

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Innovation in Transportation: Tips for Success

Results of Domestic Scan 23-04: DEVELOPING AND MAINTAINING A CULTURE OF INNOVATION WITHIN DOTS

U.S. Domestic Scan Program

SCAN FOCUS

Innovation can help a transportation agency improve its performance, effectiveness and efficiency, but some agencies seem to have more successful innovation programs than others.

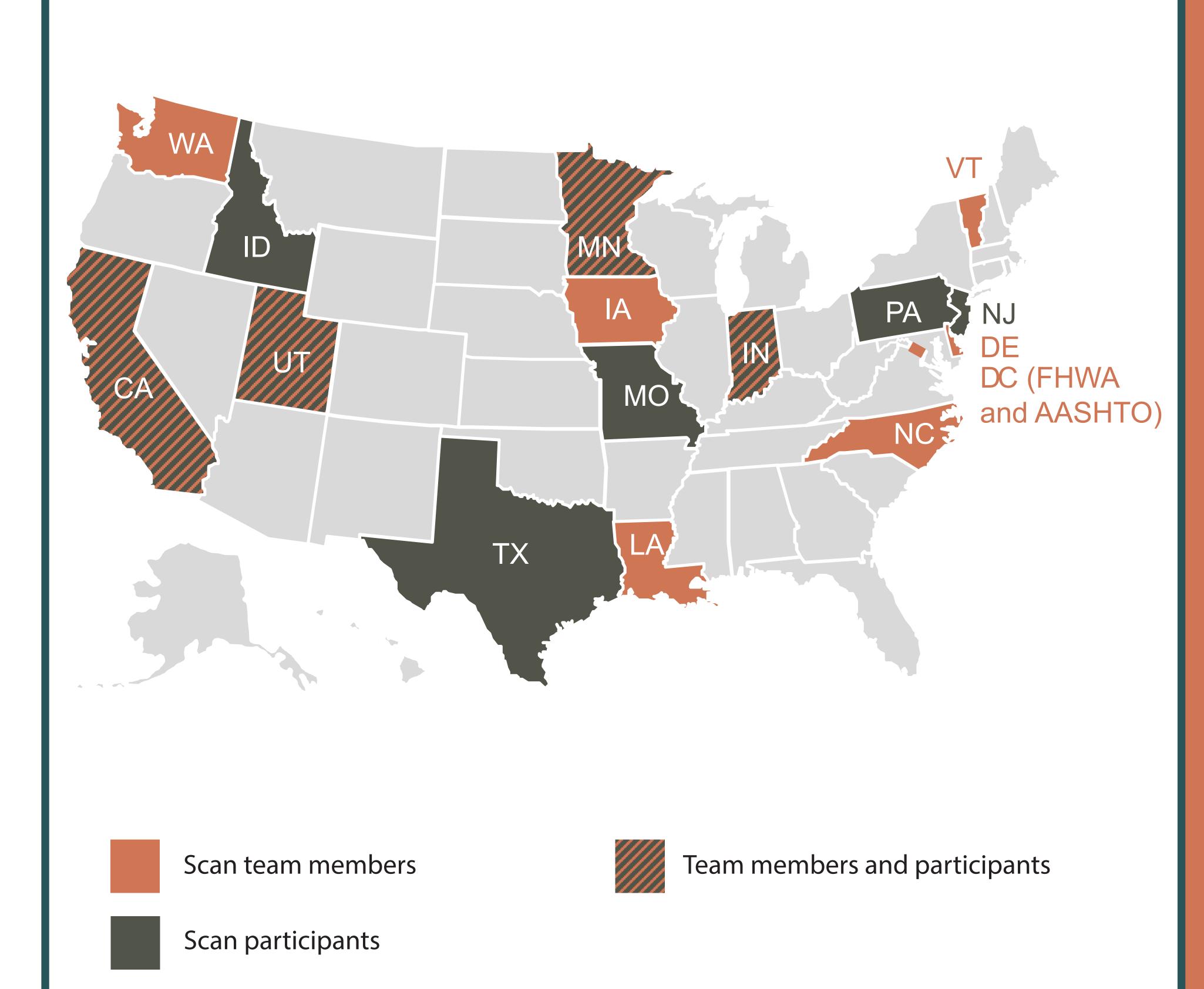
To better understand how internal culture can affect an agency's ability to innovate, Domestic Scan 23-04 sought to identify:

- The characteristics shared by agencies with a strong culture of innovation.
- Variations in culture across an agency's disciplines.
- Examples of successful change initiatives and innovation programs.
- Strategies for sustaining an agency's cultural improvements.

PERSON-TO-PERSON EXCHANGE

The virtual scan was held from April 15 - 19, 2024 and included in-depth interviews with nine transportation agencies renowned for their innovation programs.

During the scan, each invited agency shared details and insights into the organizational structure and programmatic strategies that contribute to its successful culture of innovation.



SCAN RECOMMENDATIONS

- Build innovation into agency values, goals and vision.
- Identify an innovation champion/sponsor at the executive level.
- Establish one or more innovation committees to promote innovation and vet and prioritize ideas for recognition and implementation.
- Create a process to collect innovation ideas, and acknowledge all submissions.
- Hold an innovation competition to encourage idea submissions.
- Develop a frequent and targeted marketing and communications strategy to engage employees and partners.
- Create a brand, logo and clever name for the innovation effort.
- Communicate examples of homegrown innovations quickly to build credibility.
- Consider rewarding employees with financial or other incentives.
- Look for opportunities to praise and recognize innovators.
- Measure progress by tracking the number of innovations submitted and implemented.
- Develop a simple process for determining the benefits of an innovation.
- Provide networking and learning opportunities for staff to discuss innovations together.
- Conduct an agency-wide survey to better understand the innovation culture as it stands.
- Leverage the national transportation innovation ecosystem to improve individual agency efforts.
- Engage ALL staff, and avoid siloing efforts.



Image courtesy Texas Department of Transportation

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Innovation Dashboard

- Employee Ideas:
- Implemented Innovations:
- Savings/efficiencies: \$61 million*
- Hours Saved:
- 669.000

1,536

- From 2014 inception thru June 30, 2024
- * Savings/efficiencies are invested back into Idaho roads and bridges or customer-service improvements for the citizens of Idaho.

Image courtesy Idaho Transportation Department

ABOUT THE DOMESTIC SCAN PROGRAM

THE BUILDING BLOCKS OF INNOVATION

The scan team identified six building blocks at the heart of

LEADERSHIP - A persistent culture of innovation depends

on strong leadership that establishes innovation as a core

employee with knowledge to stimulate ideas and a mindset

COMMUNICATION - Communication should be creative

innovation. It should also frequently remind employees that

RECOGNITION - Frequent and timely recognition motivates

employees and communicates the importance of innovation

MEASUREMENT - Successful organizations find simple

ways to measure the pace and the impact of innovation.

COLLABORATION - Innovation is more likely to happen

when agencies are collaborative, flexible and nimble.

Routine tracking and communication of results helps to keep

and practical and draw attention to the importance of

new ideas are valued in a transportation agency.

EMPOWERMENT - An innovative culture equips every

that innovation is an expectation for all employees.

every successful innovation program:

value throughout an organization.

employees engaged and motivated.

Launched in 2006, the NCHRP U.S. Domestic Scan Program typically sponsors two or three scans per year, putting state and federal DOT practitioners in touch with innovative peers around the country. During the intense experience of the scan (typically one to two weeks), participants see how a new technology or practice works in the real world. They also develop close professional relationships that remain readily available to them years later.

SCAN TEAM MEMBERS

Dara Wheeler
AASHTO Chair
California DOT

to the agency.

Shante Hastings
Delaware DOT

Todd May
Indiana DOT
Linda Su

Linda Su Iowa DOT Tyson Rupnow
Louisiana DOTD
Katie Walker

Alyson Tamer
North Carolina DOT

Cameron Kergaye
Utah DOT

Amanda Gilman-Bogie Vermont AOT Anne Freeman
Washington State DOT

Glenn PageAASHTO

Jeffrey Zaharewicz

Dale PeabodySubject Matter Expert

NEXT STEPS

EXPLORE NEW IDEAS

The strategies that
have worked well
for other public and
private organizations
may suit your agency's
needs as well

GET INVOLVED

Help problem-solve with
TRB's Research Innovation
Implementation
Management (RIIM)
Committee

READ MORE

The full report on Scan
23-04 will be available at
domesticscan.org/
scans/23-04



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What topic do you have for an NCHRP
Domestic Scan?
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