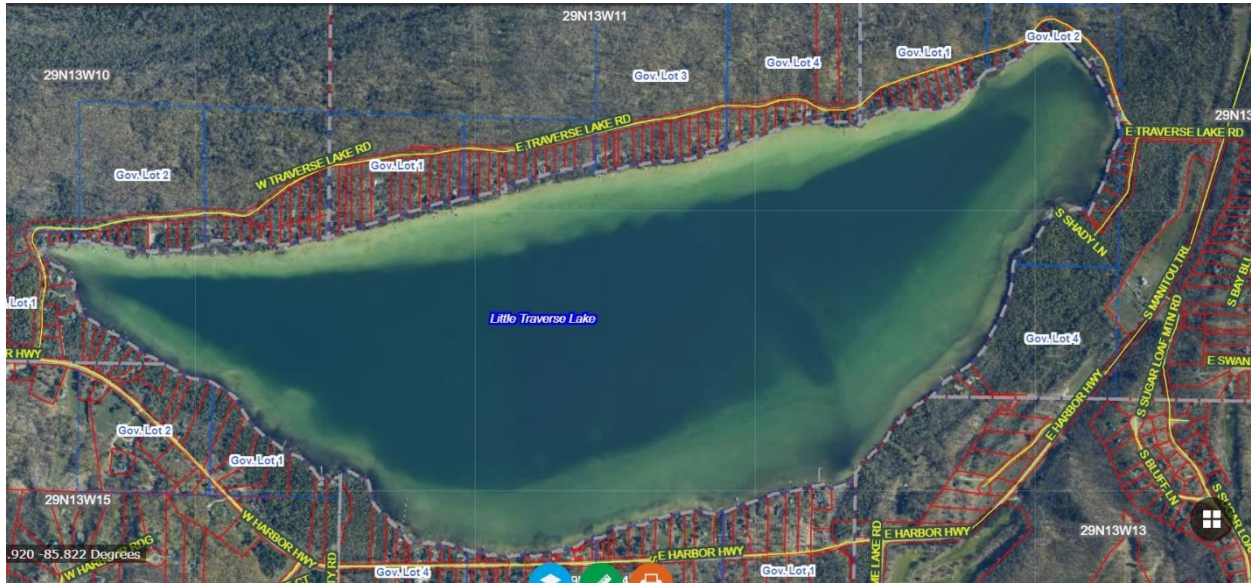


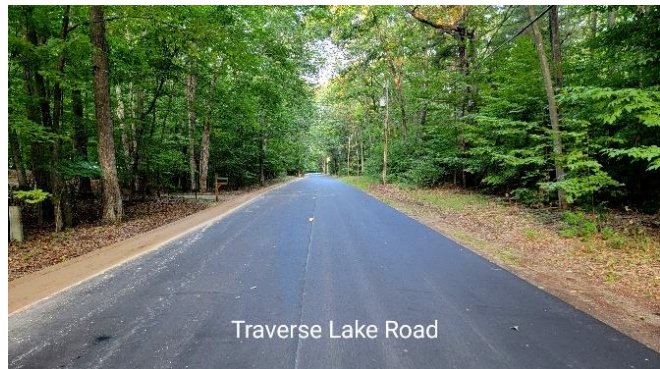
## SPEED LIMIT REDUCTION REQUEST FOR TRAVERSE LAKE ROAD IN CLEVELAND TOWNSHIP

Traverse Lake Road residents have submitted a formal request to Cleveland Township, including individual signed petitions from 60 residents along Traverse Lake Road, for the speed limit to be lowered from the current 40 mph to as low as 25 mph. Many residents believe a lower speed limit best fits this residential neighborhood. The last speed limit adjustment was completed in 2004 and current conditions warrant a reduction in the speed limit.



### Current Conditions

Traverse Lake Road (TLR) is a local scenic road that primarily serves the local residential neighborhood with approximately 80 properties along the south side, with driveways almost every 200 feet. The area is zoned residential with higher density properties that line the north shore of Traverse Lake Road. The north side of TLR mostly borders the Sleeping Bear Dunes National Lakeshore. TLR is not a thoroughfare used by the general public as a key connector road. It is a residential neighborhood road with access to M-22 at the west end and the east end, similar in design to other residential subdivision roads within Cleveland Township. The approximate 2.5 mile long winding road does have several curves, some of the sharper in nature with posted lower speeds of 15-25 mph.



Traverse Lake Road is a mixed-use road where non-vehicular and vehicular users both enjoy using the road. Road cyclists often use it as part of their route as a detour from travelling M-22. Local residents like to walk, run and bike. In a survey of lake residents that was independently conducted by a local resident (50% response rate), 90% of respondents indicated using TLR for walking, biking and running, with 61% doing so frequently or very frequently. During the summer, some pickle ball and basketball games do spill over into the road at a couple of locations. The community hosts an annual July 4 5K Fun-Run-Walk-Bike where almost 100 people stroll up and down the road and rarely is a car encountered.

In order to better characterize the nature and extent of non-vehicular use of TLR, a study was conducted using motion sensor cameras to document usage (see Appendix). The study captured user images at two different locations and for a seven-day period in August as well in September. Non-vehicular user volume is higher in August as compared to September. In August, an average of 67 (range 38-111) people walked, ran, or biked Traverse Lake Road daily at the eastern location with an average of 57 (range 34-94) recorded at the western location. Overall, approximately 28% rode bikes. A small percentage also walked with strollers or walked dogs. The maximum number of users in one hour was 15 (range 6-15). In September, the volume of daily users dropped to 57 at the eastern location and 45 at the western location.

Currently one family walks across the road on a regular basis going from their house on the north side to the lake front on the south side. If the proposed Heritage Trail extension along TLR were constructed, there would be a new reason for potentially 80 families to cross TLR from the south side to access the trail on the north side. Some residents would continue on TLR until reaching an easier access point to the off-road trail, like a driveway, or just continue to walk, run or bike on TLR as they do now. Nonetheless, TLR will continue to be a mixed-use residential road that is used more in feel as a local neighborhood street than a rural county connector road.

As part of the motion camera study that was done by LTL volunteer residents, vehicular traffic was also noted and broken into categories of motorcycles, passenger vehicles and commercial vehicles. Total vehicle users dropped approximately 38% from August to September, while non-vehicular users had a smaller 18% drop. In comparisons, the average number of vehicles per day in the two LCRC studies (even though years apart) was about 30% lower in September as compared to July.





Commercial vehicles make up approximately 17% of all vehicle traffic. Motorcycles represented a small percentage with occasional riders. During August, total vehicle count at the eastern location was an average of 124 vehicles per day (range 87-150) with the maximum in one hour being 19 (range 11-19). During September, the average dropped to 72 vehicles per day (range 54-95) with the maximum in one hour being 18 (range 9-18). For the western location, the August daily average was 138 vehicles (range 93-180) with the maximum number of vehicles in one hour being 22 (range 12-22). The average in September dropped to 90 (range 58-106) with the maximum on one hour being 18 (range 11-18). This data is consistent with the traffic count data observed during LCRC studies (see below).

### **Perspective on mixed-use of Traverse Lake Road**

Based on all daily totals combined at both locations during both weeks of camera observation, the ratio of non-vehicular users (1,575) to vehicular users (2,962) was 0.53. ***In other words, for every 2 vehicular users, there is one non-vehicular user of Traverse Lake Road.*** The historical pattern is a neighborhood mixed-use road where residents use the road daily to walk, bike, and run, even with strollers and dogs.

Traverse Lake Road is a low traffic road with non-vehicular users averaging less than 150 vehicles a day during the peak summer months and averaging less than 100 cars a day during the shoulder season. The maximum number of cars in one hour is less than 20, with most hours of the day seeing considerably less traffic. The low vehicular volume is indicative of TLR being a residential neighborhood street, with only entrance and exit access to M-22, in contrast to being a local connector road that provides access elsewhere.

Most people do pay attention to speed and attempt to lower speeds. Unfortunately, some drive faster in the short middle section of the road which tends to be straighter with fewer curves as evidence by the traffic count data. Local residents conducted an educational campaign during summer 2024 to ask people to lower their speeds and more attention is being given to ways to lower speeds on TLR, including the growing interest in lowering the speed limit in this residential neighborhood. People would change driving behaviors in response to a lower posted speed limit.



### **State law establishing speed limit in residential neighborhoods**

According to Michigan Compiled Laws, Chapter 257. Motor Vehicles § 257.627:

*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.***

The conditions of Traverse Lake Road warrant a speed limit of 25 mph due to its nature as a high density residential subdivision (driveways every 200 feet) without serving as a connector road and being only a dedicated road that serves as entrance and exit to private residents along the road way. Other residential neighborhoods within Cleveland Township have posted speeds of 25 mph. Traffic patterns on TLR indicate a mixed-use residential street where residents walk, bike and run regularly on TLR. For every two vehicular uses, there is one non-vehicular user. Traverse Lake Road also has several posted recommended speeds of 15-25 mph on several sections with winding curves. In addition, TLR also serves as a road servicing a public park with trail access within the Sleeping Bear Dunes National Lakeshore. Local residents feel that 25 mph is more suited to the speed limit on this residential street, rather than 40 mph.

### **Safety benefits of lowering the speed limit**

In 2022, the National Traffic Highway Transportation Administration (NHTSA) reported, as part of Traffic Safety Facts (DOT HS 813 590), 7,522 pedestrians will killed in traffic crashes. Of these, 1,124 were from the state of Michigan. While most of these fatalities were in urban areas, approximately 15% were in rural areas. Of these fatal crashes, a large majority of crashes occurred in non-intersection road locations (75%) and in dark lighting conditions (78%).

Speeds can play a major role in traffic accidents and the severity of crashes and injuries. Simple physics illustrates the reduction of kinetic energy (e.g. the energy transferred from the moving vehicle to a pedestrian at impact) as follows:

$$K.E. = \frac{1}{2} \times \text{mass} \times \text{velocity}^2$$

If we consider an average SUV today, the resulting reduction on energy would be more than 23%.

$$K.E. = \frac{1}{2} \times 4,344 \text{ lbs} \times 40 \text{ mph} \approx 315 \text{ KJ}$$

$$K.E. = \frac{1}{2} \times 4,344 \text{ lbs} \times 35 \text{ mph} \approx 241 \text{ KJ}$$

How does this translate to real-world conditions such as TLR road? A 2011 study “Impact Speed and a Pedestrian’s Risk of Severe Injury or Death” published by the AAA Foundation for Safety indicates the risks of fatality or severe injury (AIS3+) of a pedestrian struck by a vehicle as follows:

#### **Fatalities**

Speed	Fatality Count	Non-Fatal Count	Total	Fatality %
> 40 mph	19	11	30	63%
< 40 mph	47	345	392	12%

#### **Injuries**

Speed	Severe*	Non-Severe	Total	Severe %
> 40 mph	26	4	30	87%
< 40 mph	80	312	392	20%

\*Severe, life threatening injuries classified as AIS4+

While other factors (e.g. vehicle type, crash kinematics, etc.) do contribute to fatality and injury risk for a vehicle-to-pedestrian fatality or injury risk, speed is significant factor in these risks. When considering the effect of speed in vehicle-to-pedestrian crashes, not only reducing the speed of the crash is important but avoiding them altogether should be our goal. The reduction of the speed limit by only 5 mph will allow for more driver reaction time and stopping braking distances.

When comparing travel speeds at 40 mph and 35 mph for a vehicle approaching a pedestrian, consider the following illustration

#### **Travel Time to Pedestrian**

Vehicle Speed		Time to Stop to Pedestrian (sec)**			
mph	ft/sec	200	300	400	500
35	51.3	3.9	5.8	7.8	9.7
40	58.7	3.4	5.1	6.7	8.5
Difference	7.3	-0.5	-0.7	-1.0	-1.2

#### **Travel Time to Stop**

Vehicle Speed		Time to Stop to Pedestrian (sec)**			
mph	ft/sec	200	300	400	500
35	51.3	9.9	16.6	23.2	29.9
40	58.7	9.4	16.1	22.8	29.4
Difference	7.3	0.5	0.5	0.5	0.5

\*\*Remaining distance to pedestrian includes a 1 sec driver reaction time and average deceleration of 15 ft/sec

When considering a response time of one second, driver reaction time to begin to apply the brakes of a vehicle and an average of deceleration of 15 ft/sec, the vehicle travelling 35 mph (51.3 ft/sec) would need about 4.5 sec to come to a stop over about 141 ft, while the vehicle travelling 40 mph (58.7 ft/sec) would need about 5 sec to come to a stop over about 176 ft. The 5 mph speed reduction therefore results in an additional ½ sec of driver response time and an additional 35 ft of stopping distance. Reducing speeds even further results in better response time and greater safety benefits.

Not only is response time increased with slower speeds, sight distance that is required for stopping is also reduced. Even a 5 mph reduction in speeds can make a big difference in stopping distance. Reducing the speed limit from 40 mph to 25 mph reduces required sight distance by 50%, a reduction of 305 feet to 155 feet. That reduced sight distance is important when road conditions make it more difficult to see longer distances, such as a winding road like Traverse Lake Road.

### Quick Charts for Stopping Sight Distance

Design Speed (mph)	Stopping Sight Distance (ft)	Rate of Vertical Curvature, K*	
		Calculated	Design
15	80	3.0	3
20	115	6.1	7
25	155	11.1	12
30	200	18.5	19
35	250	29.0	29
40	305	43.1	44
45	360	60.1	61
50	425	83.7	84
55	495	113.5	114
60	570	150.6	151
65	645	192.8	193
70	730	246.9	247
75	820	311.6	312
80	910	383.7	384

While motor vehicle crashes on LTL road may be infrequent, preventative steps should be considered, including taking a proactive approach to mitigating these risks. Road safety is a high priority. The Little Traverse Lake community is looking at other ways to increase sight distance, evaluate traffic calming measures and explore other aspects of road design. However, a reduction of the speed limit from 40 mph to 25 mph for a residential neighborhood, can make a difference in preventing accidents and in helping to make sure family and friends do not become a safety statistic. Even lowering the speed limit to 35 mph, as allowed by recent legislative efforts, is a minimal first step in reducing the potential of severe accidents.

### Recent traffic count studies

The LCRC conducted a traffic count study on TLR the last week in September, 2018. Here is the summary of those counts:

**Total average daily vehicular trips: 85 (less than 100)** Vehicles with speed 35 mph or less: 76.6%  
**Highest number of vehicular trips in one hour: 18** Vehicles with speed 36-40 mph: 16.0%  
 8 hourly periods had 10-18 vehicular trips per hour Vehicles with speed 41-45 mph: 6.2%  
 18 hourly periods had 6-9 vehicular trips per hour Vehicles with speed 46-50 mph: 1.2%  
 The remaining hourly periods over 4 days had 5 or less **85<sup>th</sup> speed percentile: 37 mph**

For other purposes related to upcoming road construction, LCRC also conducted a traffic count July 11, 3:24 pm – July 14, 11:29 pm. A total of 410 cars were counted representing an average of 117 cars per day. Speeds ranged from 25 mph to 54 mph with an average speed of 33 mph. The 85<sup>th</sup> percentile speed was 38 mph. User volume in the peak summer months is higher than the non-summer months.

### Other State law options

Under state law, Cleveland Township, the Leelanau County Road Commission, and the Michigan State Police may unanimously establish a safe speed on Traverse Lake Rd. (MCL Sec. 257.628(1).

Earlier this year the State amended the Michigan Vehicle Code to allow speeds on county roads to be reduced. MCL Sec. 257.628(5) now provides:

(5) A speed limit established under this section must be determined in accordance with traffic engineering practices that provide an objective analysis of the characteristics of the highway and by the eighty-fifth percentile speed of free-flowing traffic under ideal conditions on the fastest portion of the highway segment for which the speed limit is being posted. **The speed limit must be in multiples of 5 miles per hour and rounded to a multiple that is within 5 miles per hour of the eighty-fifth percentile speed.** A speed limit established under this section may be set below the eighty-fifth percentile speed if an engineering and safety study demonstrates a situation with hazards to public safety that are not reflected by the eighty-fifth percentile speed, but must not be set below the fiftieth percentile speed. **(emphasis added).**

The amendment's intent is to allow local units of government to round down the posted speeds from the 85<sup>th</sup> percentile speed determined by a traffic study, instead of only rounding up. The 85<sup>th</sup> percentile in a 2018 Leelanau County Road Commission traffic study on Traverse Lake Road was 37 mph. The 85<sup>th</sup> percentile in a 2024 LCRC traffic study was 38 mph. Under the new law, the speed limit could be established at 35 mph, rather than 40 mph. A speed limit of 35 mph would be within 2-3 miles per hour of the 85<sup>th</sup> percentile speed.

### **Speed limit reduction**

The Little Traverse Lake community requests the recognition of Traverse Lake Road as a residential street, servicing only a local neighborhood, and to establish a 25 mph speed limit. At a very minimum, speeds should be reduced to 35 mph.

## TRAVERSE LAKE ROAD – TRAFFIC CHARACTERIZATION STUDY

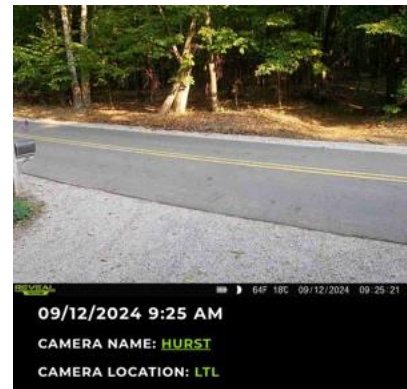
Traverse Lake Road is a multi-use road, frequently used by local residents to walk, bike, and run, often with dogs or strollers. No data exists on the non-vehicular nature of TLR traffic and characterizing non-vehicular use was the primary purpose of this study, which was completed by TLR volunteer residents. A secondary interest was to characterize the vehicular use and to compare with traffic count data collected by Leelanau County Road Commission using data cables capturing traffic counts.



In order to characterize the traffic use of Traverse Lake Road, including both vehicular and non-vehicular use, two motion sensing cameras were installed. One camera was posted on the eastern end across from the trailhead at the Bumb residence, 752 E Traverse Lake Road. Another camera was posted across at the western end from the trailhead at the Hurst residence, 292 E Traverse Lake Road. Permission was granted by both property owners. Both cameras were installed 10' above the ground and secured with a cable and lock to prevent tampering. Images were recorded via a cell service subscription as well as on a SD data card.



Two different seven-day time windows were included in the study: August 14-20, 2024 and September 8-14, 2024 (12:01 am to 11:59 pm). All photo images were analyzed visually and appropriate data entered into an excel spreadsheet based on location (Hurst versus Bumb), type of traffic use, date and time (recorded by hour timeframes). Data was entered by the same person to ensure consistency and data was spot checked by another individual. Data was also totaled by type and also by hour. All images remain on file (as many as 400 per day from both cameras).



The data observations were broken out by the following traffic characterizations:

### NON-VEHICULAR

Person walking  
Person running  
Stroller  
(person w/ stroller entered as person walking)  
Dogs  
(person w/ dog entered as person walking)  
Bicyclist or person on skate board

### VEHICULAR

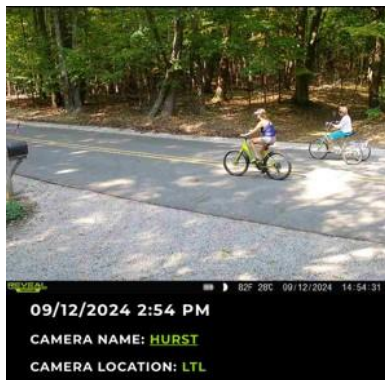
Motorcycle  
Residential Cars + SUVs  
    <25 mph  
    25-30 mph  
    >35 mph  
Commercial Trucks  
Off-screen (blank photos triggered by motion)



## Walkers, Runners, Stollers and Dogs



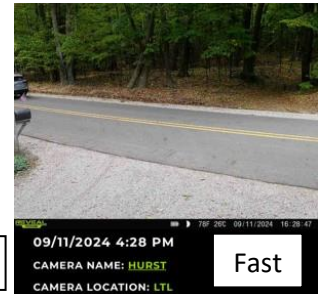
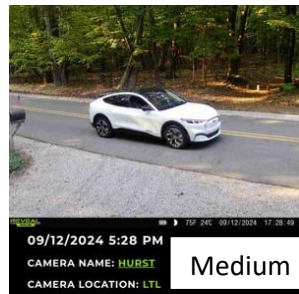
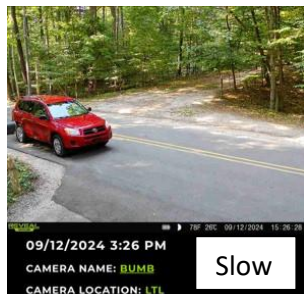
## Bicyclists



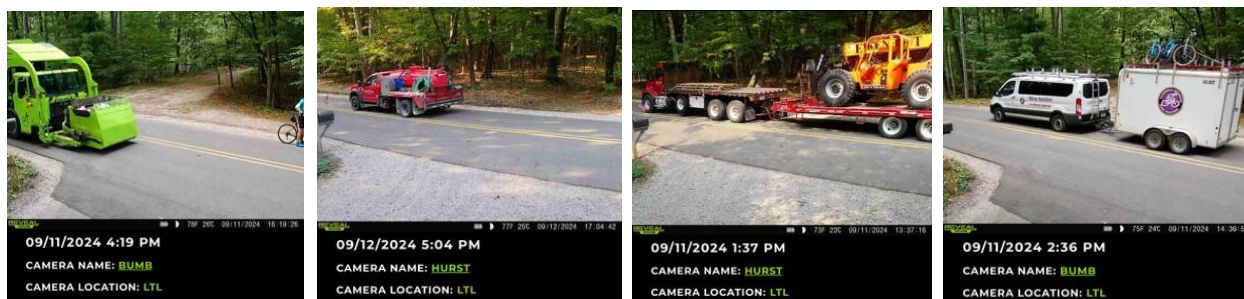
## Motorcycles



## Passenger vehicles



## Commercial vehicles



It was also noted when cars were parked at trailhead or when deer were captured on image. Speeds were estimated based on distance car travelled on camera after triggering motion sensor – cars travelling slower were just entering picture frame where faster cars were leaving picture frame. Test drives were made to verify the photo standards used in categorizing vehicular photo images. Cars driving faster than 40 mph left the picture frame faster than the camera could take the picture after motion triggering. However, it cannot be only assumed that was the case with blank photo images but the camera might have been triggered for some other reason and there was no way to verify other than photo itself. The speed calculation was not the primary purpose of the study; only an attempt to gather incidental data observations. It was too difficult and time consuming to track which road users appeared on both cameras within the same hour as an indication of length of travel along road. Thus, data from each location was kept separate.

## NON-VEHICULAR USERS – BUMB Location, 752 E Traverse Lake Road

<u>Date</u>	<u>Walk/Run</u>	<u>Stroller</u>	<u>Dogs</u>	<u>Bikes</u>	<u>Total Human</u>	<u>Max/Hr</u>
					<u>Users</u>	
8/14	32	0	6	6	38	11
8/15	40	2	3	9	51	11
8/16	51	0	4	7	58	13
8/17	48	0	9	9	57	9
8/18	78	5	8	28	111	15
8/19	61	2	6	15	78	18
8/20	57	4	8	14	75	12
<b>AVERAGE</b>	<b>52</b>	<b>2</b>	<b>6</b>	<b>13</b>	<b>67</b>	<b>13</b>

<u>Date</u>	<u>Walk/Run</u>	<u>Stroller</u>	<u>Dogs</u>	<u>Bikes</u>	<u>Total Human</u>	<u>Max/Hr</u>
					<u>Users</u>	
9/8	27	0	4	7	34	9
9/9	40	0	7	23	63	11
9/10	23	2	4	24	49	10
9/11	24	2	12	25	51	6
9/12	46	2	6	12	60	10
9/13	50	1	11	16	67	15
9/14	54	0	20	21	75	10
<b>AVERAGE</b>	<b>38</b>	<b>1</b>	<b>9</b>	<b>18</b>	<b>57</b>	<b>10</b>

**NON-VEHICULAR USERS – HURST Location, 292 E Traverse Lake Road**

<u>Date</u>	<u>Walk/Run</u>	<u>Stroller</u>	<u>Dogs</u>	<u>Bikes</u>	<u>Total Human Users</u>	<u>Max/Hr</u>
8/14	37	3	11	14	54	12
8/15	23	0	2	11	34	7
8/16	27	0	5	11	38	8
8/17	27	0	2	12	39	6
8/18	56	7	5	31	94	15
8/19	47	0	1	20	67	10
8/20	47	4	6	19	70	11
<b>AVERAGE</b>	<b>38</b>	<b>2</b>	<b>5</b>	<b>17</b>	<b>57</b>	<b>10</b>

<u>Date</u>	<u>Walk/Run</u>	<u>Stroller</u>	<u>Dogs</u>	<u>Bikes</u>	<u>Total Human Users</u>	<u>Max/Hr</u>
9/8	21	0	6	8	29	8
9/9	31	0	4	20	51	10
9/10	25	2	7	24	49	6
9/11	30	2	7	18	48	8
9/12	34	0	8	15	49	7
9/13	23	2	5	14	37	7
9/14	28	0	6	21	49	13
<b>AVERAGE</b>	<b>27</b>	<b>1</b>	<b>6</b>	<b>17</b>	<b>45</b>	<b>8</b>

Non-vehicular user volume is higher in August as compared to September. In August, an average of 67 (range 38-111) people walked, ran, or biked Traverse Lake Road daily at the eastern location with an average of 57 (range 34-94) recorded at the western location. Overall, approximately 28% rode bikes. A small percentage also walked with strollers or walked dogs. The maximum number of users in one hour was 15 (range 6-15). In September, the volume of daily users dropped to 57 at the eastern location and 45 at the western location.

**VEHICULAR USERS - BUMB LOCATION: 752 E Traverse Lake Road**

<u>Date</u>	<u>Cars</u>			<u>Total Cars</u>	<u>Commercial</u>	<u>Motorcycles</u>	<u>Total Vehicles</u>	<u>Max/Hr</u>	<u>Off-screen</u>
	<u>&lt;25mph</u>	<u>25-30 mph</u>	<u>&gt;30 mph</u>						
8/14	7	74	30	111	30	0	141	15	10
8/15	16	52	29	97	53	0	150	19	10
8/16	11	58	42	111	18	1	130	17	11
8/17	14	55	21	90	5	0	95	11	13
8/18	17	42	21	80	4	3	87	12	7
8/19	20	50	36	106	40	0	146	19	19
8/20	14	38	46	98	19	0	117	14	12
<b>AVG</b>	<b>14</b>	<b>53</b>	<b>32</b>	<b>99</b>	<b>24</b>	<b>1</b>	<b>124</b>	<b>15</b>	<b>12</b>

<u>Date</u>	<u>Cars</u>			<u>Total</u> <u>Cars</u>	<u>Commercial</u>	<u>Motorcycles</u>	<u>Total</u> <u>Vehicles</u>	<u>Max/Hr</u>	<u>Off-</u> <u>screen</u>
	<25mph	25-30 mph	>30 mph						
9/8	6	25	19	50	4	0	54	9	10
9/9	16	30	13	59	4	7	70	10	15
9/10	10	30	10	50	14	3	67	13	12
9/11	12	29	37	78	16	1	95	18	9
9/12	15	32	14	61	11	1	73	12	10
9/13	15	24	15	54	12	1	67	11	14
9/14	27	29	16	72	6	0	78	14	16
<b>AVG</b>	<b>14</b>	<b>28</b>	<b>18</b>	<b>61</b>	<b>10</b>	<b>2</b>	<b>72</b>	<b>12</b>	<b>12</b>

**VEHICULAR USERS - HURST LOCATION: 292 E Traverse Lake Road**

<u>Date</u>	<u>Cars</u>			<u>Total</u> <u>Cars</u>	<u>Commercial</u>	<u>Motorcycles</u>	<u>Total</u> <u>Vehicles</u>	<u>Max/Hr</u>	<u>Off-</u> <u>screen</u>
	<25mph	25-30 mph	>30 mph						
8/14	6	87	29	122	36	0	158	21	6
8/15	10	88	27	125	55	0	180	20	7
8/16	13	66	48	127	22	0	149	18	17
8/17	10	43	35	88	5	0	93	13	17
8/18	23	37	25	85	6	4	95	12	19
8/19	19	74	37	130	39	0	169	22	19
8/20	14	38	46	98	22	0	120	20	12
<b>AVG</b>	<b>14</b>	<b>62</b>	<b>35</b>	<b>111</b>	<b>26</b>	<b>1</b>	<b>138</b>	<b>18</b>	<b>14</b>

<u>Date</u>	<u>Cars</u>			<u>Total</u> <u>Cars</u>	<u>Commercial</u>	<u>Motorcycles</u>	<u>Total</u> <u>Vehicles</u>	<u>Max/Hr</u>	<u>Off-</u> <u>screen</u>
	<25mph	25-30 mph	>30 mph						
9/8	6	36	12	54	4	0	58	11	8
9/9	13	43	19	75	7	0	82	14	11
9/10	12	40	26	78	12	4	94	11	4
9/11	10	32	28	70	20	1	91	14	4
9/12	22	43	22	87	18	1	106	13	11
9/13	24	36	15	75	16	1	92	18	6
9/14	21	55	25	101	4	0	105	16	8
<b>AVG</b>	<b>15</b>	<b>41</b>	<b>21</b>	<b>77</b>	<b>12</b>	<b>1</b>	<b>90</b>	<b>14</b>	<b>7</b>

Total vehicle users dropped approximately 38% from August to September. Commercial vehicles make up approximately 17% of all vehicle traffic. Motorcycles represented a small percentage with occasional riders. During August, total vehicle count at the eastern location was an average of 124 vehicles per day (range 87-150) with the maximum in one hour being 19 (range 11-19). During September, the average dropped to 72 vehicles per day (range 54-95) with the maximum in one hour being 18 (range 9-18). For



the western location, the August daily average was 138 vehicles (range 93-180) with the maximum number of vehicles in one hour being 22 (range 12-22). The average in September dropped to 90 (range 58-106) with the maximum on one hour being 18 (range 11-18).

Based on all daily totals combined at both locations during both weeks of observation, the ratio of non-vehicular users (1,575) to vehicular users (2,962) was 0.53. In other words, for every 2 vehicular users, there is one non-vehicular user of Traverse Lake Road. The historical pattern is a neighborhood mixed-use road where residents use the road to walk, bike, and run, even at times with strollers and dogs.

For more information, contact David Skjaerlund, PhD, chair of LTLA's TLR Workgroup, at [FarMoreGlory@gmail.com](mailto:FarMoreGlory@gmail.com).

TLR Workgroup  
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