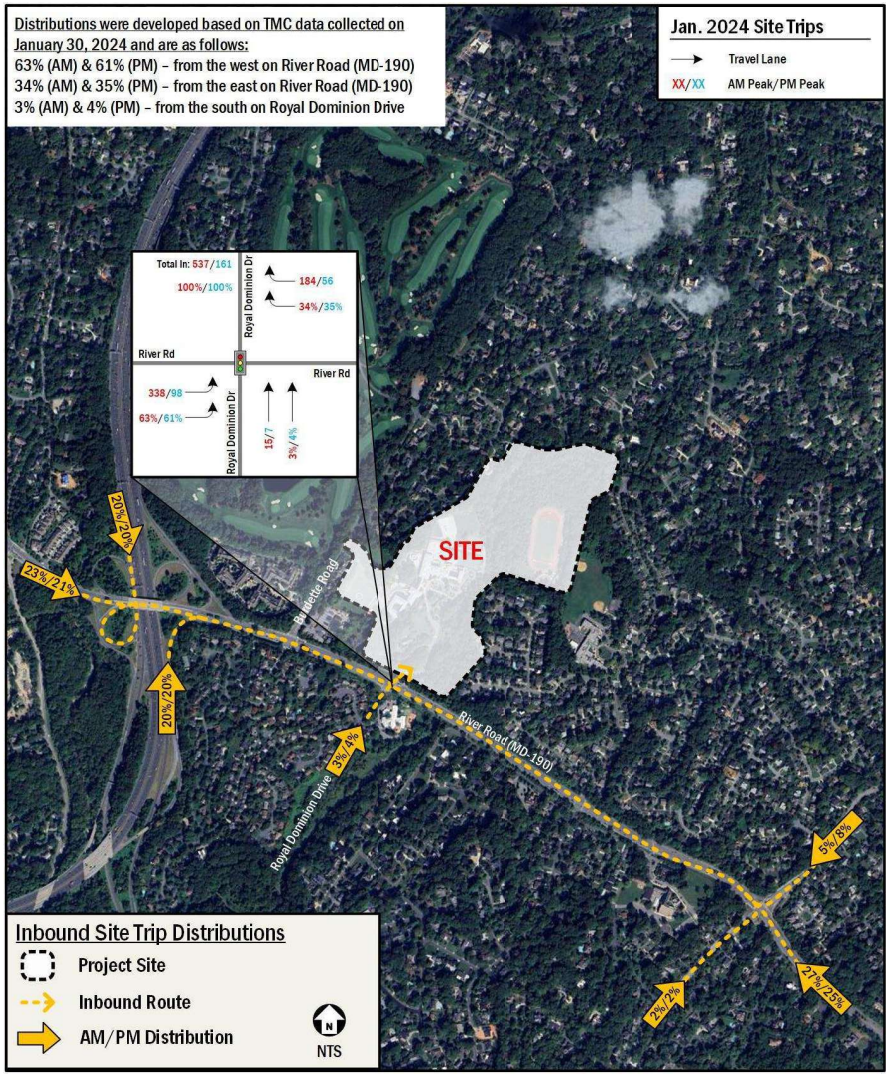
Pick-up/Drop-off Traffic Split

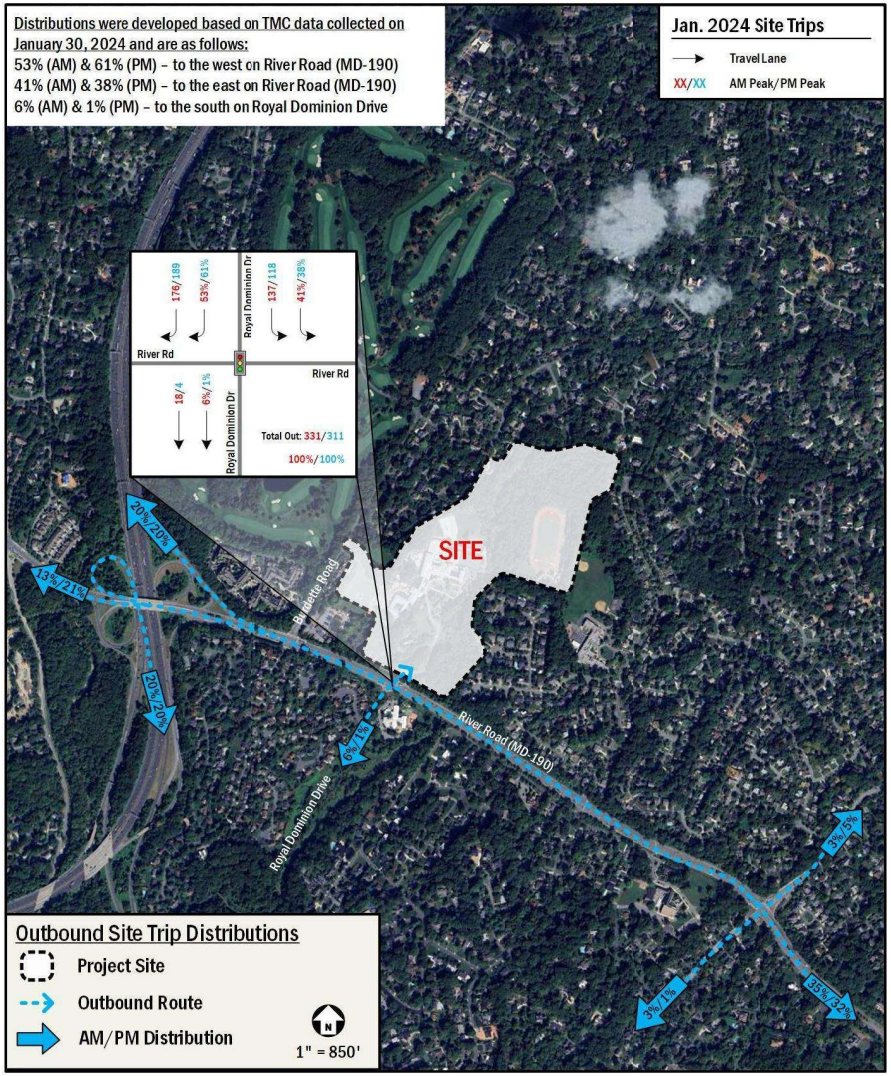
Study Area Intersections
Exhibit 33, Table 3, page 12

Table 11. Intersections to be Included in a Transportation Study

Weekday Peak Hour Site Vehicle Trips	Minimum Number of Intersections in Each Direction
< 250	1
250 – 749	2
750 – 1,249	3
1,250 – 1,749	4
1,750 – 2,249	5
2,250 – 2,749	6
>2,749	7
The term "each direction" applies to every study intersection. For example, in a hypothetical grid, the first ring from the site access point or off site PLD garage, if applicable, would include four intersections. The second ring would include not only the next four intersections along the streets serving the site, but also the four intersections with cross streets encountered in the first ring. As the number of intersections in each direction grows linearly from one to five, the number of total study area intersections grows at a greater rate.	

Study Intersection Requirements
2023 LATR Guidelines, Table 11, page 38





Distributions Used in Analysis

Exhibit 33, Table 3, page 12

Directional Distribution

Planning Department staff provides applicants with guidance pertaining to the directional distribution of background and site traffic generated by office and residential uses from the latest edition of the Trip Distribution and Traffic Assignment Guidelines (see Appendix 2). The distribution of trips entering and leaving the proposed development will be determined based on the relative location of other traffic generators, including background development, employment centers, commercial centers, regional or area shopping centers, transportation terminals or other trip table information provided by staff. For land uses not covered in ITE documents, distribution should be developed in consultation with Planning Department staff.

Distributions
2023 LATR Guidelines, page 41

Trip distribution for other land uses will be decided based on consultation with Planning staff and the Applicant prior to submission of the transportation study.

Distributions
2025 LATR Guidelines, page 45

For motor vehicle adequacy, the Applicant must mitigate the project's impact on motor vehicle delay or reduce motor vehicle delay to the applicable policy area standard, whichever is less. Operational changes and infrastructure improvements that increase safety for all roadway users are the first mitigation options to pursue. Consider roadway capacity improvements only if they do not negatively impact safety. For the Planning Board to accept a motor vehicle improvement as a mitigation measure, the applicant must show that alternative non-motor vehicle mitigation measures are not feasible or desirable.

An Applicant is not required to mitigate the conditions assessed in the Vision Zero Statement speed studies. However, with the concurrence of the responsible agency, an Applicant may implement or contribute to implementing safety countermeasures as part of their off-site mitigation efforts.

Improvements conditioned for construction or payment by one applicant typically will not be required of another.

Motor Vehicle Adequacy
2025 LATR Guidelines, page 35

Corridor-Based Analysis

If an individual intersection is analyzed, the vehicular delay threshold applies to the intersection as a whole, not to individual approaches or turning movements in the intersection. Similarly, if a network of multiple intersections is analyzed, the vehicular delay threshold applies to the network as a whole, not to individual intersections within the network. The focus on average delay is intended to facilitate a focus on management and operations strategies; as the county builds out its roadway network, the emphasis is less on constructing additional automobile capacity and more on finding more efficient means for operating the current network to accommodate changing travel demands through techniques such as signal timing, signing and marking, and vehicle progression.

2023 LATR Guidelines, page 33

A. Isolated Intersection and Network Analysis

When analyzing an individual intersection, the acceptable delay threshold applies to the overall performance of the intersection, not to specific lanes or turning movements. Similarly, when analyzing a network of intersections, the acceptable delay threshold applies to the network as a whole, rather than to each individual intersection within it.

For stop or yield-controlled intersections, the delay standard applies to the average vehicle delay calculated by the HCM for controlled movements with the inclusion of zero seconds of delay for vehicles that do not stop or yield. For instance, a stop-controlled intersection with 100 vehicles each experiencing 60 seconds of delay and 1,000 mainline vehicles without delay, the average vehicular delay is (1,000*0+100*60)/1,100=5.4 seconds per vehicle.

2025 LATR Guidelines, page 62

Table 7: River Road Corridor Delay Results*

Direction/Total	Existing						Background						Background (Modified)						Total Future						Total Future (Mitigation)					
	AM School Peak		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Eastbound:	20.0	C	16.0	B	20.0	C	22.0	C	16.0	B	20.0	C	29.0	C	17.0	B	24.0	C	30.0	C	18.0	B	20.0	C	31.0	C	17.0	B	28.0	C
Westbound:	27.0	C	30.0	C	38.0	D	29.0	C	31.0	C	39.0	D	48.0	D	38.0	D	35.0	D	43.0	D	42.0	D	39.0	D	57.0	E	38.0	D	35.0	D
Corridor:	**23.0**	**C**	**24.0**	**C**	**30.0**	**C**	**24.0**	**C**	**25.0**	**C**	**30.0**	**C**	**36.0**	**D**	**28.0**	**C**	**30.0**	**C**	**35.0**	**D**	**31.0**	**C**	**30.0**	**C**	**40.0**	**D**	**28.0**	**C**	**32.0**	**C**

* Total corridor delays (Control Delay + Queue Delay)

Table 8: Isolated Intersection HCM Delays

Intersection	Existing						Background						Total Future					
	AM School Peak		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
7. Burdette Road & Arrowood Road/ Hillmead Road	**7.9**	**A**	**8.1**	**A**	**8.1**	**A**	**7.9**	**A**	**8.1**	**A**	**8.1**	**A**	**7.9**	**A**	**8.1**	**A**	**8.1**	**A**

Intersection Delays

Exhibit 33, Tables 7/8, page 24

Table 9: Queueing Analysis Results

	Intersection and Lane Group	Storage Length (ft)	Existing						Background						Background (Exclusive Lefts, EBL re-servicing in the AM)						Total Future						Total Future Mitigated (TDM + exclusive lefts, EBL re-servicing in the AM)					
			AM School Peak		*PM Peak*		*Summer PM Peak*		*AM School Peak*		*SY PM Peak*		*Summer PM Peak*		*AM School Peak*		*SY PM Peak*		*Summer PM Peak*		*AM School Peak*		*SY PM Peak*		*Summer PM Peak*		*AM School Peak*		*SY PM Peak*		*Summer PM Peak*	
			50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
1.	I-495 SB Ramps & River Road																															
	Eastbound Thru	855	82	177	54	140	52	132	89	174	36	103	48	124	70	158	50	135	64	155	101	189	48	119	50	130	83	182	49	125	50	125
	Westbound Thru	885	86	173	51	136	62	149	79	166	52	135	55	147	73	165	59	148	63	162	90	177	50	130	52	138	66	154	57	142	57	147
	Northbound Left	210	111	178	96	163	95	156	116	181	89	142	97	158	114	176	97	160	97	160	117	173	91	153	106	169	111	171	94	155	98	161
2.	I-495 NB Ramps & River Road																															
	Eastbound Left	670	239	355	240	356	243	357	244	359	230	355	251	361	245	357	247	369	250	375	245	362	245	363	252	366	244	360	237	349	255	369
	Eastbound Thru	920	-	-	-	-	-	-	1	9	-	-	-	-	1	16	125	264	0	2	54	251	-	-	-	-	14	127	-	-	2	29
	Westbound Thru	775	373	333	206	366	207	381	180	340	217	375	206	361	171	356	208	387	198	373	178	340	208	373	206	362	187	355	192	358	210	372
3.	Burdette Road & River Road																															
	Eastbound Left	175	69	189	81	152	75	139	78	214	84	152	77	144	84	221	85	162	89	175	106	268	78	142	75	138	85	219	84	158	88	175
	Eastbound Thru	1,750	388	720	92	217	104	235	427	713	104	233	120	280	410	653	116	251	119	248	533	787	110	249	118	255	468	719	111	230	163	418
	Eastbound Right	400	337	791	1	10	3	25	380	807	1	11	2	24	321	758	2	17	3	18	520	868	2	14	2	16	406	831	1	14	51	302
	Westbound Left	195	2	11	105	315	46	205	10	76	131	348	64	246	3	16	115	328	63	240	5	49	127	340	65	244	3	13	109	323	63	244
	Westbound Thru	870	95	256	714	1031	497	837	106	271	769	1009	605	936	51	204	699	1007	488	860	136	337	726	1004	520	808	67	227	667	978	635	963
	Westbound Right	270	9	61	166	443	79	307	7	32	163	441	124	391	7	75	187	464	90	328	7	59	181	461	73	295	5	54	164	441	99	348
	Northbound LTR	820	46	94	27	66	25	68	47	101	26	62	28	67	37	79	23	60	25	62	41	91	20	55	30	73	45	100	22	55	27	68
	Southbound Left Thru	200	86	155	44	96	47	104	87	153	51	105	49	100	75	158	50	108	38	91	87	156	50	107	43	99	76	145	46	107	46	120
	Southbound Right	200	46	86	41	94	50	104	47	102	43	91	52	107	47	94	46	99	53	111	43	82	43	90	56	114	50	96	51	111	58	123
4.	Royal Dominion Drive & River Road																															
	Eastbound Left	500	253	542	86	174	112	196	259	539	84	189	110	217	281	591	130	305	173	325	362	627	94	180	127	221	289	549	205	461	304	586
	Eastbound Thru	865	376	761	131	242	156	309	394	774	147	277	156	310	488	834	192	355	211	380	473	898	169	320	166	312	452	785	205	441	336	775
	Eastbound Right	240	47	217	2	11	10	72	47	217	5	49	10	73	47	217	3	14	15	111	54	235	7	69	8	52	66	257	5	51	23	134
	Westbound Left	235	65	196	26	139	43	169	71	210	43	197	42	177	87	239	36	163	58	187	83	250	44	202	34	142	102	260	32	145	86	255
	Westbound Thru	1,935	492	1140	1458	2541	903	2011	527	1292	1565	2490	1093	2224	815	1758	1675	2519	1043	2205	833	1857	1736	2458	1007	2098	919	1898	1763	2458	1257	2432
	Westbound Right	210	139	345	97	314	129	339	134	336	108	332	156	375	176	372	91	304	141	356	179	374	134	361	146	357	-	-	-	-	-	-
	Westbound Right	*500*	-	-	-	-	-	-			-		-		-	-	-	-	-	-							311	737	254	711	345	785
	Northbound LTR	350	101	194	58	119	72	137	102	184	60	131	78	152	94	190	55	137	71	141	108	207	61	124	84	165	-	-	-	-	-	-
	Northbound Left	*150*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	65	28	69	33	78
	Northbound Thru Right	*350*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	145	33	76	43	92
	Southbound Left	280	60	155	47	133	63	159	65	173	45	130	70	169	64	180	42	121	74	202	91	220	63	190	88	205	86	200	52	140	97	228
	Southbound Left Thru	1425	110	188	86	170	204	591	114	213	84	169	191	536	117	211	91	193	183	523	143	269	121	286	151	350	137	245	104	251	337	830
	Southbound Thru Right	*1425*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound Right	330	77	183	136	251	150	383	74	170	137	265	156	393	67	147	134	257	156	381	115	266	174	332	162	325	91	200	156	280	214	464

School Driveway

Intersection Queues

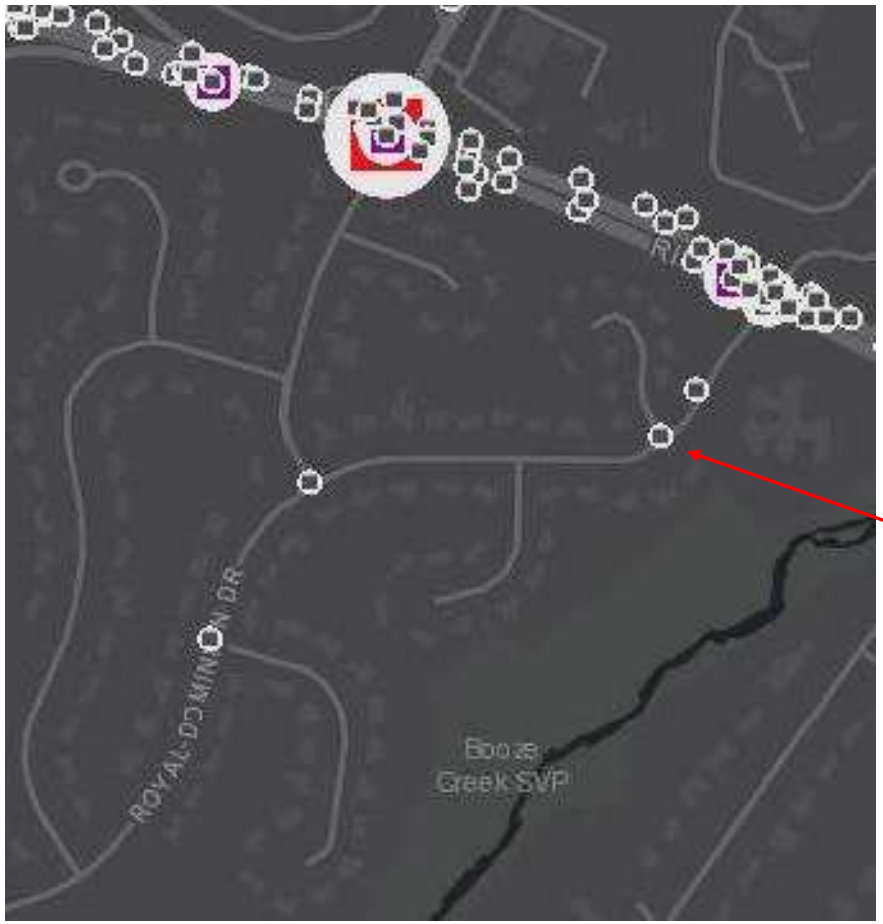
Exhibit 33, Table 9, page 24

Intersection and Lane Group	Storage Length (ft)	Existing						Background						Background (Exclusive Lefts, EBL re-servicing in the AM)						Total Future						Total Future Mitigated (TDM + exclusive lefts, EBL re-servicing in the AM)					
		AM School Peak		PM Peak		Summer PM Peak		AM School Peak		SY PM Peak		Summer PM Peak		AM School Peak		SY PM Peak		Summer PM Peak		AM School Peak		SY PM Peak		Summer PM Peak		AM School Peak		SY PM Peak		Summer PM Peak	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
5. Beech Tree/Nevis Road & River Road																															
Eastbound Left	300	9	29	15	43	38	118	8	26	16	41	32	94	10	30	16	71	36	115	10	34	16	39	34	97	11	34	15	41	42	153
Eastbound Thru	1,935	160	333	138	299	136	321	160	312	144	312	140	331	160	304	197	440	219	433	160	311	147	336	132	333	182	349	181	400	192	426
Eastbound Right	270	4	53	4	18	13	107	3	18	5	21	7	57	3	18	29	173	18	132	7	75	10	93	8	58	8	76	17	121	12	95
Westbound Left	250	21	51	130	349	43	156	32	111	116	334	67	238	26	92	119	340	54	212	37	142	130	358	55	203	29	85	134	370	64	232
Westbound Thru	1,780	197	371	844	2116	260	929	228	393	896	2206	424	1325	216	377	937	2214	411	117'	256	524	1138	2426	353	1189	213	387	1100	2362	635	1773
Westbound Right	450	14	90	139	512	31	219	13	42	141	521	91	409	12	40	113	460	33	220	36	209	141	520	52	302	11	36	151	540	99	427
Northbound Left Thru	70	109	201	54	125	45	94	105	204	50	105	47	99	111	211	51	117	40	91	101	194	53	120	44	94	103	187	55	121	46	99
Northbound Right	70	72	146	39	93	27	57	69	141	39	82	26	59	70	147	38	83	26	60	69	139	42	90	28	66	71	138	36	76	28	61
Southbound Left Thru	1,060	84	161	113	195	105	175	80	146	104	185	110	201	78	150	117	217	105	190	79	143	115	204	100	179	80	144	110	190	106	177
Southbound Right	150	19	49	12	38	21	49	20	59	17	57	22	73	19	48	19	78	16	47	23	62	20	64	18	58	19	48	13	42	18	48
6. Wilson Lane & River Road																															
Eastbound Left	330	260	375	266	378	275	386	250	372	256	372	271	378	252	371	248	375	247	362	252	372	265	379	271	385	245	370	249	365	246	363
Eastbound Thru	1780	543	1228	367	665	341	589	426	873	337	547	341	599	465	962	318	588	273	506	471	1051	359	623	352	630	379	824	291	516	281	536
Eastbound Right	400	104	391	48	259	6	83	79	339	51	268	25	185	90	363	25	184	8	102	81	344	45	251	20	161	79	339	28	195	6	82
Westbound Left	270	85	200	119	309	116	303	68	170	126	325	105	276	85	212	129	328	102	267	82	184	117	324	105	274	68	138	137	343	114	298
Westbound Thru	1,585	256	407	997	1768	538	871	270	441	996	1802	556	929	265	409	916	1795	641	124'	278	436	1128	1920	639	1111	258	406	1024	1882	766	1513
Westbound Right	400	6	90	172	518	101	402	9	111	123	442	89	375	3	63	144	478	77	348	9	111	153	492	104	407	3	61	144	478	113	425
Northbound Left	260	35	86	94	163	85	158	39	87	96	167	81	146	34	83	94	163	79	147	40	90	96	168	90	165	40	90	96	183	88	166
Northbound Thru	1130	89	144	87	142	85	139	91	159	76	127	88	141	87	140	85	138	87	139	96	152	82	136	88	153	92	146	85	132	85	144
Northbound Right	300	12	79	-	-	-	-	22	120	-	-	-	-	9	70	-	-	-	-	4	47	-	-	-	-	20	105	-	-	-	-
Southbound Left	230	55	111	61	116	55	107	54	109	62	117	62	120	52	103	63	121	49	104	52	105	67	118	51	111	56	115	61	116	49	100
Southbound Thru	570	85	147	226	426	207	418	73	151	250	442	223	421	76	162	246	433	205	409	88	181	257	458	185	401	79	168	236	412	213	423
Southbound Right	300	17	98	142	243	135	246	20	110	149	241	138	248	27	126	149	242	130	245	34	142	152	238	128	246	19	107	152	238	145	242
7. Arrowood Road/Hillmead Road & Burdette Road																															
Eastbound Left/Right	1700	21	45	19	47	25	54	22	46	19	48	25	57	19	45	18	43	22	52	20	45	16	46	25	55	22	46	20	47	24	56
Westbound Left/Right	300	23	51	21	49	20	45	21	49	20	48	21	48	20	50	20	45	22	45	26	53	21	45	21	47	23	53	22	48	19	43
Northbound Left Thru	1055	31	61	48	84	42	73	30	57	40	67	42	75	33	67	46	79	43	76	30	55	43	74	40	74	32	62	45	78	42	77
Southbound Left Thru	1,480	36	58	30	56	38	63	35	56	31	52	37	62	31	51	34	60	38	67	32	53	33	56	37	64	31	51	34	57	37	63

Intersection Queues
Exhibit 33, Table 9, page 25

Incident Severity

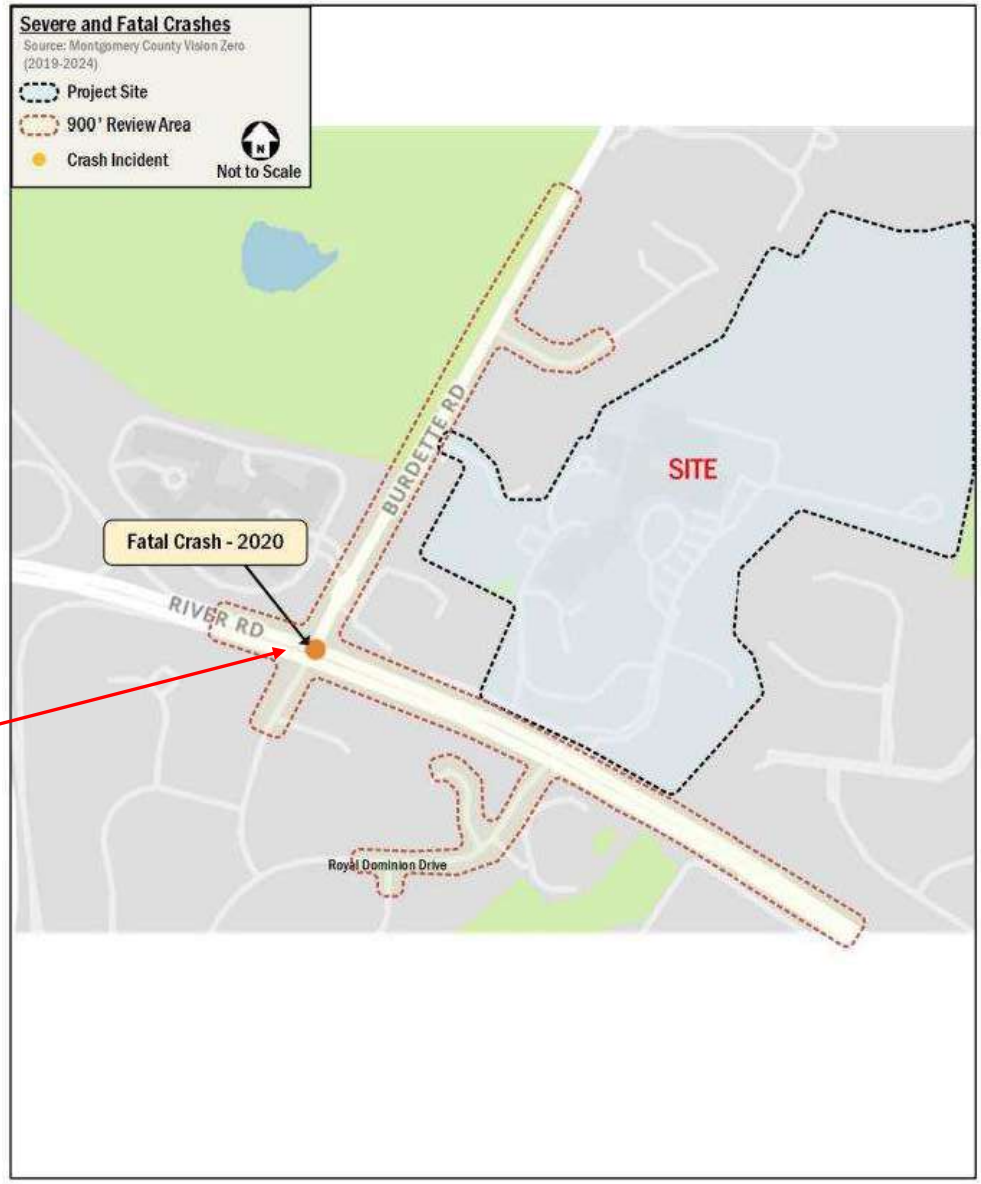
- Pedestrian Fatality
- Bicycle Fatality
- Fatal Motor Vehicle Crash
- Pedestrian Severe Injury
- Bicycle Severe Injury
- Severe Motor Vehicle Crash
- Pedestrian Crash
- Bicycle Crash
- Pedestrian & Bicycle Crash
- Motor Vehicle Crash



All crashes are motor vehicle only (no pedestrians involved)

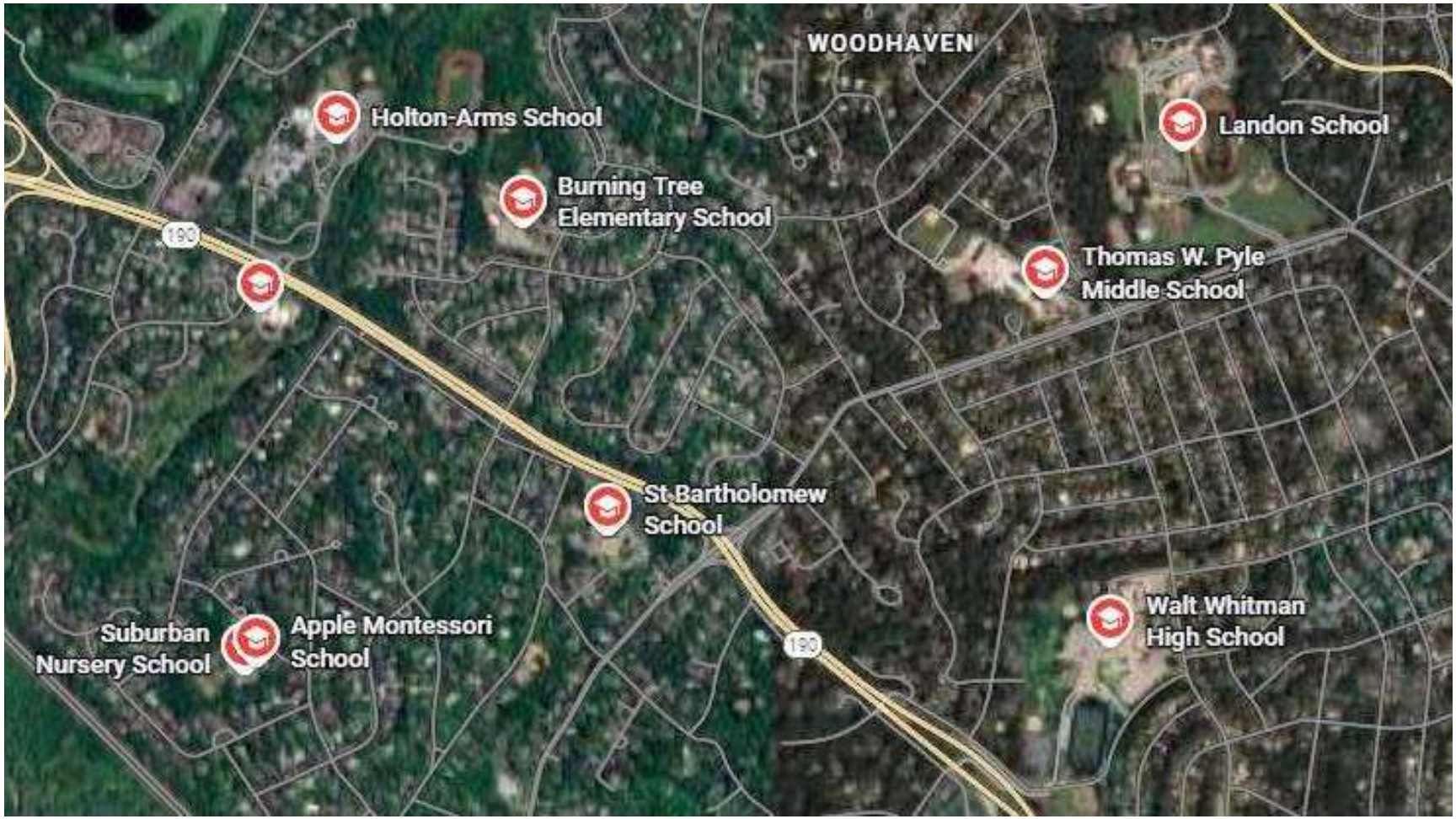
Crashes in Al Marah

Montgomery County Interactive Crash Map, Al Marah Neighborhood



Fatal vehicle crash

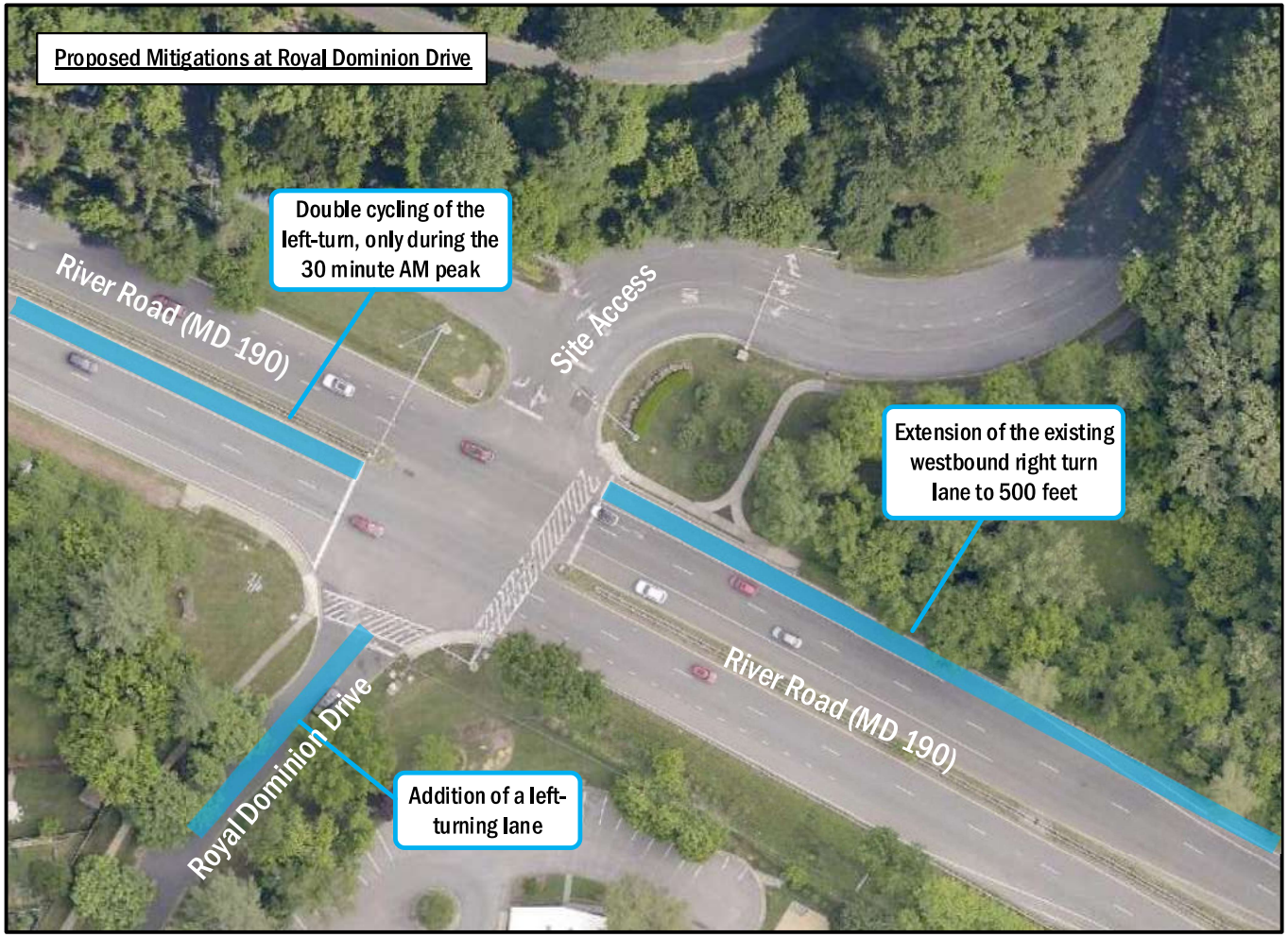
Severe and Fatal Crashes:
Exhibit 33, Figure 4, page 16



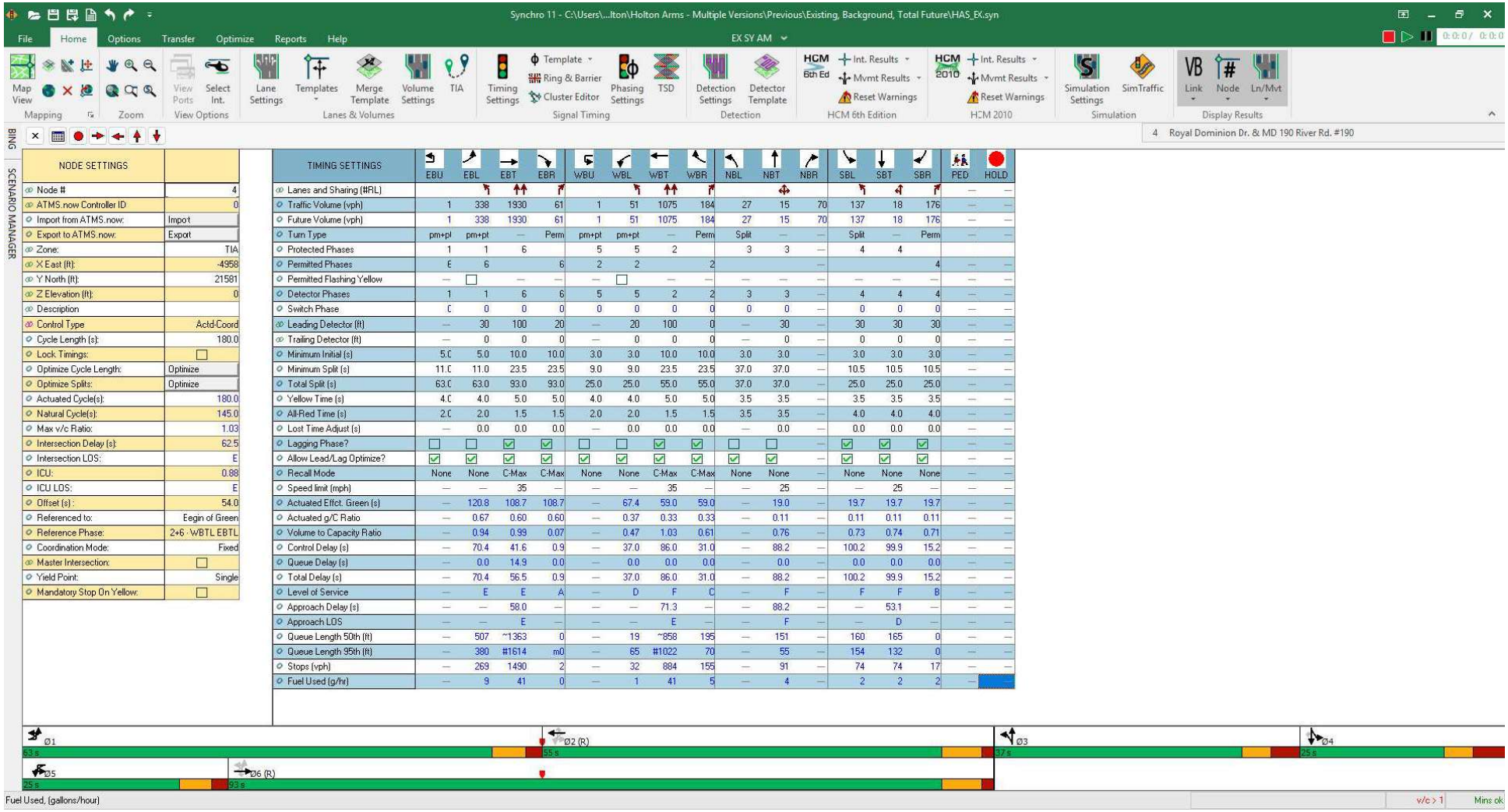
Schools Along the River Road Corridor

	Intersection:	1. Royal Dominion Drive & River Road (MD 190)																			
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Royal Dominion Drive					River Road (MD 190)					Royal Dominion Drive					River Road (MD 190)				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	1	0	0	1	0	1	134	1	1	0	1	0	1	1	0	8	334	3	0
06:45 AM	to 07:00 AM	0	1	0	1	0	0	0	125	1	3	0	1	0	4	4	0	12	420	3	0
07:00 AM	to 07:15 AM	0	4	1	5	0	0	1	224	13	1	0	0	1	3	1	1	34	514	3	0
07:15 AM	to 07:30 AM	0	10	0	6	0	0	7	248	24	4	0	0	0	7	2	0	40	540	5	0
07:30 AM	to 07:45 AM	0	45	2	47	0	0	10	237	64	0	0	1	6	15	0	2	106	447	6	0
07:45 AM	to 08:00 AM	0	67	4	61	0	0	9	233	95	0	0	8	15	21	0	0	91	345	12	0
08:00 AM	to 08:15 AM	0	20	4	48	1	2	28	343	14	2	0	21	2	21	2	0	51	475	24	0
08:15 AM	to 08:30 AM	0	3	0	8	0	0	5	366	6	0	0	18	1	24	0	0	4	525	8	0
08:30 AM	to 08:45 AM	0	2	1	2	0	0	3	319	0	1	0	2	0	2	2	2	4	350	2	0
08:45 AM	to 09:00 AM	0	0	0	1	0	0	3	302	3	0	0	2	0	2	0	1	1	365	1	0
09:00 AM	to 09:15 AM	0	1	0	1	0	0	2	294	2	0	0	0	0	8	0	1	2	383	1	0
09:15 AM	to 09:30 AM	0	4	0	4	0	0	2	307	1	0	0	2	0	6	0	0	0	322	4	0

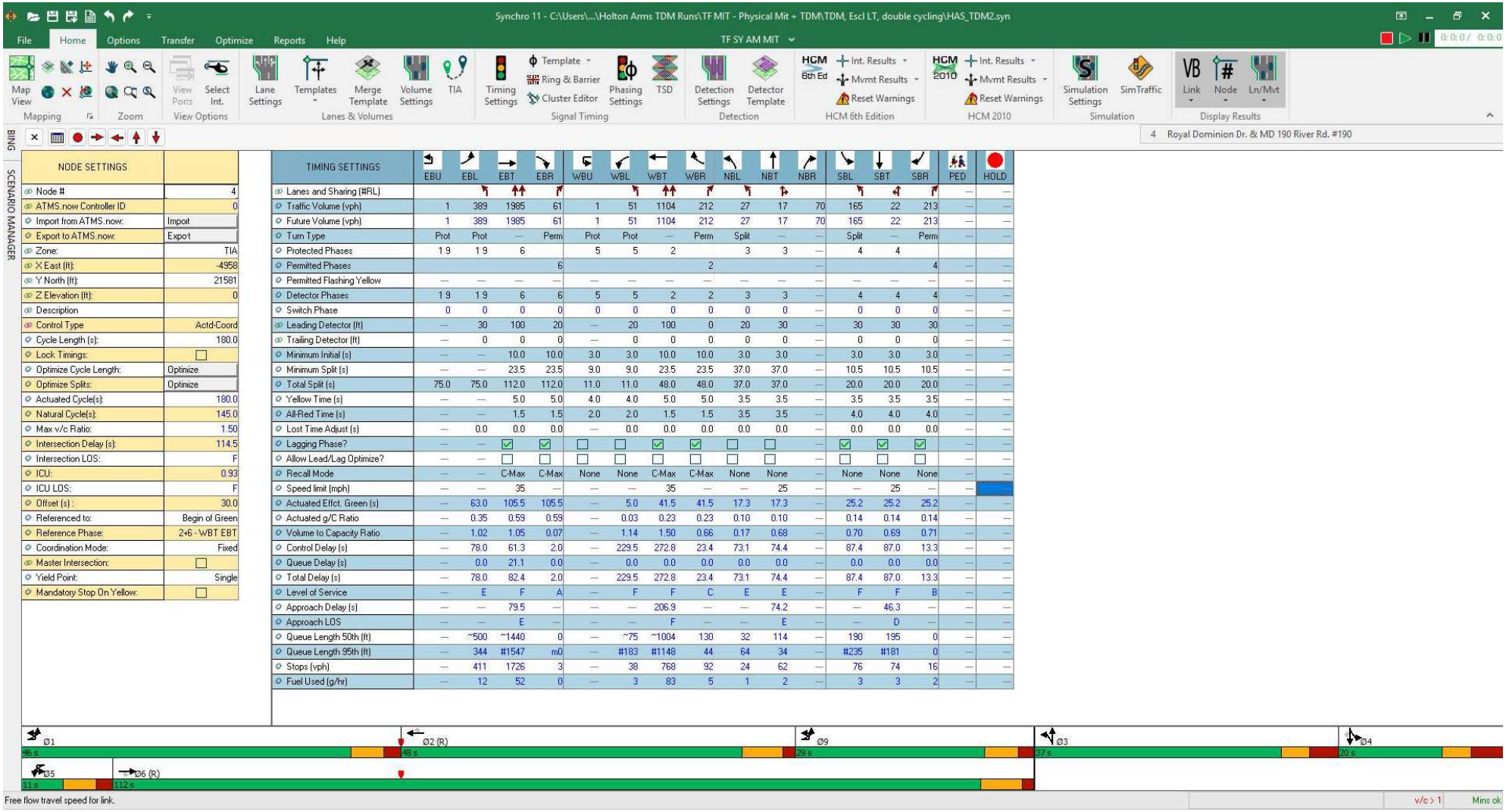
2025 AM Traffic Counts at Royal Dominion Drive



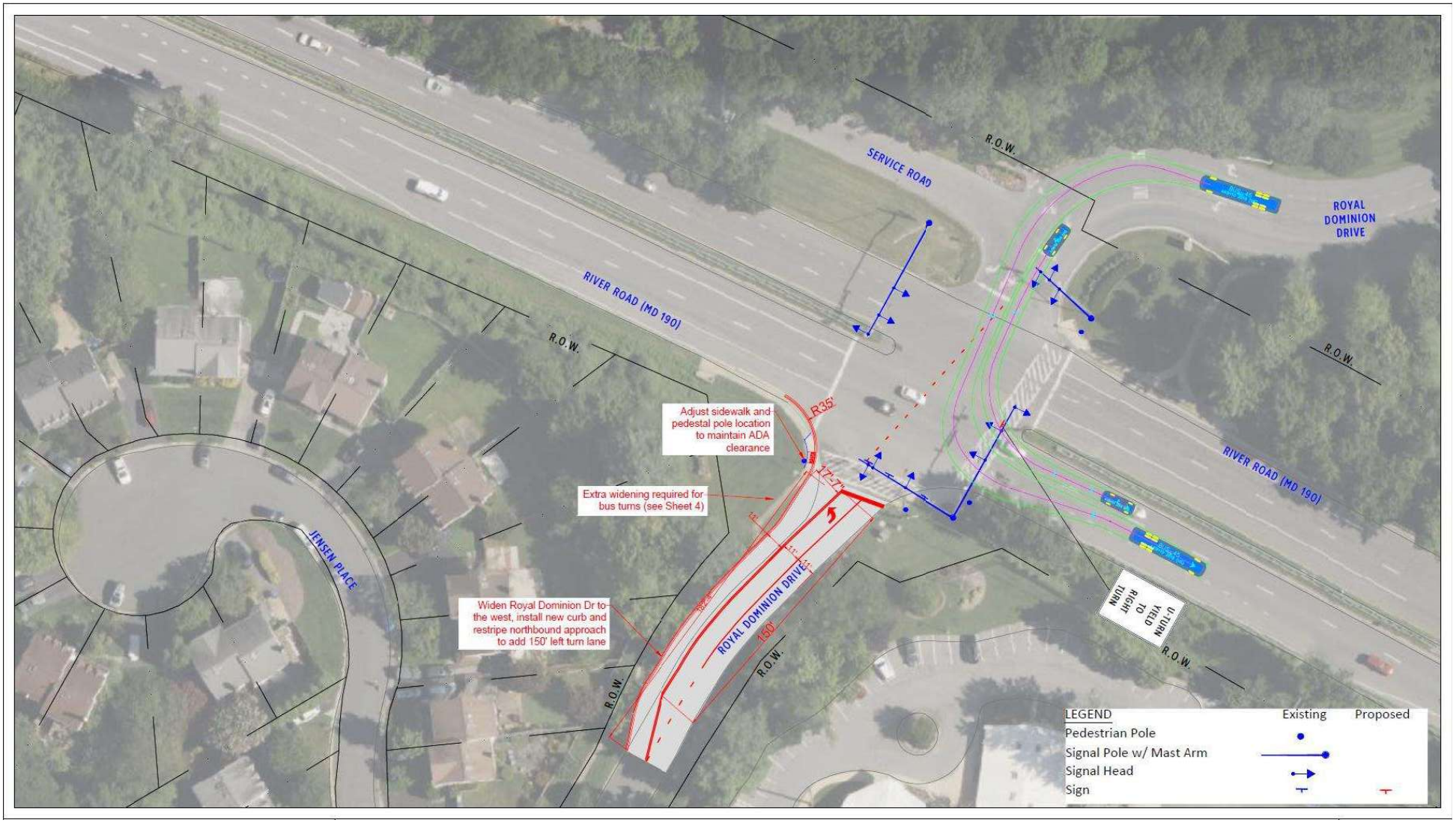
Proposed Mitigations at Royal Dominion Drive



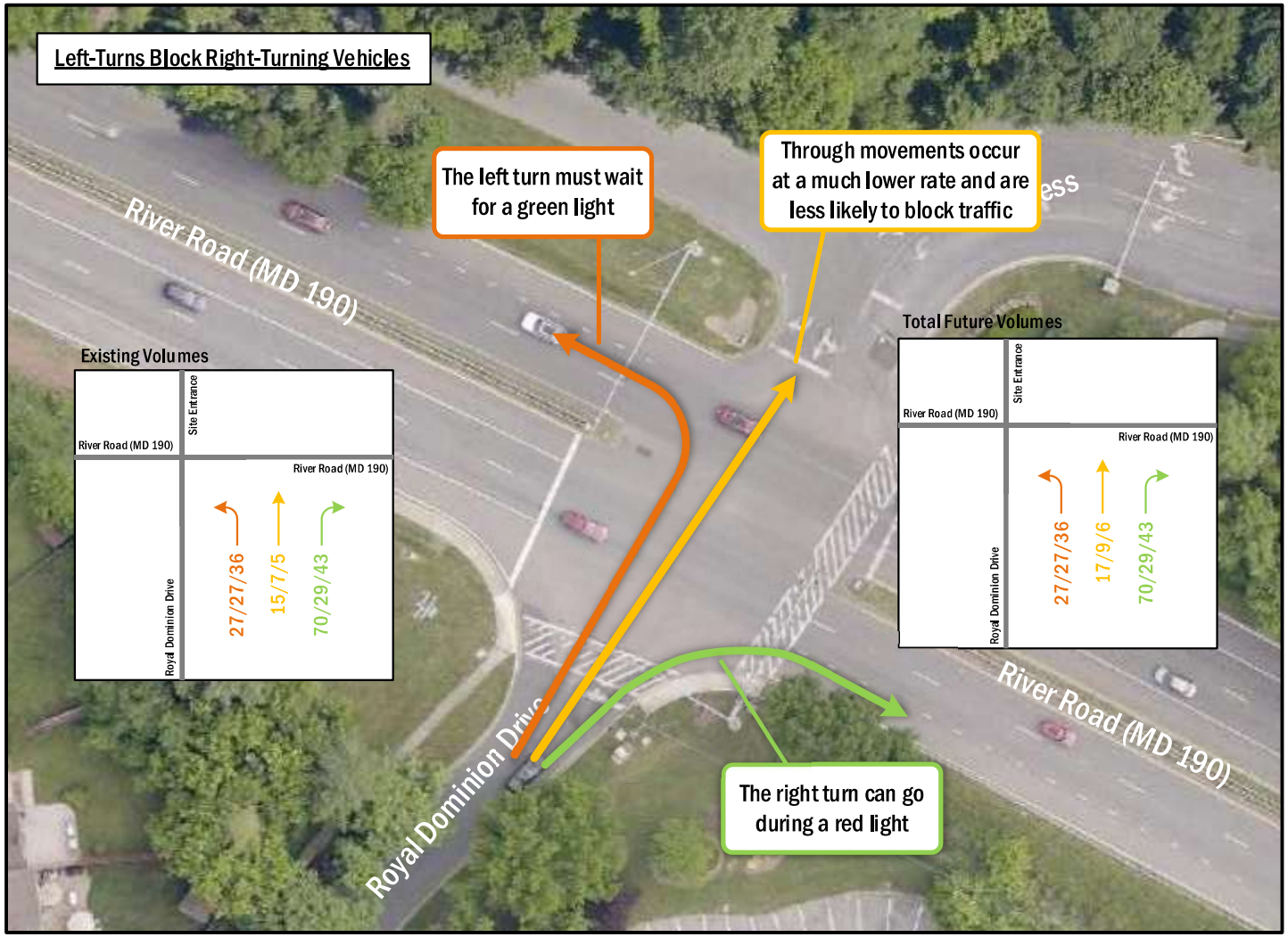
Existing AM Timings at River Road & Royal Dominion Drive



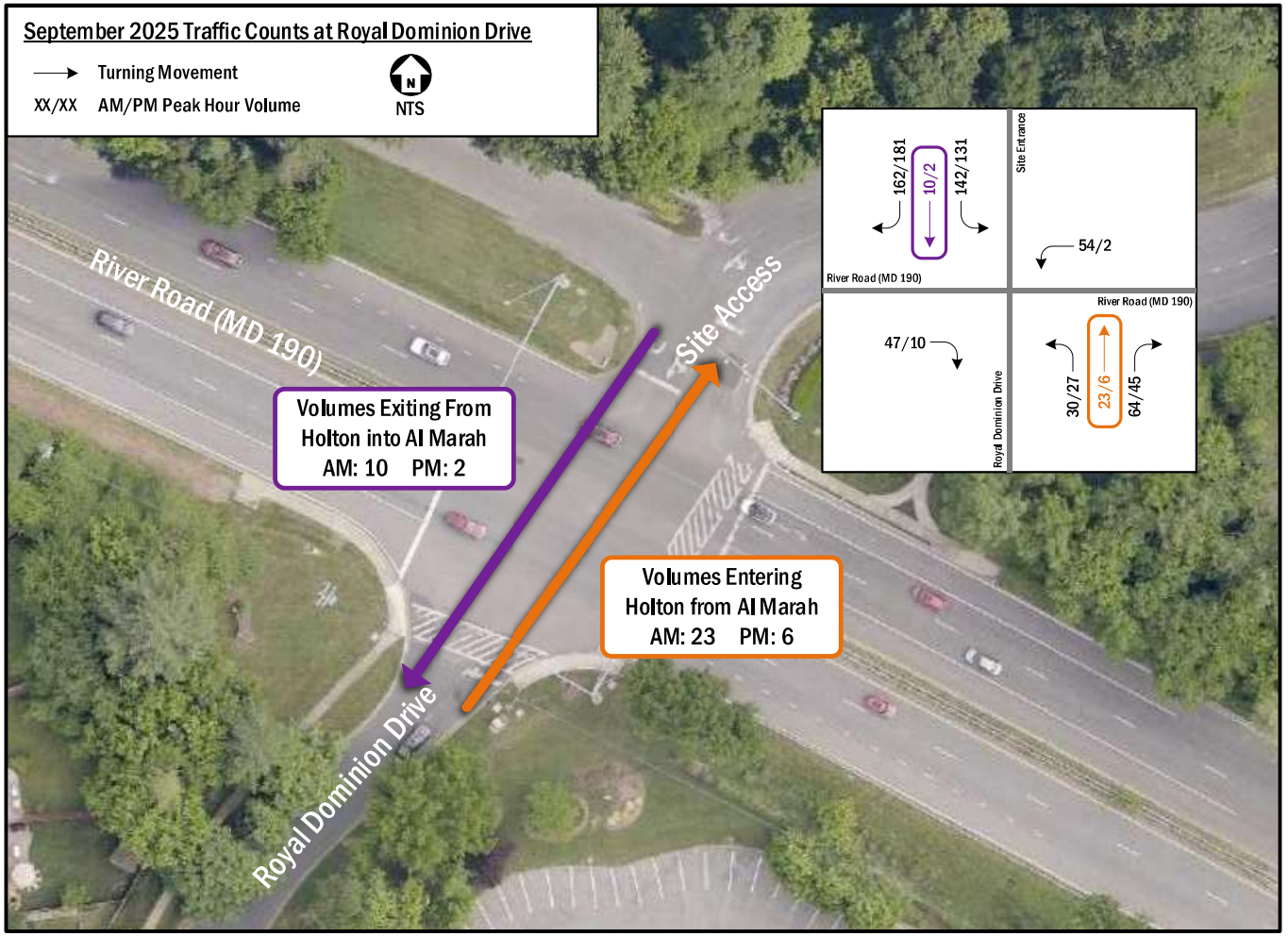
Proposed AM Timings at River Road & Royal Dominion Drive – Double Cycling



Proposed Mitigations at Royal Dominion Drive: Exhibit 40, Section O, page 335



Left Turns Out of the Al Marah Neighborhood



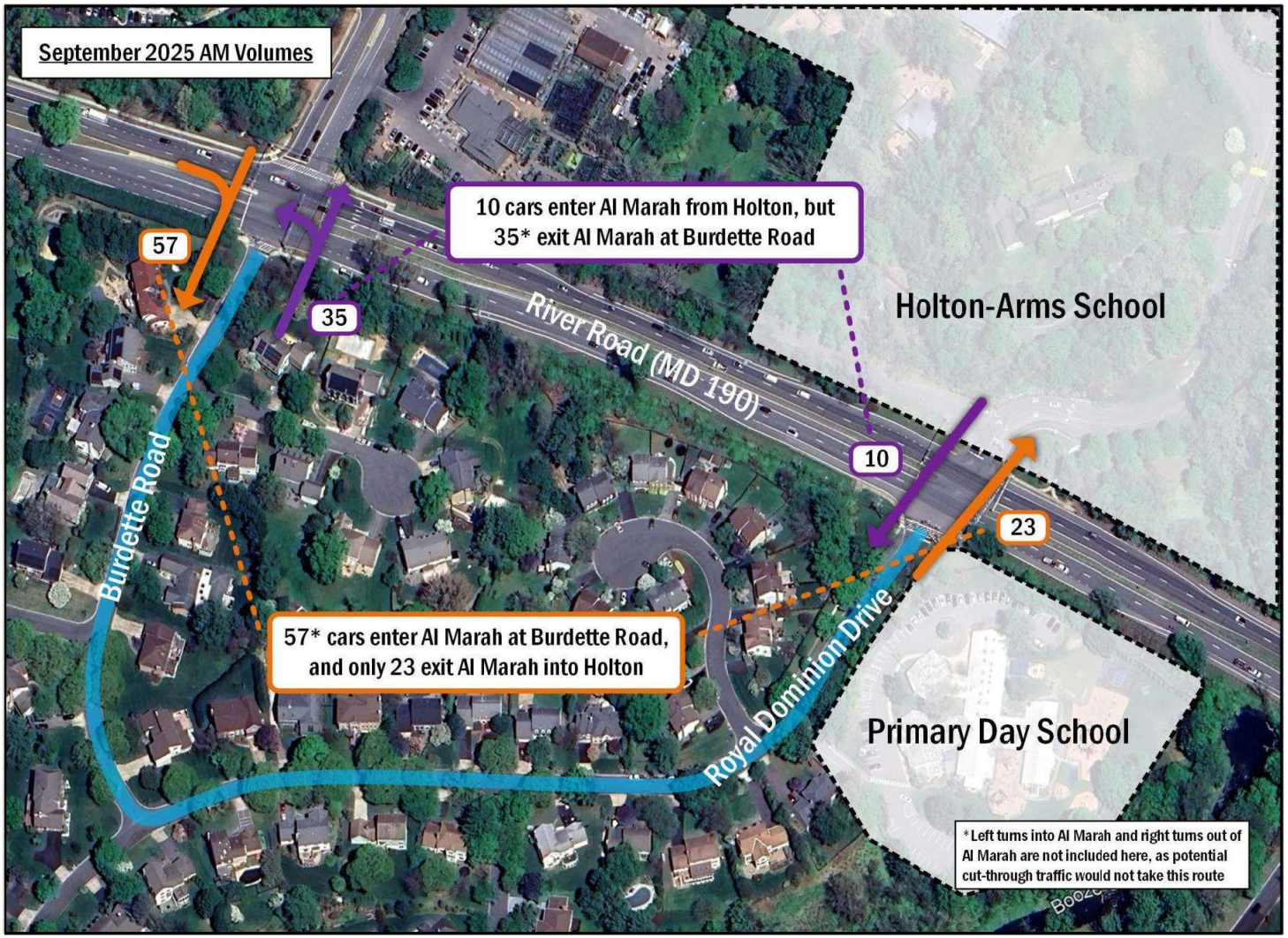
Cut-Through Analysis: Exhibit 38.c, Figure 1, page 5

Table 1: Percent Change in Study Area Total Volumes between 2024 and 2025

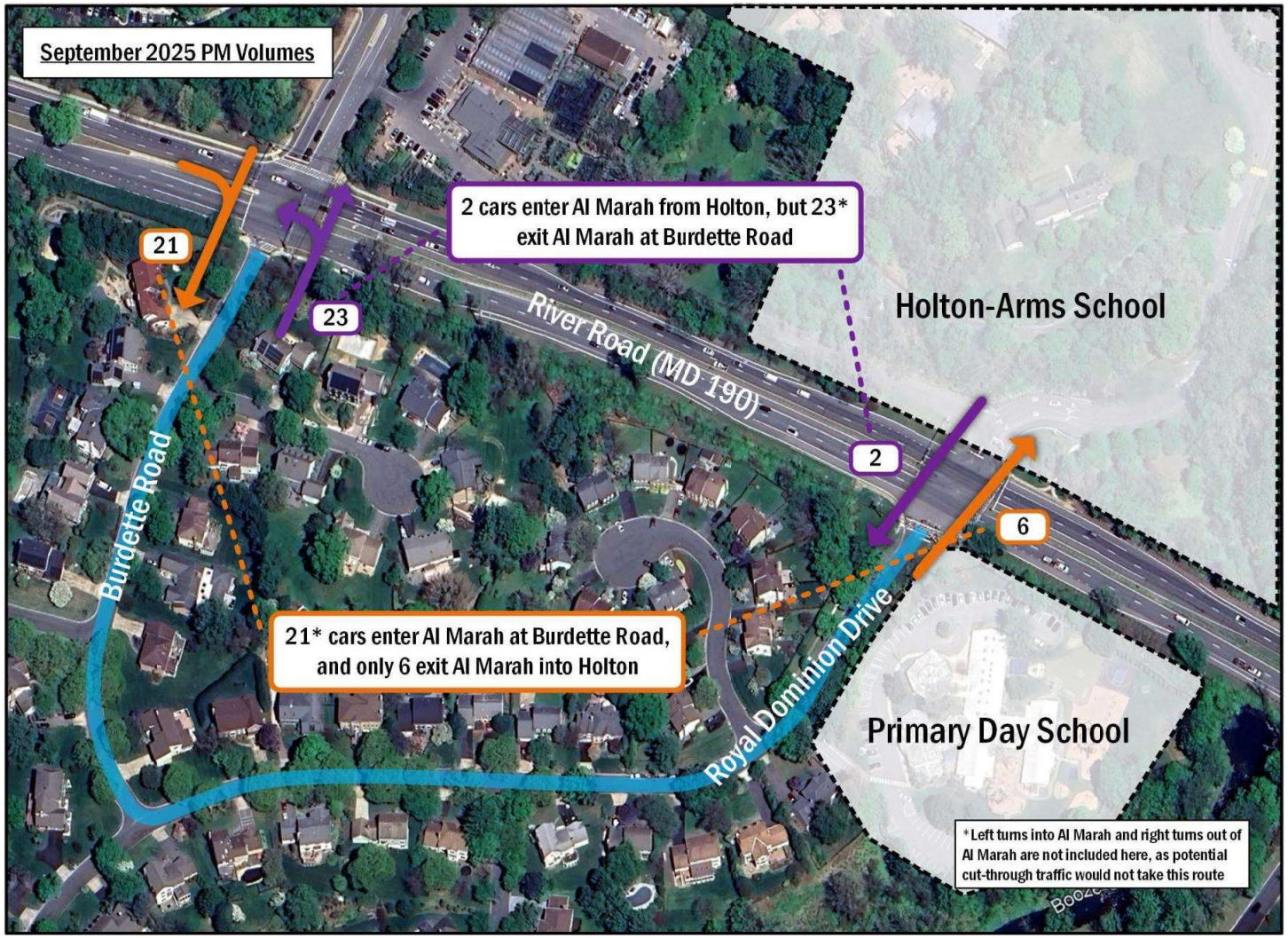
2024 LATR Volumes to 2025 Counts % Change			
AM School Peak (7:15-8:15 AM)	LATR AM School Peak vs 2025 AM Roadway Peak*	PM Roadway Peak (3:15-4:15 PM)	Summer School Peak (2:30-3:30 PM)
-7.29%	-5.19%	-11.87%	-13.23%

*In the LATR, the AM School Peak was analyzed, as it did not overlap with the AM Roadway (or commuter) Peak. As the 2025 AM Roadway Peak overlapped with the LATR AM School Peak, we compared the volumes in case there was more traffic on the roadway than in 2024. Volumes still decreased, meaning the LATR analysis was conservative.

2024-2025 Volume Comparison
Exhibit 38.c, Table 1, page 2



Cut-Through Analysis: Exhibit 38.c, Figure 2, page 6



Cut-Through Analysis: Exhibit 38.c, Figure 3, page 7

Delays Exiting Al Marah via Royal Dominion Drive (seconds)

Intersection	Existing						Total Future (with Mitigation)					
	AM School Peak		***PM Peak***		*Summer PM Peak*		*AM School Peak*		*PM Peak*		*Summer PM Peak*	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Royal Dominion Drive & River Road (MD 190) Northbound Approach	**92.1**	**F**	**87.5**	**F**	**89.0**	**F**	**79.5**	**E**	**81.8**	**F**	**79.6**	**E**

Delays for Vehicles Exiting Al Marah via Royal Dominion Drive

French International School Cut-Through