



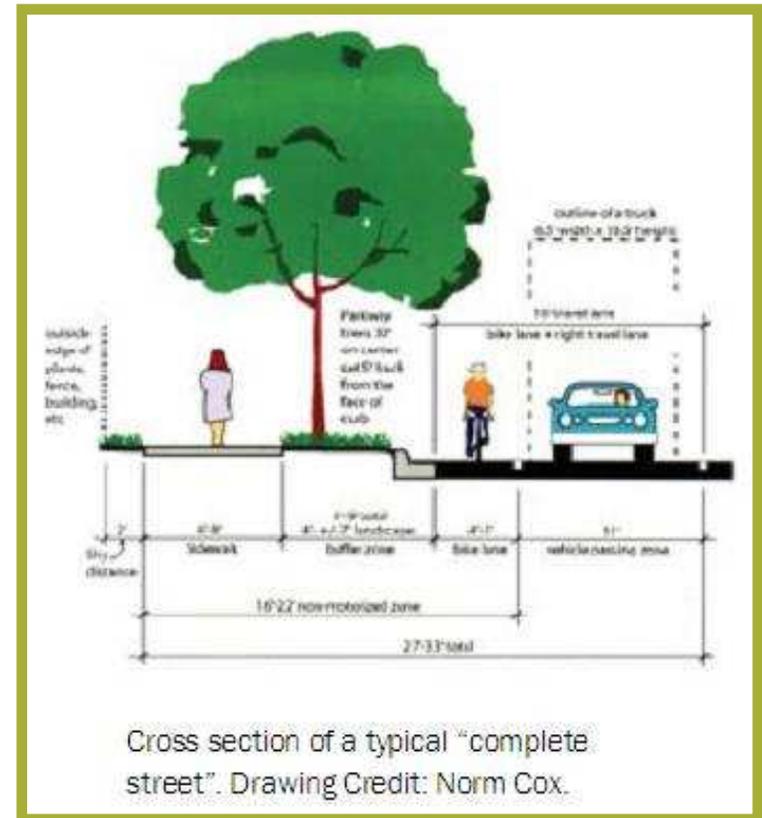
# Complete Streets: Jonesville

Holly Madill  
Complete Streets Project Coordinator  
Michigan Department of Community Health



# What are “Complete Streets”?

Complete streets are roadways planned, designed and constructed to accommodate safe access for all users. On these streets, pedestrians, bicyclists, motorists and transit riders of all ages and abilities are able to safely move along and across streets which may include sidewalks, crosswalks, and bike lanes.



# Complete Streets & Context Sensitive Solutions Examples

Urban



Suburban



Rural



**There is no prescription for Complete Streets!**

# Incomplete Street



TOO NARROW TO SHARE WITH BIKES

# Incomplete Street



TOO DANGEROUS TO CROSS ON FOOT

# Incomplete Street



UNINVITING FOR BUS RIDERS

# Incomplete Street



INACCESSIBLE FOR WHEELCHAIR USERS

# Incomplete Street



NO ROOM FOR PEOPLE, NO SIDEWALKS

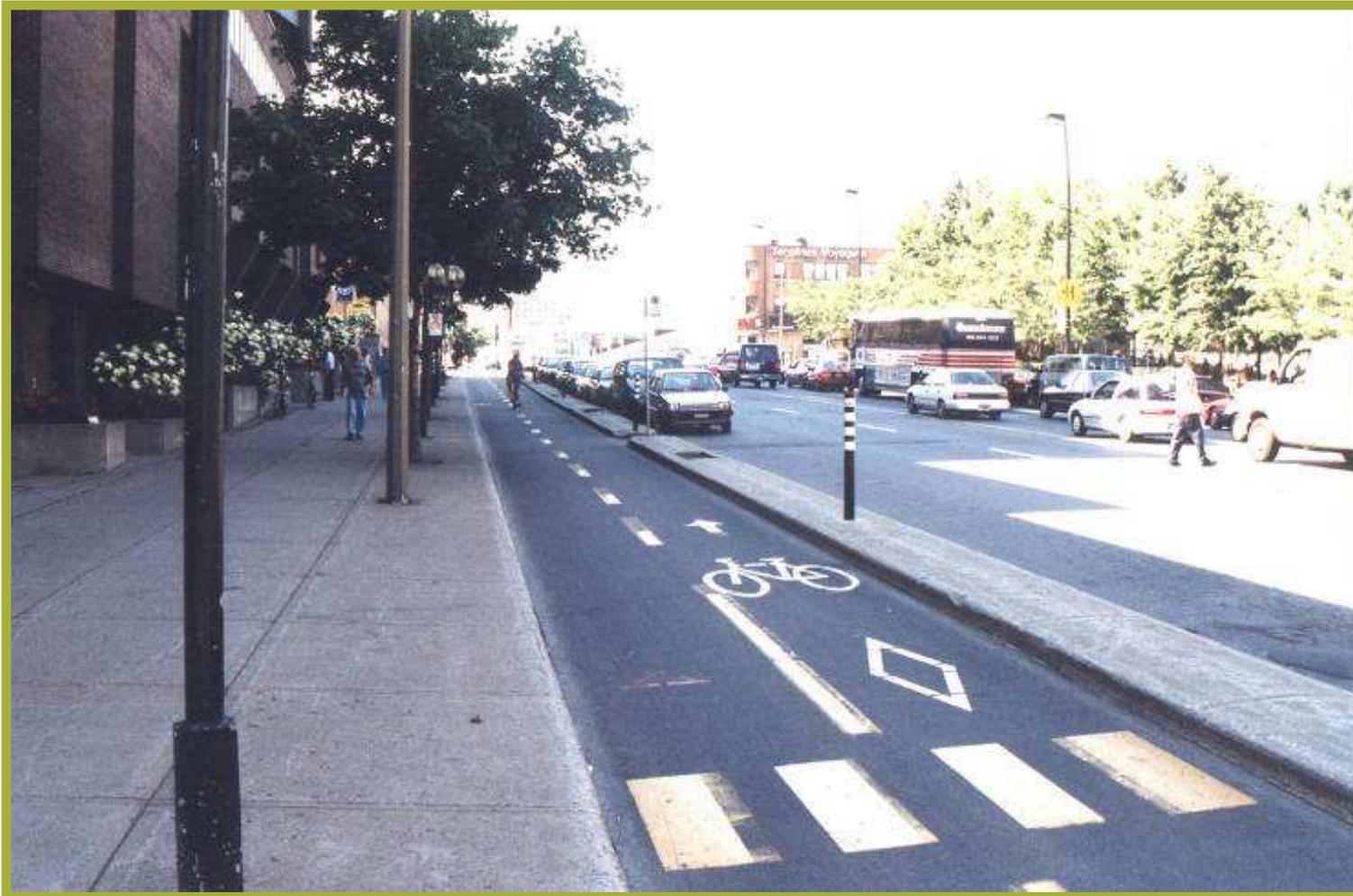
# The Many Types of Complete Streets: Urban



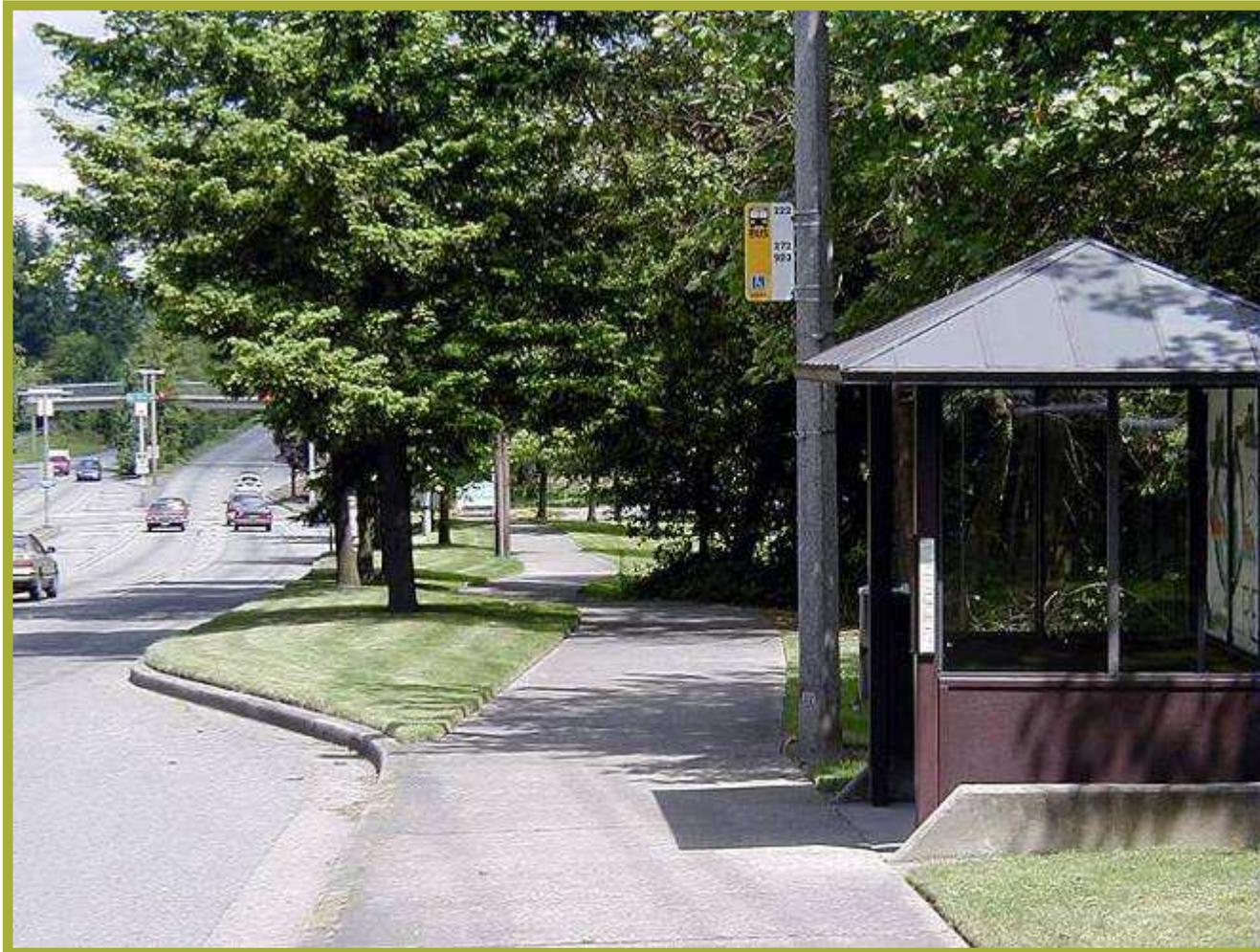
# The Many Types of Complete Streets: Rural



# The Many Types of Complete Streets: Commercial



# The Many Types of Complete Streets: Major Road



# The Many Types of Complete Streets: Major Road



# The Many Types of Complete Streets: Neighborhood



# The Many Types of Complete Streets: Downtown



# Why Complete Streets? MONEY



## Ease Residents' Expenses

- Non-motorized travel allows people to make fewer car trips and save on gasoline.
  - A 2007 MSU study confirms that building walk and bike friendly features leads to more walking and bicycling.

## Ease Employers' Expenses

- Poor exercise habits of employees costs employers additional healthcare costs.
- Businesses that provide opportunities for employees to walk and bicycle during the workday report a ~30% reduction in sick-leave absenteeism, health care use, and worker's comp and disability claims.



## Ease Government Expenses

- Non-motorized travel manages traffic demand, saves money on road and parking facilities, and reduces congestion.
- By making a community more walkable, property values can increase from \$10-\$40/sq.ft. to \$50-\$100/sq.ft. and homebuyers are willing to pay \$20,000 more.

# Why Complete Streets? PLACE

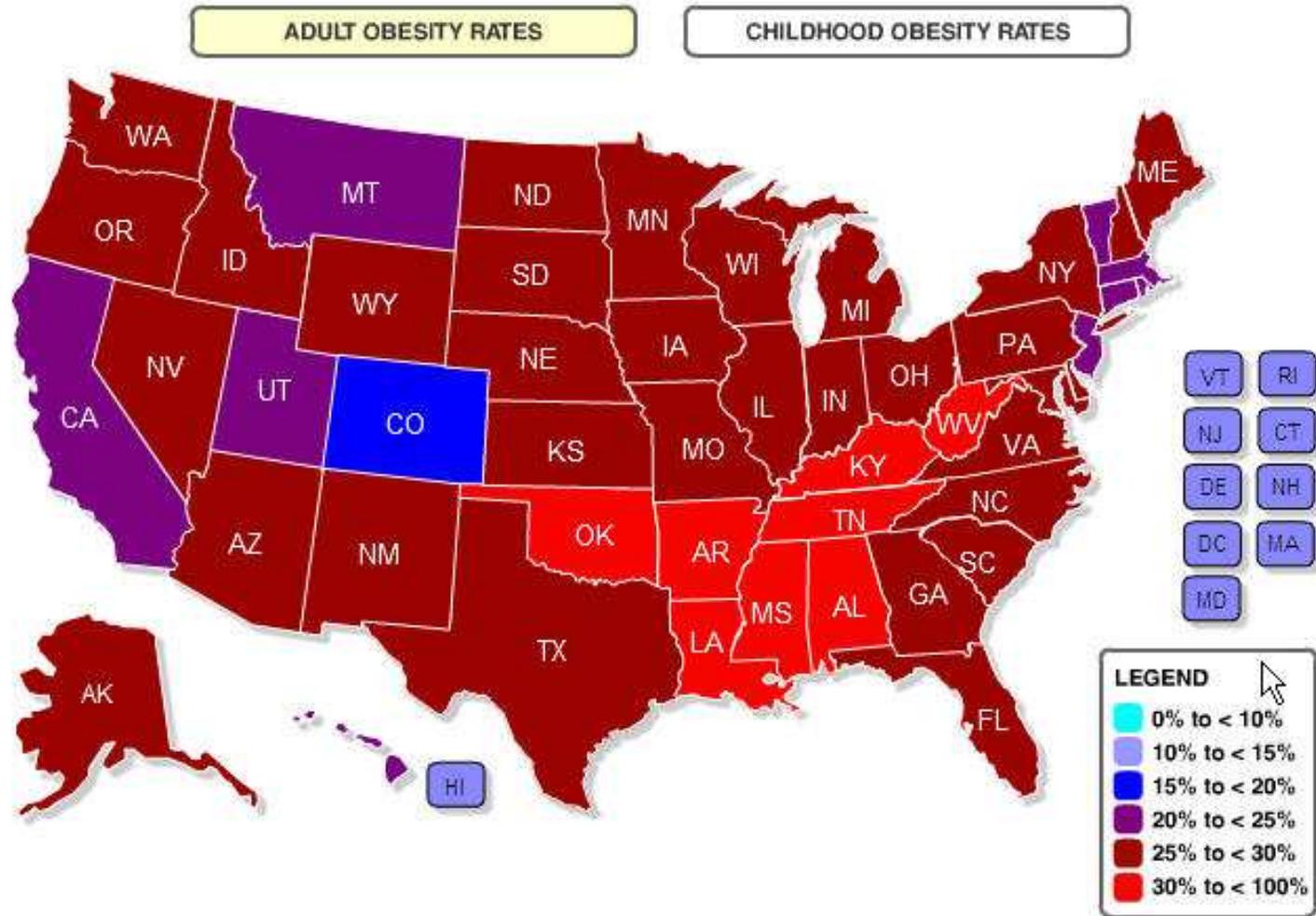


- **Increase sales for businesses:** Walkability features in downtown Lodi, CA have led to a 30% overall increase in sales for downtown businesses, a drop in the vacancy rate from 18% to 6%, and the addition of 60 new businesses.
- **Attract Residents:** 79% of Americans rate “sidewalks and places to take walks” as a top consideration in choosing where to live.
- Recent college graduates from Michigan schools say that safe streets and neighborhoods, walk-able streets, and affordable living are their top factors in **choosing where to live.**

\* Sources at [www.walkbikelansing.com/Why](http://www.walkbikelansing.com/Why)

# Why Complete Streets? HEALTH

## Adult Obesity Rates and Childhood Obesity Rates



# Why Complete Streets? HEALTH

## Improve Physical Health

- The leading cause of death in Michigan is heart disease.
- 1/3 of all deaths in the United States attributable to coronary heart disease could have been prevented if all persons were highly active.
- Research continues to show a strong relationship between walkability and bikeability and residents' overall physical health.
- Walking and bicycling help prevent obesity, diabetes, high blood pressure, and colon cancer.



## Ease Healthcare Costs

- If just 1 in 20 sedentary Michigan adults became physically active, Michigan employers would save \$575 million per year in healthcare costs and insurance premiums.
- \$0.30 per dollar will be spent on healthcare as opposed to \$0.07 in the 1950s

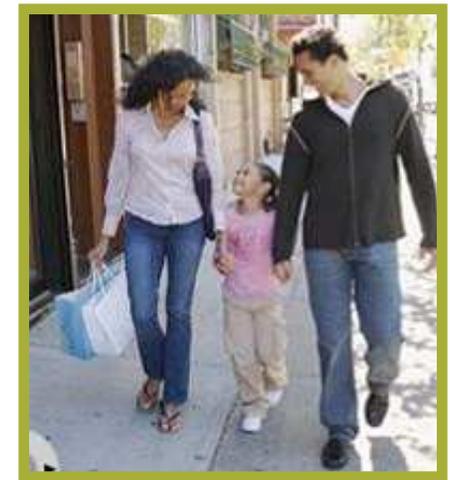


# Why Complete Streets? SAFETY

## MI Deaths in Crashes

- 2009 in 121
- 2008 in 114
- 2007 in 134

- Of the 13 pedestrians and bicyclists killed by cars in Lansing between 2000 and 2006, most were children and seniors.



Source: Michigan Traffic  
Crash Facts/Office of  
Highway Safety Planning

# Why Complete Streets? ENVIRONMENT

## Improve Air Quality

- In Michigan, vehicles create 30% of Michigan's ozone-forming pollutants.
- 2006 studies show that the more walkable a community, the lower the vehicle emissions.



## Reduce Our Carbon Footprint

- Global warming is increasing, and the impacts will only get worse if we don't start cutting carbon emissions.
- Between 1960 and 2001, Michigan's CO<sub>2</sub> emissions from fossil fuels increased by 46%—primarily as a result of oil combustion for transportation.



# Why Complete Streets? MOBILITY EQUITY & CHOICE

- 50% of Americans will be over 55 in 2030
- 21% of Americans over the age of 65 do not drive
- 33% of Americans don't drive
- >50% of non-drivers stay at home because they lack transportation options



Photos: Michael Ronkin, ODOT

# Why Complete Streets?

## MOBILITY EQUITY & CHOICE

- 20% of Americans have a disability that limits their daily activities
- Complete Streets feature curb cuts and other designs for disabled travelers
- *Complete Streets* reduce isolation and dependence



# Why Complete Streets? PEOPLE

- **52%** of Americans want to bike more than they do now
- **55%** of Americans would prefer to drive less and walk more
- The # of people who exercise 3x/week will increase by **25%** if we create/improve places to be active
- Residents are **65%** more likely to walk in a neighborhood with sidewalks

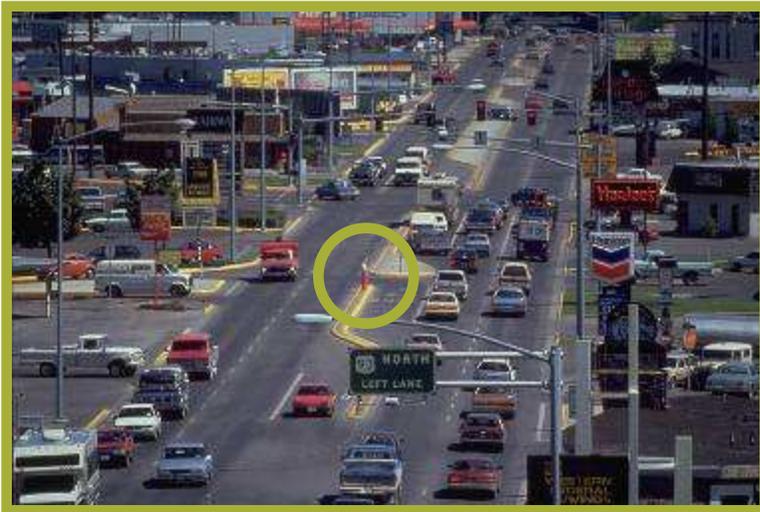


photo: Dan Burden, pedbikeimages.org

# Where would you rather live?



OR



OR



# FHWA Walkway and Bikeway List

- **Sidewalk**—A paved walkway that allows pedestrians to walk along the roadway without interference from traffic.
- **Buffer or planting strip**— A zone separating pedestrians on sidewalks from moving vehicles on the road.
- **Marked crosswalk**— Areas on the street (delineated by paint, brick, etc.) indicating to pedestrians where they should cross the road.
- **Curb ramp or curb cut**— A ramp providing a smooth transition between sidewalk and street.
- **Raised medians and crossing islands**— The median is the area between opposing lanes of traffic. These provide pedestrians with a safe place to wait while crossing a street.
- **Curb extension**— An extension of the sidewalk into the street that reduces the distance pedestrians must cross.
- **Traffic sign**— An official device that gives a specific message, either by words or symbols, to the public. Examples are "stop," "yield," etc.

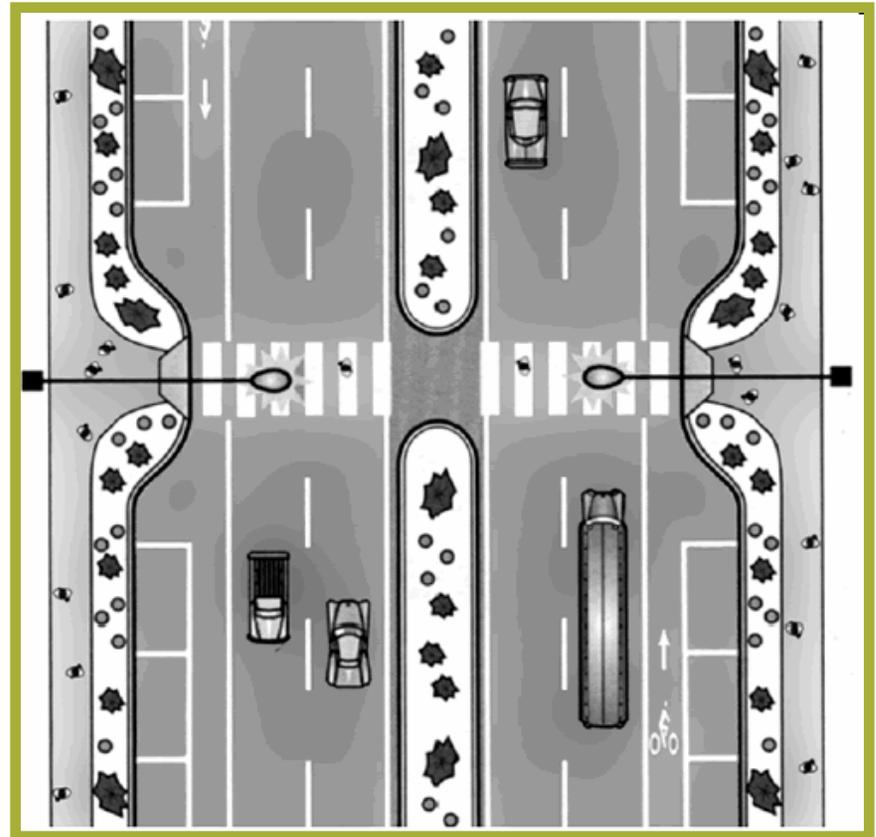
# FHWA Walkway and Bikeway List

- **Traffic signal**— A visual signal to control the flow of traffic. Pedestrian signals let pedestrians know when they have priority and warn drivers to stop/yield for pedestrians.
- **Traffic calming**— Physical changes to a street to encourage drivers to drive slowly or to discourage cut-through traffic.
- **Road diet**— Narrowing or eliminating travel lanes on a roadway to make more room for pedestrians and bicyclists.
- **Overpasses/underpasses**— A street crossing separating pedestrians from motor vehicle traffic (i.e., bridge or tunnel).
- **Street lighting**— This illuminates the roadway and intersections to help motorists see other motor vehicles and pedestrians crossing the roadway.
- **Temporary walkways**— These provide pedestrians with designated routes along a construction site when sidewalks and other pedestrian travel ways have been closed.

# Are Complete Streets Expensive?

“By fully considering the needs of all non-motorized travelers (pedestrians, bicyclists, and persons with disabilities) early in the life of a project, the costs associated with including facilities for these travelers [later] are minimized.”

Jeff Morales, former Director,  
CalTrans



# Sample Costs of Complete Streets Improvements

<u>Facility / Project Type</u>	<u>Cost</u>
4 to 3 lane conversion (re-striping only) (could include bike lanes)	\$8,000 per mile
4 to 3 lane conversion (w/ road work)	\$20,000 per mile
On-road bike lane (5' x 2 directions) (Cost for additional pavement, striping, and signs)	\$550,000 per mile
Sidewalk installation	\$120,000 per mile/side

**\*\*The cost of creating complete streets can be minimal, particularly if you are already resurfacing the road or re-striping**

# Costs

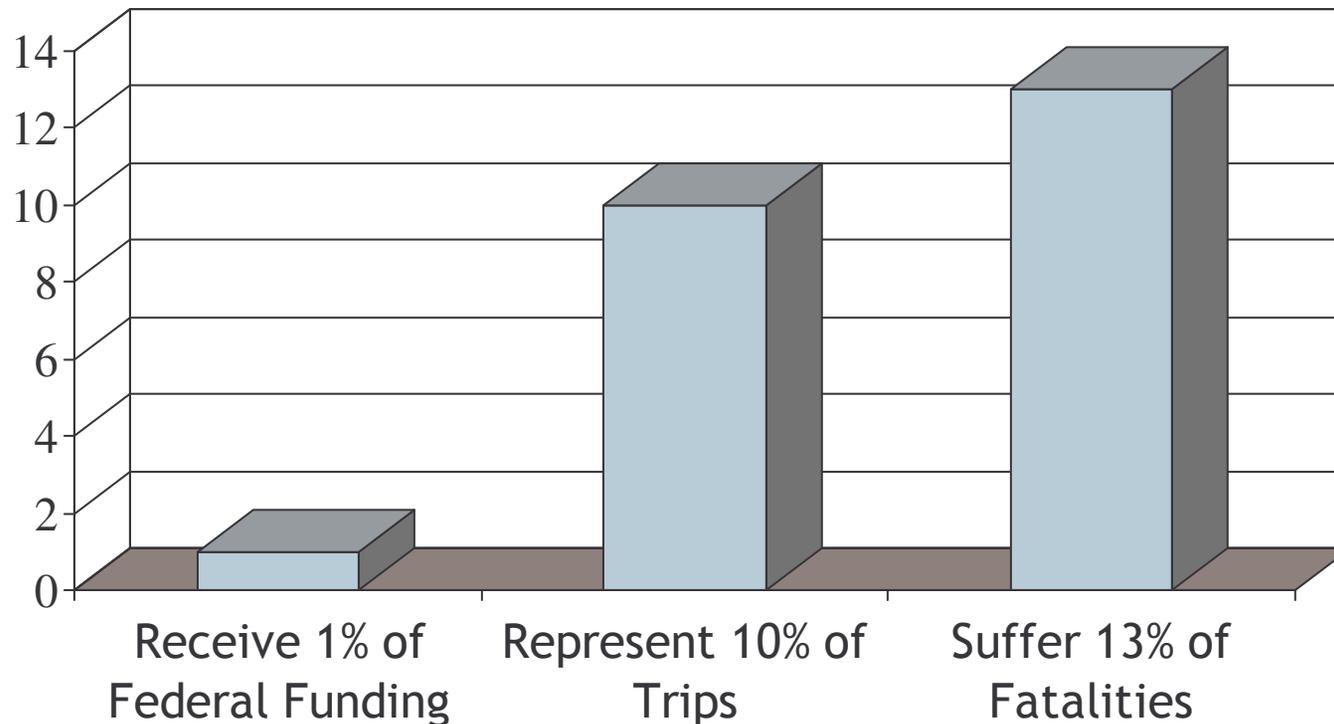
- 20 miles of bike lane = ~\$160,000, if done as a “road diet”
- 30 miles of sidewalk = ~\$3.6 million
- 5 miles of River Trail = ~\$1.7 million



Photo by Heidi Potter

# Nationally: % of Trips vs. % of Funding

Pedestrians and Bicyclists...



FMIS, NHTS, FARS federal databases

# National & State Advocates



# Policies Nationwide



[www.completestreets.org](http://www.completestreets.org)

# Complete Streets State Policy Action Team

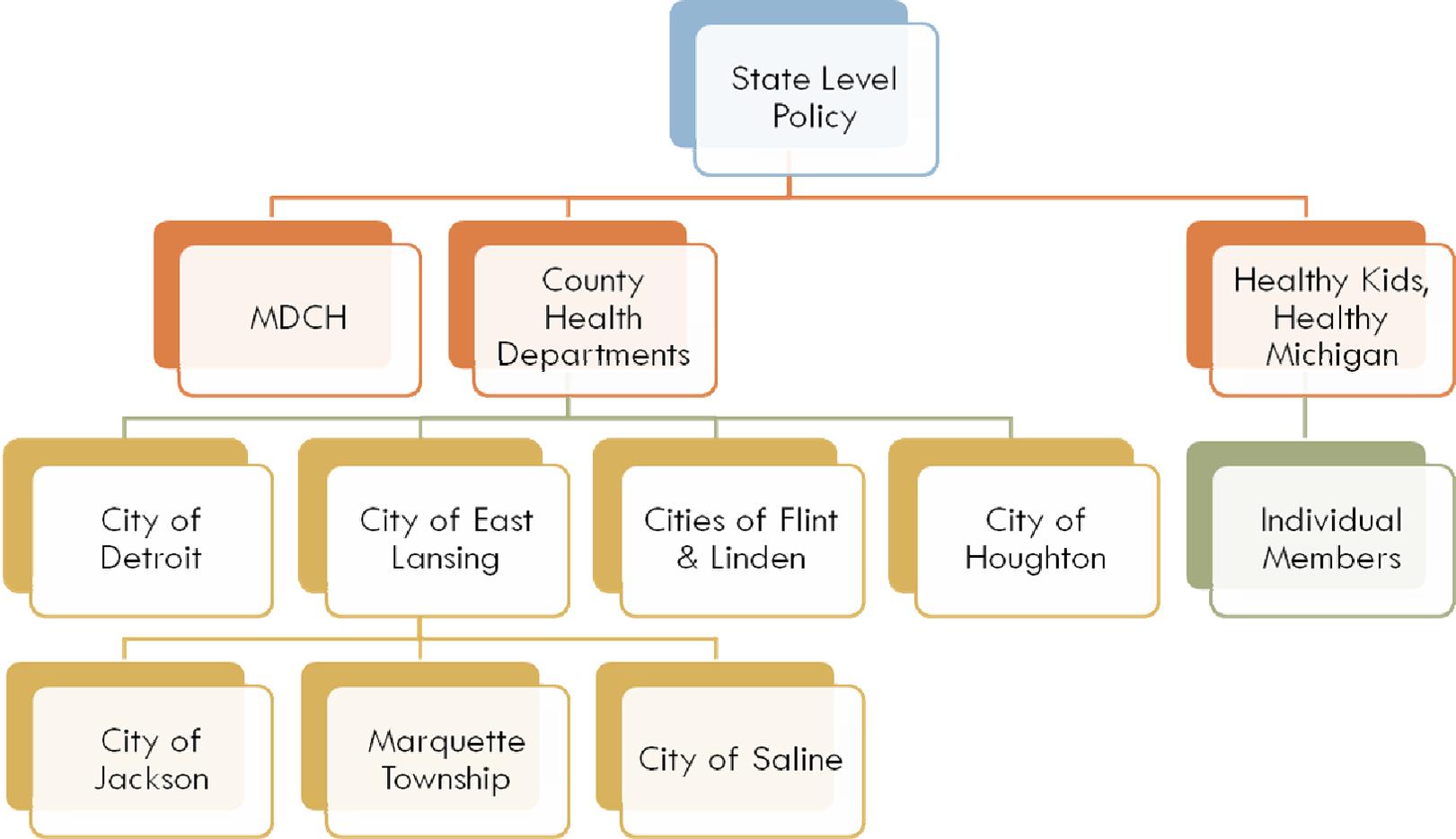
- County Road Association of Michigan
- Crim Fitness Foundation
- League of Michigan Bicyclists
- Michigan Association of Counties
- Michigan Association of Planning
- Michigan Department of Community Health
- Michigan Department of Transportation
- Michigan Environmental Council
- Michigan Fitness Foundation
- Michigan Municipal League
- Michigan Recreation and Park Association
- Michigan State Housing Development Authority
- Michigan Trails and Greenways Alliance
- Seven Local Community Grant Sites
- YOU

# Local Policies



[www.michigancompletestreets.org](http://www.michigancompletestreets.org)

# Overview of the MDCH Program



# State-Level Complete Streets Policy

## PA 135: MDOT

- Defines CS
- Mandates consultation & notification at all levels
- Mandates use of best practices
- STC to adopt a CS policy for MDOT, develop model CS for localities
- MDOT/locals need to consult/ agree on CS in 5-year program
- TA from STC/MDOT
- Allows localities to enter maintenance agreements
- establishes Advisory Council

## PA 134: local planning laws

- Expands definition of street to include all users and modes
- Enables CS as a portion of local master plan
- Transportation improvements in a plan take into account local context and all users
- Means for implementing transportation elements in cooperation with CRC or MDOT

# Thank you!

