READY RESULTS

Sharing Innovative Practices from State DOTs



FOCUS ON: NCHRP U.S. Domestic Scan 23-05

November 2025

Communicating the Effects of an Aging Fleet



Snowplows in Ohio await deployment.

SCAN FOCUS

As state agencies tighten their budets, transportation agencies face difficult decisions about whether and how to make their existing vehicles and equipment last longer. While extending the service life of a fleet defers the costs of buying new vehicles, older fleets have higher maintenance costs and lower operational ability. To provide fleet managers with support to estimate and communicate the effects of operating an aging fleet, Domestic Scan 23-05 sought to learn from agencies that have developed procedures for estimating the costs of delaying replacement and to gather information for new approaches to optimizing fleet management decisions.

PERSON-TO-PERSON RESEARCH

The scan team invited agencies from 11 states to participate in a workshop in the summer of 2024 to share their experiences with effectively communicating fleet management viewpoints to decision makers and stakeholders. The scan team members then synthesized the themes and findings from the workshop to provide recommendations to help fleet managers present accurate and convincing fleet replacement information.

NEXT STEPS Put It into Practice

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 AASHTO's Committee on Maintenance at transportation.org/maintenance.

READ MORE

The full Scan 23-05 report is available at domesticscan.org/scans/23-05.

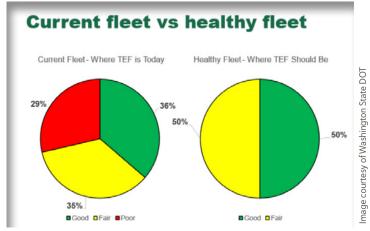
SUGGEST FUTURE SCANS

What topic do you have for an NCHRP Domestic Scan? See domesticscan.org/.

PRELIMINARY FINDINGS

The scan found that having strength in four key areas can help an agency validate and communicate its fleet management decisions: (1) credibility, which improves fleet management and demonstrates good stewardship; (2) data to quantify fleet needs and support viewpoints; (3) communication that is open with upper management and stakeholders, and utilizes visual presentations; and (4) relationships with decision makers to enhance communication and encourage advocacy for the agency's fleet needs.

The scan team also found that agencies that have alternative processes for disposing of aging fleet assets, such as a buy-back or trade-in program, have been able to augment their available funding.



Washington State DOT uses graphics to illustrate the agency's fleet needs. This graphic compares the current state of the agency's Transportation Equipment Fund (TEF) to what it would look like if the fleet were at optimum health

PUTTING IT TO WORK

The scan team offered recommendations to enhance future fleet discussions and decisions:

- · Use data effectively and develop replacement and purchasing plans.
- · Create and report fleet metrics that are accessible and provide actionable evidence and insights.
- Establish regular communication with decision makers and develop effective visual tools and presentations.
- Devote specific time to network and cultivate relationships.

SHARING THE RESULTS

Scan team members have presented their findings at national and state gatherings of fleet and equipment professionals, with more scheduled throughout 2025.

ABOUT THE PROGRAM: The NCHRP U.S. Domestic Scan Program (NCHRP Project 20-68, domesticscan.org) recognizes the value of firsthand sharing of new technologies and practices. Launched in 2006, the program typically sponsors two or three scans per year, putting state and federal DOT practitioners who need solutions in touch with innovative peers around the country, speeding the transfer of technology and know-how. 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 PARTICIPANTS



Image courtesy of Florida DOT

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