

2023 COUNTY ROAD NEEDS STUDY

County: _____

Contact: _____
Name Phone Email

Preparer: _____ Date Prepared: _____

Aggregate Description

To determine the type and quality of aggregate used in your county, please check all boxes that apply. For example, if your county uses crushed, specification base gravel – select gravel, crushed material and specifications.

- Gravel
- Scoria
- Pit Run
- Screened
- Crushed Material
- Specifications
 - Fractured Faces
 - PI
 - Other _____
- Tested
- Other _____

Placement Practices

When aggregate overlays are placed in your county, please select the all practices that are used to apply an aggregate overlay.

- Truck Drop and Blade
 - Windrow/Equalize
 - Water/Rolling/Compaction
 - Reshaping
 - Pulling in Shoulders
 - Soft Spot Repair
 - Other _____
-

Operational Tasks

In this section, please provide a percentage of tasks that are done using county resources versus the percentage of work done by a contractor. For example, if your county owns the pit and does all of the crushing using county labor, 100% would be entered into the first column, and 0% in the second column.

Task	Performed by:	
	County	Contractor
Crushing		
Hauling		
Placement		
Blading		
Dust Control		
Base Stabilization		

Gravel Road Costs

Please report costs for gravel for county roads in the table below. The table asks for unit costs for graveling, maintaining, and operating gravel roads. If you are quoting contractor prices, please circle "yes" in the right-hand column.

Gravel/Scoria Cost			Is this Contractor Price?
Average Gravel/Scoria Cost (crushing & royalties at the pit)		<input type="checkbox"/> Per cu. yard <input type="checkbox"/> Per Ton	<input type="checkbox"/> Yes <input type="checkbox"/> No
Average Transportation Cost from Gravel Origin		<input type="checkbox"/> Per loaded mile <input type="checkbox"/> Per cu. yard <input type="checkbox"/> Per Ton	<input type="checkbox"/> Yes <input type="checkbox"/> No
Average trucking distance for aggregate		<input type="checkbox"/> Miles one-way <input type="checkbox"/> Miles roundtrip	
Truck Payload		<input type="checkbox"/> Cu. Yards <input type="checkbox"/> Tons	
Placement Cost		Per Mile	<input type="checkbox"/> Yes <input type="checkbox"/> No
Blading Cost		Annual cost per mile	<input type="checkbox"/> Yes <input type="checkbox"/> No
Dust Suppressant Cost		Per mile	<input type="checkbox"/> Yes <input type="checkbox"/> No
Base Stabilization Cost		Per mile	<input type="checkbox"/> Yes <input type="checkbox"/> No

Gravel Road Practices

This section asks for information regarding gravel road practices based upon differing traffic levels. Under the “Daily Traffic” row, please enter what you would consider low, medium and high traffic levels on gravel roads within your county. In the example below, low is categorized as less than 50 vehicles, medium 50-150 vehicles and high 150-350. This is expected to vary significantly from county to county, so please use your own estimates of traffic levels. Following the traffic entry, please enter the regravelling thickness, blading frequency, regravelling frequency, and whether dust suppressant or base stabilization are used at each of these traffic categories.

EXAMPLE/ENTER ACTUAL BELOW	Traffic Levels		
	Low	Medium	High
Daily Traffic (Total AADT)	>50	50-150	150-350
Average Regraveling Thickness (specify)	1 1/2"	3"	6"
Blading Frequency (# per year)	8	12	16
Regraveling Frequency (years between regravelling)	7	5	3
Dust Suppressant (yes/no)	no	no	Yes
Base Stabilization (yes/no)	no	no	Yes

County Entry	Traffic Levels		
	Low	Medium	High
Daily Traffic (Total AADT)			
Average Regraveling Thickness (specify)			
Blading Frequency (# per year)			
Regraveling Frequency (years between regravelling)			
Dust Suppressant (yes/no)			
Base Stabilization (yes/no)			

If you answered yes for Dust Suppressant – which type do you use?

If you answered yes for Base Stabilization – which type do you use?

Are you using Recycled Asphalt Products?

Gravel Road Condition

This section asks for information regarding gravel road conditions and is broken into two separate categories: Federal Aid, and Non-Federal Aid. Please provide a rough estimate of the percentage of unpaved roads by condition for these two categories.

Condition	% Federal Aid Roads (CMC)	% Non-Federal Aid Roads (non-CMC)
Very Good		
Good		
Fair		
Poor		
Total	100%	100%

Gravel Materials Specifications

If available, please attach a sample specification and sample gradation, or state materials specification number. If materials used on CMC routes differ from non-CMC routes, please provide sample specifications and gradation by system type, if available.

Comments or Suggestions (please attach additional sheets if needed):

Please complete this survey and email a copy to alan.dybing@ndsu.edu, or via US Mail to: UGPTI ATTN: Alan Dybing, NDSU Dept 2880, PO Box 6050, Fargo, ND 58108-6050 by **November 20, 2023**. Please direct any questions to Alan Dybing at 701.231.5988 or the email address above.

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