

Investment Prioritization Methods for Low-Volume Roads



Client

National Cooperative Highway Research
Program (NCHRP)

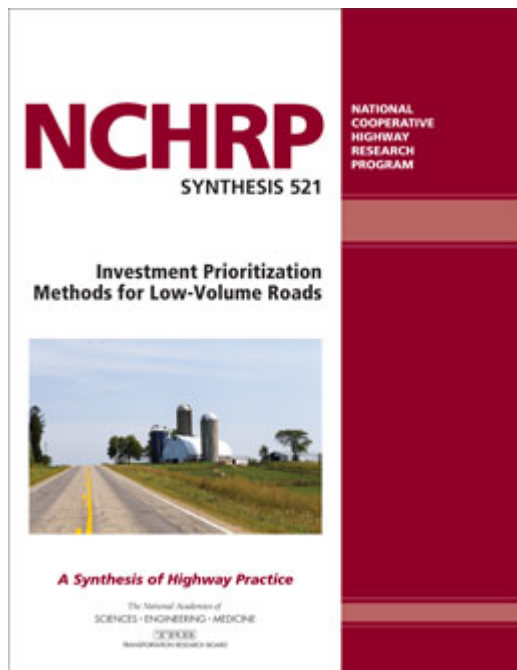
Facts

Period	2018
Project Country	United States

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.



Contact Persons