

Integrating Safety into Your Agency's Workforce Development



Session Outline/Agenda

9:30-10:30 AM

- Workforce Development for Current Employees
 - Presentation of LTAP Programs (15 min)
 - Discussion (15 min)
 - Presentation on Local Road Safety Certificate (15 min)
 - Discussion (15 min)

10:50-11:50 AM

- Hiring New Employees
 - Presentation on How to Market Positions (15 min)
 - Discussion (15 min)
 - Presentation on Key Qualifications (15 min)
 - Discussion (15 min)



Goals for Session, Part A

- Discuss workforce development for current employees
 - Summarize the Local Road Safety Certificate (and LTAP Road Scholars Programs, and Safety Circuit Rider Programs) and solicit feedback on the courses and structure.
 - Identify best practices for engaging/encouraging employees in trainings.
 - State the most needed trainings in your agency.





Beverly FontenotGA LTAP Program Manager

Workforce Development for Current Employees

- Safety Circuit Rider
- LTAP Roads Scholar Program



Employee engagement isn't something that happens by itself - it needs to be driven by somebody. It's not just a switch you can flick either; it's a continuous conversation between everyone in the organization



Reducing vehicle crashes and improving overall roadway safety are the key goals of the Safety Circuit Rider (SCR) program.



- Provides safety-related information, training, and support to agencies responsible for local roadway safety
- SCR programs can take many forms including technical assistance, training, and technology transfer
- Providing this onsite, safety-related support meets two needs. First, safety on locally maintained roads is a significant issue nationwide. Second, many local agencies lack the resources or technical expertise to properly identify, diagnose, and treat traffic safety problems.



- In Florida, the safety circuit riders have worked with nearly a dozen counties to review crash data and identify locations with safety issues. Once locations are identified, the safety circuit riders conduct site visits or formal RSAs to diagnose safety issues. Florida safety circuit riders have been conducting RSAs for over three years.
- District 7 has become so involved with the SCR program that it has developed a five-year work plan for conducting RSAs and Road Safety Audit Reviews (RSARs). Based on a safety diagnosis, the safety circuit riders work with the agency to identify low-cost solutions to:
- Improve signing and pavement markings.
- Install appropriate signs and rumble strips.
- Trim vegetation to improve sight distance/ visibility of signs.
- Figure 5 provides an example of issues identified during RSAs in Pasco County and the actions taken to remedy the issue. A more detailed example of a Pasco County RSA is provided in Appendix E.
- Figure 5. Examples of Issues Identified during Pasco County RSAs.
- **Location:** Ridge Road (CR 587) at Leo Kidd Avenue.
- **Left Photo:** BEFORE Guide signs were identified as confusing and obstructed visibility of the traffic signals on Leo Kidd Avenue (background).
 - **Right Photo:** AFTER Guide signs were consolidated and backplates added to increase visibility of the traffic signal and to reduce driver overload



- Figure below provides an example of issues identified during RSAs in Pasco County and the actions taken to remedy the issue.
- Examples of Issues Identified during Pasco County RSAs.
- Location: Ridge Road (CR 587) at Leo Kidd Avenue.
- **Left Photo: BEFORE -** Guide signs were identified as confusing and obstructed visibility of the traffic signals on Leo Kidd Avenue (background).
 - **Right Photo:** AFTER Guide signs were consolidated and backplates added to increase visibility of the traffic signal and to reduce driver overload







Figure 6. Example of Technical Assistance Activity in West Virginia

- Top left and right photos show a marked crosswalk before a technical assistance activity from the West Virginia SCR. Crossing is difficult to see from a driver's perspective.
- Bottom left and right photos show the same marked crosswalk after a technical assistance activity from the West Virginia SCR. Pavement markings have been repainted and a retroreflective sign has been installed to increase conspicuity.











- Offered in your state?
- Other names for this program?



- This certificate program combines a range of training options—LTAP and in-person workshops, online courses, and more—into a structured curriculum. Graduates earn a valuable professional development credential.
- To earn your certificate, you must earn a defined number credits within a certain pre-defined period of time from available LTAP courses.
- Your accomplishment won't go unnoticed. When you complete your final course, the LTAP will send confirmation letters to you and your supervisor, and a press release to your local newspaper.
- Graduates for the year are honored during a ceremony and announced (with Photo)in the <u>newsletter</u>.





- Who can participate?
- The Roads Scholar Program is designed for all municipal employees and officials responsible for road maintenance and safety in their community.
 Roadmasters, road superintendents, road crews, public works personnel, managers, and elected officials will learn from each workshop and become an even more valuable member of their municipal team as a result of this knowledge





The Local Technical Assistance Program, an OSU outreach project for construction and maintenance of transportation systems employees at the local level, recently awarded Roads Scholar Completion Certificates to 49 individuals, the largest group in the program's history.



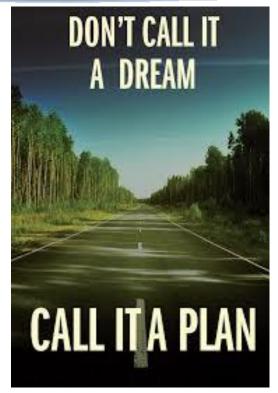














Training ??



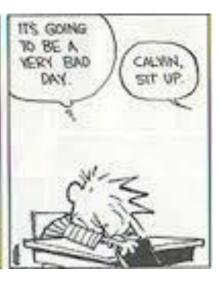


Engagement











Beverly FontenotGA LTAP Program Manager

Workforce Development for Current Employees

Discussion



Discussion Regarding: 1) Safety Circuit Rider & 2) Roads Scholar Programs

- Have you heard of these programs before or participated in them?
- How do we ensure that the programs remain relevant?
- How do we evaluate the effectiveness of engaging employees?





Natalie Villwock-Witte Safety Center/WTI

Workforce Development for Current Employees

 Local Road Safety Certificate Program



Background

- National Center for Rural Road Safety:
 - <u>Development Materials for a Local Maintenance</u>
 <u>Personnel Rural Road Safety Recognition Program</u>
- National Association of County Engineers:
 - Local Road Safety Certificate Framework
- West Region Transportation Workforce Center
 - Maintenance Safety Recognition Program Framework
- Montana Local Technical Assistance Program
 - Conducts the road scholar program which incorporates several safety courses



Objectives

- Promote safety through professional development of local road officials utilizing a comprehensive safety educational initiative
- Integrate safety competencies into transportation training, education, and career pathway streams
- Create a nationally replicable structure for obtaining and incentivizing road safety training and competencies attainment

Audience

- Local roads personnel
- Focused on suburban, rural and smaller communities and towns

Project Partner Roles

West Region Transportation Workforce Center (WRTWC)

- Apply for the pilot implementation funding
- Oversee the development of the framework and learning objectives for core training courses

National Center for Rural Road Safety (Safety Center)

- Provide guidance on the development of the certificate framework
- Assist in defining learning objectives for core safety training courses
- Develop new training courses for incorporation into the certificate framework
- Work with training providers to pilot new training courses

National Association of County Engineers (NACE)

- Provide guidance on the development of the certificate framework
- Provide guidance, through consultation with its membership, in defining core safety content and learning objectives
- Provide outreach support to promote and incentivize participation in the pilot project

Montana Local Technical Assistance Program (MT LTAP)

- Adapt existing training courses, or to integrate new training courses into its on-site and blended training programs
 - Pilot the implementation of the certificate

Framework Considerations

- Utilize existing resources to develop content as much as practical
- Incorporate existing courses into the framework (e.g., LTAP, Safety Center, TC3, etc.)
- Utilize existing partners to deliver training as appropriate (e.g., LTAPs, Safety Center, etc.)
- Provide graduated learning levels based upon need(s) and expertise
- Develop content deliverable in various formats to fit audience, needs, time and objectives.
- Develop modular format to allow learning based upon need (e.g., one-size does not fit all)
- Make compatible with LTAP Road Scholar Programs and CO community college degree



Accomplished to Date

- Created a draft framework of modules
- Created a template for each module in the planning, design, traffic engineering/operations, and data analysis pathway and the construction and maintenance pathway
- Created an implementation plan for the WRTWC
- Conducted a survey of the NACE safety committee to identify priority modules to create
- Created a safety culture training and piloted it at the Safety Summit



Next Steps

- Solidify partnerships through support letters
- Safety Center will create additional trainings
- Finalize framework details
- MT LTAP pilot anticipated summer/fall 2019





Natalie Villwock-Witte Safety Center/WTI

Workforce Development for Current Employees

Discussion



Discussion on LRSC

- For the Local Road Safety Certificate, do you feel that there are any topics missing?
- How do you offer these courses statewide with overwhelming demand?



Discussion, Part A

- What are the most needed trainings in your agency?
- What are your best practices for engaging/encouraging employees to take trainings?
- How do your trainings vary by time of year?
- Are you getting new trainings requests that you aren't already offering? What are example topics?
- How do you engage law enforcement?
- Have others identified making trainings relatable and more engaging as a need? If so, how do we do this?

Break: 10:30-10:50am





Natalie Villwock-Witte Safety Center/WTI

Hiring New Employees

- Identify how to market positions
- Key qualifications



Goals for Session, Part B

- Discuss how to hire new employees
 - > Identify how to market positions.
 - > State key qualifications to list.
- Summarize how to train for safety when onboarding.





WRTWC Draft Report

 West Region Transportation Workforce Center (WRTWC) Draft Report



Career Cluster Areas, Critical Transportation Safety Occupations

Infrastructure Construction & Maintenance

- Construction Managers
- First Line Supervisors Construction Trades
- Highway
 Maintenance Workers

Road Safety

- Civil/Transportation Engineers
- Urban & Regional Planners
- Human Factors Engineers
- Computer & Mathematical Occupations
- Civil Engineering Technician



Frequently Cited Safety-Related Competencies



Construction Supervisor & Manager

- Safety compliance (28 postings)
- Ability to promote safety (25 postings)
- Knowledge of health, safety, and environmental policies (9 postings)
- Job hazard analysis (2 postings)



Human Factors Engineer

- Ability to recommend appropriate changes in policies, procedures, equipment to prevent incidents (6 postings)
- Risk and hazard analysis (5 postings)
- Knowledge of OSHA policies (2 postings)



Transportation Engineer

- <u>Least</u> evidence of demand for specific safety competencies
- Highway design tools (e.g. MicroStation) were the most in-demand skills
- Highway Safety Manual was <u>not</u> mentioned in any identified posting
- Have direct safety impacts (bike/ped design, intersection layouts, roadway alignment, pavement markings, sight distance, traffic control, etc.)



Hiring Practice Challenges for Transportation Safety Occupations

- DOTs rely on broader job classifications
- Assumptions that safety specific skills are too difficult to find – unsuccessful hiring process



Maintenance Personnel Role in Road Safety

- Vegetation/ROW management
- Lighting and signage
- Temporary traffic control



Experiential Learning, Transportation Safety Professional Pipeline



Transportation Agency

Real-World Safety Projects & Processes

Problem statement; Data

Quality Control; Set outcomes

- Expose/attract emerging workforce to safety occupations
- Pool of new recruits with safety expertise
- Creates employer-driven curriculum
- Low-cost/high-rewards program meeting both industry & educators' expectations

Education Institution

Project Scoping/Advance State of Practice

> Faculty/Researcher Mentors; Student Recruitment

Coursework/Curriculum Development



Utah DOT/Brigham Young University

- Collaboration to:
 - Develop safety countermeasure improvements
 - Develop and improve safety models
 - Analyze up-to-date safety data and identified countermeasures
- More than 25 students involved, many of which have entered safety-focused careers at the DOT or a private consultant



CA Office of Traffic Safety & CA State Universities

- 5 universities
- Funded by NHTSA grants
- More than 75 students involved; reported "safety mindset" as a result of participation



Core Competencies for Transportation Safety Professionals (1 of 3)

- Awareness of the importance of safety and ability to communicate importance to a broader audience in a manner that fosters greater organizational, employee, and/or public safety culture
- Understanding of safety management principles and the safety planning process
- Ability to identify & apply regulatory requirements



Core Competencies for Transportation Safety Professionals (2 of 3)

- Knowledge of, or ability to locate, use and interpret various data and information sources and analytical tools to:
 - Identify and assess safety risks
 - Identify appropriate countermeasures to mitigate risks (including prioritization of multiple options using a data-based decision-making process)
 - Assess effectiveness of safety measures



Core Competencies for Transportation Safety Professionals (3 of 3)

- Ability to effectively develop and/or implement a safety plan
- Ability to communicate and collaborate with multiple stakeholders and to lead and navigate change
- Ability to recognize the capabilities and limitations of road users in terms of behavior choices, reactions to transportation systems, and the capacity to survive a crash

"The question is how to bring into existence a healthy layer of professionals to be the carriers and suppliers of factual road-safety knowledge. Three conditions must exist: there has to be sufficient factual knowledge; there have to be textbooks, teachers, and courses of study by which the factual knowledge is imparted onto trainees; and there have to be jobs in which the graduates make use of the knowledge they mastered...I believe that factual knowledge is sparse and training for professionals is sporadic because there is virtually no demand for the services of persons trained in road-safety." -Hauer, **2007**, p.335



Natalie Villwock-Witte Safety Center/WTI

Hiring New Employees

Discussion



Discussion, Part B

- What are some key qualifications that should be included for a safety position?
- How do you balance the qualifications needed for new employees with the skills that can be taught as they develop as an employee? (Job retiree qualifications vs. young professional qualifications)





Natalie Villwock-Witte Safety Center/WTI

Recruitment, Retention & Retirement

- Challenges
- Opportunities



Recruitment, Retention & Retirement

 Taken from the National Association of Counties' "Managing County Workers: Recruitment, Retention, and Retirement"



Current Challenges

- Ability to offer competitive compensation packages
- Typical 5.4 year tenure for employees
- High cost-of-living is a barrier for many candidates/employees to live and work in same county
- Retirement of Baby Boomer generation
 - Loss of institutional knowledge
- Perceptions of government workplace



"The average cost to fill a position is approximately \$4,100 and can take 42 days or longer to fill."



Innovative Techniques to Attract & Retain Employees (1)

- Employee Resource Groups (ERG)
 - Emerging Workforce Association
- Social media to market job openings
 - > LinkedIn
 - > Facebook
- Short videos: what will county work look like, impact on lives of residents
- Surveys, post-hiring practices



Innovative Techniques to Attract & Retain Employees (2)

- Survey to department: opinion of recruitment process, quality of applicants
- Internship program
 - Helps to address increased workload with decrease workforce
 - Provides potential candidates with an "inside look"
- Annual raises & upward mobility
- Flexible schedule



Innovative Techniques to Attract & Retain Employees (3)

- Relaxed dress code
- Assist employees with student loan debt



How to ensure needed skills are reflected in new hires?

- "Checklist" of skills and education
- Documentation of processes, contacts and status of outstanding items
- Overlap employees for a soon-to-be vacant position





Natalie Villwock-Witte Safety Center/WTI

Recruitment, Retention, & Retirement

Discussion



Discussion, Part B (1 of 2)

- Does a perception of "doing more with less" dissuade potential candidates from pursuing a job at a county?
- Who implements surveying of departing/employees?
- From your experience, which seems to be most influential in retaining employees?
 - Annual pay increases
 - Flexible work schedules
 - Relaxed dress codes



Discussion, Part B (2 of 2)

- How does your agency train for safety when onboarding?
- What innovative ideas does your agency use for recruiting?
- Does your agency have innovative ideas to offer for retention?

