



A Publication of the Charlevoix County Road Commission

Traffic and Speed Counts

By Keith Ogden

Frequently asked questions

- How are Speed Limits changed?

- See "Traffic and Speed Counts", pages 1, 2, 3

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When you are out driving around on Charlevoix County's paved roads, you will occasionally see a pair of black rubber hoses stretched completely across the driving lanes. Those hoses are connected to a grey box, which together make up a traffic counter and a speed register. So, why should anyone be interested in counting traffic and knowing how fast people are driving?

Well, here is the rest of the story about how the Road Commission tries to make life a little safer and convenient for Charlevoix County motorists. Those traffic counters have been placed there to gather information about how much traffic uses a particular road, and whether the posted speed limit is appropriate. The number of cars and trucks driving over the hoses is recorded, and at the end of a full 24 hour day are summarized. The grey box is so-

phisticated enough, with its computerized electronics, that it can tell the difference between cars and trucks, and how the trucks differ by type and number of axles.

So what exactly does the information generated by the traffic counters do for the Road Commission? First of all, there are several townships who have road millages that use the traffic counts in their decision as to which roads should be improved. In other words, the counts help prioritize needs. Similar is the information about speed; generally, the higher speed roads involve to a greater extent the issue of safety; therefore a speed study may play an important role in design standards, especially width, when a road is considered for a rebuild.

Under State law, a speed limit on paved roads outside cities is established

through a scientific speed study, but the most frequent reason for studying speed is a result of requests by local residents who live on a road where they believe traffic is traveling faster than is safe for their neighborhood road. In general, the residents' concern includes an implied request to lower the speed limit. However, most speed studies do not support lowering speed limits, which is based on the fundamental premise that 85 out of 100 drivers will drive at a reasonable and safe speed on a given stretch of road. Thus is established the 85th "percentile" method of determining a proper speed limit. The percentile method is not quite the same as a "percentage", as the percentile method excludes (kicks out) the 15 people who are driving at the extreme edges of the study - that is, way too fast,

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Traffic Counts
Burgess Road, Hayes Township

CHARLEVOIX COUNTY 2008 ROAD PROJECTS

ROAD NAME	TOWNSHIP	LENGTH (miles)	ACTUAL COST	STATUS & CONTRACTOR
Alpine Hills Subdivision Streets and a Portion of Eagle Island Rd. Wedge & Overlay	Bay	0.96	\$ 168,089.98	Completed (Rieth-Riley Construction Inc.)
Mercer and Old Orchard Shoulder Paving	Charlevoix	0.28	\$ 22,487.58	Completed (MDC Contracting)
Pinehurst Shores Subdivision Paving Phase II	Evangeline	0.74	& 179,626.23	Completed (Tri-County Excavating)
Shadow Trails Reconstruction	Evangeline	0.22	\$ 63,932.82	Completed (Tri-County Excavating)
Sanderson Rd. North Aggregate Placement	Eveline	0.3	\$ 8,567.40	Completed (Rieth-Riley Construction Inc.)
Sequanota Rd. Wedge & Overlay	Eveline	2.32	\$ 302,739.87	Completed (Payne & Dolan Inc.)
Holy Island Bridge Replacement	Eveline	N/A	-	To be Awarded in December
Pincherry Rd. Wedge & Overlay	Hayes	0.41	\$ 54,584.69	Completed (Rieth-Riley Construction Inc.)
Maple Grove Rd., Murray Rd., Old 31 Single 29A Slag Seal	Hayes	7.01	\$ 101,179.48	Completed (Michigan Pavement Solutions)
Maple Grove Rd., Wedge & Overlay	Hayes	1.10	\$ 188,328.22	Completed (Rieth-Riley Construction Inc.)
County Line Rd. Afton Stone Placement	Hudson	1.01	\$ 53,829.75	Completed (Rieth-Riley Construction Inc.)
Blanchard Rd. 23A Aggregate Placement	Marion	1.18	\$ 14,563.56	Completed (MDC Contracting)
Sugarbush Knoll Subdivision Streets Overlay	Marion	1.03	\$ 92,331.76	Completed (Payne & Dolan Inc.)
Loeb Rd., Mascho Rd. Single 29A Slag Sealcoat	Marion	1.18	\$ 22,031.82	Completed (Michigan Pavement Solutions)
Lake 26 Rd., 23A Aggregate Placement	Marion	2.45	\$ 27,049.30	Completed (MDC Contracting)
Shadow Trails Reconstruction	Melrose	0.8	\$ 190,795.78	Completed (Tri-County Excavating)
First Street 23A Aggregate Placement	Melrose	0.07	\$ 935.25	Completed by CCRC forces
Dixie HWY, Lake & Harris St. Wedge & Overlay	Norwood	0.91	\$ 233,863.50	Completed (Payne & Dolan Inc.)
TOTAL			\$ 1,724,936.99	

The above projects were funded by the individual townships listed. The Road Commission hereby extends our special "thanks" for the much needed financial help.

**Walloon Valley Road Wedge & Overlay,
Bay Township**



Traffic and Speed Counts

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or way too slow to be included in a study that seeks a reasonable conclusion. If a pure "percentage" were used, the results would be most often skewed toward a higher speed limit, since most of the 15 excluded drivers are driving too fast for safe and reasonable operation, and their inclusion in the study would pull the average speed upward.

As noted earlier, we are talking about studying speed on paved roads outside cities. Speed limits on city streets are established under different criteria than county or state roads. Gravel roads outside cities are generally not posted for speed, due to the ever changing conditions of the road surface. Where a recently graded gravel surface may be safe for a 45 mph speed on a straight stretch, that same section may

not be safe at 35 mph three weeks later when holes and "chatter bumps" are well established, which could negatively effect driver controllability.

Before talking about what we do with the information collected from that "gray box", lets briefly review a few more important facts about speed limits. Regardless of the results, a speed study can not create a speed limit higher than Michigan's statutory 55 miles per hour limit on non freeway roads. For example, lets say residents living on a roadway currently posted at 55 request through their township supervisor that they want a speed study performed, in hopes the road could be posted at a lower speed, for example 45 mph. But when the study shows that drivers are generally traveling at 61 mph; the result would be that no

change to the speed limit would occur – the study shows that reducing speed to 45 is inappropriate, and increasing it to 60 mph does not conform to the law. When a study indicates a need to change a speed limit, the incremental change is in even amounts, generally 5 or 10 mph—that's why you will not see a curious number like 27 mph or 43 mph on county or state highways. Much of the work involved in studying and establishing speed limits is covered under Act 300 of the Public Acts of 1949. As with many laws, there are provisions for unusual situations. For example, posting of reduced speeds around rural schools, on narrow bridges, sometimes at railroad grade crossings, and often on a temporary basis during road construction projects.

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Employee Anniversaries

BOB HAMMERBERG retired after 35 years with the Road Commission.

Thanks Bob for your Service!



THANKS TO US

"Thank you for repairing the pot holes on Anderson Road."
Quoted from the card of Ray & Gloria Anderson.

"Thank you" from Jean Cox for graveling and brining Sumner Road.
Also she compliments The Charlevoix County Road Commission Crew for doing a good job countywide.

Thanks to everybody who supports us !

Traffic and Speed Counts

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Most of the discussion so far has been about "absolute" speed limits, posted on a white sign, where it is illegal to exceed, regardless of conditions. There are also advisory speed limits, posted on yellow signs, which "suggest" an appropriate speed. These can usually be found on curves or steep hills and reflect the fact that some vehicles may have better controllability or braking than another, so that an absolute speed limit would not be appropriate.

After the gray box has been in location long enough to collect the necessary speed and traffic count information, it is removed from the site. Along with the two hoses (which to properly operate the computerized receiving center, must be spaced 8 feet apart, and pegged at the end of their 50 foot length). The information is "downloaded" at the Road Commission office, and transferred to paper copies. If a governmental official had requested the speed study based on a perceived need to change the speed limit, a traffic survey team will be formed to determine if the change is warranted. The team will consist of a member of the local State Police Post

(here in Charlevoix County it is the sergeant from the Traverse City Post), the Road Commission manager or staff engineer, and the township supervisor.

After the traffic survey team reviews the study, and studies the road in question, they will determine if a speed limit change is appropriate. Lets assume a change is justified; the next step is for the team to generate a traffic control order which must be signed by the Road Commission and the State Police, after which it is filed with the County Clerk. The final step is for the Road Commission to change the sign on the roadway to reflect the new speed limit. All the foregoing requirements must be met before the new speed limit can be legally enforced.

While those black hoses stretched across the road may seem like nothing more than a curiosity at first glance, they actually serve a much larger purpose. Although the explanation of traffic and speed counts has been overly brief, the ultimate reason for their use is to make our roads safer for everyone who drives in Charlevoix County.

A Special look at Motorcycles

High gasoline prices cause a boom in summertime motorcycle traffic.

Motorcyclists pose a higher risk for accidents according to the National Highway Traffic Safety Administration. Per vehicle mile traveled, motorcyclists are 34 times more likely than a passenger car occupant to die in a crash, and 8 times more likely to be injured.

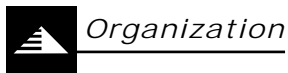
Collisions between motorcycles and vehicles, such as passenger cars, pickup trucks and dump trucks often result in catastrophic injuries or death to the motorcyclist.

When you are driving during the time of year when motorcycles are actively using our roadways, let's remember to be a little more cautious in our driving, so that we can improve the safety of our fellow drivers who ride motorcycles.

Picture Gallery

Photo was taken somewhere in Charlevoix County about 1920. Here, the Charlevoix County Road Commission crew is shown with a Gravel Screener used for road building.





CHARLEVOIX COUNTY ROAD COMMISSION

Main Office

Boyne City Garage
P.O. Box 39
1251 Boyne avenue, Boyne City, MI 49712
Phone: (231)582-7330
Fax: (231)582-3110

Since 2005 we have our own page on the Charlevoix County Website. Charlevoix County Road Commission Board minutes are posted there, as well as permit applications.

Ironton Garage

11705 Shaw Road
Charlevoix, MI 49720
Phone: (231)547-2551



Beaver Island Garage

38310 Bay Avenue
Beaver Island, MI 49782
Phone: (231)448-2285
Fax: (231)448-2193

How to contact us

Office Hours

7:00 AM - 3:30 PM Weekdays
(Excluding Holidays)

Contact Information

Main Office Phone: (231)582-7330
Main Office Fax: (231)582-3110
E-mail: ccrclerk@utmi.net



The Charlevoix County Road Commission Main Office and the Boyne City maintenance garage is located on M-75 just east of the Boyne City Public School football field. Two other locations include the Ironton maintenance garage (11705 Shaw Road) and the Beaver Island maintenance garage (38310 Bay Avenue).