# CITY OF NOVI CITY COUNCIL MAY 9, 2022



**SUBJECT:** Approval of Traffic Control Order 22-01 for speed limit signs along Regency

Drive.

**SUBMITTING DEPARTMENT:** Department of Public Works, Engineering Division

#### **BACKGROUND INFORMATION:**

Regency Drive is an industrial park roadway that currently has no posted speed limit. Following complaints about speeding motorists, a traffic speed study was completed by AECOM, the City's Traffic Engineering Consultant. The results of the attached speed study recommends establishing a 30 MPH speed limit. Therefore, the Engineering Division proposes to adopt a 30 MPH speed limit on Regency Drive from Haggerty Road to the cul-de-sac.

Traffic control orders are required under the Uniform Traffic Code to enforce traffic control signs installed on public streets. Staff has prepared the following traffic control order for approval by City Council.

TCO No.	Description
22-01	30 MPH speed limit on Regency Drive

**RECOMMENDED ACTION:** Approval of Traffic Control Order 22-01 for speed limit signs along Regency Drive.

#### CITY OF NOVI TRAFFIC CONTROL ORDER

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	PARKING OTHER	CONT	ROL NUMBER:	22-01
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REGENC	Y DRIVE			
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30 MPH S	SPEED LIMIT			
			en Croy - Traffic E ated: <u>04/25/2022</u>	•
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BEING FI	Ther Ordered and Directed tha Led With the Clerk and upon ere Ence of Aforesaid,			
30 MPH S	SPEED LIMIT			
	D AT THE REGULAR MEETING OF UNCIL ON <u>05/09/2022.</u>	Ву:	Robert J. Gatt, I	Mayor
		Ву:	Cortney Hansor	n, City Clerk



Project: Regency Speed Limit Version #: v1.0

#### MAP INTERPRETATION NOTICE



City of Novi

Engineering Division
Department of Public Works
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org





Memo



To: Ben Croy City of Novi 45175 10 Mile Road Novi, Michigan 48375

CC:

AECOM 27777 Franklin Road Southfield MI, 48034 USA aecom.com

Project name:

Regency Drive 85th Percentile Speed Data

From: AECOM

**Date:** April 7, 2022

# Memo

Subject: 85th percentile Speed study on Regency Drive, Novi

### Introduction:

The City of Novi has received requests to set an absolute speed limit for Regency Drive. The road currently has a prima facie speed limit and the City routinely receives complaints from residents regarding the unreasonable speeds by roadway users. In accordance with the Michigan Motor Vehicle Code and Michigan Act no. 445 (**Appendix A**) a traffic and engineering investigation is required to establish an absolute speed limit. The traffic and engineering investigation follows the established standardized methods outlined in Chapter 5 - Spot Speed Study from the ITE Manual of Transportation Engineering Studies 2nd Ed. to determine reasonable and proper speed typically defined by the 85th percentile speed.

# **Project Area and Background:**

Regency Drive is a two-lane low volume cul-de-sac roadway with no pedestrian facilities, nine driveway access points, and 3 reported vehicle crashes over the past five years (**Appendix B**). The crash analysis suggests that crashes are not associated with speed and crashes are reported as the driver falling asleep having a single motor crash (2020), the vehicle did not stop and striking from rear-end (2020), and a crash with snow plowing truck (2022) respectively. The roadway is located north of Grand River Avenue on the east side of Haggerty Road and serves as the only access to a light industrial development with businesses including American Tire Distribution, Oxid, and Underwriters Laboratories, Inc. Project location is provided in **Figure 1**.



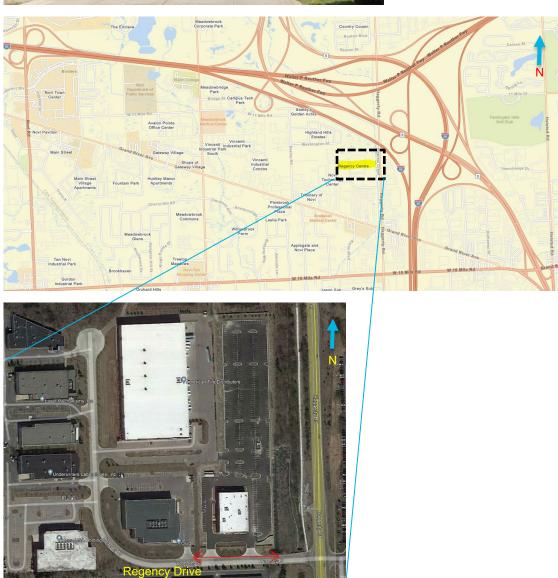


Figure 1: Regency Drive and Location of Speed Data Collection (marked in red arrow)

# **Sample Size and Equipment:**

Sample size as per ITE Manual of Transportation Engineering Studies 2<sup>nd</sup> Ed Equation 5-2

 $N = S^2K^2(2+U^2)/2E^2$ 

Constant U = 1.04 (for 85<sup>th</sup> percentile speed)

Constant K = 1.96 (95% confidence level)

S = Standard Deviation (5 mph rounded value for Urban/Two-lane highway type)

E = permitted error 2 mph

N = 37 samples

Equipment - Bushnell Speedster III – Speed Radar Gun was used to collect the data along Regency Drive on March 21, 2022 from 10 AM to 12:30 PM with validation of speed carried out before starting the data collection by observing the speed of the known vehicle speed.

### **Results:**

Spot speed data collected are shown in **Appendix C**. Based on radar speed data collected on March 21, 2022 the 85th percentile speed along Regency Drive was 31 mph:

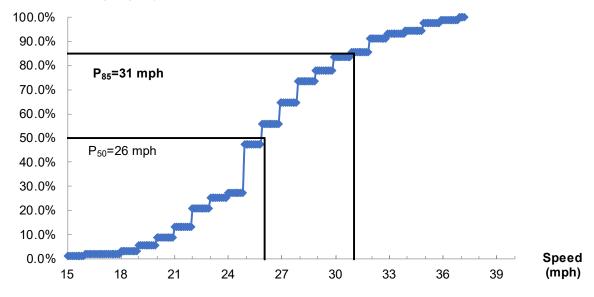


Figure 2: Results from speed data collected using a speed radar gun on 3/21/22

## **Recommendation:**

It is recommended that an absolute speed limit of 30 mph be established for Regency Drive. To validate the absolute speed limit a traffic control order must be filed and speed limit signs must be placed in conformance with the Michigan manual on uniform traffic control devices.

Act No. 445
Public Acts of 2016
Approved by the Governor
January 4, 2017
Filed with the Secretary of State
January 5, 2017

EFFECTIVE DATE: January 5, 2017

# STATE OF MICHIGAN 98TH LEGISLATURE REGULAR SESSION OF 2016

Introduced by Rep. Jacobsen

# ENROLLED HOUSE BILL No. 4423

AN ACT to amend 1949 PA 300, entitled "An act to provide for the registration, titling, sale, transfer, and regulation of certain vehicles operated upon the public highways of this state or any other place open to the general public or generally accessible to motor vehicles and distressed vehicles; to provide for the licensing of dealers; to provide for the examination, licensing, and control of operators and chauffeurs; to provide for the giving of proof of financial responsibility and security by owners and operators of vehicles; to provide for the imposition, levy, and collection of specific taxes on vehicles, and the levy and collection of sales and use taxes, license fees, and permit fees; to provide for the regulation and use of streets and highways; to create certain funds; to provide penalties and sanctions for a violation of this act; to provide for civil liability of manufacturers, the manufacturers of certain devices, the manufacturers of automated technology, upfitters, owners, and operators of vehicles and service of process on residents and nonresidents; to regulate the introduction and use of certain evidence; to regulate and certify the manufacturers of certain devices; to provide for approval and certification of installers and servicers of certain devices; to provide for the levy of certain assessments; to provide for the enforcement of this act; to provide for the creation of and to prescribe the powers and duties of certain state and local agencies; to impose liability upon the state or local agencies; to provide appropriations for certain purposes; to repeal all other acts or parts of acts inconsistent with this act or contrary to this act; and to repeal certain parts of this act on a specific date," by amending section 627 (MCL 257.627), as amended by 2012 PA 252; and to repeal acts and parts of acts.

#### The People of the State of Michigan enact:

- Sec. 627. (1) A person operating a vehicle on a highway shall operate that vehicle at a careful and prudent speed not greater than nor less than is reasonable and proper, having due regard to the traffic, surface, and width of the highway and of any other condition existing at the time. A person shall not operate a vehicle upon a highway at a speed greater than that which will permit a stop within the assured, clear distance ahead. A violation of this subsection shall be known and may be referred to as a violation of the basic speed law or "VBSL".
- (2) Except as provided in subsection (1), it is lawful for the operator of a vehicle to operate that vehicle on a highway at a speed not exceeding the following:
- (a) 15 miles per hour on a highway segment within the boundaries of a mobile home park, as that term is defined in section 2 of the mobile home commission act, 1987 PA 96, MCL 125,2302.
  - (b) 25 miles per hour on a highway segment within a business district.
- (c) 25 miles per hour on a highway segment within the boundaries of a public park. A local authority may decrease the speed limit to not less than 15 miles per hour in a public park under its jurisdiction.
- (d) 25 miles per hour on a highway segment within the boundaries of a residential subdivision, including a condominium subdivision, consisting of a system of interconnected highways with no through highways and a limited number of dedicated highways that serve as entrances to and exits from the subdivision.

- (e) 25 miles per hour on a highway segment with 60 or more vehicular access points within 1/2 mile.
- (f) 30 miles per hour on a highway segment with not less than 50 vehicular access points but no more than 59 vehicular access points within 1/2 mile.
- (g) 35 miles per hour on a highway segment with not less than 45 vehicular access points but no more than 49 vehicular access points within 1/2 mile.
- (h) 40 miles per hour on a highway segment with not less than 40 vehicular access points but no more than 44 vehicular access points within 1/2 mile.
- (i) 45 miles per hour on a highway segment with not less than 30 vehicular access points but no more than 39 vehicular access points within 1/2 mile.
- (3) A person operating a truck with a gross weight of 10,000 pounds or more, a truck-tractor, a truck-tractor with a semi-trailer or trailer, or a combination of these vehicles shall not exceed a speed of 35 miles per hour during the period when reduced loadings are being enforced in accordance with this chapter.
- (4) Where the posted speed limit is greater than 65 miles per hour, a person operating a school bus, a truck with a gross weight of 10,000 pounds or more, a truck-tractor, or a truck-tractor with a semi-trailer or trailer or a combination of these vehicles shall not exceed a speed of 65 miles per hour on a limited access freeway or a state trunk line highway.
  - (5) All of the following apply to the speed limits described in subsection (2):
- (a) A highway segment adjacent to or lying between 2 or more areas described in subsection (2)(a), (b), (c), or (d) shall not be considered to be within the boundaries of those areas.
- (b) A highway segment of more than 1/2 mile in length with a consistent density of vehicular access points equal to the number of vehicular access points described in subsection (2)(e), (f), (g), (h), or (i) shall be posted at the speed limit specified in the adjoining segment. A separate determination shall be made for each adjoining highway segment where vehicular access point density is different.
- (c) A speed limit may be posted on highways less than 1/2 mile in length by prorating in 1/10 mile segments the vehicular access point density described in subsection (2)(e), (f), (g), (h), or (i).
- (6) A person operating a vehicle on a highway, when entering and passing through a work zone described in section 79d(a) where a normal lane or part of the lane of traffic has been closed due to highway construction, maintenance, or surveying activities, shall not exceed a speed of 45 miles per hour unless a different speed limit is determined for that work zone by the state transportation department, a county road commission, or a local authority, based on accepted engineering practice. The state transportation department, a county road commission, or a local authority shall post speed limit signs in each work zone described in section 79d(a) that indicate the speed limit in that work zone and shall identify that work zone with any other traffic control devices necessary to conform to the Michigan manual of uniform traffic control devices. A person shall not exceed a speed limit established under this section or a speed limit established under section 628.
- (7) The state transportation department, a county road commission, or a local authority shall decrease the speed limit in a hospital highway zone by up to 10 miles per hour upon request of a hospital located within that hospital highway zone. The state transportation department, county road commission, or local authority may decrease the speed limit in a hospital highway zone by more than 10 miles per hour if the decrease is supported by an engineering and safety study. The state transportation department, county road commission, or local authority shall post speed limit signs in a hospital highway zone that indicate the speed limit in that hospital highway zone and shall identify that hospital highway zone with any other traffic control devices necessary to conform to the Michigan manual of uniform traffic control devices. If a change in a sign, signal, or device, is necessitated by a speed limit decrease described in this subsection, the hospital requesting the decrease shall pay the cost of doing so. As used in this subsection, "hospital highway zone" means a portion of state trunk line highway maintained by the state transportation department that has a posted speed limit of at least 50 miles per hour and has 2 or fewer lanes for travel in the same direction, traverses along property owned by a hospital, contains an ingress and egress point from hospital property, and extends not more than 1,000 feet beyond the boundary lines of hospital property in both directions in a municipality.
- (8) Subject to subsection (17), the maximum speed limit on all limited access freeways upon which a speed limit is not otherwise fixed under this act is 70 miles per hour, which shall be known as the "limited access freeway general speed limit". The minimum speed limit on all limited access freeways upon which a minimum speed limit is not otherwise fixed under this act is 55 miles per hour.
- (9) Subject to subsection (17), the speed limit on all trunk line highways and all county highways upon which a speed limit is not otherwise fixed under this act is 55 miles per hour, which shall be known as the "general speed limit".
- (10) Except as otherwise provided in this subsection, the speed limit on all county highways with a gravel or unimproved surface upon which a speed limit is not otherwise fixed under this act is 55 miles per hour, which shall be known as the "general gravel road speed limit". Upon request of a municipality located within a county with a population of 1,000,000 or more, the county road commission in conjunction with the requesting municipality may lower the speed limit to 45 miles per hour on the requested road segment and if a sign, signal, or device is erected or maintained, taken

down, or regulated as a result of a request by a municipality for a speed limit of 45 miles per hour, the municipality shall pay the costs of doing so. If a municipality located within a county with a population of 1,000,000 or more requests a speed different than the speed described in this subsection, the county road commission in conjunction with the department of state police and the requesting municipality may conduct a speed study of free-flow traffic on the fastest portion of the road segment in question for the purpose of establishing a modified speed limit. A speed study conducted under this subsection shall be completed between 3 and 14 days after a full gravel road maintenance protocol has been performed on the road segment. A full gravel road maintenance protocol described in this subsection shall include road grading and the application of a dust abatement chemical treatment. Following a speed study conducted under this subsection, the speed limit for the road segment shall be established at the nearest multiple of 5 miles per hour to the eighty-fifth percentile of speed of free-flow traffic under ideal conditions for vehicular traffic, and shall not be set below the fiftieth percentile speed of free-flow traffic under ideal conditions for vehicular traffic. A speed study conducted under this subsection shall be the responsibility of the department of state police, and if a sign, signal, or device is erected or maintained, taken down, or regulated as a result of a request by a municipality under this subsection, the municipality shall pay the costs of doing so.

- (11) A public record of all traffic control orders establishing statutory speed limits authorized under this section shall be filed with the office of the clerk of the county in which the county highway is located or at the office of the city or village clerk or administrative office of the airport, college, or university in which the local highway is located, and a certified copy of the traffic control order shall be evidence in every court of this state of the authority for the issuance of that traffic control order. The public record filed with the county, city, or village clerk or administrative office of the airport, college, or university shall not be required as evidence of authority for issuing a traffic control order in the case of signs temporarily erected or placed at points where construction, maintenance, or surveying activities is in progress. A traffic and engineering investigation is not required for a traffic control order for a speed limit established under subsection (2). A traffic control order shall, at a minimum, contain all of the following information:
  - (a) The name of the road.
  - (b) The boundaries of the segment of the road on which the speed limit is in effect.
  - (c) The basis upon which the speed limit is in effect.
  - (d) The section of law, including a reference to the subsection, under which the speed limit is established.
- (12) Except for speed limits described in subsections (1), (2)(d), and (9), speed limits established under this section are not valid unless properly posted. In the absence of a properly posted sign, the speed limit in effect is the basic speed law described in subsection (1). Speed limits established under subsection (2)(b), (e), (f), (g), (h), and (i) are not valid unless a traffic control order is filed as described in subsection (11).
- (13) Nothing in this section prevents the establishment of a modified speed limit after a speed study as described in section 628. A modified speed limit established under section 628 supersedes a speed limit established under this section.
- (14) All signs erected or placed under this section shall conform to the Michigan manual on uniform traffic control devices.
- (15) If upon investigation the state transportation department or county road commission and the department of state police determine that it is in the interest of public safety, they may order city, village, airport, college, university, and township officials to erect and maintain, take down, or regulate speed limit signs, signals, and devices as directed. In default of an order, the state transportation department or county road commission may cause designated signs, signals, and devices to be erected and maintained, removed, or regulated in the manner previously directed and pay the costs for doing so out of the designated highway fund. An investigation, including a speed study, conducted under this subsection shall be the responsibility of the department of state police.
  - (16) A person who violates a speed limit established under this section is responsible for a civil infraction.
- (17) No later than 1 year after the effective date of the amendatory act that added this subsection, the state transportation department and the department of state police shall increase the speed limits on at least 600 miles of limited access freeway to 75 miles per hour if an engineering and safety study and the eighty-fifth percentile speed of free-flowing traffic under ideal conditions of that section contain findings that the speed limit may be raised to that speed, and the department shall increase the speed limit of 900 miles of trunk line highway to 65 miles per hour if an engineering and safety study and the eighty-fifth percentile speed of free-flowing traffic under ideal conditions of that section contain findings that the speed limit may be raised to that speed.
  - (18) As used in this section:
- (a) "Traffic control order" means a document filed with the proper authority that establishes the legal and enforceable speed limit for the highway segment described in the document.
  - (b) "Vehicular access point" means a driveway or intersecting roadway.

Enacting section 1. Section 629 of the Michigan vehicle code, 1949 PA 300, MCL 257.629, is repealed.

Enacting section 2. This amendatory act does not take effective enacted into law:	ect unless all of the following bills of the 98th Legislature
(a) House Bill No. 4424.	
(b) House Bill No. 4425.	
(c) House Bill No. 4426.	
This act is ordered to take immediate effect.	Clerk of the House of Representatives
	Secretary of the Senate
Approved	

Governor

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# **Appendix B: Crash Data**

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	<sub>//Twsp</sub> 2 - Novi			Contributir 1st None	ng Circumsta	inces	:	2nd				Ligh D	ayligl	nt		Road Surfa Dry	ace Cond	dition		Total Lanes 02	Speed Limit 25	Posted Yes
Wo	rk Zone (if app Type	licable)		Wor	kers Presen	t	Activ	vity				•	Loca	tion	•							
z O	Prefix			ary Road N GENCY	ame					Road T	уре					\$	Suffix			Divided Ro	adway	
ΑT	Distance / 75 Fee		1						rafficway Not Phy	sically	Divio	ded										
LOCATION	Prefix		Inter	secting Roa	d Name Y					Road T RD	уре					5	Suffix			Divided Ro	adway	
	Unit Number	Unit Knov Yes	- 1		icense Num				of Birth (A /##/###		L	Ope O Cha O Mop	erator auffeur		ndorsem O Cycle O Farm O Recrea		Sex M	Total 01	Occupants	Failed to		
	Unit Type MV	####	!#### !####	####### #######	####### ####### 48165-9	####		####			Ye:	is Own	ier Inji		Position Fron	nt - Left				estraint Shoulder an	d Lap Be	lt
	Driver Condition 1st Appear			h		2nd						ted By	d t				Ejected	Trap	ped Air	bag Deployed Not Deploye	ed	
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/ D F	Drug Suspecte No		ntributin 10	g Factor D	Orug Test Ty O Blood O Field	O Ur	ine efused ● Not O	fforod			Test R Pendin		Te	est Resu	lts:		ОН	n Issued Iazardou Other				
H	Vehicle Registr				nicle scription	Oike	Year 2009	Mal	ke VROLE	<del> </del> [T					Model RAVEF	RSE	1 00	ou lei		Color WHITE		
Z D	VIN 1GNER1:	3D59S	11317	75 Pas	e Type ssenger (	Car, S	SUV, Van		cial Vehicl ot Appli					Private '	Frailer Ty	ype			Vehicle D	Defect		
	Automation Sy No	stem(s) ir	Vehicle		ion System I utomatio		Vehicle	•								ystem Leve nation	el Engage	ed at Tim	e of Crash	n		
	Insurance Con ########		####	"######	######		nce Policy #  ###################################	#####	#####	#####	###	Towed	Ву					Te	owed To			
	Location of Greatest Dama	age 01	First 01		xtent of Dan Minor Da		Power Unit and/or E	Trailers	s) Vehic E	le Direction		ehicle U Privat							ion Prior Boing S	traight Ahea	ad	
	Sequence of Events (• indicates M	OST harr			rked Mo	tor Ve	ehicle	Seco	ond					Third	i				Fo	ourth		
	Passenger Info	ormation							Date of B	irth (Age)	)	Sex	Positi	on					Restrair	nt		
R S								-	Injury	Ejected	Tra	pped	Airbag	Deploye	d							
ВE	Hospital Passenger Info										┪	Ambula	ance									
SEN	Passenger Info	ormation							Date of B	irth (Age)	)	Sex	Positi	on					Restrair	nt		
PASS									Injury	Ejected	Tra	pped	Airbag	Deploye	d				1			
	Hospital							,				Ambula	ance									
S N	Carrier Informa	ntion										USDO	Г				MC			MPSC		
K/B												Driver's	S CDL 1	Гуре	ОН	op ot	.	DL Exer O Farm O Other	npt			
TRUCK/BUS	GVWR/GCWR O 10,000 lbs		O 10,	001 - 26,00	0 lbs. O G	ireater t	than 26,000 lbs.	Vehicle	Configur	ation	!		Cargo	Body Ty		Medical C		Ha	azardous M D Placard	Material O Cargo Spill	ID#	Class #
	Owner Informa		#####	<b>"#####</b>	######							Owner	Informa	ation		l					1	1
OWNERS	#######	######	#####	4######	######	####	, ## #####-	####	(###	) ###-#	####											
Da	maged Propert	у								Public	C	wner &	Phone									

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_																					
	Unit Number 02	Unit Knov No			r License Num				Birth (Ag			License T O Ope O Cha O Mop	rator	O Cycle O Farm O Recre		Sex	Total Occi	upants I	Hazardous A	ction	
	Unit Type MV	####	######	#####	!####### !########		•				Drive	er is Owne	er Injury	Position	1			Restr	aint		
	Driver Conditi 1st					2nd					Distra (NOW	cted By /N			E	Ejected	Trapped	Airba	g Deployed		
<u>م</u>	Hospital NONE											Ambula NON									
>	Alcohol Suspe No		ntributing No	Factor	Alcohol Test O Breath O Field	O Blood	O Urine O Refused	O No	ot Offered	01	ol Tes Pendir	st Results	Test Re	esults:		Interlock No	Device				
2	Drug Suspect No		ntributing No	Factor	Drug Test Ty O Blood O Field				ii Onorou	Drug	Test f Pendir	Results ng	Test Re	esults:		Citation I O Haz O Othe	ardous				
H	Vehicle Regis K062820	stration 0	Stat		ehicle escription	Year 2016		Make	ROLE	T				Model SILVER	ADO	Our	51		Color WHITE		
-	VIN 1GCHSE	BEA5G	374280	Vehi Pi	<sup>icle Type</sup> ickup Truc	ck			al Vehicle Applic				Priva	te Trailer T	ype		Vel	nicle Def	ect		
	Automation S		Vehicle		ation System (NOWN	Level in Vehicle							ι	tomation S Jnknowr	ystem Level ใ	Engaged					
	Insurance Co					Insurance Poli	#######		_			Towed					Tower				
	Location of Greatest Dam	nage 05			Minor Da	mage (Power Ui amage			E	e Direction		Private	)	12-1			Park	ked			
	Sequence of Events (• indicates N	MOST harr	•	First 17 - N	Notor Veh	in Transpo		Secon	a					hird				Four	tn		
	Passenger In	formation						D	ate of Bir	th (Age)		Sex	Position				Re	estraint			
0 0 L	2							In	jury	Ejected	Tra	apped /	Airbag Deplo	oyed			<b>_</b>				
2	Hospital								•		•	Ambula	nce								
	Passenger Ini	formation							ate of Bir			Sex	Position				Re	estraint			
2								In	ijury	Ejected	Tra		Airbag Deplo	oyed							
	Hospital											Ambula	nice								
<u>-</u>	Carrier Inform	nation										USDOT				MC		MP	SC		
1	2											Drivers	CDL Type	οн	oP oT	0	Exempt Farm Other				
_ G H	GVWR/GCWI		O 10,00	1 - 26,0	000 lbs. O G	Greater than 26,		ehicle C	Configurat	tion			Cargo Body	Туре	Medical Ca	ard		dous Mat acard (	erial O Cargo Spill	ID#	Class #
OWNIEDO		!###### !######	######	####	#######	·**********	<b></b>	###	(###)	###-#	###	Owner	nformation				<u>'</u>			<u>'</u>	
d	Witness Infor								(""")			Witness	Information	1							
	nvestigated at Scene Yes		d Date (Ti 5/2020	,		gator Name (Ba A (260)	adge)				2nd	Investig	ator Name (	Badge)			Pho N				
1	VEH 2 WA	S STOR	PPED O	N RO	DADWAY.	VEH 1 WA	AS TRA\	/ELIN	NG EAS	ST OI	١	Diagra	n							(A	
	REGENCY	/, DID N	OT STO	OP AN	ND STRU	CK VEH 2.	NO INJ	URIE	ES REF	PORT	ED.									NOT 70	SCALE
														REGENCYI	DR.	Ont 2					

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Authority: 1949 PA 3	200 0 05	7.000			External		C-	ash ID				Г	Page 0	1 -4 04		
Compliance: Require Penalty: \$100 and/o	red M	7.622 SP UD-10E (Rev 11/20	20)		124356			14987				- 1	-	ss C3145		
STATE	OF	MICH	IIGAN			RASH	l RE	POF	RT					04645		
MI 6362700				Novi Polic	me e Departmen	t							Reviewe BOO	r DY (0021	5)	
Oz/02/2022		Crash Time 14:19	No. of Units	Crash Type Angle	`●	cial Circumst None Fleeing Poli	ОН	it and Run nknown	O So O Ar	hool Bus imal	S	pecial Cl O Fatal		Non-Traffic A	rea O OR\	//Snowmobile
County 63 - Oakland	I	Traffic Cor None	ntrol		On the Ro	-		Weather Snow			Area N		RWY I	Oriveway F	Related	
City/Twsp 62 - Novi		Contributir 1st None		2	nd		Light Day	/light		Road Surface Snow	e Condit	ion		Total Lanes 02	Speed Limit 35	Posted No
Nork Zone (if applic Type	cable)	_	kers Present	Activ	ity		ı.	_ocation						!	l	
Prefix		Primary Road N REGENCY	ame			Road Type DR				Suf	fix			Divided R	oadway	
Distance / D					Trafficway Not Phys	ically Divi	ded									
Prefix		ntersecting Roa				Road Type RD				Suf	fix			Divided R	oadway	
	nit Known Yes		icense Number		Date of Birth (Age		License Typ  Opera O Chauft O Mopeo	tor feur	ndorseme O Cycle O Farm O Recrea		Sex M	Race W	Total C		zardous Action Failed to Yi	
MV	#######		######################################	####	) ###-####	Drive No	er is Owner	Injury O	Position Fron	t - Left				straint Shoulder a	nd Lap Bel	t
Driver Condition 1st Appeared	at Time of	Crash	2nd	5-1403 (###	) <del>"""-"""</del>	Driver Distra Not Dis				Eje	ected	Trappe		bag Deployed Not Deploy		
Hospital NONE							Ambuland NONE					<u> </u>				
Alcohol Suspecte	ed Contril	outing Factor A	Alcohol Test Type O Breath O B	Blood O Urine		Alcohol Te O Pendi	st Results	Test Resu	lts:		nterlock No	Device				
Drug Suspected	Contril No	outing Factor D	O Field O P Orug Test Type O Blood O U	Jrine	ed • Not Offered	Drug Test O Pendi		Test Resu	lts:		Citation • Haz	zardous				
Vehicle Registrat	ition		O Field O R nicle scription	Refused ● Not Of Year 2013	Make FORD	1			Model 250		O Oth	ier		Color		
VIN 1FT7X2B6	SXDEB6		le Type kup Truck	2010	Special Vehicles Not Applic				Trailer Ty	ре		١	/ehicle D			
Automation Syste	tem(s) in Ve		ion System Level i	in Vehicle					nation Sy Auton	stem Level E	ngaged	at Time	of Crash	1		
Insurance Comp				ance Policy # ###################################	·*************************************	#######	Towed By	,				Tow	red To			
#########	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	##########				Direction V	ehicle Use						n Prior	traight Ahe	ead	
Location of Greatest Damag		First Impact E		Power Unit and/or	Trailers) Vehicle		Comme	rcial (Bus	siness)			G	mig o			
Location of Greatest Damag Sequence of Events	ge 02	First Impact 02 First • 17 - Mo	xtent of Damage (	amage			Comme	rcial (Bus				GC		ourth		
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Location of Greatest Damag Sequence of Events ( indicates MO:	ge 02 OST harmful	First Impact 02 First • 17 - Mo	extent of Damage ( Functional D	amage	Second Date of Birt		Sex R	Thire	n				Fo			
Location of Greatest Damag Sequence of Events ( indicates MO:	ge 02 OST harmful	First Impact 02 First • 17 - Mo	extent of Damage ( Functional D	amage	Second Date of Birt		Sex R	Third lace Position bag Deploye	n				Fo			
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Location of Greatest Damage Sequence of Events (     indicates MO:  Passenger Information Hospital	psT harmful	First Impact 02 First • 17 - Mo	extent of Damage ( Functional D	amage	Second  Date of Birt  Injury  Date of Birt	Ejected Tr	Sex R apped Air Ambulanc	Third Tace Position The property of the proper	n d				F	Restraint		
Location of Greatest Damage Sequence of Events ( indicates MO: Passenger Information Pas	psT harmful	First Impact 02 First • 17 - Mo	extent of Damage ( Functional D	amage	Second  Date of Birt  Injury  Date of Birt	Ejected Tr	Sex R apped Air Ambulanc	Third cace Position bag Deploye be acce Position bag Deploye bag Deploye	n d				F	Restraint		
Location of Greatest Damage Sequence of Events (● indicates MO:  Passenger Inform Hospital Passenger Inform Passenger Inform	e 02	First Impact 02 First • 17 - Mo	extent of Damage ( Functional D	amage	Second  Date of Birt  Injury  Date of Birt	Ejected Tr	Sex R apped Air Ambulanc Sex R apped Air	Third cace Position bag Deploye be acce Position bag Deploye bag Deploye	n d		MC		F	Restraint		
Location of Greatest Damage Sequence of Events (● indicates MO:  Passenger Inform Hospital  Passenger Inform Hospital	e 02	First Impact 02 First • 17 - Mo	extent of Damage ( Functional D	amage	Second  Date of Birt  Injury  Date of Birt	Ejected Tr	Sex R Ambulance	Third	n d Endorsi	ements OP OT	CD	L Exemp	F	Restraint		
December 2012  Location of Greatest Damage Sequence of Events (  Fassenger Information of Events (  Hospital Passenger Information of Events (  Carrier Information of Events (  Government of Events (  Hospital Of Events (  Government of Events (   Government of Events (   Government of Events (   Government of Events (   Government of Events (   Government of Events (   Government of Events (   Government of Events (    Government of Events (    Government of Events (    Government of Events (     Government of Events (       Government of Events (        Government of Events (          Government o	pe 02  DST harmful mation  mation	First Impact   E   02   First   • 17 - Mc   event)	extent of Damage ( Functional D	amage	Second  Date of Birt  Injury  Date of Birt	Ejected Tr	Sex R Ambulanc Sex R Ambulanc L Ambulanc Driver's C	Third	n d d Endorse O H O N	ements	CD O	L Exemp Farm Other	For any other states of the st	Restraint  Restraint	ID#	Class #
Location of Greatest Damage Sequence of Events (	pe 02  OST harmful mation  mation  or Less C	First Impact   E   02   First   • 17 - Mc   event)	extent of Damage (Functional D	amage	S Second  Date of Birt  Injury  I  Date of Birt  Injury  I  Injury  I  Injury  I  Injury  I  Injury  I  I  I  I  I  I  I  I  I  I  I  I  I	Ejected Tr	Sex R Ambulanc Sex R Ambulanc L Ambulanc Driver's C	Third	n d d Endorse O H O N	ements OP OT OS OX	CD O	L Exemp Farm Other	For any other states of the st	Restraint Restraint MPSC		Class #
Description of Greatest Damage Sequence of Events (	De 02  DEST harmful mation  mation  or Less Coon	First Impact   E   02   First   17 - Mc   event)	oxtent of Damage (Functional Dotor Veh in Tr	amage	Second  Date of Birt  Injury  Date of Birt  Injury  I	Ejected Tr	Sex R Ambulanc Sex R Ambulanc USDOT Driver's C	Third	n d d Endorse O H O N	ements OP OT OS OX	CD O	L Exemp Farm Other	For any other states of the st	Restraint Restraint MPSC		Class #

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	Unit Number 02	Unit Ki			ver License				f Birth (Ag ##/####		L	Ope O Cha	erator auffeur	0 (	orsements Cycle Farm Recreation	Sex M	Race B	Total 01	Occupants	None	n
	Unit Type MV	### ### NE\	#### WPOI	##### ###### RT, MI		######## ######## 100 (###		#			Yes	is Owr	ier Inju		osition Front - Left				estraint Shoulde	r and Lap Be	elt
	Driver Condition 1st Appear					2nd				Driver Dr		ted By	d t	•		Ejected	Trapp	ed A	irbag Deplo Not Dep	<sub>yed</sub> loyed	
ЕВ	Hospital NONE											Ambula NO					!				
<u>۸</u> - ۸	No No	ected	Contrib No	uting Facto	Or Alcohol T O Brea O Field	ath O Bloo		ed ● N	ot Offered		ol Test endin	t Resul g		est Results:	:	No Interlock	Device	1			
/ D F	Drug Suspecto No	ed	Contrib No	uting Facto	Or Drug Tes O Bloo O Field	d O Urine	sed • Not Off	fered			Test R endin	esults g	Te	est Results	:	Citation O Ha: O Oth	zardous				
<b>⊢</b>	Vehicle Regist 6MXT82			State MI	Vehicle Description	Y	'ear	Make DOD(		•					odel JRNEY	•			Colo BLUE		
n	VIN 3C4PDD			4438		er Car, Sl	•		al Vehicle t Applic					Private Tra				Vehicle			
	No Automation Sy		i) in Veh		omation Syst o Automa										tion System Leve Automation	I Engaged			sh		
	Insurance Cor ####### Location of			####### First Impac		####	e Policy # ########## ver Unit and/or			#####	##	Towed HAI	DĹEY	'S TOW	'ING - (248)	471-576	3 F	wed To HADLI on Prior			
	Greatest Dam Sequence of	age		08 First		oling Dama		Secor	Е	Directio		Privat		Third				oing S	Straight A	Ahead	
	Events (  indicates N	IOST h	armful e	• 17 -	Motor V	eh in Tran	sport														
	Passenger Inf	ormatic	n						Date of Bir			Sex		Position					Restraint		
ERS	112.1							lı	njury	Ejected				Deployed							
PASSENG	Hospital Passenger Inf	ormatic	ın.					Ir	Date of Bir	th (Age)		Ambula	Race	Position					Restraint		
ASSI	r assenger im	omanc						L		Ejected	Trap			Deployed					restraint		
Ъ,	Hospital											Ambula									
(0	Carrier Inform	ation									<u> </u>	USDO	Г			Імс			MPSC		
TRUCK/BUS											ŀ	Driver's	S CDL T		Indorsements		L Exem	pt			
UCK	GVWR/GCWF	₹					T	Vehicle	Configura	tion			Cargo		OH OP OT ON OS OX	С	Farm Other	zardous	Material	ID#	Class #
_	O 10,000 lb	s. or Le	ess O	10,001 - 2	6,000 lbs.	O Greater tha											- 1		O Cargo		
OWNERS	Owner Informa ####### ############################	#### ####	#####	4######	4#######	##	!# #####- <sub>1</sub>	####	(###)	###-#		Owner	Informa	ation							
=	Witness Inform	nation										Witnes	s Inform	nation							
WITNESS																					
	estigated Scene Yes			ate (Time) 022 (14:		restigator Nam					2nd	Investiç	gator Na	ame (Badge	e)			hotos No			
F	PLOWING STRAIGHT	SNO AHE	W IN	THE LO	OT OF 25 THE DR	070 REGI IVEWAY	EGENCY. ENCY. UN TO PUSH #2. UNIT	IIT #1 THE S	DROV	E ACRO		Diagra	am		25070 Regenc Dr	у				N N	
														_	Regency U	Dr .	Unit 2				

# **Appendix C: Spot Speed Data Collection**

Form 750-010-03 TRAFFIC ENGINEERING March 2020

## **VEHICLE SPOT SPEED STUDY**

	General Informati	ion			Site In	formation		
Analyst/Observer:		PT/SS		Location:		Regency Drive		
Agency or Company:	A	ECOM		City:	Novi	County:	Oakland	
Date Performed:	Monday, M	larch 21,	2022	Roadway ID				
Time Period From:	10:00 AM	To:	12:00 PM	Milepost:		Posted Speed (m)	ph):	
Weather/Road Conditi	ion:	Clear, Dr	у	Remarks:				

Weath	ner/Ro	ac	l Co	nc	litio	n:			<u> </u>			CI	ea	r, C									Re		ark			Т											<u>ou (III)</u>			
	Vehic	le	s tra	ive	linç	g			W	est			b	ou	nd					Spe	had		٧	'eh	icle	es	tra	vel	ing				Eas	<u>st</u>		ı	boı	und				oth ctions
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Total	0	_				ť									Ĭ					≥ 8	30	Н				7	T		T	10				10	Ή	П	Т	20	0	Total		91
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42	4										_					1	1	1	1	32 -			_	_															3	43	7	85
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37	5														1	1	1	1	1	28 -			_			1	_	1									_		7	34	12	71
32	9										_	1 ′	-	+	+-	1	1	1	1	26 -				-	_	_	1				ļ						_		7	27	16	59
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