

Investment Prioritization Methods for Low-Volume Roads



27.04.2024 Page 1

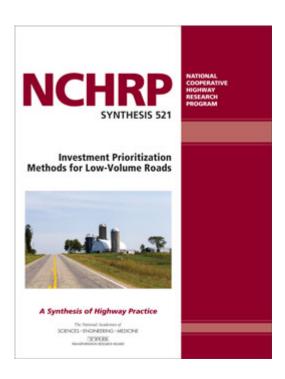
| National Cooperative Highway Research Program (NCHRP) | Project Country | United States |
|---|-----------------|---------------|
| | Period | 2018 |
| Client | Facts | |

For the National Cooperative Highway Research Program (NCHRP), Synthesis 48-07, EDR Group (now EBP) documented current practices used by transportation agencies to make investment decisions about low-volume roads.

Low-volume roads are at a disadvantage relative to other roads within traditional investment prioritization processes that focus on volume-based metrics of benefit and impact. However, low-volume roads can also create significant value for the wider economy and society, providing basic access to remote communities, ensuring connectivity (particularly last-mile connectivity) for industries to the global economy, and supporting economic development opportunities. Through a literature review, survey of state DOTs, and a series of case studies, the synthesis investigated state DOT prioritization practices for low volume roads, focusing specifically on approaches that go beyond standard transportation asset management or engineering-type measures, to those that account for broader economic, social, and environmental implications of low volume road projects. Key issues addressed in the research include:

- 1. How State DOTs define low volume roads and the reasons for creating separate classes of facilities or separate funding programs.
- 2. The unique ways in which low volume roads serve our communities within the context of broader transportation networks.
- 3. Concepts of basic access as a justification for maintaining low volume roads, and how they are employed both domestically and abroad to support decision-making.
- 4. Prioritization approaches that supplement core quantitative data, such as asset condition and transportation-related conditions/impacts, with additional decision variables in the form of quantitative ratings, qualitative scoring (e.g., 0 to 10), and descriptive approaches.
- 5. Emerging issues in low volume road planning and management, including funding constraints, the influence of asset/performance management requirements, and issues of jurisdictional responsibility.

27.04.2024 Page 2



Contact Persons

27.04.2024 Page 3