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The highway safety profession is undergoing significant evolution...

- Increasing emphasis on managing safety performance
- Improvements in the science of highway safety
- Initiatives underway to reduce fatalities
Overview

- Need to adequately prepare transportation workforce
  - Nationally: +/- 10,000 public-sector employees whose primary focus is safety
  - +/- 100,000 public-sector employees who influence safety

- Safety related job roles, responsibilities, and education backgrounds are varied and diverse

- A need to providing road safety education to support sound decisions is a challenge

- Core safety knowledge and skills are generally learned on-the-job, if at all
ALDOT SAFETY WORKFORCE DEVELOPMENT INITIATIVES

A partnership:

ALDOT’s Office of Safety Operations
Auburn University Highway Research Center
Cambridge Systematics
Development of a Highway Safety Workforce in Alabama: Phase I Study

Objective:

• Develop a comprehensive report on the Alabama Department of Transportation’s (ALDOT) safety workforce development challenges

Additional Motivation / Connections:

• Regionalization/decentralization within ALDOT
• Goal 5 of the Strategic Plan for AASHTO’s Standing Committee on Highway Traffic Safety: To ensure a knowledgeable and competent safety workforce.
Phase I – Tasks

1. Review road safety “core competencies”

2. Identify current training materials and compare to the core competencies

3. Interview ALDOT personnel in key positions
   Cross-cutting review across many offices

4. Survey state DOT training directors

5. Match safety core competencies to ALDOT positions
   Develop a training and education plan

6. Document offerings from universities, NHI, etc., in relevant areas

7. Develop a management briefing package

8. Share deliverables with professional associations
Phase I Study Highlight –
Task 3: The interviews

Interviewed over 30 ALDOT employees
» Several Bureau Chiefs and their assistants or section leaders
» A few Assistant Division Engineers and District Managers

What did we find?
» Safety was often thought to be adequately addressed by adherence to “manuals” or “guidelines”
» Lack of follow-up training or widespread application of the Highway Safety Manual
» Lack of familiarity or even awareness of Alabama’s Strategic Highway Safety Plan
Highway safety training needs specific to several key positions were identified

- Bureaus: Design, Construction, Maintenance, Bridge, etc.
- Division (now Region) and District positions

Education and training needs specific to each position were categorized into short, medium, and long-term needs

- A review of existing resources was conducted to identify “gaps” that need to be filled.
Phase I Recommendation: 1. Invest in Personnel Resources

» Opportunity
  - Staff each region with a well-trained highway safety engineer, who has continuing access to the expertise available through national sources and Alabama-specific training

» Key points
  - Have the right people, with the right knowledge, in the right place
  - Ensure expertise is accessible
  - Distribute the safety analysis workload throughout the state
Phase 1 Recommendation:  
2. Provide Resources and Training

» Opportunity
  – Provide additional focused training to all functional areas, within the Central Office and Regions
  – Increase safety knowledge and expertise across multiple areas in ALDOT, e.g., planning, design, maintenance and operations

» Key points
  – Positively impact safety performance
  – Improve project design decisions
  – Improve both system efficiency and safety
  – Save time, money, and most importantly – lives
Phase I Recommendation:
3. Promote the Strategic Highway Safety Plan (SHSP)

» Opportunity
  – Use the Alabama SHSP as a guide to achieving the mission of excellence in a safe transportation system.

» Key points
  – Promote a safety culture within ALDOT
  – Encourage ALL employees to become safety ambassadors
  – Identify implementation leaders
  – Provide a catalyst to save lives

» Development of a new SHSP is underway
  – Currently working with MPOs and local governments to identify priority focus areas
Phase I Recommendation: 4. Succession Planning

» Opportunity
  – Implement a plan to train and educate ALDOT staff
  – Continue success and advancement in transportation safety improvement

» Key points
  – Minimize the Impact of key retirements
  – Promote the use of science-based safety tools
  – Provide sustainable support for transportation safety
MOVING FORWARD WITH DEDICATED SAFETY TRAINING
Phase II – Study Objectives & Tasks

1. Implement the recommendations of Phase One
2. Develop training materials on highway safety fundamentals and network screening methods
3. Conduct a peer exchange and complete the education and training matrix proposed in the Phase I study
4. Develop a curriculum outline for regional highway safety engineers
5. Develop safety engineering awareness materials for law enforcement and other safety partners
Training Program

Developing a series of training videos on highway safety topics FOR A VARIETY OF POSITIONS...list of topics will be developed from:

» Education and training plan from Phase 1
» Content of *HSM* Parts A and B
» *NCHRP Report 600: Human Factors Guide*
» Input from a review panel and the peer exchange

Developing a curriculum plan for region highway safety engineers
Training Videos: ALDOT Personnel

- Videos will be approximately 15-20 minutes in length
- Videos will mainly be independent of each other
- Curriculum can be built specifically for the needs of the any position and its safety-related responsibilities
Training Videos: Law Enforcement

- Videos will be approximately 15-20 minutes in length
- Videos will mainly be independent of each other
- Videos will be oriented specifically for the law enforcement audience (state troopers, city police officers, sheriff’s deputies, etc.)
THE FOCUS IS RESULTS!
Anticipated results of these studies...

- Roadmap for enhancing ALDOT’s safety education and training
- Training and education materials for ALDOT’s highway safety, planning, design, maintenance, and operations
  - Including support for MPO/RPO, cities, counties, consultants
- Safety engineering information for law enforcement personnel and other safety partners
- Increase in efficiency, cost savings, and return on investment
- Improved safety
WE COULD USE YOUR HELP!!

Any suggestions for the Phase 2 training development program are welcome!
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