

**Transportation-Related Training Needs  
of County Road Officials and Elected Officials**

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***TRANSPORTATION-RELATED TRAINING NEEDS  
OF COUNTY ROAD MANAGERS AND ELECTED OFFICIALS***

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## **Disclaimer**

The data and information presented herein do not necessarily reflect the views or policies of the North Dakota Department of Transportation and are the sole responsibility of the Upper Great Plains Transportation Institute and the authors.

## **ABSTRACT**

Training is a necessary and integral part of life, which has become more necessary in the past two decades as our economy and society have moved toward a knowledge-based system where information, ideas, procedures, and data have become the common currency of success. The information age is quickly replacing the industrial age and is driving this phenomena. Training is integral to our lives then, because both formal and informal training increases our awareness of important issues and aids in better decision making. Without training we are left only with our formal education, which falls far short of the required knowledge to succeed in our jobs. The field of transportation is not immune from the effects of the information age. In fact, it probably is more prone to the need for training than the average field of endeavor or vocation.

Transportation-related decision making grows increasingly important as resources allocated to counties and townships become more scarce. Counties and townships are forced to do more or maintain status quo with shrinking dollars. This study was designed to determine the transportation-related training needs of county road managers and elected officials. The training needs were identified through a mail questionnaire. Results indicate that there is an overwhelming desire for some or significant amounts of training by elected county officials and county road engineers and supervisors. All of the 13 categories, e.g., gravel roads, and 46 subcategories e.g., sealants/chemical, county road managers rated contained responses, which indicated a need for “Some Training Needed” and “Significant Training Needed.” Likewise, the 11 categories and 19 subcategories Elected Officials rated, more than 50 percent of the respondents believed there was a need for “Some Training Needed” and “Significant Training Needed.”

## LIST OF TABLES

	<b>Page</b>
1. Select LTAP Training Courses that may be applicable to North Dakota. . . . .	5
2. Categories of Potential Training for Road and Elected Officials . . . . .	6
3. County Road Manager and Elected Official Response Rate, by Percentage Response . . .	7
4. Training Specifics of Road and Elected Officials, by Percentage Response . . . . .	8
5. County Road Managers' Perceptions of Their Training Needs . . . . .	10
6. Elected Officials' Perceptions of Their Transportation-Related Training Needs . . . . .	13
7. Additional Training Need Topics Identified by Elected Officials . . . . .	14
8. County Road Managers' Perceptions of Elected Officials' Training Needs. . . . .	15
9. Best Time to Receive Training, by Percentage Response . . . . .	16
10. How Much Training is Needed . . . . .	17

## INTRODUCTION

Training is a necessary and integral part of life. It has become more necessary in the past two decades as our economy and society have moved toward a knowledge-based system where information, ideas, procedures, and data have become the common currency of success. The information age is quickly replacing the industrial age and driving this phenomena. Training is integral to our lives then, because both formal and informal training increases our awareness of important issues and aids in better decision making. Without training we are left with just our formal education, which falls far short of the required knowledge to succeed in our jobs. The field of transportation is not immune from the effects of the information age. In fact, it probably more prone to the need for training than the average field of endeavor or vocation.

Transportation-related decision making, maintenance, construction, and planning, and the required necessary training, is becoming more important than ever for several reasons.

- ☐ Transportation policy changes rapidly in an ever increasingly dynamic socioeconomic system.
- ☐ Technological changes at a seemingly faster pace.
- ☐ Management information and ideas continually are being developed and refined.
- ☐ Socioeconomic factors, such as population and economic base, constantly change in rural areas.
- ☐ There are increasing pressures on budgets in a relative or absolute sense.

Even as this report is being prepared, a new national transportation policy is being written by Congress in the form of a reauthorized *Intermodal Surface Transportation Efficiency Act*, which likely will have a profound influence on the county road system when enacted. For example, there is uncertainty about changes to the funding formula. Currently, for every one

dollar North Dakota pays into the federal fuel tax, two dollars is redistributed to the state. Donor states — states that contribute more than what they receive in federal dollars — are lobbying to change the funding formula so they would receive more of what they paid in. Even at the current funding level, it is difficult to maintain the present road network. Also, there may be a possible shift on the emphasis of funding toward the national highway system and away from the local or state systems. Other examples of the changing transportation environment include advances in pavement technology, bridge construction, maintenance procedures, planning and management, environmental concerns, and public involvement in the decision making process. These and many more make training imperative to developing and maintaining the county road system at the desired level of quality while using the scarce resources available as efficiently as possible.

Another factor for North Dakota is the change in demands placed on its road system overtime. Historically, states developed extensive road networks to support the agrarian economy of production agriculture and ranching and the associated lifestyle. Typically roads were built every mile to provide farmers and ranchers access to the farm-to-market road system and to other arterials. Significant changes in the agricultural sector are resulting in a major adjustment in the demands placed on the rural road systems. First, the trend toward larger farms reduces the need for access roads to farmsteads. Although field access is still required, it also has changed with larger field sizes. Second, with increased farm size, reduced availability of farm labor, and an increase in crop production productivity, there has been an increase in equipment size. The larger and heavier equipment requires wider and stronger rural roads. Third, several rural families earn off-farm income either seasonally or all year-round, thus increasing commuter traffic on rural roads. As the purpose of rural trips changes, the demands for improved quality of infrastructure and maintenance increase.

These changes and a shift to the knowledge age have important implications for county road managers, managers, and staff. County officials and managers must decide how the limited road budgets should be allocated to the various road uses. The decisions ultimately will be approved by elected officials, who must be familiar with basic transportation principles and current issues. County road managers who manage road maintenance and operation must also recognize and respond to the new financial, technical, and road use patterns. These officials must stay abreast of new features or innovations, which can help them offer superior services, and still maintain the fiscal responsibility of operating within budget constraints. Proper training for elected and appointed county road managers can help them make more educated decisions.

In recognition of the changes taking place, the Local Technical Assistance Program (LTAP) program was designed by the Federal Highway Administration of the U.S. Department of Transportation to provide transportation-related training to county road managers, management and staff. The LTAP is a national effort designed to improve access to highway, road, and street technology for local units of general purpose and tribal government.<sup>1</sup> This study will provide insights to the personnel who manage and operate the LTAP's in developing and delivering training that is more efficiently targeted at the customer.

In the following sections, perceived training needs of road and elected officials are presented. The needs were identified through a mail survey sent to road and elected officials in North Dakota.

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<sup>1</sup>U.S. Department of Transportation, *Local Technical Assistance Program Field Manual*. Federal Highway Administration, Washington, DC, 1997.



## **OBJECTIVES OF STUDY**

The overall objective of this report is to identify the transportation-related training needs of county road officials, elected and appointed, and county road system managers, to facilitate more informed decision making, policy development, and better application of maintenance and construction technology and practices for North Dakota's rural roads. The specific tasks of the study were to:

1. Survey county road managers to determine what transportation-related training they have received and what road-related training they would like to receive, and determine the best time of the year for them to receive training.
2. Survey elected and appointed officials to determine what transportation-related training they have received and what transportation-related training they would like to receive, and determine the best time of the year for them to receive training.
3. Explore methods for facilitating effective transportation-related training to county road managers and elected officials.

## **DATA COLLECTION**

A list of LTAP training courses was obtained from the Washington, D.C. national office to identify transportation-related training courses offered throughout the United States. Table 1 contains a list of select training courses offered throughout the United States that could be applicable to North Dakota's training needs. This list was used to develop the survey instrument county road and elected officials would receive to help identify their training needs.

**Table 1. Select LTAP Training Courses that may be applicable to North Dakota.**  
(Shading denotes training programs currently available in North Dakota.)

<b><u>Asphalt Roads</u></b>	<b><u>Bridges</u></b>	<b><u>City Streets</u></b>	<b><u>Computer and Technology</u></b>
Construction of	Construction	Pothole Repair	Geosynthetics
Maintenance of	Maintenance		Intelligent Trans. Systems
Asphalt Recycling	Strengthening		Geographic Info. Systems
			PC Skills and Software
<b><u>Concrete Roads</u></b>	<b><u>Construction</u></b>	<b><u>Drainage</u></b>	<b><u>Environmental</u></b>
Construction of	Equipment Operation	Water Management	Vegetation Control
Maintenance of	Equipment Maintenance	Culverts	Environmental Impact
	Const. Plan Reading	Sediment Control	Herbicide Application
	Excavation and Trenching	Erosion Control	
	Utility Repair		
	Impact of Trucks on Roads		
<b><u>Financial</u></b>	<b><u>Gravel Roads</u></b>	<b><u>Management</u></b>	<b><u>Non-vehicular Traffic</u></b>
Equipment Purchasing	Construction of	Supervision	Bicycles
Major Investment Study	Maintenance of	Communication	Pedestrians
	Sealants	Motivation	
		Technical Writing	
		Dealing With The Public	
		Time and Stress Mgmt.	
<b><u>Planning and Design</u></b>	<b><u>Road Bases</u></b>	<b><u>Safety</u></b>	<b><u>Surveying and GPS</u></b>
Traffic Engineering	Soils and Foundations	Injury Prevention	
Basic Road Design		First Aid	
Cost Estimation & Control		Drug and Alcohol Testing	
Transition to Metric		Accident Reconstruction	
Road Classification		Risk Management???	
		Hazardous Materials	
		Explosives Training	
<b><u>Traffic Control</u></b>	<b><u>Transit</u></b>	<b><u>Winter Concerns</u></b>	
In Construction Zones	Mass Transit	Snow and Ice	
Highway Signing		Winter Survival	
		Winter Maintenance	

Shading denotes training programs currently available in North Dakota.

## Survey Development

Data were collected through two questionnaires mailed to county road managers (supervisors and engineers) and to elected officials, including county commissioners and city mayors. The surveys were similar (see Appendix 1). Both surveys contained similar general questions regarding how much formal training the county road managers and elected officials had received e.g., one-half day; if training was adequate; best time for training to be offered e.g., winter; and how much training was necessary, e.g., three days. In addition, a major portion of the survey focused on the specific areas where more training should be offered. Thirteen categories of potential training areas were identified for county road managers and 11 categories were identified for elected officials (Table 2).

**Table 2. Categories of Potential Training for Road and Elected Officials**

---

Gravel Roads  
Asphalt Roads  
Bridges  
Construction\*  
Planning and Design  
Traffic Control  
Drainage  
Management  
Safety  
Winter Concerns  
Financial  
Environmental\*  
Computer and Technology

---

\* not included in elected official questionnaire.

### Survey Responses

Seventy-eight county road managers and elected officials responded to the questionnaire. Of these, 65 were elected officials and 13 were county road managers (Table 3). The response level was lower than expected, however, two months prior to mailing the survey, certain regions of North Dakota experienced a “500 year” flood. Additionally, the Devils Lake Basin area and many areas of North Dakota were still dealing with the effects of one of the worst winters on record. Record amounts of snowfall resulted in record runoff and negative consequences for the county road systems throughout the state. Problems resulting from the flood, flooding in the Devils Lake region, and other natural disaster problems very likely reduced the survey responses.

**Table 3. County Road Manager and Elected Official Response Rate, by Percentage Response**

	<b>Number of Surveys Mailed</b>	<b>Number Received</b>	<b>Percentage Response</b>
<b>County Road Manager</b>	<b>53</b>	<b>13</b>	<b>24.5</b>
<b>Elected Official</b>	<b>540</b>	<b>65</b>	<b>12.0</b>
<b>Overall</b>	<b>593</b>	<b>78</b>	<b>13.2</b>

## RESULTS

The following sections describe the responses for the mail questionnaire mailed to county road managers and elected officials. First, the amount of training county road managers and elected officials have received is presented. Second, the perceptions of county road managers and elected officials pertaining to their transportation-related training needs are presented. Third, the county road managers also were asked to identify the areas in which they thought elected officials should receive more training. Finally, the best times to offer training to road and elected officials is presented.

### Training Received

One hundred percent of the county road managers and 84 percent of the elected officials responding to the survey indicated that they have attended some training courses (Table 4). Most of the road and elected officials receive approximately three days of training per year. Sixty-two percent of the county road managers and elected officials believe the training courses they received were adequate. However, they believe there is a need for additional training.

<b>Table 4. Training Specifics of Road and Elected Officials, by Percentage Response</b>							
	Attended Training		Amount of Training			Duration of Other	
	Yes	No	½ day	1 day	Other	Avg.	Maximum
Road Official	100	0	0	25	75	2.7	3
Elected Official	84	16	8	42	50	2.7	3

### ***County Road Managers Responses***

It is evident from the survey responses that there is a significant desire for additional training in every category listed, and nearly all subcategories, by county road engineers and supervisors. Of the 13 categories, county road managers had to rate the level of training needed, 46 subcategories were listed (Table 5.). County road managers indicated whether “No Training”; “Some Training”; or “Significant Training” was needed for each subcategory. Most of the subcategories received a rating of “Some Training Needed.” The only subcategories receiving a “No Training” rating were Utility Repair and Drug/Alcohol Testing. Eight specific areas were classified as “Significant Training” needed. They include: Construction of Gravel Roads; Construction and also Maintenance of Bridges; Cost Estimate and Control of Planning and Design; and Highway Signing for better Traffic Control (Table 5). All of the items listed in the Computer and Technology category were viewed as “Significant Training Needed:” Geographic Information Systems; PC Skills and Software; and Surveying and Global Positioning (Table 5). The desire for additional training in this category is consistent with a transition to the knowledge age from the industrial age.

One of the most significant findings of this study is the overwhelming desire, and presumably need, for additional training. This is evidenced by the responses shown in Table 5. The responses of the county road managers seem to reflect enlightened leadership that is well aware of the rapid advances in knowledge and technology as it applies to transportation management, construction, maintenance, and planning. Furthermore, it suggests that county road managers view training as an effective way to deal with the other changes they face such as shrinking budgets, either real or relative.

The subcategories, which county road managers listed as needing more training, may be available in other states. The N.D. Department of Transportation and the Local Technical Assistance Program Center could contact the states currently offering these training sessions and use their training materials to develop materials relevant to North Dakota.

**Table 5. County Road Managers' Perceptions of Their Training Needs**

Categories	Responses	No Training Needed	Some Training Needed	Significant Training Needed
		-----Percent-----		
<b>Gravel Roads</b>				
Construction	12	12	42	42
Maintenance	13	8	69	23
Sealants/Chemicals	12	8	62	31
Soils/Foundations	13	17	67	17
<b>Asphalt Roads</b>				
Construction	11	36	45	18
Maintenance	12	8	58	33
Asphalt Recycling	11	27	55	18
Pothole Repair	11	9	73	18
<b>Bridges</b>				
Construction	12	17	33	50
Maintenance	12	0	50	50
Strengthening	12	17	50	33
<b>Construction</b>				
Equipment Operation	13	23	46	31
Equipment Maintenance	13	23	54	23
Excavation and Trenching	12	25	67	8
Utility Repair	12	50	42	8
<b>Planning and Design</b>				
Traffic Engineering	12	17	58	25
Basic Road Design	12	25	42	33
Road Impacts from Trucks	13	8	46	46
Cost Est. and Control	12	17	33	50
<b>Traffic Control</b>				
Construction Zones	12	8	50	42
Highway Signing	12	8	42	50
<b>Drainage</b>				
Water Management	12	25	42	33
Culverts	12	17	50	33
Sediment Control	12	8	67	25
Erosion Control	12	8	67	25
<b>Management</b>				
Supervision	13	15	46	38
Technical Writing	12	17	50	33

**Table 5. County Road Managers' Perceptions of Their Training Needs**

Dealing with the Public	13	23	46	31
Bid Specification	12	8	67	25
Emergency Management	12	25	58	17
<b>Safety</b>				
Drug/Alcohol Testing	13	46	46	8
Accident Reconstruction	13	38	54	8
Risk Management	13	23	54	23
Hazardous Materials	13	23	69	8
work zone/Workplace	13	23	69	8
<b>Winter Conditions</b>				
Snow and Ice	13	23	62	15
Winter Survival	13	31	69	0
Winter Maintenance	13	23	69	8
<b>Financial</b>				
Equipment Purchasing	12	25	50	25
Life-cycle Cost Analysis	12	17	50	33
Innovative Financing	12	25	50	25
<b>Environmental</b>				
Vegetation Control	12	25	50	25
Herbicide Application	12	33	50	17
<b>Computer &amp; Technology</b>				
Geographical Information Systems	13	8	38	54
PC Skills and Software	13	8	31	62
Surveying and Global Positioning	13	15	38	46



### ***Elected Official Training Needs***

Elected county officials exhibited a similar desire for training as county road engineers and supervisors. Elected officials rated 19 subcategories in regard to training needs. Nearly all the subcategories were recognized as needing “Some Training” by more than 50 percent of the respondents (Table 6). There were three subcategories in which nearly one-half of the respondents indicated “No Training Needed”: included Asphalt Recycling; Winter Survival; and PC Skills and Software (Table 6); however, the other one-half of the respondents indicated that these subcategories required “Some Training” or “Significant Training.” This would seem consistent with the different roles of the elected county officials and county road managers in providing a county road system adequate for the needs of the citizens of the county. Obviously then, it is recommended that no training be offered on these subcategories for North Dakota elected officials.

Similar to managers, the desire for additional training is significant among elected officials. This shows their understanding of the mechanisms for survival and success in an information age.

**Table 6. Elected Officials' Perceptions on Their Transportation-Related Training Needs**

	Responses	No Training Needed	Some Training Needed	Significant Training Needed
		Percent	Percent	Percent
<b>Gravel Roads</b>				
Maintenance	57	26	49	25
Sealants/Chemicals	55	20	40	40
Other*	2	0	50	50
<b>Asphalt Roads</b>				
Maintenance	49	31	47	22
Asphalt Recycling	38	42	39	18
<b>Bridges</b>				
Maintenance	44	34	43	23
<b>Planning and Design</b>				
Road Impacts from Trucks	56	25	55	20
Cost Est. and Control	50	18	56	26
<b>Traffic Control</b>				
Highway Signing	54	31	62	6
<b>Drainage</b>				
Water Management	54	28	46	26
<b>Management</b>				
Dealing with the Public	53	34	40	26
Emergency Management	49	14	59	27
<b>Safety</b>				
Drug/Alcohol Testing	-	-	-	-
Accident Reconstruction	-	-	-	-
Risk Management	53	28	58	13
Hazardous Materials	-	-	-	-
Workzone/Workplace	-	-	-	-
<b>Winter Conditions</b>				
Snow and Ice	56	34	54	13
Winter Survival	45	49	47	4
Winter Maintenance	53	30	53	17
<b>Financial</b>				
Life-cycle Cost Analysis	52	31	46	23
Innovative Financing	51	25	47	27
<b>Computer &amp; Technology</b>				
Geographical Information Systems	-	-	-	-
PC Skills and Software	51	45	35	20

Elected officials identified other areas in which they would like to receive training, as listed in Table 7. Generally only one official identified the additional training area, but it still should be considered when North Dakota plans its training sessions for road and elected officials.

**Table 7. Additional Training Need Topics Identified by Elected Officials**

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Blading  
Drainage and Safety  
Drainage to Save Roads and Fields  
Culverts and Ditches  
Patching  
Record Management  
Long Range Planning  
Legal Aspects  
Construction and Repair  
Pothole Repair  
Impact of Cars  
Traffic Patterns on Rural Roads  
Township Field Roads  
Regulatory  
Snow Fences

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***County Road Managers' Perceptions of Elected Officials' Training Needs***

Road officials' perceptions of the training needs of elected officials nearly mirror the training needs elected officials identified. This may indicate that the managers understand their supervisors quite well regarding training needs. There was a slight tendency for county road managers to believe that elected officials needed more training in some particular areas. These areas included: Asphalt Road maintenance; Construction zones; Risk Management; Equipment Purchasing; and Life-cycle Cost Analysis (Table 8). It may be that elected officials believe this

responsibility belongs to the managers and that they trust their judgement in matters of a technical nature.

**Table 8. County Road Managers' Perceptions of Elected Officials' Training Needs**

Categories	Responses	No Training Needed	Some Training Needed	Significant Training Needed
		-----Percent-----		
<b>Gravel Roads</b>				
Maintenance	12	8	58	33
Sealants/Chemicals	11	36	45	18
<b>Asphalt Roads</b>				
Maintenance	12	17	42	42
Asphalt Recycling	12	42	42	17
<b>Bridges</b>				
Maintenance	12	33	33	33
<b>Planning and Design</b>				
Road Impacts from Trucks	13	0	38	62
Cost Est. and Control	12	17	50	33
<b>Traffic Control</b>				
Highway Signing	13	31	46	23
<b>Drainage</b>				
Water Management	13	23	38	38
<b>Management</b>				
Dealing with the Public	13	15	62	23
Emergency Management	12	17	50	33
<b>Safety</b>				
Risk Management	12	23	23	54
<b>Winter Conditions</b>				
Snow and Ice	12	25	50	25
Winter Survival	12	50	50	0
Winter Maintenance	12	17	67	17
<b>Financial</b>				
Life-cycle Cost Analysis	13	8	38	54
Innovative Financing	13	23	15	62
<b>Computer &amp; Technology</b>				
PC Skills and Software	10	40	30	30

### ***Best Training Times***

It was identified by the road and elected officials that transportation-related training is important. Winter is the best time of the year for training, particularly for county road managers (Table 9). Fall and winter are the best times for training elected officials. Results indicate that winter training sessions will attract the most participants from road and elected officials.

The perceptions for the amount of training needed varies considerably between the county road managers and elected officials. Thirty-eight percent of the county road managers believed that one day of training a year was needed, whereas, 54 percent believed that more training was necessary (Table 10). On average, they believed that approximately six days of training was necessary per year (Table 10). On the other hand, 54 percent of the elected officials believed that one day of training was sufficient, whereas 35 percent believed approximately three days of training was necessary. County road managers perceived that elected officials should have approximately three days of transportation-related training per year.

**Table 9. Best Time to Receive Training, by Percentage Response**

<b>Official</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
County road managers	15	92	31	8
Elected Officials	20	68	5	7
County road managers Responses for Elected Officials	15	92	31	15

Note: Respondents could select more than one seasonal category.

**Table 10. How Much Training is Needed**

<b>Officials</b>	<b>½ Days</b>	<b>1 Day</b>	<b>Other</b>	<b>Duration of Other</b>	
				<b>Average</b>	<b>Max</b>
County road managers	8	38	54	6.1	12.5
Elected Officials	13	52	35	2.9	10
County road managers Responses for Elected Officials	0	46	54	2.9	7

### CONCLUSIONS AND RECOMMENDATIONS

There appears to be an overwhelming desire for some or significant amounts of training by elected county officials and county road engineers and supervisors. This was true for all categories of training and most subcategories. County road managers and elected officials identified the need for more transportation-related training in several training areas. All of the 13 categories and 46 subcategories county road managers rated contained responses, which indicated a need for “Some Training Needed” and “Significant Training Needed.” Likewise, the 11 categories and 19 subcategories Elected Officials rated, more than 50 percent of the respondents believed there was a need for “Some Training Needed” and “Significant Training Needed.” Some basic conclusions in bullet form are:

- This large interest in additional training will place more demand on North Dakota’s LTAP center. The large number of topics requested for training would require much time in development. Since LTAP centers are located throughout the United States the topic has already been developed at one of the centers. It is a matter of modifying the training topic to meet North Dakota needs.
- Due to the large number of training topics, it is recommended that North Dakota rotate the training topics over a multi-year period, such as two years.

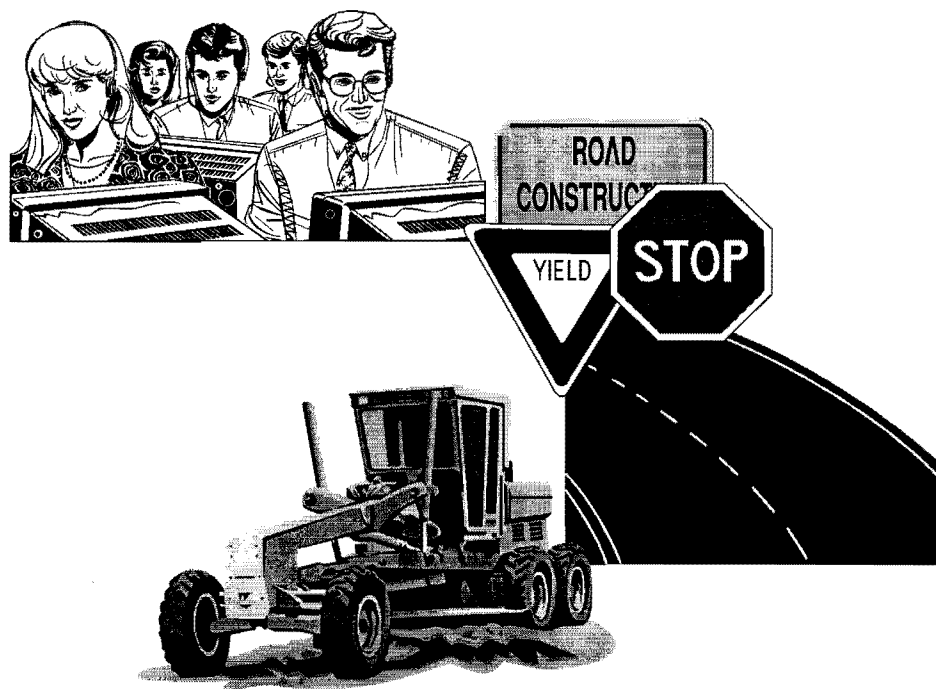
- Winter seems to be the best time for training. Several training topics are appropriate for both road and elected officials. It is recommended that joint training sessions are held during the winter months.
- It is recommended the NDDOT work closely to recommend training/workshop topics to be presented at the North Dakota Association of County Engineers annual meeting.
- It is recommended that NDDOT take into consideration mandatory training for the road and elected officials. Important decisions rely on the judgment of road and elected officials and it is imperative they make the most educated decisions to best use the scarce resources.
- Communications technologies and systems, such as TEL8, should be used to make training available from other states and increase the effectiveness of the limited training budgets.

In summary, there is an expressed desire, and therefore a need, for training county road managers and elected officials. This indicates that the LTAP center at North Dakota State University's Department of Civil Engineering has an important and increasing role in the quality of the county road system and the streets of the state's cities. Furthermore, the data and information suggest that an increasing emphasis be put on training by state, county, and city agencies.

**APPENDIX A:**  
**Transportation-Related Training Needs of Road Officials Survey**



# Transportation Related Training Needs of Road Officials



May/June 1997

## INSTRUCTIONS

This is a three part questionnaire. Please answer all the questions within each part.

**Part I.** Contains general questions about the amount and type of training you receive.

**Part II.** Contains specific training topics we would like for you to rate according to the amount of training you would like to receive on the given topic areas. There are spaces available for you to add additional topics. The rating scale is as follows:

1= No Training Needed      2= Some Training Needed      3= Significant Training Needed

**Part III.** Please rate the specific training topics which may aid **elected officials** in their transportation related decision making responsibilities. The scale is identical to Part II.

1. If you wish to comment on any questions or qualify your answers, please use the space provided. Your comments are important to this study.
2. If you would like a copy of the final report *Transportation Related Training Needs of Road and Elected Officials*, please write your name and address on the last page.
3. Please return this questionnaire as soon as possible in the enclosed postage-paid pre-addressed envelope.

**Thank you for your help.**

If you have any questions regarding this survey, please call Jill Hough at (701)231-8082.



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## TRAINING NEEDS QUESTIONNAIRE

## Part I. General Information

1. Do you represent a :
  - ☐ city (please specify) \_\_\_\_\_
  - ☐ county (please specify) \_\_\_\_\_
  - ☐ township (please specify) \_\_\_\_\_
- 1a. What is the population? \_\_\_\_\_
2. Have you attended transportation related training courses or seminars, (e.g. T2 center seminars, etc.)?
  - ☐ YES ☐ NO
2. If YES, what types of training have you received, e.g., gravel road maintenance?
4. How much formal training do you receive annually?
  - ☐ ½ day ☐ one day ☐ other \_\_\_\_\_
- 4a. Do you believe this level of training is adequate? ☐ YES ☐ NO

## Part II. Training Topics for Road Officials

5. Please circle the number which best represents the amount of training you would like to receive to help you on the job. (1= No Training Needed; 2 = Some Training Needed; and 3 = Significant Training Needed)

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Gravel Roads</b>			
Construction of	1	2	3
Maintenance of	1	2	3
Sealants / chemical additives	1	2	3
Soils and Foundations	1	2	3
<b>Asphalt Roads</b>			
Construction of	1	2	3
Maintenance of	1	2	3
Asphalt Recycling	1	2	3
Pothole Repair	1	2	3
<b>Bridges</b>			
Construction	1	2	3
Maintenance	1	2	3
Strengthening	1	2	3
<b>Construction</b>			
Equipment Operation	1	2	3
Equipment Maintenance	1	2	3
Excavation and Trenching	1	2	3
Utility Repair	1	2	3

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Planning and Design</b>			
Traffic Engineering	1	2	3
Basic Road Design	1	2	3
Impact of Trucks on Road	1	2	3
Cost Estimation & Control	1	2	3
<b>Traffic Control</b>			
In Construction Zones	1	2	3
Highway Signing	1	2	3
<b>Drainage</b>			
Water Management	1	2	3
Culverts	1	2	3
Sediment Control	1	2	3
Erosion Control	1	2	3
<b>Management</b>			
Supervision	1	2	3
Technical Writing	1	2	3
Dealing with the Public	1	2	3
Bid Specification	1	2	3
Emergency Management	1	2	3
<b>Safety</b>			
Drug and Alcohol Testing	1	2	3
Accident Reconstruction	1	2	3
Risk Management	1	2	3
Hazardous Materials	1	2	3
Workzone/Workplace	1	2	3

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Winter Concerns</b>			
Snow and Ice	1	2	3
Winter Survival	1	2	3
Winter Maintenance	1	2	3
<b>Financial</b>			
Equipment Purchasing	1	2	3
Life-cycle cost analysis	1	2	3
Innovative Financing	1	2	3
<b>Environmental</b>			
Vegetation Control	1	2	3
Herbicide Application	1	2	3
<b>Computer and Technology</b>			
Geographic Information Systems	1	2	3
PC Skills and Software	1	2	3
Surveying and Global Positioning	1	2	3

6. Are there other areas in which you would like to see additional training offered (please describe)?

7. When is the best time of the year for you to receive training?

(Please select all that apply)

☐ Fall

☐ Winter

☐ Spring

☐ Summer

8. How much time could you designate to training?

☐ ½ day

☐ one day

☐ other \_\_\_\_\_

### Part III. Potential Training Topics for Elected Officials

9. Do the elected officials in your county currently receive transportation related training?  
☐ YES ☐ NO
10. If YES, how much transportation related training do they receive?  
☐ ½ day ☐ one day ☐ other
11. Please rate the training needs **that you perceive elected road officials** should have to make more informed transportation related decisions.

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Gravel Roads</b>			
Maintenance of	1	2	3
Sealants/chemical additives	1	2	3
Other (please specify)_____	1	2	3
<b>Asphalt Roads</b>			
Maintenance of	1	2	3
Asphalt Recycling	1	2	3
Other (please specify)_____	1	2	3
<b>Bridges</b>			
Maintenance	1	2	3
Other (please specify)_____	1	2	3



	No Training Needed	Some Training Needed	Significant Training Needed
<b>Planning and Design</b>			
Impact of Trucks on Road	1	2	3
Cost Estimation & Control	1	2	3
Other (please specify)_____	1	2	3
<b>Traffic Control</b>			
Highway Signing	1	2	3
Other (please specify)_____	1	2	3
<b>Drainage</b>			
Water Management	1	2	3
Other (please specify)_____	1	2	3
<b>Management</b>			
Dealing with the Public	1	2	3
Emergency Management	1	2	3
Other (please specify)_____	1	2	3
<b>Safety</b>			
Risk Management	1	2	3
Other (please specify)_____	1	2	3

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Winter Concerns</b>			
Snow and Ice	1	2	3
Winter Survival	1	2	3
Winter Maintenance	1	2	3
Other (please specify) _____	1	2	3
<b>Financial</b>			
Life-cycle cost analysis	1	2	3
Innovative Financing	1	2	3
Other (please specify) _____	1	2	3
<b>Computer and Technology</b>			
PC Skills and Software	1	2	3
Other (please specify) _____	1	2	3

12. Are there other areas in which additional training should be offered (please describe)?
13. When is the best time of the year for elected officials to receive training? (Please select all that apply)  
☐ Fall      ☐ Winter      ☐ Spring      ☐ Summer
14. How much transportation related training do you think elected officials should receive?  
☐ ½ day      ☐ one day      ☐ other \_\_\_\_\_

[illegible]

Name: \_\_\_\_\_

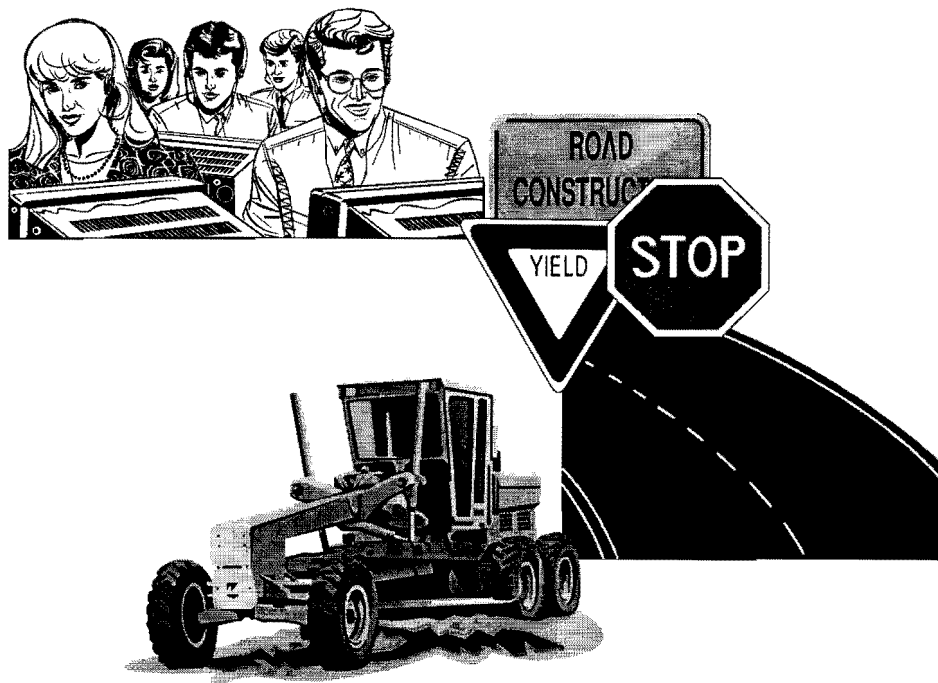
Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Would you like a copy of the final report from this study?    ☐ YES                      ☐ NO

**APPENDIX B:**  
**Transportation-Related Training Needs for Elected Officials Survey**

# Transportation Related Training Needs for Elected Officials



May/June 1997

## INSTRUCTIONS

This is a two part questionnaire. Please answer all the questions within each part.

**Part I.** Contains general questions about the amount and type of training you receive.

**Part II.** Please rate the specific training topics which may aid **elected officials** in their transportation related decision making responsibilities. There are spaces available for you to add additional topics. The rating scale is as follows:

1= No Training Needed      2= Some Training Needed      3= Significant Training Needed

1. If you wish to comment on any questions or qualify your answers, please use the space provided. Your comments are important to this study.
2. If you would like a copy of the final report *Transportation Related Training Needs of Road and Elected Officials*, please write your name and address on the last page.
3. Please return this questionnaire as soon as possible in the enclosed postage-paid pre-addressed envelop.

**Thank you for your help.**

If you have any questions regarding this survey, please call Jill Hough at (701)231-8082.



Upper Great Plains Transportation Institute  
North Dakota State University  
Room 430 IACC Bldg., P.O. Box 5074  
Fargo, North Dakota 58105

## TRAINING NEEDS QUESTIONNAIRE

## Part I. General Information

1. Do you represent a: ☐ city (please specify) \_\_\_\_\_  
☐ county (please specify) \_\_\_\_\_  
☐ township (please specify) \_\_\_\_\_
- 1a. What is the population? \_\_\_\_\_
2. Have you attended transportation related training courses or seminars, (e.g. T2 center seminars, etc.)?  
☐ YES ☐ NO
2. If YES, what types of training have you received, e.g., gravel road maintenance?
4. How much formal training do you receive annually?  
☐ ½ day ☐ one day ☐ other \_\_\_\_\_
- 4a. Do you believe this level of training is adequate? ☐ YES ☐ NO

## Part II. Potential Training Topics for Elected Officials

5. Do the elected officials in your county currently receive transportation related training?  
☐ YES      ☐ NO
6. If YES, how much transportation related training do they receive?  
☐ ½ day      ☐ one day      ☐ other
7. Please rate the training needs **that you perceive elected road officials** should have to make more informed transportation related decisions.

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Gravel Roads</b>			
Maintenance of	1	2	3
Sealants/chemical additives	1	2	3
Other (please specify) _____	1	2	3
<b>Asphalt Roads</b>			
Maintenance of	1	2	3
Asphalt Recycling	1	2	3
Other (please specify) _____	1	2	3
<b>Bridges</b>			
Maintenance	1	2	3
Other (please specify) _____	1	2	3



	No Training Needed	Some Training Needed	Significant Training Needed
<b>Planning and Design</b>			
Impact of Trucks on Road	1	2	3
Cost Estimation & Control	1	2	3
Other (please specify) _____	1	2	3
<b>Traffic Control</b>			
Highway Signing	1	2	3
Other (please specify) _____	1	2	3
<b>Drainage</b>			
Water Management	1	2	3
Other (please specify) _____	1	2	3
<b>Management</b>			
Dealing with the Public	1	2	3
Emergency Management	1	2	3
Other (please specify) _____	1	2	3
<b>Safety</b>			
Risk Management	1	2	3
Other (please specify) _____	1	2	3

	No Training Needed	Some Training Needed	Significant Training Needed
<b>Winter Concerns</b>			
Snow and Ice	1	2	3
Winter Survival	1	2	3
Winter Maintenance	1	2	3
Other (please specify)_____			
<b>Financial</b>			
Life-cycle cost analysis	1	2	3
Innovative Financing	1	2	3
Other (please specify)_____	1	2	3
<b>Computer and Technology</b>			
PC Skills and Software	1	2	3
Other (please specify)_____	1	2	3

8. Are there other areas in which additional training should be offered (please describe)?
9. When is the best time of the year for elected officials to receive training? (Please select all that apply)
- ☐ Fall                      ☐ Winter                      ☐ Spring                      ☐ Summer
10. How much transportation related training do you think elected officials should receive?
- ☐ ½ day                      ☐ one day                      ☐ other \_\_\_\_\_

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slightly textured appearance and is set against a dark background.

Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Would you like a copy of the final report from this study? ☐ YES ☐ NO