

Virtual Peer Exchange

STRUCTURAL APPROACHES TO INNOVATION PROGRAMS & STIC

JUNE 1 & 2, 2020



**THE
LANGDON
GROUP**
a J-U-B Company

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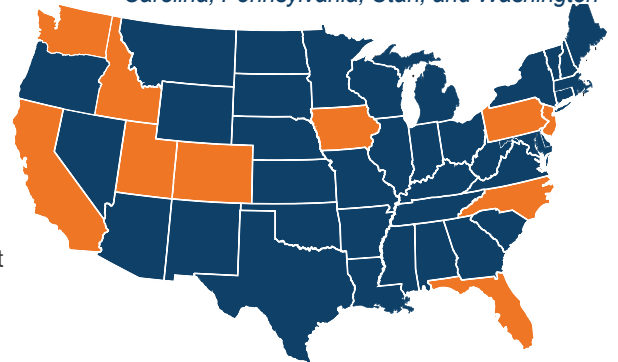
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Executive Summary

Utah Department of Transportation (UDOT) in partnership with Federal Highway Administration (FHWA) hosted a two-day Virtual Peer Exchange on June 1 and 2, 2020. This peer exchange was originally planned to be a three-day in person meeting. To use more innovative platforms, this meeting was shifted to a virtual/online platform and condensed to two half-day sessions.

Prior to the exchange, each state representative was interviewed and asked what they hoped to learn from the exchange. This helped to center the discussion on topics the attendees were seeking. Additionally, each participant was briefed on Zoom, a virtual meeting platform, to ensure the success of the meeting.

10 states represented – California, Colorado, Florida, Idaho, Iowa, New Jersey, North Carolina, Pennsylvania, Utah, and Washington



PRE-MEETING INTERVIEW TAKEAWAYS

What would you like to takeaway from the peer exchange?

- How other states promoting a culture of innovation (internally and externally)
- How other states tell the stories of their innovation successes
- Developing an Innovation Communication Plan
- How to effectively share innovation lessons learned
- How other states are measuring and tracking the value of innovative efforts
- Learning more about the STIC program and application process
- How to maximize STIC funding
- How other DOTs implement innovations beyond Every Day Counts
- How to effectively go from concept and ideation to implementation
- How to help DOT staff utilize the innovations already in place
- Where and how innovation ideas are being generated and collected
- How other state DOTs structure their STIC or innovation program

MEETING TAKEAWAYS

At the conclusion of the peer exchange, the participant's key takeaways were:

- STIC application scoring frameworks
- Utah's efficiency report
- STIC communication plans
- Forming a strategic team
- Creating better connection between innovation program and STIC
- Creating an external STIC communications plan
- Qmarket software
- Integrating communication into the innovation program
- The importance of story telling
- The importance of showing ROI and setting up dashboards for stakeholders
- Recognizing innovative ideas
- The importance of peer relationships
- Grants for STIC proposals
- Involving all levels of the organization into innovation



This exchange was held in conformity with 23.CFR. Section 420.207(b). Peer exchanges, as required under 23 CFR, Section 420.207(b) are a practical and effective tool to foster excellence in R&T program management. They provide an opportunity for participants to share best practices and management innovations through an open exchange of ideas, knowledge, and brainstorming. Both staff and management from the home State and a group of invited top-level State and Federal managers exchange information particularly relevant to the home State's R&T program over 2 to 4 days.

Day One Minutes & Virtual Chat

INNOVATION PROGRAM OVERVIEW

JUNE 1, 2020

9:00 – 9:15 A.M. | WELCOME

- Rod McDaniels, UDOT Innovation and Implementation Manager, welcomed participants to the Virtual Peer Exchange and introduced Carlos Braceras (UDOT Executive Director) and Ivan Marrero (FHWA Utah Division Administrator)
- Carlos Braceras – UDOT Executive Director
 - He thanked everyone for participating in the virtual platform
 - He spoke to the current events – COVID lockdown and recent protests – now, more than ever, it is important for every organization to find ways to keep jobs secure while keeping families safe
 - He spoke to the recent SpaceX launch: There are positive, progressive, innovative efforts happening all around us
 - When it comes to innovation, going through trial and error and learning from mistakes is vital and important to progress.
 - He spoke to the history of STIC and DOT innovation and the effort made to build a collaborative spirit between FHWA and DOTs when it came to innovation
- Ivan Marrero – FHWA Utah Division Administrator
 - He expressed that learning from other DOTs and peers is time well spent
 - He is proud of Utah's innovation culture and Every Day Counts efforts
 - He talked about UDOT allowing room to take risks and push the boundaries. He added that we all should be encouraging people to take risks and push toward innovation.

9:15 – 9:20 A.M. | AGENDA OVERVIEW & VIRTUAL MEETING

INSTRUCTIONS – DAN ADAMS

- Dan Adams is facilitator with the Langdon Group (a consulting firm in the Pacific Northwest and Mountain West). Dan was joined in facilitating the Virtual Peer Exchange by Jennifer Fowler and Allison Adams.
- Dan Adams introduced himself as the meeting facilitator and went over the ground rules and virtual meeting recommendations
 - He introduced the true spirit of a peer exchange and explained the agenda will be flexible and allow the conversation to move where the group would like to go
 - He added that if there is something someone feels concerned about being in the meeting notes, please speak up and the comments will not be tracked in the event meeting summary
 - The virtual meeting was not recorded, though the Langdon Group transcribed notes.

9:20 – 9:25 A.M. | PARTICIPANT INTRODUCTIONS

- Clare Fullerton – NCDOT, Value Management Program Engineer
- David Henard – NC State University, Professor of Marketing, DOT Partner
- Edward Parker – FHWA, Deputy Administrator
- Amanda Gendek – NJDOT, Bureau of Research Manager
- Helene Roberts – FHWA-NJ, Performance Manager

VIRTUAL CHAT

These are the comments made by participants in the virtual chat function on Zoom's platform.

Dara Wheeler 9:13 A.M.

Thanks Carlos! Very inspiring - it's our Moonshot Monday!

- Robert Clark – FHWA-NJ, Division Administrator
- Bryan Roeder – Colorado DOT, Research Branch
- Tricia Sergeson – FHWA, ITS and New Technology Program Manager
- Dara Wheeler – California DOT, Chief, Chief, Division of Research, Innovation and System Informationr
- Anja Walker - PennDOT, Bureau of Innovations, STIC Manager
- Danielle Klinger-Grumbine – PennDOT, Bureau of Innovations, Division Chief
- Laura Meyer – ITD, Continuous Improvement Facilitator and Business Analyst
- Ned Parrish – ITD, Research Program Manager (Innovate ITD)
- Anne Freeman – WSDOT, Research and Library Services Program Administrator
- Courtney Drummond - FDOT, Assistant Secretary of Engineering and Operations
- Ryan Bailey – UDOT, Innovation and Implementation Coordinator
- Rod McDaniels – UDOT, Innovation and Implementation Manager
- Vanessa Goetz – IowaDOT, Office of Research and Analytics
- John Haynes – FHWA, Research and Innovation Program Manager
- Sara Lowry - CAI, Program Coordinator, National STIC Network and Incentive Program
- Tom Harman - CAI, Director
- Jeff Zaharewicz – CAI, Senior Advisor, EDC Initiative Stakeholder Engagement
- Karyn Vandervoort – CAI, Manager and Program Analyst

VIRTUAL CHAT

9:25 – 9:30 A.M. | NATIONAL STIC OVERVIEW – SARA LOWRY, FHWA CENTER FOR ACCELERATING INNOVATION

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- FHWA Office of Innovative Program Delivery (OIPD) aims to improve transportation performance by driving innovation into action through partnerships, technology development, and capacity building. The office fosters a culture of innovation: www.fhwa.dot.gov/innovativeprograms/
- OIPD Centers
 - The Center for Accelerating Innovation (CAI) is under Tony Furst, FHWA Chief Innovation Officer
 - CAI shares the success of innovation at the national and local levels. It facilitates the rapid deployment of innovation into the transportation community through Every Day Counts Program.
 - » STIC Program: Fosters and supports the State Transportation Innovation Councils' National Network
 - » AID Demo: Supports innovation through the Accelerated Innovation Deployment grant program
 - » AMR: Supports advancement of emerging technologies through Accelerating Market Readiness
- CAI transforms transportation innovation through use of the STIC network, collaborative efforts, and sharing success stories

- The National STIC Network encapsulates and represents multiple stakeholders from the transportation community, including:
 - State DOT and FHWA Divisions, Consultants, Contractors, Local Public Agencies, LTAPS/TTAPS/UTCs, Universities, and Federal Resource Agencies
 - Through this network, CAI considers all sources of innovation
 - The strength of the CAI and DOT innovation efforts comes from learning from peers
- CAI and STIC resources are available online at: www.fhwa.dot.gov/innovation/resources/success.cfm

9:30 – 9:40 A.M. | REVIEW OF PRE-MEETING PARTICIPANT FEEDBACK – DAN ADAMS

- What did participants want to get out of the peer exchange?
 - How other states are fostering dialogue and **promoting a culture of innovation** (internally and externally)
 - How other states **tell the stories** of their **innovation successes**
 - Developing an **Innovation Communication Plan**
 - How to effectively **share innovation lessons learned** between DOT Departments and states
 - How other states are **measuring and tracking** the value of innovative efforts
 - Learning more about the **STIC program and application process**
 - How much time other STIC Councils are focused on **funding vs. other STIC efforts**
 - How to **maximize STIC funding**
 - How other DOTs **implement innovations beyond Every Day Counts**
 - How to effectively bridge the gap between concept and **ideation to implementation**
 - How to help DOT staff **utilize the innovations that are already in place**
 - How to help different disciplines implement innovative practices and **break down the silos**
 - Where and how innovation ideas are being **generated and collected**
 - How other state DOTs **structure their STIC or innovation program**

9:40 – 9:45 A.M. | BREAK

- Polling Question: If you could go on any vacation right now, what type of vacation would it be?
 - Options: Tropical, Camping, Road Trip, Cruise, Foreign Country, Other

9:45 – 10:35 A.M. | STATE INNOVATION PRESENTATIONS – HOW DOES INNOVATION WORK IN YOUR STATE?

UDOT – ROD MCDANIELS, INNOVATION & IMPLEMENTATION MANAGER, & RYAN BAILEY, INNOVATION & IMPLEMENTATION COORDINATOR

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - 1736 FTEs
 - 102,410 Lane Miles
 - 4 Regions
 - 2018 – Innovation Program was started, with 2 Innovation FTEs (\$150,000 in support funding)

VIRTUAL CHAT

Sara Lowry 10:00 A.M.

Got my popcorn (well, banana chips) and ready for the presentations! I am so glad that all of you are here!

Laura Meyer 10:01 A.M.

Popcorn is a great idea!! I'm excited too!!

- Innovation Engine Blueprint Graphic –
 - Has an 18-person innovation council
 - Innovation recruitment flier and process for the Innovation Council
 - Built a training guide for the Council and a Portal Guide for the Ideas Portal
- Incentivized Rewards Approach – the implementation of the idea is what provides the value
 - Reward model – people should be rewarded for implementing innovation efforts
- Ideas Portal – Sabacloud Activity Stream
- [UDOT's Live API](#)-connected ROI Dashboard
 - UDOT shared background details on their first generation innovations dashboard
- UDOT's STIC Maturity Level – only at the mid-point right now
- There is a lot of enthusiasm for change - this doesn't always lead to change
- UDOT mainly focuses on Statewide innovation (to avoid local and regional innovation from being too different). Innovation should be implemented or aim to be implemented statewide and beyond the local/regional level.
- Recommended book on innovation – “Diffusion of Innovations” (Everett M. Rogers)
- Key Lessons Learned
 - The best way to do your job has not been invented yet
 - Leverage
 - Do your homework
 - Place strategy before execution
 - Have a bias toward Action (fail fast)
 - Stop doing is at least as important as start doing

VIRTUAL CHAT

ITD – LAURA MEYER, CONTINUOUS IMPROVEMENT FACILITATOR & BUSINESS ANALYST, & NED PARRISH, RESEARCH PROGRAM MANAGER

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - ITD has 1600 Employees
 - 6 Districts and Headquarters located in Boise, ID
 - Serve 1.78 Million Idahoans
 - Maintain 12,200 Lane Miles
 - 1800 Bridges
 - 126 Public Use Airports
 - 1 Sea Port
 - 29 Rest Areas
 - 12 Ports of Entry
 - **\$0.00 Funds Designated to Innovation**
- Every Day Counts (EDC):
 - 3D Modeling
 - » STIC funding used to purchase tablet with EDC 3 software
 - » Workshop was held to demo and will be in Pilot 2020 season
 - UAS Drones
 - » EDC 5 - used for stockpile management and bridge inspection
 - » Workgroup created for setting policy and best practices
 - Value Capture Funds

- » Economist is investigating value capture options – EDC 5 and sharing that with ITD management and Idaho agencies.
- Intelligent Compaction Methods
 - » Purchased a rolling density meter – EDC 2, obtaining training and looking to pilot on several projects.
- When the ITD plan for innovation was implemented in 2014, there were 5 steps to the process:
 - Create Vision
 - Establish Framework
 - Set Goals
 - Engage People
 - Measure and Celebrate
- STIC is led jointly by FHWA Assistant Division Manager and ITD Engineer Representative
- STIC is relatively disconnected from the innovation program and efforts – this is an area to improve and collaborate on
- “Innovate ITD” Program
 - The “Innovate ITD” group puts out a scorecard, which is public information
 - The scorecard tracks employee ideas submitted, ideas implemented, savings/efficiencies, and customer-service improvements
 - Year to date, 108 ideas have been submitted and 69 innovations have been implemented
 - Innovation Stewards are key to the success and implementation of ideas – the stewards are responsible for a District and implementing the innovation efforts in that District
- Innovation ideas are submitted through a SharePoint form. When an innovation is implemented, ITD awards a “Best of the Best” award.
 - ITD found that recognition was important to fostering and propelling a culture of innovation
- Innovation successes and highlights:
 - Projects were submitted to the Innovative Company of the Year Competition
 - ITD was chosen to be one of the **top 3 innovative companies** in Idaho
 - ITD was the only public sector entry
 - ITD District 6 was the **first district** to get to the \$1 million mark in savings (in Eastern Idaho)
 - A North Idaho (District 1) tree-removal innovation put the department over the **\$10 million mark in savings**
 - The **largest innovation** savings came from a collaborative effort when District 4, District 5 and District 6 tackled 17 bridge repairs in South-central, Southeast and Eastern Idaho in one project, saving **\$4.7 million**
 - **Some of our innovations have won awards!** North-central Idaho (District 2) won an **AASHTO President’s Award** for their Osprey Nesting Platforms innovation
 - Many ITD innovations involve many different departments and agencies. A good example is when Bridge Design (HQ / ETS / DMV) developed a method to measure the minimum bridge heights and communicate that data to the permitting department in an easy to follow Google map.
- “The Bud Bar” example
 - What went well – rapid prototyping, made a video and it went viral within ITD
 - What did not go well – the crews did not get any approval to develop and implement the “Bud Bar.” The safety department was concerned and put a stop to the project.
 - This effort ultimately brought all parties together to work through the

VIRTUAL CHAT

Rod McDaniels 10:30 A.M.

Great background story about the bud bar Laura!!

Tricia Sergeson 10:33 A.M.

Great presentation. Really like the idea of an innovation score card!

development of the “Bud Bar,” what the intent was, and develop a marketing plan (ITD Innovation Department facilitated that process).

- Key Lessons Learned
 - Keep doing videos, keep sharing ideas, and create a communication plan

CDOT – BRYAN ROEDER, RESEARCH BRANCH, & TRICIA SERGESON, FHWA, ITS & NEW TECHNOLOGY PROGRAM MANAGER

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - 5.8 million in Colorado
 - 5 Regions
 - 3100 CDOT Employees
 - 23,000 Lane miles
 - 3,447 bridges
- There are several offices in CDOT that do innovation. Each office has different amounts of funding available.
- Safety is a major component in evaluating innovation and implementation
- STIC formed in 2014 – co-chaired by Chief Engineer and FHWA Division Admin.
 - Currently in a transition phase – only 7 members (want to include more local agencies and MPOs)
 - Meet quarterly and focuses on managing the STIC funding and implementation
- Implementation Stages Dashboard – to track progress in EDC-5 Innovations
- Change Management and Innovation
 - Had every innovation staff member go through a Knowledge Management Training
 - Have engaged with Executive Management and DOT Champions to help propel innovation throughout the state
- STIC Project Scoring and Criteria
 - Identify goals and create criteria to rank project and their priority
 - » STIC emphasis does change every year, so the goals and score weighting does shift
 - This has helped Colorado determine how to effectively spend their available funding
- Example: Local Innovation Implementation Summit
 - Born from discussions at EDC-4 Summit
 - Funded by STIC
 - 200 participants (supplemented travel and lodging)
 - Targeting effort identified EDC initiatives local agencies could utilize
- DFS – One Source of T2 funds (also available through SPR – State Planning and Research Part 2)

10:35 – 10:45 A.M. | HOLD FOR BREAK

10:45 – 11:35 A.M. | STATE INNOVATION PRESENTATIONS (CONT.) – HOW DOES INNOVATION WORK IN YOUR STATE?

VIRTUAL CHAT

Laura Meyer 10:40 A.M.

Raising a vocabulary question: What is T2?

Sara Lowry 10:40 A.M.

Technology Transfer = T2

Rod McDaniels 10:42 A.M.

I really like the “Stages of Implementation” chart! Smart design.

External-facing dashboard (even better)

Can really use a copy of CDOT’s STIC Project Scoring matrix.

Tricia Sergeson 10:45 A.M.

We’ll send that on!

Helene Roberts 10:47 A.M.

I like the idea of the summit for local agencies.

DFS = Director of Field Services

An FHWA position.

Dara Wheeler 10:48 A.M.

CA is planning a virtual innovation summit for the late fall - if anyone has guidance on planning a virtual summit, we would appreciate learning about it

Danielle Klinger-Grumbine 10:49 A.M.

Pennsylvania would be interested in that information as well.

Clare Fullerton 10:49 A.M.

Dara - we are planning on that too.

IOWA

IOWADOT – VANESSA GOETZ, OFFICE OF RESEARCH & ANALYTICS

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Goal: Drive a quality research program that delivers targeted solutions for Iowa's transportation future
- Demographics
 - 3.2 Million people
 - Lane miles: 9K DOT, 90K county, 15K cities
 - » 99 counties
 - Bridges: 4K DOT, 19K county, 1.1K cities
 - 6 DOT Districts
 - » 3,200 employees (900 teleworking because of COVID)
 - 99 Counties
- Located in "Strategic Performance Division"
 - Research and Analytics
 - Two team members are focused on FTE
 - » Most FTE are hired through contracts
- 3 main research programs:
 - Iowa Highway Research Board (IHRB, Since 1949)
 - » State, County, Local, STIC project considerations
 - » All STIC is managed through this Department
 - State Planning and Research (SPR)
 - » State, regional, national project consideration
 - Other Partnerships
 - » AASHTO
 - » TRB
 - » FHWA
 - » USDOT
- Roughly \$7 million funding/annual expenditures
- About 190 research projects a year
 - All master research agreements go through this office
 - Complete about 50 projects in any given year
- Research Focus Areas
 - Safety
 - Mobility
 - Sustainably
 - Technology
 - Moved from researching which innovation projects to do to researching to "why are we researching this effort?" (not just focused on concrete innovation, etc.)
- Research Cycle
 - Identify topics
 - » Open solicitation
 - » Topics accepted continuously
 - » Trimester deadlines for consideration
 - » Submit topics through www.iowadot.gov/research
 - Review topics
 - » Research section review
 - » Open feedback solicitation

VIRTUAL CHAT

Rod McDaniels 10:58 A.M.
Nice Research Focus Areas breakdown
Vanessa.

- » Technical expert review, champion designation, and prioritization
- » Assigned a research program and manager for further development
- » Topics removed from consideration must resubmit if so desired
- Develop ideas and strategies
 - » Project Development Group (PDG) formed
 - » Further details added and literature searches completed
 - » Requests for proposal posted to website
 - » Responses collected and reviewed
 - » Winning proposal selected
- Create program to implement
 - » Approval process within specific research program
 - » Agreement signed between DOT research agency
 - » Technical Advisory Committee (TAC) assigned
 - » Project kickoff meeting with PI & TAC
- Review process involves open feedback on innovative ideas solicited, identify who will be the champion, and determine where funding will come from
 - The project development process begins – this is where Iowa DOT starts to talk to experts and research further into the idea
- Examples: The use of mobile devices for construction methods (to reach the goal of going paperless), Virtual Reality Public Engagement
- Most innovation efforts relate back to EDC initiatives
- AID – Accelerated Innovation Deployment (FHWA initiative)
- Top 4 projects are funded by STIC: www.fhwa.dot.gov/innovation/grants/

VIRTUAL CHAT

Sara Lowry 11:02 A.M.

AID Demo website: www.fhwa.dot.gov/innovation/grants/

NCDOT – CLARE FULLERTON, VALUE MANAGEMENT PROGRAM ENGINEER, & DR. DAVID HENARD, FHWA, TECH TRANSFER PROGRAM, DEPUTY DIVISION ADMINISTRATOR

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - Population 10.5 million
 - 9,000-10,000 DOT employees
 - 80,000 Centerline Maintained Miles of Roadway (173,000 lane miles)
 - 18,000 Maintained structures (13,500 Bridges)
 - 14 Divisions
 - DOT also includes highways, rail, aviation, ferry, Public transit, and Bike/Ped
- Big focus: find a better way to communicate innovation, break down silos, and bridge gaps
- NC-TIC was prioritized in 2019 – how can we accelerate and scale innovation?
 - NC-TIC provides a platform for innovation, programming, and guidance on policies and best practices to ensure efficient investment, development, and management of North Carolina's transportation infrastructure.
 - We have innovation coordinators for each group and throughout the regions. They go through change management trainings.
 - We are trying to make sure all our groups are communicating so we are leveraging all our resources. We are trying to find the innovative ideas and then test them out.
- Focus
 - Internal Innovation
 - Academic Partnerships

NORTH CAROLINA

- Industry Partnerships
- NC-TIC under Deputy Secretary David Howard
 - Internal: Innovation Coordination
 - Expert reviewers (between 40-60 reviewers)
 - Academic Partners: Universities, UTC, TCC
 - External: TAC, TCC
- Working on a 5-step Implementation Process for Innovation
 - VEPP: Identify, Vet, Evaluate, Review, Implement
 - Found that it is important to have collaboration and good communication with efforts
- EDC Initiatives:
 - UAS – Scaling Out, piloting Initiatives in construction and maintenance, training program, rental program
 - VPI (Virtual Public Involvement) – Institutionalized, various tool, responding during this crisis
- Past Internal Innovation Effort:
 - Some old programs went away because there was not dedicated funding
 - Positives – Employee input, annual event, implemented ideas
 - Negatives – Limited follow-up, difficult to lookup past information, tied to funding (it ended up being a top-down effort)
- KM Program – CLEAR
 - Take lessons learned, establish workflow, process ideas properly, develop communication plan and ROI methods
 - Goals are set for end the of 2020
- How do we build a culture of innovation with 10,000 employees and break down the silos?

WSDOT – ANNE FREEMAN, RESEARCH & LIBRARY SERVICES PROGRAM ADMINISTRATOR

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - 6,300 WSDOT employees
 - 6 regions
 - 18,600 lane miles
 - 3300 bridge structures
 - Largest ferry system in the nation
 - » A lot of WSDOT innovation focuses on the ferry system (limiting noise and impact to natural environment and habitats)
- Average Annual Expenditure for Research Projects
 - \$348,000 WA State Dollars
 - Client Sponsored Research
- Department is under Transportation Safety and Systems Analysis - TSSA (Directed by John Milton)
 - Department falls under “Multi-modal branch” of DOT
- Strategic Plan:
 - WSDOT is very engineering centric
- Practical Solutions
 - Lowest life cycle cost to preserve system

VIRTUAL CHAT

Laura Meyer 11:16 A.M.

Nice presentation Clare! I love the CLEAR idea!

Helene Roberts 11:18 A.M.

It is interesting how many different approaches or variations there are to the same concept.

Amanda Gendek 11:19 A.M.

I am interested in learning more about UDOT’s methods for capturing ROI.

Ned Parrish 11:20 A.M.

What are your suggestions and lessons learned for involving contractors and consultants in agency innovation efforts?

Dan Adams 11:20 A.M.

How many states do Change Management Training?

Bryan Roeder 11:20 A.M.

Does FHWA host all the STIC close out reports publicly on the web? If not do any of the DOTs host them themselves?

Dara Wheeler 11:21 A.M.

CA does not have change management training but NEED to!

Courtney Drummond 11:21 A.M.

It’s interesting how other states share the same concerns of funding for innovation

Bryan Roeder 11:21 A.M.

CDOT does some change management training

Clare Fullerton 11:21 A.M.

I liked Colorado’s approach to Local Innovation Summit. We are just dipping our toes into Change Management, but it has been helpful and interested in methods for capturing ROI.

Ryan Bailey 11:22 A.M.

How do you DOT’s work with local universities?

Dara Wheeler 11:22 A.M.

Would love to hear from states that have dashboards or scorecards!

Vanessa Goetz 11:23 A.M.

Interested in info on dashboards and project tracking, as well as ROI calculations

- WSDOT Research Office –
 - 3 research managers average 100 projects every fiscal year
 - Research Areas: planning, design, construction, operations, maintenance, environmental, multi-modal, ferries, etc.
- Successes:
 - Bi-monthly webinar Wednesdays
- Weighted priority vetting process – each innovation effort is vetted against the agency Vision, Mission, and Goals
- Challenges: Tracking and documentation (Implementation/Technology Transfer)
- Engaging leadership and internal stakeholders
- TM's/SME's ability to find for project. How do we find time for the subject matter experts to manage and oversees projects?

**NJDOT – AMANDA GENDEK, BUREAU OF RESEARCH
MANAGER, & HELENE ROBERTS, FHWA NJ STIC PERFORMANCE
MANAGER**

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - 8,722.58 square miles
 - Most densely populated state in the country
 - 8.9 million residents (1th most populated state)
 - 3 regions
 - \$2.308 billion capital program
 - » No money is dedicated solely for innovation
 - » However, innovation is woven into other funded programs
- NJDOT is committed to:
 - Enhance the quality of life for residents and traveling public
 - Achieve consistent progress through focused investments in keeping infrastructure in a State of Good Repair
 - Stimulate and sustain smart development and economic growth
 - **Employ the latest technologies to adapt to changing conditions and environments**
 - Respect and protect the distinctive and delicate character of the State's natural resources
 - Embrace its roles as a customer service organization
- NJDOT Research Program and NJ STIC work together to propel innovation. They are integrated efforts.
- Background/History:
 - 2010 FHWA Every Day Counts (EDC) program began
 - 2013 Helene Roberts of FHWA joined NJ STIC, developed a charter, structure, and a tracking tool
 - 2017 Leadership change and existing BoR became the lead unit for NJ STIC
 - 2018 Commissioner Diane Gutierrez-Scaccetti joined NJDOT
 - 2019 NJ STIC was awarded the Excellence Award
- FHWA/STIC Structure:
 - NJDOT Assistant Commissioner & FHWA Deputy Division Administrator
 - NJ STIC Executive Team
 - NJ STIC Advisory Team
 - NJ STIC Core Innovation Areas

VIRTUAL CHAT

Sara Lowry 11:23 A.M.

@Bryan Roeder - FHWA has all of the STIC Incentive Projects listed online, but not the STIC Final Reports. The Division or myself have access to the Final Reports that can be shared directly if there are specific requests.

John Haynes 11:23 A.M.

Utah and NC are both implementing a KM program... perhaps an opportunity for collaboration and sharing.

Dan Adams 11:25 A.M.

Any other questions or key observations from the presentations so far?

Helene Roberts 11:26 A.M.

@Ned Parrish in NJ, the contractors and consultants are represented by their associations (ACEC for consultants and the equivalent of the AGC in NJ for contractors).

Laura Meyer 11:30 A.M.

@Dan Idaho teaches the Change Mgmt

Curious about any software you use for the "behind the scenes" Power BI, or SharePt Work Flows etc...

Rod McDaniels 11:31 A.M.

UDOT live dashboard. Note, this remains a first gen product. We are working on a display/format update: www.udot.utah.gov/go/innovation-dashboard

Rod McDaniels 11:33 A.M.

Nice presentation Anne. Like your STIC scoring matrix.

Dan Adams 11:37 A.M.

There have been multiple references to working with Universities. Are there specific programs, process or guidance with STIC and working with Universities?

Helene Roberts 11:39 A.M.

@Dan, in NJ there have been various levels of involvement by universities over the years. It got complicated. Currently, the LTAP center and the Rutgers people who help with technology transfer are at the STIC meetings and help out.

Courtney Drummond 11:43 A.M.

I would love to see the drone program plan

- 3 Core Innovation Teams
 - Each with one FHWA and NJDOT Liaison
- Stakeholder groups in STIC
 - Counties
 - LTAP
 - Municipalities
 - NJDOT
 - FHWA
 - Universities
 - Contractors
 - Consultants
 - MPOs
- FTE Numbers:
 - 9 dedicated to Bureau of Research functions, with 2 librarians, none are dedicated to Innovation Funds
 - When it comes to innovation, utilize 4 different staff members
- Where do innovative ideas come from?
 - Primarily driven by EDC initiatives
 - Solicit ideas from external group through “STIC Idea Button”
- Funding – STIC takes advantage of grants and DOT funds
- UAS (Drone Program)
 - FHWA Tech Transfer (T2) funds
 - FHWA's STIC Incentive funds
 - Funding first national UAS peer exchange (using state planning and research dollars)
 - A video was developed on success of UAS program
- Beacon Hazard Lights Technology on Safety Service Patrol vehicles
 - To help drivers locate and see where safety response vehicles are located to avoid collisions, etc
- 21st Annual NJDOT Research Showcase
 - Hosted event and panel speakers to talk about how NJDOT improves the lives of residents and drivers
 - “Build a Better Mousetrap” competition award winner
- Robust Technology Transfer Program – partnered with university to develop website and post research information publicly online
- Tech Talks events

VIRTUAL CHAT

Bryan Roeder 11:44 A.M.

Ditto on the drone program plan

Rod McDaniels 11:44 A.M.

Check out the NJ DOT - State Farm SPONSORSHIP!

Dara Wheeler 11:44 A.M.

Would love to read more about the Beacon Hazard Lights Tech on Safety Service Patrol vehicles. CA just hired a Chief Safety Officer, and this would be nice pilot to share.

Helene Roberts 11:45 A.M.

Public Private Partnership there on the road safety service patrol.

Rod McDaniels 11:45 A.M.

Would like to learn more about NJ DOT - private sector sponsorship.

Vanessa Goetz 11:46 A.M.

In IA, we have 2 major U with civil E programs. The chairs of both serve as members in IHRB/STIC. We also have master agreements for research with our 3 state Universities: ISU, UofI, UNI.

Vanessa Goetz 11:47 A.M.

I was going to mention that we will be rolling out a new system for ideation July 1. It is called Qmarkets and if all goes well, we will start using this new system to track ideas from submittal to implementation. This will serve as our public facing dashboard.

Ned Parrish 11:49 A.M.

@Helene Roberts. I wasn't so much thinking about formally involving contractors and consultants on the STIC, but how to engage the contractor and consultant community in identifying possible innovations to improve DOT services and projects.

Amanda Gendek 11:51 A.M.

I'll put together all of the Drone info and send it to the U DOT peer exchange coordinator to share to all participants. You can also google NJDOT Drone Technology to find a couple things on our Tech Transfer website.

PENNDOT – ANJA WALKER, BUREAU OF INNOVATIONS, STIC MANAGER, & DANIELLE KLINGER-GRUMBINE, BUREAU OF INNOVATIONS, DIVISION CHIEF

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices.
- Demographics
 - 12.8 million residents in Pennsylvania
 - 12,000 employees
 - 11 PennDOT Districts
 - 5th largest national road/bridge network
 - PennDOT responsible for nearly 40,000 miles of highway, 25,000 bridges
 - Manages driver and vehicle services, safety and emissions inspections, rail/ freight, ports, waterways, etc.

- Bureau of Innovations – Innovation Department, Change Managers and Lean Leaders
 - Essential function
 - Oversight includes
 - » Data mining, analytics, and reporting
 - » Meeting facilitation
 - » Organizational reviews and process mapping
 - » Strategic visioning and business planning
 - » Survey development, execution and analysis
 - » STIC and agility programs
- LEAN PA Initiative was implemented a few years ago
 - All Districts have a dedicated a LEAN manager/leader
- Several Employee engagements tools
 - IdeaLink – a way for employees to share innovative ideas (4,000 ideas submitted since it was implemented)
 - WorkSmart System – a way for employees to share lessons learned and best practices with fellow staff
 - Organization Climate Survey – assesses employee’s perceptions
 - » Help identify areas of strength and areas for growth
- Pennsylvania STIC
 - Established in 2012
 - Meets three times a year
 - Co-chaired by PennDOT’s Secretary and FHWA Division Administrator
 - Supports and promotes deployment of Every Day Counts innovations
 - Focused on developing and deploying grassroots innovation through use of TAGs
 - STIC Organizational Chart (Combined effort of State Transportation Innovation Council, STIC Management Team, Highway Administration)
 - » Worked to collaborate to avoid duplication efforts
- STIC Development Innovation Process:
 - Initiation, Initial Evaluation, Detailed Development, Advancement
- Communication & Outreach
 - Strategic communication about innovations
 - Tailored communications to different target audiences
 - Collaborated with partner organizations to help promote innovations and reach target audiences
 - Tactics: webinars with partners and internal staff, website, newsletter, annual report
- Success Stories:
 - Hot Pour Mastics
 - Hosted demonstrations from 4 vendors to DOT reps
- Innovation Organizations at PennDOT
 - Research and Implementation Program (supports strategic plan at PennDOT)
 - » Every two years, PennDOT hosts a conference to share innovation ideas from universities
 - New Products Evaluation Processes
 - Quality Improvement Committees (QICs)
 - Transportation Quality Initiative
 - » Minimize owner, contractor conflicts by bringing together representatives to collaborate

11:50 A.M. – 12:00 P.M. | CONCLUDE & ADJOURN

VIRTUAL CHAT

Amanda Gendek 11:55 A.M.

Here is a link to the beacon hazard lights technology: <https://www.njdottechtransfer.net/2020/02/12/final-report-released-for-the-connected-vehicles-program-pilot-testing-of-technology-for-distributing-road-service-safety-messages-from-safety-service-patrols/>

Rod McDaniels 12:00 P.M.

Really interested to learn how many FTE's are supporting PennDOT's STIC Mgt Team (and overall FTE contributions leading to this robust program delivery).

Amanda Gendek 12:01 P.M.

NJ Drone info page link: www.njdottechtransfer.net/uas/

Day Two Minutes & Virtual Chat

INNOVATION COMMUNICATIONS, LESSONS LEARNED, & FUTURE DIRECTION JUNE 2, 2020

9:00 – 9:05 A.M. | WELCOME & AGENDA OVERVIEW

9:05 – 9:25 A.M. | STATE PRESENTATIONS CONTINUED

CALTRANS – DARA WHEELER, CHIEF INNOVATION OFFICER & DIRECTOR OF RESEARCH, INNOVATION & SYSTEM INFORMATION

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - California is the 5th largest economy in the world
 - California's population is 39.51 million (2019)
 - Caltrans has 20,822 employees
 - » 15,00 are office workers
 - » 5,000 are onsite workers
 - » For COVID lockdown, Caltrans went from having 300 to 11,000 teleworkers
 - » The innovation office is partially leading a sustainable teleworking workforce, post pandemic
- Caltrans Mission: Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability
- California is split into 12 Districts/Regions (divided north to south)
- There are 18 MPOs and over 100 tribal governments in California
- Caltrans oversees:
 - 51,279 lane miles
 - 12,000 state highway bridges
 - Inspects 12,200 bridges
 - 187 billion annual miles traveled
 - 250 state highways
 - In the last year, entire DOT leadership changed
 - » The new leaderships has identified innovation as one of the top 5 priorities for the DOT – wants teams and employees to submit and embrace “bold and transformative ideas”
 - The Strategic Management Plan expired and Caltrans is working on developing a new plan for 2020 – 2024. Innovation will be a key component.
 - In March 2015, an ad hoc team began exploring strategies to enhance a Caltrans culture of innovation
 - » Used crowd sourcing innovation as a management tool to engage staff statewide
 - » Leveraged Lean 6 Sigma to train staff to be lean thinkers and practitioners
 - » Aimed to move the needle on innovation performance measures identified in Caltrans Strategic Management Plan
 - » Innovation group is under the multi-modal umbrella
 - » The innovation group works with 3 universities
 - » The innovation group works with many different “labs” spanning a variety of topics (earthquakes, pavement, etc.)

VIRTUAL CHAT

Tricia Sergeson 9:19 A.M.

Really like the campaign innovation idea!

Sara Lowry 9:19 A.M.

Dara - Do you have an external space that you highlight innovations from your Challenge Program?

Tricia Sergeson 9:23 A.M.

Does Caltrans have a Lean Six Sigma training program for staff?

Rod McDaniels 9:23 A.M.

Very clean presentation Dara! Caltrans operates at a giant scale. Thank you!

- Innovation is funded at the program level
 - » The program that “owns” the innovation idea gets additional funding from STIC and Accelerated Innovation Deployment (AID)
 - » Caltrans has a \$0 innovation budget
- 2019 Statewide Challenge Statistics
 - » 416 Idea Submissions
 - » 2,100 Comments
 - » 3,294 Votes
 - » 5,373 Users
- 5 topic campaign efforts to support innovation:
 - » Idea Factory
 - » Reduce Roadway Trash
 - » Better, Faster, Cheaper
 - » Wildfire-Mudslides
 - » Communication
- Lean 6 Sigma Program
 - » Making Caltrans a “Lean” organization
 - » Caltrans has been performing L6S project since 2015
 - » Currently, over 60 projects have been completed
- Active EDC-5 Initiatives
 - » Collaborative Hydraulics
 - » Reducing Rural Departures
 - » Virtual Public Involvement
 - » Project Bundling
 - » Unmanned Aerial Systems
 - » Weather Response Management Strategies
- California STIC is in the process of reconstituting the STIC in Caltrans and working on these four goals
 - » Integrating NEPA Permitting
 - » Implementing Highway Safety Manual
 - » Advancing Unmanned Aerial Systems
 - » Implementing Weather Decision Tiers
- Innovation Across the State
 - » District Innovation Fairs
 - » Suggestion Programs
 - » Statewide Initiatives
 - » Recognition Programs
 - » HR – Supports an idea submission program
 - » Suggestions in-boxes
 - » Innovation teams
- Gas Tax – required the Department to document the efficiencies in the State
 - » Innovation plays a critical role in supporting and identifying efficiencies that they are now expected to identify even more efficiencies
- Caltrans recently hired for a new position - Statewide Innovation Coordinator. Their responsibilities will include:
 - » Creating an innovation portal
 - » Discovering, recording, and communicating Caltrans innovations
 - » Coordinating Caltrans’ 2020 Virtual Innovation Week
 - » Developing the Annual Innovation Report
 - » Coordinating with transportation partners
 - » Marketing Caltrans innovations
- Caltrans Snow Gate-Innovation Case Study
 - » 52-foot long reinforced steel device
 - » Allows DOT to turn around traffic if the snow is heavy and traffic needs to be redirected
 - » Manually operated gate, Gate weighs 5 tons

VIRTUAL CHAT

Dara Wheeler 9:26 A.M.

@SaraLowry - no we do not have an external space but that's in our plan - we TOTALLY need an external component to our program. Hoping the Innov Summit will have a good sized external presence. @Tricia Sergeson Yes - we have a lead for L6S, a training program for staff and also have white belt training

Ned Parrish 9:26 A.M.

I'd like more information on Caltrans innovation challenges (How it worked, how employees voted, etc.)

Dara Wheeler 9:27 A.M.

@Ned Parrish - I will e-introduce you to the lead on innovation challenges

Danielle Klinger-Grumbine 9:27 A.M.

Pennsylvania would like that information as well. I think it's a great idea!

Clare Fullerton 9:28 A.M.

I'd also like more information on the challenges - its something we have thought about implementing.

Dara Wheeler 9:28 A.M.

@DanielleKlinger-Grumbine and @ClareFULLerton - I will include you as well on e-intro

Vanessa Goetz 9:30 A.M.

Include me as well. Thanks!

Laura Meyer 9:32 A.M.

@Dara please include me too!

Danielle Klinger-Grumbine 9:34 A.M.

Laura, we have the same issue here in Pennsylvania. Our employees say that they are just doing their jobs and don't recognize that they are being innovative in their thinking and approaches to doing their jobs.

Helene Roberts 9:36 A.M.

I have found over the years that a large part of my role has been telling people that things they are doing are innovative. They don't have the big picture.

FLORIDA – COURTNEY DRUMMOND, ASSISTANT SECRETARY OF ENGINEERING & OPERATIONS

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Demographics
 - FDOT has total budget of \$10.8 billion
 - » The State Transportation Work Program budget is \$9.7 billion
 - 28 million residents
 - » Millions of visitors a year
 - 6,000 FDOT employees
 - 7 districts, plus Florida's Turnpike Enterprise
 - Florida elected a new Governor in 2019
 - Transportation Department's Vision and Focus
 - » Increasing Safety
 - » Enhancing Mobility
 - » Inspiring Innovation
- Florida Innovation Efforts
 - FDOT Internal Innovation Program – “Innovation Rising”
 - » Decentralized agency – each district has their own innovation team, and then there is a state innovation team
- 7 Districts and Turnpike enterprise each have innovation programs
 - » Each utilize a central SharePoint tracking system
 - » Ideas reviewed by district innovation teams
- District innovation teams are comprised of different disciplines
 - » Ideas with statewide implications elevated to statewide innovators teams
 - » All Teams comprised of multi-disciplined members
 - » Statewide team includes FDOT executive leadership, FHWA representation
 - » System in place for over 10 years and is institutionalized
 - » The teams continue to utilize Juice Inc.'s “Innovation In A Box” program
 - » Over 6000 ideas submitted and 532 have been implemented STIC Programs (external to FDOT but internal to State)
- STIC and FDOT
 - » Traditionally seen as a CO program
 - » Traditionally projects related to FDOT
 - » Traditionally projects submitted had a traffic ops flavor
 - » Great support from FHWA Florida division
 - » This program is not yet institutionalized
- Every Day Counts
 - » Participated in all Every Day Counts initiatives
 - » 4 Projects in development stage
 - » 8 Projects in demonstration mode
 - » 32 Projects institutionalized
 - » Great support from FHWA Florida division
 - » Program is institutionalized in FDOT
- FDOT Research Facilities
 - » Participate with instate colleges and out of the state colleges
 - » Conduct research for AASHTO
 - » Have our own research facilities TERL, Structures lab, State lab
 - » Collaborate with manufacturers and producers
- Future of FDOT: Innovation
 - Secretary has put together a task team to look at innovation
 - » Task team will look at how to inspire people to submit innovation, gather

VIRTUAL CHAT

Helene Roberts 9:38 A.M.

It takes a culture change so they are not afraid. They have to see that leadership is willing to accept the risk.

Dara Wheeler 9:39 A.M.

@Danielle - yes to the comment about front line employees being afraid to share innovations - Indiana DOT has an approach to this by sending out the innovation team to maintenance stations statewide and meeting with the front line workers to have this discussion. Skipping the conversation w/ management.

Laura Meyer 9:40 A.M.

Yes! Amanda!!! Go to the Gemba and fire up that competitive spirit!!

STORYTELLING!!!! YES YES YES

Dara Wheeler 9:41 A.M.

YES - storytelling culture was my TAKEAWAY from TRB. Every state needs this training!

Laura Meyer 9:41 A.M.

Sometimes we also have an issue with letting perfect get in the way of better.

Dara Wheeler 9:42 A.M.

@TomHarman - can we get the name of the Univ of Maryland storyteller guy???

Rod McDaniels 9:43 A.M.

Good point about getting out and making contact Amanda. Ryan on our team does exactly this. He visit all sheds each year (92 of them!). Amazingly, he get this done in less than two weeks.

Dara Wheeler 09:44 A.M.

@Rod and @Ryan - is Ryan Superman? That's incredible!!!! Congrats!

- ideas, and implement submissions
- Innovation is a large effort but there is no dedicated FDOT staff or a distinct resource for innovation
- FDOT is taking a comprehensive look at innovation in the department and wants to enhance
 - » Recognition program
 - » Find ideas
 - » Continue to inspire people
 - » Define success in innovation program
- FDOT is working on building relationships with partners
- FDOT is working on building synergy between FDOT innovation program, EDC and STIC
- The Departments want to focus on innovation to improve mobility and safety
- FDOT wants to find evolutionary steps to generate revolutionary results

9:25 – 9:45 A.M. | STATE PRESENTATIONS Q & A

- Innovation Development Help
 - “Innovation in a Box” program
- Some DOTs have trouble getting their employees to share their innovative ideas and some employees do not recognize that they are doing innovation – they are “just doing their jobs”
 - Some employees even feel like they do not have time to submit innovation ideas
 - Some DOTs have employees that express fear in sharing ideas because they might be told they are not doing their job or should not be innovative without permission
 - » It takes a culture change to help employees feel comfortable submitting ideas
 - » New Jersey’s “Mousetrap Competition” helps create a fun, competitive environment for employees to innovate
 - » It sometimes takes an innovation representative to go out and talk to the crews on the ground and at the maintenance shed
 - It is important to tell the “story” and have a good narrative to help support and perpetuate a culture of innovation
- ITD is doing open seat, self-sustaining work to determine where Idaho’s ROI’s are. It has been difficult to determine if innovation pushes actual work or if hiring for innovation works best
- When it comes to an innovation review process that looks at ideas and then rejects them, the FHWA Center for Accelerating Innovation learned that the selected type of review process stifled interest in being involved; it stifled people’s enthusiasm
- In Florida, the local/district innovation teams progress the innovation ideas – this has proven difficult in supporting a culture of sharing ideas because there is not a mechanism for districts to share their ideas with others. That is one of the challenges with the current system in Florida. District leaders pick ideas and try to make them fun. Each district approaches things differently – some are formal, some are informal.

VIRTUAL CHAT

Sara Lowry 9:45 A.M.

@Dara - his name is Ira Koretsky, “The Chief Storyteller”

Ryan Bailey 9:47 A.M.

Believe me it is worth the time to meet with all the people and bring out their ideas. If COVID goes away I am planning another run through the State.

Amanda Gendek 9:50 A.M.

@Rod McDaniels & @Ryan, that is an amazing feat! 92 in two weeks!

New Jersey doesn’t have an innovative officer/office either!

Vanessa Goetz 9:53 A.M.

IA does not have an innovation officer/ position. We tried twice to hire an innovation program coordinator and did not get any applicants. So abandoned that idea and decided to not pursue a formal innovation program.

Dara Wheeler 9:55 A.M.

Technically, CA does not have a box/funding for a Chief Innovation Officer (which is the role I try to play), but I did just convert a vacancy for a Statewide Innovation Coordinator and would be happy to share that duty statement.

Courtney Drummond 9:56 A.M.

Dara I would appreciate receiving a copy of that

Dara Wheeler 9:58 A.M.

@CourtneyDrummond - happy to

Amanda Gendek 9:59 A.M.

@Dara, I would like to get a copy of that too.

Dara Wheeler 9:59 A.M.

@AmandaGendek ok

Sara Lowry 10:01 A.M.

How are innovation ideas solicited from your external partners? Or do you share your internal innovations with your local agencies that might be having similar issues (as they have their own maintenance forces)?

9:45 – 10:00 A.M. | VIRTUAL PUBLIC INVOLVEMENT & EVERY DAY COUNTS – EILEEN BARRON

- The full presentation is available online by [clicking here](#) or find the webpage link in the Appendices
- Eileen Barron – UDOT Planning and Investment Communications Manager
 - Helps support innovation planning and supports Every Day Counts
- Listen for Purpose, People, and Process
 - Tying together Every Day Counts, the COVID-19 pandemic and public involvement – the question arises; how do DOTs do public involvement in a situation where we do social distancing? (staying safe)
 - Eileen was asked to give some recommendations on how to effectively provide a public involvement experience in a virtual space
 - » Is there a tool out there that could provide that?
 - » Historically, finding that perfect program was like spinning the wheels
 - When COVID hit, the need to find a virtual platform became a high priority. Eileen researched, spoke with consultants and internal UDOT experts. She looked into the suggestions and submitted a plan to UDOT Leadership. That platform and plan has now been approved and the effort is moving into the next phase of innovation (implementation).
- People: Enhancing Online Public Outreach – it was important to Eileen to find a centralized platform that all UDOT staff and consultants could use. She wanted to find one, centralized platform that could track all of the same metrics for each effort when it came to public involvement efforts.
 - UDOT is a lean organization that does not have a lot of in-house capabilities or bandwidth, so a centralized platform that was easy to implement and could be used internally and externally was important.
- While working with others in the industry, she recognized that she has a lot to learn when it comes to virtual platforms
- Process: Learn, Define, Design, Test
 - In this instance, the “Learning” phase was ongoing but with COVID, the “Define” became different and the importance was elevated. The need had to be re-defined. Now, UDOT is moving forward with the “Design” and “Test” phase with the PublicInput.com platform.
- Every Day Counts Resources:
 - FHWA Every Day Counts Virtual Public Involvement Resources: www.fhwa.dot.gov/innovation/everydaycounts/edc_5/virtual_public_involvement.cfm
 - FHWA Extending Our Reach Webinar Series: www.fhwa.dot.gov/planning/public_involvement/vpi/webinars/
- Public Involvement Industry: UDOT wants to enhance the online experience but it is still important to use non-digital ways of reaching the public. The virtual platforms for public involvement are not a replacement for other, more traditional outreach mechanisms.
 - Telephone
 - Text message
 - Telephone Town Halls
 - Posters and fliers
- Participant Questions:
 - How do you do livestream online experiences instead of relying on a pre-filmed or pre-created information experiences online?
 - Live interaction is a way to enhance the digital experience and there are some platforms that can provide that feature
 - PublicInput.com and similar platforms could also be used to engage with participants in a conference setting

VIRTUAL CHAT

Laura Meyer 10:03 A.M.

Once you select an idea, who is responsible for the implementation? Does a team take it on and make it happen?

Amanda Gendek 10:04 A.M.

NJ solicits innovative ideas from both internal and external. We started to put them into a searchable database and log the outcome of them all so people could see the status.

Amanda Gendek 10:09 A.M.

In NJ, once an idea is vetted and selected, it is assigned to one of our three Core Innovation Areas to implement. Our Core Innovation Areas have one NJDOT lead and one FHWA lead. It's up to the NJDOT lead as to who on their staff they assign it to.

Amanda Gendek 10:23 A.M.

NJDOT's last quarterly NJ STIC Meeting was dedicated to VPI. The meeting was recorded and I can share the information with the group if anyone is

Laura Meyer 10:23 A.M.

Awesome Eileen!! Thank you for sharing!! The FHWA Extending our Reach Webinar Series is going to be my Takeaway!!

Ned Parrish 10:26 A.M.

Listening to Eileen's presentation got me wondering if the publicinput.com tool be used in-house to generate innovation ideas and facilitate innovation.

Rod McDaniels 10:29 A.M.

UDOT's Transportation Commission holds meetings in a different part of the state each time. Developing VPI will broaden the reach and makes geographic boundaries less of a constraining factor.

Laura Meyer 10:35 A.M.

Random question: Does anyone have any “games” that they have played during a long virtual meeting? I have a few in mind for an upcoming Innovation Steward's meeting, but I'd love to hear this group's thoughts.

Sara Lowry 10:38 A.M.

@Laura - we have used Kahoot for meetings to create a “game” aspect to meetings. Used in person and virtually.

10:00 – 10:10 A.M. | BREAK**10:10 – 10:50 A.M. | INNOVATION COMMUNICATION – SMALL BREAKOUT GROUP DISCUSSIONS**

- Through the Zoom Virtual Meeting Breakout Platform, the participants were divided into three small groups to discuss one of the following topics
 - **Group 1:** Components of an Innovation/STIC Communication Plan
 - **Group 2:** Cultivating and communicating a culture of innovation
 - **Group 3:** Communicating and sharing innovation/STIC internally and externally

GROUP 1: COMPONENTS OF AN INNOVATION/STIC COMMUNICATION PLAN

1. Does your Innovation group/STIC have a communication plan? If so, what does the communication plan include?
2. What would be beneficial to include in a communication plan – what tactics and what audiences are targeted? Is there use of social media?
3. Does the DOT communication group utilize or publicize innovations?
4. Does your innovation group publish an annual highlights report (internally/externally)?
5. When communicating to the external public, what is the message, is it distributed through the Public Affairs office?

Discussion Notes:

- PennDOT does have a STIC Communication Plan and the development of the plan was a point of focus last year. PennDOT took the time and effort to put together a structured plan.
- PennDOT has a Communication Officer that is on the STIC Management Team
- Innovation and STIC communication efforts are primarily published through existing PennDOT platforms
 - The STIC also works closely with PennDOT's Communications Office to leverage the Department's social media platforms and LinkedIn account to promote innovations.
 - STIC website (housed on PennDOT's website)
 - The STIC has started leveraging the PennDOT blog
- There are consultants helping PennDOT put these communication tactics into play
- The PennDOT STIC/Innovation group is located next to the PennDOT Communications Office. When it came time to find a dedicated communications representative, PennDOT asked the communication office to choose a representative for STIC/innovation.
- New Jersey DOT recently applied for a grant from STIC to develop a communication plan. NJDOT was awarded the grant and the Communication Plan is currently in development.
 - NJDOT has their own procurement platform; and a separate RFP. NJDOT recently put out a proposal, with one of the tasks identified as "STIC Support." A group was selected based on the RFPs and a university now runs the STIC support. The university manages the STIC web presence, posts articles, and produces videos.
- Caltrans STIC has not been functioning at a high level and is currently building

VIRTUAL CHAT**Laura Meyer 10:03 A.M.**

Once you select an idea, who is responsible for the implementation? Does a team take it on and make it happen?

Laura Meyer 10:41 A.M.

Thanks Sara! I love Kahoot!

Amanda Gendek 10:46 A.M.

Using Menti.com or mentimeter is fun during meetings.

John Haynes 10:46 A.M.

Word Clouds

Vanessa Goetz 10:47 A.M.

We use menti a lot in our program

Danielle Klinger-Grumbine 10:47 A.M.

We've used mentimeter and Word Clouds at our STIC Business Meetings.

Rod McDaniels 10:47 A.M.

We used menti to capture and display best ideas in real-time at our annual conference.

the program from scratch. There is not a STIC Communication Plan but it is in development.

- Sara Lowry with FHWA CAI asked, “Is the plan you are working on for the internal group or external?”
 - » Caltrans explained that they are focusing on internal communication right now, with the goal to broaden and include external
- NJDOT – During the first year of meetings, the discussions were NJDOT representatives talking about what the Department was doing. NJDOT would address the council and designated a fifteen-minute time frame to show off what was working well. This has raised a lot more interest – having people present on what the locals are doing has been helpful.
- PennDOT – We evaluate STIC organization membership every two years. With that evaluation, some organizations roll off the STIC and new organizations are brought onboard. Additionally, some organizations represented on the STIC are standing organizations, and it’s just their respective representatives that change every two years. PennDOT typically rotates the universities on the STIC. PennDOT looks at what value the university will bring to the STIC.
 - **Example:** Carnegie Mellon – this university has worked on autonomous vehicles
- FHWA CAI – Suggested that DOTs should also include in their Communication Plans a system for communicating with legislative groups and elected officials. She also suggested that DOTs should be cautious on what they communicate to elected officials. Elected officials can be a huge advocate for different programs. They helped introduce different Every Day Counts to the legislators to advocate for better safety.
- Question, “What is the best platform for sharing ideas?”
 - PennDOT - From a STIC perspective, webinars have been beneficial to educating technical staff. At one point, PennDOT partnered with certain STIC member organizations to host webinars that educated technical staff on various pavement innovations. Other effective sharing platforms include:
 - » Conferences and events
 - » Regional Innovation Day
 - » Local Government Innovation Day
- “Innovation Days” have been a great way to share innovations and to network
 - Utah and Idaho have used newsletters to share ideas
- UDOT is working on developing a more robust STIC program. A formalized strategic communication plan is on the drawing board.
- Amanda Gendek, NJDOT – Suggested that one way to start, is to look at the Every Day Counts initiatives, which many DOTs are probably already doing. Pinpoint the initiatives that are not currently in place and focus your efforts there. That could be a good starting point.
- ITD – What is the point of the outward communications? Do we want outside involvement?
 - NJDOT – Outward communication can help put DOTs on the map. It helps the taxpayers know what DOTs are doing. It is getting involvement and buy off from the public. It also helps our employees.
 - ITD – It can also show that DOTs are good stewards of money, are being forward thinking, and can illustrate how external groups can be involved. Also, to generate new ideas.
 - ITD – sometimes we/DOTs forget the “why”
- FHWA CAI – STIC is whatever the state wants to make it. Every state has different stakeholders. FHWA is hoping to move everyone in the same direction, strategically.

VIRTUAL CHAT

- PennDOT – PennDOT’s communication goal is to get buy in and support from all stakeholders. It helps them do their job better and save money in the long run. It helps to dispel myths about different innovations.

SMALL GROUP 1 DISCUSSION KEY TAKEAWAYS

1. **How: start with Every Day Counts initiatives, coordinate with DOT Communications Representative and enable them to be an asset for you and make sure they are familiar with the vernacular.**
2. **Utilize as many opportunities as you can within your DOT to support the Communication Plan (DOT LinkedIn, social media), partner with universities and utilize students.**
3. **Every DOT is across the map on where they are with a STIC Communication Plan – and that is okay! Building a sharing network between DOTs can help move everyone in the right direction.**

GROUP 2: CULTIVATING & COMMUNICATING A CULTURE OF INNOVATION

1. How does your DOT push for, support, or perpetuate innovation?
2. How does your DOT quantify or identify how many innovation ideas to strive for?

Discussion Notes:

- To get a culture of innovation going, it needs to come from the top
- Identify what group or office will be responsible for gathering the innovation information
- UDOT’s innovation group participate directly in the new employee orientation. It is a multi-day orientation and with a segment to talk about innovation – a “crash course” on UDOT’s innovation program.
 - Idaho has a similar program
- Tell stories! Talk about what people are doing to be innovative and tell the story of how people are being innovative.
- UDOT tells stories in monthly newsletters and at the annual conference. At the conference, UDOT shares innovation stories and recognizes employees.
- Talk about how the stories tie to the organizational goals.
- Department employees vote on who to recognize from the different districts - the “Best of the Best”
- Find out how to communicate innovation between different departments
- Have innovation stewards that help shepherd people through the innovation process
- Communication in the Intra-net helps people understand. Helps communicate national innovation competition.
- Help reduce redundancy and duplicate effort by better communication and clear framework for innovation
- Utilize dashboards
 - Significant investment
- A lot of culture of innovation challenges are simple “growing pains” as all DOTs learn how to do it
- Every Day Counts has calls for action - this is from different panels and sources. Things can get lost in the process.
- PennDOT has a Bureau of Innovation. They even see the Governor promote

VIRTUAL CHAT

the innovation competition that is between other agencies, not just PennDOT! They even reach out to school kids for innovation ideas.

- Part of this is story telling!
- Show they are innovative and show they are saving money
- Colorado DOT
 - CDOT innovation comes from leadership, top down but it is helpful to give the people submitting ideas credit and acknowledgement
 - Reach out in a variety of ways, not just with a website or newsletter. Visiting with people seems to be the most effective way - physical, in-person outreach.
- UDOT gives people “points” as part of the reward system for implemented ideas
 - Reference book: Ideas Are Free
- ITD hosted a leadership summit, which led to a one-day innovation summit and resulted in the creation of interdisciplinary teams to solve problems
- The interdisciplinary teams then shared their stories. The innovation summit involves 150 people each year and rotates the groups annually.
- In Florida, the DOT engages the executive team and is clear to let people know that not every idea is going to be a huge success and that they will try and fail, but that’s OK. Failure is an option.
 - » Some will be a minor change at a local level
 - » Help people to feel safe to submit an idea
 - » No idea is a bad idea
- Online tools help people that are quiet to submit ideas
- Try to gather information within venues where they feel comfortable
- There can be a disconnect between offices of innovation and people in the field
- Anne Freeman, Washington DOT, gets out in the field and talks to people. The legwork of communicating makes a big difference.
- Innovation programs evolve, communicate the changes. Communicate the benefits of the innovation program.
- Reinforcing that attitude is important! Dynamic personalities bring energy to the innovation teams in the different districts. These districts have a “bigger box to play in.” One Florida DOT district created a super hero mascot (Mr. Incredible) that was helpful, fun and motivating.
- Help people see that they are creating tools that makes peoples jobs better. This is innovation. Don’t have to call it innovation for those that might get hung up.

SMALL GROUP 2 DISCUSSION KEY TAKEAWAYS

1. **Make sure you are story-telling – utilize all available methods (email, online, blogs, meetings, dashboards, events, etc.)**
2. **Provide innovation recognition awards – to help promote innovation culture and show support for innovative ideas**
3. **Multi-channel outreach efforts! Use a variety of channels!**
4. **Keep the messaging fun (example: innovation mascot!)**
5. **Work with colleges and high schools. Fund courses for school teachers to bring transportation back to the classrooms as part of our STEM outreach.**

VIRTUAL CHAT

Sara Lowry 11:20 A.M.

Great Job Laura! NJ is using STIC Incentive to create a STIC Communication Plan. PA has a plan that was just created and willing to share.

Sara Lowry 11:21 A.M.

NJ has an RFP for a Tech Transfer Program that include STIC support. PA has a consultant to help with marketing and communication.

Vanessa Goetz 11:27 A.M.

The mention on working with school: IA DOT funds a Bridge Competition with the Science Center of Iowa where school kids compete to make bridges. We also fund courses for school teachers to bring transportation back to the classrooms as part of our STEM outreach and STEM weeks for HS students to participate during the summer.

Courtney Drummond 11:30 A.M.

<https://youtu.be/igp3fTDiEck> captain innovator

GROUP 3: COMMUNICATING & SHARING INNOVATION/STIC INTERNALLY & EXTERNALLY

1. How do you communicate innovation ideas and avoid duplication of effort within your DOT?
2. How do you communicate to avoid doing something that has already been done in another department in your DOT? How do you communicate this statewide (internal/external)?
3. What challenges or successes have you had communicating innovation and sharing lessons learned?

Discussion Notes:

- New Jersey DOT has a technology transfer website with a lot of good information available about sharing innovation
 - Externally - When NJDOT does something new, information is posted on the website and it is also sent out via a statewide email blast to announce the new communication efforts
- Posts STIC initiatives and Tech Talk video/topics
 - » Internally – Initiatives trickle down through the 4 innovation leaders in NJDOT and then back up through the innovation group and onto the executive team
 - » New Jersey DOT is also developing a Communication Plan for innovation
 - » A research showcase event is held annually with guest speakers and about 250 attendees
 - Iowa DOT relies heavily on email updates for announcing campaigns
 - » Iowa DOT is currently under contract with a consultant to put together a communication and outreach plan. The consultant is also going to help with social media presence and creating collateral and videos.
 - » Just purchased ideation software (QMarkets).
- Should be rolled-out July 1, 2020
- The program will help to collect innovation ideas and will be the online tracking tool
- Will be a website accessible to internal and external folks
- This platform will also show status and progress of innovation efforts
- This platform will become the “library” of innovation ideas and resources
 - » Iowa DOT also hosts innovation meetings and sharing events
 - » Collaborates with universities to help disseminate and share information through events
 - » Hosts a mini-TRB (Transportation Research Board) event every other year
 - » Invites future/innovation/technology experts to talk at events and meetings (Tesla, etc.)
 - » Iowa DOT wants to begin sharing pre-recorded webinars
 - » Grassroots Outreach: Iowa DOT research office started an effort to do “Research on Tour” to go around to each office and give a 15-minute presentation on what the Department does
- Wanted to let people know that the research group is there to help on projects but also help do internal studies
 - UDOT puts out an annual [Innovations and Efficiencies Report](#)
- Starts with mission statements and 3 main goals (starts with the “Why”)

VIRTUAL CHAT**Danielle Klinger-Grumbine 11:31 A.M.**

Pennsylvania also hosts an annual Innovations Challenge for high school students: www.penndot.gov/about-us/PennDOT2020/Pages/Innovations-Challenge.aspx

Sara Lowry 11:31 A.M.

Love hearing about the interaction with schools and onboarding programs to show that innovation is being used and important. This is great for future workforce/recruitment that is an ongoing challenge in transportation.

Dara Wheeler 11:35 A.M.

Does UDOT have a training program for ROI?

Isn't there an NCHRP panel that is looking at developing ROI for state DOTs? Char McCarther is on it - I think???

John Haynes 11:38 A.M.

David Esse; WisDOT Innovation Officer has a process for tracking ROI.

Amanda Gendek 11:38 A.M.

TX has a Value of Research process that may apply to innovation as well. I've been wanting to incorporate ROI into our research projects AND innovations as well.

Rod McDaniels 11:43 A.M.

I think you will find broad variation in methods used to determine ROI values. At the same time, there are some common recurring themes. As such, recording/memorializing calc methods is really important.

- Describes the state based innovations – could be as simple as sharing how to trim grass around guardrail
- Dashboards and gauges (Secrata) – fueled by a database
- The more you can demonstrate how money is being spent, means the legislature will continue to support and fund efforts.
 - » PennDOT does have a STIC Communication Plan
- PennDOT is currently trying to improve marketing, identifying target audiences and how to more effectively reach all of the audiences
 - Utilizing info sheets, trainings, conferences, webinars
- The PennDOT STIC website is the outreach “anchor” where all materials are located
- PennDOT hosts innovation events – for local staff, regional groups, local governments, and industry peers
 - » PennDOT utilizes a STIC newsletter
- Also send articles and information to other publications
 - » Outreach and communication goes through PennDOT Communications Office
- Both communication staff in the innovation group and press office work jointly
 - North Carolina DOT
 - » Rolling out a Knowledge Management Program to spread institutional knowledge
- Finding that mass emails are good to make people aware of innovation efforts but not good at getting people to change their behaviors
- NC is identifying key people and key departments to begin rolling-out innovation and Knowledge Management Plans (slow roll-out) and want to create a bottom-up culture of innovation
- Finding innovation champions are important – use the champions to present and get the ball rolling. Other staff are then recruited to help the champions.

SMALL GROUP DISCUSSION KEY TAKEAWAYS:

1. **When communicating STIC innovation, internally and externally, utilize a variety of platforms and communication mechanisms (newsletters, meetings, events, website, social media, etc.)**
2. **Work with the DOT Communications/Press Office to help support outreach efforts**
3. **Events (district meetings, conferences, peer exchanges) are an effective way to share innovation ideas and “go to the source” of regional innovation efforts**
4. **Find ways to share and demonstrate how funds are being spent or how innovation is saving the DOT money. The more you can demonstrate the financial benefit; the more likely decisions makers and the legislature will continue to allocate state funds.**
5. **Develop a STIC/Innovation Communication Plan**

10:50 – 11:00 A.M. | BREAK

11:00 – 11:30 A.M. | INNOVATION TRACKING – LARGE GROUP DISCUSSION

- How are innovation ideas solicited in your state? Internally and Externally? (suggestion box, email, web platform, combination, other.)
- How are innovations or implementations being incentivized or rewarded?

VIRTUAL CHAT

- Do you have dashboard metrics to share?
- ROI calculations (what methodologies are applied?)
 - UDOT is focusing heavily on ROI and capturing as much as possible in live Dashboard
 - Focused on reaching back out to the innovation initiative champions and ask them about the ROI and benefits
 - Articulate with each individual, in-person to get feedback
 - The aim is to get a program developed that each champion can go in and enter information or answer ROI questions
 - One ROI metric is based on insurance claims – money, injury avoidance, lives saved
 - Important to be able to capture the methodology and show the math behind the ROI and aggregated numbers
- Is there a ROI training program available?
- Isn't there an NCHRP panel that is looking at developing ROI for state DOT's? Char McCarther is looking into it but it is mainly focused on research ROI.
- Might be applicable to ROI innovation efforts
- Idaho is being careful on not extrapolating information but really focusing on the hard numbers and data
- Idaho DOT has decided to pick one key measurement for the dashboard and focus on that. Any other ROI benefit are an added bonus

11:30 – 11:50 A.M. | STRATEGIC PLANNING & INNOVATION – LARGE GROUP DISCUSSION

- Does your DOT have a Strategic Plan the includes innovation? Does your STIC?
- How does the research program communicate with the innovation program?
- How does or can your STIC and relationships with your transportation partners help solve issues that arise? Is there a strategy in place to discuss issues?
- Does your Strategic Plan include communicating to DOT leadership, State leadership and STIC partners?
- Does your Strategic Plan include collaboration with neighboring states or similar sized programs?
 - Pennsylvania STIC
 - Rolled out a strategic plan in 2018. After two years, there is now an assessment of the strategic plan – to look at what is working well and what is not working. Doing this with the help a consultant.
 - » Are innovations actually getting deployed?
 - » Are people coordinating the way they need to be?
 - » The consultant is conducting key person interviews to assess how the strategic plan is working. The interviews are being conducted with:
 - Technical Advisory Groups
 - Innovation Owners and Innovation Development Teams
 - The assessment interviews try to encompass everyone that was involved (at every level or phase in the innovation process)
 - » PennDOT used a consultant to help with the STIC and interview because they are a neutral voice and can solicit open, honest feedback
 - Outsider, unbiased feedback was important
- Leadership – how do you help leadership become supportive of innovation efforts?
 - Iowa DOT – innovation is bottom-up, so leadership is not heavily involved.

VIRTUAL CHAT

Innovation is a grassroots effort. Leadership is not involved in the innovation process. Most management does not have the time or availability to be involved in innovation development and implementation. They are mainly involved only when their approval is needed.

11:50 A.M. – 12:00 P.M. | CLOSING THOUGHTS, KEY TAKEAWAYS

- Rod McDaniels with UDOT thanked the participants for attending the virtual peer exchange
 - Rod reiterated what Carlos Braceras said, “**Transportation never takes a day off!**”
 - As innovation experts, everyone has the opportunity to look across our states and DOTs and see innovation opportunities on a wide scale
 - This is just the start of the conversation, set-up a buddy system and network with those in the meeting
 - At the close of the peer exchange, John Haynes requested that each participant think about their key takeaway from the conversations over the last two days and submit them in the “chat” window
 - John heard a lot of feedback that reiterates that “**Evolutionary steps generate revolutionary results**”

PEER EXCHANGE KEY TAKEAWAYS (FROM VIRTUAL CHAT)

- **Rod McDaniels:** Takeaway - Lot’s of great examples here! We will be borrowing STIC application scoring frameworks!
- **Helene Roberts:** Utah’s Efficiency Report and the software used to develop it.
- **Ryan Bailey:** STIC communication plans and setting up a STIC group.
- **Anne Freeman:** Presentations were great; I want to explore more of the “dashboard” approach mentioned yesterday and also look to forming a more “Strategic Team” similar to ITD.
- **Ned Parrish:** Create better connection between our innovation program and the STIC.
- **Dara Wheeler:** External STIC Comm Plan - borrowing NJDOT example, competing for money for STIC communications
- **Helene Roberts:** The use of the Qmarket software package by some of the states.
- **Laura Meyer:** “Extending our Reach” Webinar... I will go visit that and learn from them... but also see how I can implement the same concepts here at Idaho with Innovate ITD.
- **Bryan Roeder:** Add Communication Staff as STIC member
- **Tricia Sergeson:** I learned so many helpful tools from the different State presentations. I think these in addition to different reporting and communication/ dashboards would be very helpful!
- **Helene Roberts:** The storytelling guy.
- **Dara Wheeler:** This is like watching closing credits after a movie!
- **Amanda Gendek:** #1 Takeaway is to get creative with the way you tell your story. There is no right or wrong way, as we can see from the various methods all of our states have been doing it or plan on doing it.
- **Danielle Klinger-Grumbine:** The importance of being able to show ROI and setting up dashboards for our stakeholders to see the ROI.
- **Edward Parker:** Recognition program to promote and encourage innovation involvement.

Tools Highlighted

1. **Utah’s Efficiency Report**
2. **STIC Communications Plan**
3. **STIC Group**
4. **Presentations**
5. **Dashboard Approach**
6. **Strategic Teams**
7. **Connections with STIC**
8. **Qmarket software package**
9. **“Extending our Reach” Webinar**
10. **Become STIC Members**
11. **Creatively tell our story of innovation success.**
12. **“There is no right or wrong way.”**
13. **Being able to show return on investment with dashboards.**
14. **Recognition program to promote innovation.**
15. **Peer relationships are key!**
16. **Core Innovation Member as part of implementation.**
17. **Colorado’s Change Management Course.**
18. **Establishing criteria for assessing STIC grant proposals**
19. **Importance of involving all levels of the agency.**
20. **Hear from the maintenance employees at the stockpiles and getting their buy-in**
21. **Innovation challenges**

- **Laura Meyer:** BTW @John it's hard to narrow it down to 1
- **Dara Wheeler:** Peer relationships are key!
- **Clare Fullerton:** Communication involvement and storytelling and the organization from NJ of having a person from the Core Innovation Area in charge of implementation
- **Helene Roberts:** Going directly to the people for input.
- **Vanessa Goetz:** Look into recognition program and how to tell the story on innovation success
- **Edward Parker:** Central landing point
- **Sara Lowry:** Takeaway - I will be learning more about Colorado's change management course. I loved hearing that they are working with their innovation champions and having them take this course.
- **Ned Parrish:** Investigating establishing criteria for assessing STIC grant proposals
- **Anja Walker:** Hard to narrow it down, but the importance of involving all levels of the agency and hearing from the maintenance employees at the stockpiles and getting their buy-in
- **Ned Parrish:** Look at doing innovation challenges like Dara

Appendices

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YOU'RE INVITED



VIRTUAL PEER EXCHANGE

ON STRUCTURAL APPROACHES
TO INNOVATION PROGRAMS &
STIC COORDINATION

HOSTED BY
THE UTAH DEPARTMENT OF
TRANSPORTATION

*June 1 - 2, 2020
9:00 a.m. - 12:00 p.m. (MST)*

The Utah Department of Transportation (UDOT), in partnership with the Federal Highway Administration (FHWA) is convening a virtual workshop and would like **to invite you, as one of two DOT innovation representatives from your state, to attend!** This event will explore how 10 State DOT's have structured their respective internal innovation programs and how they are setup to leverage resources through STIC coordination efforts.

This workshop will be virtual and utilize the Zoom meeting platform. It will take place June 1 and 2, 2020 from 9:00 a.m. - 12:00 p.m. (MST).

As part of this peer exchange, participants should anticipate coming prepared to provide a behind-the-scenes look at your:

- Your DOT's internal innovation program history: How is it currently structured and how does it operate?
- FTE role assignments
- Available resources
- Tracking and ROI calculation methods
- Incentivized recognition or rewards models
- Output work products (annual reports, training materials, events, etc.)
- Lessons learned, best practices, and similar outcome characteristics

This qualifying background will be used to better understand how various State DOT's effectively leverage STIC-related resources. We will also explore how State DOT's and the FHWA are applying innovative practices to adapt to an increasingly virtual and digital world.

This workshop is interactive, visual and will incorporate participant interests. To help accomplish this, Dan Adams, Jennifer Fowler and Allison Adams will help with facilitation of this event.

If you have questions regarding the peer exchange event, please contact Dan Adams (dadams@langdongroupinc.com), Jennifer Fowler (jfowler@langdongroupinc.com) or Allison Adams (aadams@langdongroupinc.com).

We look forward to meeting with you on June 1 and 2, 2020 and learning together!

VIRTUAL PEER EXCHANGE

STRUCTURAL APPROACHES TO INNOVATION PROGRAMS & STIC COORDINATION

The Innovation & STIC Peer Exchange will be hosted online as a virtual experience. Please join the workshop via the Zoom web meeting information below. If possible, please join by using your computer camera and microphone. If you are unable to use your computer's microphone, a call-in phone number is available.



Web Link: <https://zoom.us/join>

Meeting ID: 977 6098 1766

Password: 514854

Join By Phone: +1 253 215 8782

There are many lessons learned from various departments of transportation (DOT) around the country. On June 1 and 2, the Utah Department of Transportation and the Federal Highways Administration will be hosting a two-day virtual peer exchange to share information amongst ten of these states and State Transportation Innovation Councils (STIC).

The agenda (based on Mountain Standard Time) is as follows:

DAY 1: Innovation Program Overview

June 1, 2020

9:00 to 9:15 a.m.	Welcome: Rod McDaniels (UDOT), Carlos Braceras (UDOT Executive Director and Executive Board Chair at TRB), Ivan Marrero (FHWA Utah Division Administrator)
9:15 to 9:20 a.m.	Agenda Overview & Virtual Meeting Instructions
9:20 to 9:25 a.m.	Introductions
9:25 to 9:30 a.m.	National STIC Overview
9:30 to 9:40 a.m.	Review of Peer Exchange Participant Feedback
9:40 to 9:45 a.m.	BREAK
9:45 to 10:35 a.m.	State Innovation Presentations – How does innovation work in your state?: Small Group Discussion
10:35 to 10:45 a.m.	BREAK
10:45 to 11:50 a.m.	State Innovation Presentations (continued)
11:50 to 12:00 p.m.	Closing Thoughts

DAY 2: Innovation Communications, Lessons Learned, & Future Direction

June 2, 2020

9:00 to 9:05 a.m.	Welcome & Agenda Overview
9:05 to 9:25 a.m.	State Innovation Presentations (continued)
9:25 to 9:45 a.m.	State Presentation Q&A
9:45 to 10:0 a.m.	Virtual Public Involvement & Every Day Counts: Eileen Barron (UDOT)
10:00 to 10:10 a.m.	BREAK
10:10 to 10:50 a.m.	Innovation Communication: Small Group Breakout Discussions
10:50 to 11:00 a.m.	BREAK
11:00 to 11:30 a.m.	Innovation Tracking: Group Discussion
11:30 to 11:50 a.m.	Strategic Planning & Innovation
11:50 to 12:00 p.m.	Closing Thoughts

VIRTUAL PEER EXCHANGE

STRUCTURAL APPROACHES TO INNOVATION PROGRAMS & STIC COORDINATION

Join the Peer Exchange with Zoom

The Innovation & STIC Peer Exchange will be hosted online as a virtual experience. Please join the workshop via the Zoom web meeting information below. If possible, please join by using your computer camera and microphone. If you are unable to use your computer's microphone, a call-in phone number is available.



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Meeting ID: 977 6098 1766

Password: 514854

Join By Phone: +1 253 215 8782

If you are not familiar with this platform, here are a few tips to help you join the meeting.

1. Give yourself an **extra 5-10 minutes before the meeting to download Zoom** by clicking on the link above (not required but is nice to have). It is very quick and simple. If you haven't used Zoom before, here is a short video on how to join a meeting: <https://support.zoom.us/hc/en-us/articles/201362193-How-Do-I-Join-A-Meeting-?zcid=1636>. We will do a quick Zoom orientation at the start of the meeting.
2. We ask that you **join from a computer** as we will be using the share screen, video and chat functions.
3. Please **USE VIDEO**. It allows us to better connect, converse, and creates a more "in person" feel. We understand that many of us are working from home right now. Don't worry about children, dogs, roommates, partners etc. moving in and out of the screen. That's all part of our crazy world right now. Let's also take advantage of our situation and dress comfortably.
4. If you have an **unstable internet connection, please also connect through the phone**. That will allow you to continue to participate, even if you lose internet connection.
 - If you call-in after you have joined on video, click the arrow between Mute and Video and there is a button for "Switch to Phone Audio." Clicking this button provides a Participant ID. Please call-in with the Participant ID as then your phone is associated with your video.
5. If you have some handy, please **USE HEADPHONES**. It helps reduce background noise and feedback issues. You will also be muted at the beginning of the meeting as we provide time for everyone to log in.
6. By clicking on Participants, a new window pops up in the chat that allows participants to **virtually raise a hand, react, agree/ disagree, or denote that they are temporarily left on a coffee break**. If you do not see the Participants icon, hover your mouse over the Zoom window and the icons should reappear.
7. You can choose to view our shared screen presentation only or view a drop-down bar of faces along the side by clicking the squares at the top of our own image.

If you do not have access to a computer (desktop, laptop or surface/ iPad) or have an unstable internet connection, there is a call-in number as a back-up:

Meeting ID: 977 6098 1766

Password: 514854

Join By Phone: +1 253 215 8782

VIRTUAL PEER EXCHANGE

STRUCTURAL APPROACHES TO INNOVATION PROGRAMS & STIC COORDINATION

Individual State Presentations

During day one of the Virtual Peer Exchange, the participants from each state will need to provide a brief, 10-minute presentation on the innovation or STIC group they represent.

When it is your state's turn to introduce your innovation group, you will be asked to "Share Your Screen" to present.

Please come prepared with a visual or innovative way to tell your group's story (ex: short video, a few PowerPoint slides, a photo slideshow, etc.) and please plan to succinctly cover these topics:

DOT Characteristics:

1. Name(s) and contact info for each Peer Exchange participant from your state in attendance
2. State and population
3. Number of DOT employees
4. Number of DOT regions and districts
5. Number of lane miles
6. Funds designated for innovation

Innovation Program Characteristics:

1. Program background/history
2. Principle focus/mission
3. FTE count
4. Reporting structure (org. chart/hierarchy)
5. Organizational chart or discussion of the difference between research (SPR), innovation, and lab
6. Who manages Federal Innovative Programs? (EDC, STIC, AID, AMIR, etc.)

Innovation or STIC Example/Case Study from your DOT:

1. Think of a STIC or innovation example from your DOT that you would like to share.
2. What made it work well or did not work well?
3. What were the lessons learned?

If you have questions regarding your presentation, please contact the peer exchange facilitators, Dan Adams at dadams@langdongroupinc.com or Jennifer Fowler at jfowler@langdongroupinc.com.

PARTICIPANTS



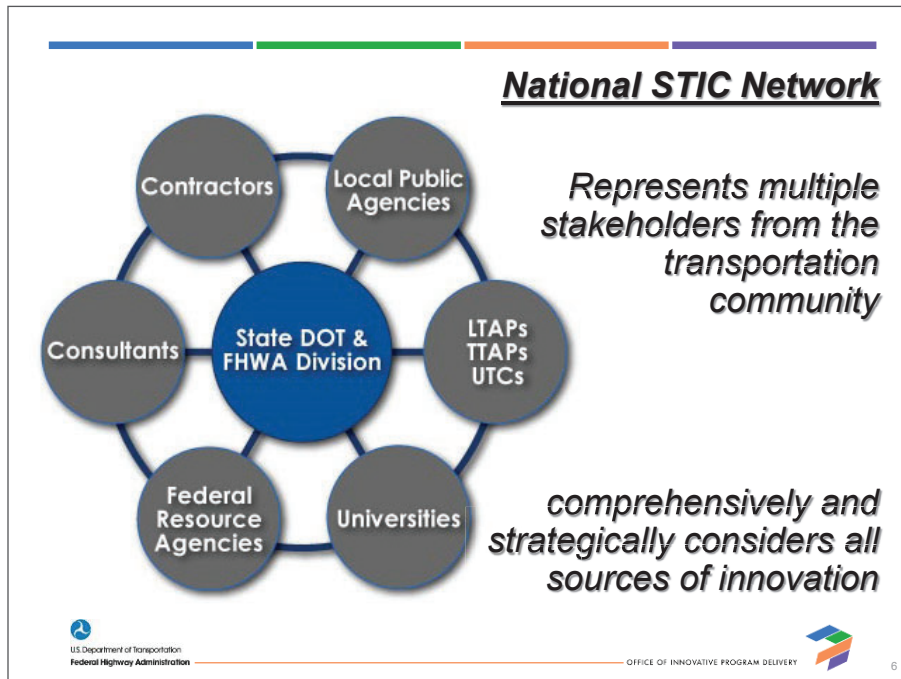
Peer Exchange Participants

California	Dara Wheeler	Caltrans	Division Chief of Research, Innovation and System Information	Dara.Wheeler@dot.ca.gov
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Utah	Rod McDaniels	UDOT	Innovation and Implementation Manager	rmcdaniels@utah.gov
Utah	Ryan Bailey	UDOT	Innovation and Implementation Coordinator	rbailey@utah.gov
Utah	John Haynes	FHWA	Research and Innovation Program Manager	John.Haynes@dot.gov
Washington	Anne Freeman	WSDOT	Research and Library Services Program Administrator	Freeann@WSDOT.WA.GOV
Facilitator	Dan Adams	The Langdon Group (TLG)	Senior Executive, Facilitator	dadams@langdongroupinc.com
Facilitator	Jennifer Fowler	TLG	Facilitator	jfowler@langdongroupinc.com
Facilitator	Allison Adams	TLG	Facilitator	aadams@langdongroupinc.com

PRESENTATION WEB LINKS

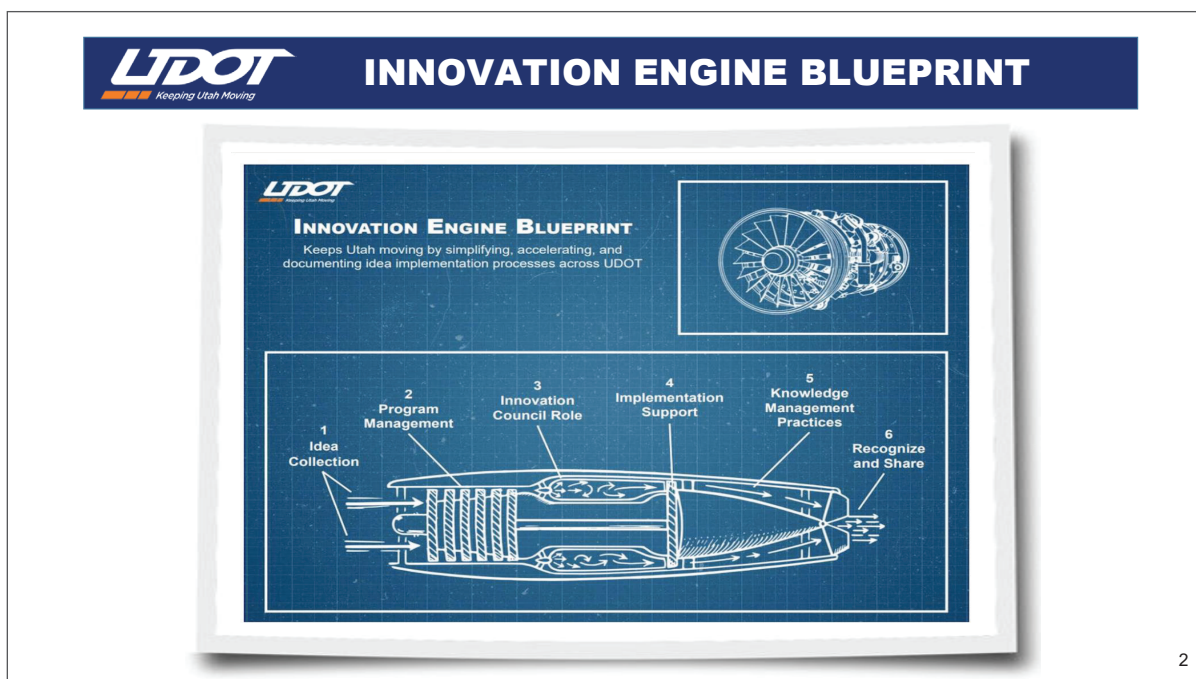
NATIONAL STIC OVERVIEW

https://drive.google.com/file/d/1smaXxUdrC2TPEHBpqA14QJED8Z5J_m_x/view?usp=sharing



UTAH / UDOT


<https://docs.google.com/presentation/d/1otJOcBlARAh3zeRmcET6KNJnbbfq5tOZo--4N8Yg45s/edit?usp=sharing>




IDAHO / ITD

https://drive.google.com/file/d/1w0Wfqtb9KOSEvQfK9_F_AbhfLo-q4F66/view?usp=sharing

AS of YTD:
108 Ideas submitted 69 Implemented Innovations



Innovation Stewards
Helping Ideas Flourish



Innovate ITD!
Innovation Scorecard

- Employee Ideas: 1,595
- Implemented Innovations: 1,124
- Savings/efficiencies: \$10.63 million *
- Hours saved: 212,427
- Customer-service improvements: 642

From Inception In 2014 through April 30, 2020

** Savings/efficiencies are invested back into Idaho roads and bridges or customer-service improvements for the citizens of Idaho.*

ITD STRATEGIC TEAM

Innovative Business Practices Team	ELT Member
Tabitha Smith	Char McArthur
Laura Meyer	
James Taylor	SLT Members
Neel Parrish	Dave Kulst
Reed Hollinshead	Alberto Gonzalez
Madison Toolay	Vince Trimboli
	Doral Hoff

COLORADO / CDOT

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Innovation at CDOT

- **Several offices focus on innovation**
 - Office of Process Improvement
 - 4 FTE
 - Applied Research & Innovation Branch
 - ~\$2M / yr (25% of CO's SPR)
 - 4 FTE currently (normally 7-9)
 - Office of Innovative Mobility
 - (new in 2019)
 - 7 FTE
 - \$11 M (currently only one year approved by TC)
- **But innovation is sprinkled throughout many different programs especially data and safety, via:**
 - Chief Engineer
 - Division of Maintenance and Operations
 - Chief Data Office
 - Others







Iowa / IowADOT

<https://drive.google.com/file/d/175CP4uM2PM1AH9JFelQgKQrKYxwIkKjL/view?usp=sharing>



RESEARCH FOCUS AREAS

- 

SAFETY
Reducing transportation fatalities and serious injuries through system-wide, multimodal, data-driven, and proactive strategies.
- 

MOBILITY
Improving the accessibility, reliability, time, and costs associated with the movement of people and goods.
- 

SUSTAINABILITY
Considering how transportation supports economic, social, and environmental progress with a long-term perspective.
- 

TECHNOLOGY
Evaluating both current and potential technologies and incorporating them effectively into existing agency functions.



VS

A.

B.


C.

7

North Carolina / NCDOT

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ncdot.gov
NCDOT Innovation Program – FHWA Utah Peer Exchange



NC-TIC | North Carolina Transportation Innovation Council

NC-TIC was prioritized in 2019 to accelerate and scale innovation within NCDOT and the state’s surrounding transportation ecosystem. NC-TIC provides a platform for innovation, programming, and guidance on policies and best practices to ensure efficient investment, development, and management of North Carolina’s transportation infrastructure.

NC-TIC serves as the epicenter of innovation for NCDOT; it cultivates a clear and universal understanding of what innovation means across departmental lines and establishes defined processes and practices that help implement it.

NC-TIC’s activities are focused on three primary areas – **Internal Innovation**, **Academic Partnerships**, and **Industry Partnerships** – and supported by stakeholders and committees

4

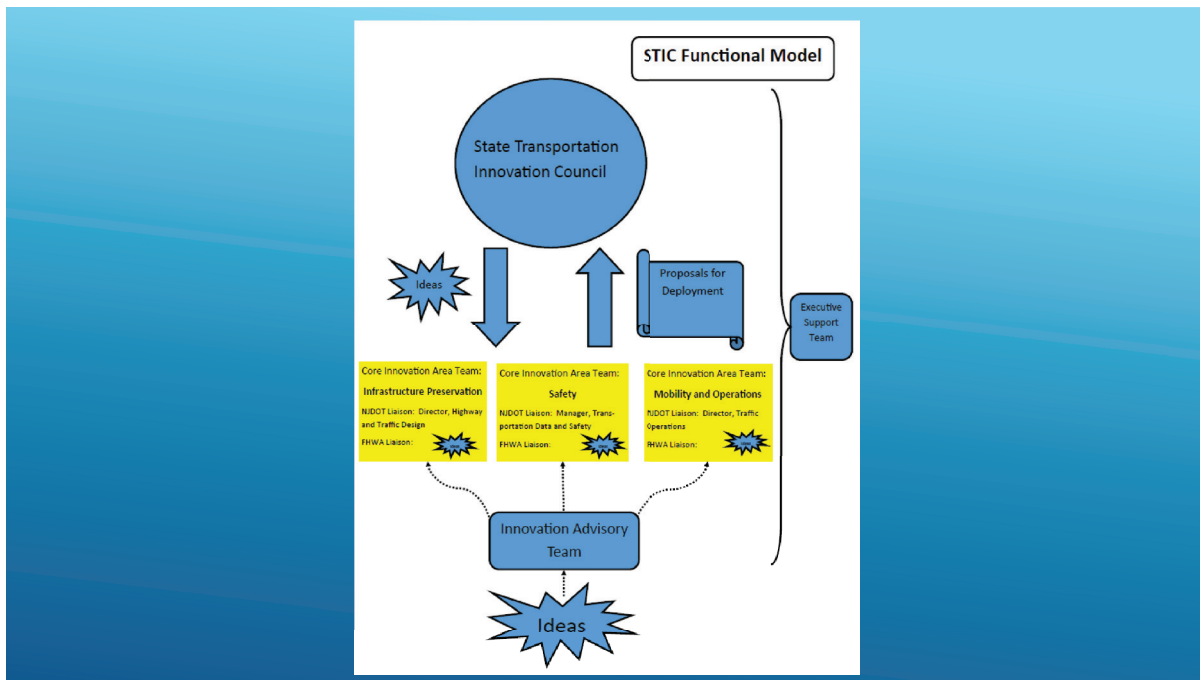
WASHINGTON / WSDOT

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NEW JERSEY / NJDOT

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PENNSYLVANIA / PENNDOT

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BUREAU OF INNOVATIONS (BOI)

- Serve as PennDOT’s organizational change managers and Lean leaders
- Essential function within the agency
- Services and program oversight include:
 - Data Mining, Analytics and Reporting
 - Meeting Facilitation
 - Organizational Reviews and Process Mapping
 - Strategic Visioning and Business Planning
 - Survey Development, Execution and Analysis
 - STIC and Agility Programs

CALIFORNIA / CALTRANS

<https://drive.google.com/file/d/1mM8ydAWwxJ1VETZdT4eVoV82XnLPYfb6/view?usp=sharing>

Director Toks Top 5 Priorities:

INNOVATION



We must counter a “business as usual” mindset by embracing bold and transformative ideas. This must include new solutions to help solve major state issues like climate change, the affordable-housing shortage and homeless crisis.




DOT Characteristics




FLORIDA / FDOT

<https://drive.google.com/file/d/1OKIUbnGdqxvnmhNSW3IU3suG9mHX0uj/view?usp=sharing>

FDOT INNOVATION PROGRAM



- 7 Districts and Turnpike enterprise each have innovation programs
- Utilize a central SharePoint tracking system
- Ideas reviewed by district innovation teams
- Ideas with statewide implications elevated to statewide innovators teams
- All Teams comprised of multi-disciplined members
- Statewide team includes FDOT executive leadership, FHWA representation
- System in place for over 10yrs
- Continue to utilize Juice Inc.'s Innovation In A Box program(15)
- Over 6000 ideas submitted, 532 implemented


5

VIRTUAL PUBLIC INVOLVEMENT & EVERYDAY COUNTS, UDOT

<https://drive.google.com/file/d/1g9ioxYB3wsY6tMzwsunq7hS2skfITx6a/view?usp=sharing>

Process

