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# Rural Road News

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## North Dakota Road Users Reveal Their Perceptions of Rural Road Needs

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North Dakota's extensive road system, characterized by low traffic densities, nevertheless requires regular maintenance. Today, increased truck traffic and larger and heavier farm equipment have led to greater needs for maintenance on gravel and paved roads.

How do decision makers — legislators, transportation commissioners, road engineers and superintendents, county commissioners and township boards — make the tough choices in allocating resources to rural roads? Are their perceptions of needs the same as those of road users? Are road users willing to increase taxes to fund road improvements?

More than 1,200 decision makers (county engineers, road superintendents and county commissioners) and road users (rural commuters, farmers, mail carriers, school bus drivers and transportation superintendents) responded to a survey about road improvement needs. They were asked about three areas: physical roadway elements affecting safety, operational conditions that affect vehicle speed, and maintenance needs. They were also asked about emergency response and problem reporting and, finally, how road improvements might best be paid for.

### Physical Roadway Elements

- **Road Width:** School bus drivers and superintendents were most critical of road width; 25% of the school respondents rated

road width poor and only 35% thought road widths were good. Farmers and mail carriers, on the other hand, perceived road width more favorably, with about half viewing road width as good.

- **Ditch Steepness and Road Shoulders:** More than one-half of each user group perceived ditch steepness as fair to poor; most users also viewed road shoulder conditions as fair to poor.
- **Top 5 Road Improvements:** Asked to identify the roadway-related improvements they would like to see, respondents listed these top 5:
  1. More and better gravel
  2. More paved road
  3. Wider roads and shoulders
  4. Build roads up
  5. Replace and widen bridges
- **More Gravel?** Surprisingly, road users overwhelmingly would like to see more gravel on the roads — rather than specifying a need for more paving. With the statewide gravel shortage, this may be difficult to accommodate. Perhaps more paved roads, ranked second, may be an economical alternative for some gravel roads with higher traffic volumes.

### Operational Conditions

- **Road Signs:** Almost all road users (87%) felt there was adequate signing to warn motorists of potential hazards. Road users did have some recommendations regarding signing. First, they would like to see more railroad crossing signs. Second, school bus drivers reported a need for more signs

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indicating curves, particularly to aid substitute drivers less familiar with specific routes.

- **Other Road Elements:** Road users were also asked if any elements limited the speed they could travel within the speed limits. More than half said yes, reporting potholes, washboard roads, snow and loose gravel.
- **Top Improvements:** Road users' suggested operational improvements included these:
  1. More signs (railroad crossings, curves)
  2. Better road drainage
  3. Guard rails on bridges
  4. Reflectors along ditch for night travel

### Maintenance Needs

- **Road Maintenance:** Asked about road, bridge and winter maintenance needs, between 20% and 30% of road users rated road maintenance poor, contrasting with only 8% of decision makers who viewed road maintenance as poor. Of all user groups, commuters were most critical of road maintenance.
- **Bridge Maintenance:** Road users and decision makers perceived bridge maintenance about the same, with one-half viewing it as good and 10% to 15% rating it poor.
- **Winter Maintenance:** Less than one-half of user groups viewed winter maintenance as good on local roads — a significant difference in perception from decision makers, 90% of whom viewed it as good. Of all user groups, farmers were least critical and most tolerant of winter driving conditions. Commuters were particularly critical of snow removal.
- **Top 5 Improvements:** Road users suggested several maintenance improvements, including these top 5:
  1. Better snow removal
  2. More blading
  3. Better overall maintenance
  4. Cut grass from ditches
  5. Fill pot holes

### Emergency Response and Problem Reporting Procedure

- **Emergency Response:** Nearly 90% of road users rated emergency services (e.g., 911, ambulance) effective in their area, matching decision makers' perceptions.

- **Reporting Problems:** School bus drivers and transportation superintendents are the most likely (75%) to report road problems, followed by 53% of farmers and 52% of mail carriers. Only 17% of rural commuters said they report road-related problems, perhaps because there is no road reporting mechanism in place for them as there may be for school bus drivers or mail carriers who report to supervisors about their daily routes.

### Road Improvement Funding

- **Tax Increases Supported:** Surprisingly, two-thirds of the users did report they would support increased taxes to make suggested road improvements. Approximately one-third supported an increase in the sales tax, and one-third supported an increase in the fuel tax. Very few supported an increase in property taxes.
- **Other Funding Options:** Users suggested the following methods to increase road funding:
  1. Increase income tax
  2. Use current funds more economically
  3. Fund through a state lottery
  4. Higher motor vehicle taxes
  5. Higher vehicle license fee

### Conclusion

Differences in perceptions about the rural road system do exist between road users and those who make decisions about road upkeep. For example, decision makers consistently indicated they perceived the physical roadway conditions to be better than rural road users perceived them to be. These differences indicate a need for better communication. Road users are willing to pay for road improvements, but the best methods to cultivate funds are still up for consideration. A good process for public input would not only allow users to explain what they want and report problems, but also let decision makers educate users about road funding and planning.

*A full copy of the study "An Assessment of Road User Needs in a Rural Environment" (MPC Report No. 96-58), including responses by region, is available from the Upper Great Plains Transportation Institute. (Contact: Jill Hough (701) 231-8082.*

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