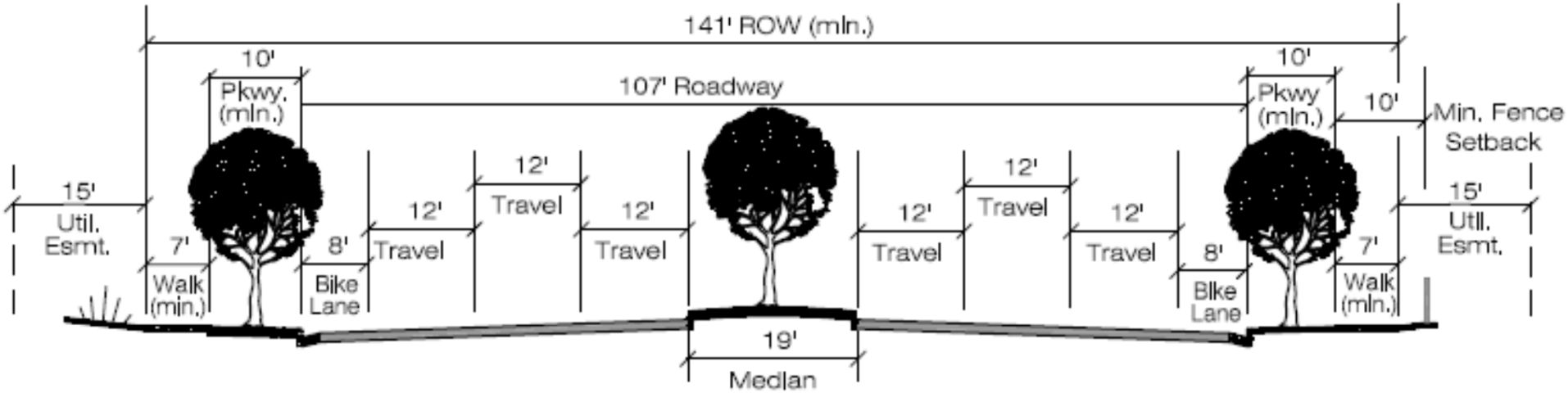
Implementation Basics

How to ensure a policy is being implemented

1. New training for planners and engineers

Complete the Streets

2. Rewrite design manuals

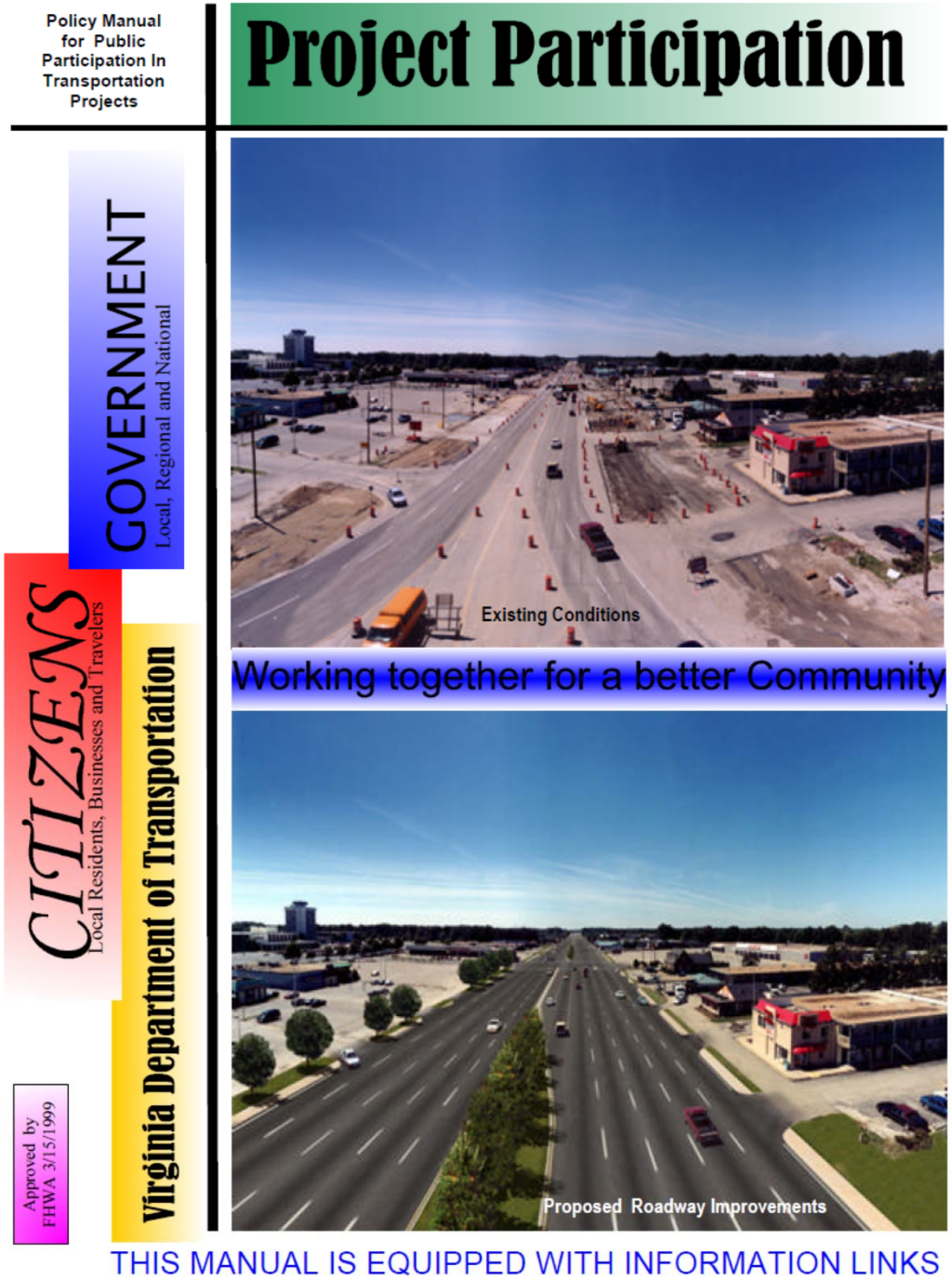


Mass. Project Development & Design Guide

3 guiding principles:

1. **Multimodal Consideration**
2. **Context Sensitive Design**
3. **A Clear Project Development Process**

What message does this cover send?



Complete the Streets

Implementation: From Policy to Practice

An effective policy should prompt these changes:

1. **Retrain planners and engineers**
2. **Rewrite design manuals**
3. **Develop new performance measures**
4. **Restructure procedures**

These will be covered in detail

Implementation challenges

- Performance measures – are we measuring what matters?
- What should we measure to ensure Complete Streets?

What each mode needs

All travelers seek a similar experience:

- Convenience
- Safety
- Comfort
- Access
- Reasonable travel time
- Low cost
- Reliability
- Speed?

Different goals => different outcomes

Both designs based on same design manuals

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

Complete the Streets

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

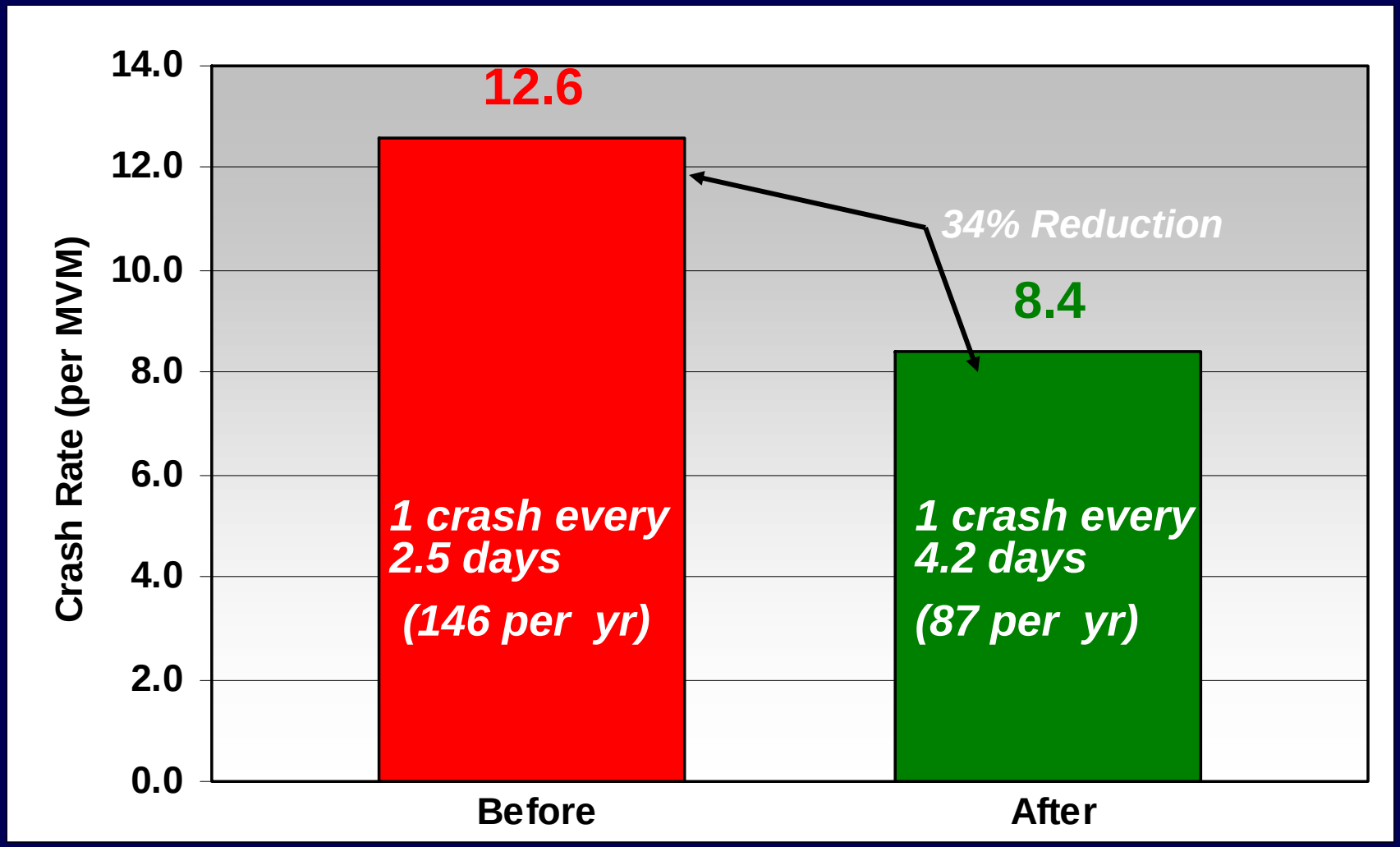
Before

Concept

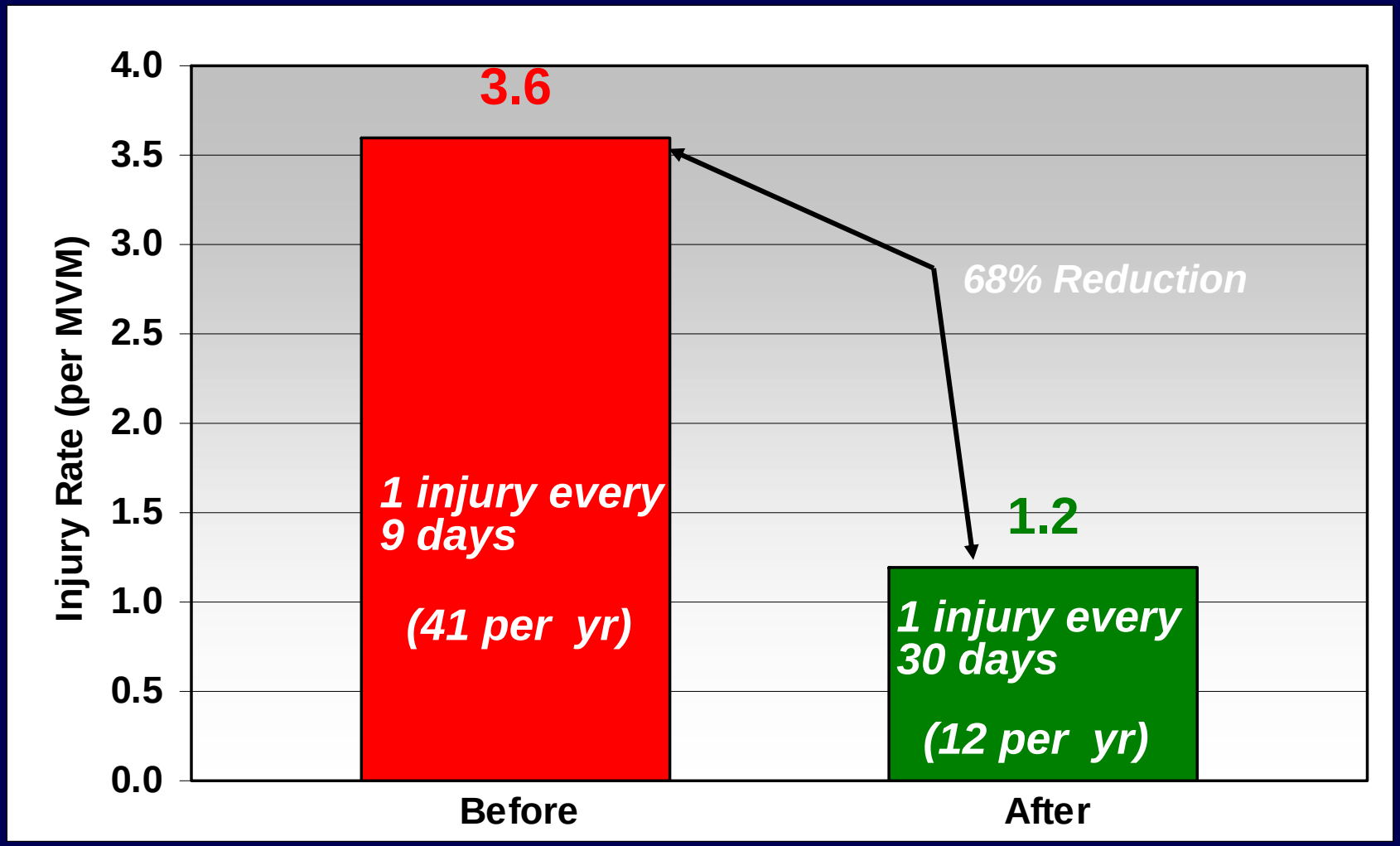
Reality: Before

Reality: After

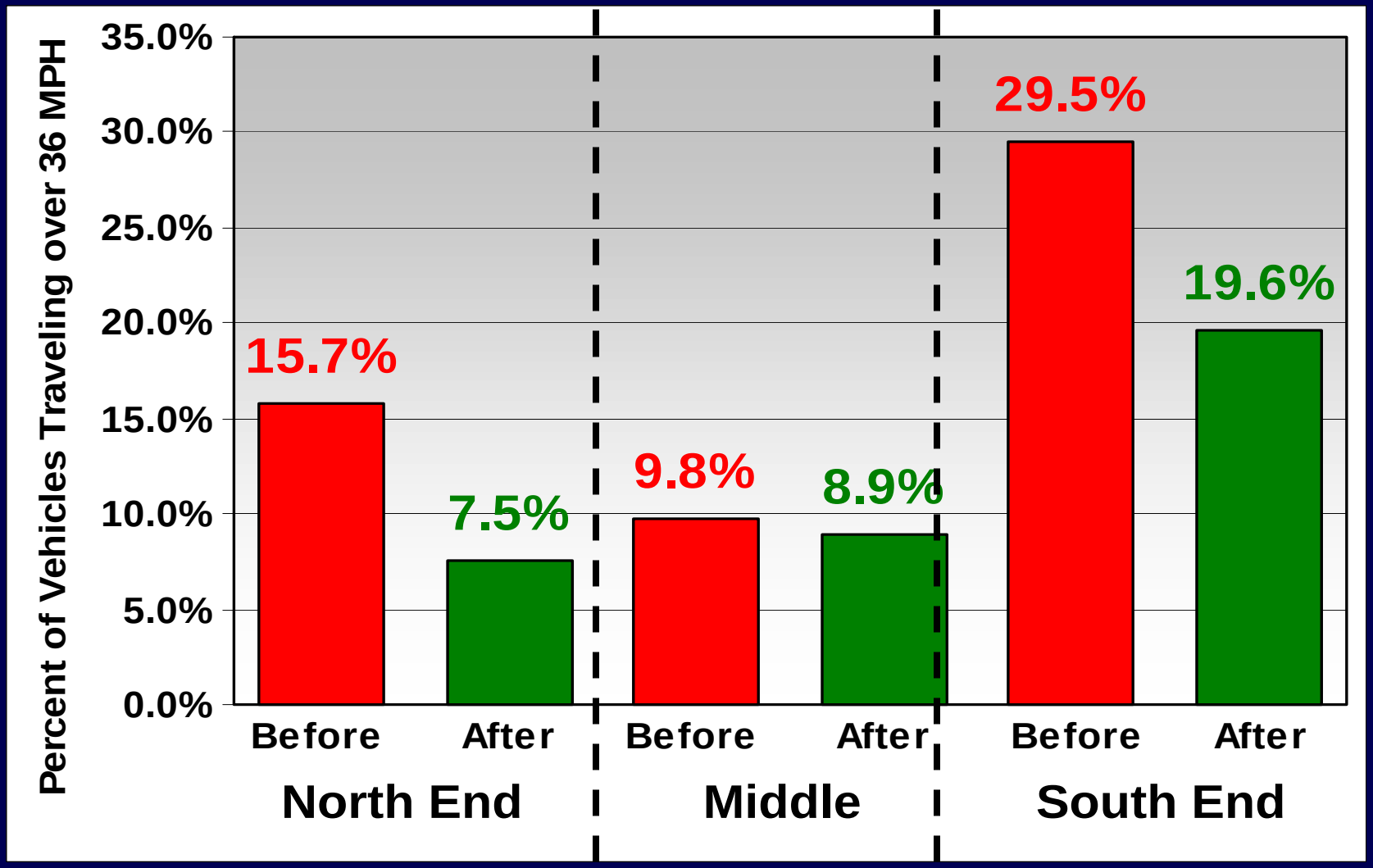
Before/after studies: 1. Crash rate



Before/after studies: 2. Injury rate

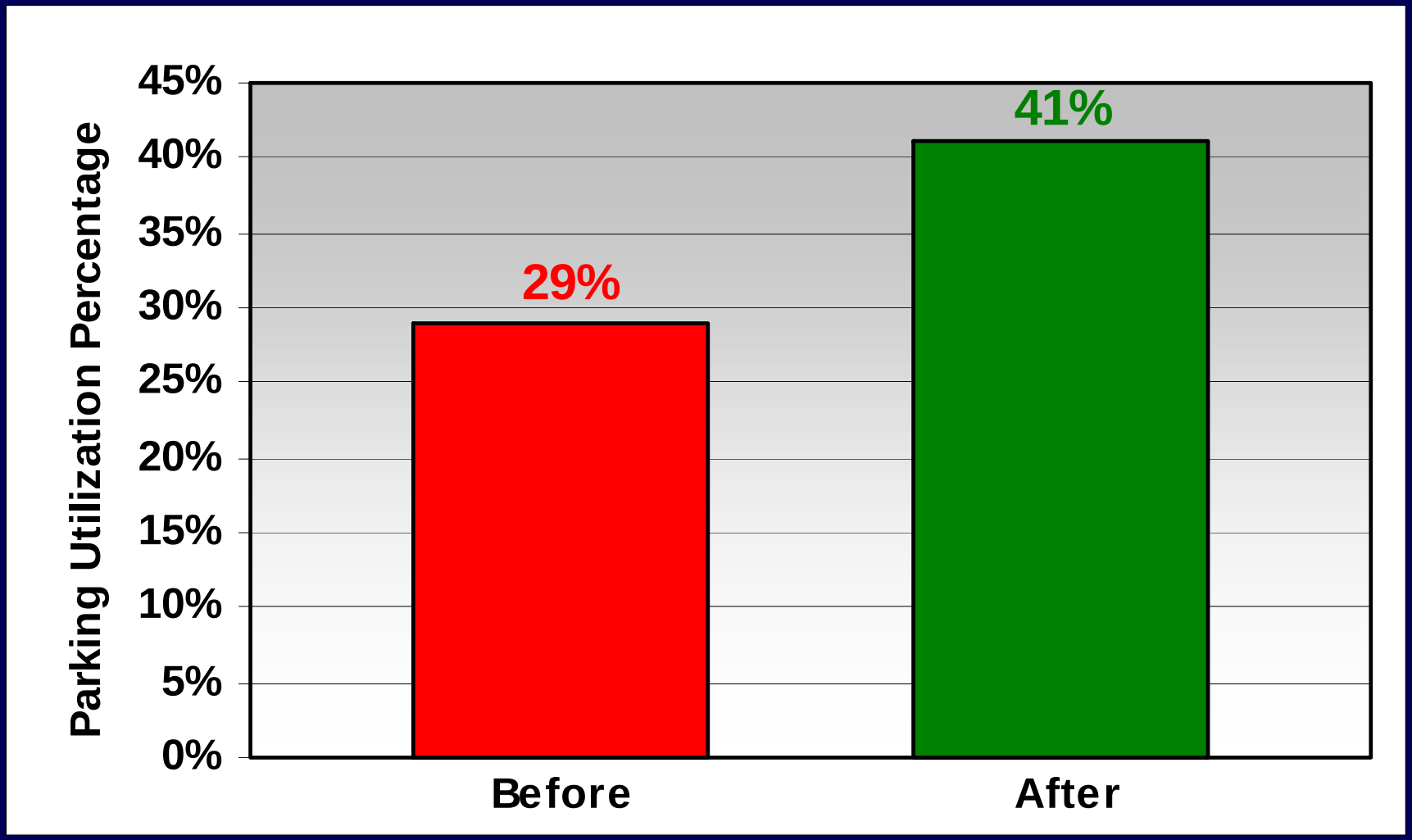


Before/after studies: 3. Speeding analysis

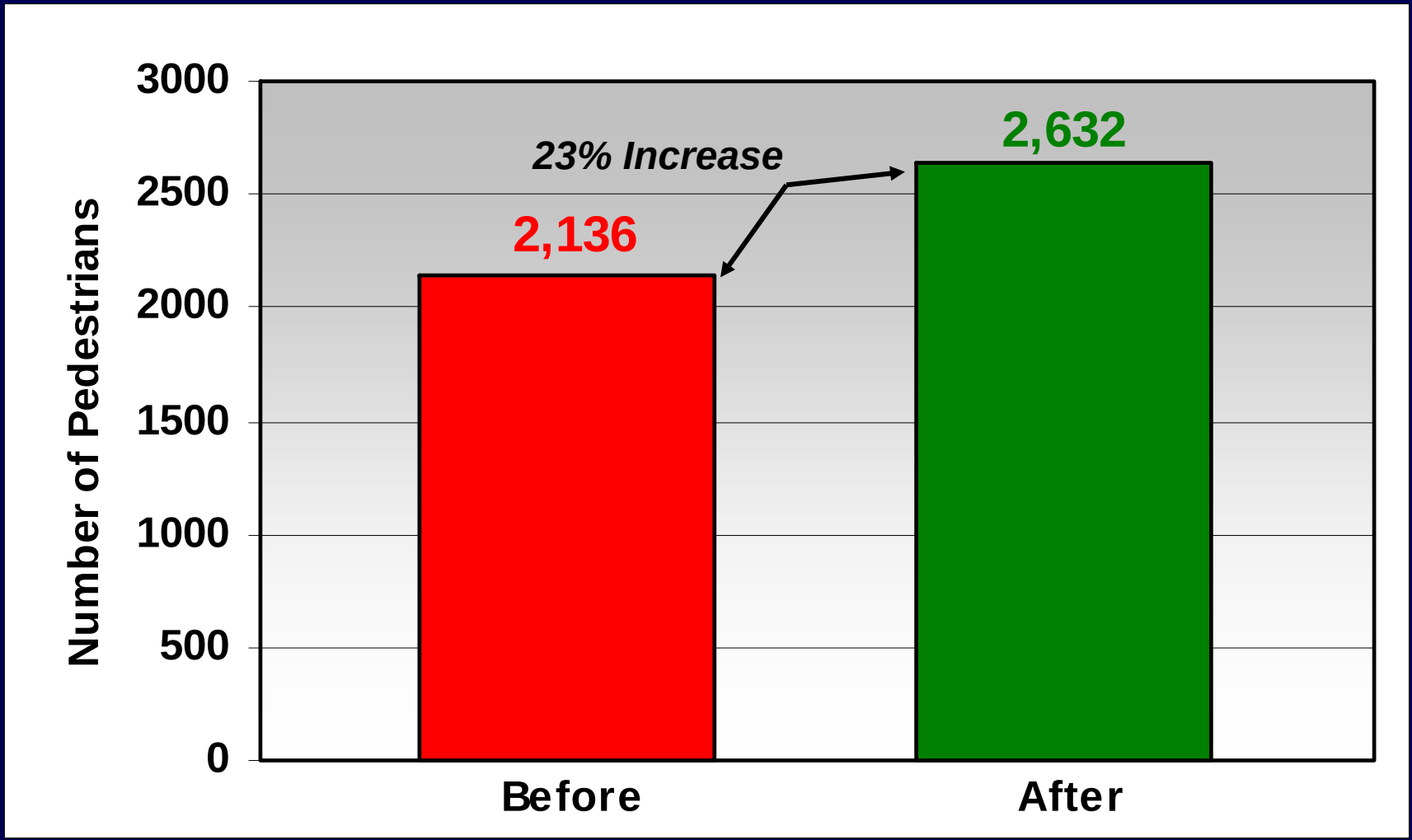


Before/after studies: 4. Traffic volumes

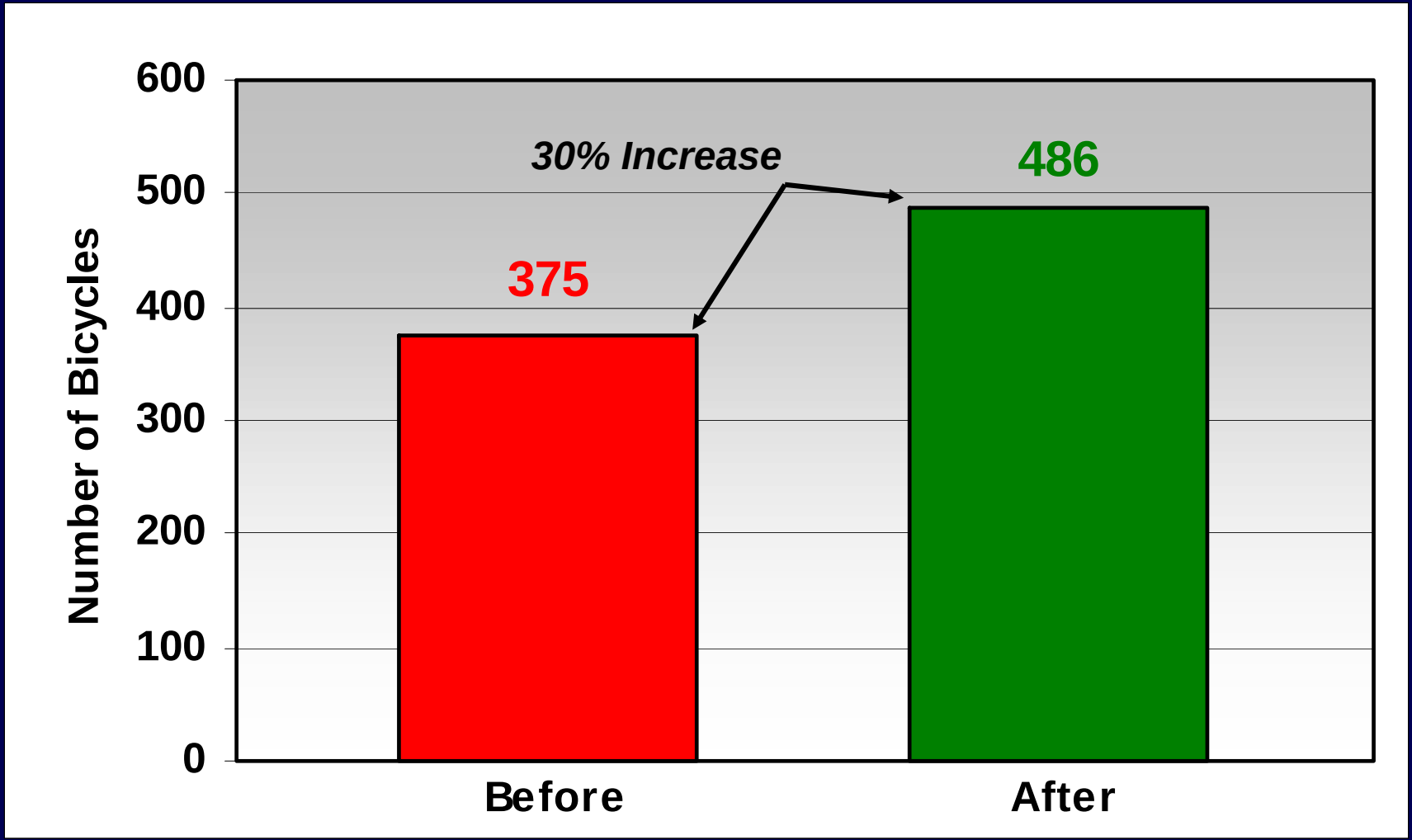
Before/after studies: 5. On-street parking utilization



Before/after studies: 6. Pedestrian volumes



Before/after studies: 7. Bicyclist volumes



Does the street benefit the community?

Which shopping mall do you want in your community?

Complete the Streets

Does the street design reduce crashes?

Does the street treat all travelers fairly?

Complete Streets Goal

Wise investments that will enhance the entire community

Exercise

Performance standards

- What would you measure to determine the success of your CS policy?
- Each table: come up with at least 3 ways you'd like to measure success

Performance standards (Nashville MPO)

a. Connectivity index – do residents have access to destinations? Intersections, nodes, links
b. Perception of safety – survey; data don't sway opinions
c. Count ALL users – walking, biking, transit use
d. % of children who live within 1 mile of school who walk or bike
e. Economic success; increased revenues of businesses adjacent to streets (measured in sales tax revenue)
f. Pre/post satisfaction survey
g. Cost of safety – reduced crashes = reduced costs
h. Increased social interactivity
i. Fewer health insurance claims
j. Bagels vs. gasoline burned
k. Air quality

Complete the Streets

Performance standards (Greater Dayton area)

a. Reduced crashes, before and after– vehicle, pedestrians, bicyclists (3)
b. Increase in ped, bike and transit users (3)
c. Adopt and use Level of Service for non-car users
d. Increase in occupancy rates (3)
e. Surveys: % bike/walk to school
f. Benefit/cost: increased real estate values
g. Recruit/retain desirable employees
h. Improved air quality
i. Improved health; lower obesity rates, other health issues (cancer)
j. # of bike racks; bike rack usage
k. Connectivity – do sidewalks/bike lanes/transit connect?
l. Are other communities looking to us as a model
m. Residents living within walking distance of work, businesses
n. Acceptance by politicians, funders, builders, all stakeholders
o. Fewer DUI citations – walk from tavern

Complete the Streets

Performance standards (Baton Rouge)

- Reduced crashes – all types (5)
- Business sales – on-street parking usage – property values (4)
- Level of Service all modes(3)
- Before and after bike/ped counts (3)
- Public opinion surveys – customer satisfaction – quality of life (2)
- Reduced crime – eyes on the street (2)
- Decrease run-off – environmental quality (air and noise)
- Improved compliance with posted speed
- Land use changes: Promotes infill – reduced trip length
- Increase in bikeway network
- Benefit/cost: $ upfront /maintenance - operation, usage

Performance standards (Moorhead/Fargo)

- Economic benefits: e.g. tourism; vacancy rates; sales tax; # of businesses; rents; character of businesses; increased Property values (4)
- Reduced crashes (3)
- Count People Miles Traveled / pedestrians / bicyclists (3)
- Travel time (improved for all modes)
- Connectivity of systems (street, pedestrian, bicyclist)
- Track <u>specific</u> expenditures on other modes
- Diversity of travel (not just how many, but who?)
- Quality of life indices: ask the right questions

Performance standards (Chattanooga)

- Economic development - % space occupied, property value increase, tax receipts, return on investment (life-cycle cost analysis)
- Public opinion – poll
- Modal choice – how many roads have gone from mono-modal to more mode choices
- Reduction of short (< 1 mile) auto trips –
- Safety – crash reduction – crash severity fatals/severe injury/minor injuries
- Speed / travel time
- Health – hospital visits, decrease in obesity
- More people walking
- Perceived quality of life
- Street appears on brochures boosting city – realtors - appears in presentations
- Neighborhood connectivity – intersections/sq mi – culs-de-sac / sq mi.

Performance standards (NW Georgia)

- Economic development – sales receipts (2); more shops downtown
- Counts of travelers by mode (increase/decrease by mode/before and after)
- Number of pedestrians
- Reduced congestions – cars stacked up
- Safety – speeding (number of speeding tickets; reduced injuries/crashes(2))
- Reduced congestion – travel time (before/after)
- Quality of life/quality of improvements – survey of business and residents
- Air quality – reduced pollution, attainment/non-attainment
- Mode shift (from motor vehicle to non-motorized)
- Survey of bicycle shops – opinion
- Travel to schools – mode split, attendance
- LOS by mode

Performance standards (NW Georgia)

- Tax base – real estate assessments; housing sales

- Balance of mode – linear feet of travel-way for each mode; percentage split
- Crime enforcement – increasing/decreasing

Performance standards (Duluth MIC)

- Count peds, bikes transit users (5) – full buses/overflowing bike racks
- Economic indicators- property values, retail sales, more businesses, fewer vacancies (5)
- Crashes (# and severity) (4)
- Reduced pollution (air, water, noise) (3)
- Crime statistics – less crime (2)
- Reduced traffic with no spillover
- Reduced impervious surfaces
- Customer satisfaction
- Measure traffic flow, not speed, stop and go
- Health benefits
- Fewer moving violations
- Miles sidewalks, bikeways, trails
- % of sidewalks clear of snow

Performance standards (Dakota Co.)

- Objective & Subjective stds
- Travel delay/time (objective) (2)
- Level of Rage (subjective)
- User satisfaction
- Safety
- Comfort
- Convenience
- Access
- Reduced destination distance (access)
- Behavior of road match road objectives?
- Measuring other forms of travel
- Improved School accessibility?
- Cars per household (less is better)