



February 6, 2025

**Mr. Thomas Barone**  
**Director of Operations**  
**Hudson City Schools**  
**76 N. Hayden Parkway**  
**Hudson, Ohio 44236**

## Hudson Middle School Post Construction Traffic Analysis Update

Dear Mr. Barone,

This updated post construction analysis is being prepared at the request of the City of Hudson for the Hudson Middle School. The purpose of this evaluation is to analyze the existing vehicular operating conditions at several key intersections surrounding Hudson City Schools, and to meet the requirements of Item 6 of the Hudson Planning Commission decision dated November 26, 2018. This analysis will determine if the vehicular operations surrounding Hudson City Schools are acceptable following the construction of the new Hudson Middle School. The previous middle school post construction analysis completed by GPD Group on September 15, 2023 recommended constructing a southbound left-turn lane at the N. Oviatt Street / Franklin Street intersection to improve traffic operations and meet the City of Hudson Land Development Code Chapter 1207.11. Constructing a southbound left-turn lane is not feasible as it would require roadway widening with impacts to the adjacent residential properties. This analysis will reevaluate the N. Oviatt / Franklin Street intersection under the existing 2024 conditions to determine if any intersection improvements are necessary.

### Traffic Volumes

From the previous post construction traffic analysis, Cummins Consulting Services, LLC. performed turning movement traffic counts at the following 11 intersections from 7:00 AM – 9:30 AM and 2:00 PM - 4:30 PM on Thursday, December 1, 2022:

- State Route 303 / N. Oviatt Street
- N. Oviatt Street / Elm Street
- N. Oviatt Street / Franklin Street
- N. Oviatt Street / Aurora Street
- State Route 303 / N. Hayden Parkway
- N. Hayden Parkway / Evamere S. Access
- N. Hayden Parkway / East Woods Elementary Drive
- N. Hayden Parkway / McDowell S. Access
- N. Hayden Parkway / McDowell N. Access
- N. Hayden Parkway / Aurora Street
- Aurora Street / Franklin Street

Since this is the primary area of concern, Tri-State Traffic Data, Inc. performed new turning movement counts at the N. Oviatt Street / Franklin Street intersection from 7:00 AM – 9:00 AM and 2:00 PM – 4:30 PM on Tuesday, October 29, 2024. The previous traffic counts at this intersection are not utilized for this analysis. The volumes counted at the N. Oviatt Street / Franklin Street intersection in 2024 are similar compared to 2022.

The 'raw' traffic count data is provided in **Attachment A**. From the count data, it was determined that the study area experiences two AM and two PM peak hours due to the different start and dismissal times

of the middle and elementary schools. The middle school’s AM peak hour was identified to occur from 7:00 – 8:00 AM while its PM peak hour was identified to occur from 2:15 – 3:15 PM. The AM peak hour of the Elementary schools was identified to occur from 8:15 – 9:15 AM while their PM peak hour was identified to occur from 3:15 – 4:15 PM.

## Traffic Analysis

### HCS Intersection Capacity Analysis

Intersection Capacity Analyses were performed for the ‘No-Build’ and ‘Build’ to compare the operations along the public roadways both before and after the construction of the Hudson Schools. The ‘No-Build’ Levels-of-Service (LOS) were taken from the 2018 School Traffic Management Plan. The quality of the operating conditions experienced by an intersection is measured in terms of Level-of-Service. Levels-of-Service can range from LOS A to LOS F. The City of Hudson Land Development Code Chapter 1207.11 requires “...any roadways or intersections with a pre-developed LOS C shall remain at or above LOS C after all construction. Any roadways or intersections with a pre-developed LOS D or below shall maintain or improve the pre-developed LOS after construction.”

The thresholds related to average control delay for signalized and unsignalized intersections are as follows:

<i>Level-of- Service</i>	<i>Delay Threshold – Signalized (Sec)</i>	<i>Delay Threshold – Unsignalized (Sec)</i>
A	< 10	< 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

The analysis is performed utilizing the computer program [HCS 2024](#) which is developed by McTrans Corporation and based on the Highway Capacity Manual, 7th Edition. Based on criteria established by ODOT, Highway Capacity Software (HCS) is used to determine the required number of lanes and the lane assignments at intersections (i.e. the needed intersection capacity). The existing peak hour factors and heavy vehicle percentage were utilized throughout the capacity analysis.

A field visit was conducted at the N. Oviatt Street / Franklin Street intersection on September 19, 2024 during school drop-off and pick-up times. During peak traffic, it was observed that drivers treat the N. Oviatt Street / Franklin Street intersection as an all-way stop even though Franklin Street is signed for stop control and N. Oviatt Street is free-flow. The intersection appears to operate better than what the analysis indicated from the previous study completed by GPD Group in 2023 with no southbound left-turn lane constructed. Based on field observations, the N. Oviatt Street / Franklin Street was analyzed under all-way stop control under the ‘Build’ conditions to more accurately represent actual operations.

**Table 1** summarizes the HCS intersection capacity analysis and details the Level-of-Service and delays experienced under the ‘No-Build’ vs. ‘Build’ traffic conditions for the unsignalized intersections during the AM peak hours while **Table 2** summarizes the same during the PM peak hours. It should be noted that the N. Oviatt Street / Franklin Street intersection was evaluated from 8:00 AM – 9:00 AM during the second AM peak hour as the traffic counts were performed until 9:00 AM. See **Attachment B** for the HCS analysis printouts.

**Table 1: HCS Intersection Capacity Analysis Summary –  
'No-Build' vs. 'Build' AM Conditions – Unsignalized Intersections**

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	7:00AM – 8:00AM		8:15AM - 9:15AM		7:00AM – 8:00AM		8:15AM - 9:15AM	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
<b>State Route 303 / N. Oviatt Street</b>								
Eastbound Left-Thru-Right	A	8.8	A	8.5	A	9.1	A	8.1
<i>Eastbound Approach</i>	A	2.1	A	1.5	A	3.8	A	2.0
Westbound Left-Thru-Right	A	8.0	A	8.2	A	8.2	A	7.9
<i>Westbound Approach</i>	A	0.5	A	0.9	A	0.4	A	0.4
Northbound Left-Thru-Right	D	25.4	D	25.0	D	34.7	C	16.7
<i>Northbound Approach</i>	D	25.4	D	25.0	D	34.7	C	16.7
Southbound Left-Thru-Right	C	21.9	C	20.3	C	20.7	B	11.6
<i>Southbound Approach</i>	C	21.9	C	20.3	C	20.7	B	11.6
<b>N. Oviatt Street / Elm Street</b>								
Westbound Left-Right	A	8.4	A	7.1	A	7.9	A	7.1
<i>Westbound Approach</i>	A	8.4	A	7.1	A	7.9	A	7.1
Northbound Thru-Right	A	8.8	A	7.5	B	10.3	A	7.7
<i>Northbound Approach</i>	A	8.8	A	7.5	B	10.3	A	7.7
Southbound Left-Thru	A	8.9	A	7.6	A	8.3	A	7.5
<i>Southbound Approach</i>	A	8.9	A	7.6	A	8.3	A	7.5
<b>Intersection Total</b>	<b>A</b>	<b>8.8</b>	<b>A</b>	<b>7.5</b>	<b>A</b>	<b>9.6</b>	<b>A</b>	<b>7.6</b>
<b>N. Oviatt Street / Franklin Street</b>								
Westbound Left-Right	B	11.1	A	9.6	B	10.1	A	7.6
<i>Westbound Approach</i>	B	11.1	A	9.6	B	10.1	A	7.6
Northbound Thru-Right	-	-	-	-	B	11.2	A	7.7
<i>Northbound Approach</i>	-	-	-	-	B	11.2	A	7.7
Southbound Left-Thru	A	7.5	A	7.7	B	12.5	A	7.5
<i>Southbound Approach</i>	A	0.0	A	0.5	B	12.5	A	7.5
<b>Intersection Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>B</b>	<b>11.5</b>	<b>A</b>	<b>7.6</b>
<b>N. Oviatt Street / Aurora Street</b>								
Eastbound Left-Thru-Right	A	8.1	A	8.1	A	7.3	A	7.4
<i>Eastbound Approach</i>	A	0.5	A	0.9	A	0.9	A	3.6
Westbound Left-Thru-Right	A	8.3	A	7.8	A	7.3	A	7.3
<i>Westbound Approach</i>	A	1.1	A	1.5	A	2.0	A	1.2
Northbound Left-Thru-Right	D	26.9	C	16.0	B	14.7	B	12.8
<i>Northbound Approach</i>	D	26.9	C	16.0	B	14.7	B	12.8
Southbound Left-Thru-Right	D	27.2	C	15.1	D	33.7	C	15.9
<i>Southbound Approach</i>	D	27.2	C	15.1	D	33.7	C	15.9

Note: Yellow highlighted cells indicate a Level-of-Service D

**Table 1: HCS Intersection Capacity Analysis Summary (Cont.)–  
'No-Build' vs. 'Build' AM Conditions – Unsignalized Intersections**

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	7:00AM – 8:00AM		8:15AM - 9:15AM		7:00AM – 8:00AM		8:15AM - 9:15AM	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
<b>N. Hayden Parkway / Evamere S. Access</b>								
Eastbound Left-Right	B	10.3	B	12.1	A	9.7	-	-
Eastbound Approach	B	10.3	B	12.1	A	9.7	-	-
Northbound Left-Thru	A	7.5	A	8.0	A	7.4	A	7.6
Northbound Approach	A	1.2	A	3.2	A	0.0	A	0.1
<b>N. Hayden Parkway / East Woods Elementary Drive</b>								
Eastbound Left	B	11.1	C	15.7	B	11.4	B	10.4
Eastbound Right					A	9.0	A	9.1
Eastbound Approach	B	11.1	C	15.7	B	10.6	A	9.7
Northbound Thru-Right	A	7.7	A	8.5	A	7.6	A	7.6
Northbound Approach	A	3.3	A	5.9	A	3.6	A	1.5
<b>N. Hayden Parkway / McDowell S. Access</b>								
Eastbound Left	B	10.9	B	10.9	A	9.8	B	10.9
Eastbound Right					A	8.7	A	8.9
Eastbound Approach	B	10.9	B	10.9	A	9.8	B	10.1
Northbound Left-Thru	N/A	- - -	N/A	- - -	A	7.4	A	7.6
Northbound Approach	N/A	- - -	N/A	- - -	A	0.4	A	2.7
<b>N. Hayden Parkway / McDowell N. Access</b>								
Eastbound Left-Right	A	7.8	A	8.0	A	7.4	A	7.7
Eastbound Approach	A	0.9	A	1.3	A	0.0	A	1.6
<b>N. Hayden Parkway / Aurora Street</b>								
Westbound Left-Thru	A	9.0	A	8.5	A	9.1	A	8.2
Westbound Approach	A	1.9	A	3.4	A	2.1	A	2.6
Northbound Left-Right	D	26.7	C	21.3	C	22.7	C	16.3
Northbound Approach	D	26.7	C	21.3	C	22.7	C	16.3
<b>Aurora Street / Franklin Street</b>								
Westbound Left-Thru	B	10.2	A	7.9	A	8.3	A	8.0
Westbound Approach	A	5.0	A	0.4	A	0.7	A	1.4
Northbound Left-Right	C	22.7	C	18.8	C	24.9	B	14.2
Northbound Approach	C	22.7	C	18.8	C	24.9	B	14.2

Note: Yellow highlighted cells indicate a Level-of-Service D

**Table 2: HCS Intersection Capacity Analysis Summary –  
'No-Build' vs. 'Build' PM Conditions – Unsignalized Intersections**

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	2:15PM – 3:15PM		3:15PM - 4:15PM		2:15PM – 3:15PM		3:15PM - 4:15PM	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
<b>State Route 303 / N. Oviatt Street</b>								
Eastbound Left-Thru-Right	A	8.6	A	8.4	A	8.1	A	8.2
<i>Eastbound Approach</i>	A	1.7	A	1.8	A	1.2	A	1.4
Westbound Left-Thru-Right	A	8.1	A	8.3	A	8.1	A	8.1
<i>Westbound Approach</i>	A	0.6	A	0.8	A	0.1	A	0.2
Northbound Left-Thru-Right	C	19.4	C	22.7	C	16.7	C	18.8
<i>Northbound Approach</i>	C	19.4	C	22.7	C	16.7	C	18.8
Southbound Left-Thru-Right	C	18.1	C	21.0	B	11.7	B	14.4
<i>Southbound Approach</i>	C	18.1	C	21.0	B	11.7	B	14.4
<b>N. Oviatt Street / Elm Street</b>								
Westbound Left-Right	A	7.6	A	7.4	A	7.0	A	7.3
<i>Westbound Approach</i>	A	7.6	A	7.4	A	7.0	A	7.3
Northbound Thru-Right	A	7.9	A	7.8	A	7.7	A	7.9
<i>Northbound Approach</i>	A	7.9	A	7.8	A	7.7	A	7.9
Southbound Left-Thru	A	8.2	A	8.0	A	7.7	A	8.0
<i>Southbound Approach</i>	A	8.2	A	8.0	A	7.7	A	8.0
<b>Intersection Total</b>	<b>A</b>	<b>8.0</b>	<b>A</b>	<b>7.9</b>	<b>A</b>	<b>7.7</b>	<b>A</b>	<b>7.9</b>
<b>N. Oviatt Street / Franklin Street</b>								
Westbound Left-Right	B	10.6	B	10.2	A	8.1	A	8.5
<i>Westbound Approach</i>	B	10.6	B	10.2	A	8.1	A	8.5
Northbound Thru-Right	-	-	-	-	A	8.0	A	8.3
<i>Northbound Approach</i>	-	-	-	-	A	8.0	A	8.3
Southbound Left-Thru	A	8.5	A	7.5	A	8.2	A	8.4
<i>Southbound Approach</i>	A	2.1	A	0.6	A	8.2	A	8.4
<b>Intersection Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>A</b>	<b>8.1</b>	<b>A</b>	<b>8.4</b>
<b>N. Oviatt Street / Aurora Street</b>								
Eastbound Left-Thru-Right	A	7.6	A	8.1	A	7.4	A	7.4
<i>Eastbound Approach</i>	A	0.3	A	0.3	A	1.7	A	1.5
Westbound Left-Thru-Right	A	7.9	A	7.8	A	7.3	A	7.3
<i>Westbound Approach</i>	A	1.5	A	1.0	A	0.9	A	1.3
Northbound Left-Thru-Right	B	12.0	B	14.5	B	12.1	B	13.1
<i>Northbound Approach</i>	B	12.0	B	14.5	B	12.1	B	13.1
Southbound Left-Thru-Right	B	13.1	C	17.6	B	13.7	C	21.4
<i>Southbound Approach</i>	B	13.1	C	17.6	B	13.7	C	21.4

**Table 2: HCS Intersection Capacity Analysis Summary (Cont.) –  
'No-Build' vs. 'Build' PM Conditions – Unsignalized Intersections**

Intersection / Movement	'No-Build' Conditions				'Build' Conditions			
	2:15PM – 3:15PM		3:15PM - 4:15PM		2:15PM – 3:15PM		3:15PM - 4:15PM	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
<b>N. Hayden Parkway / Evamere S. Access</b>								
Eastbound Left-Right	A	9.4	B	12.0	-	-	-	-
Eastbound Approach	A	9.4	B	12.0	-	-	-	-
Northbound Left-Thru	A	7.4	A	7.8	A	7.4	A	7.6
Northbound Approach	A	0.8	A	2.1	A	0.2	A	0.1
<b>N. Hayden Parkway / East Woods Elementary Drive</b>								
Eastbound Left	A	9.7	B	11.1	B	10.1	B	10.7
Eastbound Right					A	8.8	A	9.3
Eastbound Approach	A	9.7	B	11.1	A	9.6	A	9.9
Northbound Thru-Right	A	7.5	A	8.3	A	7.5	A	7.5
Northbound Approach	A	2.0	A	2.0	A	2.3	A	1.0
<b>N. Hayden Parkway / McDowell S. Access</b>								
Eastbound Left	A	9.2	B	10.0	A	9.5	B	10.8
Eastbound Right					A	8.7	A	8.9
Eastbound Approach	A	9.2	B	10.0	A	9.2	B	9.9
Northbound Left-Thru	N/A	- - -	N/A	- - -	A	7.4	A	7.4
Northbound Approach	N/A	- - -	N/A	- - -	A	0.0	A	1.4
<b>N. Hayden Parkway / McDowell N. Access</b>								
Eastbound Left-Right	A	7.3	A	7.5	A	7.4	A	7.5
Eastbound Approach	A	0.6	A	1.0	A	0.6	A	0.7
<b>N. Hayden Parkway / Aurora Street</b>								
Westbound Left-Thru	A	8.3	A	8.4	A	8.2	A	8.2
Westbound Approach	A	1.1	A	2.1	A	1.5	A	1.7
Northbound Left-Right	B	13.5	C	17.3	B	13.4	C	19.8
Northbound Approach	B	13.5	C	17.3	B	13.4	C	19.8
<b>Aurora Street / Franklin Street</b>								
Westbound Left-Thru	A	8.0	A	7.9	A	7.9	A	8.0
Westbound Approach	A	1.1	A	0.5	A	0.6	A	1.1
Northbound Left-Right	B	12.5	B	14.9	B	12.6	C	17.1
Northbound Approach	B	12.5	B	14.9	B	12.6	C	17.1

As shown in **Tables 1 & 2**, all study intersections are anticipated to operate at acceptable LOS C or better per the Hudson Land Development Code under the 'Build' conditions except for the intersection of State Route 303 / N. Oviatt Street. During the 7:00 AM – 8:00 AM peak hour, the NB movements and approach are shown to operate at LOS D. However, the movements and approach were also operating at LOS D under the 'No-Build' conditions, therefore no degradation occurs at this intersection. The N. Oviatt Street / Franklin Street intersection operates at LOS B or better when assumed the intersection operates with all-way stop control during peak school drop-off and pick-up times.

**Table 3** summarizes the HCS intersection capacity analysis and details the Level-of-Service and delays experienced under the 'No-Build' vs. 'Build' traffic conditions for the signalized intersection during the AM peak hours while **Table 4** summarizes the same during the PM peak hours. See **Attachment B** for the HCS analysis printouts.

<b>Table 3: HCS Intersection Capacity Analysis Summary – 'No-Build' vs. 'Build' AM Conditions – Signalized Intersections</b>								
<b>Intersection / Movement</b>	<b>'No-Build' Conditions</b>				<b>'Build' Conditions</b>			
	<b>7:00AM – 8:00AM</b>		<b>8:15AM - 9:15AM</b>		<b>7:00AM – 8:00AM</b>		<b>8:15AM - 9:15AM</b>	
	<b>LOS</b>	<b>Delay (sec)</b>	<b>LOS</b>	<b>Delay (sec)</b>	<b>LOS</b>	<b>Delay (sec)</b>	<b>LOS</b>	<b>Delay (sec)</b>
<b>S.R. 303 / N. Hayden Parkway</b>								
Eastbound Left-Thru-Right	C	20.2	C	23.1	B	16.7	B	15.1
<i>Eastbound Approach</i>	C	20.2	C	23.1	B	16.7	B	15.1
Westbound Left-Thru-Right	B	19.8	B	16.5	B	16.2	B	15.5
<i>Westbound Approach</i>	B	19.8	B	16.5	B	16.2	B	15.5
Northbound Left-Thru-Right	B	19.0	C	20.9	C	20.8	C	20.6
<i>Northbound Approach</i>	B	19.0	C	20.9	C	20.8	C	20.6
Southbound Left-Thru-Right	C	20.1	C	23.0	C	22.1	C	21.8
<i>Southbound Approach</i>	C	20.1	C	23.0	C	22.1	C	21.8
<b>Intersection Total</b>	<b>B</b>	<b>19.9</b>	<b>C</b>	<b>20.5</b>	<b>B</b>	<b>17.5</b>	<b>B</b>	<b>16.5</b>

<b>Table 4: HCS Intersection Capacity Analysis Summary – 'No-Build' vs. 'Build' PM Conditions – Signalized Intersections</b>								
<b>Intersection / Movement</b>	<b>'No-Build' Conditions</b>				<b>'Build' Conditions</b>			
	<b>2:15PM – 3:15PM</b>		<b>3:15PM - 4:15PM</b>		<b>2:15PM – 3:15PM</b>		<b>3:15PM - 4:15PM</b>	
	<b>LOS</b>	<b>Delay (sec)</b>	<b>LOS</b>	<b>Delay (sec)</b>	<b>LOS</b>	<b>Delay (sec)</b>	<b>LOS</b>	<b>Delay (sec)</b>
<b>S.R. 303 / N. Hayden Parkway</b>								
Eastbound Left-Thru-Right	B	18.6	C	21.1	B	17.1	B	16.6
<i>Eastbound Approach</i>	B	18.6	C	21.1	B	17.1	B	16.6
Westbound Left-Thru-Right	B	18.2	B	17.4	B	15.9	B	15.4
<i>Westbound Approach</i>	B	18.2	B	17.4	B	15.9	B	15.4
Northbound Left-Thru-Right	B	17.8	B	18.9	C	20.5	C	20.4
<i>Northbound Approach</i>	B	17.8	B	18.9	C	20.5	C	20.4
Southbound Left-Thru-Right	B	18.6	C	21.0	C	21.4	C	22.4
<i>Southbound Approach</i>	B	18.6	C	21.0	C	21.4	C	22.4
<b>Intersection Total</b>	<b>B</b>	<b>18.4</b>	<b>B</b>	<b>19.8</b>	<b>B</b>	<b>17.2</b>	<b>B</b>	<b>17.2</b>

As shown in **Tables 3 and 4**, the signalized intersection of State Route 303 / N. Hayden Parkway is currently operating at LOS B overall in all four peak hours with all movements and approaches at LOS C or better. This is the same or better than what was shown in the 'No-Build' conditions as part of the 2018 School Traffic Management Plan.

## Off-Site Evaluation

Although the capacity analysis indicates that the study area intersections operate at levels that meet the Land Development Code, there are periods during school pick-up that traffic queues along Franklin Street and onto N. Oviatt Street. This is generally for a short amount of time when there is little traffic on the area roadways besides school traffic. However, there are options that the schools can work toward in the future to alleviate the queuing.

1. Active management in front of the school would keep vehicles moving, control traffic flow, and assist in keeping students within prescribed areas. This would likely involve more staff at dismissal time to encourage drivers to pull forward and minimize gaps.
2. Allowing parents to queue within the parking lot would create additional storage. It is understood that this isn't preferred since students would then be walking through the parking lot and could result in conflicts between cars and pedestrians.



3. Create a one-lane paved loop for queuing in the vacant area west of the parking lot. This would provide additional storage with reduced conflicts since it is beyond the area where most students walk. Students would utilize the sidewalk and get in cars along Franklin Street, while parents would wait in the queuing loop and move forward to pick up their student.



4. Widen the entrance from Oviatt Street to provide a three-lane driveway (Franklin Street) for the entire length. The lane would be striped as two lanes 'in' and one lane 'out' for approximately 450'. Then the lane would be tapered out near the parking lot entrance to return to the existing single storage lane and bypass lane. This additional storage would take at least 20 additional vehicles off of Oviatt Street. This expansion of the driveway would require the removal of the Saywell House on the southeast corner of the driveway.



Of the four options shown above, all can provide an improvement to the flow of traffic at the school. Option 1, active management in front of the school, can be implemented with any of the other options. The other three options that provide additional stacking area vehicles. As shown above, Option 2 will provide approximately 400 feet of additional storage in the existing parking lot. Option 3 will also provide approximately 400' of additional storage in what is currently open field. Option 4 can provide approximately 550' of additional storage along the existing driveway. Option 4 provides the most additional storage, and short of the conflict with the Saywell house, seems to have minimal negative concerns.

### Summary and Conclusions

This post-construction evaluation of the Hudson Middle School has found that the key intersections surrounding the Hudson School Campus satisfy the requirements of the Hudson Land Development Code under the 'Build' conditions and meets the requirements of Item 6 of the Hudson Planning Commission decision dated November 26, 2018. No further roadway improvements are recommended at this time, but the situation can be monitored and consideration could be given to the above queue management options in the future as necessary.

If you have any questions or comments on this analysis, please feel free to contact me via phone at (216) 927-8688 or via email at [kwestbrooks@gpdgroup.com](mailto:kwestbrooks@gpdgroup.com).

Respectfully Submitted,  
GPD Group

Kevin Westbrooks, P.E., PTOE  
Project Manager / Traffic Engineer

CC: John P. Peterson, AIA (GPD Group)  
File

**ATTACHMENT A**

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
4HR

File Name : 1\_SR303-Streetsboro\_Road\_at\_N\_Oviatt\_Street\_12012022  
Site Code : Site 1  
Start Date : 12/1/2022  
Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Oviatt Street From North					SR303 - Streetsboro Road From East					N Oviatt Street From South					SR303 - Streetsboro Road From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	2	1	6	0	9	3	63	8	0	74	1	4	0	0	5	15	49	1	0	65	153
07:15 AM	2	3	19	0	24	2	92	18	0	112	0	7	1	0	8	37	70	1	0	108	252
07:30 AM	1	1	17	0	19	4	92	34	0	130	1	1	3	0	5	58	97	0	0	155	309
07:45 AM	1	6	18	1	26	3	100	10	0	113	0	8	2	1	11	13	97	2	0	112	262
<b>Total</b>	<b>6</b>	<b>11</b>	<b>60</b>	<b>1</b>	<b>78</b>	<b>12</b>	<b>347</b>	<b>70</b>	<b>0</b>	<b>429</b>	<b>2</b>	<b>20</b>	<b>6</b>	<b>1</b>	<b>29</b>	<b>123</b>	<b>313</b>	<b>4</b>	<b>0</b>	<b>440</b>	<b>976</b>
08:00 AM	0	0	15	1	16	3	77	4	0	84	1	11	1	3	16	11	80	1	0	92	208
08:15 AM	0	0	10	2	12	4	83	4	0	91	2	5	2	2	11	16	63	2	0	81	195
08:30 AM	0	0	13	0	13	2	55	5	0	62	0	7	2	1	10	22	81	0	0	103	188
08:45 AM	2	2	18	1	23	2	82	7	0	91	1	4	2	0	7	17	62	1	0	80	201
<b>Total</b>	<b>2</b>	<b>2</b>	<b>56</b>	<b>4</b>	<b>64</b>	<b>11</b>	<b>297</b>	<b>20</b>	<b>0</b>	<b>328</b>	<b>4</b>	<b>27</b>	<b>7</b>	<b>6</b>	<b>44</b>	<b>66</b>	<b>286</b>	<b>4</b>	<b>0</b>	<b>356</b>	<b>792</b>
09:00 AM	1	2	9	0	12	4	57	6	0	67	2	2	2	0	6	11	67	2	0	80	165
09:15 AM	0	1	10	0	11	3	52	5	0	60	5	3	1	0	9	4	56	1	0	61	141
<b>Total</b>	<b>1</b>	<b>3</b>	<b>19</b>	<b>0</b>	<b>23</b>	<b>7</b>	<b>109</b>	<b>11</b>	<b>0</b>	<b>127</b>	<b>7</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>123</b>	<b>3</b>	<b>0</b>	<b>141</b>	<b>306</b>
02:00 PM	1	1	15	1	18	2	46	10	0	58	1	1	1	0	3	11	75	2	0	88	167
02:15 PM	1	1	16	2	20	1	60	14	0	75	2	0	3	2	7	10	71	1	0	82	184
02:30 PM	0	1	14	0	15	1	49	17	0	67	1	1	2	3	7	9	81	4	0	94	183
02:45 PM	0	2	40	1	43	0	58	12	0	70	2	0	1	1	4	10	85	2	0	97	214
<b>Total</b>	<b>2</b>	<b>5</b>	<b>85</b>	<b>4</b>	<b>96</b>	<b>4</b>	<b>213</b>	<b>53</b>	<b>0</b>	<b>270</b>	<b>6</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>21</b>	<b>40</b>	<b>312</b>	<b>9</b>	<b>0</b>	<b>361</b>	<b>748</b>
03:00 PM	1	3	21	2	27	1	75	15	0	91	2	2	0	0	4	12	91	1	0	104	226
03:15 PM	3	5	20	7	35	2	81	19	0	102	1	1	1	2	5	13	82	2	0	97	239
03:30 PM	3	6	19	0	28	1	83	13	0	97	0	2	2	1	5	9	108	0	0	117	247
03:45 PM	2	4	27	2	35	2	69	15	0	86	2	0	0	0	2	8	89	3	0	100	223
<b>Total</b>	<b>9</b>	<b>18</b>	<b>87</b>	<b>11</b>	<b>125</b>	<b>6</b>	<b>308</b>	<b>62</b>	<b>0</b>	<b>376</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>16</b>	<b>42</b>	<b>370</b>	<b>6</b>	<b>0</b>	<b>418</b>	<b>935</b>
04:00 PM	1	3	25	0	29	0	60	22	0	82	2	2	1	0	5	20	86	4	0	110	226
04:15 PM	2	3	15	0	20	1	55	27	0	83	1	2	0	0	3	18	67	1	0	86	192
Grand Total	23	45	347	20	435	41	1389	265	0	1695	27	63	27	16	133	324	1557	31	0	1912	4175
Apprch %	5.3	10.3	79.8	4.6		2.4	81.9	15.6	0		20.3	47.4	20.3	12		16.9	81.4	1.6	0		
Total %	0.6	1.1	8.3	0.5	10.4	1	33.3	6.3	0	40.6	0.6	1.5	0.6	0.4	3.2	7.8	37.3	0.7	0	45.8	
Cars	14	45	345	0	404	41	1271	260	0	1572	27	63	26	0	116	324	1433	31	0	1788	3880
% Cars	60.9	100	99.4	0	92.9	100	91.5	98.1	0	92.7	100	100	96.3	0	87.2	100	92	100	0	93.5	92.9
Buses	9	0	1	0	10	0	58	5	0	63	0	0	0	0	0	0	62	0	0	62	135
% Buses	39.1	0	0.3	0	2.3	0	4.2	1.9	0	3.7	0	0	0	0	0	0	4	0	0	3.2	3.2
Trucks	0	0	1	0	1	0	60	0	0	60	0	0	1	0	1	0	62	0	0	62	124
% Trucks	0	0	0.3	0	0.2	0	4.3	0	0	3.5	0	0	3.7	0	0.8	0	4	0	0	3.2	3
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	20	20	0	0	0	0	0	0	0	0	16	16	0	0	0	0	0	36
% Peds	0	0	0	100	4.6	0	0	0	0	0	0	0	0	100	12	0	0	0	0	0	0.9

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

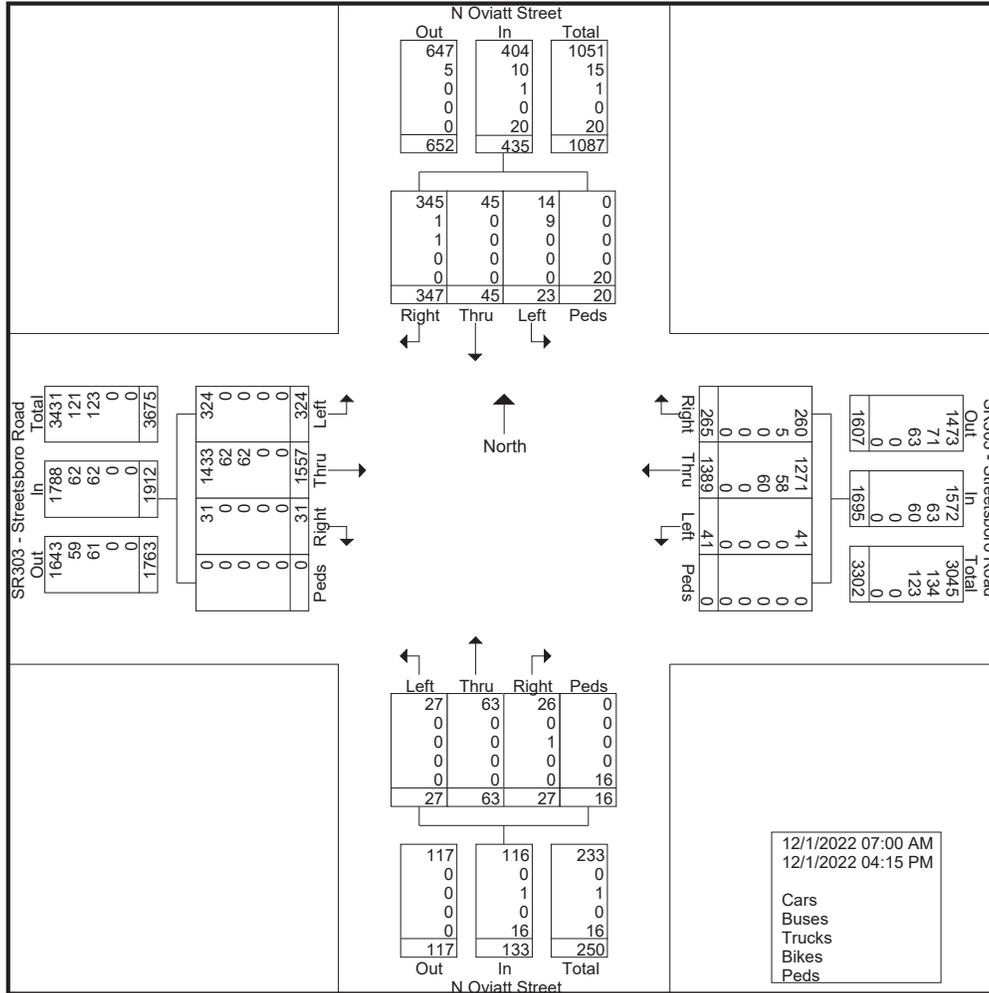
"2022 ... Data Collection simplified"

File Name : 1\_SR303-Streetsboro\_Road\_at\_N\_Oviatt\_Street\_12012022

Site Code : Site 1

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

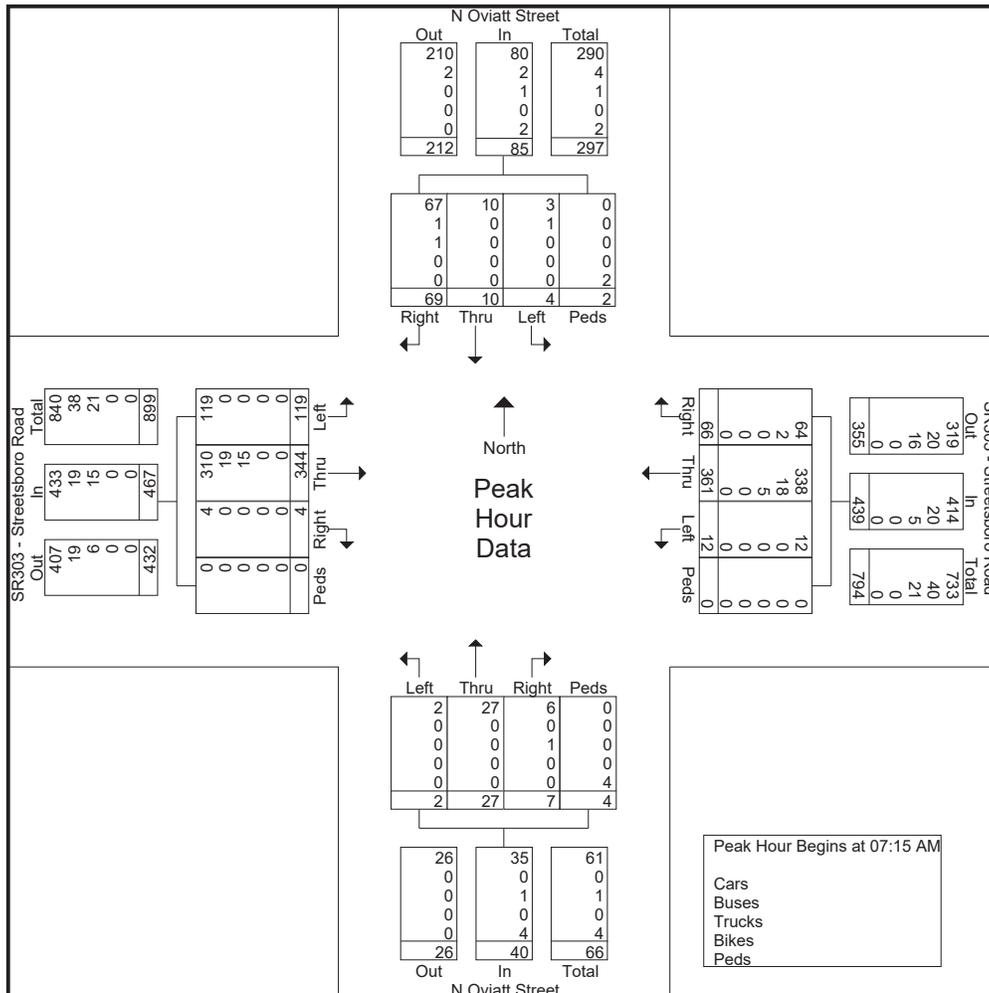
File Name : 1\_SR303-Streetsboro\_Road\_at\_N\_Oviatt\_Street\_12012022

Site Code : Site 1

Start Date : 12/1/2022

Page No : 3

Start Time	N Oviatt Street From North					SR303 - Streetsboro Road From East					N Oviatt Street From South					SR303 - Streetsboro Road From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	3	19	0	24	2	92	18	0	112	0	7	1	0	8	37	70	1	0	108	252
07:30 AM	1	1	17	0	19	4	92	34	0	130	1	1	3	0	5	58	97	0	0	155	309
07:45 AM	1	6	18	1	26	3	100	10	0	113	0	8	2	1	11	13	97	2	0	112	262
08:00 AM	0	0	15	1	16	3	77	4	0	84	1	11	1	3	16	11	80	1	0	92	208
Total Volume	4	10	69	2	85	12	361	66	0	439	2	27	7	4	40	119	344	4	0	467	1031
% App. Total	4.7	11.8	81.2	2.4		2.7	82.2	15	0		5	67.5	17.5	10		25.5	73.7	0.9	0		
PHF	.500	.417	.908	.500	.817	.750	.903	.485	.000	.844	.500	.614	.583	.333	.625	.513	.887	.500	.000	.753	.834
Cars	3	10	67	0	80	12	338	64	0	414	2	27	6	0	35	119	310	4	0	433	962
% Cars	75.0	100	97.1	0	94.1	100	93.6	97.0	0	94.3	100	100	85.7	0	87.5	100	90.1	100	0	92.7	93.3
Buses	1	0	1	0	2	0	18	2	0	20	0	0	0	0	0	0	19	0	0	19	41
% Buses	25.0	0	1.4	0	2.4	0	5.0	3.0	0	4.6	0	0	0	0	0	0	5.5	0	0	4.1	4.0
Trucks	0	0	1	0	1	0	5	0	0	5	0	0	1	0	1	0	15	0	0	15	22
% Trucks	0	0	1.4	0	1.2	0	1.4	0	0	1.1	0	0	14.3	0	2.5	0	4.4	0	0	3.2	2.1
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	2	2	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	6
% Peds	0	0	0	100	2.4	0	0	0	0	0	0	0	0	100	10.0	0	0	0	0	0	0.6



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

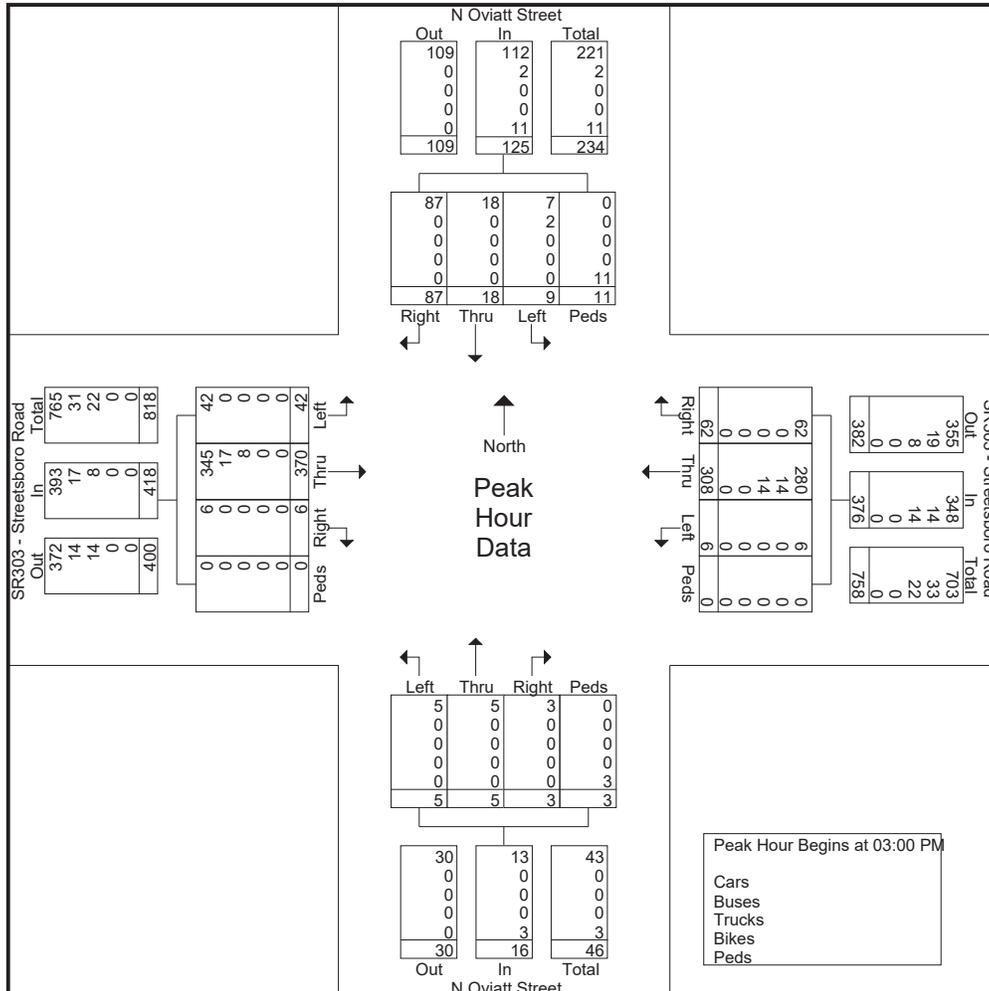
File Name : 1\_SR303-Streetsboro\_Road\_at\_N\_Oviatt\_Street\_12012022

Site Code : Site 1

Start Date : 12/1/2022

Page No : 4

Start Time	N Oviatt Street From North					SR303 - Streetsboro Road From East					N Oviatt Street From South					SR303 - Streetsboro Road From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	1	3	21	2	27	1	75	15	0	91	2	2	0	0	4	12	91	1	0	104	226
03:15 PM	3	5	20	7	35	2	81	19	0	102	1	1	1	2	5	13	82	2	0	97	239
03:30 PM	3	6	19	0	28	1	83	13	0	97	0	2	2	1	5	9	108	0	0	117	247
03:45 PM	2	4	27	2	35	2	69	15	0	86	2	0	0	0	2	8	89	3	0	100	223
Total Volume	9	18	87	11	125	6	308	62	0	376	5	5	3	3	16	42	370	6	0	418	935
% App. Total	7.2	14.4	69.6	8.8		1.6	81.9	16.5	0		31.2	31.2	18.8	18.8		10	88.5	1.4	0		
PHF	.750	.750	.806	.393	.893	.750	.928	.816	.000	.922	.625	.625	.375	.375	.800	.808	.856	.500	.000	.893	.946
Cars	7	18	87	0	112	6	280	62	0	348	5	5	3	0	13	42	345	6	0	393	866
% Cars	77.8	100	100	0	89.6	100	90.9	100	0	92.6	100	100	100	0	81.3	100	93.2	100	0	94.0	92.6
Buses	2	0	0	0	2	0	14	0	0	14	0	0	0	0	0	0	17	0	0	17	33
% Buses	22.2	0	0	0	1.6	0	4.5	0	0	3.7	0	0	0	0	0	0	4.6	0	0	4.1	3.5
Trucks	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	8	0	0	8	22
% Trucks	0	0	0	0	0	0	4.5	0	0	3.7	0	0	0	0	0	0	2.2	0	0	1.9	2.4
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	11	11	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	14
% Peds	0	0	0	100	8.8	0	0	0	0	0	0	0	100	18.8		0	0	0	0	0	1.5



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
8FX

File Name : 2\_N\_Oviatt\_Street\_at\_Elm\_Street\_12012022  
Site Code : Site 2  
Start Date : 12/1/2022  
Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Oviatt Street From North					Elm Street From East					N Oviatt Street From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	6	0	0	7	2	0	1	0	3	0	22	2	0	24	0	0	0	0	0	34
07:15 AM	1	21	0	1	23	2	0	2	0	4	0	59	0	0	59	0	0	0	1	1	87
07:30 AM	4	23	0	2	29	1	0	4	1	6	0	106	1	0	107	0	0	0	2	2	144
07:45 AM	1	26	0	1	28	2	0	6	1	9	0	26	0	0	26	0	0	0	1	1	64
<b>Total</b>	<b>7</b>	<b>76</b>	<b>0</b>	<b>4</b>	<b>87</b>	<b>7</b>	<b>0</b>	<b>13</b>	<b>2</b>	<b>22</b>	<b>0</b>	<b>213</b>	<b>3</b>	<b>0</b>	<b>216</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>329</b>
08:00 AM	0	15	0	0	15	0	0	1	1	2	0	26	1	1	28	0	0	0	1	1	46
08:15 AM	0	10	0	0	10	0	0	0	2	2	0	17	0	1	18	0	0	0	0	0	30
08:30 AM	0	13	0	2	15	0	0	2	1	3	0	31	2	1	34	0	0	0	0	0	52
08:45 AM	4	17	0	0	21	1	0	3	0	4	0	27	2	0	29	0	0	0	0	0	54
<b>Total</b>	<b>4</b>	<b>55</b>	<b>0</b>	<b>2</b>	<b>61</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>4</b>	<b>11</b>	<b>0</b>	<b>101</b>	<b>5</b>	<b>3</b>	<b>109</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>182</b>
09:00 AM	0	13	0	0	13	2	0	2	0	4	0	16	2	0	18	0	0	0	1	1	36
09:15 AM	1	10	0	0	11	1	0	1	0	2	0	11	1	0	12	0	0	0	0	0	25
<b>Total</b>	<b>1</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>27</b>	<b>3</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>61</b>
02:00 PM	0	17	0	0	17	0	0	2	2	4	0	19	4	1	24	0	0	0	1	1	46
02:15 PM	1	17	0	1	19	0	0	4	1	5	0	26	0	3	29	0	0	0	3	3	56
02:30 PM	2	15	0	3	20	1	0	2	2	5	0	32	0	0	32	0	0	0	5	5	62
02:45 PM	0	42	0	7	49	1	0	2	20	23	0	21	0	2	23	0	0	0	6	6	101
<b>Total</b>	<b>3</b>	<b>91</b>	<b>0</b>	<b>11</b>	<b>105</b>	<b>2</b>	<b>0</b>	<b>10</b>	<b>25</b>	<b>37</b>	<b>0</b>	<b>98</b>	<b>4</b>	<b>6</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>265</b>
03:00 PM	2	24	0	1	27	0	0	3	1	4	0	25	4	0	29	0	0	0	1	1	61
03:15 PM	4	26	0	10	40	1	0	1	1	3	0	30	3	0	33	0	0	0	10	10	86
03:30 PM	3	24	0	0	27	0	0	3	0	3	0	26	0	3	29	0	0	0	1	1	60
03:45 PM	3	34	0	1	38	2	0	2	1	5	0	22	2	0	24	0	0	0	3	3	70
<b>Total</b>	<b>12</b>	<b>108</b>	<b>0</b>	<b>12</b>	<b>132</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>3</b>	<b>15</b>	<b>0</b>	<b>103</b>	<b>9</b>	<b>3</b>	<b>115</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>277</b>
04:00 PM	2	30	0	0	32	2	0	4	1	7	0	38	6	2	46	0	0	0	1	1	86
04:15 PM	4	15	0	0	19	0	0	2	4	6	0	46	3	0	49	0	0	0	5	5	79
Grand Total	33	398	0	29	460	18	0	47	39	104	0	626	33	14	673	0	0	0	42	42	1279
Apprch %	7.2	86.5	0	6.3		17.3	0	45.2	37.5		0	93	4.9	2.1		0	0	0	100		
Total %	2.6	31.1	0	2.3	36	1.4	0	3.7	3	8.1	0	48.9	2.6	1.1	52.6	0	0	0	3.3	3.3	
Cars	32	385	0	0	417	16	0	46	0	62	0	603	32	1	636	0	0	0	0	0	1115
% Cars	97	96.7	0	0	90.7	88.9	0	97.9	0	59.6	0	96.3	97	7.1	94.5	0	0	0	0	0	87.2
Buses	0	12	0	0	12	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	30
% Buses	0	3	0	0	2.6	0	0	0	0	0	0	2.9	0	0	2.7	0	0	0	0	0	2.3
Trucks	1	1	0	0	2	2	0	1	0	3	0	5	1	0	6	0	0	0	0	0	11
% Trucks	3	0.3	0	0	0.4	11.1	0	2.1	0	2.9	0	0.8	3	0	0.9	0	0	0	0	0	0.9
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	29	29	0	0	0	39	39	0	0	0	13	13	0	0	0	42	42	123
% Peds	0	0	0	100	6.3	0	0	0	100	37.5	0	0	0	92.9	1.9	0	0	0	100	100	9.6

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

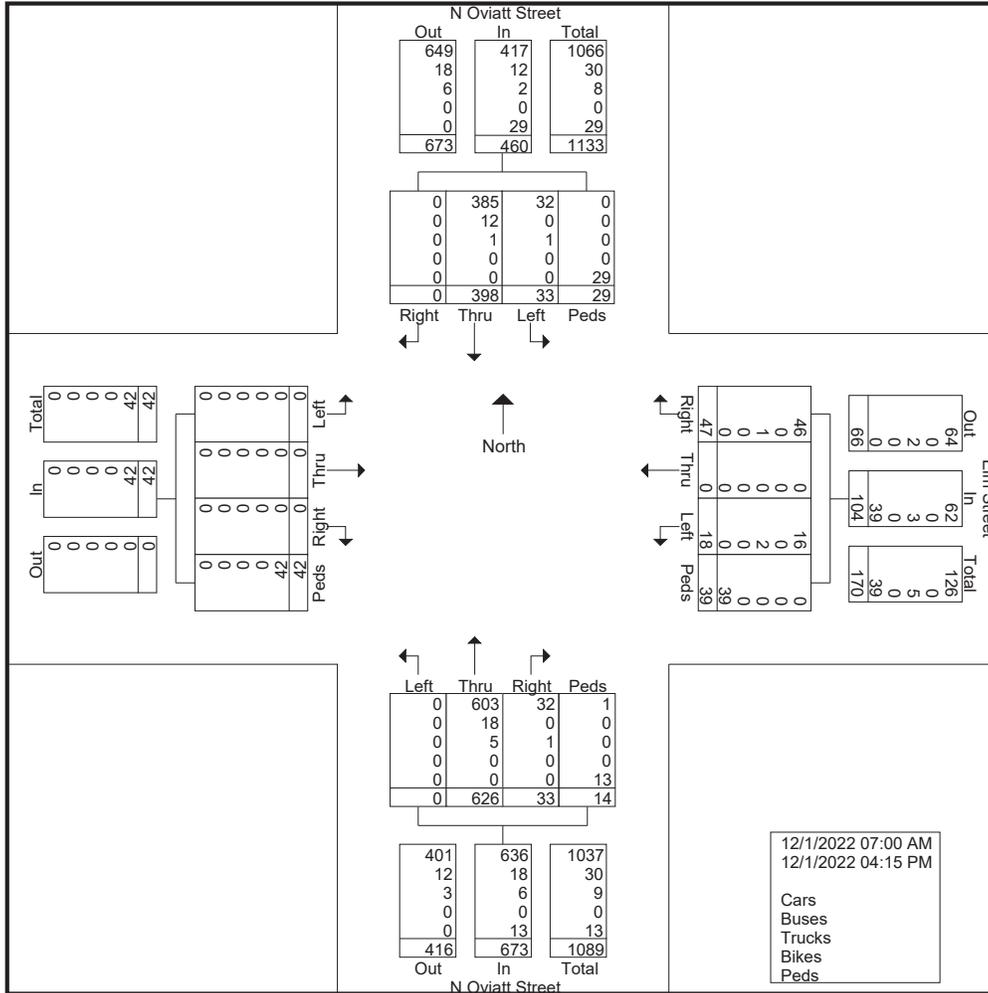
"2022 ... Data Collection simplified"

File Name : 2\_N\_Oviatt\_Street\_at\_Elm\_Street\_12012022

Site Code : Site 2

Start Date : 12/1/2022

Page No : 2





# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

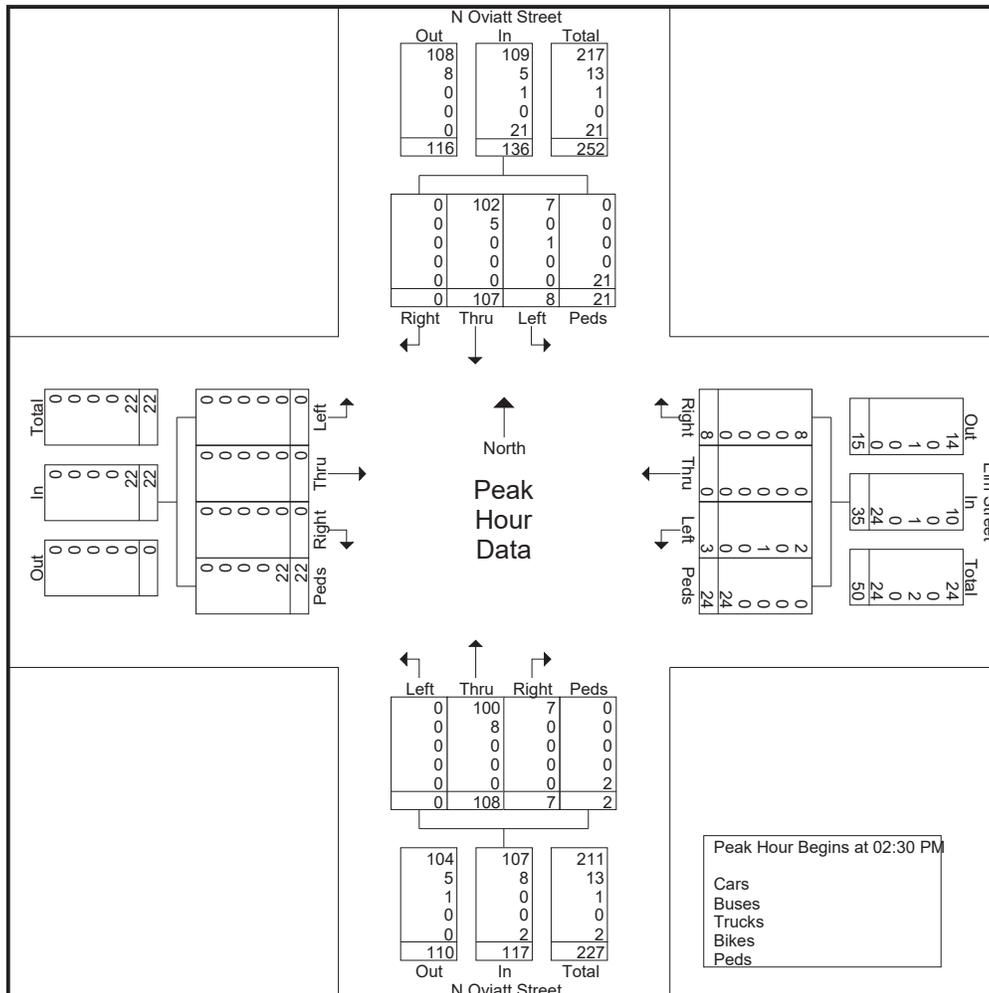
File Name : 2\_N\_Oviatt\_Street\_at\_Elm\_Street\_12012022

Site Code : Site 2

Start Date : 12/1/2022

Page No : 4

Start Time	N Oviatt Street From North					Elm Street From East					N Oviatt Street From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 02:30 PM</b>																					
02:30 PM	2	15	0	3	20	1	0	2	2	5	0	32	0	0	32	0	0	0	5	5	62
02:45 PM	0	42	0	7	49	1	0	2	20	23	0	21	0	2	23	0	0	0	6	6	101
03:00 PM	2	24	0	1	27	0	0	3	1	4	0	25	4	0	29	0	0	0	1	1	61
03:15 PM	4	26	0	10	40	1	0	1	1	3	0	30	3	0	33	0	0	0	10	10	86
Total Volume	8	107	0	21	136	3	0	8	24	35	0	108	7	2	117	0	0	0	22	22	310
% App. Total	5.9	78.7	0	15.4		8.6	0	22.9	68.6		0	92.3	6	1.7		0	0	0	100		
PHF	.500	.637	.000	.525	.694	.750	.000	.667	.300	.380	.000	.844	.438	.250	.886	.000	.000	.000	.550	.550	.767
Cars	7	102	0	0	109	2	0	8	0	10	0	100	7	0	107	0	0	0	0	0	226
% Cars	87.5	95.3	0	0	80.1	66.7	0	100	0	28.6	0	92.6	100	0	91.5	0	0	0	0	0	72.9
Buses	0	5	0	0	5	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	13
% Buses	0	4.7	0	0	3.7	0	0	0	0	0	0	7.4	0	0	6.8	0	0	0	0	0	4.2
Trucks	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Trucks	12.5	0	0	0	0.7	33.3	0	0	0	2.9	0	0	0	0	0	0	0	0	0	0	0.6
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	21	21	0	0	0	24	24	0	0	0	2	2	0	0	0	22	22	69
% Peds	0	0	0	100	15.4	0	0	0	100	68.6	0	0	0	100	1.7	0	0	0	100	100	22.3





www.TSTData.com  
Tri-State Traffic Data, Inc

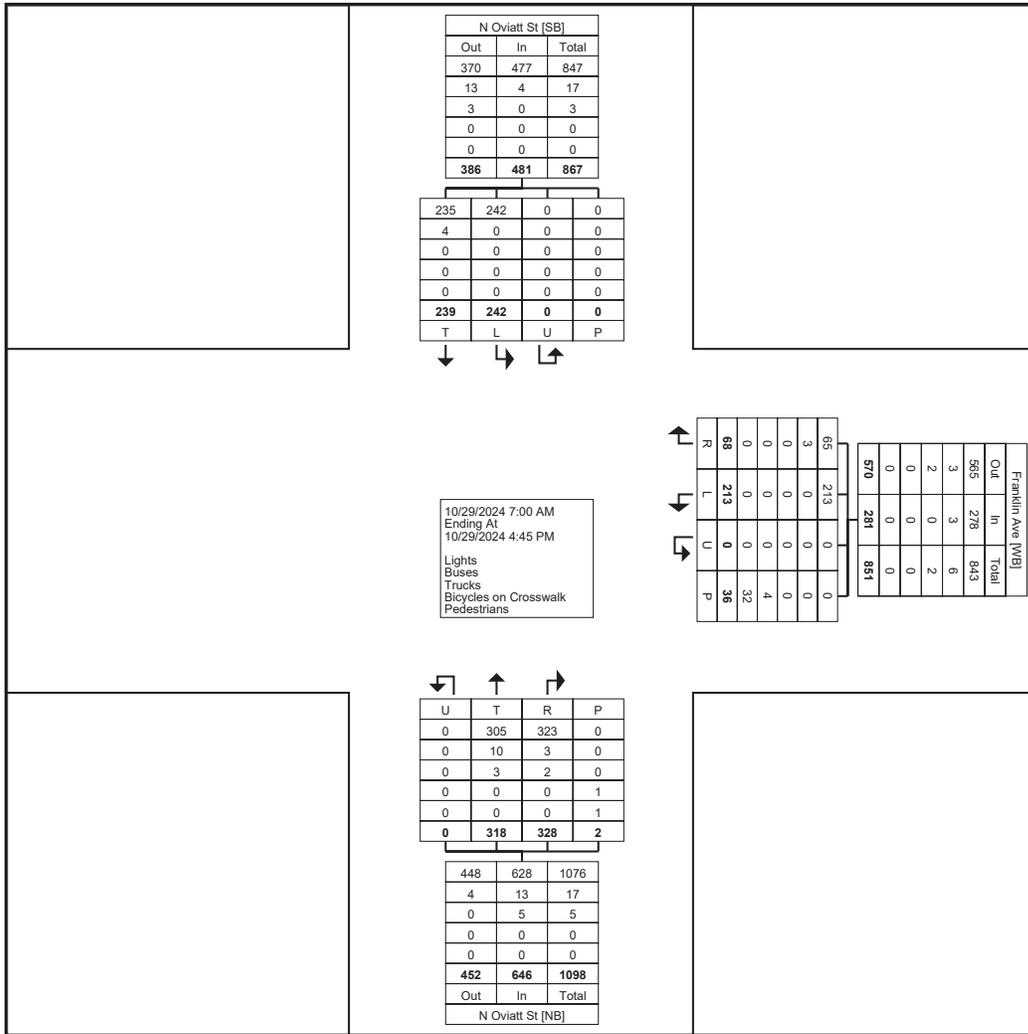
Coatesville, PA, Pennsylvania, United States 19320  
610-466-1469 TSTData@aol.com  
Serving Transportation Professionals Since 1995

Hudson, OH  
Franklin Ave & N Oviatt St  
Tuesday, October 29, 2024  
Location: 41.243561, -  
81.434941

Count Name: N Oviatt St &  
Franklin Ave  
Site Code:  
Start Date: 10/29/2024  
Page No: 1

### Turning Movement Data

Start Time	N Oviatt St Southbound					Franklin Ave Westbound					N Oviatt St Northbound					Int. Total
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	
7:00 AM	5	15	0	0	20	0	2	0	0	2	25	6	0	0	31	53
7:15 AM	7	72	0	0	79	5	18	0	0	23	71	6	0	0	77	179
7:30 AM	6	89	0	0	95	10	31	0	1	41	78	9	0	0	87	223
7:45 AM	10	12	0	0	22	3	14	0	1	17	18	31	0	0	49	88
Hourly Total	28	188	0	0	216	18	65	0	2	83	192	52	0	0	244	543
8:00 AM	18	3	0	0	21	0	2	0	0	2	3	30	0	1	33	56
8:15 AM	8	2	0	0	10	1	0	0	0	1	13	17	0	0	30	41
8:30 AM	7	3	0	0	10	3	9	0	3	12	17	21	0	0	38	60
8:45 AM	11	1	0	0	12	1	14	0	0	15	11	18	0	0	29	56
Hourly Total	44	9	0	0	53	5	25	0	3	30	44	86	0	1	130	213
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	10	2	0	0	12	0	1	0	2	1	5	9	0	0	14	27
2:15 PM	10	12	0	0	22	1	1	0	5	2	12	14	0	1	26	50
2:30 PM	11	6	0	0	17	1	2	0	0	3	9	16	0	0	25	45
2:45 PM	12	7	0	0	19	16	30	0	12	46	16	13	0	0	29	94
Hourly Total	43	27	0	0	70	18	34	0	19	52	42	52	0	1	94	216
3:00 PM	13	0	0	0	13	14	18	0	4	32	5	12	0	0	17	62
3:15 PM	17	2	0	0	19	3	10	0	0	13	13	16	0	0	29	61
3:30 PM	17	3	0	0	20	2	3	0	1	5	8	24	0	0	32	57
3:45 PM	41	3	0	0	44	3	28	0	3	31	13	21	0	0	34	109
Hourly Total	88	8	0	0	96	22	59	0	8	81	39	73	0	0	112	289
4:00 PM	17	7	0	0	24	0	13	0	3	13	7	23	0	0	30	67
4:15 PM	19	3	0	0	22	5	17	0	1	22	4	32	0	0	36	80
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	239	242	0	0	481	68	213	0	36	281	328	318	0	2	646	1408
Approach %	49.7	50.3	0.0	-	-	24.2	75.8	0.0	-	-	50.8	49.2	0.0	-	-	-
Total %	17.0	17.2	0.0	-	34.2	4.8	15.1	0.0	-	20.0	23.3	22.6	0.0	-	45.9	-
Lights	235	242	0	-	477	65	213	0	-	278	323	305	0	-	628	1383
% Lights	98.3	100.0	-	-	99.2	95.6	100.0	-	-	98.9	98.5	95.9	-	-	97.2	98.2
Buses	4	0	0	-	4	3	0	0	-	3	3	10	0	-	13	20
% Buses	1.7	0.0	-	-	0.8	4.4	0.0	-	-	1.1	0.9	3.1	-	-	2.0	1.4
Trucks	0	0	0	-	0	0	0	0	-	0	2	3	0	-	5	5
% Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.6	0.9	-	-	0.8	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	4	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	11.1	-	-	-	-	50.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	32	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	88.9	-	-	-	-	50.0	-	-



Turning Movement Data Plot



www.TSTData.com  
Tri-State Traffic Data, Inc

Coatesville, PA, Pennsylvania, United States 19320  
610-466-1469 TSTData@aol.com  
Serving Transportation Professionals Since 1995

Hudson, OH  
Franklin Ave & N Oviatt St  
Tuesday, October 29, 2024  
Location: 41.243561, -  
81.434941

Count Name: N Oviatt St &  
Franklin Ave  
Site Code:  
Start Date: 10/29/2024  
Page No: 3

### Turning Movement Peak Hour Data (7:15 AM)

Start Time	N Oviatt St Southbound					Franklin Ave Westbound					N Oviatt St Northbound					Int. Total
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	
7:15 AM	7	72	0	0	79	5	18	0	0	23	71	6	0	0	77	179
7:30 AM	6	89	0	0	95	10	31	0	1	41	78	9	0	0	87	223
7:45 AM	10	12	0	0	22	3	14	0	1	17	18	31	0	0	49	88
8:00 AM	18	3	0	0	21	0	2	0	0	2	3	30	0	1	33	56
Total	41	176	0	0	217	18	65	0	2	83	170	76	0	1	246	546
Approach %	18.9	81.1	0.0	-	-	21.7	78.3	0.0	-	-	69.1	30.9	0.0	-	-	-
Total %	7.5	32.2	0.0	-	39.7	3.3	11.9	0.0	-	15.2	31.1	13.9	0.0	-	45.1	-
PHF	0.569	0.494	0.000	-	0.571	0.450	0.524	0.000	-	0.506	0.545	0.613	0.000	-	0.707	0.612
Lights	41	176	0	-	217	17	65	0	-	82	169	72	0	-	241	540
% Lights	100.0	100.0	-	-	100.0	94.4	100.0	-	-	98.8	99.4	94.7	-	-	98.0	98.9
Buses	0	0	0	-	0	1	0	0	-	1	1	2	0	-	3	4
% Buses	0.0	0.0	-	-	0.0	5.6	0.0	-	-	1.2	0.6	2.6	-	-	1.2	0.7
Trucks	0	0	0	-	0	0	0	0	-	0	0	2	0	-	2	2
% Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	2.6	-	-	0.8	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	0.0	-	-





www.TSTData.com  
Tri-State Traffic Data, Inc

Coatesville, PA, Pennsylvania, United States 19320  
610-466-1469 TSTData@aol.com  
Serving Transportation Professionals Since 1995

Hudson, OH  
Franklin Ave & N Oviatt St  
Tuesday, October 29, 2024  
Location: 41.243561, -  
81.434941

Count Name: N Oviatt St &  
Franklin Ave  
Site Code:  
Start Date: 10/29/2024  
Page No: 5

### Turning Movement Peak Hour Data (3:30 PM)

Start Time	N Oviatt St Southbound					Franklin Ave Westbound					N Oviatt St Northbound					Int. Total
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	
3:30 PM	17	3	0	0	20	2	3	0	1	5	8	24	0	0	32	57
3:45 PM	41	3	0	0	44	3	28	0	3	31	13	21	0	0	34	109
4:00 PM	17	7	0	0	24	0	13	0	3	13	7	23	0	0	30	67
4:15 PM	19	3	0	0	22	5	17	0	1	22	4	32	0	0	36	80
Total	94	16	0	0	110	10	61	0	8	71	32	100	0	0	132	313
Approach %	85.5	14.5	0.0	-	-	14.1	85.9	0.0	-	-	24.2	75.8	0.0	-	-	-
Total %	30.0	5.1	0.0	-	35.1	3.2	19.5	0.0	-	22.7	10.2	31.9	0.0	-	42.2	-
PHF	0.573	0.571	0.000	-	0.625	0.500	0.545	0.000	-	0.573	0.615	0.781	0.000	-	0.917	0.718
Lights	93	16	0	-	109	10	61	0	-	71	32	97	0	-	129	309
% Lights	98.9	100.0	-	-	99.1	100.0	100.0	-	-	100.0	100.0	97.0	-	-	97.7	98.7
Buses	1	0	0	-	1	0	0	0	-	0	0	3	0	-	3	4
% Buses	1.1	0.0	-	-	0.9	0.0	0.0	-	-	0.0	0.0	3.0	-	-	2.3	1.3
Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	12.5	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	7	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	87.5	-	-	-	-	-	-	-



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
5EC

File Name : 4\_N\_Oviatt\_Street\_at\_Aurora\_Street\_12012022  
Site Code : Site 4  
Start Date : 12/1/2022  
Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Oviatt Street From North					Aurora Street From East					N Oviatt Street From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	6	51	0	0	57	2	0	5	0	7	0	31	2	0	33	1	1	0	0	2	99
07:15 AM	51	75	0	0	126	2	2	2	1	7	0	62	26	0	88	0	3	3	0	6	227
07:30 AM	53	87	5	0	145	4	0	12	0	16	1	99	40	0	140	0	2	2	1	5	306
07:45 AM	8	86	3	0	97	7	10	11	0	28	8	84	5	0	97	1	2	1	0	4	226
<b>Total</b>	<b>118</b>	<b>299</b>	<b>8</b>	<b>0</b>	<b>425</b>	<b>15</b>	<b>12</b>	<b>30</b>	<b>1</b>	<b>58</b>	<b>9</b>	<b>276</b>	<b>73</b>	<b>0</b>	<b>358</b>	<b>2</b>	<b>8</b>	<b>6</b>	<b>1</b>	<b>17</b>	<b>858</b>
08:00 AM	5	70	7	1	83	5	15	8	0	28	9	34	0	0	43	4	9	12	0	25	179
08:15 AM	5	60	1	0	66	2	2	6	0	10	2	47	2	0	51	4	1	2	0	7	134
08:30 AM	2	58	2	0	62	2	6	16	0	24	0	64	0	0	64	3	3	0	0	6	156
08:45 AM	9	102	4	1	116	3	8	13	1	25	3	42	3	0	48	5	3	1	0	9	198
<b>Total</b>	<b>21</b>	<b>290</b>	<b>14</b>	<b>2</b>	<b>327</b>	<b>12</b>	<b>31</b>	<b>43</b>	<b>1</b>	<b>87</b>	<b>14</b>	<b>187</b>	<b>5</b>	<b>0</b>	<b>206</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>0</b>	<b>47</b>	<b>667</b>
09:00 AM	8	52	0	0	60	4	2	9	0	15	0	31	2	0	33	0	2	1	0	3	111
09:15 AM	11	50	1	0	62	1	2	9	0	12	3	38	2	0	43	0	0	4	0	4	121
<b>Total</b>	<b>19</b>	<b>102</b>	<b>1</b>	<b>0</b>	<b>122</b>	<b>5</b>	<b>4</b>	<b>18</b>	<b>0</b>	<b>27</b>	<b>3</b>	<b>69</b>	<b>4</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>232</b>
02:00 PM	8	41	0	2	51	0	3	13	1	17	0	20	3	0	23	1	2	1	0	4	95
02:15 PM	12	42	2	0	56	1	7	13	0	21	2	37	8	0	47	1	4	1	0	6	130
02:30 PM	14	51	3	1	69	0	0	14	0	14	2	55	10	0	67	2	1	6	0	9	159
02:45 PM	15	54	1	0	70	6	8	12	4	30	1	45	3	0	49	3	1	3	0	7	156
<b>Total</b>	<b>49</b>	<b>188</b>	<b>6</b>	<b>3</b>	<b>246</b>	<b>7</b>	<b>18</b>	<b>52</b>	<b>5</b>	<b>82</b>	<b>5</b>	<b>157</b>	<b>24</b>	<b>0</b>	<b>186</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>0</b>	<b>26</b>	<b>540</b>
03:00 PM	8	67	3	2	80	4	8	21	2	35	1	55	1	0	57	0	4	0	0	4	176
03:15 PM	12	66	1	0	79	2	4	19	0	25	1	55	1	0	57	1	9	1	0	11	172
03:30 PM	14	84	3	1	102	4	6	19	3	32	3	56	1	0	60	4	7	5	0	16	210
03:45 PM	13	134	4	0	151	7	7	5	1	20	2	41	1	0	44	1	5	0	0	6	221
<b>Total</b>	<b>47</b>	<b>351</b>	<b>11</b>	<b>3</b>	<b>412</b>	<b>17</b>	<b>25</b>	<b>64</b>	<b>6</b>	<b>112</b>	<b>7</b>	<b>207</b>	<b>4</b>	<b>0</b>	<b>218</b>	<b>6</b>	<b>25</b>	<b>6</b>	<b>0</b>	<b>37</b>	<b>779</b>
04:00 PM	13	65	0	6	84	3	7	16	0	26	0	38	3	0	41	2	5	1	0	8	159
04:15 PM	5	53	1	0	59	5	6	12	2	25	2	54	5	0	61	4	8	3	0	15	160
Grand Total	272	1348	41	14	1675	64	103	235	15	417	40	988	118	0	1146	37	72	47	1	157	3395
Apprch %	16.2	80.5	2.4	0.8		15.3	24.7	56.4	3.6		3.5	86.2	10.3	0		23.6	45.9	29.9	0.6		
Total %	8	39.7	1.2	0.4	49.3	1.9	3	6.9	0.4	12.3	1.2	29.1	3.5	0	33.8	1.1	2.1	1.4	0	4.6	
Cars	259	1297	39	0	1595	62	102	218	0	382	39	931	118	0	1088	35	72	47	1	155	3220
% Cars	95.2	96.2	95.1	0	95.2	96.9	99	92.8	0	91.6	97.5	94.2	100	0	94.9	94.6	100	100	100	98.7	94.8
Buses	10	44	1	0	55	0	0	15	0	15	0	44	0	0	44	0	0	0	0	0	114
% Buses	3.7	3.3	2.4	0	3.3	0	0	6.4	0	3.6	0	4.5	0	0	3.8	0	0	0	0	0	3.4
Trucks	3	7	1	0	11	2	1	2	0	5	1	13	0	0	14	2	0	0	0	2	32
% Trucks	1.1	0.5	2.4	0	0.7	3.1	1	0.9	0	1.2	2.5	1.3	0	0	1.2	5.4	0	0	0	1.3	0.9
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	14	14	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	29
% Peds	0	0	0	100	0.8	0	0	0	100	3.6	0	0	0	0	0	0	0	0	0	0	0.9

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

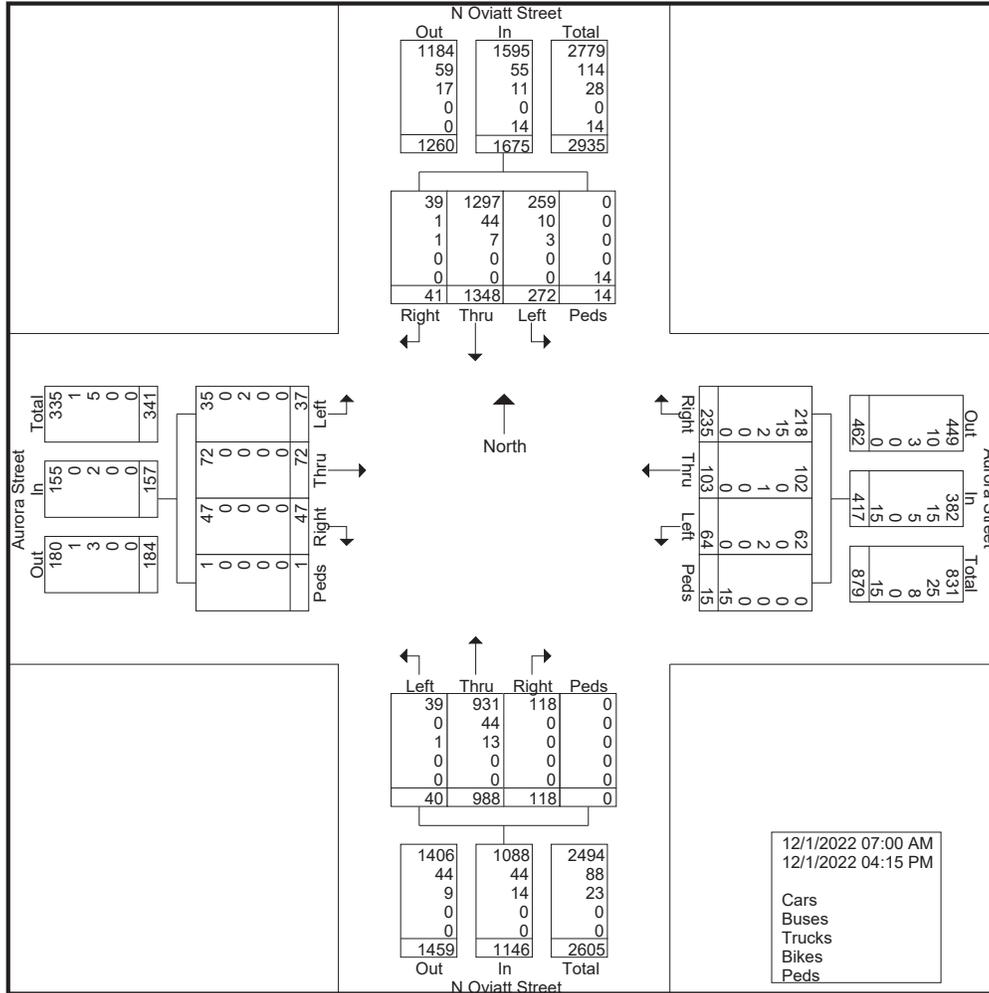
"2022 ... Data Collection simplified"

File Name : 4\_N\_Oviatt\_Street\_at\_Aurora\_Street\_12012022

Site Code : Site 4

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

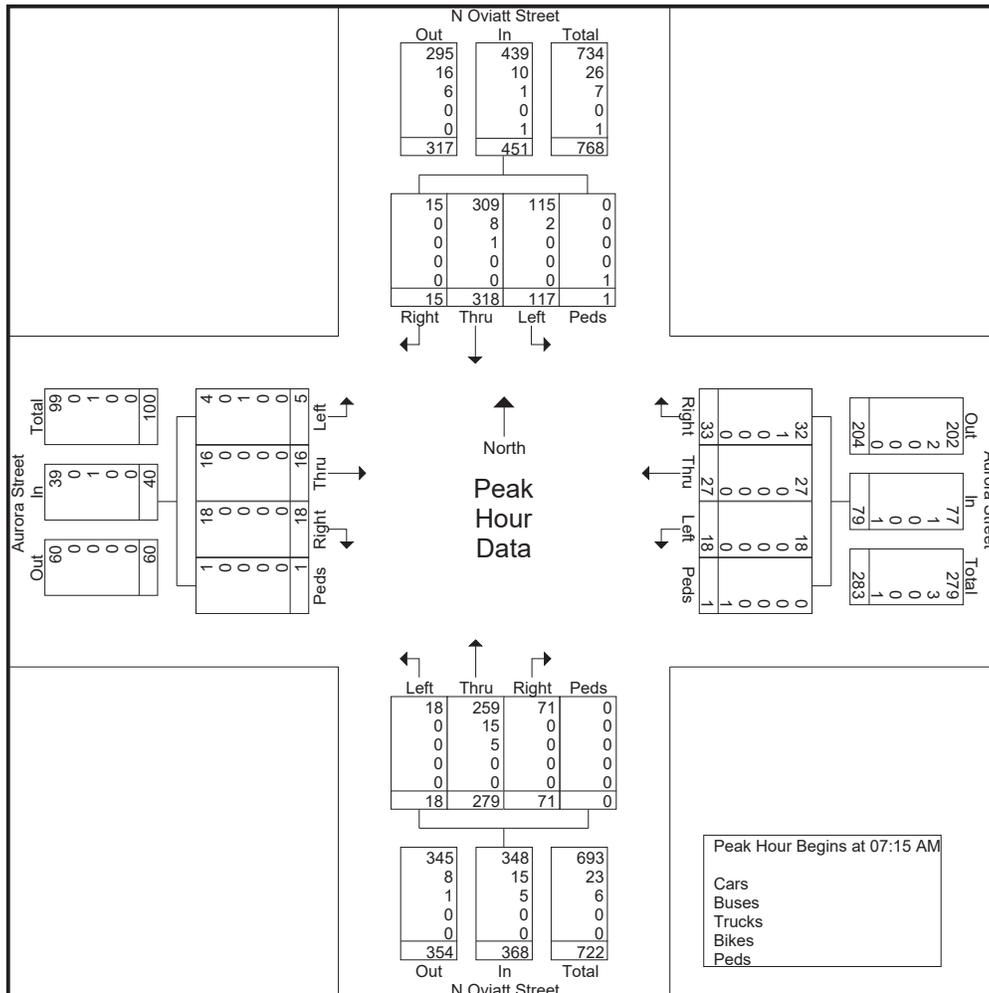
File Name : 4\_N\_Oviatt\_Street\_at\_Aurora\_Street\_12012022

Site Code : Site 4

Start Date : 12/1/2022

Page No : 3

Start Time	N Oviatt Street From North					Aurora Street From East					N Oviatt Street From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	51	75	0	0	126	2	2	2	1	7	0	62	26	0	88	0	3	3	0	6	227
07:30 AM	<b>53</b>	<b>87</b>	5	0	<b>145</b>	4	0	<b>12</b>	0	16	1	<b>99</b>	<b>40</b>	0	<b>140</b>	0	2	2	<b>1</b>	5	<b>306</b>
07:45 AM	8	86	3	0	97	7	10	11	0	28	8	84	5	0	97	1	2	1	0	4	226
08:00 AM	5	70	7	1	83	5	<b>15</b>	8	0	28	<b>9</b>	34	0	0	43	<b>4</b>	<b>9</b>	<b>12</b>	0	<b>25</b>	179
Total Volume	117	318	15	1	451	18	27	33	1	79	18	279	71	0	368	5	16	18	1	40	938
% App. Total	25.9	70.5	3.3	0.2		22.8	34.2	41.8	1.3		4.9	75.8	19.3	0		12.5	40	45	2.5		
PHF	.552	.914	.536	.250	.778	.643	.450	.688	.250	.705	.500	.705	.444	.000	.657	.313	.444	.375	.250	.400	.766
Cars	115	309	15	0	439	18	27	32	0	77	18	259	71	0	348	4	16	18	1	39	903
% Cars	98.3	97.2	100	0	97.3	100	100	97.0	0	97.5	100	92.8	100	0	94.6	80.0	100	100	100	97.5	96.3
Buses	2	8	0	0	10	0	0	1	0	1	0	15	0	0	15	0	0	0	0	0	26
% Buses	1.7	2.5	0	0	2.2	0	0	3.0	0	1.3	0	5.4	0	0	4.1	0	0	0	0	0	2.8
Trucks	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	7
% Trucks	0	0.3	0	0	0.2	0	0	0	0	0	0	1.8	0	0	1.4	20.0	0	0	0	2.5	0.7
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
% Peds	0	0	0	100	0.2	0	0	0	100	1.3	0	0	0	0	0	0	0	0	0	0	0.2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

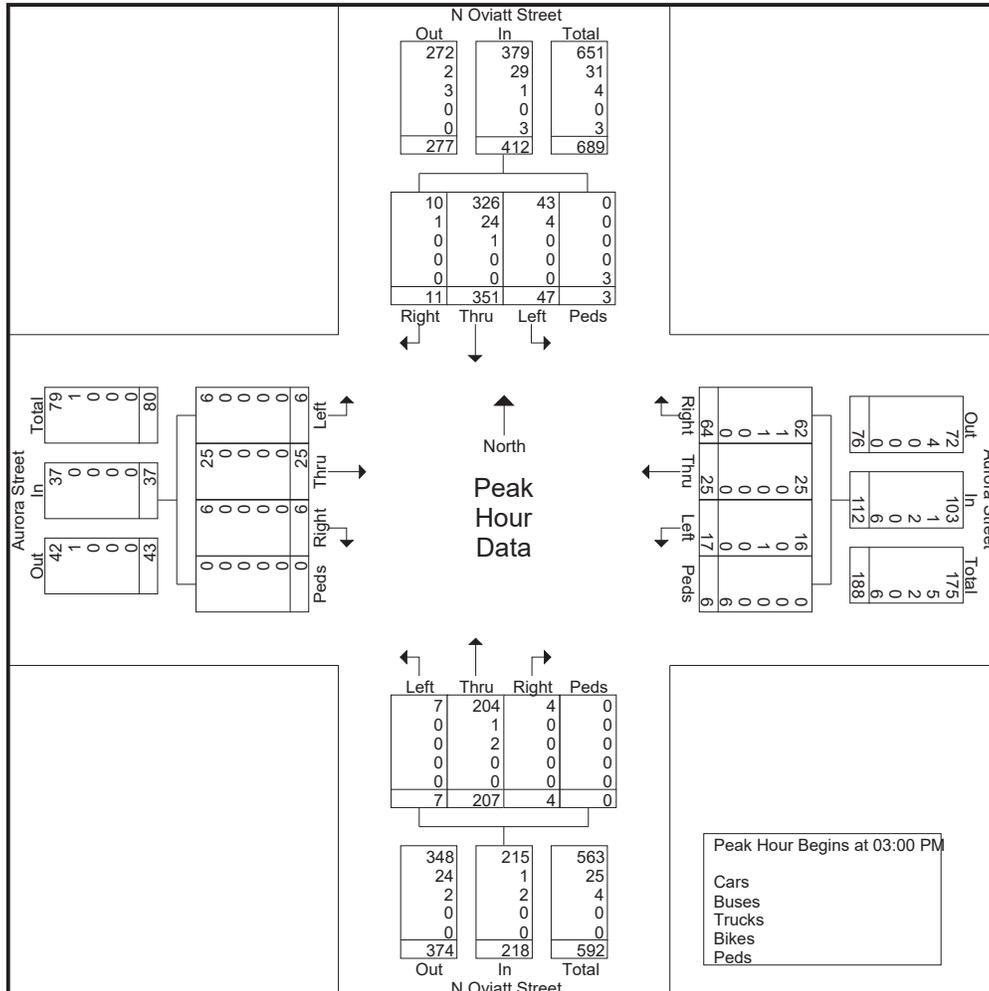
File Name : 4\_N\_Oviatt\_Street\_at\_Aurora\_Street\_12012022

Site Code : Site 4

Start Date : 12/1/2022

Page No : 4

Start Time	N Oviatt Street From North					Aurora Street From East					N Oviatt Street From South					Aurora Street From West					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																						
<b>Peak Hour for Entire Intersection Begins at 03:00 PM</b>																						
03:00 PM	8	67	3	2	80	4	8	21	2	35	1	55	1	0	57	0	4	0	0	4	176	
03:15 PM	12	66	1	0	79	2	4	19	0	25	1	55	1	0	57	1	9	1	0	11	172	
03:30 PM	14	84	3	1	102	4	6	19	3	32	3	56	1	0	60	4	7	5	0	16	210	
03:45 PM	13	134	4	0	151	7	7	5	1	20	2	41	1	0	44	1	5	0	0	6	221	
Total Volume	47	351	11	3	412	17	25	64	6	112	7	207	4	0	218	6	25	6	0	37	779	
% App. Total	11.4	85.2	2.7	0.7		15.2	22.3	57.1	5.4		3.2	95	1.8	0		16.2	67.6	16.2	0			
PHF	.839	.655	.688	.375	.682	.607	.781	.762	.500	.800	.583	.924	1.00	.000	.908	.375	.694	.300	.000	.578	.881	
Cars	43	326	10	0	379	16	25	62	0	103	7	204	4	0	215	6	25	6	0	37	734	
% Cars	91.5	92.9	90.9	0	92.0	94.1	100	96.9	0	92.0	100	98.6	100	0	98.6	100	100	100	0	100	94.2	
Buses	4	24	1	0	29	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	31
% Buses	8.5	6.8	9.1	0	7.0	0	0	1.6	0	0.9	0	0.5	0	0	0.5	0	0	0	0	0	4.0	
Trucks	0	1	0	0	1	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	0	5
% Trucks	0	0.3	0	0	0.2	5.9	0	1.6	0	1.8	0	1.0	0	0	0.9	0	0	0	0	0	0.6	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	3	3	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	9	
% Peds	0	0	0	100	0.7	0	0	0	100	5.4	0	0	0	0	0	0	0	0	0	0	1.2	



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

File Name : 5\_SR303-Streetsboro\_Road\_at\_N\_Hayden\_Pkwy\_12012022

Site Code : Site 5

Start Date : 12/1/2022

Page No : 1

Partly Cloudy - Cold  
Schools in Session  
3DC

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Hayden Pkwy From North					SR303 - Streetsboro Road From East					N Hayden Pkwy From South					SR303 - Streetsboro Road From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	5	0	6	0	64	2	0	66	1	0	2	3	6	11	43	1	5	60	138
07:15 AM	3	3	15	0	21	0	89	5	0	94	2	8	0	0	10	24	46	1	0	71	196
07:30 AM	18	13	30	0	61	0	74	6	0	80	9	9	6	0	24	23	76	0	1	100	265
07:45 AM	5	8	12	0	25	2	96	6	0	104	7	4	1	1	13	19	89	2	0	110	252
<b>Total</b>	<b>27</b>	<b>24</b>	<b>62</b>	<b>0</b>	<b>113</b>	<b>2</b>	<b>323</b>	<b>19</b>	<b>0</b>	<b>344</b>	<b>19</b>	<b>21</b>	<b>9</b>	<b>4</b>	<b>53</b>	<b>77</b>	<b>254</b>	<b>4</b>	<b>6</b>	<b>341</b>	<b>851</b>
08:00 AM	4	3	11	0	18	2	82	2	0	86	4	7	3	0	14	19	56	2	0	77	195
08:15 AM	0	5	8	0	13	0	88	13	0	101	3	1	2	6	12	17	42	3	3	65	191
08:30 AM	13	7	9	0	29	0	58	19	0	77	0	13	2	2	17	34	47	0	5	86	209
08:45 AM	12	9	39	0	60	2	68	3	0	73	5	3	3	0	11	13	50	2	0	65	209
<b>Total</b>	<b>29</b>	<b>24</b>	<b>67</b>	<b>0</b>	<b>120</b>	<b>4</b>	<b>296</b>	<b>37</b>	<b>0</b>	<b>337</b>	<b>12</b>	<b>24</b>	<b>10</b>	<b>8</b>	<b>54</b>	<b>83</b>	<b>195</b>	<b>7</b>	<b>8</b>	<b>293</b>	<b>804</b>
09:00 AM	1	1	6	0	8	2	65	2	1	70	4	0	2	0	6	7	57	4	0	68	152
09:15 AM	2	1	10	0	13	0	58	3	0	61	1	2	1	0	4	7	44	7	0	58	136
<b>Total</b>	<b>3</b>	<b>2</b>	<b>16</b>	<b>0</b>	<b>21</b>	<b>2</b>	<b>123</b>	<b>5</b>	<b>1</b>	<b>131</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>10</b>	<b>14</b>	<b>101</b>	<b>11</b>	<b>0</b>	<b>126</b>	<b>288</b>
02:00 PM	8	2	8	0	18	0	58	0	0	58	2	3	2	0	7	11	75	2	0	88	171
02:15 PM	2	3	7	0	12	1	72	8	0	81	2	4	2	1	9	15	65	3	1	84	186
02:30 PM	2	3	12	0	17	0	58	4	0	62	1	3	0	0	4	14	80	2	0	96	179
02:45 PM	7	6	10	0	23	1	81	3	0	85	4	3	2	2	11	24	71	4	0	99	218
<b>Total</b>	<b>19</b>	<b>14</b>	<b>37</b>	<b>0</b>	<b>70</b>	<b>2</b>	<b>269</b>	<b>15</b>	<b>0</b>	<b>286</b>	<b>9</b>	<b>13</b>	<b>6</b>	<b>3</b>	<b>31</b>	<b>64</b>	<b>291</b>	<b>11</b>	<b>1</b>	<b>367</b>	<b>754</b>
03:00 PM	8	6	13	0	27	2	95	7	0	104	3	1	5	6	15	21	83	3	8	115	261
03:15 PM	7	4	13	0	24	4	83	11	0	98	2	4	1	0	7	19	73	1	1	94	223
03:30 PM	8	4	14	0	26	4	80	9	0	93	2	3	2	0	7	33	86	3	1	123	249
03:45 PM	13	14	36	0	63	5	62	2	0	69	3	3	2	7	15	12	86	3	9	110	257
<b>Total</b>	<b>36</b>	<b>28</b>	<b>76</b>	<b>0</b>	<b>140</b>	<b>15</b>	<b>320</b>	<b>29</b>	<b>0</b>	<b>364</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>13</b>	<b>44</b>	<b>85</b>	<b>328</b>	<b>10</b>	<b>19</b>	<b>442</b>	<b>990</b>
04:00 PM	11	7	25	0	43	5	72	3	0	80	4	1	1	0	6	14	93	4	0	111	240
04:15 PM	7	6	14	0	27	0	68	7	0	75	4	4	2	0	10	8	75	4	2	89	201
Grand Total	132	105	297	0	534	30	1471	115	1	1617	63	76	41	28	208	345	1337	51	36	1769	4128
Apprch %	24.7	19.7	55.6	0		1.9	91	7.1	0.1		30.3	36.5	19.7	13.5		19.5	75.6	2.9	2		
Total %	3.2	2.5	7.2	0	12.9	0.7	35.6	2.8	0	39.2	1.5	1.8	1	0.7	5	8.4	32.4	1.2	0.9	42.9	
Cars	116	99	236	0	451	29	1406	103	0	1538	63	72	38	0	173	283	1273	47	0	1603	3765
% Cars	87.9	94.3	79.5	0	84.5	96.7	95.6	89.6	0	95.1	100	94.7	92.7	0	83.2	82	95.2	92.2	0	90.6	91.2
Buses	11	5	55	0	71	0	10	7	0	17	0	2	1	0	3	55	8	2	0	65	156
% Buses	8.3	4.8	18.5	0	13.3	0	0.7	6.1	0	1.1	0	2.6	2.4	0	1.4	15.9	0.6	3.9	0	3.7	3.8
Trucks	5	0	6	0	11	1	55	5	0	61	0	0	2	0	2	7	56	2	0	65	139
% Trucks	3.8	0	2	0	2.1	3.3	3.7	4.3	0	3.8	0	0	4.9	0	1	2	4.2	3.9	0	3.7	3.4
Bikes	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
% Bikes	0	1	0	0	0.2	0	0	0	0	0	0	2.6	0	0	1	0	0	0	0	0	0.1
Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	28	28	0	0	0	36	36	65
% Peds	0	0	0	0	0	0	0	0	100	0.1	0	0	0	100	13.5	0	0	0	100	2	1.6

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

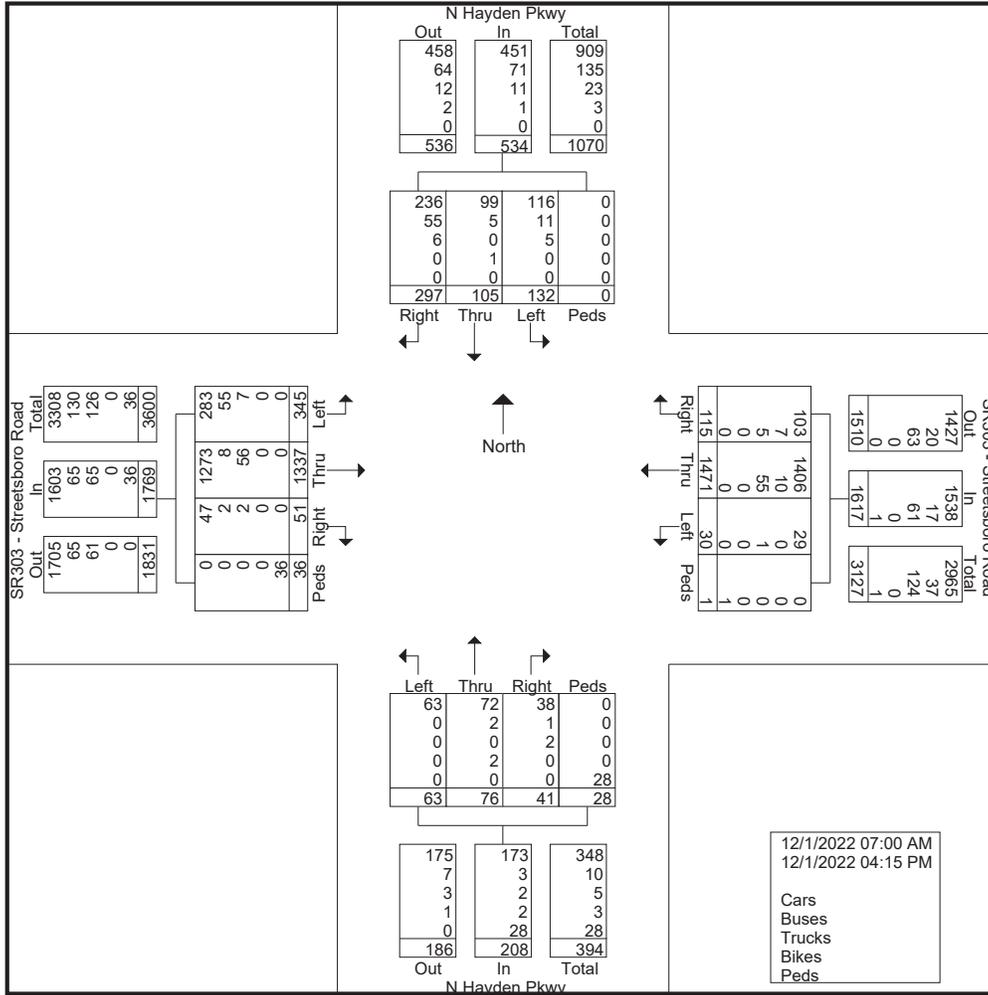
"2022 ... Data Collection simplified"

File Name : 5\_SR303-Streetsboro\_Road\_at\_N\_Hayden\_Pkwy\_12012022

Site Code : Site 5

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

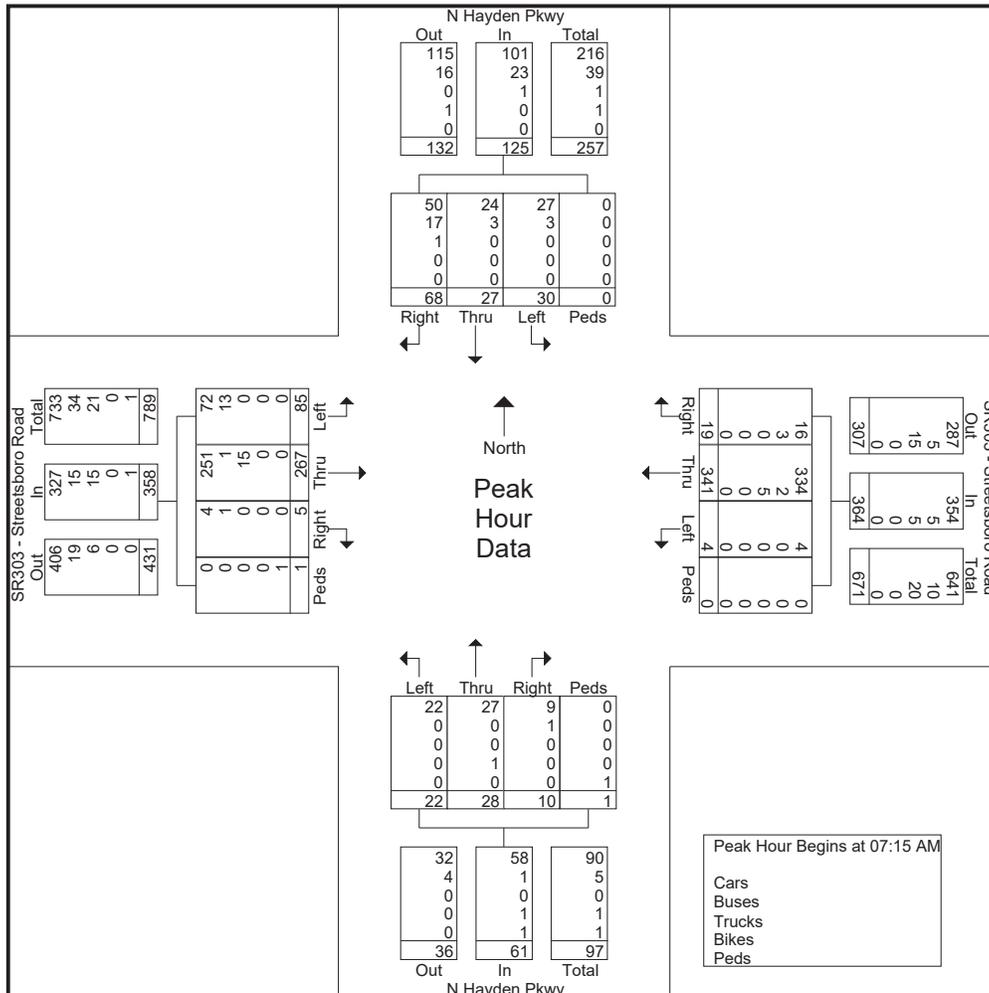
File Name : 5\_SR303-Streetsboro\_Road\_at\_N\_Hayden\_Pkwy\_12012022

Site Code : Site 5

Start Date : 12/1/2022

Page No : 3

Start Time	N Hayden Pkwy From North					SR303 - Streetsboro Road From East					N Hayden Pkwy From South					SR303 - Streetsboro Road From West					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:15 AM																						
07:15 AM	3	3	15	0	21	0	89	5	0	94	2	8	0	0	10	24	46	1	0	71	196	
07:30 AM	18	13	30	0	61	0	74	6	0	80	9	9	6	0	24	23	76	0	1	100	265	
07:45 AM	5	8	12	0	25	2	96	6	0	104	7	4	1	1	13	19	89	2	0	110	252	
08:00 AM	4	3	11	0	18	2	82	2	0	86	4	7	3	0	14	19	56	2	0	77	195	
Total Volume	30	27	68	0	125	4	341	19	0	364	22	28	10	1	61	85	267	5	1	358	908	
% App. Total	24	21.6	54.4	0		1.1	93.7	5.2	0		36.1	45.9	16.4	1.6		23.7	74.6	1.4	0.3			
PHF	.417	.519	.567	.000	.512	.500	.888	.792	.000	.875	.611	.778	.417	.250	.635	.885	.750	.625	.250	.814	.857	
Cars	27	24	50	0	101	4	334	16	0	354	22	27	9	0	58	72	251	4	0	327	840	
% Cars	90.0	88.9	73.5	0	80.8	100	97.9	84.2	0	97.3	100	96.4	90.0	0	95.1	84.7	94.0	80.0	0	91.3	92.5	
Buses	3	3	17	0	23	0	2	3	0	5	0	0	1	0	1	13	1	1	1	0	15	44
% Buses	10.0	11.1	25.0	0	18.4	0	0.6	15.8	0	1.4	0	0	10.0	0	1.6	15.3	0.4	20.0	0	4.2	4.8	
Trucks	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	15	0	0	0	15	21
% Trucks	0	0	1.5	0	0.8	0	1.5	0	0	1.4	0	0	0	0	0	0	5.6	0	0	0	4.2	2.3
Bikes	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	3.6	0	0	1.6	0	0	0	0	0	0	0.1
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1.6	0	0	0	100	0.3	0.2	



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

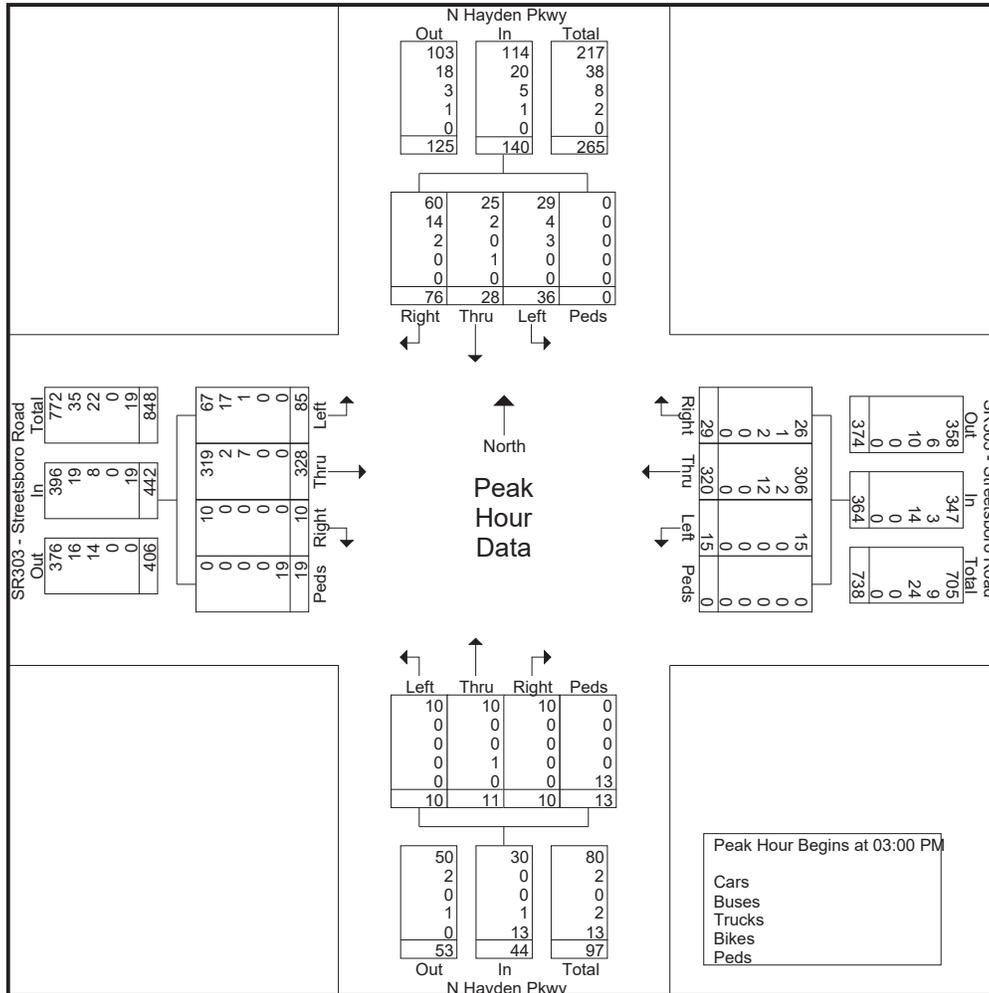
File Name : 5\_SR303-Streetsboro\_Road\_at\_N\_Hayden\_Pkwy\_12012022

Site Code : Site 5

Start Date : 12/1/2022

Page No : 4

Start Time	N Hayden Pkwy From North					SR303 - Streetsboro Road From East					N Hayden Pkwy From South					SR303 - Streetsboro Road From West					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																						
Peak Hour for Entire Intersection Begins at 03:00 PM																						
03:00 PM	8	6	13	0	27	2	95	7	0	104	3	1	5	6	15	21	83	3	8	115	261	
03:15 PM	7	4	13	0	24	4	83	11	0	98	2	4	1	0	7	19	73	1	1	94	223	
03:30 PM	8	4	14	0	26	4	80	9	0	93	2	3	2	0	7	33	86	3	1	123	249	
03:45 PM	13	14	36	0	63	5	62	2	0	69	3	3	2	7	15	12	86	3	9	110	257	
Total Volume	36	28	76	0	140	15	320	29	0	364	10	11	10	13	44	85	328	10	19	442	990	
% App. Total	25.7	20	54.3	0		4.1	87.9	8	0		22.7	25	22.7	29.5		19.2	74.2	2.3	4.3			
PHF	.692	.500	.528	.000	.556	.750	.842	.659	.000	.875	.833	.688	.500	.464	.733	.644	.953	.833	.528	.898	.948	
Cars	29	25	60	0	114	15	306	26	0	347	10	10	10	0	30	67	319	10	0	396	887	
% Cars	80.6	89.3	78.9	0	81.4	100	95.6	89.7	0	95.3	100	90.9	100	0	68.2	78.8	97.3	100	0	89.6	89.6	
Buses	4	2	14	0	20	0	2	1	0	3	0	0	0	0	0	17	2	0	0	0	19	42
% Buses	11.1	7.1	18.4	0	14.3	0	0.6	3.4	0	0.8	0	0	0	0	0	20.0	0.6	0	0	0	4.3	4.2
Trucks	3	0	2	0	5	0	12	2	0	14	0	0	0	0	0	1	7	0	0	8	27	
% Trucks	8.3	0	2.6	0	3.6	0	3.8	6.9	0	3.8	0	0	0	0	0	1.2	2.1	0	0	0	1.8	2.7
Bikes	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
% Bikes	0	3.6	0	0	0.7	0	0	0	0	0	0	9.1	0	0	2.3	0	0	0	0	0	0	0.2
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13	0	0	0	0	19	19	32
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	29.5		0	0	0	100	4.3	3.2	



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

File Name : 6\_N\_Hayden\_Pkwy\_at\_Evamere-S\_12012022

Site Code : Site 6

Start Date : 12/1/2022

Page No : 1

Partly Cloudy - Cold  
Schools in Session  
8HG

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					Evamere S Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	8	0	0	8	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	23
07:15 AM	0	19	2	0	21	0	0	0	0	0	0	23	0	0	23	1	0	0	2	3	47
07:30 AM	0	24	3	0	27	0	0	0	0	0	0	31	0	0	31	0	0	0	2	2	60
07:45 AM	0	27	1	0	28	0	0	0	0	0	0	32	0	0	32	0	0	0	0	0	60
<b>Total</b>	0	78	6	0	84	0	0	0	0	0	0	101	0	0	101	1	0	0	4	5	190
08:00 AM	0	19	1	0	20	0	0	0	0	0	1	31	0	0	32	0	0	0	0	0	52
08:15 AM	0	16	2	0	18	0	0	0	0	0	0	17	0	0	17	1	0	0	3	4	39
08:30 AM	0	25	8	0	33	0	0	0	0	0	1	44	0	0	45	0	0	0	3	3	81
08:45 AM	0	56	5	0	61	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	82
<b>Total</b>	0	116	16	0	132	0	0	0	0	0	2	113	0	0	115	1	0	0	6	7	254
09:00 AM	0	10	0	0	10	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	14
09:15 AM	0	11	0	0	11	0	0	0	1	1	0	10	0	0	10	0	0	0	0	0	22
<b>Total</b>	0	21	0	0	21	0	0	0	1	1	0	14	0	0	14	0	0	0	0	0	36
02:00 PM	0	13	2	0	15	0	0	0	0	0	1	12	0	0	13	0	0	0	1	1	29
02:15 PM	0	10	1	0	11	0	0	0	0	0	1	16	0	0	17	0	0	0	2	2	30
02:30 PM	0	19	0	0	19	0	0	0	0	0	0	17	0	0	17	0	0	0	1	1	37
02:45 PM	0	18	3	0	21	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	45
<b>Total</b>	0	60	6	0	66	0	0	0	0	0	2	69	0	0	71	0	0	0	4	4	141
03:00 PM	0	15	7	0	22	0	0	0	0	0	1	25	0	0	26	0	0	0	1	1	49
03:15 PM	0	33	7	0	40	0	0	0	0	0	1	32	0	0	33	0	0	0	1	1	74
03:30 PM	0	23	7	0	30	0	0	0	0	0	0	35	0	0	35	0	0	0	1	1	66
03:45 PM	0	56	2	0	58	0	0	0	0	0	0	23	0	0	23	0	0	0	1	1	82
<b>Total</b>	0	127	23	0	150	0	0	0	0	0	2	115	0	0	117	0	0	0	4	4	271
04:00 PM	0	39	0	0	39	0	0	0	0	0	0	18	0	0	18	0	0	0	2	2	59
04:15 PM	0	19	1	0	20	0	0	0	0	0	0	15	0	0	15	0	0	0	7	7	42
Grand Total	0	460	52	0	512	0	0	0	1	1	6	445	0	0	451	2	0	0	27	29	993
Apprch %	0	89.8	10.2	0		0	0	0	100		1.3	98.7	0	0		6.9	0	0	93.1		
Total %	0	46.3	5.2	0	51.6	0	0	0	0.1	0.1	0.6	44.8	0	0	45.4	0.2	0	0	2.7	2.9	
Cars	0	406	48	0	454	0	0	0	0	0	4	384	0	0	388	1	0	0	0	1	843
% Cars	0	88.3	92.3	0	88.7	0	0	0	0	0	66.7	86.3	0	0	86	50	0	0	0	3.4	84.9
Buses	0	43	3	0	46	0	0	0	0	0	1	48	0	0	49	0	0	0	0	0	95
% Buses	0	9.3	5.8	0	9	0	0	0	0	0	16.7	10.8	0	0	10.9	0	0	0	0	0	9.6
Trucks	0	10	1	0	11	0	0	0	0	0	1	12	0	0	13	0	0	0	0	0	24
% Trucks	0	2.2	1.9	0	2.1	0	0	0	0	0	16.7	2.7	0	0	2.9	0	0	0	0	0	2.4
Bikes	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
% Bikes	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.2	50	0	0	0	3.4	0.3
Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	27	27	28
% Peds	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	100	93.1	2.8

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

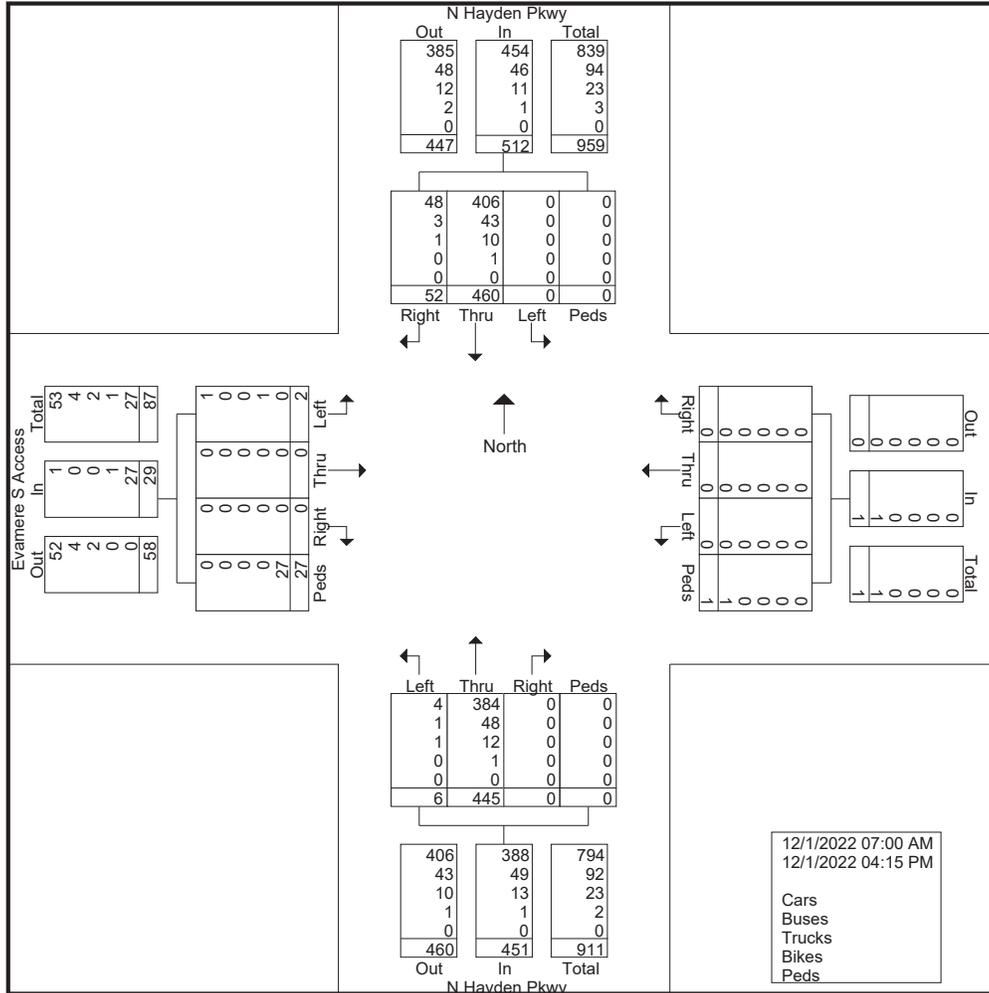
"2022 ... Data Collection simplified"

File Name : 6\_N\_Hayden\_Pkwy\_at\_Evamere-S\_12012022

Site Code : Site 6

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

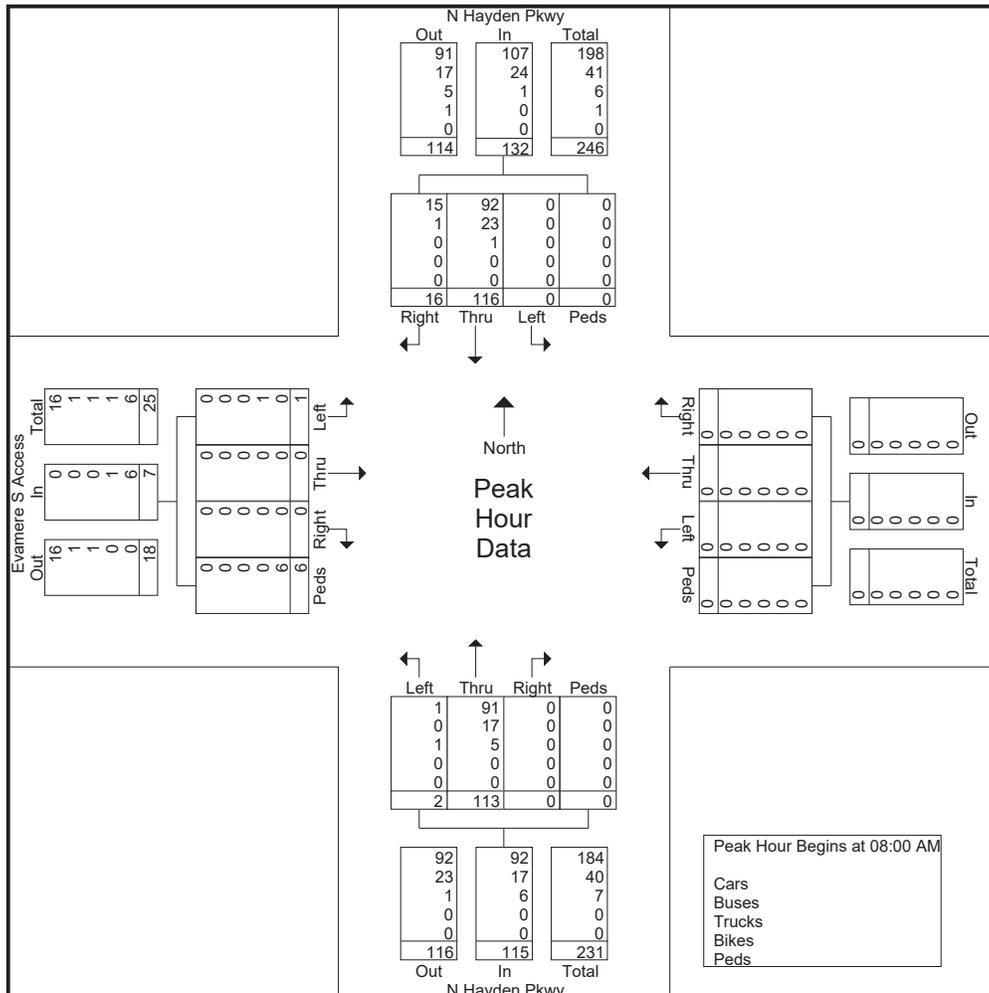
File Name : 6\_N\_Hayden\_Pkwy\_at\_Evamere-S\_12012022

Site Code : Site 6

Start Date : 12/1/2022

Page No : 3

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					Evamere S Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	19	1	0	20	0	0	0	0	0	1	31	0	0	32	0	0	0	0	0	52
08:15 AM	0	16	2	0	18	0	0	0	0	0	0	17	0	0	17	1	0	0	3	4	39
08:30 AM	0	25	8	0	33	0	0	0	0	0	1	44	0	0	45	0	0	0	3	3	81
08:45 AM	0	56	5	0	61	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	82
Total Volume	0	116	16	0	132	0	0	0	0	0	2	113	0	0	115	1	0	0	6	7	254
% App. Total	0	87.9	12.1	0		0	0	0	0	0	1.7	98.3	0	0		14.3	0	0	85.7		
PHF	.000	.518	.500	.000	.541	.000	.000	.000	.000	.000	.500	.642	.000	.000	.639	.250	.000	.000	.500	.438	.774
Cars	0	92	15	0	107	0	0	0	0	0	1	91	0	0	92	0	0	0	0	0	199
% Cars	0	79.3	93.8	0	81.1	0	0	0	0	0	50.0	80.5	0	0	80.0	0	0	0	0	0	78.3
Buses	0	23	1	0	24	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	41
% Buses	0	19.8	6.3	0	18.2	0	0	0	0	0	0	15.0	0	0	14.8	0	0	0	0	0	16.1
Trucks	0	1	0	0	1	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	7
% Trucks	0	0.9	0	0	0.8	0	0	0	0	0	50.0	4.4	0	0	5.2	0	0	0	0	0	2.8
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	14.3	0.4
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	6
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	85.7	2.4



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

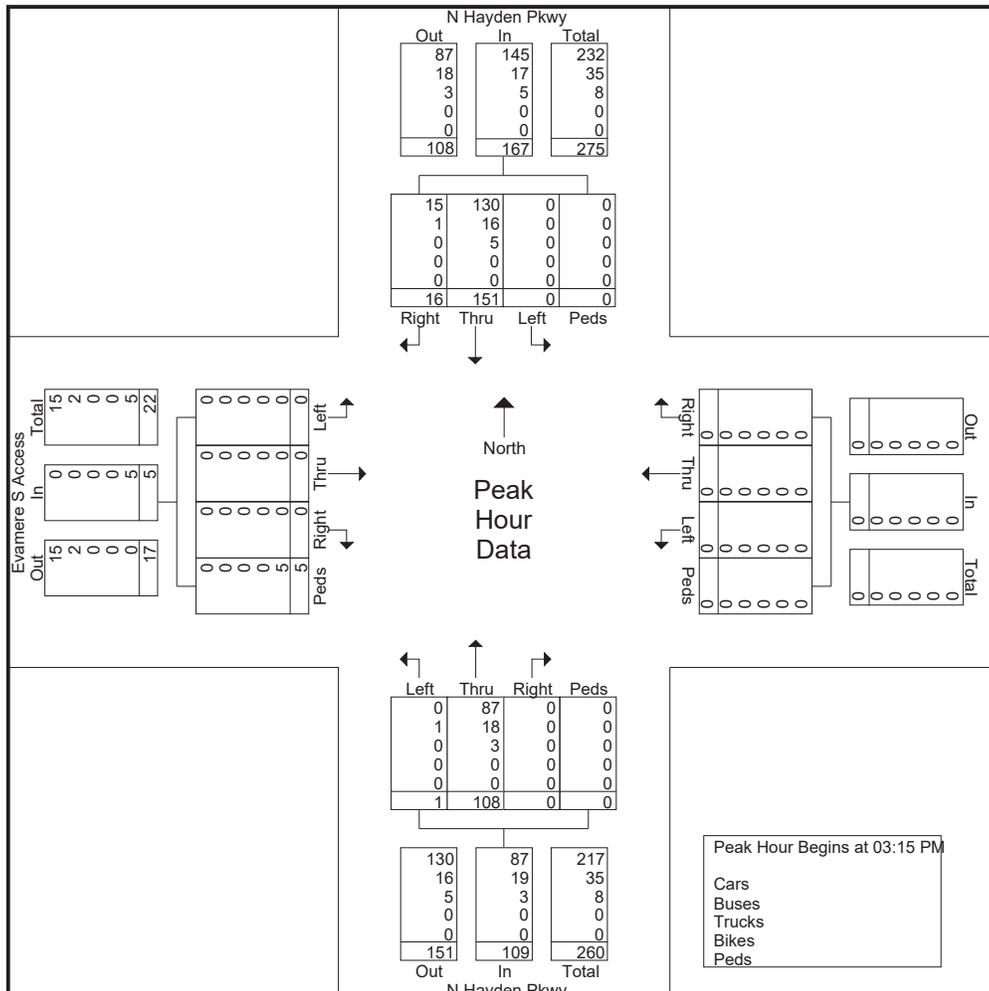
File Name : 6\_N\_Hayden\_Pkwy\_at\_Evamere-S\_12012022

Site Code : Site 6

Start Date : 12/1/2022

Page No : 4

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					Evamere S Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 03:15 PM</b>																					
03:15 PM	0	33	7	0	40	0	0	0	0	0	1	32	0	0	33	0	0	0	1	1	74
03:30 PM	0	23	7	0	30	0	0	0	0	0	0	35	0	0	35	0	0	0	1	1	66
03:45 PM	0	56	2	0	58	0	0	0	0	0	0	23	0	0	23	0	0	0	1	1	82
04:00 PM	0	39	0	0	39	0	0	0	0	0	0	18	0	0	18	0	0	0	2	2	59
Total Volume	0	151	16	0	167	0	0	0	0	0	1	108	0	0	109	0	0	0	5	5	281
% App. Total	0	90.4	9.6	0		0	0	0	0		0.9	99.1	0	0		0	0	0	100		
PHF	.000	.674	.571	.000	.720	.000	.000	.000	.000	.000	.250	.771	.000	.000	.779	.000	.000	.000	.625	.625	.857
Cars	0	130	15	0	145	0	0	0	0	0	0	87	0	0	87	0	0	0	0	0	232
% Cars	0	86.1	93.8	0	86.8	0	0	0	0	0	0	80.6	0	0	79.8	0	0	0	0	0	82.6
Buses	0	16	1	0	17	0	0	0	0	0	1	18	0	0	19	0	0	0	0	0	36
% Buses	0	10.6	6.3	0	10.2	0	0	0	0	0	100	16.7	0	0	17.4	0	0	0	0	0	12.8
Trucks	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
% Trucks	0	3.3	0	0	3.0	0	0	0	0	0	0	2.8	0	0	2.8	0	0	0	0	0	2.8
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	1.8



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
9S4

File Name : 7\_N\_Hayden\_Pkwy\_at\_EastWoods\_Elementary\_12012022

Site Code : Site 7

Start Date : 12/1/2022

Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					East Woods Elementary Drive From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	5	7	1	13	0	0	0	0	0	10	2	1	1	14	3	0	2	1	6	33
07:15 AM	1	16	15	4	36	0	0	0	0	0	9	19	0	3	31	10	0	9	1	20	87
07:30 AM	2	11	14	3	30	0	0	0	0	0	13	21	2	1	37	32	0	11	3	46	113
07:45 AM	1	19	5	1	26	0	0	0	0	0	14	15	5	0	34	9	0	7	0	16	76
<b>Total</b>	<b>4</b>	<b>51</b>	<b>41</b>	<b>9</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>57</b>	<b>8</b>	<b>5</b>	<b>116</b>	<b>54</b>	<b>0</b>	<b>29</b>	<b>5</b>	<b>88</b>	<b>309</b>
08:00 AM	2	15	11	0	28	0	0	0	0	0	18	11	4	0	33	1	0	1	0	2	63
08:15 AM	1	13	5	0	19	0	0	0	0	0	6	11	3	0	20	2	0	2	0	4	43
08:30 AM	1	30	7	8	46	0	0	0	0	0	4	39	5	9	57	4	1	3	6	14	117
08:45 AM	1	31	1	2	35	0	0	0	0	0	3	15	3	2	23	11	0	22	1	34	92
<b>Total</b>	<b>5</b>	<b>89</b>	<b>24</b>	<b>10</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>76</b>	<b>15</b>	<b>11</b>	<b>133</b>	<b>18</b>	<b>1</b>	<b>28</b>	<b>7</b>	<b>54</b>	<b>315</b>
09:00 AM	0	10	1	2	13	0	0	0	0	0	2	4	0	2	8	2	0	1	0	3	24
09:15 AM	1	7	1	0	9	0	0	0	0	0	3	7	2	0	12	3	0	1	0	4	25
<b>Total</b>	<b>1</b>	<b>17</b>	<b>2</b>	<b>2</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>11</b>	<b>2</b>	<b>2</b>	<b>20</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>49</b>
02:00 PM	1	8	1	0	10	0	0	0	0	0	2	10	2	0	14	1	0	4	0	5	29
02:15 PM	0	8	6	0	14	0	0	0	0	0	4	12	0	0	16	2	0	5	0	7	37
02:30 PM	0	12	2	0	14	0	0	0	0	0	5	10	1	0	16	3	0	4	0	7	37
02:45 PM	0	15	3	3	21	0	0	0	0	0	8	15	2	2	27	23	0	8	5	36	84
<b>Total</b>	<b>1</b>	<b>43</b>	<b>12</b>	<b>3</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>47</b>	<b>5</b>	<b>2</b>	<b>73</b>	<b>29</b>	<b>0</b>	<b>21</b>	<b>5</b>	<b>55</b>	<b>187</b>
03:00 PM	5	22	9	3	39	0	0	0	0	0	6	20	5	3	34	6	0	3	10	19	92
03:15 PM	4	32	0	3	39	0	0	0	0	0	3	23	6	3	35	2	0	7	2	11	85
03:30 PM	1	28	0	23	52	0	0	0	0	0	1	32	4	25	62	5	0	3	27	35	149
03:45 PM	3	24	0	5	32	0	0	0	0	0	4	22	3	4	33	27	0	29	12	68	133
<b>Total</b>	<b>13</b>	<b>106</b>	<b>9</b>	<b>34</b>	<b>162</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>97</b>	<b>18</b>	<b>35</b>	<b>164</b>	<b>40</b>	<b>0</b>	<b>42</b>	<b>51</b>	<b>133</b>	<b>459</b>
04:00 PM	0	21	3	5	29	0	0	0	0	0	5	13	4	5	27	10	0	15	3	28	84
04:15 PM	3	13	4	0	20	0	0	0	0	0	4	16	2	0	22	2	0	4	10	16	58
Grand Total	27	340	95	63	525	0	0	0	0	0	124	317	54	60	555	158	1	141	81	381	1461
Apprch %	5.1	64.8	18.1	12		0	0	0	0	0	22.3	57.1	9.7	10.8		41.5	0.3	37	21.3		
Total %	1.8	23.3	6.5	4.3	35.9	0	0	0	0	0	8.5	21.7	3.7	4.1	38	10.8	0.1	9.7	5.5	26.1	
Cars	22	327	81	1	431	0	0	0	0	0	117	265	44	0	426	108	1	98	0	207	1064
% Cars	81.5	96.2	85.3	1.6	82.1	0	0	0	0	0	94.4	83.6	81.5	0	76.8	68.4	100	69.5	0	54.3	72.8
Buses	0	2	9	0	11	0	0	0	0	0	6	42	0	0	48	48	0	43	0	91	150
% Buses	0	0.6	9.5	0	2.1	0	0	0	0	0	4.8	13.2	0	0	8.6	30.4	0	30.5	0	23.9	10.3
Trucks	5	10	0	0	15	0	0	0	0	0	1	7	10	0	18	1	0	0	0	1	34
% Trucks	18.5	2.9	0	0	2.9	0	0	0	0	0	0.8	2.2	18.5	0	3.2	0.6	0	0	0	0.3	2.3
Bikes	0	1	5	0	6	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	10
% Bikes	0	0.3	5.3	0	1.1	0	0	0	0	0	0	0.9	0	0	0.5	0.6	0	0	0	0.3	0.7
Peds	0	0	0	62	62	0	0	0	0	0	0	0	0	60	60	0	0	0	81	81	203
% Peds	0	0	0	98.4	11.8	0	0	0	0	0	0	0	0	100	10.8	0	0	0	100	21.3	13.9



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

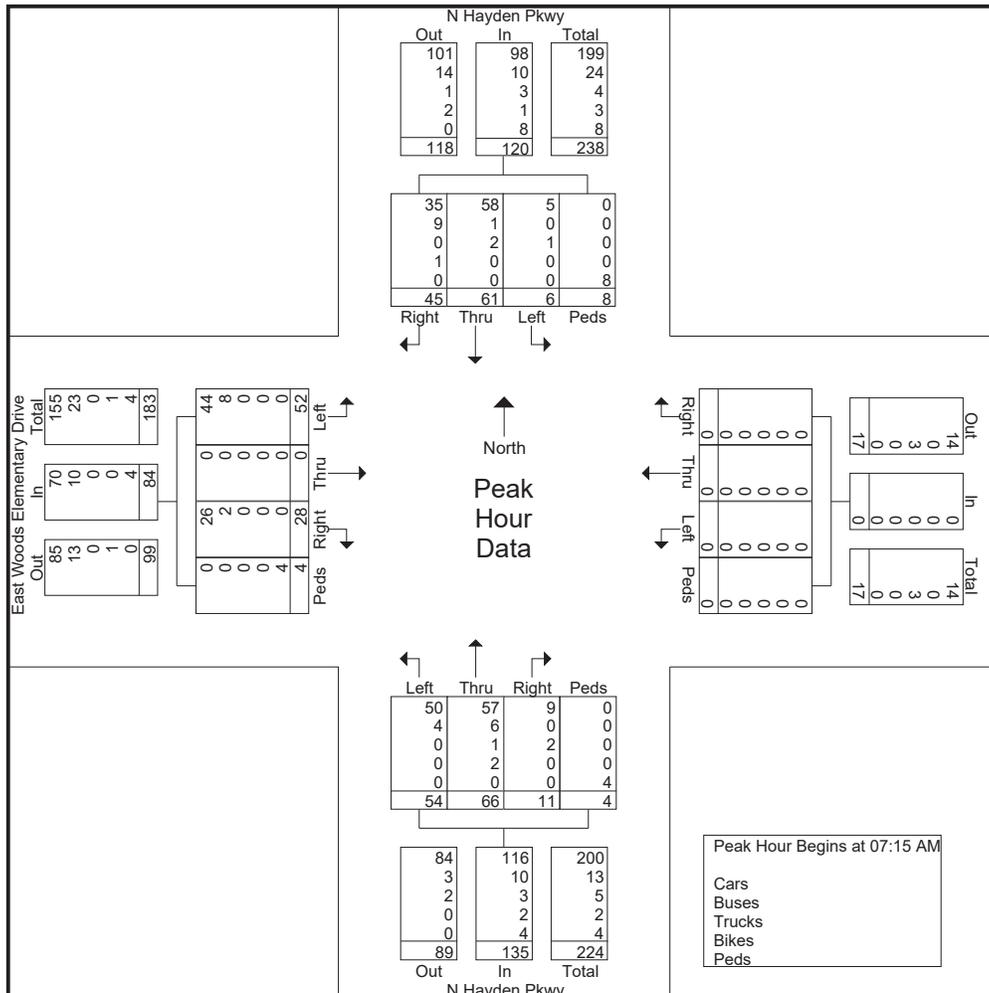
File Name : 7\_N\_Hayden\_Pkwy\_at\_EastWoods\_Elementary\_12012022

Site Code : Site 7

Start Date : 12/1/2022

Page No : 3

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					East Woods Elementary Drive From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	16	15	4	36	0	0	0	0	0	9	19	0	3	31	10	0	9	1	20	87
07:30 AM	2	11	14	3	30	0	0	0	0	0	13	21	2	1	37	32	0	11	3	46	113
07:45 AM	1	19	5	1	26	0	0	0	0	0	14	15	5	0	34	9	0	7	0	16	76
08:00 AM	2	15	11	0	28	0	0	0	0	0	18	11	4	0	33	1	0	1	0	2	63
Total Volume	6	61	45	8	120	0	0	0	0	0	54	66	11	4	135	52	0	28	4	84	339
% App. Total	5	50.8	37.5	6.7		0	0	0	0	0	40	48.9	8.1	3		61.9	0	33.3	4.8		
PHF	.750	.803	.750	.500	.833	.000	.000	.000	.000	.000	.750	.786	.550	.333	.912	.406	.000	.636	.333	.457	.750
Cars	5	58	35	0	98	0	0	0	0	0	50	57	9	0	116	44	0	26	0	70	284
% Cars	83.3	95.1	77.8	0	81.7	0	0	0	0	0	92.6	86.4	81.8	0	85.9	84.6	0	92.9	0	83.3	83.8
Buses	0	1	9	0	10	0	0	0	0	0	4	6	0	0	10	8	0	2	0	10	30
% Buses	0	1.6	20.0	0	8.3	0	0	0	0	0	7.4	9.1	0	0	7.4	15.4	0	7.1	0	11.9	8.8
Trucks	1	2	0	0	3	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	6
% Trucks	16.7	3.3	0	0	2.5	0	0	0	0	0	0	1.5	18.2	0	2.2	0	0	0	0	0	1.8
Bikes	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
% Bikes	0	0	2.2	0	0.8	0	0	0	0	0	0	3.0	0	0	1.5	0	0	0	0	0	0.9
Peds	0	0	0	8	8	0	0	0	0	0	0	0	0	4	4	0	0	0	4	4	16
% Peds	0	0	0	100	6.7	0	0	0	0	0	0	0	0	100	3.0	0	0	0	100	4.8	4.7



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

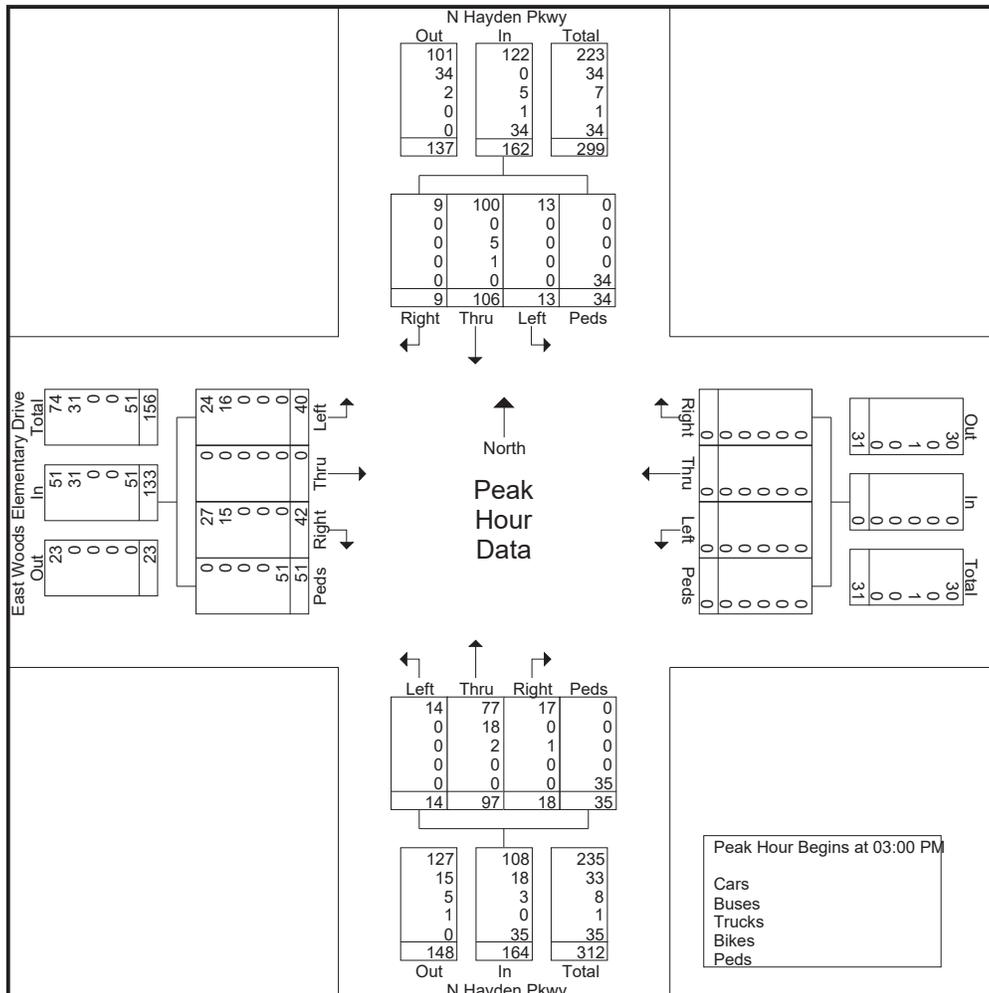
File Name : 7\_N\_Hayden\_Pkwy\_at\_EastWoods\_Elementary\_12012022

Site Code : Site 7

Start Date : 12/1/2022

Page No : 4

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					East Woods Elementary Drive From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	5	22	9	3	39	0	0	0	0	0	6	20	5	3	34	6	0	3	10	19	92
03:15 PM	4	32	0	3	39	0	0	0	0	0	3	23	6	3	35	2	0	7	2	11	85
03:30 PM	1	28	0	23	52	0	0	0	0	0	1	32	4	25	62	5	0	3	27	35	149
03:45 PM	3	24	0	5	32	0	0	0	0	0	4	22	3	4	33	27	0	29	12	68	133
Total Volume	13	106	9	34	162	0	0	0	0	0	14	97	18	35	164	40	0	42	51	133	459
% App. Total	8	65.4	5.6	21							8.5	59.1	11	21.3		30.1	0	31.6	38.3		
PHF	.650	.828	.250	.370	.779	.000	.000	.000	.000	.000	.583	.758	.750	.350	.661	.370	.000	.362	.472	.489	.770
Cars	13	100	9	0	122	0	0	0	0	0	14	77	17	0	108	24	0	27	0	51	281
% Cars	100	94.3	100	0	75.3	0	0	0	0	0	100	79.4	94.4	0	65.9	60.0	0	64.3	0	38.3	61.2
Buses	0	0	0	0	0	0	0	0	0	0	0	18	0	0	18	16	0	15	0	31	49
% Buses	0	0	0	0	0	0	0	0	0	0	0	18.6	0	0	11.0	40.0	0	35.7	0	23.3	10.7
Trucks	0	5	0	0	5	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	8
% Trucks	0	4.7	0	0	3.1	0	0	0	0	0	0	2.1	5.6	0	1.8	0	0	0	0	0	1.7
Bikes	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes	0	0.9	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Peds	0	0	0	34	34	0	0	0	0	0	0	0	0	35	35	0	0	0	51	51	120
% Peds	0	0	0	100	21.0	0	0	0	0	0	0	0	0	100	21.3	0	0	0	100	38.3	26.1



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
9W5

File Name : 8\_N\_Hayden\_Pkwy\_at\_McDowell-S\_12012022  
Site Code : Site 8  
Start Date : 12/1/2022  
Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					McDowell S Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	8	1	0	9	0	0	0	0	0	0	8	0	0	8	0	0	0	1	1	18
07:15 AM	0	18	1	0	19	0	0	0	0	0	2	18	0	0	20	0	0	0	0	0	39
07:30 AM	0	16	3	0	19	0	0	0	0	0	0	40	0	0	40	0	0	0	2	2	61
07:45 AM	0	21	6	0	27	0	0	0	0	0	2	21	0	0	23	1	0	0	0	1	51
<b>Total</b>	0	63	11	0	74	0	0	0	0	0	4	87	0	0	91	1	0	0	3	4	169
08:00 AM	0	15	10	0	25	0	0	0	0	0	2	19	0	0	21	6	0	0	0	6	52
08:15 AM	0	13	15	0	28	0	0	0	0	0	9	11	0	0	20	1	0	0	0	1	49
08:30 AM	0	15	21	0	36	0	0	0	0	0	16	25	0	0	41	14	0	4	0	18	95
08:45 AM	0	9	4	0	13	0	0	0	0	0	4	22	0	0	26	24	0	21	0	45	84
<b>Total</b>	0	52	50	0	102	0	0	0	0	0	31	77	0	0	108	45	0	25	0	70	280
09:00 AM	0	6	1	0	7	0	0	0	0	0	2	4	0	0	6	1	0	1	0	2	15
09:15 AM	0	5	0	0	5	0	0	0	1	1	0	10	0	0	10	0	0	1	0	1	17
<b>Total</b>	0	11	1	0	12	0	0	0	1	1	2	14	0	0	16	1	0	2	0	3	32
02:00 PM	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	3	0	2	0	5	17
02:15 PM	0	13	0	0	13	0	0	0	0	0	0	11	0	0	11	2	0	2	2	6	30
02:30 PM	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	2	0	2	0	4	24
02:45 PM	0	15	0	0	15	0	0	0	0	0	0	27	0	0	27	2	0	0	1	3	45
<b>Total</b>	0	45	0	0	45	0	0	0	0	0	0	53	0	0	53	9	0	6	3	18	116
03:00 PM	0	19	0	0	19	0	0	0	0	0	0	30	0	0	30	0	0	0	3	3	52
03:15 PM	0	15	2	0	17	0	0	0	0	0	2	23	0	0	25	2	0	1	1	4	46
03:30 PM	0	12	8	0	20	0	0	0	0	0	17	19	0	0	36	18	0	19	1	38	94
03:45 PM	0	11	1	0	12	0	0	0	0	0	3	44	0	0	47	23	0	20	2	45	104
<b>Total</b>	0	57	11	0	68	0	0	0	0	0	22	116	0	0	138	43	0	40	7	90	296
04:00 PM	0	9	0	0	9	0	0	0	0	0	0	18	0	0	18	9	0	10	0	19	46
04:15 PM	0	16	0	0	16	0	0	0	0	0	0	16	0	0	16	1	0	2	12	15	47
Grand Total	0	253	73	0	326	0	0	0	1	1	59	381	0	0	440	109	0	85	25	219	986
Apprch %	0	77.6	22.4	0		0	0	0	100		13.4	86.6	0	0		49.8	0	38.8	11.4		
Total %	0	25.7	7.4	0	33.1	0	0	0	0.1	0.1	6	38.6	0	0	44.6	11.1	0	8.6	2.5	22.2	
Cars	0	233	47	0	280	0	0	0	0	0	22	317	0	0	339	103	0	85	0	188	807
% Cars	0	92.1	64.4	0	85.9	0	0	0	0	0	37.3	83.2	0	0	77	94.5	0	100	0	85.8	81.8
Buses	0	11	26	0	37	0	0	0	0	0	37	55	0	0	92	6	0	0	0	6	135
% Buses	0	4.3	35.6	0	11.3	0	0	0	0	0	62.7	14.4	0	0	20.9	5.5	0	0	0	2.7	13.7
Trucks	0	8	0	0	8	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	17
% Trucks	0	3.2	0	0	2.5	0	0	0	0	0	0	2.4	0	0	2	0	0	0	0	0	1.7
Bikes	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes	0	0.4	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	25	25	26
% Peds	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	100	11.4	2.6

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

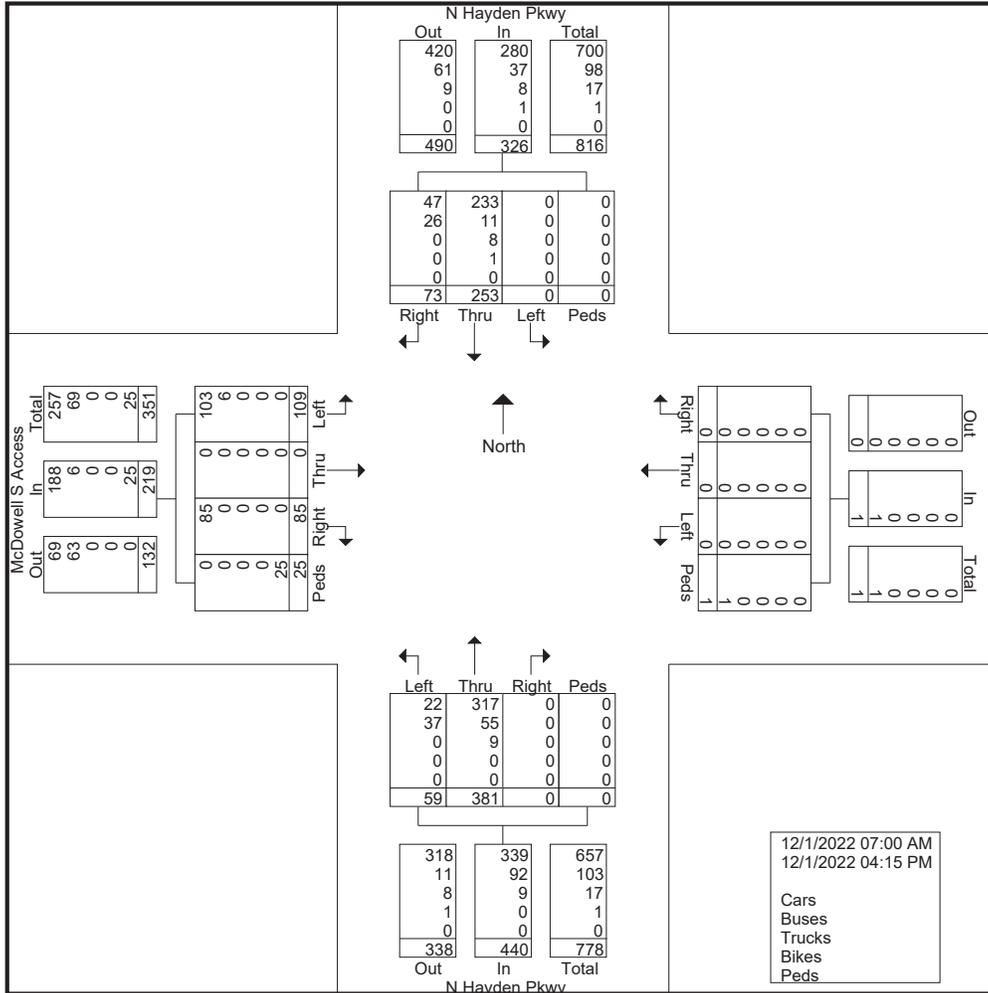
"2022 ... Data Collection simplified"

File Name : 8\_N\_Hayden\_Pkwy\_at\_McDowell-S\_12012022

Site Code : Site 8

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

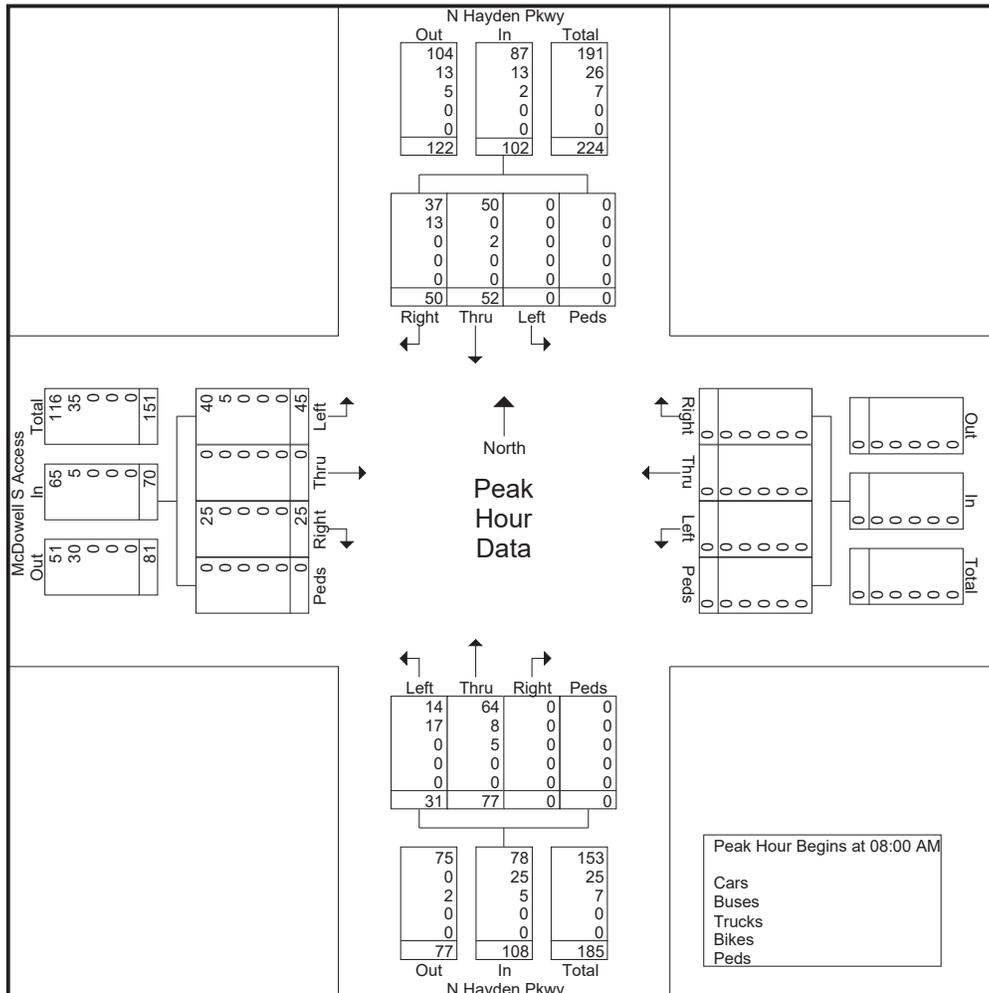
File Name : 8\_N\_Hayden\_Pkwy\_at\_McDowell-S\_12012022

Site Code : Site 8

Start Date : 12/1/2022

Page No : 3

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					McDowell S Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	15	10	0	25	0	0	0	0	0	2	19	0	0	21	6	0	0	0	6	52
08:15 AM	0	13	15	0	28	0	0	0	0	0	9	11	0	0	20	1	0	0	0	1	49
08:30 AM	0	15	21	0	36	0	0	0	0	0	16	25	0	0	41	14	0	4	0	18	95
08:45 AM	0	9	4	0	13	0	0	0	0	0	4	22	0	0	26	24	0	21	0	45	84
Total Volume	0	52	50	0	102	0	0	0	0	0	31	77	0	0	108	45	0	25	0	70	280
% App. Total	0	51	49	0		0	0	0	0		28.7	71.3	0	0		64.3	0	35.7	0		
PHF	.000	.867	.595	.000	.708	.000	.000	.000	.000	.000	.484	.770	.000	.000	.659	.469	.000	.298	.000	.389	.737
Cars	0	50	37	0	87	0	0	0	0	0	14	64	0	0	78	40	0	25	0	65	230
% Cars	0	96.2	74.0	0	85.3	0	0	0	0	0	45.2	83.1	0	0	72.2	88.9	0	100	0	92.9	82.1
Buses	0	0	13	0	13	0	0	0	0	0	17	8	0	0	25	5	0	0	0	5	43
% Buses	0	0	26.0	0	12.7	0	0	0	0	0	54.8	10.4	0	0	23.1	11.1	0	0	0	7.1	15.4
Trucks	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
% Trucks	0	3.8	0	0	2.0	0	0	0	0	0	0	6.5	0	0	4.6	0	0	0	0	0	2.5
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

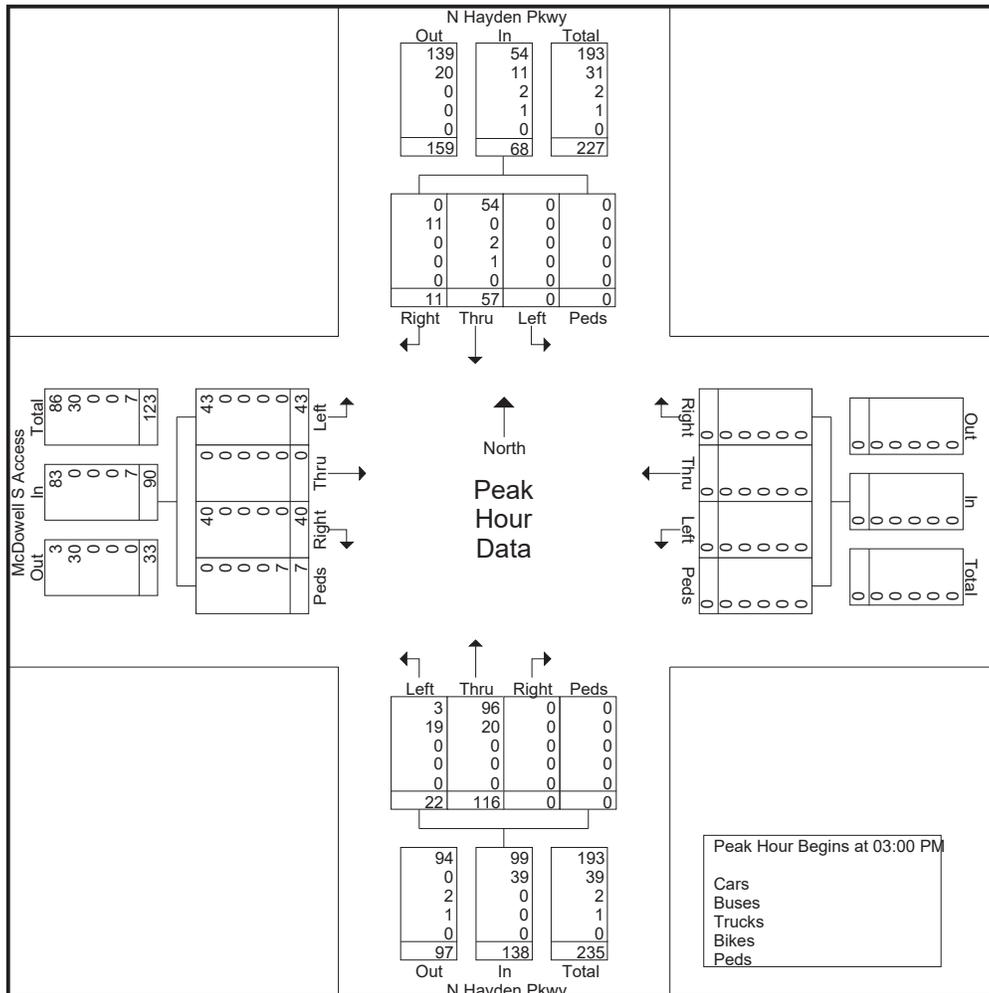
File Name : 8\_N\_Hayden\_Pkwy\_at\_McDowell-S\_12012022

Site Code : Site 8

Start Date : 12/1/2022

Page No : 4

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					McDowell S Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	0	19	0	0	19	0	0	0	0	0	0	30	0	0	30	0	0	0	3	3	52
03:15 PM	0	15	2	0	17	0	0	0	0	0	2	23	0	0	25	2	0	1	1	4	46
03:30 PM	0	12	8	0	20	0	0	0	0	0	17	19	0	0	36	18	0	19	1	38	94
03:45 PM	0	11	1	0	12	0	0	0	0	0	3	44	0	0	47	23	0	20	2	45	104
Total Volume	0	57	11	0	68	0	0	0	0	0	22	116	0	0	138	43	0	40	7	90	296
% App. Total	0	83.8	16.2	0		0	0	0	0	0	15.9	84.1	0	0		47.8	0	44.4	7.8		
PHF	.000	.750	.344	.000	.850	.000	.000	.000	.000	.000	.324	.659	.000	.000	.734	.467	.000	.500	.583	.500	.712
Cars	0	54	0	0	54	0	0	0	0	0	3	96	0	0	99	43	0	40	0	83	236
% Cars	0	94.7	0	0	79.4	0	0	0	0	0	13.6	82.8	0	0	71.7	100	0	100	0	92.2	79.7
Buses	0	0	11	0	11	0	0	0	0	0	19	20	0	0	39	0	0	0	0	0	50
% Buses	0	0	100	0	16.2	0	0	0	0	0	86.4	17.2	0	0	28.3	0	0	0	0	0	16.9
Trucks	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	3.5	0	0	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7
Bikes	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes	0	1.8	0	0	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	7.8	2.4



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

File Name : 9\_N\_Hayden\_Pkwy\_at\_McDowell-N\_12012022

Site Code : Site 9

Start Date : 12/1/2022

Page No : 1

Partly Cloudy - Cold  
Schools in Session  
8ES

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					McDowell N Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	9	1	0	10	0	0	0	0	0	0	9	0	0	9	0	0	0	1	1	20
07:15 AM	0	18	0	0	18	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	34
07:30 AM	0	19	1	0	20	0	0	0	0	0	0	39	0	0	39	0	0	0	2	2	61
07:45 AM	0	29	0	0	29	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	50
<b>Total</b>	0	75	2	0	77	0	0	0	0	0	0	85	0	0	85	0	0	0	3	3	165
08:00 AM	0	22	1	0	23	0	0	0	0	0	0	28	0	0	28	0	0	0	0	0	51
08:15 AM	0	27	2	0	29	0	0	0	0	0	1	12	0	0	13	0	0	0	0	0	42
08:30 AM	0	38	22	0	60	0	0	0	0	0	12	23	0	0	35	0	0	0	0	0	95
08:45 AM	0	15	22	0	37	0	0	0	0	0	6	43	0	0	49	0	0	0	0	0	86
<b>Total</b>	0	102	47	0	149	0	0	0	0	0	19	106	0	0	125	0	0	0	0	0	274
09:00 AM	0	7	2	0	9	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	16
09:15 AM	0	5	4	0	9	0	0	0	1	1	1	9	0	0	10	0	0	0	0	0	20
<b>Total</b>	0	12	6	0	18	0	0	1	1	2	1	15	0	0	16	0	0	0	0	0	36
02:00 PM	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
02:15 PM	0	14	1	0	15	0	0	0	0	0	1	13	0	0	14	0	0	0	2	2	31
02:30 PM	0	8	1	0	9	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	21
02:45 PM	0	16	1	0	17	0	0	0	0	0	3	23	0	0	26	0	0	0	1	1	44
<b>Total</b>	0	44	3	0	47	0	0	0	0	0	4	54	0	0	58	0	0	0	3	3	108
03:00 PM	0	19	3	0	22	0	0	0	0	0	1	18	0	0	19	0	0	1	3	4	45
03:15 PM	0	15	14	0	29	0	0	0	0	0	8	21	0	0	29	0	0	0	1	1	59
03:30 PM	0	20	22	0	42	0	0	0	0	0	2	28	0	0	30	0	0	0	0	0	72
03:45 PM	0	13	4	0	17	0	0	0	0	0	2	67	0	0	69	0	0	0	2	2	88
<b>Total</b>	0	67	43	0	110	0	0	0	0	0	13	134	0	0	147	0	0	1	6	7	264
04:00 PM	0	9	1	0	10	0	0	0	0	0	1	31	0	0	32	0	0	0	0	0	42
04:15 PM	0	14	0	0	14	0	0	0	0	0	0	16	0	0	16	0	0	0	5	5	35
Grand Total	0	323	102	0	425	0	0	1	1	2	38	441	0	0	479	0	0	1	17	18	924
Apprch %	0	76	24	0		0	0	50	50		7.9	92.1	0	0		0	0	5.6	94.4		
Total %	0	35	11	0	46	0	0	0.1	0.1	0.2	4.1	47.7	0	0	51.8	0	0	0.1	1.8	1.9	
Cars	0	277	100	0	377	0	0	1	0	1	38	381	0	0	419	0	0	0	0	0	797
% Cars	0	85.8	98	0	88.7	0	0	100	0	50	100	86.4	0	0	87.5	0	0	0	0	0	86.3
Buses	0	37	2	0	39	0	0	0	0	0	0	51	0	0	51	0	0	0	0	0	90
% Buses	0	11.5	2	0	9.2	0	0	0	0	0	0	11.6	0	0	10.6	0	0	0	0	0	9.7
Trucks	0	9	0	0	9	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	18
% Trucks	0	2.8	0	0	2.1	0	0	0	0	0	0	2	0	0	1.9	0	0	0	0	0	1.9
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	5.6	0.1
Peds	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	17	17	18
% Peds	0	0	0	0	0	0	0	0	100	50	0	0	0	0	0	0	0	0	100	94.4	1.9

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

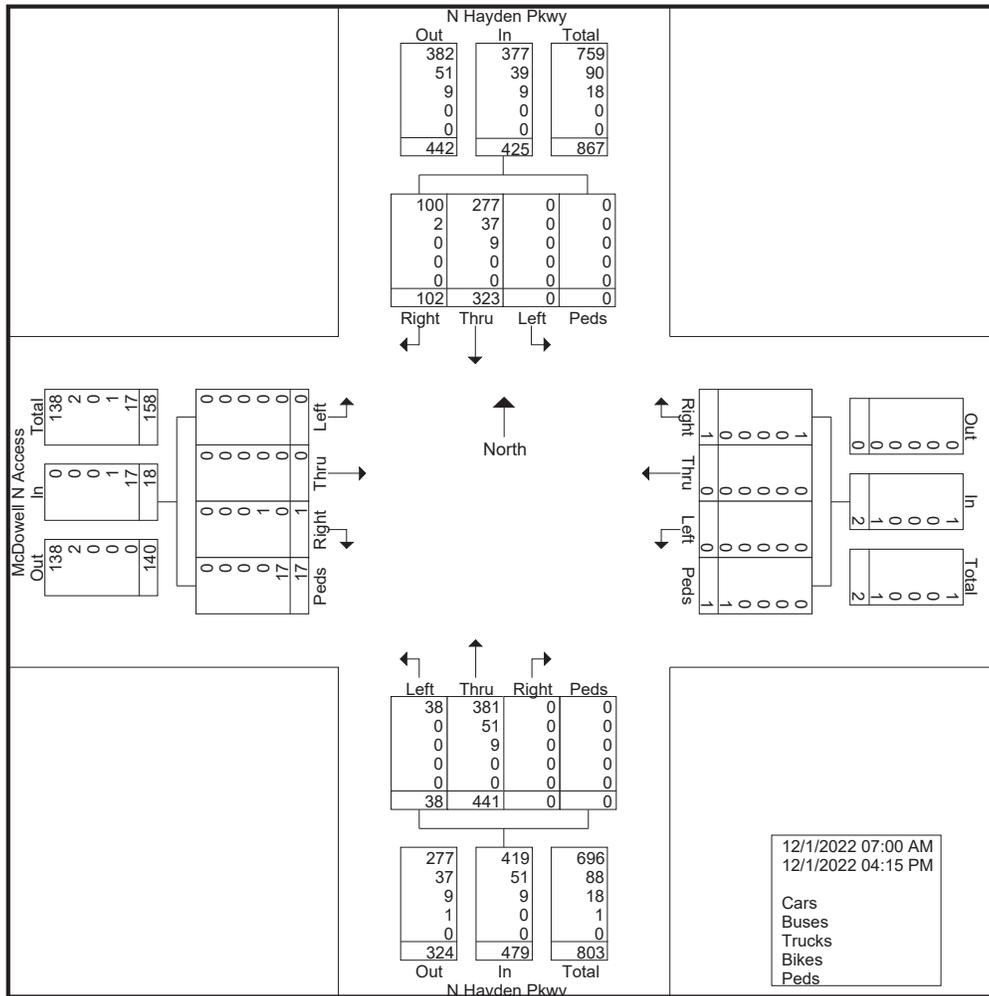
"2022 ... Data Collection simplified"

File Name : 9\_N\_Hayden\_Pkwy\_at\_McDowell-N\_12012022

Site Code : Site 9

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

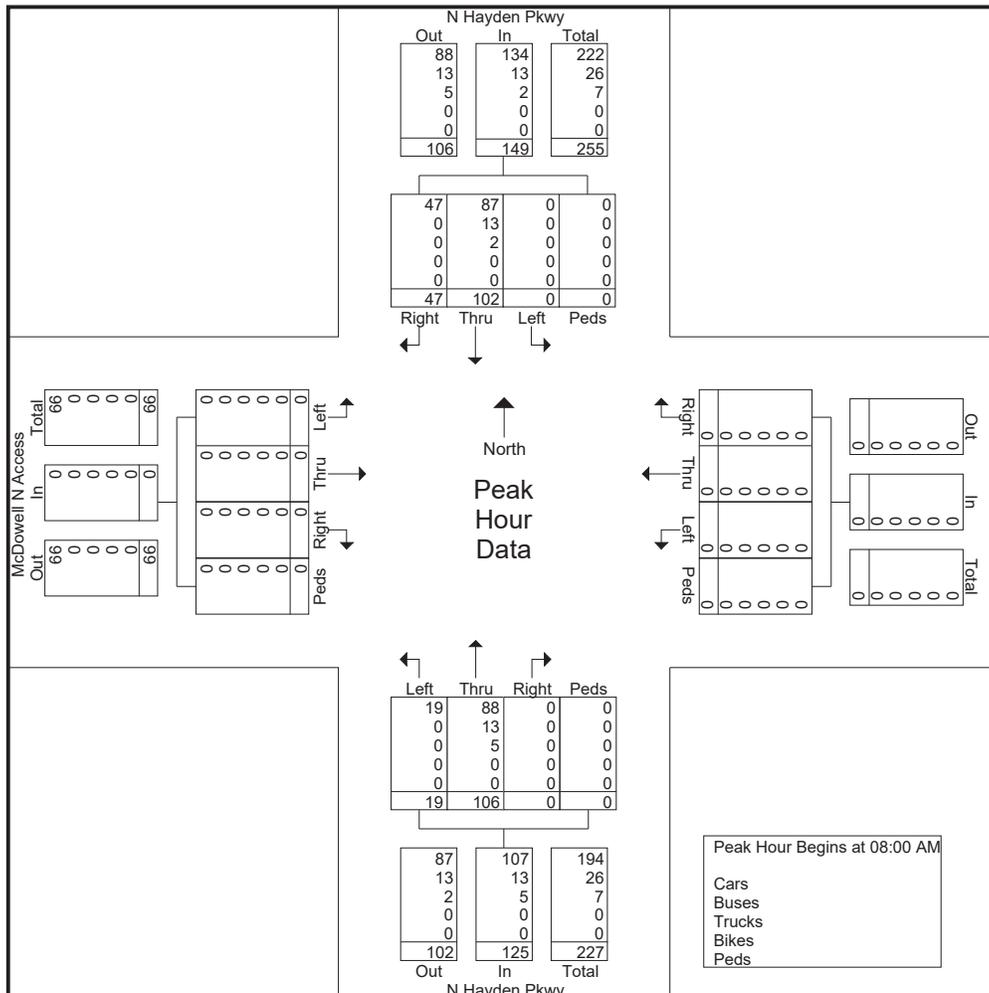
File Name : 9\_N\_Hayden\_Pkwy\_at\_McDowell-N\_12012022

Site Code : Site 9

Start Date : 12/1/2022

Page No : 3

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					McDowell N Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	22	1	0	23	0	0	0	0	0	0	28	0	0	28	0	0	0	0	0	51
08:15 AM	0	27	2	0	29	0	0	0	0	0	1	12	0	0	13	0	0	0	0	0	42
08:30 AM	0	<b>38</b>	<b>22</b>	0	<b>60</b>	0	0	0	0	0	<b>12</b>	<b>23</b>	0	0	<b>35</b>	0	0	0	0	0	<b>95</b>
08:45 AM	0	15	22	0	37	0	0	0	0	0	6	<b>43</b>	0	0	<b>49</b>	0	0	0	0	0	86
Total Volume	0	102	47	0	149	0	0	0	0	0	19	106	0	0	125	0	0	0	0	0	274
% App. Total	0	68.5	31.5	0		0	0	0	0	0	15.2	84.8	0	0		0	0	0	0	0	
PHF	.000	.671	.534	.000	.621	.000	.000	.000	.000	.000	.396	.616	.000	.000	.638	.000	.000	.000	.000	.000	.721
Cars	0	87	47	0	134	0	0	0	0	0	19	88	0	0	107	0	0	0	0	0	241
% Cars	0	85.3	100	0	89.9	0	0	0	0	0	100	83.0	0	0	85.6	0	0	0	0	0	88.0
Buses	0	13	0	0	13	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	26
% Buses	0	12.7	0	0	8.7	0	0	0	0	0	0	12.3	0	0	10.4	0	0	0	0	0	9.5
Trucks	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
% Trucks	0	2.0	0	0	1.3	0	0	0	0	0	0	4.7	0	0	4.0	0	0	0	0	0	2.6
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

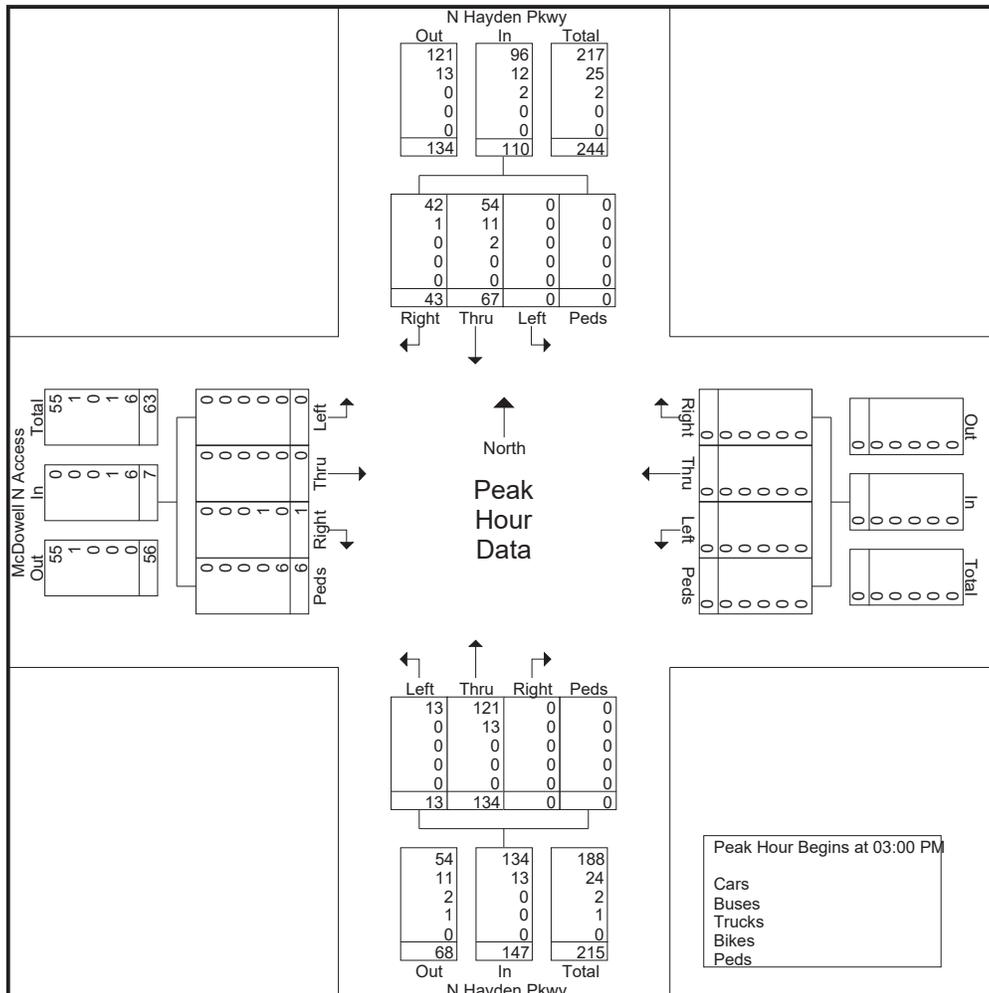
File Name : 9\_N\_Hayden\_Pkwy\_at\_McDowell-N\_12012022

Site Code : Site 9

Start Date : 12/1/2022

Page No : 4

Start Time	N Hayden Pkwy From North					From East					N Hayden Pkwy From South					McDowell N Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
<b>Peak Hour for Entire Intersection Begins at 03:00 PM</b>																					
03:00 PM	0	19	3	0	22	0	0	0	0	0	1	18	0	0	19	0	0	1	3	4	45
03:15 PM	0	15	14	0	29	0	0	0	0	0	8	21	0	0	29	0	0	0	1	1	59
03:30 PM	0	20	22	0	42	0	0	0	0	0	2	28	0	0	30	0	0	0	0	0	72
03:45 PM	0	13	4	0	17	0	0	0	0	0	2	67	0	0	69	0	0	0	2	2	88
Total Volume	0	67	43	0	110	0	0	0	0	0	13	134	0	0	147	0	0	1	6	7	264
% App. Total	0	60.9	39.1	0		0	0	0	0	0	8.8	91.2	0	0		0	0	14.3	85.7		
PHF	.000	.838	.489	.000	.655	.000	.000	.000	.000	.000	.406	.500	.000	.000	.533	.000	.000	.250	.500	.438	.750
Cars	0	54	42	0	96	0	0	0	0	0	13	121	0	0	134	0	0	0	0	0	230
% Cars	0	80.6	97.7	0	87.3	0	0	0	0	0	100	90.3	0	0	91.2	0	0	0	0	0	87.1
Buses	0	11	1	0	12	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	25
% Buses	0	16.4	2.3	0	10.9	0	0	0	0	0	0	9.7	0	0	8.8	0	0	0	0	0	9.5
Trucks	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	3.0	0	0	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	14.3	0.4
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	6
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	85.7	2.3



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
5GE

File Name : 10\_N\_Hayden\_Pkwy\_at\_Aurora\_Street\_12012022  
Site Code : Site 10  
Start Date : 12/1/2022  
Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	From North					Aurora Street From East					N Hayden Pkwy From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	7	60	0	0	67	4	0	6	0	10	0	33	3	0	36	113
07:15 AM	0	0	0	0	0	12	117	0	0	129	5	0	10	0	15	0	81	5	0	86	230
07:30 AM	0	0	0	0	0	16	109	0	0	125	8	0	28	0	36	0	174	5	0	179	340
07:45 AM	0	0	0	0	0	21	101	1	0	123	5	0	20	1	26	0	153	7	0	160	309
<b>Total</b>	0	0	0	0	0	56	387	1	0	444	22	0	64	1	87	0	441	20	0	461	992
08:00 AM	0	0	0	0	0	15	66	0	0	81	14	0	14	0	28	0	37	10	0	47	156
08:15 AM	0	0	0	0	0	20	72	0	0	92	4	1	7	0	12	0	41	9	0	50	154
08:30 AM	0	0	0	1	1	37	73	0	0	110	7	0	18	0	25	1	61	25	0	87	223
08:45 AM	0	0	0	0	0	20	80	0	0	100	22	0	25	0	47	0	76	11	0	87	234
<b>Total</b>	0	0	0	1	1	92	291	0	0	383	47	1	64	0	112	1	215	55	0	271	767
09:00 AM	0	0	0	0	0	5	49	0	0	54	5	0	2	0	7	0	32	4	0	36	97
09:15 AM	0	0	0	0	0	6	63	0	0	69	1	0	8	1	10	0	52	3	0	55	134
<b>Total</b>	0	0	0	0	0	11	112	0	0	123	6	0	10	1	17	0	84	7	0	91	231
02:00 PM	0	0	0	0	0	2	46	0	0	48	2	0	6	0	8	0	33	5	0	38	94
02:15 PM	0	0	0	0	0	8	48	0	0	56	7	0	6	1	14	0	47	6	0	53	123
02:30 PM	0	0	1	0	1	8	58	0	0	66	2	0	10	2	14	1	53	5	0	59	140
02:45 PM	0	0	0	0	0	10	55	0	0	65	5	0	15	0	20	1	83	7	0	91	176
<b>Total</b>	0	0	1	0	1	28	207	0	0	235	16	0	37	3	56	2	216	23	0	241	533
03:00 PM	0	0	0	0	0	14	89	0	0	103	9	0	22	0	31	0	73	8	1	82	216
03:15 PM	0	0	0	0	0	26	82	0	0	108	10	0	8	4	22	1	64	9	0	74	204
03:30 PM	0	0	1	0	1	17	110	0	0	127	8	0	18	0	26	0	68	19	0	87	241
03:45 PM	0	0	0	0	0	10	95	0	0	105	28	0	37	1	66	0	89	6	0	95	266
<b>Total</b>	0	0	1	0	1	67	376	0	0	443	55	0	85	5	145	1	294	42	1	338	927
04:00 PM	0	0	0	0	0	4	75	0	0	79	17	0	16	8	41	1	50	4	0	55	175
04:15 PM	0	0	0	0	0	8	71	0	0	79	7	1	8	3	19	0	49	9	0	58	156
Grand Total	0	0	2	1	3	266	1519	1	0	1786	170	2	284	21	477	5	1349	160	1	1515	3781
Apprch %	0	0	66.7	33.3		14.9	85.1	0.1	0		35.6	0.4	59.5	4.4		0.3	89	10.6	0.1		
Total %	0	0	0.1	0	0.1	7	40.2	0	0	47.2	4.5	0.1	7.5	0.6	12.6	0.1	35.7	4.2	0	40.1	
Cars	0	0	2	0	2	237	1459	1	0	1697	154	2	232	0	388	5	1300	140	0	1445	3532
% Cars	0	0	100	0	66.7	89.1	96.1	100	0	95	90.6	100	81.7	0	81.3	100	96.4	87.5	0	95.4	93.4
Buses	0	0	0	0	0	24	52	0	0	76	13	0	48	0	61	0	26	15	0	41	178
% Buses	0	0	0	0	0	9	3.4	0	0	4.3	7.6	0	16.9	0	12.8	0	1.9	9.4	0	2.7	4.7
Trucks	0	0	0	0	0	3	8	0	0	11	3	0	4	0	7	0	21	5	0	26	44
% Trucks	0	0	0	0	0	1.1	0.5	0	0	0.6	1.8	0	1.4	0	1.5	0	1.6	3.1	0	1.7	1.2
Bikes	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	4
% Bikes	0	0	0	0	0	0.8	0	0	0	0.1	0	0	0	0	0	0	0.1	0	0	0.1	0.1
Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	21	21	0	0	0	1	1	23
% Peds	0	0	0	100	33.3	0	0	0	0	0	0	0	0	100	4.4	0	0	0	100	0.1	0.6

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

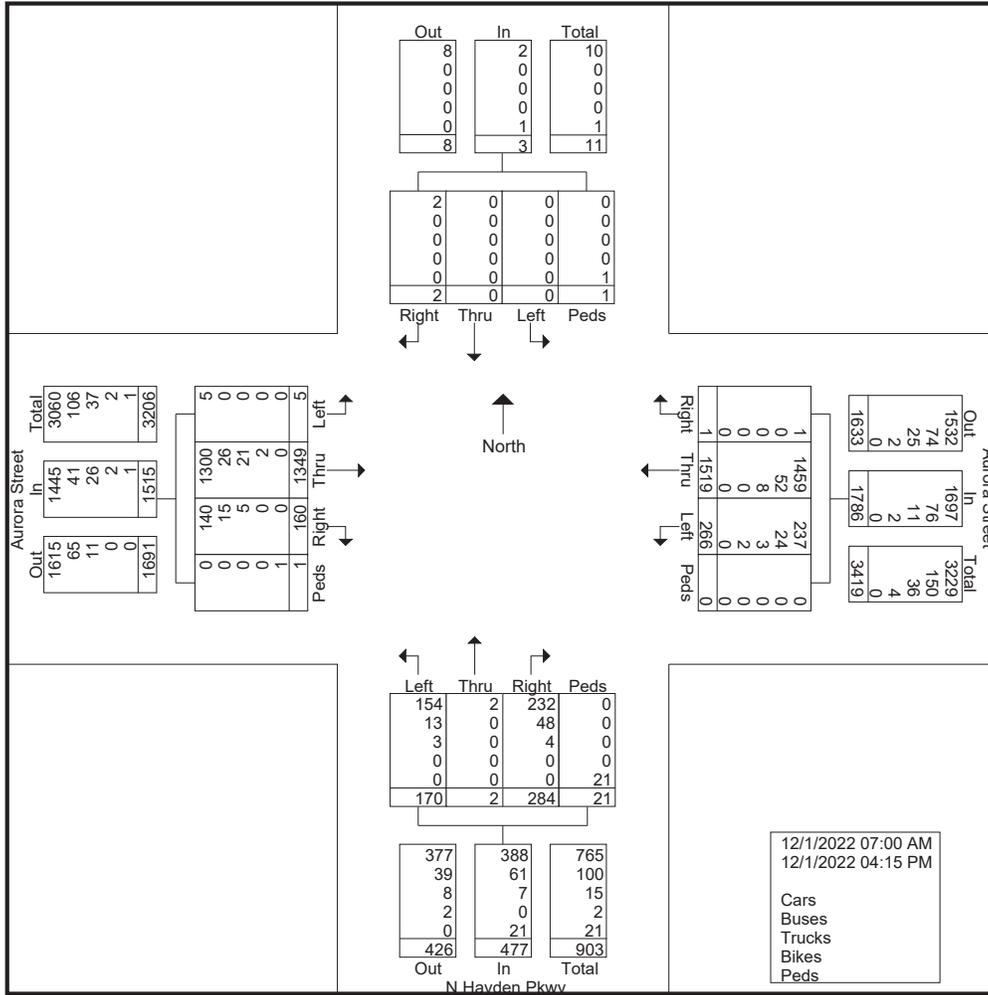
"2022 ... Data Collection simplified"

File Name : 10\_N\_Hayden\_Pkwy\_at\_Aurora\_Street\_12012022

Site Code : Site 10

Start Date : 12/1/2022

Page No : 2



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

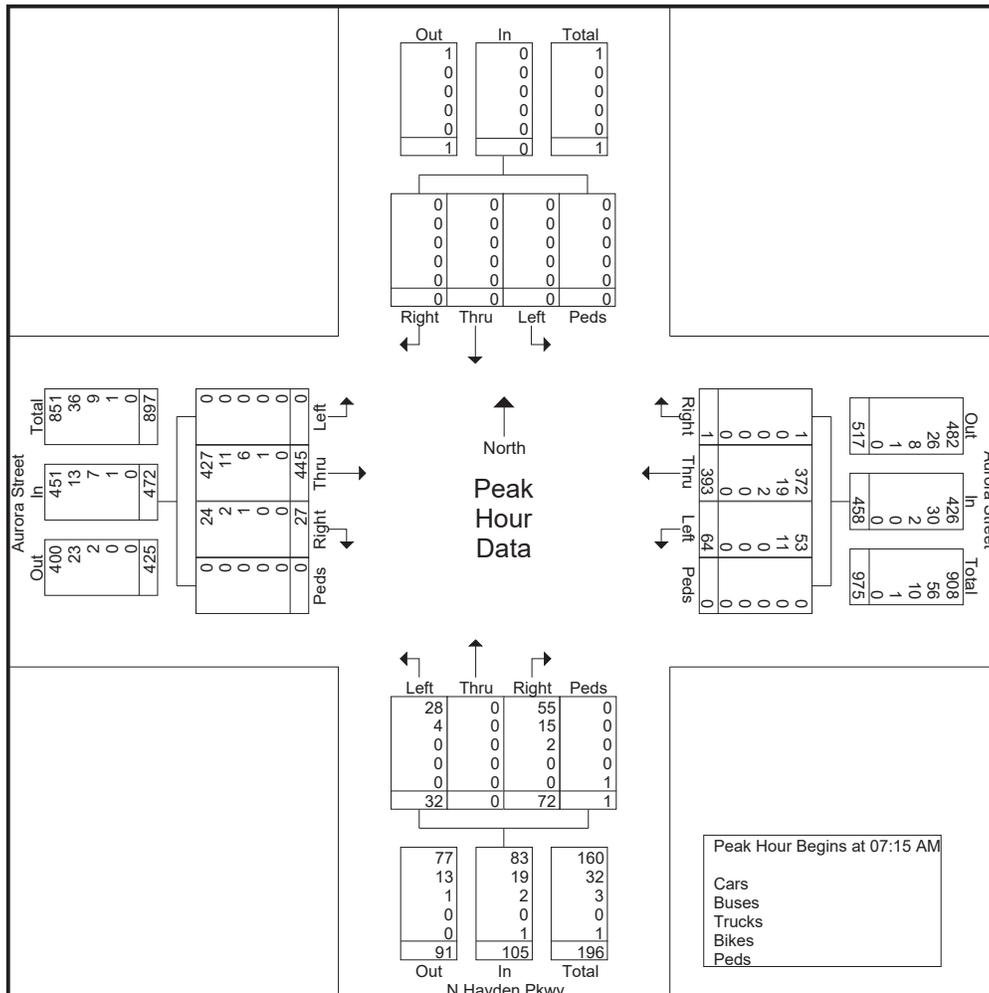
File Name : 10\_N\_Hayden\_Pkwy\_at\_Aurora\_Street\_12012022

Site Code : Site 10

Start Date : 12/1/2022

Page No : 3

Start Time	From North					Aurora Street From East					N Hayden Pkwy From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	12	117	0	0	129	5	0	10	0	15	0	81	5	0	86	230
07:30 AM	0	0	0	0	0	16	109	0	0	125	8	0	28	0	36	0	174	5	0	179	340
07:45 AM	0	0	0	0	0	21	101	1	0	123	5	0	20	1	26	0	153	7	0	160	309
08:00 AM	0	0	0	0	0	15	66	0	0	81	14	0	14	0	28	0	37	10	0	47	156
Total Volume	0	0	0	0	0	64	393	1	0	458	32	0	72	1	105	0	445	27	0	472	1035
% App. Total	0	0	0	0	0	14	85.8	0.2	0		30.5	0	68.6	1		0	94.3	5.7	0		
PHF	.000	.000	.000	.000	.000	.762	.840	.250	.000	.888	.571	.000	.643	.250	.729	.000	.639	.675	.000	.659	.761
Cars	0	0	0	0	0	53	372	1	0	426	28	0	55	0	83	0	427	24	0	451	960
% Cars	0	0	0	0	0	82.8	94.7	100	0	93.0	87.5	0	76.4	0	79.0	0	96.0	88.9	0	95.6	92.8
Buses	0	0	0	0	0	11	19	0	0	30	4	0	15	0	19	0	11	2	0	13	62
% Buses	0	0	0	0	0	17.2	4.8	0	0	6.6	12.5	0	20.8	0	18.1	0	2.5	7.4	0	2.8	6.0
Trucks	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	0	6	1	0	7	11
% Trucks	0	0	0	0	0	0	0.5	0	0	0.4	0	0	2.8	0	1.9	0	1.3	3.7	0	1.5	1.1
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.2	0.1
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1.0	0	0	0	0	0	0.1



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

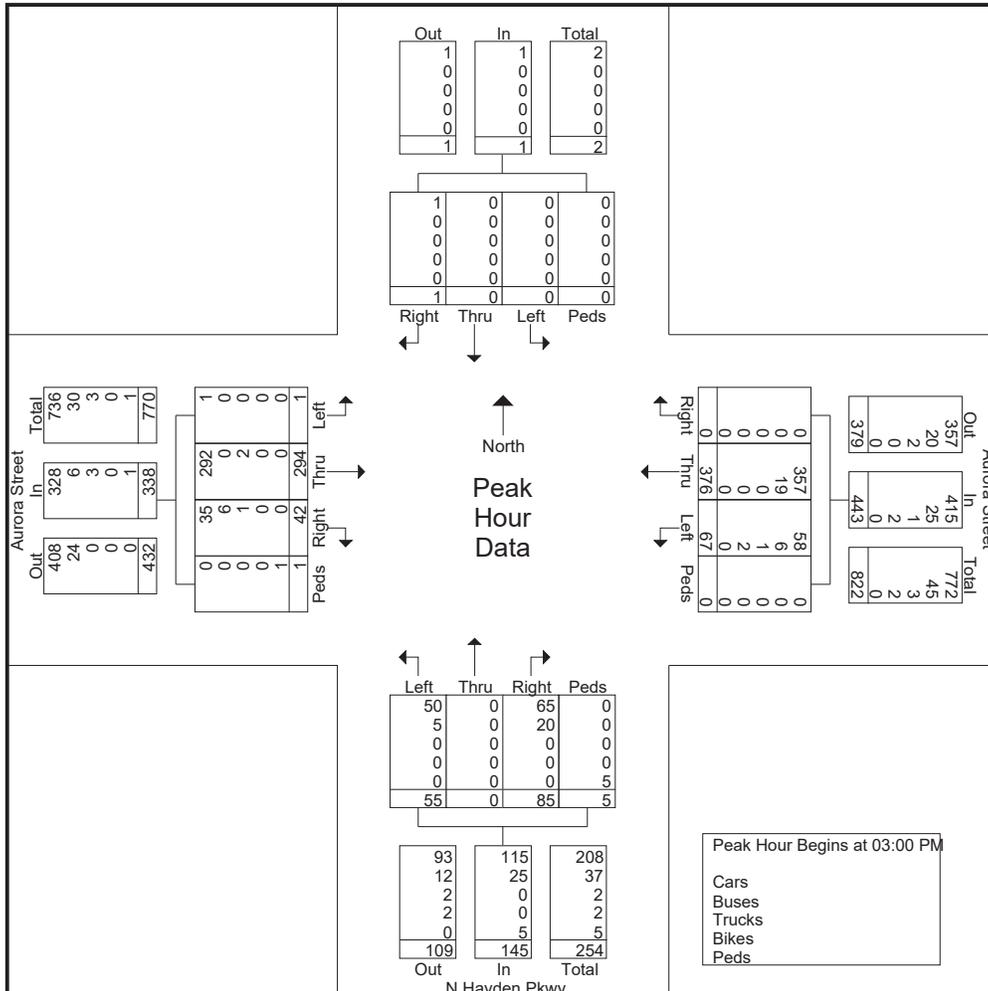
File Name : 10\_N\_Hayden\_Pkwy\_at\_Aurora\_Street\_12012022

Site Code : Site 10

Start Date : 12/1/2022

Page No : 4

Start Time	From North					Aurora Street From East					N Hayden Pkwy From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	0	0	0	0	0	14	89	0	0	103	9	0	22	0	31	0	73	8	1	82	216
03:15 PM	0	0	0	0	0	26	82	0	0	108	10	0	8	4	22	1	64	9	0	74	204
03:30 PM	0	0	1	0	1	17	110	0	0	127	8	0	18	0	26	0	68	19	0	87	241
03:45 PM	0	0	0	0	0	10	95	0	0	105	28	0	37	1	66	0	89	6	0	95	266
Total Volume	0	0	1	0	1	67	376	0	0	443	55	0	85	5	145	1	294	42	1	338	927
% App. Total	0	0	100	0		15.1	84.9	0	0		37.9	0	58.6	3.4		0.3	87	12.4	0.3		
PHF	.000	.000	.250	.000	.250	.644	.855	.000	.000	.872	.491	.000	.574	.313	.549	.250	.826	.553	.250	.889	.871
Cars	0	0	1	0	1	58	357	0	0	415	50	0	65	0	115	1	292	35	0	328	859
% Cars	0	0	100	0	100	86.6	94.9	0	0	93.7	90.9	0	76.5	0	79.3	100	99.3	83.3	0	97.0	92.7
Buses	0	0	0	0	0	6	19	0	0	25	5	0	20	0	25	0	0	6	0	6	56
% Buses	0	0	0	0	0	9.0	5.1	0	0	5.6	9.1	0	23.5	0	17.2	0	0	14.3	0	1.8	6.0
Trucks	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	4
% Trucks	0	0	0	0	0	1.5	0	0	0	0.2	0	0	0	0	0	0	0.7	2.4	0	0.9	0.4
Bikes	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Bikes	0	0	0	0	0	3.0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0.2
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	1	1	6
% Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	100	3.4	0	0	0	100	0.3	0.6



# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

Partly Cloudy - Cold  
Schools in Session  
5FO

File Name : 11\_Aurora\_Street\_at\_Franklin\_Street12012022  
Site Code : Site 11  
Start Date : 12/1/2022  
Page No : 1

### Groups Printed- Cars - Buses - Trucks - Bikes - Peds

Start Time	Private Drive From North					Aurora Street From East					Franklin Street From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	2	56	0	0	58	3	0	3	0	6	0	35	4	0	39	103
07:15 AM	0	0	0	0	0	13	106	0	0	119	24	0	30	0	54	0	55	9	0	64	237
07:30 AM	0	0	1	0	1	3	118	0	0	121	25	0	61	0	86	0	111	1	0	112	320
07:45 AM	0	0	1	1	2	2	89	0	0	91	10	0	30	2	42	0	95	3	0	98	233
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>20</b>	<b>369</b>	<b>0</b>	<b>0</b>	<b>389</b>	<b>62</b>	<b>0</b>	<b>124</b>	<b>2</b>	<b>188</b>	<b>0</b>	<b>296</b>	<b>17</b>	<b>0</b>	<b>313</b>	<b>893</b>
08:00 AM	0	0	1	0	1	5	75	0	0	80	3	0	1	0	4	0	36	4	0	40	125
08:15 AM	0	0	1	0	1	9	62	0	0	71	5	0	2	0	7	0	47	13	0	60	139
08:30 AM	1	0	0	0	1	18	53	0	0	71	10	0	33	1	44	1	56	23	0	80	196
08:45 AM	0	0	0	0	0	10	95	0	0	105	22	0	28	0	50	0	49	14	0	63	218
<b>Total</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>42</b>	<b>285</b>	<b>0</b>	<b>0</b>	<b>327</b>	<b>40</b>	<b>0</b>	<b>64</b>	<b>1</b>	<b>105</b>	<b>1</b>	<b>188</b>	<b>54</b>	<b>0</b>	<b>243</b>	<b>678</b>
09:00 AM	0	0	0	0	0	2	52	0	0	54	4	0	1	0	5	0	38	2	0	40	99
09:15 AM	0	0	0	0	0	2	59	0	0	61	1	0	2	0	3	0	42	2	0	44	108
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>111</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>80</b>	<b>4</b>	<b>0</b>	<b>84</b>	<b>207</b>
02:00 PM	0	0	0	0	0	3	49	0	0	52	0	0	1	0	1	0	33	0	0	33	86
02:15 PM	0	0	0	0	0	3	54	0	0	57	4	0	4	1	9	0	46	7	0	53	119
02:30 PM	0	0	0	0	0	0	63	0	0	63	3	0	1	0	4	0	48	19	0	67	134
02:45 PM	0	0	0	0	0	2	48	0	0	50	21	0	24	3	48	0	57	6	0	63	161
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>214</b>	<b>0</b>	<b>0</b>	<b>222</b>	<b>28</b>	<b>0</b>	<b>30</b>	<b>4</b>	<b>62</b>	<b>0</b>	<b>184</b>	<b>32</b>	<b>0</b>	<b>216</b>	<b>500</b>
03:00 PM	0	0	0	0	0	9	70	0	0	79	11	0	11	2	24	0	68	8	0	76	179
03:15 PM	0	0	0	0	0	7	67	0	0	74	6	0	2	0	8	1	63	8	0	72	154
03:30 PM	0	0	0	0	0	14	89	0	0	103	11	0	11	2	24	0	72	9	0	81	208
03:45 PM	0	0	0	1	1	2	112	0	0	114	36	0	43	3	82	0	42	5	0	47	244
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>32</b>	<b>338</b>	<b>0</b>	<b>0</b>	<b>370</b>	<b>64</b>	<b>0</b>	<b>67</b>	<b>7</b>	<b>138</b>	<b>1</b>	<b>245</b>	<b>30</b>	<b>0</b>	<b>276</b>	<b>785</b>
04:00 PM	0	0	0	0	0	13	72	0	0	85	7	0	3	5	15	0	48	8	0	56	156
04:15 PM	0	0	0	0	0	16	57	0	0	73	3	0	2	2	7	0	55	14	0	69	149
Grand Total	1	0	4	2	7	135	1446	0	0	1581	209	0	293	21	523	2	1096	159	0	1257	3368
Apprch %	14.3	0	57.1	28.6		8.5	91.5	0	0		40	0	56	4		0.2	87.2	12.6	0		
Total %	0	0	0.1	0.1	0.2	4	42.9	0	0	46.9	6.2	0	8.7	0.6	15.5	0.1	32.5	4.7	0	37.3	
Cars	1	0	4	0	5	125	1391	0	0	1516	197	0	290	0	487	2	1044	130	0	1176	3184
% Cars	100	0	100	0	71.4	92.6	96.2	0	0	95.9	94.3	0	99	0	93.1	100	95.3	81.8	0	93.6	94.5
Buses	0	0	0	0	0	9	46	0	0	55	10	0	0	0	10	0	33	27	0	60	125
% Buses	0	0	0	0	0	6.7	3.2	0	0	3.5	4.8	0	0	0	1.9	0	3	17	0	4.8	3.7
Trucks	0	0	0	0	0	1	9	0	0	10	2	0	3	0	5	0	19	2	0	21	36
% Trucks	0	0	0	0	0	0.7	0.6	0	0	0.6	1	0	1	0	1	0	1.7	1.3	0	1.7	1.1
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	2	2	0	0	0	0	0	0	0	0	21	21	0	0	0	0	0	23
% Peds	0	0	0	100	28.6	0	0	0	0	0	0	0	0	100	4	0	0	0	0	0	0.7

# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

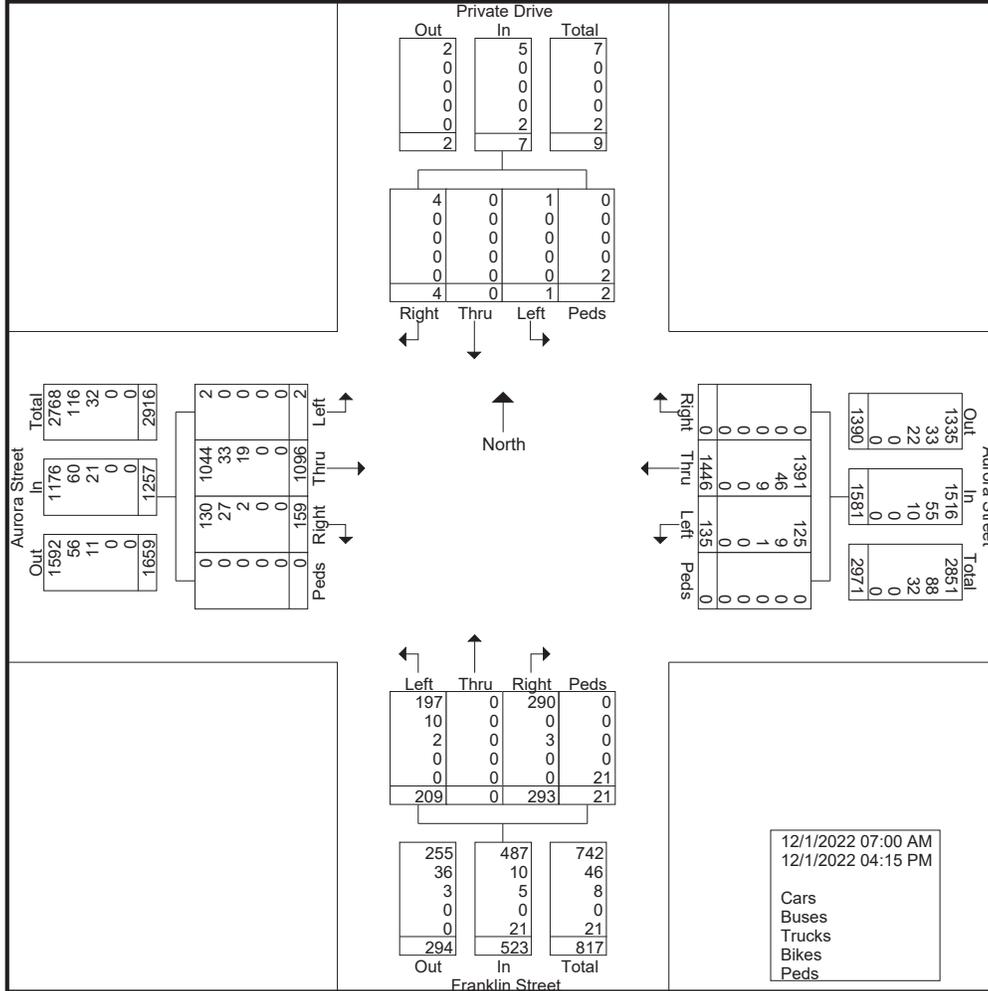
"2022 ... Data Collection simplified"

File Name : 11\_Aurora\_Street\_at\_Franklin\_Street12012022

Site Code : Site 11

Start Date : 12/1/2022

Page No : 2





# Cummins Consulting Services, LLC

swcummins@ccsdata.com 859-361-2589

"2022 ... Data Collection simplified"

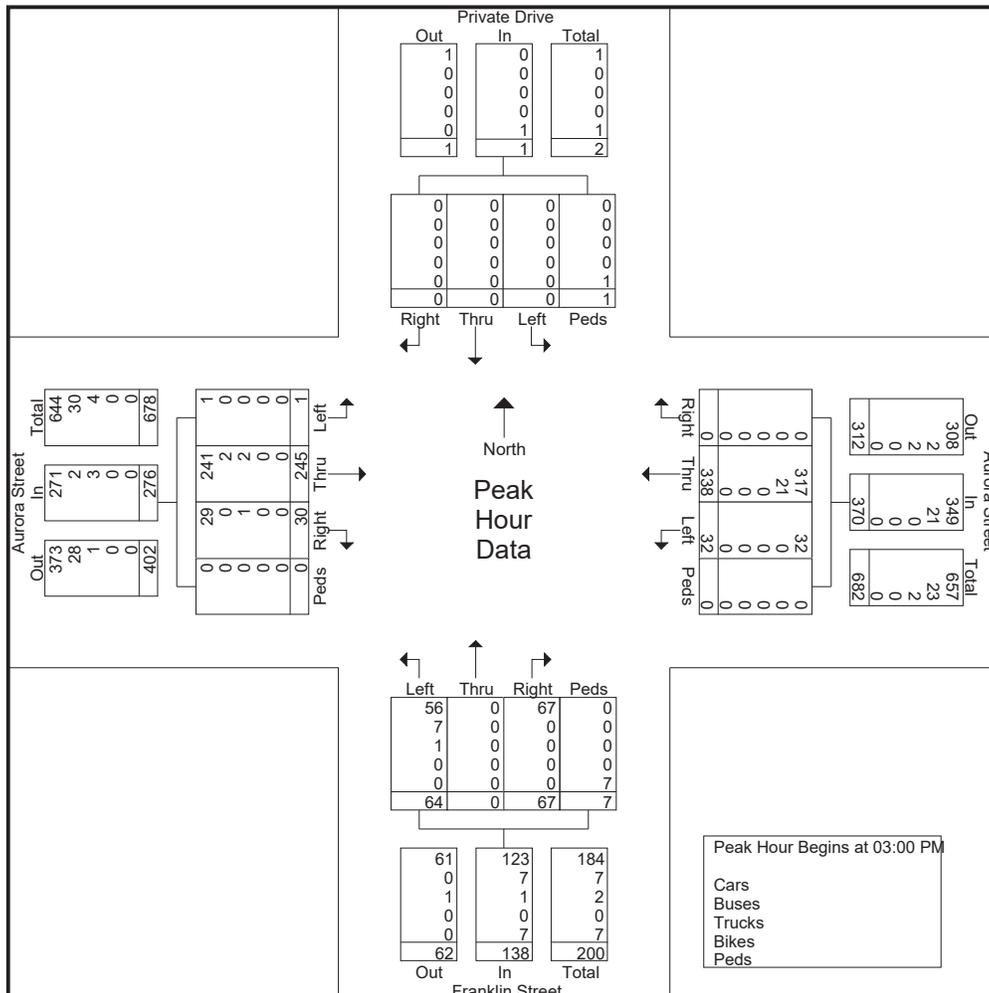
File Name : 11\_Aurora\_Street\_at\_Franklin\_Street12012022

Site Code : Site 11

Start Date : 12/1/2022

Page No : 4

Start Time	Private Drive From North					Aurora Street From East					Franklin Street From South					Aurora Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
<b>Peak Hour Analysis From 12:00 PM to 04:15 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	0	0	0	0	0	9	70	0	0	79	11	0	11	2	24	0	68	8	0	76	179
03:15 PM	0	0	0	0	0	7	67	0	0	74	6	0	2	0	8	1	63	8	0	72	154
03:30 PM	0	0	0	0	0	14	89	0	0	103	11	0	11	2	24	0	72	9	0	81	208
03:45 PM	0	0	0	1	1	2	112	0	0	114	36	0	43	3	82	0	42	5	0	47	244
Total Volume	0	0	0	1	1	32	338	0	0	370	64	0	67	7	138	1	245	30	0	276	785
% App. Total	0	0	0	100		8.6	91.4	0	0		46.4	0	48.6	5.1		0.4	88.8	10.9	0		
PHF	.000	.000	.000	.250	.250	.571	.754	.000	.000	.811	.444	.000	.390	.583	.421	.250	.851	.833	.000	.852	.804
Cars	0	0	0	0	0	32	317	0	0	349	56	0	67	0	123	1	241	29	0	271	743
% Cars	0	0	0	0	0	100	93.8	0	0	94.3	87.5	0	100	0	89.1	100	98.4	96.7	0	98.2	94.6
Buses	0	0	0	0	0	0	21	0	0	21	7	0	0	0	7	0	2	0	0	2	30
% Buses	0	0	0	0	0	0	6.2	0	0	5.7	10.9	0	0	0	5.1	0	0.8	0	0	0.7	3.8
Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	1	0	3	4
% Trucks	0	0	0	0	0	0	0	0	0	0	1.6	0	0	0	0.7	0	0.8	3.3	0	1.1	0.5
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds	0	0	0	1	1	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	8
% Peds	0	0	0	100	100	0	0	0	0	0	0	0	0	100	5.1	0	0	0	0	0	1.0

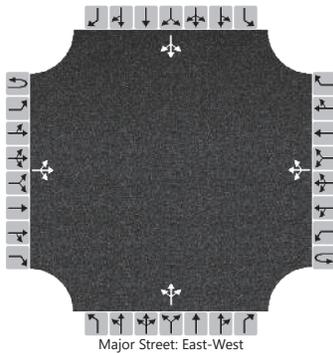


**ATTACHMENT B**

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Tyler Stratton			Intersection	SR-303 / Oviatt Street		
Agency/Co.	GPD Group			Jurisdiction	City of Hudson		
Date Performed	2/15/2023			East/West Street	SR-303		
Analysis Year	2022			North/South Street	Oviatt Street		
Time Analyzed	7am - 8am			Peak Hour Factor	0.79		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Post Construction Analysis						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		123	313	4		12	347	70		2	20	6		6	11	60
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

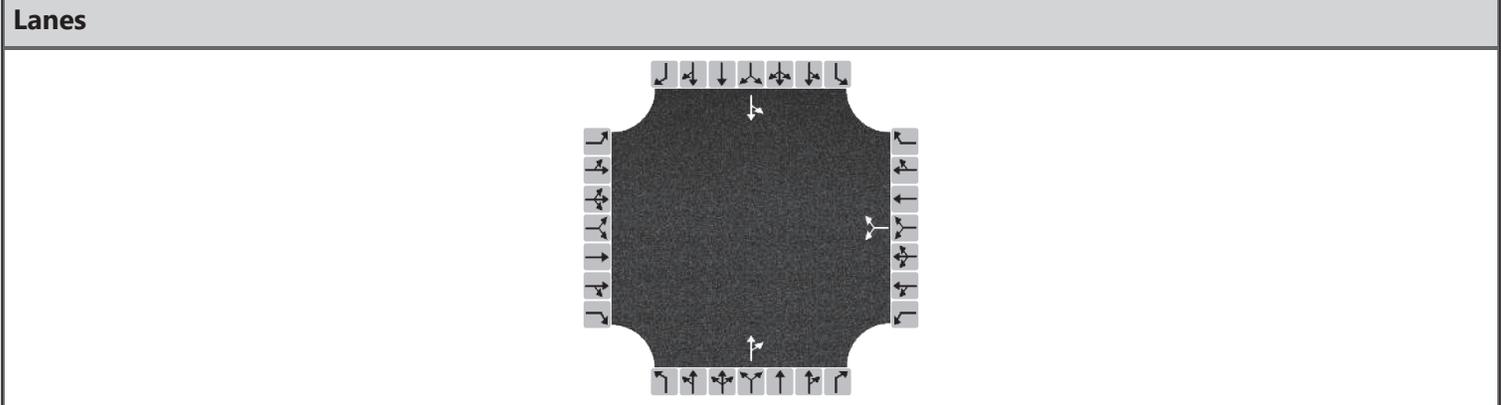
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		156				15				35				97		
Capacity, c (veh/h)		1039				1157				156				326		
v/c Ratio		0.15				0.01				0.23				0.30		
95% Queue Length, Q <sub>95</sub> (veh)		0.5				0.0				0.8				1.2		
Control Delay (s/veh)		9.1				8.2				34.7				20.7		
Level of Service (LOS)		A				A				D				C		
Approach Delay (s/veh)	3.8				0.4				34.7				20.7			
Approach LOS									D				C			

# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Oviatt St. / Elm St.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Elm Street
Analysis Year	2022	North/South Street	Oviatt Street
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.57
Time Analyzed	7am - 8am		
Project Description	Post Construction Analysis		



**Vehicle Volume and Adjustments**

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume				7		13		213	3	7	76	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				35			379			146		
Percent Heavy Vehicles				0			0			0		

**Departure Headway and Service Time**

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.031			0.337			0.129		
Final Departure Headway, hd (s)				4.68			4.13			4.37		
Final Degree of Utilization, x				0.046			0.434			0.177		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.68			2.13			2.37		

**Capacity, Delay and Level of Service**

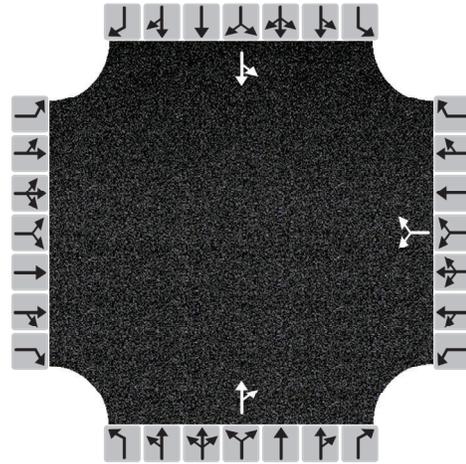
Flow Rate, v (veh/h)				35			379			146		
Capacity				769			872			824		
95% Queue Length, Q <sub>95</sub> (veh)				0.1			2.2			0.6		
Control Delay (s/veh)				7.9			10.3			8.3		
Level of Service, LOS				A			B			A		
Approach Delay (s/veh)				7.9			10.3			8.3		
Approach LOS				A			B			A		
Intersection Delay, s/veh   LOS	9.6						A					

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	Ryan Barco
Agency/Co.	GPD Group
Date Performed	11/15/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	7am - 8am
Project Description	Post Construction Analysis Update
Intersection	Oviatt St. / Franklin St.
Jurisdiction	City of Hudson
East/West Street	Franklin Street
North/South Street	Oviatt Street
Peak Hour Factor	0.61

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)				65		18		52	192	188	28	
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				136			400			354		
Percent Heavy Vehicles				1			2			0		
Initial Departure Headway, $h_d$ (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.121			0.356			0.315		
Final Departure Headway, $h_d$ (s)				5.63			4.31			4.92		
Final Degree of Utilization, x				0.213			0.479			0.484		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, $t_s$ (s)				3.63			2.31			2.92		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				136			400			354		
Capacity (veh/h)				639			835			732		
95% Queue Length, $Q_{95}$ (veh)				0.8			2.6			2.7		
95% Queue Length, $Q_{95}$ (ft)				20.2			66.0			67.5		
Control Delay (s/veh)				10.1			11.2			12.5		
Level of Service, LOS				B			B			B		
Approach Delay (s/veh)   LOS				10.1		B	11.2		B	12.5		B
Intersection Delay (s/veh)   LOS				11.5			B					

# HCS7 Two-Way Stop-Control Report

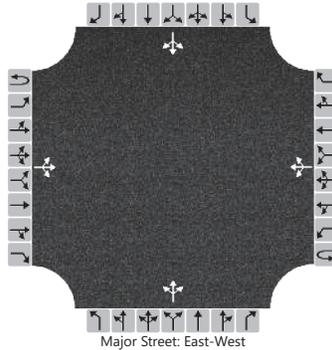
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	7am - 8am
Intersection Orientation	East-West
Project Description	Post Construction Analysis

## Site Information

Intersection	Aurora St. / Oviatt St.
Jurisdiction	City of Hudson
East/West Street	Aurora Street
North/South Street	Oviatt Street
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	8	6		15	12	30		9	276	73		118	299	8
Percent Heavy Vehicles (%)		1				1				1	1	1		1	1	1
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.11				4.11				7.11	6.51	6.21		7.11	6.51	6.21
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.21				2.21				3.51	4.01	3.31		3.51	4.01	3.31

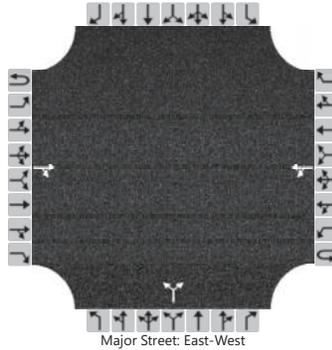
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				18					437				518		
Capacity, c (veh/h)		1561				1607					804				619		
v/c Ratio		0.00				0.01					0.54				0.84		
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					3.3				9.0		
Control Delay (s/veh)		7.3				7.3					14.7				33.7		
Level of Service (LOS)		A				A					B				D		
Approach Delay (s/veh)		0.9				2.0				14.7				33.7			
Approach LOS										B				D			

# HCS Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Tyler Stratton	Intersection	Aurora St. / Franklin St.				
Agency/Co.	GPD Group	Jurisdiction	City of Hudson				
Date Performed	2/15/2023	East/West Street	Aurora Street				
Analysis Year	2022	North/South Street	Franklin Street				
Time Analyzed	7am - 8am	Peak Hour Factor	0.72				
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25				
Project Description	Post Construction Analysis						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			296	17		20	369			62		124				
Percent Heavy Vehicles (%)						1				1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.11					6.41		6.21			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.21					3.51		3.31			

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						28						258				
Capacity, c (veh/h)						1130						432				
v/c Ratio						0.02						0.60				
95% Queue Length, Q <sub>95</sub> (veh)						0.1						3.8				
Control Delay (s/veh)						8.3	0.3					24.9				
Level of Service (LOS)						A	A					C				
Approach Delay (s/veh)					0.7				24.9							
Approach LOS					A				C							

# HCS7 Two-Way Stop-Control Report

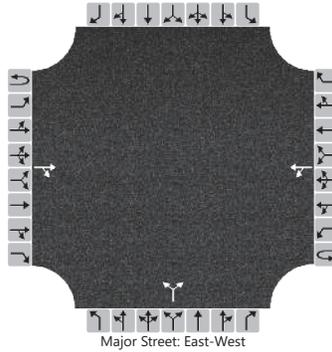
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	7am - 8am
Intersection Orientation	East-West
Project Description	Post Construction Analysis

## Site Information

Intersection	Aurora St. / Hayden Pkwy.
Jurisdiction	City of Hudson
East/West Street	Aurora Street
North/South Street	Hayden Parkway
Peak Hour Factor	0.73
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			441	20		56	387			22		64				
Percent Heavy Vehicles (%)						1				1		1				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.11				6.41		6.21				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.21				3.51		3.31				

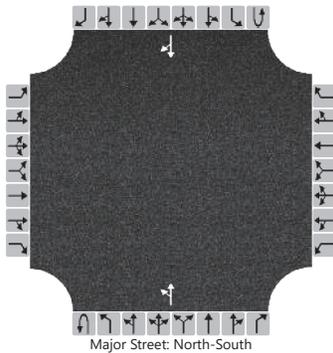
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						77					118					
Capacity, c (veh/h)						956					319					
v/c Ratio						0.08					0.37					
95% Queue Length, Q <sub>95</sub> (veh)						0.3					1.6					
Control Delay (s/veh)						9.1					22.7					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					2.1				22.7							
Approach LOS									C							

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./McDowell N.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	McDowell N. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	7am - 8am	Peak Hour Factor	0.69
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0		0	1	0		0	1	0
Configuration										LT						TR
Volume (veh/h)										0	85				75	2
Percent Heavy Vehicles (%)										1						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.11						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.21						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										0						
Capacity, c (veh/h)										1484						
v/c Ratio										0.00						
95% Queue Length, Q <sub>95</sub> (veh)										0.0						
Control Delay (s/veh)										7.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)	0.0															
Approach LOS																

# HCS7 Two-Way Stop-Control Report

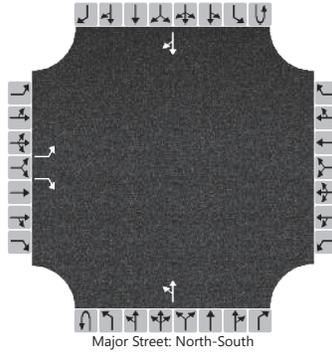
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	7am - 8am
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./McDowell S.
Jurisdiction	City of Hudson
East/West Street	McDowell S. Access
North/South Street	Hayden Parkway
Peak Hour Factor	0.70
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		1		0						4	87				63	11	
Percent Heavy Vehicles (%)		0		0						0							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

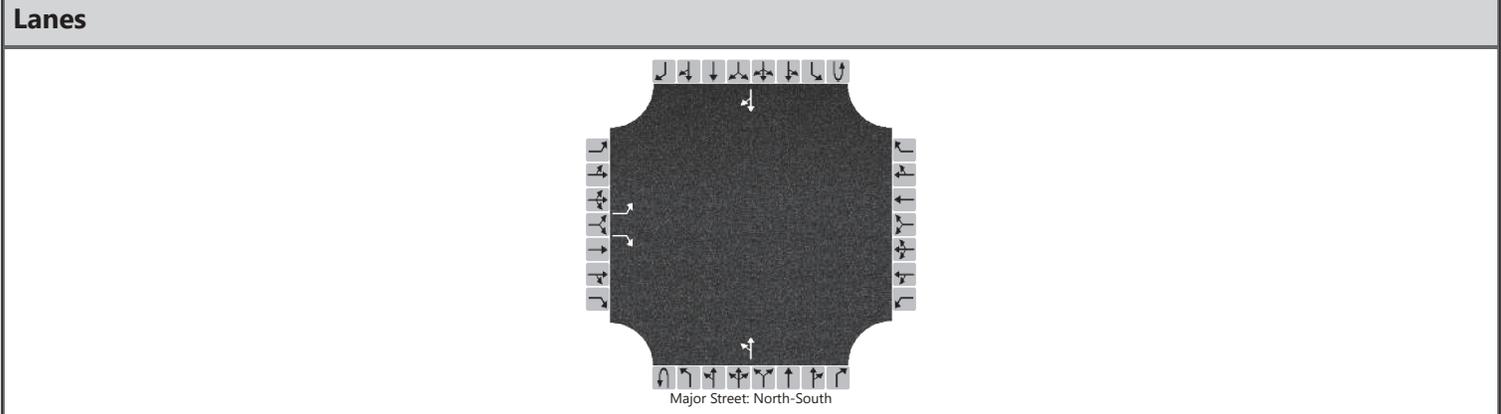
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		0						6						
Capacity, c (veh/h)		756		964						1498						
v/c Ratio		0.00		0.00						0.00						
95% Queue Length, Q <sub>95</sub> (veh)		0.0		0.0						0.0						
Control Delay (s/veh)		9.8		8.7						7.4						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)		9.8										0.4				
Approach LOS		A														

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./E. Woods Dr.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	E. Woods Elementary Drive
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	7am - 8am	Peak Hour Factor	0.68
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		



**Vehicle Volumes and Adjustments**

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		54		29						46	57				51	41	
Percent Heavy Vehicles (%)		1		1						1							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

**Critical and Follow-up Headways**

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.41		6.21						4.11						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.51		3.31						2.21						

**Delay, Queue Length, and Level of Service**

Flow Rate, v (veh/h)		79		43						68						
Capacity, c (veh/h)		639		952						1455						
v/c Ratio		0.12		0.04						0.05						
95% Queue Length, Q <sub>95</sub> (veh)		0.4		0.1						0.1						
Control Delay (s/veh)		11.4		9.0						7.6						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)		10.6										3.6				
Approach LOS		B														

# HCS7 Two-Way Stop-Control Report

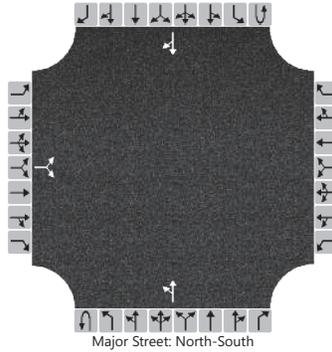
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2022
Analysis Year	2022
Time Analyzed	7am - 8am
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./Evamere S.
Jurisdiction	City of Hudson
East/West Street	Evamere S. Access
North/South Street	Hayden Parkway
Peak Hour Factor	0.78
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		1		0						0	101				78	6
Percent Heavy Vehicles (%)		0		0						1						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

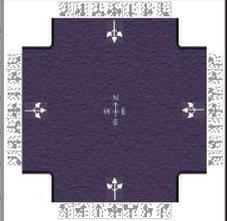
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.11						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.21						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1							0						
Capacity, c (veh/h)			759							1489						
v/c Ratio			0.00							0.00						
95% Queue Length, Q <sub>95</sub> (veh)			0.0							0.0						
Control Delay (s/veh)			9.7							7.4						
Level of Service (LOS)			A							A						
Approach Delay (s/veh)	9.7								0.0							
Approach LOS	A															

## HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GPD Group			Duration, h	0.250		
Analyst	Tyler Stratton	Analysis Date	Sep 6, 2018	Area Type	Other		
Jurisdiction	City of Hudson	Time Period	AM Peak	PHF	0.80		
Urban Street	State Route 303	Analysis Year	2018	Analysis Period	1> 7:00		
Intersection	Hayden Parkway	File Name	11. SR-303_Hayden Pkwy_7am-8am.xus				
Project Description	Post Construction Analysis_7am - 8am						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( v ), veh/h	77	254	4	2	323	19	19	20	9	27	24	62

Signal Information												
Cycle, s	105.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
		Green	54.1	40.3	0.0	0.0	0.0	0.0				
		Yellow	3.6	3.0	0.0	0.0	0.0	0.0				
		Red	2.0	2.0	0.0	0.0	0.0	0.0				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6		8		4
Case Number		8.0		8.0		8.0		8.0
Phase Duration, s		59.7		59.7		45.3		45.3
Change Period, ( Y+R <sub>c</sub> ), s		5.6		5.6		5.2		5.2
Max Allow Headway ( MAH ), s		1.2		1.2		4.4		4.4
Queue Clearance Time ( g <sub>s</sub> ), s		20.6		17.6		4.3		8.0
Green Extension Time ( g <sub>e</sub> ), s		0.1		0.1		0.8		0.8
Phase Call Probability		1.00		1.00		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

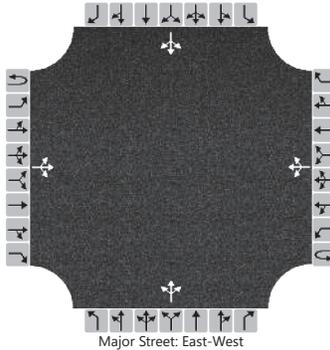
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate ( v ), veh/h	419			430			60			141		
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1532			1827			1545			1577		
Queue Service Time ( g <sub>s</sub> ), s	2.9			0.0			0.0			0.0		
Cycle Queue Clearance Time ( g <sub>c</sub> ), s	18.6			15.6			2.3			6.0		
Green Ratio ( g/C )	0.52			0.52			0.38			0.38		
Capacity ( c ), veh/h	832			976			638			645		
Volume-to-Capacity Ratio ( X )	0.504			0.441			0.094			0.219		
Back of Queue ( Q ), ft/ln ( 95 th percentile)	264.2			262.2			44.1			109.7		
Back of Queue ( Q ), veh/ln ( 95 th percentile)	10.4			10.3			1.7			4.3		
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00			0.00			0.00			0.00		
Uniform Delay ( d <sub>1</sub> ), s/veh	16.5			16.1			20.8			21.9		
Incremental Delay ( d <sub>2</sub> ), s/veh	0.2			0.1			0.1			0.2		
Initial Queue Delay ( d <sub>3</sub> ), s/veh	0.0			0.0			0.0			0.0		
Control Delay ( d ), s/veh	16.7			16.2			20.8			22.1		
Level of Service ( LOS )	B			B			C			C		
Approach Delay, s/veh / LOS	16.7	B		16.2	B		20.8	C		22.1	C	
Intersection Delay, s/veh / LOS	17.5						B					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	SR-303 / Oviatt Street
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	SR-303
Analysis Year	2022	North/South Street	Oviatt Street
Time Analyzed	815am - 915am	Peak Hour Factor	0.93
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		66	273	5		12	277	22		5	18	8		3	4	50
Percent Heavy Vehicles (%)		4				4				4	4	4		4	4	4
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

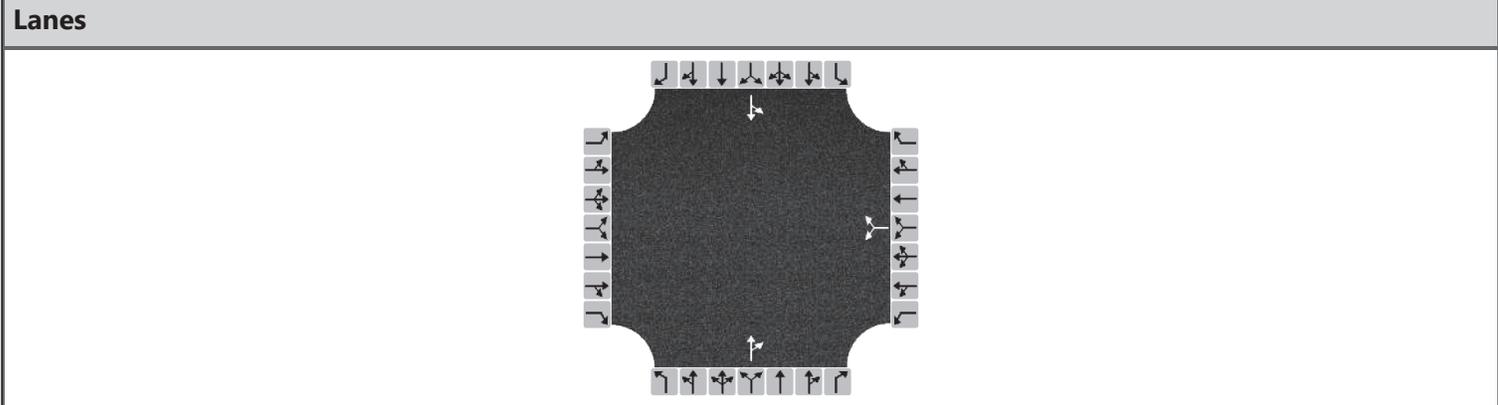
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.14				4.14				7.14	6.54	6.24		7.14	6.54	6.24
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.24				2.24				3.54	4.04	3.34		3.54	4.04	3.34

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		71				13					33					61	
Capacity, c (veh/h)		1227				1251					340					611	
v/c Ratio		0.06				0.01					0.10					0.10	
95% Queue Length, Q <sub>95</sub> (veh)		0.2				0.0					0.3					0.3	
Control Delay (s/veh)		8.1				7.9					16.7					11.6	
Level of Service (LOS)		A				A					C					B	
Approach Delay (s/veh)		2.0				0.4				16.7				11.6			
Approach LOS										C				B			

# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Oviatt St. / Elm St.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Elm Street
Analysis Year	2022	North/South Street	Oviatt Street
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.76
Time Analyzed	815am - 915am		
Project Description	Post Construction Analysis		



**Vehicle Volume and Adjustments**

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume				3		7		91	6	4	53	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				13			128			75		
Percent Heavy Vehicles				3			3			3		

**Departure Headway and Service Time**

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.012			0.113			0.067		
Final Departure Headway, hd (s)				4.02			4.01			4.11		
Final Degree of Utilization, x				0.015			0.142			0.086		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.02			2.01			2.11		

**Capacity, Delay and Level of Service**

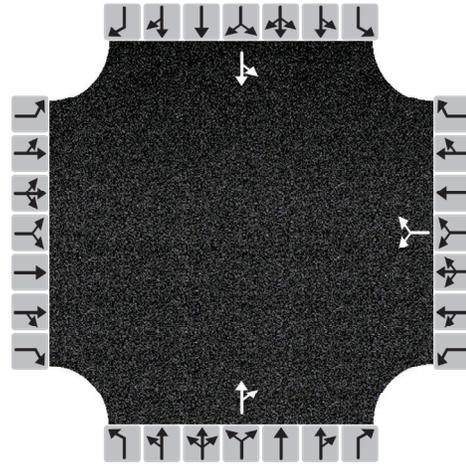
Flow Rate, v (veh/h)				13			128			75		
Capacity				896			897			876		
95% Queue Length, Q <sub>95</sub> (veh)				0.0			0.5			0.3		
Control Delay (s/veh)				7.1			7.7			7.5		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				7.1			7.7			7.5		
Approach LOS				A			A			A		
Intersection Delay, s/veh   LOS	7.6						A					

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	Ryan Barco
Agency/Co.	GPD Group
Date Performed	11/15/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	8am - 9am
Project Description	Post Construction Analysis Update
Intersection	Oviatt St. / Franklin St.
Jurisdiction	City of Hudson
East/West Street	Franklin Street
North/South Street	Oviatt Street
Peak Hour Factor	0.89

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)				25		5		86	44	9	44	
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				34			146			60		
Percent Heavy Vehicles				0			5			0		
Initial Departure Headway, $h_d$ (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.030			0.130			0.053		
Final Departure Headway, $h_d$ (s)				4.39			3.92			4.15		
Final Degree of Utilization, x				0.041			0.159			0.069		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, $t_s$ (s)				2.39			1.92			2.15		

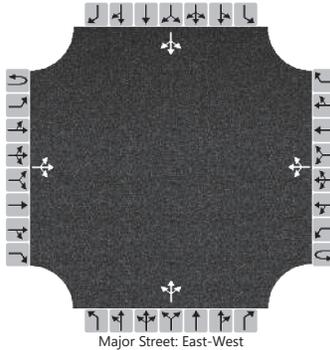
## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				34			146			60		
Capacity (veh/h)				819			919			868		
95% Queue Length, $Q_{95}$ (veh)				0.1			0.6			0.2		
95% Queue Length, $Q_{95}$ (ft)				2.5			15.6			5.0		
Control Delay (s/veh)				7.6			7.7			7.5		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)   LOS				7.6		A	7.7		A	7.5		A
Intersection Delay (s/veh)   LOS				7.6			A					

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Aurora St. / Oviatt St.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Aurora Street
Analysis Year	2022	North/South Street	Oviatt Street
Time Analyzed	815am - 915am	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Priority																	
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR		
Volume (veh/h)		12	9	4		11	18	44		5	184	7		24	272	7	
Percent Heavy Vehicles (%)		1				1				1	1	1		1	1	1	
Proportion Time Blocked																	
Percent Grade (%)										0				0			
Right Turn Channelized																	
Median Type   Storage	Undivided																

## Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.11				4.11				7.11	6.51	6.21		7.11	6.51	6.21
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.21				2.21				3.51	4.01	3.31		3.51	4.01	3.31

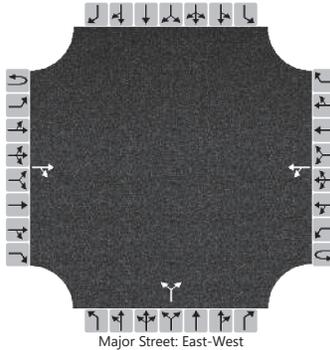
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				14					258					399	
Capacity, c (veh/h)		1522				1607					715					724	
v/c Ratio		0.01				0.01					0.36					0.55	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					1.6					3.4	
Control Delay (s/veh)		7.4				7.3					12.8					15.9	
Level of Service (LOS)		A				A					B					C	
Approach Delay (s/veh)		3.6				1.2				12.8				15.9			
Approach LOS		A				A				B				C			

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Aurora St. / Franklin St.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Aurora Street
Analysis Year	2022	North/South Street	Franklin Street
Time Analyzed	815am - 915am	Peak Hour Factor	0.75
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT					LR					
Volume (veh/h)			190	52		39	262			41		64				
Percent Heavy Vehicles (%)						1				1		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)					4.1				7.1		6.2					
Critical Headway (sec)					4.11				6.41		6.21					
Base Follow-Up Headway (sec)					2.2				3.5		3.3					
Follow-Up Headway (sec)					2.21				3.51		3.31					

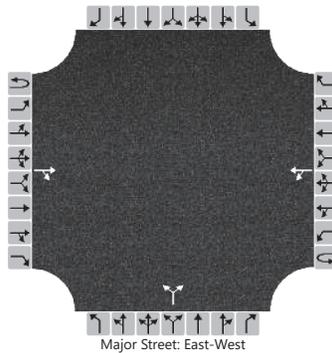
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					52					140						
Capacity, c (veh/h)					1243					532						
v/c Ratio					0.04					0.26						
95% Queue Length, Q <sub>95</sub> (veh)					0.1					1.0						
Control Delay (s/veh)					8.0					14.2						
Level of Service (LOS)					A					B						
Approach Delay (s/veh)					1.4				14.2							
Approach LOS									B							

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Aurora St. / Hayden Pkwy.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Aurora Street
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	815am - 915am	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			210	49		82	274			38		52				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.12					6.42		6.22			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.22					3.52		3.32			

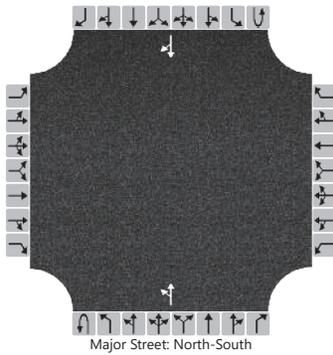
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						108					118					
Capacity, c (veh/h)						1218					436					
v/c Ratio						0.09					0.27					
95% Queue Length, Q <sub>95</sub> (veh)						0.3					1.1					
Control Delay (s/veh)						8.2					16.3					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					2.6				16.3							
Approach LOS									C							

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./McDowell N.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	McDowell N. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	815am - 915am	Peak Hour Factor	0.63
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0		0	1	0		0	1	0
Configuration										LT						TR
Volume (veh/h)										19	84				87	48
Percent Heavy Vehicles (%)										2						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.12						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.22						

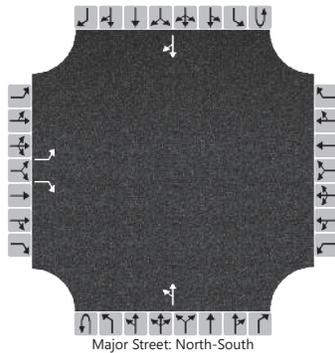
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										30						
Capacity, c (veh/h)										1356						
v/c Ratio										0.02						
95% Queue Length, Q <sub>95</sub> (veh)										0.1						
Control Delay (s/veh)										7.7						
Level of Service (LOS)										A						
Approach Delay (s/veh)										1.6						
Approach LOS																

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./McDowell S.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	McDowell S. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	815am - 915am	Peak Hour Factor	0.64
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		40		26						31	62				43	41	
Percent Heavy Vehicles (%)		0		0						2							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.22						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		63		41						48						
Capacity, c (veh/h)		677		962						1454						
v/c Ratio		0.09		0.04						0.03						
95% Queue Length, Q <sub>95</sub> (veh)		0.3		0.1						0.1						
Control Delay (s/veh)		10.9		8.9						7.6						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)		10.1										2.7				
Approach LOS		B														

# HCS7 Two-Way Stop-Control Report

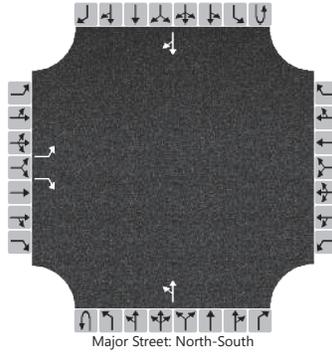
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	815am - 915am
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./E. Woods Dr.
Jurisdiction	City of Hudson
East/West Street	E. Woods Elementary Drive
North/South Street	Hayden Parkway
Peak Hour Factor	0.65
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		19		28						15	69				84	14	
Percent Heavy Vehicles (%)		0		0						4							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.40		6.20						4.14							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.50		3.30						2.24							

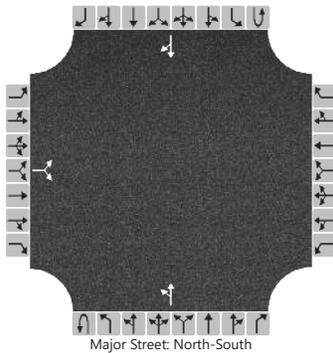
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		29		43						23								
Capacity, c (veh/h)		691		913						1418								
v/c Ratio		0.04		0.05						0.02								
95% Queue Length, Q <sub>95</sub> (veh)		0.1		0.1						0.0								
Control Delay (s/veh)		10.4		9.1						7.6								
Level of Service (LOS)		B		A						A								
Approach Delay (s/veh)		9.7								1.5								
Approach LOS		A																

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./Evamere S.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2022	East/West Street	Evamere S. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	815am - 915am	Peak Hour Factor	0.64
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						1	86				107	15
Percent Heavy Vehicles (%)		0		0						2						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type   Storage		Undivided														

## Critical and Follow-up Headways

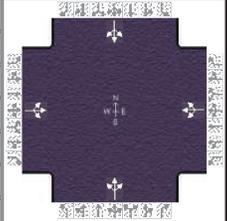
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.22						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							2						
Capacity, c (veh/h)										1383						
v/c Ratio										0.00						
95% Queue Length, Q <sub>95</sub> (veh)										0.0						
Control Delay (s/veh)										7.6						
Level of Service (LOS)										A						
Approach Delay (s/veh)										0.1						
Approach LOS																

## HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GPD Group			Duration, h	0.250		
Analyst	Tyler Stratton	Analysis Date	Sep 6, 2018	Area Type	Other		
Jurisdiction	City of Hudson	Time Period	AM Peak	PHF	0.89		
Urban Street	State Route 303	Analysis Year	2018	Analysis Period	1> 7:00		
Intersection	Hayden Parkway	File Name	11. SR-303_Hayden Pkwy_815am-915am.xus				
Project Description	Post Construction Analysis_815am - 915am						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( v ), veh/h	71	196	9	4	279	37	12	17	9	26	22	62

Signal Information												
Cycle, s	105.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	54.1	40.3	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.6	3.0	0.0	0.0	0.0	0.0		
				Red	2.0	2.0	0.0	0.0	0.0	0.0		

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6		8		4
Case Number		8.0		8.0		8.0		8.0
Phase Duration, s		59.7		59.7		45.3		45.3
Change Period, ( Y+R <sub>c</sub> ), s		5.6		5.6		5.2		5.2
Max Allow Headway ( MAH ), s		1.2		1.2		4.3		4.3
Queue Clearance Time ( g <sub>s</sub> ), s		13.6		14.6		3.6		7.2
Green Extension Time ( g <sub>e</sub> ), s		0.1		0.1		0.6		0.6
Phase Call Probability		1.00		1.00		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

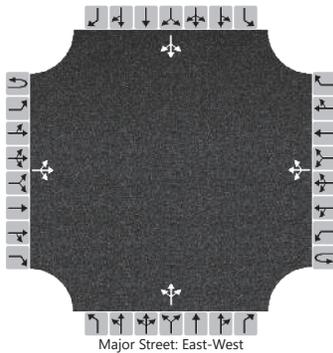
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate ( v ), veh/h	310			360			43			124		
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1549			1806			1588			1577		
Queue Service Time ( g <sub>s</sub> ), s	0.0			0.0			0.0			0.0		
Cycle Queue Clearance Time ( g <sub>c</sub> ), s	11.6			12.6			1.6			5.2		
Green Ratio ( g/C )	0.52			0.52			0.38			0.38		
Capacity ( c ), veh/h	841			965			652			645		
Volume-to-Capacity Ratio ( X )	0.369			0.373			0.066			0.192		
Back of Queue ( Q ), ft/ln ( 95 th percentile)	191.7			219			31			95		
Back of Queue ( Q ), veh/ln ( 95 th percentile)	7.5			8.6			1.2			3.7		
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00			0.00			0.00			0.00		
Uniform Delay ( d <sub>1</sub> ), s/veh	15.0			15.4			20.6			21.7		
Incremental Delay ( d <sub>2</sub> ), s/veh	0.1			0.1			0.0			0.1		
Initial Queue Delay ( d <sub>3</sub> ), s/veh	0.0			0.0			0.0			0.0		
Control Delay ( d ), s/veh	15.1			15.5			20.6			21.8		
Level of Service (LOS)	B			B			C			C		
Approach Delay, s/veh / LOS	15.1	B		15.5	B		20.6	C		21.8	C	
Intersection Delay, s/veh / LOS	16.5						B					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	SR-303 / Oviatt Street
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	SR-303
Analysis Year	2022	North/South Street	Oviatt Street
Time Analyzed	215pm - 315pm	Peak Hour Factor	0.89
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Priority																	
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR		
Volume (veh/h)		41	328	8		3	242	58		7	3	6		2	7	91	
Percent Heavy Vehicles (%)		4				4				4	4	4		4	4	4	
Proportion Time Blocked																	
Percent Grade (%)										0				0			
Right Turn Channelized																	
Median Type   Storage	Undivided																

## Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.14				4.14				7.14	6.54	6.24		7.14	6.54	6.24
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.24				2.24				3.54	4.04	3.34		3.54	4.04	3.34

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		46				3					18					112	
Capacity, c (veh/h)		1211				1170					325					649	
v/c Ratio		0.04				0.00					0.06					0.17	
95% Queue Length, Q <sub>95</sub> (veh)		0.1				0.0					0.2					0.6	
Control Delay (s/veh)		8.1				8.1					16.7					11.7	
Level of Service (LOS)		A				A					C					B	
Approach Delay (s/veh)		1.2				0.1				16.7				11.7			
Approach LOS										C				B			

# HCS7 All-Way Stop Control Report

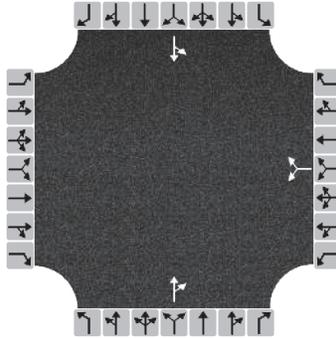
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	215pm - 315pm
Project Description	Post Construction Analysis

## Site Information

Intersection	Oviatt St. / Elm St.
Jurisdiction	City of Hudson
East/West Street	Elm Street
North/South Street	Oviatt Street
Peak Hour Factor	0.85

## Lanes



## Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume				2		11		104	4	5	98	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				15			127			121		
Percent Heavy Vehicles				1			1			1		

## Departure Headway and Service Time

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.014			0.113			0.108		
Final Departure Headway, hd (s)				3.96			4.04			4.08		
Final Degree of Utilization, x				0.017			0.143			0.137		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				1.96			2.04			2.08		

## Capacity, Delay and Level of Service

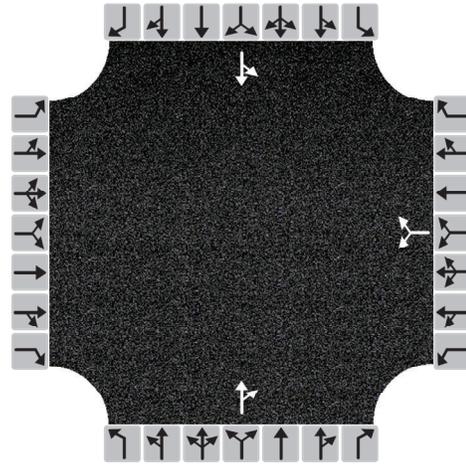
Flow Rate, v (veh/h)				15			127			121		
Capacity				909			891			883		
95% Queue Length, Q <sub>95</sub> (veh)				0.1			0.5			0.5		
Control Delay (s/veh)				7.0			7.7			7.7		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				7.0			7.7			7.7		
Approach LOS				A			A			A		
Intersection Delay, s/veh   LOS	7.7						A					

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	Ryan Barco
Agency/Co.	GPD Group
Date Performed	11/15/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	2:15pm - 3:15pm
Project Description	Post Construction Analysis Update
Intersection	Oviatt St. / Franklin St.
Jurisdiction	City of Hudson
East/West Street	Franklin Street
North/South Street	Oviatt Street
Peak Hour Factor	0.67

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)				51		32		55	42	25	46	
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				124			145			106		
Percent Heavy Vehicles				1			5			4		
Initial Departure Headway, h <sub>d</sub> (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.110			0.129			0.094		
Final Departure Headway, h <sub>d</sub> (s)				4.37			4.14			4.48		
Final Degree of Utilization, x				0.150			0.166			0.132		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, t <sub>s</sub> (s)				2.37			2.14			2.48		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				124			145			106		
Capacity (veh/h)				824			870			803		
95% Queue Length, Q <sub>95</sub> (veh)				0.5			0.6			0.5		
95% Queue Length, Q <sub>95</sub> (ft)				12.6			15.6			12.9		
Control Delay (s/veh)				8.1			8.0			8.2		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)   LOS				8.1		A	8.0		A	8.2		A
Intersection Delay (s/veh)   LOS				8.1			A			A		

# HCS7 Two-Way Stop-Control Report

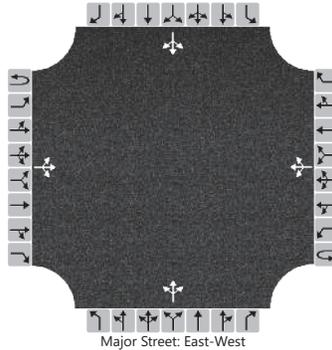
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	215pm - 315pm
Intersection Orientation	East-West
Project Description	Post Construction Analysis

## Site Information

Intersection	Aurora St. / Oviatt St.
Jurisdiction	City of Hudson
East/West Street	Aurora Street
North/South Street	Oviatt Street
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	10	10		11	23	60		6	192	22		49	214	9
Percent Heavy Vehicles (%)		1				1				1	1	1		1	1	1
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.11				4.11				7.11	6.51	6.21		7.11	6.51	6.21
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.21				2.21				3.51	4.01	3.31		3.51	4.01	3.31

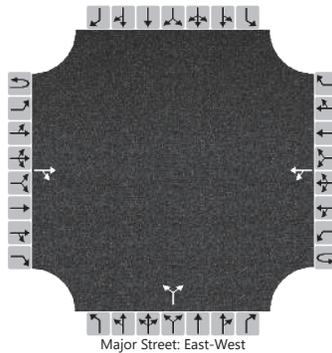
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				12					247					306	
Capacity, c (veh/h)		1507				1599					751					715	
v/c Ratio		0.00				0.01					0.33					0.43	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					1.4					2.1	
Control Delay (s/veh)		7.4				7.3					12.1					13.7	
Level of Service (LOS)		A				A					B					B	
Approach Delay (s/veh)		1.7				0.9				12.1				13.7			
Approach LOS										B				B			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Tyler Stratton			Intersection	Aurora St. / Franklin St.		
Agency/Co.	GPD Group			Jurisdiction	City of Hudson		
Date Performed	2/15/2023			East/West Street	Aurora Street		
Analysis Year	2022			North/South Street	Franklin Street		
Time Analyzed	215pm - 315pm			Peak Hour Factor	0.83		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Post Construction Analysis						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			219	40		14	235			39		40				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.12					6.42		6.22			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.22					3.52		3.32			

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					95					
Capacity, c (veh/h)						1248					567					
v/c Ratio						0.01					0.17					
95% Queue Length, Q <sub>95</sub> (veh)						0.0					0.6					
Control Delay (s/veh)						7.9					12.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					0.6				12.6							
Approach LOS									B							

# HCS7 Two-Way Stop-Control Report

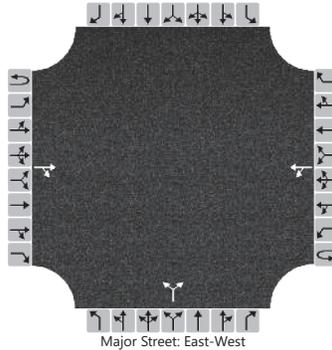
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	215pm - 315pm
Intersection Orientation	East-West
Project Description	Post Construction Analysis

## Site Information

Intersection	Aurora St. / Hayden Pkwy.
Jurisdiction	City of Hudson
East/West Street	Aurora Street
North/South Street	Hayden Parkway
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			256	26		40	250			23		53				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

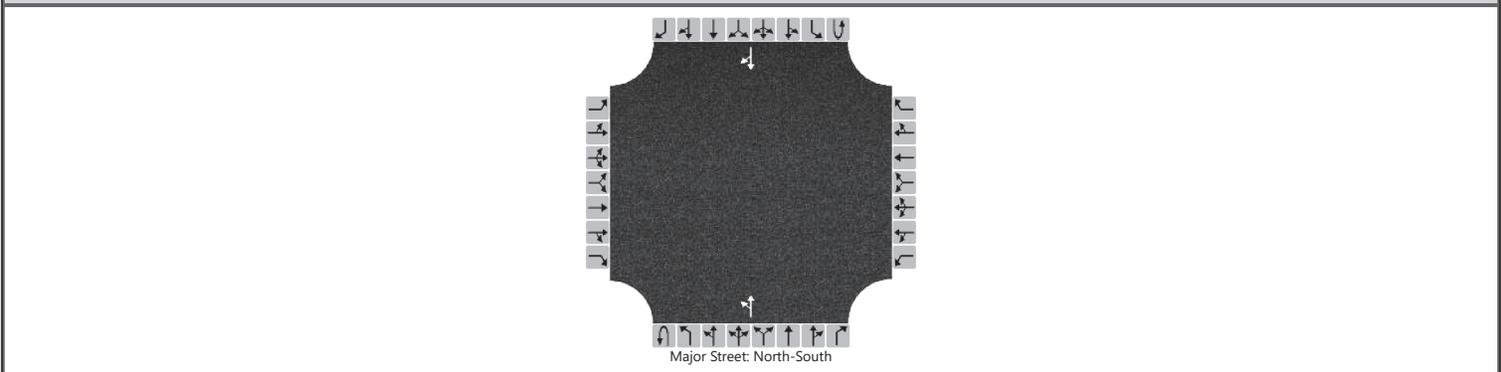
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						53						100				
Capacity, c (veh/h)						1187						526				
v/c Ratio						0.04						0.19				
95% Queue Length, Q <sub>95</sub> (veh)						0.1						0.7				
Control Delay (s/veh)						8.2						13.4				
Level of Service (LOS)						A						B				
Approach Delay (s/veh)					1.5				13.4							
Approach LOS									B							

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./McDowell N.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	McDowell N. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	215pm - 315pm	Peak Hour Factor	0.78
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0		0	1	0		0	1	0
Configuration										LT						TR
Volume (veh/h)										5	66				57	6
Percent Heavy Vehicles (%)										2						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

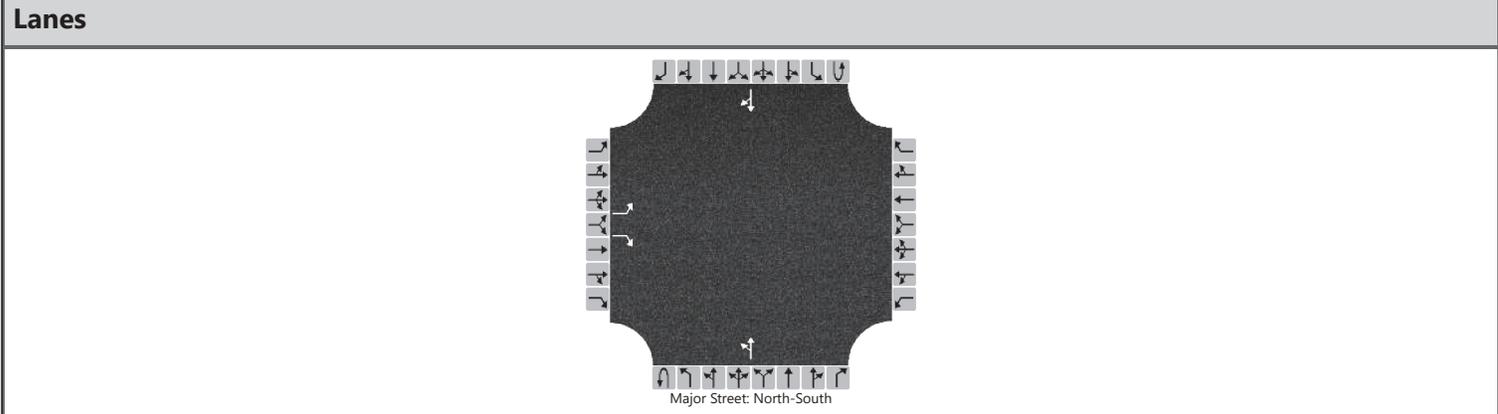
Base Critical Headway (sec)											4.1					
Critical Headway (sec)											4.12					
Base Follow-Up Headway (sec)											2.2					
Follow-Up Headway (sec)											2.22					

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)											6					
Capacity, c (veh/h)											1517					
v/c Ratio											0.00					
95% Queue Length, Q <sub>95</sub> (veh)											0.0					
Control Delay (s/veh)											7.4					
Level of Service (LOS)											A					
Approach Delay (s/veh)	0.6															
Approach LOS	A															

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./McDowell S.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	McDowell S. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	215pm - 315pm	Peak Hour Factor	0.74
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		



**Vehicle Volumes and Adjustments**

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		7		4						0	78				57	0	
Percent Heavy Vehicles (%)		0		0						2							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

**Critical and Follow-up Headways**

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.22						

**Delay, Queue Length, and Level of Service**

Flow Rate, v (veh/h)		9		5						0						
Capacity, c (veh/h)		812		990						1522						
v/c Ratio		0.01		0.01						0.00						
95% Queue Length, Q <sub>95</sub> (veh)		0.0		0.0						0.0						
Control Delay (s/veh)		9.5		8.7						7.4						
Level of Service (LOS)		A		A						A						
Approach Delay (s/veh)		9.2										0.0				
Approach LOS		A														

# HCS7 Two-Way Stop-Control Report

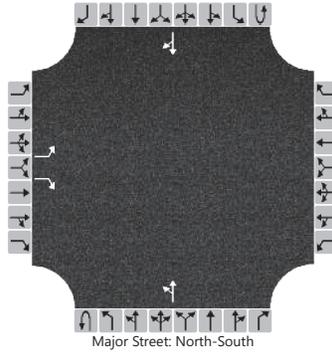
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	215pm - 315pm
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./E. Woods Dr.
Jurisdiction	City of Hudson
East/West Street	E. Woods Elementary Drive
North/South Street	Hayden Parkway
Peak Hour Factor	0.74
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		34		20						23	57					56	20
Percent Heavy Vehicles (%)		0		0						2							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.40		6.20						4.12							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.50		3.30						2.22							

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		46		27						31								
Capacity, c (veh/h)		748		974						1489								
v/c Ratio		0.06		0.03						0.02								
95% Queue Length, Q <sub>95</sub> (veh)		0.2		0.1						0.1								
Control Delay (s/veh)		10.1		8.8						7.5								
Level of Service (LOS)		B		A						A								
Approach Delay (s/veh)		9.6								2.3								
Approach LOS		A																

# HCS7 Two-Way Stop-Control Report

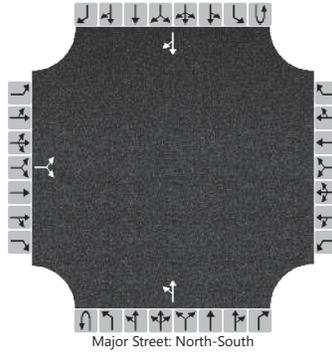
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2022
Analysis Year	2022
Time Analyzed	215pm - 315pm
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./Evamere S.
Jurisdiction	City of Hudson
East/West Street	Evamere S. Access
North/South Street	Hayden Parkway
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						2	82				62	11
Percent Heavy Vehicles (%)		0		0						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

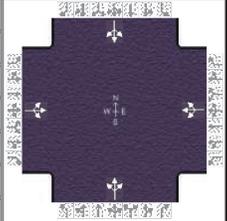
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.23						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							2						
Capacity, c (veh/h)										1500						
v/c Ratio										0.00						
95% Queue Length, Q <sub>95</sub> (veh)										0.0						
Control Delay (s/veh)										7.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)	0.2															
Approach LOS																

## HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GPD Group			Duration, h	0.250		
Analyst	Tyler Stratton	Analysis Date	Sep 6, 2018	Area Type	Other		
Jurisdiction	City of Hudson	Time Period	AM Peak	PHF	0.84		
Urban Street	State Route 303	Analysis Year	2018	Analysis Period	1> 7:00		
Intersection	Hayden Parkway	File Name	11. SR-303_Hayden Pkwy_215pm-315pm.xus				
Project Description	Post Construction Analysis_215pm - 315pm						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( v ), veh/h	74	299	12	4	306	22	10	11	9	19	17	42

Signal Information												
Cycle, s	105.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	54.1	40.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6		8		4
Case Number		8.0		8.0		8.0		8.0
Phase Duration, s		59.7		59.7		45.3		45.3
Change Period, ( Y+R <sub>c</sub> ), s		5.6		5.6		5.2		5.2
Max Allow Headway ( MAH ), s		1.2		1.2		4.3		4.3
Queue Clearance Time ( g <sub>s</sub> ), s		21.4		16.4		3.4		5.9
Green Extension Time ( g <sub>e</sub> ), s		0.1		0.1		0.5		0.5
Phase Call Probability		1.00		1.00		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

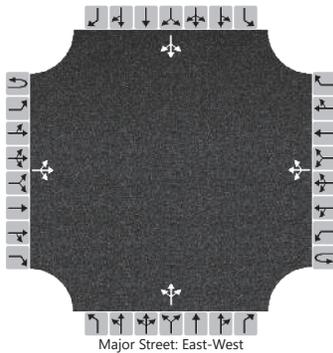
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate ( v ), veh/h	458			395			36			93		
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1587			1791			1547			1556		
Queue Service Time ( g <sub>s</sub> ), s	5.0			0.0			0.0			0.0		
Cycle Queue Clearance Time ( g <sub>c</sub> ), s	19.4			14.4			1.4			3.9		
Green Ratio ( g/C )	0.52			0.52			0.38			0.38		
Capacity ( c ), veh/h	859			958			637			637		
Volume-to-Capacity Ratio ( X )	0.534			0.413			0.056			0.146		
Back of Queue ( Q ), ft/ln ( 95 th percentile)	292.4			245.2			26.3			71.1		
Back of Queue ( Q ), veh/ln ( 95 th percentile)	11.3			9.5			1.0			2.8		
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00			0.00			0.00			0.00		
Uniform Delay ( d <sub>1</sub> ), s/veh	16.8			15.8			20.5			21.2		
Incremental Delay ( d <sub>2</sub> ), s/veh	0.3			0.1			0.0			0.1		
Initial Queue Delay ( d <sub>3</sub> ), s/veh	0.0			0.0			0.0			0.0		
Control Delay ( d ), s/veh	17.1			15.9			20.5			21.4		
Level of Service (LOS)	B			B			C			C		
Approach Delay, s/veh / LOS	17.1	B		15.9	B		20.5	C		21.4	C	
Intersection Delay, s/veh / LOS	17.2						B					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	SR-303 / Oviatt Street
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	SR-303
Analysis Year	2022	North/South Street	Oviatt Street
Time Analyzed	315pm - 415pm	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		50	365	9		5	293	69		5	5	4		9	18	91
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

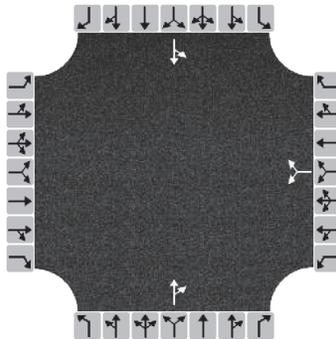
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		53				5				15						126
Capacity, c (veh/h)		1173				1161				276						509
v/c Ratio		0.05				0.00				0.05						0.25
95% Queue Length, Q <sub>95</sub> (veh)		0.1				0.0				0.2						1.0
Control Delay (s/veh)		8.2				8.1				18.8						14.4
Level of Service (LOS)		A				A				C						B
Approach Delay (s/veh)	1.4				0.2				18.8				14.4			
Approach LOS									C				B			

# HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Oviatt St. / Elm St.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Elm Street
Analysis Year	2022	North/South Street	Oviatt Street
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.82
Time Analyzed	315pm - 415pm		
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume				5		10		116	11	12	114	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				18			155			154		
Percent Heavy Vehicles				1			1			1		

## Departure Headway and Service Time

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.016			0.138			0.137		
Final Departure Headway, hd (s)				4.23			4.05			4.12		
Final Degree of Utilization, x				0.021			0.174			0.176		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.23			2.05			2.12		

## Capacity, Delay and Level of Service

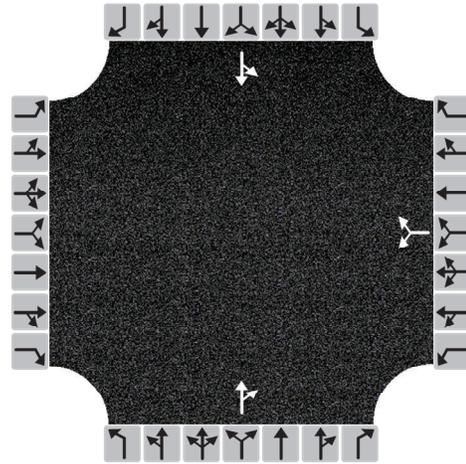
Flow Rate, v (veh/h)				18			155			154		
Capacity				851			888			873		
95% Queue Length, Q <sub>95</sub> (veh)				0.1			0.6			0.6		
Control Delay (s/veh)				7.3			7.9			8.0		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				7.3			7.9			8.0		
Approach LOS				A			A			A		
Intersection Delay, s/veh   LOS	7.9						A					

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	Ryan Barco
Agency/Co.	GPD Group
Date Performed	11/15/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	3:15pm - 4:15pm
Project Description	Post Construction Analysis Update
Intersection	Oviatt St. / Franklin St.
Jurisdiction	City of Hudson
East/West Street	Franklin Street
North/South Street	Oviatt Street
Peak Hour Factor	0.67

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)				54		8		84	41	15	92	
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				93			187			160		
Percent Heavy Vehicles				2			2			0		
Initial Departure Headway, $h_d$ (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.082			0.166			0.142		
Final Departure Headway, $h_d$ (s)				4.79			4.15			4.36		
Final Degree of Utilization, x				0.123			0.215			0.193		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, $t_s$ (s)				2.79			2.15			2.36		

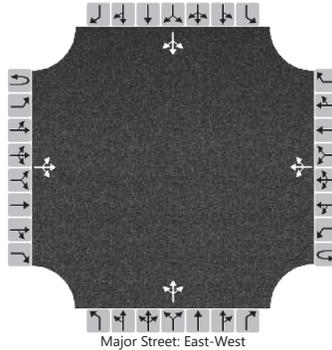
## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				93			187			160		
Capacity (veh/h)				752			868			826		
95% Queue Length, $Q_{95}$ (veh)				0.4			0.8			0.7		
95% Queue Length, $Q_{95}$ (ft)				10.2			20.3			17.5		
Control Delay (s/veh)				8.5			8.3			8.4		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)   LOS				8.5		A	8.3		A	8.4		A
Intersection Delay (s/veh)   LOS				8.4			A					

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Aurora St. / Oviatt St.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	Aurora Street
Analysis Year	2022	North/South Street	Oviatt Street
Time Analyzed	315pm - 415pm	Peak Hour Factor	0.85
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	26	7		16	24	59		6	190	6		52	349	8
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.10				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

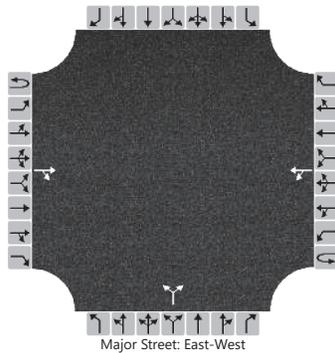
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9				19					238					481	
Capacity, c (veh/h)		1508				1584					679					690	
v/c Ratio		0.01				0.01					0.35					0.70	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.0					1.6					5.7	
Control Delay (s/veh)		7.4				7.3					13.1					21.4	
Level of Service (LOS)		A				A					B					C	
Approach Delay (s/veh)		1.5				1.3				13.1				21.4			
Approach LOS										B				C			

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Tyler Stratton			Intersection	Aurora St. / Franklin St.		
Agency/Co.	GPD Group			Jurisdiction	City of Hudson		
Date Performed	2/15/2023			East/West Street	Aurora Street		
Analysis Year	2022			North/South Street	Franklin Street		
Time Analyzed	315pm - 415pm			Peak Hour Factor	0.78		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Post Construction Analysis						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT					LR					
Volume (veh/h)			225	30		36	340			60		59				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

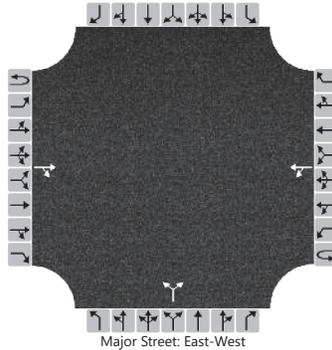
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						46					153					
Capacity, c (veh/h)						1244					448					
v/c Ratio						0.04					0.34					
95% Queue Length, Q <sub>95</sub> (veh)						0.1					1.5					
Control Delay (s/veh)						8.0					17.1					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					1.1				17.1							
Approach LOS					A				C							

# HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Tyler Stratton			Intersection	Aurora St. / Hayden Pkwy.		
Agency/Co.	GPD Group			Jurisdiction	City of Hudson		
Date Performed	2/15/2023			East/West Street	Aurora Street		
Analysis Year	2022			North/South Street	Hayden Parkway		
Time Analyzed	315pm - 415pm			Peak Hour Factor	0.82		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Post Construction Analysis						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT					LR					
Volume (veh/h)			271	38		57	362			63		79				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.10					6.40		6.20			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.20					3.50		3.30			

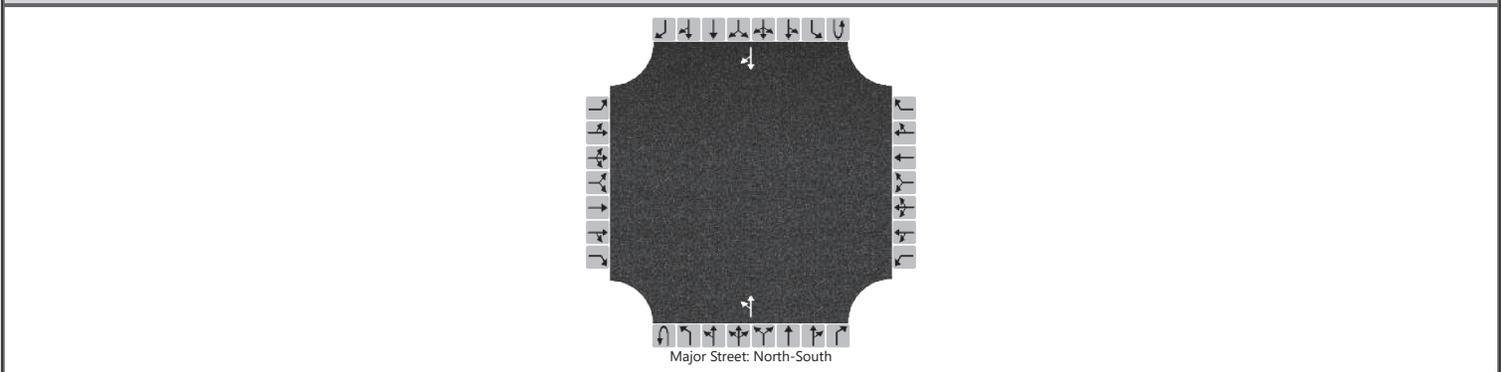
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						70						173				
Capacity, c (veh/h)						1193						414				
v/c Ratio						0.06						0.42				
95% Queue Length, Q <sub>95</sub> (veh)						0.2						2.0				
Control Delay (s/veh)						8.2						19.8				
Level of Service (LOS)						A						C				
Approach Delay (s/veh)					1.7				19.8							
Approach LOS									C							

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./McDowell N.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2023	East/West Street	McDowell N. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	315pm - 415pm	Peak Hour Factor	0.75
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0		0	1	0		0	1	0
Configuration										LT						TR
Volume (veh/h)										13	147				57	41
Percent Heavy Vehicles (%)										1						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.11						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.21						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										17						
Capacity, c (veh/h)										1461						
v/c Ratio										0.01						
95% Queue Length, Q <sub>95</sub> (veh)										0.0						
Control Delay (s/veh)										7.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										0.7						
Approach LOS																

# HCS7 Two-Way Stop-Control Report

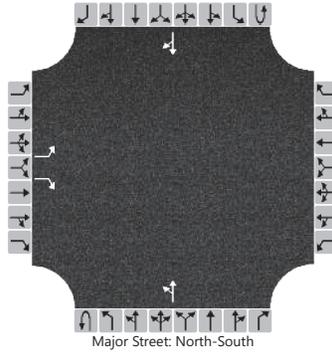
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	315pm - 415pm
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./McDowell S.
Jurisdiction	City of Hudson
East/West Street	McDowell S. Access
North/South Street	Hayden Parkway
Peak Hour Factor	0.70
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0	
Configuration		L			R					LT						TR	
Volume (veh/h)		52			50					22	104					47	11
Percent Heavy Vehicles (%)		0			0					1							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage					Undivided												

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.40		6.20						4.11							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.50		3.30						2.21							

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		74		71						31							
Capacity, c (veh/h)		692		992						1521							
v/c Ratio		0.11		0.07						0.02							
95% Queue Length, Q <sub>95</sub> (veh)		0.4		0.2						0.1							
Control Delay (s/veh)		10.8		8.9						7.4							
Level of Service (LOS)		B		A						A							
Approach Delay (s/veh)		9.9								1.4							
Approach LOS		A															

# HCS7 Two-Way Stop-Control Report

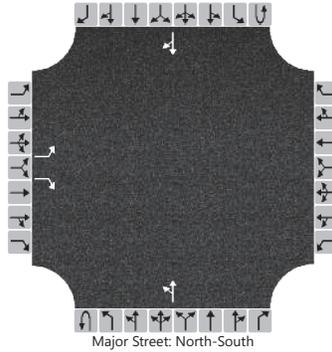
## General Information

Analyst	Tyler Stratton
Agency/Co.	GPD Group
Date Performed	2/15/2023
Analysis Year	2022
Time Analyzed	315pm - 415pm
Intersection Orientation	North-South
Project Description	Post Construction Analysis

## Site Information

Intersection	Hayden Pkwy./E. Woods Dr.
Jurisdiction	City of Hudson
East/West Street	E. Woods Elementary Drive
North/South Street	Hayden Parkway
Peak Hour Factor	0.74
Analysis Time Period (hrs)	0.25

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		43		54						13	90				105	3	
Percent Heavy Vehicles (%)		0		0						2							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No															
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.22						

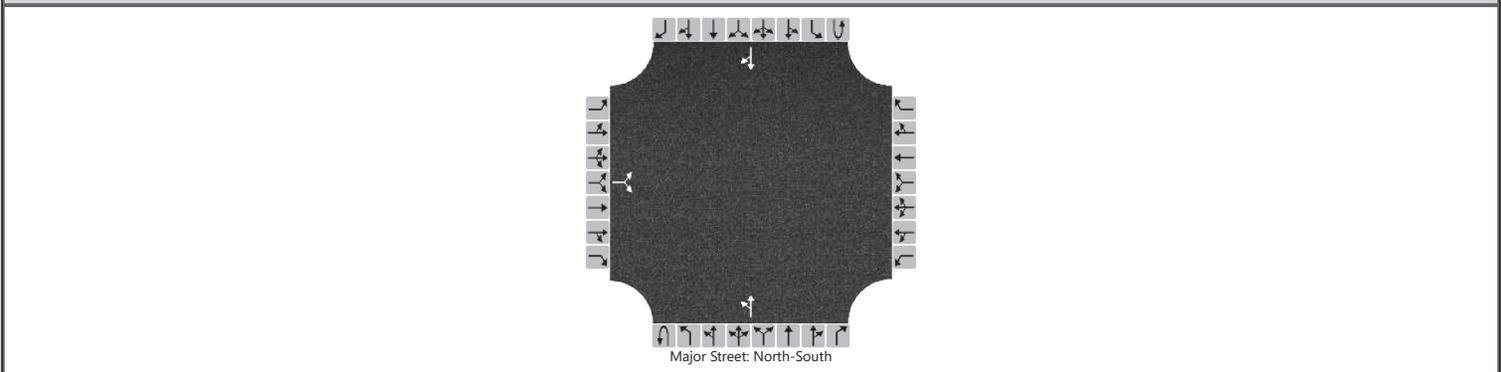
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		58		73						18						
Capacity, c (veh/h)		686		909						1436						
v/c Ratio		0.08		0.08						0.01						
95% Queue Length, Q <sub>95</sub> (veh)		0.3		0.3						0.0						
Control Delay (s/veh)		10.7		9.3						7.5						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)		9.9										1.0				
Approach LOS		A														

# HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Tyler Stratton	Intersection	Hayden Pkwy./Evamere S.
Agency/Co.	GPD Group	Jurisdiction	City of Hudson
Date Performed	2/15/2022	East/West Street	Evamere S. Access
Analysis Year	2022	North/South Street	Hayden Parkway
Time Analyzed	315pm - 415pm	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Post Construction Analysis		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						1	108				151	16
Percent Heavy Vehicles (%)		0		0						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

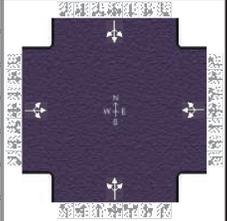
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.23						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							1						
Capacity, c (veh/h)										1370						
v/c Ratio										0.00						
95% Queue Length, Q <sub>95</sub> (veh)										0.0						
Control Delay (s/veh)										7.6						
Level of Service (LOS)										A						
Approach Delay (s/veh)									0.1							
Approach LOS																

## HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GPD Group			Duration, h	0.250		
Analyst	Tyler Stratton	Analysis Date	Sep 6, 2018	Area Type	Other		
Jurisdiction	City of Hudson	Time Period	AM Peak	PHF	0.96		
Urban Street	State Route 303	Analysis Year	2018	Analysis Period	1> 7:00		
Intersection	Hayden Parkway	File Name	11. SR-303_Hayden Pkwy_315pm-415pm.xus				
Project Description	Post Construction Analysis_315pm - 415pm						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( v ), veh/h	78	338	11	18	297	25	11	10	6	39	29	88

Signal Information																		
Cycle, s	105.0	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	Yes	Simult. Gap E/W	On	Green	54.1	40.3	0.0	0.0	0.0	0.0	1		2		3		4	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.6	3.0	0.0	0.0	0.0	0.0	5		6		7		8	
				Red	2.0	2.0	0.0	0.0	0.0	0.0								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2		6		8		4
Case Number		8.0		8.0		8.0		8.0
Phase Duration, s		59.7		59.7		45.3		45.3
Change Period, ( Y+R <sub>c</sub> ), s		5.6		5.6		5.2		5.2
Max Allow Headway ( MAH ), s		1.2		1.2		4.4		4.4
Queue Clearance Time ( g <sub>s</sub> ), s		19.7		14.3		3.0		9.1
Green Extension Time ( g <sub>e</sub> ), s		0.1		0.1		0.8		0.7
Phase Call Probability		1.00		1.00		1.00		1.00
Max Out Probability		0.00		0.00		0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate ( v ), veh/h	445			354			28			163		
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1646			1785			1523			1575		
Queue Service Time ( g <sub>s</sub> ), s	5.4			0.0			0.0			1.1		
Cycle Queue Clearance Time ( g <sub>c</sub> ), s	17.7			12.3			1.0			7.1		
Green Ratio ( g/C )	0.52			0.52			0.38			0.38		
Capacity ( c ), veh/h	889			956			630			644		
Volume-to-Capacity Ratio ( X )	0.501			0.371			0.045			0.252		
Back of Queue ( Q ), ft/ln ( 95 th percentile)	274.3			215.4			20.3			128.2		
Back of Queue ( Q ), veh/ln ( 95 th percentile)	10.8			8.5			0.8			5.0		
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00			0.00			0.00			0.00		
Uniform Delay ( d <sub>1</sub> ), s/veh	16.4			15.3			20.4			22.2		
Incremental Delay ( d <sub>2</sub> ), s/veh	0.2			0.1			0.0			0.2		
Initial Queue Delay ( d <sub>3</sub> ), s/veh	0.0			0.0			0.0			0.0		
Control Delay ( d ), s/veh	16.6			15.4			20.4			22.4		
Level of Service (LOS)	B			B			C			C		
Approach Delay, s/veh / LOS	16.6	B		15.4	B		20.4	C		22.4	C	
Intersection Delay, s/veh / LOS	17.2						B					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				