



Complete Streets for an Aging America

Key Issues for Older Adults

- Declining vision
- Decreased physical fitness and flexibility
- Decreased ability to focus attention
- Increased reaction time



AARP

Mission: AARP is dedicated to enhancing quality of life for all as we age. We lead positive social change and deliver value to members through information, advocacy and service.

AARP Works on Transportation and Safety

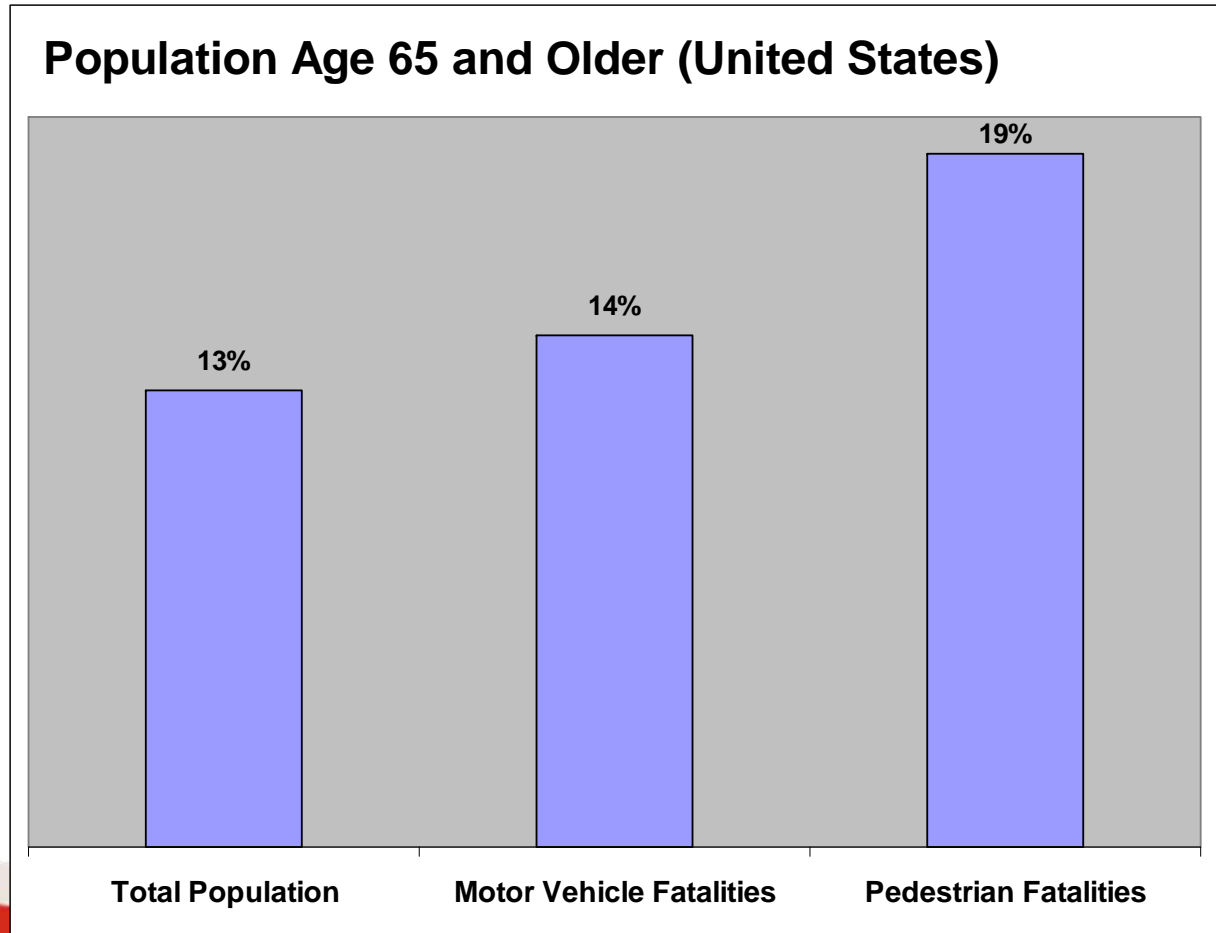
- As part of AARP's Livable Communities Campaign, we're working on:
- Complete Streets - federal legislation
- HR 1443 (Sen. Specter is a co-sponsor)
- HR 3355 (Older Driver and Pedestrian Safety and Roadway Enhancement Act)
- State issues
- Much of the work is done thru Volunteers

Volunteers such as myself...

- Meeting with Rep. Albio Sires (D-13, NJ)

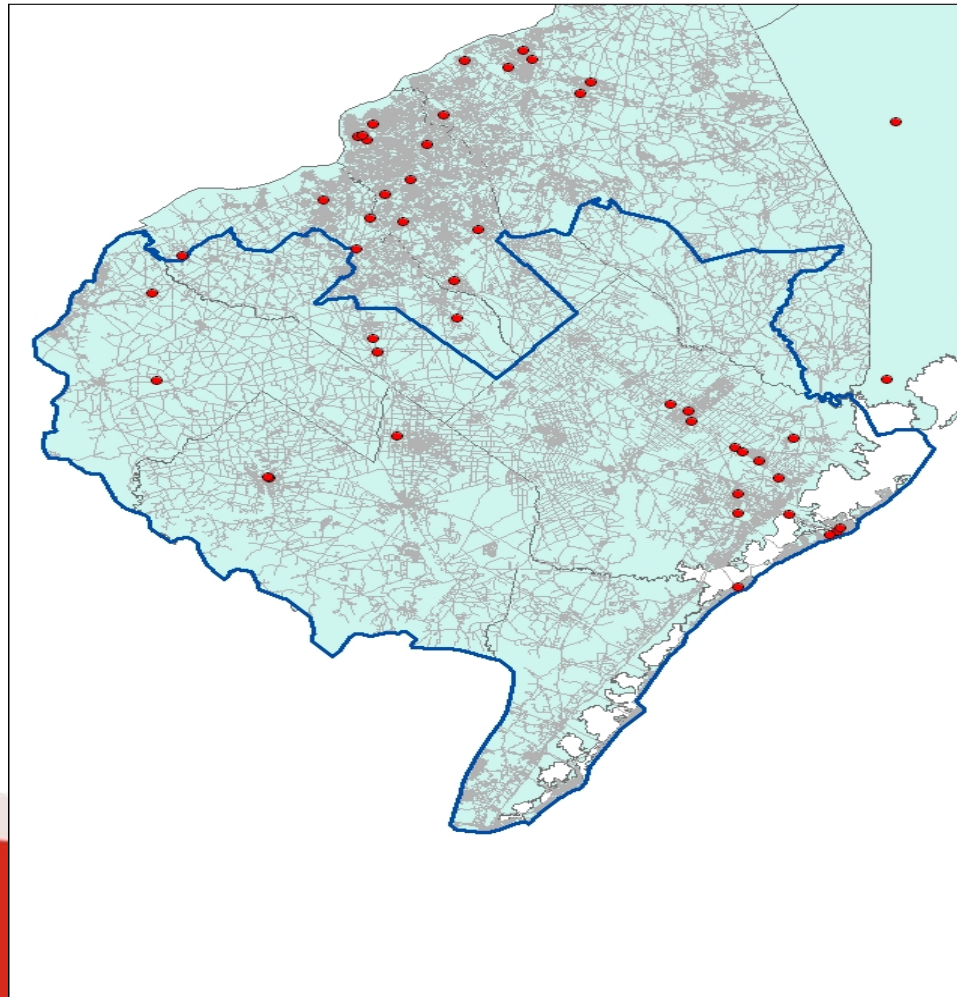


Our Roads are Hazardous and Older Adults are Especially Vulnerable



Why are federal legislators interested in local traffic safety?

Older Pedestrian Fatalities (2005-2007)
District 2



Incomplete Streets



Safety on America's streets is a major concern for older adults

- 40% say they do not have adequate sidewalks in their neighborhoods
- 47% say they cannot cross their main roads safely

*International Communications Research Poll for AARP,
1,000 adults, July 2008*

Older adults support Complete Streets initiatives

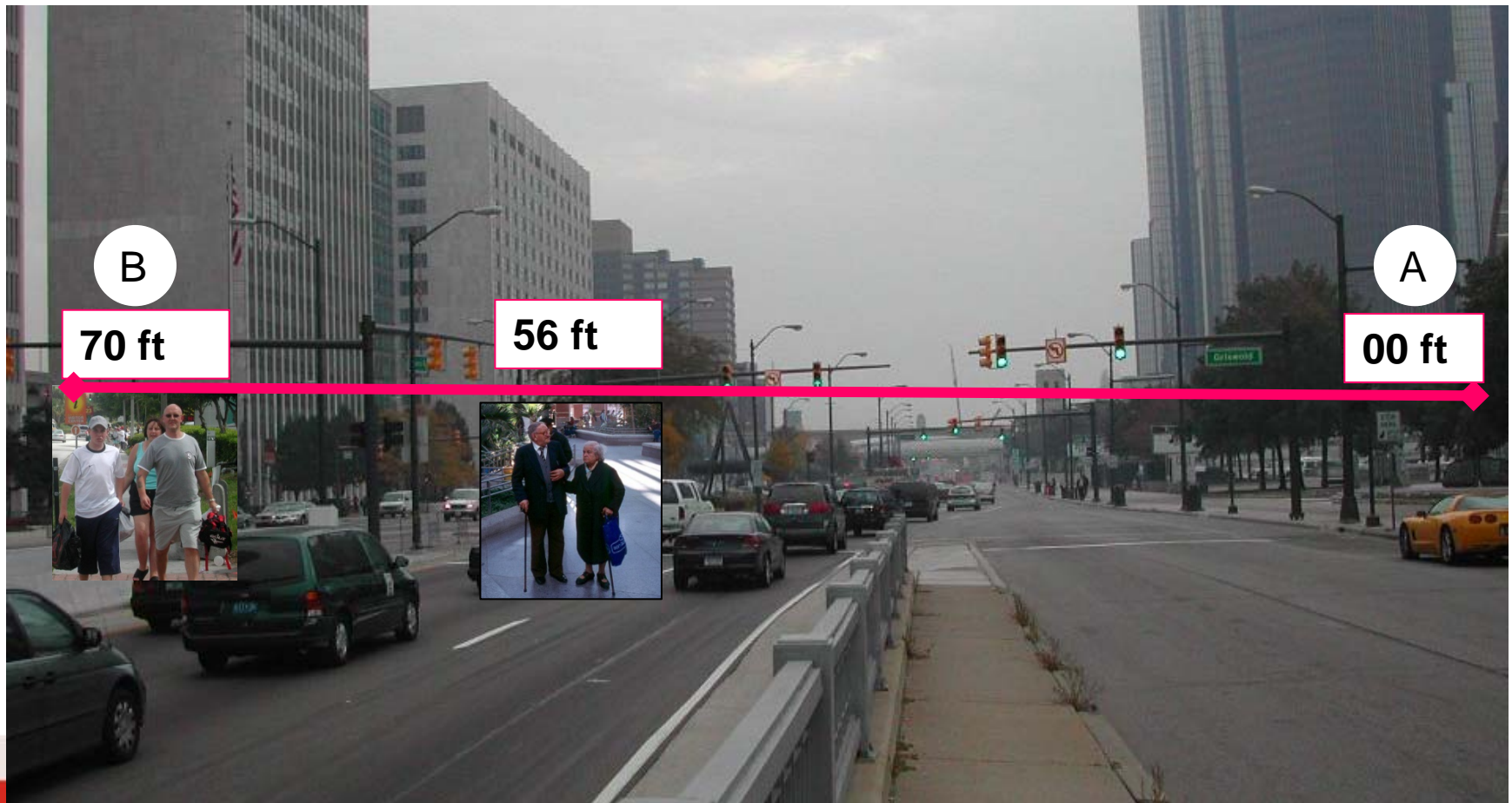
- 54 percent of those living in inhospitable neighborhoods said they would walk and ride more often if conditions improved.
- The majority support adoption of Complete Streets policies, with 56% expressing strong support.

International Communications Research Poll for AARP, 1,000 adults, July 2008

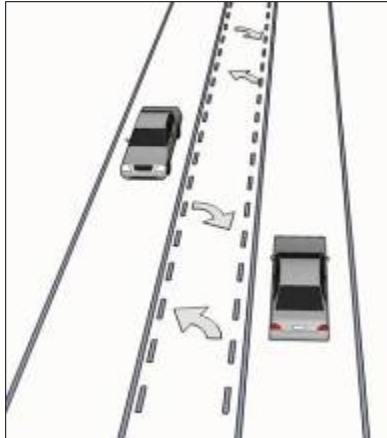
Major Findings

- Two-thirds of planners and engineers report that they have not yet begun considering the needs of older road users in their multi-modal planning.
- Less than one-third of the 80 state and local Complete Streets policies explicitly address the needs of older road users.
- Four the FHWA Handbook intersection treatments fail to adequately address the needs of non-drivers.

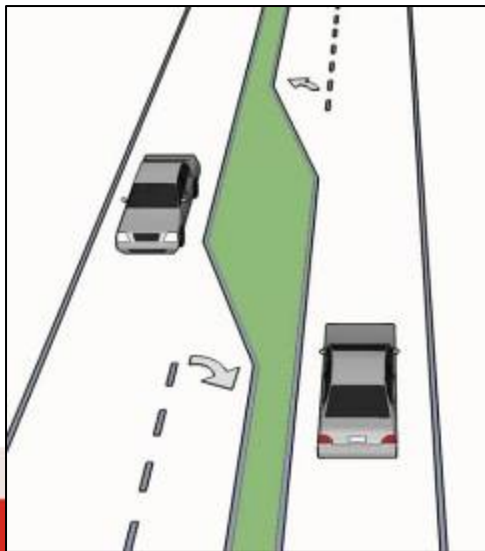
Pedestrian Signal Timing Can Make a Whole Lane of Difference for Older Adults



Avoid Hazardous Turn Lanes



Older drivers report that two-way left-turn lanes are confusing and risky



A raised curb median treatment reduces crashes and provides refuge for pedestrians

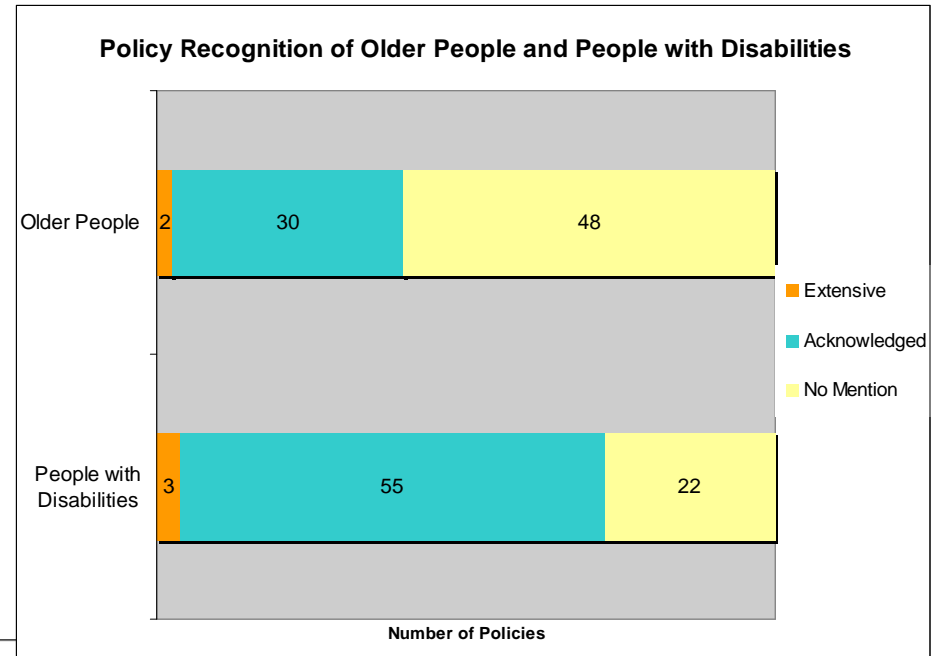
Online survey of planners and engineers reveals implementation challenges

- Limited funding for new or retrofit projects
- Lack of will and leadership
- Conflicts between State DOT and local jurisdiction and challenge of balancing Complete Streets with current DOT standards
- Lack of authority
- Lack of knowledge about multi-modal design and engineering
- General resistance to doing things differently

Inventory of Complete Streets Policies

80 policies evaluated

- Type of policy
- Modes covered
- Discussion of older users & those with disabilities
- Policy reach, coverage, purpose & vision



Complete Streets Policy Inventory

Agency	Policy	Level	Description/ Language	Year	Modes Covered	Users with Disabilities	Older Adults	Policy Reach	Purpose & Vision	Coverage	Context
Type: Legislation/Ordinance											
San Francisco County, CA	San Francisco Transit First Policy	County	"Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety"	1995		●	●	●	●	○	○
State of Florida	Florida Bicycle & Pedestrian Ways statute (335.065)	State	"Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into state, regional, and local transportation plans and programs. Bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any state transportation facility, and special emphasis shall be given to projects in or within 1 mile of an urban area."	2003		○	○	●	○	●	○
Honolulu, HI	Charter Amendment 8	City	"It shall be one of the priorities of the department of transportation services to make Honolulu a pedestrian- and bicycle-friendly city."	2006		○	○	●	○	○	○
State of Illinois	Public Act 065-0665	State	"An act... requiring incorporation of bicycle and pedestrian ways into state, regional, and local transportation plans and programs; bicycle lanes shall be established if there is sufficient right-of-way whenever there is construction, reconstruction, or other change of any state transportation facility. Provides for the inclusion of bicycle and pedestrian ways into planning and design standards for scenic highway designation."	2007		○	○	●	○	●	✓
Louisville, KY	Cornerstone 2020 Comprehensive Plan Complete Streets Ordinance	County & City	"A thoroughfare system that creates 'Complete Streets' will require facilities that promote safe pedestrian trips for individuals of all ages and abilities."	2008		●	●	●	●	○	✓
State of Massachusetts	Bicycle-Pedestrian Access Law (Chapter 90E)	State	"The commissioner shall make all reasonable provisions for the accommodation of bicycle and pedestrian traffic in the planning, design, and construction, reconstruction or maintenance of any project undertaken by the department."	1996		○	○	●	○	●	○
Montgomery County, MD	Montgomery County Road Code (2014)	County	"Each County road and street must be designed so that the safety and convenience of all users of the roadway system, including pedestrians, bicyclists, transit users, and people with disabilities, is maintained."	2007							

California Complete Streets Act (AB 1358)

Requires that “legislative body of a city or county...plan for a balanced, multimodal transportation network that meets the needs of all users...defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.”

Refinements to FHWA Highway Design Handbook for Older Drivers & Peds

The addition of bike lanes and parallel parking increases the effective radius making it easier for older drivers to turn.

Turning radius

Offset left turns

Channelized right turns

Pedestrian crossings

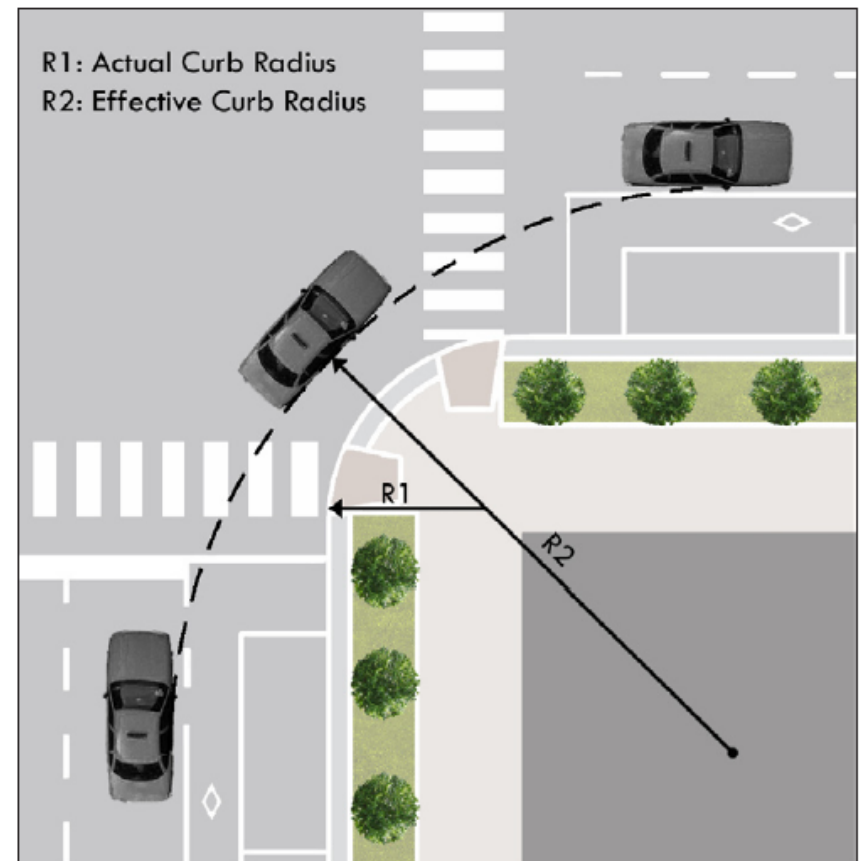


Figure 23: Comparison of Actual and Effective Curb Radii

AARP Public Policy Institute's Recommendations for FHWA Handbook

Update FHWA Handbook to:

- Provide greater focus on pedestrians
- Consider the effects of vehicle speed
- Acknowledge evolving state of the practice
- Address different land use contexts

Planning & Design Principles for Older Adults

- *Slow Down*
 - Allow drivers and pedestrians enough time to prepare for and execute changes
- *Make it Easy*
 - Make the physical layout of the system easy to maneuver for drivers and pedestrians
- *Enjoy the View*
 - Make it easy for drivers and pedestrians to notice, read, understand, and respond to visual cues



- AARP urges Congress to:
 - Include Complete Streets in transportation authorization
 - Help states implement recommendations of Highway Design Handbook for Older Drivers and Pedestrians



AARP Staff Contacts & Resources

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Planning Complete Streets for an Aging America

http://www.aarp.org/research/housing-mobility/transportation/2009_02_streets.html

Local AARP Contacts

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Aggressive Driving Study and Intervention

Dr. Shari Willis
Rowan University
Advisor for Driver Education

AAA Foundation for Traffic Safety

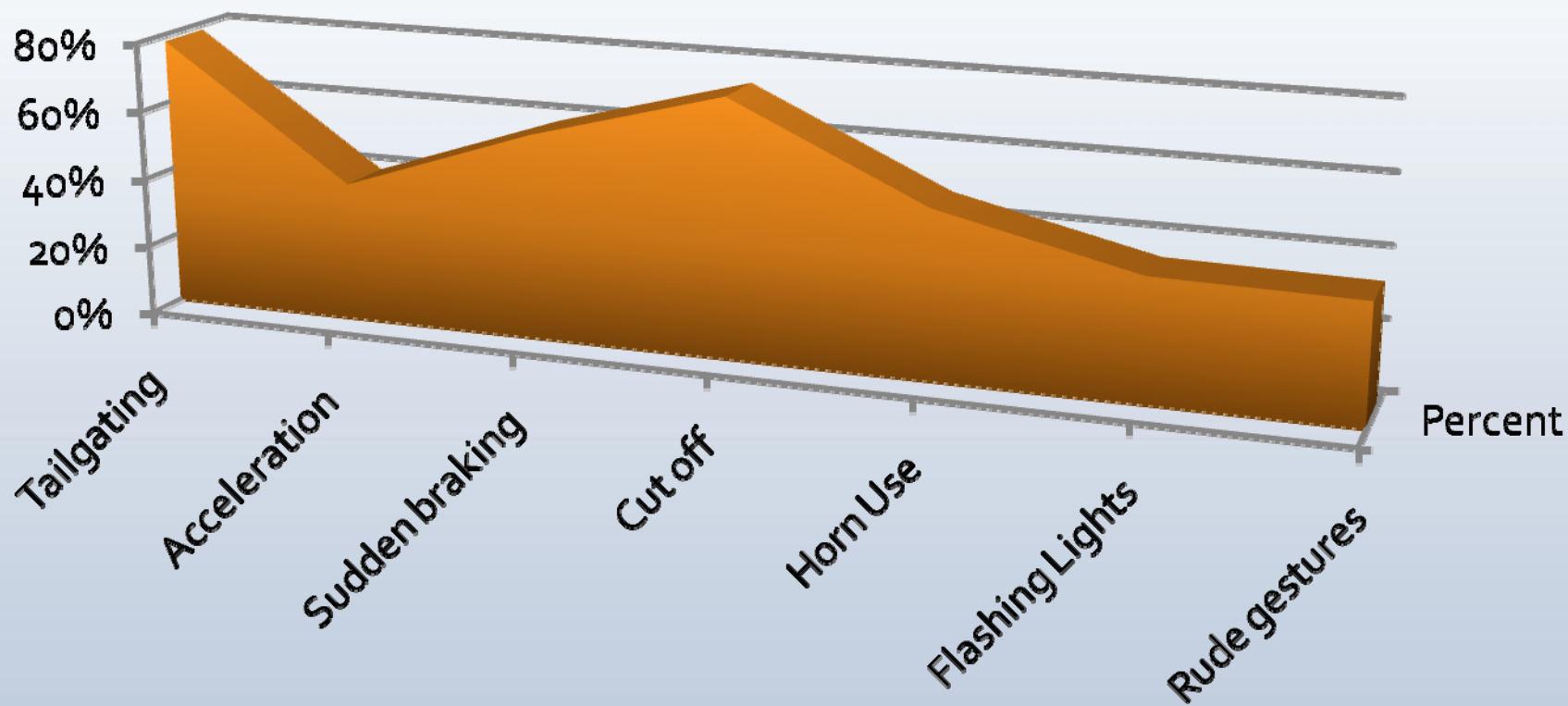
- Approximately 56 % of deadly vehicle crashes involve one or more unsafe driving behaviors associated with aggressive driving
- Speeding contributes for approximately “30% of deadly crashes”
- 80% of people polled believe aggressive driving is a serious problem
 - Source: PROFESSIONAL SAFETY (June 2009)

Aggressive Driving Statistics

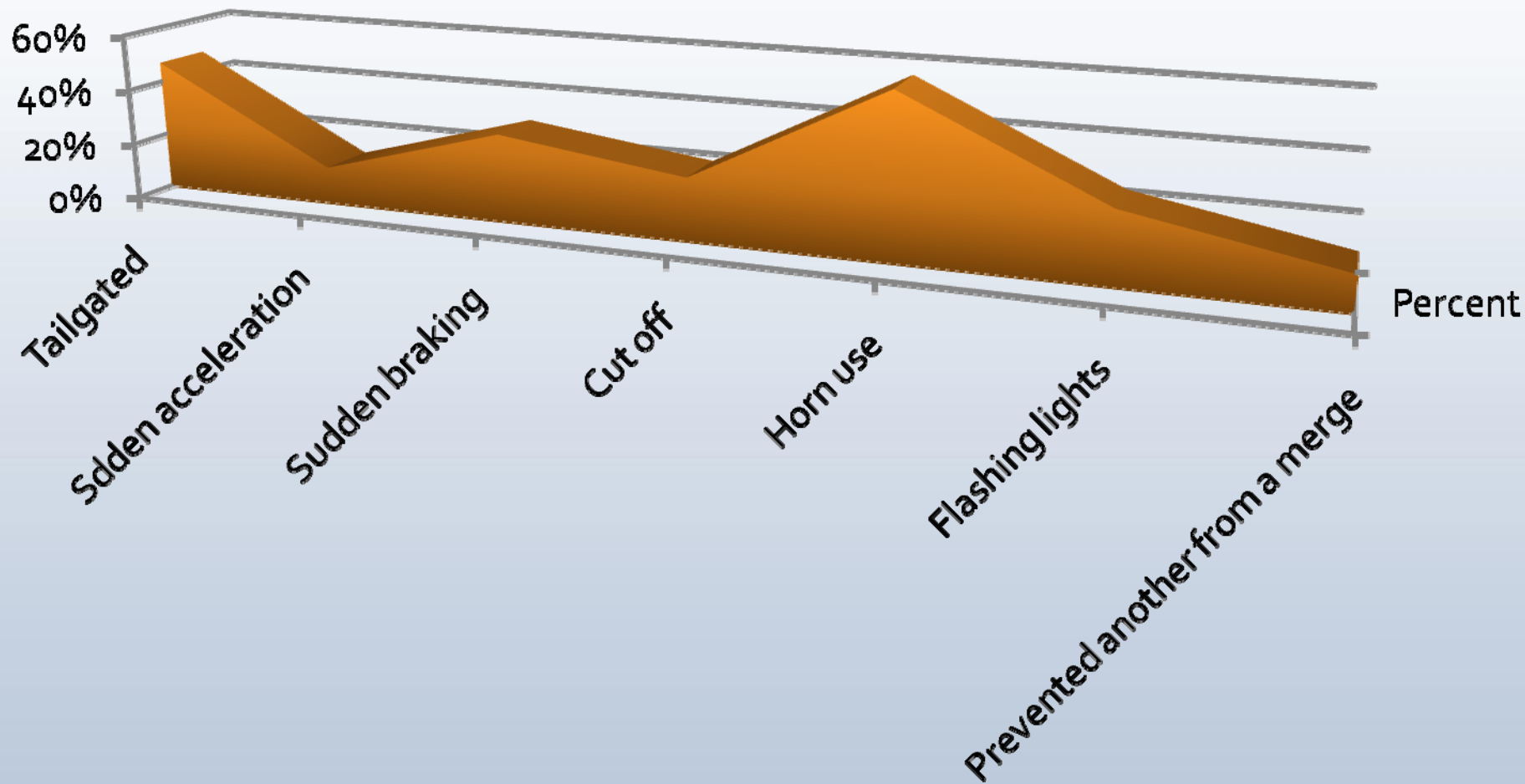
Study

- Participants—702 College students
- 65% female, 35% male
- About 50% drive during the rush hours

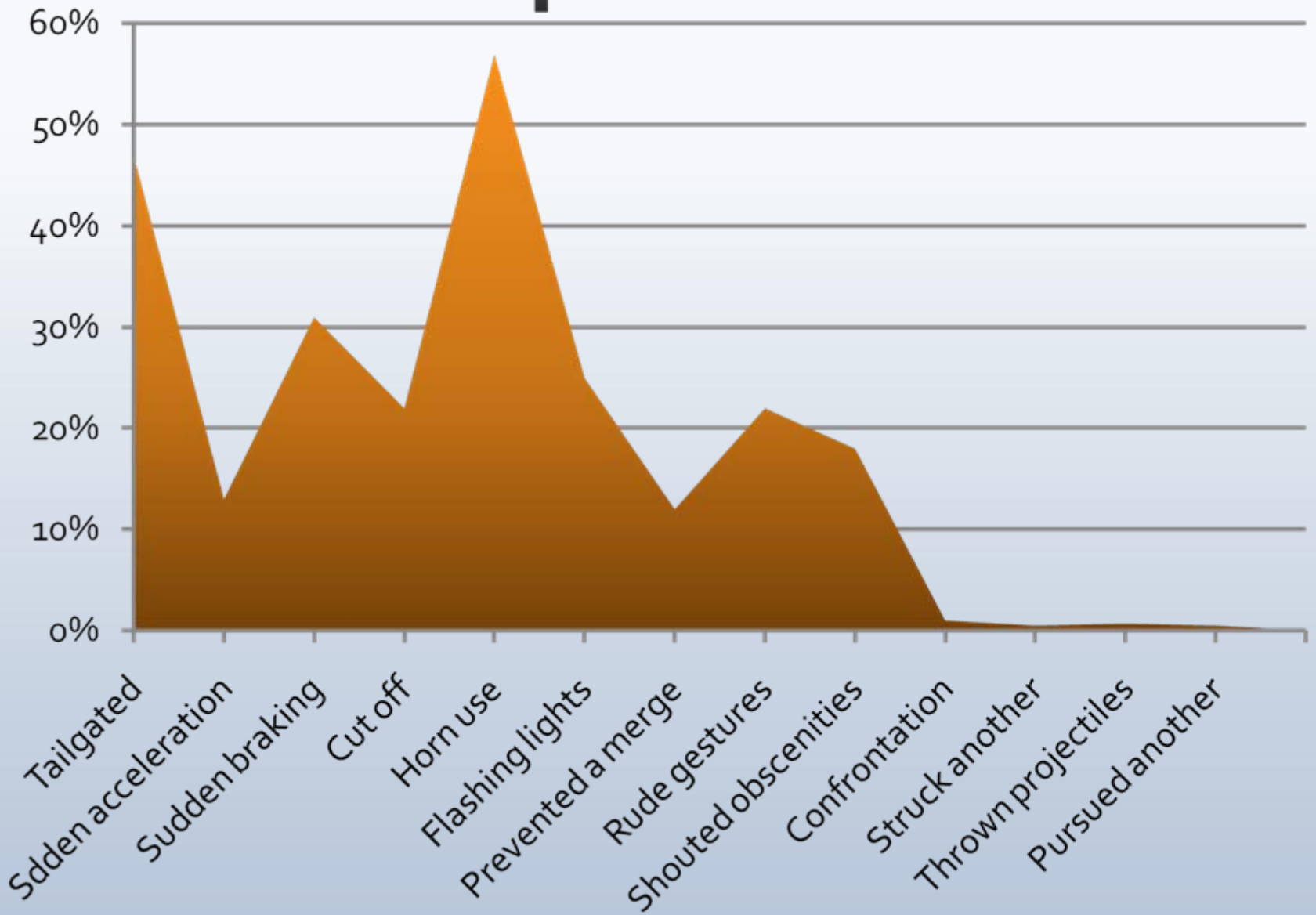
Have you been a target?



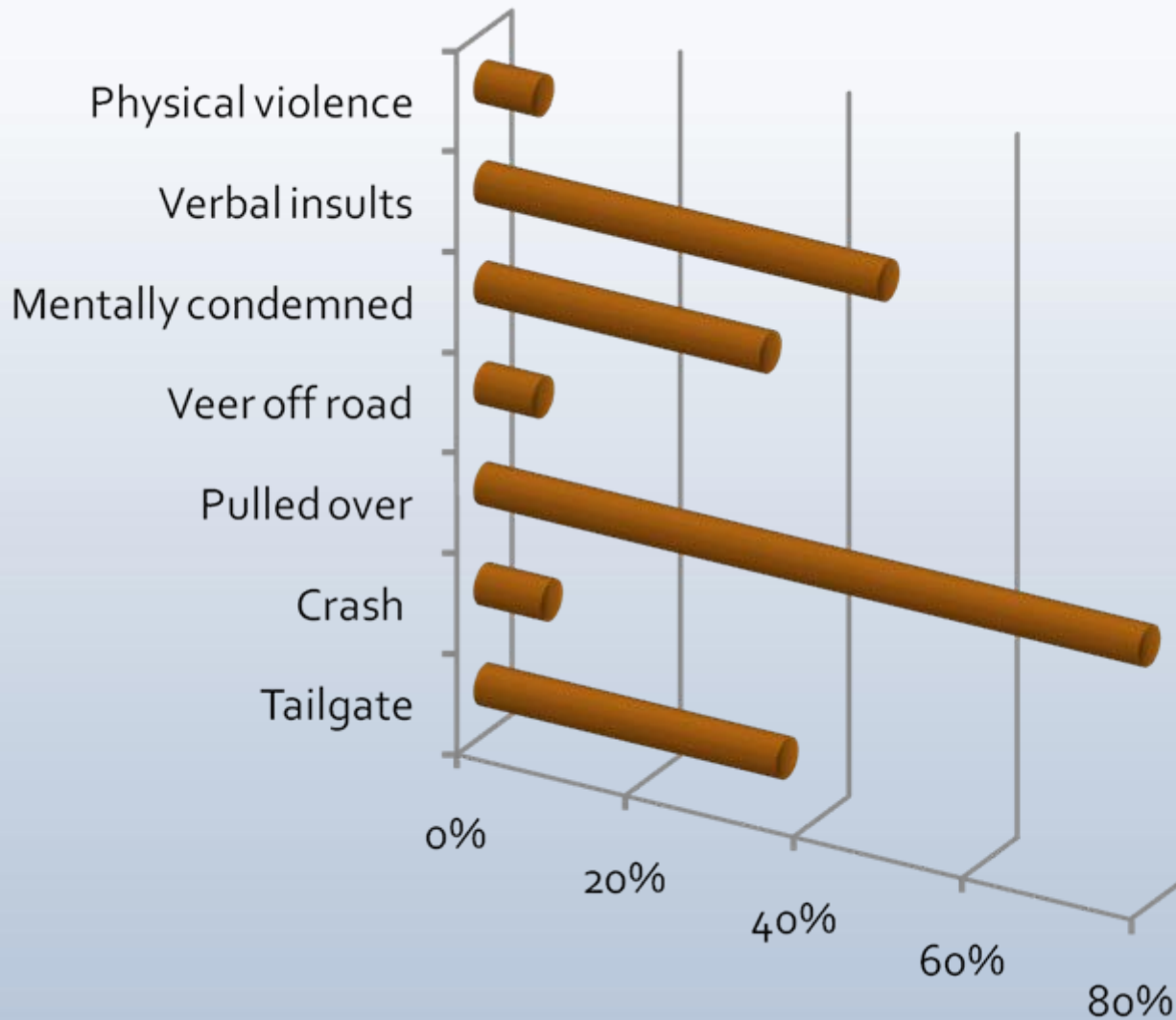
Have you been a target?



Perpetuated



Fantasized About?



Intervention

- Based upon Albany Model
- 5 two hour sessions over 5 weeks
- More integrated stress management techniques and practice
- Groups of 10

- The way two drivers think about and interpret an event can be very different.
- Rethink.



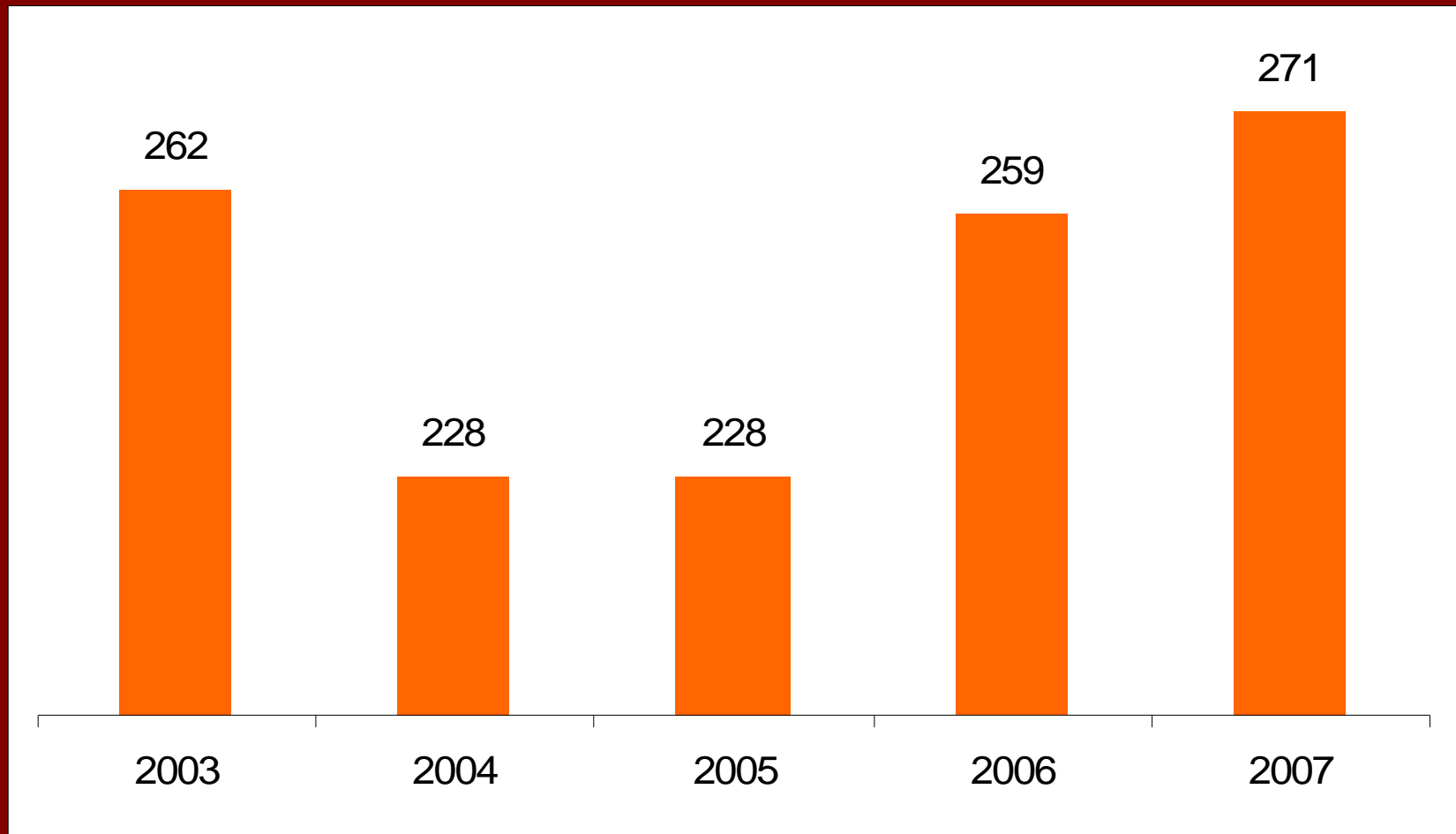
Curbing Aggressive Driving in the Delaware Valley

General Notes

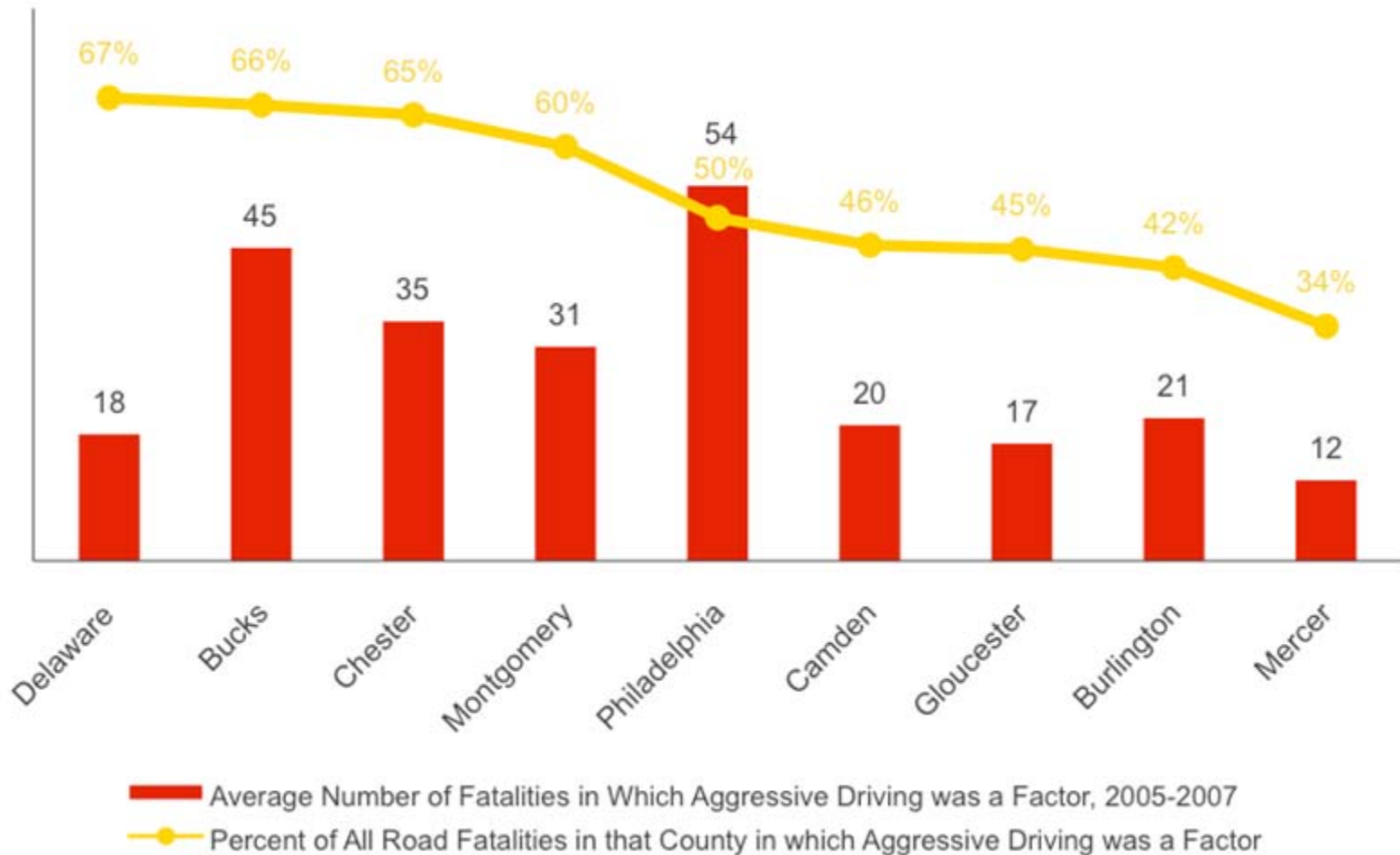
- **Major update to improving safety in the Delaware Valley complete!**
 - Data memo and summary cards ready
 - Safety Action Plan recommended for Board approval on October 22nd
- **RSTF focusing on one emphasis area per meeting for implementation**

Why Curb Aggressive Driving?

Fatalities for which Aggressive Driving was a Factor in the Delaware Valley



Importance of Curbing Aggressive Driving



Priority Strategies

1. Promote legislation aimed at curbing Aggressive Driving
2. Maintain multifaceted education/awareness programs
3. Fund targeted, publicized enforcement programs
4. Evaluate, implement, and maintain engineering solutions
5. Evaluate and establish realistic speed limits and design speeds as a systematic approach for the region
6. Address severely congested intersections and corridors with a focus on reducing aggressive driving

Resources

- All of you in the room
- Safety Action Plan and data memo
- NCHRP Report 500-1, A Guide for Addressing Aggressive Driving Collisions, available at <http://safety.transportation.org/guides.aspx?cid=22>

Starting Thoughts from...

- **Richard F. Simon, Deputy Regional Administrator, NHTSA**
- **Cathy Rossi, Manager, Public and Government Affairs, AAA Mid-Atlantic**
- **Gary Chilutti, Executive Director, Chester County Council on Addictive Diseases**
- **Shari Willis, Assistant Professor, Aggressive Driving Prevention, Rowan University**
- **Lt. Neil Brosnan, Assistant Bureau Chief, Operations Safety Bureau, New Jersey State Police**
- **Janine Bauer, Partner, Szaferman, Lakind, Blumstein & Blader, P.C.**

The logo is a downward-pointing triangle with a thick gold border. The interior of the triangle is a dark blue color. The text "STATE POLICE NJ" is centered within the triangle in a gold, bold, sans-serif font. The word "STATE" is on the top line, "POLICE" is on the second line, and "NJ" is on the third line.

**STATE
POLICE
NJ**

Neil Brosnan, Lieutenant

Assistant Bureau Chief
Operations Safety Bureau
New Jersey State Police
609-882-2000 ext 2289
Lpp4768@gw.njsp.org

Aggressive Driving

The Problem

- Most densely populated state
- Over 75 billion vehicle miles travels / year
- 320,000 crashes per year
- 700+ fatalities per year **
- 80,000+ Injuries per year

The Issue

Aggressive Driving

What is considered Aggressive Driving?

- Unsafe Speed
- Improper Lane Change
- Improper Passing
- Following Too Closely
- Failing to Yield Right of Way
- Failing to Obey Traffic Control Device

The Solution?

- Enforcement
- Education

ENFORCEMENT

- NJSP and NJDOT form a Partnership – March '05
 - “State Police Enhanced Enforcement Program”
- Roads / Areas of concern identified
 - 10 “Target Areas”
 - I-78 (3), I-80 (2), I-195, I-280, I-287 (2), I-295 (2)
 - 92 Miles of Interstate
 - Encompasses 9 State Police Stations, 3 Troops
- Approximately 2000 Details per year
- 16 Fully Equipped Unmarked Dodge Chargers

Funding

- \$400,000 from implementation of .08 BAC
- 2 Million in Federal Safety monies
- Request – 2 Million for 2 year period

Results: '05 – '08 (Approximates)

- 55,600 Motor Vehicle stops
- 55,600 Summonses
 - 15,000 Driver Inattention
 - 3,800 Following too Close
 - 3,588 Unsafe Speed
- Overall Crashes increased by 6.9%
- Injury Crashes Decreased by 23.5%
- Fatal Crashes Decreased by 20%
 - '06 = 774, '07 = 730, '08 = **590**
- Vehicle Miles Traveled **INCREASED** by 18%

NJ Turnpike Tailgating Initiative

- Approximately 30% of Crashes attributed to F.T.C
- Use of laser to determine Distance Between Vehicles
 - Speed of one vehicle
 - Speed of second vehicle
 - Mathematical Equation
- PSA's, Palmcards, Press Releases
- Oct 17th – Oct 31st
- Info: Lt. Tom Bernhardson, Troop D Traffic Officer,
(609) 860-9000 Ext.4205

Education ('08-'09)

- PSA's, Plamcards, Billboards, Variable Message Boards, etc
- Emphasis on Young Drivers – Change Culture
- NJ Drive Program
 - 62 presentations reaching over 13,000 high school students
- Graduated Drivers License
 - 10 presentations reaching over 1000 students
- DWI
 - 35 presentations reaching over 5500 people
- Alive @ 25 (partnership w NJ Safety Council)
 - 20 programs reaching over 1700 students

**The New Jersey State Police
commits itself to our partners
in an effort to reduce the
number of crashes, injuries
and deaths attributed to
aggressive driving behaviors**



www.completestreets.org

What Are Complete Streets?

Complete Streets are designed and operated so they are safe, comfortable, and convenient for all users - pedestrians, bicyclists, motorists and transit riders of all ages and abilities.



Why Do We Need to Complete the Streets?



Americans Want to Walk and Bike More

52%
of Americans want
to bike more
than they do
now.



Americans Want to Drive Less



55% of Americans would prefer to drive less and walk more.



STPP Poll

photos: Dan Burden, pedbikeimages.org

About 1/3 of Americans Do Not Drive

This includes:

- 21% of Americans over 65.
- All children under 16.
- Many low income Americans who cannot afford automobiles.



Dan Burden, pedbikeimages.org



But There are Few or No Sidewalks...



or They are Unsafe or Inadequate



Streets Too Narrow to Share with Bicycles



We need On Street Bike Lanes and Off Road Paths



Crossing Multi Lane Streets is Most Dangerous



And It Takes Too Long



Bus Riders Are Almost Completely Ignored



in the Provision of Walking Infrastructure



Often, wheelchair users are even worse off...



INACCESSIBILITY IS AGAINST THE LAW



FATAL CRASHES OCCUR WHEN THERE IS



NO ROOM FOR BICYCLISTS OR PEDESTRIANS



Streets Must Accommodate All Users



MAKE ROOM FOR PEOPLE ON FOOT AND BICYCLE



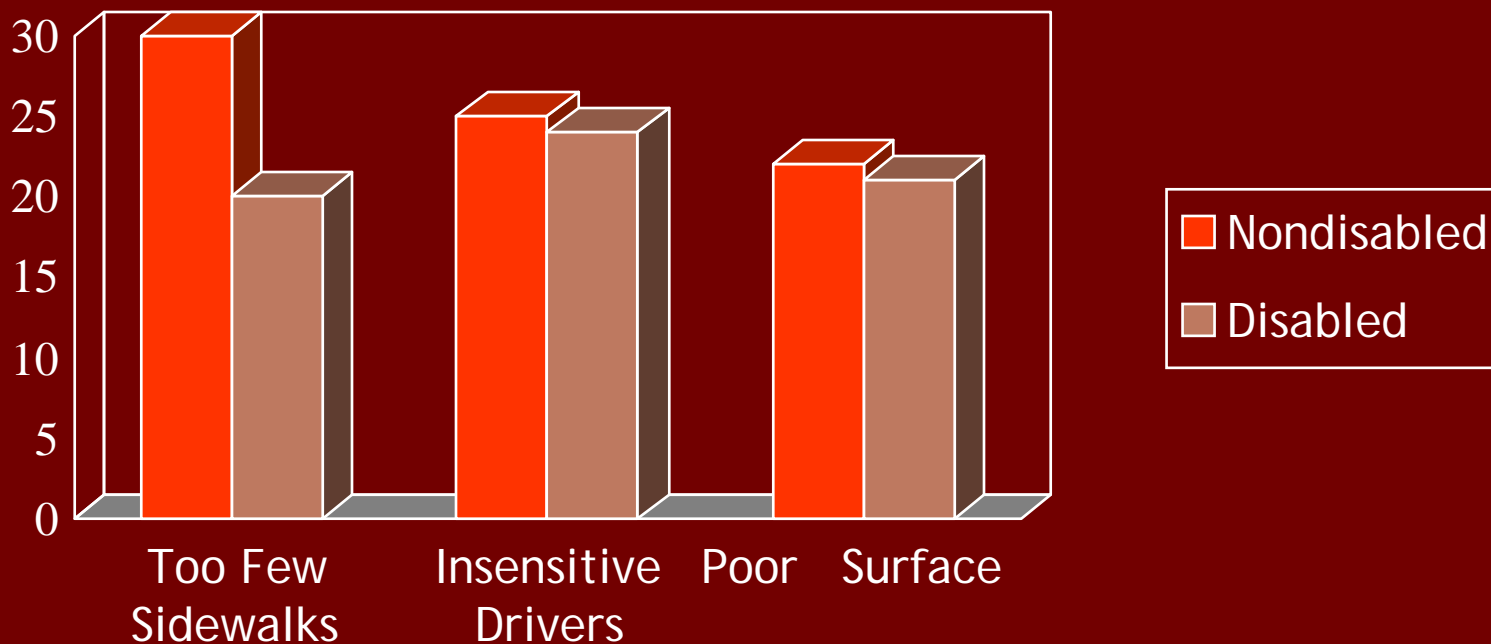
Streets Are Inadequate

- 25% of walking trips take place on roads without sidewalks or shoulders
- Bike lanes are available for only about 5% of bike trips



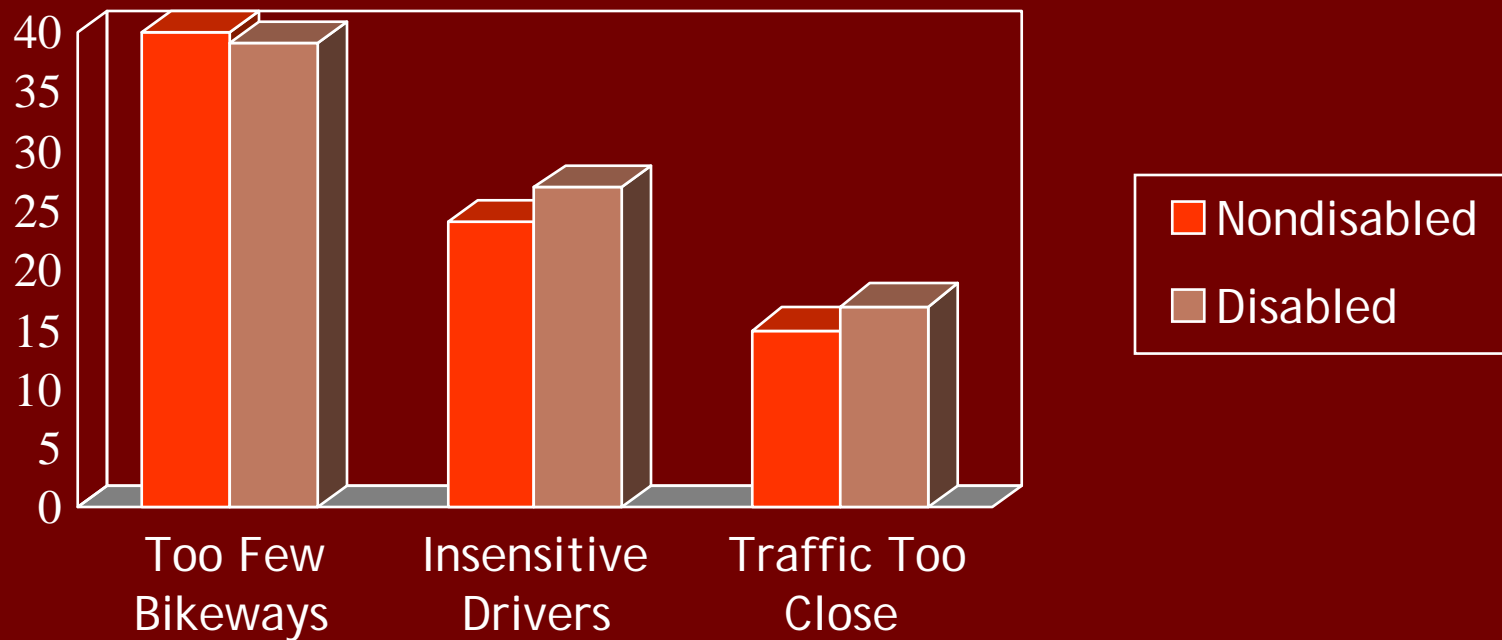
Top Pedestrian Complaints Are Incomplete Streets

Percentage of Pedestrians Experiencing Problematic Streets



Top Bicyclist Complaints Are Incomplete Streets

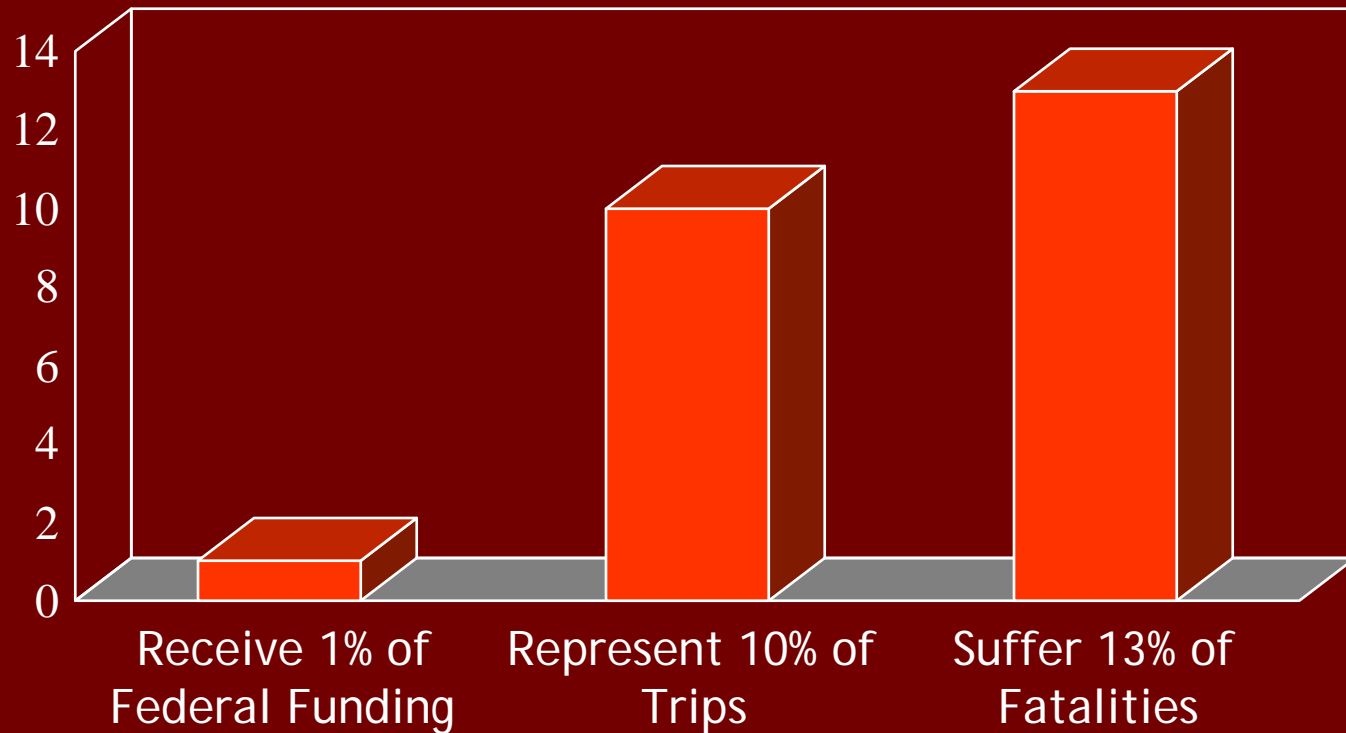
Percentage of Cyclists Experiencing Problematic Streets



2002 National Transportation
Availability & Use Survey

There's a Funding Imbalance That Is Affecting Our Safety

Pedestrians and Bicyclists...



Safe Infrastructure Helps Prevent Crashes



Pine Street Bicycle Lane, After



Leadership is Rewarded



Unsafe Infrastructure and Driving is Expensive and Heart-breaking

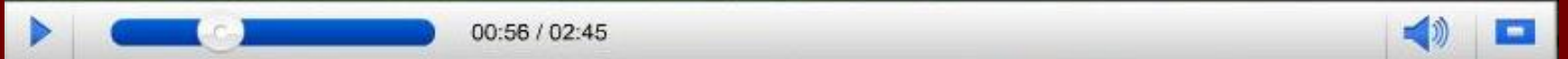


A boy was critically injured recently at this popular crossing point while bicycling on a tandem with his father.

MLK Drive aka West River drive, Phila PA



Take Back The Drive Campaign



Designing intersections for pedestrian travel can reduce pedestrian risk by 28%.



NJ ped fatalities increased 34% (2009)



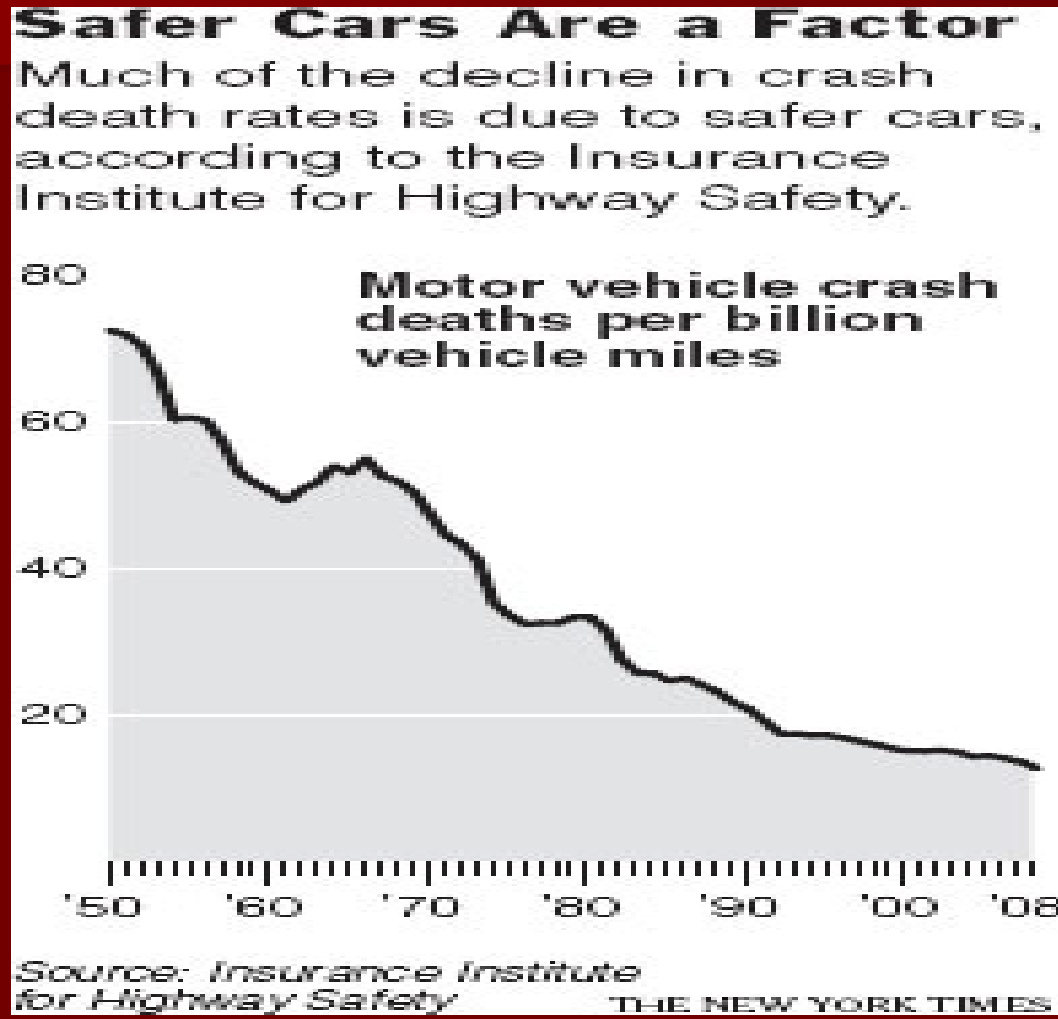
FATAL ACCIDENT INVESTIGATION UNIT

YTD CRASHES AND FATALITIES BY PERSON TYPE (COUNTY) COMPARATIVE REPORT

Date Range: 01/01/2009- 09/29/2009

County	Driver	Passenger	Pedalcyclist	Pedestrian	Fatalities	Crashes
Atlantic	15	5	1	5	26	25
Bergen	11	0	0	8	19	18
Burlington	23	13	0	7	43	38
Camden	15	4	2	7	28	26
Cape May	5	0	0	1	6	6
Cumberland	18	4	1	1	24	23
Essex	12	5	0	15	32	30
Gloucester	8	4	1	1	14	14
Hudson	4	3	0	12	19	19
Hunterdon	2	1	0	0	3	3
Mercer	8	4	0	6	18	17
Middlesex	13	5	0	14	32	30
Monmouth	18	2	2	10	32	32
Morris	6	3	0	3	12	12
Ocean	26	8	3	12	49	44
Passaic	12	3	0	6	21	19
Salem	7	1	1	1	10	10
Somerset	9	3	0	1	13	13
Sussex	4	2	0	0	6	6
Union	19	4	0	9	32	29
Warren	5	1	0	1	7	7
Total	240	75	11	120	446	421

Yet vehicular fatalities are down 18% nationwide, 16% when corrected for VMT



What Is a Complete Streets Policy?



A complete streets policy ensures that the entire right of way is routinely designed and operated to enable safe access for all users.



Complete Streets Are Consistent with Federal Guidance

2000 FHWA Guidance:

"Bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist."

<http://www.fhwa.dot.gov/environment/bikeped/design.htm>



Some Existing Policies

	State	County	MPO	City
Public: legislation, ordinances, resolutions	FL, IL, MA, MD, NC, OR, RI, SC	DuPage IL Jackson MI Johnson IA Sacramento CA San Diego CA	Columbus OH Bay Area CA	Buffalo NY Columbia MO Iowa City IA Sacramento CA Spartanburg SC
Internal: policies, plans, manuals	CA, KY, MA, PA, TN, VA, VT		Austin TX Cleveland OH Gulf Coast FL Knoxville TN St Louis MO	Boulder CO Chicago IL Charlotte NC Decatur GA Ft. Collins CO Santa Barbara CA Scottsdale AZ W. Palm Beach FL



The Best Complete Streets Policies:

- Apply to all phases of all projects
- Feature direct use of the latest and best design standards
- Allow flexibility in balancing user needs
- Specify any exceptions and require high-level approval of them.



Completing the Streets: State Action

Oregon State Law:

- *" footpaths and bicycle trails... shall be provided wherever a highway, road or street is being constructed, reconstructed, or relocated."*
- A minimum of 1% of the state's transportation funds go to bicycling and walking.



Completing the Streets: State Action

Massachusetts Project Development & Design Guide:

"A guiding principle of the Guidebook is that the roadway system of the Commonwealth should safely accommodate all users of the public right-of-way, including:

- *pedestrians,*
- *people requiring mobility aids...*
- *bicyclists,*
- *drivers and passengers of transit vehicles,*
- *trucks,*
- *automobiles and motorcycles."*



Completing the Streets: Local Action

City of Chicago Complete Streets Policy:

"The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all transportation and development projects and through all phases of a project so that even the most vulnerable - children, elderly, and persons with disabilities - can travel safely within the public right of way."



Completing the Streets: Local Action

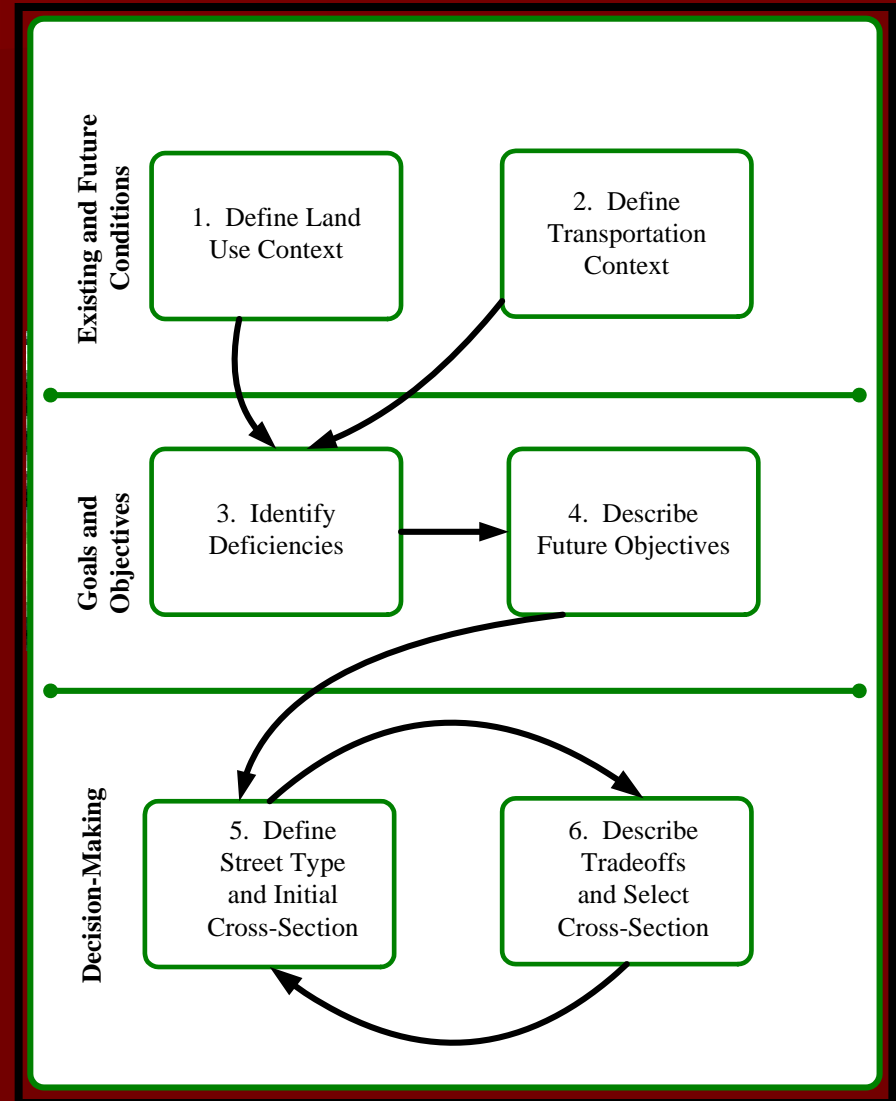
Boulder, Colorado is building all arterials as multi-modal corridors for auto, pedestrian, bicycle, and transit.



Completing the Streets: Local Action

Charlotte NC Urban Street Design Standards:

A six step process for considering and balancing the needs of all users.



Local Action, Local Input



Implementation: From Policy to Practice

An effective policy should prompt the following changes:

- restructured procedures
- re-written design manuals
- New training for planners and engineers
- re-tooled measures to track outcomes



The Many Types of Complete Streets



The Many Types of Complete Streets



The Many Types of Complete Streets



The Many Types of Complete Streets



The Many Types of Complete Streets



The Many Types of Complete Streets



Isn't It Expensive? Actually, No.

"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 are minimized."

Jeff Morales, former Director, CalTrans



Benefits: Safety

Designing intersections for pedestrian travel can reduce pedestrian risk by **28%**.



Older Americans Walk

- 50% of Americans will be over 55 in 2030.
- More than half of older Americans walk regularly.



Photo: Michael Ronkin, ODOT

Not Driving and Lack of Safe Walking Infrastructure = House Arrest for Older Americans

- 21% of Americans over the age of 65 do not drive.
- More than 50% of non-drivers stay at home on a given day because they lack transportation options.



Photo: Michael Ronkin, ODOT



Benefits: Encouraging Healthy Activity Reduces Disease

- Walking and bicycling help prevent obesity, diabetes, high blood pressure, and colon cancer.
- Residents are 65% more likely to walk in a neighborhood with sidewalks.



Benefits: People with Disabilities Can Get Around

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



Benefits: Reducing Vehicular Traffic and Air Pollution

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*



National Complete Streets Coalition Steering Committee

- AARP
- Active Living by Design
- America Bikes
- America Walks
- American Council of the Blind
- American Planning Association
- American Public Transportation Association
- American Society of Landscape Architects
- Association of Pedestrian and Bicycle Professionals
- City of Boulder
- Institute of Transportation Engineers
- League of American Bicyclists
- McCann Consulting
- National Center for Bicycling and Walking
- Smart Growth America
- Surface Transportation Policy Project
- Thunderhead Alliance



For More Information: www.completestreets.org

- Links to success stories & existing policies
- How-To Tools
- Resources: PowerPoint Presentations, Fact Sheets, Brochures
- Newsletter sign-up

