

IMPLEMENTING COMPLETE STREETS

MAKING IT HAPPEN

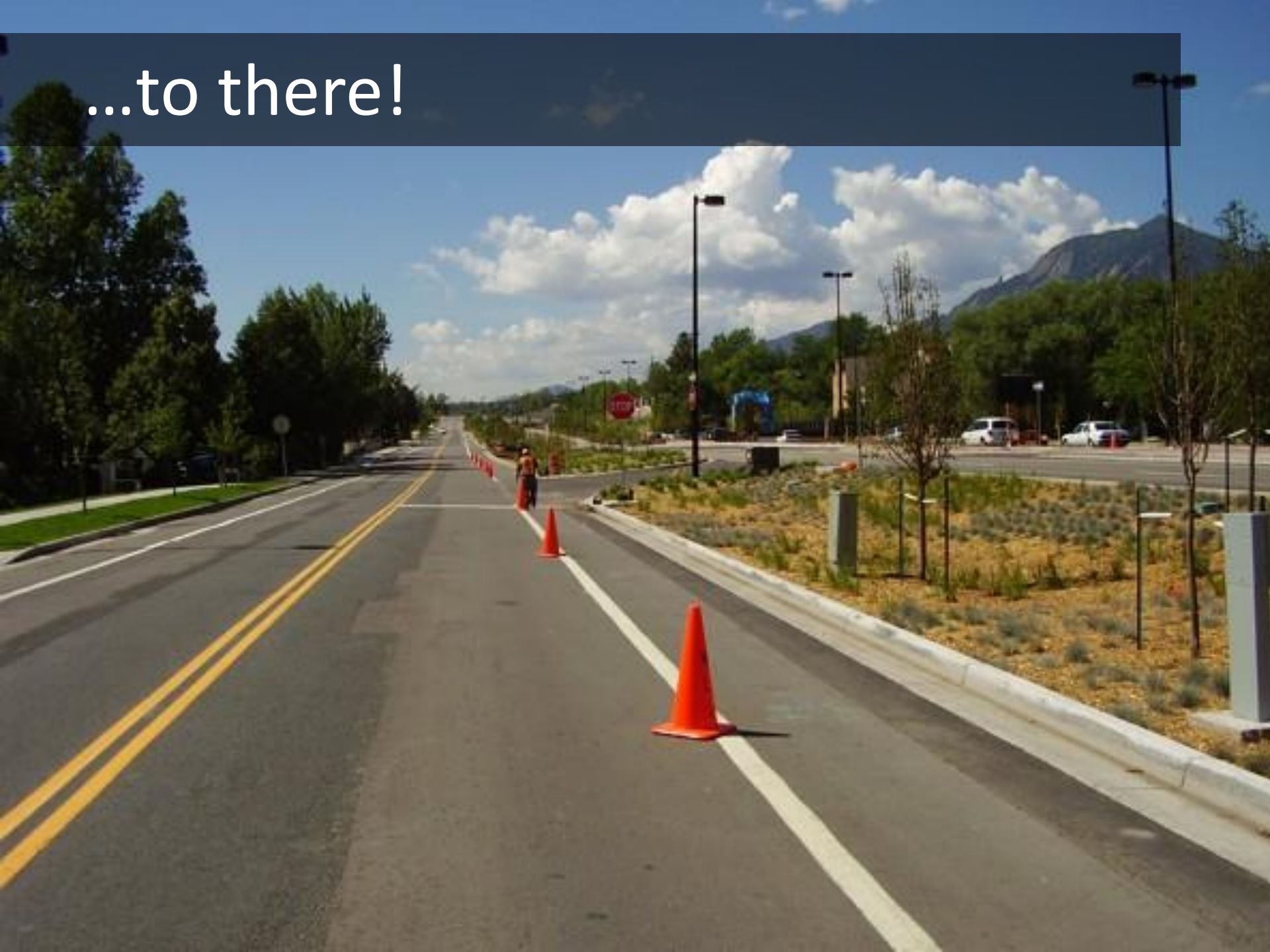
(Module 6)

- **Organize implementation**
- **Process and procedure changes**
- **Update design guidance**
- **Offer training opportunities**
- **Create new performance measures**



Getting from here...





...to there!

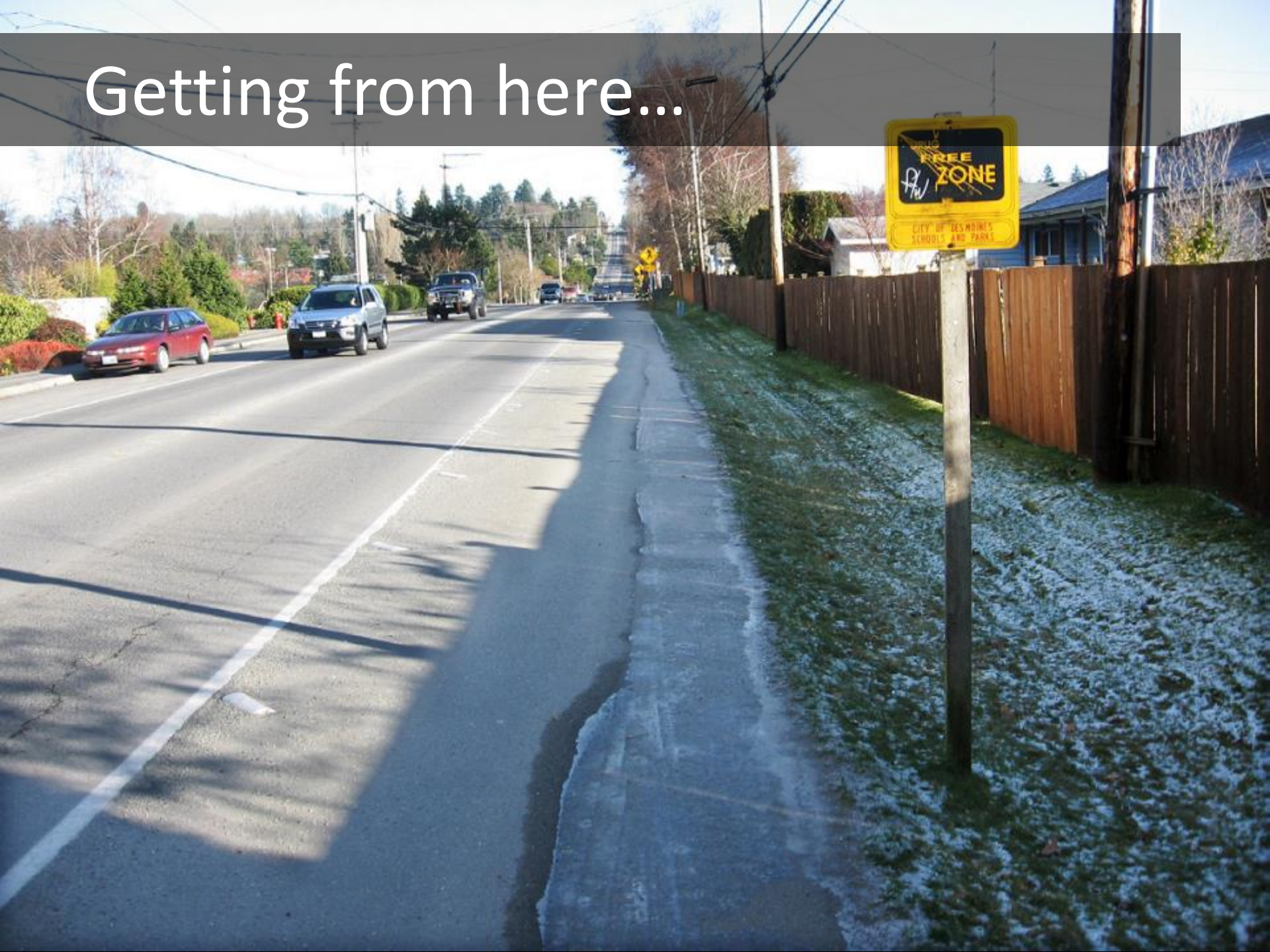
Getting from here...



...to there!



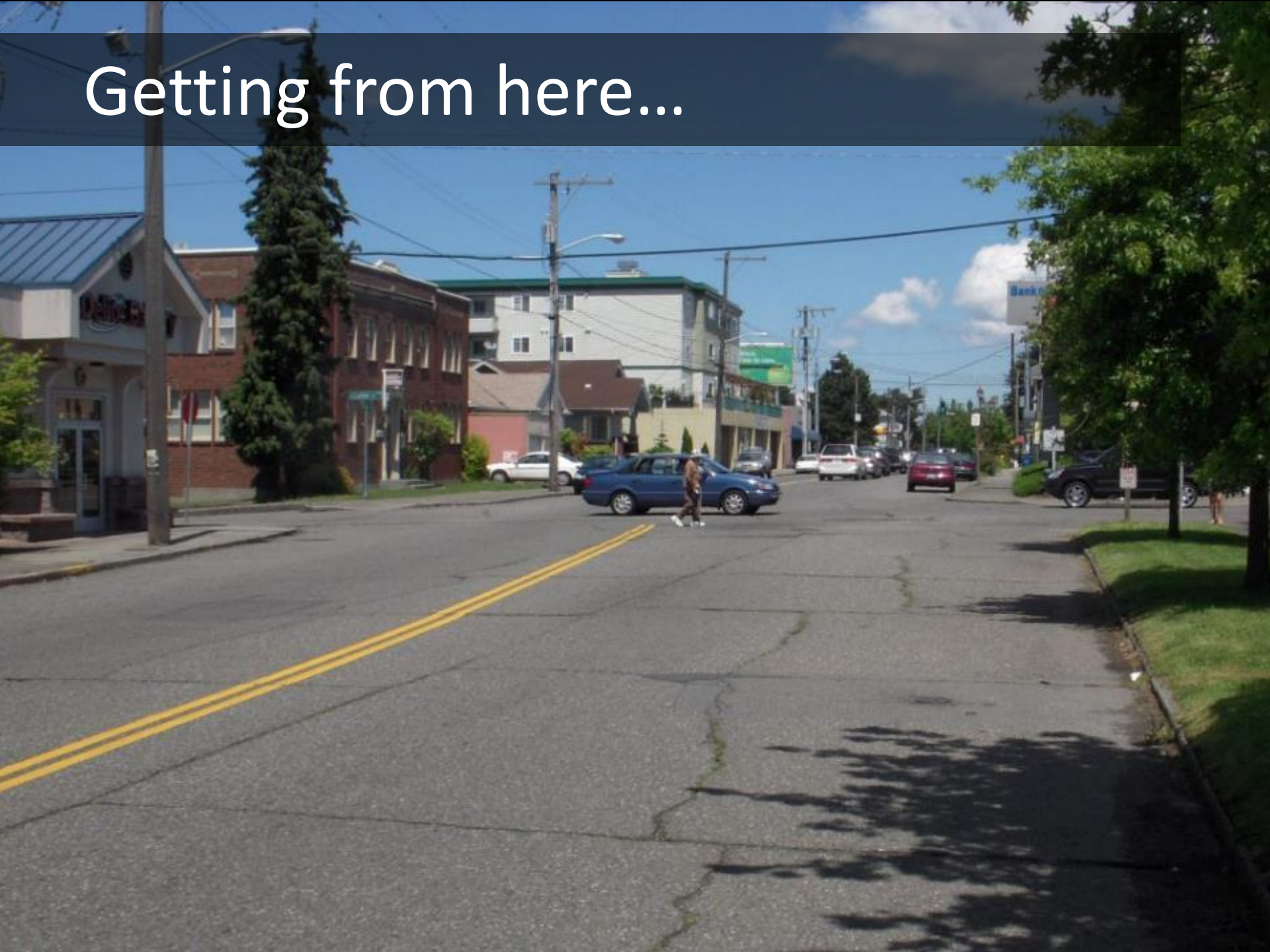
Getting from here...



...to there!



Getting from here...



...to there!



From policy to practice

Effective implementation means:

1. Organize implementation activities
2. Restructure procedures, policies, and programs
3. Rewrite or update design guidance
4. Offer training opportunities to transportation staff, community leaders, and the general public
5. Create new performance measures



1. Organize implementation

**Committee or person to “guide” activities,
ensure accountability**

External or internal; new or new responsibilities



Implementation Committees

Bring together different departments (buy-in)

Clear coordination and accountability

Need appropriate level of staff

- High-level: authority, demonstrate commitment, but delegates work
- Mid-level: more familiar with projects and stakeholders, but doesn't have authority

Share work in identifying gaps and fixing them

Multi-disciplinary review of exceptions



Implementation Committees

Internal stakeholders:

- Engineering/Public Works
- Transportation planners, land use planners
- Transit agencies
- Accessibility (ADA) compliance
- Parks, recreation, trails
- Economic development
- Public health



Implementation Committees

Internal: Easier to manage expectations, achieve goals

External: Builds stronger community and political will

- State/MPO/other staff
- Bike-walk advocates
- Disability advocates
- Older adult organization
- Realtors & developers
- YMCA/health promotion
- Enviro: Sierra Club
- Smart Growth groups
- Churches/faith-based
- Neighborhood orgs



1. Organize Implementation

Committee or person to “guide” activities,
ensure accountability

External or internal; new or new responsibilities

Benchmarking audit

Checklists, procedures, plans, processes, design
guidance, performance measures



1. Organize Implementation

Committee or person to “guide” activities,
ensure accountability

External or internal; new or new responsibilities

Benchmarking audit

Checklists, procedures, plans, processes, design
guidance, performance measures currently used

Develop a plan



Implementation plans

Best practices:

- List of documents, policies, procedures needing update
- Timeline for action
- Assign responsibilities to people/positions/departments

Clear path forward

Measure internal changes as well as built projects

Communication tool



Implementation plan: Cobb County, GA

Best Practices	Related Documents	Coordination Status	Implementation Goals
Create a Unified Street Design Manual	Development Regulations, Engineering Procedures Manual, Comprehensive Transportation Plan, Zoning Codes, Bike & Pedestrian Plan	Currently no unified design manual exists. Greater flexibility in design is needed. Design should be context sensitive and surrounding coordinated with land uses (See Appendix E for Examples)	Immediate Use ITE CSS to supplement AASHTO guidelines and allow greater design flexibility and begin process for creating Cobb Street Design Manual
			Mid-Term Adopt Design Manual and apply to all County funded projects
			Long-Term Amend Development Regulations and Zoning Code to enforce Design Manual on "by right" development
Clearly Define Street Planning Process	Development Regulations, Engineering Procedures Manual, Zoning Code	Process is not codified in a single document. Process should include all users (Aging, Disabled, Transit, Advocate for Children)	Immediate Create a document that outlines the current street planning process
			Mid-Term Create and adopt a transparent planning process on all County funded projects (e.g. Charlotte, NC 6 step process)
			Long-Term Include adopted process in Design Manual for use in public and private funded projects
Project Prioritization	Comprehensive Transportation Plan, Bike & Pedestrian Plan, SPLOST Program	Projects are appropriately linked to Comprehensive Transportation Plan and the Bicycle & Pedestrian Plan	Immediate Focus prioritization of improvements on access to schools, major activity centers, ADA accessibility in conjunction with safety and congestion
			Mid-Term Link 5 year CIP to implementation strategies from CTP and Bike & Pedestrian Plan
			Long-Term Continue to update CIP based on updates of Transportation Plans

Train Engineers, Planners and Staff on CS Train Engineers, Planners and Staff on CS principles (cont.)	Institute of Transportation Engineers Context Sensitive Solutions, American Association of State Highway Transportation Officials Bicycle & Pedestrian Design Guidance, (Cobb Street Design Manual)	Currently there is not a Complete Streets training program developed for the County	Immediate Provide training through Local and National Complete Streets and CSS Seminars before a formal manual is written
			Mid-Term Continue to provide on going training. When the Design Manual is complete, conduct an orientation session with all personnel
			Long-Term Have new hires attend Complete Streets seminars and training, and Cobb Street Design Manual orientation
Research and Secure Appropriate Funding	Zoning Codes, Design Manual, Capital Improvement Plan, Special Purpose Local Option Sales Tax Program	Funding sources are clearly organized in Capital Improvement Plan and Special Purpose Local Option Sales Tax program	Immediate Apply for Transportation Enhancement and Safe Routes to School funding
			Mid-Term Amend zoning codes to provide incentives to developers that included bike lanes and public sidewalks in new projects. Monitor GDOT, ARC and FHWA for new funding opportunities
			Long-Term Determine what funding will be available after new federal transportation bill has been adopted. Create a funding appendix in Street Design Manual and update regularly
Inter-Departmental Coordination	Capital Improvement Plan, Comprehensive Transportation Plan, Bike and Pedestrian Plan	Coordination exists in County funded projects in initial planning. Additional coordination in the prioritization phase by coordinating plans with other departments and utility companies	Immediate Evaluate what current projects can be consolidated. Determine where road diets can be made on any current repaving projects
			Mid-Term Determine where sidewalk and bike lanes can be installed in conjunction with storm water, sewer, or utility projects

Implementation plan: Cobb County, GA (cont)

Performance Evaluation	Design Manual, Comprehensive Transportation Plan, Bike & Pedestrian Plan, Engineering Procedures Manual	The Engineering Procedures Manual does not require bike or pedestrian counts before or after infrastructure improvements	Immediate Amend the Engineering Procedures Manual to require pedestrian and bicycle counts before sidewalk and bike lane additions/improvements and/or road diets
			Mid-Term Conduct bike and pedestrian counts after major maintenance, construction, or road diets. Measure miles of sidewalk and bike lanes to track progress of expanding bike and pedestrian network. Measure transit ridership and land use changes along streets where improvements are made
			Long-Term Analyze data from bike and pedestrian counts and crash data to determine the effectiveness of improvements and make adjustments where necessary

Implementation plan: MnDOT

Design	What Needs To Be Done	Responsible Party	Timeline for Work Items	Completion Date
	1) Integrate CS into HPDP process	Director of CSS, Web Developer, Tech Support		
	▪ Interview Director of CSS	Project Manager	February, 2010	
	▪ E-Learning module for CSS awareness	Director of CSS	June, 2010	
	▪ Look for opportunity to move CSS webpage to	Tech Support	Feb/March, 2010	March, 2011

Funding/ Planning	What Needs To Be Done	Responsible Party	Timeline for Work Items	Completion Date
	1) Review funding sources and how each can be used/constraints for local projects	Federal Aid Engineers, Government Relations		
	▪ Interview with Federal Aid Engineer	Project Manager		March, 2010
	▪ Develop list of sources	Federal Aid Engineers, Government Affairs	Spring, 2010 & ongoing	
	▪ List ways to access funding & the restrictions		Spring, 2010 & -----	

Training/ Support	What Needs To Be Done	Responsible Party	Timeline for Work Items	C
	1) Integrate CS in existing CSS and flexible design training for Mn/DOT staff	Director of CSS, LTAP Director, Consultants	Enhanced as we go	
	▪ Interview with Director of CSS	Project Manager		Ma
	▪ Overview for speaking engage includes CS	Director of CSS, Technical Support		Jan
	▪ Training module includes CS	Director of CSS, Technical Support		Jan
	▪ Advanced training includes CS	Director of CSS, Technical Support		Jan
	▪			
	▪			
	▪			

2. Process & procedure changes

Update documents to comply with CS

RFPs, plans, regulations, codes, project scope



2. Process & procedure changes

Update documents to comply with CS

RFPs, plans, regulations, codes, project scope

Modify process, procedures, and documents



Holistic project-development process

Existing & Future Conditions

1. Define Land Use Context

2. Define Transportation Context

Goals and Objectives

3. Identify Deficiencies

4. Describe Future Objectives

Decision-making

5. Define Street Type and Initial Cross-Section

6. Describe Trade-Offs and Select Cross-Section



Change project procedures

- Planning
- Programming
- Scoping
- Design
- Construction
- Maintenance*
- Operations*
- Capital projects
 - New, retrofit, reconstruction
- Repair, resurfacing, restoration, rehabilitation
- Bridges



**More opportunities than with CIP/TIP projects!*

Modify procedural documents

- Checklists
 - Roadway design, signals, streetscaping, ADA, development reviews, etc.
- Decision trees
- Design vehicle
- Standard operating procedures
- Project development forms



2. Process & procedure changes

Update documents to comply with CS

RFPs, plans, regulations, codes, project scope

Modify process, procedures, and documents

Prioritize projects that achieve CS goals



Complete Streets prioritization

- Use same budget, but *better*
- Clear and transparent decisions
 - Stakeholder input on criteria
- Align with larger community goals, not just “mobility”
- Award points to multimodal projects, projects that fill gaps in walking, biking networks
- Prioritize for submission to TIP



2. Process & procedure changes

Update documents to comply with CS

RFPs, plans, regulations, codes, project scope

Modify process, procedures, and documents

Prioritize projects that achieve CS goals

Clarify exceptions process, accountability

Implementation committee can help!



2. Process & procedure changes

Update documents to comply with CS

RFPs, plans, regulations, codes, project scope

Modify process, procedures, and documents

Prioritize projects that achieve CS goals

Clarify exceptions process, accountability

**Adopt or update relevant/supporting plans
and policies**



2. Process & procedure changes

Update documents to comply with CS

RFPs, plans, regulations, codes, project scope

Modify process, procedures, and documents

Prioritize projects that achieve CS goals

Clarify exceptions process, accountability

Adopt or update relevant/supporting plans and policies

Take advantage of maintenance and operations opportunities



Opportunity: repaving



Opportunity: repaving

Colorado Springs:

- Bike lanes added after resurfacing projects
- 2-3% of network per year



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& ASSOCIATES

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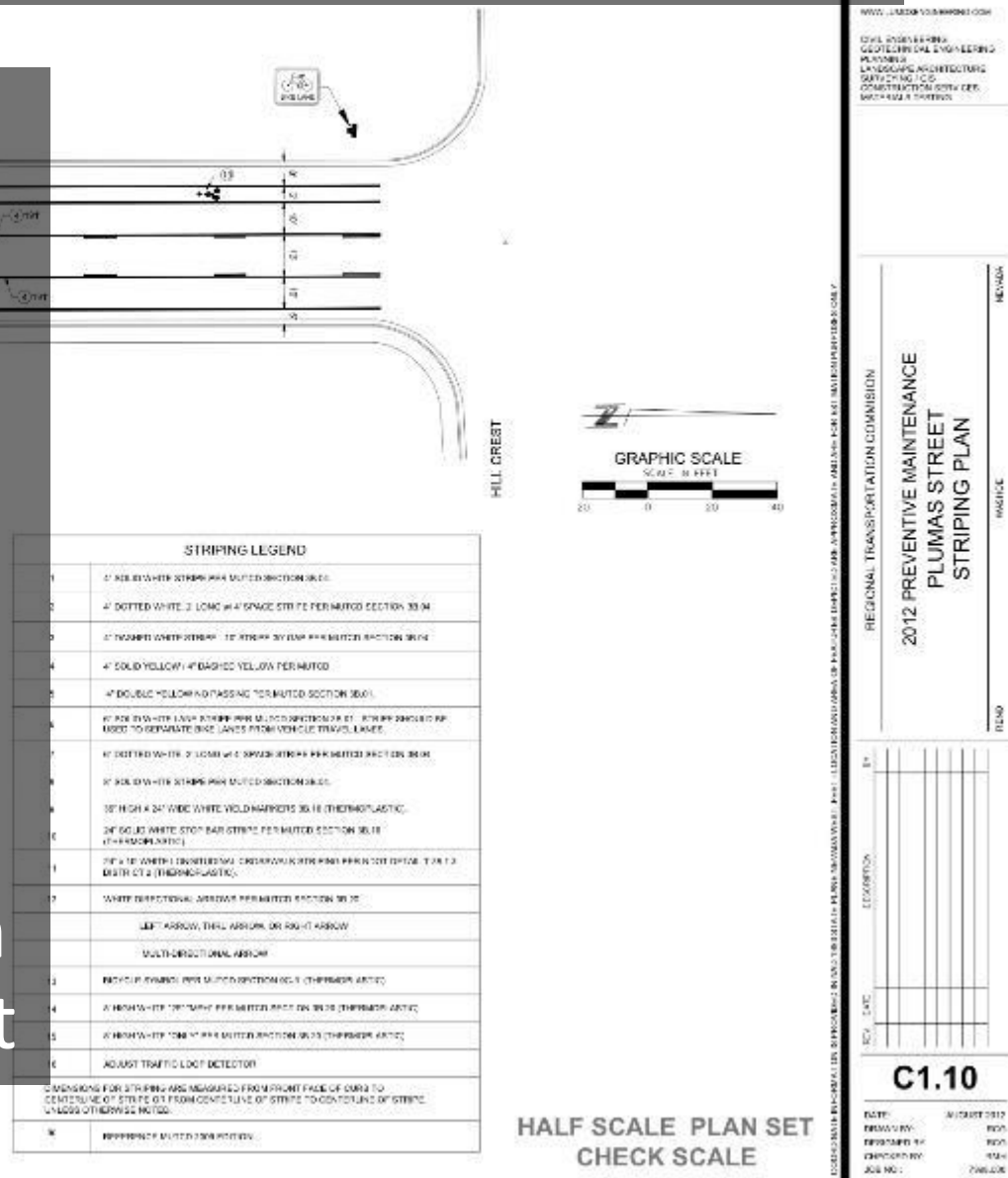
- Chip seals, slurry seals

- 10' lanes

- Center turn lanes

- Parking

- Add sidewalks with later capital project



Opportunity: utilities work

- Sidewalk added after fiber optic cable laid



3. Update design guidance

Create new document or revise existing

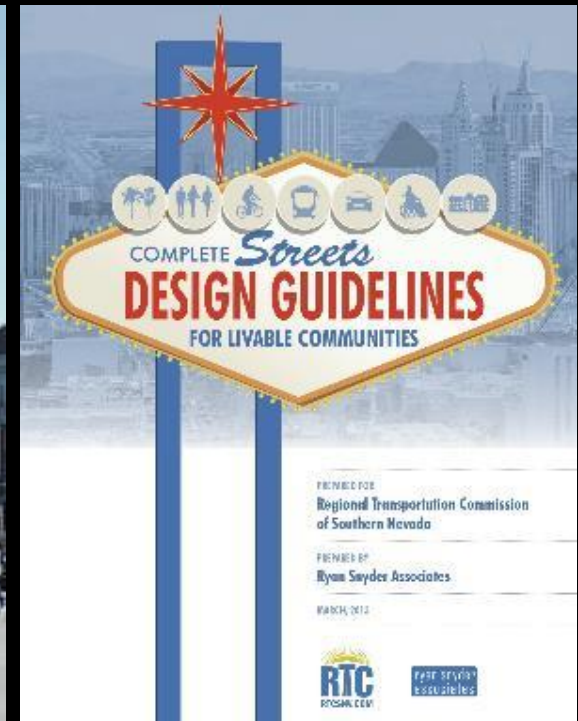
Custom

Time- and resources-intensive

Buy-in from staff



Build Your Own Guidelines



3. Update design guidance

Create new document or revise existing

Reference latest and best national/state guides

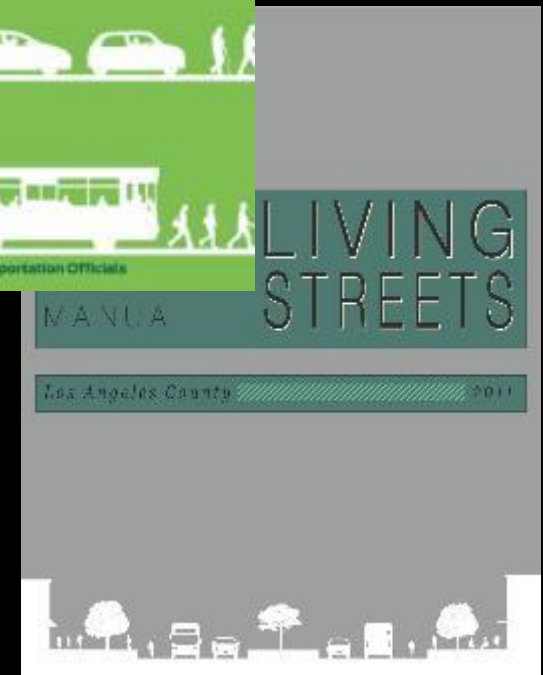
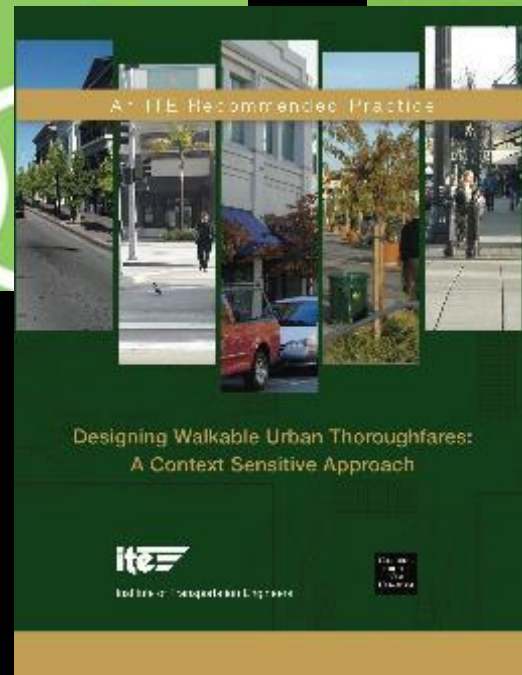
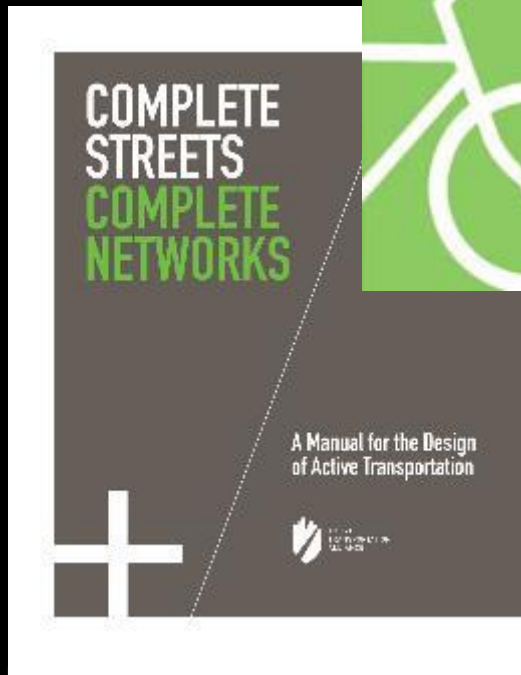
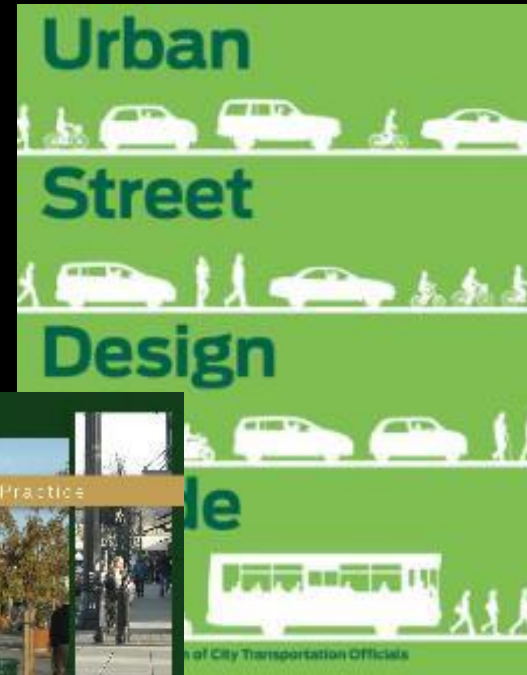
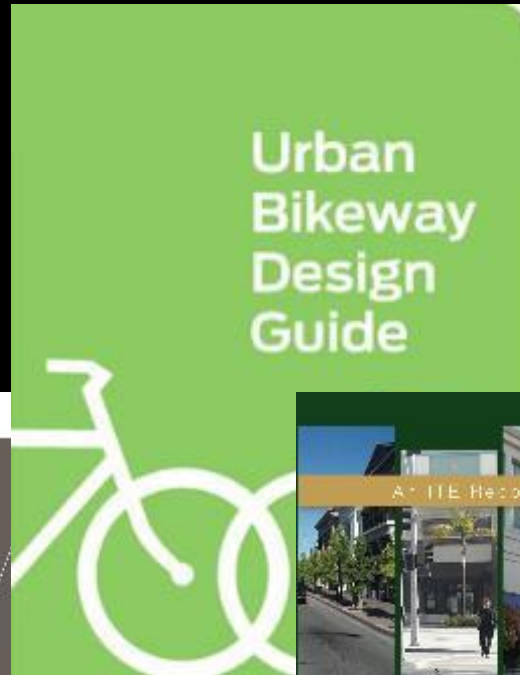
Less work

Great examples ready for adoption

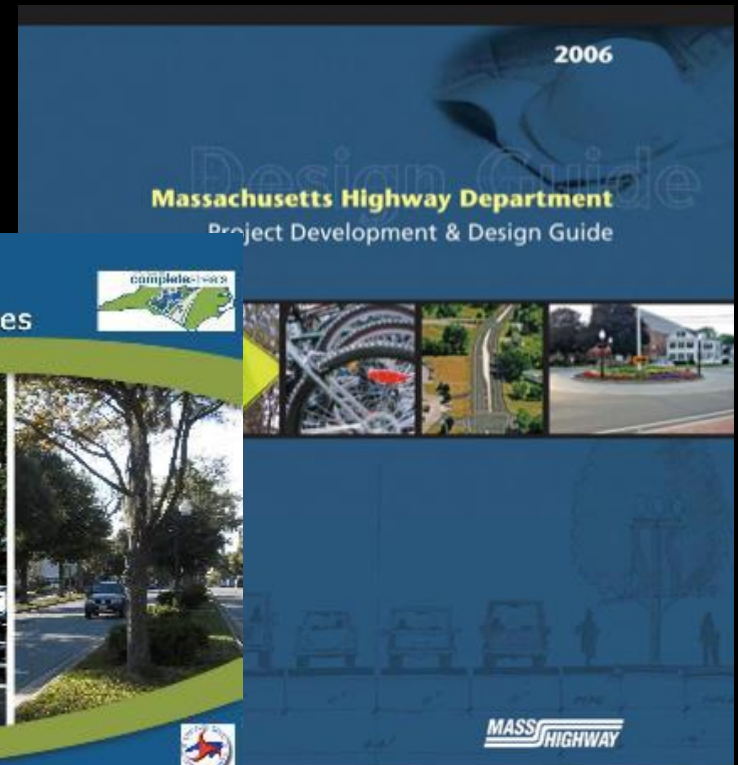
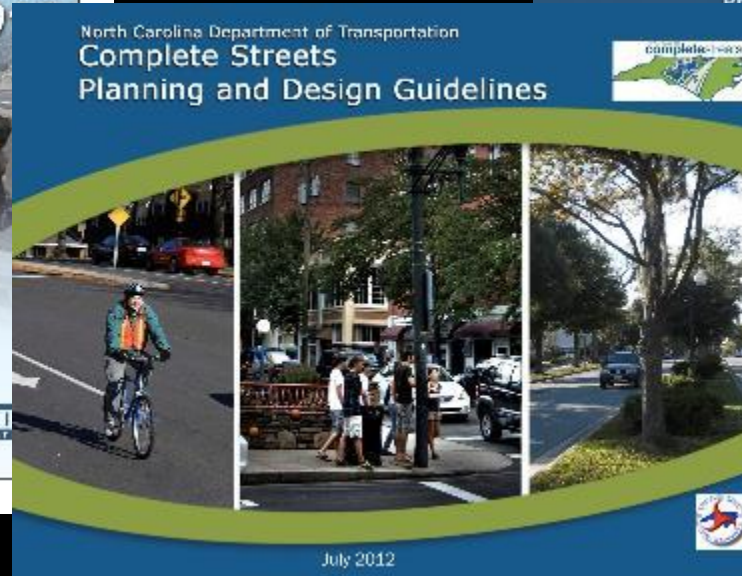
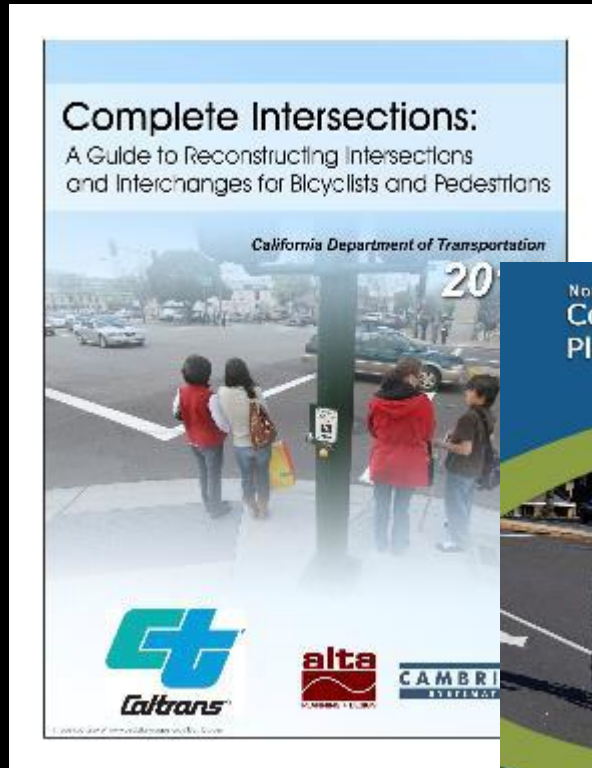
Move on to other activities sooner



Adopt / Adapt National Best Practices



Refer to state standards



If appropriate for local needs...



3. Update design guidance

Create new document or revise existing

Reference latest and best national/state guides

Public and private development

Update related land use and development codes, parking policies, zoning, station design plans



3. Update design guidance

Create new document or revise existing

Reference latest and best national/state guides

Public and private development

Set new standard templates



3. Update design guidance

Create new document or revise existing

Reference latest and best national/state guides

Public and private development

Set new standard templates

Pilot new designs



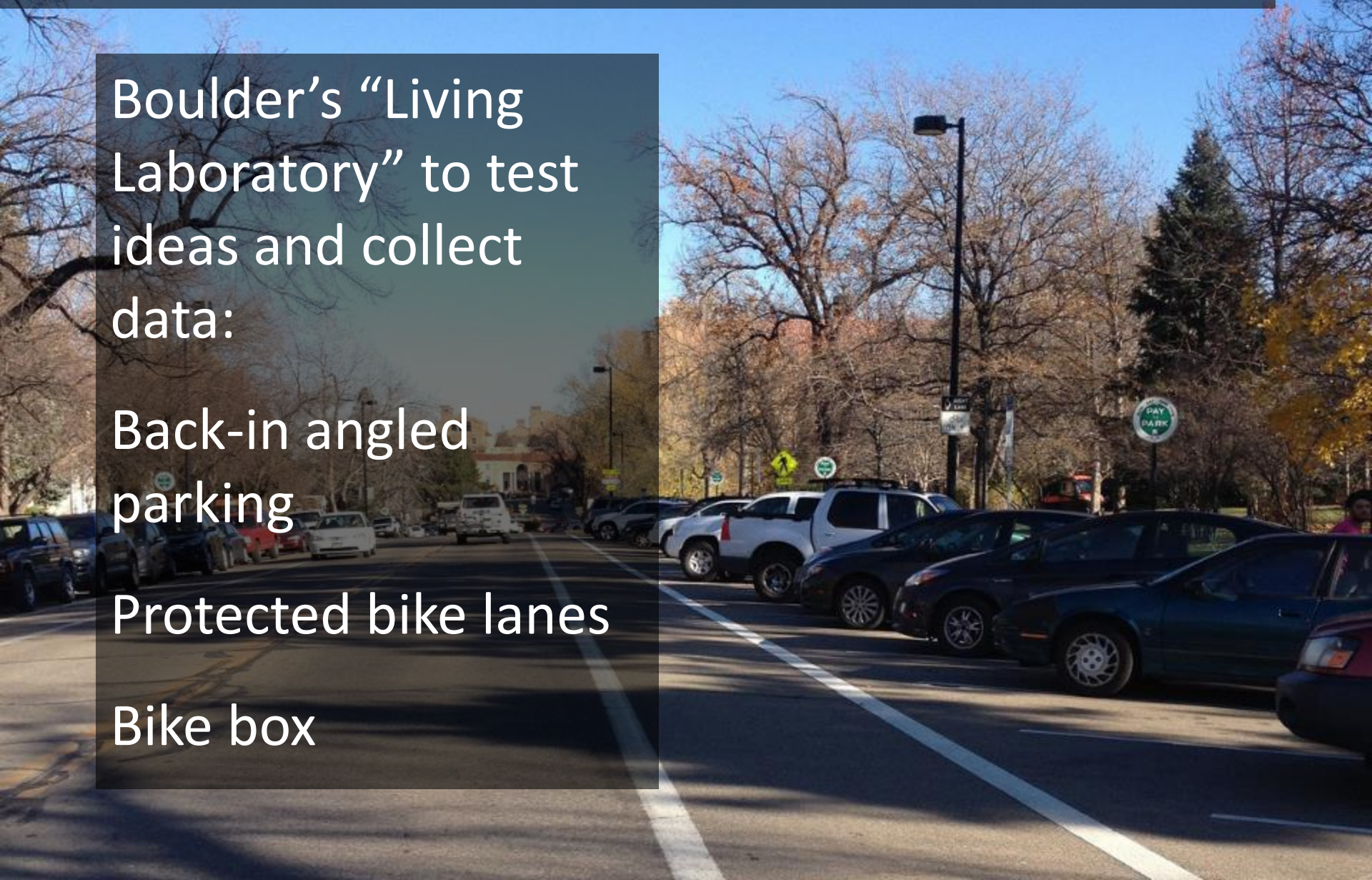
Pilot designs

Boulder's "Living Laboratory" to test ideas and collect data:

Back-in angled parking

Protected bike lanes

Bike box



Interim strategies: moving the curb

Traffic calming

Narrow drainage
channel



Traffic calming, via bike corral

“Daylight” an intersection when placed at corner

Can benefit local businesses



Parklets

Relieve sidewalk
congestion

Property owners
enter into agreement
with city

Can be seasonal



3. Update design guidance

Create new document or revise existing

Reference latest and best national/state guides

Public and private development

Set new standard templates

Pilot new designs

Integrate new techniques into practice



4. Offer training

Identify different training needs

- Department heads, managers, program staff
- Planning/design staff
- Construction/field operations staff
- Cooperating agencies (health, transit, etc.)



4. Offer training



Formal & informal training for all staff levels

- Staff retreat
- Series of technical training sessions
- Walk/bike tours and audits
- Conferences, webinars
- Walk to lunch with coworker

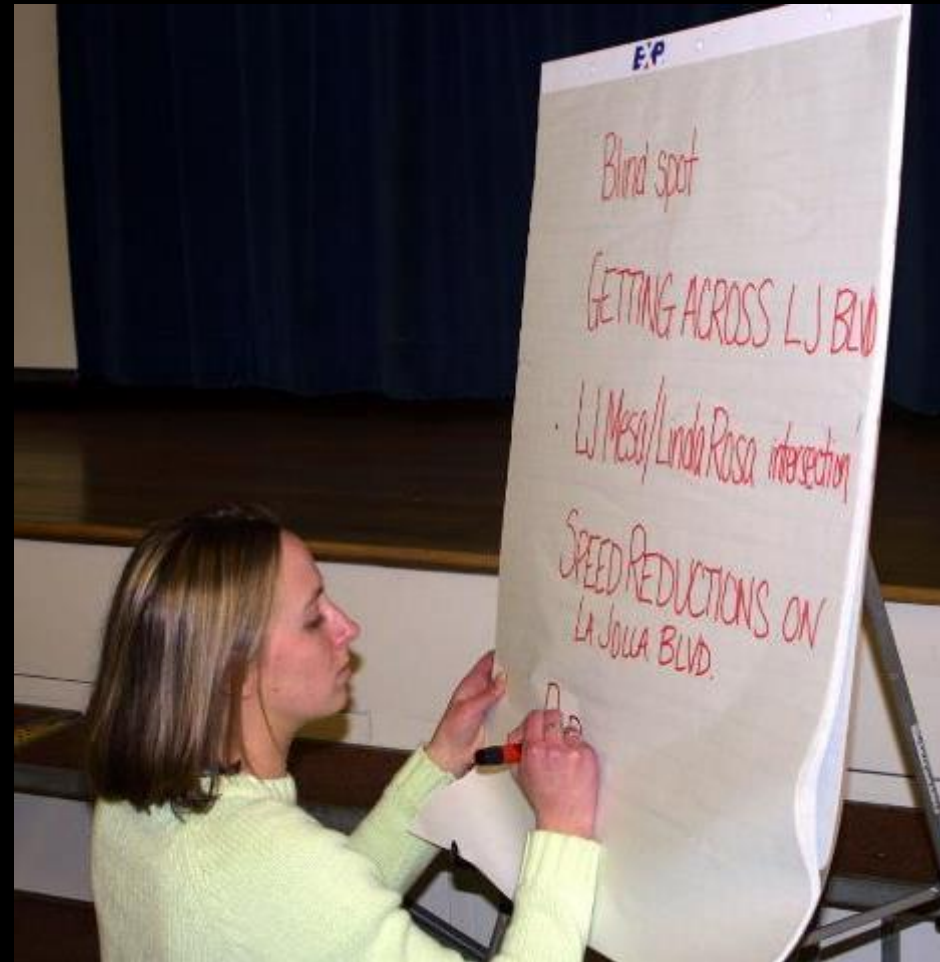
4. Offer training

Technical and non-technical issues

- Not always needed for design, but for *procedures*

Multi-departmental

Public outreach and education is key



Share information



Operated by NYC Bike Share

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System Data

Citi Bike

Miles traveled today (5 pm to 5 pm) ▾





Linden Ave N Cycle Track

Seattle Department of Transportation
The Seattle Department of Transportation recently completed a two-way cycle track on Linden Ave N... [See more](#)

[View all sets](#) [Photos](#)





Complete the Streets

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Personal interaction



5. Performance measures

Adopt or revise transportation performance measures

- Establish base data collection

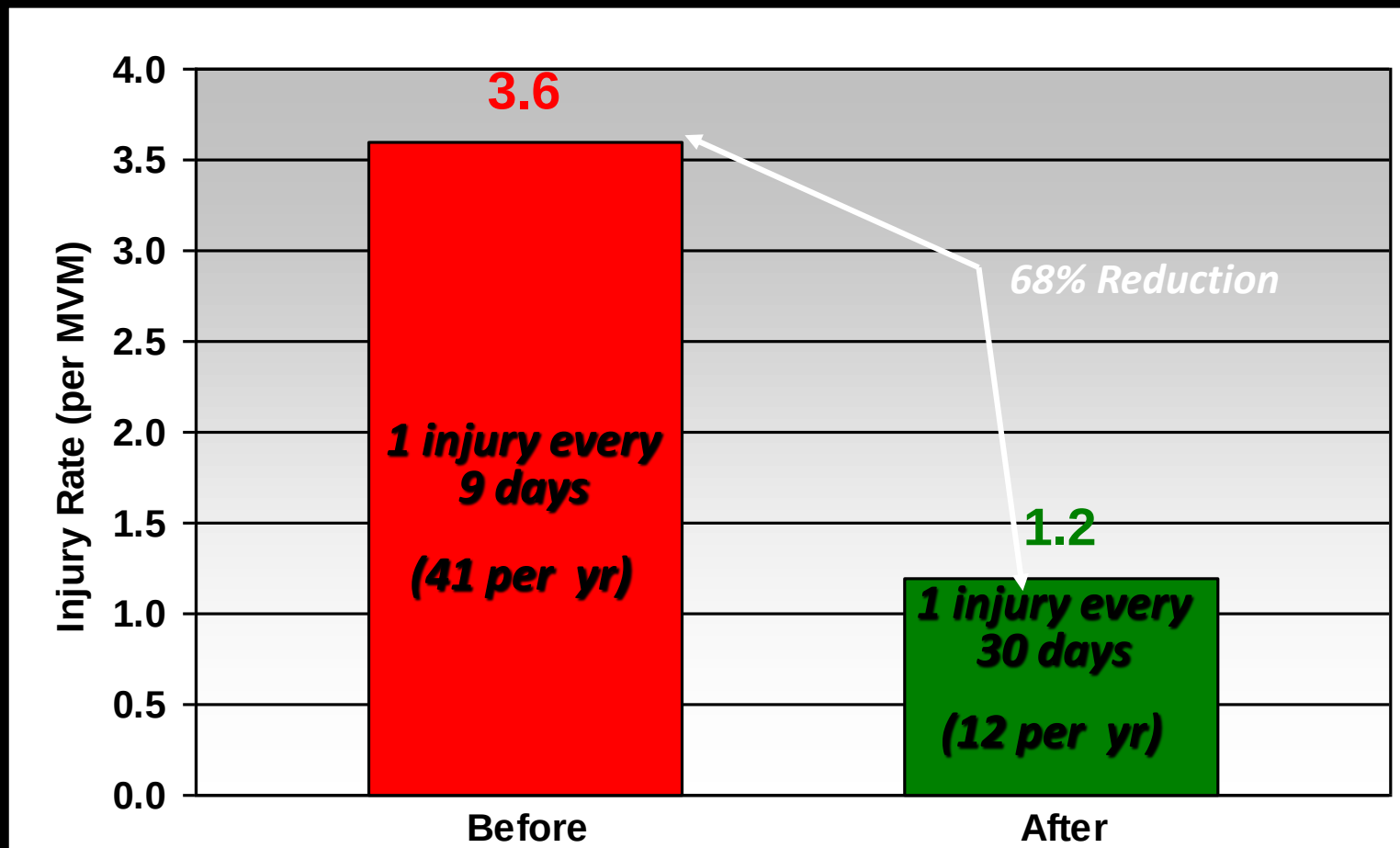
- Easily countable data better than none!

- Project/corridor specific AND community wide

- Compare over years



Transportation Performance Measures



Before/after studies: Injury rate



5. Performance measures

Adopt or revise transportation performance measures

Easily countable, compare over years

Track Complete Streets projects



Track projects

- Miles or # of facilities
 - Sidewalk blocks, ADA-accessible ramps, bike lanes, street trees
- # of intersections improved
 - Signal timing, medians, count-down timers, bulb outs
- %age of sidewalk gaps eliminated
- %age of modal plans completed
- %age of children walking/biking to school
- # of exceptions granted



Track projects

City of Billings Major Roadway Projects Completed During 2012 Construction Season

Project Description	How Non-Motorized Roadway Users Were Considered/Accommodated				
	Pedestrians	Elderly + Disabled	Bicyclists	Transit	Additional Complete Streets Features
Rimrock Road Reconstruction (Forsythia Boulevard to 17th Street West)	New continuous sidewalk on both sides	ADA ramps at intersections	On-street bike lanes	Two-way left turn lane allows traffic to pass when buses are stopped	Street lighting
32nd Street West Striping (King Avenue to Broadwater Avenue)	Existing crosswalks perpetuated	Striping project only	On-street bike lanes added	No specific changes	Shared bike/motor vehicle lane at major intersections
Central Avenue & 29th Street West Traffic Signal	Pedestrian signals included	ADA accessible ramps & accessible ped signals	Parallel trail along BBWA* canal	No specific changes	
Central Avenue (29th to 32nd Streets West)	Sidewalk added along north side	ADA ramps at intersections	No specific features added for bicyclists	No specific changes	
Bench Boulevard Connection (a Montana Department of Transportation project)	Sidewalk added on one side	ADA ramps at intersections	No specific features for bicyclists	Not on MET route	Constructed sidewalk connecting Airport Road & Bench Boulevard intersection to the trail paralleling Alkali Creek
Broadwater Trail -- Vermillion Dr to Zimmerman Trail	Multi use trail	ADA ramps added at 31st St. W	Multi-use trail	No specific changes	
2012 ADA Ramp Project	Project concentrates on accessibility at intersection corners; not aimed at providing continuous pedestrian path	46 ADA accessible ramps along major streets	Project intent is providing accessibility at intersections	Provides improved access along some MET routes	
Annual Curb, Gutter, Sidewalk Project	Installed 6,700 lineal feet of new sidewalk	ADA ramps where applicable	Project intent is to install missing curb, gutter, and sidewalk, and was not focused on bicycle improvements	Provides improved access along some MET routes	
2nd & 3rd Avenues North -- Conversion to 2-way traffic N 13th to N 22nd	Striping project only	Striping project only	Added on-street bike lanes	Not on MET route	
2012 Overlay Program:					
Overland Avenue	Existing sidewalk on north side, partial sidewalk on south side	No specific changes	On-street bike lanes added	No specific changes	
Grant Road	Continuous sidewalk both sides	Existing ramps	Parallel to Overland Avenue	Not on MET route	
Gabel Road	Gaps in sidewalk along undeveloped lots	Existing ramps	Parallel trail system through TransTech	Not on MET route	
Daniel/Regal from Central Avenue to Monad Road	Outside scope of project	Does not have continuous sidewalk	Insufficient street width; no connections on either end	No specific changes	
Swords Bypass (Airport Road to 6th)	Outside scope of project	No existing sidewalks	Insufficient street width	No specific changes	

Track on corridor or community

- Deaths and injuries by mode
- Crashes by mode and type
- Minimal walking delay at crossings
- Travel time for all modes
- Mode shift
- On-road transit performance
 - Buses running on time, average speed
- Stress or comfort indicators for bike, walk
- Corridor impact analysis
- Automobile Trips Generated (ATG)
- VMT or SOV trip reduction
- Level of Service that includes all modes



5. Performance measures

Adopt or revise transportation performance measures

Easily countable, compare over years

Track Complete Streets projects

Collaborate on achieving community-wide goals

Departments of Public Health, Environment;
transit agencies; first responders



Collaborate with other agencies

- Air quality improvements
- Health
 - Chronic disease, physical activity
- Housing + Transportation affordability
- Emergency response time
- Transit operating costs and farebox recovery ratio
- Economic impact
 - Revenue, jobs, increased value
- Community quality of life survey



5. Performance measures

Adopt or revise transportation performance measures

Easily countable, compare over years

Track Complete Streets projects

Collaborate on achieving community-wide goals

Air quality, public health, economics

Communicate internal and external activities on regular basis

Public reports, annual



Regular progress reports

Lee County:

Action Item	Action Required	Timeline/Deliverables	Status	
			October 2010	November 2011
Modified Transportation Planning and Budgeting Process	Modify internal transportation planning and budgeting process	- Report outlining modified transportation planning and budgeting process. Draft report completed. BOCC input in November 2011. - Adopt Lee Plan policies to incorporate the planning and budgeting process. Due December 2012.	A Complete Streets Team has been created. This team will be reviewing the current transportation planning and budgeting process and will prepare the report with the modified process.	- Identified role of each Department for developing and implementing the Complete Streets Program. - Drafted a revised planning and budgeting process to integrate Complete Streets into County operations. The process has been reviewed by the Sustainability Committee's Complete Streets Working Group and Budget Services. - Upon completion and approval of the revised planning and budgeting process, applicable policies will be incorporated into the Lee Plan.
Exceptions Process	- Develop thresholds and guidelines for design exceptions and variances from bicycle, pedestrian and public transit accommodations - Identify decision-making authority - Develop process for public access to exceptions information	Status report to County Manager with proposed process and recent examples of exceptions and variances from Complete Street criteria. The paper will be reviewed by internal and external stakeholders, the Complete Streets Implementation Team, the Community Sustainability Advisory Committee, and the Bicycle and Pedestrian Advisory Committee. An exception report/list will be provided with the annual Complete Streets Report. Guidelines for exceptions from Complete Streets criteria will be developed based on the revised planning and budgeting process. Draft due July 2012.	A draft white paper has been prepared and has been distributed for internal review. A draft will be distributed for review by internal and external stakeholders, the Complete Streets Implementation Team, the Community Sustainability Advisory Committee, and the Bicycle and Pedestrian Advisory Committee by mid-2011 in conjunction with the report with the modified transportation planning and budgeting process.	- Guidelines for exceptions from Complete Streets criteria will be developed based on the revised planning and budgeting process. An exceptions report/list is provided with the Annual Report. - The Complete Streets website was launched in May 2011. The intention of the website is to provide transparency of the Complete Streets Program, including the decision-making process for exceptions. - A Map-Based Complete Streets Evaluation Tool is being developed to facilitate project prioritization and document rationale/tradeoffs of recommendations for Complete Streets implementation. This information will be available for public access through the Complete Streets website.



Summary: Implementation steps

1. Organize implementation activities
2. Restructure procedures, policies, and programs
3. Rewrite or update design guidance
4. Offer training opportunities to transportation staff, community leaders, and the general public
5. Create new performance measures



Successful implementation

1. Have a champion
2. Ensure organization supports the plan
3. Focus on less – do it well
4. Align work and communicate across all stakeholders
5. Monitor progress often
6. Update plan for strength, agility, and relevance



End of Module

