TECHNICAL MEMORANDUM



SURVEYORS

Date: July 3, 2024-DRAFT ENGINEERS
PLANNERS

To: Ms. Margaret Morris – First Ward Councilmember, Chair of Legal Committee

From: Ken Wersted, PE, PTOE

CC: Jason Foster – C/o Hudson DPW

Project: Hudson Speed Evaluation – 123-427

Re: Summary of Speed Limit Evaluation Within City Limits

1. Purpose

The purpose of this evaluation is to review the operating speeds and speed limits on local streets under the jurisdiction of the City of Hudson and make appropriate recommendations.

2. Summary

Vehicle volume and speed data was collected throughout the city. The 85th -percentile speeds were found to be in the approximately 29 mph in the heart of the city, and 45 mph out further towards the city limits. The 50th -percentile speeds were found to be in the approximately 25 mph in the heart of the city, and 40 mph out further towards the city limits. A USLIMITS2 analysis recommended a speed limit of 25 mph. As such, it is recommended that the city be posted with a 25-mph speed limit and 35 mph along the southern leg of Route 23B/9G. Further, adjustments to the school reduced speed zone on Harry Howard Boulevard is recommended.

3. Background

In 2021, Assembly Bill A1007A was introduced which would amend the Vehicle and Traffic (VAT) law to allow for setting maximum speed limits as low as 25 mph. The previous law allowed a minimum of 30 mph with some exceptions for school zones and certain specified cities. The bill was subsequently passed and Chapter 71, Title 8, Article 39, Section (§)1643 of the VAT law was amended (Attachment A). Said amendment includes the following excerpt:

"The legislative body of any city or village with respect to highways (which term for the purposes of this section shall include private roads open to public motor vehicle traffic) in such city or village, other than state highways maintained by the state on which the department of transportation shall have established higher or lower speed limits than the statutory fifty-five miles per hour speed limit as provided in section sixteen hundred twenty of this title, or on which the department of transportation shall have designated that such city or village shall not establish any maximum speed limit as provided in section sixteen hundred twenty-four of this title, subject to the limitations imposed by section sixteen hundred eighty-four of this title may by local law, ordinance, order, rule or regulation establish maximum speed limits at which vehicles may proceed within such city or village, within designated or village higher or lower than the fifty-five miles per hour maximum statutory limit. No such speed limit applicable throughout such city or village or within designated areas of such city or village shall be established at less than [thirty] twenty-five miles per hour;"

"No speed limits shall be established pursuant to the provisions of this section except in accordance with the engineering considerations and factors for speed limits set forth in the manual and specifications for a uniform system of traffic control devices maintained by the commissioner of transportation pursuant to section sixteen hundred eighty of this title, as such manual and specifications may be amended from time to time, certified by a licensed professional engineer who specializes in traffic operations."

City of Hudson Speed Evaluation July 3, 2024

4. Methodologies

New York State uses the 2009 and 2023 Manual on Uniform Traffic Control Devices for Streets and Highways, published by the Federal Highway Administration (FHWA), herein referred to as the MUTCD. Certain state specific modifications to the Federal MUTCD are provided in the New York State Supplement to the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the New York State Department of Transportation (NYSDOT), herein referred to as the NYS Supplement. NYS follows §1680 of the VAT using these two documents.

As it relates to speed limits, the MUTCD Section 2B.13 (2009) and 2B.21 (2023) and as modified by the NYS Supplement states:

"Support:

In general, the maximum speed limits applicable to rural and urban roads are established:

- A. Statutorily a maximum speed limit applicable to a particular class of road, such as freeways or city streets, that is established by State law; or
- B. As speed zones based on engineering studies.

State statutory limits might restrict the maximum speed limit that can be established on a particular road, notwithstanding what an engineering study might indicate.

Agencies with designated authorities to set speed limits, which include States, and sometimes local jurisdictions, can establish non-statutory speed limits or designate reduced speed zones using an engineering study. Setting appropriate speed limits is especially important to ensure safety for all road users in varying types of contexts, particularly on roadways where adjacent land use suggests that trips could be served by varied modes. These situations include urban and suburban non-freeway arterials or rural arterials that serve as main streets in smaller communities, consistent with the context classifications of urban core, urban, suburban, and rural towns found in "A Policy on Geometric Design of Highways and Streets," 2018 Edition, AASHTO. When setting a speed limit, a range of factors such as land-use context, pedestrian and bicyclist activity, crash history, intersection spacing, driveway density, roadway geometry, roadside conditions, roadway functional classification, traffic volume, and observed speeds can influence the speed limit determined in the engineering study. The engineering study will determine which of the recommended factors will prevail in setting the speed limit.

Jurisdictions can use speed limit setting tools and methods such as expert systems and those consistent with the safe system approach as part of the required engineering study for a non-statutory speed limit. As speed limit setting tools vary, jurisdictions need to be aware of their limitations and advantages, possible variation between the tools and the need to explore gaps or weaknesses of tools and weigh the output accordingly in consideration of setting speed limits.

To achieve desired operating speeds, agencies often implement other speed management strategies concurrently with setting speed limits, such as traffic calming measures, geometric design features, speed safety cameras, and increased enforcement." – 2B.21, 2023 MUTCD

"Standard:

Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall consider the roadway context.

"Guidance:

City of Hudson Speed Evaluation July 3, 2024

Among the factors that should be considered when conducting an engineering study for establishing or reevaluating speed limits within speed zones are the following:

- A. Roadway environment (such as roadside development, number and frequency of driveways and access points, and land use), functional classification, public transit volume and location or frequency of stops, parking practices, and pedestrian and bicycle facilities and activity;
- B. Roadway characteristics (such as lane widths, shoulder condition, grade, alignment, median type, and sight distance);
- C. Geographic context (such as an urban district, rural town center, non-urbanized rural area, or suburban area), and multi-modal trip generation;
- D. Reported crash experience for at least a 12-month period;
- E. Speed distribution of free-flowing vehicles including the pace, median (50th-percentile), and 85th-percentile speeds; and
- F. A review of past speed studies to identify any trends in operating speeds." 2B.21, 2023 MUTCD

"Support:

Area Speed Limit – An area speed limit is one which applies to all highways within a specified area, except those specifically excluded. The area may be an entire municipality, or only a portion thereof. The defined area may also be the grounds of a school, hospital, or other institution." – 2011 NYS Supplement

Although the MUTCD/Supplement calls for an engineering study to establish speed limits, it does not detail the specific practice outside of simply using the 85th-percentile speed; therefore, additional resources were reviewed for such.

TSMI 17-05

The NYSDOT *Traffic Safety and Mobility Instruction* (TSMI) 17-05 (8/2017), summarizes the Departments guidance on establishing speed limits, although it pre-dates the VAT amendment. It recommends determining speed limits using:

- a. 85th percentile speed via radar
- b. Conduct a floating vehicle speed check
- c. Using USLIMITS2, an FHWA web-based tool

This TSMI set guidance for how NYSDOT is to complete speed limit studies over the roads covered by their jurisdiction, or on county and town roads as requested by those respective county superintendents and town boards.

85th-Percentile Speed

The concept of the 85th-percentile speed is that drivers will generally drive at a speed they feel comfortable with based on the surrounding roadway environment and surface conditions, regardless of the posted speed limit. Assuming the speed limit is reasonably posted, a narrow road with limited visibility and varied uses (i.e. pedestrians, bikes, on-street parking, etc.) will influence a reasonable person to drive slower, just as a wide road with limited access and clear views will make a driver more comfortable going faster. When the posted speed limit varies significantly from the natural free-flow speed, there will be more variability of speed; some drivers will drive closer to the speed limit (fearing a speeding ticket), while others will drive comfortably above the speed limit. This speed variation can have an impact on safety when faster drivers encounter slower drivers. The concept of setting the speed limit to the nearest increment of the 85th percentiles speed encompasses a more uniform flow of traffic to minimize the speed differential.

USLIMITS2

City of Hudson Speed Evaluation July 3, 2024

This is a web-based tool based on research by the National Cooperative Highway Research Program (NCHRP). It considers major factors used by practitioners using engineering judgement in determining an appropriate speed limit, including operating speeds, daily traffic, roadway characteristics, development, parking, and pedestrian and bicycle activity.

Methods and Practices for Setting Speed Limits

This informational report was published by FHWA¹ describing four primary practices and methodologies used in establishing speed limits: engineering approach, expert systems, optimization, and injury minimization. This report provides a broad overview of different speed limit setting methods but makes no specific policy recommendations or suggestions.

Managing Speed

This publication is from the Transportation Research Board, Special Report 254, published in 1998. Their research found that setting speed limits by road classification and geographic area was widely used. Although the decision process for legislating speed limits for different classifications of roads may include input from traffic engineers, law enforcement, and the public among others, there is always a trade off with respect to safety, travel time, and feasibility of enforcement. A speed limit set too high may minimize travel time but at the cost of safety to vulnerable road users in the context of a residential area. Likewise, setting a limit too low on a rural through-road traveled mostly by commuters may improve safety, but would be contrary to driver expectation leading to low compliance and higher demand for enforcement. In the end, there is no single "right" speed limit, but should meet the requirements of enforceability and acceptance by the community at large.

5. Study Area

City of Hudson

The City of Hudson (see Figure 1) is bounded on the west by the Hudson River, and the north, south, and east by the Town of Town of Greenport. The city limits are approximately 2.3 square miles. The city contains numerous local streets; several state routes traverse the city, all under the jurisdiction of the city within its boundaries. Roads are generally two lane, paved, unstriped, on average 33-feet wide with no shoulders, allow for on-street parking, and presently have a posted area speed limit of 30 mph. The vast majority of properties are residential with commercial, recreational, and community services uses spread throughout the city. On average there are about 25 driveways or intersections per mile of local roadway. Activities within the city are typical of an urban landscape – residents walking, kids playing on sidewalks, riding bicycles, business and shopping activity, mail, package, and garbage services. Sidewalks are available on most streets within city limits.

6. Analysis

Data

Traffic volumes and speeds were collected from May 9 to May 15, 2024, using automatic traffic recorders (ATRs) on State Street, NY Route 23B/9G, and Harry Howard Avenue as representative locations of city streets. Table 1 summarizes the results of each data collection point; detailed data reports are included under Attachment B.

¹ Report No. FHWA-SA-12-004, April 2012, by Forbes, Gardner, McGee, Srinivasan

City of Hudson Speed Evaluation July 3, 2024

Table	1-	Observation	Summary	1
-------	----	--------------------	---------	---

Location		Speeds (mph)		Volume (vpd)
Location	85 th -% ¹	50 th -% (median) ¹	Pace (10 mph) ²	ADT ³
State Street	29	25	19-29	4200
NY-23B/9G	45	40	35-45	6700
Harry Howard Avenue	44	39	34-44	6660
School Hours (7a-4p)	34	29	23-33	4830

¹⁻ The highest speed at which 85% or 50% of drivers were observed driving.

Crashes

Crashes and their contributing factors can be an element to consider in setting speed limits. Crash data was requested throughout the City from January 1, 2021 through December 31, 2023, the most recent three full years. The data was screened to remove crashes in parking lots, leaving 343 crashes occurring on city roads and intersections over the course of three years. Of the 343 crashes, 66 resulted in personal injuries, one resulted in a fatality with the remaining 276 crashes resulting in property damage only. Of the total 343 crashes, seven listed unsafe speed as a contributing factor.

85th-Percentile Speed

All of the referenced publications and guidance include some combination of data and engineering judgement. Using the 85th-percentile method and accounting for several local factors (street width, residential uses, shared use with peds and bikes), a 25-mph speed limit is suggested for most of the city streets. On the segment of NY-23B/9G, the prevailing speeds and limited side road access suggest a 40 or 45 mph speed limit.

Harry Howard Ave carries traffic past Montgomery Smith Elementary School, the Firemen's Home/Museum, and Hudson High School. The 85th-percentile speed was measured as 44 mph with an average speed of 39 mph. The road is much less developed in comparison to the center of Hudson and can be characterized as more "suburban" than urban. Filtering the data to just school hours indicates an 85th-percentile speed of 34 mph, with an average of 29 mph. Therefore, while the overall average 85th suggests a 40-45 mph speed limit, daytime hours influenced by the school speed limit zone suggest a 35-mph speed limit.

On Harry Howard northbound, the school speed limit zone begins at approximately house #56, roughly 1,000 feet from the edge of the elementary school property. There does not appear to be any "end school zone" signage. There is another "Speed Limit – 20" at house #184, the very edge of the high school property, which continues north and onto Joslen Boulevard in the Town of Greenport.

According to section 7B.15 of the 2011 NYS Supplement:

"Guidance:

The numerical value of a school speed limit should be approximately 10 MPH below the normally prevailing 85th percentile speed on the highway, or at approximately the actual 85th percentile speed within the zone during school crossing periods.

"Standard:

The maximum length of a school speed limit zone, as established in the New York State Vehicle and Traffic Law, shall not be greater than 1,320 feet (0.25 mile) on a highway passing a school building, entrance or exit of a school abutting on the highway."

"Guidance:

²⁻The 10-mph pace is the range of speeds that include most drivers, typically about 70% of the observations

³⁻ADT is the average daily traffic volume, reported as the average of the weekdays observed (weekends excluded)

City of Hudson Speed Evaluation July 3, 2024

The reduced speed limit zone should begin at a point either 200 feet upstream from the crosswalk, or 300 feet upstream from the school property line, whichever is encountered first as traffic approaches the school. The minimum length of a school speed limit zone should be 400 feet."

In some cases, nearby schools may have overlapping school speed zones. In such cases, the total length of the contiguous zone shall not exceed the number of schools times the 1320 feet, e.g. two x 1,320 feet equals 2640 feet².

In the case of Harry Howard Avenue, the 85th-percentile speed during school hours suggests a 30-35 mph school zone speed limit. Compliance with school speed limits diminishes as the prevailing speeds increase, i.e. if drivers feel comfortable driving faster on a road outside of school hours, there will be less compliance with a lower school zone speed limit. Further, the school speed zone area appears to exceed 4,300 feet (0.81 miles), where the MUTCD standards call for about a 1,200-foot school speed zone for the elementary school and 1,320 feet for the high school. The recommended limits are shown on Figure 2.

Considering the guidance above, the 0.81-mile reduced school speed zone should be reduced in length and consideration be given to implementing driver feedback signs to improve compliance with the new posted speed limit.

USLIMITS2

The USLIMITS2 evaluation was run on the respective streets. Table 3 summarizes the criterion and results, and detailed reports are included under Attachment C. A 25-mph speed limit is suggested on most city streets. The two exceptions are Route 23B/9G and Harry Howard Avenue, each suggested at 45 and 40 mph respectively.

Of Recommended On-street 85th/50th-% ΤάΑ Ped and Bike Location Driveways parking and Speed Limit Speed (mph) (vpd) activity (approx.)* use (mph) State Street 29/25 18 4200 High High 25 NY-23B/9G 44/39 11 6700 Not High Not High 45 44/39 43 40 Harry Howard Avenue 6660 Not High High

Table 3 - USLIMITS2 Criterion and Results

7. Conclusions/Recommendations:

Amendment §1643 of the Vehicle and Traffic law allows the city to lower the speed limit on their jurisdictional roads to 25 mph. Presently, roads in the city carry a 30-mph speed limit. The appropriateness of lowering the area speed limits to 25 mph was evaluated by collecting existing speed, volume, and roadside setting characteristics and comparing that data to industry standard methodologies.

The results of each method were similar, suggesting a reduced speed limit is justified on most roads and a higher speed limit on Route 23B/9G and Harry Howard Avenue. Based on our assessment of the area, it is our professional opinion that a 25-mph speed limit is appropriate for most roads within the limits of the City of Hudson based on several factors:

- These factors include the results of the above methodologies
- The suggested speed limit is within the observed 10-mph pace speed
- Changing the study area roads to 25 mph would make them consistent with the land uses of these
 areas in the context of an urban environment.

^{*}Based on an average of 25 driveways per mile

² NYSDOT TSMI 17-05 VII.C.2

City of Hudson Speed Evaluation July 3, 2024

Given the limited access and uses along the southern edge of Route 23B/9G, we recommend a linear speed limit of 30 to 35 mph as a step down from the Town of Greenport's 55-mph zone to the railroad bridge and the beginning of the dense urban setting. These limits are shown on Figure 3.

The reduced speed limit school zone on Harry Howard Avenue should be adjusted to meet guidance, reducing from 4,300 feet to approximately 1,200 feet for the elementary school and 1,320 for the high school.

8. Next Steps:

The Common Council has authority to set and change speed limits within city limits. The Council should review this memo and, if supported, pass a resolution amending the local law and in consultation with the city attorney.

The City will be responsible for purchasing and installing the new speed limits signs. We recommend placing flags or sign markers (NYW7-15) on each sign for the first 90 days of the posting to inform the public of the new speed limits. See the sign example (right).

NYW7-15 (12"x12") For first 90-days

NYR2-3 (24"x30")
Replace "AREA" with "CITY"!

Recommended Speed Limit Sign (TYP)

AREA SPEED

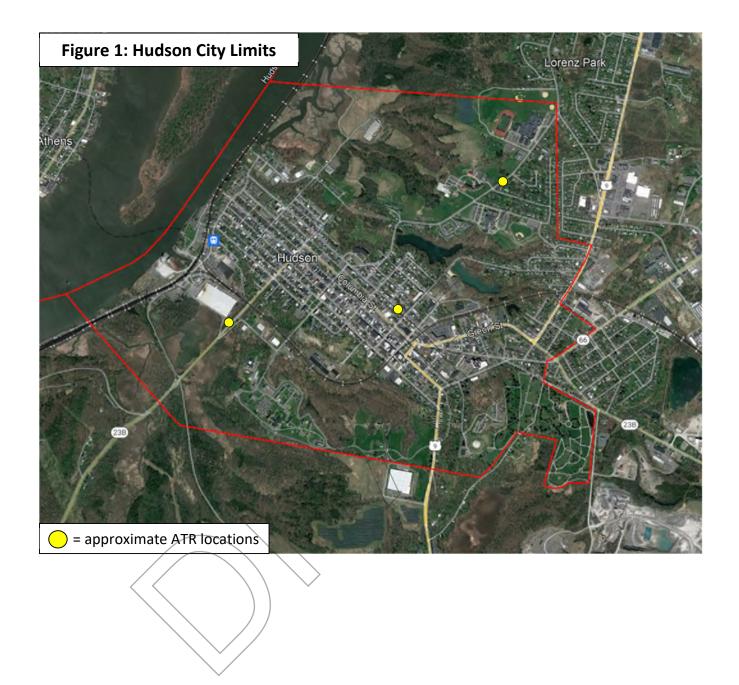
LIMIT

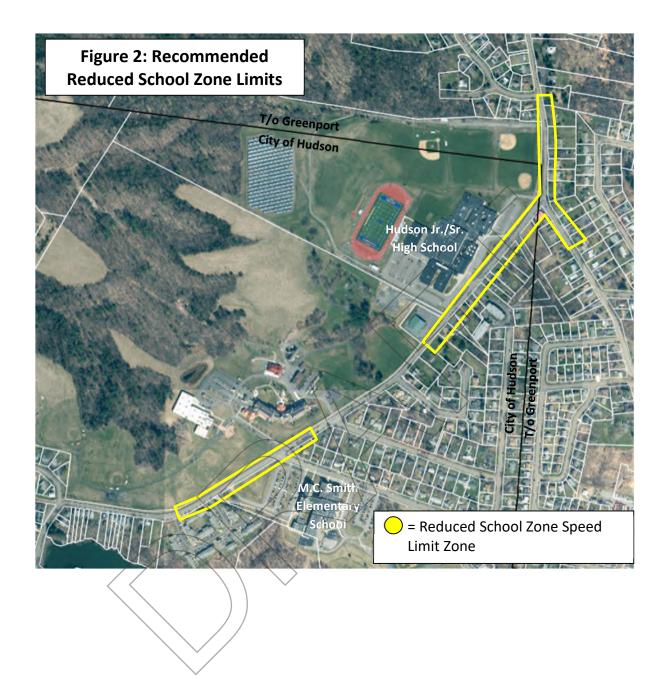
Some roads parallel the city/town boundary: Columbia Turnpike/Rt 23B, Paul Ave, Union Turnpike/Rt 66, Fairview Avenue/Rt 9, Ten Broeck Lane. One side of the street is the City of Hudson, while the other side is Town of Greenport. Additional coordination with Greenport and/or NYSDOT may be necessary to determine the limits of the city's jurisdiction and who sets the speed limit of the that segment of road.

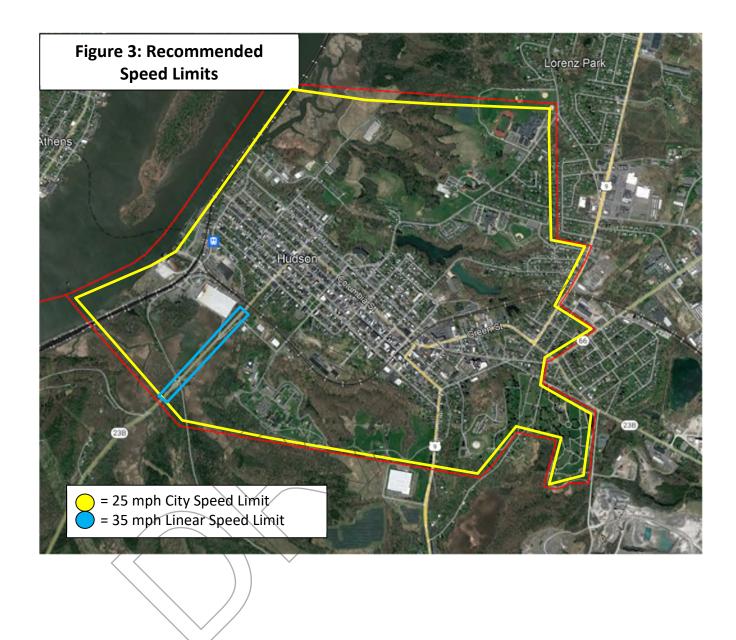
N:\Projects\2023\123-427 Hudson - Hudson Speed Evaluation\Working\Traffic\Reports\2024-05-17_City of Hudson Speed Limit Memo Draft_123-427.docx



City of Hudson Speed Evaluation July 3, 2024







City of Hudson Speed Evaluation July 3, 2024

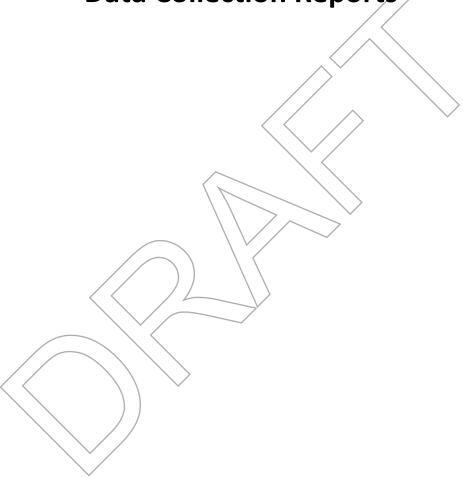
SECTION 1643

Speed limits on highways in cities and villages

Vehicle & Traffic (VAT) CHAPTER 71, TITLE 8, ARTICLE 39

§ 1643. Speed limits on highways in cities and villages. The legislative body of any city or village with respect to highways (which term for the purposes of this section shall include private roads open to public motor vehicle traffic) in such city or village, other than state highways maintained by the state on which the department of transportation shall have established higher or lower speed limits than the statutory fifty-five miles per hour speed limit as provided in section sixteen hundred twenty of this title, or on which the department of transportation shall have designated that such city or village shall not establish any maximum speed limit as provided in section sixteen hundred twenty-four of this title, subject to the limitations imposed by section sixteen hundred eighty-four of this title may by local law, ordinance, order, rule or regulation establish maximum speed limits at which vehicles may proceed within such city or village, within designated areas of such city or village or on or along designated highways within such city or village higher or lower than the fifty-five miles per hour maximum statutory limit. No such speed limit applicable throughout such city or village or within designated areas of such city or village shall be established at less than thirty miles per hour; except that in the city of Long Beach, in the county of Nassau, speed limits may be established at not less than fifteen miles per hour on any portion of the following highways in such city: Cleveland avenue, Harding avenue, Mitchell avenue, Belmont avenue, Atlantic avenue, Coolidge avenue, Wilson avenue and Taft avenue. No such speed limit applicable on or along designated highways within such city or village shall be established at less than twenty-five miles per hour, except that school speed limits may be established at not less than fifteen miles per hour, for a distance not to exceed one thousand three hundred twenty feet, on a highway passing a school building, entrance or exit of a school abutting on the highway and except that within the cities of Buffalo and Rochester speed limits may be established at not less than fifteen miles per hour for any portion of a highway within a city park.

Attachment B Data Collection Reports







City of Hudson Speed Evaluation June 20, 2024 - DRAFT

SECTION 1643

Speed limits on highways in cities and villages

Vehicle & Traffic (VAT) CHAPTER 71, TITLE 8, ARTICLE 39

§ 1643. Speed limits on highways in cities and villages. The legislative body of any city or village with respect to highways (which term for the purposes of this section shall include private roads open to public motor vehicle traffic) in such city or village, other than state highways maintained by the state on which the department of transportation shall have established higher or lower speed limits than the statutory fifty-five miles per hour speed limit as provided in section sixteen hundred twenty of this title, or on which the department of transportation shall have designated that such city or village shall not establish any maximum speed limit as provided in section sixteen hundred twenty-four of this title, subject to the limitations imposed by section sixteen hundred eighty-four of this title may by local law, ordinance, order, rule or regulation establish maximum speed limits at which vehicles may proceed within such city or village, within designated areas of such city or village or on or along designated highways within such city or village higher or lower than the fifty-five miles per hour maximum statutory limit. No such speed limit applicable throughout such city or village or within designated areas of such city or village shall be established at less than thirty miles per hour; except that in the city of Long Beach, in the county of Nassau, speed limits may be established at not less than fifteen miles per hour on any portion of the following highways in such city: Cleveland avenue, Harding avenue, Mitchell avenue, Belmont avenue, Atlantic avenue, Coolidge avenue, Wilson avenue and Taft avenue. No such speed limit applicable on or along designated highways within such city or village shall be established at less than twenty-five miles per hour, except that school speed limits may be established at not less than fifteen miles per hour, for a distance not to exceed one thousand three hundred twenty feet, on a highway passing a school building, entrance or exit of a school abutting on the highway and except that within the cities of Buffalo and Rochester speed limits may be established at not less than fifteen miles per hour for any portion of a highway within a city park.



MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-13 -- English (ENU)

Datasets:

Site: [123-427] NY Route 23B/9G, approximately 300-feet north of Power Avenue

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 1

Survey Duration: 16:39 Thursday, May 9, 2024 => 9:45 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 0945.EC1 (Plus)

Identifier: S1328N62 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North, South (bound), P = North**Separation:** Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 34489 / 34972 (98.62%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-13

Site: 123-427.1.2NS

Description: NY Route 23B/9G, approximately 300-feet north of Power Avenue Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	es 1 - 7
Hour								1 3	- ,
0000-0100	18.0	24.0	21.0	*	20.0	41.0	29/0 j	20.8	25.5
0100-0200	10.0	9.0	9.0	*	11.0	18.0	170 i	9.8	12.3
0200-0300	8.0	9.0	7.0	*	6.0	16.0/	/8.0 i	7.5	9.0
0300-0400	19.0	12.0	16.0	*	11.0	6.0	8.0	14.5	12.0
0400-0500	30.0	32.0	29.0	*	26.0	21.0	11.0	29.3	24.8
0500-0600	77.0	75.0	60.0	*	78.0	40.0	22.0	72.5	58.7
0600-0700	197.0	196.0	207.0	*	207.0	/ / / 3. 0	59.0	201.8	159.8
0700-0800	392.0	432.0	398.0	*	403.0/	187.0	→ 90.0	406.3	317.0
0800-0900	411.0	447.0	399.0	*	452.0	258.0	/191.0	427.3	359.7
0900-1000	354.0	359.0	*	*	470.0	338.0	263.0	394.3	356.8
1000-1100	434.0	369.0	*	*	430.0	499,0	408.0	411.0	428.0
1100-1200	437.0	392.0	*	* _	492.0	537.0	440.0	440.3	459.6
1200-1300	417.0	434.0	*	*/ 、	517.0	578.0	468.0	456.0	482.8
1300-1400	430.0	399.0	*	*\	560.0	548.0	452.0	463.0	477.8
1400-1500	420.0	453.0	*	* \	494.0	499.0	484.0	455.7	470.0
1500-1600	511.0	559.0	*	* '	\ 606.0	627.0	442.0	558.7	549.0
1600-1700	572.0	620.0	*	*	637.0	524.0	419.0	609.7	554.4
1700-1800	468.0	488.0	//_	548.0	554 0	453.0	365.0	514.5	479.3
1800-1900	329.0	338.0	/ */	412 0	453.0	339.0	281.0	383.0	358.7
1900-2000	212.0	243.0	*	284 0	3 8 8 . 0	294.0	233.0	269.3	267.3
2000-2100 2100-2200	191.0 85.0	175.0 121.0	< ^ *	230.0	283.0	231.0 173.0	176.0 129.0	219.8 134.5	214.3 140.0
2200-2300	72.0	79.0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	87.0	149.0	117.0	70.0	96.8	95.7
2300-2400	38.0	46.0	*	71.0	95.0	94.0	48.0	62.5	65.3
2300-2400	30.0	40.0		71.0	93.0	94.0	40.0	02.5	03.3
Totals _							l		
0000 1000	F17F	/5000 0		\\ \ \ *	6060 0	F207 0	1202 0	FF10 7	F000 1
0700-1900 0600-2200	5175.0 5860.0	5290.0	/ 1	* *	6068.0 7085.0	5387.0 6178.0	4303.0 4900.0	5519.7	5293.1 6074.6
0600-2200	5970.0	6150.0) ^)	*	7329.0	6389.0	5018.0	6344.9 6504.2	6235.6
0000-0000	6132.0	6311.0	/ 7	*	7481.0	6531.0	5113.0	6658.4	6377.9
0000-0000	0132.0	001110		^	7401.0	0331.0	2112.0	0030.4	63/1.9
AM Peak	1100	0800	// *	*	1100	1100	1100		
AM Feak	437.0	447.0	*	*	492.0	537.0	440.0		
	13 / • 0	11/.0			122.0	337.0	110.0		
PM Peak	1600	1600	*	*	1600	1500	1400		
	572.0	620.0	*	*	637.0	627.0	484.0		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

<u>VirtWeeklyVehicle-14 -- English (ENU)</u>

Datasets:

Site: [123-427] NY Route 23B/9G, approximately 300-feet north of Power Avenue

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 1

Survey Duration: 16:39 Thursday, May 9, 2024 => 9:45 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 0945.EC1 (Plus)

Identifier: S1328N62 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, toh)
In profile: Vehicles = 16823 / 34972 (48.10%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-14

Site: 123-427.1.2NS

Description: NY Route 23B/9G, approximately 300-feet north of Power Avenue Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	es 1 - 7
Hour								1 - 5	1 - /
0000-0100	12.0	13.0	9.0	*	8.0	23.0	126	10.5	12.8
0100-0200	5.0	6.0	5.0	*	4.0	10.0	901	5.0	6.5
0200-0300	4.0	3.0	2.0	*	2.0	8.0/	\\5.0 \	2.8	4.0
0300-0400	5.0	4.0	4.0	*	5.0	2.0	4.0	4.5	4.0
0400-0500	9.0	12.0	13.0	*	11.0	5.0	6.0	11.3	9.3
0500-0600	35.0	35.0	23.0	*	34.0	/12/0	13.0	31.8	25.3
0600-0700	118.0	104.0	110.0	*	106.0	<i>5</i> 7.0	33.0	109.5	88.0
0700-0800	230.0	270.0	228.0	*	232.0/	/112.0	<u> </u>	240.0	189.0
0800-0900	246.0	257.0	217.0	*	245.0	138.0/	/119.0	241.3	203.7
0900-1000	207.0	201.0	*	*	237.0	179.0	146.0	215.0	194.0
1000-1100	236.0	191.0	*	*	224.0	264.0	186.0	217.0	220.2
1100-1200	262.0	187.0	*	*	235.0	303.0	217.0	228.0	240.8
1200-1300	219.0	222.0	*	*/	243.0	279.0	240.0	228.0	240.6
1300-1400	208.0	199.0	*	*\	269.0	248.0	218.0	225.3	228.4
1400-1500	173.0	198.0	*	* \	227.0	221.0	√218.0	199.3	207.4
1500-1600	203.0	227.0	*	*	\$57.0	291.0	220.0	229.0	239.6
1600-1700	228.0	238.0	*	*	299.0	228.0	178.0	255.0	234.2
1700-1800	220.0	248.0	*	247.0	262,0	193.0	156.0	244.3	221.0
1800-1900	155.0	153.0	/ */	2(16)0	1/98/0	176.0	154.0	180.5	175.3
1900-2000	100.0	116.0	/ /*	1,31,10	163.0	152.0	103.0	127.5	127.5
2000-2100	91.0	74.0	/ *	92/.0	124.0	95.0	81.0	94.5	92.3
2100-2200	46.0	50.0	\ \ * /	66.0	77/0	87.0	62.0	59.8	64.7
2200-2300	36.0	41.0	\ <u>*</u> /	47.0	√ 6.0	55.0	34.0	47.5	46.5
2300-2400	22.0	29.0	_ * <	29.0	36.0	40.0	21.0	29.0	29.5
Totals _							l		
				$\backslash \rangle$					
0700-1900	2587 🔨	2591.0	\ \ \	*	2928.0	2632.0	2114.0	2702.7	2594.2
0600-2200	2942.0	2935.0	\ *	*	3395.0	3023.0	2393.0	3093.9	2966.7
0600-0000	3000.0	3005.0) *)	*	3497.0	3118.0	2448.0	3170.4	3042.7
0000-0000	3070.0	3078,0	//	*	3561.0	3178.0	2497.0	3236.2	3104.7
AM Peak	1100	0700	// *	*	0800	1100	1100		
	262.0	270.0	*	*	245.0	303.0	217.0		
PM Peak	1600	1700	*	*	1600	1500	1200		
	228.0	248.0	*	*	299.0	291.0	240.0		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

<u>VirtWeeklyVehicle-15 -- English (ENU)</u>

Datasets:

Site: [123-427] NY Route 23B/9G, approximately 300-feet north of Power Avenue

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 1

Survey Duration: 16:39 Thursday, May 9, 2024 => 9:45 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 0945.EC1 (Plus)

Identifier: S1328N62 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: South (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 17666 / 34972 (50.51%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-15

Site: 123-427.1.2NS

Description: NY Route 23B/9G, approximately 300-feet north of Power Avenue Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	es 1 - 7
Hour								1 3	- ,
0000-0100	6.0	11.0	12.0	*	12.0	18.0	176 i	10.3	12.7
0100-0200	5.0	3.0	4.0	*	7.0	8.0	8 0 i	4.8	5.8
0200-0300	4.0	6.0	5.0	*	4.0	8.0/	/3.di	4.8	5.0
0300-0400	14.0	8.0	12.0	*	6.0	4.0	4.0	10.0	8.0
0400-0500	21.0	20.0	16.0	*	15.0	16.0	5.0	18.0	15.5
0500-0600	42.0	40.0	37.0	*	44.0	28/0	9.0 Ì	40.8	33.3
0600-0700	79.0	92.0	97.0	*	101.0	3 6.0	26.0	92.3	71.8
0700-0800	162.0	162.0	170.0	*	171.0/	75.0	<u> </u>	166.3	128.0
0800-0900	165.0	190.0	182.0	*	207 . Q	120.0	/ 72.0 I	186.0	156.0
0900-1000	147.0	158.0	*	*	233.0	159.0	117.0	179.3	162.8
1000-1100	198.0	178.0	*	*	206.0	235.0	222.0	194.0	207.8
1100-1200	175.0	205.0	*	* ^	257.0	234.0	223.0	212.3	218.8
1200-1300	198.0	212.0	*	*/ 、	274.0	299.0	228.0	228.0	242.2
1300-1400	222.0	200.0	*	*\	291.0	300.0	234.0	237.7	249.4
1400-1500	247.0	255.0	*	* \	267.0	278.0	√266.0	256.3	262.6
1500-1600	308.0	332.0	*	* \	349.0	336.0	222.0	329.7	309.4
1600-1700	344.0	382.0	* _	*	388.0	296.0	241.0	354.7	320.2
1700-1800	248.0	240.0	*_	301.0	292,0	260.0	209.0	270.3	258.3
1800-1900	174.0	185.0	/ */	1/96/0	2\55\.0	163.0	127.0	202.5	183.3
1900-2000	112.0	127.0	/ /*	153/0	1 75.0	142.0	130.0	141.8	139.8
2000-2100	100.0	101.0	/ / *	1/38/.0	162.0	136.0	95.0	125.3	122.0
2100-2200	39.0	71.0	\	77.0	112/0	86.0	67.0	74.8	75.3
2200-2300	36.0	38.0	\ * /	40.0	83.0	62.0	36.0	49.3	49.2
2300-2400	16.0	17.0	_ * <	42.0	59.0	54.0	27.0	33.5	35.8
Totals							 		
	0500	/2522		$\backslash \rangle$	0140 0	0.555	0100 6	0015	0.600
0700-1900	2588.0	2699.0	\	*	3140.0	2755.0	2189.0	2817.0	2698.9
0600-2200	2918.0	3090.0) *)	*	3690.0	3155.0	2507.0	3251.0	3107.9
0600-0000	2970.0	3145.0) */	*	3832.0	3271.0	2570.0	3333.8	3192.9
0000-0000	3062.0	3233.0	/ /	*	3920.0	3353.0	2616.0	3422.3	3273.2
AM Peak	1000	1100	// *	*	1100	1000	1100		
AM Peak	198.0	205.0	*	*	257.0	235.0	223.0		
	190.0	203.0		**	231.0	233.0	ZZJ.U		
PM Peak	1600	1600	*	*	1500	1500	1400		
In reak	344.0	382.0	*	*	349.0	336.0	266.0		
	511.0	302.0			515.0	550.0	200.0		

^{* -} No data.

MetroCount Traffic Executive Speed Statistics

SpeedStat-16 -- English (ENU)

Datasets:

Site: [123-427] NY Route 23B/9G, approximately 300-feet north of Power Avenue

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 1

Survey Duration: 16:39 Thursday, May 9, 2024 => 9:45 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 0945.EC1 (Plus)

Identifier: S1328N62 MC56-L5 [MC55] (c)Microcom 19Oct04/

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North, South (bound), P = North**Separation:** Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 34489 / 34972 (98 62%)



Speed Statistics

SpeedStat-16

Site: 123-427.1.2NS

Description: NY Route 23B/9G, approximately 300-feet north of Power Avenue Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 34489

Posted speed limit = 30 mph, Exceeding = 33613 (97.46%), Mean Exceeding = 39.63 mph

Maximum = 85.0 mph, Minimum = 6.5 mph, Mean = 39.3 mph

85% Speed = 44.3 mph, **95% Speed** = 47.9 mph, **Median** = 38.9 mph **10 mph Pace** = 34 - 44, **Number in Pace** = 23872 (69.22%)

Variance = 27.01, Standard Deviation = 5.20 mph

Speed Bins (Partial days)

Speed	- [Bi	n	Bel	Low	Abo	ve//	Energy	vMult	n * vMult
0 -	5	0	0.0%	0	0.0%	34489	100/.0%	0.00	0,00	0.00
5 - 1	10	13	0.0%	13	0.0%	34476	100.0%	0.00	0.00	0.00
10 - 1	15	15	0.0%	28	0.1%	34461	99.9%	0.00	0.00	0.00
15 - 2	20	18	0.1%	46	0.1%	34443	99.9%	0.00	0.00	0.00
20 - 2	25	75	0.2%	121	0.4%	34368	99 6%	0.00	0.00	0.00
25 - 3	30	755	2.2%	876	2.5%/	33613	97.5%	0.00	0.00	0.00
30 - 3	35	5755	16.7%	6631	19.2%	27858	80.8%	0.00	0.00	0.00
35 - 4	40	13116	38.0%	19747	57.3%	14742	42.7%	0.00	0.00	0.00
40 - 4	45	10312	29.9%	30059	87.2%	4430	12.8%	0.00	0.00	0.00
45 - 5	50	3553	10.3%	33612	97.5%	\\ 87 <i>7</i>	2.5%	0.00	0.00	0.00
50 - 5	55	726	2.1%	34338	99.6%	\ \1/51/	0.4%	0.00	0.00	0.00
55 - 6	60	120	0.3%	34458	99.9%	\ 31	0.1%	0.00	0.00	0.00
60 - 6	65	20	0.1%	34478	100.0%	\ \11	0.0%	0.00	0.00	0.00
65 - 7	70	3	0.0%	34481	100.0%	/ /8	0.0%	0.00	0.00	0.00
70 - 7	75	3	0.0%	34484	1/00/.0%	\ 3	0.0%	0.00	0.00	0.00
75 - 8	80	2	0.0%	34486	100.0%	/3	0.0%	0.00	0.00	0.00
80 - 8	85	3	0.0%	34489	100.0%	0	0.0%	0.00	0.00	0.00
85 - 9	90	0	0.0%	34489	100.0%	0	0.0%	0.00	0.00	0.00
90 - 9	95	0	0.0%	34489	100.0%	0	0.0%	0.00	0.00	0.00
95 - 10	00	0	0.0%	34489	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit		Be:	low	Abo	ve
0	30 (PSL)	\vee	876	2.5%	33613	97.5%

MetroCount Traffic Executive Speed Statistics

SpeedStat-17 -- English (ENU)

Datasets:

Site: [123-427] NY Route 23B/9G, approximately 300-feet north of Power Avenue

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 1

Survey Duration: 16:39 Thursday, May 9, 2024 => 9:45 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 0945.EC1 (Plus)

Identifier: S1328N62 MC56-L5 [MC55] (c)Microcom 19Oct04/

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 16823 / 34972 (48,10%)



Speed Statistics

SpeedStat-17

Site: 123-427.1.2NS

Description: NY Route 23B/9G, approximately 300-feet north of Power Avenue Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 16823

Posted speed limit = 30 mph, Exceeding = 16372 (97.32%), Mean Exceeding = 39.40 mph

Maximum = 83.3 mph, **Minimum** = 6.5 mph, **Mean** = 39.1 mph **85% Speed** = 44.1 mph, **95% Speed** = 47.6 mph, **Median** = 38.7 mph

10 mph Pace = 34 - 44, Number in Pace = 11720 (69.67%)

Variance = 27.41, Standard Deviation = 5.24 mph

Speed Bins (Partial days)

Speed] В	in	Bel	.ow	Abo	ve/	Energy	vMult	n * vMult
0 - 5	0	0.0%	0	0.0%	16823	100/.0%	0.00	0,00	0.00
5 - 10	11	0.1%	11	0.1%	16812	99.9%	/ > 0.00	0.00	0.00
10 - 15	12	0.1%	23	0.1%	16800	99.9%	0.00	0.00	0.00
15 - 20	5	0.0%	28	0.2%	16795	99.8%	0.00	0.00	0.00
20 - 25	38	0.2%	66	0.4%	16757	99 6%	0.00	0.00	0.00
25 - 30	385	2.3%	451	2.7%/	16372	97.3%	0.00	0.00	0.00
30 - 35	3008	17.9%	3459	20.6%	13364	79.4%	0.00	0.00	0.00
35 - 40	6540	38.9%	9999	59.4%	6824	40.6%	0.00	0.00	0.00
40 - 45	4828	28.7%	14827	88.1% \	1996	11.9%	0.00	0.00	0.00
45 - 50	1586	9.4%	16413	97.6%	41,0	2.4%	0.00	0.00	0.00
50 - 55	331	2.0%	16744	99.5%	\ \/79/	0.5%	0.00	0.00	0.00
55 - 60	63	0.4%	16807	99.9%	\ 1/6	0.1%	0.00	0.00	0.00
60 - 65	10	0.1%	16817	100.0%	\ \6	0.0%	0.00	0.00	0.00
65 - 70	1	0.0%	16818	100.0%	\ \5	0.0%	0.00	0.00	0.00
70 - 75	2	0.0%	16820	1/00/.0%	\3	0.0%	0.00	0.00	0.00
75 - 80	1	0.0%	16821	100.0%	1/2	0.0%	0.00	0.00	0.00
80 - 85	2	0.0%	16823	100.0%	0	0.0%	0.00	0.00	0.00
85 - 90	0	0.0%	16823	100.0%	0	0.0%	0.00	0.00	0.00
90 - 95	1 0	0.0%	16823	100.0%	0	0.0%	0.00	0.00	0.00
95 - 100	0	0.0%	16823	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit		Be	low	Abo	ve
0	30 (PSL)	\vee	451	2.7%	16372	97.3%

MetroCount Traffic Executive Speed Statistics

SpeedStat-18 -- English (ENU)

Datasets:

Site: [123-427] NY Route 23B/9G, approximately 300-feet north of Power Avenue

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 1

Survey Duration: 16:39 Thursday, May 9, 2024 => 9:45 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 0945.EC1 (Plus)

Identifier: S1328N62 MC56-L5 [MC55] (c)Microcom 19Oct04/

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: South (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 17666 / 34972 (50,51%)



Speed Statistics

SpeedStat-18

Site: 123-427.1.2NS

Description: NY Route 23B/9G, approximately 300-feet north of Power Avenue Filter time: 17:00 Thursday, May 9, 2024 => 9:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 17666

Posted speed limit = 30 mph, Exceeding = 17241 (97.59%), Mean Exceeding = 39.84 mph

Maximum = 85.0 mph, Minimum = 6.5 mph, Mean = 39.5 mph

85% Speed = 44.5 mph, **95% Speed** = 48.1 mph, **Median** = 39.4 mph

10 mph Pace = 34 - 44, Number in Pace = 12194 (69.03%)

Variance = 26.52, Standard Deviation = 5.15 mph

Speed Bins (Partial days)

	_	Bin Below						>		
Spee	ed	Bi	n	Bel	LOW	Abo	ve /	Energy	\ ₩Mult	n * vMult
0 -	5	0	0.0%	0	0.0%	17666	100.0%	0.00	0,00	0.00
5 -	10	2	0.0%	2	0.0%	17664	1/00,/0%	0.00	0.00	0.00
10 -	15	3	0.0%	5	0.0%	17661	100.0%	0.00	0.00	0.00
15 -	20	13	0.1%	18	0.1%	17648	99.9%	0.00	0.00	0.00
20 -	25	37	0.2%	55	0.3%	17611	99.7%	0.00	0.00	0.00
25 -	30	370	2.1%	425	2.4%	17241	97.6%	0.00	0.00	0.00
30 -	35	2747	15.5%	3172	18.0%	14494	82.0%	0.00	0.00	0.00
35 -	40	6576	37.2%	9748	55.2∜	7918	44.8%	0.00	0.00	0.00
40 -	45	5484	31.0%	15232	86.2%	2434	13.8%	0.00	0.00	0.00
45 -	50	1967	11.1%	17199	97.4%	467	2.6%	0.00	0.00	0.00
50 -	55	395	2.2%	17594	99.6%	72/	0.4%	0.00	0.00	0.00
55 -	60	57	0.3%	17651	99.9%	\ /15/	0.1%	0.00	0.00	0.00
60 -	65	10	0.1%	17661	100.0%	\	0.0%	0.00	0.00	0.00
65 -	70	2	0.0%	17663	100.0%	\ (3	0.0%	0.00	0.00	0.00
70 -	75	1	0.0%	1/1664	100.0%	\ \2	0.0%	0.00	0.00	0.00
75 -	80	1	0.0%	/17665	1,00,0%	/ 1/	0.0%	0.00	0.00	0.00
80 -	85	1	0.0%	17666	100.0%	0	0.0%	0.00	0.00	0.00
85 -	90	0	0.0%	17666	100.0%	0	0.0%	0.00	0.00	0.00
90 -	95	0	0.0%	17666/	100.0%	0	0.0%	0.00	0.00	0.00
95 -	100	ا ا	0.0%	17666	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00
Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit		Bel	ow	Abo	ve
0	30 (PSL)	$\overline{}$	425	2.4%	17241	97.6%

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-1 -- English (ENU)

Datasets:

Site: [123-427] State Street, approximately 200-feet of east of Dodge Street

Attribute: City of Hudson Speeds

Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2

Survey Duration: 16:55 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1000.EC2 (Plus)

Identifier: R519M98M MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024 (3.33333)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: East, West (bound), $P = \underline{East}$

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, ton) In profile: Vehicles = 11015 / 19850 (55.49%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-1

Site: 123-427.2.3EW

Description: State Street, approximately 200-feet of east of Dodge Street 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(EW) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average	
Hour								1 - 5	1 - 7
0000-0100	11.0	*	*	*	9.0	37.0	24.0	10.0	20.3
0100-0200	*	*	*	*	3.0	12.0	170	3.0	10.7
0200-0300	*	*	*	*	4.0	4.0/	5.0	4.0	4.3
0300-0400	*	*	*	*	3.0	7.0	6.0	3.0	5.3
0400-0500	*	*	*	*	12.0	7.0	2.0	12.0	7.0
0500-0600	*	*	*	*	29.0	15/0	12.0	29.0	18.7
0600-0700	*	*	*	*	97.0	45.0	37.0	97.0	59.7
0700-0800	*	*	*	*	225.0/	91.0	<u>√ 56.0 i</u>	225.0	124.0
0800-0900	*	*	*	*	257 . 0	127.0/	106.0	257.0	163.3
0900-1000	*	*	*	*	261.0	207/0/	115.0	261.0	194.3
1000-1100	*	*	*	*	295.0	262.0	163.0	295.0	240.0
1100-1200	*	*	*	*	284.0	245.0	197.0	284.0	242.0
1200-1300	*	*	*	*/	341.0	254.0	211.0	341.0	268.7
1300-1400	*	*	*	*\	325.0	268.0	188.0	325.0	260.3
1400-1500	*	*	*	* \	279.0	220.0	√209.0	279.0	236.0
1500-1600	*	*	*	* '	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	261.0	185.0	299.0	248.3
1600-1700	*	*	* _	*	322.0/	242.0	193.0	322.0	252.3
1700-1800	*	*	*	276.0	320 0	202.0	181.0	298.0	244.8
1800-1900	*	*	/ */	247 0	2 123 1, 0	194.0	169.0	235.0	208.3
1900-2000	*	*	/ /*	183/0	186.0	161.0	169.0	184.5	174.8
2000-2100	*	* /	*	155.0	155.0	117.0	118.0	155.0	136.3
2100-2200	*	*	\	99.0	125/0	108.0	85.0	112.0	104.3
2200-2300	*	*	\ * /	68.0	74.0	71.0	53.0	71.0	66.5
2300-2400	*	*	* <	34.0	68.0	50.0	38.0	51.0	47.5
Totals	/								
_			///						
0700-1900	* <	*	\ \	*	3431.0	2573.0	1973.0	3421.0	2682.3
0600-2200	* '	*	\ *	*	3994.0	3004.0	2382.0	3969.5	3157.3
0600-0000	*	*) *)	*	4136.0	3125.0	2473.0	4091.5	3271.3
0000-0000	*	/ /*	//	*	4196.0	3207.0	2539.0	4152.5	3337.5
AM Peak	*	/*/	// *	*	1000	1000	1100		
-	*	*	*	*	295.0	262.0	197.0		
PM Peak	*	*	*	*	1200	1300	1200		
	*	*	*	*	341.0	268.0	211.0		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-2 -- English (ENU)

Datasets:

[123-427] State Street, approximately 200-feet of east of Dodge Street Site:

Attribute: City of Hudson Speeds

8 - East bound A>B, West bound B>A. Lane: 2 Direction:

16:55 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024, **Survey Duration:**

Zone:

File: 123-427 0 2024-05-15 1000.EC2 (Plus)

Identifier: R519M98M MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024 (3.33333) Filter time:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: East (bound), P = East

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: **Default Profile**

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, ton) Units:

Vehicles = 4306 / 19850 (21.69%) In profile:

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-2

Site: 123-427.2.3EW

Description: State Street, approximately 200-feet of east of Dodge Street 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(E) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	
Hour								1 - 5	1 - 7
0000-0100	6.0	*	*	*	4.0	11.0	12.6	5.0	8.3
0100-0200	*	*	*	*	0.0	5.0	/ 8 0 i	0.0	4.3
0200-0300	*	*	*	*	2.0	0.0/	\\\2.\dot\	2.0	1.3
0300-0400	*	*	*	*	0.0	2.0	2.0	0.0	1.3
0400-0500	*	*	*	*	6.0	4.0	1.0	6.0	3.7
0500-0600	*	*	*	*	11.0	10.0	4.0	11.0	8.3
0600-0700	*	*	*	*	36.0	24.0	20.0	36.0	26.7
0700-0800	*	*	*	*	89.0/	38.0	↑ 20.0	89.0	49.0
0800-0900	*	*	*	*	110.0	56.0	/ 33.0	110.0	66.3
0900-1000	*	*	*	*	117.0	77/0/	43.0	117.0	79.0
1000-1100	*	*	*	*	129.0	99,0	52.0	129.0	93.3
1100-1200	*	*	*	* _	137.0	86.0	76.0	137.0	99.7
1200-1300	*	*	*	*/ 、	133.0	96.0	79.0	133.0	102.7
1300-1400	*	*	*	*\	140.0	90.00	80.0	140.0	103.3
1400-1500	*	*	*	* \	106.0	79.0	/ 90.0 ∣	106.0	91.7
1500-1600	*	*	*	* '	132.0	105.0	72.0	132.0	103.0
1600-1700	*	*	*	*	182.0/	88.0	69.0	132.0	96.3
1700-1800	*	*	*_	98.0	127.0	75.0	65.0	112.5	91.3
1800-1900	*	*	/ */	109/0	\77\0	81.0	68.0	93.0	83.8
1900-2000	*	*	//*	74)0	84.0	69.0	59.0	79.0	71.5
2000-2100	*	* <	*	48.0	57.0	45.0	36.0	52.5	46.5
2100-2200	*	* *	\	40.0	4300	44.0	25.0	41.5	38.0
2200-2300	*	*	*	28.0	26.0	26.0	18.0	27.0	24.5
2300-2400	*		` * <	7.0	28.0	14.0	12.0	17.5	15.3
Totals									
							1		
0700-1900	* <	*	\	*	1429.0	970.0	747.0	1430.5	1059.3
0600-2200	*	*	\ *	*	1649.0	1152.0	887.0	1639.5	1242.0
0600-0000	*	*) *)	*	1703.0	1192.0	917.0	1684.0	1281.8
0000-0000	*	/ /*	/ /*	*	1726.0	1224.0	946.0	1708.0	1309.0
AM Peak	*	* \	*	*	1100	1000	1100		
	*	*	*	*	137.0	99.0	76.0		
PM Peak	*	*	*	*	1300	1500	1400		
III I CON	*	*	*	*	140.0	105.0	90.0		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-3 -- English (ENU)

Datasets:

Site: [123-427] State Street, approximately 200-feet of east of Dodge Street

Attribute: City of Hudson Speeds

Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2

Survey Duration: 16:55 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1000.EC2 (Plus)

Identifier: R519M98M MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024 (3.33333)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: West (bound), $P = \underline{East}$

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, toh) In profile: Vehicles = 6709 / 19850 (33.80%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-3

Site: 123-427.2.3EW

Description: State Street, approximately 200-feet of east of Dodge Street 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(W) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average	
Hour								1 - 5	1 - 7
0000-0100	5.0	*	*	*	5.0	26.0	12.0	5.0	12.0
0100-0100	J.U *	*	*	*	3.0	7.0	9 0 1	3.0	6.3
0200-0300	*	*	*	*	2.0	4.0/	3.0	2.0	3.0
0300-0400	*	*	*	*	3.0	5.0	4.0	3.0	4.0
0400-0500	*	*	*	*	6.0	3.0	1.0	6.0	3.3
0500-0600	*	*	*	*	18.0	5.0	8.0	18.0	10.3
0600-0700	*	*	*	*	61.0	21.0	17.0	61.0	33.0
0700-0800	*	*	*	*	136.0/	53.0	∧ 36.0 i	136.0	75.0
0800-0900	*	*	*	*	147.0	71.0/	73.0	147.0	97.0
0900-1000	*	*	*	*	144.0	130.0	72.0	144.0	115.3
1000-1100	*	*	*	*	166.0	163.0	111.0	166.0	146.7
1100-1200	*	*	*	* ^	147.0	159.0	121.0	147.0	142.3
1200-1300	*	*	*	*/\	208.0	158.0	132.0	208.0	166.0
1300-1400	*	*	*	*\ `	185.0	178.0	108.0	185.0	157.0
1400-1500	*	*	*	* \	173.0	141.0	√119.0	173.0	144.3
1500-1600	*	*	*	* \	\ \ \ \ \ 67.0	156.0	113.0	167.0	145.3
1600-1700	*	*	* _	*	190.0	154.0	124.0	190.0	156.0
1700-1800	*	*	*_	178.0	193,0	127.0	116.0	185.5	153.5
1800-1900	*	*	/ */	1/38/0	1/46/,0	113.0	101.0	142.0	124.5
1900-2000	*	*	//*	1)09)0	102.0	92.0	110.0	105.5	103.3
2000-2100	*	* <	/	1/07.0	98.0	72.0	82.0	102.5	89.8
2100-2200	*	*	\ \	59.0	82\0	64.0	60.0	70.5	66.3
2200-2300	*	*	*	40.0	48.0	45.0	35.0	44.0	42.0
2300-2400	*	*	_ * <	27.0	40.0	36.0	26.0	33.5	32.3
Totals							 		
_		/	/ / / /	//					
0700-1900	* <	*	\ \ \ \	*	2002.0	1603.0	1226.0	1990.5	1623.0
0600-2200	* '	*	\ *	*	2345.0	1852.0	1495.0	2330.0	1915.3
0600-0000	* \	*) *)	*	2433.0	1933.0	1556.0	2407.5	1989.5
0000-0000	*	/ /*	/ /	*	2470.0	1983.0	1593.0	2444.5	2028.5
AM Peak	*	*\	// *	*	1000	1000	1100		
2001	*	*	*	*	166.0	163.0	121.0		
PM Peak	*	*	*	*	1200	1300	1200		
IM LEGY	*	*	*	*	208.0	178.0	132.0		

^{* -} No data.

MetroCount Traffic Executive Speed Statistics

SpeedStat-4 -- English (ENU)

Datasets:

Site: [123-427] State Street, approximately 200-feet of east of Dodge Street

Attribute: City of Hudson Speeds

Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2

Survey Duration: 16:55 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1000.EC2 (Plus)

Identifier: R519M98M MC56-L5 [MC55] (c)Microcom 19Oct04/

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024 (3.33333)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

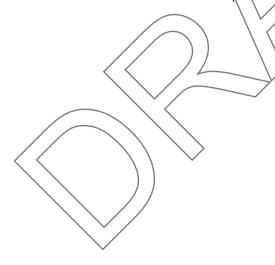
Speed range: 6 - 99 mph.

Direction: East, West (bound), $P = \underline{East}$

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 11015 / 19850 (55,49%)



Speed Statistics

SpeedStat-4

Site: 123-427.2.3EW

Description: State Street, approximately 200-feet of east of Dodge Street 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(EW) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 11015

Posted speed limit = 30 mph, Exceeding = 1162 (10.55%), Mean Exceeding = 32.75 mph

Maximum = 68.5 mph, Minimum = 6.3 mph, Mean = 24.5 mph

85% Speed = 28.9 mph, **95% Speed** = 32.0 mph, **Median** = 24.4 mph

10 mph Pace = 19 - 29, Number in Pace = 8421 (76.45%) Variance = 20.95, Standard Deviation = 4.58 mph

Speed Bins (Partial days)

Speed	Bir	ı	Be]	Low	Abo ⁻	ve/	Energy	vMult	n * vMult
0 - 5	0	0.0%	0	0.0%	11015	100/.0%	0.00	0,00	0.00
5 - 10	31	0.3%	31	0.3%	10984	9.7%	/ > 0.00	0.00	0.00
10 - 15	202	1.8%	233	2.1%	10782	97.9%	0.00	0.00	0.00
15 - 20	1266	11.5%	1499	13.6%	9516	86.4%	0.00	0.00	0.00
20 - 25	4670	42.4%	6169	56.0%	4846	44.0%	0.00	0.00	0.00
25 - 30	3684	33.4%	9853	89.5%/	1162	10.5%	0.00	0.00	0.00
30 - 35	980	8.9%	10833	98.3%	182	1.7%	0.00	0.00	0.00
35 - 40	155	1.4%	10988	99.8%	27	0.2%	0.00	0.00	0.00
40 - 45	23	0.2%	11011	100.0%	1 4	0.0%	0.00	0.00	0.00
45 - 50	1	0.0%	11012	100.0%	\ \ 3	0.0%	0.00	0.00	0.00
50 - 55	0	0.0%	11012	100.0%	\ \ 3/	0.0%	0.00	0.00	0.00
55 - 60	0	0.0%	11012	100.0%	\ 3	0.0%	0.00	0.00	0.00
60 - 65	0	0.0%	11012	100.0%	\ \ 3	0.0%	0.00	0.00	0.00
65 - 70	3	0.0%	1/1015	100.0%	\ \0	0.0%	0.00	0.00	0.00
70 - 75	0	0.0%	11015	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
75 - 80	0	0.0%	11015	100.0%		0.0%	0.00	0.00	0.00
80 - 85	0	0.0%	11025	100.0%	0	0.0%	0.00	0.00	0.00
85 - 90	0	0.0%	11015	100.0%	0	0.0%	0.00	0.00	0.00
90 - 95	1	0.0%	11015	100.0%	0	0.0%	0.00	0.00	0.00
95 - 100	/0/	0.0%	11015	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit		Bel	ow	Abo	ve
0	30 (PSL)	\vee	9853	89.5%	1162	10.5%

SpeedStat-5 -- English (ENU)

Datasets:

Site: [123-427] State Street, approximately 200-feet of east of Dodge Street

Attribute: City of Hudson Speeds

Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2

Survey Duration: 16:55 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1000.EC2 (Plus)

Identifier: R519M98M MC56-L5 [MC55] (c)Microcom 19Oct04/

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024 (3.33333)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: East (bound), $P = \underline{East}$

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 4306 / 19850 (21.69%)



SpeedStat-5

Site: 123-427.2.3EW

Description: State Street, approximately 200-feet of east of Dodge Street Filter time: 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(E) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 4306

Posted speed limit = 30 mph, Exceeding = 751 (17.44%), Mean Exceeding = 33.07 mph

Maximum = 68.5 mph, Minimum = 6.4 mph, Mean = 25.7 mph

85% Speed = 30.4 mph, **95% Speed** = 33.6 mph, **Median** = 25.5 mph

10 mph Pace = 20 - 30, **Number in Pace** = 3148 (73.11%)

Variance = 24.81, Standard Deviation = 4.98 mph

Speed Bins (Partial days)

								\		
Spee	d	Bi	n	Be:	low	Abo	ve /	Energy	₩Mult	n * vMult
0 -	5	0	0.0%	0	0.0%	4306	100.0%	0.00	0,00	0.00
5 -	10	14	0.3%	14	0.3%	4292	/99/7%	0.00	0.00	0.00
10 -	15	69	1.6%	83	1.9%	4223	98.1%	0.00	0.00	0.00
15 -	20	373	8.7%	456	10.6%	3850	89.4%	0.00	0.00	0.00
20 -	25	1453	33.7%	1909	44.3%	2397	55.₹%	0.00	0.00	0.00
25 -	30	1646	38.2%	3555	82.6%	751	17.4%	0.00	0.00	0.00
30 -	35	609	14.1%	4164	96.7%	142	3.3%	0.00	0.00	0.00
35 -	40	121	2.8%	4285	99.5%	21	0.5%	0.00	0.00	0.00
40 -	45	18	0.4%	4303	99.9%	3	0.1%	0.00	0.00	0.00
45 -	50	1	0.0%	4304	100.0%	2	0.0%	0.00	0.00	0.00
50 -	55	0	0.0%	4304	100.0%	\ \ 2	0.0%	0.00	0.00	0.00
55 -	60	0	0.0%	4304	100.0%	\ /2/	0.0%	0.00	0.00	0.00
60 -	65	0	0.0%	4304	100.0%	\	0.0%	0.00	0.00	0.00
65 -	70	2	0.0%	4306	100.0%	\ (0	0.0%	0.00	0.00	0.00
70 -	75	0	0.0%	4306	100.0%	\ \0	0.0%	0.00	0.00	0.00
75 -	80	0	0.0%	4306	1,00,0%	\ \	0.0%	0.00	0.00	0.00
80 -	85	0	0.0%	4306	100.0%	\\d	0.0%	0.00	0.00	0.00
85 -	90	0	0.0%	4306	100.0%	0	0.0%	0.00	0.00	0.00
90 -	95	0	0.0%	4306	100.0%	0	0.0%	0.00	0.00	0.00
95 - 3	100	9	0.0%	4306	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00
Total Moving Energy (Estimated) = 0.00

	Limit		Bel	ow	Abo	ve
0	30 (PSL)		3555	82.6%	751	17.4%

SpeedStat-6 -- English (ENU)

Datasets:

Site: [123-427] State Street, approximately 200-feet of east of Dodge Street

Attribute: City of Hudson Speeds

Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2

Survey Duration: 16:55 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1000.EC2 (Plus)

Identifier: R519M98M MC56-L5 [MC55] (c)Microcom 19Oct04/

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024 (3.33333)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: West (bound), $P = \underline{East}$

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 6709 / 19850 (33.80%)



SpeedStat-6

Site: 123-427.2.3EW

Description: State Street, approximately 200-feet of east of Dodge Street 17:00 Thursday, May 9, 2024 => 1:00 Monday, May 13, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(W) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 6709

Posted speed limit = 30 mph, Exceeding = 411 (6.13%), Mean Exceeding = 32.17 mph

Maximum = 68.5 mph, **Minimum** = 6.3 mph, **Mean** = 23.8 mph

85% Speed = 27.5 mph, **95% Speed** = 30.2 mph, **Median** = 23.7 mph

10 mph Pace = 19 - 29, Number in Pace = 5410 (80.64%)

Variance = 16.99, Standard Deviation = 4.12 mph

Speed Bins (Partial days)

Speed	Bi	n	Bel	Low	Abo	ve//	Energy	vMult	n * vMult
0 - 5	0	0.0%	0	0.0%	6709	100.0%	0.00	0,00	0.00
5 - 10	17	0.3%	17	0.3%	6692	9 9.7%	0.00	0.00	0.00
10 - 15	133	2.0%	150	2.2%	6559	97.8%	0.00	0.00	0.00
15 - 20	893	13.3%	1043	15.5%	5666	84.5%	0.00	0.00	0.00
20 - 25	3217	48.0%	4260	63.5%	2449	36 5%	0.00	0.00	0.00
25 - 30	2038	30.4%	6298	93.9%/	411	6.1%	0.00	0.00	0.00
30 - 35	371	5.5%	6669	99.4%	40	0.6%	0.00	0.00	0.00
35 - 40	34	0.5%	6703	99.9%	6	0.1%	0.00	0.00	0.00
40 - 45	5	0.1%	6708	100.0%	(0.0%	0.00	0.00	0.00
45 - 50	0	0.0%	6708	100.0%	\ \ \	0.0%	0.00	0.00	0.00
50 - 55	0	0.0%	6708	100.0%	\ \ 1/	0.0%	0.00	0.00	0.00
55 - 60	0	0.0%	6708	100.0%	\	0.0%	0.00	0.00	0.00
60 - 65	0	0.0%	6708	100.0%	\ \1	0.0%	0.00	0.00	0.00
65 - 70	1	0.0%	6709	100.0%	\ \0	0.0%	0.00	0.00	0.00
70 - 75	0	0.0%	6709	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
75 - 80	0	0.0%	6709	100.0%		0.0%	0.00	0.00	0.00
80 - 85	0	0.0%	6709	100.0%	0	0.0%	0.00	0.00	0.00
85 - 90	0	0.0%	6709	100.0%	0	0.0%	0.00	0.00	0.00
90 - 95	1 0	0.0%	6709	100.0%	0	0.0%	0.00	0.00	0.00
95 - 100	/ 0/	0.0%	6709	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

	Limit		/ Be	low	Abo	ve
0	30 (PSL)	\vee	6298	93.9%	411	6.1%

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-22 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5,66667)

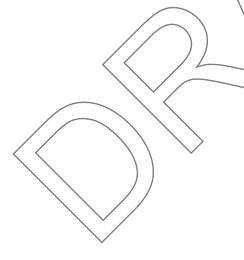
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North, South (bound), P = North**Separation:** Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 32374 / 32741 (98.88%)



Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-22

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average	
Hour								1 - 5	1 - 7
0000-0100	7.0	18.0	20.0	*	11.0	34.0	25.0	14.0	19.2
0100-0100	5.0	8.0	4.0	*	9.0	24.0	8 0 1	6.5	9.7
0200-0300	5.0	5.0	6.0	*	5.0	8.0/	5.0 l	5.3	5.7
0300-0400	11.0	5.0	8.0	*	4.0	6.0	9.0	7.0	7.2
0400-0500	16.0	17.0	12.0	*	16.0	13.0	8.0	15.3	13.7
0500-0600	77.0	67.0	70.0	*	56.0	26/0	21.0	67.5	52.8
0600-0700	167.0	163.0	160.0	*	199.0	/1.0	61.0	172.3	136.8
0700-0800	586.0	563.0	549.0	*	658.0/	150.0	98.0	589.0	434.0
0800-0900	394.0	427.0	399.0	*	508.0	272.0/	7167.0 j	432.0	361.2
0900-1000	328.0	332.0	339.0	*	413.0	373.0	266.0	353.0	341.8
1000-1100	351.0	286.0	*	*	386.0	410.0	333.0	341.0	353.2
1100-1200	394.0	405.0	*	*	495.0	466.0	369.0	431.3	425.8
1200-1300	417.0	421.0	*	*/	539.0	512.0	329.0	459.0	443.6
1300-1400	408.0	429.0	*	*\	521.0	471.0	340.0	452.7	433.8
1400-1500	566.0	585.0	*	* \	(607.0	525.0	√333.0	586.0	523.2
1500-1600	620.0	588.0	*	*	629.0	511.0	340.0	612.3	537.6
1600-1700	524.0	618.0	*	*	\5\79.0/	385.0	285.0	573.7	478.2
1700-1800	519.0	459.0	*	_ \ *	450 0	341.0	268.0	476.0	407.4
1800-1900	312.0	356.0	/ */	3/68/0	3,56,0	290.0	249.0	348.0	321.8
1900-2000	272.0	297.0	/ /*	254/0	2 2.0	252.0	189.0	273.8	256.0
2000-2100	155.0	189.0	/ / *	1/82/.0	218.0	171.0	157.0	186.0	178.7
2100-2200	90.0	120.0	\ \ *	110.0	152/0	126.0	103.0	118.0	116.8
2200-2300	78.0	82.0	\ <u>*</u> /	73.0	101.0	95.0	74.0	83.5	83.8
2300-2400	53.0	47.0	_ *	56.0	66.0	59.0	44.0	55.5	54.2
Totals									
_									
0700-1900	5419.0	< 5469.0	\	*	6141.0	4706.0	3377.0	5654.0	5061.6
0600-2200	6103.0	6238.0	/ */	*	6982.0	5326.0	3887.0	6404.0	5750.0
0600-0000	6234.0	6367.0) *)	*	7149.0	5480.0	4005.0	6543.0	5888.0
0000-0000	6355.0	6487.0	//*	*	7250.0	5591.0	4081.0	6658.5	5996.1
AM Peak	0700	0700	// *	*	0700	1100	1100		
	586.0	563.0	*	*	658.0	466.0	369.0		
PM Peak	1500	1600	*	*	1500	1400	1500		
	620.0	618.0	*	*	629.0	525.0	340.0		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

<u>VirtWeeklyVehicle-23 -- English (ENU)</u>

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5,66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3) Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 17264 / 32741 (52.73%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-23

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	es 1 - 7
Hour								1 - 5	1 - /
0000-0100	5.0	9.0	10.0	*	4.0	20.0	15/0	7.0	10.5
0100-0200	4.0	4.0	3.0	*	7.0	19.0	60	4.5	7.2
0200-0300	2.0	3.0	1.0	*	3.0	5.0/	/3.8	2.3	2.8
0300-0400	3.0	1.0	3.0	*	2.0	5.0	5.0	2.3	3.2
0400-0500	8.0	5.0	7.0	*	7.0	5.0	5.0	6.8	6.2
0500-0600	29.0	33.0	27.0	*	22.0	5.0	12.0	27.8	21.3
0600-0700	78.0	61.0	66.0	*	74.0	\$2.0	24.0	69.8	55.8
0700-0800	291.0	294.0	267.0	*	311.0/	79.0	<u> </u>	290.8	216.2
0800-0900	208.0	204.0	199.0	*	283 . Q	129.0/	85.0	223.5	184.7
0900-1000	170.0	172.0	172.0	*	246.0	187/0/	135.0	190.0	180.3
1000-1100	191.0	152.0	*	*	183.0	195,0	189.0	175.3	182.0
1100-1200	217.0	212.0	*	* ^	291.0	254.0	200.0	240.0	234.8
1200-1300	227.0	249.0	*	*/ 、	272.0	262.0	184.0	249.3	238.8
1300-1400	200.0	231.0	*	*\	314.0	233.0	176.0	248.3	230.8
1400-1500	289.0	306.0	*	* \	\315.0	295.0	√163.0	303.3	273.6
1500-1600	359.0	348.0	*	* '	₹68.0	255.0	202.0	358.3	306.4
1600-1700	319.0	366.0	* _	*	320.0/	206.0	151.0	335.0	272.4
1700-1800	286.0	263.0	*	_ \ *	263,0	185.0	140.0	270.7	227.4
1800-1900	152.0	208.0	/ */	206/0	200/.0	163.0	136.0	191.5	177.5
1900-2000	157.0	115.0	/ /*	1)33/0	153.0	132.0	99.0	139.5	131.5
2000-2100	83.0	92.0	/ *	1/02/.0	118.0	106.0	84.0	98.8	97.5
2100-2200	51.0	58.0	\ \ * /	61.0	90/0	78.0	52.0	65.0	65.0
2200-2300	44.0	46.0	*	45.0	5/9.0	50.0	36.0	48.5	46.7
2300-2400	36.0	30.0	_ * <	34.0	36.0	34.0	25.0	34.0	32.5
Totals _							[
			//	\ >					
0700-1900	2909.0	3005.0	\	*	3366.0	2443.0	1816.0	3076.1	2724.9
0600-2200	3278.0	3331.0	\ *	*	3801.0	2791.0	2075.0	3449.1	3074.7
0600-0000	3358.0	3407.0) *)	*	3896.0	2875.0	2136.0	3531.6	3153.9
0000-0000	3409.0	3462,0	/ /	*	3941.0	2934.0	2182.0	3582.1	3205.0
AM Peak	0700	0700	// *	*	0700	1100	1100		
	291.0	294.0	*	*	311.0	254.0	200.0		
PM Peak	1500	1600	*	*	1500	1400	1500		
	359.0	366.0	*	*	368.0	295.0	202.0		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-24 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5,66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: South (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)

Units: Non metric (ft, mi, ft/s, mph, lb, ton)

In profile: Vehicles = 15110 / 32741 (46.15%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-24

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	es 1 - 7
Hour								1 - 5	1 - /
0000-0100	2.0	9.0	10.0	*	7.0	14.0	10/0	7.0	8.7
0100-0200	1.0	4.0	1.0	*	2.0	5.0	20	2.0	2.5
0200-0300	3.0	2.0	5.0	*	2.0	3.0/	/\2.\d	3.0	2.8
0300-0400	8.0	4.0	5.0	*	2.0	1.0	4.0	4.8	4.0
0400-0500	8.0	12.0	5.0	*	9.0	8.0	3.0	8.5	7.5
0500-0600	48.0	34.0	43.0	*	34.0	21.0	9.0	39.8	31.5
0600-0700	89.0	102.0	94.0	*	125.0	/ 29. 0	37.0	102.5	81.0
0700-0800	295.0	269.0	282.0	*	347.0/	71.0	√ 43.0	298.3	217.8
0800-0900	186.0	223.0	200.0	*	225.0	143.0	82.0	208.5	176.5
0900-1000	158.0	160.0	167.0	*	167.0	186.0	131.0	163.0	161.5
1000-1100	160.0	134.0	*	*	203.0	215,0	144.0	165.7	171.2
1100-1200	177.0	193.0	*	* ^	204.0	212.0	169.0	191.3	191.0
1200-1300	190.0	172.0	*	*/、	267.0	250.0	145.0	209.7	204.8
1300-1400	208.0	198.0	*	*\	207.0	238.0	164.0	204.3	203.0
1400-1500	277.0	279.0	*	* \	\292.0	230.0	√ 170.0	282.7	249.6
1500-1600	261.0	240.0	*	* \	\ 261.0	256.0	138.0	254.0	231.2
1600-1700	205.0	252.0	* _	*	259.0/	179.0	134.0	238.7	205.8
1700-1800	233.0	196.0	*	_ \ *	187 0	156.0	128.0	205.3	180.0
1800-1900	160.0	148.0	/ */	162 0	1,56,0	127.0	113.0	156.5	144.3
1900-2000	115.0	182.0	/ /*	121/0	11/9.0	120.0	90.0	134.3	124.5
2000-2100	72.0	97.0	/ / *	80.0	100.0	65.0	73.0	87.3	81.2
2100-2200	39.0	62.0	\ \ *	49.0	62\0	48.0	51.0	53.0	51.8
2200-2300	34.0	36.0	*	28.0	42.0	45.0	38.0	35.0	37.2
2300-2400	17.0	17.0	_ * <	22.0	30.0	25.0	19.0	21.5	21.7
Totals _									
							1		
0700-1900	2510 0	2464.0	\ \ \	*	2775.0	2263.0	1561.0	2577.9	2336.8
0600-2200	2825.0	2907.0	\ *	*	3181.0	2535.0	1812.0	2954.9	2675.3
0600-0000	2876.0	2960.0) *)	*	3253.0	2605.0	1869.0	3011.4	2734.1
0000-0000	2946.0	3025,0	//	*	3309.0	2657.0	1899.0	3076.4	2791.1
AM Peak	0700	0700	// *	*	0700	1000	1100		
	295.0	269.0	*	*	347.0	215.0	169.0		
PM Peak	1400	1400	*	*	1400	1500	1400		
	277.0	279.0	*	*	292.0	256.0	170.0 j		

^{* -} No data.

SpeedStat-25 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge

Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)/

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North, South (bound), P = North**Separation:** Headway > 0 sec, Span $0^{-3}28.084$ ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 32374 / 32741 (98.88%)



SpeedStat-25

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 32374

Posted speed limit = 30 mph, Exceeding = 14152 (43.71%), Mean Exceeding = 33.56 mph

Maximum = 68.4 mph, **Minimum** = 6.3 mph, **Mean** = 29.4 mph **85% Speed** = 34.0 mph, **95% Speed** = 37.1 mph, **Median** = 29.1 mph

10 mph Pace = 24 - 34, Number in Pace = 23491 (72.56%)

Variance = 22.21, Standard Deviation = 4.71 mph

Speed Bins (Partial days)

Speed	I	Ві	n	Be:	low	Abo	ve///	Energy	vMult	n * vMult
0 -	5	0	0.0%	0	0.0%	32374	100/.0%	0.00	0,00	0.00
5 - 1	10	7	0.0%	7	0.0%	32367	100.0%	0.00	0.00	0.00
10 - 1	15	37	0.1%	44	0.1%	32330	99.9%	0.00	0.00	0.00
15 - 2	20	526	1.6%	570	1.8%	31804	98.2%	0.00	0.00	0.00
20 - 2	25	5093	15.7%	5663	17.5%	26711	82 5%	0.00	0.00	0.00
25 - 3	30	12559	38.8%	18222	56.3%/	14152	43.7%	0.00	0.00	0.00
30 - 3	35	10548	32.6%	28770	88.9%	3604	11.1%	0.00	0.00	0.00
35 - 4	40	3076	9.5%	31846	98.4%	528	1.6%	0.00	0.00	0.00
40 - 4	45	459	1.4%	32305	99.8% \	\ 69>	0.2%	0.00	0.00	0.00
45 - 5	50	54	0.2%	32359	100.0%	1,5	0.0%	0.00	0.00	0.00
50 - 5	55	13	0.0%	32372	100.0%	\ \ 2/	0.0%	0.00	0.00	0.00
55 - 6	60	0	0.0%	32372	100.0%	\	0.0%	0.00	0.00	0.00
60 - 6	65	1	0.0%	32373	100.0%	\ \1	0.0%	0.00	0.00	0.00
65 - 7	70	1	0.0%	32374	100.0%	/ /0	0.0%	0.00	0.00	0.00
70 - 7	75	0	0.0%	32374	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
75 – 8	B0	0	0.0%	32374	100.0%		0.0%	0.00	0.00	0.00
80 - 8	85	0	0.0%	32374	100.0%	0	0.0%	0.00	0.00	0.00
85 - 9	90	0	0.0%	32374	100.0%	0	0.0%	0.00	0.00	0.00
90 - 9	95	0	0.0%	32374	100.0%	0	0.0%	0.00	0.00	0.00
95 - 10	00	0	0.0%	32374	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

	Limit		Bel	ow	Abo ⁻	ve
0	30 (PSL)	$\overline{}$	18222	56.3%	14152	43.7%

SpeedStat-26 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge

Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North (bound), P = North

Separation: Headway > 0 sec, Span 0 > 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 17264 / 32741 (52.73%)

SpeedStat-26

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 17264

Posted speed limit = 30 mph, Exceeding = 8106 (46.95%), Mean Exceeding = 33.77 mph

Maximum = 68.4 mph, **Minimum** = 6.3 mph, **Mean** = 29.7 mph **85% Speed** = 34.4 mph, **95% Speed** = 37.6 mph, **Median** = 29.5 mph

10 mph Pace = 25 - 35, **Number in Pace** = 12312 (71.32%)

Variance = 23.35, Standard Deviation = 4.83 mph

Speed Bins (Partial days)

Speed	Ві	n	Bel	Low	Abo	ve/ /	Energy	vMult	n * vMult
0 - 5	0	0.0%	0	0.0%	17264	100.0%	0.00	0,00	0.00
5 - 10	6	0.0%	6	0.0%	17258	100.0%	/ > 0.00	0.00	0.00
10 - 15	21	0.1%	27	0.2%	17237	99.8%	0.00	0.00	0.00
15 - 20	251	1.5%	278	1.6%	16986	98.4%	0.00	0.00	0.00
20 - 25	2501	14.5%	2779	16.1%	14485	83,9%	0.00	0.00	0.00
25 - 30	6379	36.9%	9158	53.0%/	8106	47.0%	0.00	0.00	0.00
30 - 35	5835	33.8%	14993	86.8%	2271	13.2%	0.00	0.00	0.00
35 - 40	1911	11.1%	16904	97.9%	360	2.1%	0.00	0.00	0.00
40 - 45	314	1.8%	17218	99.7%	46	0.3%	0.00	0.00	0.00
45 - 50	36	0.2%	17254	99.9%	1,0	0.1%	0.00	0.00	0.00
50 - 55	8	0.0%	17262	100.0%	\ \ 2/	0.0%	0.00	0.00	0.00
55 - 60	0	0.0%	17262	100.0%	\	0.0%	0.00	0.00	0.00
60 - 65	1	0.0%	17263	100.0%	\ \1	0.0%	0.00	0.00	0.00
65 - 70	1	0.0%	17264	100.0%	\ \0	0.0%	0.00	0.00	0.00
70 - 75	0	0.0%	17264	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
75 - 80	0	0.0%	17264	100.0%		0.0%	0.00	0.00	0.00
80 - 85	0	0.0%	17264	100.0%	0	0.0%	0.00	0.00	0.00
85 - 90	0	0.0%	17264	100.0%	0	0.0%	0.00	0.00	0.00
90 - 95	1	0.0%	17264	100.0%	0	0.0%	0.00	0.00	0.00
95 - 100	0	0.0%	17264	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

	Limit			Belo	WC	Abo ⁻	ve
0	30 (PSL)	\vee	9	158	53.0%	8106	47.0%

SpeedStat-27 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge

Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5.66667)

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

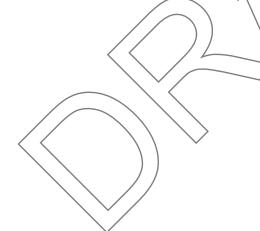
Speed range: 6 - 99 mph.

Direction: South (bound), P = North

Separation: Headway > 0 sec, Span θ - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 15110 / 32741 (46.15%)



SpeedStat-27

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 15110

Posted speed limit = 30 mph, Exceeding = 6046 (40.01%), Mean Exceeding = 33.27 mph

Maximum = 52.9 mph, Minimum = 9.5 mph, Mean = 28.9 mph

85% Speed = 33.3 mph, **95% Speed** = 36.5 mph, **Median** = 28.6 mph

10 mph Pace = 24 - 34, **Number in Pace** = 11221 (74.26%)

Variance = 20.56, Standard Deviation = 4.53 mph

Speed Bins (Partial days)

Spe	ed	Ві	n.	Be]	Low	Abo	ve /	Energy	wMult	n * vMult
0 -	- 5	0	0.0%	0	0.0%	15110	100.0%	0.00	0,00	0.00
5 -	10	1	0.0%	1	0.0%	15109	100.0%	0.00	0.00	0.00
10 -	15	16	0.1%	17	0.1%	15093	99.9%	/ > 0.00	0.00	0.00
15 -	20	275	1.8%	292	1.9%	14818	98.1%	0.00	0.00	0.00
20 -	25	2592	17.2%	2884	19.1%	12226	80.9%	0.00	0.00	0.00
25 -	30	6180	40.9%	9064	60.0%	6046	40.0%	0.00	0.00	0.00
30 -	35	4713	31.2%	13777	91.2%	1333	8.8%	0.00	0.00	0.00
35 -	40	1165	7.7%	14942	98.9%	168	1.1%	0.00	0.00	0.00
40 -	45	145	1.0%	15087	99.8%	23	0.2%	0.00	0.00	0.00
45 -	50	18	0.1%	15105	100.0%	5	0.0%	0.00	0.00	0.00
50 -	55	5	0.0%	15110	100.0%	\ \ 	0.0%	0.00	0.00	0.00
55 -	60	0	0.0%	15110	100.0%	\	0.0%	0.00	0.00	0.00
60 -	65	0	0.0%		100.0%	\	0.0%	0.00	0.00	0.00
65 -	70	0	0.0%	15110	1,00,0%	\ (0	0.0%	0.00	0.00	0.00
70 -	75	0	0.0%	1/5110	100.0%	\ \0	0.0%	0.00	0.00	0.00
75 -	80	0	0.0%	15110	1,00,0%	/ ø	0.0%	0.00	0.00	0.00
80 -	85	0	0.0%	15110	100.0%	\O	0.0%	0.00	0.00	0.00
85 -	90	0	0.0%	15110	100.0%	0	0.0%	0.00	0.00	0.00
90 -	95	0	0.0%	15110	100.0%	0	0.0%	0.00	0.00	0.00
95 -	100	1 9	0.0%	15110	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00
Total Moving Energy (Estimated) = 0.00

	Limit			Below		Above	
0	30 (PSL)	$\overline{}$		9064	60.0%	6046	40.0%

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-18 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5,66667) (With Exclusions)

Data Filtered to Show

Speeds During

School Hours Only

Exclusion: Vehicles are excluded at the following times:

Monday: 00:00-07:00, 17:00-00:00, Tuesday: 00:00-07:00, 17:00-00:00, Wednesday: 00:00-07:00, 17:00-00:00, Thursday: 00:00-07:00, 17:00-00:00, Friday: 00:00-07:00, 17:00-00:00, Saturday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00

Saturday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00, **The following entire days are excluded:**

None

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North, South (bound), P = North**Separation:** Headway > 0 sec, Span 0 $\sqrt{328.084}$ ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 22799 / 32741 (69.63%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-18

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (With Exclusions)

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	s 1 - 7
Hour								1 3	- ,
0000-0100	*	*	*	*	*	*	/ /*	*	*
0100-0200	*	*	*	*	*	*	/ (*	*	*
0200-0300	*	*	*	*	*	* /	/ / *	*	*
0300-0400	*	*	*	*	*	*	*	*	*
0400-0500	*	*	*	*	*	/*/	*	*	*
0500-0600	*	*	*	*	*	/ /*	*	\ \ *	*
0600-0700	*	*	*	*	*	/ / *	*	/ /*	*
0700-0800	586.0	563.0	549.0	*	658.0/	150.0		589.0	434.0
0800-0900	394.0	427.0	399.0	*	508.	272.0/	167.0	432.0	361.2
0900-1000	328.0	332.0	339.0	*	413.0	373.0	266.0	353.0	341.8
1000-1100	351.0	286.0	*	*	386.0	410.0	333.0	341.0	353.2
1100-1200	394.0	405.0	*	*	495.0	466.0	369.0	431.3	425.8
1200-1300	417.0	421.0	*	*/	539.0	512.0	329.0	459.0	443.6
1300-1400	408.0	429.0	*	*\	521.0	471.0	340.0	452.7	433.8
1400-1500	566.0	585.0	*	* \	(607.0	525.0	√333.0	586.0	523.2
1500-1600	620.0	588.0	*	*	629.0	511.0	340.0	612.3	537.6
1600-1700	524.0	618.0	*	*	\ 5\79\.0/	385.0	285.0	573.7	478.2
1700-1800	*	*	*	*	\	*	*	*	*
1800-1900	*	*	/ */	/ / *	/ / *	*	*	*	*
1900-2000	*	*	/*))*	\ *	*	*	*	*
2000-2100	*	*	/ / *	/ / *	\	*	*	*	*
2100-2200	*	*	/ / *	*	*	*	*	*	*
2200-2300	*	*	\ * /	*	*	*	*	*	*
2300-2400	*	*	_ * <	*	*	*	*	*	*
Totals _									
0700-1900		/ *	/ /	×	*	*	*	*	*
	\$ '	*	/]	*	*	*	*	*	*
0600-2200 0600-0000	*	,) _)	*	^ *	^ *	^ *	^	*
0000-0000	*	\ \ ^	12	*	*	*	^ *	~4828	*
0000-0000	*	/ /*		*	*	*	*	1020	*
AM Peak	*	/* /	// *	*	*	*	*		
	*	*	*	*	*	*	*		
PM Peak	*	*	*	*	*	*	*		
	*	*	*	*	*	*	*		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-19 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5,66667) (With Exclusions)

Data Filtered to Show

Speeds During

School Hours Only

Exclusion: Vehicles are excluded at the following times:

Monday: 00:00-07:00, 17:00-00:00, Tuesday: 00:00-07:00, 17:00-00:00, Wednesday: 00:00-07:00, 17:00-00:00, Thursday: 00:00-07:00, 17:00-00:00, Friday: 00:00-07:00, 17:00-00:00, Saturday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00

Sunday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00, The following entire days are excluded:

None

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: North (bound), P= North

Separation: Headway > 0 sec, Span 0 -/328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, roph, lb, ton)
In profile: Vehicles = 12181 / 32741 (37.20%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-19

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (With Exclusions)

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average 1 - 5	s 1 - 7
Hour								1 - 3	1 - /
0000-0100	*	*	*	*	*	*	/ /*	*	*
0100-0200	*	*	*	*	*	*	/ < *	*	*
0200-0300	*	*	*	*	*	* /	\ \ \ \ \	*	*
0300-0400	*	*	*	*	*	√ /	/ * \	*	*
0400-0500	*	*	*	*	*	*\	*	*	*
0500-0600	*	*	*	*	*	//*	* 1	\	*
0600-0700	*	*	*	*	*	/ / *	*	/ /*	*
0700-0800	291.0	294.0	267.0	*	311.0/	79.0 /	√ 55.0 i	290.8	216.2
0800-0900	208.0	204.0	199.0	*	283.0	129.0	> 85.0 i	223.5	184.7
0900-1000	170.0	172.0	172.0	*	246.0	187/0/	135.0	190.0	180.3
1000-1100	191.0	152.0	*	*	183.0	195.0	189.0	175.3	182.0
1100-1200	217.0	212.0	*	*	291.0	254.0	200.0	240.0	234.8
1200-1300	227.0	249.0	*	*/	272.0	262.0	184.0	249.3	238.8
1300-1400	200.0	231.0	*	*\	314.0	233.0	176.0 ∣	248.3	230.8
1400-1500	289.0	306.0	*	* \	315.0	295.0	/163.0	303.3	273.6
1500-1600	359.0	348.0	*	* '	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	255.0	202.0	358.3	306.4
1600-1700	319.0	366.0	*	*	320.0	206.0	151.0	335.0	272.4
1700-1800	*	*	*	*	\	*	*	*	*
1800-1900	*	*	/*/	//*	\	*	*	*	*
1900-2000	*	*	/ /*))*	/ /*	*	*	*	*
2000-2100	*	*	/ / *	/ / *	\	*	*	*	*
2100-2200	*	*	*	*	*	*	*	*	*
2200-2300	*	*	\ \ * /	*	*	*	*	*	*
2300-2400	*	*	_ * <	*	*	*	*	*	*
Totals _									
			//	\ >			1		
0700-1900	* *	*	\	*	*	*	*	*	*
0600-2200	*	*	\ *	*	*	*	*	*	*
0600-0000	*	*) */	*	*	*	*	*	*
0000-0000	*	/ /*	//*	*	*	*	*	*	*
AM Peak	*	/* /	/ / *	*	*	*	*		
	*	*	*	*	*	*	*		
PM Peak	*	*	*	*	*	*	*		
	*	*	*	*	*	*	*		

^{* -} No data.

MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-21 -- English (ENU)

Datasets:

[123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge Road Site:

City of Hudson Speeds Attribute:

Direction: 7 - North bound A>B, South bound B>A. Lane: 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Axle sensors - Paired (Class/Speed/Count) Data type:

Profile:

18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5,66667) (With Exclusions) Filter time:

Data Filtered to Show

Speeds During

School Hours Only

Exclusion: Vehicles are excluded at the following times:

Monday: 00:00-07:00, 17:00-00:00, Tuesday: 00:00-07:00, 17:00-00:00, Wednesday: 00:00-07:00, 17:00-00:00, Thursday: 00:00-07:00, 17:00-00:00, Friday: 00:00-07:00, 17:00-00:00, Saturday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00,

The following entire days are excluded:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: South (bound), P = North

Headway > 0 sec, Span 0 -Separation: /32/8.084 ft

Name: Default Profile

Vehicle classification (Scheme F3) Scheme: Non metric (ft, mi, ft/s, mph, lb, ton) Units: Vehicles = 10618 / 32741 (32.43%) In profile:

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-21

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (With Exclusions)

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Average	s
								1 - 5	1 - 7
Hour									
0000-0100	*	*	*	*	*	*	/ /*	*	*
0100-0200	*	*	*	*	*	*	/	*	*
0200-0300	*	*	*	*	*	*/	/ * /	*	*
0300-0400	*	*	*	*	*	. </th <th>/* /</th> <th>*</th> <th>*</th>	/* /	*	*
0400-0500	*	*	*	*	*	/ * *	*	*	*
0500-0600	*	*	*	*	*	/ /*	*	/ / *	*
0600-0700	*	*	*	*	*	/ / *	*	/ /*	*
0700-0800	295.0	269.0	282.0	*	347.0	71.0 /	√ 43.0	298.3	217.8
0800-0900	186.0	223.0	200.0	*	225.0	143.0	82.0	208.5	176.5
0900-1000	158.0	160.0	167.0	*	167.0	186.0	131.0	163.0	161.5
1000-1100	160.0	134.0	*	*	203.0	215,0	144.0	165.7	171.2
1100-1200	177.0	193.0	*	*	204.0	212.0	169.0	191.3	191.0
1200-1300	190.0	172.0	*	*/	267.0	250.0	145.0	209.7	204.8
1300-1400	208.0	198.0	*	*\	207.0	238.0	164.0	204.3	203.0
1400-1500	277.0	279.0	*	* \	292.0	230.0	/170.0	282.7	249.6
1500-1600	261.0	240.0	*	*	\ 261.0	256.0	138.0	254.0	231.2
1600-1700	205.0	252.0	* _	*	259.0	179.0	134.0	238.7	205.8
1700-1800	*	*	*/	*	*	*	*	*	*
1800-1900	*	*	/*/	\ \ \ *	\	*	*	*	*
1900-2000	*	*	/ /*))*	\ *	*	*	*	*
2000-2100	*	*	/ / *	/ / *	\ \ \	*	*	*	*
2100-2200	*	*	\ \ *	/ *	*	*	*	*	*
2200-2300	*	*	\ \ * /	*	*	*	*	*	*
2300-2400	*	*	* /	*	*	*	*	*	*
			/ / '				1		
Totals _							1		
				/ >					
0700-1900	*	*	/ /	*	*	*	*	*	*
0600-2200	*	*	\ *	*	*	*	*	*	*
0600-0000	*	*) *)	*	*	*	*	*	*
0000-0000	*	/ /*	/ /	*	*	*	*	*	*
		//					1		
AM Peak	*	* 1	*	*	*	*	*		
	*	*	*	*	*	*	*		
			•				1		
PM Peak	*	*	*	*	*	*	*		
	*	*	*	*	*	*	*		

^{* -} No data.

SpeedStat-14 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge

Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5.66667)

Data Filtered to Show

Speeds During

School Hours Only

(With Exclusions)

Exclusion:

Vehicles are excluded at the following times: Monday: 00:00-07:00, 17:00-00:00,

Tuesday: 00:00-07:00, 17:00-00:00, Wednesday: 00:00-07:00, 17:00-00:00, Thursday: 00:00-07:00, 17:00-00:00, Friday: 00:00-07:00, 17:00-00:00,

Saturday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00, The following entire days are excluded:

None

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99/mph.

Direction: North, South (bound), P = North **Separation:** Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 22799 / 32741 (69.63%)

SpeedStat-14

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (With

Exclusions)

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 -

Weekday School hours 7a-4p

filter

328.084)

Vehicles = 22799

Posted speed limit = 30 mph, Exceeding = 9209 (40.39%), Mean Exceeding = 33.39 mph

Maximum = 53.4 mph, **Minimum** = 6.3 mph, **Mean** = 29.0 mph **85% Speed** = 33.6 mph, **95% Speed** = 36.7 mph, **Median** = 28.9 mph

10 mph Pace = 23 - 33, **Number in Pace** = 16675 (73.14%)

Variance = 21.31, Standard Deviation = 4.62 mph

Speed Bins (Partial days)

Speed	l Bi	'n	l Bel	OW.	Abo	/ve /	Energy	vMu/lt	n * vMult
				_		_			
0 - 5	5 0	0.0%	0	0.0%	22799	100.0%	0.00	0.00	0.00
5 - 1 0) 6	0.0%	6	0.0%	22793	100 0%	0.00	0.00	0.00
10 - 1 5	5 27	0.1%	33	0.1%	22766	99.9%	0.00	0.00	0.00
15 - 2 0	410	1.8%	443	1.9%	22356	98.1%	0.00	0.00	0.00
20 - 2 5	3976	17.4%	4419	19.4%	18380	80.6%	0.00	0.00	0.00
25 - 3 0	9171	40.2%	13590	59.6	9209	40.4%	0.00	0.00	0.00
30 - 3 5	7034	30.9%	20624	90.5%	21.75	9.5%	> 0.00	0.00	0.00
35 - 4 0	1895	8.3%	22519	98.8%	280	1.2%	0.00	0.00	0.00
40 - 45	252	1.1%	22771	99.9%	\ 28	0.1%	0.00	0.00	0.00
45 - 5 0	23	0.1%	22794	100.0%	\ \ 5/	0.0%	0.00	0.00	0.00
50 - 5 5	5 5	0.0%	22799	100.0%	\	0.0%	0.00	0.00	0.00
55 - 6 0	0	0.0%	22/199	100.0%	\ \0	0.0%	0.00	0.00	0.00
60 - 6 5	6 0	0.0%	22799	100.0%	/ /0	0.0%	0.00	0.00	0.00
65 - 7 0	0	0.0%	22799	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
70 - 7 5	5 0	0.0%	22799	100.0%	0	0.0%	0.00	0.00	0.00
75 - 80	0	0.0%	22799	100.0%	0	0.0%	0.00	0.00	0.00
80 - 85	6 0	0.0%	22799	100.0%	0	0.0%	0.00	0.00	0.00
85 - 9 0		0.0%] 22799	100.0%	0	0.0%	0.00	0.00	0.00
90 - 9 5	/ 9/	0.0%	22799	100.0%	0	0.0%	0.00	0.00	0.00
95 - 10 0	/ /0	0.0%	22799	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

	Limit	Below	Above
0	30 (PSL)	13590 59 6%	9209 40 4%

SpeedStat-15 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge

Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. Lane: 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Factory default axle (v4.06) Algorithm:

Axle sensors - Paired (Class/Speed/Count)/ Data type:

Profile:

18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5.66667) Filter time:

Data Filtered to Show

Speeds During

School Hours Only

(With Exclusions)

Exclusion: Vehicles are excluded at the following times:

Monday: 00:00-07:00, 17:00-00:00, Tuesday: 00:00-07:00, 17:00-00:00, Wednesday: 00:00-07:00, 17:00-00:00, Thursday: 00:00-07:00, 17:00-00:00, Friday: 00:00-07:00, 17:00-00:00, Saturday: 00:00-07:00, 17:00-00:00, Sunday: 00:00-07:00, 17:00-00:00,

The following entire days are excluded:

None

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 Included classes:

6 - 99 mph. Speed range:

Direction: North (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Default Profile < Name:

Vehicle classification (Scheme F3) Scheme: Non metric (ft, mi, ft/s, mph, lb, ton) Units: Vehicles = 12181 32741 (37.20%) In profile:

SpeedStat-15

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (With

Exclusions)

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 -

328.084)

Vehicles = 12181

Posted speed limit = 30 mph, Exceeding = 5354 (43.95%), Mean Exceeding = 33.60 mph

Maximum = 53.4 mph, Minimum = 6.3 mph, Mean = 29.4 mph 85% Speed = 34.0 mph, 95% Speed = 37.1 mph, Median = 29.1 mph

10 mph Pace = 24 - 34, **Number in Pace** = 8758 (71.90%)

Variance = 22.39, Standard Deviation = 4.73 mph

Speed Bins (Partial days)

Speed	ı	Bir	n	Bel	Low	Abo	ve/	Energy	vMu1t	n * vMult
0 -	5	0	0.0%	0	0.0%	12184	100.0%	/ 0.00	0.00	0.00
5 - 1	LO İ	5	0.0%	5	0.0%	12176	100 0%	0.00	0.00	0.00
10 - 1	L5	15	0.1%	20	0.2%	12161	99.8%	0.00	0.00	0.00
15 - 2	20	190	1.6%	210	1.7%	11971	98.3%	0.00	0.00	0.00
20 - 2	25	1944	16.0%	2154	17.7%	10027	82.3%	0.00	0.00	0.00
25 - 3	30	4673	38.4%	6827	56.0%	5354	44.0%	0.00	0.00	0.00
30 - 3	35	3958	32.5%	10785	88.5%	1396	11.5%	0.00	0.00	0.00
35 - 4	10	1200	9.9%	11985	98.4%	\ 196	> 1.6%	0.00	0.00	0.00
40 - 4	ŀ5	178	1.5%	12163	99.9%	\ \ 1.8	0.1%	0.00	0.00	0.00
45 - 5	50	15	0.1%	12178	100.0%	\	0.0%	0.00	0.00	0.00
50 - 5	55	3	0.0%	12181	100.0%	\	0.0%	0.00	0.00	0.00
55 - 6	50	0	0.0%	12/181	100.0%	\ \0	0.0%	0.00	0.00	0.00
60 - 6	55	0	0.0%/	12181	100.0%	/ /9	0.0%	0.00	0.00	0.00
65 - 7	70	0	0.0%	12181	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
70 - 7	75	0	0.0%	12181/	100.0%	0	0.0%	0.00	0.00	0.00
75 - 8	30	0	0.0%	12181	100.0%	0	0.0%	0.00	0.00	0.00
80 - 8	35	0	0.0%	12181	100.0%	0	0.0%	0.00	0.00	0.00
85 - 9	0	0	0.0%	12181	100.0%	0	0.0%	0.00	0.00	0.00
90 - 9	95	/ 9/	0.0%	12181	100.0%	0	0.0%	0.00	0.00	0.00
95 - 10	00	/ /0	0.0%	[12181	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

	Limit	Below	Above
0	30 (PSL)	6827 56.0%	5354 44.0%

SpeedStat-17 -- English (ENU)

Datasets:

Site: [123-427] Harry Howard Avenue, approximately 400-feet north of Riverledge

Road

Attribute: City of Hudson Speeds

Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2

Survey Duration: 17:13 Thursday, May 9, 2024 => 10:17 Wednesday, May 15, 2024,

Zone:

File: 123-427 0 2024-05-15 1017.EC2 (Plus)

Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04

Algorithm: Factory default axle (v4.06)

Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (5.66667)

Data Filtered to Show

Speeds During

School Hours Only

(With Exclusions)

Exclusion: Vehicles are excluded at the following times:

Monday: 00:00-07:00, 17:00-00:00, Tuesday: 00:00-07:00, 17:00-00:00, Wednesday: 00:00-07:00, 17:00-00:00, Thursday: 00:00-07:00, 17:00-00:00, Friday: 00:00-07:00, 17:00-00:00, Saturday: 00:00-07:00, 17:00-00:00,

Sunday: 00:00-07:00, 17:00-00:00,

The following entire days are excluded:

None

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 6 - 99 mph.

Direction: South (bound), P = North

Separation: Headway > 0 sec, Span 0 - 328.084 ft

Name: Default Profile

Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 10618 / 32741 (32.43%)

SpeedStat-17

Site: 123-427.2.3NS

Description: Harry Howard Avenue, approximately 400-feet north of Riverledge Road Filter time: 18:00 Thursday, May 9, 2024 => 10:00 Wednesday, May 15, 2024 (With

Exclusions)

Scheme: Vehicle classification (Scheme F3)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 10618

Posted speed limit = 30 mph, Exceeding = 3855 (36.31%), Mean Exceeding = 33.11 mph

Maximum = 51.9 mph, **Minimum** = 9.5 mph, **Mean** = 28.5 mph **85% Speed** = 32.9 mph, **95% Speed** = 35.8 mph, **Median** = 28.4 mph

10 mph Pace = 23 - 33, Number in Pace = 7977 (75.13%) Variance = 19.70, Standard Deviation = 4.44 mph

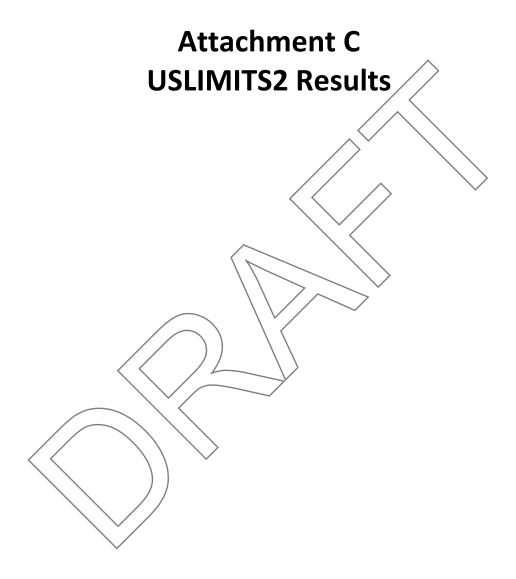
Speed Bins (Partial days)

Speed	в	in	Bel	ow	Abo	ve/ /	Energy	vMult	n * vMult
0 - 5	0	0.0%	0	0.0%	10618	100.0%	0.00	0,00	0.00
5 - 10	1	0.0%	1	0.0%	10617	100.0%	/ > 0.00	0.00	0.00
10 - 15	12	0.1%	13	0.1%	10605	99.9%	0.00	0.00	0.00
15 - 20	220	2.1%	233	2.2%	10385	97.8%	0.00	0.00	0.00
20 - 25	2032	19.1%	2265	21.3%	8353	78 7%	0.00	0.00	0.00
25 - 30	4498	42.4%	6763	63.7%/	3855	36.3%	0.00	0.00	0.00
30 - 35	3076	29.0%	9839	92.7%	779	7.3%	0.00	0.00	0.00
35 - 40	695	6.5%	10534	99.2%	\\\ 84	0.8%	0.00	0.00	0.00
40 - 45	74	0.7%	10608	99.9% \	\ 10	0.1%	0.00	0.00	0.00
45 - 50	8	0.1%	10616	100.0%	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0.0%	0.00	0.00	0.00
50 - 55	2	0.0%	10618	100.0%	\ \ / 0/	0.0%	0.00	0.00	0.00
55 - 60	0	0.0%	10618	100.0%	\	0.0%	0.00	0.00	0.00
60 - 65	0	0.0%	10618	%0/.09 ſ	\ \0	0.0%	0.00	0.00	0.00
65 - 70	0	0.0%	10618	100.0%	/ /0	0.0%	0.00	0.00	0.00
70 - 75	0	0.0%	10618	1/00/.0%	\ 0	0.0%	0.00	0.00	0.00
75 - 80	0	0.0%	10618	100.0%		0.0%	0.00	0.00	0.00
80 - 85	0	0.0%	10618	100.0%	0	0.0%	0.00	0.00	0.00
85 - 90	0	0.0%	10618	100.0%	0	0.0%	0.00	0.00	0.00
90 - 95	1 0	0.0%	10618	100.0%	0	0.0%	0.00	0.00	0.00
95 - 100	/ 0	0.0%	10618	\$0.00L	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

	Limit		/ B	elow	Abo	ve
0	30 (PSL)	\vee	676	3 63.7%	3855	36.3%



USLIMITS2 Speed Zoning Report

Project Overview

Project Name: City of Hudson Speeds

Analyst: Liam Chaskey

Basic Project Information

Project Number: 123-427 Route Name: State Street From: N Front Street To: Columbia Street State: New York

County: Columbia County

City: Hudson city

Route Type: Road Section in Developed Area

Route Status: Existing

Roadway Information

Section Length: 1 mile(s) Statutory Speed Limit: 30 mph Existing Speed Limit: 30 mph Adverse Alignment: No One-Way Street: No

Divided/Undivided: Undivided Number of Through Lanes: 2

Area Type: Residential-Collector/Arterial

Number of Driveways: 18 Number of Signals: 2

Project Description: Speed Limit Reduction Study

Recommended Speed Limit:

SPEED LIMIT

Note: The section crash rate of 652 per 100 MVM is above the critical rate (359). The injury crash rate for the section of 87 per 100 MVM is more than 30 percent above the average for similar roads (66) but below the critical rate (140). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

Equations Used in the Crash Data Calculations

Rc = (Section Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Rc = (10.00 * 100000000) / (4200 * 365 * 1)
Rc = 652.32 crashes per 100 MVM

Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length)

Date: 2024-05-28

Crash Data Information

Crash Data Years: 3.00 Crash AADT: 4200 veh/day Total Number of Crashes: 30 Total Number of Injury Crashes: 4 Section Crash Rate: 652 per 100 MVM Section Injury Crash Rate. 87 per 100 MVM Crash Rate Average for Similar Roads: 232 Injury Rate Average for Similar Roads: 66

Traffic Information

85th Percentile Speed: 29 mph 50th Percentile Speed: 25 mph

AADT: 4200 veh/day

On Street Parking and Usage: High Pedestrian / Bicyclist Activity: High

```
Ri = (1.33 * 100000000) / (4200 * 365 * 1)

Ri = 86.98 injuries per 100 MVM

Critical Crash Rate (Cc)

Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))

Cc = 231.80 + 1.645 * (231.80 / 0.0460) ^ (1/2) + (1 / (2 * 0.0460))

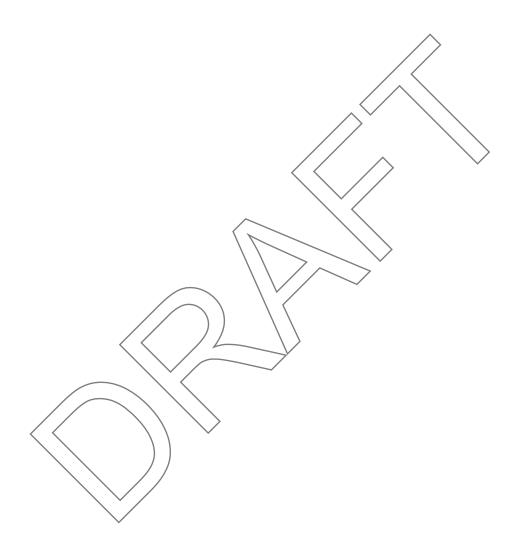
Cc = 359.46 crashes per 100 MVM

Critical Injury Rate (Ic)

Ic = Injury Crash Average of Similar Sections + 1.645 * (Injury Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))

Ic = 66.27 + 1.645 * (66.27 / 0.0460) ^ (1/2) + (1 / (2 * 0.0460))

Ic = 139.59 injuries per 100 MVM
```



USLIMITS2 Speed Zoning Report

Project Overview

Project Name: City of Hudson Speeds

Analyst: Liam Chaskey

Basic Project Information

Project Number: 123-427 Route Name: NY Route 23B9G

From: City Line To: Allen Street State: New York

County: Columbia County

City: Hudson city

Route Type: Road Section in Undeveloped Area

Route Status: Existing

Roadway Information

Section Length: 0.652 mile(s) Statutory Speed Limit: 30 mph Existing Speed Limit: 30 mph

Adverse Alignment: No Divided/Undivided: Undivided

Number of Lanes: 2 Roadside Hazard Rating: 3 Transition Zone: No

Project Description: Speed Limit Reduction Study

Recommended Speed Limit:

SPEED LIMIT

Note: The final recommended speed limit is higher than the 30 mph statutory speed limit for this type of road. An engineering study such as the one carried out with USLIMITS is usually required to set a speed limit above the statutory limit.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

How the Recommended Speed Limit was Determined

The questions and responses below, and the referenced page numbers, correspond to the flowcharts found in the Decision Rules Flowchart document

Terms Used in the Recommendation

• Closest 85th: This is the 5 mph increment that is closest to the 85th percentile speed (e.g., if the 85th

percentile speed is 63 mph, the Closest 85th will be 65 mph).
 Rounded-down 85th: This is the 5 mph increment obtained by rounding down the 85th percentile to the nearest 5 mph increment (e.g., if the 85th percentile speed is 63 mph, the Rounded-down 85th will

Closest 50th: This is the 5 mph increment that is closest to the 50th percentile speed (e.g., if the 50th percentile speed is 58 mph, the Closest 50th will be 60 mph).
SL_1: Speed limit determined using site characteristics (e.g., AADT, interchange spacing, roadside

hazard rating, ped/bike activity, number of traffic signals, etc.).

Date: 2024-06-07

Crash Data Information

Crash Data Years: 3.00 Crash AADT: 6700 veh/day Total Number of Crashes: 1 Total Number of Injury Crashes: 0 Section Crash Rate: 21 per 100 MVM Section Injury Crash Rate. 0 per 100 MVM Crash Rate Average for Similar Roads: 131 Injury Rate Average for Similar Roads: 46

Traffic Information

85th Percentile Speed: 44 mph 50th Percentile Speed: 39 mph

AADT: 6700 veh/day

- 2: Speed limit determined using crash data from the crash module.
- **SL**: Recommended Speed Limit.

The Recommended Speed Limit (SL) is the lower of the speed limit determined without crash data (SL_1) and the speed limit determined with crash data (SL 2).

Determine SL 1 Using Site Characteristics (pg. K-14)

Question 1: What is the roadside hazard rating (RHR)?

Results: Because the RHR (3) is less than 4, the SL_1 is the closest 85th speed (45 mph).

Question 2: Are crash data available?

Results: Yes, so use these data to determine SL_2.

Determine SL 2 Using Crash Data (pg. K-15)

Question 3: Is more than one year of crash data available?

Results: Yes, at least one year of crash data is available.

Note: The crash rate is calculated to be 21 crashes per 100M VMT, and the injury rate is calculated to be 0 crashes per 100M VMT.

Note: The critical crash rate is calculated as 227 crashes per 100M VMX.

Question 4: Is the crash rate (21 per 100M VMT) greater than the critical crash rate (22) crashes per 100M VMT)?

Results: No, so the crash level is classified as low.

Question 5: Is the injury crash rate (0 per 100M VMT) greater than the critical injury rate (108 crashes per 100M

Results: No, so the injury crash level is classified as low.

Question 6: Are either of the crash level (low) or injury crash level (low) classified as medium or high?

Results: No, so the total crash level is classified low.

Question 7: Is the total crash level (low) classified as medium or high?

Results: No, so SL_2 is set as the closest 85th speed (45 mph).

Determine SL (pg. K-12)

Note: SL is set as the lower of SL 1 (45 mph) and SL 2 (45 mph). The SL is set to 45 mph.

Determine the Final Recommended Speed Limit (pg. K-19)

Question 8: Is the &L Jess than 25 mph or greater than 65 mph?

Results: The SL (45 mph) is between 25 mph and 65 mph. The SL remains the same.

Final Recommendation: The recommended speed limit is 45 mph.

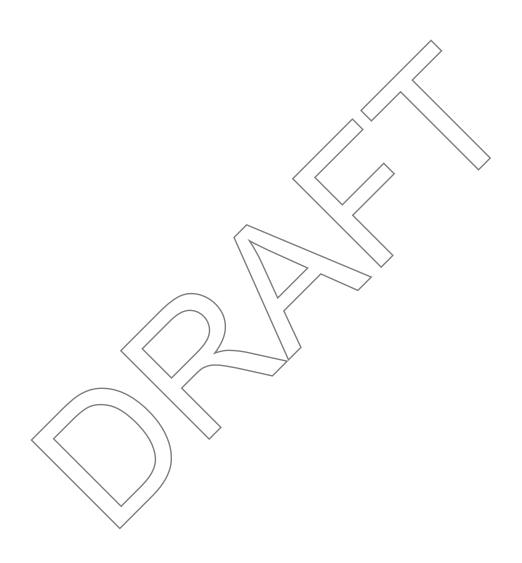
Equations Used in the Crash Data Calculations

```
Exposure (M)
M = (Section AADT * 365 * Section Length * Duration of Crash Data) / (100000000) 

<math>M = (6700 * 365 * 0.652 * 3.00) / (100000000)
M = 0.0478
Crash Rate (Rc)
Rc = (Section Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Rc = (0.33 * 100000000) / (6700 * 365 * 0.652)
Rc = 20.91 crashes per 100 MVM
Injury Rate (Ri)
Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length) Ri = (0.00 * 100000000) / (6700 * 365 * 0.652) Ri = 0.00 injuries per 100 MVM
Critical Crash Rate (Cc)
Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 /
```

(2 * Exposure)) Cc = 130.90 + 1.645 * (130.90 / 0.0478) ^ (1/2) + (1 / (2 * 0.0478)) Cc = 227.41 crashes per 100 MVM

Critical Injury Rate (Ic) Ic = Injury Crash Average of Similar Sections + 1.645 * (Injury Crash Average of Similar Sections / Exposure) ^ (1/2) + (1/2 * Exposure) Ic = $46.27 + 1.645 * (46.27/0.0478) ^ (1/2) + (1/(2 * 0.0478))$ Ic = 107.88 injuries per 100 MVM



USLIMITS2 Speed Zoning Report

Project Overview

Project Name: City of Hudson Speeds

Analyst: Liam Chaskey

Basic Project Information

Project Number: 123-427

Route Name: Harry Howard Avenue

From: Washington Street To: Joslen Boulevard State: New York

County: Columbia County

City: Hudson city

Route Type: Road Section in Developed Area

Route Status: Existing

Roadway Information

Section Length: 1.1 mile(s)
Statutory Speed Limit: 30 mph
Existing Speed Limit: 30 mph

Adverse Alignment: No One-Way Street: No

Divided/Undivided: Undivided
Number of Through Lanes: 2

Area Type: Residential-Collector/Arterial

Number of Driveways: 43 Number of Signals: 0

Project Description: Speed Limit Reduction Study

Recommended Speed Limit:

SPEED LIMIT 40

Note: The final recommended speed limit is higher than the 30 mph statutory speed limit for this type of road. An engineering study such as the one carried out with USLIMITS is usually required to set a speed limit above the statutory limit.

Note: The road section is in an area with high pedestrian or bicycle activity. Consider implementing engineering measures to reduce speeds before lowering the recommended speed limit. See Engineering Countermeasures for Speed Management and PedSafe for more guidance.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

How the Recommended Speed Limit was Determined

The questions and responses below, and the referenced page numbers, correspond to the flowcharts found in the <u>Decision Rules Flowchart document</u>.

Terms Used in the Recommendation

• Closest 85th: This is the 5 mph increment that is closest to the 85th percentile speed (e.g., if the 85th percentile speed is 63 mph, the Closest 85th will be 65 mph).

Date: 2024-06-07

Crash Data Information

Crash Data Years: 3.00
Crash AADT: 6600 veh/day
Total Number of Crashes: 14
Total Number of Injury Crashes: 4
Section Crash Rate: 176 per 100 MVM
Section Injury Crash Rate: 50 per 100 MVM
Crash Rate Average for Similar Roads: 235
Injury Rate Average for Similar Roads: 68

Traffic Information

85th Percentile Speed: 44 mph 50th Percentile Speed: 39 mph

AADT: 6600 veh/day

On Street Parking and Usage: Not High Pedestrian / Bicyclist Activity: High

- Rounded-down 85th: This is the 5 mph increment obtained by rounding down the 85th percentile to the nearest 5 mph increment (e.g., if the 85th percentile speed is 63 mph, the Rounded-down 85th will be 60 mph)
- **Closest 50th**: This is the 5 mph increment that is closest to the 50th percentile speed (e.g., if the 50th percentile speed is 58 mph, the Closest 50th will be 60 mph).
- SL_1: Speed limit determined using site characteristics (e.g., AADT, interchange spacing, roadside hazard rating, ped/bike activity, number of traffic signals, etc.).
 SL_2: Speed limit determined using crash data from the crash module.

• SL: Recommended Speed Limit.

The Recommended Speed Limit (SL) is the lower of the speed limit determined without crash data (SL $_1$) and the speed limit determined with crash data (SL $_2$).

Determine SL 1 Using Site Characteristics (pg. K-23)

Note: The number of signals per mile is being calculated as 0.00 signals per mile.

Note: The number of driveways per mile is being calculated as 39.09 driveways per mile.

Question 1: Are any of the following true: there are more than four signals per mile, pedestrian or bicyclist activity is high, parking activity is high, or there are more than 60 driveways per mile?

Results: Yes. There are 0.00 signals per mile, 39.09 driveways per mile, high pedestrian/bicyclist activity, and not high parking activity. **The SL_1 is set to the closest 50th percentile speed (40 mph)**.

Question 2: Are crash data available?

Results: Yes, so use these data to determine SL_2.

Determine SL 2 Using Crash Data (pg. K-24)

Question 3: Is more than one year of crash data available?

Results: Yes, at least one year of crash data is available.

Note: The crash rate is calculated to be 176 crashes per 100M VMT, and the injury rate is calculated to be 50 crashes per 100M VMT.

Note: The critical crash rate is calculated as 331 crashes per 100M VMT.

Question 4: Is the crash rate (176 per 100M-VMT) greater than the critical crash rate (331 crashes per 100M VMT)?

Results: No. so the crash level is classified as low.

Question 5: Is the injury crash rate (50 per 100M-VMT) greater than the critical injury rate (122 crashes per 100M VMT)?

Results: No, so the injury crash level is classified as low.

Question 6: Are either of the crash level (low) or injury crash level (low) classified as medium or high?

Results: No, so the total crash level is classified low.

Question 7: Is the total crash level (low) classified as medium or high?

Results: No, so SL_2 is set as the closest 85th speed (45 mph).

Determine SL (pg. K-22)

Note: SL is set as the lower of Sk_1 (40 mph) and SL_2 (45 mph). The SL is set to 40 mph.

Determine the Final Recommended Speed Limit (pg. K-28)

Question 8: Is the SL less than 20 mph or greater than 50 mph?

Results: The SL (40 mph) is between 20 mph and 50 mph. The SL remains the same.

Final Recommendation: The recommended speed limit is 40 mph.

Equations Used in the Crash Data Calculations

```
M = (Section AADT * 365 * Section Length * Duration of Crash Data) / (100000000) M = (6600 * 365 * 1.1 * 3.00) / (100000000) M = 0.0795
```

Crash Rate (Rc)

Rc = (Section Crash Average * 100000000) / (Section AADT * 365 * Section Length)

```
Rc = (4.67 * 100000000) / (6600 * 365 * 1.1)
Rc = 176.11 crashes per 100 MVM

Injury Rate (Ri)
Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Ri = (1.33 * 100000000) / (6600 * 365 * 1.1)
Ri = 50.32 injuries per 100 MVM

Critical Crash Rate (Cc)
Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))
Cc = 235.03 + 1.645 * (235.03 / 0.0795) ^ (1/2) + (1 / (2 * 0.0795))
Cc = 330.77 crashes per 100 MVM

Critical Injury Rate (Ic)
Ic = Injury Crash Average of Similar Sections + 1.645 * (Injury Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))
Ic = 67.63 + 1.645 * (67.63 / 0.0795) ^ (1/2) + (1 / (2 * 0.0795))
Ic = 121.90 injuries per 100 MVM
```

