

Strategies for Accelerating Multimodal Infrastructure Delivery

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Wednesday, October 31, 2018

Housekeeping

⇒ **Problems with audio?**

Dial into the phone line instead of using “mic & speakers”

⇒ **Webinar issues?**

Re-Load the webpage and log back into the webinar. Or send note of an issue through the Question box.

⇒ **Questions?**

Submit your questions at any time in the Questions box.

Archive and Certificates

Archive posted at www.pedbikeinfo.org/webinars

- ⇒ Copy of presentations
- ⇒ Recording (within 1-2 days)
- ⇒ Links to resources

Follow-up email will include...

- ⇒ Link to certificate of attendance
- ⇒ Information about webinar archive

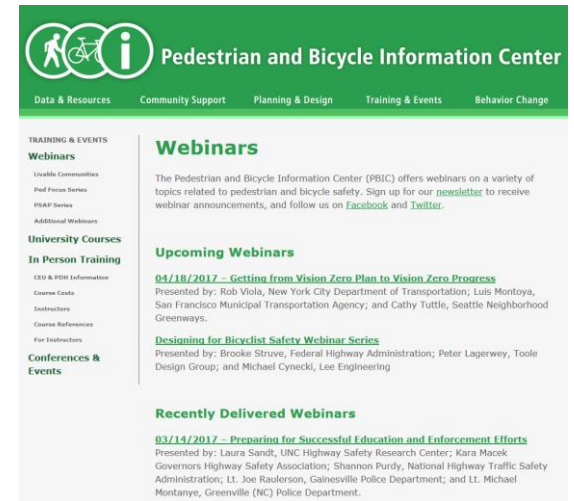
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The screenshot shows the PBIC website's 'Webinars' page. The header includes the PBIC logo and navigation links: Data & Resources, Community Support, Planning & Design, Training & Events, and Behavior Change. The main content area is titled 'Webinars' and includes a brief description of the center's offerings, a list of 'Upcoming Webinars' (e.g., '04/18/2017 - Getting from Vision Zero Plan to Vision Zero Progress'), and a list of 'Recently Delivered Webinars' (e.g., '03/14/2017 - Preparing for Successful Education and Enforcement Efforts').



The screenshot shows the PBIC Facebook page. The profile picture is the PBIC logo. The cover photo features a collage of images related to pedestrian and bicycle safety. The page name is 'Pedestrian and Bicycle Information Center' with the URL www.pedbikeinfo.org. The page is categorized as a 'Government Organization' and has 3,509 likes and 3,446 followers. A recent post titled 'VISION ZERO STRATEGIES SERIES' is visible, featuring images of a cyclist and a pedestrian crossing a street.



U.S. Department of Transportation
Federal Highway Administration

Strategies for Accelerating Multimodal Project Delivery Webinar

Wesley Blount
Office of Human Environment
Federal Highway Administration



FHWA FY 2019-2022 Strategic Plan



- Safety
- Infrastructure – Accelerated Project Delivery
- Innovation
- Accountability – Performance Measures
- <https://www.fhwa.dot.gov/policy/fhwaplan.cfm>

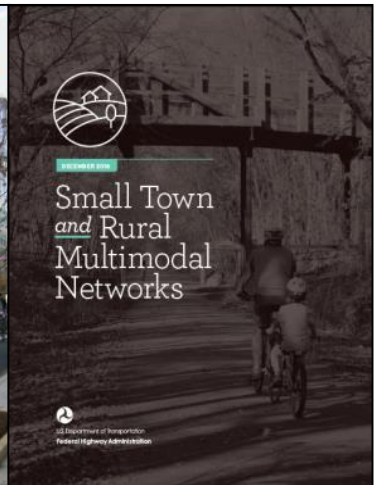
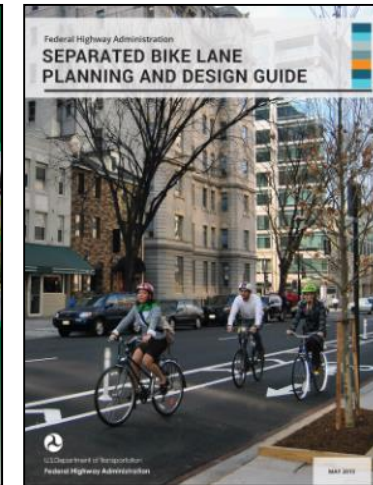
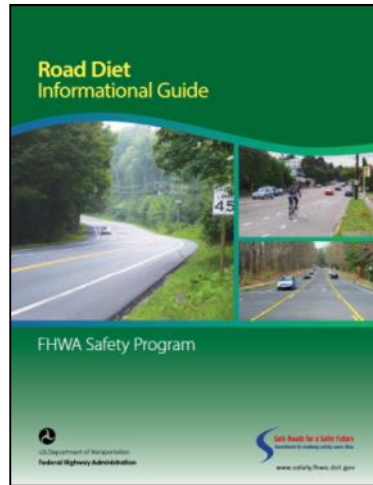
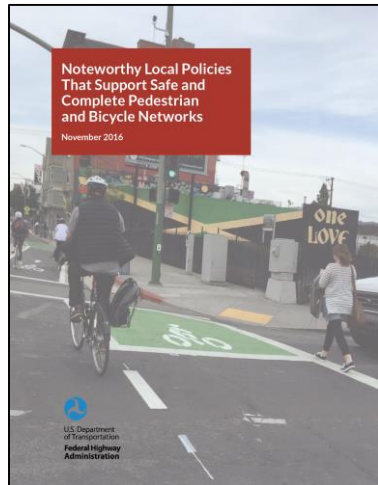
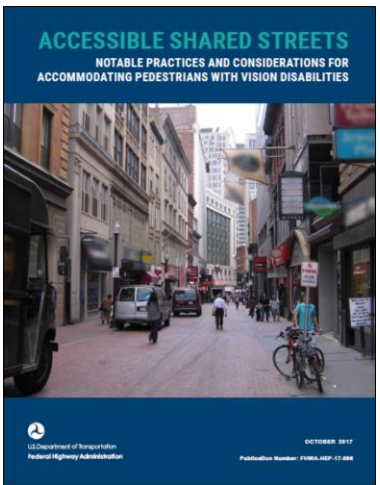
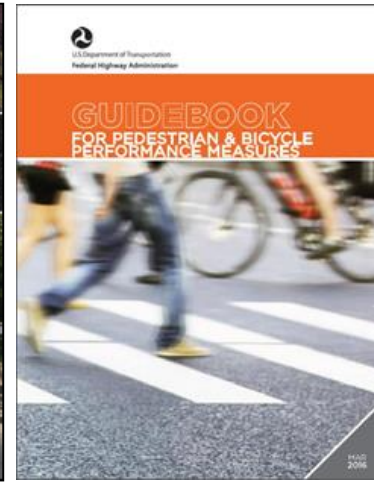
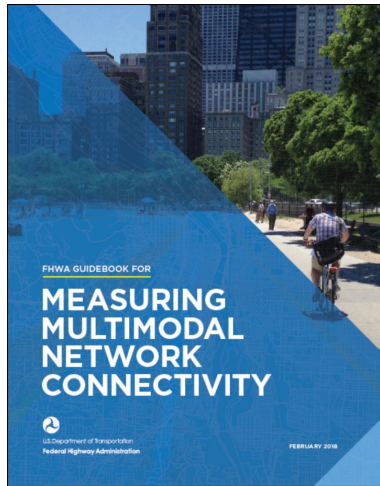


Why is Accelerating Project Delivery Important?

- Improve safety for all roadway users.
- Reduces cost.
- Enables agencies to do more with less.
- Leverages other investments.



Recent FHWA Pedestrian and Bicycle Resources





FHWA GUIDEBOOK FOR

MEASURING MULTIMODAL NETWORK CONNECTIVITY



U.S. Department of Transportation
Federal Highway Administration

FEBRUARY 2018



Human Environment Newsletters

Human Environment Digest

December 14, 2017

PDF files can be viewed with the [Acrobat® Reader®](#)

Welcome to the Federal Highway Administration (FHWA) Office of Human Environment biweekly email digest. This digest shares the latest information from a range of Federal and non-Federal sources, addressing transportation and its relationship to the human environment. Through this information exchange, FHWA hopes to foster dialogue at all levels and continue to further the state of the practice on these important topics in support of safety; infrastructure, including accelerated project delivery, access to jobs, and community revitalization; technology and design innovation; and accountability, including, data-driven decisions and performance-based planning.

For more information on any of these topics, see the FHWA Related Links on the sidebar.

*The information provided in this mailing does not necessarily reflect the view of the Federal Highway Administration or the U.S. Department of Transportation.



Safety

The Next Generation of North American Bike Facilities

The National Association of City Transportation Officials (NACTO) released a new guidance, titled "[Designing for All Ages & Abilities: Contextual Guidance for High-Comfort Bicycle Facilities](#)." The guidance focuses on two key safety factors, vehicle speeds and traffic volumes, to give cities the tools they need to decide what street treatments will most improve bicycle safety.



Infrastructure

California's Approach to Balancing Infrastructure and Stewardship

The Federal Highway Administration's (FHWA's) Successes in Stewardship newsletter highlights environmental streamlining and stewardship practices from across the country. The November 2017 edition of the newsletter is titled, "[California's North Coast Corridor Program Balances Infrastructure Demands and Environmental Stewardship](#)." The California

For more information about events and webinars, see the [HEP Calendar](#).

Events

- January 23-24, 2018:** NCSE's 18th National Conference and Global Forum on Science, Policy, and the Environment: The Science, Business, and Education of Sustainable Infrastructure: Building Resilience in a Changing World
- March 8-9, 2018:** Traditional Cultural Places (Classroom), San Francisco, CA.

Webinars

- December 14, 2:00 PM - 3:00 PM**
 ET: Safety Performance Measures for Pedestrians and Bicyclists
- December 19, 1:00 PM - 2:00 PM**
 ET: TREC's Bike-Ped Portal: National Bicycle and Pedestrian Count Archive
- December 20, 1:00 PM - 2:30 PM**
 ET: Talking Freight's Good Practices in MPO Freight Planning
- January 9, 2018, 1:00 PM - 2:00 PM**
 ET: ostering Community Partnerships to Advance Health Equity
- January 24, 11:00 AM - 12:00 PM**
 ET: PeopleForBikes' eMTBs: Current Issues and Partnership Opportunities

FHWA Related Links

- [Environment Homepage](#)
- [Bicycle/ Pedestrian](#)
- [Environmental Justice](#)
- [Transportation Alternatives](#)
- [Recreational Trails Program](#)

To submit comments or information for inclusion in the next HE Digest, click [here](#). Submissions must be made before 12 PM EST Wednesday.



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Editor's Note: With the New Year and the release of the U.S. Department of Transportation Strategic Plan for Fiscal Years 2018- 2022, we are introducing some formatting changes to this publication to highlight the development and implementation of multimodal transportation projects.

Introduction

The Federal Highway Administration's (FHWA's) Fostering Multimodal Connectivity Newsletter is intended to provide transportation professionals with real-world examples of ways that multimodal transportation investments promote economic revitalization, provide access to jobs, and achieve safer communities through support of accelerated project delivery, technology and design innovation, and public/private partnerships. This newsletter communicates FHWA and partner efforts in support of the U.S. DOT Strategic Plan by improving connectivity, accessibility, safety, and convenience for all users.

Want to access additional tools and resources? Please visit FHWA's [website](#). Past issues of the newsletter are also [available](#). To subscribe to the newsletter, visit [GovDelivery](#).

http://www.fhwa.dot.gov/livability/he_digest

<https://www.fhwa.dot.gov/livability/newsletter/>



Program Websites

- Livability:
<http://www.fhwa.dot.gov/livability>
- Environmental Justice:
http://www.fhwa.dot.gov/environment/environmental_justice
- Bicycle and Pedestrian:
http://www.fhwa.dot.gov/environment/bicycle_pedestrian/index.cfm
- Economic Development
https://www.fhwa.dot.gov/planning/economic_development/
- Sustainable Transportation
<https://www.fhwa.dot.gov/environment/sustainability/>
- Community Connections
https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/connections.cfm
- Health in Transportation
https://www.fhwa.dot.gov/planning/health_in_transportation/



Project Purpose

- Document challenges to delivering multimodal infrastructure projects
- Identify top strategies and solutions for overcoming challenges and accelerating project delivery
- Facilitate peer-to-peer exchanges of strategies among practitioners



What's preventing or delaying projects?

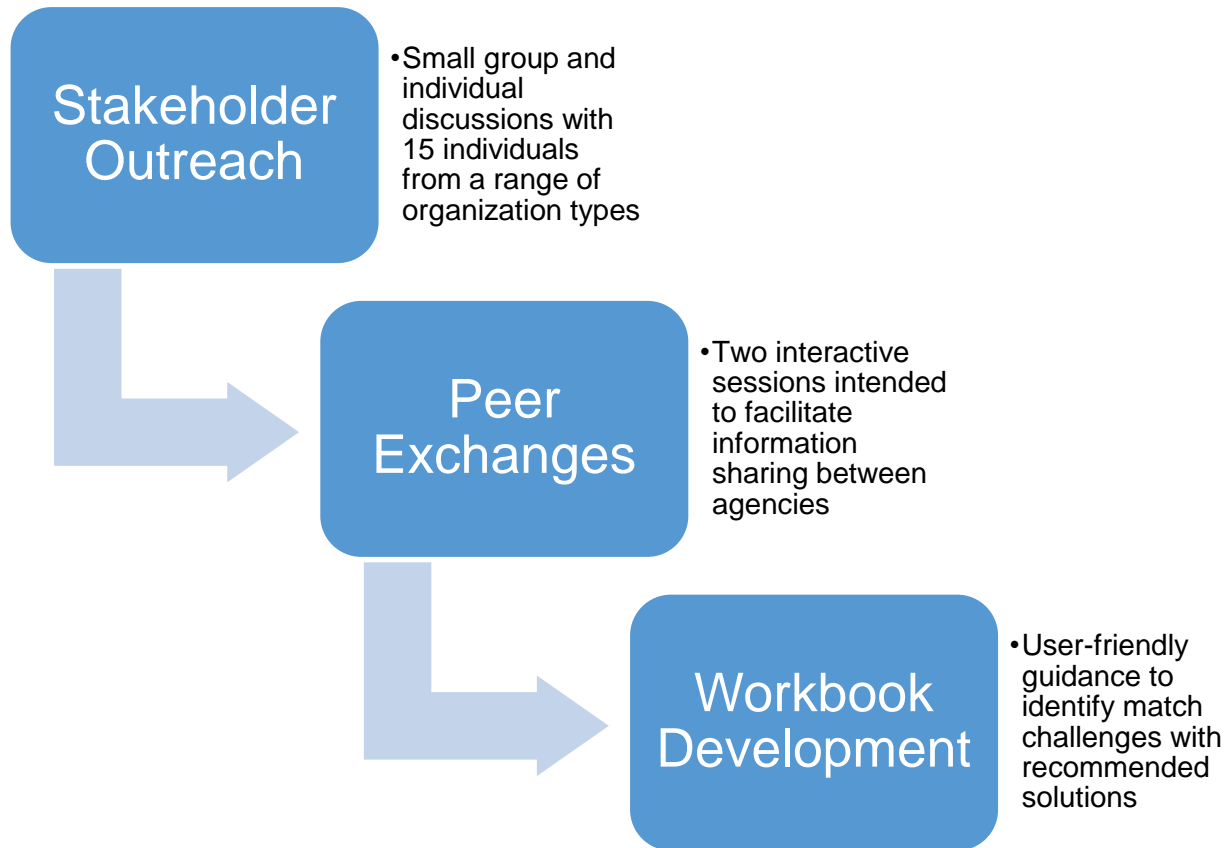


How have agencies solved these problems?



What can we learn from each other?

Project Phases



Stakeholder Organizations

Federal Highway Administration	State DOT Headquarters	State DOT Division and District Offices	Regional Agencies	Local Agencies
<ul style="list-style-type: none"> Office of Project Development and Environmental Review Office of Planning, Environment and Realty Michigan Division Office 	<ul style="list-style-type: none"> Florida DOT Colorado DOT Oregon DOT Utah DOT Illinois DOT 	<ul style="list-style-type: none"> Ohio DOT District 7 Michigan DOT's University District Caltrans District 3 	<ul style="list-style-type: none"> North Central Texas Council of Governments San Diego Association of Governments 	<ul style="list-style-type: none"> Chicago Department of Transportation City of San Jose City of Berkeley



Key Challenges Identified

Programming
Delays and
Funding Source
Challenges

Difficulties
Competing for
Limited
Funding

Inadequate
Internal and
External
Coordination

Inadequate
Community
Input

Design
Guidelines
Insensitive to
Context

Lengthy
Environmental
Reviews

Insufficient
Staff Capacity
or Technical
Knowledge

- Stakeholder discussions revealed numerous challenges to accelerating multimodal infrastructure delivery

Strategies for Accelerating Multimodal Project Delivery



U.S. Department of Transportation
Federal Highway Administration

- New workbook released today
- Identifies 13 strategies for accelerating project delivery across multiple phases of project development
- Links strategies to documented challenges
- Includes case study examples and further reading/resources for each strategy

STRATEGIES FOR ACCELERATING MULTIMODAL PROJECT DELIVERY



Credit: www.pedbikemages.org
/ Nathan Roseberry (CDOT)

Credit:
www.pedbikemages.org
/ Seattle DOT

Strategies for Accelerating Multimodal Project Delivery

Planning and Project Scoping

Environmental Review

Design

Funding

- 1 Develop Prioritization Methods for Multimodal Projects
- 2 Allow Flexibility in Funding Smaller, Low-Cost Projects and Project Elements
- 3 Identify Multimodal Needs Early in Project Development
- 4 Improve Public Involvement
- 5 Make Appropriate and Effective Use of Categorical Exclusions (CEs)
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement
- 7 Incorporate Context-Based Design into State Design Processes and Manuals
- 8 Apply and Leverage the Innovative Multimodal Treatments in the MUTCD
- 9 Promote Flexibility in Existing Funding Sources
- 10 Allocate New Funding Sources to Implement Multimodal Infrastructure and Leverage Existing Programs
- 11 Communicate Benefits of Multimodal Projects and Improve Performance Data for Evaluating Them
- 12 Increase Staff Capacity and Knowledge
- 13 Provide Technical Assistance to Support Small and Rural Communities

Programming Delays and Funding Source Challenges

Lengthy Environmental Reviews

Inadequate Internal and External Coordination

Difficulties Competing for Limited Funding

Design Guidelines Insensitive to Context

Insufficient Staff Capacity or Technical Knowledge

Inadequate Community Input

Strategies for Accelerating Multimodal Project Delivery

GUIDE 1 - STRATEGIES RELATED TO PROJECT DEVELOPMENT PHASE

PROJECT DEVELOPMENT PHASE

MOST RELEVANT STRATEGIES

Planning and Project Scoping

- 1 Develop Prioritization Methods for Multimodal Projects
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Environmental Review

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Design

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Funding

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GUIDE 2 – STRATEGIES RELATED TO KEY CHALLENGES

KEY CHALLENGES

MOST RELEVANT STRATEGIES

Programming Delays and Funding Source Challenges

- 1 Develop Prioritization Methods for Multimodal Projects
- 2 Allow Flexibility in Funding Smaller, Low-Cost Projects and Project Elements
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement
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Difficulties Competing for Limited Funding

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Inadequate Internal and External Coordination

- 3 Identify Multimodal Needs Early in Project Development
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement

Inadequate Community Input

- 4 Improve Public Involvement

Design Guidelines Insensitive to Context

- 4 Improve Public Involvement
- 7 Incorporate Context-Based Design into State Design Processes and Manuals
- 8 Apply and Leverage the Innovative Multimodal Treatments in the MUTCD

Lengthy Environmental Reviews

- 4 Improve Public Involvement
- 5 Make Appropriate and Effective Use of Categorical Exclusions (CEs)
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement

Insufficient Staff Capacity or Technical Knowledge

- 8 Apply and Leverage the Innovative Multimodal Treatments in the MUTCD
- 12 Increase Staff Capacity and Knowledge
- 13 Provide Technical Assistance to Support Small and Rural Communities

Strategies for Accelerating Multimodal Project Delivery

3 IDENTIFY MULTIMODAL NEEDS EARLY IN PROJECT DEVELOPMENT

STRATEGY OVERVIEW

Identifying multimodal needs early in the project development process allows the early incorporation of project elements to address those needs. Identifying these needs during planning and project scoping can be critical to avoiding delays during design, right-of-way acquisition, and funding. Early incorporation of multimodal elements allows potential solutions to be more comprehensively evaluated as they are developed and can also help uncover right-of-way acquisition needs earlier in the project development process.

Multimodal projects or elements that require the purchase of ROW can be challenging to deliver in a timely manner.

While most States are legally able to purchase ROW for multimodal elements or projects, most typically avoid purchasing ROW for multimodal projects as standard practice. One exception is Massachusetts DOT, which routinely purchases ROW for sidewalks and bicycle facilities. They identify ROW needs during the corridor planning phase of a project.

Local plans (for example, comprehensive plans, local multimodal plans and capital programs, regional transportation plans and transit agency plans) can be good sources for understanding the multimodal needs of areas or projects.

CONSTRAINTS/ CHALLENGES ADDRESSED

- Programming delays and funding sources
- Inadequate internal and external coordination

EFFECTIVENESS

- Understanding a project's multimodal needs early on can eliminate the need to look at new alternatives or new project elements during later phases of project development. As a result, the time needed to deliver a project and the potential for rework in the NEPA review and design phases can be reduced.

Innovations are needed to accelerate purchasing right-of-way (ROW) for multimodal projects. Some agencies are accelerating project delivery by purchasing easements for multimodal projects and others are working with property owners to donate land for multimodal elements or projects. One example of this was the Central Platte Valley Light Rail Project in Denver, CO. The Regional Transportation District (RTD) received \$1.4 M in land donations for the right-of-way needed for the expansion of the light rail Line C.

The ability to routinely purchase ROW for multimodal projects is critical to providing multimodal networks. While this Workbook represents a snapshot in time, FHWA encourages agencies to share existing and emerging best practices for purchasing ROW for multimodal projects.

APPLICABILITY & TRANSFERABILITY

- The use of context-based planning and design tools that inform planners and designers about the multimodal needs of project has widespread applicability.

EXAMPLES AND CASE STUDIES

A Oregon DOT developed an Active Transportation Plan that inventoried bicycle and pedestrian facilities on Region 1 (Portland-area) State highways and identified gaps and deficiencies in the active transportation network. Department staff worked with the public to develop a set of evaluation criteria and then applied the criteria in developing a prioritized pedestrian and bicycle network. This framework is being used by Region 1 as projects are implemented.

accommodations for individuals with disabilities; local and regional pedestrian, bicycle, and greenways plans; multimodal safety problems; school zones and school access; railroad crossings; freight patterns; and airport access.

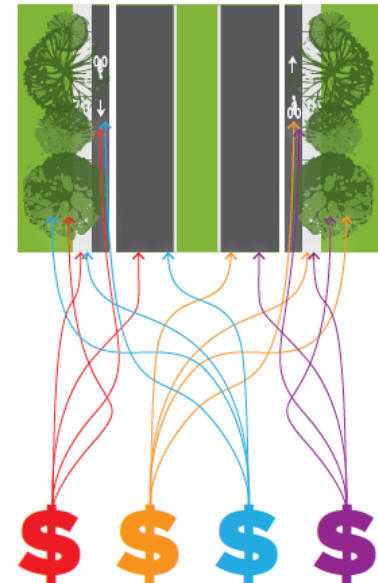
This graphic is used by FDOT to illustrate how different multimodal project elements can utilize different types of funding.

B FDOT District 4 Multimodal Screening Checklist (MMSC) – District 4 (serving five counties in southeast Florida) uses a Multimodal Screening Checklist (MMSC) to identify the full range of multimodal needs prior to developing the scope or budget for all projects on State roadways. The District coordinates with local governments, transit providers, and regional transportation planning organizations to identify and document the full range of multimodal needs for all projects, including capital projects, maintenance and resurfacing projects, traffic operations projects, and safety projects.

This approach helps the District avoid reworking the project design later in the project development process, which would typically require having to find additional funding for the project. The District uses this approach for all of its projects, including maintenance and resurfacing projects.

This checklist aims to implement FDOT's Complete Streets policy (<http://www.flcompletestreets.com/000-625-017-a.pdf>). This policy recognizes that complete streets require designs that consider local land development patterns, built form, and context-based roadway design speed. The policy's goal is to maintain safety and mobility while serving the transportation needs of users of all ages and abilities.

The MMSC gathers and documents information related to passenger access to transit and levels of transit service; corridor lighting;



Strategies for Accelerating Multimodal Project Delivery

V. Relevant Federal Policies and Resources

There are numerous relevant resources and Federal policies that offer guidance and real-world examples of projects that have applied this guidance. These policies and resources are listed and described below.

Annotated Resources/Policies

Project Development Phase: Planning and Project Scoping

Federal Highway Administration (FHWA) - Use of Federal Funds for Bicycle and Pedestrian Efforts

<https://www.transportation.gov/mission/healthy-use-federal-funds-bicycle-pedestrian-efforts>

Measures the percentage of Federal transportation dollars that go to bicycle and pedestrian infrastructure projects

FHWA - Bicycle and Pedestrian Program

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/

Identifies transportation funding programs with flexibility to fund pedestrian and bicycle projects and activities from several transportation funding programs.

FWHA - Fiscal Management Information System. Federal-Aid Highway Program Funding for Pedestrian and Bicycle Facilities and Programs

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/bipedfund.cfm

Summarizes Federal-Aid Highway Program funding for pedestrian and bicycle facilities and programs by year and by State.

FHWA - Guidebook for Measuring Multimodal Network Connectivity

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_connectivity/

The Guidebook for Measuring Multimodal Network Connectivity provides methods and measures to support transportation planning and programming decisions. It includes references and illustrations of current practices, including materials from five case studies conducted as part of the research process.

FHWA - Transportation Alternatives Set-Aside Implementation Guidance

https://www.fhwa.dot.gov/environment/transportation_alternatives/guidance/guidance_2016.cfm

Overview of Fixing America's Surface Transportation (FAST) Act and Surface Transportation Block Grant Program funding for transportation alternatives, including program purpose, funding, project eligibility, and competitive selection process.

FHWA - Incorporating On-Road Bicycle Networks Into Resurfacing Projects

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/

Identifies least cost strategies to capture multimodal network improvements, specifically by incorporating them into other ongoing and routine activities.

FHWA - Bike Network Mapping Idea Book

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/bikemap_book/

Identifies how a transportation agency can better integrate existing and proposed pedestrian and bicycle network maps into their planning process, to reduce project delay and capture both proactive and reactive opportunities.

Federally Funded Early Acquisition Project FAQ

https://www.fhwa.dot.gov/real_estate/policy_guidance/feefundfaq.cfm

Addresses the acquisition of real property—including a specific parcel, a portion of a transportation corridor, or an entire corridor—in advance of the completion of the environmental review process under the National Environmental Policy Act.

Project Development Phase: Environmental Review

Moving Ahead for Progress in the 21st Century Act, P.L. 112-141, 126 Stat. 405, Sec. 1318(d)

40 CFR parts 1500 - 1508

DOT Order 5610.1C

23 CFR 771.117

FHWA - Additional Flexibilities in Categorical Exclusions Memorandum. May 22, 2017.

https://www.environment.fhwa.dot.gov/legislation/nepa/memo_additional-flex.aspx

Memorandum including a compiled list of activities that may be undergoing more detailed NEPA processing than required by law, which should qualify as categorical exclusions under 23 CFR 771.117(c)

American Association of State Highway and Transportation Officials Programmatic Agreement Toolkit

The toolkit presents information, guidance, and recommendations on developing and implementing programmatic agreements among State DOTs, the FHWA, and agencies responsible for the protection of environmental resources. Programmatic agreements are intended to “reduce unnecessary project delays, including delays caused by staffing constraints, and to amend rules and policies where needed without compromising environmental quality”.

https://environment.transportation.org/documents/programmatic_agreement_toolkit/

Project Development Phase: Design

FHWA - Manual on Uniform Traffic Control Devices (MUTCD)

<https://mutcd.fhwa.dot.gov>

Defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel

FHWA - Revisions to the Controlling Criteria for Design and Documentation for Design Exceptions Memorandum. May 5, 2016.

<https://www.fhwa.dot.gov/design/standards/160505.cfm>

Reduced the number of controlling criteria on low speed roadways

Pedestrian and Bicycle Information Center - Design Resource Index

www.pedbikeminfo.org/planning/facilities_designresourceindex.cfm

Defines the specific location of information in key national design manuals for various pedestrian and bicycle design treatments



13 Strategies for Accelerating Project Delivery

Planning &
Project Scoping

Environmental
Review

Design

Funding



PLANNING AND PROJECT SCOPING AND SELECTION

- 1 DEVELOP PRIORITIZATION METHODS FOR MULTIMODAL PROJECTS**
- 2 ALLOW FLEXIBILITY IN FUNDING SMALLER, LOW-COST PROJECTS AND PROJECT ELEMENTS**
- 3 IDENTIFY MULTIMODAL NEEDS EARLY IN PROJECT DEVELOPMENT**
- 4 IMPROVE PUBLIC INVOLVEMENT**

3

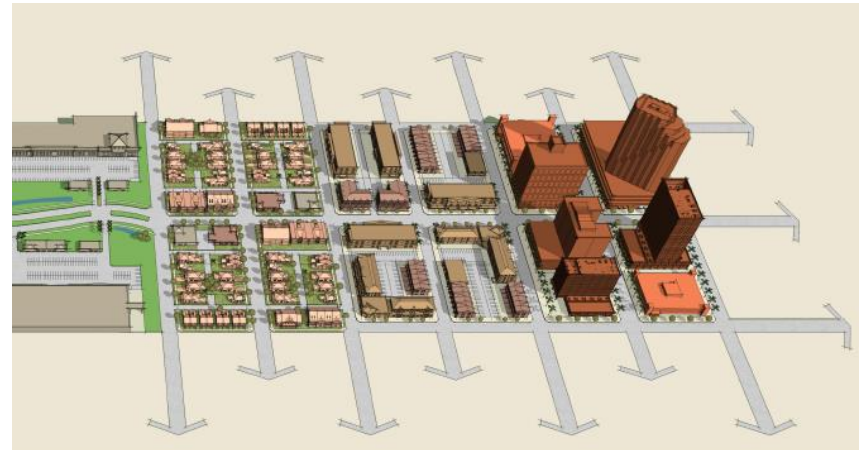
IDENTIFY MULTIMODAL NEEDS EARLY IN PROJECT DEVELOPMENT

Strategy Overview

- Context-sensitive approach
- Identify full range of users
- Establish multimodal elements as part of the Purpose and Need
- Planning & Environmental Linkages (PEL)

Challenges Addressed

- Difficulties competing for limited funding
- Inadequate internal and external coordination



Strategy Overview

- Gather meaningful input early
- Engage broad and diverse group of stakeholders
- Utilize innovative and interactive tools/techniques

Challenges Addressed

- Inadequate community input
- Design guidelines insensitive to context
- Lengthy environmental reviews

Example Tools & Techniques

- Virtual meetings
- Pop-up events
- Graphics & renderings
- Walking & biking tours
- Virtual reality
- Community events
- Online interactive maps
- Translation & interpretation

2

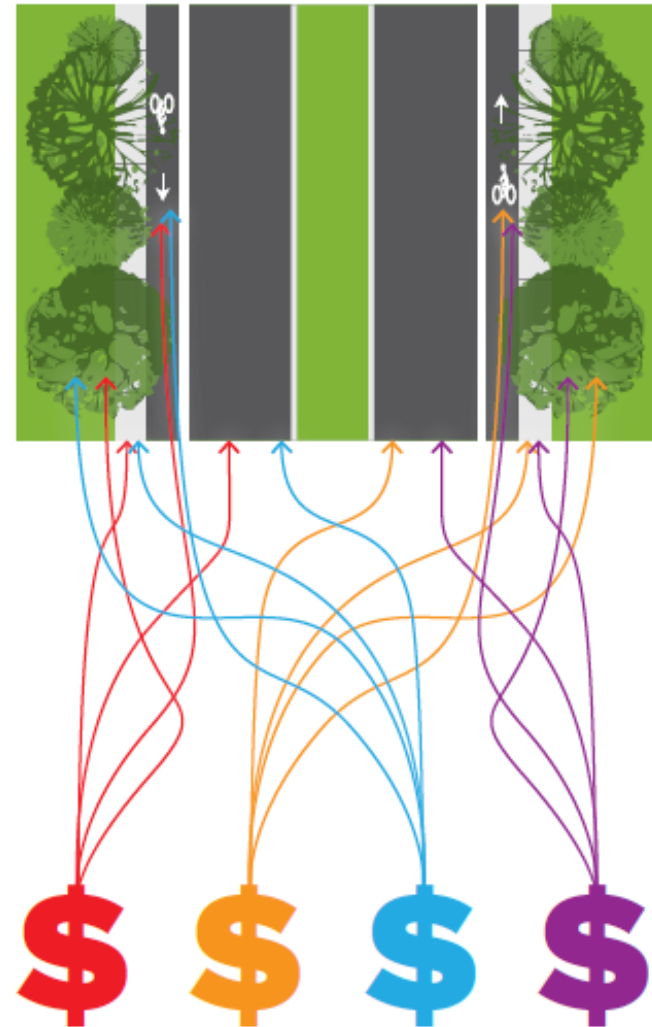
ALLOW FLEXIBILITY IN FUNDING SMALLER, LOW-COST PROJECTS AND PROJECT ELEMENTS

Strategy Overview

- Context-sensitive approach
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Challenges Addressed

- Programming delays and funding source challenges



Strategy Overview

- Two project types:
 - Standalone projects with dedicated funding
 - Multimodal elements of larger projects
- Develop process and criteria to identify eligible projects for grant funding
- Implement scoring process that includes multimodal prioritization criteria or weighting

Challenges Addressed

- Programming delays and funding source challenges
- Difficulties competing for limited funding

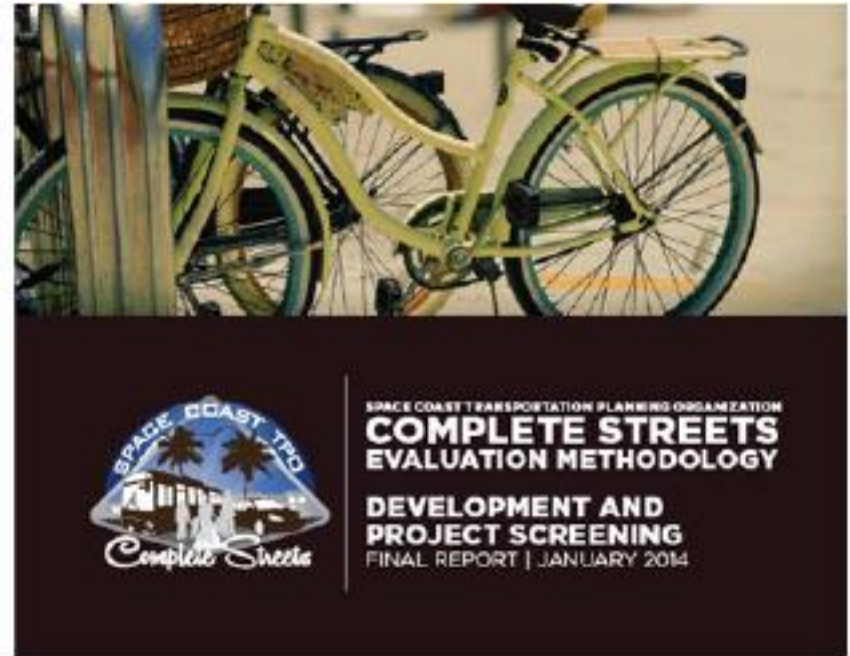
Example: Space Coast Transportation Planning Organization – Complete Streets



Space Coast Transportation Planning Organization (SCTPO) created their Complete Streets program to identify, prioritize and fund multimodal projects within their region. They apply a set of criteria that include both transportation and land use factors to foster successful multimodal projects. Some of the criteria include:

- Multimodal safety
- Land uses/generators of multimodal trips
- Permeability or number of pedestrian crossing opportunities of the existing roadway
- Posted and design speed of roadway
- Location within defined redevelopment areas

To be eligible for funding, local government applicants must have an adopted Complete Streets policy.



Example: Virginia DOT – SMART SCALE

Safety

District

Counties Cities

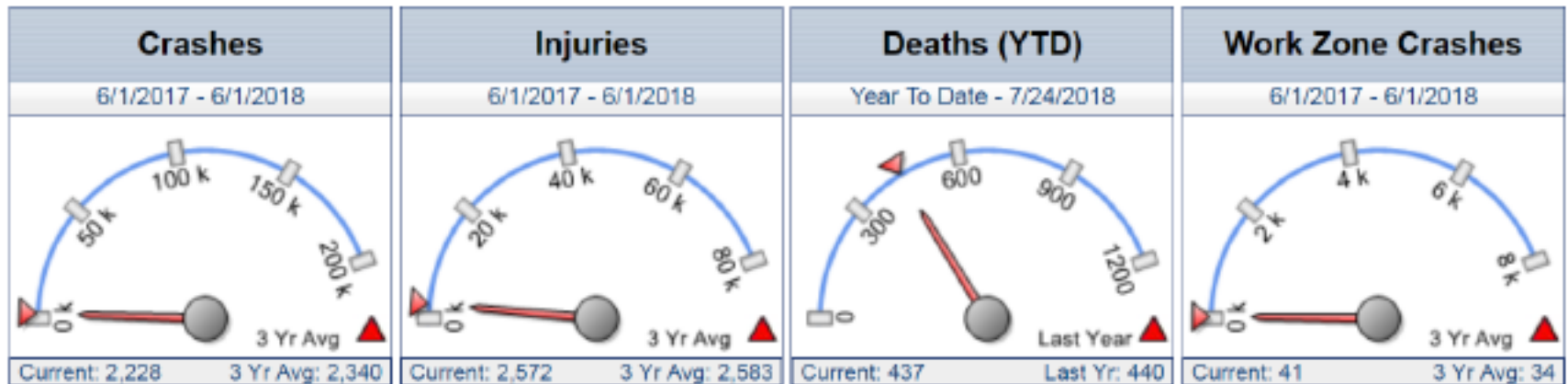
Focus Area

All Districts ▼

All Counties ▼

Bike/Pedestrian ▼

(not applied to YTD Deaths)



VDOT's Smart Scale Dashboard Focused on Bicycle and Pedestrian Safety



ENVIRONMENTAL REVIEW

5 MAKE APPROPRIATE AND EFFECTIVE USE OF CATEGORICAL EXCLUSIONS

6 INTEGRATE MULTIMODAL ELEMENTS IN THE PROJECT'S PURPOSE AND NEED STATEMENT



www.pedbikeimages.org /
Seattle DOT

Strategy Overview

- Most bicycle and pedestrian projects may be processed as CEs under NEPA
- Must meet criteria under 23 CFR 771.117 - no unusual circumstances
- Examples of projects include:
 - Construction of bicycle and pedestrian lanes, paths, trails, and facilities
 - Projects that would take place entirely within the existing operational right-of-way
 - Projects that receive less than \$5 M in Federal Funds
- Programmatic CE (PCE) Agreements provide State DOTs with the authority to make a NEPA CE determination and approval on FHWA's behalf

Challenges Addressed

- Lengthy environmental reviews

Strategy Overview

- Needs are the basis for developing project alternatives
- Document the needs of all potential project users to inform:
 - Range of alternatives
 - Scope of environmental reviews
 - Public engagement strategies
 - Types and level of funding

Challenges Addressed

- Lengthy environmental reviews
- Programming delays and funding source challenges
- Inadequate internal and external coordination

Example: PennDOT Interstate 95/Girard Avenue Interchange

A

NEPA document included pedestrian, bicycle and transit (access to Girard Avenue Trolley needs

- Alternatives included:
 - Multimodal access parallel to and underneath I-95 with appropriate pavement markings, bike lanes, sidewalks, curb ramps, and lighting
 - Relocated Delaware Avenue and Richmond Street with lower design speeds, minimal lane widths, and green-colored bicycle lanes
 - Widened sidewalks and connections to a new trail system through the interchange
 - Reconstruction of the Route 15 Girard Avenue Trolley under an agreement with SEPTA.



DESIGN



7

INCORPORATE CONTEXT-BASED DESIGN INTO STATE DESIGN PROCESSES AND MANUALS



8

APPLY AND LEVERAGE THE INNOVATIVE MULTIMODAL TREATMENTS IN MUTCD



www.pedbikeimages.org/
New York City DOT



INCORPORATE CONTEXT-BASED DESIGN INTO STATE DESIGN PROCESSES AND MANUALS

Strategy Overview

- Leverage federal design flexibility
- Influence street design across all state roadways
- Recognize relationship between transportation and land use
- Use flexibility in guidance where appropriate

Challenges Addressed

- Design Guidelines Insensitive to Context

Strategy Overview

- Use Experimentation Requests to test innovations and designs
- Measure and evaluate device performance
- Adopt and recognize devices with Interim Approval status

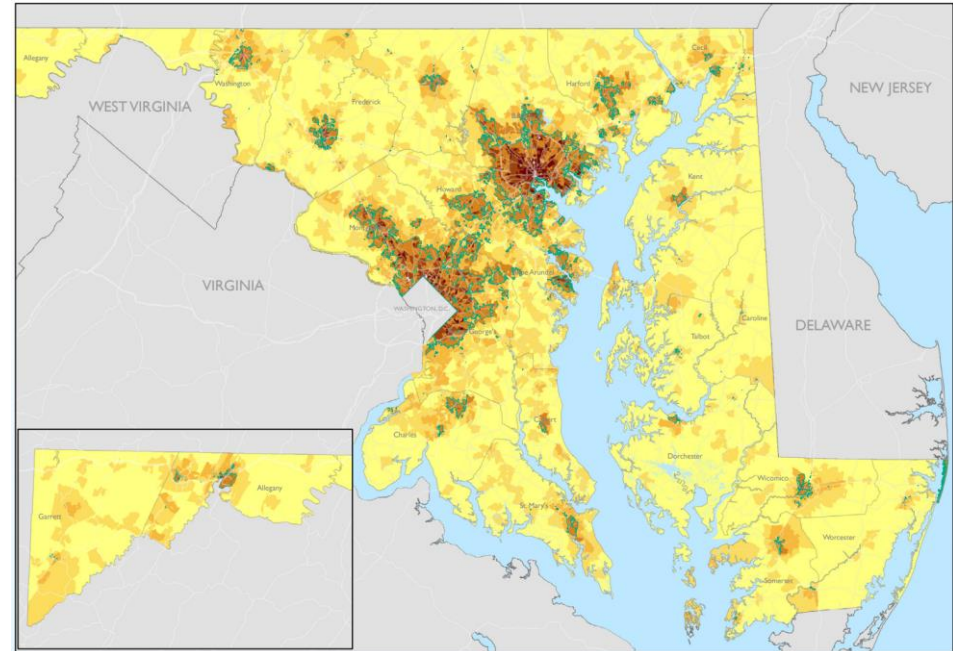
Challenges Addressed

- Design Guidelines Insensitive to Context
- Insufficient Staff Capacity or Technical Knowledge

Example: Maryland Bicycle and Pedestrian Priority Areas



Maryland DOT designated portions of the State as Pedestrian and Bicycle Priority Areas (BPPAs) to facilitate the coordinated planning of bicycle and pedestrian facilities in areas with a high potential for bicycling and walking. BPPAs were identified based on demographic and land use characteristics, rather than existing counts of people walking and bicycling. This distinction is important because it acknowledges an inherent demand for non-motorized travel in places where there is a higher intensity of trip generators such as housing, schools, shops, and transit facilities. BPPAs can receive a number of special considerations, including focused recommendations for roadway geometric and operational guidelines that align local and State bicycle and pedestrian planning with design.



FUNDING

9

PROMOTE FLEXIBILITY IN EXISTING FUNDING SOURCES

10

ALLOCATE NEW FUNDING SOURCES TO IMPLEMENT MULTIMODAL INFRASTRUCTURE AND LEVERAGE EXISTING PROGRAMS

9

PROMOTE FLEXIBILITY IN EXISTING FUNDING SOURCES

- Bike/ped projects can be funded through many FHWA and FTA programs
- The tremendous flexibility in using federal funds for multimodal projects is often not fully understood or utilized
- See FHWA webpage addressing funding misconceptions: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/misconceptions.cfm
- Some funding categories have special requirements (see workbook)

Pedestrian and bicycle projects are potentially eligible to receive funds through these surface transportation programs:

BUILD: Better Utilizing Investments to Leverage Development Transportation Discretionary Grant program

INFRA: Infrastructure for Rebuilding America

TIFIA: Transportation Infrastructure Finance and Innovation Act (loans)

FTA: Federal Transit Administration Capital Funds

ATI: Associated Transit Improvement (1% set-aside of FTA)

CMAQ: Congestion Mitigation and Air Quality Improvement Program

HSIP: Highway Safety Improvement Program

NHPP: National Highway Performance Program

STBG: Surface Transportation Block Grant Program

TA: Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program)

RTP: Recreational Trails Program

PLAN: Statewide Planning and Research (SPR) or Metropolitan Planning funds (PL)

NHTSA 402: State and Community Highway Safety Grant Program

NHTSA 405: National Priority Safety Programs (Nonmotorized safety)

FLTTP: Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program, Nationally Significant Federal Lands and Tribal Projects)

- Transportation agencies have used a variety of new or previously untapped programs to fund multimodal projects
- Public/private partnerships (P3s) can help deliver projects sooner and with less Federal investment
- New programs can consolidate funding sources to focus on multimodal infrastructure (for instance, California Active Transportation Program)
- Existing funding programs (for instance, maintenance resurfacing) can provide new opportunities
- Discretionary programs can fund projects that might not fit traditional categories

Example: Pennsylvania Community Transportation Initiative (PCTI)

- Temporary program using PennDOT Secretary's discretionary funds
- Created to promote a project-driven vision of "smart transportation"
- Encouraged local initiative and innovative projects
- Result: In 2009, 50 projects, \$59 million
- Most projects had at least some bike/ped component
- Related program (still in existence): Delaware Valley Regional Planning Commission (DVRPC) Transportation and Community Development Initiative



MULTIPLE PHASES OF PROJECT DEVELOPMENT

11

COMMUNICATE BENEFITS OF MULTIMODAL PROJECTS AND IMPROVE PERFORMANCE DATA FOR EVALUATING THEM

12

INCREASE STAFF CAPACITY AND KNOWLEDGE

13

PROVIDE TECHNICAL ASSISTANCE TO SUPPORT SMALL AND RURAL COMMUNITIES

Strategy Overview

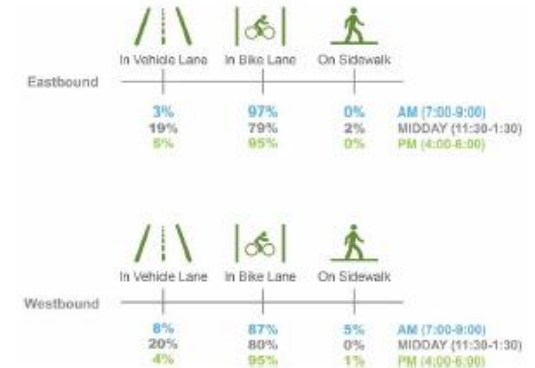
- Multimodal projects have wide-ranging benefits, but those can be hard to capture and communicate



- Methods are available to properly document outcomes and measure successes to justify further investment

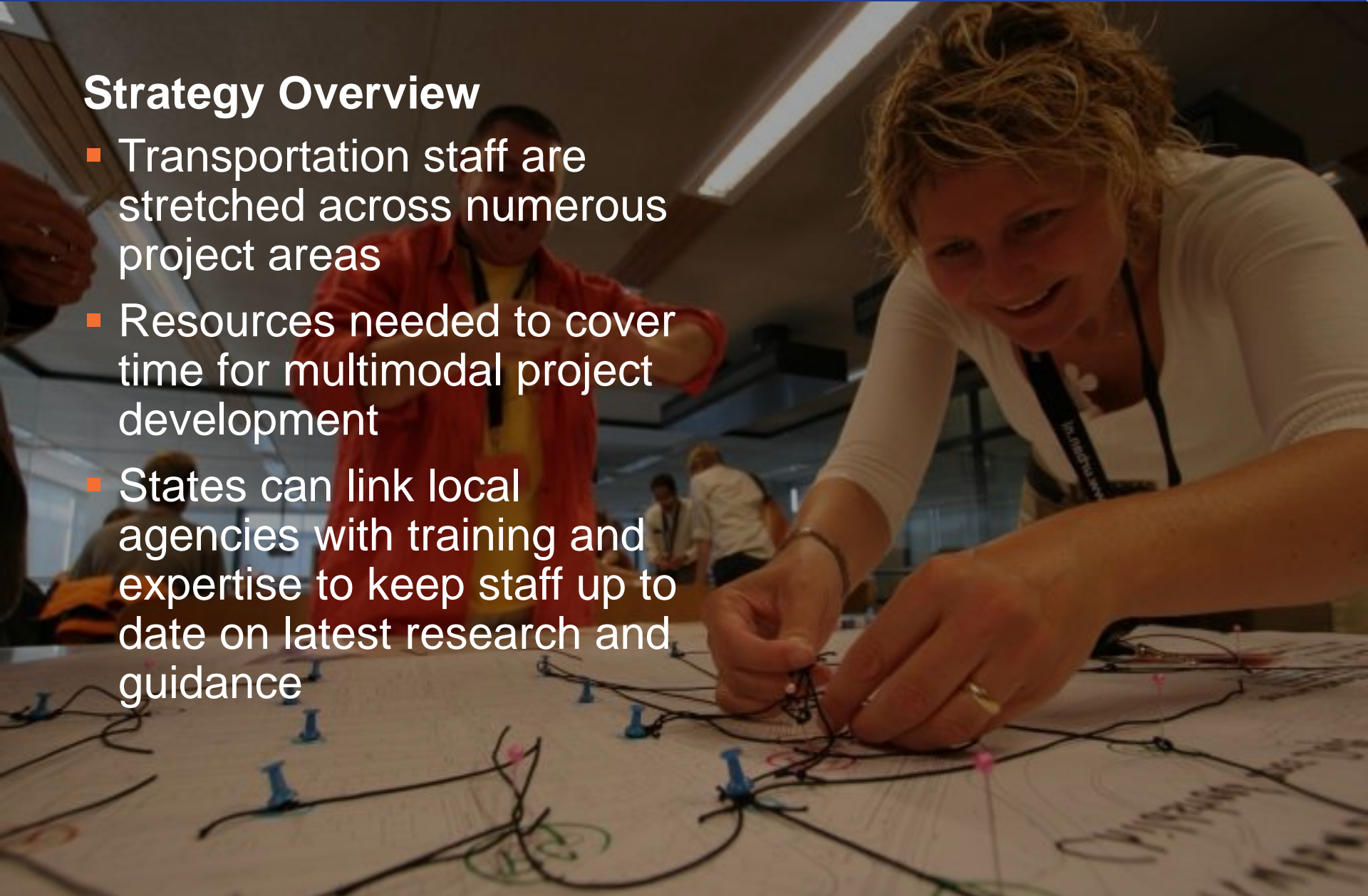


Figure 2: Data Summary Example



Strategy Overview

- Transportation staff are stretched across numerous project areas
- Resources needed to cover time for multimodal project development
- States can link local agencies with training and expertise to keep staff up to date on latest research and guidance



Example: California Active Transportation Resource Center

- The Active Transportation Resource Center connects CA communities with experts in planning, public health, behavioral programs and design/engineering.
- Provides resources and training for both infrastructure and non-infrastructure projects

Examples of Resources Offered

Disadvantaged Community Training

Understanding Bike Transportation

Pedestrian Facility Design

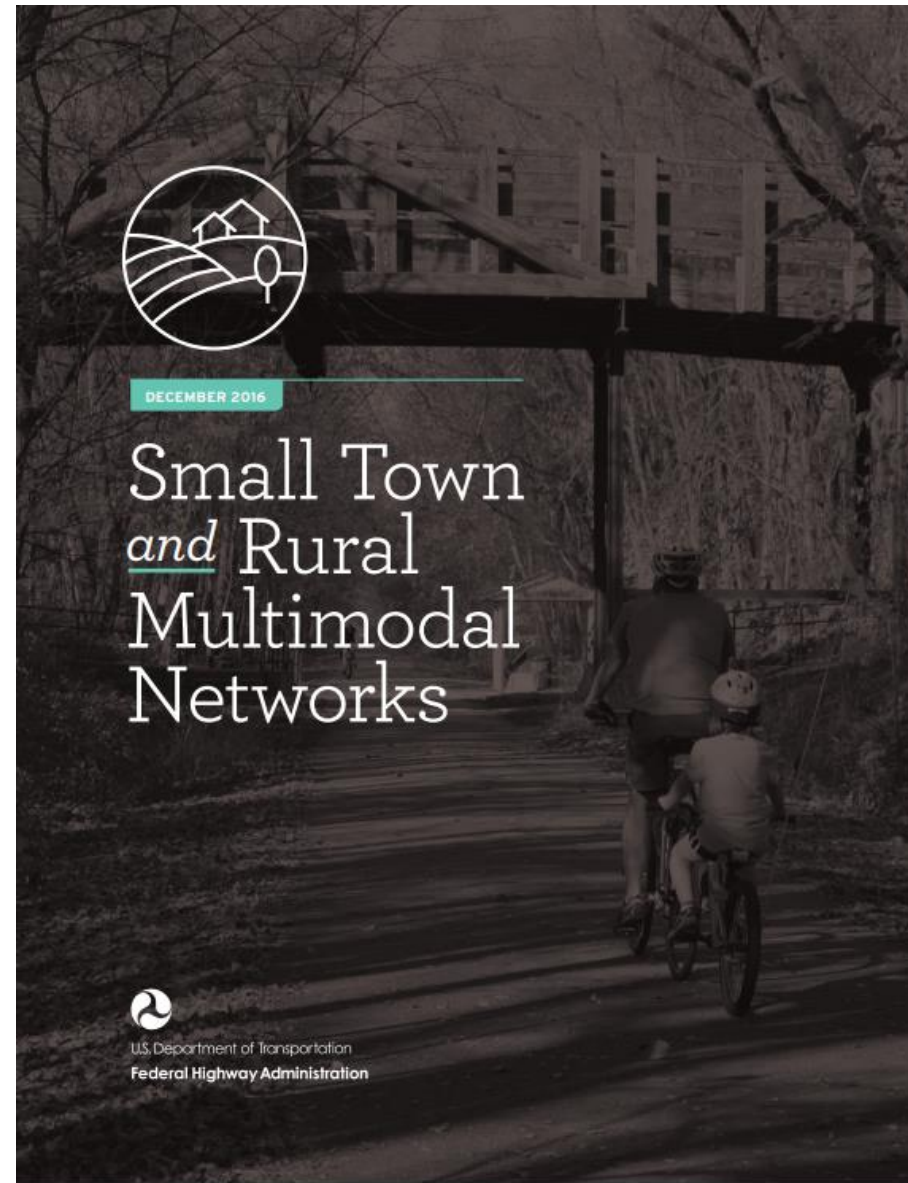
Project Implementation Training

Active Transportation Planning and Scoping



Strategy Overview

- Rural communities are especially limited in staff and funding for multimodal projects
- Targeted programs can help equip these communities with resources needed to plan and implement multimodal projects



Strategies for Accelerating Multimodal Project Delivery

GUIDE 1 - STRATEGIES RELATED TO PROJECT DEVELOPMENT PHASE

PROJECT DEVELOPMENT PHASE

MOST RELEVANT STRATEGIES

Planning and Project Scoping

- 1 Develop Prioritization Methods for Multimodal Projects
- 2 Allow Flexibility In Funding Smaller, Low-Cost Projects and Project Elements
- 3 Identify Multimodal Needs Early In Project Development
- 4 Improve Public Involvement
- 11 Communicate Benefits of Multimodal Projects and Improve Performance Data for Evaluating Them
- 12 Increase Staff Capacity and Knowledge

Environmental Review

- 5 Make Appropriate and Effective Use of Categorical Exclusions (CEs)
- 6 Document Multimodal Elements In the Project's Purpose and Need Statement
- 12 Increase Staff Capacity and Knowledge
- 13 Provide Technical Assistance to Support Small and Rural Communities

Design

- 7 Incorporate Context-Based Design Into State Design Processes and Manuals
- 8 Apply and Leverage the Innovative Multimodal Treatments In the MUTCD
- 12 Increase Staff Capacity and Knowledge
- 13 Provide Technical Assistance to Support Small and Rural Communities

Funding

- 1 Develop Prioritization Methods for Multimodal Projects
- 2 Allow Flexibility In Funding Smaller, Low-Cost Projects and Project Elements
- 9 Promote Flexibility In Existing Funding Sources
- 10 Allocate New Funding Sources to Implement Multimodal Infrastructure and Leverage Existing Programs
- 11 Communicate Benefits of Multimodal Projects and Improve Performance Data for Evaluating Them
- 13 Provide Technical Assistance to Support Small and Rural Communities

GUIDE 2 – STRATEGIES RELATED TO KEY CHALLENGES

KEY CHALLENGES

MOST RELEVANT STRATEGIES

Programming Delays and Funding Source Challenges

- 1 Develop Prioritization Methods for Multimodal Projects
- 2 Allow Flexibility in Funding Smaller, Low-Cost Projects and Project Elements
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement
- 9 Promote Flexibility in Existing Funding Sources
- 10 Allocate New Funding Sources to Implement Multimodal Infrastructure and Leverage Existing Programs
- 13 Provide Technical Assistance to Support Small and Rural Communities

Difficulties Competing for Limited Funding

- 1 Develop Prioritization Methods for Multimodal Projects
- 3 Identify Multimodal Needs Early in Project Development
- 9 Promote Flexibility in Existing Funding Sources
- 10 Allocate New Funding Sources to Implement Multimodal Infrastructure and Leverage Existing Programs
- 11 Communicate Benefits of Multimodal Projects and Improve Performance Data for Evaluating Them
- 13 Provide Technical Assistance to Support Small and Rural Communities

Inadequate Internal and External Coordination

- 3 Identify Multimodal Needs Early in Project Development
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement

Inadequate Community Input

- 4 Improve Public Involvement

Design Guidelines Insensitive to Context

- 4 Improve Public Involvement
- 7 Incorporate Context-Based Design into State Design Processes and Manuals
- 8 Apply and Leverage the Innovative Multimodal Treatments in the MUTCD

Lengthy Environmental Reviews

- 4 Improve Public Involvement
- 5 Make Appropriate and Effective Use of Categorical Exclusions (CEs)
- 6 Document Multimodal Elements in the Project's Purpose and Need Statement

Insufficient Staff Capacity or Technical Knowledge

- 8 Apply and Leverage the Innovative Multimodal Treatments in the MUTCD
- 12 Increase Staff Capacity and Knowledge
- 13 Provide Technical Assistance to Support Small and Rural Communities

Discussion

⇒ Send us your questions



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