



May 29, 2019

Ms. Cindy Sauls
Aurora Public Schools
Construction Management and Support
1369 Airport Boulevard
Aurora, CO 80011

Re: Virginia Court Elementary School
Proposed Student Drop-Off/Pick Up Lane and Parking Lot Traffic Study Letter
Aurora, Colorado

Dear Ms. Sauls:

This letter has been prepared for Aurora Public Schools as a traffic study for Virginia Court Elementary School on the southwest corner of the Virginia Court and Troy Street intersection in Aurora, Colorado. The purpose of this letter is to provide a redistribution of traffic and analysis for the proposed student drop-off and pick-up lane and parking lot proposed along Virginia Court. This traffic study includes the analysis of existing traffic as well as the traffic anticipated with the completion of the school drop-off and pick-up lane and surface parking lot with the new traffic patterns anticipated.

The proposed project will include a new student drop-off and pick-up lane along Virginia Court to serve the Virginia Court Elementary School. The circulation pattern for the student drop-offs and pick-ups will include vehicles entering the site from a new access constructed to align with the Virginia Court and Revere Street intersection. Traffic will travel counterclockwise so that the passenger side of the vehicle is adjacent to the school building to drop-off and pick-up students. Then these vehicles will exit the school at a new access to align with the Virginia Court and Salem Street intersection. A surface parking lot is also proposed between the access lane and Virginia Court. A vicinity map illustrating the Virginia Court Elementary School location is attached as **Figure 1**. A site plan for the project is also attached that shows the detail of the drop-off/pick-up lane and parking lot project.

The purpose of this study is to identify existing traffic characteristics, to identify potential traffic related impacts on the local street system with the proposed drop-off/pick-up lane and parking lot, and to develop mitigation measures required for identified impacts. The following intersections were incorporated into this traffic study in accordance with City of Aurora standards and requirements:

- Virginia Court and Revere Street
- Virginia Court and Salem Street
- Virginia Court and Troy Street
- Troy Street and Ursula Way
- Troy Street School Access

Existing Roadway Network and Traffic Counts

Regional access to Virginia Court Elementary School is provided by Interstate 225 (I-225). This access is provided by nearby interchanges with I-225 at Alameda Avenue and

Mississippi Avenue. Primary access however is provided by Virginia Court and Troy Street and to a lesser extent Revere Street, Salem Street, and Ursula Way. Direct access is provided by an existing parking lot along the west side of Troy Street. Direct access to the school will be improved to include the new drop-off/pick-up lane and parking lot to be accessed along Virginia Court as part of this project.

Virginia Court is an unstriped roadway that provides sufficient width for one through lane in each direction, eastbound and westbound, with parking on both sides of the roadway. Virginia Court has a 25 mile per hour posted speed limit. Troy Street is striped with one through lane in each direction, northbound and southbound, and a 25 mile per hour posted speed limit. Northbound Troy Street provides a striped bicycle lane and on-street parking, while southbound Troy Street provides a striped shared bus/bicycle lane adjacent to the school. Ursula Way is an unstriped roadway that provides sufficient width for one through lane in each direction, eastbound and westbound, with parking on both sides of the roadway. Ursula Way has a 25 mile per hour posted speed limit. The existing roadway network surrounding the existing school is shown in **Figure 2**.

The existing T-intersection of Virginia Court and Revere Street is unsignalized with stop control on the southbound Revere Street approach. All three approaches provide a single lane for shared movements. The existing T-intersection of Virginia Court and Salem Street is unsignalized with stop control on the southbound Salem Street approach. All three approaches also provide a single lane for shared movements. The existing T-intersection of Virginia Court and Troy Street is unsignalized with stop control on the eastbound Virginia Court approach. All three approaches provide a single lane for shared movements. The existing T-intersection of Troy Street and Ursula Way is unsignalized with stop control on the westbound Ursula Way approach. All three of these approaches also provide a single lane for shared movements. The existing T-intersection of Troy Street and the school access is unsignalized with stop control on the eastbound exiting school access approach. All three approaches provide a single lane for shared movements. An existing lane configurations figure is attached as **Figure 3**.

Weekday morning and afternoon peak hour of the school generator traffic volume counts were collected at the existing key study intersections and accesses on Tuesday, May 7, 2019. Likewise, the number of pick-up and drop-off vehicles using Virginia Court, Troy Street, Revere Street, and Salem Street (both directions) during the count time periods were also recorded. The weekday counts were conducted in 15-minute intervals during the morning and afternoon peak hours of school generator traffic from 7:00 AM to 8:00 AM and 2:00 PM to 3:00 PM. Existing turning movement counts are attached in **Figure 4** with count sheets attached as well.

Project Redistribution and Total Traffic

Redistribution of school traffic was based on the existing traffic patterns and volumes, and the proposed access system for the drop-off/pick-up lane and parking lot project. The existing school traffic patterns currently include parking along the sides of the road along Virginia Court, Troy Street, Revere Street, Salem Street, and Ursula Way to allow students to be dropped off and picked up, sometimes across the roadway, to access the school from various locations. The existing traffic movements includes a considerable number of U-turns in some locations as shown in **Figure 4**.

The proposed project will include the construction of a student drop-off and pick-up lane along Virginia Court with access that aligns with Revere Street and Salem Street. A surface parking lot is also proposed within the proposed access lane to allow vehicles to park if desired. The recommended school circulation plan includes the new south leg at Revere Street to be restricted to entering school traffic only, while the new south leg at Salem Street would be restricted to exiting school traffic only during the peak hours. With the addition of this drop-off/pick-up lane and parking lot, all traffic using the public streets for student drop-off/pick-up will be encouraged to reroute to the new drop-off and pick-up lane and parking lot location. The expected trip redistribution for the proposed Virginia Court Elementary School project is illustrated in **Figure 5**. This figure only shows the rerouted traffic based on the on-street student drop-offs and pick-ups observed during the morning and afternoon peak hours. The rerouted school traffic volumes were added to the existing traffic volumes at the key study area intersections to represent estimated school traffic with build-out of the project. The total traffic volumes for the school with construction of the proposed drop-off/pick-up lane and parking lot are illustrated in **Figure 6**. Of note, these traffic volumes are anticipated to remain relatively the same over time as the area is completely developed and built out. Therefore, no traffic volume or student population growth is expected in the years to come.

Traffic Operations Analysis

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies at the project key intersections for the existing condition and proposed condition with the drop-off/pick-up lane with traffic redistribution. The acknowledged source for determining overall capacity is the *Highway Capacity Manual*¹.

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, typical traffic study practice identifies overall intersection LOS D and movements or approaches LOS E as the minimum thresholds for acceptable operations. The following **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Table 2 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Sixth Edition, Transportation Research Board, 2016.

¹ Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.

The following provides an intersection by intersection operational analysis for the existing and proposed conditions with construction of this project.

Virginia Court and Revere Street LOS

The existing T-intersection of Virginia Court and Revere Street is unsignalized with stop control on the southbound Revere Street approach. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS A during the morning and afternoon peak hours of generator.

This project proposes a new student drop-off and pick-up lane entry access to be constructed as the south leg of this intersection. This project is proposing to restrict this access to allow entering school traffic only during the peak hours. If the school desires this traffic flow patten to be permanent, R6-1 "ONE WAY" signs could be installed on the new south leg. With construction of the proposed drop-off and pick-up lane, all movements at this intersection are anticipated to operate acceptably with LOS B or better during the peak hours. Therefore, based on the operational analysis one lane is anticipated to be sufficient to accommodate eastbound and westbound traffic entering the school. No additional improvements are anticipated to be needed based on the projected school traffic at this location. **Table 3** provides the results of the level of service analysis for this intersection.

Table 3 – Virginia Court and Revere Street LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Existing				
Eastbound Left	7.4	A	7.5	A
Southbound Approach	9.6	A	9.6	A
Proposed with Project #				
Eastbound Left	7.5	A	7.6	A
Westbound Left	7.9	A	7.6	A
Southbound Approach	11.5	B	12.7	B

= Includes Construction of South Leg and Associated Movements

Virginia Court and Salem Street LOS

The existing T-intersection of Virginia Court and Salem Street is unsignalized with stop control on the southbound Salem Street approach. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS A during the morning and afternoon peak hours of school generator traffic.

This project proposes a new student drop-off and pick-up lane along with a surface parking lot to be constructed with exiting access as the south leg of this intersection. It is recommended that the new northbound approach be stop controlled with the installation of a R1-1 "STOP" sign. If it is desired that the exit only access be designated that way permanently, R5-1 "DO NOT ENTER" signs could be installed on the new south leg of this access, visible to drivers along Virginia Court. Based on the operational analysis one lane is anticipated to be sufficient to accommodate northbound traffic exiting the school. Therefore, it is recommended that the northbound approach be constructed with one shared movement lane for exiting vehicles. Two vehicles of storage (50 feet) is recommended to be provided for the project accesses based on vehicle usage anticipated. If the access is proposed to be exit only for all times of the day, then separate left turn and shared through/right turn lanes for traffic exiting the school would be beneficial at this intersection.

With the construction of the proposed student drop-off and pick-up lane and with this restriction, all movements at this intersection are anticipated to operate acceptably with LOS B or better during the peak hours. **Table 4** provides the results of the level of service analysis for this intersection.

Table 4 – Virginia Court and Salem Street LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Existing				
Eastbound Left	7.4	A	7.5	A
Southbound Approach	9.8	A	9.9	A
Proposed with Project #				
Northbound Approach	10.5	B	10.6	B
Eastbound Left	7.6	A	7.9	A
Southbound Approach	12.5	B	12.9	B

= Includes Construction of South Leg and Associated Movements

Virginia Court and Troy Street

The existing T-intersection of Virginia Court and Troy Street is unsignalized with stop control on the eastbound Virginia Court approach. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS B or better during the morning and afternoon peak hours of school generator. With construction of the proposed student drop-off and pick-up lane and the anticipated reroute of traffic, all movements at this intersection are anticipated to continue to operate acceptably with LOS B or better during the peak hours. **Table 5** provides the results of the level of service analysis for this intersection.

Table 5 – Virginia Court and Troy Street LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Existing				
Northbound Left	7.5	A	7.6	A
Eastbound Approach	10.2	B	10.3	B
Proposed with Project				
Northbound Left	7.7	A	7.8	A
Eastbound Approach	12.8	B	12.9	B

Ursula Way and Troy Street

The existing T-intersection of Troy Street and Ursula Way is unsignalized with stop control on the westbound Ursula Way approach. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS B or better during the morning and afternoon peak hours of generator. With the proposed drop-off and pick-up lane and the anticipated reroute of traffic, all movements at this intersection are anticipated to continue to operate acceptably with LOS B or better during the peak hours. **Table 6** provides the results of the level of service analysis for this intersection.

Table 6 – Ursula Way and Troy Street LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Existing				
Westbound Approach	10.7	B	10.5	B
Southbound Left	7.6	A	7.6	A
Proposed with Project				
Westbound Approach	11.2	B	11.0	B
Southbound Left	7.6	A	7.7	A

Troy Street School Access

The T-intersection of Troy Street and the existing school access is unsignalized with stop control on the eastbound exiting school access approach. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS B or better during the morning and afternoon peak hours of generator. With construction of the proposed school drop-off and pick-up lane and the anticipated reroute of traffic, all movements at this intersection are anticipated to continue to operate acceptably with LOS B or better during the peak hours. **Table 7** provides the results of the level of service analysis for this intersection.

Table 7 – Troy Street School Access LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Existing				
Northbound Left	7.9	A	7.8	A
Eastbound Approach	11.1	B	10.4	B
Proposed with Project				
Northbound Left	8.0	A	7.9	A
Eastbound Approach	11.7	B	10.9	B

The results of the operational level of service analysis demonstrates that acceptable operations are anticipated to occur of the surrounding street network and intersections with construction of the proposed on-site student drop-off/pick-up lane and parking lot along Virginia Court. Some traffic movements may increase along Troy Street and Virginia Court due to focusing all student drop-offs and pick-ups in the proposed new location, but the number of U-Turns and students walking across the street along Virginia Court and Troy Street are expected to reduce significantly. The reduction in U-Turns and pedestrians crossing the street are anticipated to improve traffic operations and safety for traffic and pedestrians adjacent to Virginia Court Elementary School.

Pedestrian Connection Analysis

Existing sidewalk exists along both sides of Virginia Court and Troy Street within the study area. These sidewalks connect from Virginia Court Elementary school to the residential neighborhoods surrounding the school site. Likewise, there are designated, and signed crosswalks located at the east leg of the Virginia Court and Salem Street intersection and at the north leg of the Ursula Way and Troy Street intersection. These sidewalks and crosswalks provide pedestrian access to the residential neighborhoods surrounding the proposed school site in all directions. With the construction of the proposed pick-up and drop-off lane along Virginia Court, construction of new sidewalk connections along the south side of Virginia Court and the new drop-off/pick-up lane is recommended. The existing crosswalks across Virginia Court and Troy Street are recommended to remain without any new crosswalks needed.

Recommendations

Based on the analysis presented in this report, Kimley-Horn believes the proposed new student drop-off/pick-up and parking lot for Virginia Court Elementary School will result in acceptable traffic operations of the existing roadway network and intersections. The proposed project and expected traffic volumes resulted in the following recommendations and conclusions:

- This project proposes a new student drop-off and pick-up lane along with a surface parking lot to be constructed for Virginia Court Elementary School. This drop-off/pick-up lane and parking lot includes construction of new south legs at the Virginia Court/Revere Street and Virginia Court/Salem Street intersections. The drop-off/pick-up lane will provide a curbside length of approximately 250 feet. It is recommended that the entire length of the curb be used for student drop-off and pick-up. School staff may be needed to direct traffic to the east end of the drop-off/pick-up lane so that the maximum number of drop-offs and pick-ups can occur simultaneously. Likewise, with the parking lot being constructed to the north, an identified location and designated crosswalk across the drop-off/pick-up lane is recommended so that people walking into and out of the school from the parking lot are directed to cross at one location. School staff should be present at this crosswalk location across the student drop-off/pick-up lane to either hold pedestrians while traffic is moving through, or to stop traffic so pedestrians can cross.
- At the intersection of Virginia Court and Revere Street this new drop-off/pick-up lane and parking lot access is planned to be restricted to allow entering school traffic only during the peak hours. If it is desired that this access serves in this entrance only fashion during all times of the day, it is recommended that R6-1 "ONE WAY" signs be installed on the new south leg of the intersection.
- At the intersection of Virginia Court and Salem Street the new Virginia Court Elementary School access is planned to be restricted to allow exiting school traffic only during the peak hours. If this configuration is desirable for all hours of the day, it is recommended that R5-1 "DO NOT ENTER" signs be installed on the south leg of this access, visible to drivers along Virginia Court. It is recommended that the northbound approach be constructed with one shared movement lane for exiting vehicles at a minimum, however separate left turn and shared through/right turn lanes would be beneficial if the access is designated exit only permanently. Two vehicles of storage (50 feet) is recommended to be provided for the project access based on the vehicle usage anticipated. It is recommended that the new northbound approach be stop controlled with the installation of a R1-1 "STOP" sign.

The recommended intersection lane configurations and control are illustrated in **Figure 7** for the project construction of a new student drop-off/pick-up lane and parking lot for Virginia Court Elementary School.

Conclusion

The proposed Virginia Court Elementary School project proposes a new student drop-off and pick-up lane to be accessed from Virginia Court at Revere Street (entrance only) and Salem Street (exit only). A surface parking lot is also proposed within the access lane. Existing school traffic is anticipated to reroute in order to access the newly constructed drop-

off and pick-up lane. Based on the results of this traffic study, the public street roadways and adjacent intersections were found to successfully accommodate the redistribution of existing school traffic to the proposed drop-off/pick-up lane. Based on these results, it is believed that the project will have a minimal traffic impact to the study area intersections and will greatly increase overall traffic operations and safety to vehicles and students by reducing the amount of U-Turn traffic and school children crossing the public streets from being dropped-off or picked-up on the other side of the roadway. If you have any questions or require anything further, please feel free to call me at (303) 228-2304.

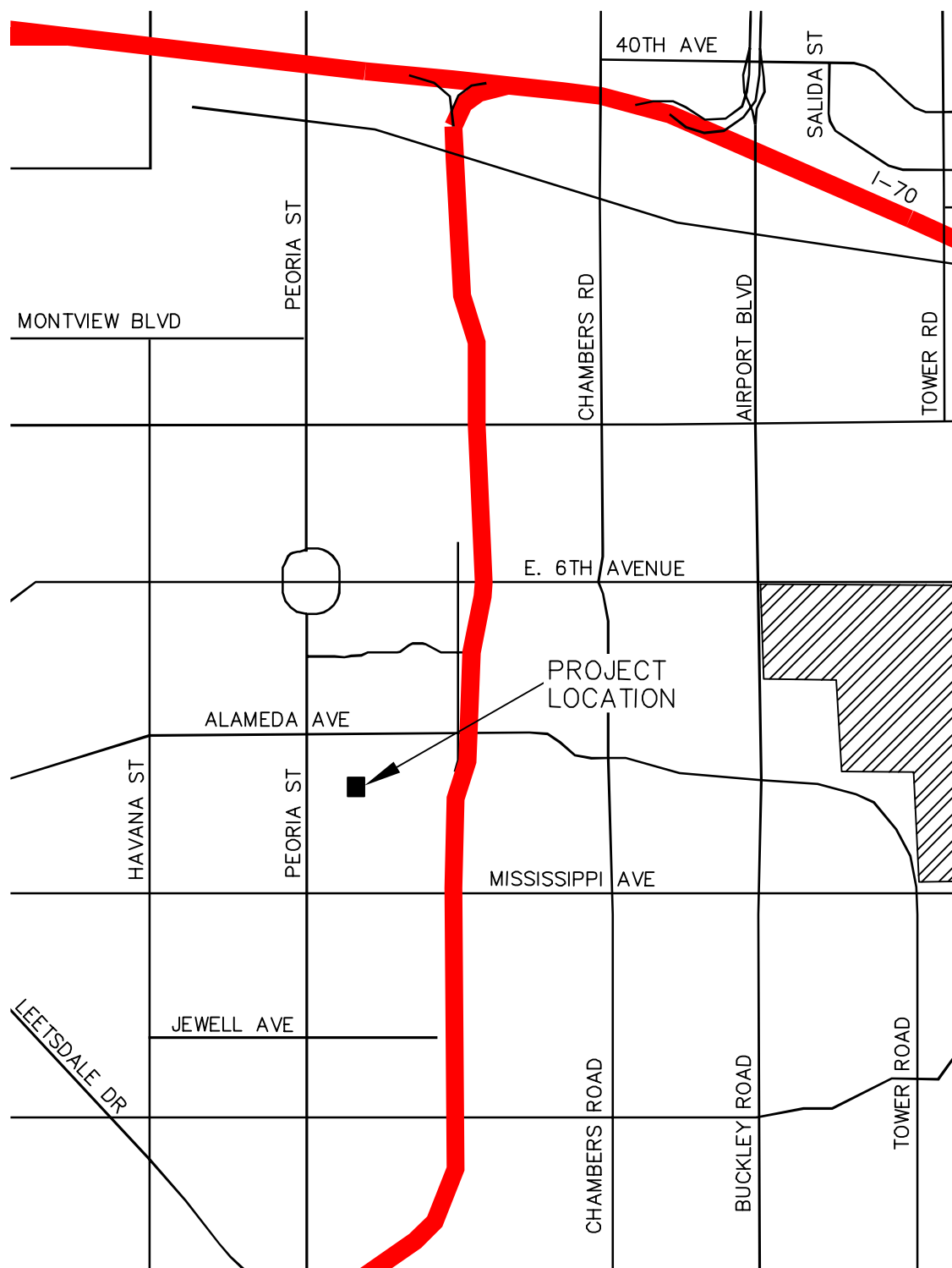
Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Curtis D. Rowe, P.E., PTOE
Vice President





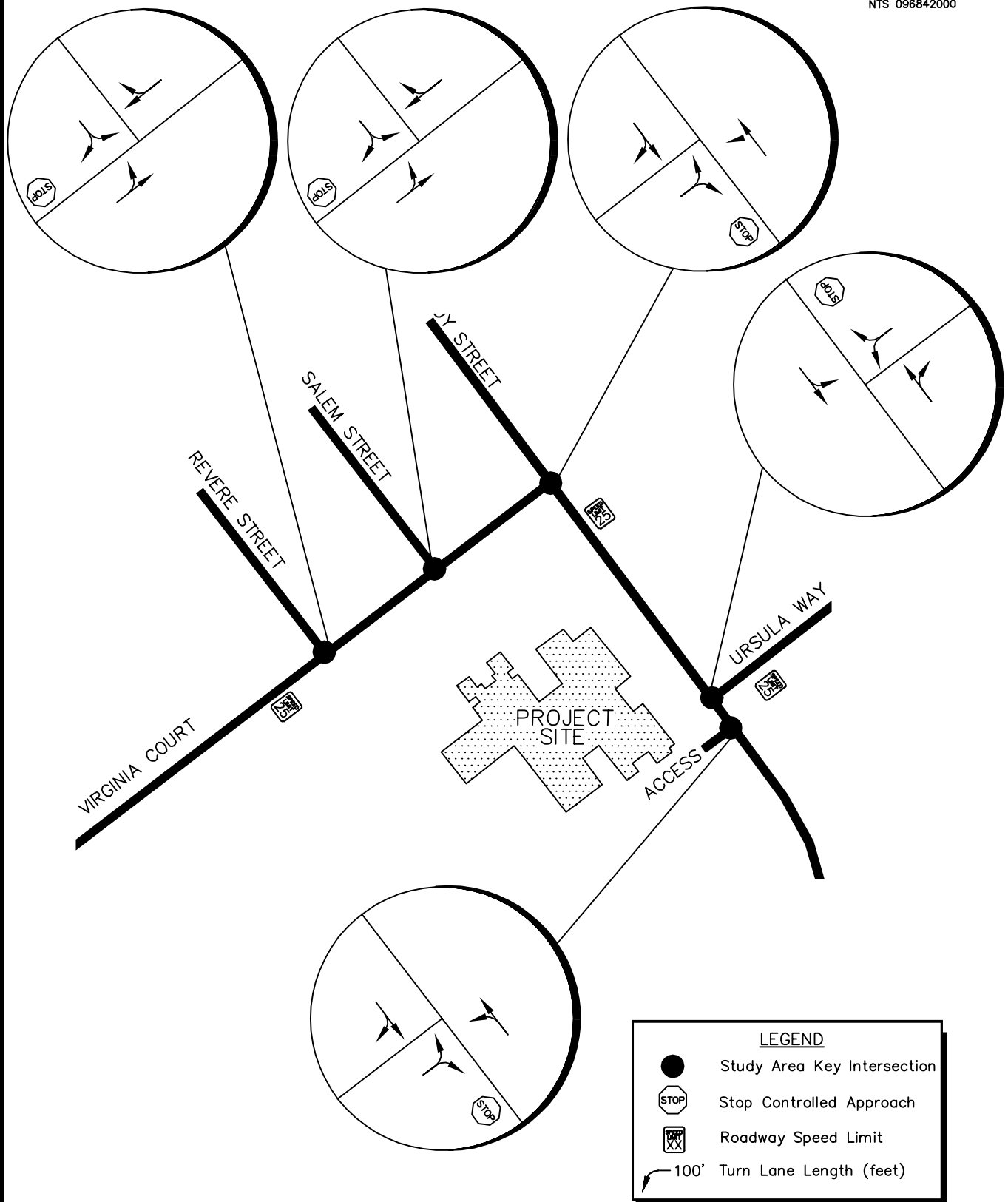
VIRGINIA COURT ELEMENTERY SCHOOL
 VICINITY MAP

FIGURE 1



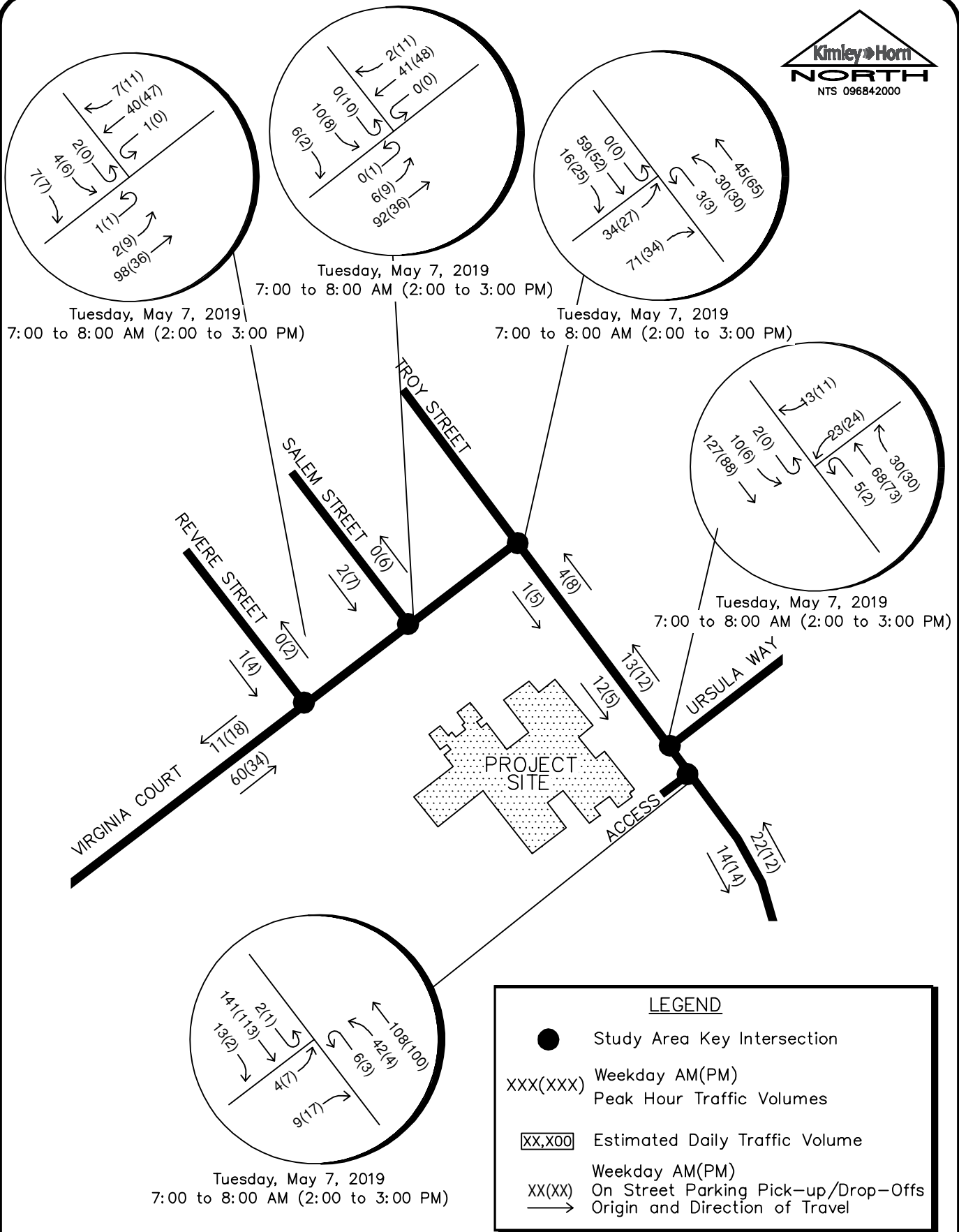
VIRGINIA COURT ELEMENTERY SCHOOL
SURROUNDING SITE AREA

FIGURE 2



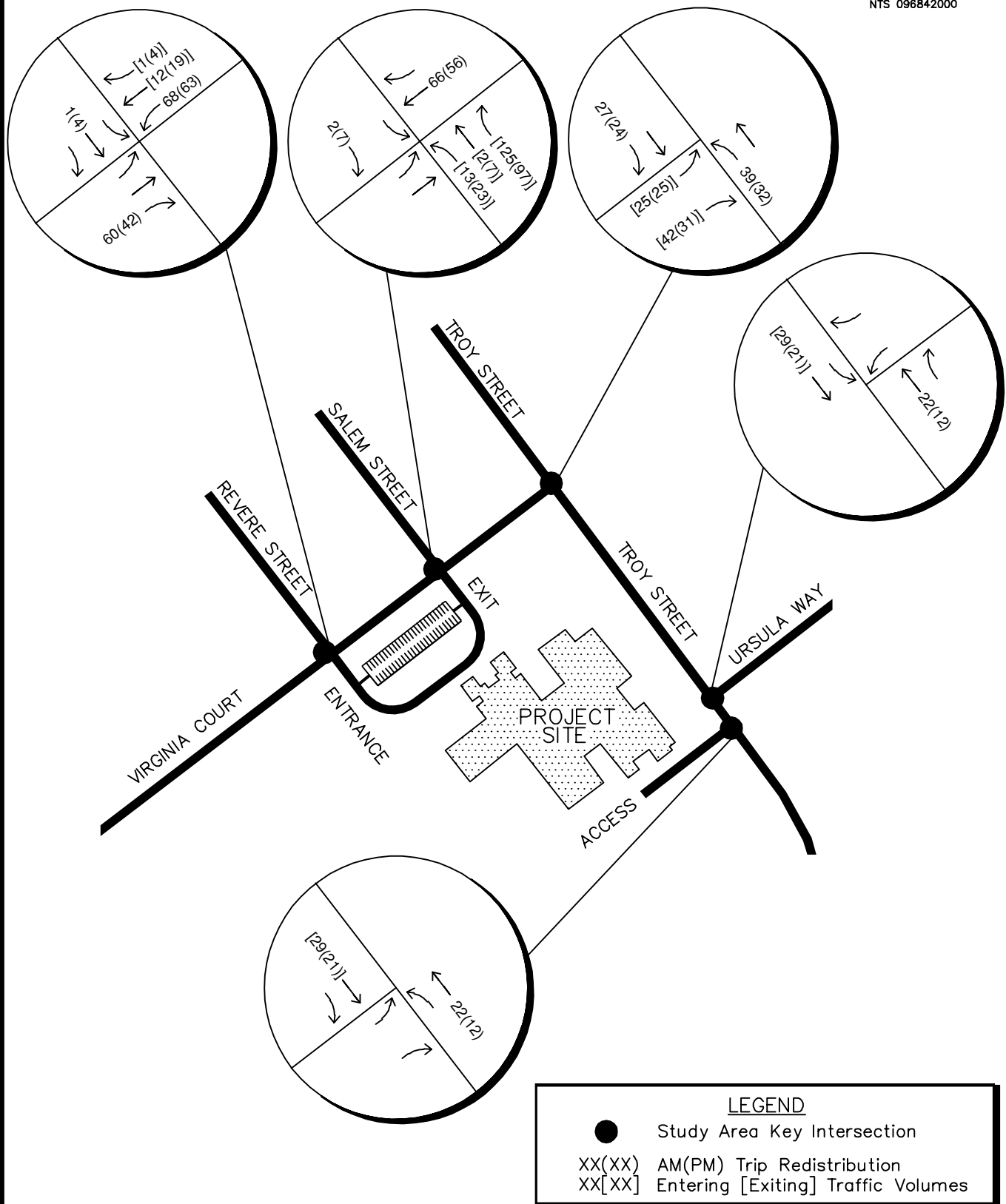
VIRGINIA COURT ELEMENTARY SCHOOL
EXISTING LANE CONFIGURATIONS

FIGURE 3



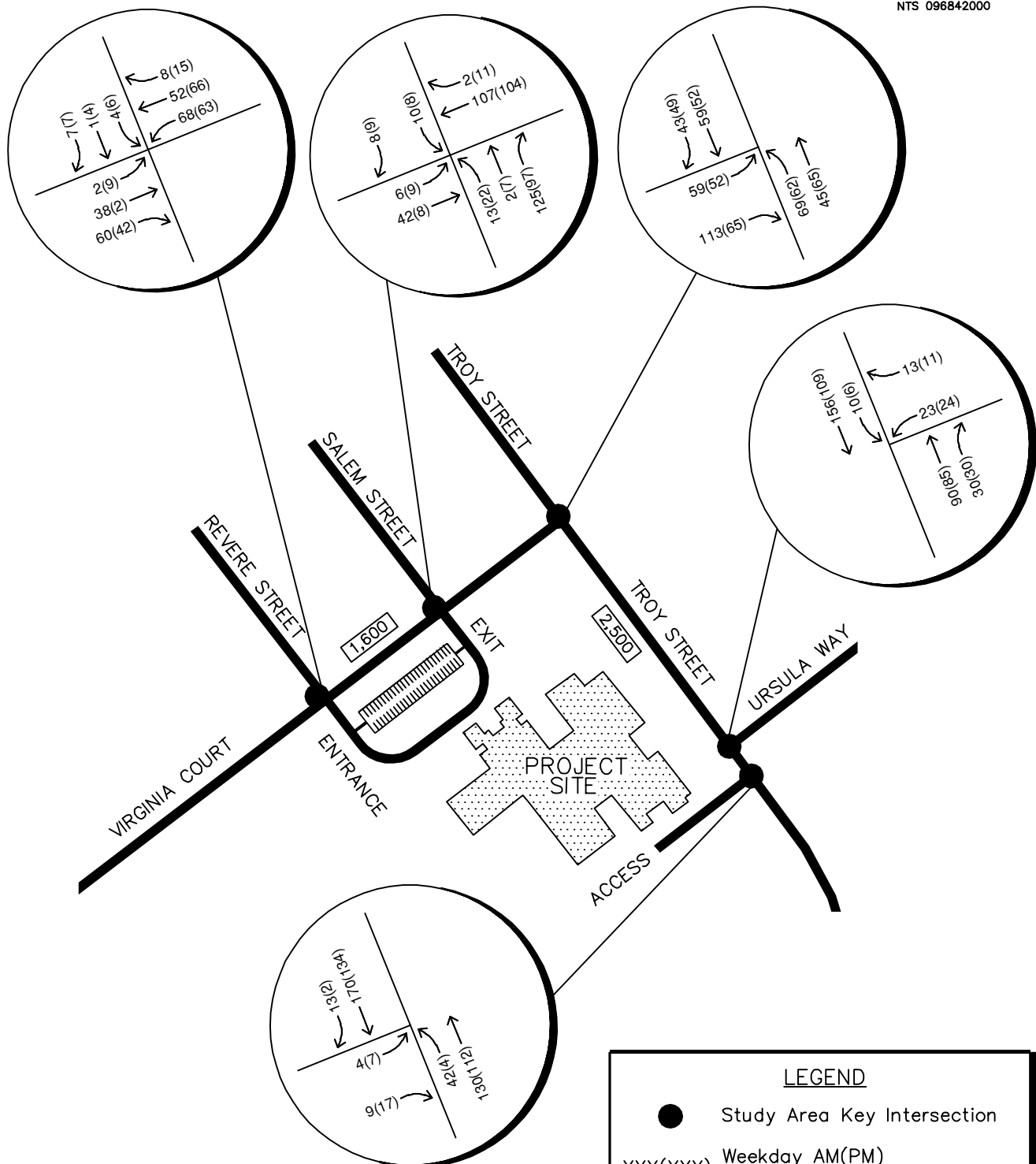
VIRGINIA COURT ELEMENTARY SCHOOL
EXISTING TRAFFIC VOLUMES

FIGURE 4



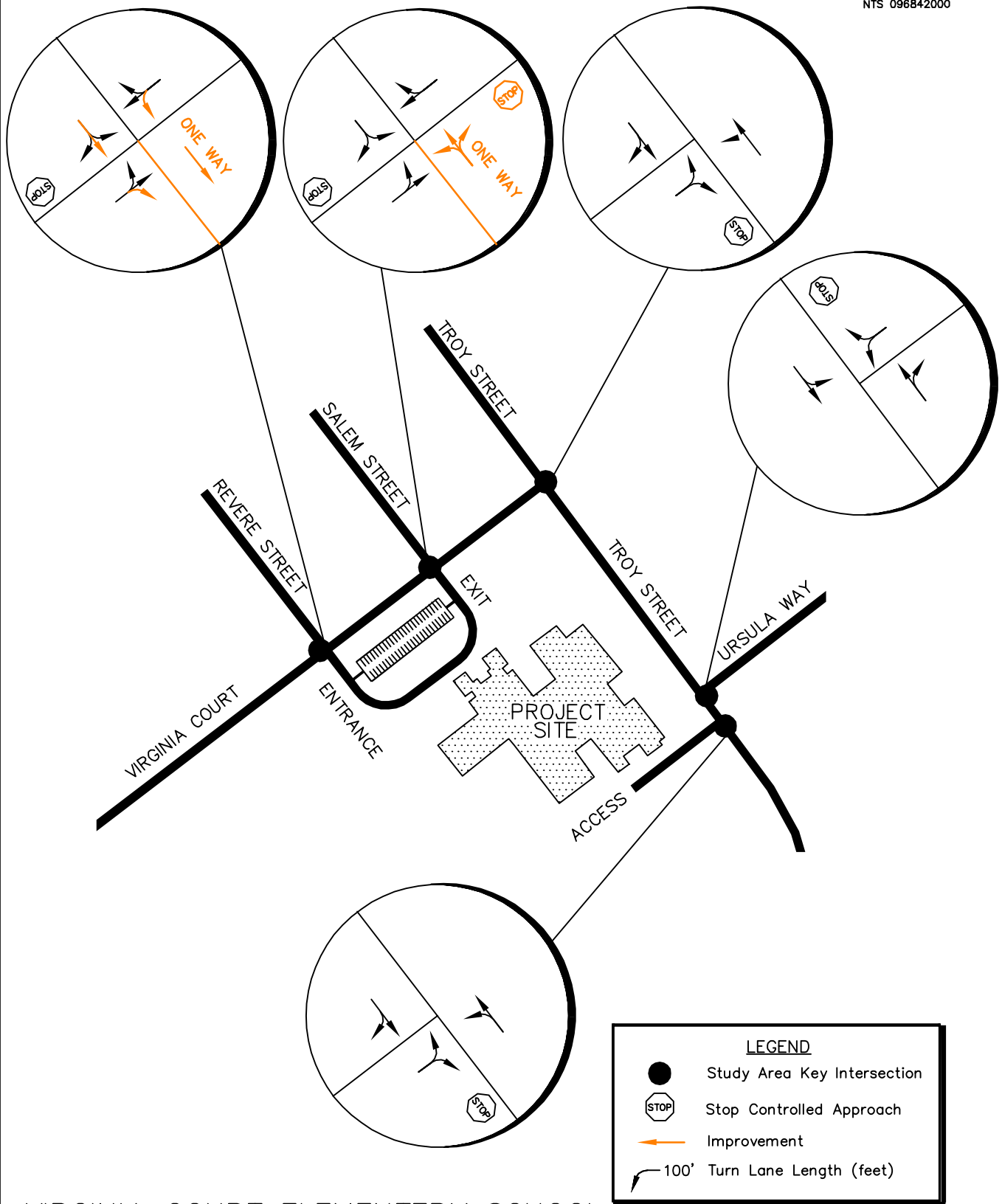
VIRGINIA COURT ELEMENTARY SCHOOL
PROJECT TRIP REDISTRIBUTION

FIGURE 5



VIRGINIA COURT ELEMENTARY SCHOOL
 REROUTE WITH PARKING LOT
 TRAFFIC VOLUMES

FIGURE 6



VIRGINIA COURT ELEMENTARY SCHOOL
RECOMMENDED LANE
CONFIGURATIONS AND CONTROL

FIGURE 7



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Revere Street

File Name : Virginia and Revere AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

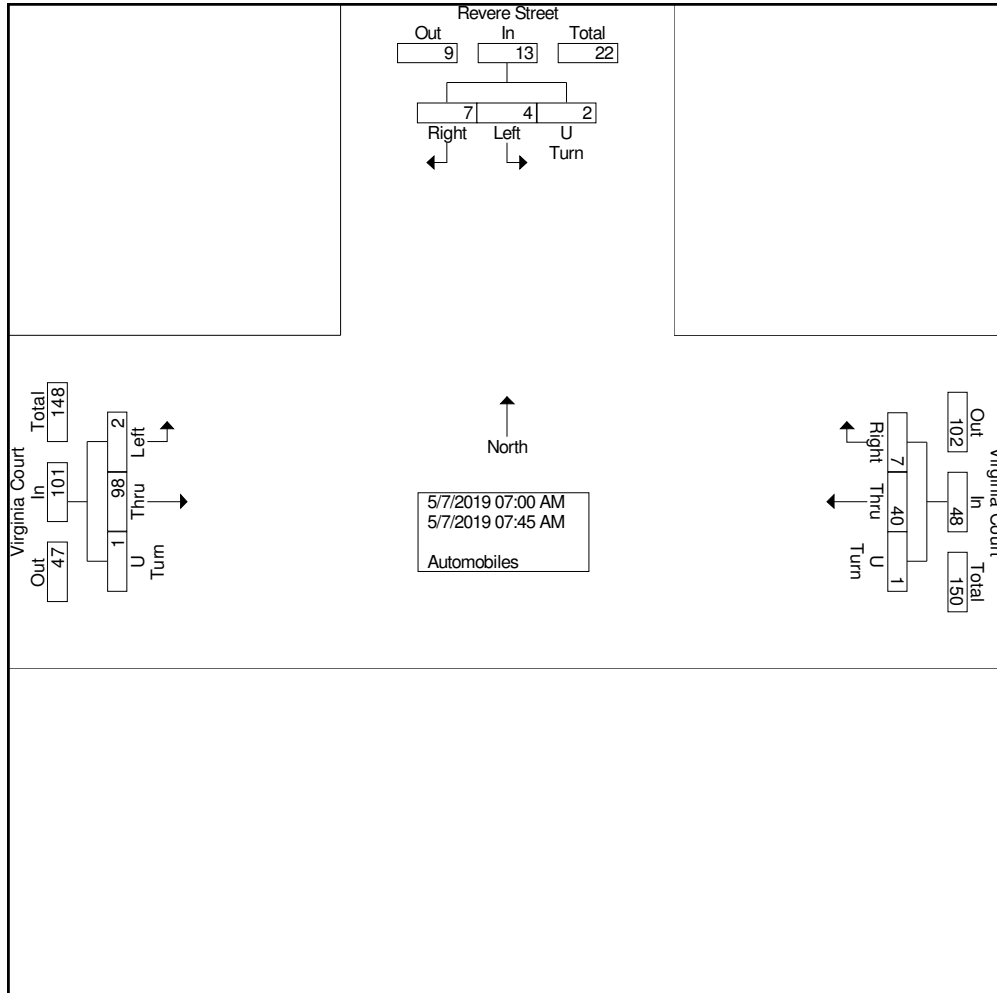
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Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
07:00 AM	0	7	0	7	2	1	0	3	1	2	0	3	13
07:15 AM	0	16	0	16	1	6	1	8	1	1	2	4	28
07:30 AM	2	58	0	60	16	0	0	16	2	3	0	5	81
07:45 AM	0	17	1	18	21	0	0	21	0	1	0	1	40
Total	2	98	1	101	40	7	1	48	4	7	2	13	162
Grand Total	2	98	1	101	40	7	1	48	4	7	2	13	162
Apprch %	2	97	1		83.3	14.6	2.1		30.8	53.8	15.4		
Total %	1.2	60.5	0.6	62.3	24.7	4.3	0.6	29.6	2.5	4.3	1.2	8	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Revere Street

File Name : Virginia and Revere AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



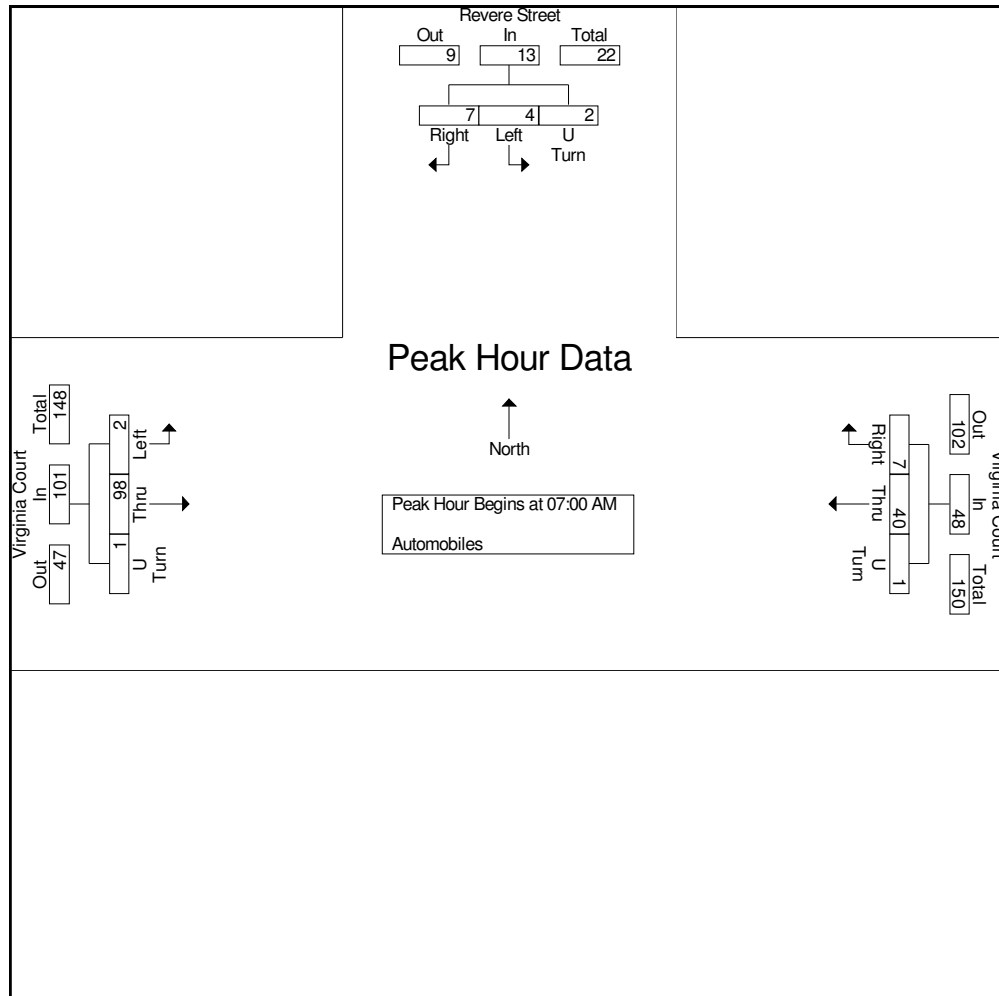


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Revere Street

File Name : Virginia and Revere AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Virginia Court Eastbound				Virginia Court Westbound				Revere Street Southbound				
Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	0	7	0	7	2	1	0	3	1	2	0	3	13
07:15 AM	0	16	0	16	1	6	1	8	1	1	2	4	28
07:30 AM	2	58	0	60	16	0	0	16	2	3	0	5	81
07:45 AM	0	17	1	18	21	0	0	21	0	1	0	1	40
Total Volume	2	98	1	101	40	7	1	48	4	7	2	13	162
% App. Total	2	97	1		83.3	14.6	2.1		30.8	53.8	15.4		
PHF	.250	.422	.250	.421	.476	.292	.250	.571	.500	.583	.250	.650	.500





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Revere Street

File Name : Virginia and Revere PM
Site Code : IPO 432
Start Date : 5/7/2019
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Groups Printed- Automobiles

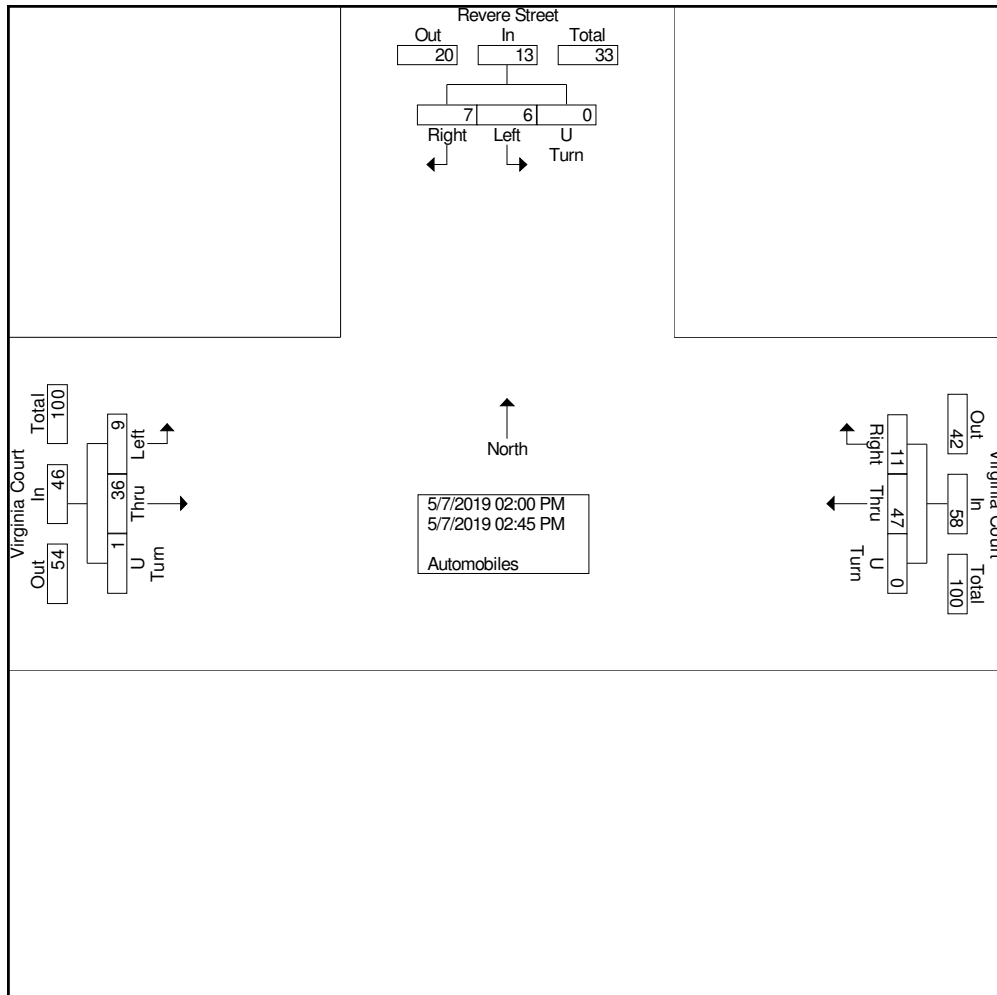
	Virginia Court Eastbound				Virginia Court Westbound				Revere Street Southbound				
Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
02:00 PM	3	12	0	15	7	3	0	10	0	2	0	2	27
02:15 PM	5	14	1	20	31	3	0	34	5	4	0	9	63
02:30 PM	0	8	0	8	5	3	0	8	0	0	0	0	16
02:45 PM	1	2	0	3	4	2	0	6	1	1	0	2	11
Total	9	36	1	46	47	11	0	58	6	7	0	13	117
Grand Total	9	36	1	46	47	11	0	58	6	7	0	13	117
Apprch %	19.6	78.3	2.2		81	19	0		46.2	53.8	0		
Total %	7.7	30.8	0.9	39.3	40.2	9.4	0	49.6	5.1	6	0	11.1	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Revere Street

File Name : Virginia and Revere PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



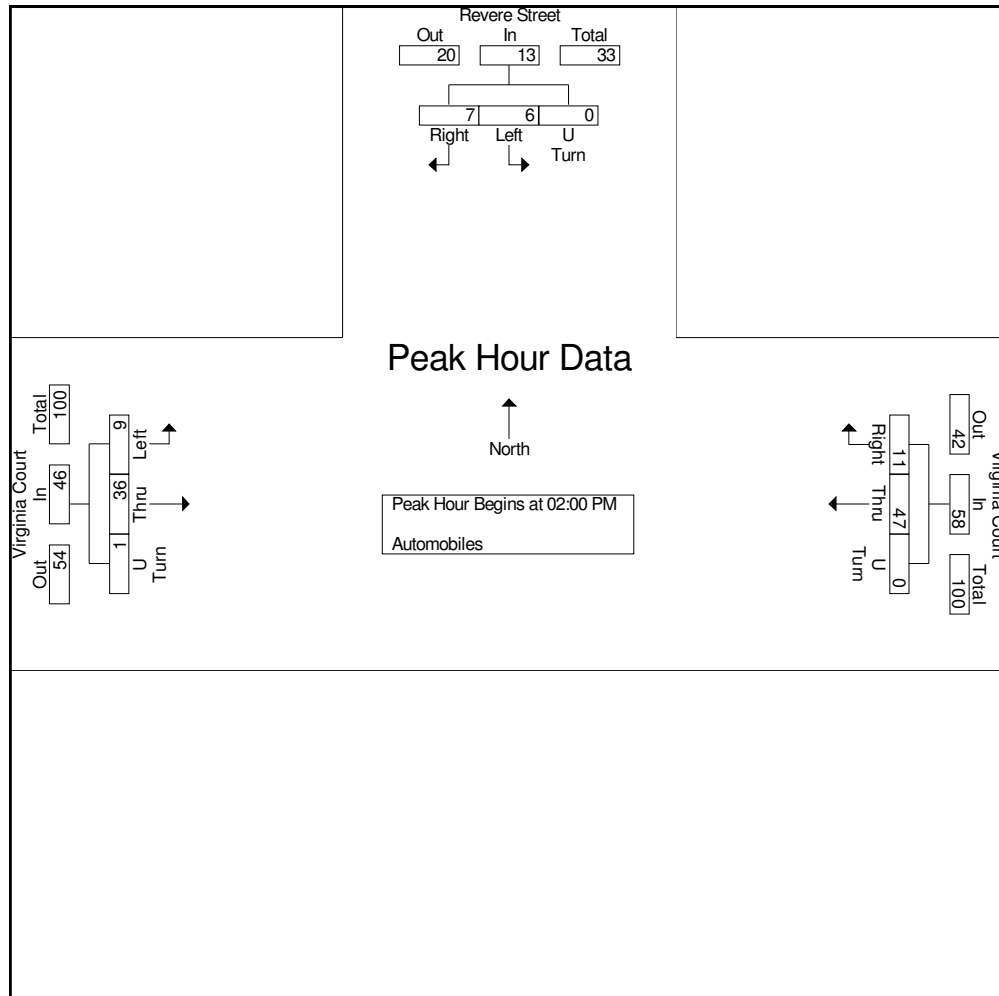


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Revere Street

File Name : Virginia and Revere PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Virginia Court Eastbound				Virginia Court Westbound				Revere Street Southbound				
Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 02:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	3	12	0	15	7	3	0	10	0	2	0	2	27
02:15 PM	5	14	1	20	31	3	0	34	5	4	0	9	63
02:30 PM	0	8	0	8	5	3	0	8	0	0	0	0	16
02:45 PM	1	2	0	3	4	2	0	6	1	1	0	2	11
Total Volume	9	36	1	46	47	11	0	58	6	7	0	13	117
% App. Total	19.6	78.3	2.2		81	19	0		46.2	53.8	0		
PHF	.450	.643	.250	.575	.379	.917	.000	.426	.300	.438	.000	.361	.464





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Salem Street

File Name : Virginia and Salem AM
Site Code : IPO 432
Start Date : 5/7/2019
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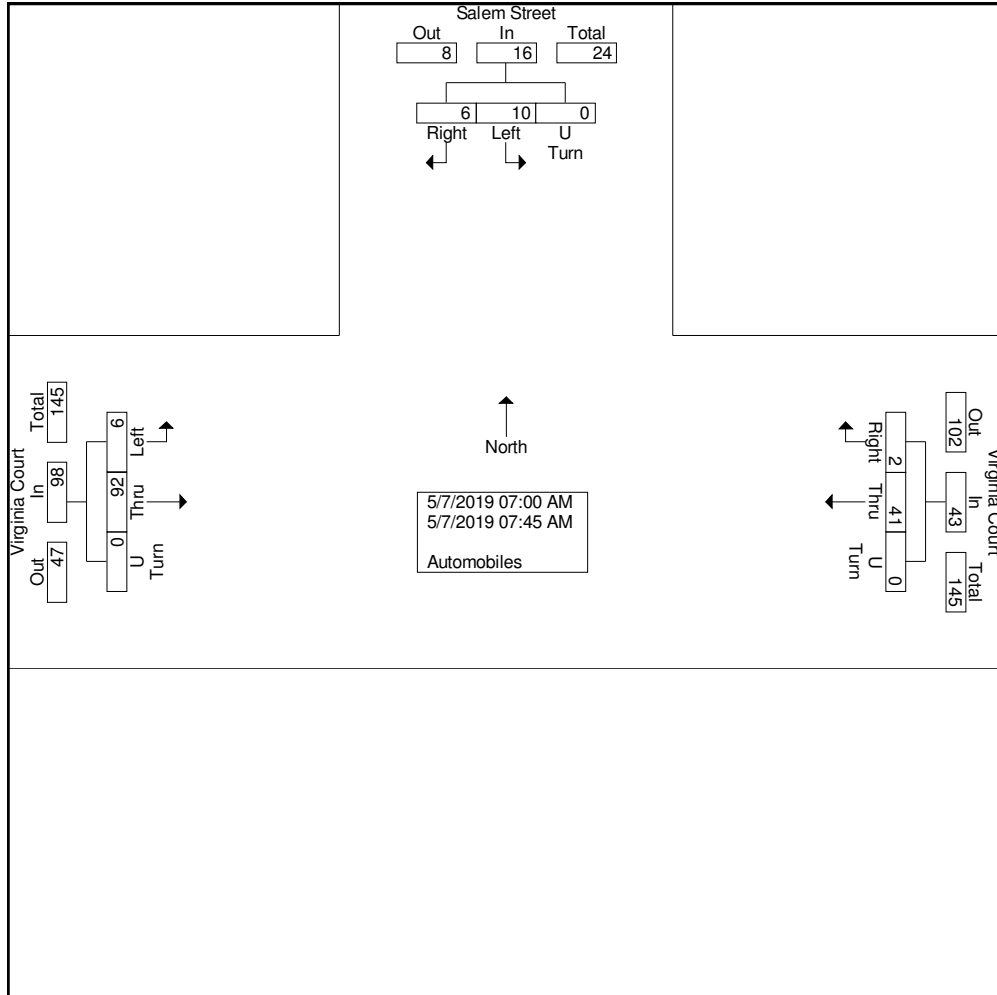
Start Time	Virginia Court Eastbound				Virginia Court Westbound				Salem Street Southbound				Int. Total
	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	
07:00 AM	0	4	0	4	8	0	0	8	1	2	0	3	15
07:15 AM	1	22	0	23	4	0	0	4	3	1	0	4	31
07:30 AM	3	45	0	48	14	1	0	15	5	2	0	7	70
07:45 AM	2	21	0	23	15	1	0	16	1	1	0	2	41
Total	6	92	0	98	41	2	0	43	10	6	0	16	157
Grand Total	6	92	0	98	41	2	0	43	10	6	0	16	157
Apprch %	6.1	93.9	0		95.3	4.7	0		62.5	37.5	0		
Total %	3.8	58.6	0	62.4	26.1	1.3	0	27.4	6.4	3.8	0	10.2	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Salem Street

File Name : Virginia and Salem AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



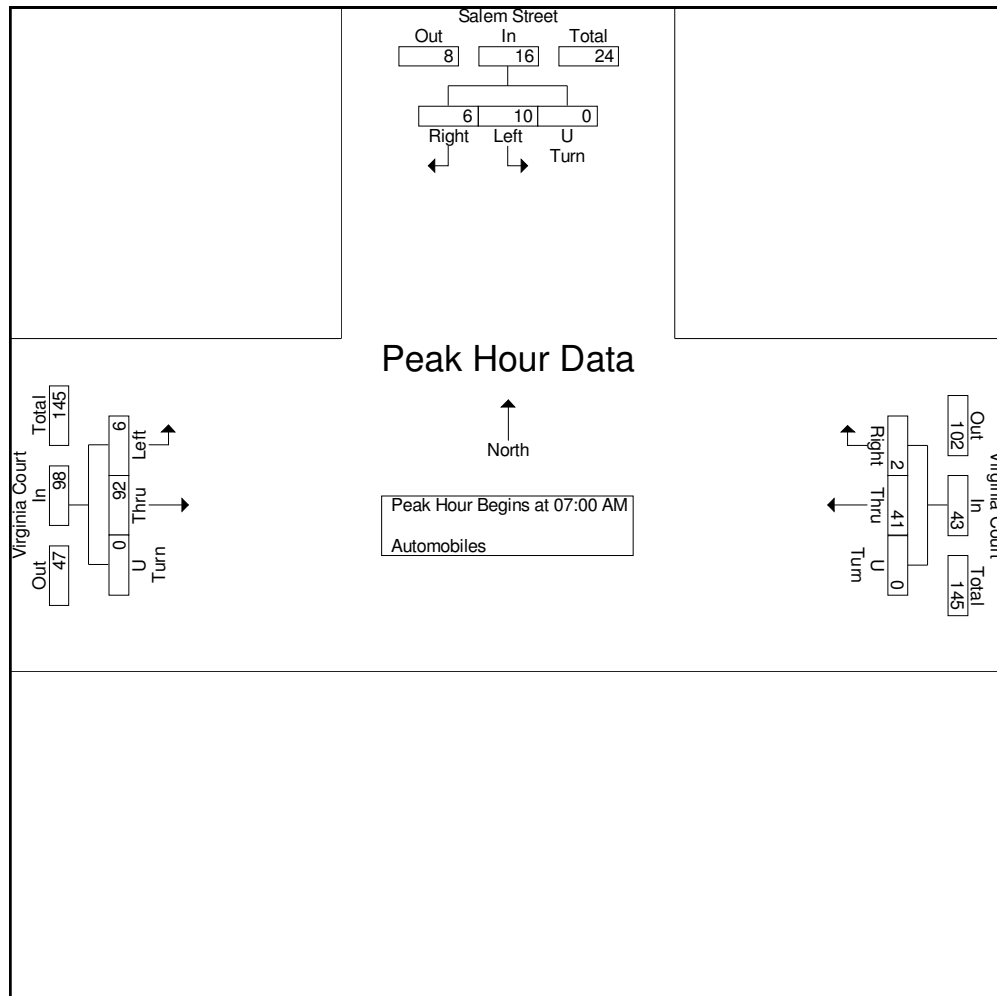


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Salem Street

File Name : Virginia and Salem AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Virginia Court Eastbound				Virginia Court Westbound				Salem Street Southbound				
Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	0	4	0	4	8	0	0	8	1	2	0	3	15
07:15 AM	1	22	0	23	4	0	0	4	3	1	0	4	31
07:30 AM	3	45	0	48	14	1	0	15	5	2	0	7	70
07:45 AM	2	21	0	23	15	1	0	16	1	1	0	2	41
Total Volume	6	92	0	98	41	2	0	43	10	6	0	16	157
% App. Total	6.1	93.9	0		95.3	4.7	0		62.5	37.5	0		
PHF	.500	.511	.000	.510	.683	.500	.000	.672	.500	.750	.000	.571	.561





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Salem Street

File Name : Virginia and Salem PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

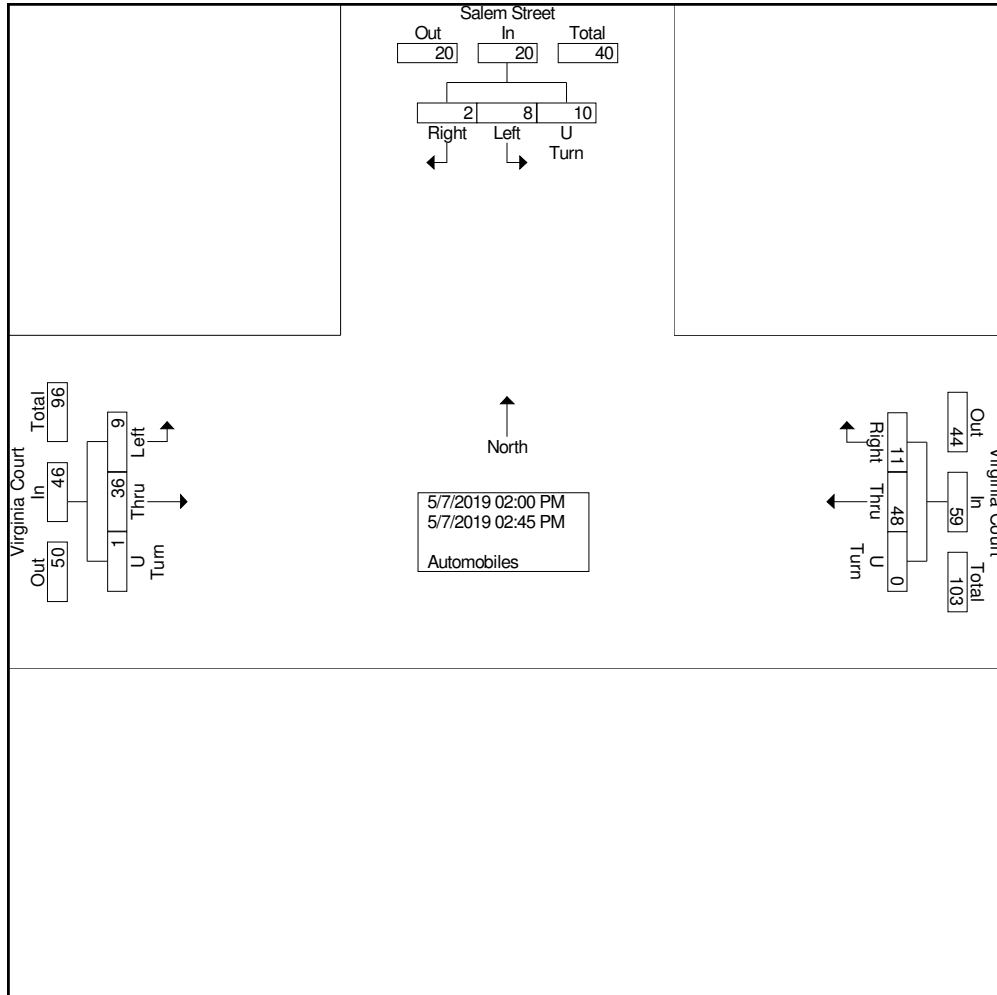
	Virginia Court Eastbound				Virginia Court Westbound				Salem Street Southbound				
Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
02:00 PM	3	13	0	16	7	3	0	10	0	1	2	3	29
02:15 PM	5	13	1	19	33	3	0	36	7	0	7	14	69
02:30 PM	0	8	0	8	4	3	0	7	0	0	0	0	15
02:45 PM	1	2	0	3	4	2	0	6	1	1	1	3	12
Total	9	36	1	46	48	11	0	59	8	2	10	20	125
Grand Total	9	36	1	46	48	11	0	59	8	2	10	20	125
Apprch %	19.6	78.3	2.2		81.4	18.6	0		40	10	50		
Total %	7.2	28.8	0.8	36.8	38.4	8.8	0	47.2	6.4	1.6	8	16	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Salem Street

File Name : Virginia and Salem PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



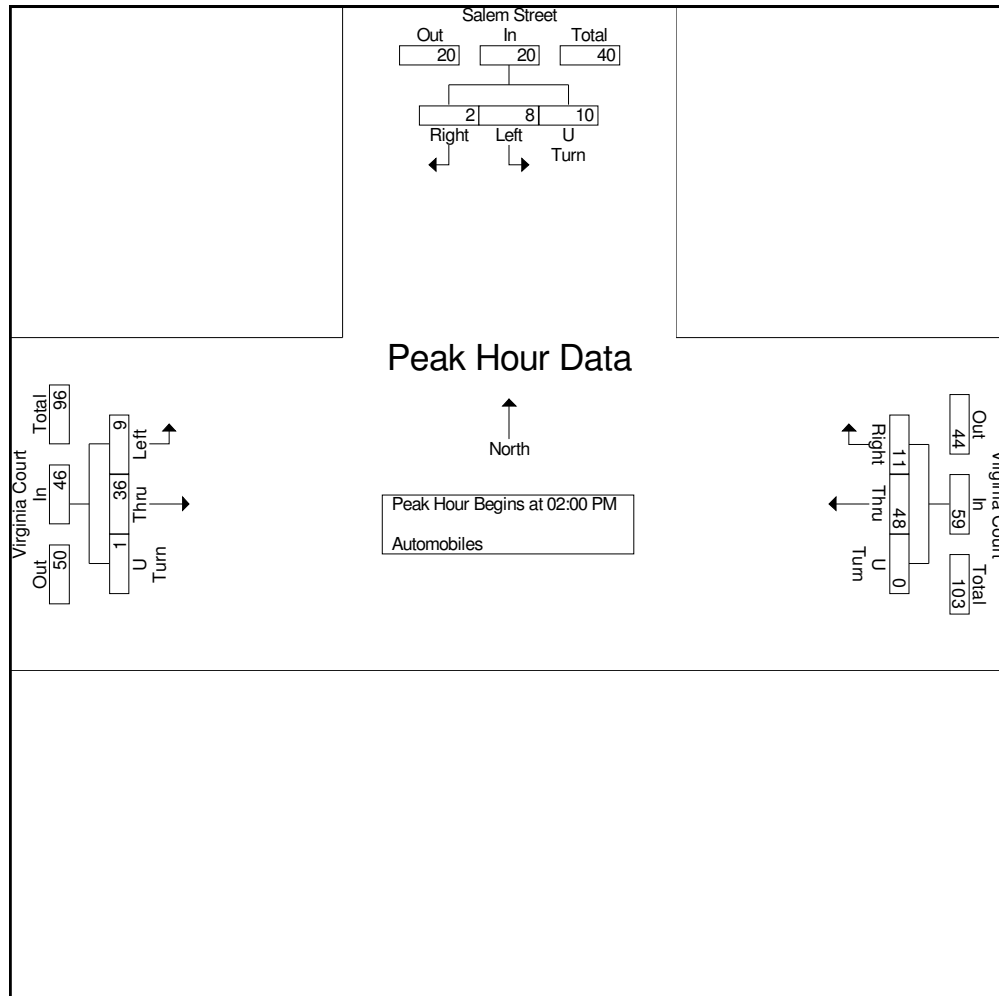


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Salem Street

File Name : Virginia and Salem PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Virginia Court Eastbound				Virginia Court Westbound				Salem Street Southbound				
Start Time	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 02:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	3	13	0	16	7	3	0	10	0	1	2	3	29
02:15 PM	5	13	1	19	33	3	0	36	7	0	7	14	69
02:30 PM	0	8	0	8	4	3	0	7	0	0	0	0	15
02:45 PM	1	2	0	3	4	2	0	6	1	1	1	3	12
Total Volume	9	36	1	46	48	11	0	59	8	2	10	20	125
% App. Total	19.6	78.3	2.2		81.4	18.6	0		40	10	50		
PHF	.450	.692	.250	.605	.364	.917	.000	.410	.286	.500	.357	.357	.453





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Troy Street

File Name : Virginia and Troy AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

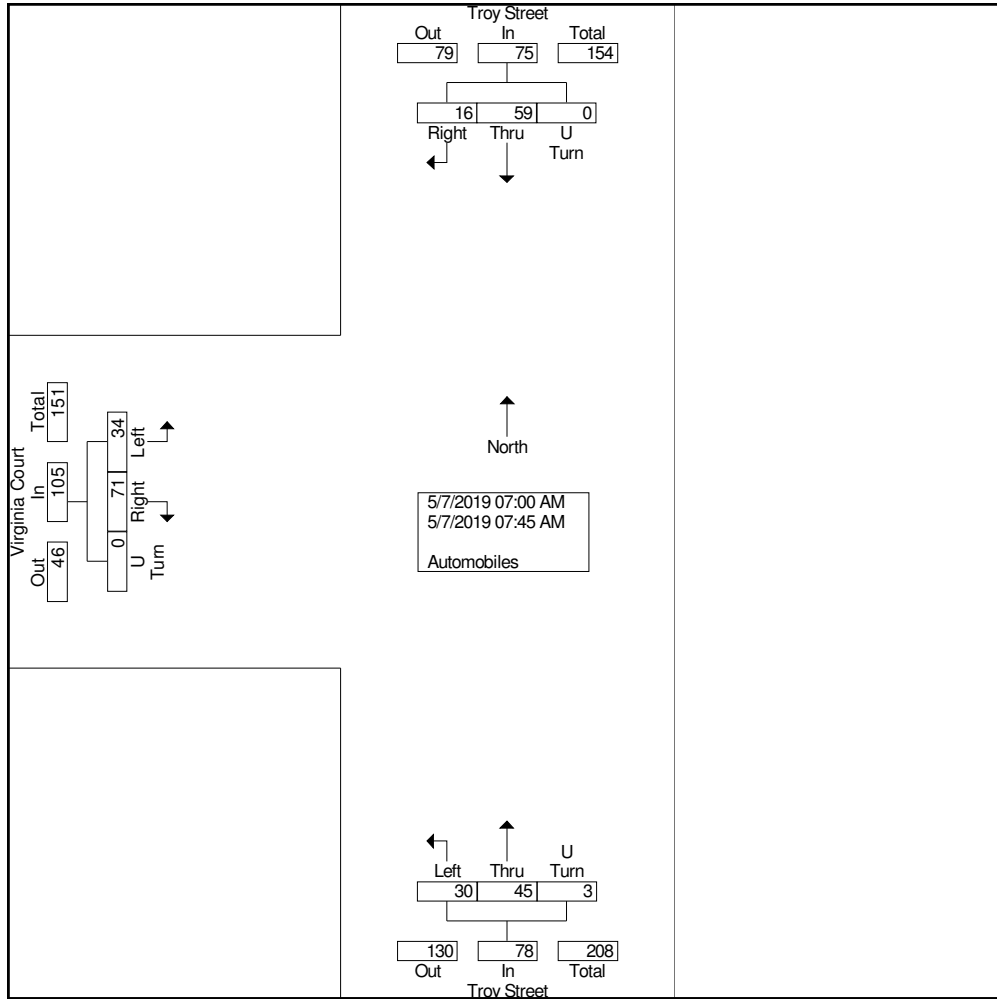
	Virginia Court Eastbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Int. Total
07:00 AM	5	4	0	9	5	8	1	14	15	0	0	15	38
07:15 AM	7	9	0	16	5	8	1	14	16	5	0	21	51
07:30 AM	11	43	0	54	13	19	0	32	15	8	0	23	109
07:45 AM	11	15	0	26	7	10	1	18	13	3	0	16	60
Total	34	71	0	105	30	45	3	78	59	16	0	75	258
Grand Total	34	71	0	105	30	45	3	78	59	16	0	75	258
Apprch %	32.4	67.6	0		38.5	57.7	3.8		78.7	21.3	0		
Total %	13.2	27.5	0	40.7	11.6	17.4	1.2	30.2	22.9	6.2	0	29.1	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Troy Street

File Name : Virginia and Troy AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



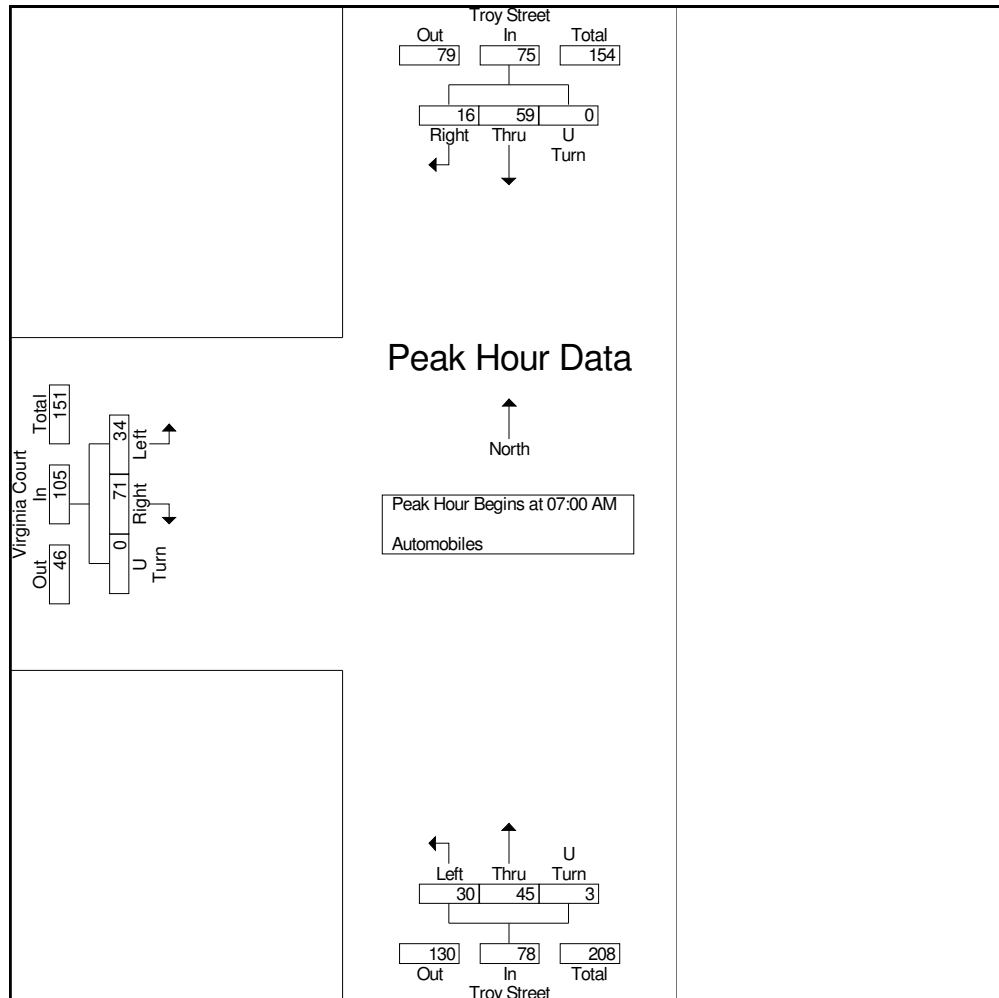


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Virginia Court and Troy Street

File Name : Virginia and Troy AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Virginia Court Eastbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	5	4	0	9	5	8	1	14	15	0	0	15	38
07:15 AM	7	9	0	16	5	8	1	14	16	5	0	21	51
07:30 AM	11	43	0	54	13	19	0	32	15	8	0	23	109
07:45 AM	11	15	0	26	7	10	1	18	13	3	0	16	60
Total Volume	34	71	0	105	30	45	3	78	59	16	0	75	258
% App. Total	32.4	67.6	0		38.5	57.7	3.8		78.7	21.3	0		
PHF	.773	.413	.000	.486	.577	.592	.750	.609	.922	.500	.000	.815	.592





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Troy Street

File Name : Virginia and Troy PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

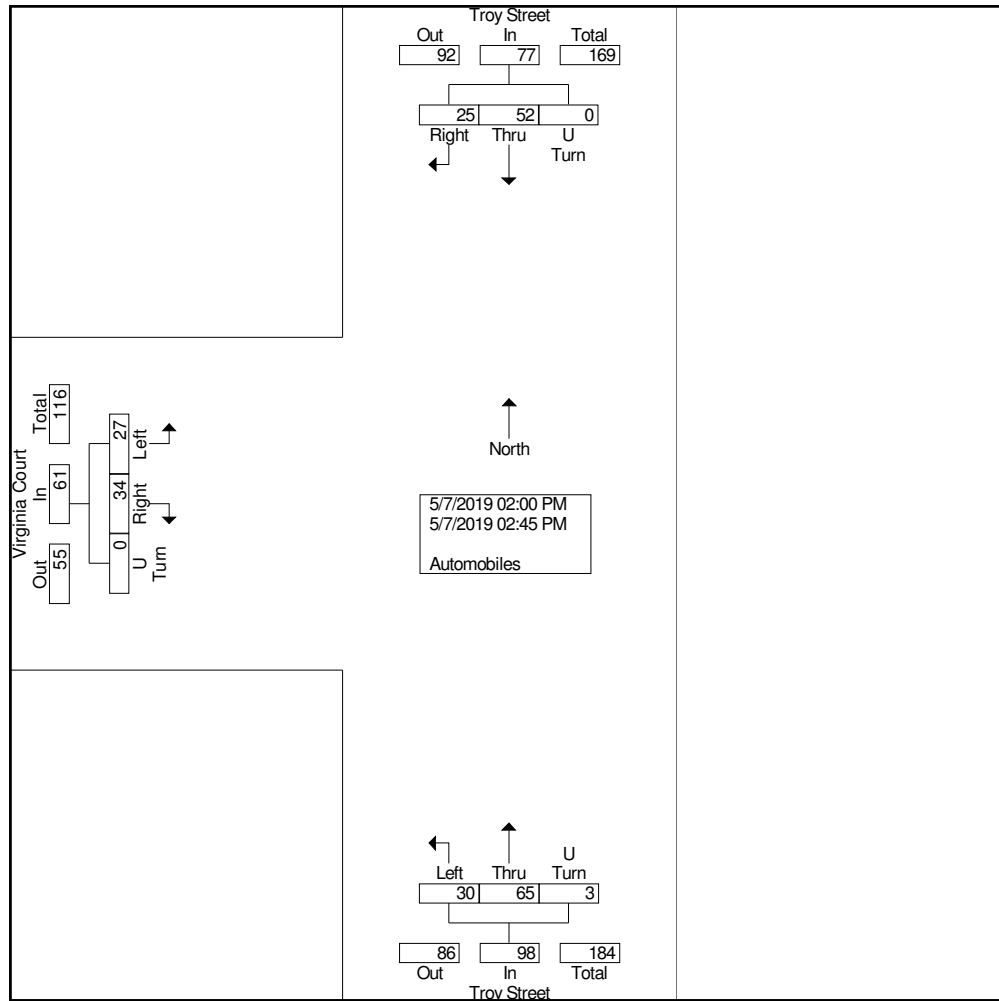
Start Time	Virginia Court Eastbound				Troy Street Northbound				Troy Street Southbound				Int. Total
	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	
02:00 PM	5	6	0	11	14	22	3	39	15	7	0	22	72
02:15 PM	12	26	0	38	10	22	0	32	21	10	0	31	101
02:30 PM	7	1	0	8	3	12	0	15	10	3	0	13	36
02:45 PM	3	1	0	4	3	9	0	12	6	5	0	11	27
Total	27	34	0	61	30	65	3	98	52	25	0	77	236
Grand Total	27	34	0	61	30	65	3	98	52	25	0	77	236
Apprch %	44.3	55.7	0		30.6	66.3	3.1		67.5	32.5	0		
Total %	11.4	14.4	0	25.8	12.7	27.5	1.3	41.5	22	10.6	0	32.6	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Troy Street

File Name : Virginia and Troy PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



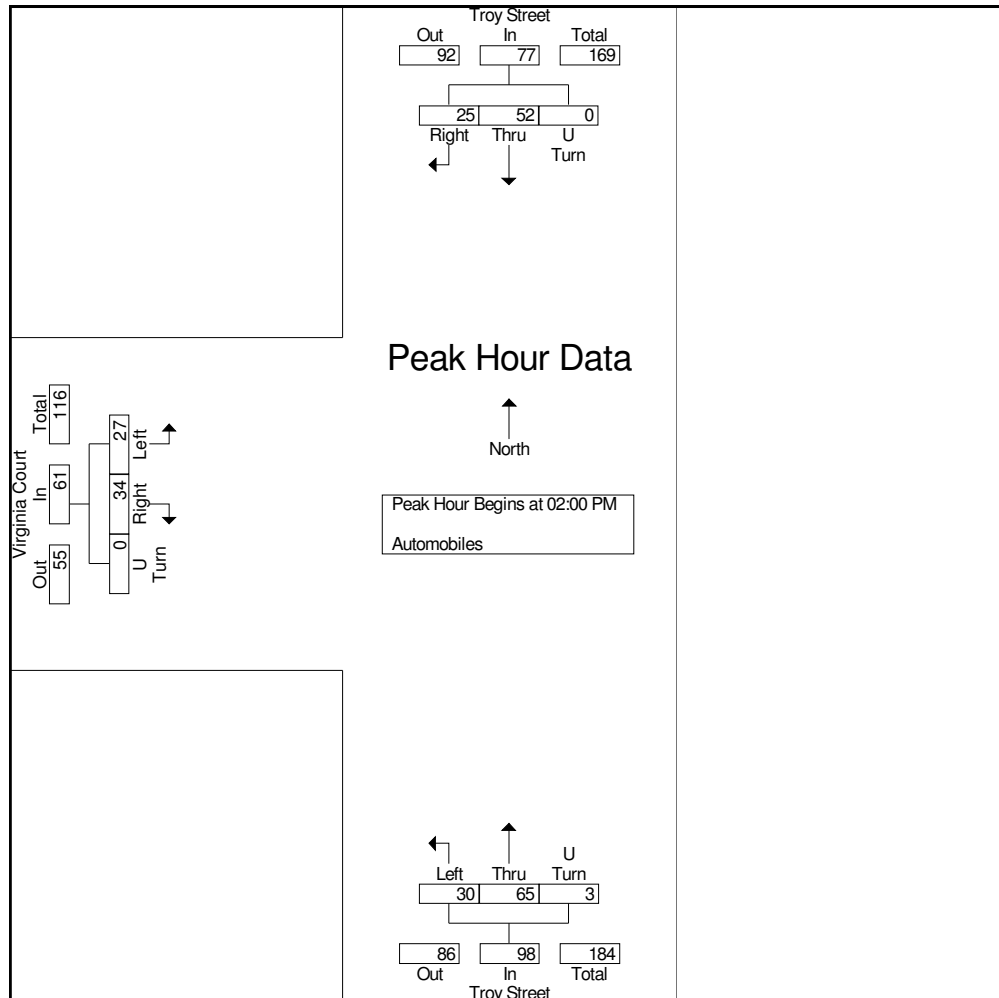


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Virginia Court and Troy Street

File Name : Virginia and Troy PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Virginia Court Eastbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 02:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	5	6	0	11	14	22	3	39	15	7	0	22	72
02:15 PM	12	26	0	38	10	22	0	32	21	10	0	31	101
02:30 PM	7	1	0	8	3	12	0	15	10	3	0	13	36
02:45 PM	3	1	0	4	3	9	0	12	6	5	0	11	27
Total Volume	27	34	0	61	30	65	3	98	52	25	0	77	236
% App. Total	44.3	55.7	0		30.6	66.3	3.1		67.5	32.5	0		
PHF	.563	.327	.000	.401	.536	.739	.250	.628	.619	.625	.000	.621	.584





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Ursula Way and Troy Street

File Name : Ursula and Troy AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

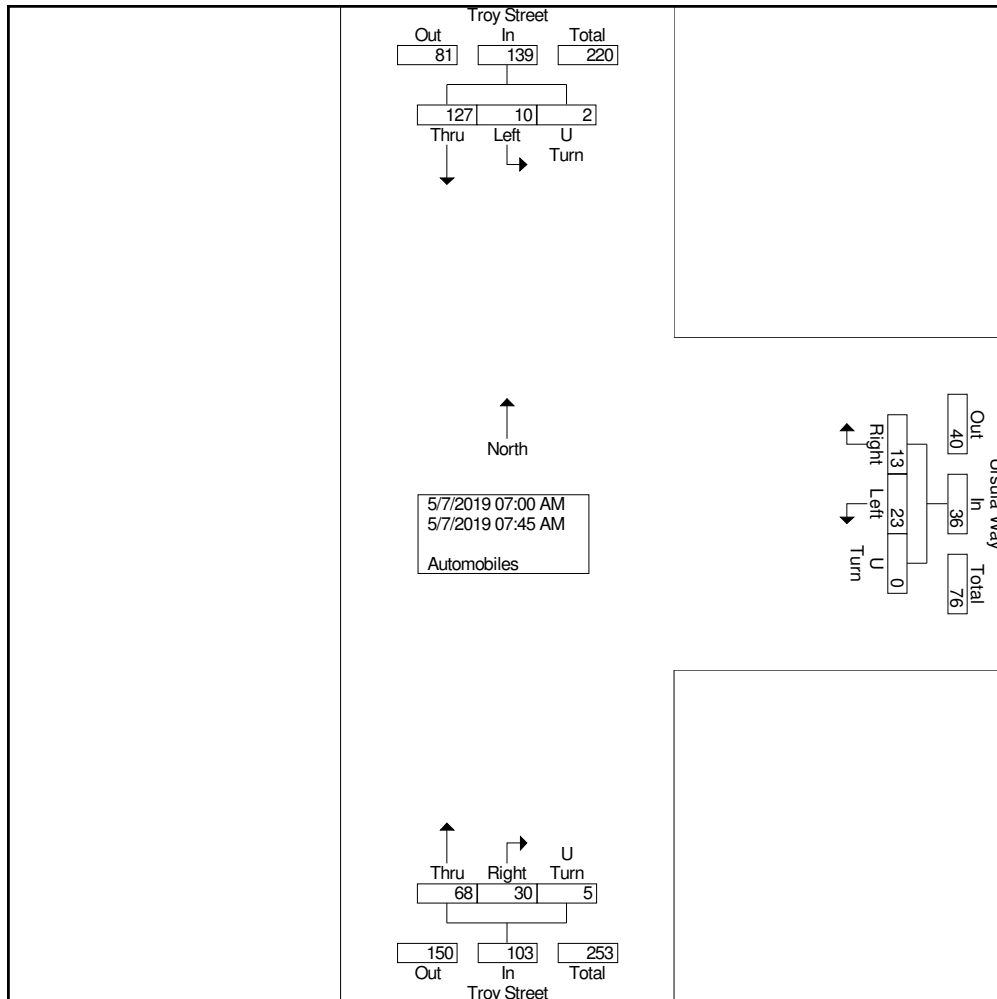
Start Time	Ursula Way Westbound				Troy Street Northbound				Troy Street Southbound				Int. Total
	Left	Right	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	
07:00 AM	5	3	0	8	11	1	0	12	0	20	0	20	40
07:15 AM	2	1	0	3	16	4	1	21	3	20	2	25	49
07:30 AM	6	5	0	11	22	17	2	41	1	50	0	51	103
07:45 AM	10	4	0	14	19	8	2	29	6	37	0	43	86
Total	23	13	0	36	68	30	5	103	10	127	2	139	278
Grand Total	23	13	0	36	68	30	5	103	10	127	2	139	278
Apprch %	63.9	36.1	0		66	29.1	4.9		7.2	91.4	1.4		
Total %	8.3	4.7	0	12.9	24.5	10.8	1.8	37.1	3.6	45.7	0.7	50	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Ursula Way and Troy Street

File Name : Ursula and Troy AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



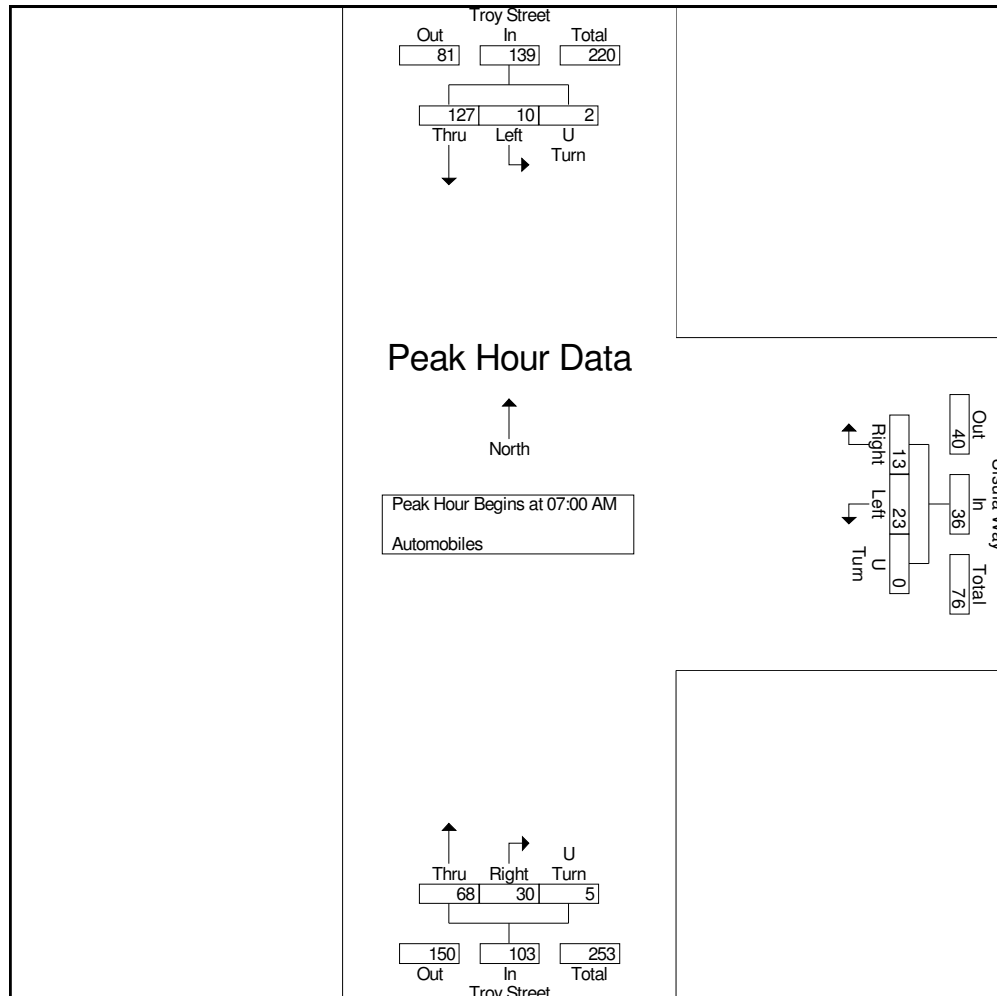


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Ursula Way and Troy Street

File Name : Ursula and Troy AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Ursula Way Westbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	5	3	0	8	11	1	0	12	0	20	0	20	40
07:15 AM	2	1	0	3	16	4	1	21	3	20	2	25	49
07:30 AM	6	5	0	11	22	17	2	41	1	50	0	51	103
07:45 AM	10	4	0	14	19	8	2	29	6	37	0	43	86
Total Volume	23	13	0	36	68	30	5	103	10	127	2	139	278
% App. Total	63.9	36.1	0		66	29.1	4.9		7.2	91.4	1.4		
PHF	.575	.650	.000	.643	.773	.441	.625	.628	.417	.635	.250	.681	.675





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Ursula Way and Troy Street

File Name : Ursula and Troy PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

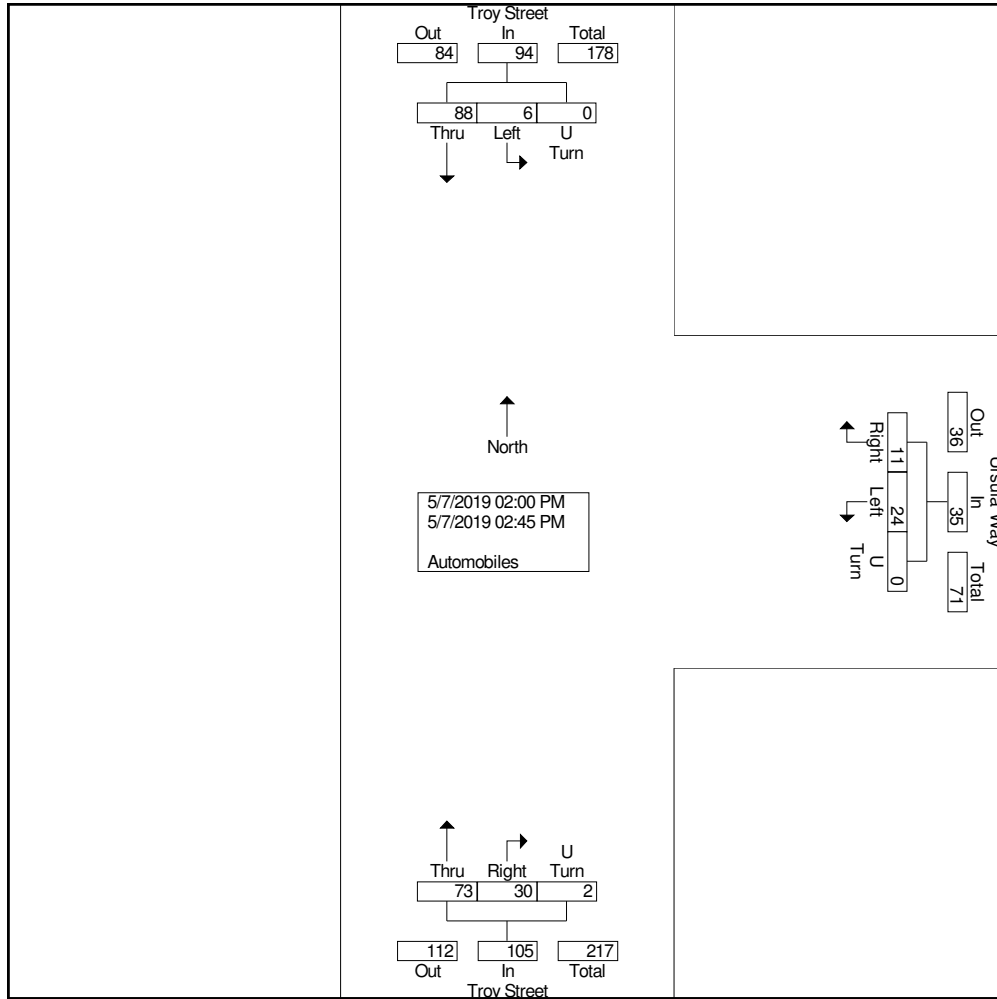
Start Time	Ursula Way Westbound				Troy Street Northbound				Troy Street Southbound				Int. Total
	Left	Right	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	
02:00 PM	6	1	0	7	35	9	0	44	3	17	0	20	71
02:15 PM	9	9	0	18	13	11	1	25	2	50	0	52	95
02:30 PM	3	1	0	4	12	4	0	16	1	11	0	12	32
02:45 PM	6	0	0	6	13	6	1	20	0	10	0	10	36
Total	24	11	0	35	73	30	2	105	6	88	0	94	234
Grand Total	24	11	0	35	73	30	2	105	6	88	0	94	234
Apprch %	68.6	31.4	0		69.5	28.6	1.9		6.4	93.6	0		
Total %	10.3	4.7	0	15	31.2	12.8	0.9	44.9	2.6	37.6	0	40.2	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Ursula Way and Troy Street

File Name : Ursula and Troy PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



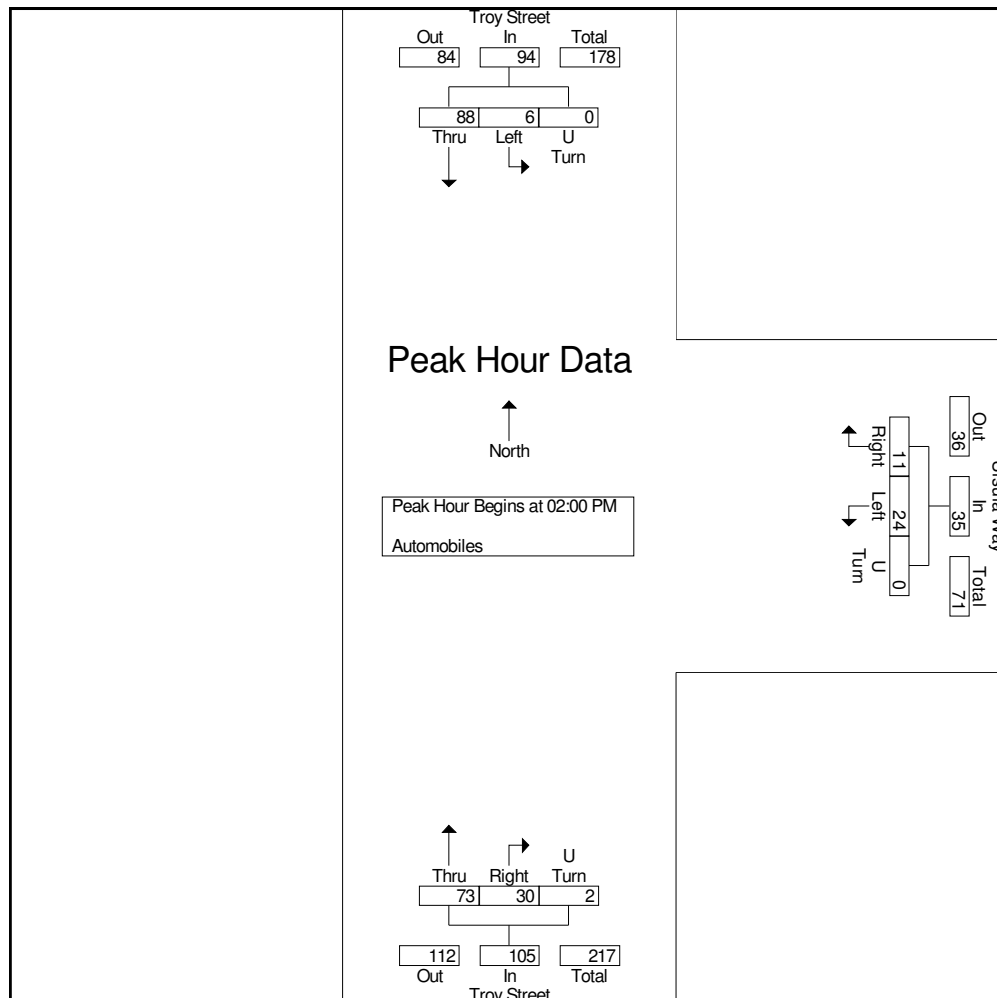


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Ursula Way and Troy Street

File Name : Ursula and Troy PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	Ursula Way Westbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Thru	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 02:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	6	1	0	7	35	9	0	44	3	17	0	20	71
02:15 PM	9	9	0	18	13	11	1	25	2	50	0	52	95
02:30 PM	3	1	0	4	12	4	0	16	1	11	0	12	32
02:45 PM	6	0	0	6	13	6	1	20	0	10	0	10	36
Total Volume	24	11	0	35	73	30	2	105	6	88	0	94	234
% App. Total	68.6	31.4	0		69.5	28.6	1.9		6.4	93.6	0		
PHF	.667	.306	.000	.486	.521	.682	.500	.597	.500	.440	.000	.452	.616





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Troy Street School Access

File Name : Troy St School Access AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

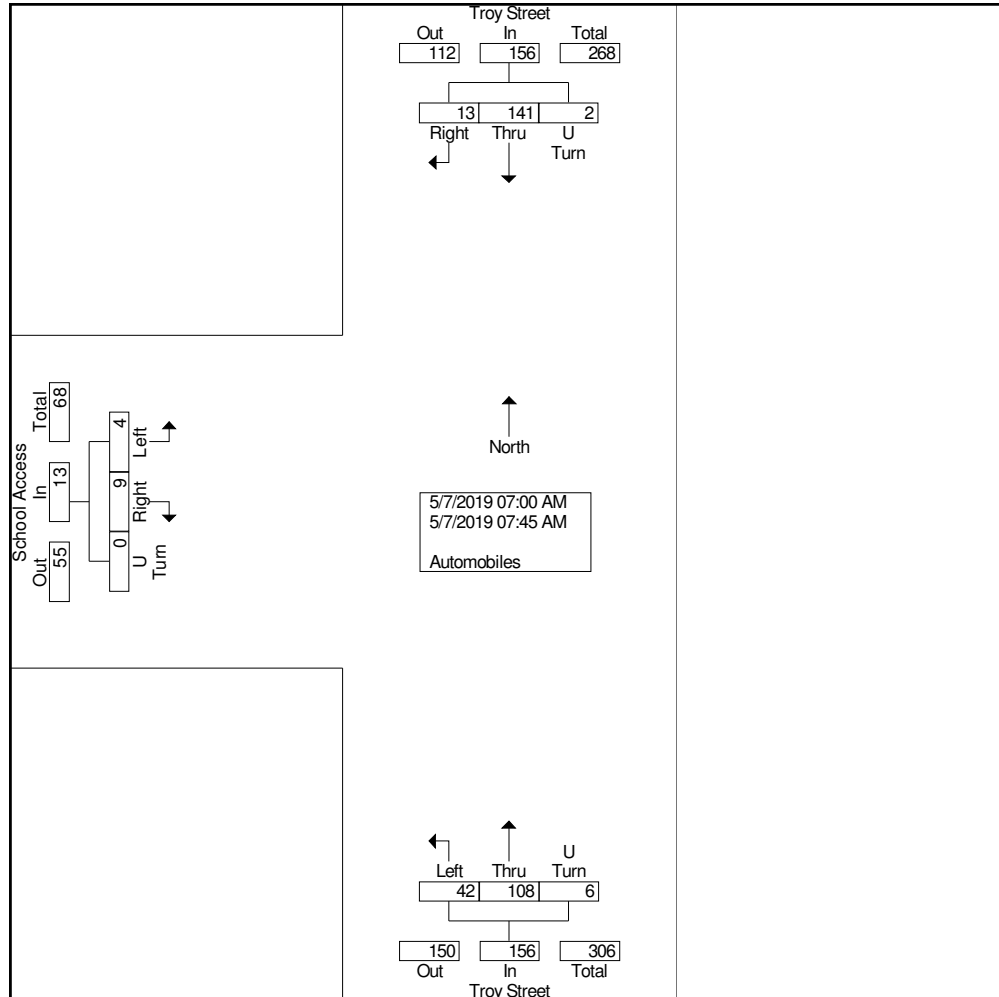
Start Time	School Access Eastbound				Troy Street Northbound				Troy Street Southbound				Int. Total
	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	
07:00 AM	0	1	0	1	17	12	1	30	16	9	0	25	56
07:15 AM	1	1	0	2	15	21	1	37	20	2	1	23	62
07:30 AM	0	1	0	1	0	53	3	56	57	0	0	57	114
07:45 AM	3	6	0	9	10	22	1	33	48	2	1	51	93
Total	4	9	0	13	42	108	6	156	141	13	2	156	325
Grand Total	4	9	0	13	42	108	6	156	141	13	2	156	325
Apprch %	30.8	69.2	0		26.9	69.2	3.8		90.4	8.3	1.3		
Total %	1.2	2.8	0	4	12.9	33.2	1.8	48	43.4	4	0.6	48	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Troy Street School Access

File Name : Troy St School Access AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



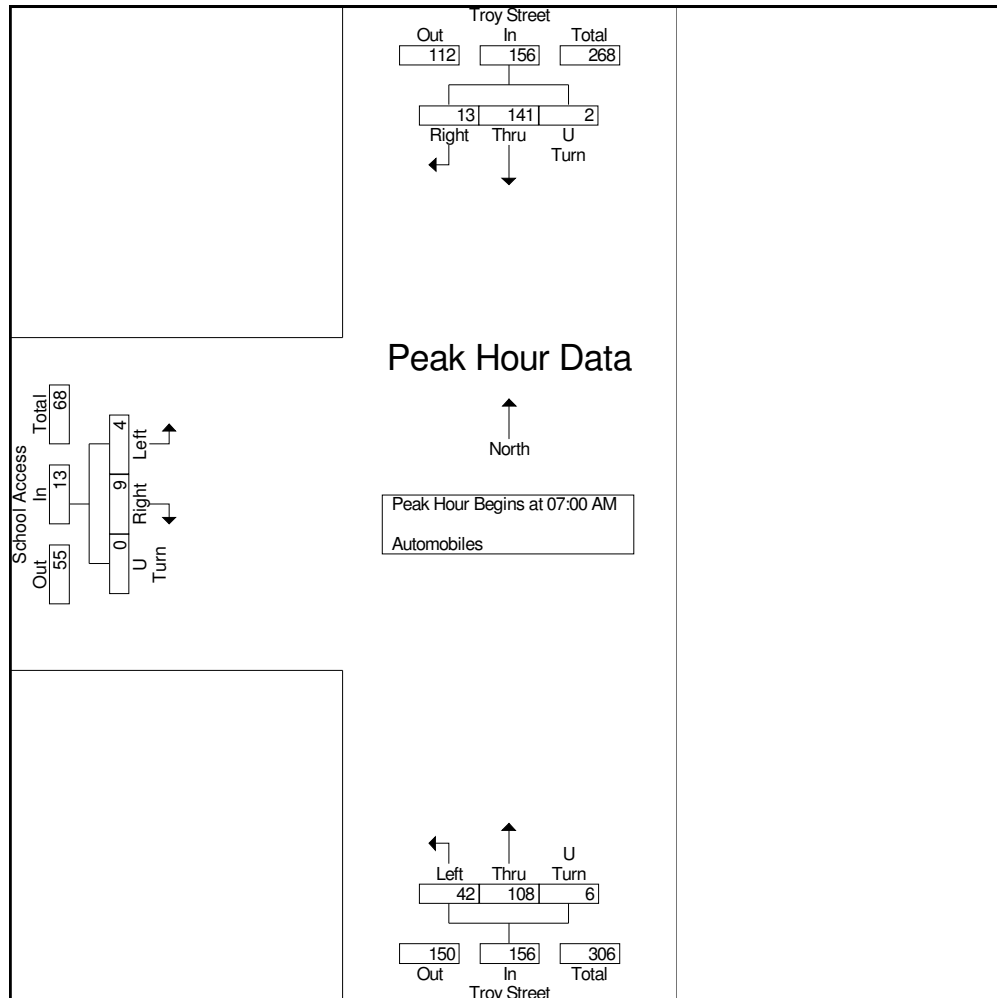


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
AM Peak
Troy Street School Access

File Name : Troy St School Access AM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	School Access Eastbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	0	1	0	1	17	12	1	30	16	9	0	25	56
07:15 AM	1	1	0	2	15	21	1	37	20	2	1	23	62
07:30 AM	0	1	0	1	0	53	3	56	57	0	0	57	114
07:45 AM	3	6	0	9	10	22	1	33	48	2	1	51	93
Total Volume	4	9	0	13	42	108	6	156	141	13	2	156	325
% App. Total	30.8	69.2	0		26.9	69.2	3.8		90.4	8.3	1.3		
PHF	.333	.375	.000	.361	.618	.509	.500	.696	.618	.361	.500	.684	.713





Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Troy Street School Access

File Name : Troy St School Access PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 1

Groups Printed- Automobiles

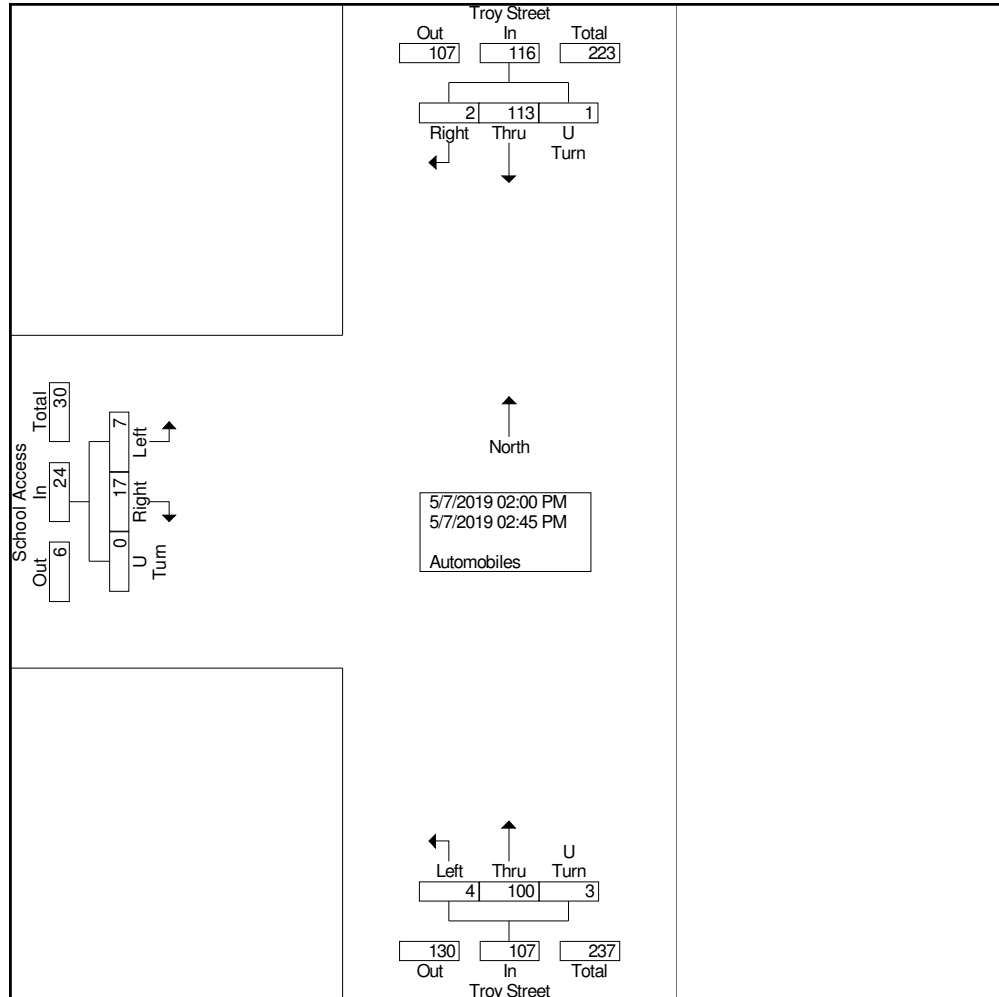
Start Time	School Access Eastbound				Troy Street Northbound				Troy Street Southbound				Int. Total
	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	
02:00 PM	3	4	0	7	2	43	0	45	22	1	0	23	75
02:15 PM	1	6	0	7	2	23	2	27	63	0	0	63	97
02:30 PM	1	3	0	4	0	17	0	17	14	0	1	15	36
02:45 PM	2	4	0	6	0	17	1	18	14	1	0	15	39
Total	7	17	0	24	4	100	3	107	113	2	1	116	247
Grand Total	7	17	0	24	4	100	3	107	113	2	1	116	247
Apprch %	29.2	70.8	0		3.7	93.5	2.8		97.4	1.7	0.9		
Total %	2.8	6.9	0	9.7	1.6	40.5	1.2	43.3	45.7	0.8	0.4	47	



Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Troy Street School Access

File Name : Troy St School Access PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 2



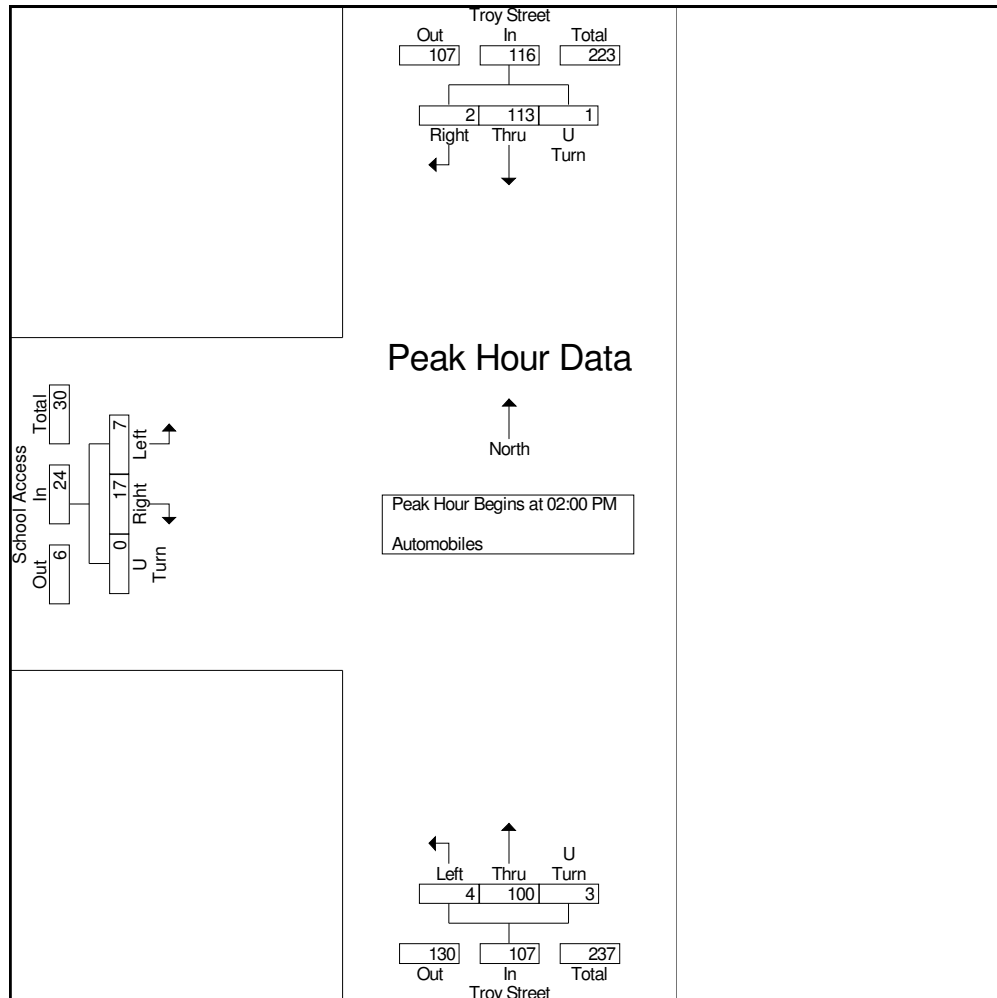


Ridgeview Data
Collection

Aurora, CO
Virginia Court Elementary School
PM Peak
Troy Street School Access

File Name : Troy St School Access PM
Site Code : IPO 432
Start Date : 5/7/2019
Page No : 3

	School Access Eastbound				Troy Street Northbound				Troy Street Southbound				
Start Time	Left	Right	U Turn	App. Total	Left	Thru	U Turn	App. Total	Thru	Right	U Turn	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 02:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	3	4	0	7	2	43	0	45	22	1	0	23	75
02:15 PM	1	6	0	7	2	23	2	27	63	0	0	63	97
02:30 PM	1	3	0	4	0	17	0	17	14	0	1	15	36
02:45 PM	2	4	0	6	0	17	1	18	14	1	0	15	39
Total Volume	7	17	0	24	4	100	3	107	113	2	1	116	247
% App. Total	29.2	70.8	0		3.7	93.5	2.8		97.4	1.7	0.9		
PHF	.583	.708	.000	.857	.500	.581	.375	.594	.448	.500	.250	.460	.637



Virginia Court Elementary On-Street Drop Off Counts

	Virginia Court				Revere Street				Salem Street			
	North Side		South Side		East Side		West Side		East Side		West Side	
	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave
7:15	1	0	0	0	0	0	0	0	0	0	0	0
7:30	4	0	7	2	0	0	1	0	0	0	1	0
7:45	5	3	49	37	0	0	0	1	0	0	1	1
8:00	1	8	4	20	0	0	0	0	0	0	0	0
	11	11	60	59	0	0	1	1	0	0	2	1

	Virginia Court Area (sum of all locations)	
	Park	Leave
7:15	1	0
7:30	13	2
7:45	55	42
8:00	5	28
	74	72

	Virginia Court				Revere Street				Salem Street			
	North Side		South Side		East Side		West Side		East Side		West Side	
	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave
2:15	8	1	11	1	1	0	2	0	3	1	5	0
2:30	3	16	8	31	0	2	2	4	1	4	2	7
2:45	0	1	1	1	0	0	0	0	1	1	0	0
3:00	0	0	0	1	0	0	0	0	0	0	0	0
	11	18	20	34	1	2	4	4	5	6	7	7

	Virginia Court Area (sum of all locations)	
	Park	Leave
2:15	30	3
2:30	16	64
2:45	2	3
3:00	0	1
	48	71

	Troy St south of crosswalk at Ursula				Troy St between crosswalk at Ursula and blinking light just south of Virginia				Troy St north of blinking light (just south of Virginia)			
	East Side		West Side		East Side		West Side		East Side		West Side	
	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave
7:15	0	0	1	0	1	1	2	2	0	2	0	0
7:30	2	1	4	1	4	2	6	5	0	0	0	0
7:45	13	11	5	5	4	3	0	1	0	2	1	0
8:00	4	10	4	8	4	6	4	3	0	0	0	1
	19	22	14	14	13	12	12	11	0	4	1	1




	Troy St (sum of all locations)			
	East Side		West Side	
	Park	Leave	Park	Leave
7:15	1	3	3	2
7:30	6	3	10	6
7:45	17	16	6	6
8:00	8	14	8	12
	32	36	27	26

	Troy St south of crosswalk at Ursula				Troy St between crosswalk at Ursula and blinking light just south of Virginia				Troy St north of blinking light (just south of Virginia)			
	East Side		West Side		East Side		West Side		East Side		West Side	
	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave	Park	Leave
2:15	3	1	2	1	1	0	0	0	6	3	4	0
2:30	1	8	2	12	2	9	1	1	1	4	0	5
2:45	0	1	1	1	1	3	3	2	0	1	0	0
3:00	1	2	1	0	0	0	0	2	0	0	0	0
	5	12	6	14	4	12	4	5	7	8	4	5

	Troy St (sum of all locations)			
	East Side		West Side	
	Park	Leave	Park	Leave
2:15	10	4	6	1
2:30	4	21	3	18
2:45	1	5	4	3
3:00	1	2	1	2
	16	32	14	24

Intersection




Int Delay, s/veh 0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	98	40	7	4	7
Future Vol, veh/h	2	98	40	7	4	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	42	48	29	50	58
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	233	83	24	8	12





Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	107	0	0 344 95
Stage 1	-	-	- 95 -
Stage 2	-	-	- 249 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1484	-	- 652 962
Stage 1	-	-	- 929 -
Stage 2	-	-	- 792 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1484	-	- 648 962
Mov Cap-2 Maneuver	-	-	- 648 -
Stage 1	-	-	- 923 -
Stage 2	-	-	- 792 -




Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.6
HCM LOS			A




Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1484	-	-	-	806
HCM Lane V/C Ratio	0.005	-	-	-	0.025
HCM Control Delay (s)	7.4	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1





Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	36	47	11	6	7
Future Vol, veh/h	9	36	47	11	6	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	45	64	38	92	30	44
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	56	124	12	20	16
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	136	0	-	0	226	130
Stage 1	-	-	-	-	130	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1448	-	-	-	762	920
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	928	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1448	-	-	-	751	920
Mov Cap-2 Maneuver	-	-	-	-	751	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	928	-
Approach	EB	WB		SB		
HCM Control Delay, s	2	0		9.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1448	-	-	-	818	
HCM Lane V/C Ratio	0.014	-	-	-	0.044	
HCM Control Delay (s)	7.5	0	-	-	9.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	38	60	68	52	8	0	0	0	4	1	7
Future Vol, veh/h	2	38	60	68	52	8	0	0	0	4	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	42	50	50	48	29	50	50	50	50	50	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	90	120	136	108	28	0	0	0	8	2	12
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	136	0	0	210	0	0	567	574	150	560	620	122
Stage 1	-	-	-	-	-	-	166	166	-	394	394	-
Stage 2	-	-	-	-	-	-	401	408	-	166	226	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1448	-	-	1361	-	-	434	429	896	439	404	929
Stage 1	-	-	-	-	-	-	836	761	-	631	605	-
Stage 2	-	-	-	-	-	-	626	597	-	836	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1361	-	-	390	381	896	401	358	929
Mov Cap-2 Maneuver	-	-	-	-	-	-	390	381	-	401	358	-
Stage 1	-	-	-	-	-	-	831	756	-	627	540	-
Stage 2	-	-	-	-	-	-	549	533	-	831	713	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			4			0			11.5		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	1448	-	-	1361	-	-	573				
HCM Lane V/C Ratio	-	0.006	-	-	0.1	-	-	0.039				
HCM Control Delay (s)	0	7.5	0	-	7.9	0	-	11.5				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	-	0	-	-	0.3	-	-	0.1				

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	2	42	63	66	15	0	0	0	6	4	7
Future Vol, veh/h	9	2	42	63	66	15	0	0	0	6	4	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	45	64	50	50	38	92	50	50	50	30	50	44
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	3	84	126	174	16	0	0	0	20	8	16
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	87	0	0	531	527	45	519	561	182
Stage 1	-	-	-	-	-	-	85	85	-	434	434	-
Stage 2	-	-	-	-	-	-	446	442	-	85	127	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1384	-	-	1509	-	-	459	456	1025	467	436	861
Stage 1	-	-	-	-	-	-	923	824	-	600	581	-
Stage 2	-	-	-	-	-	-	591	576	-	923	791	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1384	-	-	1509	-	-	407	407	1025	429	389	861
Mov Cap-2 Maneuver	-	-	-	-	-	-	407	407	-	429	389	-
Stage 1	-	-	-	-	-	-	909	812	-	591	526	-
Stage 2	-	-	-	-	-	-	518	522	-	909	779	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			3			0			12.7		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	1384	-	-	1509	-	-	513				
HCM Lane V/C Ratio	-	0.014	-	-	0.083	-	-	0.086				
HCM Control Delay (s)	0	7.6	0	-	7.6	0	-	12.7				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	-	0	-	-	0.3	-	-	0.3				

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	92	41	2	10	6
Future Vol, veh/h	6	92	41	2	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	51	68	50	50	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	180	60	4	20	8
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	64	0	-	0	266	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	204	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1538	-	-	-	723	1003
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	830	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1538	-	-	-	716	1003
Mov Cap-2 Maneuver	-	-	-	-	716	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	830	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		9.8		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1538	-	-	-	780	
HCM Lane V/C Ratio	0.008	-	-	-	0.036	
HCM Control Delay (s)	7.4	0	-	-	9.8	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	36	48	11	8	2
Future Vol, veh/h	9	36	48	11	8	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	45	69	36	92	29	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	52	133	12	28	4
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	145	0	-	0	231	139
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	92	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1437	-	-	-	757	909
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1437	-	-	-	746	909
Mov Cap-2 Maneuver	-	-	-	-	746	-
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	932	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.1	0		9.9		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1437	-	-	-	763	
HCM Lane V/C Ratio	0.014	-	-	-	0.041	
HCM Control Delay (s)	7.5	0	-	-	9.9	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	




Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	42	0	0	107	2	13	2	125	10	0	8
Future Vol, veh/h	6	42	0	0	107	2	13	2	125	10	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	51	50	50	68	50	50	50	50	50	50	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	82	0	0	157	4	26	4	250	20	0	11
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	161	0	0	82	0	0	271	267	82	392	265	159
Stage 1	-	-	-	-	-	-	106	106	-	159	159	-
Stage 2	-	-	-	-	-	-	165	161	-	233	106	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1418	-	-	1515	-	-	682	639	978	567	640	886
Stage 1	-	-	-	-	-	-	900	807	-	843	766	-
Stage 2	-	-	-	-	-	-	837	765	-	770	807	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1418	-	-	1515	-	-	669	633	978	417	634	886
Mov Cap-2 Maneuver	-	-	-	-	-	-	669	633	-	417	634	-
Stage 1	-	-	-	-	-	-	892	800	-	835	766	-
Stage 2	-	-	-	-	-	-	827	765	-	565	800	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			10.5			12.5		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	931	1418	-	-	1515	-	-	511				
HCM Lane V/C Ratio	0.301	0.008	-	-	-	-	-	0.06				
HCM Control Delay (s)	10.5	7.6	0	-	0	-	-	12.5				
HCM Lane LOS	B	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-	-	0.2				

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	8	0	0	104	11	22	7	97	8	0	9
Future Vol, veh/h	9	8	0	0	104	11	22	7	97	8	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	45	69	50	50	36	92	50	50	50	29	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	12	0	0	289	12	44	14	194	28	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	301	0	0	12	0	0	356	353	12	451	347	295
Stage 1	-	-	-	-	-	-	52	52	-	295	295	-
Stage 2	-	-	-	-	-	-	304	301	-	156	52	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1260	-	-	1607	-	-	599	572	1069	519	576	744
Stage 1	-	-	-	-	-	-	961	852	-	713	669	-
Stage 2	-	-	-	-	-	-	705	665	-	846	852	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1260	-	-	1607	-	-	577	563	1069	412	567	744
Mov Cap-2 Maneuver	-	-	-	-	-	-	577	563	-	412	567	-
Stage 1	-	-	-	-	-	-	946	838	-	702	669	-
Stage 2	-	-	-	-	-	-	688	665	-	670	838	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5	0	10.6	12.9
HCM LOS			B	B




Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	892	1260	-	-	1607	-	-	500
HCM Lane V/C Ratio	0.283	0.016	-	-	-	-	-	0.091
HCM Control Delay (s)	10.6	7.9	0	-	0	-	-	12.9
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	0.3




Intersection						
Int Delay, s/veh	5.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	71	30	45	59	16
Future Vol, veh/h	34	71	30	45	59	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	41	58	59	92	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	173	52	76	64	32




Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	260	80	96
Stage 1	80	-	-
Stage 2	180	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	729	980	1498
Stage 1	943	-	-
Stage 2	851	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	703	980	1498
Mov Cap-2 Maneuver	703	-	-
Stage 1	909	-	-
Stage 2	851	-	-




Approach	EB	NB	SB
HCM Control Delay, s	10.2	3	0
HCM LOS	B		




Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1498	-	907	-	-
HCM Lane V/C Ratio	0.035	-	0.24	-	-
HCM Control Delay (s)	7.5	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.9	-	-




Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	34	30	65	52	25
Future Vol, veh/h	27	34	30	65	52	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	33	54	74	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	103	56	88	84	40
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	304	104	124	0	-	0
Stage 1	104	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	688	951	1463	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	660	951	1463	-	-	-
Mov Cap-2 Maneuver	660	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.3	2.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1463	-	834	-	-	
HCM Lane V/C Ratio	0.038	-	0.181	-	-	
HCM Control Delay (s)	7.6	0	10.3	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-	

Intersection						
Int Delay, s/veh	7.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	59	113	69	45	59	43
Future Vol, veh/h	59	113	69	45	59	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	41	58	59	92	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	276	119	76	64	86
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	421	107	150	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	314	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	589	947	1431	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	538	947	1431	-	-	-
Mov Cap-2 Maneuver	538	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.8	4.7		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1431	-	813	-	-	
HCM Lane V/C Ratio	0.083	-	0.433	-	-	
HCM Control Delay (s)	7.7	0	12.8	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.3	-	2.2	-	-	

Intersection						
Int Delay, s/veh	7.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	65	62	65	52	49
Future Vol, veh/h	52	65	62	65	52	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	33	54	74	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	93	197	115	88	84	79
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	442	124	163	0	-	0
Stage 1	124	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	573	927	1416	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	524	927	1416	-	-	-
Mov Cap-2 Maneuver	524	-	-	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.9	4.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1416	-	744	-	-	
HCM Lane V/C Ratio	0.081	-	0.39	-	-	
HCM Control Delay (s)	7.8	0	12.9	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.3	-	1.9	-	-	




Intersection						
Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	13	68	30	10	127
Future Vol, veh/h	23	13	68	30	10	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	57	65	77	44	42	64
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	20	88	68	24	198
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	368	122	0	0	156	0
Stage 1	122	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	632	929	-	-	1424	-
Stage 1	903	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	620	929	-	-	1424	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.7	0	0.8			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	697	1424	-	
HCM Lane V/C Ratio	-	-	0.087	0.017	-	
HCM Control Delay (s)	-	-	10.7	7.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

Intersection						
Int Delay, s/veh	1.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	11	73	30	6	88
Future Vol, veh/h	24	11	73	30	6	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	31	52	68	50	44
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	35	140	44	12	200
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	386	162	0	0	184	0
Stage 1	162	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	617	883	-	-	1391	-
Stage 1	867	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	611	883	-	-	1391	-
Mov Cap-2 Maneuver	611	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.5	0	0.4			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	722	1391	-	
HCM Lane V/C Ratio	-	-	0.099	0.009	-	
HCM Control Delay (s)	-	-	10.5	7.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	13	90	30	10	156
Future Vol, veh/h	23	13	90	30	10	156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	57	65	77	44	42	64
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	20	117	68	24	244
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	443	151	0	0	185	0
Stage 1	151	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	572	895	-	-	1390	-
Stage 1	877	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	561	895	-	-	1390	-
Mov Cap-2 Maneuver	561	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.2	0	0.7			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	640	1390	-	
HCM Lane V/C Ratio	-	-	0.094	0.017	-	
HCM Control Delay (s)	-	-	11.2	7.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

Intersection




Int Delay, s/veh 1.6




Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	11	85	30	6	109
Future Vol, veh/h	24	11	85	30	6	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	31	52	68	50	44
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	35	163	44	12	248




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	457	185	0
Stage 1	185	-	-
Stage 2	272	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	562	857	-
Stage 1	847	-	-
Stage 2	774	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	556	857	-
Mov Cap-2 Maneuver	556	-	-
Stage 1	839	-	-
Stage 2	774	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	674	1364
HCM Lane V/C Ratio	-	-	0.106	0.009
HCM Control Delay (s)	-	-	11	7.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	9	42	108	141	13
Future Vol, veh/h	4	9	42	108	141	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	33	38	62	51	62	36
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	24	68	212	227	36
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	593	245	263	0	-	0
Stage 1	245	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	468	794	1301	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	440	794	1301	-	-	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.1	1.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1301	-	624	-	-	
HCM Lane V/C Ratio	0.052	-	0.057	-	-	
HCM Control Delay (s)	7.9	0	11.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-	




Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	17	4	100	113	2
Future Vol, veh/h	7	17	4	100	113	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	58	71	50	58	45	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	24	8	172	251	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	441	253	255	0	-	0
Stage 1	253	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	574	786	1310	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	570	786	1310	-	-	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	0.3		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1310	-	697	-	-	
HCM Lane V/C Ratio	0.006	-	0.052	-	-	
HCM Control Delay (s)	7.8	0	10.4	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	9	42	130	170	13
Future Vol, veh/h	4	9	42	130	170	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	33	38	62	51	62	36
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	24	68	255	274	36

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	683	292	310
Stage 1	292	-	-
Stage 2	391	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	415	747	1250
Stage 1	758	-	-
Stage 2	683	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	389	747	1250
Mov Cap-2 Maneuver	389	-	-
Stage 1	710	-	-
Stage 2	683	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1250	-	570	-	-
HCM Lane V/C Ratio	0.054	-	0.063	-	-
HCM Control Delay (s)	8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	17	4	112	134	2
Future Vol, veh/h	7	17	4	112	134	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	58	71	50	58	45	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	24	8	193	298	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	509	300	302	0	-	0
Stage 1	300	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	524	740	1259	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	520	740	1259	-	-	-
Mov Cap-2 Maneuver	520	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.9	0.3		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1259	-	648	-	-	
HCM Lane V/C Ratio	0.006	-	0.056	-	-	
HCM Control Delay (s)	7.9	0	10.9	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

