



cityofnovi.org

## CITY of NOVI CITY COUNCIL

Agenda Item E  
November 23, 2009

**SUBJECT:** Approval of Traffic Control Order 09-13 for the implementation of a 35 mph speed limit on Meadowbrook Road between Eight Mile Road and Ten Mile Road.

**SUBMITTING DEPARTMENT:** Department of Public Services, Engineering Division <sup>R14</sup> *BTC*  
Police Department

**CITY MANAGER APPROVAL** 

### BACKGROUND INFORMATION:

Speed limits are governed by the Michigan Vehicle Code (MVC) and the Michigan Manual of Traffic Control Devices (MMUTCD). The MVC provides a standard "prima facie" speed based on the number of access points on a roadway. The MVC allows the local agency to adjust the speed limit based on a traffic engineering study. The MMUTCD requires an engineering study to determine the speed limit in accordance with established traffic engineering practices, and that the limit must be adopted by the local agency in the form of a traffic control order. The engineering study identifies the 85th percentile speed, or the speed at which 85 percent of the traffic is traveling at or below that speed. Drivers who are ticketed for violating a speed limit can challenge the ticket if a valid traffic control order (supported by an engineering study) is not on file.

A speed study was initiated because the posted speed limit on Meadowbrook Road lacked a traffic control order and required a recent study to justify the posted speed limit. In completing the traffic study, the Engineering Division and the City's traffic consultant, Birchler Arroyo, took a two-step approach. First, a speed sample was collected with the original 30 mph speed limit signs in place to determine the 85th percentile speed. Then, the speed limit was changed to the new 85th percentile speed and a new speed sample was collected after waiting several weeks for drivers to adjust to the new temporary speeds. The revised 85th percentile speed was determined from the second sample and compared to see if the new posting was resulting in a significant increase in speed. The result was a slight increase of 2.9 mph to an average 85<sup>th</sup> percentile speed of 38 mph.

The public has expressed some concern regarding the proposed change in the speed limit on Meadowbrook Road, especially the one-half mile segment between Chattman Drive and Ten Mile Road. This area is characterized by narrow residential lots with homes that have a relatively decreased setback from the road than most other areas of the city. The temporary speed limit of 35 miles per hour has resulted in greater compliance with State law, but as indicated by the data, it has resulted in a slight increase in the 85th percentile speed. Understanding that the speed limit needs to be set as dictated by state law, a mix of education, enforcement, and engineering is needed to increase compliance with the proposed speed limit of 35 mph.

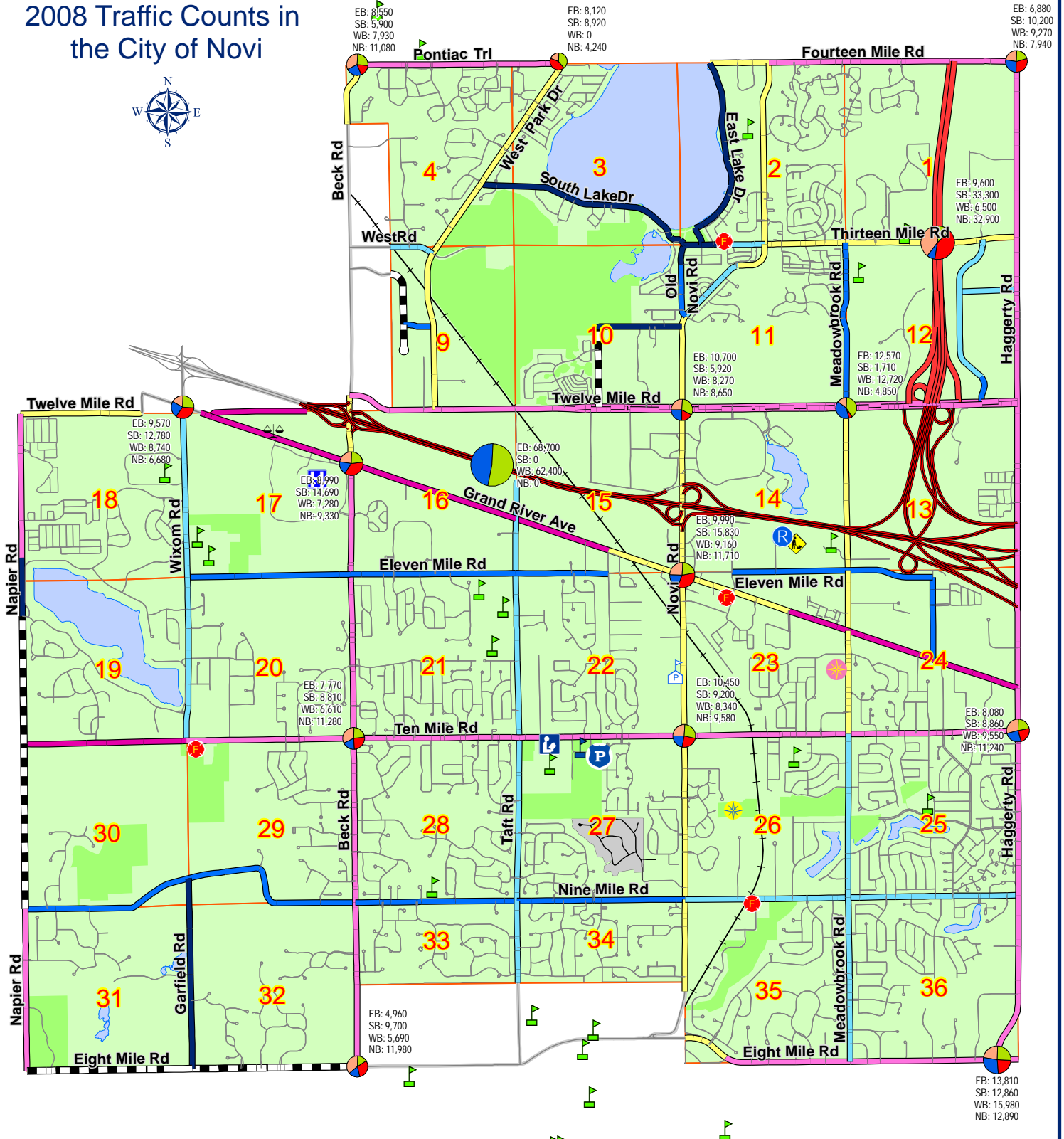
In order to increase compliance with the proposed posted speed limit, a mix of enforcement and education is recommended. Deployment of the radar speed trailer will provide feedback to drivers to make them more aware of their speed. A presence by the Police Department to enforce the speed limit on a regular basis will help to increase driver compliance with the posted speed. In the attached memo, there is a discussion about permanent radar speed signs to provided feedback to drivers which when combined with enforcement, could be effective in keeping drivers at the posted speed (see attached Brian Coburn November 10, 2009 memo for additional information).

**RECOMMENDED ACTION:** Approval of Traffic Control Order 09-13 for the implementation of a 35 mph speed limit on Meadowbrook Road between Eight Mile Road and Ten Mile Road.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Crawford				
Council Member Fischer				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				

# Speed Limits & Selected 2008 Traffic Counts in the City of Novi








Map Author: Christopher Blough, GIS Manager  
 Date: November 18, 2009  
 Project: Speed Limits and Selected 2008 Traffic Counts  
 Version #: 1.0

### MAP INTERPRETATION NOTICE

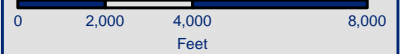
Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

### Map Legend

- |   |   |   |                    |
|---|---|---|--------------------|
| <b>Traffic Counts</b>   |   | <b>Posted Speed Limits</b>  |                    |
|  | Traffic Volume is Proportionate to Size of Pie<br>= 270,000 ADT |  | Expressway/Ramp 35 |
|  | Eastbound Traffic   |  | Unposted (55 MPH)  |
|  | Southbound Traffic  |  | 55                 |
|  | Westbound Traffic   |  | 50                 |
|  | Northbound Traffic  |  | 40                 |
|   |   |  | Residential 25     |
|   |   |  | Railroad           |
|   |   |  | Parks              |



**City of Novi**  
 Geographic Information Services  
 Department of Information Technology  
 45175 W Ten Mile Rd  
 Novi, MI 48375  
 cityofnovi.org



1 inch = 4,400 feet

**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

SPEED  
 PARKING  
 OTHER

DATE OF ORDER: November 13, 2009

CONTROL NUMBER: 09-13

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, SENIOR CIVIL ENGINEER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33.141 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

**MEADOWBROOK RD**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE **SPEED LIMIT** SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33.217 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**SPEED LIMIT FOR MEADOWBROOK RD NORTH OF EIGHT MILE TO SOUTH OF TEN MILE TO BE 35 MPH**



TRAFFIC ENGINEER-BRIAN COBURN

DATED: 11/13/2009

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 09-13 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDEED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COP THEREOF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

**SPEED LIMIT FOR MEADOWBROOK RD NORTH OF EIGHT MILE TO SOUTH OF TEN MILE TO BE 35 MPH**

ADOPTED AT THE REGULAR MEETING  
OF COUNCIL ON \_\_\_\_\_.

BY: \_\_\_\_\_  
Mayor - David Landry

By: \_\_\_\_\_  
City Clerk - Maryanne Cornelius



# MEMORANDUM

TO: ROB HAYES, P.E.; DIRECTOR OF PUBLIC SERVICES *RH*  
 FROM: BRIAN COBURN, P.E.; SENIOR CIVIL ENGINEER *BC*  
 SUBJECT: SPEED STUDIES  
 DATE: NOVEMBER 10, 2009

*11/12/09  
 To: Mayor & City Council Members  
 For future action.  
 [Signature]*

The Engineering Division has completed a review of the speed limits on the following road segments:

- Beck Road from Eight Mile Road to Grand River Avenue
- Cabot Drive from 12 Mile Road to 13 Mile Road
- Eleven Mile Road from Town Center Drive to Seeley Road
- Lewis Drive from Haggerty Road to Cabot Drive
- Meadowbrook Road from Eight Mile Road to Ten Mile Road

As stated in previous memos on this topic, the speed studies were initiated because the posted speed limit on the roads listed above lacked proper traffic control orders and required a recent study to justify the posted speed limit. Speed limits are governed by the Michigan Vehicle Code (MVC) and the Michigan Manual of Traffic Control Devices (MMUTCD). The MVC provides a standard "prima facie" speed based on the number of access points on a roadway. The MVC allows the local agency to adjust the speed limit based on a traffic engineering study. The MMUTCD requires an engineering study to determine the speed limit in accordance with established traffic engineering practices and that the limit must be adopted by the local agency (in the form of a traffic control order). Drivers that are ticketed for violating a speed limit can challenge the ticket if a valid traffic control order (supported by an engineering study) is not on file.

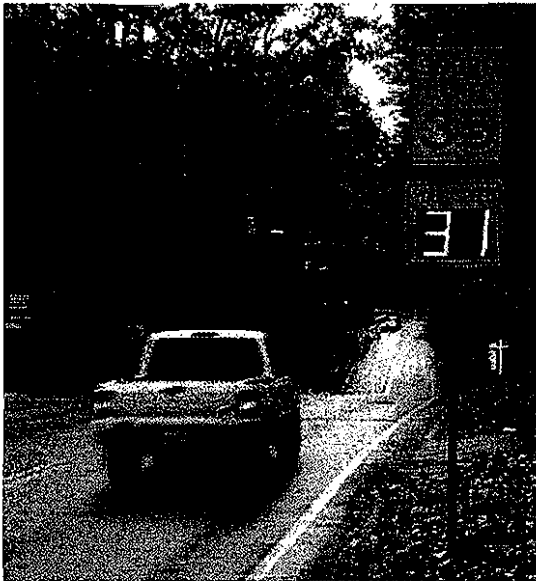
In completing the traffic studies, the Engineering Division and our traffic consultant, Birchler Arroyo, took a two-step approach. First, a speed sample was collected with the original speed limit signs in place to determine the 85<sup>th</sup> percentile speed. Then, the speed limit was changed to the new 85<sup>th</sup> percentile speed and a new speed sample was collected after waiting several weeks for drivers to adjust to the new temporary speeds. The revised 85<sup>th</sup> percentile speed was determined from the second sample and compared to see if the new posting was resulting in significant increase in speed. The results of the speed studies are summarized below and detailed in the attached reports.

Segment	Original Speed Limit	Average 85 <sup>th</sup> Percentile Speed (first study)	Average 85 <sup>th</sup> Percentile Speed (follow-up study)	Average Change in 85 <sup>th</sup> percentile speed	Proposed New Speed Limit
Beck (8 Mile to Grand River)	40	46.7	47.8	+1.1	45
Cabot Drive (12 Mile to 13 Mile)	25	36.3	36.5	+0.2	35*
11 Mile (Town Center to Seeley)	30	37.3	**	**	35
Lewis Drive (Cabot to Haggerty)	25	35.4	37.2	+1.8	35
Meadowbrook (8 Mile to 10 Mile)	30	35.2	38.1	+2.9	35

\*the southern 750 feet of Cabot is recommend for a 30 mph limit due to road geometry.  
 \*\*There was only one speed sample collected for 11 Mile Road

Generally, we have received positive feedback from the public regarding the temporary speed limits for the study areas (written forms of feedback are attached). The public has expressed some concern regarding the proposed change in the speed limit on Meadowbrook Road, especially the one-half mile segment between Chattman Drive and Ten Mile Road. This area is characterized by narrow residential lots with homes that have a relatively decreased setback from the road than most other areas of the city. The temporary speed limit of 35 miles per hour has resulted in greater compliance with State law, but as indicated by the data, has resulted in a slight increase in the 85<sup>th</sup> percentile speed. Understanding that the speed limit needs to be set as dictated by state law; a mix of education, enforcement, and engineering is needed to increase compliance with the proposed speed limit of 35. ))

In the short term, we recommend implementation of the proposed new speed limits and will prepare traffic control orders for consideration by City Council at the ~~November 23, 2009~~ *upcoming* meeting. We will work with the Police Department to monitor the speeds using the portable radar trailer and enforce the new speed limits on Meadowbrook Road, especially the northern half-mile of the study area.



We have researched potential longer term solutions and have identified the sign shown to the left as a potential solution. Our research indicates that driver feedback signs are effective at alerting drivers to speed violations, especially when combined with enforcement on a recurring basis. Installation of a driver feedback sign along Meadowbrook would allow us to maintain compliance in setting speed limits while addressing resident concerns about increasing speeds on an arterial with narrow lots and decreased setbacks. We would propose the installation of a sign on northbound Meadowbrook just north of Chattman and another sign on southbound Meadowbrook just south of Ten Mile Road. There are solar powered models available to decrease on the installation costs. We estimate the total cost for the two signs including installation to be approximately \$15,000. ) \*

We look forward to feedback on the proposed speed limits and the driver feedback signs as we prepare traffic control orders for speed limit changes on each study segment for City Council consideration on the November 23, 2009 agenda.

cc: David Molloy, Chief of Police  
Matt Wiktorowski, Field Operations Senior Manager

October 1, 2009

Brian T. Coburn, P.E.  
Engineering Div., Dept. of Public Services  
City of Novi  
26300 Delwal Drive  
Novi, MI 48375  
[bcoburn@cityofnovi.org](mailto:bcoburn@cityofnovi.org)



**Subject: Follow-Up Speed Study of Meadowbrook Road Between 8 Mile and 10 Mile Roads**

Dear Mr. Coburn:

In response to the recommendation in our speed limit study dated May 12, 2009, the City posted a temporary 35-mph speed limit on the above sections of Meadowbrook Road. This represented a 5-mph increase over the previous speed limit. At your request, we have evaluated the current speeds to see how they differ from those before the speed limit increase.

**Recommendation**

The speed limit on Meadowbrook Road, between 8 Mile and 10 Mile Roads, should be maintained at 35 mph and supported by an appropriate Traffic Control Order.

**Supporting Analysis**

Table 1 compares the single most important speed statistic after the speed limit increase to what it was before the increase. More detailed speed statistics for the two samples are detailed in Tables 2a and 2b.

**Table 1. 85<sup>th</sup>-Percentile Speed by Location**

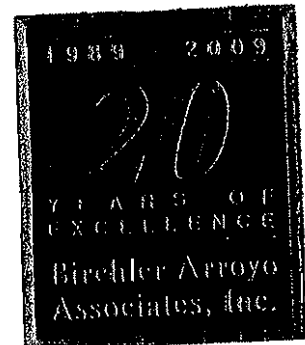
Sampling Location	85 <sup>th</sup> -Percentile Speed (mph)		
	BEFORE ( 30-mph Limit in May 09)	AFTER (35-mph Limit in Sep-Oct 09)	Change
9-10 Mile	35.4	37.9	+ 2.5
8-9 Mile	35.0	38.3	+ 3.3

Although there has been a modest increase in speeds with the increased limit, compliance with State law has improved. The speed limit is closer to and now within 5 mph of the 85<sup>th</sup>-percentile speed on both sections, and the posted limit corresponds with the prima facie limit defined by law based on the greatest driveway frequency (i.e., in the first half mile south of Ten Mile Road).

Sincerely,  
BIRCHLER ARROYO ASSOCIATES, INC.

Rodney L. Arroyo, AICP  
Vice President

William A. Stimpson, P.E.  
Director of Traffic Engineering



Attachments

**Table 2a. Summary of May 2009 Speed Statistics for Meadowbrook Road**

Sec.	Dir.	Date	Sample Size	Speed (mph)			
				Average	85th %tile	10-mph Pace	% in Pace
9-10 Mile	NB	5-05-09 (>6 am)	4368	32.5	36.0	25-35	80.9%
		5-06-09	4354	32.4	35.4	25-35	82.7%
		5-07-09 (<6 am)	82	32.6	37.4	25-35	75.6%
		Average Day	4402	32.5	35.7	25-35	81.7%
	SB	5-05-09 (>6 am)	4743	31.9	35.0	25-35	83.5%
		5-06-09	4652	31.9	35.0	25-35	84.6%
		5-07-09 (<6 am)	71	31.6	36.7	25-35	74.6%
		Average Day	4733	31.9	35.0	25-35	84.0%
	Both	Average Day	9135	32.2	35.4	25-35	82.9%
	8-9 Mile	NB	5-05-09 (>6 am)	4086	30.7	34.6	25-35
5-06-09			4027	30.9	34.8	25-35	80.2%
5-07-09 (<6 am)			81	31.3	35.0	25-35	76.5%
Average Day			4097	30.8	34.7	25-35	81.2%
SB		5-05-09 (>6 am)	3710	31.9	35.5	25-35	79.1%
		5-06-09	3743	31.6	35.0	25-35	80.7%
		5-07-09 (<6 am)	79	31.1	34.4	25-35	89.8%
		Average Day	3766	31.7	35.2	25-35	80.0%
Both		Average Day	7863	31.3	35.0	25-35	80.6%

**Table 2b. Summary of September-October 2009 Speed Statistics for Meadowbrook Road**

Sec.	Dir.	Date	Sample Size	Speed (mph)			
				Average	85th %tile	10-mph Pace	% in Pace
9-10 Mile	NB	9-29-09 (>10 am)	2803	33.1	37.6	30-40	79.1%
		9-30-09	4053	33.1	37.7	30-40	79.3%
		10-01-09 (<10 am)	1006	33.0	37.6	30-40	77.5%
		Average Day	3931	33.1	37.7	30-40	79.0%
	SB	9-29-09 (>10 am)	3339	33.3	37.8	30-40	80.5%
		9-30-09	4408	33.7	38.2	30-40	81.4%
		10-01-09 (<10 am)	697	34.1	38.8	30-40	81.3%
		Average Day	4222	33.6	38.1	30-40	81.0%
Both	Average Day	8153	33.3	37.9	30-40	80.1%	
8-9 Mile	NB	9-29-09 (>10 am)	2528	33.3	38.6	30-40	73.1%
		9-30-09	3433	33.4	38.7	30-40	72.9%
		10-01-09 (<10 am)	813	33.6	38.4	30-40	79.2%
		Average Day	3387	33.4	38.6	30-40	73.7%
	SB	9-29-09 (>10 am)	2666	32.8	37.9	30-40	73.5%
		9-30-09	3797	32.8	38.0	30-40	74.4%
		10-01-09 (<10 am)	901	32.5	38.0	30-40	72.8%
		Average Day	3682	32.8	38.0	30-40	73.9%
Both	Average Day	7069	33.1	38.3	30-40	73.8%	

**Coburn, Brian**

**From:** Penny [pennyce@twmi.rr.com]  
**Sent:** Thursday, August 20, 2009 2:43 PM  
**To:** Coburn, Brian  
**Subject:** Re: Meadowbrook Road Speed Limit Change

Thank you so much for the info and update. I will pass it along to our sub members and once again thanks.

----- Original Message -----

**From:** Coburn, Brian  
**To:** smmb659@yahoo.com ; lcroad@twmi.rr.com ; kvdd2000@twmi.rr.com ; david@davidstaudt.com ; chrysanthek@msn.com ; bmeyers53@yahoo.com ; surya.prakash@earthlink.net ; edmoylan@sbcglobal.net ; rasabi2000@yahoo.com ; grizzlies4@sbcglobal.net ; jrzepka@colasantigroup.com ; blask3@aol.com ; pennyce@twmi.rr.com ; barbaranap@aol.com ; mbceresko@aol.com ; dasouthworth@yahoo.com ; trsouthworth@yahoo.com ; pgrabow@twmi.rr.com ; Waltkleban@ATT.net ; junitis@twmi.rr.com ; jdwysocki@aol.com ; maggievonb@hotmail.com ; moira.robinson@hotmail.com  
**Cc:** Hayes, Rob ; Walsh, Sheryl ; Ringle, Tracie  
**Sent:** Thursday, August 20, 2009 11:29 AM  
**Subject:** Meadowbrook Road Speed Limit Change

Dear Homeowner Association Representatives,

The speed limit on Meadowbrook Road from Eight Mile Road to Ten Mile Road was recently reviewed in response to several requests from drivers in the community. In order to be enforced, State law requires that speed limits be set in one of two ways: 1) based on the number of driveways intersecting the road, or 2) based on an engineering study to determine the speed at which 85 percent of the vehicles are moving (85<sup>th</sup> percentile speed). Our evaluation revealed that Method 1 would result in a speed of 35-45 mph, while method 2 resulted in a speed limit of 35 mph.

Generally, speed limits should be set so that the majority of drivers observe them voluntarily. Studies have shown that drivers generally operate their vehicles at speeds that are reasonable and proper, regardless of the posted speeds. It is generally accepted that when traffic deviates from the 85<sup>th</sup> percentile speed, the probability of a traffic crash becomes greater.

Our speed study concluded that the majority of drivers are actually driving 35 mph as presented in the attached speed study. Posted speed limits that are artificially low can pose a safety risk to the motoring public because those who obey the posted speed are in the minority and may in effect cause traffic crashes. There is also a safety risk to the adjacent residents who may have a false sense of security that drivers will obey the slower speed limits when the study indicates otherwise.

We are temporarily posting the new speeds beginning in August for the purpose of conducting follow-up speed studies. The new study for Meadowbrook should demonstrate no **additional** increase in speed as a result of the newly posted limit because, in general, motorists have already been driving the speed at which they felt safe and were disregarding the posted speed. In other words, we don't expect to see an increase in speed as a result of the new speed limit since people were already driving 35 as shown in the study.

Also enclosed are some pamphlets from the Traffic Improvement Association that provide more information about speed limits.

Please let me know if you have additional questions or concerns in this regard. Please feel free pass along this information to your residents.

**Brian T. Coburn, PE**

Senior Civil Engineer  
 Department of Public Services-Engineering Division

## Coburn, Brian

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**From:** jdwysocki@aol.com  
**Sent:** Friday, August 21, 2009 12:00 PM  
**To:** Coburn, Brian  
**Subject:** Re: Meadowbrook Road Speed Limit Change

Brian,

I like the new limit, it flows more smoothly.

Joan Wysocki  
Sec/Treas. Meadowbrook Manor Assn

-----Original Message-----

**From:** Coburn, Brian <bcoburn@cityofnovi.org>  
**To:** smmb659@yahoo.com; lcroad@twmi.rr.com; kvdd2000@twmi.rr.com; david@davidstaudt.com; chrysanthek@msn.com; bmeyers53@yahoo.com; surya.prakash@earthlink.net; edmoylan@sbcglobal.net; rasabi2000@yahoo.com; grizzlies4@sbcglobal.net; jrzepka@colasantigroup.com; blask3@aol.com; pennyce@twmi.rr.com; barbaranap@aol.com; mbceresko@aol.com; dasouthworth@yahoo.com; trsouthworth@yahoo.com; pgrabow@twmi.rr.com; Waltkleban@ATT.net; junitis@twmi.rr.com; jdwysocki@aol.com; maggievonb@hotmail.com; moira.robinson@hotmail.com  
**Cc:** Hayes, Rob <rhayes@cityofnovi.org>; Walsh, Sheryl <swalsh@cityofnovi.org>; Ringle, Tracie <tringle@cityofnovi.org>  
**Sent:** Thu, Aug 20, 2009 11:29 am  
**Subject:** Meadowbrook Road Speed Limit Change

Dear Homeowner Association Representatives,

The speed limit on Meadowbrook Road from Eight Mile Road to Ten Mile Road was recently reviewed in response to several requests from drivers in the community. In order to be enforced, State law requires that speed limits be set in one of two ways: 1) based on the number of driveways intersecting the road, or 2) based on an engineering study to determine the speed at which 85 percent of the vehicles are moving (85<sup>th</sup> percentile speed). Our evaluation revealed that Method 1 would result in a speed of 35-45 mph, while method 2 resulted in a speed limit of 35 mph.

Generally, speed limits should be set so that the majority of drivers observe them voluntarily. Studies have shown that drivers generally operate their vehicles at speeds that are reasonable and proper, regardless of the posted speeds. It is generally accepted that when traffic deviates from the 85<sup>th</sup> percentile speed, the probability of a traffic crash becomes greater.

Our speed study concluded that the majority of drivers are actually driving 35 mph as presented in the attached speed study. Posted speed limits that are artificially low can pose a safety risk to the motoring public because those who obey the posted speed are in the minority and may in effect cause traffic crashes. There is also a safety risk to the adjacent residents who may have a false sense of security that drivers will obey the slower speed limits when the study indicates otherwise.

We are temporarily posting the new speeds beginning in August for the purpose of conducting follow-up speed studies. The new study for Meadowbrook should demonstrate no **additional** increase in speed as a result of the newly posted limit because, in general, motorists have already been driving the speed at which they felt safe and were disregarding the posted speed. In other words, we don't expect to see an increase in speed as a result of the new speed limit since people were already driving 35 as shown in the study.

Also enclosed are some pamphlets from the Traffic Improvement Association that provide more information about speed limits.

Please let me know if you have additional questions or concerns in this regard. Please feel free pass along this information to your residents.

**Brian T. Coburn, PE**

Senior Civil Engineer  
Department of Public Services-Engineering Division

**CITY OF NOVI**

Field Services Complex  
26300 Delwal Drive  
Novi, Michigan 48375  
(248) 347-0454 Office  
(248) 735-5659 Fax  
cityofnovi.org

**Coburn, Brian**

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**From:** Walter Kleban [waltkleban@att.net]  
**Sent:** Friday, August 21, 2009 7:09 PM  
**To:** Coburn, Brian  
**Cc:** Debra Southworth; Carl Unitis; Patricia Grabow  
**Subject:** Re: Meadowbrook Road Speed Limit Change

Brian:

I can understand the speed limit change on Meadowbrook. The 30 MPH limit always seemed arbitrary. What I do not agree with is the change in the traffic regulations on Nine Mile to eliminate thought commercial traffic. The major effect was to greatly increase the truck traffic on Meadowbrook. The excuse that the change was done to reduce commercial traffic on the "Residential Nine Mile Road" does not hold true. There are far more residences on Meadowbrook and no industrial properties between 8 mile and Grand River as there are on Nine Mile between Meadowbrook and Novi.

I see that the City of Novi is still being arbitrary and short sighted when it comes to traffic.

Walt Kleban

Carriage Hill Home Owners Association.

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**From:** "Coburn, Brian" <bcoburn@cityofnovi.org>  
**To:** smmb659@yahoo.com; lcroad@twmi.rr.com; kvdd2000@twmi.rr.com; david@davidstaudt.com; chrysanthek@msn.com; bmeyers53@yahoo.com; surya.prakash@earthlink.net; edmoylan@sbcglobal.net; rasabi2000@yahoo.com; grizzlies4@sbcglobal.net; jrzepka@colasantigroup.com; blask3@aol.com; pennyce@twmi.rr.com; barbaranap@aol.com; mbceresko@aol.com; dasouthworth@yahoo.com; trsouthworth@yahoo.com; pgrabow@twmi.rr.com; Waltkleban@ATT.net; junitis@twmi.rr.com; jdwysocki@aol.com; maggiavonb@hotmail.com; moira.robinson@hotmail.com  
**Cc:** "Hayes, Rob" <rhayes@cityofnovi.org>; "Walsh, Sheryl" <swalsh@cityofnovi.org>; "Ringle, Tracie" <tringle@cityofnovi.org>  
**Sent:** Thursday, August 20, 2009 11:29:29 AM  
**Subject:** Meadowbrook Road Speed Limit Change

Dear Homeowner Association Representatives,

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Our speed study concluded that the majority of drivers are actually driving 35 mph as presented in the attached speed study. Posted speed limits that are artificially low can pose a safety risk to the motoring public because those who obey the posted speed are in the minority and may in effect cause traffic crashes. There is also a safety risk to the adjacent residents

who may have a false sense of security that drivers will obey the slower speed limits when the study indicates otherwise.

We are temporarily posting the new speeds beginning in August for the purpose of conducting follow-up speed studies. The new study for Meadowbrook should demonstrate no **additional** increase in speed as a result of the newly posted limit because, in general, motorists have already been driving the speed at which they felt safe and were disregarding the posted speed. In other words, we don't expect to see an increase in speed as a result of the new speed limit since people were already driving 35 as shown in the study.

Also enclosed are some pamphlets from the Traffic Improvement Association that provide more information about speed limits.

Please let me know if you have additional questions or concerns in this regard. Please feel free pass along this information to your residents.

**Brian T. Coburn, PE**

Senior Civil Engineer

Department of Public Services-Engineering Division

**CITY OF NOVI**

Field Services Complex

26300 Delwal Drive

Novi, Michigan 48375

(248) 347-0454 Office

(248) 735-5659 Fax

[cityofnovi.org](http://cityofnovi.org)

**Coburn, Brian**

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**From:** Daniel Gulledge [daniel.gulledge@gmail.com]  
**Sent:** Tuesday, August 25, 2009 11:05 AM  
**To:** Coburn, Brian  
**Cc:** Walsh, Sheryl; Antil, Pam; Molloy, David; Hayes, Rob; Pearson, Clay  
**Subject:** Re: Message to all City Council from www.cityofnovi.org

Brian:

Thank you for the detailed response and explanation of this study. I also noticed a similar speed limit increase on Beck Road. Has it been considered also for 11 Mile (between the Town Center and Meadowbrook)?

What is the justification and cost-benefit balance to start these studies? I am certain that the study is not free of charge. How do these studies fit into the city's budget priorities, given the revenue challenges in our economic environment?

Which drivers on Meadowbrook prompted this study? Mostly residents or mostly drivers using the road as a connector?

When will the new speed study be completed? What is the new average or 85th percentile speed?

The guidelines state that speed limits should be within 5mph of the 85th percentile speed. Table 2 shows the overall average 85th percentile is 35mph / 35.4mph. Keeping 30mph speed limits is "within" the 5mph limit, although on the very edge of acceptability depending on how rounding is handled.

I understand how speed differentials can lead to risky driving situations and accidents. But, in creasing the limit to what people actually drive seems to penalize those who follow the existing limit. A logical extension of this method to set traffic speed would be to look at how many people actually stop at a STOP sign.... if most do not, then the sign should be removed. I doubt this would improve safety or reduce accidents.

Are other speed control devices options? Speed bumps?

As a resident of the road, the increase in speed limit also increases the stress I feel each time I start to turn into my driveway. I feel I now have the potential to be hit by someone travelling 5mph faster.

Please keep me informed of the progress and results of these studies.

Best Regards,

Daniel Gulledge

On Mon, Aug 10, 2009 at 10:34 AM, Coburn, Brian <[bcoburn@cityofnovi.org](mailto:bcoburn@cityofnovi.org)> wrote:

Dear Mr. Gulledge,

Thank you for your email. As the designated traffic engineer for the City of Novi, I have been asked to respond to your message regarding the temporary speed limit change on Meadowbrook Road.

The speed limit on Meadowbrook Road from Eight Mile Road to Ten Mile Road was recently reviewed in response to several requests from drivers in the community. In order to be enforced, State law requires that speed limits be set in one of two ways: 1) based on the number of driveways intersecting the road, or 2) based on an engineering study to determine the speed at which 85 percent of the vehicles are moving (85<sup>th</sup> percentile speed). Our evaluation revealed that Method 1 would result in a speed of 35-45 mph, while method 2 resulted in a speed limit of 35 mph.

Generally, speed limits should be set so that the majority of drivers observe them voluntarily. Studies have shown that drivers generally operate their vehicles at speeds that are reasonable and proper, regardless of the posted speeds. It is generally accepted that when traffic deviates from the 85<sup>th</sup> percentile speed, the probability of a traffic crash becomes greater.

Our speed study confirms what you mention in your email that the 30 mph speed limit on Meadowbrook is not being observed and that is because the majority of drivers are actually driving 35 mph as presented in the attached speed study. Posted speed limits that are artificially low can pose a safety risk to the motoring public because those who obey the posted speed are in the minority and may in effect cause traffic crashes. There is also a safety risk to the adjacent residents who may have a false sense of security that drivers will obey the slower speed limits when the study indicates otherwise.

We are temporarily posting the new speeds beginning in August for the purpose of conducting follow-up speed studies. The new study for Meadowbrook should demonstrate no increase in speed as a result of the newly posted limit because, in general, motorists have already been driving the speed at which they felt safe and were disregarding the posted speed. In other words, we don't expect to see an increase in speed as a result of the new speed limit since people were already driving 35 as shown in the study.

Also enclosed are some pamphlets from the Traffic Improvement Association that provide more information about speed limits.

Please let me know if you have additional questions or concerns in this regard.

**Brian T. Coburn, PE**

Senior Civil Engineer

Department of Public Services-Engineering Division

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**From:** [postmaster@muniweb.com](mailto:postmaster@muniweb.com) [mailto:[postmaster@muniweb.com](mailto:postmaster@muniweb.com)]

**Sent:** Sun 8/9/2009 4:39 PM

**To:** Landry, David; Burke, Brian; Gatt, Bob; Margolis, Terry; Mutch, Andrew; Crawford, Kathy; Staudt, Dave; Walsh, Sheryl

**Subject:** Message to all City Council from [www.cityofnovi.org](http://www.cityofnovi.org)

**Message to all City Council from [www.cityofnovi.org](http://www.cityofnovi.org)**

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**Name:**

Daniel Gullede

**Address:**

23149 Meadowbrook

**Resident of Novi:**

Yes

**Number of years as resident:**

**Feedback:**

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The speed limit on Meadowbrook Road was increased to 35mph. When was this changed and why? I do not recall hearing any opportunity to voice my concern. Meadowbrook Road (in this area) is primarily residential; even the 30mph limit seemed to be largely ignored. I have concern that an increase in legal limit will result in an overall increase in speed, and corresponding decrease in safety.

**Is a response desired:**

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Yes

**Email or phone:**

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[daniel.gulledge@gmail.com](mailto:daniel.gulledge@gmail.com)

**Remote IP:**

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75.184.106.138

**Date & Time:**

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8/9/2009 4:39:27 PM

CITY OF NOVI  
CITY CLERK'S OFFICE

2009 AUG 24 P 1:29

8/20/2009

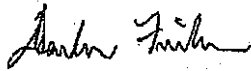
Darlene Friedman  
40944 Mooringside  
Novi, MI 48375

To the Mayor and the City Council:

I would like to address the recent increase in the speed limit on Meadowbrook Road. I read in today's Novi News that residents who live along Meadowbrook Road dislike the new speed limit of 35 mph and are hoping to have it overturned. I have lived in a subdivision off of Meadowbrook Road since 1979. For thirty years, I have been aggravated by the 30mph speed limit on Meadowbrook. I have never been able to understand why roads with just as many houses along them, for example 10 Mile Road, have much higher speed limits than Meadowbrook did. I have complained about the low speed limit several times in the past, to no avail. So I was extremely happy to see the new speed limit signs.

I would like to implore the mayor and city council not to be swayed by the opinions of fifty or so residents along Meadowbrook Road, and to keep the new 35mph speed limit. I believe that the vast majority of Novi residents (as well as other people who travel this road) are very pleased with the new speed limit and would like to keep it at 35mph. Please don't let the voices of a few residents ruin this wonderful change for the rest of the people of Novi, as well as for others who travel through the city.

Thank you very much.



Darlene Friedman

**Name:**

tanya and gary gold

**Email Address:**

teensietg@aol.com

**Phone:**

**Comments/Feedback:**

thank you for determining that 35 miles per hour is acceptable on meadowbrook rd between 8 and 10. we have lived in turtle creek sub since 1985 and have always thought 30 was too slow. hopefully it will be permanent. thank you

**Remote IP:**

205.188.116.144

**Date & Time:**

8/27/2009 12:00:25 PM

**Name:**

Dennis Owens

**Email Address:**

denowens@hotmail.com

**Phone:**

248.349.2197

**Comments/Feedback:**

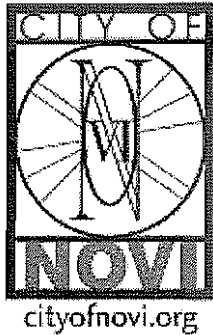
City Counsel Members, The increase in the speed limit on Meadowbrook and Beck Roads are long over due. It is appreciated that the city is conducting a study for a more reasonable speed limit on these roads. Village Oaks resident of 26 years.

**Remote IP:**

64.211.41.194

**Date & Time:**

8/27/2009 12:11:53 PM



## MEMORANDUM

**TO:** ROB HAYES, P.E.; DIRECTOR OF PUBLIC SERVICES  
**FROM:** BRIAN COBURN, P.E.; SENIOR CIVIL ENGINEER *BC*  
**SUBJECT:** MEADOWBROOK ROAD SPEED LIMIT STUDY UPDATE  
**DATE:** SEPTEMBER 23, 2009

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The Engineering Division is in the final stages of reviewing the speed limits on Meadowbrook Road, Beck Road, Cabot Drive, and Lewis Drive. The final data collection event is in progress this week for Meadowbrook Road in which the speeds will be sampled again after having allowed time (approximately four weeks) for drivers to adjust to the temporary posted speed. This second speed sample will be used to determine if the speeds have changed since the new speed limit signs were posted. Data collection for Beck Road, Cabot Drive and Lewis Drive will occur over the next two weeks.

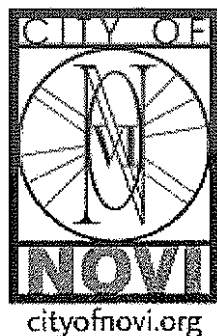
As stated in previous memos on this topic, the speed studies were initiated because the posted speed limit on the roads listed above lacked proper traffic control orders and required a recent study to justify the posted speed limit. Speed limits are governed by the Michigan Vehicle Code (MVC) and the Michigan Manual of Traffic Control Devices (MMUTCD). The MVC provides a standard "prima facie" speed based on the number of access points on a roadway. The MVC allows the local agency to adjust the speed limit based on a traffic engineering study. The MMUTCD requires an engineering study to determine the speed limit in accordance with established traffic engineering practices and that the limit must be adopted by the local agency (in the form of a traffic control order). Drivers that are ticketed for violating a speed limit can challenge the ticket if a valid traffic control order (supported by an engineering study) is not on file.

There has been concern expressed about the temporary posted speed limit on Meadowbrook Road as it relates to the number of driveways and the need for the residents to back out onto Meadowbrook Road, specifically between Nine Mile and Ten Mile Roads. The type of movement required to use the access drive (e.g., backing out versus pulling out) is not given consideration in the MVC for setting the prima facie speed. However, we will review these movements as part of the final traffic study to determine if the driveway maneuvers are a mitigating factor that should be considered in setting the speed.

During audience participation at the last City Council meeting, a resident mentioned a recent crash that occurred as a vehicle was backing out of a driveway on Meadowbrook. We have reviewed the crash report in which the police officer noted that speed was not a factor in the crash and cited the driver backing out of the driveway for failure to yield the right-of-way. We will review past crash reports and identify and review any recent crashes as part of the final speed limit review.

We will use the second speed sample to prepare the final report for Meadowbrook Road, which will include a final speed limit recommendation. The final traffic control order will be presented to City Council for consideration at a future meeting.

cc: David Molloy, Chief of Police  
Matt Wiktorowski, Field Operations Senior Manager



## MEMORANDUM

**TO:** ROB HAYES, P.E.; DPS DIRECTOR/CITY ENGINEER  
**FROM:** BRIAN COBURN, P.E.; SENIOR CIVIL ENGINEER *BTC*  
**SUBJECT:** SPEED STUDY IMPLEMENTATIONS  
**DATE:** JULY 22, 2009

Speed limits are governed by the Michigan Vehicle Code (MVC) and the Michigan Manual of Traffic Control Devices (MMUTCD). The MVC provides a standard "prima facie" speed based on the number of access points on a roadway. The MVC allows the local agency to adjust the speed limit based on a traffic engineering study. The MMUTCD requires an engineering study to determine the speed limit in accordance with established traffic engineering practices and that the limit must be adopted by the local agency (in the form of a traffic control order). The MMUTCD further recommends that speed limits be reevaluated at least once every five years on road segments that have undergone significant change in roadway characteristics or surrounding land use.

In response to requests from numerous drivers in the community (include some that have received speeding tickets on segments lacking proper traffic control orders), we have conducted engineering speed studies on the following thoroughfares within the city:

- Beck Road (Eight Mile Road to Grand River Avenue)
- Meadowbrook Road (Eight Mile to Ten Mile Road)
- Cabot Drive (12 Mile Road to 13 Mile Road)

Several of the segments identified for study either did not have traffic control orders, or the traffic orders were very old and should be restudied based on changes in traffic and development. Drivers that are ticketed for violating a speed limit can challenge the ticket if a valid traffic control order is not on file.

Generally, speed limits should be set so that the majority of drivers observe them voluntarily. Studies have shown that drivers generally operate their vehicles at speeds that are reasonable and proper, regardless of the posted speeds. Nationally, this is recognized as the 85<sup>th</sup> percentile speed, which is the speed at which 85 percent of the vehicles are moving. It is generally accepted that when traffic deviates from the 85<sup>th</sup> percentile speed, the probability of a traffic crash becomes greater. In addition to the 85<sup>th</sup> percentile speed, the MMUTCD recommends review of other road characteristics including pedestrian activity, road conditions, crash experience, and road side environment. Realistic speed limits should be set at no more than seven miles per hour below or above the 85<sup>th</sup> percentile speed based on these mitigating factors.

In completing the study of the three segments identified above, we collected and analyzed speed data to determine the 85<sup>th</sup> percentile speed. Our traffic consultants further investigated each respective segment to identify any mitigating factors to deviate from the 85<sup>th</sup> percentile speed and prepared the enclosed reports. The results of the studies are summarized below:

Road Segment	Current Posted Speed	Proposed Speed
Beck Road (Eight Mile Road to Grand River)	40	45
Meadowbrook Road (Eight Mile to Ten Mile Road)	30	35
Cabot Drive (12 Mile Road to 13 Mile Road)	25	35*

\*the southern 850 feet should be posted at 30 mph.

The enclosed studies have demonstrated that the speed limits currently posted on these segments are not being observed by the majority of drivers and are therefore unrealistic. The posted speed limits can pose a safety risk to the motoring public because those that obey the posted speed are in the minority and can cause traffic crashes. There is also a safety risk to the adjacent residents who may have a false sense of security that drivers will obey the slower speed limits when the study indicates otherwise.

It is usually difficult for the public to understand that raising the speed limit will make the road safer. For this reason, we propose to temporarily post the new speeds beginning in August for the purpose of conducting follow-up speed studies. Each of these new studies should demonstrate no increase in speed as a result of the newly posted limit because, in general, motorists have already been driving the speed at which they felt safe and were disregarding the posted speed.

We will share this information with City Council in the preparation of any permanent traffic control orders for these segments. If the revised studies show an increase in speed, we will review further to determine if there are mitigating factors that would warrant a lower speed limit. We will work collaboratively with the Police Department during the follow-up study phase and in evaluating any mitigating factors. We plan to post the temporary speed limit signs in August. The follow-up speed studies will be conducted after a two week adjustment period for the drivers. We will present the revised speed studies in September. We would anticipate sending the permanent traffic control orders to City Council for consideration in October.

Please let me know if you questions in this regard.

cc: David Molloy, Police Chief  
Matt Wiktorowski, Field Operations Senior Manager