Laying the Foundation for Complete Streets

Palm Beach County

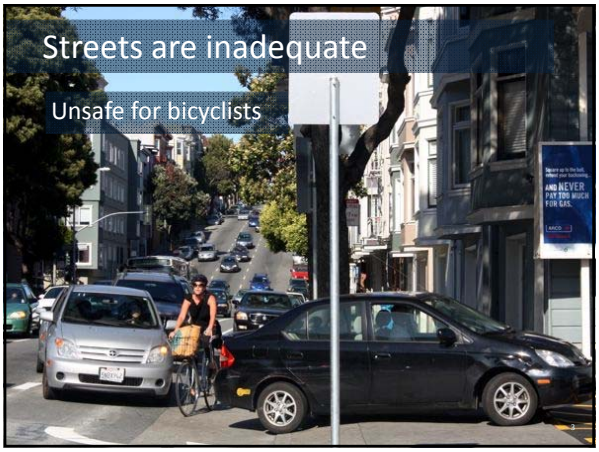
December 8, 2015

Streets are inadequate

No sidewalks

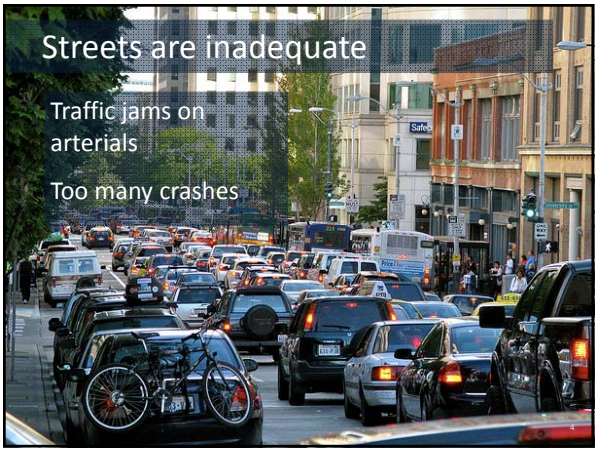
Too dangerous to cross on foot

Streets are inadequate



Unsafe for bicyclists

Streets are inadequate



Traffic jams on arterials

Too many crashes

Streets are inadequate

Uninviting for bus riders

Streets are inadequate

Inaccessible for wheelchair users


Streets are inadequate
No room for people!


We know how to build right

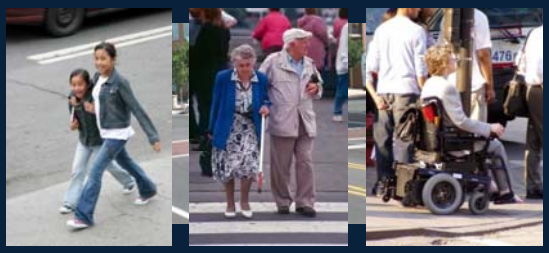

We know how to build right


We know how to build right
XING


We know how to build right


We know how to build right

What are Complete Streets?



Complete Streets are streets for everyone, no matter who they are or how they travel.

Introductions 1: Who are you?

- Planner?
- Engineer?
- Elected Official?
- Interested Citizen?
- Transit?
- Public Health?
- Advocacy?
- City?
- County?
- MPO?
- State?
- Other?

Introductions 2: Who are we?

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Today's agenda

- Welcome and Introductions
- Introduction to Complete Streets
- Complete Streets Performance Measures
- Creating Room for Complete Streets
- Introduction to Complete Streets Policy
- Policy Development Process
- Implementation
- Local Policies and Topics
- Exercise: Congress Avenue Redesign
- Discussion: Next Steps
- Adjourn – 4:30 pm

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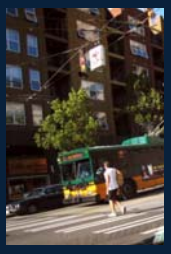
Everyone wins with Complete Streets

Complete Streets policies provide for all users





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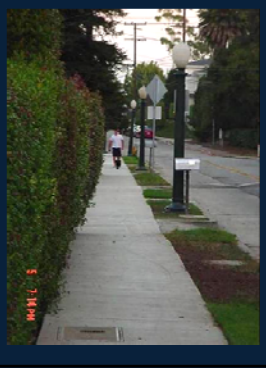
A Complete Streets policy…

Ensures that the entire right-of-way is planned, designed, constructed, operated, and maintained to provide safe access for all users



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Why have a Complete Streets policy?

To make the needs of all users the **default** for **everyday** transportation planning practices

- Reverse burden of proof: assume bike, walk, transit unless proven otherwise

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Why have a Complete Streets policy?

To shift transportation investments so they create better streets **opportunistically**

- Take advantage of all planning, construction, operations and maintenance activities

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Why adopt a policy?

To **make streets better each time you touch them**, not just via capital planning

- Small, low-cost, quick projects can have high impact

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Why have a Complete Streets policy?

To ensure every project creates better streets *now* with **current funding sources**

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Why have a Complete Streets policy?

To **save money**

- Retrofits cost more than getting it right initially

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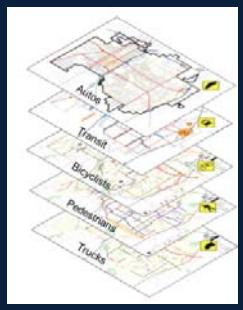
Why have a Complete Streets policy?

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



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Why have a Complete Streets policy?

To give transportation professionals **political and community support** for innovative solutions that help make active living possible

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Why have a Complete Streets policy?

To apply solutions across a community and **address systematic inequities**

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Complete Streets in demand

66% of Americans want more transportation options so they have the freedom to choose how to get where they need to go.

73% currently feel they have no choice but to drive as much as they do.

57% would like to spend less time in the car.

Future of Transportation National Survey (2010)

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Who wants Complete Streets?

47%

of older Americans say it is unsafe to cross a major street near their home.

54%

of older Americans living in inhospitable neighborhoods say they would walk and bike more often if the built environment improved.

56%

express strong support for adoption of Complete Streets policies.

Planning Complete Streets for the Aging of America, AARP

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Who needs Complete Streets?

1 in 12 households do not have access to a vehicle

1 in 5 Americans aged 65+ do not drive

100% of children under 15 do not drive

2009 National Household Travel Survey

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The tremendous potential

Of all trips:

50% are less than 3 miles

28% are less than 1 mile

60% **are driven**

of these trips…

2009 National Household Travel Survey

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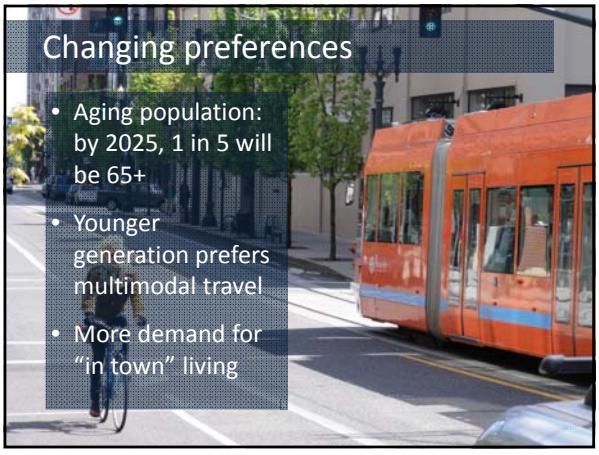
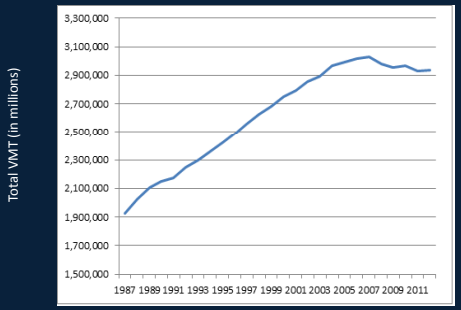
Changing preferences



- Aging population: by 2025, 1 in 5 will be 65+
- Younger generation prefers multimodal travel
- More demand for "in town" living

Total VMT is declining



Source: FHWA and Census Bureau. Image: State Smart Transportation Initiative

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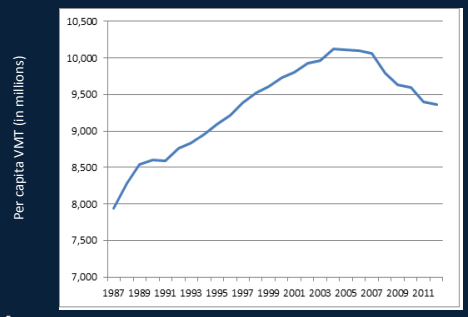
Per capita VMT is declining



Source: FHWA and Census Bureau. Image: State Smart Transportation Initiative

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Are our plans changing?

Graphic: Ian Lockwood

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Complete Streets = best practices

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Old paradigm: "passive" design

- "Forgives" behavior through design, assumes worst case
- Designed for high speeds and high volumes
- Encourages high-risk behaviors from all users:
  - Driving too fast; crossing mid-block; bicycling on sidewalks
- Limits land use and building types, street life

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New paradigm: "proactive" design

- Changes behavior through design
- Guides users through physical and environmental cues
- Slows vehicle speeds
- Encourages walking, bicycling, transit use
- Key to successful Complete Streets implementation

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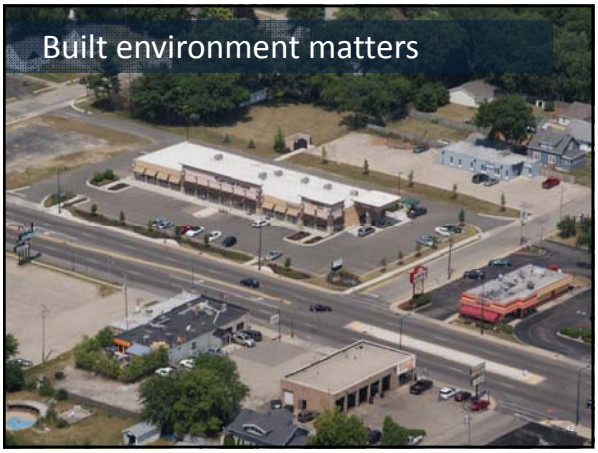
Built environment matters



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Pedestrian scale is safer for everyone

Incomplete streets are unsafe

More than 40% of pedestrian deaths in 2007 and 2008 occurred where no crosswalk was available.

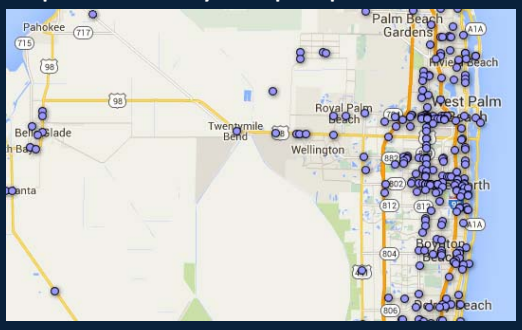
National Highway Traffic Safety Administration Fatality Analysis Reporting System

Incomplete streets are unsafe

Especially for:

- People of color
- Low-income communities
- Older adults

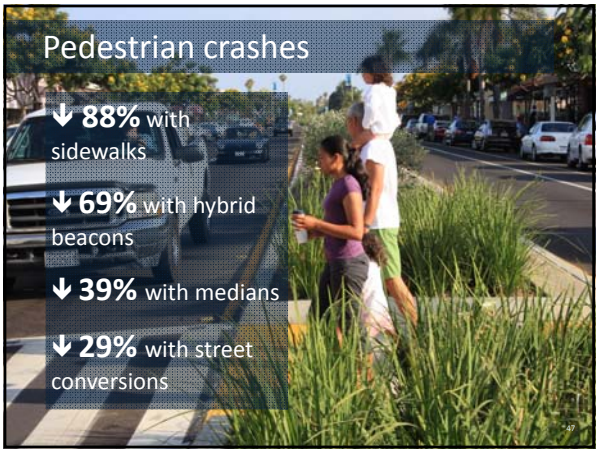
Improve safety for people on foot



Pedestrian Fatalities 2003-2012

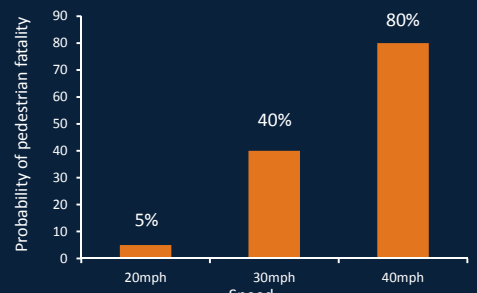
Source: Dangerous by Design 2014, Smart Growth America

Pedestrian crashes



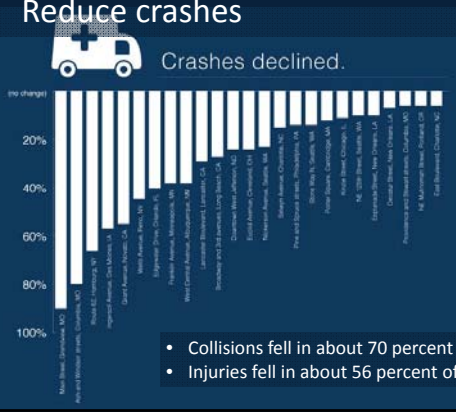
- ↓ **88%** with sidewalks
- ↓ **69%** with hybrid beacons
- ↓ **39%** with medians
- ↓ **29%** with street conversions

Safer travel speeds



W.A. Leaf and D.F. Preusser, "Literature Review on Vehicle Travel Speeds and Pedestrian Injuries Among Selected Racial/Ethnic Groups," US Department of Transportation, National Highway Traffic Safety Administration (1999).

Reduce crashes



- Collisions fell in about 70 percent of projects.
- Injuries fell in about 56 percent of projects.

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Safer conditions save money

- Every avoided collisions produces cost-savings for individuals.
- Within a sample of 37 projects, the improvements averted $18.1 million in one year
- For individual projects, these savings alone can justify the cost of these improvements.

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People with disabilities

Nearly 1 in 5 Americans have a disability

Sidewalks make a community accessible for all

- ADA requires sidewalks be accessible, but doesn't require their construction

Reduce the need for expensive paratransit

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Children

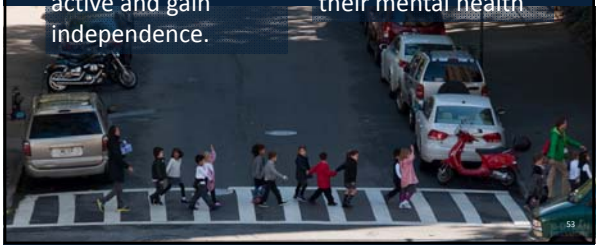
More than 1/3 of kids and teens are obese.

Unhealthy weight gain brings higher risk for pre-diabetes, high cholesterol, high blood pressure, sleep apnea, and joint problems

Children

Dedicated, safe space for bicycling and walking help kids be active and gain independence.

Being physically active helps kids learn and improves their mental health



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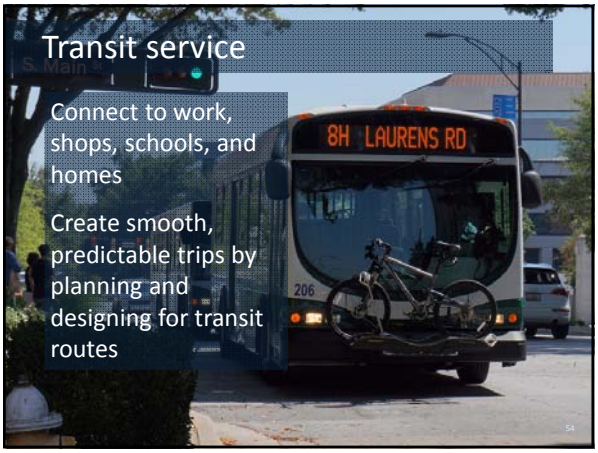
Transit service

Connect to work, shops, schools, and homes

Create smooth, predictable trips by planning and designing for transit routes



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Fixed route accessibility

1 year of paratransit service for 1 daily commuter: $38,500

Making a transit stop accessible: $7,000 - $58,000

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Health

We are moving without *moving*

60% are at risk for diseases associated with inactivity:

- Diabetes
- High blood pressure
- Other chronic diseases

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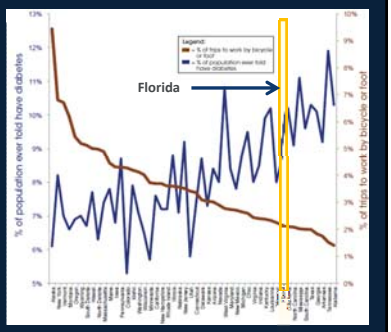
Chronic disease

Lowest levels of biking & walking → highest rates of diabetes, high blood pressure, & obesity.



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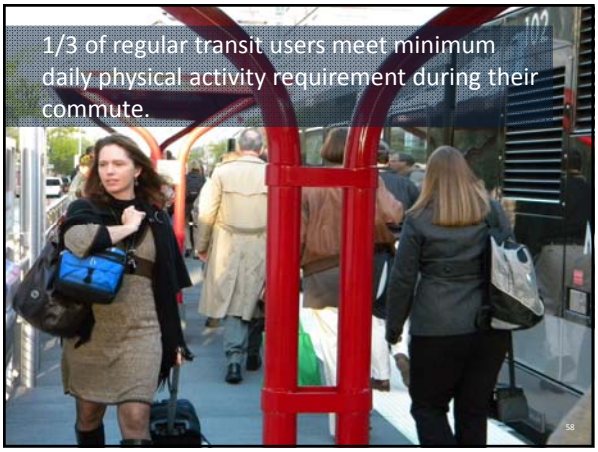
1/3 of regular transit users meet minimum daily physical activity requirement during their commute.



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Economic development

Washington, DC:

$8m public investment 2003–2004

$8m private investment 2005-2007

32 new business establishments

$80,000 in sales tax annually

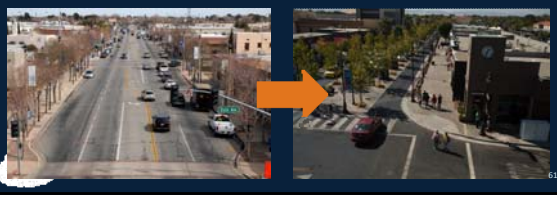
60

Economic development

Lancaster, California:

- Reconstruction project
- $11.6m public investment

- 48 new businesses
- 802 new jobs
- Vacancy rate: 4%
- Sales tax revenue: ↑ 96%



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Walkability = value

+1 point on Walk Score scale = + $500-$3,000 in home value.

Walkable commercial neighborhoods in DC: 75% higher office rents than auto-oriented suburban neighborhoods

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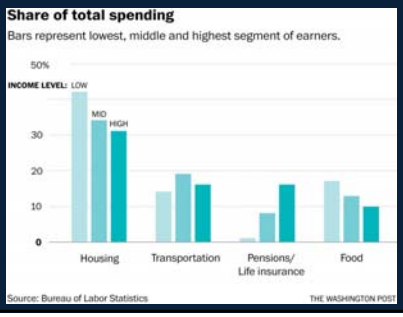
Wallet-friendly

Transportation is second largest expense for families



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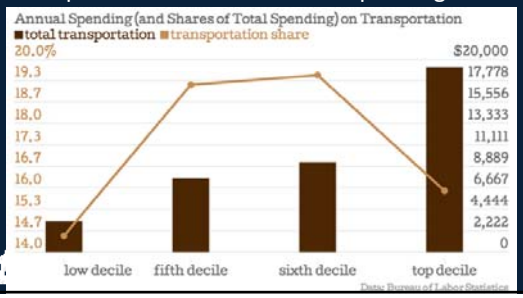
Wallet-friendly

Middle-class households spend more on transportation as share of total spending



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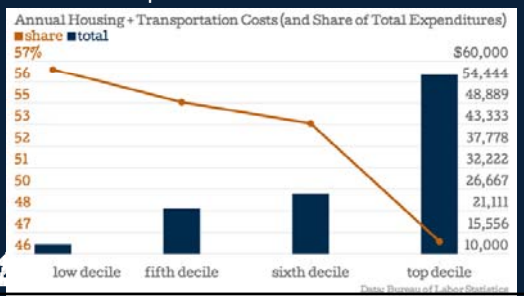
Wallet-friendly

Complete Streets give people more control over their expenses.



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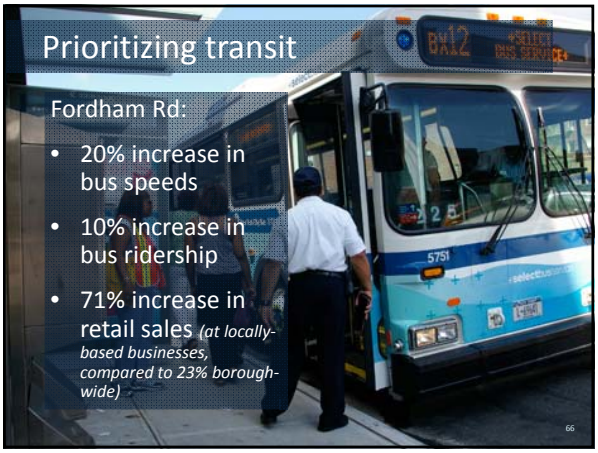
Prioritizing transit

Fordham Rd:

- 20% increase in bus speeds
- 10% increase in bus ridership
- 71% increase in retail sales *(at locally-based businesses, compared to 23% borough-wide)*



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Budget savings in Washington state

500 miles of highway system are "main streets."

Over 10 years, 47% of projects on these streets had scope, schedule, or budget changes resulting in delay.

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Budget savings in Washington state

Pilot project: consult community during planning, Complete Streets approach.

Result: Complete Streets planning could have saved $9m per project—about 30%

http://www.wsdot.wa.gov/research/reports/fullreports/733.1.pdf

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Cost-effective investments

Richfield, Minnesota road needed replacement after sewer work. Priced at $6 million to replace road as is.

MnDOT re-evaluated transportation needs and found no need for wide roadway. Reallocated road space for all users, saved $2 million

"Feels like home"

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Environmental benefits

Fewer emissions

Less noise pollution

Less pavement

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Complete Streets changes the built environment

Changes intersection design

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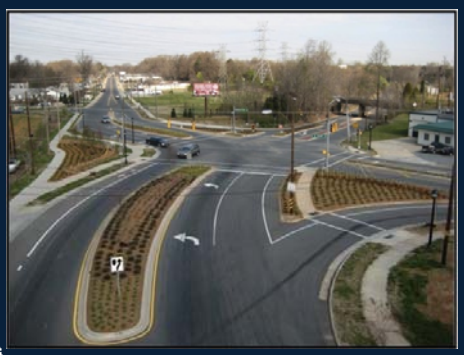
Changes intersection design



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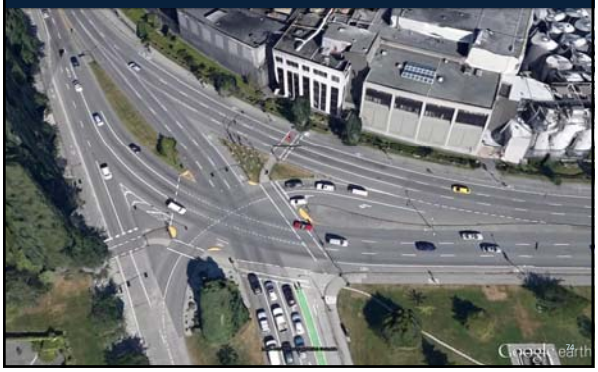
Changes intersection design



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Changes intersection design

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Changes bicycling

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Changes bicycling

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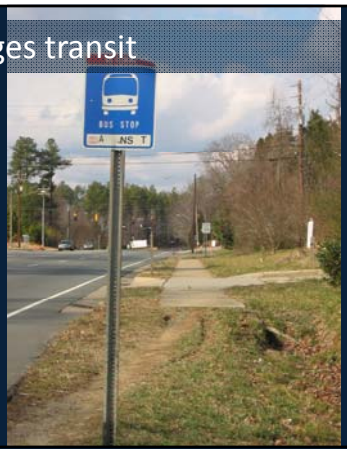
Changes transit



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Changes transit

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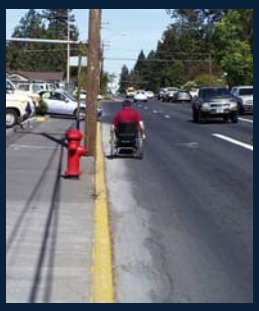
Changes accessibility



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Changes accessibility

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Complete Streets is NOT:

- One 'special' street project
- A design prescription
- A mandate for immediate retrofit
- Only accomplished with special funding source
- A silver bullet; other initiatives must be addressed:
  - Land use (proximity, mixed-use)
  - Environmental concerns
  - Transportation Demand Management

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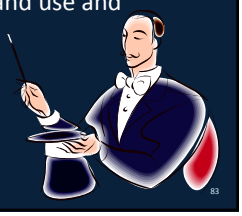
No magic formula for design

One size doesn't fit all

Doesn't mean every street has sidewalks, bike lanes and transit

Fits context of community: land use and transportation needs



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Rural roads with shared paths

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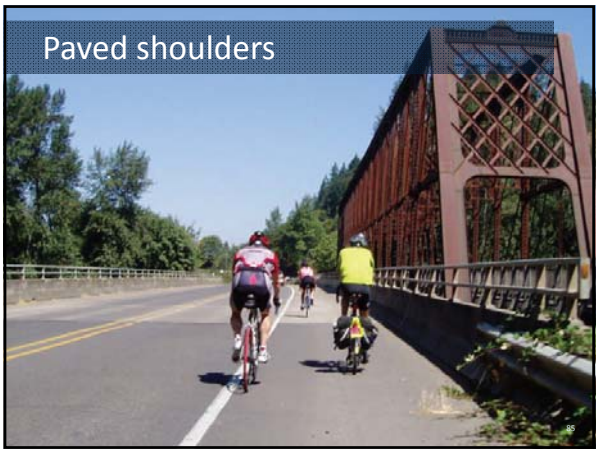
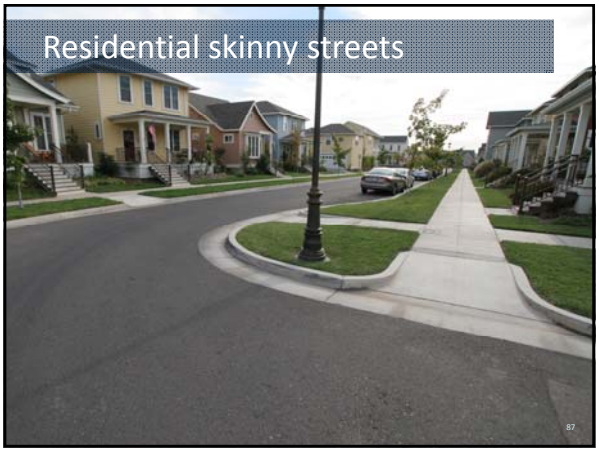
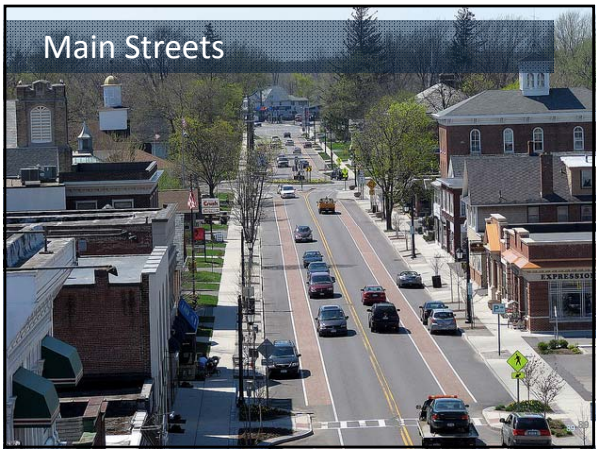
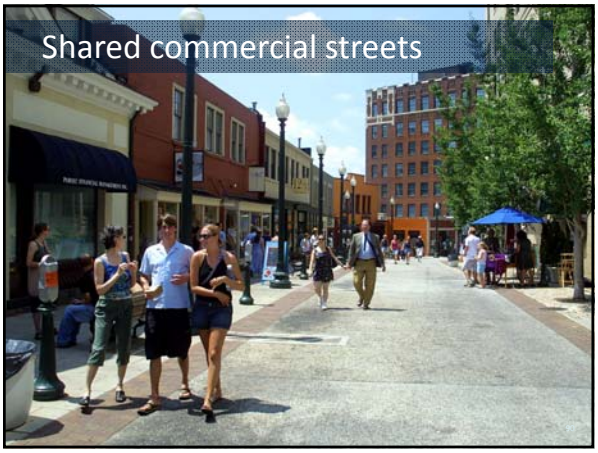

Paved shoulders


Low traffic, shared residential streets


Residential skinny streets


Neighborhood greenways
DO NOT
ENTER
ONLY


Main Streets


Shared commercial streets

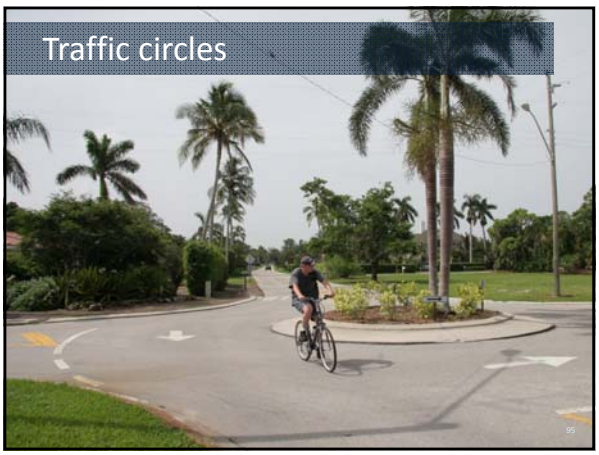
Suburban thoroughfares

Protected bike lanes

Transit routes

Bus Rapid Transit

Traffic circles



Modern roundabouts

Busy multi-modal thoroughfares

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Complete Streets and trails

Streets provide **access** to trails

Complete Streets + trails = **comprehensive network**

Complete Streets take pressure off overcrowded trails

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Complete Streets & Context Sensitive Solutions

- Complementary ideas
- Respond to unique transportation and land use needs
- Emphasize stakeholder involvement
- Applied to every street project

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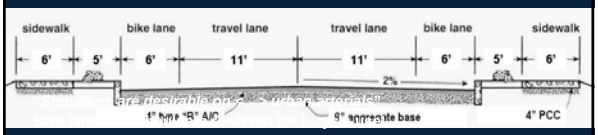
What do the design guides say?

The AASHTO "Green Book" states:
"*Sidewalks are **integral parts** of city streets*"
Not added to – **a part of!**



AASHTO: American Association of State Highway and Transportation Officials
Green Book: A Policy on Geometric Design of Highways and Streets

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2010 USDOT Policy Statement

"…DOT encourages transportation agencies to **go beyond the minimum requirements**, and proactively provide convenient, safe, and **context-sensitive facilities** that foster **increased use by bicyclists and pedestrians of all ages and abilities**, and utilize universal design characteristics when appropriate."

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/overview/policy_accom.cfm

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2013 FHWA memo

U.S. Department of Transportation
Federal Highway Administration

Memorandum

SENT BY ELECTRONIC MAIL

Subject: **GUIDANCE**: Bicycle and Pedestrian Facility Design Flexibility Date: August 20, 2013

Supports "**taking a flexible approach to bicycle and pedestrian facility design**"

Recommends using AASHTO, ITE, and NACTO guidance

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/design_flexibility.cfm

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Designing for Emergency Access: Best Practices

- Street design
- Land use and street network planning
- Equipment purchases

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Street Design

- Parking placement strategies
- Mountable curbs
- Use of materials and paint
- Roundabouts
- Appropriate use of traffic calming measures

Land Use Planning

- Compact neighborhoods
- Land use controls
  - Building height, setbacks
  - Tree spacing
  - Limit development in hazardous areas
- Sprinkler requirements
- Street connectivity

Equipment Purchasing

- Retrieving from side compartments
- Ground ladder retrieval
- Deploying stabilizers
- Side-mount pumps
- Appropriate fleet
- Fire trucks

What about funding?

- Complete Streets is about **using existing resources differently**:
  - No special funding needed!
  - Usual suspects: Alternative Transportation, HSIP, State, Palm Beach MPO, bond measures, sales taxes, property taxes/assessments, business improvement districts, etc.
- Retrofit funding is important, it is not necessary to get started
- Additional funding is not needed

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Does it cost more?

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Does it cost more?

- Avoid costly retrofits
- Requires minimal additional funding
- Save money with better design
  - Comprehensive ROI including benefits in health, safety, economic, environmental, etc.
- **Scope projects well**
  - Budgets typically reflect project goals

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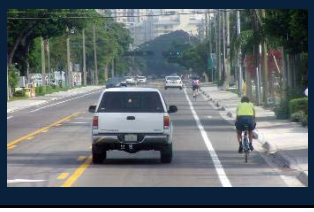
Low-cost improvements

- Restripe for bike lanes without moving curbs
- Do not construct overly wide lanes
  - 10' or 11' instead of 12'+



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Low-cost improvements

- Add Sidewalks during drainage project for little cost
- Signal timing for safety and speed control
- Countdown ped signals: low cost, reduce crashes



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Exercise

How would your community benefit from a Complete Streets policy?

Each table brainstorms 3-5 ideas

Benefits for our community:

- A

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Benefits identified in Miami Valley OH

- Connecting people to trails and to trails to each other.
- Changing attitudes.
- Livability.
- Increased community interaction. (3)
- Reducing paratransit costs.
- Economic development. (3)
- Improving mobility for seniors, the disabled, and other travelers.
- Creating a sense of place (more Oregon districts). (2)
- Health benefits.
- Reducing community isolation. (2)
- Better health through accessing facilities.
- Incomplete streets are costly and inefficient to maintain. (2)
- Public education leverages political pressure for CS.
- Intermodal connectivity.
- Provide transportation for those w/ low income.
- Establishes framework for design.
- Some CS projects lower costs.
- Reduce per capita vehicle trips.
- Improved safety. (2)
- Promotes more compact, diverse land use and housing.
- CS promotes attractive public design.

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Benefits identified in Baton Rouge

- Integrate design elements into beginning of project/reduce costs (2)
- Attract attention about CS
- Influence locals about design decisions
- Avoid nimbyisms (Especially IMBY)
- Provide good examples
- Economic development – place making (3)
- Improve public transportation
- Increase physical activity and health benefits (3)
- Create Connectivity/Compact development (3)
- Improve safety (3)
- Access management
- Socialization
- Improve air quality
- Clarifying liability issues
- Managing priorities
- Increase public input
- Increase real estate value
- Improve independence/options for travelers

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Benefits identified in Moorhead/Fargo

- Increased safety (6).
- Acknowledge the high demand for transport choices (4)
- Environmental benefits/Sustainability (4)
- Health benefits (4)
- Promotes Mixed-Use development/Supports land use objectives (2)
- Gives permission to use available designs (2)
- Encourages retrofitting (2)
- Cost savings (2)
- Increased knowledge/awareness (2)
- Increased neighborhood permeability/Connectivity (2)
- Slow traffic/Peace of mind(2)
- Sense of pride/the city for good first impression.
- Quality of life.
- Meeting an emerging housing demand.
- Promotes grassroots collaboration
- Improved transit
- Increased property values.
- More accessibility for the elderly, children, disabled.
- Reallocation of ROW use/Less pavement

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Benefits identified in Chattanooga, TN

- Health
- Air quality (2)
- Social interaction
- Save $
- Safety –fewer cars, eyes on the street
- Aesthetics
- Accessibility - universal
- Encourage all modes / Transportation choices
- Inviting roads – connectivity
- Consistent approach

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Benefits identified in Northwest Georgia

- Economic benefit – e.g., streetscape project in Rockmont increased retail sales (2)
- Safety (2)
- Accessibility for people with disabilities
- Air quality—reduced pollution from increased walking and biking
- Aesthetics
- Commercial centers are more accessible for lower social economic groups
- Communication among various departments
- Sense of place/community
- Outlying areas have access to downtown
- Resolve parking needs
- Economic re-development
- Bike and pedestrian facilities in project planning
- Elected officials support – don't need to lobby
- Health benefits
- Increased connectivity (see also 6 and 9)

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