Scan Team NCHRP 20-68A

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Scan Team NCHRP 20-68A

East Coast:
- Florida DOT
- New Orleans Regional Planning Commission
- Pennsylvania DOT
- Georgia DOT
- North Carolina DOT

Midwest & Western:
- Utah DOT
- Montana DOT
- California DOT
- Minnesota DOT
- Washington DOT
Scan Itinerary

• October 2 - 7, 2011
  ▪ Tallahassee, FL
  ▪ New Orleans, LA
  ▪ Harrisburg, PA

• October 30 - November 5, 2011
  ▪ Atlanta, GA
    - Virginia DOT presentation
  ▪ Salt Lake City, UT
    - Minnesota and Montana DOT webinars
  ▪ Sacramento, CA
    - North Carolina and Washington DOT webinars
Background

- Federal initiatives for transportation require coordination in the development of land uses and transportation facilities.

- Regional planning organizations and local governments:
  - Encourage economic growth and land development.
  - Protect existing and future corridors.
  - Promote sustainable economic development.
Background (cont.)

- Transportation agencies need best practices in the forecasting of land use and the ensuing actions for corridor management.

- Evaluating land use as a source of risk to the performance of multimodal transportation corridors in the course of planning, programming, and funding project delivery could be an innovative and effective re-framing of this topic.
Target Issues

- 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 risk of adjacent land use.
- Forecasting land use changes and the associated demand on the transportation facilities by means of methods, models, and data analysis.
- Methods, models, and data used to forecast land uses adjacent to transportation facilities.
- Integrating land use forecasts into transportation plans with a multi-year horizon.
Risk

- Assessment Methodology
  - What can go wrong
  - What are the likelihoods
  - What are the consequences

- Management Methodology
  - What can be done
  - What are the trade offs
  - What are the impacts of current decisions to future options
Summary of Findings

• Monitoring/tracking of key decision points across agencies and stakeholders, by need and by project, as implemented in Florida by FDOT.

• Systematic documentation of environmental regulations and compliance, by need and by project, as implemented in Pennsylvania by PennDOT.

• Coordination with localities and sharing of databases for land use and transportation facilities, as implemented in New Orleans by the NORPC.
Summary of Findings (cont.)

• Project proposal submission, filtering, and review/evaluation in several tiers of analysis, as implemented in Pennsylvania by PennDOT.

• Education of local authorities and citizens of the factors involved in land use and transportation, as implemented in Montana by MTDOT.

• Balancing transportation innovation with the memory/recovery of legacy communities and facilities, through data collection and analysis, as implemented in New Orleans by the NORPC.
Summary of Findings (cont.)

• Analyzing the risk of adjacent land developing considering the current densities of access points, forecasts of land development, and current and forecasted travel demands, as implemented in Virginia by VDOT.

• Prioritizing and filtering needs for near-term, mid-term, and long-term action of planners, developers, and citizens, as implemented in Virginia by VDOT.
Types of Best Practices

- Forecasting corridor development.
- Understanding how transportation systems are influenced by land development.
- Prioritizing funding allocations to maximize the beneficial economic effects of land development.
- Protection of rural corridors and communities.
- Protection of existing corridors to insure the function of the facility.
Local Coordination for Corridor Preservation Among Stakeholders

- Through interactive participation
- Through technology
- Through educational resources
Samples of Best Practices
Pennsylvania land development process aligned with high occupancy permitting process. The procedures enable PennDOT to coordinate with over 2500 municipal governments (Source: PennDOT).
Roles of stakeholders in the Pennsylvania coordination of transportation corridors and risk management. The procedures enable PennDOT to coordinate with over 2500 municipal governments (Source: PennDOT).
Linking corridor planning and the NEPA process
(Source: PennDOT).
Example assessment of the development impact for proposed intersections (Source: PennDOT).
GDOT
GDOT Unified Growth Management Policy map used with local agencies to forecast and plan future land use (Source: GDOT).
Life cycle showing the impact of land use change on transportation corridor performance (Source: GDOT).
Scenario analysis for Georgia South Fulton Parkway Access Management Plan (Source: GDOT).
Level of service planning for the Georgia South Fulton Parkway Access Management Plan (Source: GDOT).
Prioritization of corridor segments based on access points per mile, risk of land development prediction, and average daily traffic (Source: VDOT, University of Virginia).
Forecasts of land development along transportation infrastructure vulnerable to adjacent land development (Source: VDOT, University of Virginia).
Managing land development for multimodal transportation corridors, suggesting the local triggers for land acquisition or other management actions (Source: VDOT, University of Virginia).
Best Practices for Risk-Based Forecasts of Land Volatility for Corridor Management and Sustainable Communities

End Presentation