

IMPLEMENTING COMPLETE STREETS

PERFORMANCE MEASURES

(Module 5)

- **What Problem are we trying to solve**
- **Performance measures and project goals**
- **Quantitative benefits of complete streets**
- **CDOT Before and After Examples**

**Problem: We want to
reduce congestion.**

Solution: More pavement

**Problem: We want
complete streets.**

**Solution: Balanced
space that encourages
safe behavior.**

Possible Project Goals (Performance Measures)

- Increased Safety
- Reduced Speeding
- Increased walking and biking
- Increased on-street parking use
- Decreased noise
- Increased neighborhood and business satisfaction
- Increased Economic activity
- Increase green space



Open Roads – Based on Data

- **Strong Data Driven Purpose and Need**
- **Defined scope based on project goals**
- **Performance Measures can act as project problems / needs**
- **Get before data to make the case for Complete Streets**
 - **Crashes, Modal Counts, Travel Times, Capacity Analysis**



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

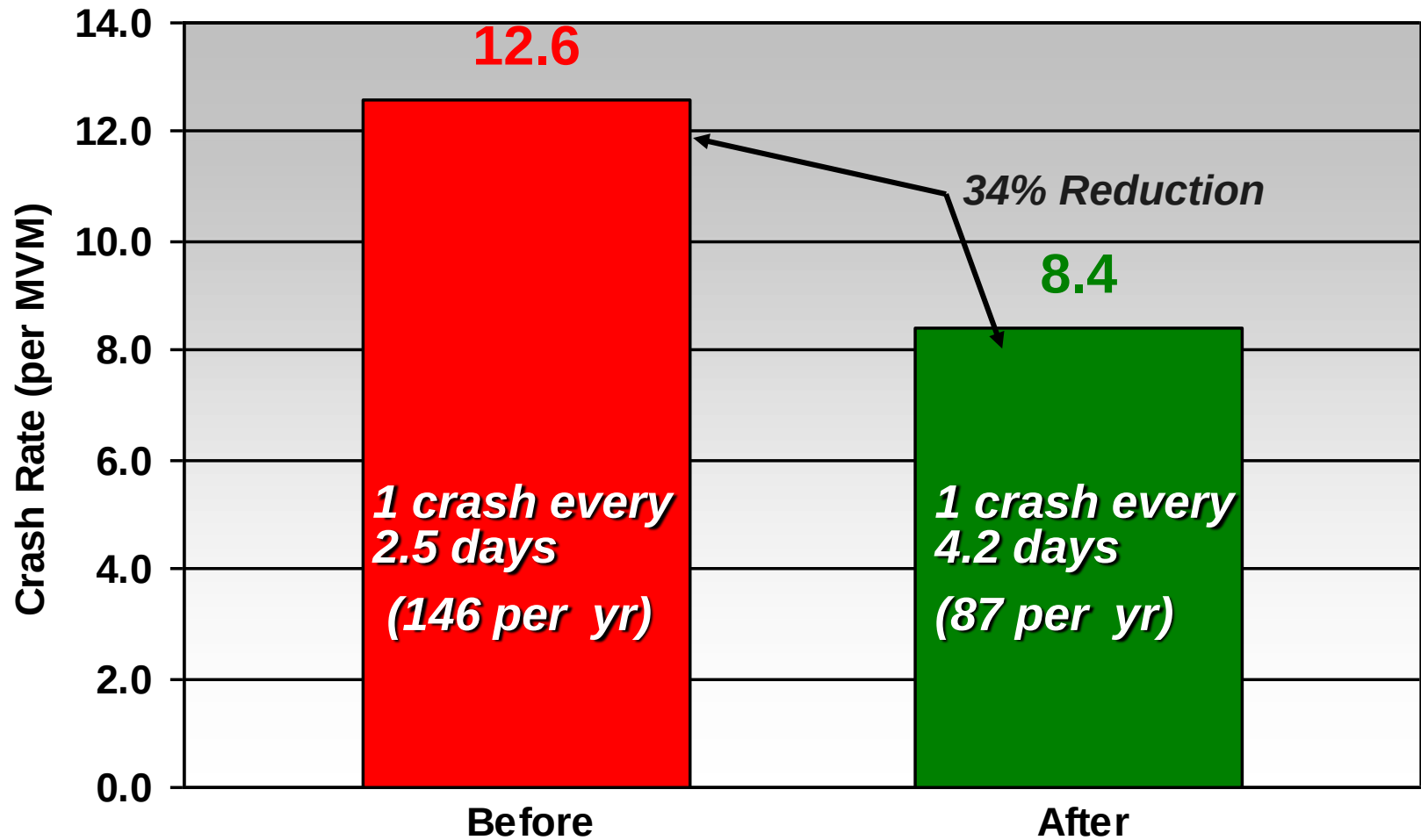


Reality: Before

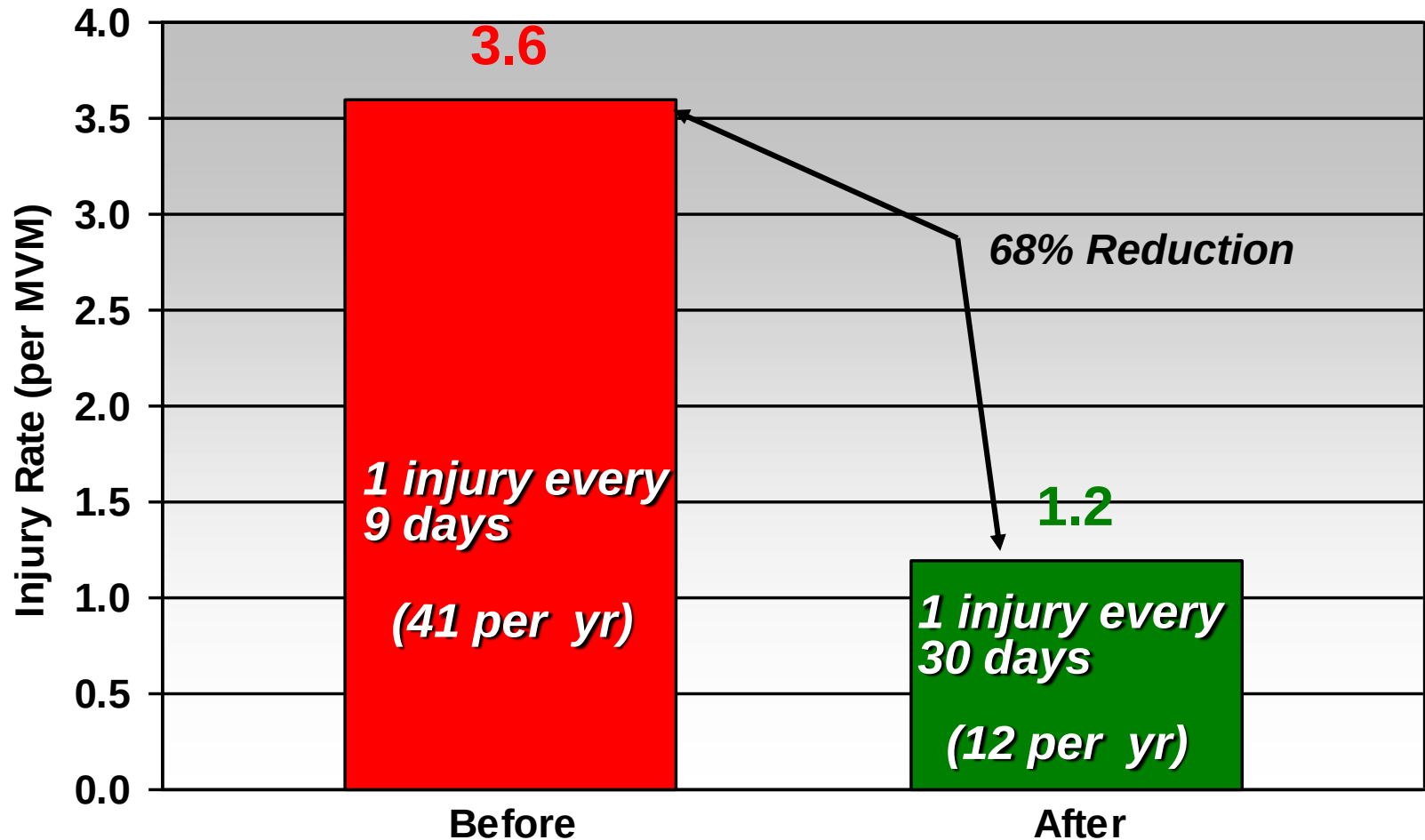


Reality: After

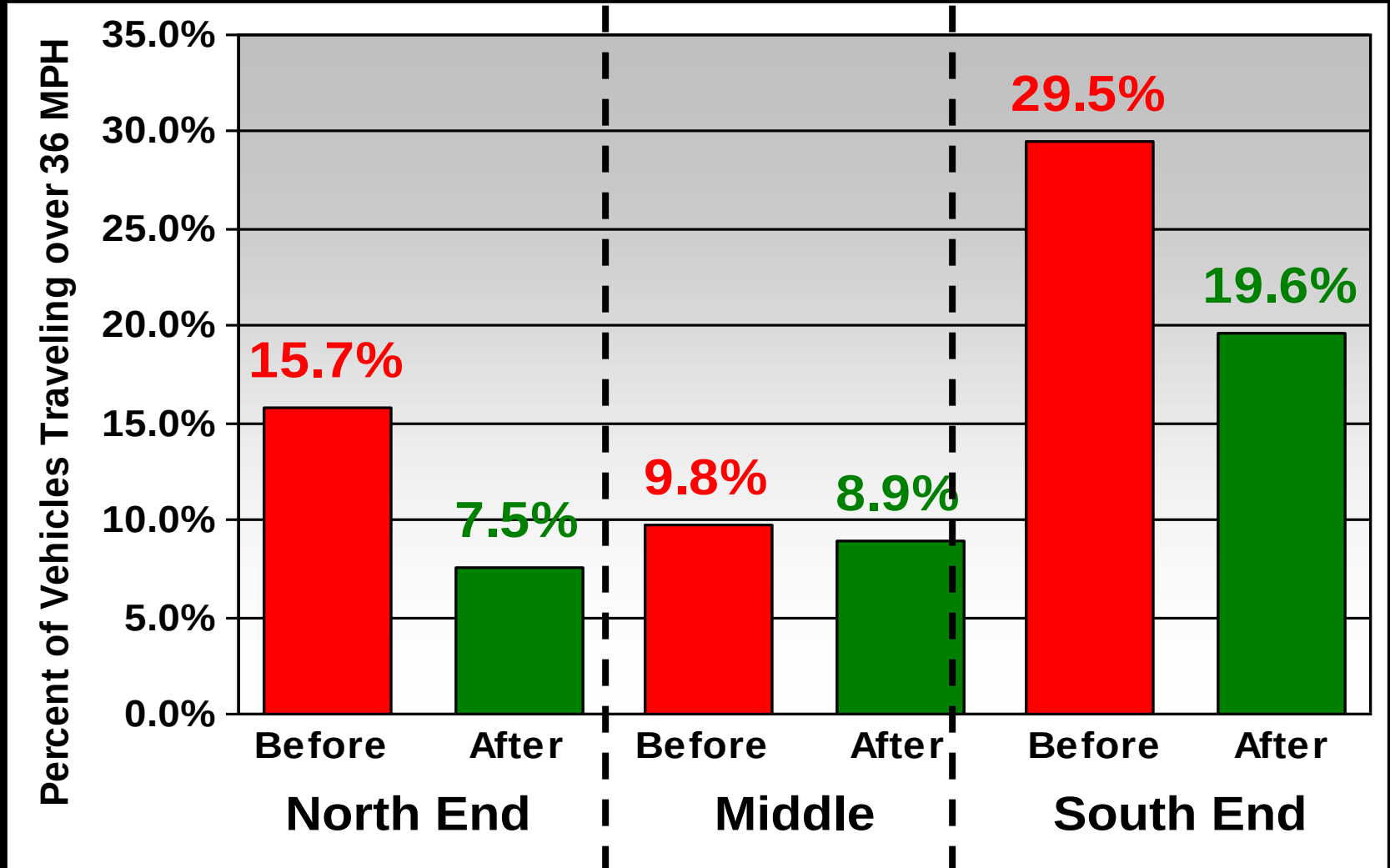
Before/after studies: Safety (Crash rate)



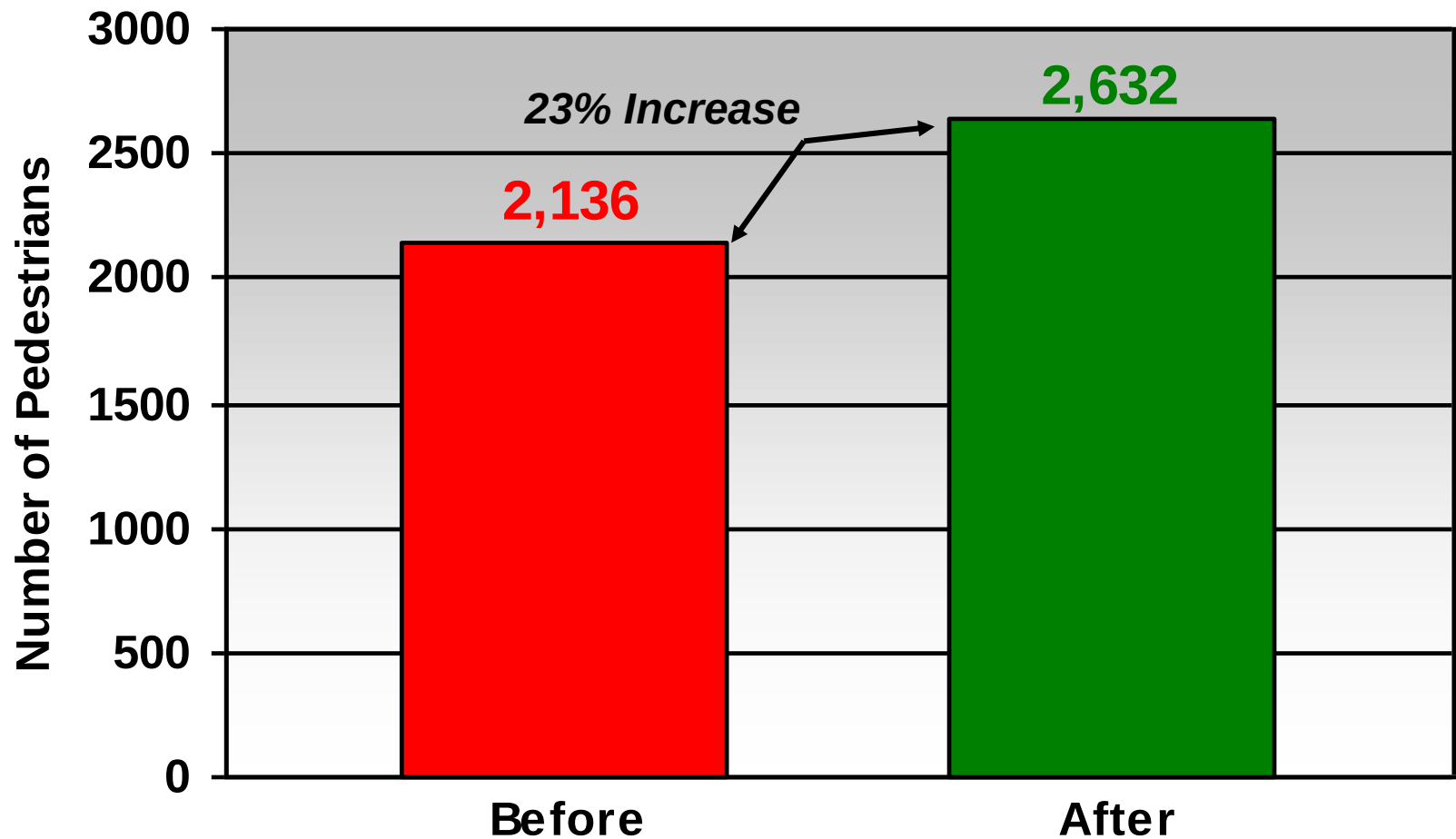
Before/after studies: Safety (Injury rate)



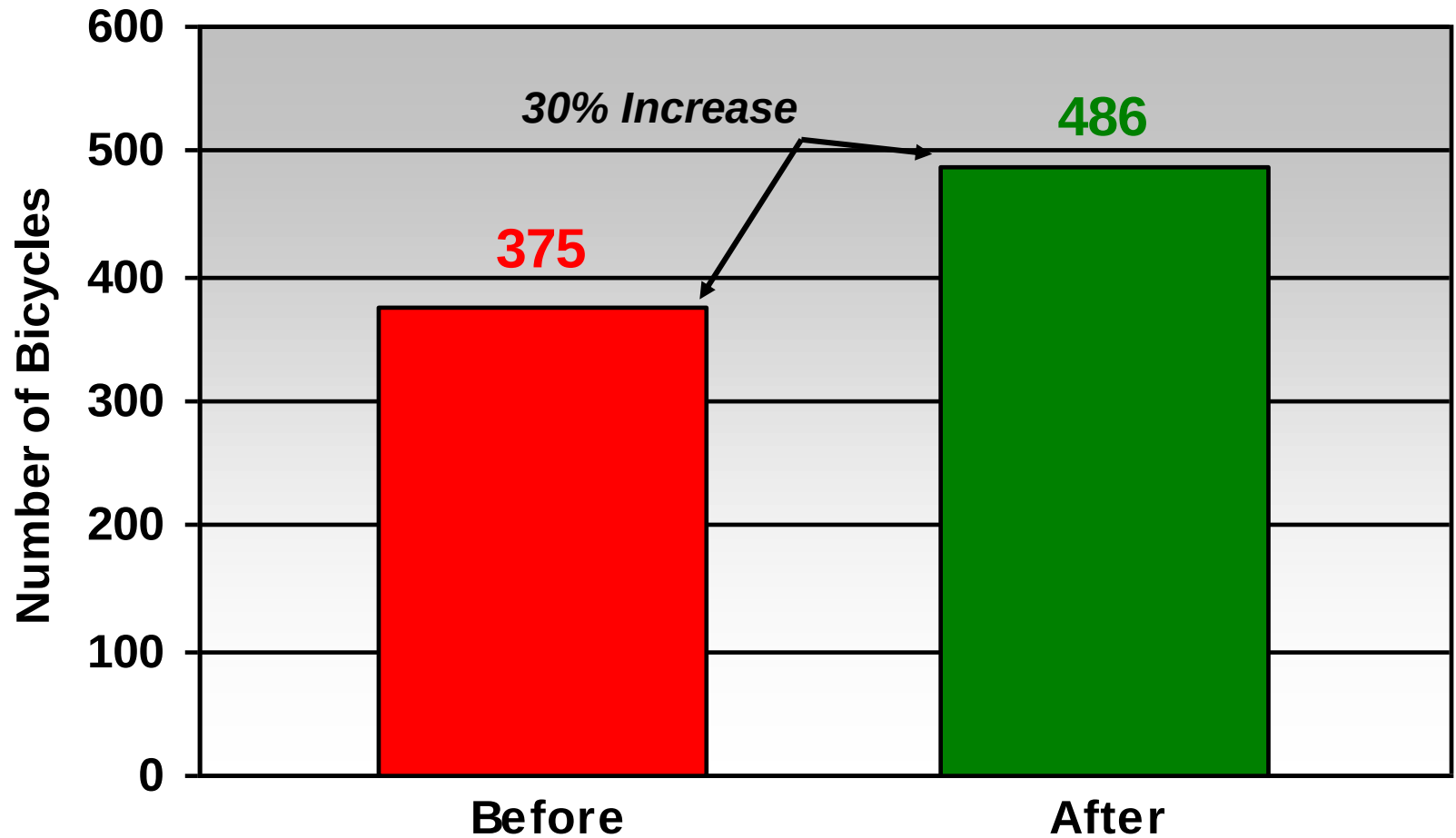
Before/after studies: Speeding analysis



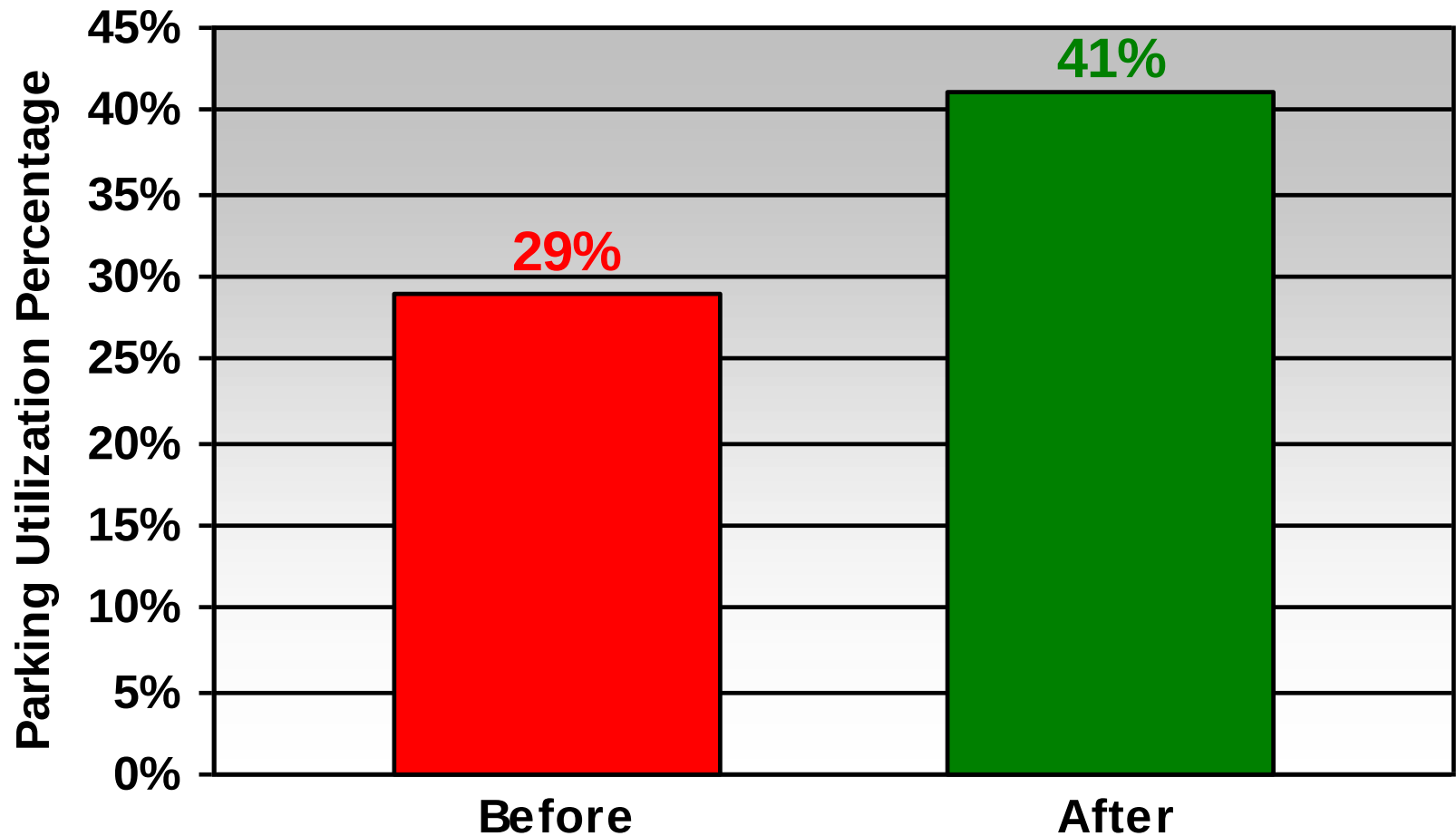
Before/after studies: Pedestrian volumes



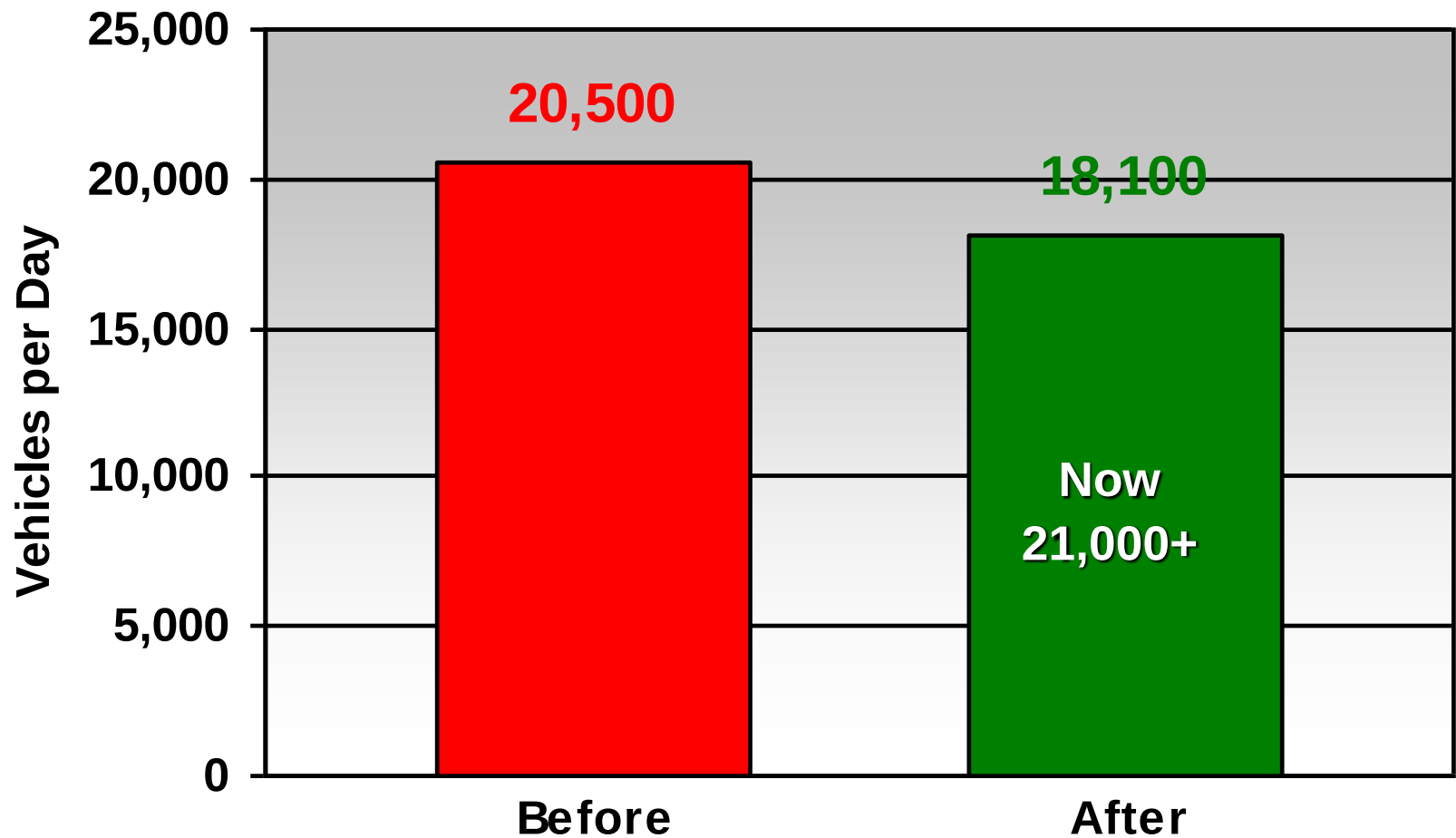
Before/after studies: Bicyclist volumes



Before/after studies: On-street parking utilization



Before/after studies: Traffic volumes

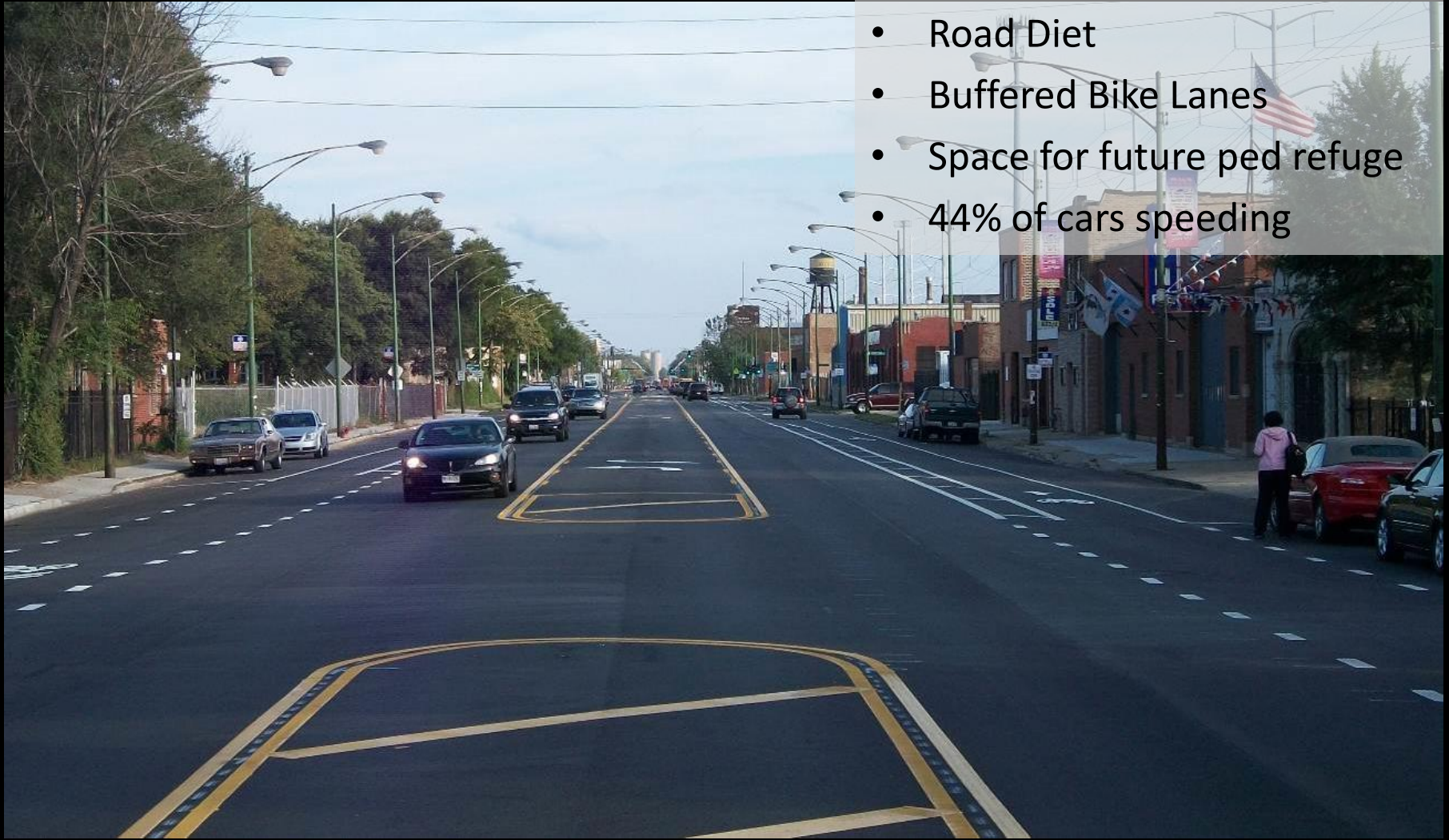


CDOT Example: South Chicago Ave

- Four Travel lanes and bike lanes
- 6 fatalities in 5 years
- 4 fatalities involved bikes or peds
- 80% of cars speeding



CDOT Example: South Chicago Ave



- Road Diet
- Buffered Bike Lanes
- Space for future ped refuge
- 44% of cars speeding

CDOT Example: Vincennes Ave

- 981 Crashes (5-year period)
 - 21% resulted in injuries
 - 100% of bike/ped crashes resulted in injuries
 - 4 fatal crashes
- 'Before' Speed Data
 - 86% of NB & 63% of SB Motorists speeding
 - 41% of NB & 16% of SB motorists exceeding 40MPH

Speed	Before	After
% Over 30 MPH	87%	64%
% Over 35 MPH	64%	27%
% Over 40 MPH	27%	8%



CDOT Example: Dearborn Street Before



CDOT Example: Dearborn Street After

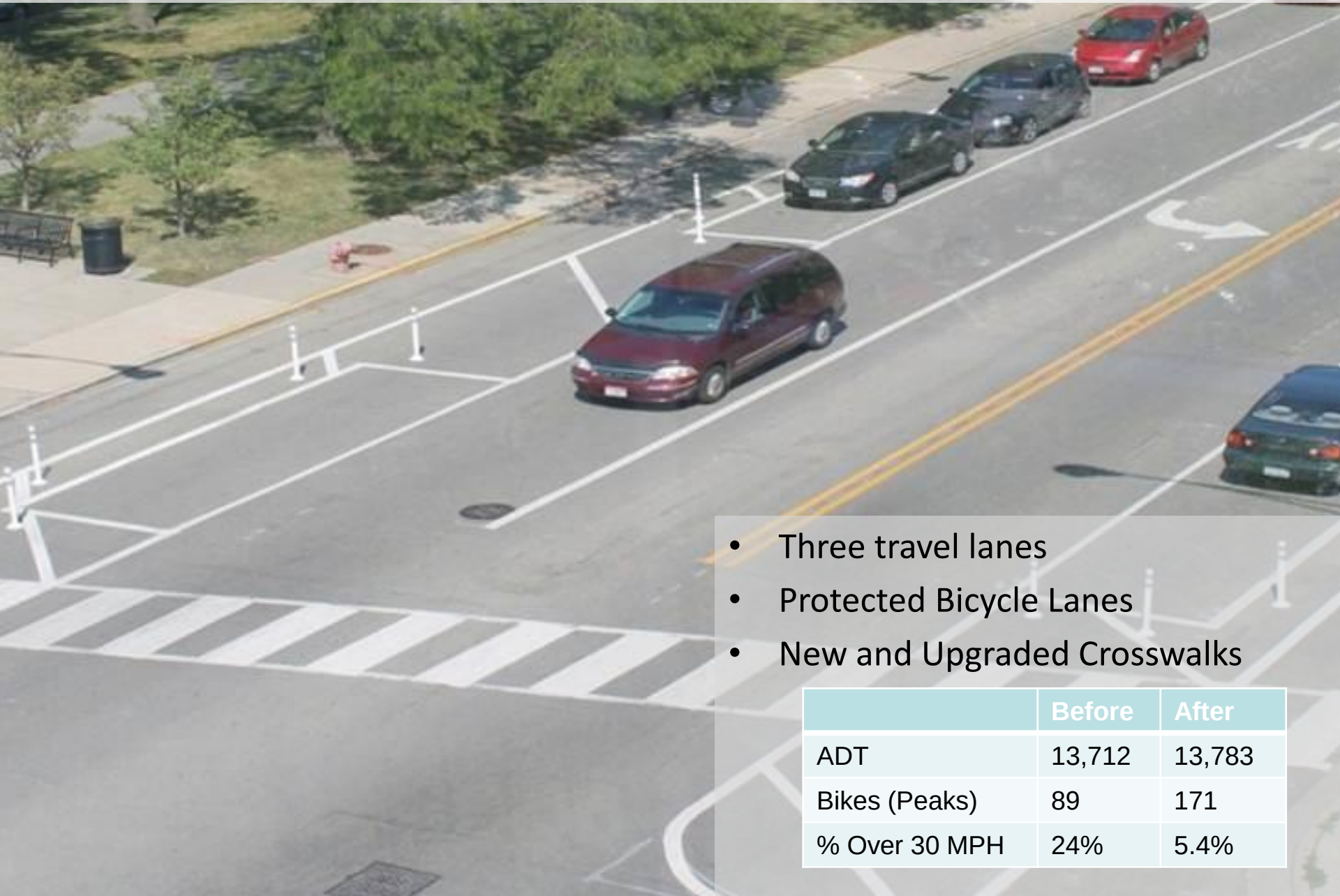


CDOT Example: 55th Street



- Four Travel lanes, no bike lanes
- 339 total crashes on 55th Street between 2006 – 2010
- 27 pedestrian and 23 bicycle crashes
- 45 injury crashes
- 26% rate of speeding

CDOT Example: 55th Street



- Three travel lanes
- Protected Bicycle Lanes
- New and Upgraded Crosswalks

	Before	After
ADT	13,712	13,783
Bikes (Peaks)	89	171
% Over 30 MPH	24%	5.4%

CDOT Example: 55th Street



- Project embraced by University of Chicago
- Future looking to improve, make changes permanent

Does the street benefit the community?



Are we aiming
for through-put
or creating
places?



Does the street design reduce crashes?



Does the street treat all travelers fairly?



End of Module