



GREEN STREETS

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Smart Growth America



What is a Complete Street?

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



Why do we need to Complete the Streets?



Americans want to walk and bike more

52% of Americans want to bike more



America Bikes Poll

Americans want to walk and bike more



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



STPP Poll

About one-third of Americans do not drive:

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



Streets are inadequate:



No sidewalks

Streets are inadequate:



Too narrow to share with bikes

Streets are inadequate:



Too dangerous to cross on foot

Streets are inadequate:



Uninviting for bus riders

Streets are inadequate:



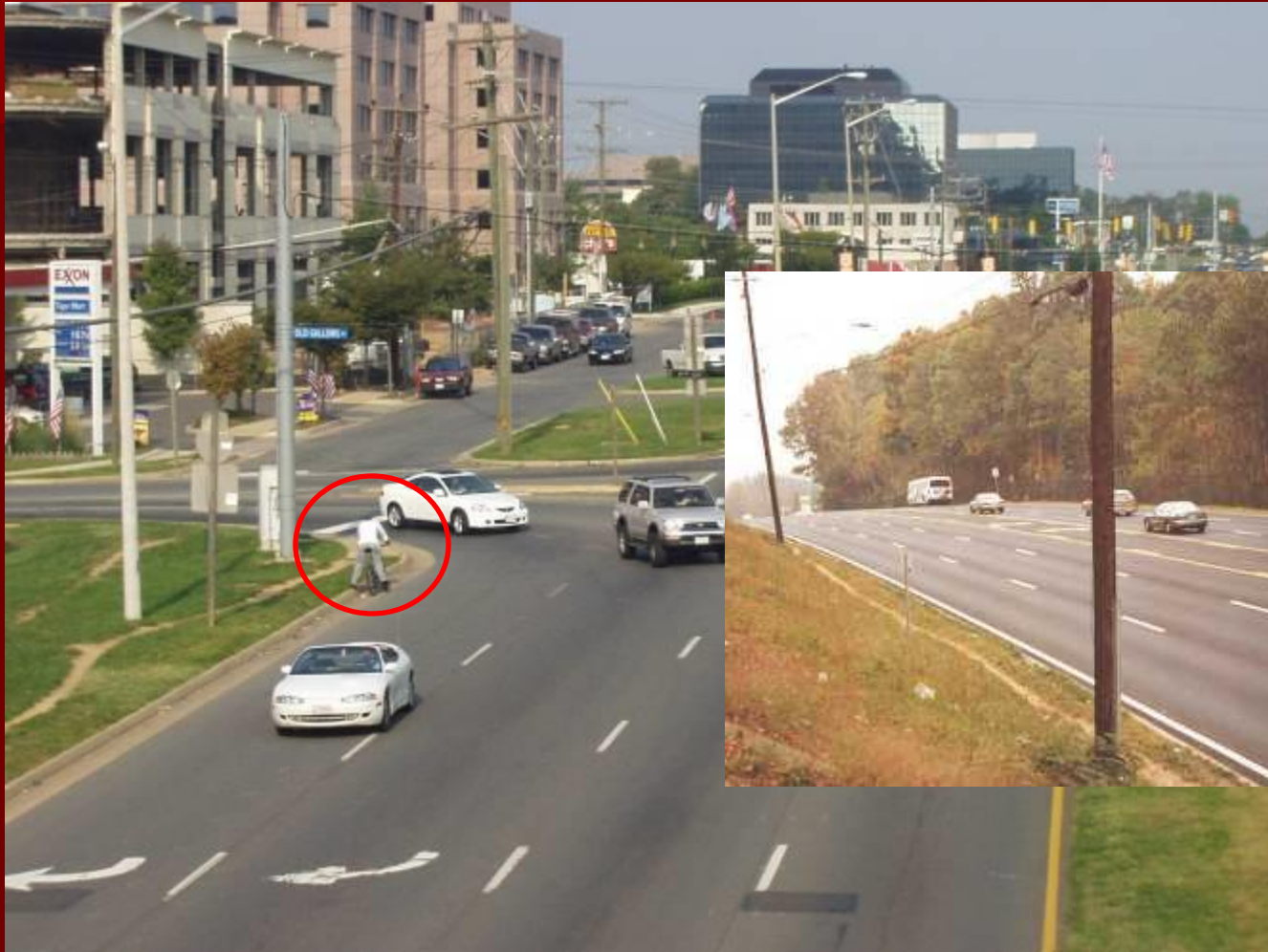
Inaccessible for wheelchair users

Streets are inadequate



No room for bikes or pedestrians

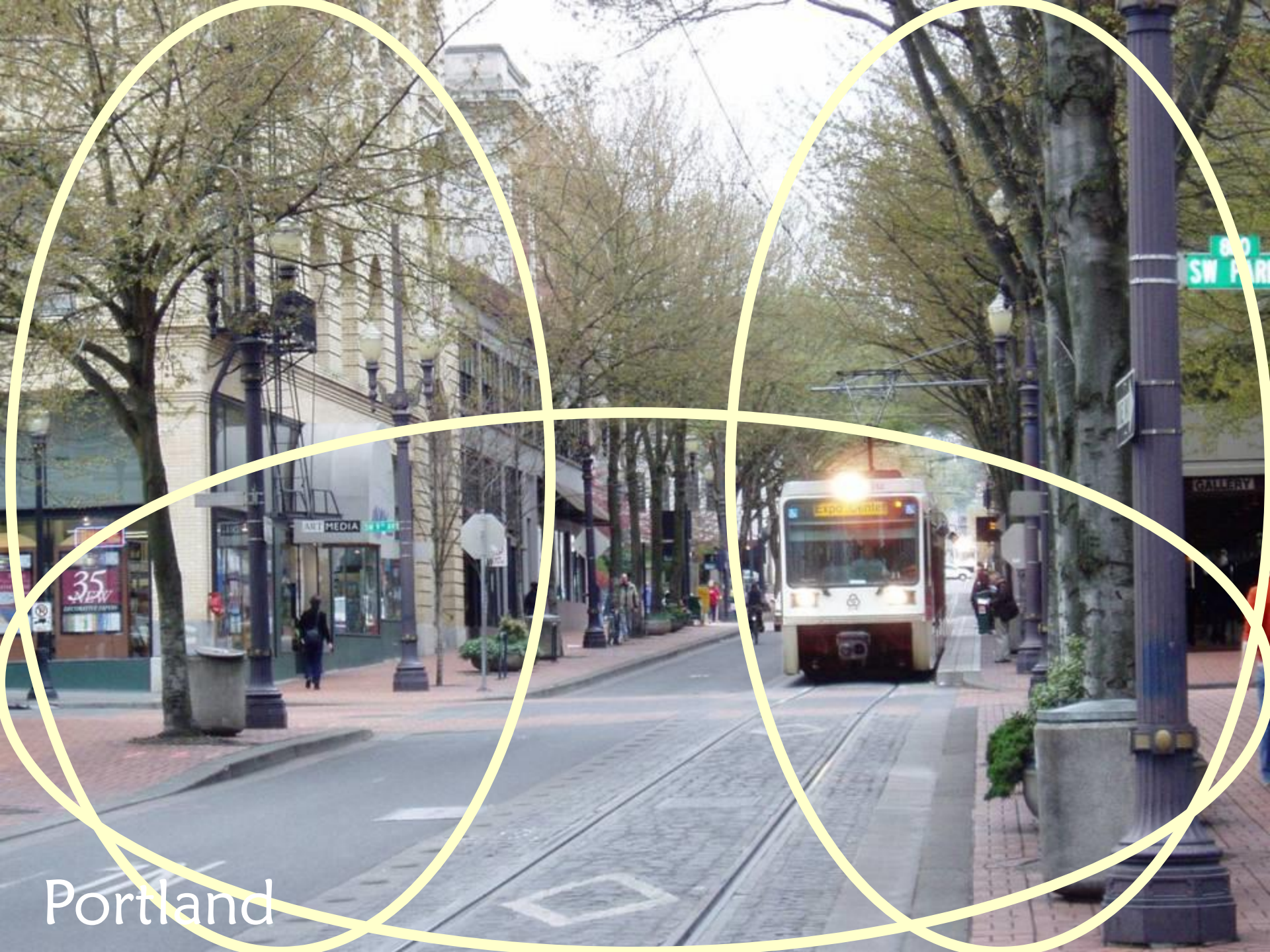
Streets are inadequate



No room for people

We know how to build right





Portland

Yet too many roads still turn out
like this



Streets are inadequate

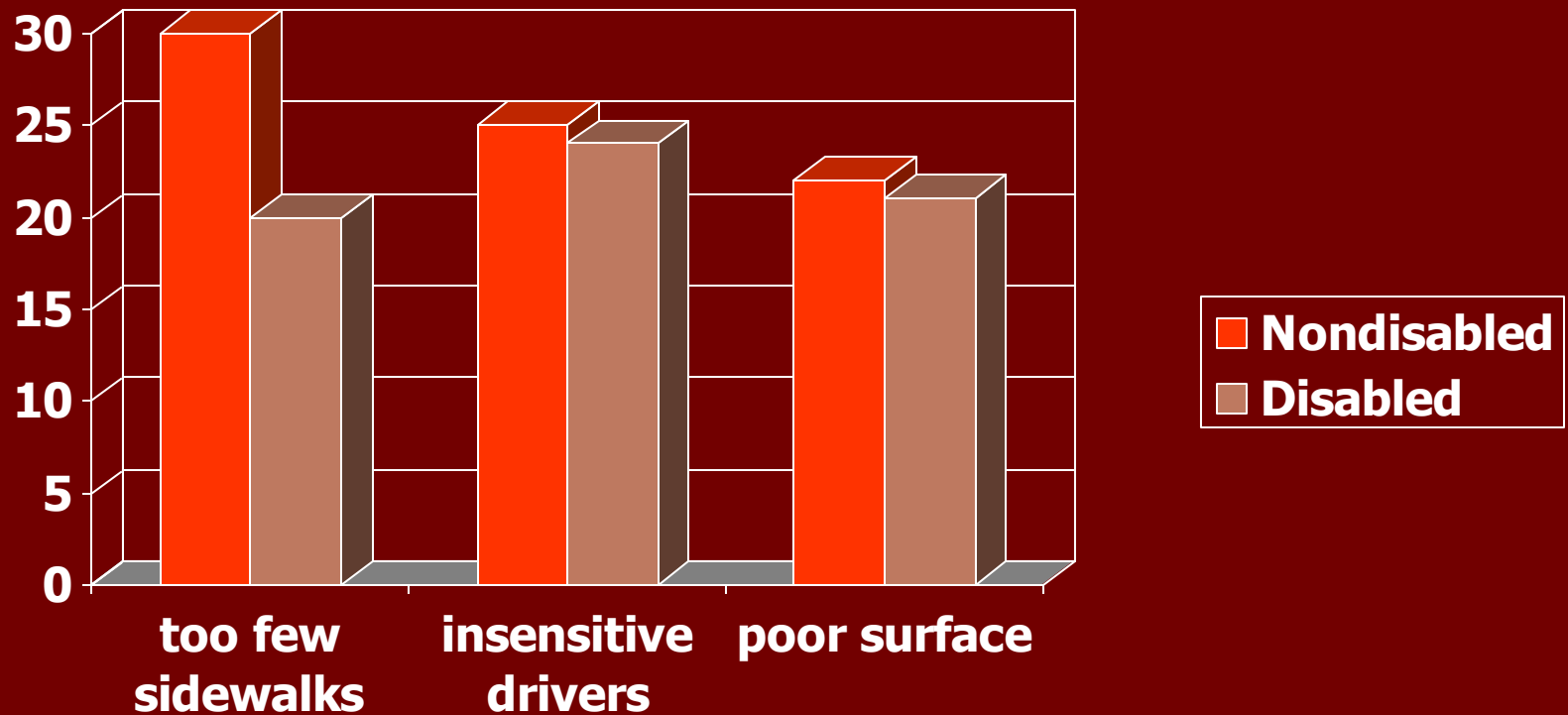
- 25% of walking trips take place on roads without sidewalks or shoulders
- Bike lanes are available for only about 5% of bike trips



Natl. Survey of Ped &
Bicyclist Attitudes &
Behaviors, 2003 BTS

Top pedestrian complaints are incomplete streets

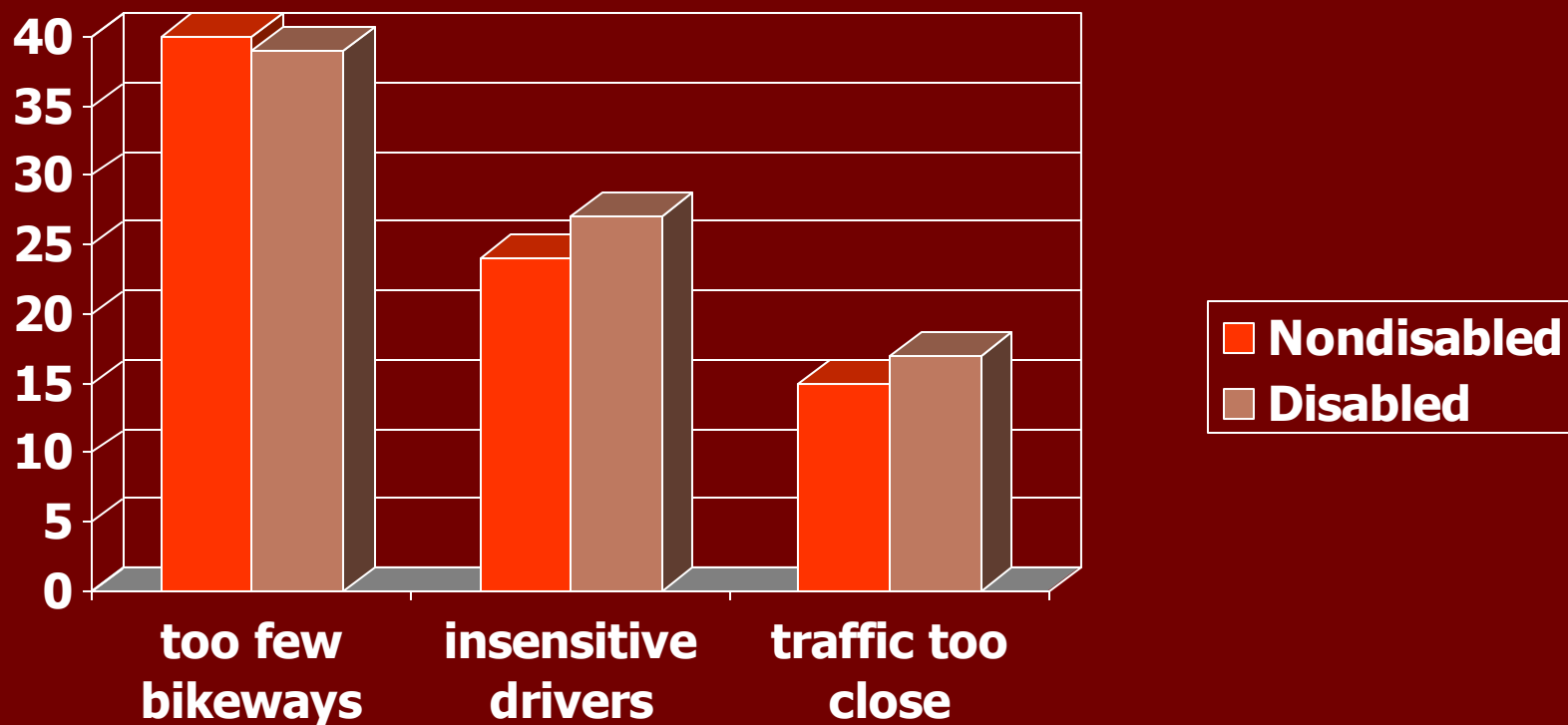
Percent of peds experiencing problem



2002 Natl. Transportation
Availability & Use Survey

Top bicyclist complaints are incomplete streets

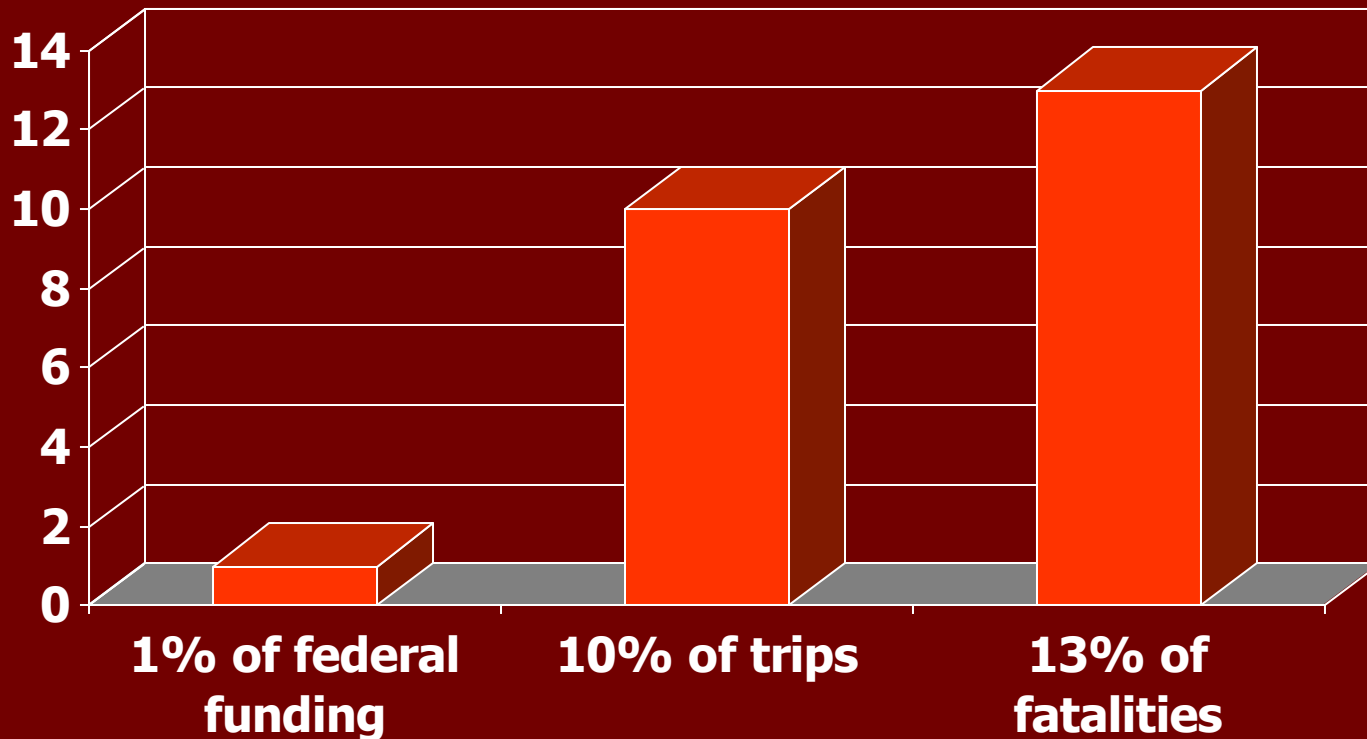
Percent of cyclists experiencing problem



2002 Natl. Transportation
Availability & Use Survey

Incomplete streets are unsafe.

Pedestrians and bicyclists...



FMIS, NHTS, FARS federal
databases

Incomplete streets



This bridge provides the only access across the Fox River to Cary, Illinois. In 2000, 17-year-old Nate Oglesby died trying to cross it on his bicycle; two teens had died previously.



US 14, Cary Illinois

Complete streets



Nate's family won a wrongful death lawsuit and the community pressed the Illinois DOT to retrofit the bridge, at far greater cost than doing it right the first time.

US 14, Cary Illinois



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 policies provide for:

- Pedestrians
- Bicyclists
- Transit
- Motorists
- Travelers of all ages and abilities



US Access Board



Why have a complete streets policy?

- To gradually create a complete network of roads that serve all users



Why have a complete streets policy?

- To *change practice*, integrating the needs of all road users into *everyday* transportation planning practices
- To be sure current transportation projects begins creating better streets *now*.



An ideal complete streets policy:

- Is inclusive of all modes
- Applies to new construction & reconstruction
- Clarifies senior manager approval for exceptions
- Specifies and limits exceptions allowed
- Is context-sensitive
- Uses latest design standards & is flexible
- Sets performance standards



Complete streets are essential to smart growth

- Complete streets policies 'pave the way' for future walkable development
- They invest traditional highway funds in meeting basic smart-growth principles.



Some Existing Policies

	State	County	MPO	City
Legislation or resolution	OR, FL, RI, SC, MA, IL	DuPage, IL San Diego Jackson, MI	SF Bay Area	Seattle Honolulu Columbia, MO Spartanburg, SC Iowa City
Internal Policies	TN, CA, KY, VA, PA, MA, DE	Arlington, VA Johnson Cty, IA	Cleveland Knoxville Austin, TX	Chicago Salt Lake City Charlotte, NC Boulder, CO Santa Barbara Ft. Collins, CO



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.”
- minimum of 1% of state transportation funds go to bicycling and walking.



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

“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...



Completing the Streets: Local Action

SO THAT even the most vulnerable-
children, elderly, and persons with
disabilities- can travel safely within
the public right-of-way”

-City of Chicago
Complete Streets
Policy



Completing the Streets: Local Action

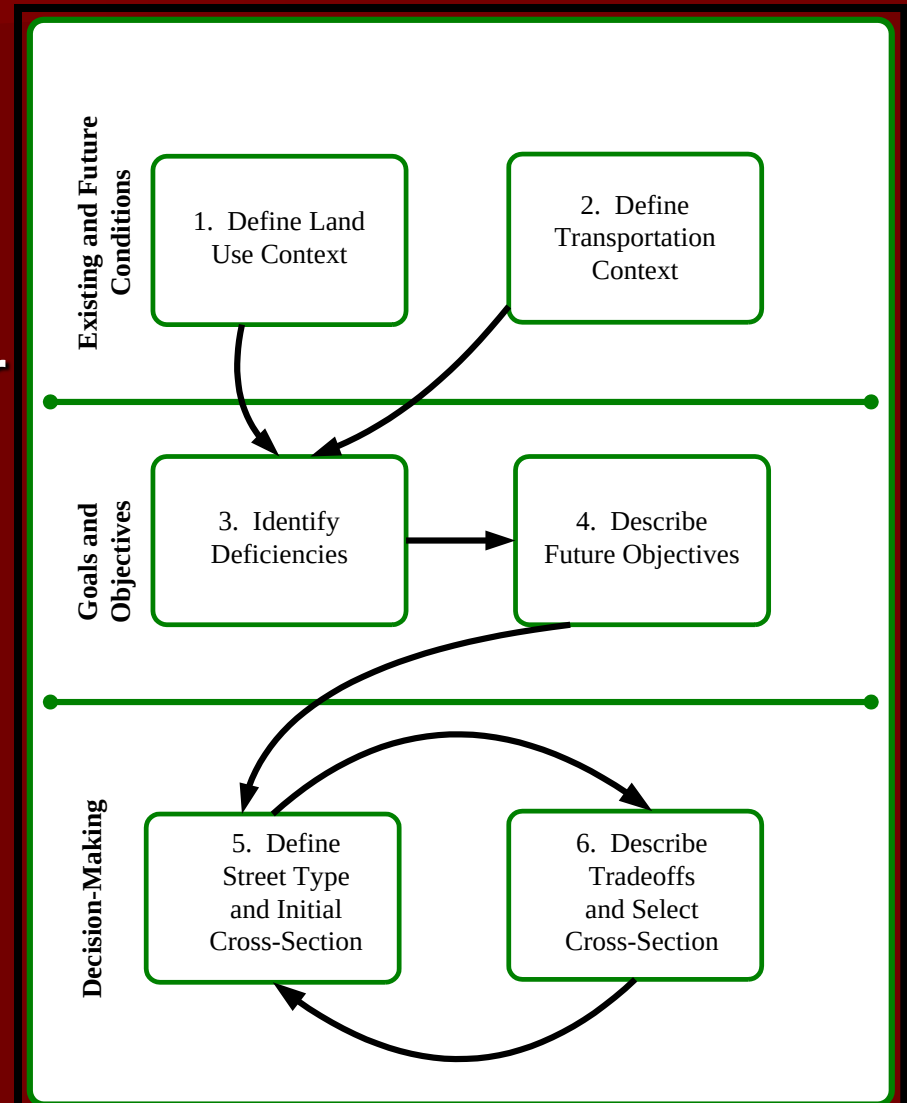
Boulder, Colorado is building all arterials as multi-modal corridors for auto, pedestrian, bicycle, and transit.



Charlotte NC Street Design Standards

Urban Street Design Standards:

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





Bridgeport Way, University Place,
Washington

Implementation: from policy to practice



Ross C. "Rocky" Anderson
Mayor

EXECUTIVE ORDER

ACCOMMODATION OF BICYCLISTS AND PEDESTRIANS

RESPONSIBLE CITY AGENCY: Planning, Transportation, Engineering, Airport

KEYWORDS: Transportation, Bicycle, Pedestrian, Safety,
Complete Streets

Preface

The benefits of bicycling and walking span across many aspects of our daily lives. Environmental benefits include healthier citizens and the improved air quality through a substantial reduction in air pollution. A community that encourages bicycling and walking can also save money, improve the overall quality of life, and improve the concept of Complete Streets for bicyclists throughout the city.



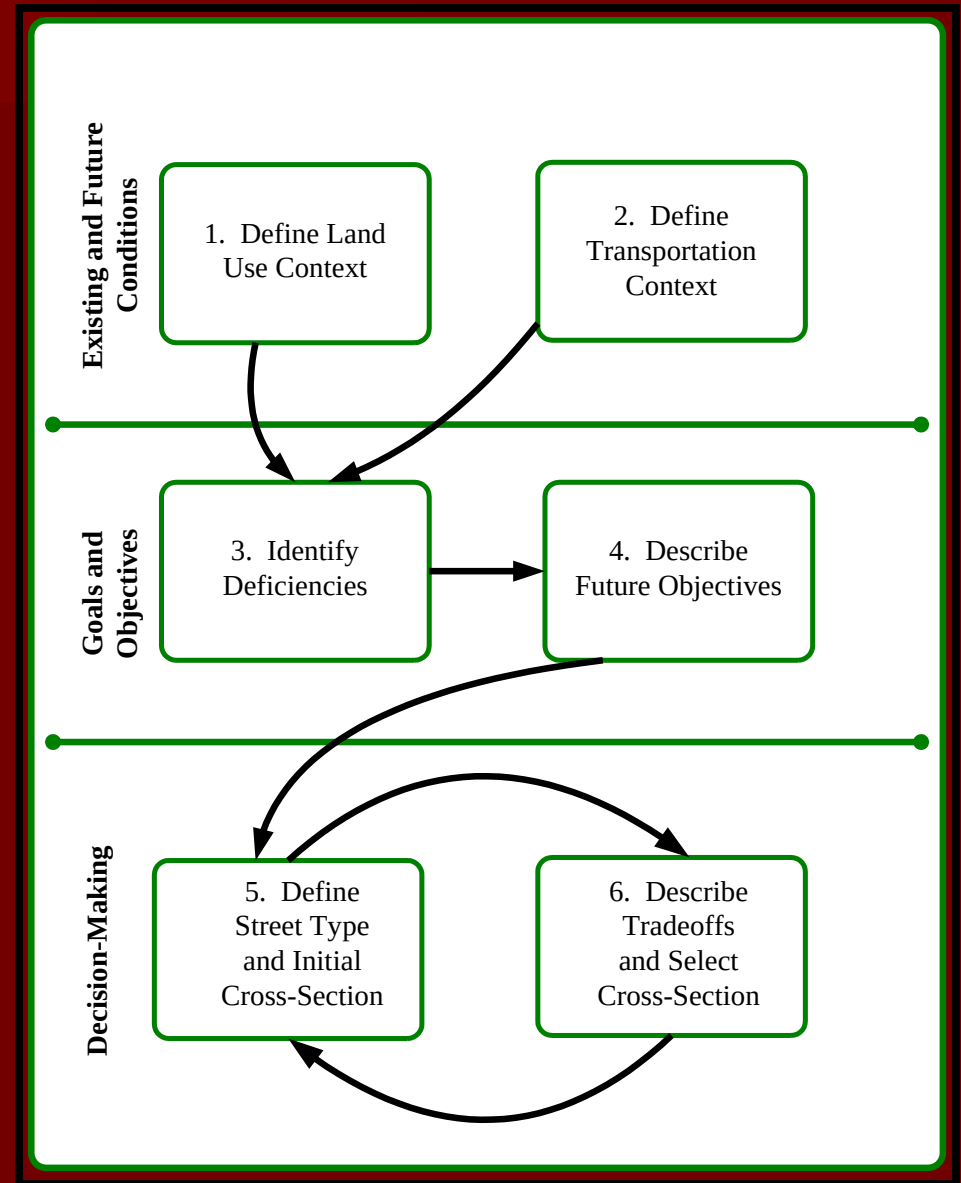
An effective policy should result in:

- New training for planners and engineers



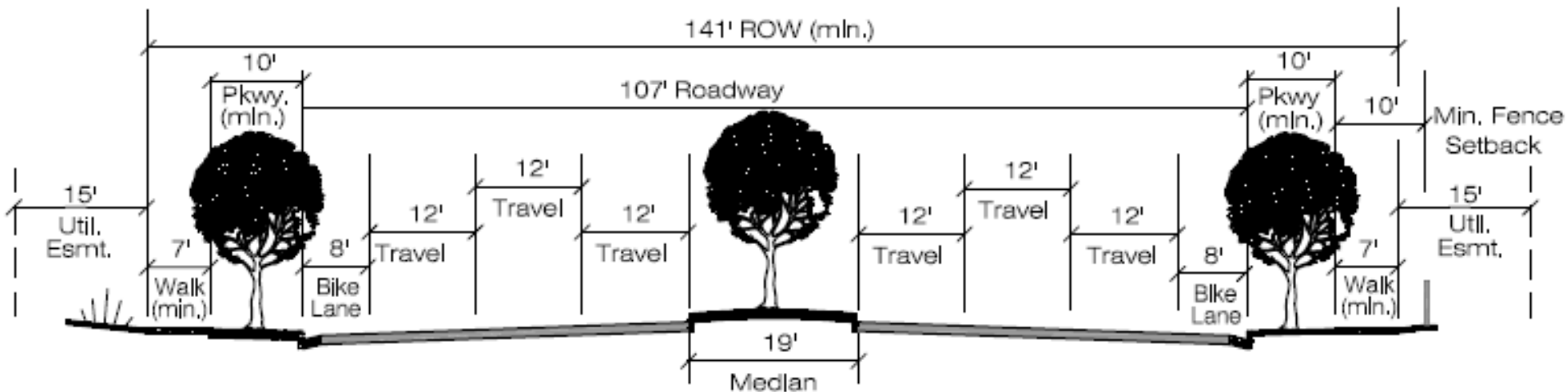
An effective policy should result in:

■ Restructured procedures

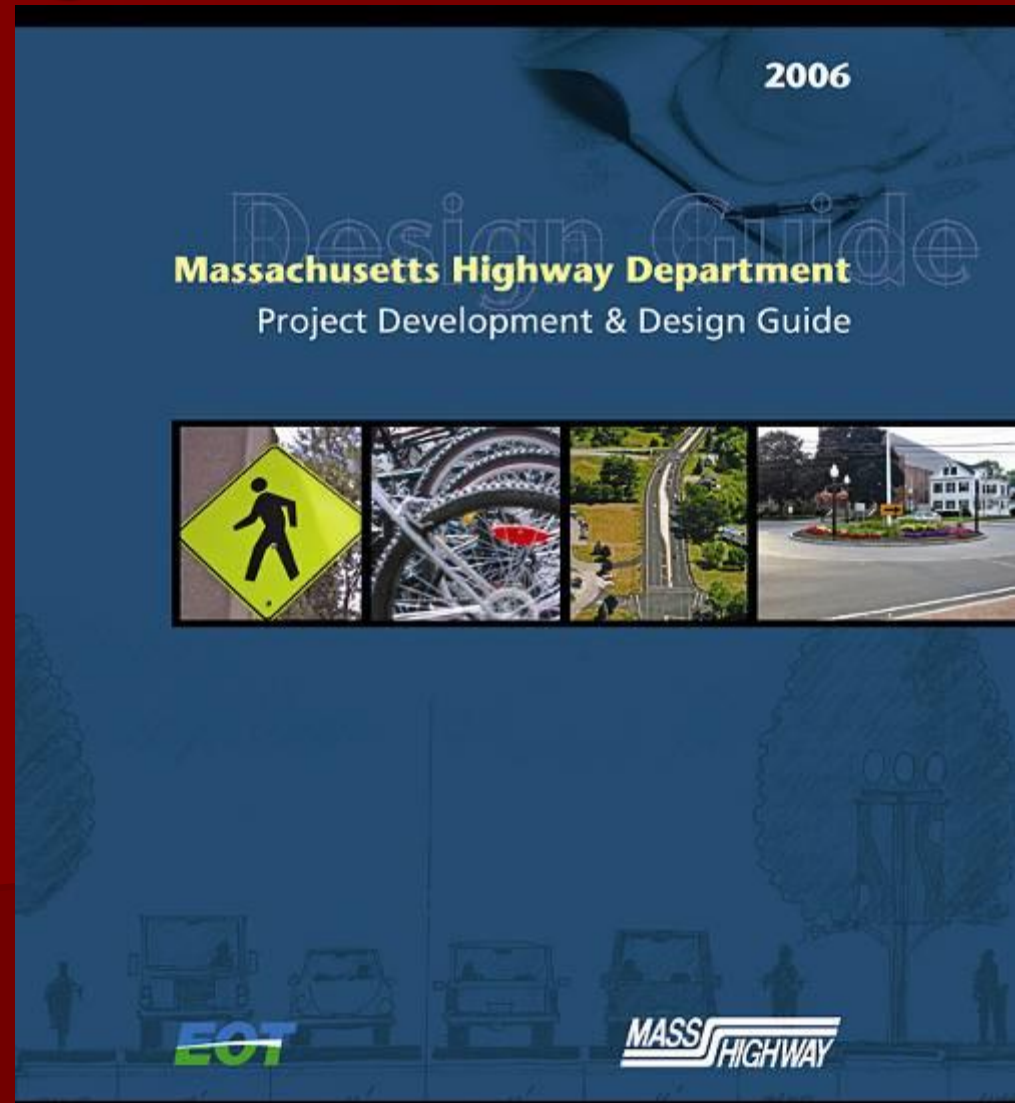
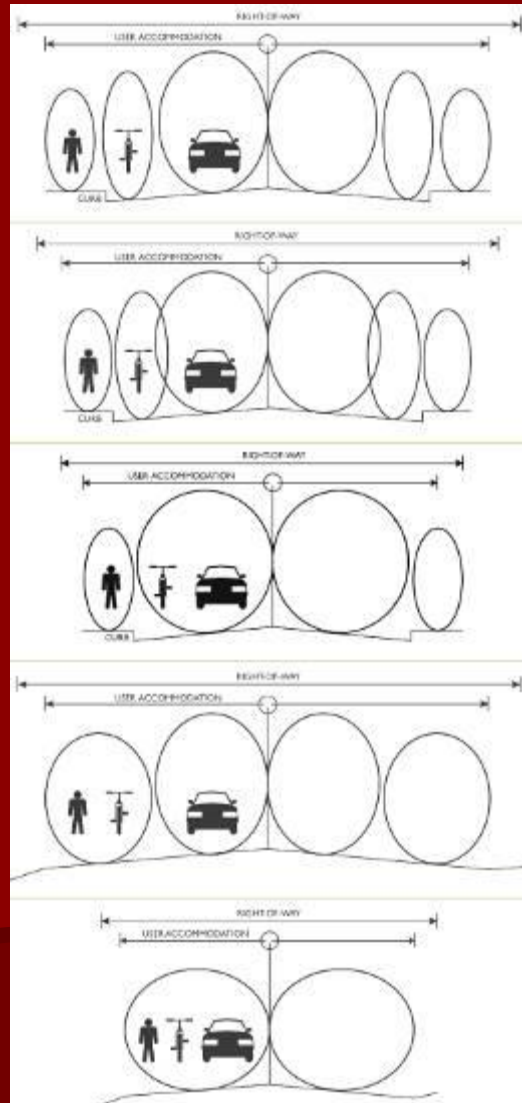


An effective policy should result in:

- Re-written design manuals

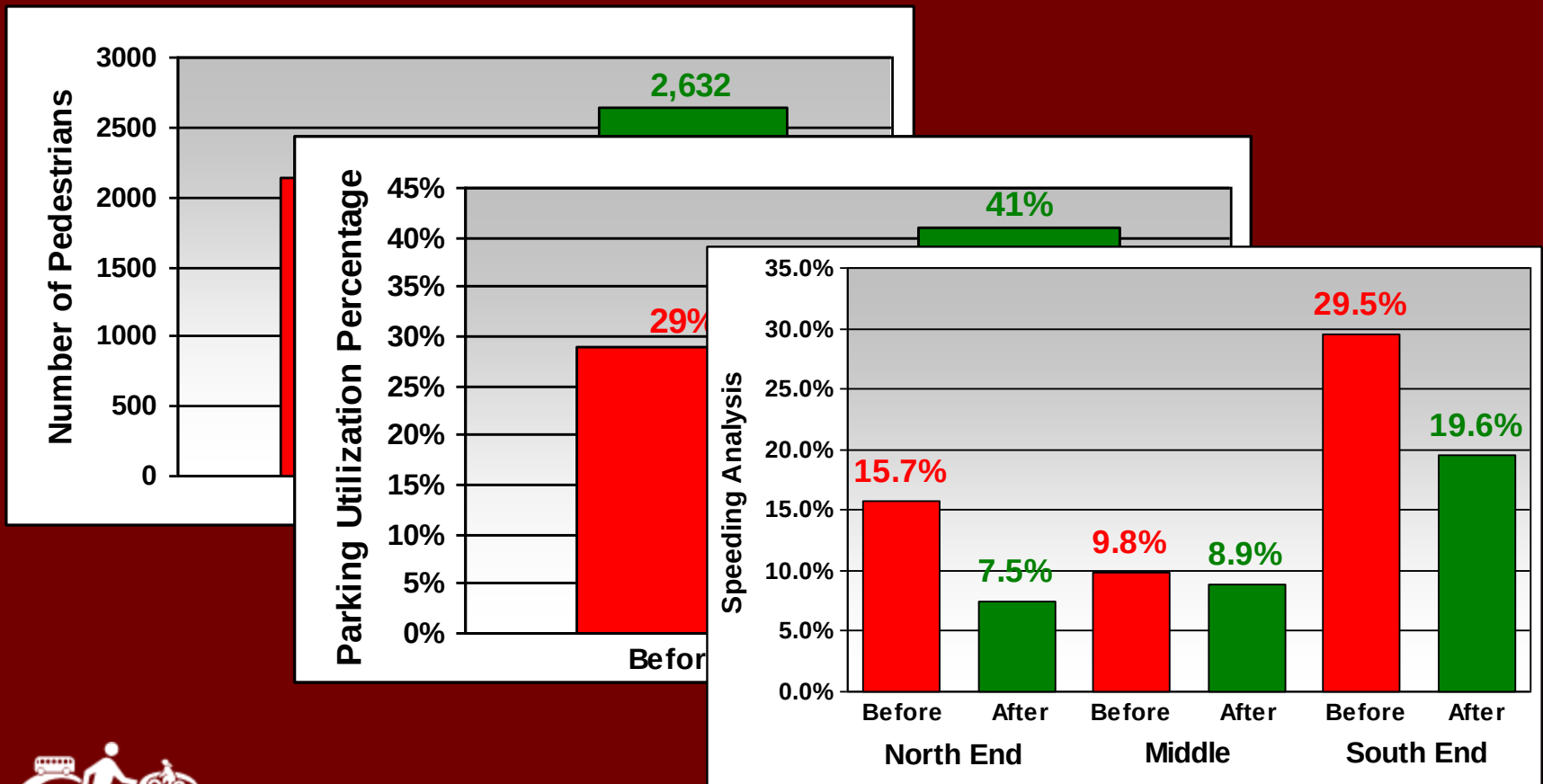


Massachusetts Project Development & Design Guide



An effective policy should result in:

■ New measures to track success



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



The many types of Complete Streets



The many types of Complete Streets



Benefits: for safety

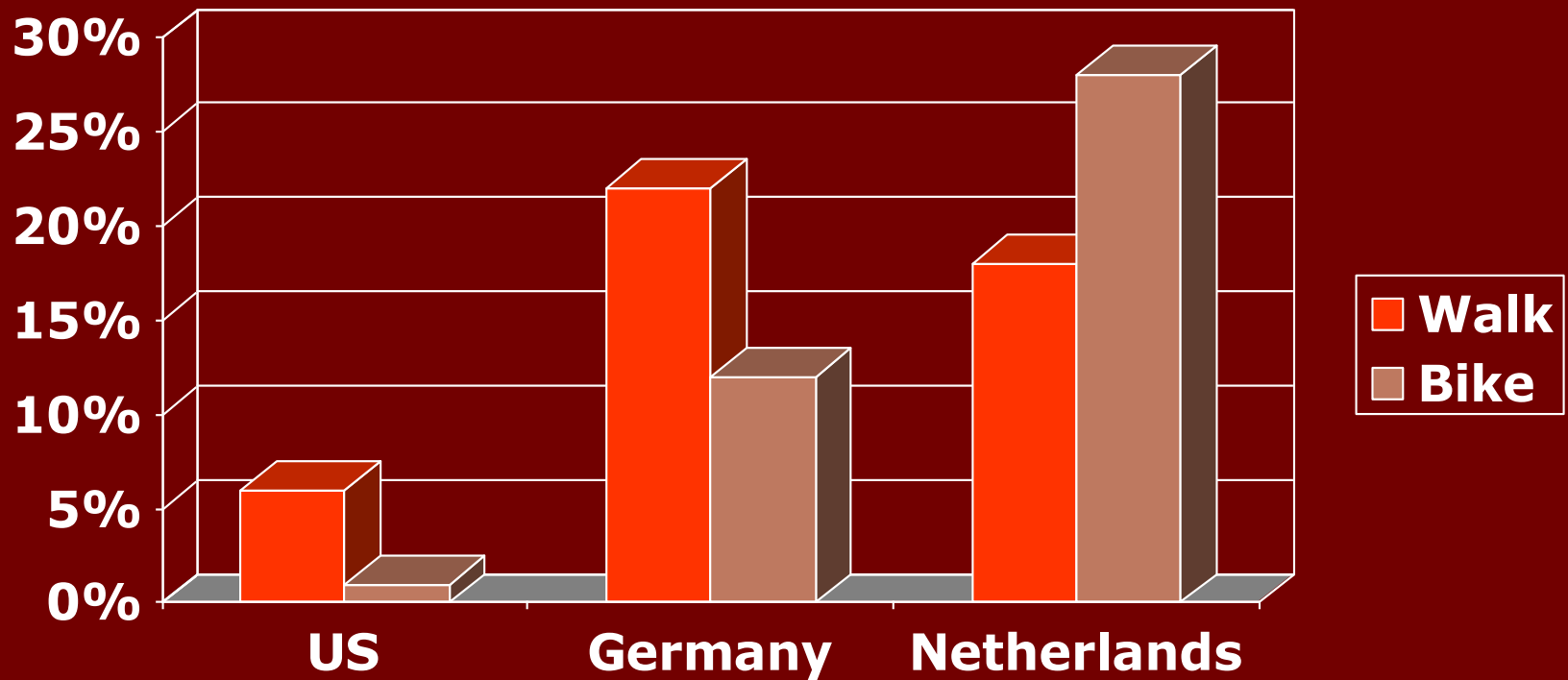
Designing intersections for pedestrian travel can reduce pedestrian risk by **28%**



King/Ewing 2003

Europe has more bike-ped travel

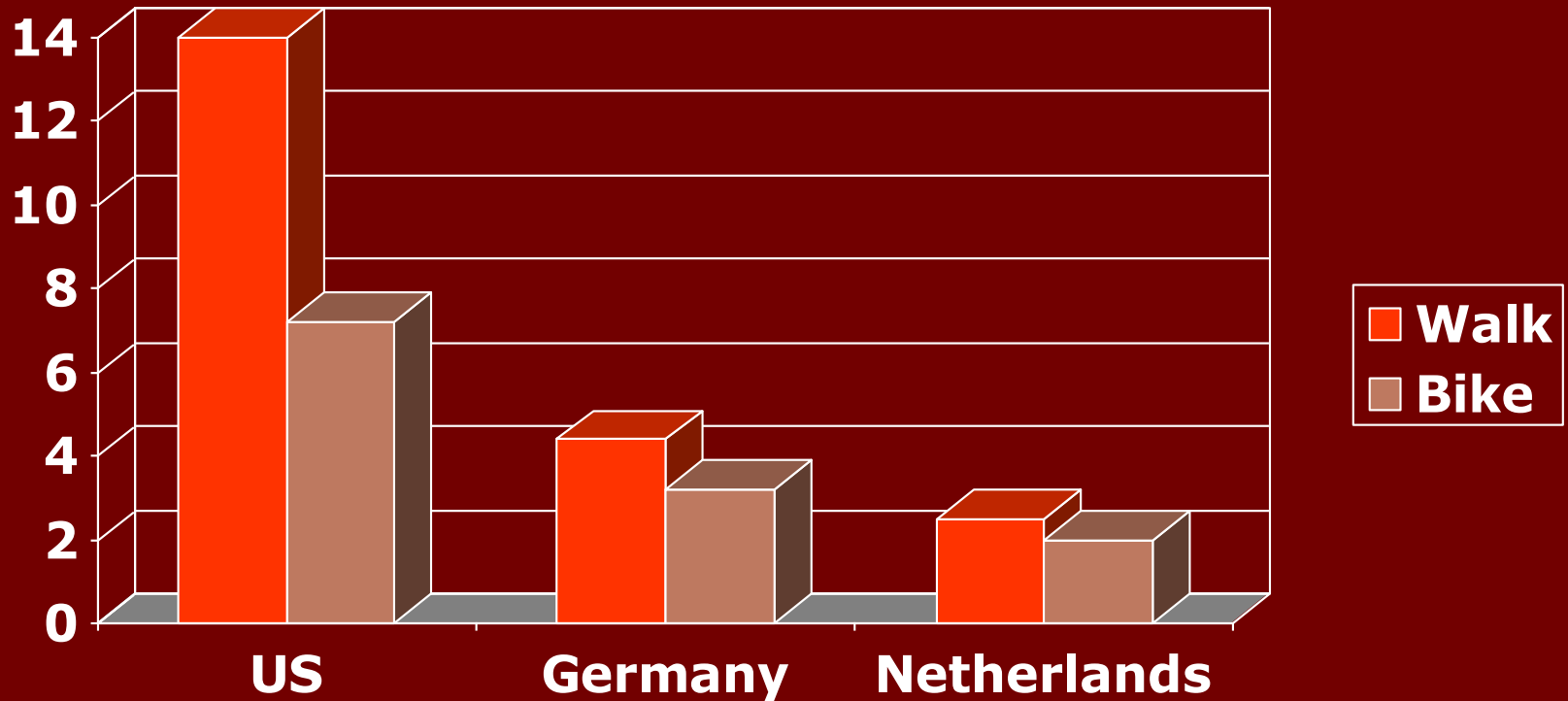
Portion of all trips



Pucher, AJPH Sept 2003

...And far fewer deaths

Deaths per 100 million km travel



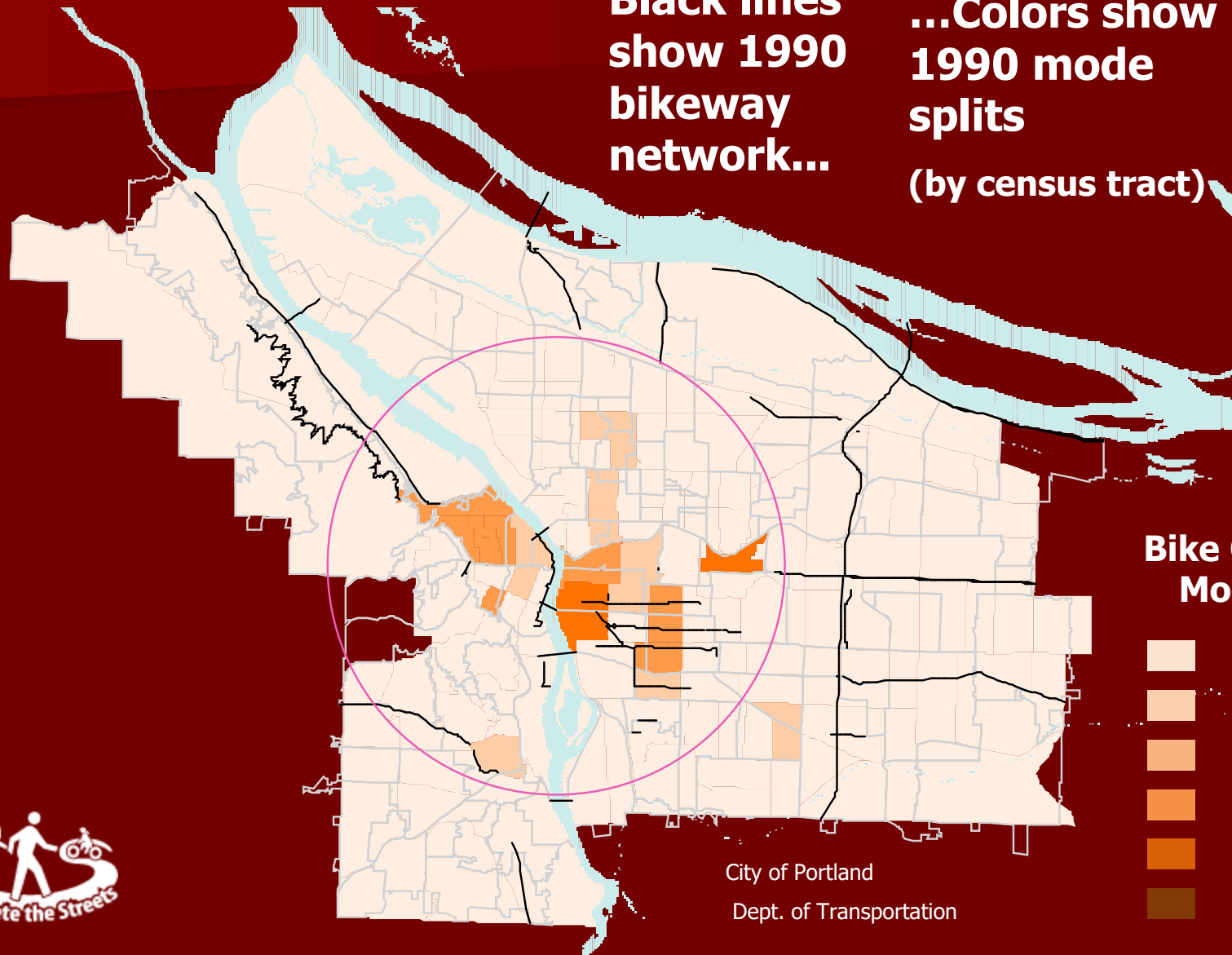
Pucher, AJPH Sept 2003

Portland Oregon 1990

Bike lanes encourage bike commuting

Black lines
show 1990
bikeway
network...

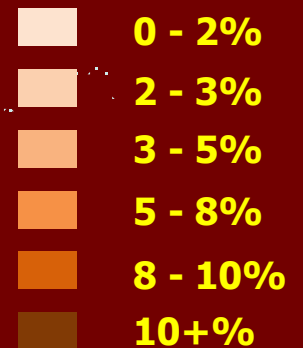
...Colors show
1990 mode
splits
(by census tract)



City of Portland

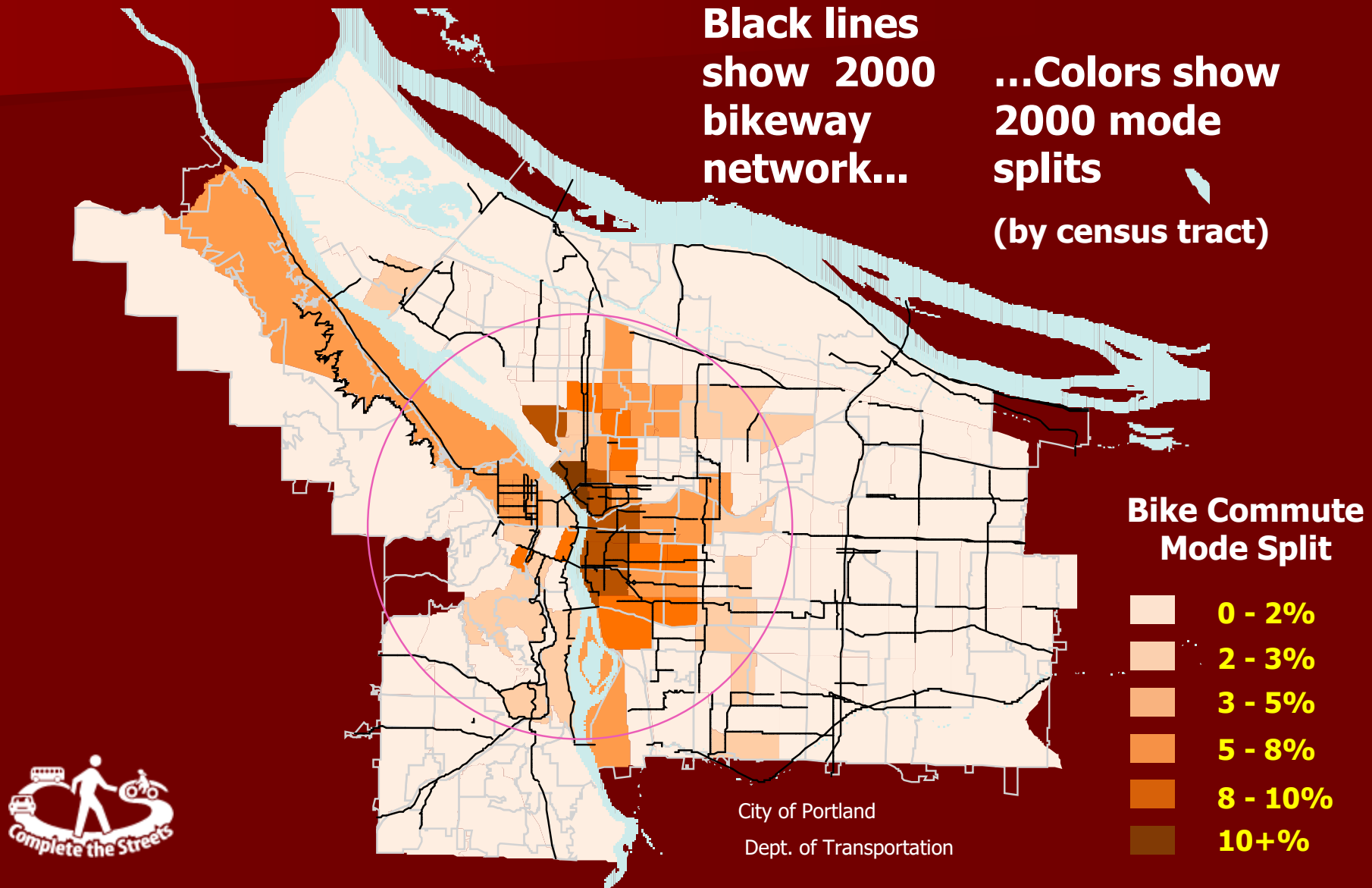
Dept. of Transportation

Bike Commute Mode Split



Portland Oregon 2000

Bike lanes encourage bike commuting



Benefits: for older Americans

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



Photo: Michael Ronkin, ODOT



Benefits: for older Americans

21% of Americans over 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: for encouraging healthy activity

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: for people with disabilities

20% of Americans have a disability that limits their daily activities.

Complete Streets have curb cuts and other features for disabled travelers.

Complete Streets reduce isolation and dependence.



Benefits: A more effective use of funds for transit providers

- A single year of paratransit service for a daily commuter:
\$38,500
- Permanent improvements to make a transit stop accessible:
\$7,000 - \$58,000



Source: Maryland Transit Administration

Benefits: the environment

- Fewer emissions
- Less noise pollution
- Less wear & tear on our roads
- Less need to widen roads



Benefits: for reducing traffic



Of all trips in metro areas:

- **50%** -- less than 3 miles
- **28%** -- less than 1 mile
 - **65%** of trips under 1 mile are now taken by automobile

2001 NHTS



Benefits: for economic activity

- Well designed multi-modal streets increase home values and help revitalize commercial areas





Olive Avenue in W. Palm Beach – homeowners report dramatic increase in home values

Benefits: for reducing greenhouse gases

- Every one-percent increase in the portion of trips made by foot or bicycle is associated with a 700-mile reduction in driving.



National Complete Streets Coalition Steering Committee

- AARP
- APBP
- 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
- City of Boulder
- Institute of Transportation Engineers
- Kimley-Horn and Associates
- League of American Bicyclists
- NCBW
- Safe Routes to School National Partnership
- Thunderhead Alliance
- Smart Growth America



For More Information: www.completestreets.org

- Links to success stories & existing policies
- How-to Tools
- Resources: power-point, brochures
- Newsletter sign up



Creating Livable Streets

- NE35th & Siskiyou Street Filter Strips
Project
Portland



Designer: Kevin Perry, City of Portland Bureau of Environmental Services

Creating Livable Streets

■ NE35th & Siskiyou Street Filter Strips



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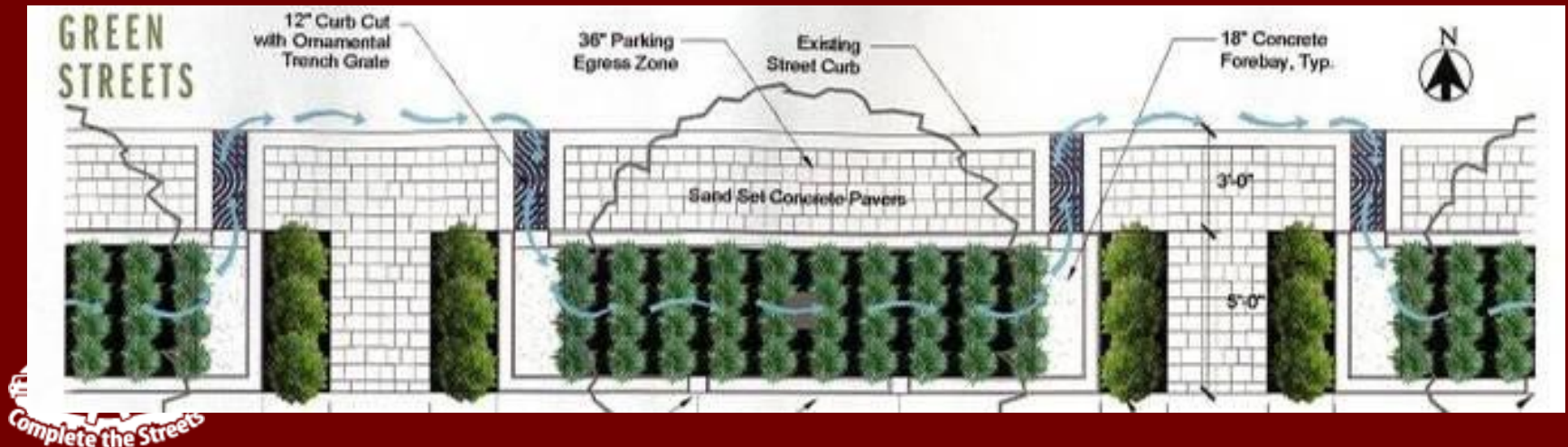
Creating Livable Streets

■ NE35th & Siskiyou Street Filter Strips



Designer: Kevin Perry, City of Portland Bureau of Environmental Services

Creating Livable Streets



Bio-Retention - Example Project

- Street Planters - SW 12th St, Portland, OR



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