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# Executive Summary

A goal of this domestic scan was to examine the design, operation, and policy decisions state Departments of Transportation (DOTs) are faced with when considering the accommodation of additional modes and services within existing right of way. A further goal is to identify findings and recommendations that will advance the institutional capacity of state DOTs to successfully participate and partner in projects to add modes to existing rights of way.

The team for this domestic scan consisted of eight members representing five state DOTs, the Federal Highway Administration and the University of Virginia. Sharon Edgar, who recently retired from the Michigan DOT, chaired the effort. Contact information and biographical sketches of the team members can be found in **Appendix A** and **Appendix B**.

The scan team was particularly interested in projects where existing general-purpose traffic lanes were converted to transit-only service (e.g., bus or rail) or to express toll lanes with bus rapid transit (BRT) or express bus service. After conducting a desk scan of 15 potential project scan sites, the scan team decided to visit seven projects in six cities believed to offer the best opportunity to meet the goals of the scan.

The projects were geographically distributed and utilized a variety of multimodal transportation strategies benefitting bicycle, pedestrian, transit, and automobile users. Transit solutions included streetcar, BRT, light rail transit, and bus-on-shoulder operations. The projects employed a wide variety of partnership arrangements, including state and local partnerships as well as interlocal partnerships. The projects were in Richmond, Virginia; Charlotte, North Carolina; Detroit, Michigan; Minneapolis, Minnesota; San Francisco, California; and Seattle, Washington.

## Summary of Findings

After meeting with staff and touring the selected projects over a two-week period, the scan team met and discussed findings and observations it believed would be most helpful to others considering similar projects. Further discussions by the scan team identified recommendations in eight groups of strategies. While several of these recommendations are directed toward state DOT officials involved in similar projects, many other recommendations are directed to all project development officials, including state DOTs, transit agencies, as well as other local city and county officials. The following are the team's recommendations for transforming existing highway rights of way into successful multimodal corridors:

### Adopt a Shared Vision

- The state DOT should develop a shared multimodal vision for the corridor with all its partners.
- The state DOT should foster a multimodal philosophy and culture throughout the agency.
- The state DOT should support the development of well-aligned multimodal plans and policies, including Complete Streets policies with its partners.

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## Define Roles and Responsibilities

- The state DOT should determine the lead federal agency early in the project development process for consistent coordination.
- State DOTs should evaluate their agency's organizational structure and make adjustments to facilitate multimodal decision-making and project delivery.
- Project development officials should insist that staff and managers have a “lean in to get to yes” philosophy – be flexible and nimble.
- The state DOT should consider taking the lead for phases of the project for which the agency has unique skills and abilities not possessed by other partners (e.g., utility relocation, environmental review, federal funding requirements, construction management, etc.).
- Project development officials should establish agreements for maintenance and operations between appropriate parties prior to project implementation.

## Planning and Design Considerations

- The state DOT should focus its attention on transit elements that directly impact the state's roadway infrastructure.
- Project development officials should not get locked in to a single or best definition of BRT.
- Project development officials should devote significant effort to determine the optimal location and configuration of transit lanes and stations to improve transit service, roadway performance, and safety.
- Project development officials should give full consideration to using the opportunity of the multimodal project to further community and economic development goals as well as improve operational issues during design.

## Seek Opportunities to Improve Transit

- The state DOT should look for ways to integrate transit and other innovative technology improvements with larger infrastructure improvements.
- The state DOT should consider the conversion of existing lanes or the addition of high-occupancy vehicle (HOV) or managed lanes as an initial commitment to dedicate lanes for the priority use of HOVs, including BRT and express buses.
- Project development officials should implement improvements for all modes that improve the overall mobility and safety of motorized and non motorized users of the corridor.
- The state DOT should make an effort to plan and design roadways to accommodate future transit options even if immediate transit funding is uncertain.

## Employ Project Controls

- Project development managers should employ appropriate controls to manage risk across project scope, schedule, and budget.
  - Develop a project management plan that includes a defined escalation plan and conflict resolution process.

- With project partners, develop and agree to written protocols that govern how changes can be made to the vision, design, and budget.
- Project development officials should bring in the right staff at the right time.

### **Communicate and Coordinate with Stakeholders**

- Project development officials (i.e., local officials or the transit agency) should develop a robust outreach plan to gather input from and disseminate information to stakeholders to keep them on board.
- Project development officials should plan on providing additional time and attention to coordinate with and meet the needs of certain stakeholders, including universities, hospitals, and railroads, which often have concerns regarding the impact of the improvement to their facilities.

### **Integrate Connections**

- Project development officials should identify and improve connections to all modes operating within the corridor to enhance seamless travel.
- Transit providers need to coordinate/align the new transit service with other existing transit routes and services to ensure that route schedules are synchronized.
- Project development officials should implement roadway improvements that improve overall mobility and safety for all modes, including bikes and pedestrians.

### **Improve Person Throughput**

- Project development officials should consider criteria in addition to level of service, including person throughput, reduced vehicle miles traveled, and safety (traffic, transit, and bicycle/pedestrian) when evaluating the impact of accommodating additional modes within existing right of way.
- Project development officials should look for ways to improve transit service that also help improve traffic flow.

Dissemination of findings and recommendations of scan information began early when Sharon Edgar, scan chair, provided updates to the American Association of State Highway and Transportation Officials Multimodal Task Force during the host site visits. Further efforts to share information will include presentations by scan team members at national, state, and local meetings of transportation officials and other interested groups, as well as conducting further research on the topic.