



Lincoln, Nebraska

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Livable Streets, Inc.



We know how to build right



Yet many roads are built like this



Recently completed IL 64 expansion with destinations on both sides of the road. Can you spot the pedestrian?



Or this:



Or this:





What is a Complete Street?



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

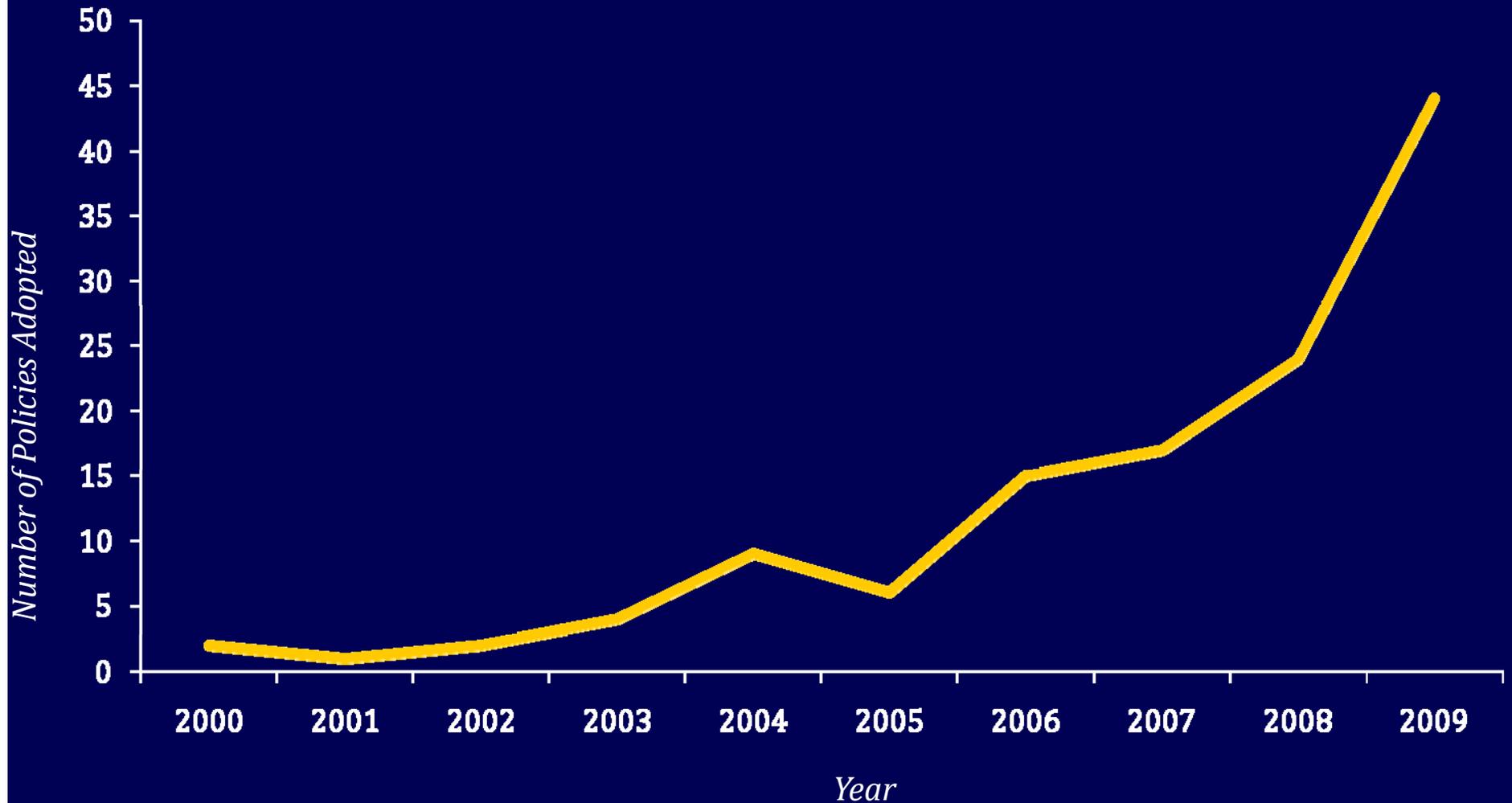


What Is a Complete Streets Policy?

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



The Growing Movement



Complete Streets Policies

US Jurisdictions with Policies: **133**
Policies Adopted Since 2005: **110**
Policies in 2009: **42**

Complete streets policies provide for:

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



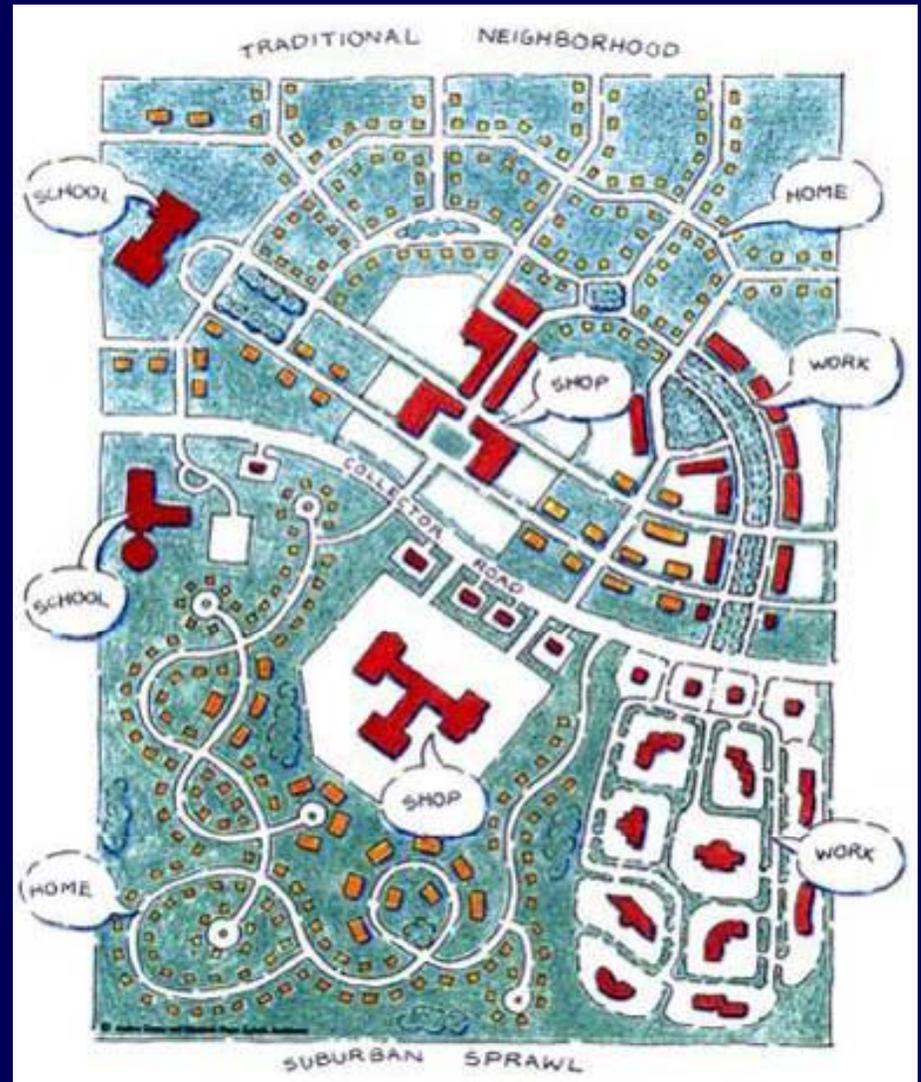
Why have a complete streets policy?

To make the needs of all users the **default** for **everyday** transportation planning, design, construction and operations practices



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 shift transportation investments so they create better streets **now**



Why have a complete streets policy?

➤ To save money:

Retrofits cost more than getting it right initially



CS Policies change project decision-making processes

Old way: Project scoping checklist **requires justifying** sidewalks, bikeways, transit

➤ Check **No**, end of story

New way: Reverse burden of proof

➤ Assume **Yes**, or justify why **not**



Reversed burden of proof assumes sidewalks, bikeways, transit...

... with exceptions:

- No expected users = **no need**, *even in the future*
- Costs disproportionately high **relative to need**, or
- Other factors indicate **no need**, *even in the future*



No sidewalks needed

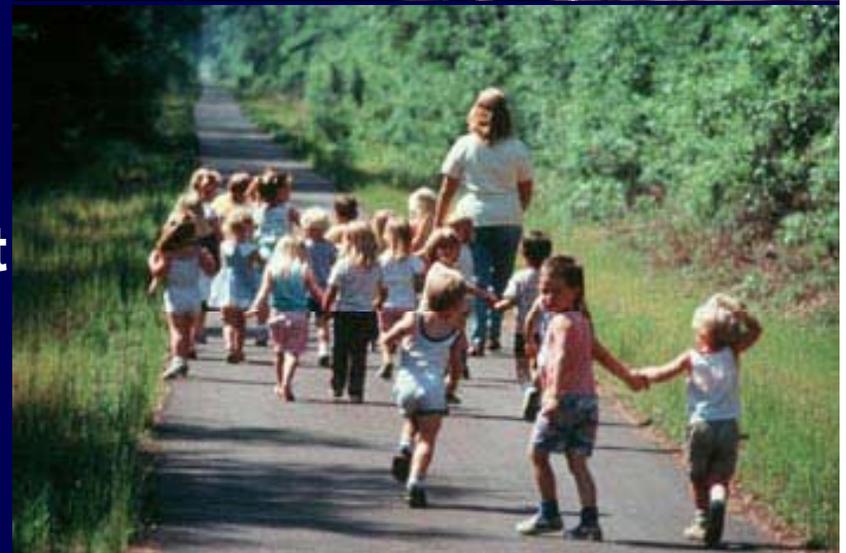


Slow speed, no need for bike lanes



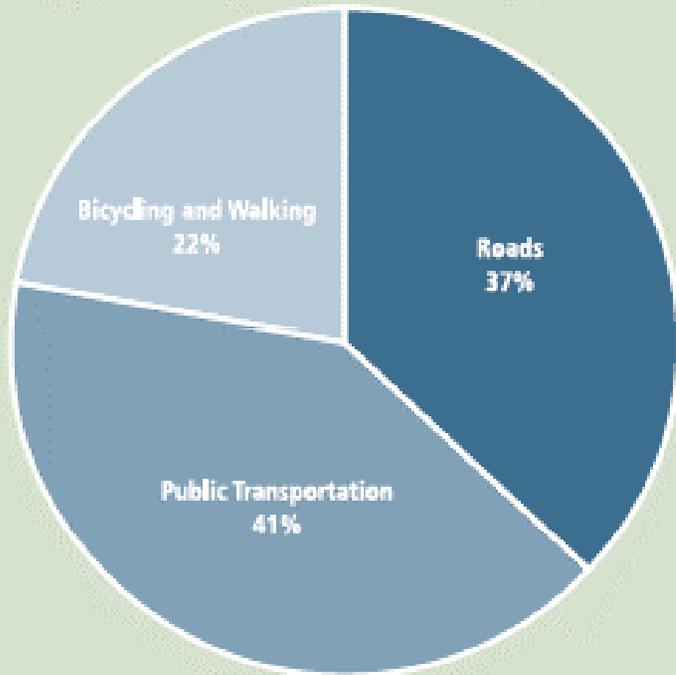
Who wants Complete Streets?

- Most Americans would rather **drive less** & walk more
- **Transit** is growing faster than population or driving
- About one-third of Americans **don't drive**:
 - ✓ 21% of Americans over 65
 - ✓ Children under 16
 - ✓ Low income Americans can't afford to drive



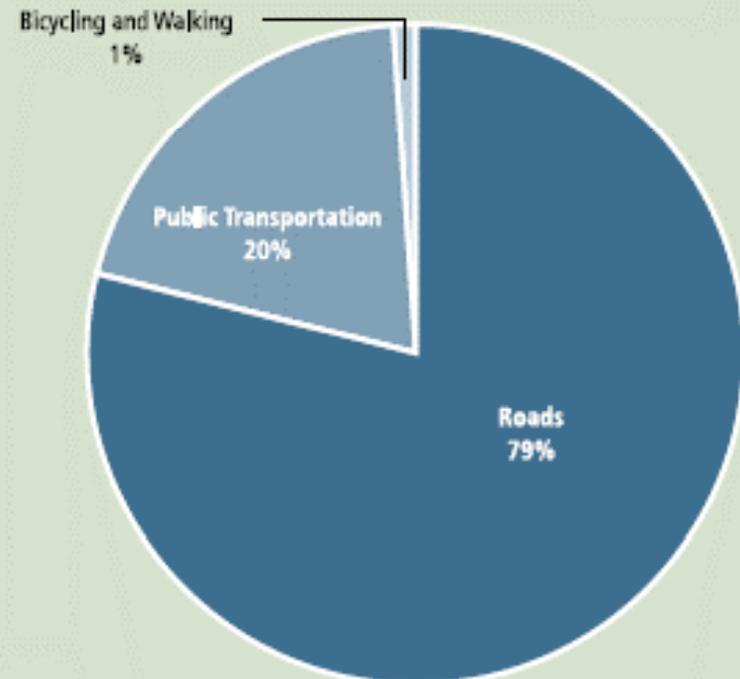
Americans want complete streets

How Respondents Would Allocate Transportation Funding



| | |
|---------------------|------------|
| Roads | 37% |
| Public Trans | 41% |
| Bike/walk | 22% |

How Transportation Funding is Currently Allocated



| | |
|---------------------|------------|
| Roads | 79% |
| Public Trans | 20% |
| Bike/walk | 1% |

From Active Transportation for America: the case for Increased federal investment in bicycling and walking. RTC 2008



Benefits: older Americans

- **21% over 65** do not drive
- Over 50% of non-drivers **stay at home** on a given day because they lack travel options
- 54% of older Americans living in inhospitable neighborhoods say they'd **walk and ride more** often if things improved



Benefits: health

- Now Americans move without moving
- 60% are at risk for **diseases** associated with **inactivity**:
 - Obesity
 - Diabetes
 - High blood pressure
 - Other chronic diseases



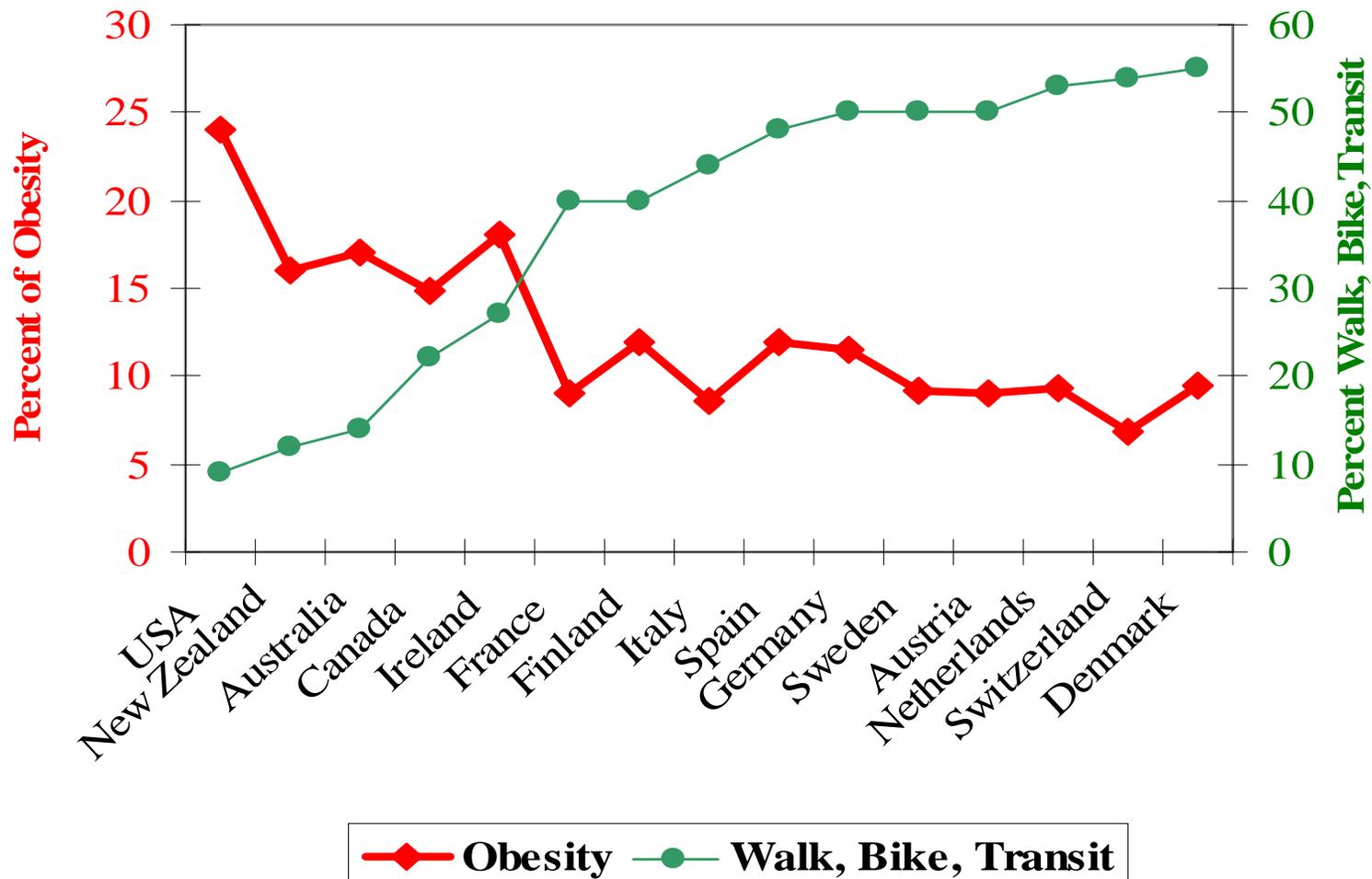
Benefits: physical activity

- Residents more likely to walk in a neighborhood w/ **sidewalks**
- Cities with more **bike lanes** have higher levels of bicycling
- 1/3 of regular **transit users** meet **minimum daily physical activity** requirement during their commute



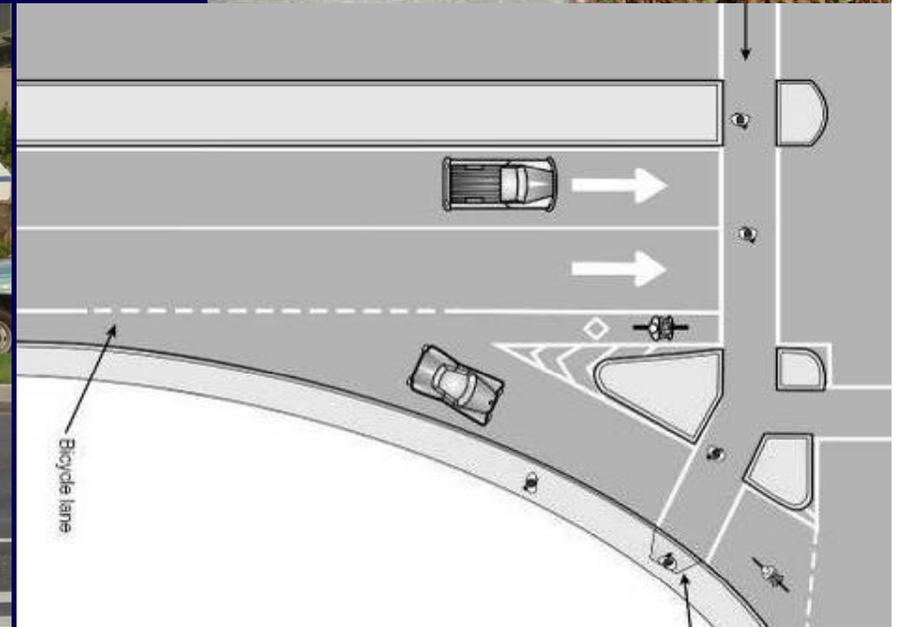
Benefits: physical activity

➤ It makes a difference!



Benefits: safety

- Sidewalks reduce ped crashes 88%
- Medians reduce crashes 40%
- Road diets reduce crashes 29%
- Countdown signals reduce crashes 25%



Benefits: reduced traffic

Trips in metro areas:

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



Benefits: the economy/your wallet

- Multi-modal streets:
 - Increase home values
 - Revitalize retail
 - People can leave their car at home



How do Complete Streets change the built environment?



CS changes intersection design



CS changes intersection design



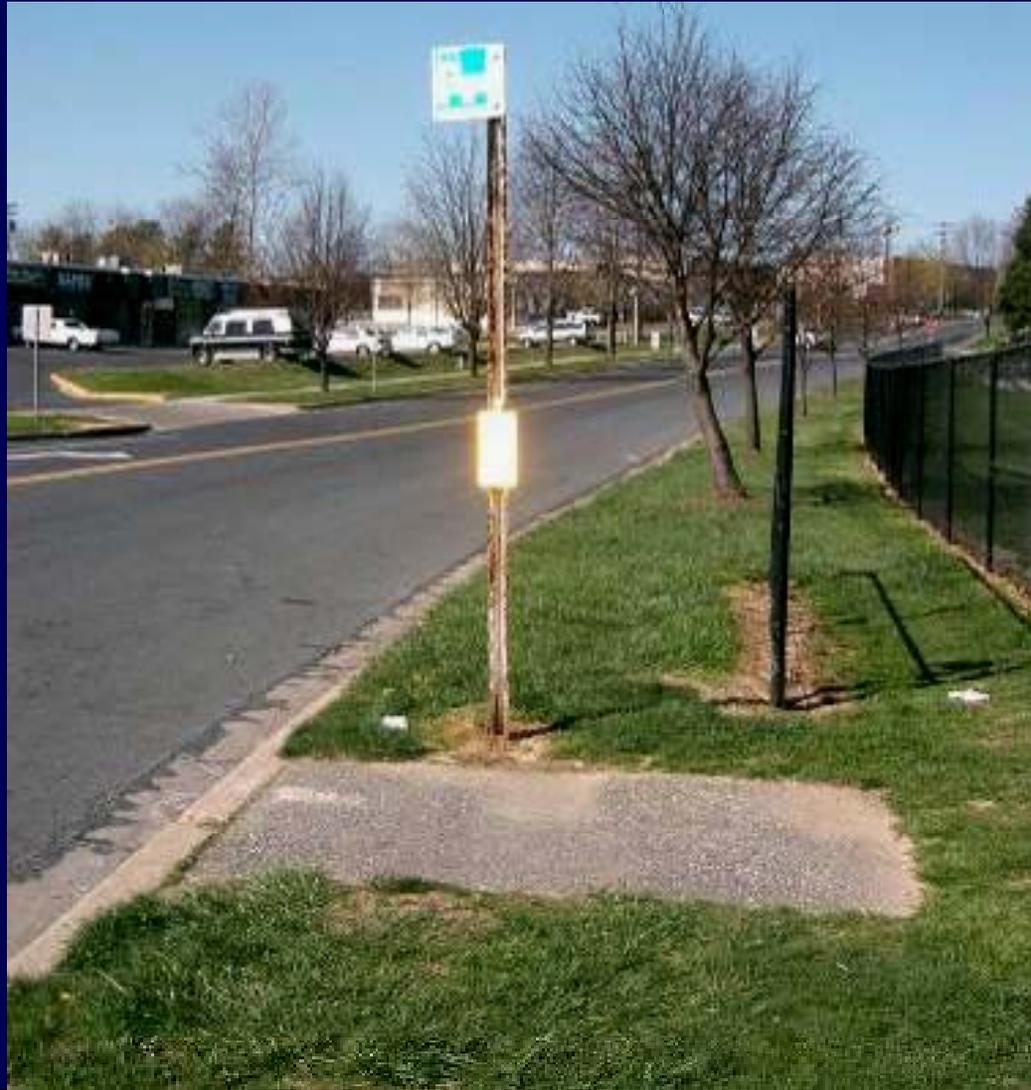
CS changes bicycling



CS changes bicycling



CS changes transit



CS changes transit



CS changes accessibility



CS changes accessibility



Complete streets and trails

- Streets provide **access** to trails
- Complete streets and trails form a **comprehensive** non-motorized network
- CS take pressure off **overcrowded** trails



Complete Streets is NOT:

- A design **prescription**
- A mandate for **immediate** retrofit
- A **silver bullet**; other initiatives must be addressed:
 - *Land use (proximity, mixed-use)*
 - *Environmental concerns*
 - *Improved Transit Service (LRT/BRT etc.)*
 - *VMT reduction*
 - ✓ (but complete streets will help!)



What does a complete street look like?

- One size doesn't fit all:
 - Complete Streets doesn't mean **every** street has sidewalks, bike lanes and transit



What does a complete street look like?



There is no magic formula



The many types of Complete Streets



Shoulder bikeways on rural roads



The many types of Complete Streets



Transit routes



The many types of Complete Streets



Busy multi-modal thoroughfares



The many types of Complete Streets



Suburban thoroughfares



The many types of Complete Streets



Historic Main Street



The many types of Complete Streets



Residential skinny streets



Performance Measures



What should the street do?

We need to ask for more than

- More pavement
- More capacity

What else could we measure on a street project?



Sample Measures

- Reduced speed
- Reduced crashes
- Increase on-street parking use
- Increase walking
- Increase bicycling
- Decrease noise
- Increase neighborhood and business satisfaction



Case study: Edgewater Drive (Orlando FL) Resurfacing Project

- Repaving project scheduled in FDOT 5-year work plan
- FDOT open to 3-lane option if City takes over jurisdiction
- Changes must be accepted by neighborhood and business associations; city must conduct before/after studies



Before



Concept





Reality: Before

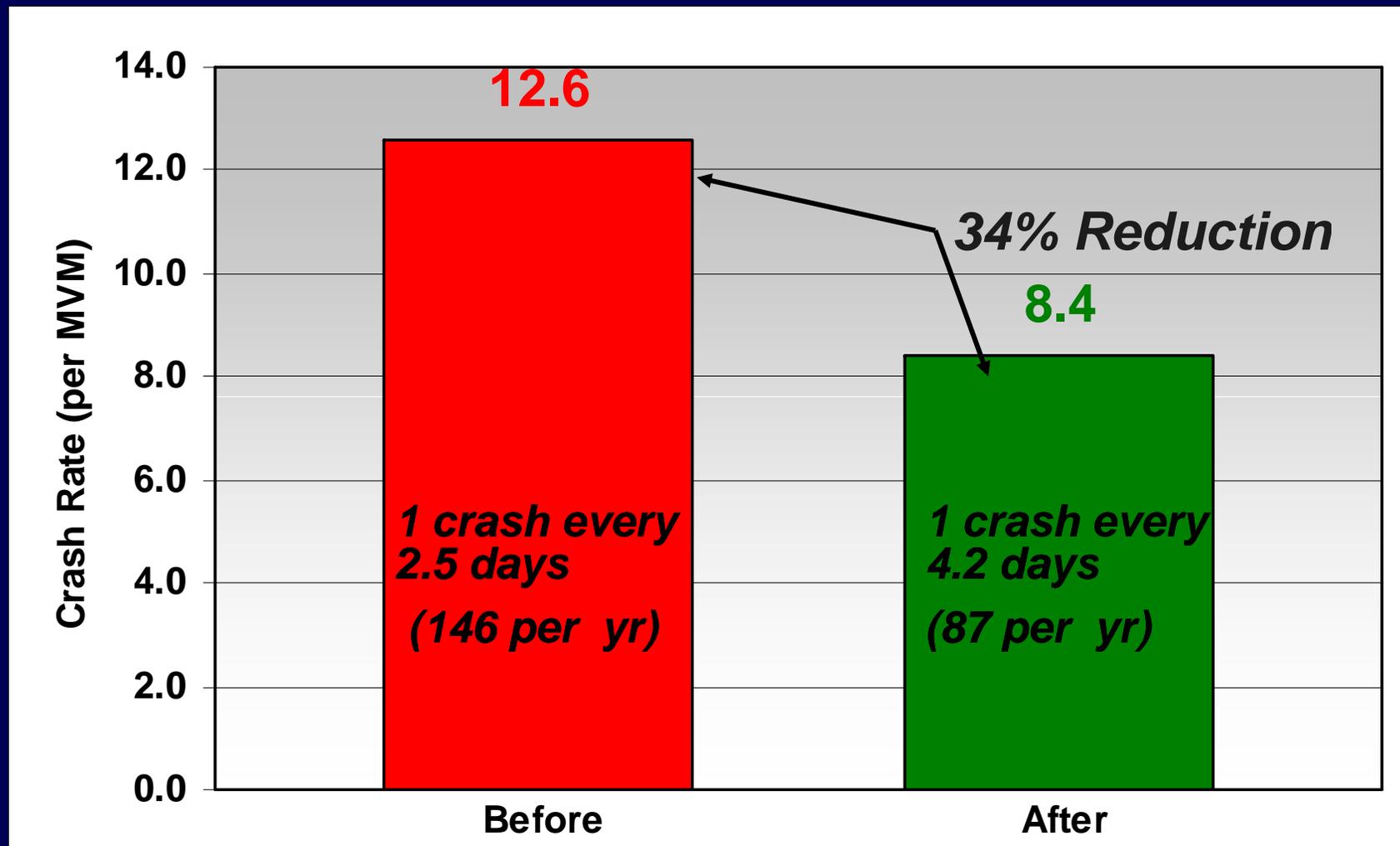




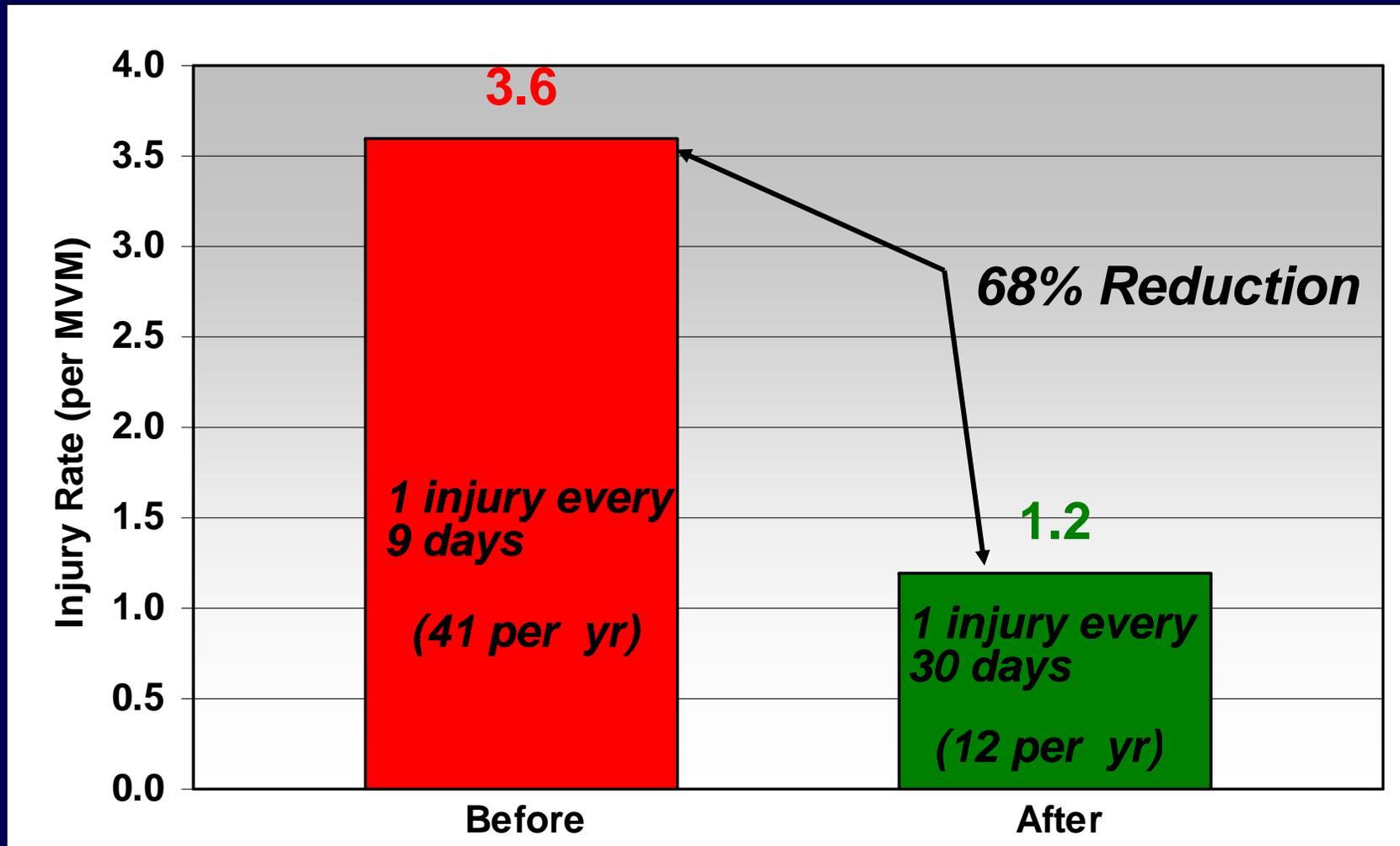
Reality: After



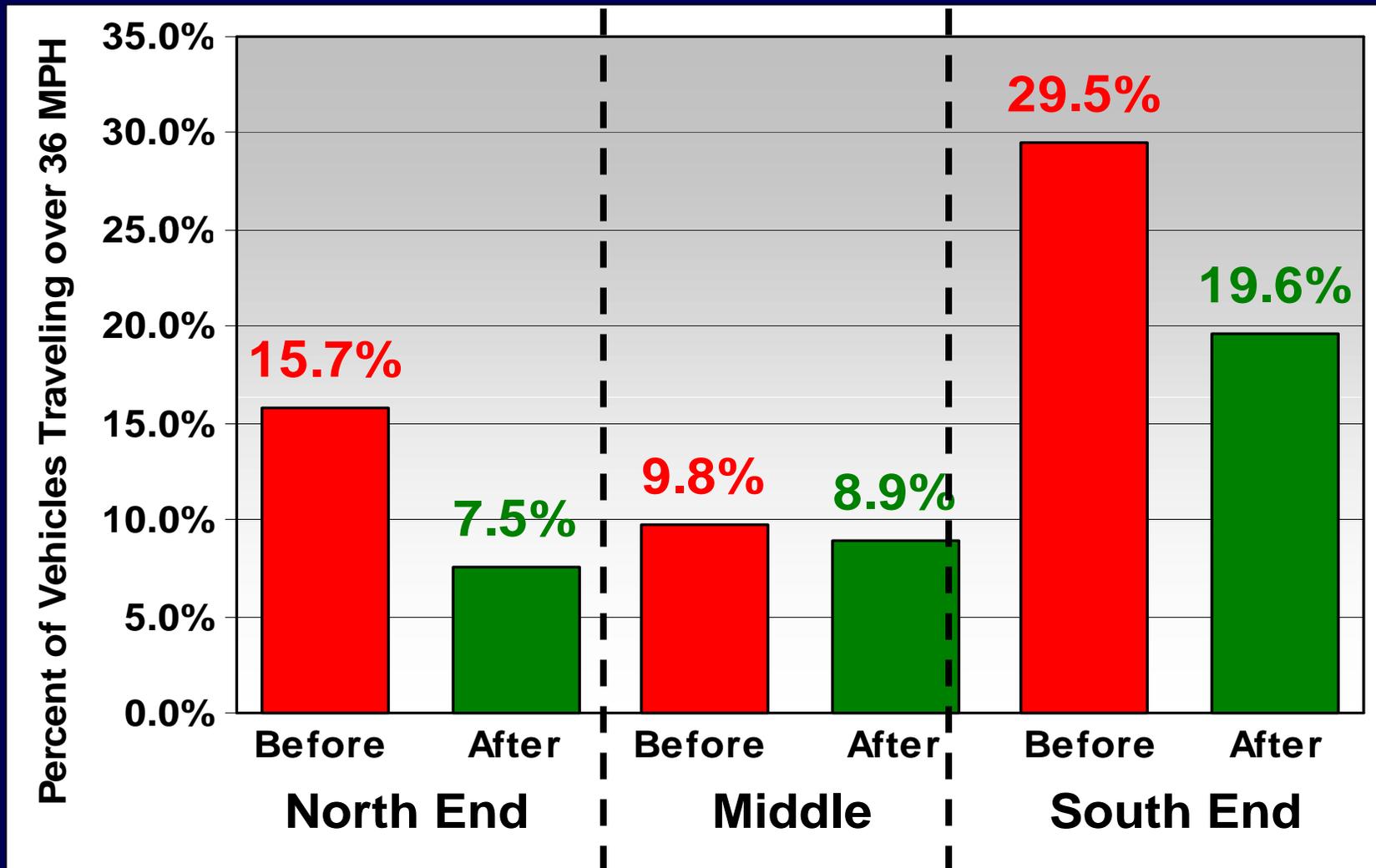
Before/after studies: 1. Crash rate



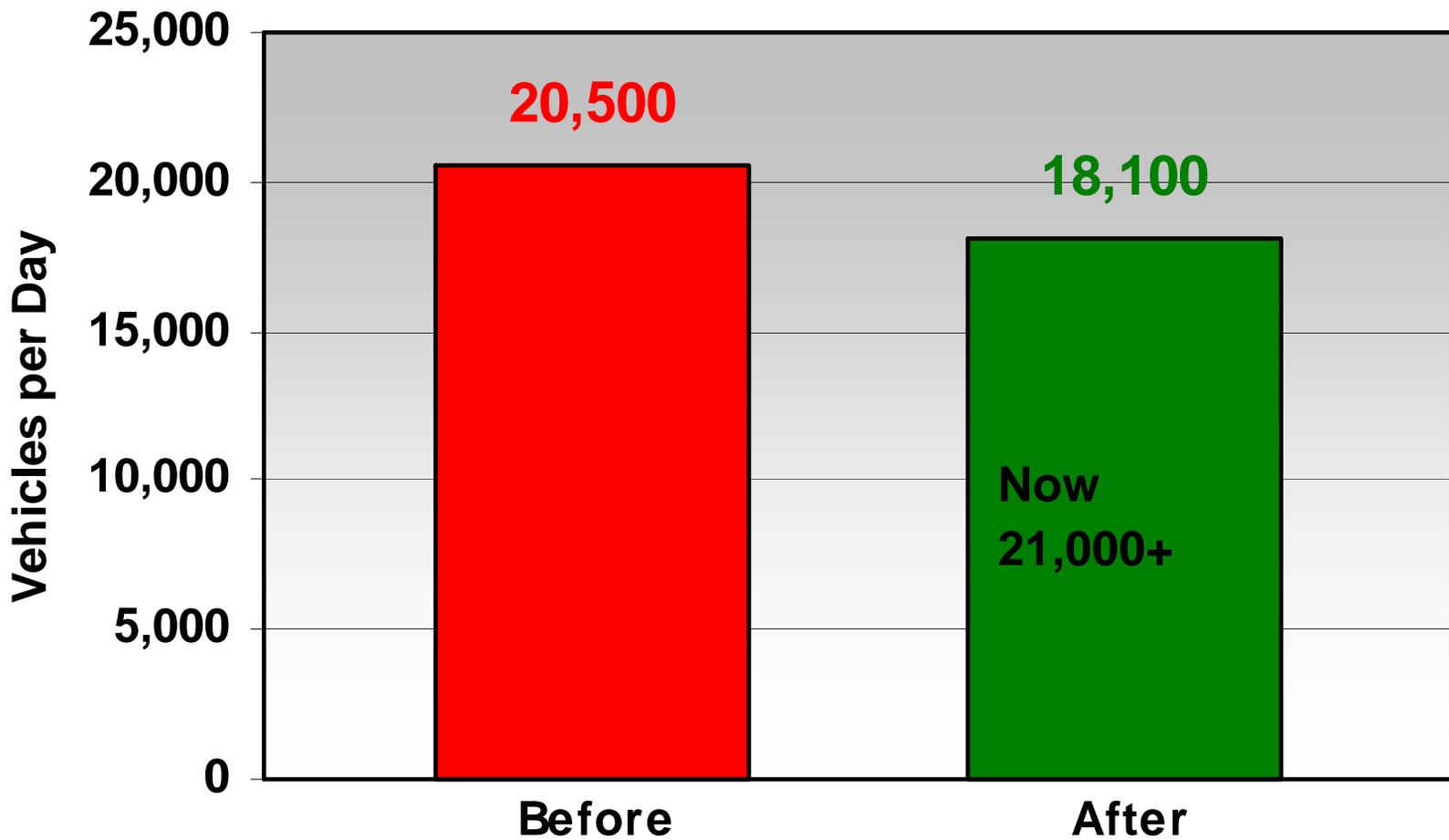
Before/after studies: 2. Injury rate



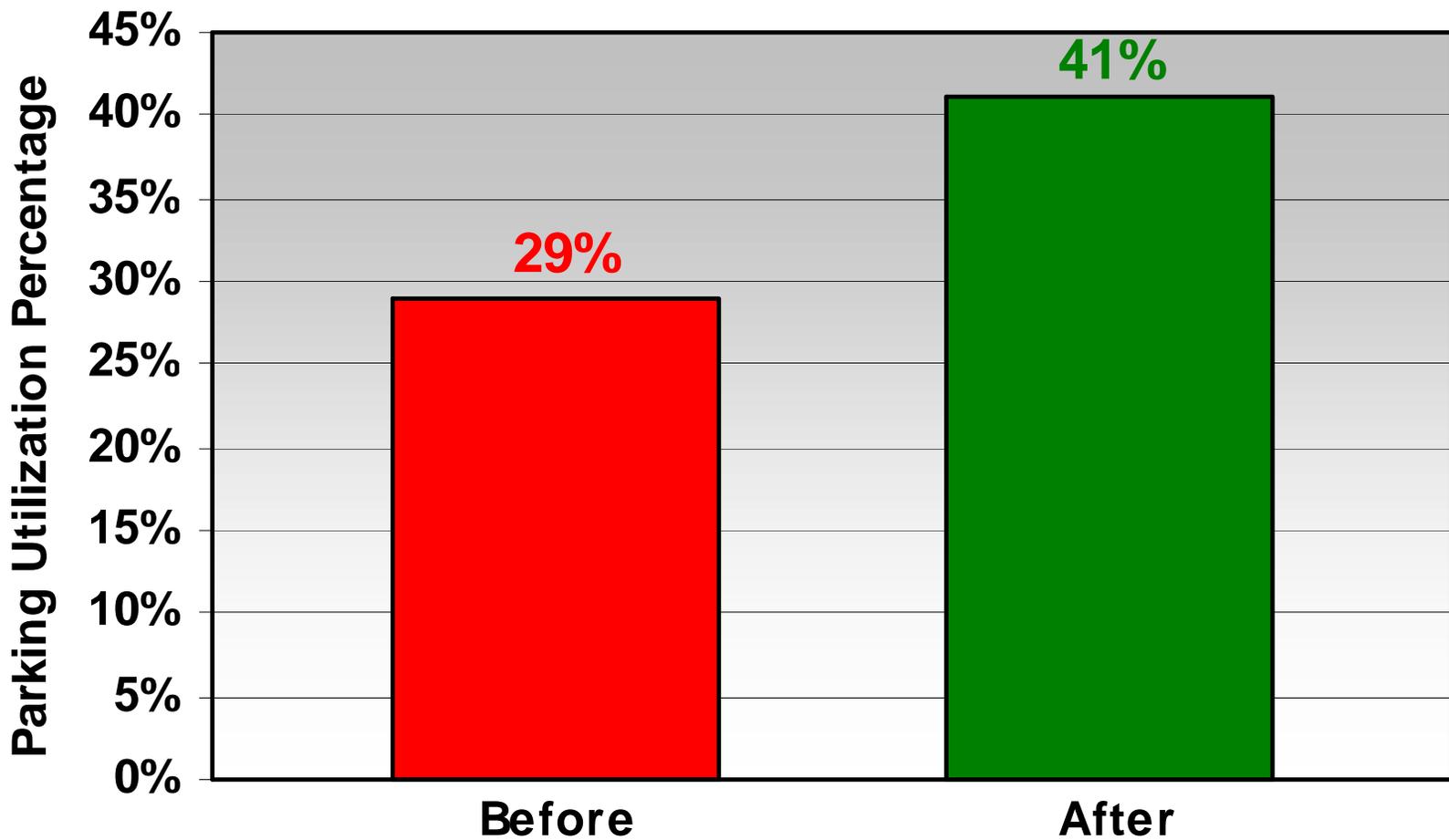
Before/after studies: 3. Speeding analysis



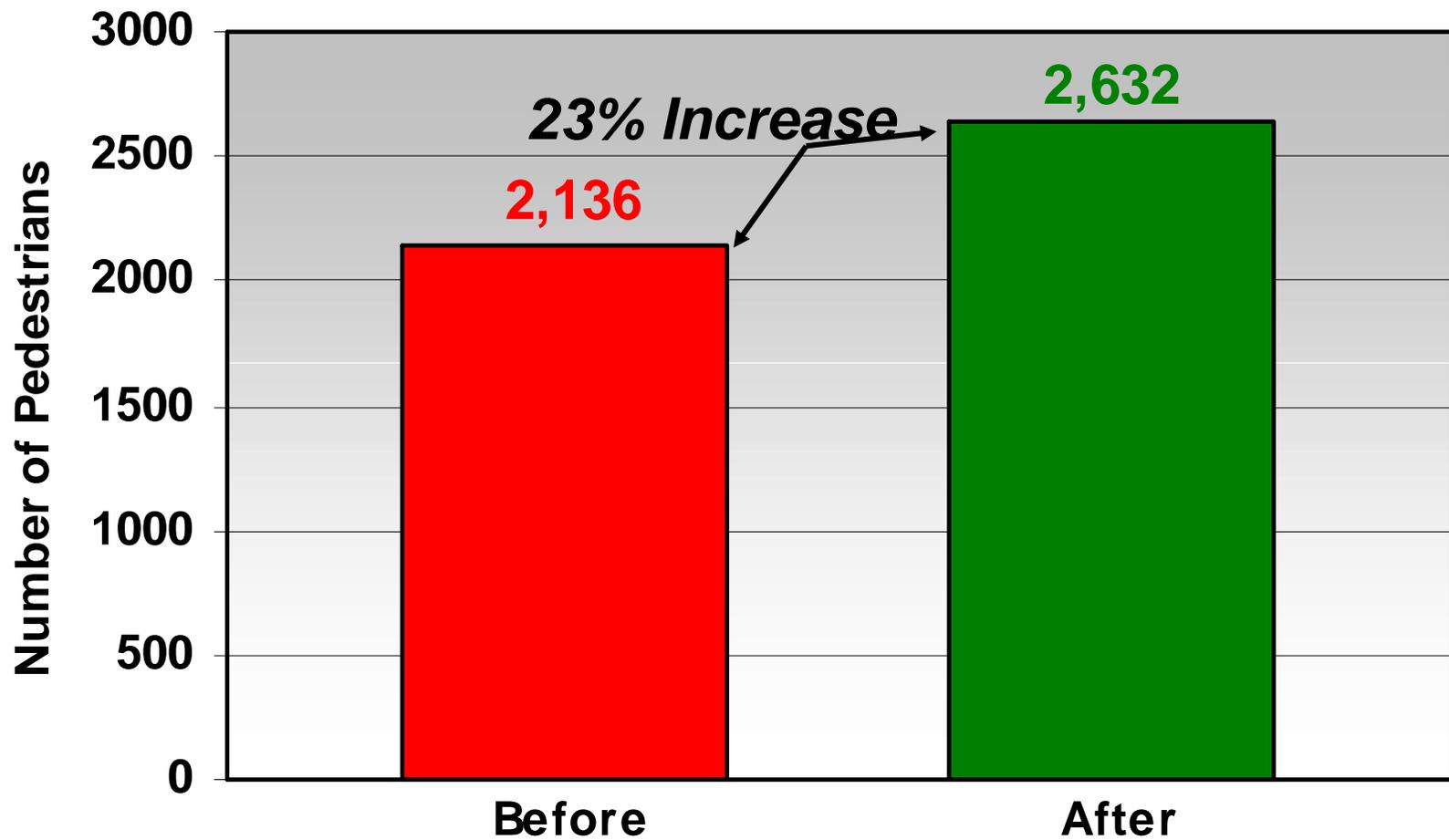
Before/after studies: 4. Traffic volumes



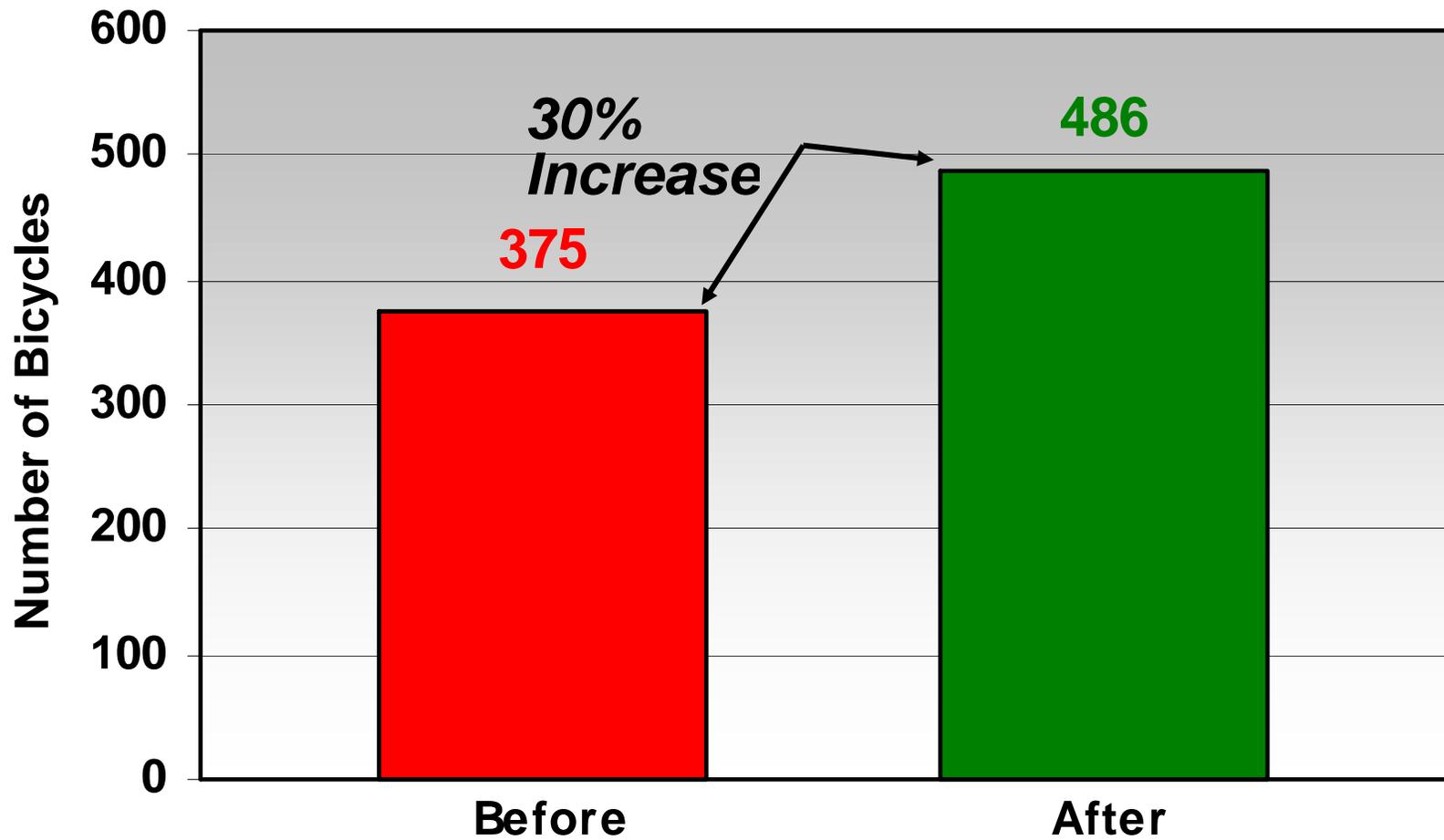
Before/after studies: 5. On-street parking utilization



Before/after studies: 6. Pedestrian volumes



Before/after studies: 7. Bicyclist volumes



Different goals => different outcomes



Both designs based on same design manuals

Complete Streets Goal



**Wise investments that will
enhance the entire community**

