



# No Boundaries Transportation Maintenance Innovations Pooled Fund Overview and Update

AASHTO Committee on Maintenance,  
Maintenance Operations TWG  
5<sup>th</sup> National Briefing  
2024

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## Overview

- What is No Boundaries?
  - Purpose, goals and history
  - Members and partners
- Highlights of how No Boundaries can help agencies share innovations and information
  - Peer Information Sharing
  - Innovation Database
  - Research Syntheses



## Purpose

- The No Boundaries pooled fund project ([maintainroads.org](https://maintainroads.org)) is a community of practice for transportation maintenance professionals around the country.
- The group identifies innovative technologies and practices used by state DOTs and then promotes their use by other agencies.



## Purpose

- Note that No Boundaries...
  - Complements AASHTO MAC, the AASHTO Innovation Initiative, and other national efforts
  - Focuses on spring, summer, fall, and winter maintenance topics



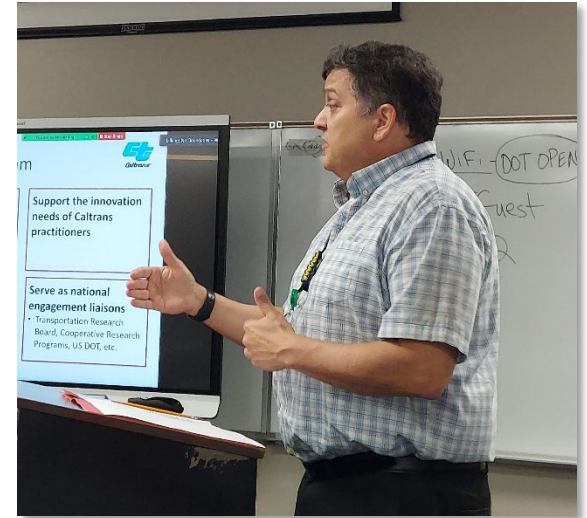
## Goals

- To help members share
  - Innovative equipment solutions
  - Innovative material solutions
  - Innovative process solutions
- To increase network and collaboration among other agencies
  - Members learn firsthand: what works, what doesn't (and why), what needs more investigation
- To promote consistent maintenance activities among agencies
  - Align policies, procedures, and technologies... when it makes sense



## Goals

- To facilitate meetings and in-person interaction
  - Provide a showcase for state innovations and technologies
  - Create a forum for direct questions and frank answers
- To increase cost-effectiveness
  - Minimize duplication of effort
  - Maximize products and services



## History

- Began in 2011
  - Developing relationships with several DOT member states
  - Build synergy to address common challenges and opportunities among DOTs
  - No sense in “reinventing the wheel”
  - Share home-grown and off-the-shelf innovative solutions that **work**
- Initially eight member states
- Missouri and Ohio were previous lead states; currently led by Colorado



# Today

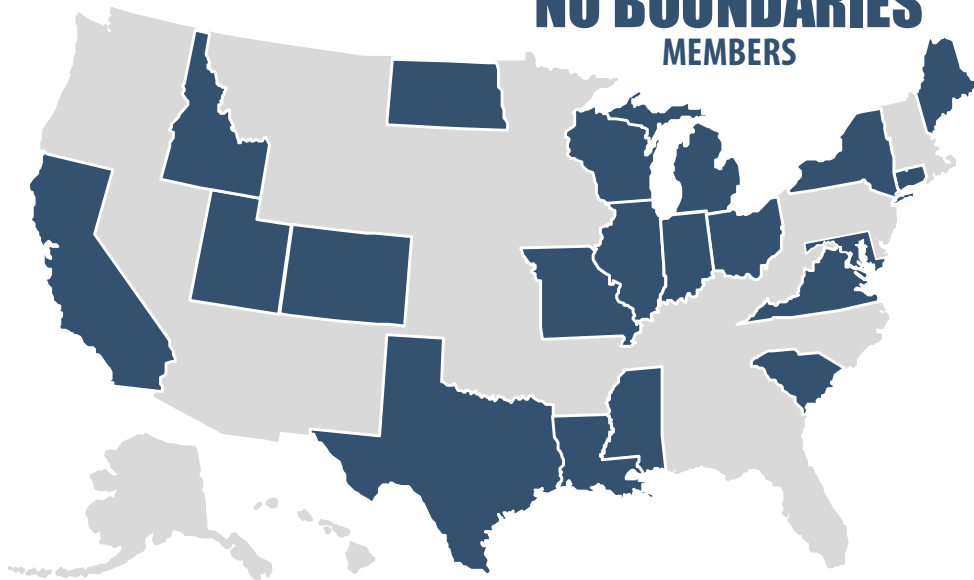
- 20 member states
- Focus areas include:
  - Core maintenance areas (bridges, pavements, operations, roadside, equipment)
  - Asset management for maintenance
  - Training, recruitment and retention
- [maintainroads.org](https://maintainroads.org) documents all resources
- Two in-person meetings annually provide peer exchanges and technical site visits
- Weekly news posts
- Informal surveys of peer agencies





# Current Member States

**NO BOUNDARIES**  
MEMBERS



# Current Partners and Liaisons

- Federal Highway Administration
- AASHTO
- Transportation Research Board
- American Public Works Association
- Front Range Community College (Colorado)
- Clear Roads pooled fund



TRANSPORTATION RESEARCH BOARD



# Highlighted Activities and Resources

## Peer Information Sharing

- Two in-person peer exchanges and technical site visits in the past year.
  - Suffolk, Virginia in October 2023
  - Baton Rouge, Louisiana in May 2024
- Highlights
  - Technical presentations
  - Roundtable discussions
  - Innovation show-and-tell
  - Equipment and product demonstrations



# Suffolk, Virginia - October 2023

- Highlights

- Roundtable discussions

- Member Agency and Maintenance Programs
- Innovations Show-and-Tell
- Measures for Determining Maintenance Staffing Needs
- Maintenance During Winter: Winter Paving Potholes Best Practices

- Demonstrations

- Virginia DOT maintenance equipment
- Aquaphalt



# Baton Rouge, Louisiana - May 2024

- Highlights

- Roundtable discussions

- Reduced Idling to Prevent Battery Drain
- Innovations Show-and-Tell
- Alternative Uses of Right-of-way for Solar/Wind/Pollinators - Curbside and Vegetation Maintenance; Maintenance around High-Tension Guardrail

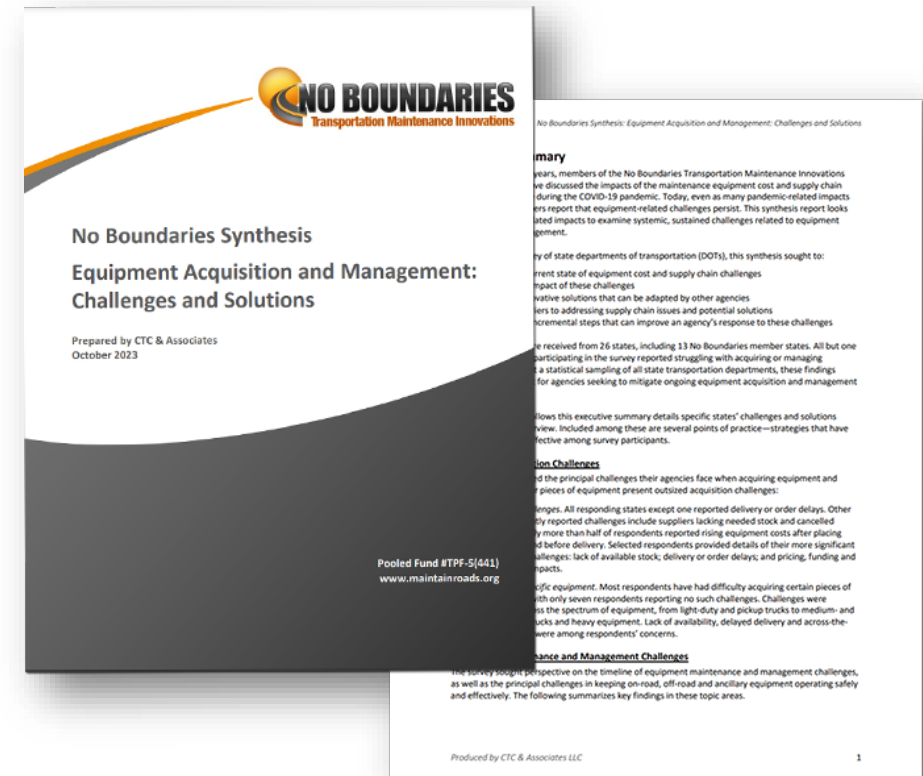
- Technical Presentations

- AI in Public Works



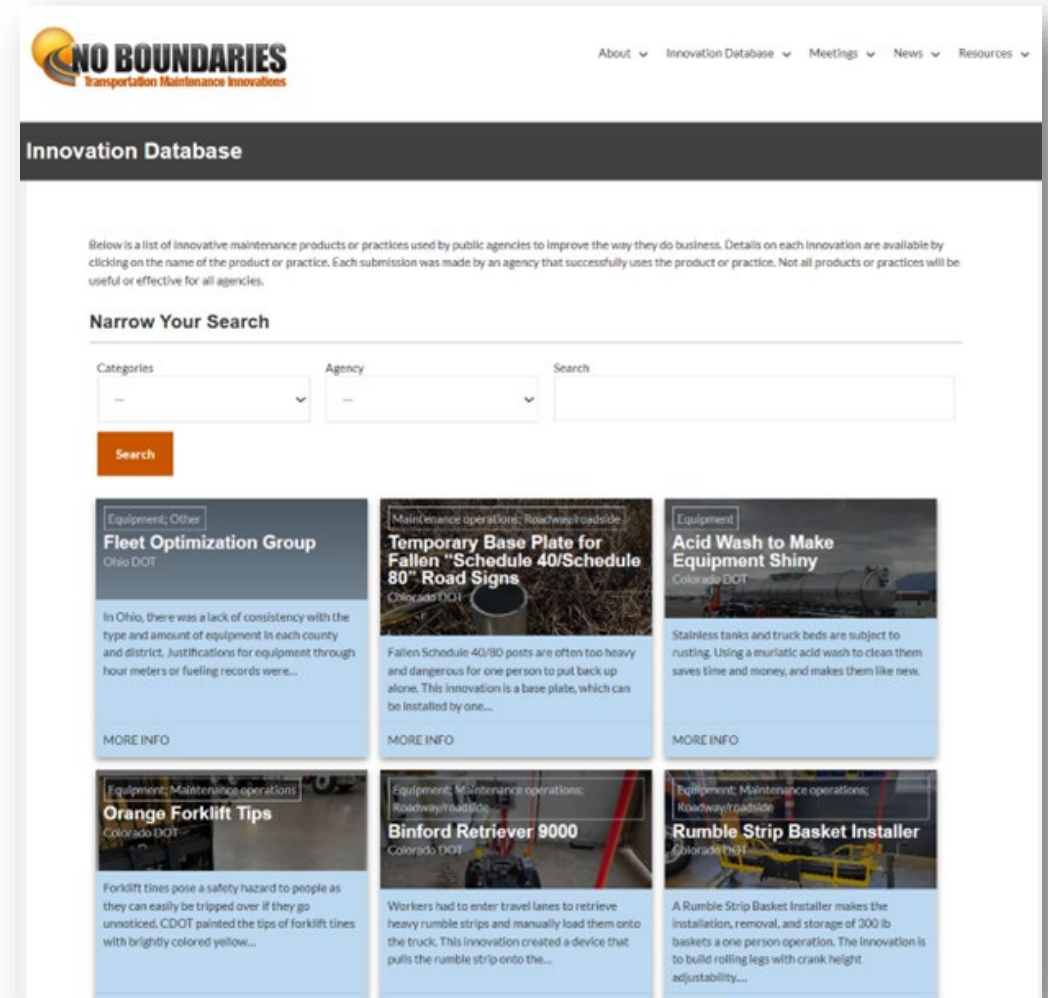
# Peer Information Sharing

- **Research Syntheses** - Quick-turnaround searches of published literature combined with a survey of practice to identify the current state of knowledge and possible pathways for further action.
- Recent topics
  - Equipment Acquisition and Management: Challenges and Solutions
  - State Innovation Programs
  - Maintenance Training with Virtual Reality



# Peer Information Sharing

- **Innovations Database** - No Boundaries' online repository of tried-and-tested products and practices.
- **Informal Surveys** - Opportunity to pose questions to the group at any time to get quick responses from peer experts.
- **News Updates** - Maintenance-related research, news, and upcoming events delivered to members' inboxes each week.



The screenshot shows the 'Innovation Database' page on the No Boundaries website. At the top, there is a navigation menu with links for 'About', 'Innovation Database', 'Meetings', 'News', and 'Resources'. Below the header, a dark bar contains the text 'Innovation Database'. The main content area features a paragraph explaining that the list contains innovative maintenance products or practices used by public agencies. Below this is a 'Narrow Your Search' section with three input fields: 'Categories', 'Agency', and 'Search', each with a dropdown arrow. An orange 'Search' button is positioned below these fields. The search results are displayed in a grid of six cards. Each card includes a category label, a title, a small image, a brief description, and a 'MORE INFO' link. The cards are: 1. 'Fleet Optimization Group' (Ohio DOT) with a category of 'Equipment, Other'. 2. 'Temporary Base Plate for Fallen "Schedule 40/Schedule 80" Road Signs' (Colorado DOT) with a category of 'Maintenance operations; Roadway/Roadside'. 3. 'Acid Wash to Make Equipment Shiny' (Colorado DOT) with a category of 'Equipment'. 4. 'Orange Forklift Tips' (Colorado DOT) with a category of 'Equipment; Maintenance operations'. 5. 'Binford Retriever 9000' (Colorado DOT) with a category of 'Equipment; Maintenance operations; Roadway/Roadside'. 6. 'Rumble Strip Basket Installer' (Colorado DOT) with a category of 'Equipment; Maintenance operations; Roadway/Roadside'.



# Learn More

- Upcoming events
  - Fargo, ND in Fall 2024
  
- On our website: [maintainroads.org](https://maintainroads.org)
  - Explore the Innovation Database
  - Subscribe for weekly news posts
  - View videos on YouTube
  - Photos available on Flickr

