

GEORGIA DOT RESEARCH PROJECT 11-26

FINAL REPORT

**GEORGIA DEPARTMENT OF TRANSPORTATION
(GDOT) LEADERSHIP ACADEMY**



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Final Report

By

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16. Abstract: Public agencies like the Georgia Department of Transportation (GDOT) are continually challenged with reduced staff levels, reduced budgets, increased workloads and expectations for services provided. In addition, the current economic and political environments and complex accountability systems create unique management and leadership challenges. Response to these demands requires a well - informed and coordinated team that includes professionals, supervisors, technicians, lead workers, and workers led by an able leader or supervisor. The development of a true leader or supervisor to address current problems and issues requires frequent training and interaction. To thrive and become successful, individuals must possess a blend of hard, soft, analytical and problem solving skills along with self - awareness, policy sophistication, and systems - focus. Such skills are not built overnight. The goal of this research is to develop a training curriculum and courses for GDOT managers and supervisors and make them perform better under challenging situations. A survey was conducted to identify the existing and required skills and competencies for the GDOT managers and supervisors. After reviewing and analyzing the results, nine core skills and competencies were finalized for the GDOT managers' and supervisors' curriculum. In this research project, new course modules were developed for eight core skills and competencies. They include: Leadership and leadership skills; Motivating employees; Negotiation and conflict resolution; Decision making and problem solving; Managing for quality; Strategic management - linking performance plans to organizational goals; Team building and group productivity; and Ethics for state employees. All the developed course modules were taught in an instructor - led class setting and were revised based on the participants' feedback.					
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EXECUTIVE SUMMARY

Public agencies like the Georgia Department of Transportation (GDOT) are continually challenged with reduced staff levels, reduced budgets, increased workloads and expectations for services provided. Managers for these agencies need to interact with, accommodate, and persuade a wide array of external factors; they must be able to organize their efforts around an evolving and changing set of strategic goals; and they must have the creativity and flexibility to implement skills and strategies to enhance operations in times of fiscal and capacity constraints. In addition, the current economic and political environments and complex accountability systems create unique management and leadership challenges. This difficulty is particularly important within GDOT, where many supervisors are moving toward retirement. Response to these demands requires a well - informed and coordinated team that includes professionals, supervisors, technicians, lead workers, and workers led by an able leader or supervisor. The development of a true leader or supervisor to address current problems and issues requires frequent training and interaction. To thrive and become successful, individuals must possess a blend of hard, soft, analytical and problem solving skills along with self - awareness, policy sophistication, and systems - focus. Such skills are not built overnight. They require purposeful investment from the state and careful attention as to how existing knowledge is transferred from generation to generation.

The goal of this research is to develop a curriculum and courses for training GDOT managers and supervisors in order to make them perform better under challenging situations. A Technical Advisory Committee (TAC) comprising of GDOT instructors, managers and supervisors who can meet and provide frequent feedback and suggestions

for the project as necessary was formed. A survey was conducted to identify the existing and required skills and competencies for the GDOT managers and supervisors. Based on the responses, the required skills and competencies for GDOT managers and supervisors were prioritized by calculating weighted average of the responses. After reviewing the results, TAC finalized the following nine core skills and competencies for the GDOT managers' and supervisors' curriculum. They include: Leadership and leadership skills; Decision making and creative problem solving; Team building and group productivity; Ethics; Motivating others; Negotiation and conflict resolution; Strategic management: linking performance plans to organizational goals; Managing for quality; and Customer Service. New course modules were developed for eight core skills and competencies. They include: Leadership and leadership skills; Motivating employees; Negotiation and conflict resolution; Decision making and problem solving; Managing for quality; Strategic management - linking performance plans to organizational goals; Team building and group productivity; and Ethics for state employees. Since two existing two courses suffice the GDOT needs on Customer Service skill and competency, a new course module on this is not developed.

Each course module is designed for half day (i.e., 4 hours) duration. Course module includes lecture, case studies and in - class exercises. To assess the effectiveness of student learning, each course is designed to have pre - course and post - course tests. The course curriculum can be offered in variety of learning settings such as in class room, partially online and fully online. All the developed course modules were taught in an instructor - led class setting. These modules were assessed with TAC and participants. Based on their feedback, the course modules were revised.

The basic framework required for online learning setting is developed by creating three videos for each course module. Additionally, interactive power point presentations, an electronic version of student's notes, case studies, in - class exercises, pre - course and post - course assessment materials are also developed. These materials can be uploaded to the GDOT's content management system for offering course modules online.

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INTRODUCTION

Public agencies like the Georgia Department of Transportation (GDOT) are continually challenged with reduced staff levels, reduced budgets, increased workloads and expectations for services provided. Managers for these agencies need to interact with, accommodate, and persuade a wide array of external factors; they must be able to organize their efforts around an evolving and changing set of strategic goals; and they must have the creativity and flexibility to implement skills and strategies to enhance operations in times of fiscal and capacity constraints (TRB, 2003; FHWA, 2009). At the same time, staffs have many more tools at their disposal and must understand how best to use them and how to translate their work for those who are not as familiar with their work. Managers need to be familiar with emerging management concepts while they also learn to understand the uses and limitations of new technologies and management tools being adopted in their departments. Most importantly, managers and staff need to collaborate effectively, and understand how their jobs interrelate and contribute to their agency's mission (NYMTC, n. d.; Galinsky et al., 2008).

In addition, the current economic and political environments and complex accountability systems create unique management and leadership challenges. This difficulty is particularly important within Georgia DOT, where many supervisors are moving toward retirement (Personal communication with GDOT officials). Response to these demands requires a well - informed and coordinated team that includes professionals, supervisors, technicians, lead workers, and workers led by an able leader or supervisor. The development of a true leader or supervisor to address current problems and issues requires frequent training and interaction (Barbara, 1994). To thrive and

become successful, individuals must possess a blend of hard, soft, analytical and problem solving skills along with self - awareness, policy sophistication, and systems - focus. Such skills are not built overnight. They require purposeful investment from the State and careful attention as to how existing knowledge is transferred from generation to generation (Cronian et al., 2011; McEvoy and Cascio, 1985; Moffat et al., 2001; ITE, 2009).

Several State Departments of Transportation (DOTs) or local entities have incorporated management and leadership development as an element of their workforce planning efforts. Notable leadership and management development programs that have been documented include those implemented in the state of Iowa, North Carolina DOT, the New York Metropolitan Transportation Council (NYMTC), NY; the Louisiana DOT, Henrico County, VA; the City of Phoenix, AZ; and the City of San Jose, CA (CTRE, 2009; Belk, 2006; Paul, 2008; Peter and Louise, 2003; WELA, 2011). Every other year, the Louisiana DOT and North Carolina DOT organize conferences to share and transfer knowledge and skills to their employees for better performance.

Before the design and development of any training activities, it is critical to identify what skills and competency are required and to what extent, as well as what pedagogy would be appropriate (Day, 2001). Henrico County developed 20 core leadership competencies which included communication, critical thinking and decision making, organizational astuteness, and personal integrity. These competencies provided the framework for their development efforts. Other agencies, such as the County of San Diego, based their leadership academy on the same model as the multi - rater, 360 - feedback tool that is used in the leadership development program (GDOT, 2010).

OBJECTIVES

The goal of this research is to develop training curriculum and courses for training GDOT managers and supervisors in order to make them perform better under challenging situations. This is accomplished by developing training curriculum which meets the GDOT managers' and supervisors' needs. The objectives of this research are as follows:

- Identify the existing and required skills and competencies for GDOT's managers and supervisors.
- Develop a training curriculum which can fulfill both managers' and supervisors' needs.
- Develop the course modules for the training curriculum.
- Teach course modules in an instructor - led class setting.
- Evaluate and revise the course modules based on Technical Advisory Committee and participants' feedback.
- Develop a basic framework for the online offering of course modules.

METHODOLOGY & RESULTS

The research methodology included eleven tasks. The following sections summarize the activities performed and results of various tasks.

Task 1: Form Technical Advisory Committee

A Technical Advisory Committee (TAC) comprising of GDOT instructors and supervisors who can meet and provide frequent feedback and suggestions for the project as necessary was formed. The committee was chaired by Jeff Conrad - Human Resources Program Manager and other members included:

- Albert Shelby - Assistant State Program Delivery Engineer

- Brent Cook - Assistant District Engineer, District 1
- Brian Robinson - Employee Relations Specialist, Human Resources
- Marc Mastronardi - State Construction Engineer
- Teague Buchanan - Assistant Administrator, Information Technology
- Paul Tanner - Assistant State Transportation Data Administrator
- Provita Mungin - Business Operations Specialist, Human Resources

Task 2: Develop Survey Questionnaire

Literature review was conducted in the area of transportation leadership development and training. This review included leadership development, succession management and leadership training research programs in different states. Based on the literature review, a draft of the survey questionnaire was developed to identify the existing and required skills and competencies for GDOT managers and supervisors. This draft was sent to TAC and other states' DOT officials for feedback. Feedback was also obtained from other transportation officials and researchers at Transportation Research Board (TRB) 2012 convention held at Washington, DC. Based on the feedback, the draft was revised and the final survey questionnaire was prepared. The survey questionnaire is enclosed in Appendix A. The survey questionnaire consisted of 24 questions and they were divided into two parts: part one included questions related to career background and general information and part two included questions related to assessment of need. The survey participants were asked to rank 36 skills and competencies using the following scale: 1 - Unimportant; 2 - Not Particularly Important; 3 - Somewhat Important; 4 - Important; 5 - Very Important.

Task 3: Conduct Survey and Analyze the Results

Survey Monkey was chosen to conduct the online survey for the study. Once the survey was uploaded on the Survey Monkey, all the research team members performed a quality control audit of the final survey to ensure it was accurate and error - free, and after that, they completed the survey to ensure proper delivery of data to the research team. After these tests, survey questionnaire was sent to ninety GDOT managers and supervisors. The survey was kept open for approximately one month. During this duration, in order to obtain more responses, five follow - up reminder emails were sent to survey participants. After one month, a total of fifty four responses were received. The GDOT survey responses are included in the Appendix B. To identify the existing and required skills and competencies for other than GDOT managers and supervisors, the same survey questionnaire was sent to other states' DOT officials. A total of twenty responses were received. The other states' DOT survey responses are included in the Appendix C. Based on the responses, the required skills and competencies for GDOT managers and supervisors were prioritized by calculating weighted average of the responses. The weighted average was calculated by using the following formula.

$$\text{Weighted average} = (1*\text{Number of responses for Unimportant rank} + 2*\text{Number of responses for Not particularly Important rank} + 3*\text{Number of responses for Somewhat Important rank} + 4*\text{Number of responses for Important rank} + 5*\text{Number of responses for Very important rank}) / (15)$$

Based on the weighted average, the top eight required skills and competencies for GDOT managers and supervisors, GDOT subordinates, Other DOT managers and supervisors, and Other DOT subordinates were identified. Table 1 lists the top eight skills

and competencies with their weighted average and response percentage for GDOT managers and supervisors. They include Leadership and leadership skills, Decision - making and creative problem - solving, Motivating others, Negotiation and conflict resolution, Customer service, Managing for quality, Team building and group productivity, and Ethics.

TABLE 1

Skills and Competencies Required for GDOT Managers and Supervisors

Priority	Skills and Competencies	Weighted Average	Response Percentage
1	Leadership and leadership skills (1)*	15.33	93.9%
2	Decision - making and creative problem - solving (4)	15.00	91.8%
3	Motivating others (2)	14.93	91.8%
4	Negotiation and conflict resolution (3)	14.40	80.0%
5	Customer service (33)	14.33	79.6%
6	Managing for quality (5)	14.07	85.7%
7	Team building and group productivity (12)	14.00	81.6%
8	Ethics (36)	14.00	81.3%

*Note: number in the parenthesis represents the skill and competency number in the survey questionnaire.

Table 2 lists the top eight skills and competencies with their weighted average and response percentage for GDOT subordinates. They include Customer service, Decision -

making and creative problem - solving, Ethics, Leadership and leadership skills, Team building and group productivity, Negotiation and conflict resolution, Technical competencies, and Time management.

TABLE 2
Skills and Competencies Required for GDOT Subordinates

Priority	Skills and Competencies	Weighted Average	Response Percentage
1	Customer service (33)*	13.60	86.7%
2	Decision - making and creative problem - solving (4)	13.33	95.6%
3	Ethics (36)	13.00	81.8%
4	Leadership and leadership skills (1)	12.93	77.8%
5	Team building and group productivity (12)	12.73	82.2%
6	Negotiation and conflict resolution (3)	12.67	78.3%
7	Technical competencies (34)	12.53	81.8%
8	Time management (19)	12.53	77.3%

*Note: number in the parenthesis represents the skill and competency number in the survey questionnaire.

Table 3 lists the top eight skills and competencies with their weighted average and response percentage for other states' DOT managers and supervisors. They are Leadership and leadership skills, Motivating others, Team building and group

productivity, Strategic management, Decision - making and creative problem - solving, Participative management skills, Interpersonal communications, and Strategic planning.

TABLE 3
Skills and Competencies Required for Other States' DOT Managers and Supervisors

Priority	Skills and Competencies	Weighted Average	Response Percentage
1	Leadership and leadership skills (1)*	5.80	90.0%
2	Motivating others (2)	5.60	89.5%
3	Team building and group productivity (12)	5.53	89.5%
4	Strategic management (8)	5.20	84.2%
5	Decision - making and creative problem - solving (4)	5.13	78.9%
6	Participative management skills (15)	5.13	73.7%
7	Interpersonal communications (18)	5.13	83.3%
8	Strategic planning (7)	5.07	78.9%

*Note: number in the parenthesis represents the skill and competency number in the survey questionnaire.

Table 4 lists the top eight skills and competencies with their weighted average and response percentage for other states' DOT subordinates. They are Interpersonal communications, Ethics, Decision - making and creative problem - solving, Customer

service, Oral communications, Negotiation and conflict resolution, Team building and group productivity, and Written communications.

TABLE 4

Skills and Competencies Required for Other States' DOT Subordinates

Priority	Skills and Competencies	Weighted Average	Response Percentage
1	Interpersonal communications (18)*	4.87	100.0%
2	Ethics (36)	4.87	82.4%
3	Decision - making and creative problem - solving (4)	4.67	76.5%
4	Customer service (33)	4.60	81.3%
5	Oral communications (22)	4.53	81.3%
6	Negotiation and conflict resolution (3)	4.47	76.5%
7	Team building and group productivity (12)	4.47	76.5%
8	Written communications (21)	4.40	75.0%

*Note: number in the parenthesis represents the skill and competency number in the survey questionnaire.

A comparison of top eight skills and competencies for GDOT and other states' DOT managers and subordinates are given in the Table 5. The common skills and competencies from top eight between GDOT managers and supervisors and GDOT subordinates were identified as: Leadership and leadership skills, Negotiation and

conflict resolution, Decision making and creative problem - solving, Team building and group productivity, Customer service, and Ethics. The common skills and competencies from top eight between GDOT and other states' DOT managers were identified as: Leadership and leadership skills, Decision - making and creative problem - solving, motivating others, Team building and group productivity. The common skills and competencies from top eight between GDOT and other states' DOT subordinates were identified as: Negotiation and conflict resolution, Decision - making and creative problem - solving, Team building and group productivity, Customer service, and Ethics.

TABLE 5

Comparison of Skills and Competencies for GDOT and Other States' DOT

Managers and Their Subordinates

Skills & Competencies	GDOT Managers	GDOT Subordinates	Other States' DOT Managers	Other States' DOT Subordinates
Leadership and leadership skills (1)*	✓	✓	✓	
Motivating others (2)	✓		✓	
Negotiation and conflict resolution (3)	✓	✓		✓
Decision - making and creative problem - solving (4)	✓	✓	✓	✓
Managing for quality (5)	✓			
Strategic planning (7)			✓	
Strategic management (8)			✓	
Team building and group productivity (12)	✓	✓	✓	✓
Participative management skills (15)			✓	
Interpersonal communications (18)			✓	✓
Time management (19)		✓		

TABLE 5 (Continued)				
Skills & Competencies	GDOT Managers	GDOT Subordinates	Other States' DOT Managers	Other States' DOT Subordinates
Written communications (21)				✓
Oral communications (22)				✓
Customer service (33)	✓	✓		✓
Technical competencies (34)		✓		
Ethics (36)	✓	✓		✓

*Note: number in the parenthesis represents the skill and competency number in the survey questionnaire.

Task 4: Identify the Course Modules of the Curriculum

After reviewing the results, TAC finalized the following nine core skills and competencies for the GDOT managers and supervisors curriculum. They include:

- 1) Leadership and leadership skills
- 2) Motivating Others
- 3) Negotiation and conflict resolution
- 4) Decision making and creative problem solving
- 5) Managing for quality
- 6) Strategic Management - linking performance plans to organizational goals
- 7) Team building and group productivity
- 8) Ethics
- 9) Customer service

Task 5: Develop the Organizational Structure of the Curriculum

Each course module is designed for half day (i.e., 4 hours) duration. Course module includes lecture, case studies and in - class exercises. To assess the effectiveness of student learning, each course is designed to have pre - course and post - course tests. Course participants take pre - course test at the beginning of the course and post - course test at the end of the course. The participants provide feedback through course evaluation forms. The curriculum can be offered in variety of learning settings such as in - class room, partially online and fully online. Table 6 shows the relative time devoted for various components of the course module for an instructor led classroom setting. For example, the partially online learning setting can be created by including pre - course, post - course and course evaluation and feedback as online components.

TABLE 6

Learning Schedule for Instructor Led Classroom Setting

Component	Suggested Time (Minutes)
Icebreaker/ Introduction of Instructor and Participants	10
Pre - course Assessment	10
Slides – Lecture/Work Session	95
Break	10
Slides – Lecture/Work Session	95
Post - course Assessment	10
Course Evaluation and Feedback	10
TOTAL	240

Task 6: Review Existing GDOT Supervisor's Training Courses

GDOT managers' and supervisors' training courses which were available before this research project were reviewed. The descriptions of the reviewed courses are given in the Appendix D.

As shown in Table 7, a comparison matrix was developed to find the relevancy of these courses with identified GDOT managers' and supervisors' and subordinates' core skills and competencies. "Legal issues" and "Supervisory roles and Responsibilities with conflict management" courses partially covered the Ethics, and Negotiation and conflict resolution skills and competencies respectively. Customer service skill and competency is addressed by "The art of exceptional customer service foundational" and "The art of exceptional customer service advanced" courses.

TABLE 7

Mapping of Existing Courses with GDOT Managers' and Subordinates'

Curriculum

Required Skills & Competencies	Existing GDOT courses
Team building and group productivity	
Decision making and creative problem - solving	
Leadership and leadership skills	
Ethics	Legal Issues
Motivating others	
Negotiation and conflict resolution	Supervisory roles and Responsibilities with conflict management
Strategic management	
Managing for quality	
Customer service	The Art of Exceptional Customer Service Foundational
	The Art of Exceptional Customer Service Advanced

Task 7: Identify the Course Modules to be Developed

After discussions with TAC, it was decided that new courses would be developed for the following eight core skills and competencies.

- 1) Leadership and leadership skills
- 2) Motivating employees
- 3) Negotiation and conflict resolution
- 4) Decision making and problem solving
- 5) Managing for quality
- 6) Strategic Management - linking performance plans to organizational goals
- 7) Team building and group productivity
- 8) Ethics for state employees

Since the existing two courses - The Art of Exceptional Customer Service Foundational and The Art of Exceptional Customer Service Advanced - suffice the GDOT needs on Customer Service skill and competency, a new course module on this is not developed.

Task 8: Develop the Course Modules

The course modules for the above eight core skills and competencies were developed. Each module included lecture, case studies and in - class exercises. The description and objectives of course modules are given in the Appendix E.

Task 9: Pilot and Revise the Course Modules

All the developed modules were taught in an instructor - led class setting. The number of participants for various course modules are listed in the Table 8 below. These

modules were assessed with the participants and their supervisors regarding how the materials help the participants with effectiveness in their works. Based on the feedback from the TAC and participants, the course modules were revised.

TABLE 8

Number of Participants Attended During Piloting of Course Modules

Course Modules	Number of Participants
Leadership and leadership skills	15
Motivating employees	11
Negotiation and conflict resolution	13
Decision making and problem solving	16
Managing for quality	10
Strategic management: linking performance plans to organizational goals	12
Team building and group productivity	15
Ethics for state employees	8

Task 10: Develop Course Implementation Guidelines

The guidelines for implementing the course modules were developed and included in the instructor’s manual. The instructor’s manuals developed are listed in the Appendix F. To assess the effectiveness of the course in the participants’ work, a post - course survey questionnaire was developed; and it is included in the Appendix G.

Task 11: Develop Course Modules for Online Learning Instruction

The basic framework required for online learning setting was developed by creating three videos for each course module. These videos include introduction to course, course demonstration and revisiting course. Introduction to course and revisiting course videos were created in the format which are compatible to be played on ipad and smart phones. Additionally interactive power point presentations, an electronic version of student's notes, case studies, in - class exercises, pre - course and post - course assessment materials were also developed. These materials can be uploaded to the GDOT's content management system for online offering of course modules. The list of videos developed for various course modules is included in the Appendix H.

CONCLUSIONS

In this study, GDOT managers' and supervisors' required skills and competencies were identified through a survey. In order to impart training in those identified top 8 skills and competencies, course modules were developed. These training courses will help GDOT managers or leaders perform better under a challenging situation, take higher supervisory roles, satisfy stakeholders and reduce the turnover of employees.

RECOMMENDATIONS

- Collect the data and evaluate the effectiveness of each course and whole curriculum.
- Evaluate various available technologies and suggest the most effective and economical technology for online offering of curriculum.
- Offer the courses through online environment. Collect feedback and revise the courses to meet the online participants' needs.

- Collect data and evaluate the effectiveness of online curriculum.
- Develop and add more courses to the curriculum to meet the supervisors' and managers' needs.

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APPENDICES

Appendix A
Survey Questionnaire

Georgia Leadership Training Academy

Questionnaire

I. Career Background and General Information

Please provide the following information about your professional and educational background.

Professional Background

Your agency/company? _____

Your name (optional)? _____

1a. How many years have you worked in the transportation industry?

1b. If your prior experience is outside the transportation industry, in which field(s) have you worked?

2. How many years during your career in the transportation industry have you spent working in each of the following modes:

<u>Mode</u>	<u>No. of years</u>
Rail	_____
Mass transit	_____
Air	_____
Highways	_____
Other Transportation	_____ (describe) _____

3. How long have you worked for your current agency/company? _____

4. What is your current position? _____

5. Please provide a brief description of your major job responsibilities:

6. How long have you been in this position?

Less than one year

6 - 10 years

1 - 2 years

11 - 20 years

3 - 5 years

21 - 30 years

7. How does your organization classify your position?

Entry level management

Middle level management

Executive level management

Other (specify) _____

8. Please list the two positions you held prior to the current one:

9. How many people do you directly supervise? _____

10. Of these, how many are classified as management personnel? _____

11. Listed below are several activities generally associated with management positions in any industry. Please indicate the percentage of time you spend annually performing each of these or other activities:

% Program/Project Planning

% Budget Preparation

% Organizational Policymaking

% Public Contact

% Personnel Supervision

___ % Program/Project Implementation

___ % Other (specify) _____

100 % Total

Education and Training Background

12. Please indicate the highest educational level you have attained:

High school __, some college __, Undergraduate degree __, some graduate work __, Masters or professional degree __, Doctoral __,

Where applicable, provide the specific degrees, the area of specialization and the school for any graduate degrees you hold:

Bachelor's _____ Year _____ School _____

Masters _____ Year _____ School _____

Doctorate _____ Year _____ School _____

13. Do you have any certifications/licenses (EIT/PE/PMP/Six Sigma/LEED AP/TQM)?

___ No. ___ Yes.

14. How important has your prior formal education been in advancing your career?

Not Important At All 1 2 3 4 5 Very Important

15. Do you plan to continue or seek additional formal education?

___ No. ___ Yes.

If Yes, indicate field of study _____

16. Is there any particular formal management education you wish you had taken before you assumed your present position?

___ No. ___ Yes (describe) _____

17. In general, how many specialized training opportunities are offered in - house by your agency during the year that is of interest to you?

None (0) ____

A fair amount (5 - 9) ____

A few (1 - 4) ____

A lot (10 +) ____

18. Please list any significant technical or managerial training courses you have attended during the past five years and who the courses were offered by:

Course Name:

Offered by:

19. Overall, how useful have these past training opportunities been in the performance of your job?

Not Useful At All 1 2 3 4 5 Very Useful

20. Is there any particular training program you wish you had taken before you assumed your present position?

___ No. ___ Yes.

If yes, please specify that training: _____

21a. What are the most important problems currently your unit is confronting? (Please discuss in terms of your immediate department or unit, and also for your agency as a whole.)

21b. To meet the above challenges, are there specific management skills, techniques, or areas of knowledge that would be beneficial either for you or your subordinates?

21c. Are there areas where the enhancement of technical competencies would be beneficial?

II. Assessment of Need

We are interested in determining which skills have the highest priority to you and your direct reports for improving work at your agency. Please rank each of the skill areas listed below using the following scale:

1 - Unimportant

2 - Not Particularly Important

3 - Somewhat Important

4 - Important

5 - Very Important

II.A. Managerial and Supervisory Skills & Competencies

This section is to determine which managerial and supervisory skills and competencies have the highest priority for you and your direct reports:

RATINGS

“ I need...” “ My subordinates need...”

SKILL AREAS

- | | | |
|---|------------------|------------------|
| 1. Leadership and leadership skills | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 2. Motivating others | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 3. Negotiation and conflict resolution | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 4. Decision - making and creative problem - solving | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 5. Managing for quality | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 6. Innovation skills | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 7. Strategic planning | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 8. Strategic management | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 9. Total quality management | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 10. Marketing | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 11. Public relations | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 12. Team building & group productivity | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 13. Work unit planning & organization | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 14. Employee recruitment & development | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 15. Participative management skills | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 16. Performance appraisal & feedback | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |
| 17. Monitoring and control systems | <u>1 2 3 4 5</u> | <u>1 2 3 4 5</u> |

18. Interpersonal communications	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
19. Time management	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
20. Stress management	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
21. Written communications	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
22. Oral communications	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
23. Capital budgeting	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
24. Program budgeting	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
25. Financial decision - making	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
26. Transportation finance	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
27. Third - party contracting	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
28. Procurement process	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
29. Contract administration	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
30. Cost and price analysis	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
31. Contract changes	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
32. Claims and disputes	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
33. Customer service	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
34. Technical competencies	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
35. Workforce diversity	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>
36. Ethics	<u>1 2 3 4 5</u> <u>1 2 3 4 5</u>

II.A.1 Rank Order Priority

Please rank order the skill areas that you designated highest priority for yourself or your subordinates (i.e. skills that you ranked as # 5). Simply list the skill number, rather than the complete term.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

II.A.2. Are there managerial and supervisory training topics not listed above that you would like to see in a training program?

Managerial and supervisory skills:

Demographics (optional)

22. What is your age? _____

23. What is your gender? _____

24. What is your race/ethnicity?

___ Native American ___ Asian

___ Caucasian ___ Latino

___ African - American ___ Other

Appendix B
GDOT Survey Responses

" I need..."							
Answer Options	1	2	3	4	5	Response Count	Weighted Average
1. Leadership and leadership skills	0	1	2	8	38	49	15.33
4. Decision - making and creative problem - solving	0	2	2	10	35	49	15.00
2. Motivating others	0	1	3	12	33	49	14.93
3. Negotiation and conflict resolution	0	0	10	14	26	50	14.40
33. Customer service	1	3	6	5	34	49	14.33
5. Managing for quality	0	1	6	19	23	49	14.07
12. Team building and group productivity	1	0	8	15	25	49	14.00
36. Ethics	2	1	6	7	32	48	14.00
13. Work unit planning and organization	1	1	10	11	26	49	13.80
22. Oral communications	2	2	7	7	30	48	13.67
18. Interpersonal communications	0	0	15	10	23	48	13.33
19. Time management	2	2	9	11	24	48	13.13
34. Technical competencies	0	1	14	13	20	48	13.07
8. Strategic management	1	2	10	15	20	48	13.00
16. Performance appraisal and feedback	2	4	11	11	21	49	12.80
20. Stress management	4	2	8	11	23	48	12.73
21. Written communications	2	3	10	12	21	48	12.73
15. Participative management skills	3	1	14	17	15	50	12.67
6. Innovation skills	0	2	15	17	14	48	12.47
7. Strategic planning	1	5	11	12	19	48	12.47
9. Total quality management	1	5	15	16	11	48	11.67
14. Employee recruitment & development	3	5	13	13	14	48	11.60
11. Public Relations	6	5	12	10	16	49	11.47
25. Financial decision - making	3	8	13	7	17	48	11.40
26. Transportation finance	6	7	7	11	17	48	11.33
35. Workforce diversity	5	2	19	11	11	48	11.00
28. Procurement process	6	3	16	12	11	48	10.87
17. Monitoring and control systems	3	8	17	9	11	48	10.73
29. Contract administration	5	5	17	11	10	48	10.67
24. Program budgeting	9	7	9	8	15	48	10.47
27. Third - party contracting	8	6	10	13	11	48	10.47
23. Capital budgeting	9	8	10	7	14	48	10.20
31. Contract changes	6	7	15	12	8	48	10.20
32. Claims and disputes	8	10	7	12	11	48	10.13
30. Cost and price analysis	8	6	14	11	9	48	10.07
10. Marketing	0	9	13	2	4	48	7.00

"My subordinates need..."							
Answer Options	1	2	3	4	5	Response Count	Weighted Average
33. Customer service	0	1	5	8	31	45	13.60
4. Decision - making and creative problem - solving	0	0	2	21	22	45	13.33
36. Ethics	1	0	7	7	29	44	13.00
1. Leadership and leadership skills	0	2	8	9	26	45	12.93
12. Team building and group productivity	1	1	6	15	22	45	12.73
3. Negotiation and conflict resolution	0	2	8	18	18	46	12.67
34. Technical competencies	0	0	8	16	20	44	12.53
19. Time management	1	0	9	10	24	44	12.53
22. Oral communications	0	0	11	10	23	44	12.53
21. Written communications	0	0	9	16	19	44	12.40
2. Motivating others	0	3	7	16	19	45	12.40
18. Interpersonal communications	0	0	12	11	21	44	12.33
5. Managing for quality	1	3	6	20	15	45	12.00
6. Innovation skills	1	2	8	16	17	44	11.87
13. Work unit planning and organization	0	4	14	13	14	45	11.47
16. Performance appraisal and feedback	2	3	12	15	13	45	11.27
20. Stress management	2	3	8	14	16	43	11.20
9. Total quality management	4	3	16	10	11	44	10.20
35. Workforce diversity	4	2	17	12	9	44	10.13
15. Participative management skills	5	5	16	11	9	46	10.13
14. Employee recruitment & development	9	3	7	12	13	44	9.93
29. Contract administration	5	6	10	13	10	44	9.93
7. Strategic planning	2	7	15	12	8	44	9.93
8. Strategic management	3	6	15	12	8	44	9.87
11. Public relations	7	6	10	11	10	44	9.53
28. Procurement process	7	5	11	13	8	44	9.47
17. Monitoring and control systems	7	5	12	11	9	44	9.47
31. Contract changes	7	8	11	10	8	44	9.07
30. Cost and price analysis	8	7	11	10	8	44	9.00
26. Transportation finance	10	6	10	13	5	44	8.60
27. Third - party contracting	10	4	17	5	8	44	8.60
25. Financial decision - making	10	6	14	6	8	44	8.53
32. Claims and disputes	8	8	14	9	5	44	8.47
24. Program budgeting	14	5	12	6	7	44	7.93
23. Capital budgeting	15	7	8	9	5	44	7.60
10. Marketing	20	9	10	2	3	44	6.07

Appendix C

Other State DOTs' Survey Responses

" I need..."							
Answer Options	1	2	3	4	5	Response Count	Weighted Average
1. Leadership and leadership skills	0	0	2	9	9	20	5.80
2. Motivating others	0	1	1	6	11	19	5.60
3. Negotiation and conflict resolution	1	2	3	4	9	19	5.00
4. Decision - making and creative problem - solving	1	1	2	7	8	19	5.13
5. Managing for quality	1	1	3	9	4	18	4.53
6. Innovation skills	0	1	5	8	4	18	4.60
7. Strategic planning	2	0	2	7	8	19	5.07
8. Strategic management	1	1	1	8	8	19	5.20
9. Total quality management	5	0	8	5	1	19	3.60
10. Marketing	3	1	7	3	5	19	4.20
11. Public relations	0	5	5	7	2	19	4.20
12. Team building and group productivity	0	0	2	8	9	19	5.53
13. Work unit planning and organization	0	3	5	4	6	18	4.47
14. Employee recruitment & development	2	2	5	3	7	19	4.53
15. Participative management skills	0	1	4	7	7	19	5.13
16. Performance appraisal and feedback	3	0	3	5	8	19	4.80
17. Monitoring and control systems	2	3	9	1	3	18	3.60
18. Interpersonal communications	0	1	2	6	9	18	5.13
19. Time management	0	1	7	6	4	18	4.47
20. Stress management	0	1	8	4	5	18	4.47
21. Written communications	1	3	2	4	8	18	4.60
22. Oral communications	0	2	3	2	11	18	5.07
23. Capital budgeting	6	4	5	3	0	18	2.73
24. Program budgeting	3	2	3	8	3	19	4.20
25. Financial decision - making	3	1	7	4	4	19	4.13
26. Transportation finance	3	5	6	3	1	18	3.20
27. Third - party contracting	6	2	5	4	1	18	3.07
28. Procurement process	3	6	5	1	3	18	3.27
29. Contract administration	3	4	2	5	4	18	3.80
30. Cost and price analysis	5	2	5	5	1	18	3.27
31. Contract changes	5	3	3	5	2	18	3.33
32. Claims and disputes	8	2	7	1	0	18	2.47
33. Customer service	0	3	2	3	10	18	4.93
34. Technical competencies	0	4	4	5	5	18	4.33
35. Workforce diversity	2	1	6	4	5	18	4.20
36. Ethics	1	1	2	4	10	18	5.00

"My subordinates need..."							
Answer Options	1	2	3	4	5	Response Count	Weighted Average
1. Leadership and leadership skills	0	1	6	6	4	17	4.27
2. Motivating others	1	1	4	9	2	17	4.07
3. Negotiation and conflict resolution	0	1	3	9	4	17	4.47
4. Decision - making and creative problem - solving	0	1	3	6	7	17	4.67
5. Managing for quality	0	1	3	11	1	16	4.00
6. Innovation skills	0	0	5	8	3	16	4.13
7. Strategic planning	0	6	5	4	2	17	3.53
8. Strategic management	1	7	3	5	1	17	3.27
9. Total quality management	5	5	5	2	0	17	2.53
10. Marketing	5	2	6	2	2	17	3.00
11. Public Relations	1	2	8	5	1	17	3.60
12. Team building and group productivity	0	2	2	8	5	17	4.47
13. Work unit planning and organization	0	5	4	5	2	16	3.47
14. Employee recruitment & development	2	1	5	5	3	16	3.60
15. Participative management skills	2	0	6	8	0	16	3.47
16. Performance appraisal and feedback	0	2	7	2	5	16	3.87
17. Monitoring and control systems	2	3	5	6	0	16	3.13
18. Interpersonal communications	0	0	0	7	9	16	4.87
19. Time management	0	1	3	6	6	16	4.33
20. Stress management	0	2	6	4	4	16	3.87
21. Written communications	0	1	3	5	7	16	4.40
22. Oral communications	0	1	2	5	8	16	4.53
23. Capital budgeting	8	4	3	1	0	16	1.93
24. Program budgeting	4	6	4	1	1	16	2.47
25. Financial decision - making	6	3	6	0	2	17	2.67
26. Transportation finance	5	5	4	1	1	16	2.40
27. Third - party contracting	7	1	5	2	1	16	2.47
28. Procurement process	5	6	2	2	1	16	2.40
29. Contract administration	3	2	4	5	3	17	3.60
30. Cost and price analysis	4	3	5	2	2	16	2.87
31. Contract changes	5	6	2	1	3	17	2.80
32. Claims and disputes	7	5	2	2	0	16	2.07
33. Customer service	0	1	2	4	9	16	4.60
34. Technical competencies	0	2	4	4	6	16	4.13
35. Workforce diversity	0	2	7	5	2	16	3.67
36. Ethics	0	1	2	5	9	17	4.87

Appendix D

Reviewed Existing GDOT Course Descriptions

Reviewed Existing GDOT's Courses Related to Supervisor's Training

Course Title: Developing Employees

Course Description: This course is designed to demonstrate to supervisors the importance of employee development and to advise them of the steps in doing so.

Duration: 3.5 hours

Course Title: Leading a Diverse Team

Course Description: This course familiarizes new supervisors with the challenges and rewards of leading a diverse team.

Duration: 4 hours

Course Title: Legal Issues

Course Description: This course familiarizes supervisors with the HR policies and procedures currently in place to avoid legal pitfalls. This should NOT be viewed as legal training or legal advice.

Duration: 3 hours

Course Title: Supervisory Roles and Responsibilities With Conflict Management

Course Description: This course familiarizes new or potential supervisors with the basic roles and responsibilities associated with supervising employees. It also addresses conflict management techniques for supervisors.

Duration: 4 hours

Course Title: Trust and Organizational Commitment

Course Description: This course is designed to strengthen the supervisor's skills in building trust and organizational commitment in work teams.

Duration: 3 hours

Course Title: Effective Communication for Managers and Supervisors

Course Description: This course is designed to refresh supervisors and managers on the basics of communication, how to be a better listener, giving feedback, determining the appropriate form of communication in various situations and how to keep effective communication flowing in the workplace.

Duration: 3 hours

Course Title: The Art of Exceptional Customer Service - Foundational

Course Description: The course serves as a pre - requisite to the Advanced Course.

Topics of this course include:

- Our Commitments to Our Customers: connecting participants' job responsibilities to our commitments to our customers and setting clear performance expectations.
- The Customer Service Connection: demonstrating the relationship between every state employee's job and customer service.
- The Customer Service Team: building an effective customer service team.
- The Customer and Relationship Building: using our Standards of Service (Greet, Listen, Help, Honor) to quickly understand and build a positive relationship with our customers.
- Effective Communication: listening to expressing an accurate message and creating positive customer service perceptions.

- From Good to Exceptional Customer Service: developing exceptional customer service skills for face to face, telephone or on line customer interactions. Improving customer satisfaction by seeing service through the customers' eyes and resolving difficult situations.

Duration: 8 hours

Course Title: The Art of Exceptional Customer Service - Advanced

Course Description: This course builds on the foundational course. Topics covered include:

- Communication Styles: discovering your own natural style of communication, how to recognize and adapt to your customer's style.
- Exceeding Customer Expectations: molding the customer service experience. Learning about customer expectations and how to exceed those expectations.
- Problem Solving and Service Recovery: accepting ownership of the customer's experience from onset to conclusion, even in difficult situations. Using service recovery steps to satisfy the uncomfortable customer.
- Creating a Customer Service Culture: using resources, tools and best practices available to state employees and agencies to create a culture of customer service. How individual employees can have a positive impact on their team's customer service and performance.

Duration: 4 hours

Appendix E

Developed Courses' Descriptions and Objectives

1) Course Title: Leadership and Leadership Skills

Course Description: This course addresses the nature of leadership, theories of contemporary leadership, common leadership traits, different approaches to leadership, the concept of followership, and use of power and influence as leaders.

Learning Objectives: Participants will:

- Define leadership
- Identify personal characteristics associated with effective leaders
- Describe types of leadership styles
- Explain how behaviors can be used to evaluate and adapt leadership style
- Explain how followership is related to effective leadership
- Identify sources of leader power and the tactics that leaders use to influence others

2) Course Title: Motivating Employees

Course Description: This course addresses the relationship between rewards and motivation, various theories of motivation, concepts of behavior reinforcement, and job design as a motivating factor.

Learning Objectives: Participants will:

- Differentiate between intrinsic and extrinsic rewards and describe how they influence motivation
- Outline the five primary content theories of motivation and describe how they are similar or different
- Describe the primary process theories of motivation and what each one attempts to measure

- Explain the different ways in which desired behavior is reinforced within an organization and the role that job design plays in channeling motivation

3) Course Title: Negotiation and Conflict Resolution

Course Description: This course is designed to develop skills for internal conflict resolution and negotiating strategies between GDOT Managers and GDOT subordinates, as well as specific strategies to deal with outside project subcontractors and vendors. This course details occurrences such as unpleasant confrontation, emotional intelligence, and personality types so managers are equipped with tools to help them manage effectively when a conflict or negotiation scenario occurs at the work place.

Learning Objectives: Participants will:

- Identify factors that lead to unpleasant confrontation
- Define personality types and predictive behaviors
- Develop a contract compliance matrix defining who is responsible for what and when
- Explain the significance of reading and analyzing the contract
- Develop conflict mitigation strategies

4) Course Title: Decision Making and Problem Solving

Course Description: This course familiarizes supervisors and managers with steps involved in decision making and problem solving process. It also addresses the factors and barriers influencing the decision making.

Learning Objectives: Participants will:

- Identify problem types
- Identify the steps in decision making and problem solving

- Identify the attributes of an effective decision maker
- Identify situations requiring individual decisions and group decisions
- Identify the factors influencing decision making
- Identify the barriers for decision making
- Explain how to encourage creative decision making
- Explain pros and cons of using group decisions
- Describe how to make a decision in a crisis

5) Course Title: Managing for Quality

Course Description: This course is designed to develop skills for managing quality between GDOT managers and GDOT subordinates as well as specific quality management strategies to deal with outside project subcontractors and vendors. This course details quality management and the four quality components such as planning, control, assurance, and compliance. Further investigation reveals the eight dimensions of quality, which is used to analyze quality characteristics so managers are equipped with tools to help them manage effectively to determine that goods and /or services procured by GDOT are consistent within the organizational standards.

Learning Objectives: Participants will:

- Define Quality Management
 - Quality Management Planning
 - Quality Management Control
 - Quality Management Assurance
- Identify the Eight Dimensions of Quality
- Identify benefits of Quality Assurance & Quality Compliance (QA/QC)

6) Course Title: Strategic Management - Linking Performance Plans to Organizational Goals

Course Description: This course familiarizes supervisors and managers with the process for developing employee performance plans that are aligned with and support organizational goals.

Learning Objectives: Participants will:

- Describe the steps in the performance management
- Determine the difference between activities and accomplishments
- Summarize steps to link individual employee's performance plans to organizational goals
- Identify organizational strategic goals
- Develop a performance plan that aligns individual performance with organizational goals

7) Course Title: Team Building and Group Productivity

Course Description: This course is designed to develop skills for increasing productivity through effective team building. Various types of team building skills will be discussed with real life examples to better understand how team working can increase worker productivity. Also discussed are the factors that affect employee productivity which can help participants to learn what may help increase productivity between GDOT Managers and GDOT subordinates, as well as specific strategies to motivate outside project subcontractors and vendors to maintain appropriate levels of productivity on GDOT projects.

Learning Objectives: Participants will:

- Identify benefits of team building
- Define goals of team building
- Identify situational leadership traits & characteristics to build the team
- Explain factors that affect employees productivity
- Define factors for improving employee productivity

8) Course Title: Ethics for State Employees

Course Description: This course addresses principles and theories of ethics, business and organizational ethics, state ethics policies and procedure.

Learning Objectives: Participants will:

- Define ethics
- Define business ethics
- Define ethics for state employees
- Perceive and avoid conflicts of interest
- Identify and prevent waste, fraud, abuse, and corruption, and know what to do if any of these are observed
- Determine strategies for behaving in an ethical manner in the public workplace

Appendix F

Developed Course Module Instructor's Manuals

- Leadership and Leadership Skills Instructor Manual
- Motivating Employees Instructor Manual
- Negotiation and Conflict Resolution Instructor Manual
- Decision Making and Problem Solving Instructor Manual
- Managing for Quality Instructor Manual
- Strategic Management - Linking Performance Plans to Organizational Goals
Instructor Manual
- Team Building and Group Productivity Instructor Manual
- Ethics for State Employees Instructor Manual

Appendix G

Post - Course Survey Questionnaire



Post - Course Survey

1. Was this course beneficial to you?

____ Yes

____ No

2. Are you currently using the information provided in the course in your daily work?

____ Yes

____ No

3. What was the most beneficial aspect of the course?

4. What was the least beneficial aspect of the course?

5. Please share any additional comments or suggestions regarding the course:

Thank you for your feedback!

Appendix H
Course Module Videos

1) Course Title: Leadership and Leadership Skills

- Introduction to Leadership and Leadership Skills
- Leadership and Leadership Skills course demonstration video
- Revisiting Leadership and Leadership Skills

2) Course Title: Motivating Employees

- Introduction to Motivating Employees
- Motivating Employees course demonstration video
- Revisiting Motivating Employees

3) Course Title: Negotiation and Conflict Resolution

- Introduction to Negotiation and Conflict Resolution
- Negotiation and Conflict Resolution course demonstration video
- Revisiting Negotiation and Conflict Resolution

4) Course Title: Decision Making and Problem Solving

- Introduction to Decision Making and Problem Solving
- Decision Making and Problem Solving course demonstration video
- Revisiting Decision Making and Problem Solving

5) Course Title: Managing for Quality

- Introduction to Managing for Quality
- Managing for Quality course demonstration video
- Revisiting Managing for Quality

6) **Course Title:** Strategic Management - Linking Performance Plans to Organizational Goals

- Introduction to Strategic Management: Linking Performance Plans to Organizational Goals
- Strategic Management: Linking Performance Plans to Organizational Goals course demonstration video
- Revisiting Strategic Management: Linking Performance Plans to Organizational Goals

7) **Course Title:** Team Building and Group Productivity

- Introduction to Team Building and Group Productivity
- Team Building and Group Productivity course demonstration video
- Revisiting Team Building and Group Productivity

8) **Course Title:** Ethics for State Employees

- Introduction to Ethics for State Employees
- Ethics for State Employees course demonstration video
- Revisiting Ethics for State Employees