



**ITASCA COUNTY
BOARD OF COMMISSIONERS**

Itasca County Courthouse
123 NE 4th Street
Grand Rapids, MN 55744
(218) 327-2847

Tuesday, February 21, 2023

2:00 PM

Itasca County Boardroom

FINAL

SPECIAL SESSION MINUTES

I. CALL TO ORDER

Chair Ives called the meeting to order at 2:00 PM.

Attendee Name	Title	Status	Arrived
Cory Smith	District #1	Present	2:00 PM
Terry Snyder	District #2	Present	2:00 PM
John Johnson	District #3	Present	2:00 PM
Burl Ives	District #4	Present	2:00 PM
Casey Venema	District #5	Present	2:00 PM

II. REGULAR AGENDA

1. System Overview

County Engineer Karin Grandia provided a Transportation system overview, including information regarding the 2023 5-Year Plan.

RESULT: INFORMATIONAL - NO ACTION TAKEN

2. CSAH 61 Citizen Concern - Coleraine

Assistant County Engineer Ryan Sutherland provided an update regarding the citizen concern relative to the CSAH 61 safety near the schools.

RESULT: INFORMATIONAL - NO ACTION TAKEN

III. ADJOURN

Chair Ives adjourned the meeting at 2:28 PM.

ATTEST

Burl Ives
Chair of the County Board

Brett Skyles
Clerk of the County Board



**ITASCA COUNTY
BOARD OF COMMISSIONERS**

Itasca County Courthouse
123 NE 4th Street
Grand Rapids, MN 55744

Tuesday, February 21, 2023

REQUEST FOR BOARD ACTION: RBA-2023-2908

DEPARTMENT: Transportation

TIME REQUESTED: 15 Minutes

PRESENTER: Karin Grandia

AGENDA ITEM:

System Overview

BOARD ACTION REQUESTED:

Informational

BACKGROUND: Every year we update the 5-year plan for transportation projects. The first part of the document includes a wide variety of information that provides a background understanding of the Itasca County system. It covers the following topics:

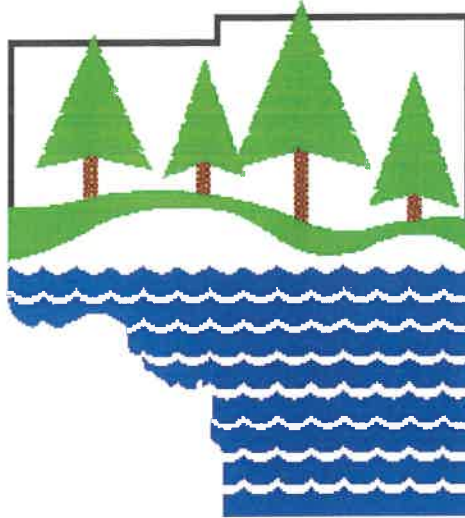
- Itasca County Transportation Department Overview
- Road Jurisdiction
- Funding Sources
- Typical Funding Amounts
- Protecting our Pavement Investment
- Costs of a Paved Road
- Gravel vs Paved Miles in Itasca County
- System Preservation Priorities

COUNTY ATTORNEY REVIEW: N/A

SUPPORTING DOCUMENTATION:

1. 2023 5-Year Plan

RESULT:	INFORMATIONAL - NO ACTION TAKEN
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Itasca County

2023

5-Year Plan For Highway Improvement Projects

Itasca County Engineer
Karin Grandia
327-2853

March 7, 2023

Introduction

Itasca County annually reviews and updates the Five-Year Plan for Highway Improvement Projects. The annual review process allows the County Board and staff the opportunity to reassess the Highway Improvement Plan and to make adjustments due to changes in financial restrictions, highway conditions, public input, and goals and priorities.

The 2023 Five Year Plan is a flexible five-year action plan for bridge and highway projects. Only construction projects listed during the current year are funded.

- Notice - Itasca County 5 Year Plan for Road and Bridge Construction Projects

Public input concerning the Itasca County 5 Year Plan for Road and Bridge projects will be accepted at the regularly scheduled County Board Work Session on March 14, 2023, in the County Board Room of the Itasca County Courthouse. County Board members will be available to hear verbal input. Written comment will be accepted at the Transportation Department until March 31, 2023. A copy of the proposed plan and maps showing the projects and their locations is available for review at the Transportation Department in the County Courthouse and online on the Itasca County website under the Transportation Department tab.

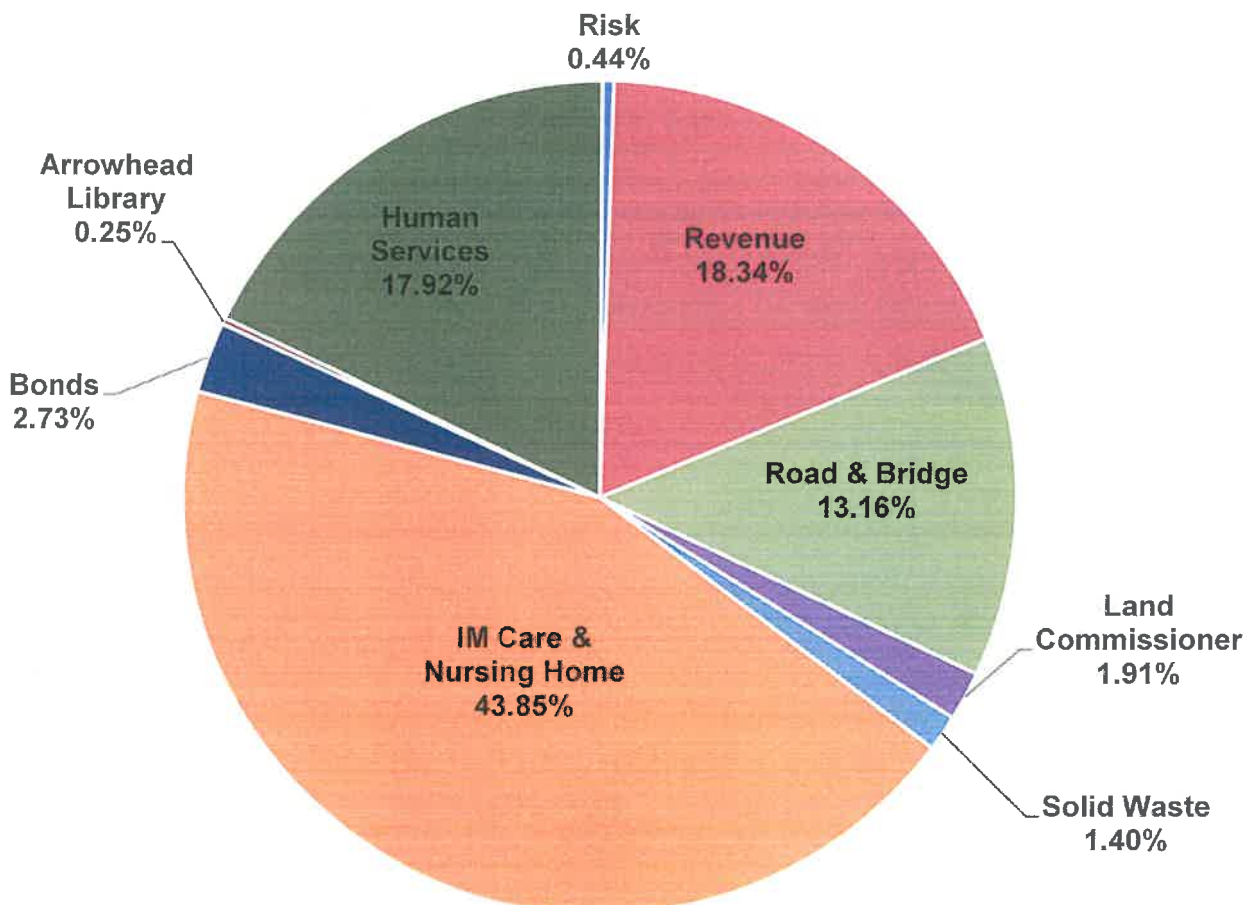
Itasca County Transportation Department Overview

The County Transportation Department is responsible for maintaining approximately 1340 miles of roadway and 137 bridges. The department also can be directly or indirectly involved with the maintenance of roadways under the jurisdiction of the 16 cities, 39 organized townships, and the 38 unorganized townships in the county.

The County Engineer, through the staff, is responsible for the administration of both the highway maintenance division and the highway construction division. The maintenance division consists of approximately 73 employees divided between 4 maintenance districts and central purchasing and repair. These employees are responsible for graveling, grading, drainage, signing, snow removal, ice control, equipment repair and minor road improvements. The construction division consists of approximately 12 employees and is responsible for the design and construction administration of all contracted road and bridge improvement projects.

As is shown below, the Transportation Department accounts for approximately 13.16% of the proposed \$161,632,982 - 2023 Itasca County Budget. In addition to the \$21,275,502 administered by the Transportation Department as part of the Itasca County Budget, the construction division administers on average an additional \$1,000,000 per year in federal construction dollars spent in Itasca County.

2023 Itasca County Budget



Road Jurisdiction

In Itasca County, there are generally three levels of road jurisdiction:

- State - Consisting of Trunk Highways - Examples include TH 169, TH 2, TH 1 etc. These roads are generally higher volume highways, which provide primary transportation routes between cities and regions within the state.
- County - Consisting of;
- County State Aid Highways (CSAH) - Examples include CSAH 7, CSAH 19, and CSAH 3 etc. These roads are generally roads which serve as local transportation routes between cities and regions within the county.
 - County Municipal State Aid Highways - Consisting of Municipal State Aid Highways located within cities with populations less than 5000. Examples include CSAH 61 in Coleraine and CSAH 81 in Deer River
 - County Roads - Examples include County Road 449, County Road 128, and County Road 539. These roads are generally lesser traveled and serve as access to local population areas. All county roads have 3-digit numbers.
 - Unorganized Township Roads - These are generally local gravel roads located within an unorganized township. By state statute, the county is required to provide maintenance on these roads. These roads have 3-digit county road numbers.
- Local - Consisting of:
- Municipal State Aid Streets - Consisting of Municipal State Aid Streets located within cities with populations greater than 5000.
 - Local Municipal Streets - These are generally local streets serving municipal subdivisions.
 - Organized Township Roads - These are local roads within organized townships. Examples include Southwood Road in Harris Township or Walker Road in Spang Township.
 - Federal Forest Service Roads - These are local recreational or logging roads having forest service jurisdiction.
 - Department of Natural Resources Roads – These are local recreational or logging roads having DNR jurisdiction.
 - County Forest Access Roads - These roads are under the jurisdiction of the County Land Commissioner (Land Department). They are generally used for timber access and recreational uses. They may be gated or receive little or no maintenance.

Funding Sources

Funding Sources for Itasca County consist of a combination of Federal, State and Local Funds.

Federal Funds

- Federal Funds spent on road projects within Itasca County are originally allocated by Congress as part of a nationwide transportation bill. The source of the money is based on the federal portion of the gas tax. The majority of these funds which make it to Minnesota are spent on state administered trunk highway projects.
- Itasca County can and does receive federal funds. The county has historically used federal funds to supplement local funding for bridge projects, road projects or railroad crossing projects. In addition, since the Chippewa National Forest is located within the county, the county periodically receives a portion of the Federal Forest Highway Fund. These funds can only be spent on roads within the forest boundary. The projects are prioritized by the forest service and the county, and the projects are administered by the county.
- Federal funds can only be spent on qualifying projects and generally require a substantial increase in project administration costs due to the increase in required federal documentation. The funds also generally require a minimum of 20% local match.

State Aid Funds

- The county receives a yearly allotment from the state to be spent on county state aid and municipal aid routes. The source of this allotment is primarily the state gas tax. These funds can only be spent on qualifying state aid routes and have historically been used for construction and maintenance. This allotment is approximately 50% of the funding for the transportation department.

Bridge Bonding

- Bridge Bonding funds are allocated by the Minnesota legislature every other year. The county can and does receive bridge bonding funds. These funds can be used on any eligible bridge in Itasca County on either a CSAH, a county road or a township bridge. State Bridge Bonding funds are allocated to the county as grants (no repayment by the county).

County Funds

- The County Board allocates a portion of its yearly budget to the transportation department for construction and maintenance of county roads. The funding primarily comes from local property taxes. These funds are generally spent on local road and maintenance projects. The amount available each year can vary greatly based on overall county budget needs.
- In 2014, the County Board implemented a wheelage tax on vehicles registered in Itasca County. This tax is estimated to generate approximately \$430,000 per year. These funds are used to supplement the maintenance and construction on roads not qualifying for state aid funding.

Unorganized Township Funds

- The unorganized township fund receives monies from the road and bridge levy in each unorganized township. These funds are generally spent on local road and maintenance projects in unorganized township areas.

Typical Funding Amounts

Construction Funding

It is difficult to provide a 'Typical' funding year due to the variability of different funding sources. The following data is based on historical data and does not indicate future funding amounts.

Federal Funds

- On average, Itasca County receives over \$1,000,000 per year in federal funds for road and bridge projects.

State Aid Funds

- Each year Itasca County receives approximately \$11,300,000 of State Aid Funds. Of that amount, \$9,950,000 is regular state aid and \$1,350,000 is municipal state aid.
- The funding is split 60/40 so that approximately \$5,975,000 is allocated for State Aid construction and \$3,985,000 for maintenance.
- Approximately \$815,000 is allocated for Municipal County State Aid construction and \$540,000 is allocated for Municipal Maintenance.

Bridge Bonding

- State Bridge Bonding is a major source of funding for bridge construction projects and is allocated by the State Legislature. Over the past 5 years approximately \$650,000 per year has been available for bridge and railroad crossing construction projects. These funds vary from year to year.

County Funds

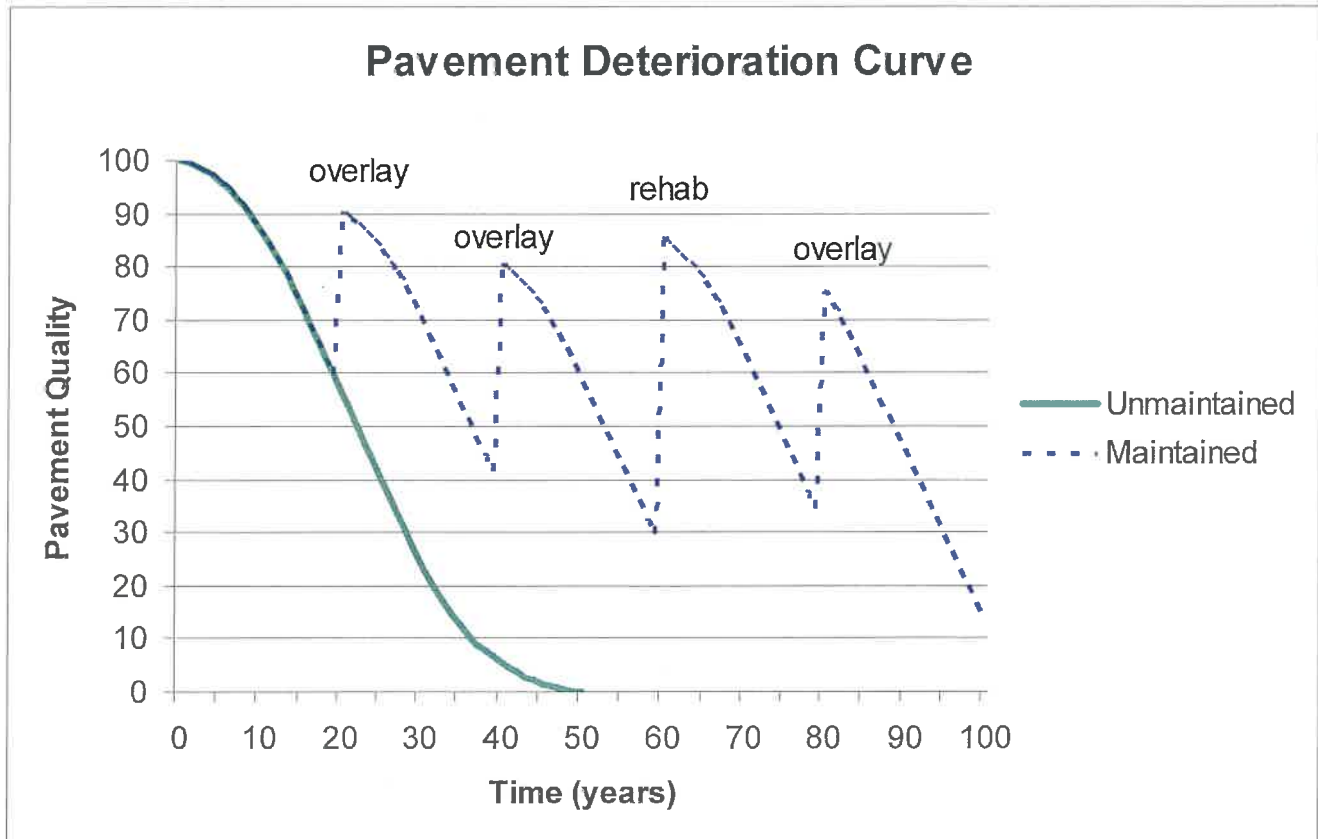
- County Construction funds are typically utilized to upgrade existing gravel County Roads to a bituminous surfaced road. These funds have not been available for many years due to budgeting constraints.
- County Preservation funds have remained at \$680,000 over the past 5 years and are supplemented with the monies collected from the wheelage tax, providing a total of \$1,100,000 for preservation. These funds are typically used on existing paved roads for contracted projects such as bituminous overlays, regrading and surfacing.
- The County averages \$310,000 per year for gravel production which is used to surface existing County gravel roads.

Other Funding

- Itasca County has received funding for projects from other sources including Unorganized Township Funding, Town Bridge and Town Road accounts.

Protecting our Pavement Investment

Pavements tend to deteriorate over time due to traffic loads and environmental effects. A graph of the life cycle of a typical bituminous road is shown below where the pavement rating is a relative evaluation of the condition of the road.



The solid line indicates how a pavement would perform with no maintenance. The road is graded and paved at year 0 and is at its best condition (Pavement Quality Index, PQI =100). The pavement will deteriorate over time and after about 30 to 35 years the pavement would deteriorate to the point where vehicle travel would be dangerous at best (PQI = 20).

The dashed line indicates the maintenance strategy of most transportation departments. Periodic overlays and rehabilitation projects are performed to increase the PQI on an interval which attempts to maximize the pavement's ride quality. Every 50 years a rehabilitation project is performed, which replaces culverts and addresses minor grade or subgrade issues. Approximately every 100 years, the road will require a major regrade project.

How much does a paved road Cost?

This County will review construction standards and consider:

- Reconstruct the grade of the road every 100 years.
- Rehabilitate the road every 50 years.
- Perform surface treatment every 20 years.

The following costs are used for budgeting road improvement projects:

1. \$ 1,150,000 per mile to reconstruct a road and surface with bituminous pavement.
2. \$ 325,000 per mile to rehabilitate an existing bituminous road.
3. \$ 130,000 per mile for surface treatment of an existing bituminous road.

The Cost cycle of 1 mile of road:

Year 1	Construct	@	\$ 1,150,000
Year 20	Surface Treatment	@	\$ 130,000
Year 40	Surface Treatment	@	\$ 130,000
Year 60	Rehabilitation	@	\$ 325,000
Year 80	Surface Treatment	@	\$ 130,000
Total			\$ 1,865,000

This equates to approximately **\$18,650 per mile per year** to maintain a bituminous road.

There are:

1. 603 total miles of paved roads (County Jurisdiction)
2. 506 of paved CSAH mileage
3. 97 of paved County funded road mileage (3-digit roads)

Therefore, to maintain our existing bituminous county roads we require the following yearly budget:

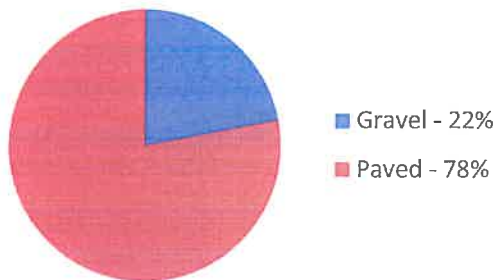
506 CSAH miles - \$ 9.4 million (current allocation at \$6.79 million)

97 County miles - \$1.8 million (current allocation at \$1.1 million)

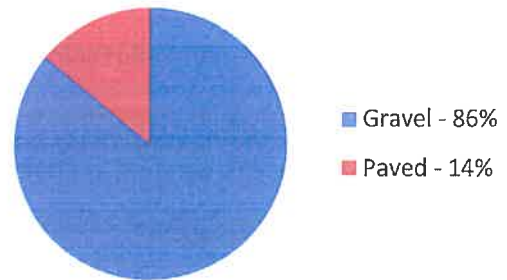
These figures do not include bridge projects, snow plowing, minor surface repairs or other incidental maintenance costs

Gravel vs. Paved

CSAH SYSTEM (649 MILES - TOTAL)



COUNTY SYSTEM (691 MILES - TOTAL)



Of the approximately 1340 miles of roads under Itasca County jurisdiction, approximately 48% are designated CSAH and 52% are designated County. In addition, approximately 45% of Itasca County Road miles are paved.

The average annual cost to maintain a bituminous road is approximately \$18,650 per mile based on construction and surface resurfacing costs over the expected life of the road.

The annual cost to maintain a gravel road surface can vary greatly and is usually directly related to the traffic volume on the road. The following table indicates an estimate of the road surface maintenance costs required for gravel roads with three traffic volume levels.

Road ADT	100	200	300
Surface Maintenance Costs (Grader time)			
Grader minutes per mile	60 minutes @ \$120.00/hr per mile	60 minutes @ \$120.00/hr per mile	60 minutes @ \$120.00/hr per mile
Number of grading passes per week	0.5	1	2
Grading weeks per year	26	26	26
Grading Cost per mile per year	\$ 1,560	\$ 6,240	\$ 9,360
Resurfacing Costs (Gravel)			
Re-gravel interval	20 years	10 years	6 years
Cost per mile per year	\$ 1,420	\$ 2,840	\$ 4,730
Chloride Costs			
Chloride Cost per mile per year	---	\$2,200	\$2,200
Total yearly cost per mile	\$ 3,144	\$ 8,488	\$ 13,720

As can be seen, the maintenance costs rise with the increase in daily traffic volume. The surface costs for a gravel road begin to justify paving at an ADT level of around 300 vehicles per day, from a maintenance perspective.

The following table lists the number of miles of gravel and bituminous surfaced roads under county jurisdiction. As can be seen, the majority of roads over 300 ADT have bituminous surface

NOTES:

- ADT means the Average Annual Daily Traffic count which is an estimate of the number of vehicles per day, calculated on an annual average.
- The State Aid Funding rules discourage the use of State Aid funds for paving roads under an ADT of 150 vehicles per day.

SURFACE TYPE - CATEGORIZED BY TRAFFIC COUNT						
	Surface type	0-100 ADT	100 -200 ADT	200 - 300 ADT	OVER 300 ADT	Total
CSAH SYSTEM	Paved (miles)	3	77	82	342	504
	Gravel (miles)	85	57	1	2	145
COUNTY ROAD SYSTEM	Paved (miles)	22	27	40	26	99
	Gravel (miles)	495	86	6	3	592
	Total	636	223	92	384	1,340

System Preservation Priorities

The County Transportation Department uses a variety of indicators to prioritize construction and rehabilitation projects. Some of these are:

- Safety
- Preservation of existing pavement
- Availability of funding
- Traffic count
- Cost participation by others
- Project grouping
- Maintenance costs
- Pavement Quality Index
- Economic Development
- Public request

These factors are evaluated on potential projects to arrive with the County 5-year Plan which is reviewed and updated on a yearly basis.

System Evaluation

Every two years Itasca County receives data from MnDOT on pavement quality. This data provides a relative ride and pavement condition rating to all paved State Aid and County Roads. This process provides a basis for potential future construction projects based on the condition of the existing road independent of other factors. The department then evaluates the individual projects as to a recommended type of construction project required to bring the roadway to an acceptable ride.

2023 - 5 Year Plan for Construction Projects

The following worksheets and maps detail the proposed 2023 - 5-year plan. It should be noted that this plan is subject to change based on available funding, project conflicts and engineering workload. Project cost and allotment estimates are preliminary and are used for planning purposes only. The detail sheets contain the following sections:

- 2023 through 2027 Highway Construction Project lists
- 2023 through 2027 Highway Construction Project Maps

Public Involvement

Public input concerning the Itasca County 5 Year Plan for Road and Bridge projects will be accepted at the regularly scheduled County Board Work Session on March 14, 2023, in the County Board Room of the Itasca County Courthouse. County Board members will be available to hear verbal input. Written comment will be accepted at the Transportation Department until March 31, 2023. A copy of the proposed plan and maps showing the projects and their locations is available for review at the Transportation Department in the County Courthouse and online at the Itasca County website under the Transportation Department tab.

Questions or comments can be addressed to:

Karin Grandia
Itasca County Engineer
123 4th Street NE
Grand Rapids, MN 55744
218-327-2853



**ITASCA COUNTY
BOARD OF COMMISSIONERS**

Itasca County Courthouse
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Tuesday, February 21, 2023

REQUEST FOR BOARD ACTION: RBA-2023-2909

DEPARTMENT: Transportation
PRESENTER: Ryan Sutherland

TIME REQUESTED: 5 Minutes

AGENDA ITEM:
CSAH 61 Citizen Concern - Coleraine

BOARD ACTION REQUESTED:
Informational

BACKGROUND:

Coleraine resident approached the county board at January 24, 2023 board meeting during citizen input over safety concerns on CSAH 61 in Coleraine.

I reached out to citizen directly to discuss their concerns and indicated that the county would be placing a radar sign out to gather both speed and traffic volume data and that we would review current inplace signing.

In the fall of 2022, the Transportation Department starting working with District 318/319 Safe Routes to School Coordinator to review speeds, traffic volume and signage at all schools near county roads. The thought process is that decisions are based on a fact driven consistent approach after sites are reviewed.

COUNTY ATTORNEY REVIEW: N/A

SUPPORTING DOCUMENTATION: None

RESULT:	INFORMATIONAL - NO ACTION TAKEN
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