Creating a Walkable Portville Through Complete Streets

Portville, New York

May 25, 2011

Prepared by: Justin S. Booth
& Joshua M. Poppel

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Table of Contents

Appendices

Creating a Walkable Portville: Through Complete Streets
Course Overview

The Creating a Walkable Portville workshop was held on May 23rd 2011. Justin Booth, Green Options Buffalo and Joshua Poppel, Alta Planning + Design; led the workshop.

The workshop contained several main elements; an introduction and visioning exercise, a presentation on the key elements of a Walkable Portville, policy recommendations for sustainability and a group exercise to develop solutions to the current challenges inhibiting the community's ability to walk and bicycle for active living.

Each Element of the course presented was designed to assist the participants in developing a Walkable community. During the visioning session participants discussed various issues and defined how they would like to see their vision take shape. The presentation educated participants on why complete streets are important, creative engineering strategies to implement them and policy ideas for long term sustainability. Provided was an overview on each along with a menu of options that may be considered in developing a walkable community. The participants worked collaboratively to discuss solutions to the local challenges observed during the walking tour. Their intimate

knowledge of the local community helped to create appropriate solutions which were related back to the visioning session. Lastly, the group discussed the necessary next steps and assigned responsibilities to course attendees to keep the process moving. Overall, the workshop was intended to help the local community develop a walkable environment and provide a strong basis for applying to acquire future resources while creating sustainability.

Vision

To start the workshop, participants were asked to introduce themselves and briefly present their individual vision in implementing a Walkable Portville. Each participant's vision was recorded and related to at the end. The purpose of this was to allow for the opportunity to air all concerns and issues in a constructive manner. The vision developed out of this exercise was referred to throughout the course as an aide to identify appropriate recommendations for moving the discussion forward.

The following is a list of the participants' vision:

- Development of a new comprehensive plan to include Complete Streets
- Create walkability to add more value to the community

- Change community for the better
- Provide lighting and benches
- Access to recreational opportunities
- Accessibility for all throughout community
- Opportunities for beautification
- New Open Space areas
- Temple Street access to Lyman Baker Park
- Non-motorized access to all public spaces
- Better Bicycle connections

Recommendations

The walking tour through Portville was to focus the participants on specific issues within their community's built environment that affect people's ability to walk and bicycle for daily routines. At the end, each person identified a next step and action they were willing to take in order to begin establishing the stated visions.

During the walking tour specific issues were identified and observations made which included:

Temple Street – leads toward Lyman Baker Park

- Good sidewalks, however; it ends along one side with the Anne Dusenbury Estate/ Cemetery
- Sidewalk completely ends at foot bridge
- Dyke system provides opportunities for Trail system
- There is a missing sidewalk connection to Lyman Baker Park
- Approvals are needed through multiple agencies including Army Corp, NYS DEC

Creating a Walkable Portville: Through Complete Streets

Portville, New York May 25, 2011

Many cost effective treatments are available to create a pedestrian connection to the park through the flood plain including;

- Space is available along creek
- There is room along the road for some traffic calming elements to slow cars
- Street is wide enough to add sidewalk
- Striping could be added along the roadway

The bridge at the end of Temple Street over the creek has no pedestrian access

- Opportunity to stripe the shoulder

Temple creates loop over creek to Brooklyn Street

- Sidewalk begins again along both sides

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Portville, New York May 25, 2011

Missing attractive gateway entering village – currently only a highway sign exists

Brooklyn Street and Fairview Street

- Wide turning radius onto Fairview from Brooklyn
- Crosswalk on Brooklyn is faded
- Truncated domes for ADA accessibility are in place

Limited sidewalk along Fairview Street on one side

- Section with sidewalk has overgrown shrubs

There are no curbs along Fairview providing a distinct edge along the street. This situation is allowing cars to park indiscriminately further reducing the limited area for pedestrian access.

Fairview takes a 90 degree turn at Foot Bridge over creek

- Dyke continues along both sides of creek

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Portville, New York May 25, 2011

Temple Street at Depot Street

- Railroad creates steep pedestrian grade
- Sidewalk ends along one side of street

Sidewalk along non-truck side of Depot Street lacks any type of buffer or curbing

Maple Street has excellent sidewalk along one side

- Missing on the opposite side

Sidewalk network ends at village/ town border

Main Street at Maple Street

- Beautiful Pioneer Park
- Pathways from park end at road
- Entrances are wide – could use bollards to restrict vehicle access

Good sidewalks along Main Street on both sides
Bicycle lanes and signage are in place (Bike Route 17)

- Need connection from the rest of the village to the bicycle facilities

Excellent ladder bar crosswalks are in place

Truncated domes are present at curb ramps but are in need of maintenance

Creating a Walkable Portville: Through Complete Streets

Portville, New York May 25, 2011

Main Street at Temple Street
Signalized intersection with good pedestrian crossings coupled with ADA compliant curb ramps

- Should be available along both sides

Village is currently working on their comprehensive plan update

- Opportunity to develop complete streets language to establish goals and objectives for enhancing the walkability and bikeability of the village

General Recommendations:

Develop sidewalk inventory and priority matrix
Provide bicycle parking in village
Develop bicycle connectivity to Main Street and other transportation generators

Appendices

PORTVILLE SIGN IN SHEET

FIRST NAME	LAST NAME	ORGANIZATION	TITLE	PHONE	EXT	EMAIL	INITIAL
CINDY	WAGNER					cindywagnr ~~CINDYWGNER~~@YAHOO.COM	CW
HELEN	WORTH					hworth@roadrunner.com	HW
JOANN	MCANDREW	Town Planning Board Village Resident		716 933 7452		joann.mcandrew@portville-ny.org	[illegible]
Holly	Fischer					29ford@roadrunner.com	H F
Bob	Fischer					29ford@roadrunner.com	B.F
Howard	Cornwell	Directions in Independent Living	Program Director Accessibility	373 4602		hcornwall@oleanilc.org	[illegible]

Creating a Walkable Portville Through Complete Streets

Justin S. Booth, Green Options Buffalo
Joshua Poppel, NY Bicycling Coalition/Alta Planning & Design

Agenda

- A Complete Street
- Visioning
- Why?
- Creative Solutions
- Policy
- Resources
- Walkabout
- De-brief
- Next Steps

What is a Complete Street?

A Complete Street is safe, comfortable and convenient for travel via automobile, foot, bicycle, and transit.

A Complete Street:

- Offers a full range of travel choices
- Connects to a network that offers choices
- Is fully accessible to all: kids, seniors and people with disabilities
- Supports & contributes to life in pleasant, convenient neighborhoods

Why do we need to Complete the Streets?

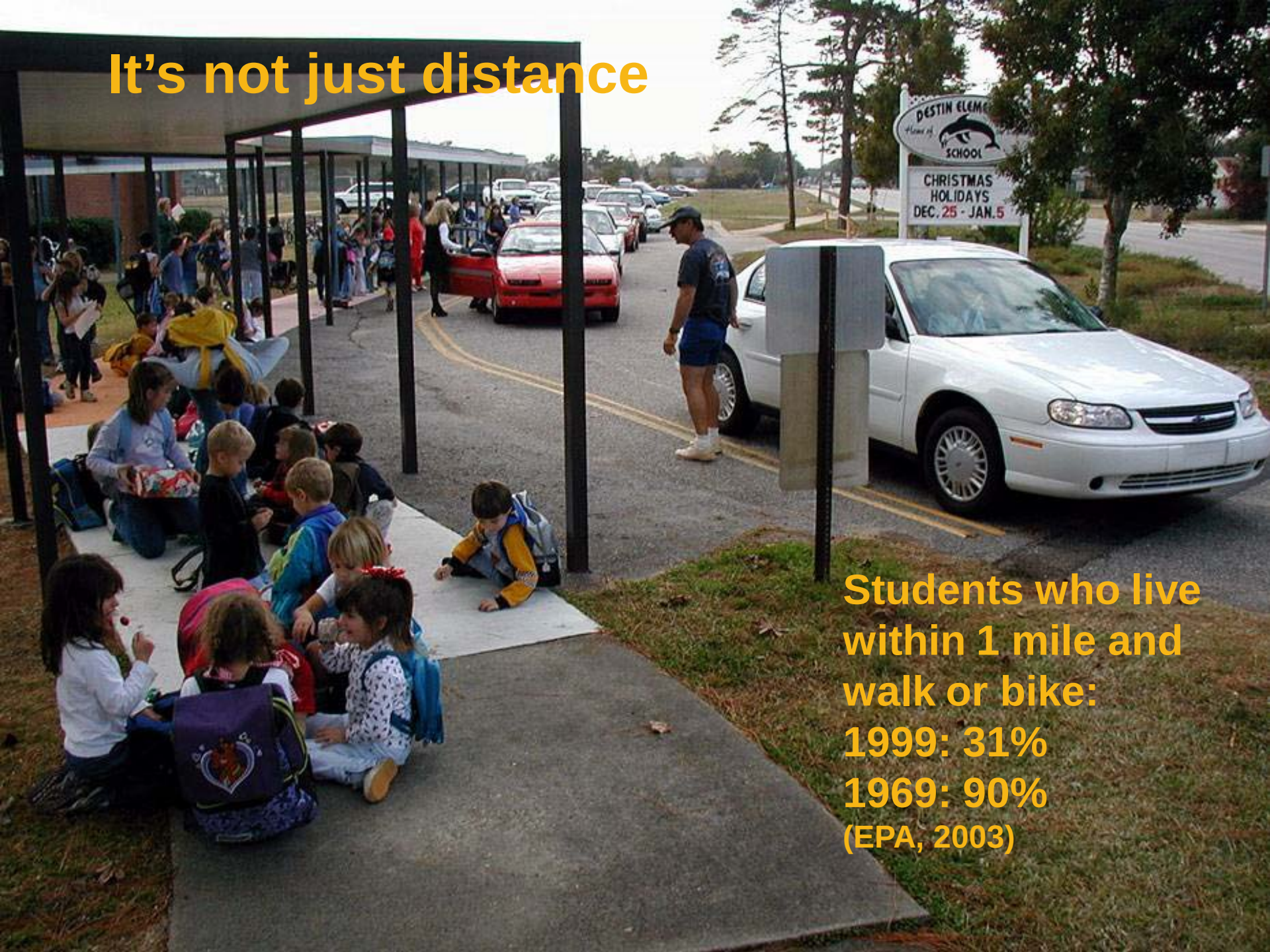
- **52%** of Americans want to bike more than they do now.
- **55%** of Americans would prefer to drive less and walk more

America Bikes & STPP Poll

Fewer kids are biking and walking
More parents are driving

- 2001: 15% walked
- 1969: 48% walked
- (EPA, 2003)

It’s not just distance



Students who live within 1 mile and walk or bike:
1999: 31%
1969: 90%
(EPA, 2003)

Our Current Behavior

Of all trips taken in metro areas:

- 50% *are three miles or less*
- 28% *are one mile or less*

65% of trips under one mile are now taken by automobile

2001 NHTS

The Transportation Prescription

- Research shows that when properly designed, transportation systems can provide:
  - reduce air pollution
  - exercise opportunities
  - improve safety
  - lower emotional stress
  - link poor people to opportunity
  - connect isolated older adults and people with disabilities to crucial services and social supports
  - stimulate economic development

Climate Change is…
A Public Health Concern

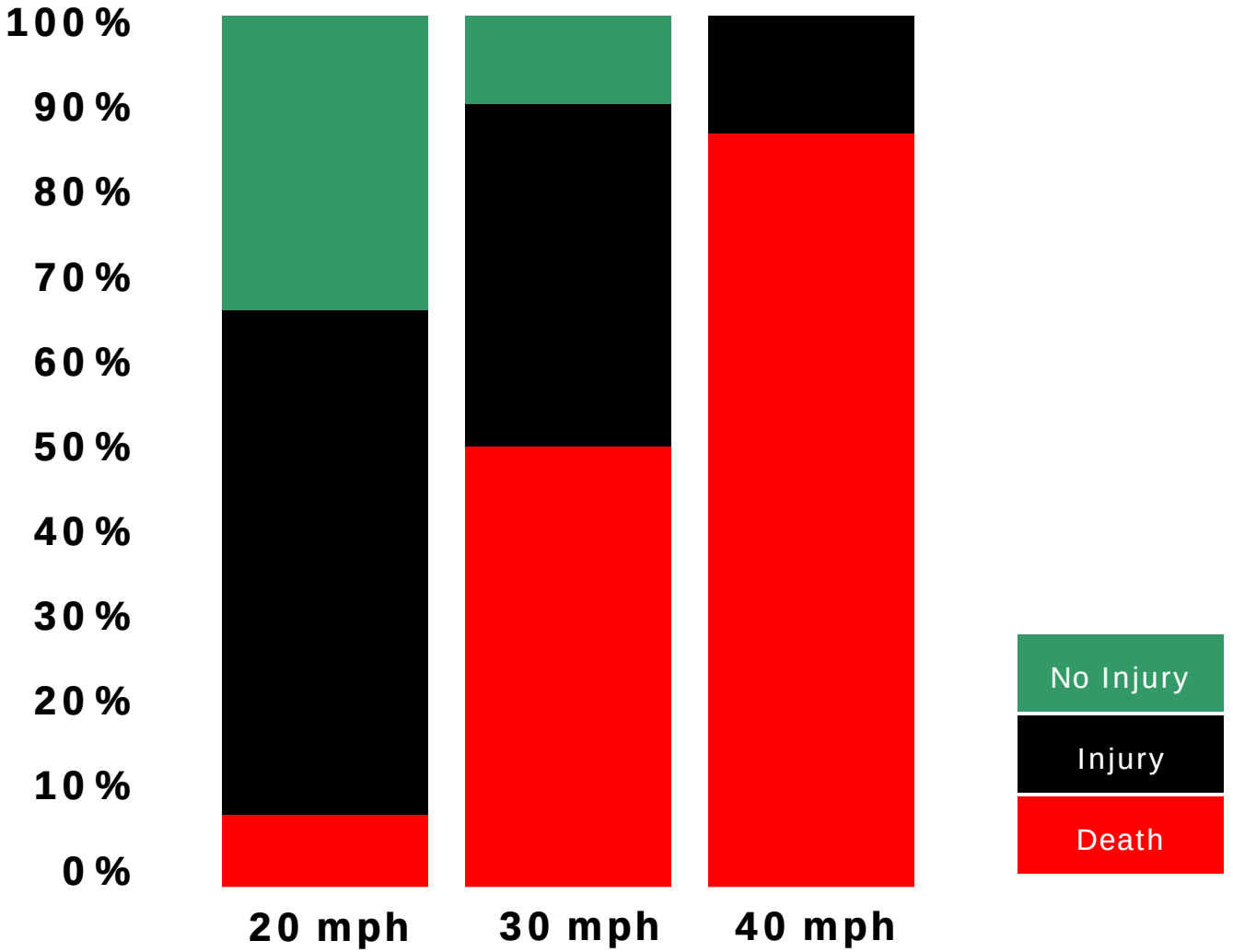
- Direct effects of heat,
- Health effects related to extreme weather events,
- Air pollution-related health effects,
- Water- and food-borne infectious diseases,
- Vector-borne and zoonotic diseases, and
- Other pathogens sensitive to weather conditions.

Physical Activity

- The NYS state comptroller has identified the cost of childhood obesity to be $242 million dollars annually in associated medical costs – for adults this jumps to $6.1 billion.

Fatalities based on speed of vehicle

A pedestrian's chance of death if hit by a motor vehicle



Killing Speed and Saving Lives, UK Department of Transportation

The Cost of Busing in New York State

- 2,598,035 students are transported to and from school through public expense (77.4% of students in K-12).
- Total cost of busing in New York State is approximately $1.1 Billion. ($1,147,993,725)
- If we can increase the number of kids walking and bicycling to school in New York by 5% (129,901 students) we could save $57 million ($57,399,354) each year on busing expenses.

Source: School Transportation News updated 1/19/05 (http://www.stnonline.com/stn/statesprovinces/unitedstates/2_ny.htm)

CREATIVE ENGINEERING SOLUTIONS

Engineering Strategies

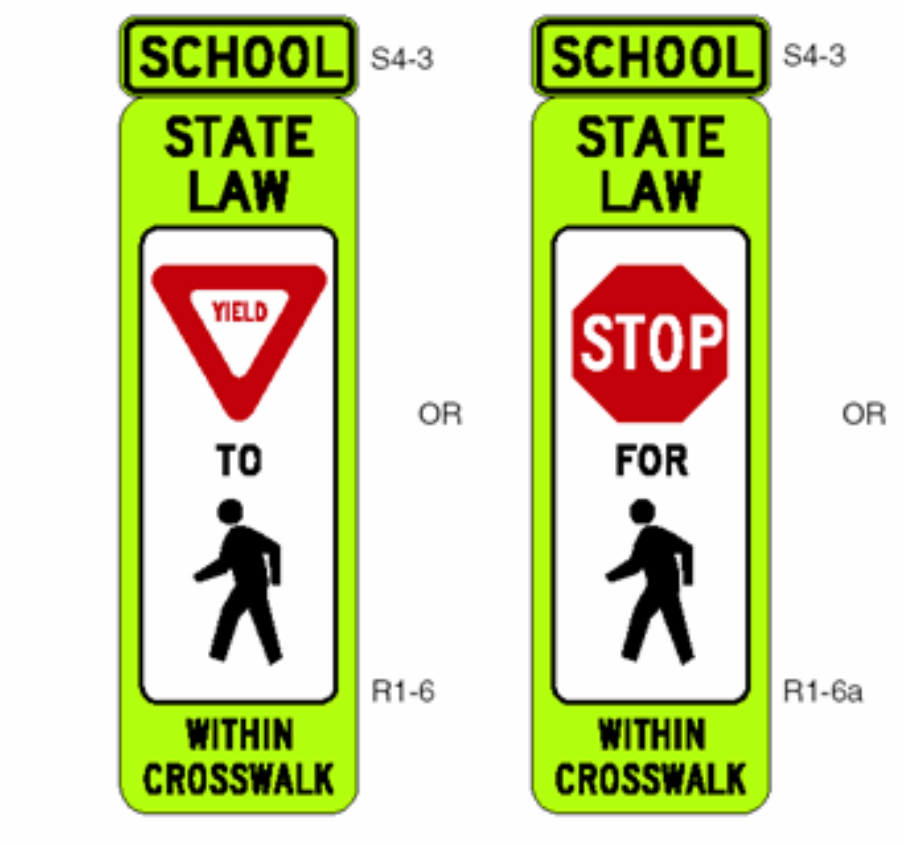
1. Focus first on easy-to-implement and low-cost solutions

2. Match the treatment to the type of problem

Focus on low cost, easy to implement solutions

Crosswalk signs and advance warning signs

In-street signing

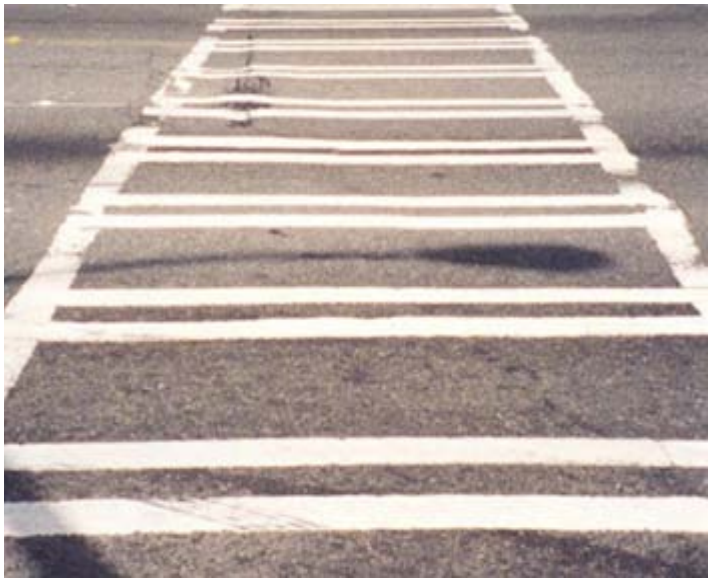


Other Signage

Flashing speed limit sign

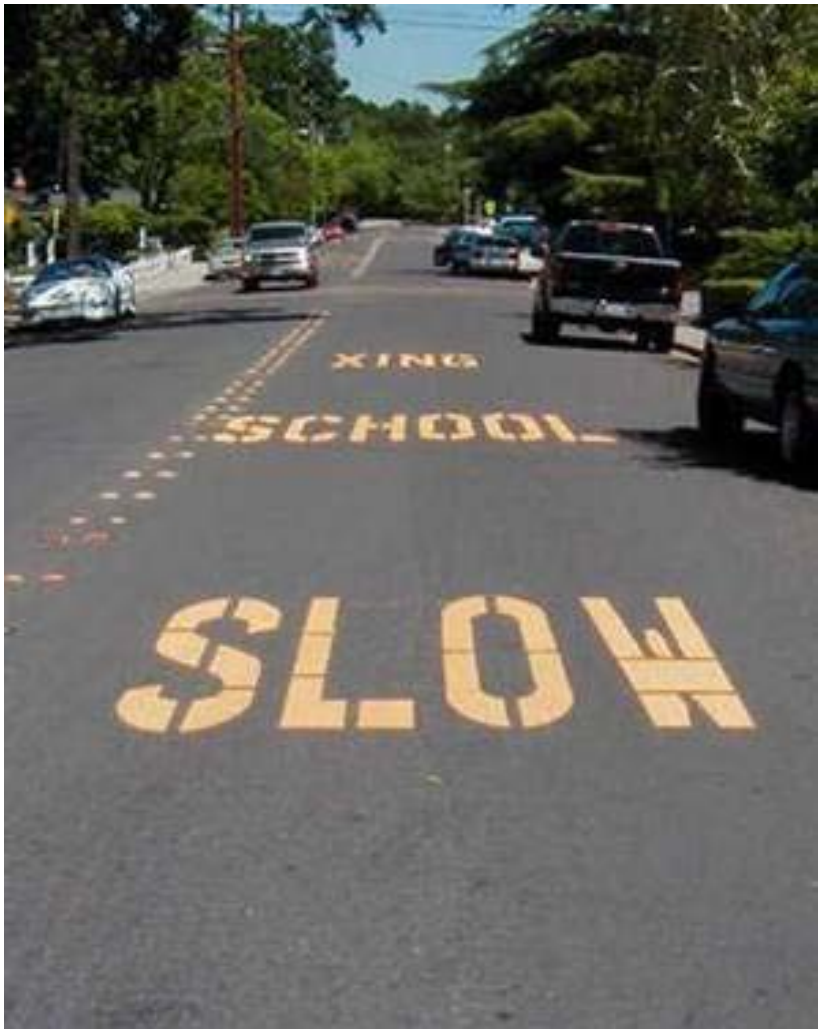
Overhead signs/beacons

Install high-visibility markings



Ladder-style is easier to see.

Pavement legends



Engineering topic outline

- **Sidewalks**
- **Crossings**
- **Pathways**
- **ADA accessibility**
- **On-street bicycling**
- **Pedestrian and bicycle bridges**
- **Traffic Calming**

Walkways and crossings: Prerequisites for walking

- Recommended minimum: 5’
- Preferred min: 6’
- At schools and other heavily traveled destination: 8’-10’

Sidewalk design criteria

Connect all sidewalks

Accommodate pedestrian desire lines outside of splash zones

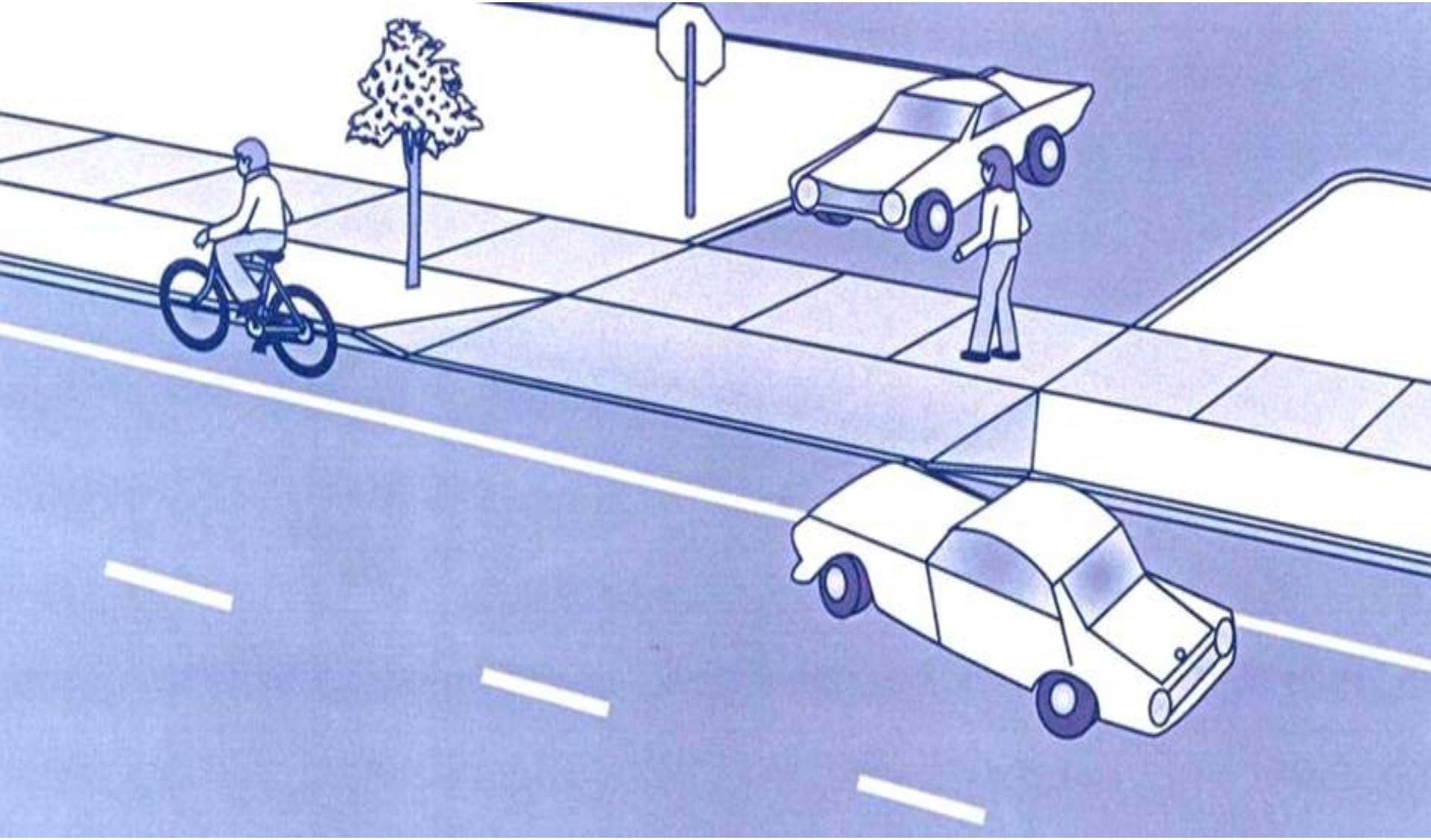
Provide sidewalk buffers

No sidewalk buffer

Remove obstacles from sidewalks

Limit driveway crossings

Build driveways like driveways



Meet ADA requirements for universal design

Wide, multi-lane roads are barriers to walking and bicycling

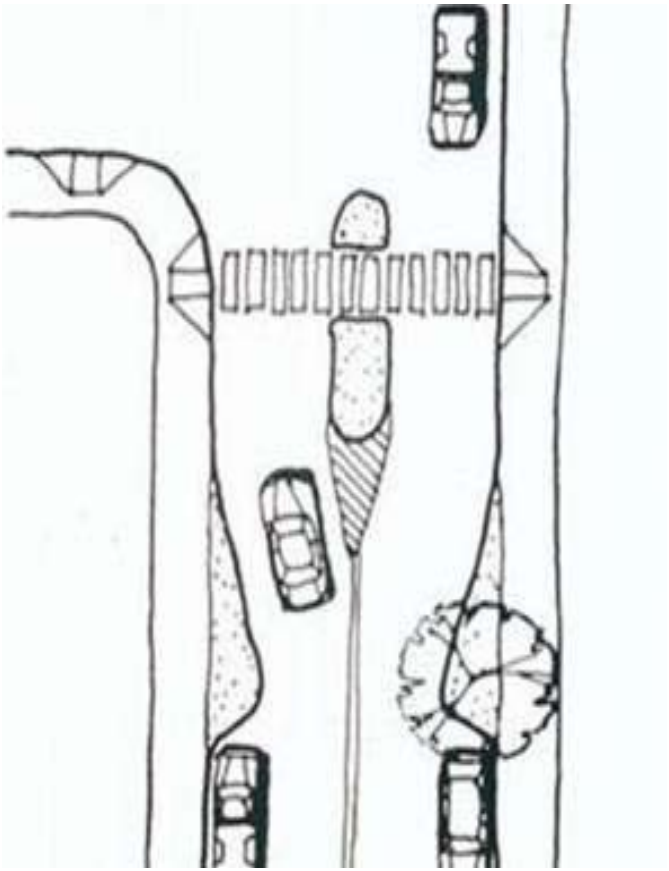
Principles for creating safe crossings

- Reduce crossing distances
- Use appropriate traffic controls
  - Marked crosswalks
  - Warning signs or flashers
  - Stop signs and traffic signals
- Slow vehicle speeds

Curb extensions along the route

Shorten exposure time with curb extensions and improve visibility, especially children

Crossing islands



Modify traffic signal phasing and/or timing

Pedestrian pushbuttons

- Buttons may be needed at some crossings
- Signals can be put in pedestrian “recall” for key times of day

Traffic Signals

No right-turn-on-red

Countdown signals

Bicycle facilities

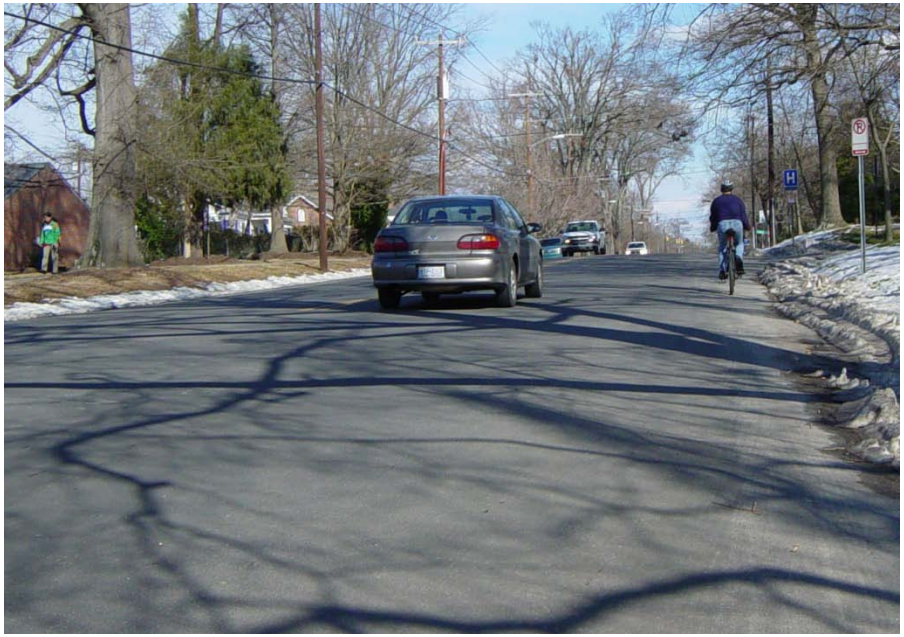
- Local and city streets
- Bike lanes
- Sharrows
- Shoulders

Bicycle lanes

Sharrows


Interior Visions
ESPRESSO MOCHA CAPPUCCINO PASTRIES
STOP

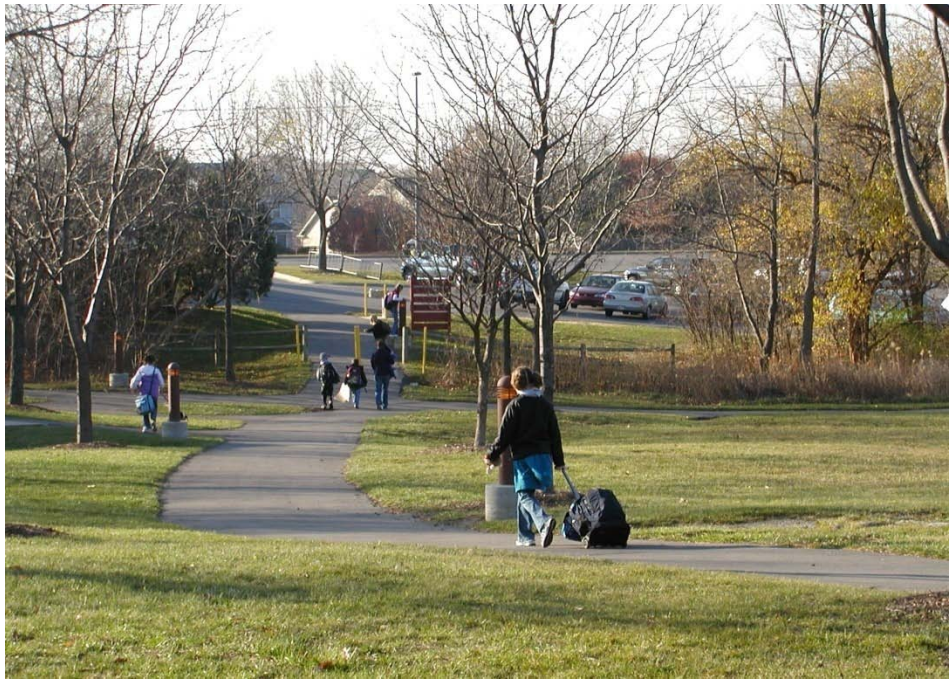
Shoulders benefit cyclists and motorists



Install bicycle racks

Signalized intersections

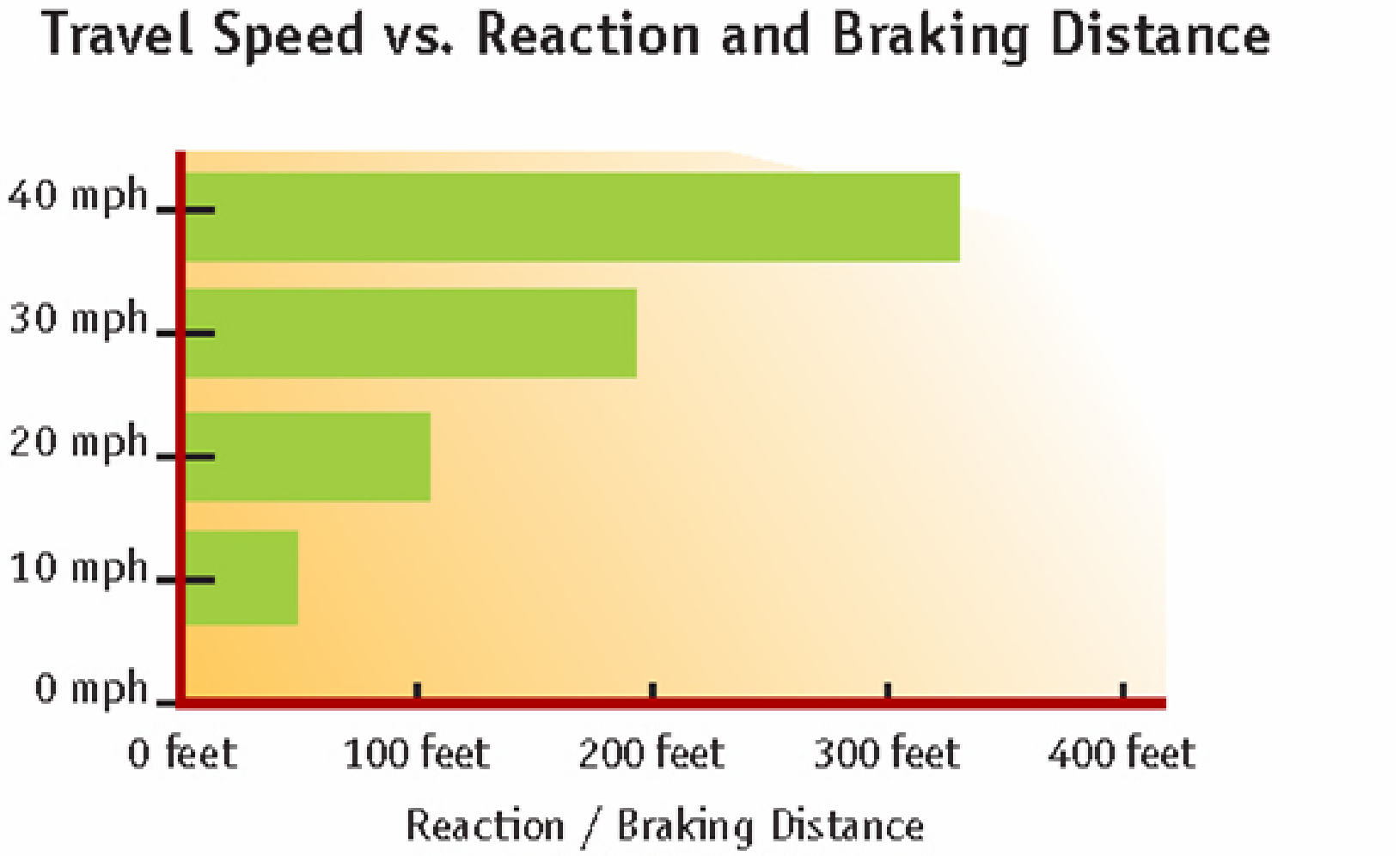
Multi-use paths



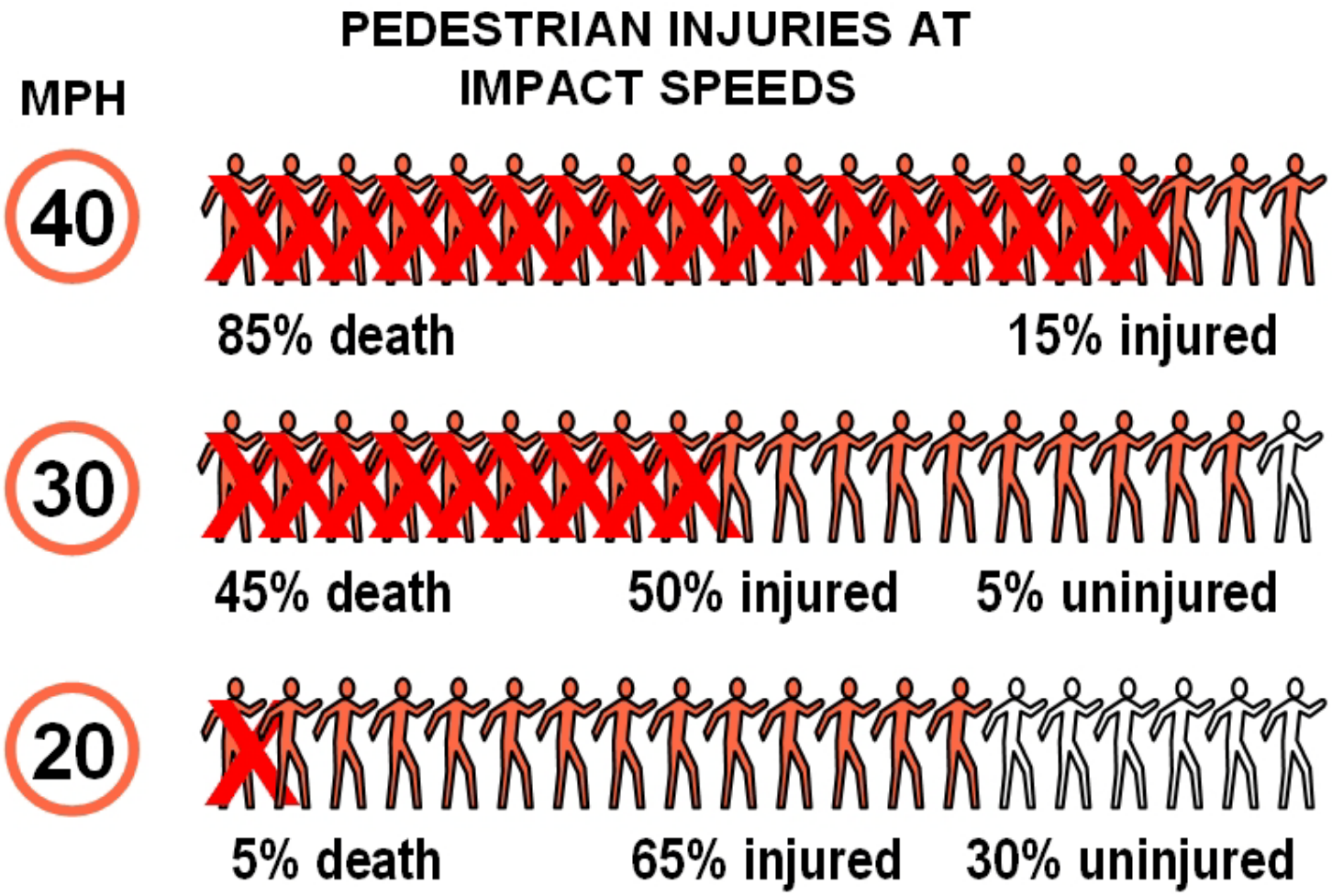
10’ to 14’ wide, 5’ setback

Traffic calming

Slowing down traffic



Slowing down traffic



Correct design invites correct use

Which street has lower speeds?

Narrow lanes reduce speeds

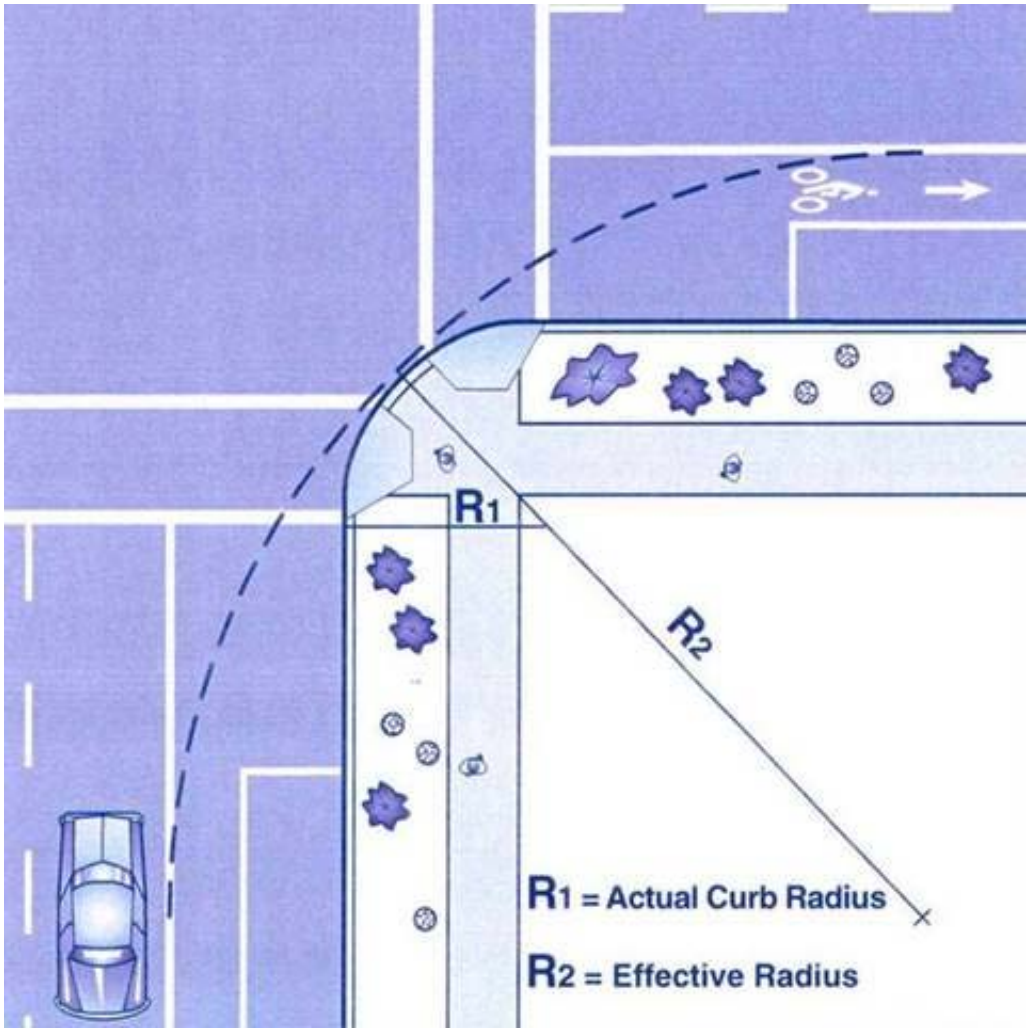
Use paint to
reduce lane width

Raised pedestrian crosswalks

Effect of large radius on drivers

They drive fast…

Curb radii: Keeping it tight



Road diet – Watch it happen

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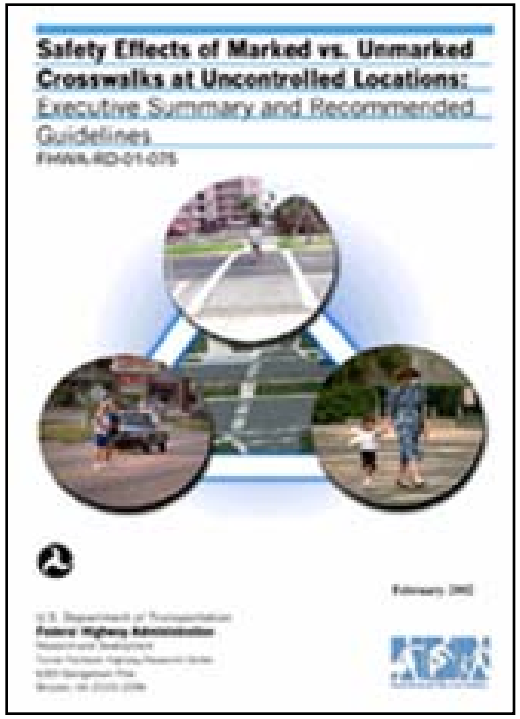
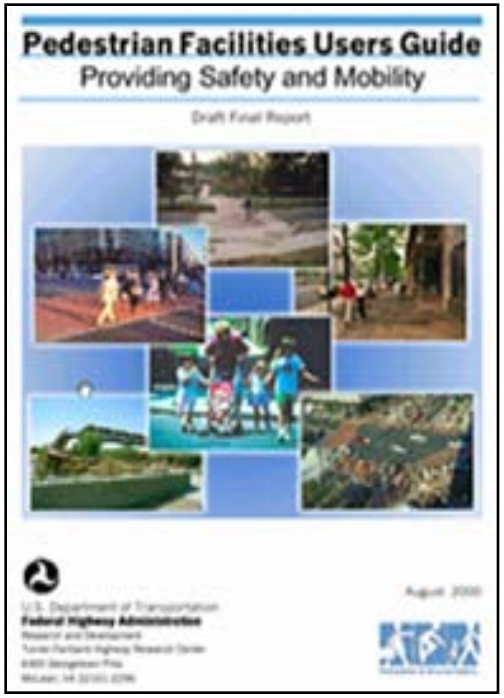
Road diet – Watch it happen

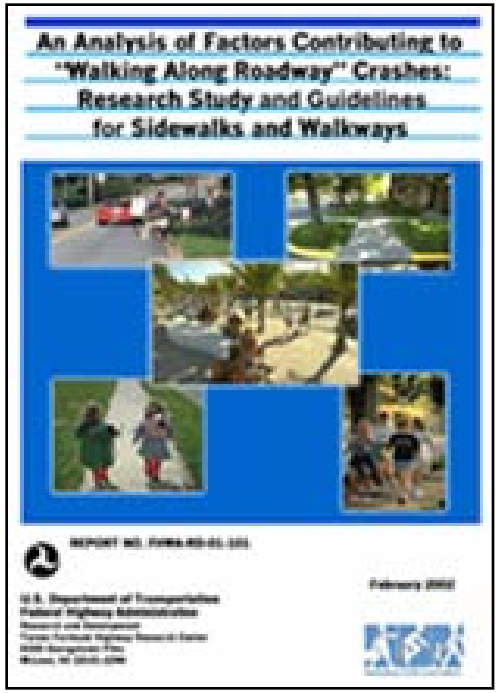
FHWA references



Crosswalk Study

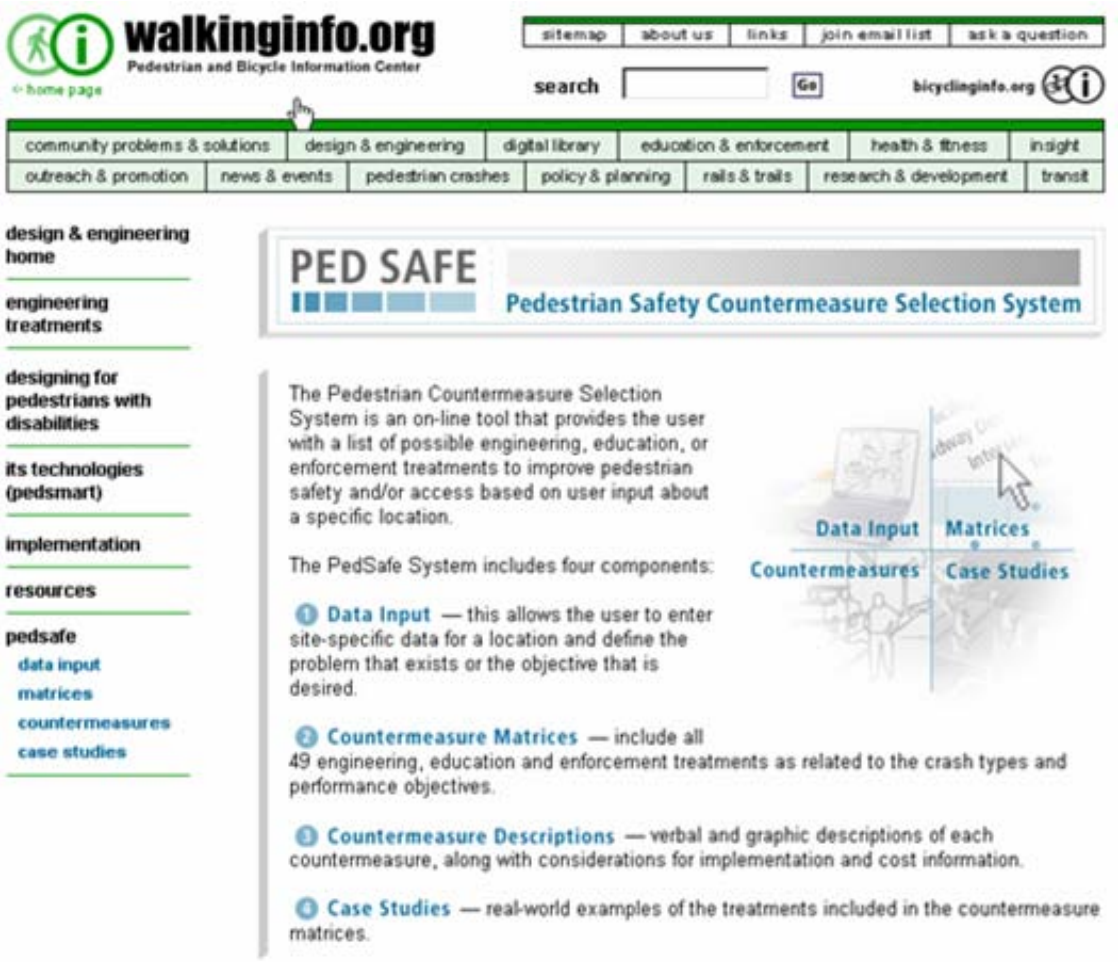


Pedestrian Facilities Users Guide



Sidewalk Study

PED SAFE


walkinginfo.org
Pedestrian and Bicycle Information Center
sitemap
about us
links
join email list
ask a question
search
Go
bicycleinfo.org
community problems & solutions
design & engineering
digital library
education & enforcement
health & fitness
insight
outreach & promotion
news & events
pedestrian crashes
policy & planning
rails & trails
research & development
transit
design & engineering home
engineering treatments
designing for pedestrians with disabilities
its technologies (pedsmart)
implementation
resources
pedsafe
data input
matrices
countermeasures
case studies
PED SAFE
Pedestrian Safety Countermeasure Selection System
The Pedestrian Countermeasure Selection System is an on-line tool that provides the user with a list of possible engineering, education, or enforcement treatments to improve pedestrian safety and/or access based on user input about a specific location.
Data Input
Matrices
Countermeasures
Case Studies
The PedSafe System includes four components:
1 Data Input — this allows the user to enter site-specific data for a location and define the problem that exists or the objective that is desired.
2 Countermeasure Matrices — include all 49 engineering, education and enforcement treatments as related to the crash types and performance objectives.
3 Countermeasure Descriptions — verbal and graphic descriptions of each countermeasure, along with considerations for implementation and cost information.
4 Case Studies — real-world examples of the treatments included in the countermeasure matrices.

Summary

1. Focus first on easy-to-implement and low-cost solutions
2. Also identify and program longer-term improvement needs (e.g. sidewalks)
3. Match the treatment to the type of problem

Summary

4. Provide and maintain a complete network of facilities:

   - Sidewalks
   - On-street bicycle facilities
   - Paths
   - Connections
   - Pedestrian and bicycle bridges

Summary

5. Provide safe street crossings:
   - Keep it simple
   - Shorten crossing distances
   - Carefully select crossing locations and marked crosswalks
   - Create visible crossings
6. Slow down traffic speeds

POLICY

Policy

- Complete Streets Advisory Board
- Complete Streets Coordinator
- Complete Streets Ordinance
- Bicycle Parking Ordinance
- Street Design Guidelines
- Comprehensive Plan
- Land Use Plan
- Zoning Code
- Sidewalk Snow Removal
- Public Art

Implementation

Overcoming Challenges in Local Communities

For More Information:

Justin S. Booth

Justin@greenoptionsbuffalo.org

716-851-4052

Or

Joshua Poppel

Joshua@NYBC.net

518-312-8047

CITY CLERK'S OFFICE
CITY HALL

BUFFALO June 11, 2008

To Whom It May Concern:
I hereby Certify, That at a Session of the Common Council of the City of Buffalo, held in the City Hall, on the 27th day of May 2008 The following item was Passed which the following is a true copy

NO. 96
ORDINANCE AMENDMENT - CHAPTER 413- STREETS AND SIDEWALKS
(ITEM NO. 115, C.C.P. MAY 13, 2008)

That the Ordinance Amendment as contained in Item No. May 13, 2008, be and the same hereby is approved.
PASSED
AYES - 9 NOES - 0

The following item has the information

NO. 115
BY: MESSRS. LOCURTO, RIVERA AND GOLOMBEK
RE: ORDINANCE AMENDMENT
CHAPTER 413, STREETS AND SIDEWALKS
ARTICLE XIV, COMPLETE STREETS

The Common Council of the City of Buffalo does hereby ordain as follows:
That Chapter 413 of the Code of the City of Buffalo be amended to read as follows:
§413-68 Complete Streets Defined
A. Complete Streets are defined as facilities that are designed and operated to enable safe access for all users. Persons with disabilities, pedestrians, bicyclists, motorists and transit riders are able to safely move along and across a complete street.
§413-69 Implementation of Complete Streets and Exceptions
A. The Commissioner of Public Works, Parks and Streets shall include pedestrian and bicycle facilities in all new street construction, street reconstruction, street maintenance, public works and park projects undertaken by the City of Buffalo subject to the exceptions contained herein.
B. The City of Buffalo Bicycle and Pedestrian Advisory Board shall review all new street construction, street reconstruction and street maintenance projects undertaken by the City of Buffalo and shall provide consultation regarding its implementation as a complete street.
C. The inclusion of bicycle and pedestrian facilities shall be mandated in all new street construction, street reconstruction and street maintenance projects undertaken by the City of Buffalo unless one of the following conditions exists:
1. Bicyclists and pedestrians are prohibited by law from using the facility. In this case, alternative facilities and accommodations for pedestrians and bicyclists shall be provided within the same transportation corridor as determined by the Commissioner of Public Works, Parks and Streets.
2. The cost of establishing bikeways or walkways would be disproportionate to the need or probable use. Costs shall be considered disproportionate for purposes of this section if the cost of including bicycle and pedestrian facilities exceeds twenty percent of the cost of the larger project.
3. Where the existing fight of way does not allow for sidewalks, bike lanes, paths or other improvements. In this case, the Commissioner shall explore alternatives such as the use of revised travel lane configurations, paved shoulders, signage, traffic calming, education or enforcement to accommodate pedestrians, cyclists and persons with disabilities. If the Commissioner makes said determination he shall reduce it to writing and file it with appropriate supporting documentation with the Common Council and Bicycle and Pedestrian Advisory Board for its information and review.
4. Where the Commissioner determines that the inclusion of bicycle and/or pedestrian facilities on a roadway would constitute a threat to the health, safety and/or

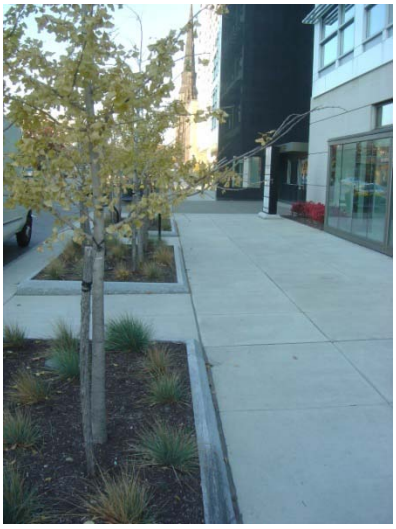
welfare to the motorists and/or pedestrians and bicyclists of the City of Buffalo. If the Commissioner makes said determination he shall confirm it in writing and file it with appropriate supporting documentation with the Common Council and Bicycle and Pedestrian Advisory Board for its information and review.
§413-70 Planning, Design and Maintenance of Facilities
A. Bicycle and Pedestrian facilities will be planned, designed, developed and maintained in accordance with guidelines adopted by the United States Department of Transportation (USDOT), New York State Department of Transportation (NYSDOT) and the American Association of State Highway and Transportation Officials (AASHTO) or other guidelines approved by the City of Buffalo.
APPROVED AS TO FORM
NOTE: Matter underlined is new.
REFERRED TO THE COMMITTEE ON LEGISLATION

ATTEST

Ronald A. Chwalinski
CITY CLERK

The above item was signed by the Mayor on 6/5/08 and returned to The City Clerk's Office on 6/11/2008

Trees: Site Selection



New trees should be included in every public streetscape improvement or new development.

Tree lawns are suitable planting sites in the area between the sidewalk and the curb (snow storage area) and must meet the following requirements:

- No tree to be planted when there is less then 3' between the sidewalk and curb
- 35' spacing from an intersection or stop sign
- 6' spacing between a driveway and drip line of overhanging tree
- 5' spacing from underground service or utility box
- 15' spacing from a street light, utility pole or fire hydrant
- 40' spacing between large trees, 20' for medium trees, 20' for small trees as designated under the City of Buffalo Reforestation Master Plan species selection list.

Tree pits are suitable planting sites in concrete cut out areas which must meet the minimum requirements for sites in tree lawns as well as:

- No vaults or utility services are directly under site where concrete is to be cut
- 5' clearance for pedestrian walkway next to pit
- Not to be located under any overhanging structures
- Size of cut out must have 28 square feet of surface area, such as 6'x6', 5'x6' or 4'x7', unless structural soil is used, then surface area may decrease to 20 square feet, 4' x 5'
- No tree grates are to be placed after planting

Planter boxes are suitable planting sites when tree lawns and tree pits are not possible. Planter boxes must meet the minimum requirements for tree lawns as well as:

- Planter box should be placed 18 inches from curb line
- No less than 16 square feet of surface area (4'x4') for small trees and shrub-like trees
- No less than 9 feet of surface area (3'x3') for small shrubs
- 5' of clearance for pedestrian walkway next to planter box
- Not to be located under any overhanging structures
- Must be irrigated regularly to ensure survival of plant

Trees: Maintenance

Trees often ruin sidewalks, and sidewalk repair often kills trees. This conflict comes from the fact that sidewalks and trees have competing needs. Trees need a soil that is moist and loose, and that they can push aside as they grow. Sidewalks should be constructed on a dense soil that will not shift with a load. Most of the damage to sidewalks is caused as roots become thicker, lifting up the concrete slabs.

To prevent extensive sidewalk damage, the appropriate rootstocks should be chosen for the trees planted at each location. Trees and rootstocks that have extensive, shallow root systems should not be planted adjacent to sidewalks. Also, tree selection should be made based on the available soil, water and light conditions, and most importantly, the width of the planting strip. Where mature trees are in place, root barriers, root pruning techniques, and interlocking sidewalk pavers could be used to retain as many mature trees as possible. The paving blocks can also be set in sand and not mortared together.

The City of Buffalo has established the Approved Street Tree Planting List which has over fifty acceptable species of trees with descriptions such as size, condition, form, method and season for planting each one.

Source:

- Dodge, Linda and Jim Geiger (2001). Tree Roots and Sidewalk Damage. City Trees, The Journal of The Society of Municipal Arborists, Vol 37, Number 4
- City of Buffalo Department of Public Works, Parks and Streets; Bureau of Forestry (2004) Arboricultural Standards Manual

Resources

Active Transportation is a Web resource for making walking and bicycling a part of daily transportation.

Adventure Cycling is working to inspire people of all ages to travel by bike.

Alliance for Biking and Walking is a coalition of state and local bicycle and pedestrian groups throughout the United States. Alliance for Biking and Walking groups will be key partners for implementation of Safe Routes to School programs. Locate a group in your community to find out more information regarding how they are working on Safe Routes to School.

America Bikes is a coalition of national bicyle and pedestrian organizations. America Bikes took the lead on advocating for Safe Routes to School in the federeal transportation bill.

America Walks is a national coalition of walking advocates that includes a list of member groups.

Association of Pedestrian and Bicycle Professionals is a professional membership organization for people who specialize in improving conditions for walking and bicycling.

Bikes Belong Coalition is the national coalition of bicycle suppliers and retailers working to put more people on bicycles more often. Bikes Belong Coalition is currently funding the Safe Routes to School National Partnership.

Complete Streets Coalition advocates for streets to be designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and bus riders of all ages and abilities are able to safely move along and across a complete street.

Healthy Schools Program offers real tools and solutions for schools to become healthier places that promote physical activity and healthy eating. Visit their website for more information on their best-practice program that provides schools with on-site and online technical assistance, resources, and national awards for school-based efforts to create healthier school environments.

International Mountain Bicycling Association is dedicated to preserving and expanding trails for mountain biking. IMBA has programs for kids.

League of American Bicyclists (LAB) is developing education materials and a curriculum for bicycle safety. LAB also has a training program for teaching adults how to ride bicycles safely.

National Center for Bicycling and Walking provides excellent Safe Routes to School resources that include a wide array of materials and links, including technical

assistance, vision and goals, sample press releases, and more.

National Center for Safe Routes to School offers a centralized resource of information on how to start and sustain a Safe Routes to School program, case studies of successful programs, as well as other resources for training and technical assistance.

Pedestrian and Bicycle Information Center developed a Safe Routes to School National Course designed to help communities create sound programs that are based on community conditions, best practices, and the responsible use of resources.

Rails-to-Trails Conservancy provides resources for turning abandoned railroad right-of-ways into bicycle and pedestrian trails for community and school use.

Safe Routes to School National Partnership is a network of more then 400 nonprofit organizations, government agencies, schools and professionals working together to advance the Safe Routes to School (SRTS) movement in the United States.

Surface Transportation Pilot Project is a diverse, nationwide coalition working to ensure safer communities and smarter transportation choices. This link directs you to a 2002 summary of Safe Routes to School programs throughout the United States.

Walkable Communities helps whole communities become more pedestrian friendly.