

December 21, 2022

Mr. Bruce E. Albright 1210 E Frazee Ave Vergas, MN 56587

Re:

Speed Study on CSAH 4 and CSAH 60 in Vergas

Dear Bruce:

Based on your request for a Speed Study on a section of County State Aid Highway (CSAH) 4 and CSAH 60 in Vergas, dated February 7, 2021, the Otter Tail County Board of Commissioners adopted Resolution 2021-32 on February 23, 2021 that the Minnesota Department of Transportation (Mn/DOT) proceed with a study in this area.

Mn/DOT has completed their study and are not recommending any changes to the speed limit in this area. Attached for your information is a copy of their letter and study results dated December 19, 2022.

We will be revising the 55 mph speed limit sign with an End 40 mph sign as recommended.

If you have any questions or require more information, please feel free to contact me at any time.

Sincerely,

Otter Tail County Highway Department

Charles H. Grotte, P.E.

Ch Hrot

**County Engineer** 

Cc: File

Matthew Yavarow, Assistant County Engineer Ricky Swanberg, Lead Sign Technician Julie Lammers, City of Vergas







MnDOT District 4 1000 Highway 10 West Detroit Lakes, MN 56501

December 19, 2022

Charles H. Grotte, P.E.
County Engineer
Otter Tail County Highway Dept.
505 South Court Street, Suite 1
Fergus Falls, MN 56537

Dear Mr. Grotte,

MnDOT received a speed study request for County State Aid Highways (CSAH) 4 and 60 in the City of Vergas. The speed study was requested by a Resolution from the Otter Tail County Board of Commissioners on behalf of the City of Vergas.

MnDOT has completed the speed study for this section of CSAH 60 on the northwest end of Long Lake at the intersection of CSAH 4. A radar check was conducted on CSAH 60 where the current posted speed limit is 40 mph westbound entering the City of Vergas and 55 mph eastbound leaving the City of Vergas. The radar check showed that the 85th percentile speed was 48 mph for vehicles traveling eastbound, and 47 mph for vehicles traveling westbound. The 85th percentile speed reflects a safe speed for existing conditions as perceived by most of the drivers. Speed checks north of CSAH 60 on CSAH 4 were not conducted as this is a stop condition for a T-intersection.

While the road curves around the lake in this area, there appears to be adequate sight lines for the existing intersections. To address the numerous driveways on this stretch of roadway, the county has striped this section as no passing.

MnDOT also researched the crashes for the last five years along CSAH 60 within the study area. The crash reports showed that there were 4 crashes in the last 5 years on this segment of road. There were no injuries resulting from the crashes.

Based on the information above, a reduction in the current 40 mph speed limit is not recommended. The present speed limit is appropriate for CSAH 60 in the area requested to be studied. The existing 55 mph speed limit sign on the north side of Long Lake was installed by MnDOT when this roadway was MN TH 228. One suggestion for consideration would be to remove the eastbound 55 mph speed limit sign and replace it with an End 40 mph sign. The 55 mph speed limit sign is not required as this is a statutory speed limit. The End 40 mph sign will reinforce the existing speed limit and may discourage drivers from speeding up as they leave the City of Vergas prior to the intersection of CSAH 4.

Thank you for your request.

Frudy a Kordosky

Sincerely,

Trudy A. Kordosky

District Traffic Engineer

CC: Nathan Gannon, DSAE

**Equal Opportunity Employer** 



## FIELD SPEED SURVEY SUMMARY

Road # OTC 60
Ref. Pt.
County OTTER TAIL
Date 6/7/2021
Day Monday

Zone 40 MPH
Time 6:30-8:30 AM

Location BEACH/RA ENTRANCE

Weather CLEAR
Machine
Observer(s)

 Road Type
 2-lane

 NB: 85th %ile
 63
 MPH
 Pace
 53
 to

 SB: 85th %ile
 62
 MPH
 Pace
 52
 to

62 61

| PASSENGER VEHICLES |                     |              |                  |            |                |                     |       |                  |            |  |  |
|--------------------|---------------------|--------------|------------------|------------|----------------|---------------------|-------|------------------|------------|--|--|
| ~ s                | IORTH BOUN          | I EAST BOUND |                  |            | S o            |                     |       |                  |            |  |  |
| SPEED (mph)        | INDIVIDUAL VEHICLES |              | ACCUMULATED VEH. |            | SPEED<br>(mph) | INDIVIDUAL VEHICLES |       | ACCUMULATED VEH. |            |  |  |
| ] ≥ [[             | # of vehicles       | % vehicles   | # of vehicles    | % vehicles | E E            | # of vehicles       |       |                  | % vehicles |  |  |
| 80                 |                     | 0.0%         | 110              | 100%       | 80             |                     | 0.0%  | 96               | 100%       |  |  |
| 79                 |                     | 0.0%         | 110              | 100%       | 79             |                     | 0.0%  | 96               | 100%       |  |  |
| 78                 |                     | 0.0%         | 110              | 100%       | 78             |                     | 0.0%  | 96               | 100%       |  |  |
| 77                 |                     | 0.0%         | 110              | 100%       | 77             |                     | 0.0%  | 96               | 100%       |  |  |
| 76                 | 1                   | 0.9%         | 110              | 100%       | 76             |                     | 0.0%  | 96               | 100%       |  |  |
| 75                 |                     | 0.0%         | 109              | 99%        | 75             |                     | 0.0%  | 96               | 100%       |  |  |
| 74                 |                     | 0.0%         | 109              | 99%        | 74             |                     | 0.0%  | 96               | 100%       |  |  |
| 73                 |                     | 0.0%         | 109              | 99%        | 73             |                     | 0.0%  | 96               | 100%       |  |  |
| 72                 |                     | 0.0%         | 109              | 99%        | 72             |                     | 0.0%  | 96               | 100%       |  |  |
| 71                 | 1                   | 0.9%         | 109              | 99%        | 71             | 2                   | 2.1%  | 96               | 100%       |  |  |
| 70                 |                     | 0.0%         | 108              | 98%        | 70             |                     | 0.0%  | 94               | 98%        |  |  |
| 69                 |                     | 0.0%         | 108              | 98%        | 69             |                     | 0.0%  | 94               | 98%        |  |  |
| 68                 | 1                   | 0.9%         | 108              | 98%        | 68             |                     | 0.0%  | 94               | 98%        |  |  |
| 67                 |                     | 0.0%         | 107              | 97%        | 67             |                     | 0.0%  | 94               | 98%        |  |  |
| 66                 | 1                   | 0.9%         | 107              | 97%        | 66             | 1                   | 1.0%  | 94               | 98%        |  |  |
| 65                 | 4                   | 3.6%         | 106              | 96%        | 65             | 4                   | 4.2%  | 93               | 97%        |  |  |
| 64                 | 6                   | 5.5%         | 102              | 93%        | 64             | 3                   | 3.1%  | 89               | 93%        |  |  |
| 63                 | 3                   | 2.7%         | 96               | 87%        | 63             | 4                   | 4.2%  | 86               | 90%        |  |  |
| 62                 | 4                   | 3.6%         | 93               | 85%        | 62             | 4                   | 4.2%  | 82               | 85%        |  |  |
| 61                 | 5                   | 4.5%         | 89               | 81%        | 61             | 5                   | 5.2%  | 78               | 81%        |  |  |
| 60                 | 11                  | 10.0%        | 84               | 76%        | 60             | 6                   | 6.3%  | 73               | 76%        |  |  |
| 59                 | 5                   | 4.5%         | 73               | 66%        | 59             | 10                  | 10.4% | 67               | 70%        |  |  |
| 58                 | 15                  | 13.6%        | 68               | 62%        | 58             | 2                   | 2.1%  | 57               | 59%        |  |  |
| 57                 | 11                  | 10.0%        | 53               | 48%        | 57             | 10                  | 10.4% | 55               | 57%        |  |  |
| 56                 | 12                  | 10.9%        | 42               | 38%        | 56             | 12                  | 12.5% | 45               | 47%        |  |  |
| 55                 | 9                   | 8.2%         | 30               | 27%        | 55             | 9                   | 9.4%  | 33               | 34%        |  |  |
| 54                 | 3                   | 2.7%         | 21               | 19%        | 54             | 9                   | 9.4%  | 24               | 25%        |  |  |
| 53                 | 9                   | 8.2%         | 18               | 16%        | 53             | 6                   | 6.3%  | 15               | 16%        |  |  |
| 52                 | 3                   | 2.7%         | 9                | 8%         | 52             | 6                   | 6.3%  | 9                | 9%         |  |  |
| 51                 | 2                   | 1.8%         | 6                | 5%         | 51             | 1                   | 1.0%  | 3                | 3%         |  |  |
| 50                 | 2                   | 1.8%         | 4                | 4%         | 50             | 2                   | 2.1%  | 2                | 2%         |  |  |
| 49                 | 1                   | 0.9%         | 2                | 2%         | 49             |                     | 0.0%  | 0                | 0%         |  |  |
| 48                 | 1                   | 0.9%         | 1                | 1%         | 48             |                     | 0.0%  | 0                | 0%         |  |  |
| 47                 |                     | 0.0%         | 0                | 0%         | 47             |                     | 0.0%  | 0                | 0%         |  |  |
| 46                 |                     | 0.0%         | 0                | 0%         | 46             |                     | 0.0%  | 0                | 0%         |  |  |
| 45                 |                     | 0.0%         | 0                | 0%         | 45             |                     | 0.0%  | 0                | 0%         |  |  |
| 44                 |                     | 0.0%         | 0                | 0%         | 44             |                     | 0.0%  | 0                | 0%         |  |  |
| 43                 |                     | 0.0%         | 0                | 0%         | 43             |                     | 0.0%  | 0                | 0%         |  |  |
| 42                 |                     | 0.0%         | 0                | 0%         | 42             |                     | 0.0%  | 0                | 0%         |  |  |
| 41                 |                     | 0.0%         | 0                | 0%         | 41             |                     | 0.0%  | 0                | 0%         |  |  |
| 40                 |                     | 0.0%         | 0                | 0%         | 40             |                     | 0.0%  | 0                | 0%         |  |  |



## FIELD SPEED SURVEY SUMMARY

Road # OTC 4 Ref. Pt. County Otter Tail
Date 8/16/2019
Day Friday

Zone <u>55</u> Time <u>7:30</u> MPH AM Weather clear

Machine

Observer(s)

Location Just east of OTC 60

64

Road Type 2-lane NB: 85th %ile SB: 85th %ile 63

MPH MPH Pace 56 Pace . 58

65 to 67 to

| PASSENGER VEHICLES |                       |              |                  |            |             |  |              |                  |            |
|--------------------|-----------------------|--------------|------------------|------------|-------------|--|--------------|------------------|------------|
| <u>~ S</u>         | ORTH BOUNI EAST BOUND |              |                  |            |             | SOUTH BOUND                              |              |                  |            |
| SPEED<br>(mph)     | INDIVIDUAL VEHICLES   |              | ACCUMULATED VEH. |            | SPEED (mph) | INDIVIDUAL VEHICLES                      |              | ACCUMULATED VEH. |            |
| 9 8                | # of vehicles         | % vehicles   | # of vehicles    | % vehicles | 3 8         | # of vehicles                            | % vehicles   | # of vehicles    | % vehicles |
| 80                 |                       | 0.0%         | 76               | 100%       | 80          |  | 0.0%         | 53               | 100%       |
| 79                 | 1                     | 1.3%         | 76               | 100%       | 79          |  | 0.0%         | 53               | 100%       |
| 78                 |                       | 0.0%         | 75               | 99%        | 78          |  | 0.0%         | 53               | 100%       |
| 77                 |                       | 0.0%         | 75               | 99%        | 77          |  | 0.0%         | 53               | 100%       |
| 76                 |                       | 0.0%         | 75               | 99%        | 76          |  | 0.0%         | 53               | 100%       |
| 75                 |                       | 0.0%         | 75               | 99%        | 75          |  | 0.0%         | 53               | 100%       |
| 74                 |                       | 0.0%         | 75               | 99%        | 74          | 7-11-11-11-11-11-11-11-11-11-11-11-11-11 | 0.0%         | 53               | 100%       |
| 73                 |                       | 0.0%         | 75               | 99%        | 73          |  | 0.0%         | 53               | 100%       |
| 72                 |                       | 0.0%         | 75               | 99%        | 72          | 1  | 1.9%         | . 53             | 100%       |
| 71                 |                       | 0.0%         | 75               | 99%        | 71          |  | 0.0%         | 52               | 98%        |
| 70                 |                       | 0.0%         | 75               | 99%        | 70          |  | 0.0%         | 52               | 98%        |
| 69                 |                       | 0.0%         | 75               | 99%        | 69          |  | 0.0%         | 52               | 98%        |
| 68                 | 1                     | 1.3%         | 75               | 99%        | 68          | 1  | 1.9%         | 52               | 98%        |
| 67                 | 1                     | 1.3%         | 74               | 97%        | 67          | 1  | 1.9%         | 51               | 96%        |
| 66                 | 1                     | 1.3%         | 73               | 96%        | 66          | 2  | 3.8%         | 50               | 94%        |
| 65                 | 5                     | 6.6%         | 72               | 95%        | 65          | 2  | 3.8%         | 48               | 91%        |
| 64                 | 2                     | 2.6%         | 67               | 88%        | 64          | 2  | 3.8%         | 46               | 87%        |
| 63                 | 1                     | 1.3%         | 65               | 86%        | 63          | 2  | 3.8%         | 44               | 83%        |
| 62                 | 4                     | 5.3%         | 64               | 84%        | 62          | 4  | 7.5%         | 42               | 79%        |
| 61                 | 5                     | 6.6%         | 60               | 79%        | 61          | 6  | 11.3%        | 38               | 72%        |
| 60                 | 7                     | 9.2%         | 55               | 72%        | 60          | 2  | 3.8%         | 32               | 60%        |
| 59                 | 3                     | 3.9%         | 48               | 63%        | 59          | 6  | 11.3%        | 30               | 57%        |
| 58                 | 3                     | 3.9%         | 45               | 59%        | 58          | 5  | 9.4%         | 24               | 45%        |
| 57                 | 7                     | 9.2%         | 42               | 55%        | 57          | 1  | 1.9%         | 19               | 36%        |
| 56                 | 3                     | 3.9%         | 35               | 46%        | 56          | 1  | 1.9%         | 18               | 34%        |
| 55                 | 2                     | 2.6%         | 32               | 42%        | 55          | 3  | 5.7%         | 17               | 32%        |
| 54                 | 1                     | 1.3%         | 30               | 39%        | 54          | 2  | 3.8%         | 14               | 26%        |
| 53<br>52           | 2                     | 2.6%         | 29               | 38%        | 53          | 1  | 1.9%         | 12               | 23%        |
| 52                 | 3                     | 2.6%<br>3.9% | 27<br>25         | 36%        | 52          | 3  | 5.7%         | 11               | 21%        |
| 50                 | 6                     | 7.9%         |                  | 33%        | 51          | 2  | 3.8%         | 8                | 15%        |
| 49                 | 1                     | 1.3%         | 22<br>16         | 29%        | 50          | 3  | 5.7%         | 6                | 11%        |
| 48                 | 2                     | 2.6%         | 15               | 21%<br>20% | 49          |  | 0.0%         | 3                | 6%         |
| 47                 | 7                     | 9.2%         | 13               | 17%        | 48<br>47    |  | 0.0%         | 3                | 6%         |
| 46                 | 1                     | 1.3%         | 6                | 8%         | 46          | 3  | 0.0%<br>5.7% | 3                | 6%         |
| 45                 | 1                     | 1.3%         | 5                | 7%         |             | 3  |              | 3                | 6%         |
| 44                 | 2                     | 2.6%         | 4                | 5%         | 45<br>44    |  | 0.0%         | 0                | 0%         |
| 43                 |                       | 0.0%         | 2                | 3%         | 43          |  | 0.0%         | 0                | 0%         |
| 42                 |                       | 0.0%         | 2                | 3%         | 42          |  | 0.0%         | 0                | 0%<br>0%   |
| 41                 |                       | 0.0%         | 2                | 3%         | 41          |  | 0.0%         | 0                | 0%         |
| 40                 | 2                     | 2.6%         | 2                | 3%         | 40          |  | 0.0%         | 0                | 0%         |
|                    |                       |              |                  | 5,0 II     | -10         |  | 0.0 %        | U                | U%         |



## FIELD SPEED SURVEY SUMMARY

| Road # OTC 60<br>Ref. Pt. | Zone 40<br>Time 7:30 | MPH<br>AM | Location Loon Lake Park Entrance |       |     |        |    |    |    |  |
|---------------------------|----------------------|-----------|----------------------------------|-------|-----|--------|----|----|----|--|
| County Otter Tail         | Weather clear        |           | Road Type 2                      | -lane |     |        |    |    |    |  |
| Date 8/15/2019            | Machine              |           | EB: 85th %ile                    | 47    | MPH | Pace   | 38 | to | 47 |  |
| Day Thursday              | Observer(s)          |           | WB: 85th %ile                    | 48    | MPH | Pace - | 37 | to | 46 |  |

| PASSENGER VEHICLES |                |             |                  |            |                |                          |        |                  |            |  |
|--------------------|----------------|-------------|------------------|------------|----------------|--------------------------|--------|------------------|------------|--|
| (0                 |                | EAST BOUND  |                  | ACCENCE    |                |                          |        |                  |            |  |
| SPEEL<br>(mph)     | INDIVIDU       | AL VEHICLES | ACCUMULATED VEH. |            | SPEED<br>(mph) | WEST BOUND               |        |                  |            |  |
| SPEED (mph)        | # of vehicles  | 1           |                  |            | 카범             | INDIVIDUAL VEHICLES      |        | ACCUMULATED VEH. |            |  |
|                    | # Of Verticles | % vehicles  | # of vehicles    | % vehicles |                | # of vehicles % vehicles |        | # of vehicles    | % vehicles |  |
| 60                 |                | 0.0%        | 146              | 100%       | 60             |                          | 0.0%   | 98<br>98         | 100%       |  |
| 59                 |                | 0.0%        | 146              | 100%       | 59             | 1                        | 1 1.0% |                  | 100%       |  |
| 58                 |                | 0.0%        | 146              | 100%       | 58             | 0.0%                     |        | 97               | 99%        |  |
| 57                 |                | 0.0%        | 146              | 100%       | 57             |                          | 0.0%   | 97               | 99%        |  |
| 56                 |                | 0.0%        | 146              | 100%       | 56             |                          | 0.0%   | 97               | 99%        |  |
| 55                 |                | 0.0%        | 146              | 100%       | 55             |                          | 0.0%   | 97               | 99%        |  |
| 54                 | 1              | 0.7%        | 146              | 100%       | 54             | 1                        | 1.0%   | 97               | 99%        |  |
| 53                 |                | 0.0%        | 145              | 99%        | 53             |                          | 0.0%   | 96               | 98%        |  |
| 52                 |                | 0.0%        | 145              | 99%        | 52             | 1                        | 1.0%   | 96               | 98%        |  |
| 51                 | 1              | 0.7%        | 145              | 99%        | 51             | 3                        | 3.1%   | 95               | 97%        |  |
| 50                 | 3              | 2.1%        | 144              | 99%        | 50             | 2                        | 2.0%   | 92               | 94%        |  |
| 49                 | 3              | 2.1%        | 141              | 97%        | 49             | 5                        | 5.1%   | 90               | 92%        |  |
| 48                 | 6              | 4.1%        | 138              | 95%        | 48             | 3                        | 3.1%   | 85               | 87%        |  |
| 47                 | 8              | 5.5%        | 132              | 90%        | 47             |                          | 0.0%   | 82               | 84%        |  |
| 46                 | 8              | 5.5%        | 124              | 85%        | 46             | 4                        | 4.1%   | 82               | 84%        |  |
| 45                 | 9              | 6.2%        | 116              | 79%        | 45             | 4                        | 4.1%   | 78               | 80%        |  |
| 44                 | 13             | 8.9%        | 107              | 73%        | 44             | 3                        | 3.1%   | 74               | 76%        |  |
| 43                 | 17             | 11.6%       | 94               | 64%        | 43             | 9                        | 9.2%   | 71               | 72%        |  |
| 42                 | 9              | 6.2%        | 77               | 53%        | 42             | 7                        | 7.1%   | 62               | 63%        |  |
| 41                 | 11             | 7.5%        | 68               | 47%        | 41             | 8                        | 8.2%   | 55               | 56%        |  |
| 40                 | 12             | 8.2%        | 57               | 39%        | 40             | 10                       | 10.2%  | 47               | 48%        |  |
| 39                 | 13             | 8.9%        | 45               | 31%        | 39             | 5                        | 5.1%   | 37               | 38%        |  |
| 38                 | 12             | 8.2%        | 32               | 22%        | 38             | 14                       | 14.3%  | 32               | 33%        |  |
| 37                 | 7              | 4.8%        | 20               | 14%        | 37             | 5                        | 5.1%   | 18               | 18%        |  |
| 36                 | 3              | 2.1%        | 13               | 9%         | 36             | 1                        | 1.0%   | 13               | 13%        |  |
| 35                 | 4              | 2.7%        | 10               | 7%         | 35             | 2                        | 2.0%   | 12               | 12%        |  |
| 34                 | 4              | 2.7%        | 6                | 4%         | 34             | 5                        | 5.1%   | 10               | 10%        |  |
| 33                 |                | 0.0%        | 2                | 1%         | 33             | 1                        | 1.0%   | 5                | 5%         |  |
| 32                 | 2              | 1.4%        | 2                | 1%         | 32             | 3                        | 3.1%   | 4                | 4%         |  |
| 31                 |                | 0.0%        | 0                | 0%         | 31             | 1                        | 1.0%   | 1                | 1%         |  |
| 30                 |                | 0.0%        | 0                | 0%         | 30             |                          | 0.0%   |                  | 0%         |  |
| 29                 |                | 0.0%        | 0                | 0%         | 29             |                          | 0.0%   | 0                | 0%         |  |
| 28                 |                | 0.0%        | 0                | 0%         | 28             |                          | 0.0%   | 0                | 0%         |  |
| 27                 |                | 0.0%        | 0                | 0%         | 27             |                          | 0.0%   | 0                | 0%         |  |
| 26                 |                | 0.0%        | 0                | 0%         | 26             |                          | 0.0%   | 0                | 0%         |  |
| 25                 |                | 0.0%        | 0                | 0%         | 25             |                          | 0.0%   | 0                | 0%         |  |
| 24                 |                | 0.0%        | 0                | 0%         | 24             |                          | 0.0%   | 0                | 0%         |  |
| 23                 |                | 0.0%        | 0                | 0%         | 23             |                          | 0.0%   | 0                | 0%         |  |
| 22                 |                | 0.0%        | 0                | 0%         | 22             |                          | 0.0%   | 0                | 0%         |  |
| 21                 |                | 0.0%        | 0                | 0%         | 21             |                          | 0.0%   | 0                | 0%         |  |
| 20                 |                | 0.0%        | 0                | 0%         | 20             |                          | 0.0%   | 0                | 0%         |  |