Complete Streets Seminar: From Policy to Project







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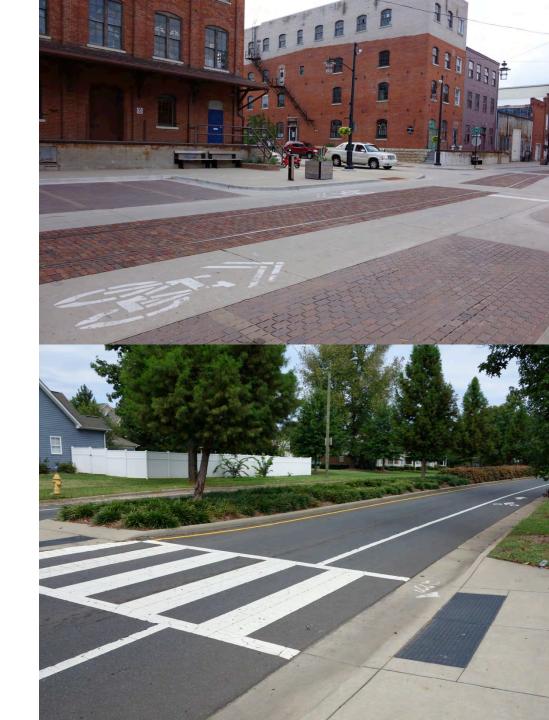
Driven to Discover™

Agenda

9 – 10:30 am
Moving from Policy
to Project Research
Highlights

10:30 – 10:45 am Break

10:45 am – 12:15 pm Minnesota Practitioner Panel



Our Study

How do communities move from concept to implementation?

Explore a variety of communities + projects

Consider tools + processes

Assess context-specific institutions, goals, stakeholders, cultures, constraints...



Questions

What does it take to move a community from complete streets **concept** to complete streets **project**?

What are the critical factors that need to be addressed to advance **implementation**?



Definitions

complete streets = the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of all users of all ages and abilities. Complete streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, commercial and emergency vehicles moving along and across roads, intersections and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings. — MN State Statutes 2008, Sec 162.02, Sub. 3a

implementation = projects on the ground



Our Study

Highlights from study of 11 cases

What can we learn from other cases?

Value in looking at "best" practices

No silver bullet – tailor approach to context

Reflect on our own communities

- 1. Albert Lea, MN
- 2. Arlington County, VA
- 3. Boulder, CO
- 4. Charlotte, NC
- 5. Columbus, OH Mid-Ohio Regional Planning Commission
- 6. Dubuque, IA
- 7. Fargo, ND Metro COG
- 8. Hennepin County, MN
- 9. Madison, WI
- 10. New Haven, CT
- 11. Rochester, MN

Background

Produce Guide to Complete Streets Planning and Implementation

Knowledge-building priority identified by the Minnesota Local Road Research Board (LRRB) + MN Department of Transportation (MnDOT)

Worked with a Technical Advisory Panel



Our Study

Explore multiple contexts – region, community, corridor, project

Acknowledge diverse contexts, goals, + constraints

Account for policies + plans, as well as decisionmaking + process



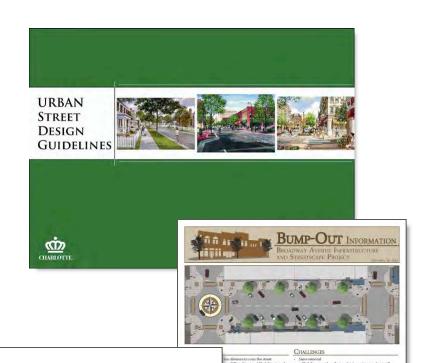
Methodology

Step 1. Document Review

Review complete streets
documents – resolutions, policies,
guidelines, tool kits, checklists,
project reports + information

Explore planning + policy framework

Understand content + use





Methodology

Step 2. Site Visits

Visited completed project(s)

Took 1000+ photos



Methodology

Step 3. Interviews

Identified **key informants** – "snowball technique"

Preliminary contact with complete streets lead

Consistent interview questions, capturing information on context, documents, projects, coordination, outreach, funding, outcomes, evaluation

103 interviews

Interviewees

Engineers

Designers

Planners

Maintenance staff

Public safety staff

Advocates

Agency staff

Elected officials

Guide to Complete Streets Planning & Implementation

11 Case Study Reports

Key findings, context, documentation, evolution, practice, photos, quotes, and examples



Guide to Complete Streets Planning & Implementation

Guidebook

Overview, complete streets practice, methodology, common + unique practices





Findings – Big Ideas

Every case is different – think strategically about context

Policy (if you have one) is just the start – institutional + cultural changes are occurring

Be rationally opportunistic + visible

Engage advocates

Make the most of your champions



Findings – Best Practices

framing + positioning broader benefits

- institutionalizing
 processes + policies +
 plans +
- analysis + evaluation pre-project, during, post-project

- project delivery + construction implementation, project-specific engagement
- promotion + education targeted campaigns, outreach, partnerships
- funding

 Sources + application

More than a transportation issue



Successful + lifelong communities

Competitive cities must respond to changing demographics + expectations

Regional workshops Complete Streets Real Estate Trends "lifelong communities." The goal is to ensure central Ohio's cities, villages, townships and counties continue to prosper, attract and retain businesses and residents, and in return have a richer tax base to support important programs, such as infrastructure, education and social services. An important facet of Lifelong Communities is Complete Streets."

More than a transportation issue





Rethinking Streets for Successful Communities

Video Link (click on video or link below)

http://www.youtube.com/watch?v=HbYgHwY6E9w&noredirect=1

Multi-modal system

framing + positioning
Boulder, CO

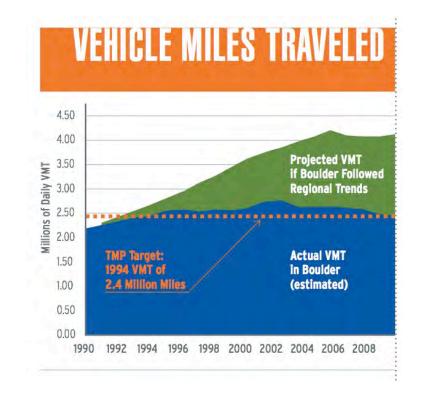
20+ year history of complete streets

1989 Transportation Master Plan called for modal shift

Policy decision to limit VMT growth to 1994 level

Multi-modal + network approach, connect across community + modes

"to preserve what makes Boulder a good place to live by minimizing auto congestion, air pollution, and noise."



Rethinking functional classification



New *Urban Street Design Guidelines* – "more streets for more people"

Requires analysis of land use + transportation context

Multimodal, bicycle, + ped level of service



Led to updates in subdivision ordinance, tree ordinance, and land development standards (e.g. street design, storm drainage)



Rethinking functional classification

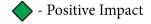


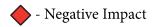
USDG Guiding Principles: Achieving a "Complete Street" Network

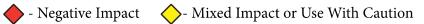
- 1. Streets are a critical component of **public space**
- **2.Streets play a major role** in establishing the image and identity of a city
- 3.Streets provide a critical **framework for current and future development**
- 4. Charlotte's streets will be designed to provide **mobility and support livability and economic development goals**
- 5. The safety, convenience, and comfort of motorists, cyclists, pedestrians, transit riders, and neighborhood residents will be considered when planning and designing Charlotte's streets.
- 6.Planning and designing streets must be a **collaborative process**, to ensure that a variety of perspectives are considered

Design Element Matrix - Different User Perspectives

		Pedestrians	Cyclists	Motorists	Transit*	Neighbors	
Pedestrians Want l	Pedestrians Want Buffering from Cars						
Consider some mix	of the following elements to create a buffer:						
Planting Strip	The wider the better, since wider strips allow trees to grow			•	\Diamond	•	
Amenity Zone	Use where high pedestrian volumes are likely, particularly in combination with on-street parking	•	\Diamond	•	•	•	
Wide Sidewalk	Back-of-curb (6' min.) may be allowable in retrofits, if combined with bike lane or on-street parking		\Diamond	\Diamond	\Diamond		
Bike Lanes	Provide "extra" buffering, in combination with other elements						
On-Street Parking	Helps shield pedestrians from moving traffic		\Diamond	\langle	\Diamond		
Trees	Need a 6'-8' minimum planting strip or treewells in amenity zone; 8' is the minimum for large maturing trees				\Diamond	•	



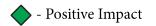


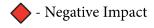




Design Element Matrix - Different User Perspectives (cont'd)

		Pedestrians	Cyclists	Motorists	Transit*	Neighbors
Cyclists Want Safer C	Cyclists Want Safer Crossings					
Consider the following	Consider the following elements to increase cyclists' visibility:					
Bike Boxes	Brings cyclists into drivers' sight; allows cyclists a headstart through an intersection; should provide bike lane approaching intersection	1		\Diamond	\Diamond	\Diamond
Drop Bike Lane at Intersection	Achieves same as bike box, but without designated space; casual cyclists may feel less comfortable, although it is considered safer to drop the lane and have cyclists merge earlier for left-turns if there is no bike box		\Diamond	\langle	\langle	\Diamond
Leading Bike Signal	Allows cyclists a headstart through the intersection; requires driver and cyclist education	\langle	\Diamond	•	\rightarrow	\Diamond
Short Blocks	Create <u>more</u> intersections, but potentially <u>smaller</u> intersections; more opportunities to avoid high volume routes; can potentially calm traffic and allow more opportunities for safe crossing treatments					



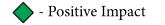


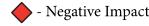


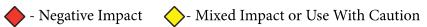


Design Element Matrix - Different User Perspectives (cont'd)

		Pedestrians	Cyclists	Motorists	Transit*	Neighbors	
Motorists Want Red	Motorists Want Reduced Delays/Increased Capacity						
The following elemen	ts can increase a street's capacity and/or potentially	reduce motoris	sts' delay:				
More Travel Lanes	Each additional travel lane increases the street's capacity, especially at intersections; the mix of through and turn lanes can, up to a point, allow an intersection to process more traffic		\Diamond	•		\langle	
Design Consistency	By providing a consistent design (number of travel lanes, i.e.), motorists don't have to unexpectedly stop or merge; however, this may be difficult to achieve	\langle	\Diamond	•	\rightarrow	•	
Grade Separated Intersections	Allows uninterrupted flow; particularly useful for high volume intersections, but destroys urban context for other users	•	\Diamond	•	\rightarrow	•	
Unsignalized Intersections	May mean less delay for the higher-volume leg, but more delay for the lower-volume leg; in general, fewer signals means less delay on thoroughfares, but may also mean less connectivity		\Diamond				

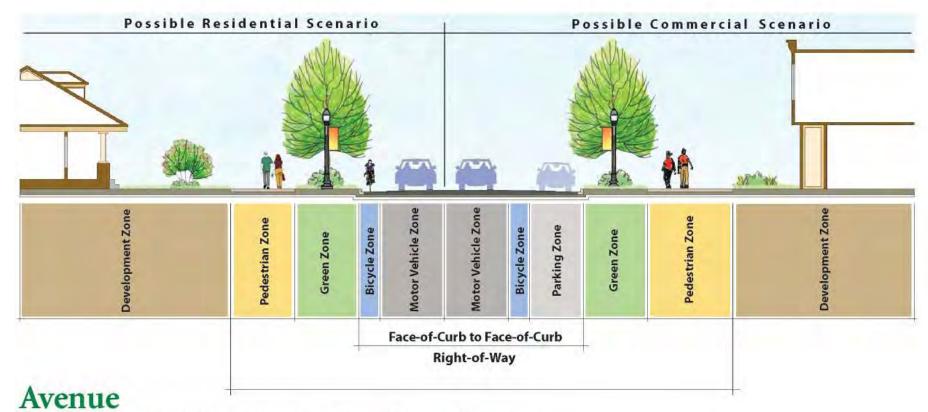








Avenues



For specific dimensional information refer to the guidelines in this section.

Avenues

Development Zone:

Setbacks, design, and land uses will vary, but the basic intent for this zone is that development orients toward and has good functional and visual connections to the street.

Pedestrian Zone:

Very important for modal balance, pedestrian travel should be comfortable on Avenues; this zone should include unobstructed sidewalks, at appropriate widths for adjacent and surrounding land uses.

Green Zone:

To maintain comfortable pedestrian travel and serve an important buffer function, as well as enhancing the street for other users, this zone should include grass, landscaping, and shade trees in spacious planting strips or, in some cases, replaced by or interspersed with hardscaped amenity zones. In some Avenue configurations, this zone will also include a median or intermittent "islands" with trees and landscaping.

Parking Zone:

The need for this zone varies on Avenues, but the potential for traffic calming, buffering between vehicles and pedestrians, and access to adjacent land uses should be considered. Some Avenues will have on-street parking and some will not.

Exclusive Bicycle Zone:

Avenues are higher-speed and volume streets than Main Streets, so cyclists are less likely to feel comfortable in mixed traffic; this zone is important and should be considered for modal balance, safety, and additional buffering for other modes.

Motor Vehicle Zone:

This zone serves motor vehicles, in a variety of possible lane configurations, to accomodate higher volumes than Main Streets, while maintaining modal balance.

New Processes in Place



Complete Streets Task Force

meets quarterly and is established to "review and recommend the most effective use of funding streams available for complete streets, develop consistent implementation principles, practices and guidelines, and identify demonstration projects for Hennepin County's Complete Streets policy..." (Hennepin County 2011).

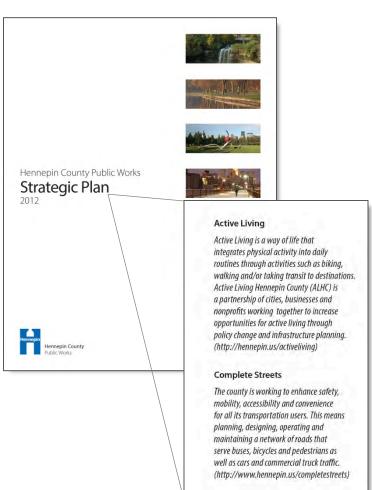


New Processes in Place



Checklist, project summaries, incorporation into Strategic Plan...





Neighborhood Engagement



Complete Streets Request Form

Response to strong neighborhood organizations + engagement

Asks for location, impetus, context (e.g. land use, neighborhood character)

Proposers identify connections to principles in Complete Streets

Design Manual

Connectivity, human health, equity, economic development



Transportation Research Program



Project-specific analysis

Traffic counts, speeds, accident rates

Long-term analysis

Land use, traffic counts, bike/ped counts, accidents, commuting patterns, outreach/engagement states, employer programs

Informs plan updates + project decision making



Ongoing Evaluation + Reporting



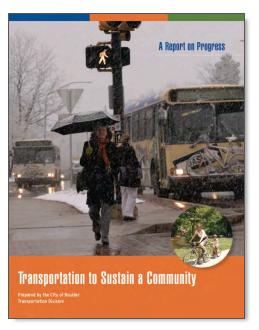
Transportation to Sustain a Community: A Report on Progress

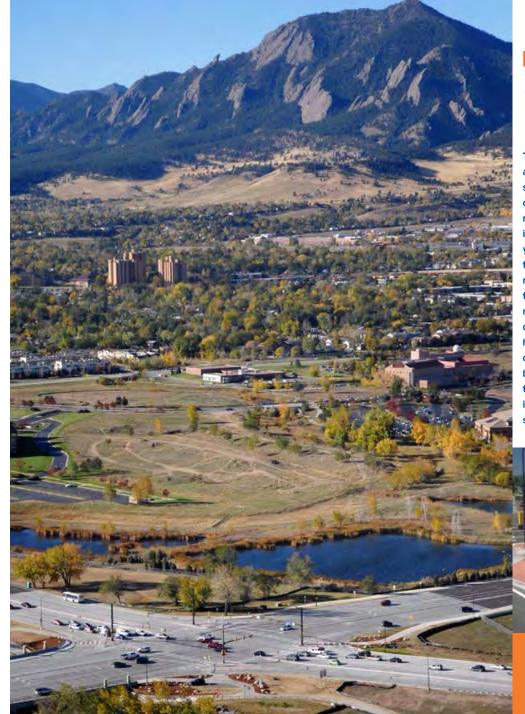
City conducts its own travel survey

Trends over 2+ decades

Strong connection to *Transportation Master Plan* – reporting on implementation progress



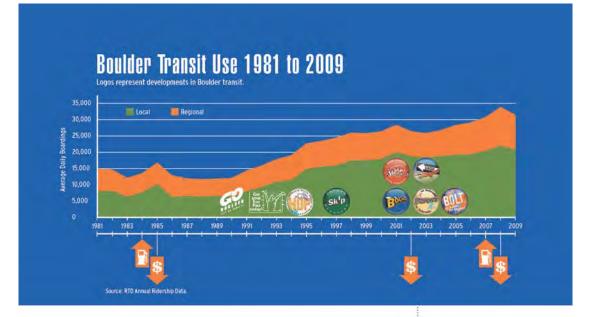


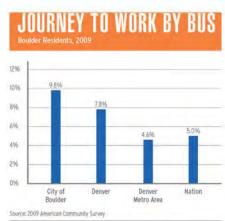


How Long is Forever?

"It takes forever to drive across town," is a common complaint.

The city has conducted a statistically accurate survey of auto travel time on two east-west and two north-south corridors in town over the last 25 years. These studies show that "forever" is about 15 minutes during rush hour traffic and that number has remained relatively steady over the years. While traffic has increased over the life of the study, the city has been able to maintain travel times with intersection improvements and traffic signal coordination.







1931 Public Service Company purchases a fleet of 4 Mack buses and





An estimated 95 percent

of Boulder's arterial streets accommodate bleyelists, and all local and regional buses in Boulder are equipped with bike racks. The city's system is boistered by a robust network of pathways and paved shoulders in surrounding Boulder County to facilitate longer trips by bike.





FACT

JOURNEY TO WORK BY BIKE

-- Baulder Deriver Area *** Nation 3% 356 256 9% 596 3% 156 1990 Census 2000 Census 2006 ACS 2008 ACS 2009 ACS

Source US Demais and American Community Survey.

Boulder has a robust bicycle network, with 150 centerline miles of bike facilities. In comparison, the city has 305 centerline miles of roads. The system includes:

- 52 miles paved multiuse pathway with 76 underpasses
- 37 miles of road with bike lanes on both sides
- 9 miles of road with paved shoulders
- 43 miles of roads designated as bike routes
- 10 miles soft surface trails



1848 340 parking meters

1852 Toll road opens with a toll of \$.25 for Boulder to Denver travel. Eight months after opening, traffic was up II percent on most arterials

1849 Denver Boulder Bus Company established with 17 buses running through Lafayette to Denver





Tailored Engagement Strategies



Sustained engagement for District-wide design

Partnerships established early engagement

Businesses, advocates, and stakeholders engaged from design through construction

Weekly meetings influenced construction schedule

Increased support of complete streets program



Innovation in Design



Years of practice + adapting to needs

Willingness to test new things and adapt – "pilot projects" - signage, bike boxes and boulevards



Innovation in Design



Established collaboration + go-to guidance

Collaboration between key City departments
- City Engineering and Traffic Engineering

State standards referenced along with other design guidance (AASHTO, NACTO)



Promotion is Important



Ongoing commitment

Blue Zones Project

National visibility

National Vitality Center

continuing the momentum



Mission:

To establish and encourage an ongoing community focus and commitment to individual wellness and personal well-being.

Vision:

To create permanent systematic environmental and policy changes that lead to a healthier environment: creating opportunities for physical activity and healthy eating by positivity encompassing an individual's community, habitat and purpose.

National Vitality Center Board of Directors

Mayo Clinic Health System, Freeborn County Public Health, City of Albert Lea, Albert Lea School District, United Way of Freeborn County, Albert Lea Family Y, Albert Lea/Freeborn County Chamber of Commerce, Albert Lea Convention and Visitor's Bureau, Freeborn County Historical Society, Freeborn County Family Services Collaborative, and Senior Services.



Promotion is Important



Educational efforts

Bike rodeos

Public Service Announcements (PSAs)

Project white papers & cost comparisons

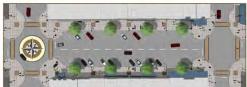
BUMP-OUTS COST LESS

- Sidewalk in bump-out areas cost less than street pavement that would be required with no bump-outs:
- Trading street pavement for sidewalk results in a slight decrease in cost per intersection with bump-outs vs. no bump-outs – approximately \$3,000/intersection
- Bump-outs reduce cost by an additional \$3,000/intersection by reducing the crosswalk decorative paver length
- Replacement of the existing traffic signals if bump-outs are not provided would cost between \$175,000 and \$200,000 per signal system
- Bump-outs save \$360,000 to \$420,000 in total project costs!

Note: See the separate "Bump-Out Information" fact sheet for more information regarding bump-outs







EXISTING INFRASTRUCTURE

- The existing sanitary sewer, watermain, and storm sewer systems in Broadway Avenue are over 80 years old and are in need of
- The existing street consists of concrete pavement that was originally constructed in 1933 and was overlaid with blacktop in 1956, 1975, and 2002
- The sidewalks and curb between Main Street and Clark Street were removed and replaced in 1976. The existing tree "bunkers", decorative walk, and decorative lighting were also added at that time.
- The existing sidewalk and curb between Fountain Street and Clark Street were reconstructed in 1991, but no streetscaping amenities were included in that project
- While the existing street surface is in fair condition, the replacement of the sanitary sewer, watermain, and storm sewe systems will require the removal of the street and sidewalk throughout most of the area
- The existing underground utility and street infrastructure needs to be replaced regardless of whether or not streetscaping elements are included in the project

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PROJECT COSTS

The following is a breakdown of the preliminary project costs based on

INFRASTRUCTURE ELEMENT	ESTIMATED COST
Basic Street and Surface	\$1,771,300
Basic Street Lights	\$238,100
Sanitary Sewer, Watermain, & Storm Sewer	\$846,800
Subtotal, Basic Infrastructure Improvement Project	\$2,856,200
Broadway Avenue Streetscaping (additional cost from basic street and surface improvements)	\$363,800
Broadway Avenue Decorative Street Lights (additional cost from basic street lights)	\$154,700
Subtotal, Additional Streetscaping Costs	\$518,500
William Street Pedestrian Plaza	\$190,500
Water Street Pedestrian Plaza	\$161,700
Fountain Park Improvements	\$349,700
Subtotal, Pedestrian Plazas and Park Improvements	\$701,900
Total	\$4.076.600

Note: Estimated costs include engineering/architectural fees, administrative costs, and financing costs

UNIQUE OPPORTUNITIES

- The fact that the existing street and sidewalks will be removed for the utility reconstruction creates a "once in a lifetime" opportunity to consider additional aesthetic amenities that
- may be a catalyst to help re-vitalize the downtown area

 The project will include treatment for stormwater runoff
 before it is discharged into Fountain Lake



City of Albert Lea

Broadway Avenue Infrastructure & Streetscape Proje



Branded Campaigns



Targeting all modes + all users

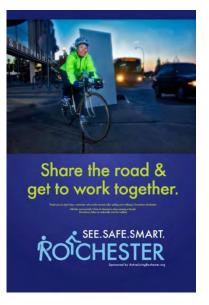
SEE.SAFE.SMART.ROCHESTER

Campaign to decrease modal conflict

Developed by Active Living Rochester

Different media pieces and well-

branded





Branded Campaigns



Mode-specific education

Safety as central focus

Street Smarts campaign – draw motorists' attention to other users on street

Branding was critical – logo, info materials, promo items, pledge of commitment

Led to DriveSmart, BikeSmart, + WalkSmart campaigns

Strong coordination with Yale – Smart Streets



SMART VSTREETS

WELCOME TO THE SMART STREETS GUIDE TO SAFETY.
THIS IS WHERE YOU WILL LEARN HOW TO BE A CITIZEN
OF THE STREET WHETHER YOU ARE A PEDESTRIAN, A
CYCLIST, A DRIVER, OR ALL THREE.

This website is the result of a partnership between Yale University Police, Security Programs, Transportation Options, and Environmental Health and Safety-along with The City of New Haven's Department of Transportation, Traffic and Parking. It depicts some broadly-accepted safety guidelines to help make our streets safe for everyone. Please consult the RESOURCES section for links to state and local laws and ordinances.



Website Link (click on image above or link below) http://yale.edu/smartstreets/

Engaging the Private Sector



Charlotte DOT funds supplemented by private development
Use new and redevelopment to facilitate ROW improvements
City ordinances are key implementation tools



Encouraging support through policy change



Special assessments – changed from 100% property owner funded to 50%-50% cost share for new sidewalks

1st 25 years – City pays for reconstruction, after 25 years, 50%-50% share

Increase in acceptance for sidewalk implementation



Questions

What does it take to move a community from complete streets **concept** to complete streets **project**?

What are the critical factors that need to be addressed to advance implementation?



Takeaways

Every context is different – what is yours?

Find the champions, or be one yourself

Policies + plans are critical, but nothing gets done without great processes

Change the way decisions are made + the way that people are engaged



Thank you!

MN Dept of Transportation + Local Road Research Board

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Minnesota Practitioner Panel

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David Larson

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Hennepin County

Shelly Pederson

City of Bloomington

