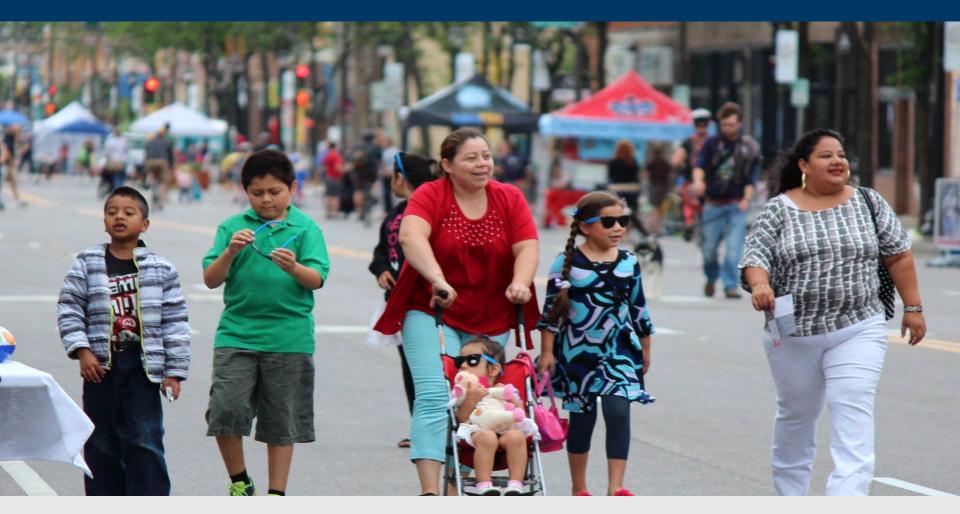
SE Minnesota TZD Workshop May 3, 2017

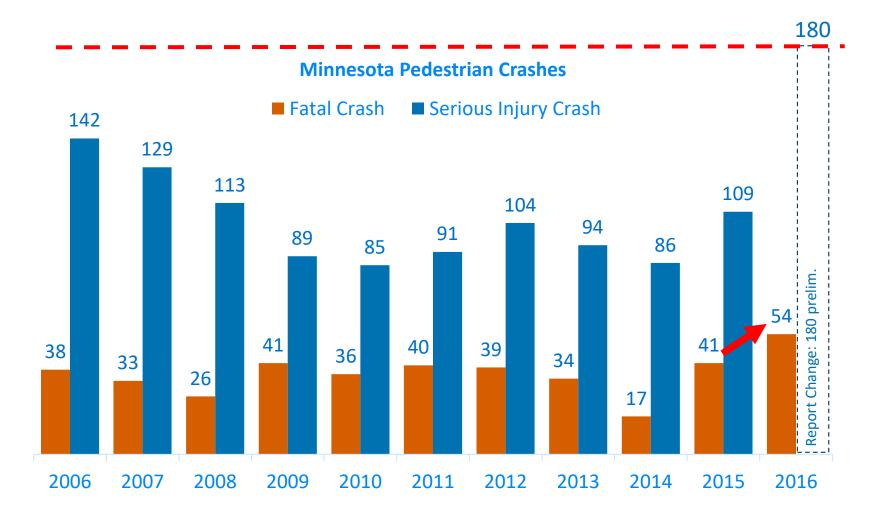


Liz Walton MnDOT - Pedestrian and Bicycle Section

Agenda

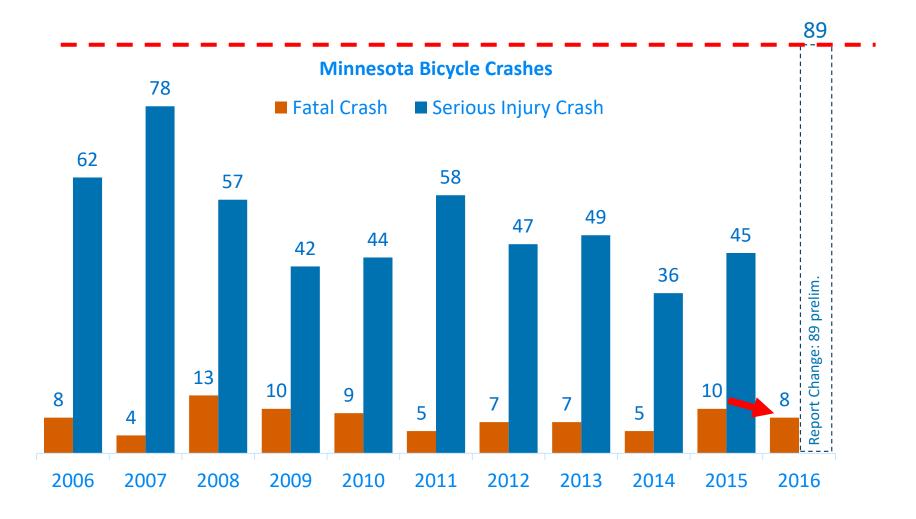
- Rising pedestrian crashes
- Tools and resources:
 - Statewide plans:
 - Pedestrian (Minnesota Walks)
 - Bicycle System Plan
- Safety education/new messages

Pedestrian - Fatal & Serious Crashes



SOURCE: Crash Facts. Minnesota Dept. Public Safety, Office of Traffic Safety. Preliminary 2016 data as of April 2017.

Bicyclist - Fatal and Serious Crashes



SOURCE: Crash Facts. Minnesota Dept. Public Safety, Office of Traffic Safety. Preliminary 2016 data as of April 2017.

Pedestrian Fatalities - Making Headlines

- Authorities ID pedestrian struck and killed by semi in Owatonna
- Faribault man hit and killed while walking his dog
- 5-year-old Byron boy struck by car dies
- Rochester man hit, and killed while outside his vehicle on shoulder of southeast Minnesota highway
- Hit-and-Run Crash Kills Pedestrian in Albert Lea
- Pedestrian struck by pickup in Kasson
- Rochester driver was drunk, speeding when he hit 4 pedestrians, killing 1

Grim Numbers

January 5, 2017 Star Tribune headline:

Minnesota Pedestrian Death Spike Illustrates Grim National Trend

In 2016:

- Pedestrian deaths spiked at 25-year high in Minnesota
 - 2016: 58 pedestrian deaths
 - 1991: 61 pedestrians deaths
- Nationally, pedestrian deaths climbing faster than motorist fatalities
 - Nearly 6,000 deaths highest total in more than two decades

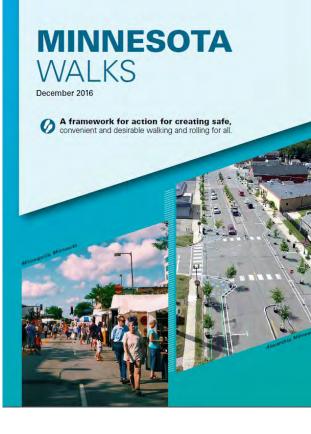
Pedestrian Fatalities

Possible factors

- More drivers and walkers distracted by cellphones and other electronic devices
- Increased driving due to improved economy
- Lower fuel prices
- More walking for exercise

Tool to create walkable communities that are safe, convenient, and desirable to all

- Collaborative effort between Minnesota
 Department of Health (MDH) and MnDOT
- Identifies action items for local, regional and state-level partners to enhance environment for people walking/rolling
- Adopted by agencies in Spring 2017



Goals:

Overarching goal - Design for All

- More people walking especially priority populations
- Improve walking for all purposes
- Healthier people
- Improve accessibility and encourage connections
- Improve safety
- Stronger communities



Priority Populations

- Small Rural Core Communities
- American Indian Populations
- Low-Income Urban Populations
- Older Adults
- People with Disabilities
- Children and Youth

Themes:

- 1. Roadway and street design
- 2. Land use and the built environment
- 3. Fostering creativity and partnerships
- 4. Listening and planning
- 5. Minnesota winter and year round upkeep
- 6. Building a culture of walking

Themes include <u>challenges</u> and <u>strategies</u>

Strategies broken into:

- 1. Policies
- 2. **Projects**
- 3. **Programs**
- 4. **Processes**
- 5. Placemaking
- 6. Partnerships
- 7. Building skills

Roadway and Street Design

GOALS

Designing walkways is the first priority when planning roadways and streets.

Design roadways and streets to encourage people driving cars to slow down.



CHALLENGES

- Lack of compliance with American Disabilities Act (ADA) guidelines.
- Need for increased training for construction inspectors to ensure ADA compliance.
- Street and roadway designs are not always accessible for people with limited physical mobility and other disabilities such as blindness or vision impairment.
- It is difficult to cross multiple lanes of traffic, especially busy road crossings.
- Busy highway crossings are barriers to walking.
- O Highways that pass through town are difficult and potentially dangerous to cross. Specific barriers are short signal crossing times, not enough signalized crossings, fast car speeds and lack of benches.
- O Long crossing distances and short signal timing to get across intersections are major barriers for people, especially those who use wheelchairs, other mobility devices, and for seniors.
- O Lack of buffer zones between sidewalks and fast moving street traffic.
- O Fast vehicle speeds.
- Obstructions along walkways such as light posts and utility poles.
- Lack of public seating on sidewalks and walking paths.
- Many destinations are frequently inaccessible or unfriendly for walking.
- Gaps in sidewalk networks and sidewalks constructed only on one side of the street.

Projects	Local	Regional	State
1. Design intersections, sidewalks, shared-use paths and crossings to maximize accessibility, safety and comfort for people who walk and roll		•	•
2. Establish specific design standards that go beyond ADA compliance for consistency in signal timing, crosswalk design, wayfinding, signage, connectivity and comfort.	٠	•	•
3. The standard for any future development should include sidewalks. Professionals involved in planning and design efforts should have to justify not including sidewalks, instead of the other way around.	٠	•	•
Policies	Local	Regional	State
4. Establish a hierarchy of modal planning that prioritizes people walking.	+	+	٠
5. Increase and prioritize funding for roadway features such as sidewalk buffers, trees, lighting, benches and other elements that enhance pedestrian safety and comfort.	٠	•	•
Re-evaluate road design to identify and accommodate lower speeds in areas where current and planned land use is conducive to walking.	•	•	•
7. Prioritize pedestrian improvements in projects where priority populations are present. (See page 14 for description of priority populations)	٠	•	•
8. Identify priority networks for walking based on everyday destinations, prevalence of people who rely on walking for transportation and network connectivity.	•	•	•
9. Review the implications of right on red turns and pork chops.			+
Building Skills	Local	Regional	State
10. Provide technical resources and training around the importance of meeting or surpassing ADA guidelines and provide case studies and visual examples.	•	+	•
11. Integrate best practices for walking infrastructure into established design manuals.			•

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Building a Culture of Walking

GOALS

Walking for transportation and recreation is integrated into the culture of all Minnesota communities and people who walk are treated with respect and not seen as second class citizens.

Communities and elected officials understand and promote the many benefits of making walking safe, convenient and desirable for all.

CHALLENGES

- Laws requiring drivers to stop for people walking in crosswalks are not always understood, followed or enforced.
- Roadway design including large turning radii, channelized turn lanes, and more allow drivers to make turns at high speeds.
- Distracted driving.
- People walking often feel a sense of invisibility to drivers.
- Personal safety issues stemming from lack of lighting and areas with a lack of presence of other people.
- People who walk for necessity may experience poor conditions in areas where they regularly walk to jobs, grocery stores, transit stops or other places, but they still walk there because they have no other means of transportation.
- Lack of organized pedestrian advocacy on a statewide level and in individual communities to highlight desires for walkable communities.
- Lack of funding and resources allocated to pedestrian improvements and maintenance.
- Pedestrians are often thought of and treated as second class citizens.

STRAT Partnershi	ps and Coordination	Local	Regional	State	
carry out impl	destrian Task Force and provide necessary tools to ementation of the strategies within this plan and walking-related efforts across the state.			•	
	with driver education organizations and individuals ver behavior and pedestrian safety curriculum.	•	•	٠	>
	with local, regional and state tourism agencies and organizations d highlight walk-friendly communities in Minnesota.	•	•	•	
4. Explore opp	ortunities to better coordinate and leverage resources for walking.	•		•	
	tnerships with youth serving organizations and programs to y concerns about walking in a multi-generational way.	•	•	•	
	trian advocacy groups to encourage and a set of the se	•	•	•	
support walkin including the l for Active Trans	regional and local efforts with national efforts that already ng, physical activity, and improved places to walk and be active, Vational Physical Activity Plan, Designed to Move, Partnership Isportation, Convergence Partnership, Every Body Walk!, and ieneral's Report: A Call to Action to Support Walking.	•	•	•	
8. Add measu	es of walkability to state and local surveillance systems.	+	•		
Programs		Local	Regional	State	
	vareness, visibility and effectiveness of "Toward with a stronger emphasis on people walking.				
10. Apply for a	Waik Friendly Communities designation.	•			
	chnical assistance to communities to help them Walk Friendly Community application.		•	•	
	public education and awareness campaigns to promote walking and d link these campaigns with other activities meant to increase walking.	•	•	•	
	sistent statewide pedestrian safety messages for communities ons, targeted at people who walk and people who drive.			•	
	edestrians about how to walk safely and the I-impaired and distracted walking.		•		
15. Encourage	local law enforcement to patrol by foot in communities.				
16. Mobilize c	eanup efforts to make places where people walk safe and attractive.				
-	zations and programs to ensure that underserved				

Minnesota Walks – Case Studies

EXPLORE USE OF TEMPORARY POP-UP INSTALLATIONS TO ENGAGE COMMUNITIES AROUND SPECIFIC PROJECTS.

Live Healthy Red Wing worked with the City of Red Wing staff to showcase a temporary crosswalk using:

- Reflective tape and planters with evergreens to create a sidewalk extension that helps pedestrians and drivers see each other more easily
- O Increasing visibility and safety
- Chalkboard for instant comments would you like something more permanent here in the future or not
- O Information sign explaining pilot project



Minnesota Walks – Case Studies

ENCOURAGE COMMUNITIES TO PROVIDE SNOW AND ICE CLEARANCE OPTIONS, SUCH AS A VOLUNTEER SERVICE, FOR PEOPLE THAT DO NOT HAVE THE TIME, MONEY OR PHYSICAL ABILITY.

Shovel Dilworth is a campaign run by the City of Dilworth, Minnesota, GreenCorps, and PartnerSHIP 4 Health to encourage shoveling sidewalks, being physically active in the wintertime, and Good Samaritan behavior. In an interview with Fargo-Moorhead KVRR, Mayor of Dilworth Chad Olson said, "It is a way to not only help out your neighbor but help the greater community, in terms of allowing students a safer route to get to school." The Dilworth Glyndon Felton National Honor Society and Dilworth Boy Scouts produced youth group volunteers over the winter. Other Dilworth residents were encouraged to participate with the possibility of winning a \$25 gift card at the end of the campaign.

SHOVEL

Let's keep our walkways clear this winter.

- Shovel a neighbor's sidewalk
- Sidewalks used by youth to get to school
- A MATBUS stop
- A fire hydrant
- Or any neglected sidewalk

DILWORTH

The Dilworth Active Living Committee and PartnerSHIP 4 Health are looking for <u>warmhearted</u> volunteers willing to adopt a sidewalk, shovel a neighbor's walkway, or offer assistance. Help shovel for:

- 1) A chance to win a cash prize
- 2) Community support
- 3) Good karma





Care to volunteer? Want to adopt a sidewalk or help a neighbor? Call Will Mackaman at **218-299-7839** or register yourself through our Eventbrite link at <u>https://www.eventbrite.com/e/shovel-dilworth-tickets-14949751108</u> for a chance to win a \$25 gift card generously donated by the Dilworth Lions Club and the Dilworth Park Board.

Next Steps

- Develop MnDOT specific plan guide future investments and facility priorities
- Statewide workshops and technical assistance focusing on Safe Routes to School (MnDOT and MDH) and Walk Friendly Communities
- Work with SHIP (Statewide Health Improvement Partnership) grantees to identify strategies and issues for focus and impact
- Develop pilot plans for people with mobility limitations (CDC grant Mankato area)
- Plan and participate in 2017 National Walking Summit (Sept 13-15; St. Paul)

Next Steps

- Develop toolkits for each partner/stakeholder "type"
 - Engineers and planners
 - Schools
 - Public health
 - Colleges

- Work sites
- Parks and recreation
- Volunteer and non-profit
- Media

Statewide Bicycle System Plan

Goals

- Increase bicycling safety and comfort (separated facilities)
- Support for local bicycle network connections and state bicycle routes
- Increase ridership

Measuring Success

- Identify the number of people bicycling
- Measure crashes and injury rates
- Do projects include needed improvements?



19 strategies

Sample Strategies

Local bicycle network connections

- STRATEGY 1. Establish a local bicycle planning technical assistance program to advance collaboration toward a bicycle system that conveniently connects people to important destinations by bicycle.
- STRATEGY 2. Coordinate and consider regional and local partner participation in MnDOT plans and projects to efficiently respond to critical local and regional bicycle connections.
- STRATEGY 3. Continue supporting efforts to allow local jurisdictions flexibility in choosing road designs that support bicycle travel.
- STRATEGY 4. Build bicycle facilities that have the appropriate amount of separation from motor vehicle traffic based on the local context.

Statewide Bicycle System Plan – District Plans

MnDOT District Plans (March to June 2018)

- Identify routes to connect corridors in State Bicycle Route Network
 - Existing facilities
 - Planned facilities
- Prioritize routes for improvement and investment
- Develop cost estimates



State Bicycle Route Network

Safety Education Document - <u>NEW</u>

Statewide Pedestrian and Bicycle Education and Safety Document

- Create simple, inclusive guidance document (for agencies to individuals)
- To educate, encourage, and improve safety for people who walk/bike
- Identify challenges, opportunities, and strategies
- Document will develop new safety/education campaign (when funding available)
- Currently organizing team of internal/external partners to advise on document scope

Share the Road

Phasing out Share the Road

- Study determined sign ambiguous and frequently misinterpreted
- Discussion to replace sign in the MUTCD (Manual on Uniform Traffic Control Devices)
- Delaware and Oregon no longer use Share the Road
- American Trucking Association and motorcycles also use Share the Road



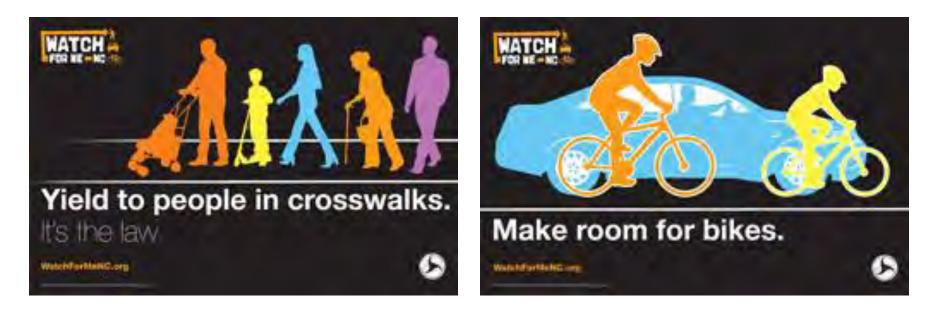




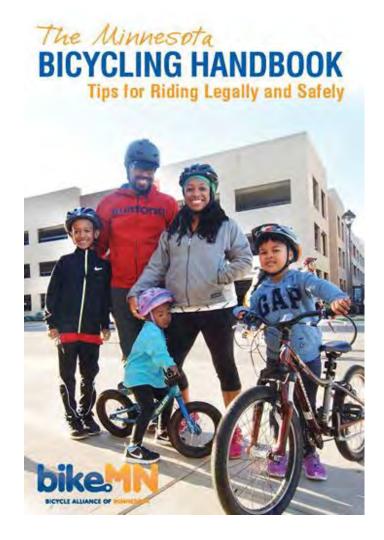
Image: Bike Delaware

Safety Education Document - <u>NEW</u>

Interim campaign (printable materials, crosswalk banners)



Minnesota Bicycling Handbook *



* Order copies from Bicycle Alliance of Minnesota

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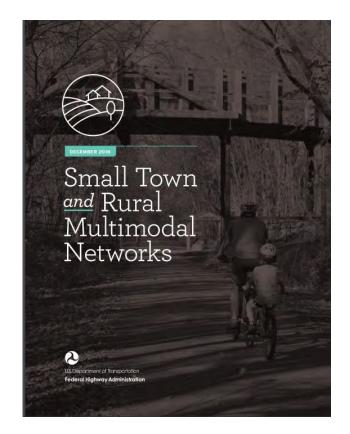
- 1. Safety Equipment
- 2. Anatomy of a Bike
- 3. Before You Ride ABC Quick Check
- 4. Hand Signals
- 5. Dangerous Behavior
- 6. Rules of the Road
- 7. Dangers of Sidewalk Riding
- 8. Commercial Vehicles
- 9. Bicycle Road Markings & Signs
- 10. State Parks & Bike Routes
- 11. Night Riding
- 12. Weather Considerations
- 13. Rules for Paths & Trails
- 14. Dealing with Road Rage
- 15. Theft Prevention
- 16. Dealing with Dogs
- 17. What if There's a Crash?
- 18. Guide to Buying a Bicycle
- 19. Proper Bike Fit
- 20. Tips for Fitting a Bike Helmet
- 21. Minnesota Bike Law FAQ
- 22. Fixing a Flat

Available Resources and Guides



Available at: www.fhwa.dot.gov/environment/bicycle_pedestrian/resources/

- Applies national guidelines <u>specifically</u> <u>to rural/small towns</u>
- Provides case studies from comparable communities - help interpret/apply design practices
- Encourages innovation
- Outcome: safe, accessible, comfortable, and appealing walk/bike networks



https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf

Why a Rural and Small Town Focused Guide?

There is a need and desire to make travel safer and more active in small and rural communities.

While rural places vary considerably in geographic scale and character, there are common issues that prevail:

Longer Non-local Trip Distances

Rural trip distances have been increasing.⁽¹⁾



Higher Crash Rates

While only 19 percent of the population lives in rural areas, 58 percent of all fatal crashes and 60 percent of traffic fatalities were recorded in rural regions.^(III)

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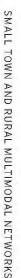
Health Disparities

Rural areas have higher rates of physical inactivity and chronic disease than urbanized areas.⁽ⁱⁱ⁾



Income Disparities

Urban households earn 32 percent more in yearly income than rural households.^(M)



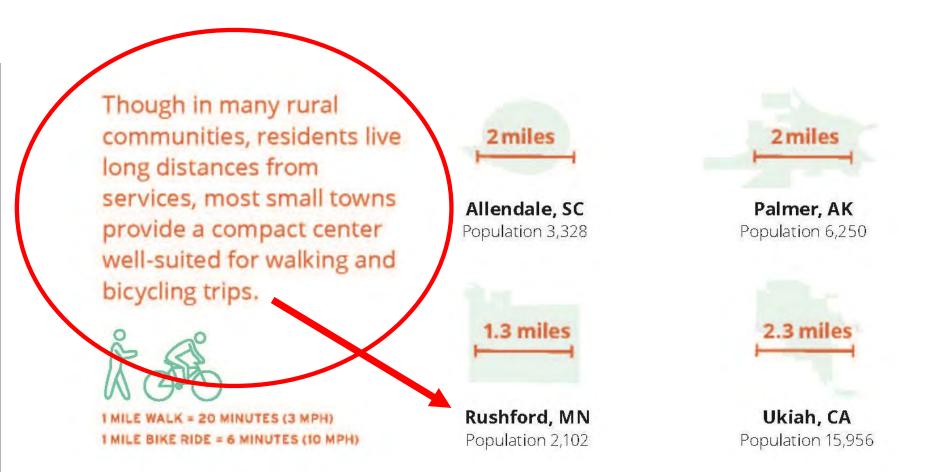
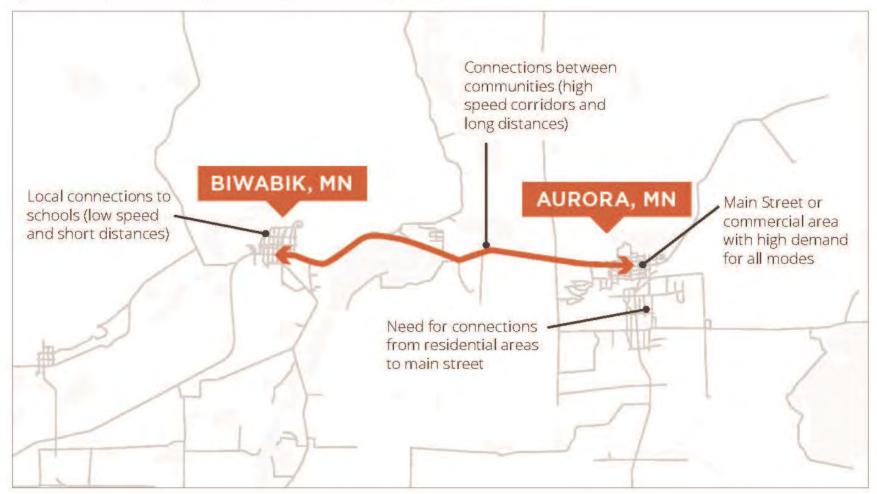




Figure 2-2. Network Connections for Rural Communities and Small Towns



Common Challenges in Small Town and Rural Areas



DUCTIO



Small towns and rural areas near agricultural operations need to consider the needs of wide and slow moving special equipment.



Many small town and rural communities are located near public lands that serve as popular destinations. Creating comfortable linkages, in effect, extends these public lands into their surrounding communities.



With lower densities and greater distances, many small towns A singular focus on automobile mobility results in a lack of and rural areas have developed in a more auto-oriented fashion than urban areas.



facilities for people walking and bicycling, making travel by these modes difficult and less safe.





Provides design info for variety of facility types

12k

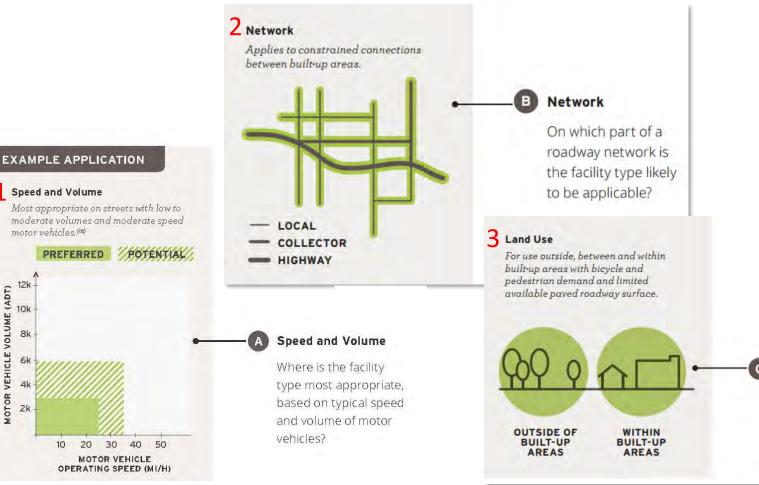
10k 8k

64

46

MOTOR VEHICLE VOLUME (ADT)

Identifies 3 context areas for each facility type (sidebars)



Land Use

Is this facility type most appropriate in built up developed rural areas, or lessdeveloped basic rural areas?

Roadway Crossings

Where paths intersect roads, enhancements should improve conditions for path users.

Network Connection Opportunities

When constructed outside of a roadway corridor, a shared use path offers a low-stress experience away from motor vehicles.

Shared Use Path

A shared use path provides a travel area separate from motorized traffic for bicyclists, pedestrians, skaters, wheelchair users, joggers, and other users. Shared use paths can provide a low-stress experience for a variety of users using the network for transportation or recreation.

Intersection Crossings Enhancements such as median crossing islands or raised crossings can increase

comfort and safety for path users.

Shared Use Path

The single path combines bicyclists and pedestrians in both directions.

BENEFITS

- Provides a dedicated facility for users
 Supports tourism through of all ages and abilities.
- · Provides, in some cases, a short-cut between cities or neighborhoods.
- · Provides, in some cases, access to areas that are otherwise served only by limited-access roadways.
- convenient access to natural areas or as an enjoyable recreational opportunity itself.
- · Provides nonmotorized transportation access to natural and recreational areas, which can especially help low-income people obtain access to recreation.
- · Paths have a small footprint and can display a distinctly rural character.

Speed and Volume Paths operating in independent corridors are fully separated from traffic Facility provision is based on opportunity and connectivity rather than roadway context. In some cases, an independent corridor may offer similar connectivity and access

Network

APPLICATION

Serves connections independently of the street network. May function as a network alternative road and highway connections.



Land Use Generally appropriate outside of built-up areas, and also as a corridor ection within built up areas



TOWN

AND

RURAL

MULTIMODAL NETWO

Bikeable Community Workshops

- Brings community partners together
- Trains local, county, and regional staff, community leaders, and advocates how to plan and support more bike-friendly communities
- Presentations, discussion, and short on-bike mobile workshop
 - Participants assess community's bicycle facilities
 - Prepare an action plan
- Uses League of American Bicyclists' 6Es:
 - Engineering
 - Equity
 - Encouragement
- Education
- Enforcement
- Evaluation





2017: Buffalo, Crookston, Long Prairie, Steele County, Windom, and Worthington

Safe Routes to School Resources

- Walk!Bike!Fun! training
- Bike Fleets (apply early 2018)
- Register walk/bike to school events
- Safe Routes Academy customized training
- Watch for funding solicitations
- Connect via online communications (enews, social media)



Walk! Bike! Fun! Training

Curriculum designed for Minnesota's schools

- Meets MN's education standards
- Key element of MN's Safe Routes
- Ages 5-13
 - Learn traffic rules and regulations
- Potential hazards
 - Handling skills to walk/bike effectively, appropriately, and safely through their community



WALK! BIKE! FUN!

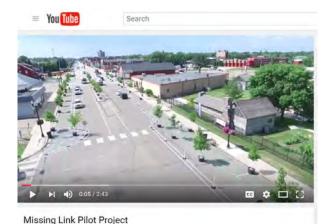
Local-Efforts

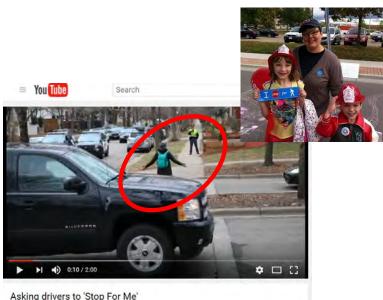
Alexandria – Missing Link Project

- Project aimed to help people visualize safety features for all modes (bump outs, trees, medians, bike lanes)
- <u>https://youtu.be/ZqE0yqwguy8</u> (2 minutes)

St. Paul - Stop for Me

- Campaign to improve safety for people using St. Paul's sidewalks and crossing its streets
- <u>https://youtu.be/8eC-u1dJ1t4</u> (2 minutes)





Alexandria – Missing Link Project



St. Paul - Stop for Me



Local Efforts

ALEXANDRIA, MINNESOTA

COMPLETE STREETS: A COMMUNITY STORY Center for Prevention

BlueCross BlueShield Minnesota

In 2008, Blue Cross and Blue Shield of Minnesota began funding Active Living Douglas County (ALDC), as part of a broader Minnesota initiative to create places where people can lead more active and healthy lives. In the summer of 2010, ALDC launched a Complete Street visioning process for Broadway Street in Alexandria. Because of this process, the construction project, completed in 2014, went beyond the critical infrastructure updates of replacing water, sewage and electrical lines, to include widened sidewalks, bump-outs at crosswalks, and additions of benches, trees, plantings, and bike racks. Along the way, Blue Cross commissioned a study to measure the economic impact and benefit of these updates. Here's what we learned:

" I think it makes the city look alive. That we are, even though we are a small town, still thriving.

....



Businesses along Broadway felt a range of impacts due to the redesign, but more businesses saw an increase in revenue post-construction than a decrease. Overall, Broadway business owners felt the redesign was more beneficial for the local economy than their businesses. Gross sales in Alexandria exceeded those of similar communities, even during the Broadway Street redesign. Upon completion of the redesign, Alexandria saw a sizable uptick in accommodations sales."



" If you do not have your business on Broadway Street, you might as well not have your business.

99



Prepared for Blue Cross and Blue Shield of Minnesota by Smith & Lehmann Consulting, Inc. Blue Cross® and Blue Shield@ of Minnesota and Blue Flus are nonprofit independent licencees of the Blue Cross and Blue Shield Association

ALEXANDRIA, MINNESOTA COMPLETE STREETS: A COMMUNITY STORY Center for Prevention

BlueCross Minnesota

component of minimizing losses and maximizing **COLLABORATION &** opportunities was COMMUNICATION

""

A key

accomplished

through the

partnerships

was key.

99

Broadway business owners say:

Appearance

Pedestrian

Businesse

should.

Traffic

of Street

APPEARANCE & PEDESTRIAN TRAFFIC

51.2% "IMPROVED!

UPPO 51.29

RECOMMEND SIMILAR PROJECT?

Business owners recommend similar projects

City officials attributed established close to two years prior to the project ... Communication

87.5% "IMPROVED"

OPPOSE

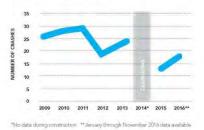
UNSURE

the success of the redesign to highly effective communication and collaboration among multiple stakeholders. Working closely during planning and construction mitigated potential negative impacts of the redesign and continues to foster a strong relationship between the City and local businesses.



TRAFFIC SAFETY

The number of crashes along Broadway Street was cut in half from 2013, the year prior to construction, to 2015, the year following construction.





Prepared for Blue Cross and Blue Shield of Minnesota by Smith & Lehmann Consulting, Inc. Blue Cross® and Blue Shield® of Minnesota and Blue Plus are nonprofit independent licencees of the Blue Cross and Blue Shield Association

Summary

- Familiarity with issues, design documents, countermeasures
- Develop networks best networks are:
 - Connected
 - Direct: access to destinations along convenient path
 - Accessible: access to destinations for all abilities (accessible not same as safe)
 - Offer alternatives/choice
 - Comfortable: appeal to broad range of age/ability and considers amenities
 - Safe and secure: reduce risk of injury, danger, or crime
- Involve varied partners helpful with political will
- Use short/long-term solutions (signal timing, narrower travel lanes)
- Use all flexibility allowed
- Benefits: economic/business impacts, community cohesion, increased use, etc.



Contact info

Melissa Barnes

Pedestrian and Bicycle Safety Engineer

Melissa.Barnes@state.mn.us

651-234-7376

Liz Walton

Landscape Architect

Liz.Walton@state.mn.us

651-366-4186

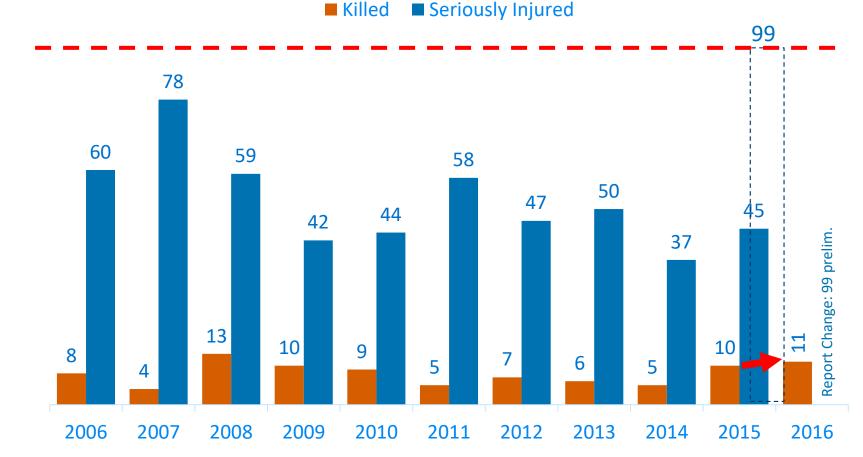
Pedestrian - Fatal & Serious Injuries



SOURCE: Crash Facts. Minnesota Dept. Public Safety, Office of Traffic Safety. Preliminary 2016 data as of April 2017.

Bicyclist - Fatal and Serious Injuries

Minnesota Bicyclist Injuries



SOURCE: Crash Facts. Minnesota Dept. Public Safety, Office of Traffic Safety. Preliminary 2016 data as of April 2017.