NCHRP 20-68A – US Domestic Scan Program

Scan 10-01 Best Practices for Risk-Based Forecasts of Land Volatility for Corridor Management and Sustainable Communities

Topic Description

Local jurisdictions typically seek to encourage economic growth and development in their areas. Such growth often increases traffic demand on highways in the jurisdiction and at the same time makes it more difficult to secure land to expand highway capacity. Land-acquisition and other costs to provide increased capacity are then increased along with congestion and safety problems on the congested facilities. Reserving land for future highway corridor expansion in anticipation of future demand represents higher costs as well and makes the land unavailable for other development, and may appear to have been imprudent if growth does not occur as anticipated. Transportation agencies have sought to understand the business risks associated with right-of-way and other land acquisition to support decision making about corridor management.

The scan will investigate how metropolitan planning organization (MPOs), state departments of transportation (DOTs), and other transportation agencies have used risk-based forecasting and related analysis to address such issues as

- Identifying corridors that may experience capacity issues due to development.
- Addressing capacity issues in the development of long-range corridor plans
- Assessing factors that contribute most to land-use volatility
- Methods, models, and data used to forecast land use
- Integrating land use and volatility forecasts into transportation plans with a multi-year horizon.

The scan team will contact DOT and MPO officials and others involved in state and regional land use and transportation planning to identify best practices in problem framing, predictive modeling, gathering expert opinion, and using GIS and other data to identify incipient and potential development. Anticipated scan results may focus on the several key issues, including

- Forecasting corridor development
- Understanding how transportation improvements are influenced by land development
- Prioritizing funding allocations to minimize the negative effects of land development
- Protection of rural corridors and communities.

Original Scan Proposal Title(s): Risk-Based Forecasts of Land Volatility for Corridor Management and Sustainable Communities

Last Reviewed/Revised October 26, 2010

Scan Team Membership

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Execution Schedule

Milestone	Anticipated Date
Chairs and Team Members Identified	February 2011
Desk Scan Completed	July 2011
Prescan Meeting Held	July 2011
Scan Conducted	October-November 2011
Draft PowerPoint submitted by SME	December 2011
Draft Report Delivered to NCHRP and Panel	February 2012
Final Report Delivered to NCHRP	July 2012

Estimated Scan Cost and Funding

Actual Duration: 2 week

Last Reviewed/Revised July 15, 2012