

Florida, Louisiana, and West Virginia 2026 Peer Exchange

Final Report



**FLORIDA, LOUISIANA, and WEST VIRGINIA PEER
EXCHANGE**
April 7-8, 2026
Peer Exchange Meeting in Conjunction with STC Annual Meeting

INTRODUCTION

Federal regulations (23 CFR 420 Subpart B) require each State Department of Transportation (DOT) to facilitate peer exchanges of its Research, Development, and Technology Transfer (RD&T²) Program on a periodic basis. The Federal Highway Administration (FHWA) interprets these peer meetings to be exchanges of information regarding the various practices used by states to manage their RD&T² programs. The intent is to enhance research programs through sharing ideas. The peer exchange teams are generally composed of state research managers, FHWA, university, and industry personnel.

Florida, Louisiana, and West Virginia collaboratively hosted a peer exchange from April 7-8, 2026, in conjunction with the Southeast Transportation Consortium (STC) Annual Meeting held in Tallahassee, FL. The focus of the exchange was “Practices and Opportunities to Increase and Improve Workforce and Student Development in Context of Research Program Activities and Relationships.” The objectives of this peer exchange were to share best practices for addressing the value and benefits of the research program with respect to workforce development, organizational training, and student engagement and recruitment.

The agenda can be found in Appendix A. Peer exchange members from other state DOTs were specifically invited to attend because of their knowledge and expertise, or desire to learn more in this specialized topic.

This report highlights the key observations and opportunities that were developed from information presented and discussions held during the peer exchange sessions.

PEER EXCHANGE TEAM

The authors wish to thank all the participants below for their participation in this peer exchange. Without their involvement in creating and giving presentations, taking notes, or actively participating in the discussions, the peer exchange would not have been the success it was.

Jarrold Stanley	Kentucky Transportation Cabinet (KYTC)
Tyson Rupnow	Louisiana Transportation Research Center (LTRC)
Jade Watford	South Carolina Department of Transportation (SCDOT)
Curtis Bradley	North Carolina Department of Transportation (NCDOT)
Jason Tuck	Florida Department of Transportation (FDOT)
Darryll Dockstader	Florida Department of Transportation (FDOT)
Sue Zheng	Florida Department of Transportation (FDOT)
Jennifer Clark	Florida Department of Transportation (FDOT)
Ta’Rika Green	Florida Department of Transportation (FDOT)
Cindy Smith	Mississippi Department of Transportation (MDOT)
Stacy Carter	Tennessee Department of Transportation (TDOT)
David Chappell	West Virginia Department of Transportation (WVDOT)
Tim Sedosky	West Virginia Department of Transportation (WVDOT)
Jason Bittner	Applied Research Associates, Inc. (ARA)

PEER EXCHANGE FORMAT

The peer exchange was conducted in an informal setting with participation encouraged of all team members and invited guests. Presentations were given by invited guests and followed by informal group discussion and question and answers sessions. At the end of each day, all State DOT participants identified their key takeaways.

PRESENTATIONS

This section outlines presentations and participant observations. Jason Bittner from Applied Research Associates, Inc. was asked to present the findings of “Workforce Development in Florida Projects.” He discussed the overall structure of the work and the results of the nationwide survey on how research programs across the nation are engaging / participating / being leveraged for workforce development activities.

Darryll Dockstader from Florida DOT also presented a short presentation regarding the results of a Florida Research Center University Workforce Workshop. Appendix B contains a copy of all presentations. Participants were asked to discuss the peer exchange topics below.

Peer Exchange Topics

- **Retention and Training of DOT through Research**
 - **How is research being used to train and develop project managers and other research stakeholders in DOTs?**
- **Engagement and Recruitment of Students on Research Projects**
 - **How do students participate and engage in research projects?**

Florida Perspective – Multiple Persons

Retention and Training

Darryll led off the discussion noting that many of our research programs are uniquely positioned to provide great input and value to Departmental retention and training efforts. This can be through participating in research activities, implementation activities, and enrichment by participating in TRB, NCHRP, and other panels on a national level.

Darryll Dockstader identified efforts being taken to identify and document professional development benefits of participation on national committees and research project panels – from knowledge enhancement to networking and influence benefits. The findings can be used to increase training and guidance for new committee members and panelists to maximize value of participation.

Similarly, serving on state-led research project panels contributes to professional development of agency staff, the effect of which can be comparable to project-oriented seminar training. Opportunities exist to identify professional development effects and improve guidance for serving on projects.

Discussion by all Florida DOT participants on how to leverage State Transportation Block Grant (STBG) and SPR B funds for staff development.

Student Engagement

Darryll discussed the potential of students on research projects for workforce recruitment. In Florida, there are more students on projects than in internship program positions, although the number of interns currently is being substantially increased through an agencywide effort. Opportunities exist to create structured engagement with students on projects to introduce them to the Department and to the transportation profession. Some students already participate in FDOT-site experiments and lab work, while others participate on field projects, which provide proximity opportunity to do engagements. Project tailored engagements, such as student presentations, could also be built into projects. There are varieties of unrealized opportunities to increase recruitment interactions.

Sue asked the question of others within Florida DOT about setting up a governmental Agreement possibly not being tied to a project such that SPR B funds or STBG funds could be used to assist the Department in hiring students, possibly funding an internship program, etc.

Jason shared the results of a multi-year voluntary effort with their university partners to capture where graduate students have landed after graduation and working on their SPR B funded projects.

Louisiana Perspective – Tyson Rupnow

Retention and Training

Tyson discussed that he has a go-by folder that contains all information to successfully start a research project. This has been given to new employees in the research section and has significantly impacted the quality of initial research project documents from new recruits. LTRC routinely sends out email blasts to departmental employees about NCHRP Panel involvement, TRB webinar opportunities, and LTRC conferences, webinars, etc. LTRC also holds a biennial Louisiana Transportation Conference (LTC) in which DOTD employees and the transportation community in general attend, interact, and earn PDHs.

LTRC has the Transportation Research Innovation and Exploration (TIRE) program that funds untenured professors at in-state universities. Funds strictly for funding explorative research efforts and no charges for indirect costs are allowed on these \$40k projects. Four (4) are awarded per year and applicants are usually between 10 and 16 annually for this program.

Student Engagement

Tyson noted that they have several student engagement initiatives. He discussed the Bentley Travel Grant funded by the Bentley Corporation through the LTRC Foundation. This grant provides at least five (5) \$1000 travel grants for graduate students to defray costs associated with traveling to conferences and workshops to present their work. To be eligible, the student is required to be the main presenter, and most applicants are asking to go to the Transportation Research Board Meeting.

LTRC also hires post-doctoral research associates and uses the LTRC research environment as a training ground for how to properly conduct research from the beginning to the end of a project including implementation efforts and technology transfer activities.

There are also opportunities at the LTC for graduate students as LTRC sponsors a graduate student poster session. A solicitation is sent out to all state universities and graduate students apply to present. A standard template is sent to them if they are selected and LTRC covers the cost of printing. Graduate students are given complimentary admission to present their work in the common areas of the LTC interacting with transportation professionals. Additionally, LTRC will work with the Department for specialized days at the Capitol and DOTD Headquarters to bring in graduate students to showcase work in that area being represented.

Discussion was had on LTRC's engagement with Civil Engineering Senior Design courses where LTRC provides funds (up to \$5,000) to defray the costs for materials, specialized analysis and / or CAD programs, etc. for teaching these capstone courses. Students are then invited to the LTC to present their project for a monetary award going to the top three finishers.

Tyson discussed the program in Oklahoma where the DOT hires engineering students (part time) while they are in college and the university provides a secure workspace for these students to work on CAD drawings, engineering documents, etc. for the Department between classes. Students are compensated and can even earn time in the retirement system and towards seniority for promotions.

LTRC uses STBG monies to fund the student worker and co-op student programs. The benefit of using STBG monies is that since it is workforce development, the funds can be 100% federal with no state matching required.

West Virginia Perspective – David Chappell and Tim Sedosky

Retention and Training

David and Tim noted that this is West Virginia's first meeting in quite some time and the STC membership welcomed them warmly. They noted that their program is essentially being rebuilt from the ground up and will take some time and intentional effort from all involved. They also noted that their staff will be "out of Civil Service" starting July 1. For workforce development, they noted that they have the LTAP program and its ROADS Scholars program to lean on. It was noted that new hires wish to stay close to home and the lack of a work from home option has, according to anecdotes, led to some potential employees not seeking opportunities in the central office.

Student Engagement

David and Tim noted that they have two co-op students and very much liked the discussion from other member states on ideas for engaging students in the research projects. Specifically, they liked the idea of inviting students to symposiums that the Department is hosting. David spoke of a program that got him interested in the engineering profession when he was in high school and outlined the program for others.

Tennessee Perspective – Stacy Carter

Retention and Training

TDOT has experienced significant organizational change under the EPI Reorganization, which resulted in several Research Leads either transitioning to new roles or leaving the Department.

This turnover created a gap in experienced project leadership and contributed to inconsistencies in how research projects were managed. In addition, TDOT identified that even some long-standing Research Leads did not fully understand the expectations, roles, and responsibilities associated with overseeing a research project. To address these gaps, TDOT developed the **Lead Staff 101 Training**, a structured orientation designed to establish clear guidance, strengthen internal processes, and ensure all Research Leads—new and existing—have a solid foundation for supporting successful project delivery.

Student Engagement

While TDOT has limited direct experience with formally structured student engagement programs, the Department has benefited from hiring full-time employees who previously worked on research projects as students. These individuals entered TDOT with practical, project-based experience and an understanding of research processes, which has strengthened the Department's research program. Their transition from student researchers to full-time staff demonstrates the value of early exposure to DOT research activities and highlights an opportunity for TDOT to expand student engagement efforts in the future.

Mississippi Perspective – Cindy Smith

Retention and Training

Cindy talked about webinars, and engaging SME's. MCOT invests heavily in training and has several grass-roots succession and knowledge management efforts, but as of yet no formal program coming from upper management. She noted that, like many others, salaries lag compared to the private sector and retention is difficult.

Student Engagement

Discussion on the modification of the research manual to encourage participation of students was discussed. She also noted that more interaction with students that come to tour the laboratories, etc. is a must. Cindy noted that engaging the students with conversation about their project goes a long way and that MDOT has had success in hiring some of these students due to being interested in their research and being willing to have a conversation taking an interest in their research efforts.

North Carolina Perspective – Curtis Bradley

Retention and Training

Curtis noted that the DOT Project Champion takes an active role in the research efforts with meetings, implementation discussion, and progress reports. He noted like many others, the SME's / project champions are also doing other work for the Department so time management can be an issue. To combat that, they look for people that are passionate and willing to implement results if they are favorable. Within one Unit at NCDOT, they have communicated that they hired a student from a previous research project. It was communicated that this new employee understands the research process from both the academic and DOT perspectives. This has been advantageous to the Unit when developing Research Ideas and evaluating proposals.

Student Engagement

NCDOT has an Emerging Technologies and Innovation Coordinator, and the research program sits adjacent to this and has a seat on the board. They are actively trying to take a tiered approach when looking at technologies (basic to applied research perspectives). Where applicable, they

leverage the UTC program to move promising technologies forward. They have the CLEAR program and use Research Reels for communicating innovation and research implementation. Curtis noted that they budget between \$500K - \$1M of funding for implementation efforts including conferences, pilot projects, etc.

NCDOT has several student engagement initiatives that happen in other NCDOT Units. In addition, NCDOT does pay for graduate students' tuition and salaries, adding to the ways NCDOT engages students into research and NCDOT businesses.

South Carolina Perspective – Jade Watford

Retention and Training

Jade discussed the role of LTAP in training efforts. She also discussed the use of STBG monies for workforce development activities. She wants to reach out to Human Resources to see how the research office can help in workforce development activities.

Student Engagement

Jade discussed that many of their professors do allow students to present at their monthly / bi-monthly meetings. She also noted that the SME's encourage that participation and can see that students are eager to share their efforts.

Jade discussed Project Lead the Way as an example of a great program that started with high schoolers interested in engineering separating them with particular courses geared toward that career in college and beyond.

Kentucky Perspective – Jarrod Stanley

Retention and Training

Jarrod discussed that they have a scholarship program that engages graduating high school seniors and provides them with a scholarship to attend college while also providing work opportunities with the Cabinet while in school. Many of the existing people in key leadership positions have taken advantage of this opportunity.

Student Engagement

KTYC engages students at universities at the graduate and undergraduate level. Jarrod noted specifically that one of their in-state universities does not have a graduate program, so their student engagement is 100 percent undergraduate student workers/researchers.

PEER EXCHANGE TAKEAWAYS

Florida DOT

- Advancing workforce development
 - Look at alternative uses of STBG monies for workforce development
 - Look for alternative uses of SPR-B monies to develop staff
 - Continue value capture
- Advancing student engagement

- Mine the university engagement workshop results
- Increase on-site engagement at the universities
- Look at ways to incorporate student posters in workforce development sessions
- Identify ways to incorporate student participation in project meetings

Louisiana DOTD

- Advancing workforce development
 - Instill a greater emphasis on TRB involvement emphasizing the benefits to the employees and the Department
 - Continue push for NCHRP involvement as it elevates DOTD to the national research level
 - Take a hard look at Kentucky’s “Boot Camp” training program
- Advancing student engagement
 - Grow the scholarship program (Bentley and others)
 - Look at Kentucky’s scholarship program for graduating high school seniors
 - Continued effort in student engagement through poster sessions at various Department activities
 - AASHTO High Value Research – Can funding be given to both the professor and the student to go and present the posters at TRB?

West Virginia DOT

- Advancing workforce development
 - LTAP has the ROADS Scholar program and be sure to continue support showing colleagues what the program’s benefits are
 - Succession planning is important and needs to be a top priority
 - Identify how to interact with District personnel to better employ and maintain talent within the agency, particularly the central office
- Advancing student engagement
 - Encourage the hiring of student workers for laboratory testing activities
 - Guide research discussions to be more student oriented
 - Identify ways to get both students and professors to the Planning Conference
 - Prioritize project coordination

Tennessee DOT

- Advancing workforce development
 - Consider including SME’s and PI’s together for creation of research needs statements
- Advancing student engagement
 - Have students attend meetings aimed at PI’s showcasing their unique capabilities to the Department

Kentucky Transportation Cabinet

- Advancing workforce development
 - Explore a Department wide open house to encourage a connection between non-traditional students and the Transportation Cabinet
- Advancing student engagement

- Bring students into the Symposium; either through lecture or poster presentations

South Carolina DOT

- Advancing workforce development
 - Explore using STBG funding for workforce development items
 - Continue to communicate the value of national programs like TRB or NCHRP across the agency
 - Connect with HR about the research office potentially partnering on workforce development efforts
- Advancing student engagement
 - Engage students and SCDOT personnel in presentations of research projects as a joint effort (i.e. meeting, conferences, etc.)
 - Consider inviting students to observe and participate in research / innovation events and activities

Mississippi DOT

- Advancing workforce development
 - Think critically about how research is used to train and develop project managers
 - Need to raise the profile of research to recruit and retain staff
 - More engagement with students on research projects at universities – have already gotten some good employees this way
 - EIT rotation is a good way to show what research does
 - Try to start short videos to showcase more research projects and their results
 - Region 2 has continuity in their research programs
 - Look at book by Simon Sinek – Start with Why – both book and YouTube videos
 - Suggest development training for “boot camps” as research projects (design, construction, project management, utilities, etc.)
 - Differences between Region 2 and other regions from peer exchange survey
 - Champions have to present ideas and compete for funding in some states; not necessarily section heads, but people who would actually implement results
 - Research symposiums and conferences can increase engagement
 - Some DOTs have non-technical people sitting on projects to get exposure to research efforts
 - Some states use LTAP to aid research training, especially those states that own 80% of assets (NC is an example) but not all states do this
- Advancing student engagement
 - LADOTD has poster sessions at transportation conference, and student is required to present it. Sessions presented by PIs have to be 5 minutes or less to explain to a lay audience
 - MDOT goes to universities to talk with students and has universities visit us. We also have interns which sometimes leads to hiring. The Construction Material Research Center (CMRC) at Mississippi State University is a good forum for meeting students. CMRC has a very strong leader at MSU, which is crucial.
 - Consider hiring interns earlier, such as freshman or sophomore year

- Pay for travel to conferences for students to present IF your state allows it and it's feasible. They have to get approval from Research Division at most states if this is allowed
- Kentucky Transportation Cabinet has scholarship program for 40-50 students at any given time
- WVDOT likes idea of encouraging student participation and talking to PIs about this. Can this be put into a contract and/or their Research Manual?
- PE training program could be funded by DOT
- Important to have enterprise-wide strategic goal
- Delaware DOT leadership is required to report on engagement strategies
- Research Manual can be vehicle to encourage this. Also can use scoring methodology, KPIs, etc. on student involvement
- Engineering camps can be effective
- Career fairs—make presentation “a day in the life”
- Challenge since most engineering students, especially civil, don't see a path to research as a job. They're usually thinking structures, geotechnical, materials, etc.
- Recruitment for non-engineering disciplines
- Pay scale is sometimes more for design, construction and materials
- Changes in retirement tiers (in MS) are going to be a huge challenge
- Likes FDOT's tracking of alumni and where they end up working
- FDOT research center university workforce workshop
 - Site visits have been a great tool
 - Participation in career centers – increases student trusts
 - Practitioner in-class sessions with follow-up luncheons
 - Work to get research students on-site at the DOT
 - Teaching NSF proposal development and presentation skills
 - Help students develop multidisciplinary, time management, and project management skills
 - NCDOT has a Center of Excellence – multi-university collaboration and student engagement

North Carolina DOT

- Advancing workforce development
 - Investigate the use of STBG monies for activities
 - Connect more with the LTAP program
 - Work diligently to reestablish the view of workforce development; not necessarily focusing on retention
- Advancing student engagement
 - Work to engage students during the research process
 - Look at Florida's post graduation tracking of students to determine where they are landing after graduation
 - Be intentional with student engagement

Jason Bittner- ARA

- Advancing workforce development
 - Noted the importance of having specific goals for workforce development

- Noted that Delaware DOT has a dedicated workforce development office
- Noted that no other state is like Kentucky with their scholarship program
- Advancing student engagement
 - Noted that career fairs can be used to showcase a “Day in the Life” of a typical DOT employee

Figure 1. Peer Exchange Attendees



APPENDIX A

Retention and Training of DOT through Research Engagement and Recruitment of Students on Research Projects Alabama, Georgia, and Tennessee Peer Exchange April 8, 2026 Tallahassee, FL

Wednesday, April 8

6:00 – 7:45 AM Breakfast – Hotel

7:45 – 8:00 AM Meet in hotel lobby for walk to meeting venue (FDOT Office)

Transportation research programs are uniquely positioned to help address workforce recruitment, retention, and development challenges faced by State DOTs given the nature and context of research projects, which provide opportunity to train, engage, and recruit university students.

Workforce development linkages to research include the value and benefits to project managers of research (and other DOT staff) as a form of professional development and through research outcomes broader organizational training on new skills, processes, and tools developed through the projects.

This peer exchange will explore existing practices and opportunities to increase and improve workforce and student development in the context of research program activities and relationships. Sessions will address the value and benefits of project managers on research projects as a form of workforce development; organizational training with areas of new skills, new processes, and new tools; student engagement and recruitment; and existing or potential synergy with other DOT student workforce programs, such as internships, fellowships, and cooperative programs.

Presentation from Jason Bittner - ARA

Session 1 - Retention and Training of DOT through Research

8:00 – 9:30 How is research being used to train and develop project managers and other research stakeholders in DOTs?

9:30 – 10:00 Summarize tools, processes, and practices for DOT staff development

10:00 – 10:15 Break

Session 2 – Engagement and Recruitment of Students on Research Projects

10:15 – 12:00 Student participation and engagement within research projects

12:00 – 1:00 Lunch

1:00 – 2:00 Student researchers and interactions with other student engagement and development programs

2:00 – 3:00 Summarize tools, practices and processes

3:30 – 3:45 Break

Session 3 – Discussion/Takeaways

3:45 – 4:15 Takeaways and opportunities to advance DOT workforce development

4:15 – 5:00 Takeaways and opportunities to advance student engagement/recruitment

Adjourn and Travel Home

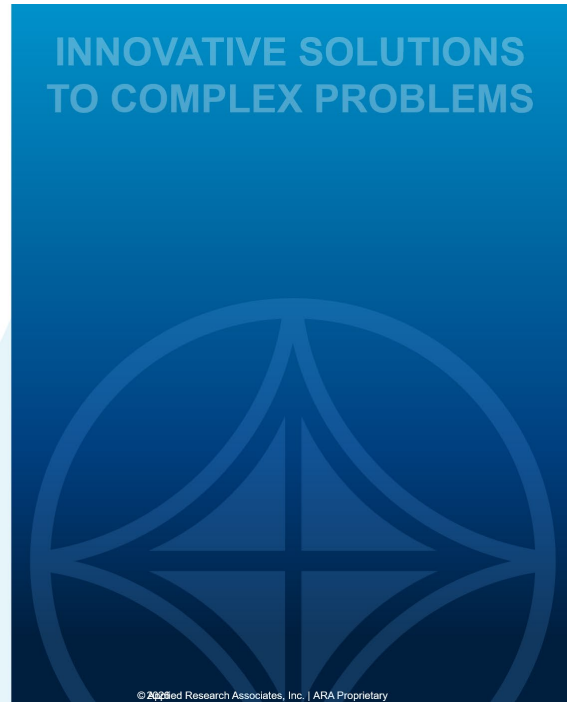
APPENDIX B



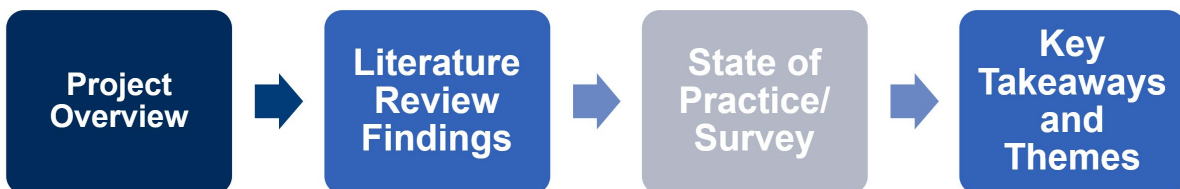
April 2026

Workforce Development in Research Projects

Jason Bittner



Presentation Outline



Literature Review



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Task 1: Literature Review

- ▶ National and state-level literature explored:
 - Workforce management
 - Workforce development
 - Workforce Planning
 - Knowledge management

- ▶ Ongoing student engagement efforts

- ▶ National best practices in state workforce development projects



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▶ Transportation Workforce Challenges

- ▶ State DOTs face **significant workforce shortages** driven by retirements and an aging workforce.
- ▶ **High turnover** intensifies competition for skilled workers and highlights the need for succession planning.
- ▶ Traditional education pipelines do not **consistently direct students** toward transportation careers.
- ▶ Research programs are uniquely positioned to help address these challenges by bridging **academia and practice**.

▶ Key Themes in Workforce Development

- ▶ Research programs help build **talent pipelines** by engaging graduate and undergraduate students.
- ▶ **University and LTAP partnerships** embed institutional knowledge into applied research and training.
- ▶ Student engagement initiatives expand awareness of **STEM and transportation career pathways**.
- ▶ Research activities provide **continuing education and upskilling** for early and mid-career professionals.

▶ Workforce Management Best Practices

- ▶ Workforce management requires a **systematic, data-driven approach** to aligning agency needs and workforce capacity.
- ▶ Best-practice actions include
 - Establishing a baseline and conducting a **gap analysis**
 - Building a strong **business case** for workforce initiatives
 - Applying **SMART goals** for measurable progress
 - Using **role designation** to define essential functions and organizational risks
- ▶ Leadership buy-in and employee engagement are key success factors.
- ▶ Workforce management should be treated similarly to asset management for long-term sustainability.

▶ Workforce Planning and Development Strategies

- ▶ Internships, mentorships, and apprenticeships help students build **job-specific skills**, especially for disadvantaged groups.
- ▶ Workforce challenges identified across DOTs include
 - Adoption of new technologies
 - Slow hiring processes
 - Need for flexible work policies
 - Difficulty attracting young and mid-career staff

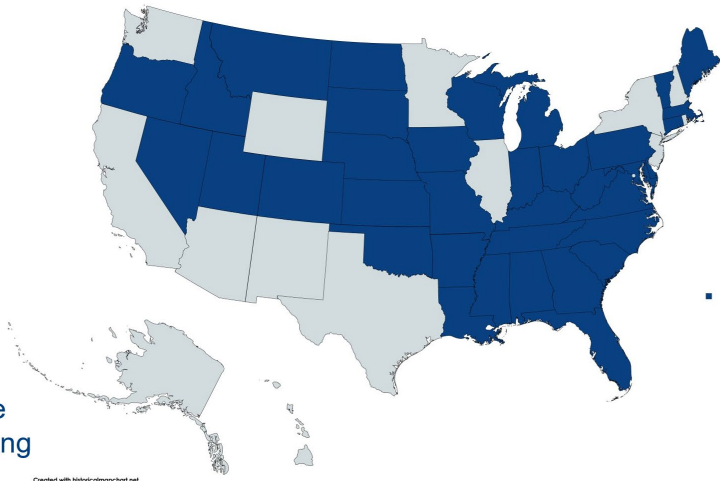
Major Takeaways

- ▶ Leverage national student engagement/workforce development initiatives for low-effort options
- ▶ Research project championship is a good way to develop young professionals
- ▶ Possible to partner with universities to develop workforce management/training
- ▶ Internships remain most popular student engagement method

Task 2: Survey of Practice

States Surveyed

- ▶ 37 state respondents
- ▶ All AASHTO Regions represented
- ▶ 28 questions on topics including:
 - Agency-level workforce management plans and initiatives
 - Student engagement
 - Research's role in workforce development, training, & hiring

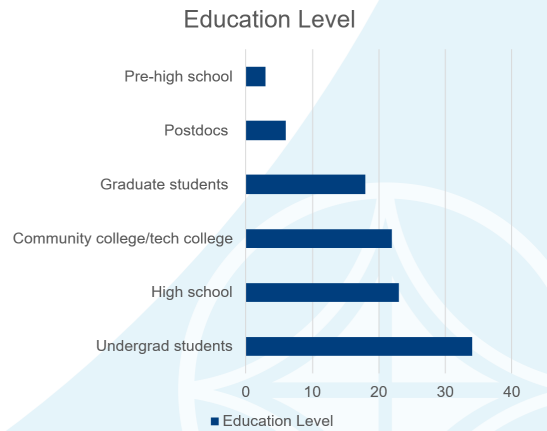


Takeaways: Workforce Planning & Preparedness

- ▶ Only 33% report an agency-wide workforce management plan
- ▶ Succession planning is mostly informal
 - Only 10% have formal processes
- ▶ 51% feel somewhat prepared for anticipated retirements in the next 10 years
- ▶ Workforce gap analyses are infrequent; nearly half are “not sure” if they occur

▶ Student Engagement – Who & How

- ▶ Agencies target all education levels but with a strong emphasis on undergraduates
 - Undergraduates (95%), community/tech college (61%), high school (64%), grad students (50%)
- ▶ Top engagement methods include internships/co-ops (95%), research involvement (54%), classroom talks (49%)
 - Major barriers identified include time (77%), funding (44%), and administrative constraints
- ▶ Novel methods: summer camps, DOT career days, National Summer Transportation Institute (NSTI)



▶ Challenges in Student Engagement

- ▶ Additional student engagement and workforce development challenges:
 - Lack of **time/bandwidth** to mentor or supervise students
 - Difficulty hiring students **competing with private-sector pay**
 - Location barriers including housing costs
 - HR restrictions, hiring freezes, or limited internship durations
 - Hard to **sustain long-term engagement** or retain student workers

Retention & Workforce Development Practices

- ▶ Most-used retention strategies:
 - Leadership/professional development (87%)
 - Flexible work arrangements (78%)
 - Recognition programs, tuition reimbursement
- ▶ Many agencies lack **structured career ladders** or formal mentoring programs
- ▶ Research deliverables only occasionally used for internal training
- ▶ Main ways staff build skills include on-the-job (100%), formal training (60%), and conferences (62%)
- ▶ How are agencies handling KSA evaluations?
 - Primarily through annual performance reviews (95%)

Research Program Role in Workforce Development

- ▶ Engagement varies widely
 - 35% partner with internal HR/Organizational Development
 - 30% participate on an ad-hoc basis
 - 16% partner with UTCs
 - 14% report no involvement
- ▶ PIs usually not required to include student involvement—46% say it's optional
- ▶ Main barriers to using research for workforce development: budget, leadership emphasis, PI awareness, admin burden
- ▶ Overall trend: *untapped potential* to contribute more strategically on workforce development

AASHTO Region Two Takeaways

- ▶ Similar data points to national perspective
 - Most common student recruitment method is internships or coops
 - Agencies feel “somewhat prepared” for key retirements in the next ten years
 - Research managers have been in their role for 5+ years
 - Tuition reimbursement as well as leadership development and professional development programs were common retention strategies
 - Yearly performance reviews were most common ways these states report that KSAs are assessed
 - Formal training, on-the-job training, conferences/interactions with peers were most common ways staff gain skills

AASHTO Region Two Takeaways

- ▶ Top challenges in transportation professional recruitment
 - Compensation
 - Private sector competition
 - Lack of awareness of career options in transportation
- ▶ 9 of 11 states report the agency provides training programs for new project managers
- ▶ Ad-hoc involvement and partners with internal HR or org development were most common responses to how states see the role of their research program in workforce development

Research Opportunities: Workforce Development Lever

- ▶ Exposure to applied problems
 - Students working on DOT-supported research gain real-world, mission-critical experience that directly prepares them for DOT careers.
- ▶ Mentorship and knowledge transfer
 - Research projects naturally pair students or junior staff with senior technical experts, aligning with agencies' preferred knowledge capture methods (documentation + informal mentorship)
- ▶ Skill development in high-priority areas
 - The top ways staff gain skills today—on-the-job learning, formal training, conferences—align well with research project participation structures, meaning research can feed into existing pipelines rather than creating new ones.

Opportunities to Strengthen Research-Workforce Connection

- ▶ Opportunity to diversify the pipeline
 - Research attracts not only engineers but planners, data scientists, policy analysts, communications specialists, technicians, and IT professionals—fields in which many DOTs struggle to recruit.
- ▶ Develop guidance for PIs to include student engagement and workforce outcomes
- ▶ Expand research deliverables to include internal training modules or other opportunities
- ▶ Pilot semi-formal method for tracking of student-to-employee transitions
- ▶ Incentivize student contributions by sharing success metrics
 - Recognize projects that successfully transition students to agency roles or build skills in needed domains.

Additional Insights: National Best Practices

- ▶ National Summer Transportation Institute
- ▶ Washington State DOT's Workforce Development Toolkit
 - PacTran's Workforce Development Initiatives and student engagement
- ▶ Michigan DOT's Workforce Management Program (MDOT House)
- ▶ Kentucky Transportation Cabinet's Highway Knowledge Portal

Questions for Discussion

- ▶ Informal or formal succession planning processes?
- ▶ Utilization of national level resources
 - (National Summer Transportation Institute, AASHTO STEM Outreach, ITE Collegiate Traffic Bowl)
- ▶ AI use in workforce development?
- ▶ Changing hiring practices? Hiring outside traditional engineering background?
- ▶ Student recruitment challenges: local university career fairs and other targeted practices for recruitment?

Thank you!

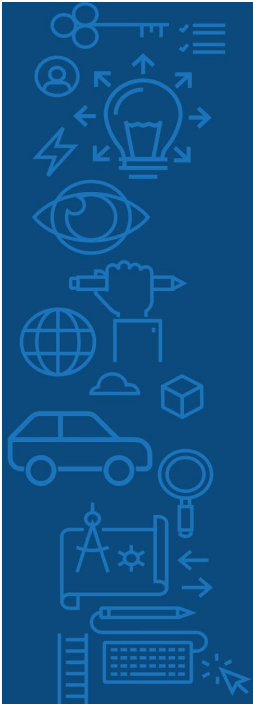
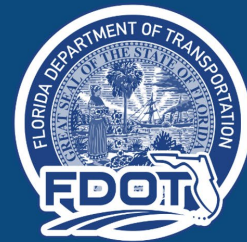


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FDOT Research Center University Workforce Workshop

April 2, 2026



Workshop Agenda



- Existing university practices for student workforce development
- Workforce/professional outcomes of student participation in research
- Opportunities to partner

Existing University Practices

- Evenings/speed dating with industry
- Association student summits with student presentations
- Bi-weekly webinars with experts and companies
- Transportation achievement awards (scholarships)
- Practitioner in-class sessions and follow-up luncheons
- University leadership summits
- Association competitions
- Sponsor on site placement





Student Workforce Development/Outcomes

- Participation in new programs (e.g., Smart Cities)
- Experiential learning (internships, industry assignments)
- Assigning faculty to student groups to improve writing and presentation skills
- Participation in TRB sessions, student networking sessions
- Participation in sponsor projects
- Student individual development plan (like NSF proposals)
- Multiple PIs to develop multidisciplinary, time management, project management skills
- Challenge: alumni tracking is completely voluntary



Opportunities to Partner

- Part-time students (non-thesis master's students)
- Student research conferences with student spotlights
- Hybrid research/residency (on site placement, project/job experience)
- Curriculum update
- Consultant sponsorship of international students
- Upstream internship timelines (freshmen/sophomore)
- Explicit recommendations for student presenters (during project life)
- Rotation program
- University/PI incentivization to engagement (field trips, sponsor guest speakers)

