

Planning for People First — Complete Streets

Minnesota Council on Transportation Access (MCOTA) Meeting

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What are Complete Streets?

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- Address safety and access needs for users of all ages and abilities
- A multi-modal <u>approach</u>
- Flexible for any transportation project, any context

Hwy 4 in St. James (D7), MN, 2018

MnDOT Complete Streets Policy History

" 'Complete Streets' is the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the <u>safety and accessibility needs of</u> <u>people of all ages and abilities</u> using the transportation system.

Complete Streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles <u>moving along and across</u> roads, intersections, and crossings in a manner that is <u>sensitive to local context</u> and recognizes that the needs vary in urban, suburban, and rural settings."

(2013) MnDOT Complete Streets Policy established

- One of first DOTs to develop a statewide policy
- Comply with <u>Minnesota Statutes §174.75</u>
- MnDOT must follow a Complete Streets approach in all phases of planning, project development, operation, and maintenance activities

(2016) MnDOT Complete Streets Policy revised

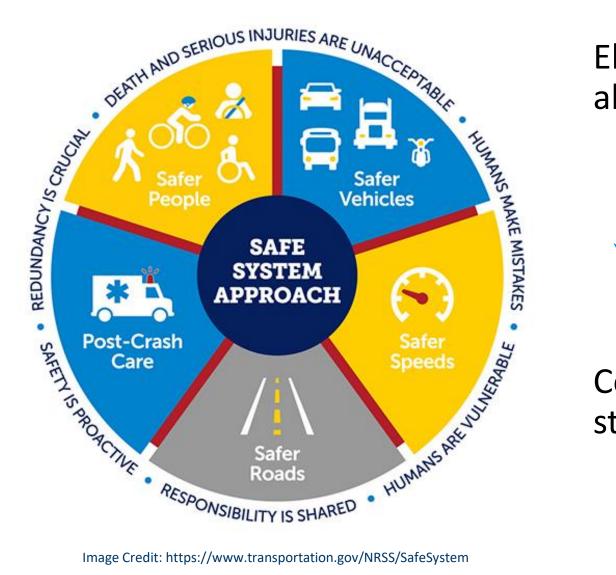
- Consolidate relevant guidance
- Establish reporting process and requirements
- Clarify policy exceptions

MnDOT's commitment to Complete Streets

Hwy 61 in Lake City (D6), MN, 2020

- One of the first DOTs to develop a statewide Complete Streets Policy (2013)
- Compliance with Minnesota Statutes §174.75
- Operationalizes MnDOT's mission, vision, and statewide planning efforts
- Updated Policy to provide implementation tools and performance measures (2022)

Supporting a Safe System Approach



Eliminate fatal and serious injuries for all road users by:



Accommodating human mistakes

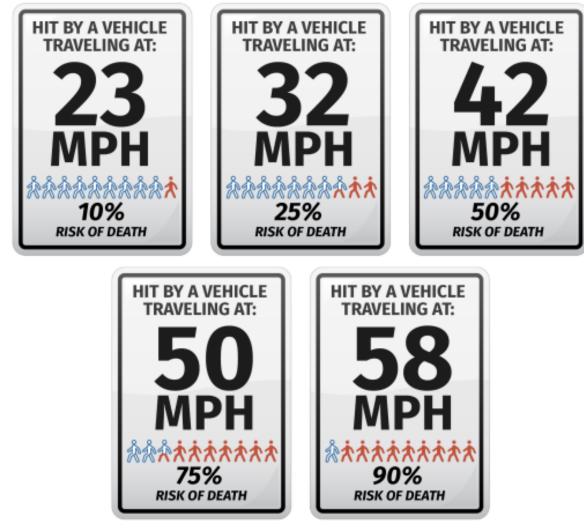


Complete Streets is an implementation strategy:





Safer Speeds



- Proactive road design to slow speed:
 - improve visibility
 - Provide additional time for drivers to stop
 - Keep impacts on the human body at tolerable levels
- Design streets for desired speed
- Prioritize lower speeds when people walking/biking are mixing with drivers

Image credit: https://highways.dot.gov/sites/fhwa.dot.gov/files/2020-11/FHWA_PedSafety_ActionPlan_Nov2020.pdf

Safer Roads

- Separate people in space and time
- If not possible to separate, then try to manage kinetic energy
- Increase visibility and awareness







Complete Streets improvements



SPEED MANAGEMENT

Appropriate speed limits for all road users



INTERSECTIONS

Access management Roundabout/mini-roundabout/traffic circle Reduced left-turn conflict intersections

ROADWAY DEPARTURE

Longitudinal rumble strips and stripes; two-lane roads



CROSS CUTTING

Landscaping* Lighting improvements



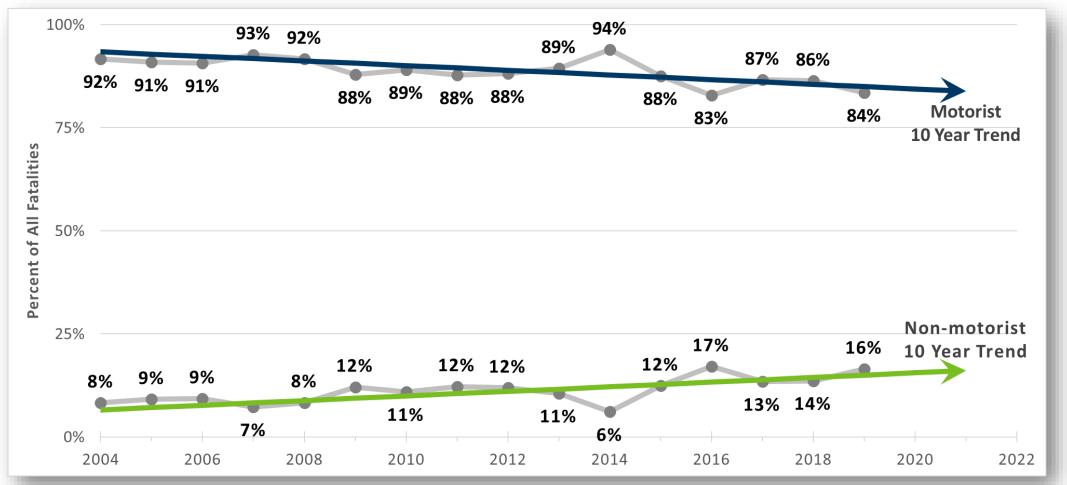
PEDESTRIAN/BICYCLIST Bicycle lanes Crosswalk visibility enhancement Curb extension/bump-out* Leading pedestrian interval Median/pedestrian refuge island Pedestrian Hybrid Beacons Rectangular Rapid Flashing Beacons (RRFB) Road diet/roadway reconfiguration Walkways (shared use path, sidewalk, widened shoulder)



TRANSIT Bus lane/shoulder* Bus shelter* Park & ride facility*

Disproportionate trend of non-motorist fatalities

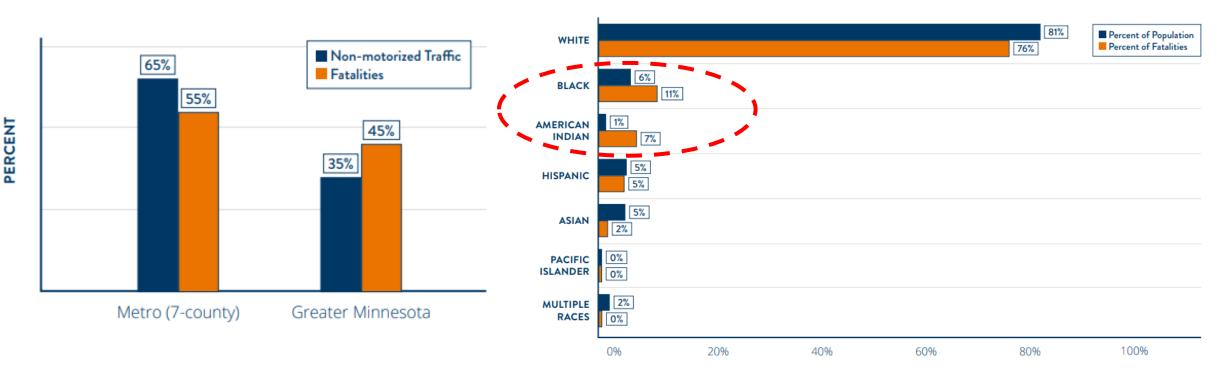
Traffic Fatalities in Minnesota (2004-2019)



Disproportionate non-motorist fatality burdens

MN Non-Motorist Fatalities by Geography (2015-2019)

MN Non-Motorist Fatalities by Race, Statewide (2015-2019)



Complete Streets advance transportation equity





- Many past transportation planning, design and operations decisions have inadvertently created **"incomplete streets"**
- These streets don't provide safe places for people to walk, bike or take public transportation.
- This is particularly dangerous for those who suffer disproportionately from transportation-related impacts:
 - People with disabilities
 - Communities of Color
 - Older adults
 - Children
 - Low-income communities

Image Credits: Smart Growth America

What's required?

POLICY STATEMENT:

The Minnesota Department of Transportation (MnDOT) must follow a Complete Streets approach in all phases of planning, scoping, project development, construction, operations, permitting, and maintenance activities.

APPLICABILITY:

Compliance is required by all MnDOT employees and MnDOT partners working on trunk highway projects, such as local agency representatives, consultants, and contractors.



What's exempt?



Emergency, routine, preventative, or localized maintenance and repair work that does not change the structure or layout of the road and does not meet the ADA alteration threshold (refer to <u>MnDOT ADA Tech Memo</u> for specific guidance).



Projects such as storm water tunnels, storm sewers, landscaping, and slope stabilization that do not directly affect transportation system users or layout.



Roadside infrastructure projects on freeways that do not involve entrance/exit ramps, loops or overpasses such as high-tension cable guardrails, sign replacements, and overhead sign structure replacements.



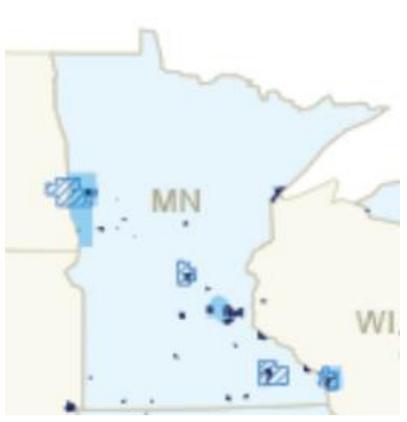
Installation or replacement of fiber optic cables, other transmission lines, solar panels or other energy infrastructure in state owned right-of-way.

What's the connection between Complete Streets and ADA?

Addressing ADA is an integrated part of a Complete Streets approach to improve mobility and access for all abilities



Minnesota Complete Streets Partners



Source: Smart Growth America, Feb. 2023

MnDOT District 1:

• Duluth

MnDOT District 2:

in progress

MnDOT District 3:

- Big Lake
- Brainerd
- St. Cloud Area Planning Org.
- St. Cloud

MnDOT District 4:

- Battle Lake
- Breckenridge
- Clay County
- Dilworth
- Fergus Falls
- Frazee
- Hawley
- Ottertail
- Parkers Prairie
- Wilkin County

MnDOT Metro District:

- Bloomington
- Brooklyn Center
- Burnsville
- Falcon Heights
- Golden Valley
- Hennepin County
- Hopkins
- Independence
- Maple Plain
- Maplewood
- Minneapolis
- New Hope
- North St. Paul
- St. Paul
- West St. Paul

MnDOT District 6:

- Albert Lea
- Austin
- Byron
- Northfield
- Red Wing
- Rochester-Olmsted
 Council of Governments
- Rochester
- Stewartville
- Winona

MnDOT District 7:

- Jackson
- Mankato
- New Ulm
- Worthington

MnDOT District 8:

- Hutchinson
- Pipestone

Updated MnDOT Guidance - Grounded in Relative Vulnerability

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User

Relative Vulnerability

High. Due to the speed and mass of vehicles, people walking are the most vulnerable. Safety of the most vulnerable users must be priority, as they are most at risk.



Medium-high. Less vulnerable than people walking, but more vulnerable than people driving due to their speed and mass. The range of age and experience for bicyclists varies broadly, which affects the needs and designs for projects.



High. People taking transit have a similar level of vulnerability as people walking or biking.



Low. Because of the relative safety provided by a vehicle (e.g., seatbelts, airbags), people driving are less vulnerable than people walking and biking.



Low. Because of the relative safety provided by a vehicle, people driving freight vehicles are less vulnerable than people walking and biking.

Roof strength test

Front-impact airbags moderate overlap front crash test

Side crash test

Overhead airbags

TRAC

Side impact

airbags

Anti-lock brakes

Pretensioners

Stability control

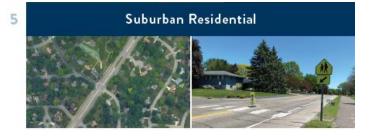
Updated MnDOT Guidance - Sensitive to Context















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Updated MnDOT Guidance - Baseline Transportation Hierarchy



Relative vulnerability and expected volume by context provides a baseline hierarchy as a <u>starting point</u>, for iteration with partners and stakeholders

Measuring Performance

PROCESS MEASURE	DESCRIPTION	TARGET	OUTCOME MEASURE	DESCRIPTION	TARGET
Complete Streets Project Report (CSPR) completion	Annual % of eligible MnDOT projects with a completed CSPR	100%	Bicycling improvements	Annual % of MnDOT projects with an identified need that include bicycling improvements.	90%
			Equitable walking improvements	Annual % of MnDOT projects that benefit high-priority areas for walking (MnDOT Priority Area for Walking Tiers 1, 2, or 3).	Increase in % over time
CSPR approval	Annual % of completed CSPRs with Project Sponsor approval	100%			
			Safety improvements	Total number of MnDOT projects that include FHWA safety countermeasures.	Increase in # and trend over time
			Meeting user needs	Share of MnDOT projects currently meeting or scoped to meet pedestrian, bicyclist, transit and freight needs	Increase in % and trend over time

Updated Complete Streets Website

DEPARTMENT OF TRANSPORTATION

(511)

Search MnDOT A to Z General Contacts

Complete Streets

Complete Streets

MnDOT is a Complete Streets leader. In 2013, we were one of the first DOTs in the country to develop a statewide policy. A Complete Streets approach is required on all eligible projects. This means addressing the safety and access needs of users of all ages and abilities. It means considering the needs of people walking, biking, and taking transit, motorists, commercial vehicles, and emergency vehicles moving along and across roads. A Complete Streets approach recognizes varying needs across urban, suburban, and rural settings.

Importance

Examples

Complete Streets has many benefits, including improving safety, advancing transportation equity, strengthening local economies, and building healthy, climate-resilient communities.



We reconstructed Hwy 78 with a Complete Streets approach to improve bicycling, walking, and livability. Hwy 78 is also Battle Lake's main street.

Related sites

Complete Streets in FHWA
 Smart Growth America

Resources

- <u>Complete Streets policy</u>
- Complete Streets handbook (PDF)
- <u>Complete Streets case studies (PDF)</u>

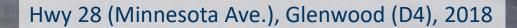
Stay in touch

Sign up for complete streets email updates

http://dot.state.mn.us/complete-streets/

Next steps for MnDOT

- Communication updated resources, research and case studies
- Education trainings, partner presentations, technical support
- Focused integration MnDOT project planning, design, and operations



Discussion

- What questions do you have?
- What opportunities should we explore to improve Complete Streets application across the State?





Thank you!

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