

“Workforce of the Future”

Welcome

Emily Elliott, Subcommittee Chair, Virginia DOT opened the meeting with introductions. Forty-one people registered for the conference this year representing nineteen states.

Colorado DOT Welcome

Mike Lewis, Deputy Executive Director, Colorado DOT (CDOT) provided an overview of Colorado, both as a state and from the DOT perspective. As an example, Colorado is so large that Rhode Island would fit inside it one-hundred times! Mike was formerly the Director of Rhode Island and also the Director of Boston’s “Big Dig” project. He mentioned that CDOT is currently recruiting for an HR Chief and encouraged the group to consider following his career path and moving to the beautiful state of Colorado!

FAST FACTS: CDOT is multi modal, Transit and Rail Divisions are included within their agency and they maintain an airport operations interface with the FFA. Their highway operations maintain and operate 23,000 highway lane miles, 3,454 bridges, 35 mountain passes and plow 6.1 MILLION miles of snow each year.

CDOT recently set a high bar for themselves, aiming to be the “Best DOT in the nation”. They’re encouraging a friendly competition with every State DOT to set the same goal. Mr. Lewis stated that as each state strives for this goal we will all learn and improve.



CDOT is currently involved in a future planning effort. They’ve been working with Price Waterhouse to help determine the distant future needs which should help them focus on what to work on now.

Continued growth appears to be the biggest challenge for CDOT. From 2013-2040 they expect their population and vehicle miles traveled to increase by 47%. Average traffic delay would increase two to three times if they do nothing.

CDOT is using workforce scenario planning as a tool to identify the skills needed in the future workforce to meet evolving transportation demands. They identified a need to focus on technology, people and the system. As they

look at this chart, they’re asking in regard to technology, “What external forces will impact CDOT? In regard to people, “What skills and roles will we need to keep pace? CDOT is facing funding shortfalls and is looking to improve their leverage of federal dollars as one way to address this issue. Mr. Lewis cited the great success of Rhode Island in effectively leveraging federal funds as a model for all states.

CDOT is focused on a “Road X Initiative” This effort is about getting more out of the system. They realize that they need to focus on the needed skillsets for this work as they move beyond a focus on building highways. More information about Road X and the video available at this link: <https://www.codot.gov/programs/roadx>

Colorado Workforce Adaptation Peer Exchange

Michelle Scheuerman, CDOT Statewide Planning Manager and Michael King, CDOT Transportation Planner spoke about the peer exchange CDOT hosted in June 2015. Workforce Adaptation is important for DOT's because the world is changing, particularly in the area of technology. For example it took forty-six years from the time it was invented in 1873 for 25% of Americans to use electricity. 25% of us were using televisions within 26 years of their invention. And it took just seven years for 25% of us to begin using the internet. We are adapting to technology at a faster pace. DOTs will need to adapt and prepare our employees to handle technologies we don't even know about today.

In 2014 CDOT held a Futures Forum and created workgroups to focus in five areas.

- Big Data
- Extreme Weather
- Funding and Finance
- Technology
- Workforce Adaptation

CDOT leadership agreed that workforce is the bedrock foundation of everything the department does. It is key to supporting the other four areas in that without the ability to adapt, they won't have the right people for the job. The group found it valuable to consider a Civic Market Approach whereby state DOTs partner closely with the private sector and academic researchers to identify, promote and prepare for mutually beneficial technologies, approaches and skillsets that build toward a common future. Successful examples of this approach include the Internet, the Interstate System, GPS and the Space Program.

Specifically, workforce adaptation planning will allow the department to be proactive rather than reactive to technological and social change in the future. Establishing a reputation as an innovative DOT will help CDOT attract the best talent and remain a competitive employer in the state and country and support the vision of becoming the best DOT. The workgroup had the following key findings and conclusions:

- Communication is key-with leadership, employees and the public.
- There should be a strategic approach to hiring up front, not after the fact.
- HR should be consulted by management and engineers earlier in the hiring process.
- HR should have more flexibility in hiring for skills, not rigid job descriptions.
- An ongoing assessment of workforce needs and gaps will be necessary to ensure that skillsets align with the mission and work of the agency.
- Workforce Adaptation is not a once-and-done task, it is continuous process improvement.

Colorado DOT Workforce

Beverly Wyatt, CDOT HR Business Partner spoke about how CDOT is adapting to the future workforce. The Department is working with Price Waterhouse to identify and understand the current challenges facing CDOT and the transportation industry such as decreasing workforce, retirement projections, attraction and retention challenges, evolving skillset needs and insufficient workforce training expenditures.

How CDOT is managing program growth when government isn't growing

- New position functions
 - Safety officers-SAP Support Staff-Environmental/water quality-Incident commander
- New Business Units
- Office of Process Improvement-the entire staff is made up of college interns, hired as 9 month temporary employees
- Project Management Office
- Office of Emergency
- Office of Major Project Development

Small Group exercise:

5 groups discussed how their DOT's are addressing the following five challenges and reported back to the larger group.

1. Retirement Projections

- Leadership academy training
- Supervisor training
- Cross training – Job shadowing
- Define: What is a leader – Travelling leadership coin
- Kansas – Senior Progression programs – more focus on leadership, less on skills
- Workforce Planning Function (CA)
- Occupation specific demographic analysis
- Leadership management training
- Leadership Interview
- Mentorship program
- Arizona – “WIN” – promoting women in the industry
- Increased retention by career matching progression

- Attraction – flexible, telecommuting, online recruitment and hiring
- Challenge – knowledge retention, generational gap between boomers and millennials

2. Attraction & Retention

- Salary is a challenge
- Declining benefits (a pay cut)
- Hiring changes with political cycles
- Civil Service process
- Hiring affected by economy
- Better classification alignment
- Relocation package
- Technology in recruitment process
- Need better data on applicants (ATS)

3. Evolving Skillset Needs

- New high-tech machine operations – snowplows, survey, GPS controlled
- (Drones feed data to the GIS System)
- Data Analytics – moving to GIS and for analysis of other data
- Certified Drone Operators
- Attracting and retaining the highly skilled tech people who can get better pay elsewhere
- Need forward thinkers, innovative, creative, can come up with ways to do things differently
- Hiring process improvement
- Skills in lean solutions
- Ability to delegate to the upcoming leaders, giving them experience and training and allow for implementation of their innovation.
- Large training budgets. Ensure we have specialized training to keep skills needed by the DOT

4. Training Challenges

- Virginia – Workforce Development Director and Org Structure Changes
- Apprenticeships
- Wyoming - Tech and Soft Skills combined into one area
- High Schools, Colleges
- Arkansas – Implementing LMS and link to performance management
- Minnesota – Workforce Development Unit, agency, soft skills
- Diversity and Inclusion – Train the trainer, managerial rotations, job swaps
- Colorado – Leadership Development focus, develop own leaders, caring, tuition reimbursement, cross training

- Iowa – Interns, Leadership Training, Certified Public manager – Statewide Program, Funding carryover-training & Technology

5. Decreasing Workforce

- Combining Functions
- Hiring Consultants/Contractors, challenge: *becoming staff aut*, Rehiring retired staff as consultants
- Prioritizing projects – training key staff
- Process Improvements (Lean solutions)
- Solicit new ideas internally, (meetings/forums)
- Publicize with posters/internal communication
- Process Improvement Team
- Tech for Process Automation
- Collaboration- training with local agencies.

Price Waterhouse Presentation – CDOT is using workforce scenario planning as a tool to identify the skills composition needed for the future.

Future State Planning

- Technology and External Forces: What external forces in each scenario will directly impact CDOT? Factors that affect CDOT functions will shape the future workforce.
i.e. Demographics...47% population increase expected by 2040.
Extreme Weather, the Economy, Technology, and Freight will also have an impact.
- Workforce Implications – What specific roles and skillsets will CDOT need to keep pace with external and technological advancements?
- Relevance and Feasibility – How feasible, realistic and relevant is each scenario to CDOT?

Key Questions:

1. What are CDOT's strategic needs and opportunities to maximize safety, mobility, economic vitality and system maintenance?
2. What are the infrastructure, financial and institutional factors to consider in the future workforce scenarios?
3. What are the current levels of readiness to execute the future workforce scenarios?
4. How quickly should CDOT implement the future scenarios to stay innovative? Not every scenario is imminent.

Their final outcome will include a range of future scenario considerations, corresponding workforce implications and some analysis and change management support to help implement the needed changes.

Recruitment Innovations at the Oregon Department of Transportation (ODOT)

Jane Lee, CHRO presented information about new technologies that the ODOT recruitment team implemented over the past year.

 **interviewstream** is an internet based interviewing service. This service serves as a screening tool, allowing for a more inclusive "first round" interview approach to narrow the candidate pool. The process saves time and money as the interviews are recorded and can be viewed at the hiring panel's convenience. Additional savings result when out of state candidates apply. This tool can easily substitute for a first round interview and avoid the travel costs for in person interviews.

Disadvantages include additional work for the recruiter to set up the process, participants can be tech-phobic regarding a recorded interview process and there is no live interaction with the participant.

Our Results: Hiring managers love it, it is easy to implement and use, candidates have adapted to it with a bit of resistance from the tech-phobic.



Using LinkedIn Recruiter, ODOT recently started recruiting passive job seekers rather than the traditional “post an announcement and pray someone will apply” method of recruitment. Your organizational page can be enhanced with dynamic content, and provide personalized web content to your target audience.

With the LinkedIn tool you can:

- View and contact anyone on LinkedIn which currently has 430 million professionals.
- Filter your criteria and search for candidates that are most likely to match your organizational needs. Save candidates so you always have a short-list of top talent.
- Automatically recommend job posts to candidates who qualify for vacancies.
- Purchase a given number of job slots, similar to a parking space and pull your job announcements in and out of those slots as needed.
- Manage your candidate contacts, take notes and reach out

After three months of using the new tool our results show that we are adding followers at a rate of 78 per month, and we’re getting a 32% response rate to emails we sent to potential candidates. Our Talent Brand Index or attractiveness as an employer has risen 225% from month one to our third month.

Other Initiatives

Our Maintenance Trainee Program is creating a path for unskilled candidates to gain the experience needed to qualify for maintenance specialist positions. While the program is open to anyone, we are specifically looking to create opportunities for underrepresented populations.

The Graduate Engineering Program provides recent engineering graduates with the necessary experience to qualify for their Professional Engineering License. We visit colleges and universities to recruit potential candidates and hire several candidates into this program each year. The successful candidates are moved into permanent positions after rotating through three different work groups such as construction management, technical support or work in a specific design fields. This program also recruits for and hires a number of engineering interns each year which provides summer employment and OTJ experiences as well as introducing them to public service careers.

ODOT recruiters attend job fairs and maintain contact lists throughout the state and Pacific Northwest. The recruitment team recently took plain language training to help make announcements easier to read and have begun reformatting job announcements to include eye-pleasing graphics and photos.

For more information on ODOT’s recruiting initiatives, please contact Richard Fraser, Central Operations Manager Richard.H.FRASER@odot.state.or.us

State DOT Highlights – Arizona DOT (ADOT)

Wendy Brazier, Arizona CHRO shared information about DDI-and Behavioral based interviewing.

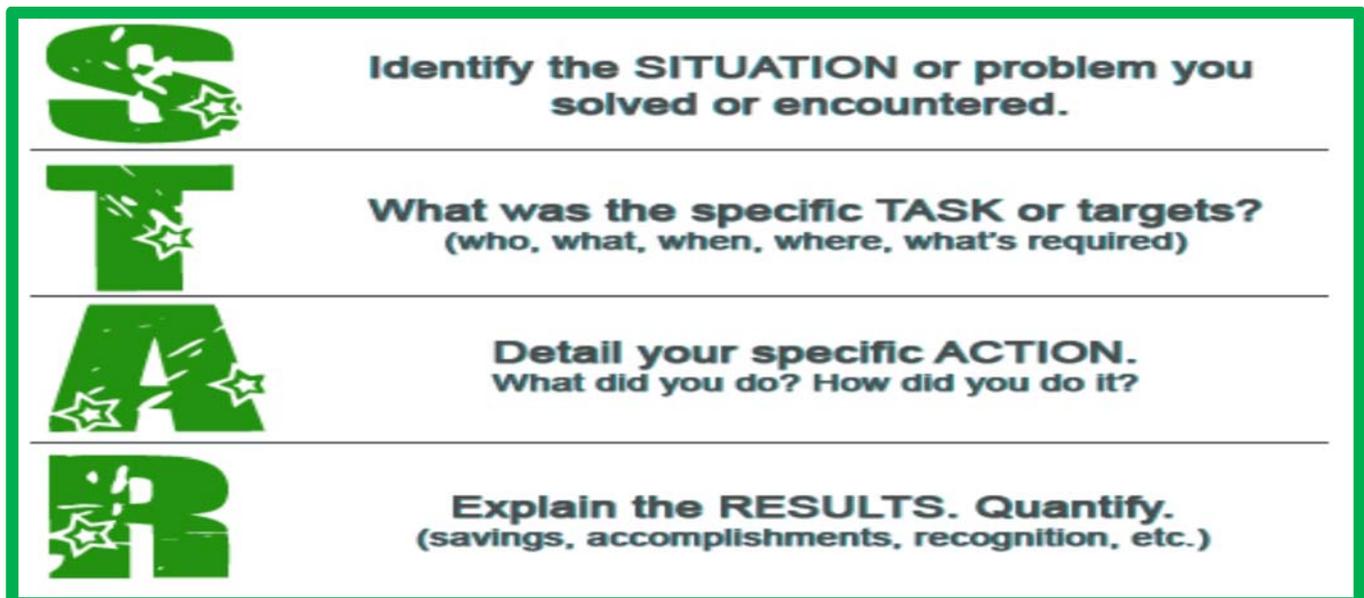
At ADOT, “Transportation is Personal” and they’re seeking the best personnel to deliver their mission.

At the start of this project, ADOT had no consistence, different rating systems were in use across the state and hiring panels asked theoretical questions such as what the candidate would do vs. experiential questions which get at what they have done.

Development Dimensions International (DDI) owns a process called Targeted Selection (TS), an accurate behavioral interviewing technique that provides a consistent, structured approach to interviewing. The process trains recruiters and hiring managers to collect job relevant data about candidates in a legally defensible way and develop the skills required to evaluate and integrate the data gathered to arrive at the best decision/fit.

The benefits of this process include a consistent process, a more engaging interview experience for candidates, lowered turnover rates, avoids areas of illegal questioning and because they're gathering specific examples of past work, it's easier to apply the past behavior predicts future performance standard to the candidate's answers. More than 75% of hires selected through TS are considered to be above average performers.

ADOT officially launched the program in January 2015. They identified approximately 120 core competencies with a bank of questions to choose from under each competency. Managers now identify the competencies they are looking for in the successful candidate and select questions from the appropriate list. The strongest candidate responses should cover the "STAR" acronym and interview panelists grade answers in relationship to how well the response covered the STAR components.



Two ADOT recruiters attended the train the trainer workshop and are certified to teach TS (Cost 7k) and they are in the midst of their 2 year plan to teach approximately 750 hiring managers to use the process. 95.2% of the 452 hiring managers polled to date indicated that the techniques they learned in the program will help them be more effective interviewers.

Achieving Career Excellence (ACE) Performance Management System – Arkansas DOT

Alicia Hunt, Arkansas DOT (ADOT) shared that as a result of their 2015 Employee Engagement Survey they found that Department employees were pleased with the stability and benefits but wanted improved feedback and recognition, more and better training opportunities, and a better system for granting pay raises. In December 2015 ADOT entered into negotiations with Halogen Software regarding the ACE program.

ACE allows employees to be more involved in managing their own career development through goal setting, training opportunities and, ultimately, performance-based pay.

Using the ACE system

- Employees create profiles to share information about themselves with others
- Employees send and receive feedback to each other

- Employees meet with supervisors twice per year
- Employees and supervisors set goals together
- Employees access training and other learning resources electronically
- Employees are evaluated and, based on those evaluations, receive performance pay raises.

Timeline

Currently Employees are creating profiles and leadership training is being delivered.

They intend to “soft launch” in June 2016

Employees will do a self-scored mid-year review in October 2016

First year-end review is scheduled for April 2017

Core values – Public Service, Teamwork & Self Development

Employee focus groups are being asked to provide 3-5 competencies per job and those will be finalized into job specific competencies for each job family. Recommendations will be used to create competency based job descriptions and loaded into ACE. Employees will be evaluated against the core values and job specific competencies, using a scale ranging from Exemplary, Exceeds Expectations, Fully Successful, Needs Improvement, through to Not meeting Expectations.

To achieve greater consistency and fairness, supervisors of similar positions will be brought together to calibrate their ratings before the ratings are finalized and presented to employees. The discussions will not include WHO an employee is, but WHY an employee might be rated significantly high or low.

Management employees will be rated against eight competencies. One of those is performance management. Managers will be measured as to whether they are rating people fairly and accurately vs. rating all employees as exemplary. There is a second level review process to help ensure consistency and fairness.

DOT Hot Topics

Vicki Arpin, CT moderated a discussion regarding the results of E-mail surveys members have been using to share best practices and seek guidance on issues they are facing at their own DOTs. It was agreed that email surveys are a valuable tool for us. (With the exception of the multiple emails when members “reply all” to the questions!) To ensure we are maximizing the benefit of e-mail surveys, we agreed that moving forward subcommittee members will engage with the following protocol:

1. If a Subcommittee member would like to pose a question/topic to our subcommittee, please continue to reach out to Clarisse as you currently do.
2. When responding to requests, please send your response only to the person asking the question (rather than “replying all”).
3. The person asking the question will then compile all responses received, send it to Clarisse who will then distribute an e-mail to the Subcommittee so that everyone is kept in the loop as to how other states are handling issues.

The following table includes the list of topics covered. Each state gave a brief recap of the status of their original question and the general response from other states.

State DOT	Requestor	Question
Alabama DOT	Steve Dukes dukess@dot.state.al.us .	Interested in learning whether any states have used customer service surveys to determine satisfaction levels for agency performance. The customers he is interested in surveying are other governmental entities such as cities, counties, metropolitan planning organizations, etc.

<p>Arizona DOT</p>	<p>Wendy Brazier wbrazier@azdot.gov</p>	<p>Interested in obtaining the following information from DOTs:</p> <ol style="list-style-type: none"> 1 – Does your DOT provide pay/compensation for those employees on stand-by or on-call? (To further define - in a status when the employee is not actually performing work, but is required to remain available/waiting at or near the duty site, which may require a response time)? 2 – If so, how is this compensation paid to the employee (stipend, OT, flat rate, etc.) and are there any caveats/restrictions (only for exempt employees, certain job codes, certain geographic locations, certain circumstances)? 3 – If you have a policy that governs stand-by/on-call/call-back (regardless if compensation is included or not), ADOT would be interested in seeing it. 4 – Are there any lessons learned to be shared regarding stand-by/on-call pay or policy?
<p>Connecticut DOT</p>	<p>Vicki Arpin Vicki.arpin@ct.gov</p>	<p>Interested in hearing from states that have collective bargaining: do you have any legislation or regulations that tie management salary increases to union salary increases?</p>
<p>Minnesota DOT</p>	<p>Karin van Dyck karin.van.dyck@state.mn.us</p>	<p>What minimum qualifications are required for entry level transportation workers (maintenance) other than the CDL. Specifically, years of experience in what area? Are any of the job qualifications trainable versus what they need when they come in the door?</p>
<p>Oregon DOT</p>	<p>Jane Lee Jane.S.LEE@odot.state.or.us</p>	<p>Interested in hearing about how states handle CDL holders who have expired medical cards due to medical issues.</p> <p>Since the federal requirements regarding exams for CDL medical cards have been strengthened, Oregon DOT has encountered a few situations where a CDL holder's medical card expires due to the doctor being unwilling to sign off until certain medical conditions have been addressed. For example, the employee may need to get their blood pressure or diabetes under control. The situation is generally short term, lasting a week to a few months. Maintaining a valid CDL is a requirement of the job. The majority of the employee's job duties entail operating CDL vehicles, and it can often be difficult to find non-driving work for them. If you have experience with this, please e-mail information regarding:</p> <ul style="list-style-type: none"> • How your state handles these types of situations <ul style="list-style-type: none"> o Do you have a standard practice, or do you address the situation on a case by case basis? o Do you operate in a union or non-union environment?

<p>Oregon DOT</p>	<p>Jane Lee Jane.S.LEE@odot.state.or.us</p>	<p>The Federal Motor Carrier Safety Act (FMCSA) was modified (effective in July 2015) to include standards for CDL test examiners. (Title 49: Transportation, Part 384 – State Compliance With Commercial Driver’s License Programs, Subpart B – Minimum Standards for Substantial Compliance by States 384.228: Examiner training and records checks.)</p> <p>The regulations now require a nationwide criminal background check for all skills tests examiners at the time of hire and that a criminal background check (CBC) be done for any current examiner who has not had a nationwide CBC. The criteria for not passing must include at least 1) any felony conviction within the last 10 years; or 2) any conviction involving fraudulent activities.</p> <ol style="list-style-type: none"> 1. Do you currently do a CBC? 2. Do you do a fingerprint check? 3. Do you run that fingerprint through the FBI? 4. Do you have any criteria, possibly in writing from FMCSA which would indicate what would comprise an acceptable nationwide CBC? 5. Do you feel that your state is currently in compliance with this updated regulation or are you still working on your response/process? 6. If we have more questions, is there someone we should contact directly in your state (or DC)?
<p>South Carolina DOT</p>	<p>Charles Brown BrownCH@scdot.org</p>	<p>Interested in learning more about states' pre-employment drug screening policies as he prepares a recommendation for his South Carolina.</p> <p>South Carolina's policy has been to conduct pre-employment drug screening for all new employees going into CDL positions. However, SC's new fleet manager pointed out that under Federal guidelines, states don't have authority to test employees until after they obtain their CDL, but that states could conduct a pre-employment screening of ALL new hires under the Drug Free Workplace Act.</p>
<p>Virginia DOT</p>	<p>Emily Elliott emily.elliott@vdot.virginia.gov</p>	<p>“Safety Rules” that are posted on bulletin boards in employee work areas. VDOT is currently reviewing rules and she would like to see what others are doing in this area. She is not seeking comprehensive safety related policies, but rather anything that is a list of perhaps the most pertinent rules that we want employees to be mindful of on a daily basis.</p>
<p>Wyoming DOT</p>	<p>Brian Foster Brian.Foster@wyo.gov</p>	<p>A few years ago Wyoming created a dual role classification (TNCM) that is used for employees who perform construction activities in the summer and maintenance activities (mainly snow removal) in the winter. Those employees split their time fairly evenly between the two roles. Wyoming has had some struggles with this classification, and are wondering if any other state has attempted something similar, if you have had success – and if so, why?</p>

Two additional questions came up during the discussion:

1. FBI based Criminal Background Checks – Tom Jackson, Hawaii DOT
2. Transgender transitions in the workplace – Crystal Woods, Arkansas DOT

How to manage communication with other workgroups, how/when to change names in the system (Answer: Best practice-when the individual does the legal name change) and communicating with the public. (Another great example: When an Arkansas maintenance employee was asked which restroom to use at a rest area... he answered “Whichever one you want.”)

National transportation Workforce Center – Millennials in Today's DOT workforce

Susan Gallagher, Western Transportation Institute, Montana State University presented an overview of the National Transportation Workforce Center (NTWC) Program and the future transportation workforce for State DOTs.

There are five workforce centers, West at Montana State University, Southwest at California State University, Long Beach, Midwest at University of Wisconsin-Madison, Northeast at University of Vermont and Southeast at the University of Memphis. The centers are supported by the FHWA and act together to identify and promote effective transportation workforce activities, programs and resources. Each center has a website and electronic newsletter. You can search their database to find what's being done in your area of interest. Each center has a specialty. For example, the Western National Transportation Workforce Center (WNTWC) center is tasked specifically with Career Seekers/Working Learners, Education and Training Providers, Workforce and Economic Development and the Transportation Industry.

To identify job needs and priorities by region, the WNTWC is using three phase research methodology consisting of a comprehensive literature review, engaging transportation workforce stakeholders and estimating the regional workforce demand for occupations.

Traditionally we looked at existing occupations, projected retirements and projected growth to determine what we need in the future. In "future casting" we now look at new technologies, streamlined organizations and organizational trends or new mandates to project what jobs will be needed.

The WNTWC is shifting the focus to possibilities and potential solutions, using networks to gather resources on great programs that already exist, building partnerships and using networks to share, scale, replicate or leverage strategic action plans.

Millennials became the largest generational cohort in 2010. They became the largest cohort within the workforce in 2016. Their generational preferences and characteristics have an impact on workplace culture and practices. 66% of millennials expect to leave their current job by 2020.

<http://www2.deloitte.com/global/en/pages/about-deloitte/articles/gxmillennials-one-foot-out-the-door.html>

The transportation workforce is older than the national average. 53% of transportation workforce is over 45 years old. There is a need for significant recruitment and hiring of new workers. The purpose of the Western Transportation Institute study was to better understand the current literature on millennials in the workforce and to better understand State DOT perspectives on hiring and retention issues. Their key takeaways are that work is less central to the millennial. Millennials are results focused rather than interested in the time spent on a task or the time spent in an office. They are more interested in mobility than prior generations. They desire mentorship, engagement and opportunities for change. They are technology dependent and used to working in both their work and personal life simultaneously.

Each successive generation desires more time away from work and is less interested in overtime. Millennials are nomads, most interested in moving often than any other generation. Things that attract millennials include work life balance, professional development, job rotations and flexible schedules. Negatives for the Millennial include technology and image. DOTs are not successfully selling themselves to this generation. While DOTs may think they have flexible schedules because they offer four, ten hour workdays millennials are more interested in a schedule that can adapt day by day.

Recruitment

DOTs need more robust social media plans, a better online presence and better data on how applicants find openings. Some DOTs are finding success through internship programs and recruitment partnerships with colleges who can disseminate information through their career services systems.

Engagement

DOTs get good marks in their ability to provide professional and leadership development opportunities. They can involve young staff in improving agency processes/policies; provide performance recognition and mentorship and feedback to employees.

Shortcomings include the availability or capacity to provide in-house mentoring; DOTs are sluggish to change, have a hierarchical culture and generally are set in their expectations about where and when the work should be done. DOTs generally have a “pay your dues” and “at your desk” approach to work.

Findings

There is great potential for collaboration with millennials on:

- Developing online and social media presence
- Building in-house mentorship capacity
 - Should there be a leadership expectation that managers mentor?
 - It's nearly impossible to develop a successful formal mentor program, but we can develop good supervisors.
 - A good mentor relationship goes beyond the work you do together. It's a relationship.
- Improving the public image of DOTs among young people
- Career messaging that highlights attractive attributes
 - North Carolina put a series of videos on Linked in and their Twitter pages highlighting positions that are difficult to recruit for. (i.e. maintenance)
- Reviewing business processes and use of technology policies in the workplace.

Recommendations

- Create a culture that values and engages people
- Empower HR-Promote innovation by supporting a “let's try it” approach to recruiting, retaining and rewarding employees.
- Reduce layers of decision making that give employees more say in setting priorities and defining direction.
- Use ongoing communication and feedback systems to ensure that employees are well informed about organizational priorities and issues affecting them.

Future work for this study will include a focus on key decision points. i.e. when employees make the decision to join, leave or change an organization. The team plans to provide specific, evidence based guidelines and tools.

Susan completed her remarks by reviewing the results of the AASHTO HR survey which includes some helpful performance measures such as Agency Employees per HR staff, Total hires per year per staff, Annual investment the DOT spends on recruitment.

Tuesday, May 3, 2016

Ageing Workforce,

Danny Rotert of Burns and McDonnell, drotert@burnsmcd.com explained that the ageing workforce can be a perception vs. reality question. For example, employees generally think of themselves as older when they get to 50 years old. Employers think of employees as older when they are 60 or older. This gap means that employers are not prepared when employees leave. In a recent Society of Human Resource Managers (SHRM) study only 4% of managers see the ageing workplace as an immediate threat to organizational performance.

- By 2030 20% of Americans will be older than 65. 28% of that group will be part of a racial or ethnic minority.

- Americans over 85 are the fastest growing demographic in America
- In 1986 when Boomers began working 75% of the knowledge they needed to perform a job well was retained in the mind.
- In 2009, for Generation X, only 10% of the knowledge needed to perform a job well was retained in the mind.
- Today, knowledge is obtained through on the job training or is available on-line. Millennials are adaptable and can learn quickly on the job.

NCHRP 750 Foresight Series

In 2008, the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Research (SCOR) established the forward-looking NCHRP Project 20-83 research series. [Published as NCHRP Report 750: Strategic Issues Facing Transportation in Volumes 1-6](#), the series examines global and domestic long-range, strategic issues and their implications for state departments of transportation (DOTs).

Mick Jagger Principle:

“You can’t always get what you want, but if you try sometimes you just might find you get what you need.”

Scenario Planning

Traditionally DOT’s have been very good at short term planning and risk management. Many DOTs also have a 20 year plan. Scenario Planning looks out decades and lets the future drive our planning. For example: If we have connected, driverless cars will we need traffic signals? 50 year planning lets people explore the possibilities. You can’t be adaptive if you’re rigid.



Five questions you should answer:

1. What is your risk?
Your aging workforce clearly impacts essential capabilities and you should know what skills are at risk.
2. How much is due to an aging workforce?
Not all critical skill shortages you will face are due to an aging workforce-you need to know what is driving your skill set shortages. How much of what you are losing is a no longer needed skill set? Not everything the 30 year employee puts together in a desk manual will be needed by the next person. They might not even need a desk manual. What about a video interview-which could possibly be used in training?
3. Where are your future gaps?
You may not need the same skills in the future. Do you really need to post the same classification when a person leaves or is it time for a new set of skills? Scenario plan your workforce needs.
4. Do you fear experience?
Don't fear hiring a 50 year old. They may stay for 20 years. Older workers will continue to be essential to your workplace.
5. Are you flexible?
Flex-time, off-site work, part-time, volunteer, and bending job requirements can help recruiting in all five generations. Beware of the automatic, knee-jerk, "has to have a college degree" mentality. A college degree may not be essential.

Business Meeting

Emily introduced the SCOPHR officers and regional representatives. There were no resignations or vacancies this year, so the people in the current positions will continue for the coming year.

The meeting minutes from the 2015 meeting were approved

AASHTO Comprehensive Committees Review (CCR)

Jim Tymon, Chief Operating Officer for AASHTO, jtymon@aaashto.org presented a status update on the CCR project.

The 2014-2019 AASHTO Strategic Plan identified new strategic goals which include:

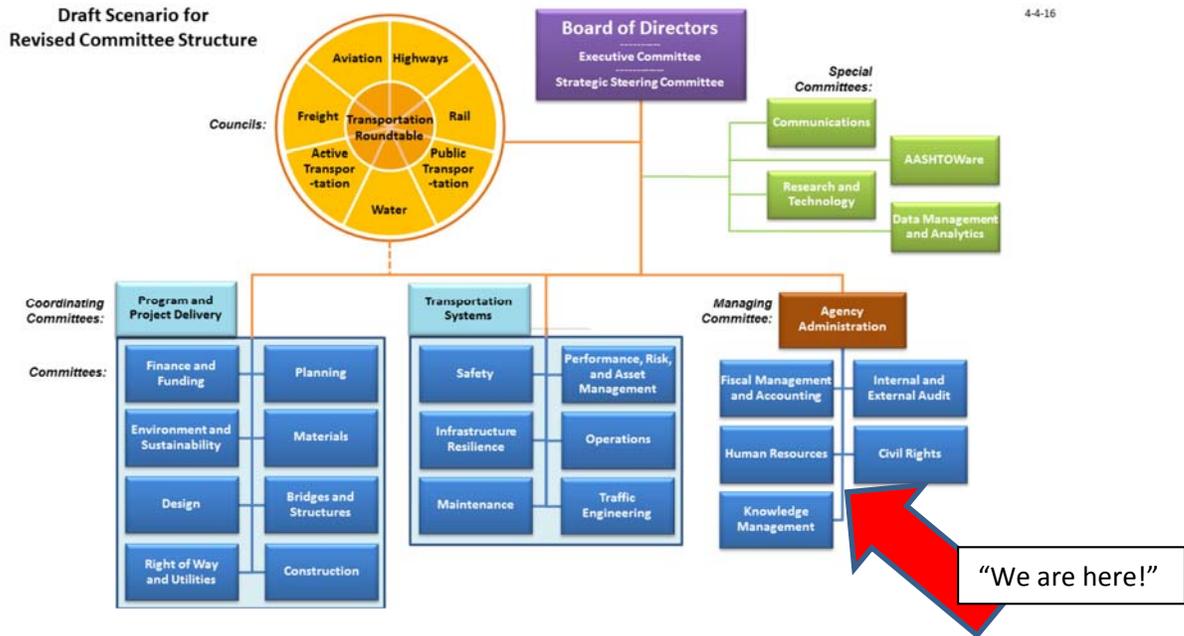
- Provide value to members
- Provide innovative technical and professional services and products
- Be a leader in national transportation policy development
- Communicate the value of transportation

The CCR Objectives include

- Better address State DOT Priorities
- Streamline/simplify the structure
- Expedite committee decision making
- Increase multi-modal communication and collaboration
- Effectively handle cross-cutting issues
- Increase nimbleness and responsiveness
- Better address gap and emerging issues
- Use available state DOT expertise
- Enhance state DOT engagement in AASHTO

Proposed Restructure

In the proposed structure HR would be under Agency Administration, this is not a certain outcome as the proposal is subject to revisions and review over the summer. The proposal will be voted on in November at the Boston meetings. Highlights of the proposal include moving knowledge management into a separate committee, adding a freight council and active transportation (Bike/Ped), a transportation roundtable which includes all modes and a Strategic steering committee to represent the standing committees.



The intended outcomes for the new organizational structure are to:

1. Provide an organizational structure that ensures committees can operate efficiently and be nimble, adaptable and forward looking.
2. Committee Priorities: Prioritize the activities and resources required to support and conduct committee activities, while representing the diverse views of member states.
3. Cross Committee Interactions: Provide for increased communication between committees if, and as needed.

CCR Website:

<http://committeereview.transportation.org/Pages/default.aspx>

Q&A Feedback

1. Helpful that the committee name changed and removed the word "personnel"
2. Safety & Training is not defined in the HR committee but not sure where the voice for that is within the new structure. The groups may not want to be linked with HR, but the reality is that we are combined in the workplace.
3. Texas is now part of both WASHTO and SASHTO
4. Encouraged and hope that cross cutting communication will happen
5. Concern that HR is not seen as a business partner by agencies. We need to share our work and learning with our agencies when we go back to the office.
6. HR is sometimes invited to attend annual meetings by their departments. Participation should be recognized as an excellent succession planning tool. Important that agency managers recognize the value added by sending employees to AASHTO meetings. (Example: One HR Director indicated that she had been invited to participate in the larger/annual meetings earlier in their career and she is now a senior level manager in her agency.)
7. Performance, risk and asset management are combined in the new structure. That may be a lot for one group to handle
8. Knowledge management moving under a standing committee may lose the human element.
9. Enterprise risk management should be pulled out of Knowledge Management
10. How flexible with this structure be?
11. This is a good move, AASHTO is moving in the right direction.

Potential Webinars for 2016

Emily led a discussion regarding the webinars held over the past year. We agreed that we like them and want to continue. One suggested topics, more information on scenario planning; perhaps there are examples from other states.

- Decision:**
1. Continue holding webinars.
 2. Emily agreed to send out a survey looking for more ideas.

SCOPHR Toolkit Discussion

The toolkit was originally done by a consultant. The question was raised as to whether we should invest in an effort to update it, or continue it as is.

Decision: Continue as is and each state was asked to please check and update your state's content or work products.

Hot Topic Review

Decision: After discussion it was proposed and agreed that for future meetings each state will bring a 1-2 page list of best practices, "what's hot" or subject areas that they are working on AND a list of what they would like more information on, what they're looking for in the future.

This will allow each state to review the lists and contact the appropriate group for more information. The plan would be to update this annually and share highlights at the meeting.

2017 Meeting – Connecticut

The 2017 meeting will be hosted by Vicky Arpin in Connecticut. Vicky asked us to think about whether we wanted to meet more centrally in Hartford at the Capitol or perhaps in Mystic/New London area. She will be working on locations and providing more information in coming months.

Agenda Build Ideas for 2017 Meeting

The group suggested a number of topics, some of which may also work for webinars.

- Workforce Development
- Safety
- Big Data – Analytics
- Law changes/Compliance IF applicable to all states, i.e. review of recent court or federal laws relevant to all states
- Mental Health in the workplace
- Social media, when is it in the HR workplace
- Telecommuting
- Retention – How to use Cross training, rotational work assignments
- Lock in/Escape rooms
- Team building exercises
- Job Shadowing for a week
- Employee Engagement
- Experiential Learning (Virginia may have some insights here)
- Missouri programs targeted to millennials
- Lean Process applied to HR work

Honoring our members

Emily recognized Lon Pfau from Wyoming DOT for his long standing participation and service (19 years!) with the committee. Lon is retiring at the end of May. Emily thanked him specifically for his friendly face and quiet presence. Lon mentioned that this has been a great group and it has been nice to come to a place where everyone understands what you're going through.

Business meeting was adjourned

Four Winds Interactive Open House & Presentation “Driving Engagement with Technology”

David Levin, CEO and President of Four Winds Interactive shared the story of what his company has learned about employee engagement as they have grown from a 5 person company in 2005 to 350 in 2016. The company is currently 63% male, 37% female and the average employee age is 35.

In 2013 they faced a number of issues:

- Their turnover percentage was 28%.
- They had little internal focus
- Employees were starting to burnout as the excitement of startup was wearing off
- Low empowerment of managers
- Little or no manager training
- Office space was no longer suitable and there were parking issues



Facing these concerns David had a personal “awakening”. He found articles about Engagement from Forbes <http://www.forbes.com/sites/meghancasserly/2013/07/17/google-management-is-evil-harvard-study-startups/#2633580917aa> and Tony Schwartz <https://theenergyproject.com/blog/what-it-takes-fully-engage-your-employees>

He noted that one of the top factors in ensuring success to a company is a high level of employee engagement. Armed with this information he and his management team put together a turnaround plan. The plan had four components:

1. Empower and train managers
2. Hire an HR leader as part of the Executive Committee
3. Use their own product to communicate
4. Find a new building to support growth

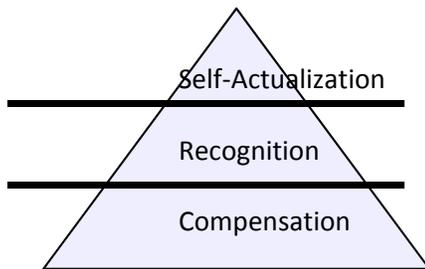
The *Rule of 7* states that “There must be seven touches before someone takes action”. When people are reading email, it’s a “pull” relationship, as with the internet. You have to pull them into what you want them to see. Pushing communication can increase the frequency that people see your message.

FWI decided that they should work on getting credit for what they were already doing, drive participation in company events and get credit for communicating in general. For example, they were already promoting “Wellness Wednesday” but it wasn’t getting wide participation.

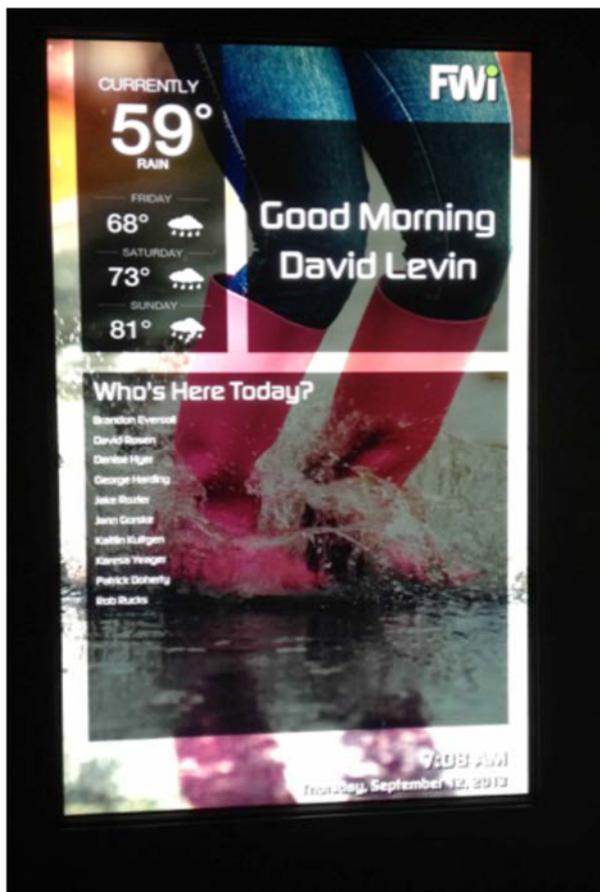
According to a May 2015 Microsoft article, Attention spans are shortening. In the past people transitioned from writing to typing. Today we’re transitioning from keyboards to touch screens. Keyboards are going away. Today’s attention span is just 8 seconds long. On average people look at a screen 21 times per hour. We need to prepare for the next generation workforce.



To get at peak performance, people need to be compensated, recognized and reach self-actualization. (“I’m doing what I was born to do”)



FWI’s first attempt to use their messaging boards turned out to be too busy. The screens were full of data, but were not increasing engagement. They also found that old employee photos were either not flattering or engaging. They took time to get better photos of the employees that are used in the various applications.



Their second and third applications started making a difference. As employees enter the building and swipe their badges the monitor greeting them customizes the experience. Employees can quickly see weather information as well as who else is already in the building.

Other screens located throughout the building capture and celebrate sales milestones, recognize employee anniversaries, birthdays, announcements, highlight new employees, help you “get to know a co-worker” or promote company wellness challenges, such as a friendly “step” competition where employees voluntarily share their Fitbit steps with the group and compete daily to be at the top of the leaderboard. This became a very popular application.

Employees have access to an online recognition system where they can give a badge of recognition or thanks to co-workers for a job well done. The badges are tied to the employee values. Messages and recognition are then displayed on monitors throughout the building. Employees also have the opportunity to post photos that are displayed on the boards. As committee members walked through the building we were able to view a number of employee pictures rotating through the monitors along with announcements, badges and “get to know your co-worker” messages.

The “Get to Know a Co-worker” application highlights information and as it is displayed throughout the day or week employees will be impacted by the “rule of 7”. Having seen the information at least seven times they are then far more likely to retain it which will make it easier to get to know the person and this accelerates collaboration. Each of these announcements are using applications (apps) developed by FWI. Through their experience they’ve found the top apps for Engagement are:

- Social Snap
- Wellness Watcher
- Badging
- Get to know a coworker
- Birthdays and Anniversaries
- Performance leaderboards

FYI credits their results in reduced turnover to use of these message boards and applications. Their turnover percentage dropped from 28% in 2013 to just 12% in 2015. (YTD for 2016 the turnover is only 4%) In 2016, 83% of their employees would recommend FWI as an employer. Their employee satisfaction rate is 81% and Employee engagement is at 76%.

FWI's journey from high turnover to high employee engagement has given them some insights on best practices. They recommend:

- Rule of 7 (People need to see something seven times before they take action)
- Drive personal connection
- Drive Recognition
- Drive participation
- Use Signage, both Mobile and Desktop

FWI found that putting business information in a visual format helps drive performance. People like to compete and this introduces some friendly gamification into the workplace.

FWI's Building is designed to be employee friendly and encourage opportunities for collaboration.

- The building has 300 screens that run 100 or more visual applications.
- Employees are assigned sit-to-stand desks
- They use self-scheduling software to manage their meeting rooms
- The building has a wellness center with exercise equipment, showers and the availability of exercise programs on the monitors.



Lastly, the building is “built to roam”. There are no offices. When employees need a change of scenery or want to meet with someone they can use the conference rooms or alternative work areas such as tables near a window or couches and chairs placed strategically around the building.

Q&A:

Regarding the Employee Recognition application, is there a gatekeeper?

A. Yes, in that someone is assigned to “load” the recognition to the application, but they haven’t needed to moderate or screen comments. Training has been provided to employees as to the purpose of the software and how to use it.

What if people want to “opt out” of the personal photo portion of the applications?

A. Employees could have something else in place of a personal photo, in fact that happens when no photo is yet available for a new employee.

However, Virginia DOT noted that they have 7,000 employees and they made the decision to not have an opt out option for employees on the photo organizational charts.

Can these applications be used on mobile devices?

A. Mobile applications are available to help employees feel connected. These have all the same information. The mobile apps interact with the agency directory and allow users to pull up the birthday, anniversary and badging applications remotely. The applications can be adapted for single users or small groups. For example: a Google Chrome stick can be inserted in a personal screen in a toll booth or in the vicinity of a small work group.

Virginia DOT's experience

At VDOT each district manages their own application content. The monitors can display videos, commissioner messages, enterprise wide communication, weather information and job posting links.

Maintenance employees can use touch screen technology. They don't need to "log on" or an email address to use the information. They can access training videos by pushing a button.

Transportation Curriculum Coordination Council (TC3)

Emily Elliott, Virginia DOT presented information about TC3 – AASHTO's Training Technical Service Program. State DOT's are the primary customers of TC3. The curriculum targets the transportation technical workforce including training on Construction, Maintenance and Materials. By partnering with AASHTO, the TC3 program has the opportunity to align goals and mission and move to a self-sustaining program.

TC3 allows states to cost effectively train staff with quality, relevant course material. TC3 courses are developed through a collaboration of national best practices and subject matter experts.

TC3 released a Mobile App in 2014 and courses are available online. A new website and Learning management system (LMS) were implemented in 2015. As of June 2015 more than 100,000 users participated in web-based training.

TC3's current goals include:

- Increase supporting states
- Increase our volunteer base and SMEs
- Increase industry partnerships
- Promote the curriculum to new users
- Increase State Sharing Program Participants

For more information about TC3, contact Mark Chaput, chaputm@Michigan.gov

NCHRP Domestic Scan: Advances in Developing a Cross Trained Workforce

Lee Wilkinson, Iowa DOT shared the results of this NCHRP study. The original problem statement asked how agencies are using workforce cross-training as a strategy for enhancing agency efficiency and agility in adapting to changing missions, priorities and budgets; and the conditions under which cross-training strategies are applicable and appropriate.

The team spent a significant amount of time defining the term cross training and learned that it can be broadly defined as it is used by the employer. We ultimately identified a basic statement that cross training prepares an employee hired for one function, how to perform other functions. We also agreed that the term is often used interchangeably with job shadowing and rotation.

DOTs cross-train for a variety of reasons including,

- Career development
- Cross utilization
- Foster better leaders
- Improved teamwork
- Succession Planning
- Training backups for coverage
- Budget driven necessity

Cross training has become a necessary management tool to remain current, have an effective workforce, retain millennials and meet the ever growing requirements to do more with less. Driving forces include aging demographics in the existing workforce and ballooning consultant costs.

The team invited a number of states and the National Institutes of Health to participate in sharing best practices.

Those states shared the work and focus they have regarding cross-training.

CalTrans

Succession planning, career development and having trained backups to seamlessly provide coverage when an employee is on vacation, etc.

Connecticut DOT

Development of new college graduate design engineers hired as trainees who lacked field exposure

Iowa DOT

Cross-utilization field staff is the need to maintain a staff level and staff competence that can deliver a high level of performance in both construction project delivery and winter operations.

Missouri DOT

Using knowledge sharing, succession planning, retention and employee development to create a more streamlined, efficient and effective organization

NIH

Succession management and employee engagement

Ohio DOT

A more flexible workforce, specifically in the areas of maintenance and construction

Oregon DOT

Added bench strength, increased employee morale and productivity, increase job satisfaction and workforce flexibility

Tennessee DOT

Reduce Construction and Maintenance costs; reduce staff

Utah DOT

Better utilization of workforce: Maintenance had a large need in the winter months, and construction in the summer months

Virginia DOT

To address needs for continuity of operations along with improving employee retention, engagement and succession planning; To address succession planning and long term needs for talent that is ready to perform current work and future work demands.

The team noted that there are a variety of methods used to cross train by the reporting agencies.

- Voluntary-Mandatory
- Job Rotation
- Leadership Academies
- Executive Cross-Training
- Combining Maintenance and Construction
- Technology
- Engineering Rotation Program
- Communities of Practice
- Boot Camp
- Knowledge Transfer Guidebook
- Mentoring
- Maintenance Leadership Academy
- Accelerated Leadership Academy
- Experiential Learning

Most agencies reported a business case or organizational need can be demonstrated for cross training. Cross trained employees have more knowledge, are more engaged and more likely to remain with a department. Once cross training programs are implemented it is important to produce metrics showing how the programs are adding value. Metrics can include:

ROI – stay under position cap, cost savings, cost avoidance

Effectiveness – Improved worker knowledge, collaboration

Efficiency – balancing workload peaks

Improved Relations – Ongoing dialog with supervisors, teamwork

Risk Management – Work coverage, maintaining service levels, mitigating the shrinking workforce

A consistent theme throughout the presentations is that cross training is about culture change and engaging executive level support to ensure it is embraced and successful. Through the assistance of Oregon DOT, a video was developed that is also representative of the findings of the study. The video has been posted on YouTube for ease of access. <https://www.youtube.com/watch?v=Sw81ex8SqNM&feature=youtu.be>

For more information, please contact:

Lee Wilkinson at lee.wilkinson@dot.iowa.gov

Jane Lee at jane.s.lee@ODOT.state.or.us

Vicki Arpin at Vicki.Arp@ct.gov

Meeting Adjourned

Minutes submitted by Subcommittee Secretary Jane Lee, Oregon Department of Transportation