Resource Allocation of Available Funding to Programs of Work (NCHRP Synthesis 510)



Client

National Cooperative Highway Research Program (NCHRP)

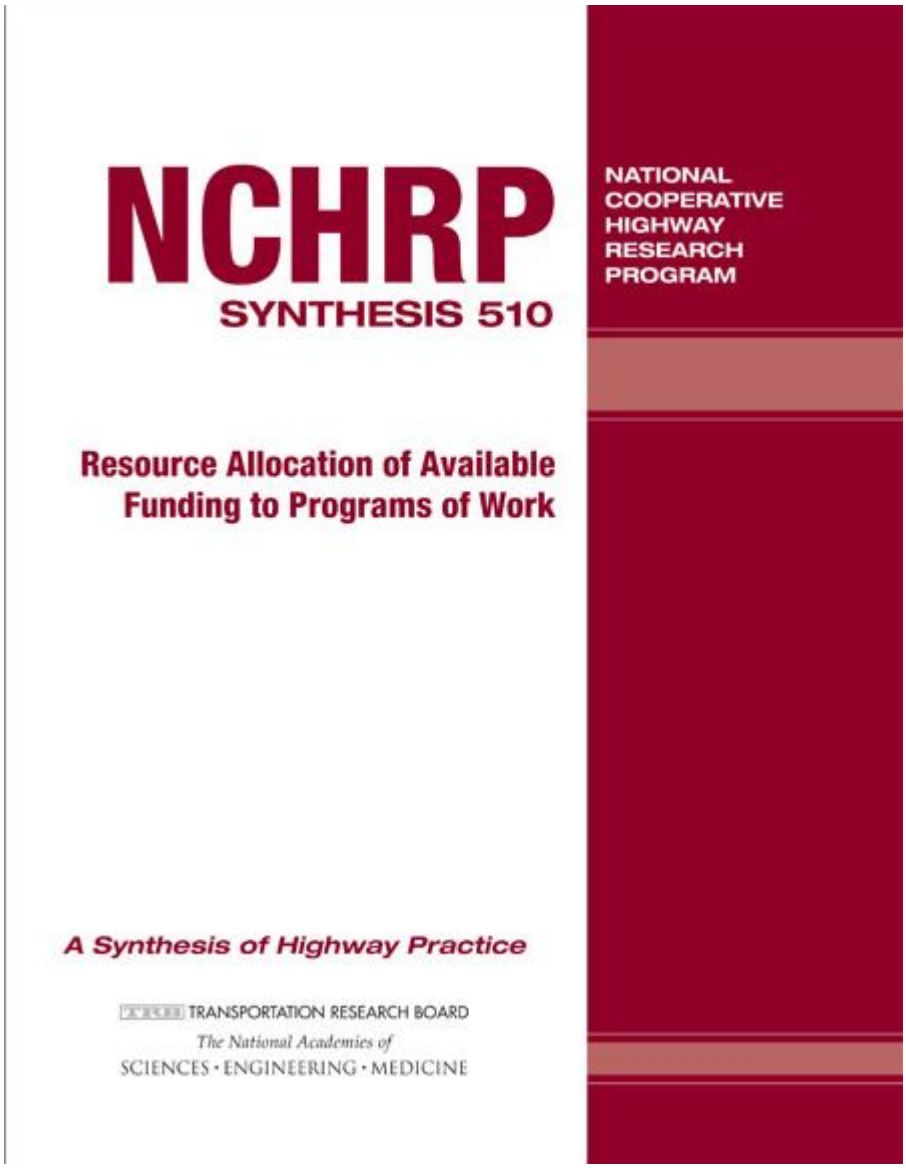
Facts

Period	2017
Project Country	United States

For the National Cooperative Highway Research Program (NCHRP), EBP (formerly EDR Group) performed a synthesis study on how state departments of transportation (DOTs) allocate resources between different programs and business activities. This project is especially relevant as agencies look to move towards performance-based planning and programming and continue to pursue innovative solutions to address funding shortfalls and uncertainty. Many agencies face rising costs of maintenance for facilities built during the highway construction heyday but also see needs for new facilities to address shifting population and travel patterns. Balancing these concerns is a key component of the resource allocation processes investigated by EBP.

The synthesis includes a comprehensive literature review, a survey of practice completed by 42 agencies, and four case examples of state DOT practice, as well as a conceptual structure for understanding resource allocation decisions. It includes a particular focus on how transportation agencies define programs for the purpose of resource allocation. Other key findings relate to the emerging role of prioritization and decision support systems, models and technologies in arriving at efficient investment levels as well as how agencies respond to political scrutiny on resource allocation choices.

The synthesis explores the relationship between planning and programming, as well as the advantages and disadvantages of "bottom-up" selection processes (where program-level budgets result from cross-asset project-level prioritization) and "top-down" processes (where program area budgets are set before projects are prioritized). The research results are a resource to help agencies improve the business process to allocate resources and demonstrate the rationale for how and why outlays are made as they are.



Contact Persons