NCHRP 20-68 – "US Domestic Scan Program"
Domestic Scan 23-05 Successful Approaches to Validating and Communicating the Long-term Effects of Aging Government Fleet Assets

Agencies are often faced with difficult decisions on how to prioritize transportation investments, State DOT Fleet managers need to get better at communicating the business case to replace Fleet Assets on time. Fleet managers are facing enormous challenges as government budgets get tighter due to stagnant or decreasing tax revenue. As budgets decrease and decisions are made to extend the life of fleet assets, it is more important than ever to efficiently communicate the long-term effects of that decision. When vehicles age, more maintenance issues arise resulting in higher annual operating costs and lower operational availability. Vehicle and equipment downtime are a monetary and safety issue, especially if vehicles and equipment cannot respond to an emergency.

The objective of this scan is to examine organizations that have successfully developed and implemented practices and procedures to estimate the cost of delayed replacement of DOT Fleet Assets beyond the optimal replacement period and to gather data that might be used to develop decision making tools and models that can effectively communicate the long-term effects of aging the Fleet Assets to decision makers.

Vehicle and equipment downtime is a monetary and safety issue, especially if vehicles and equipment cannot respond to an emergency. This scan team will gather information from innovative agencies that can be used to effectively communicate the impacts of investment decisions related to Fleet Assets. The team will gather references to research and data from experts within DOTs or engaged by DOTs that have knowledge of how to realistically estimate the long-term effects of aging fleet assets. In addition, the team will gather data from agencies studied regarding their budget needs to replace deficient assets, the age of their existing fleet, and their estimated cost of deferring replacement of older assets. Identification of fleet and equipment performance measures that may be used to estimate impacts of aging Fleet Assets on an agency's ability to provide needed services would be informative. Also of interest is the agencies rationale used in deciding to defer replacement of Fleet Assets if available.

As capital budgets decrease State DOTs are faced with difficult decisions prioritizing transportation investments. It is more important than ever to efficiently communicate the long-term monetary effects of those decisions. Fleet assets may not get funded without a clear communication of the resulting impacts being provided to decision makers within a DOT.

The scan is envisioned to be conducted as a Type 2 Scan (Reverse Scan). By documenting and sharing successful practices the scan team will produce a valuable resource for use by fleet managers and stakeholders, including state DOTs, on how to assess and make better decisions within their organization to properly prioritize fleet funding among the long list of agency needs. This scan supports a key focus area of the AASHTO Committee on Maintenance but will also be of interest to several other AASHTO Committees involved in Budgeting and Asset Management.

Original Scan Proposal Title: Problem Statement Number: 2023-F-02 - Problem Title "Validating and communicating the long-term effects of aging Government Fleet Asset"