

# Columbus Avenue Parking-Protected Bicycle Path Preliminary Assessment



# Project Background

October 2009: CB 7 requests DOT proposal for protected bicycle paths on Columbus and Amsterdam Aves

May 2010: DOT presents proposed design on Columbus Avenue between West 96<sup>th</sup> – West 77<sup>th</sup> Streets to CB 7 Transportation Committee

Spring 2010: DOT collects fresh “before” data for proposed corridor

June 2010: CB 7 Full Board approves proposed design on Columbus Ave

August 2010: Implementation begins

March 2011: Split-phase signals at two-way crosstown streets completed

Spring/summer 2011: DOT collects ongoing “after” data for project corridor

October 2011: DOT reports 6-month preliminary assessment to CB 7



# Roadway Design – Before & After

2010



Columbus Ave @ West 79<sup>th</sup> St

2011





# Project Summary

Columbus Ave @ West 82<sup>nd</sup> St





# Project Summary

Columbus Ave @ West 89<sup>th</sup> St

## Improvements to Columbus Avenue:

- Protected Bike Path
- Pedestrian Safety Islands
- Shorter Crossing Distance
- Mixing Zones
- Left-turn Lanes
- Freight Loading & Unloading Zones

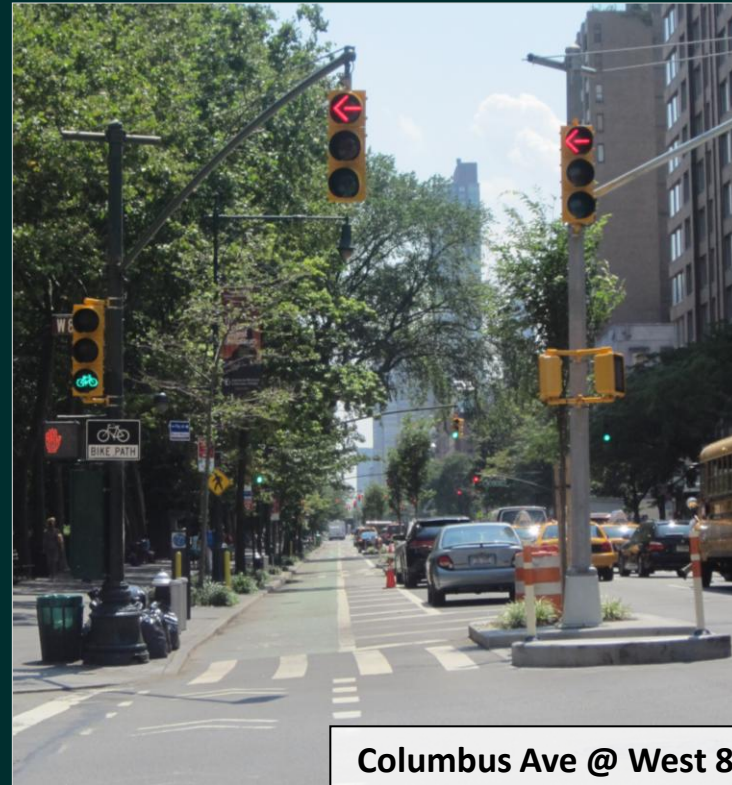




# Project Summary



Columbus Ave @ West 84<sup>th</sup> St



Columbus Ave @ West 81<sup>st</sup> St



Columbus Ave @ West 94<sup>th</sup> St

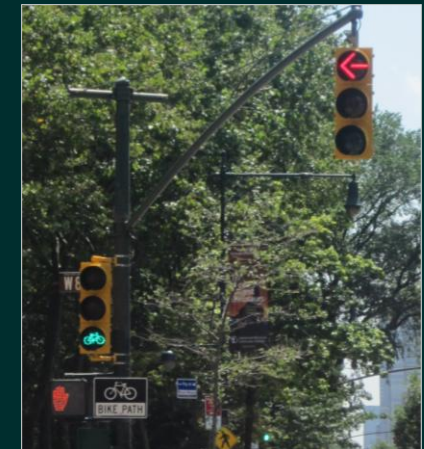


Columbus Ave @ West 90<sup>th</sup> St



# Ongoing Design Updates

- Parking/loading space added between W. 82 – W. 81 Sts
- Eight commercial loading zones added/expanded
- Improved markings on West 81 St
- Split-phase signal installation



Columbus Ave @ West 81<sup>st</sup> St



Columbus Ave @ West 82<sup>nd</sup> St

# Safety Data – Preliminary Crash Analysis

## Columbus Avenue – Before/After Preliminary Crash Analysis

from W. 96<sup>th</sup> Street to W. 77<sup>th</sup> Street

	Before Period		After: 6-month Average	Percent Change
	Total Before	Average of Before Period		
Crashes	357	119.0	79.0	-33.6%
Crashes w/ Injury	50	16.7	12.0	-28.0%
Total Injuries	53	17.7	13.0	-26.4%

- Crashes are down **34 %**
- Preliminary data shows safety improvements
- DOT will continue to monitor corridor crashes

*Before period:* August - September 2007, April - September 2008, April - September 2009, April - July 2010; (Average of three 6-month periods);

*After period:* 04/01/11 - 09/30/11 (6 months)

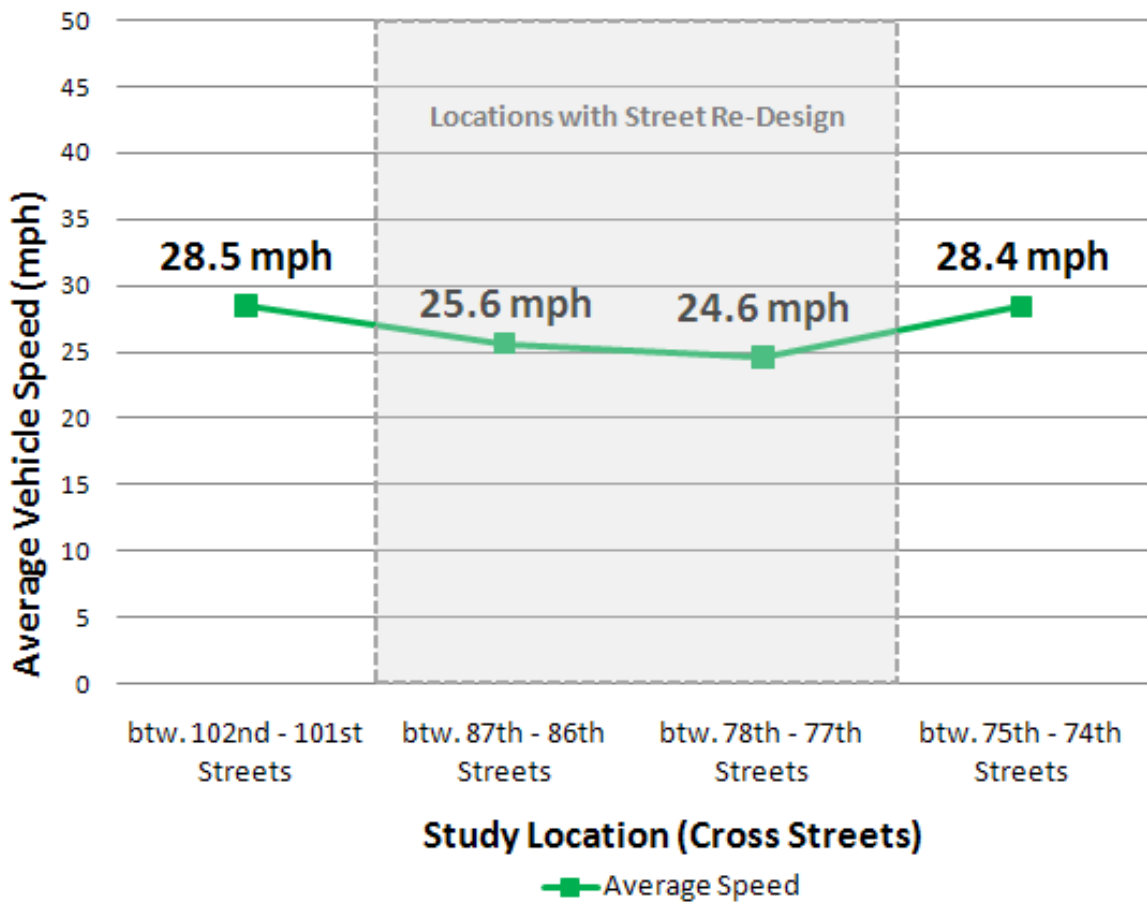
*Signals installed on West 86<sup>th</sup>, West 81<sup>st</sup> and West 77<sup>th</sup> Streets Feb-March 2011; project considered complete: 03/31/11*

*Crash Data from NYPD Accident Database (TAMS data)*



# Safety Data – Vehicle Speeds

**Columbus Avenue Average Vehicle Speeds**  
May 5, 2011



Higher rates of speeding in segments without re-design

**29%**  
Over 30mph  
Speed Limit

**17%**  
Over 30mph  
Speed Limit

**8%**  
Over 30mph  
Speed Limit

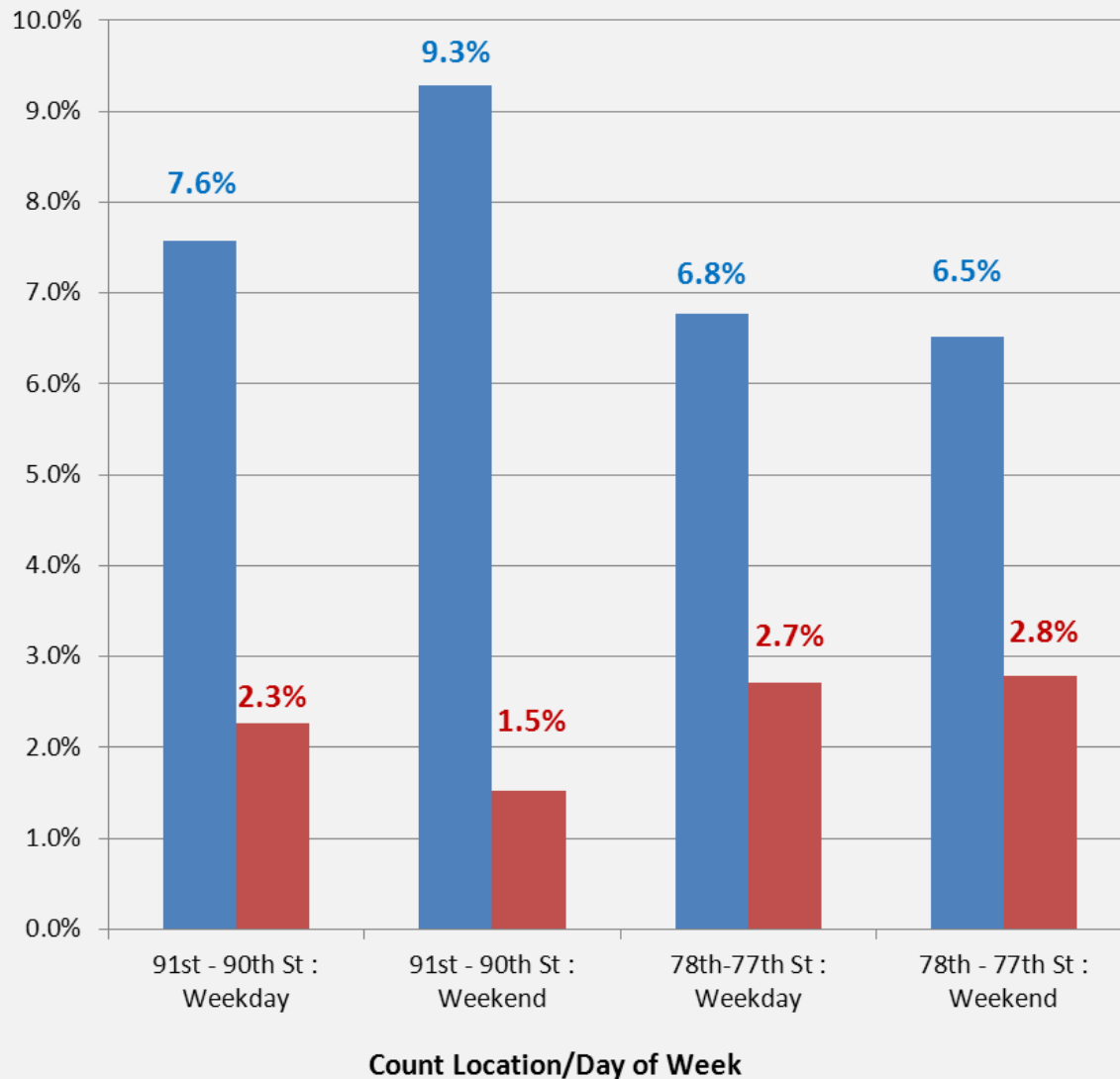
**29%**  
Over 30mph  
Speed Limit





# Safety Data – Sidewalk Ridership

## Columbus Avenue Before/After Sidewalk Ridership Rates



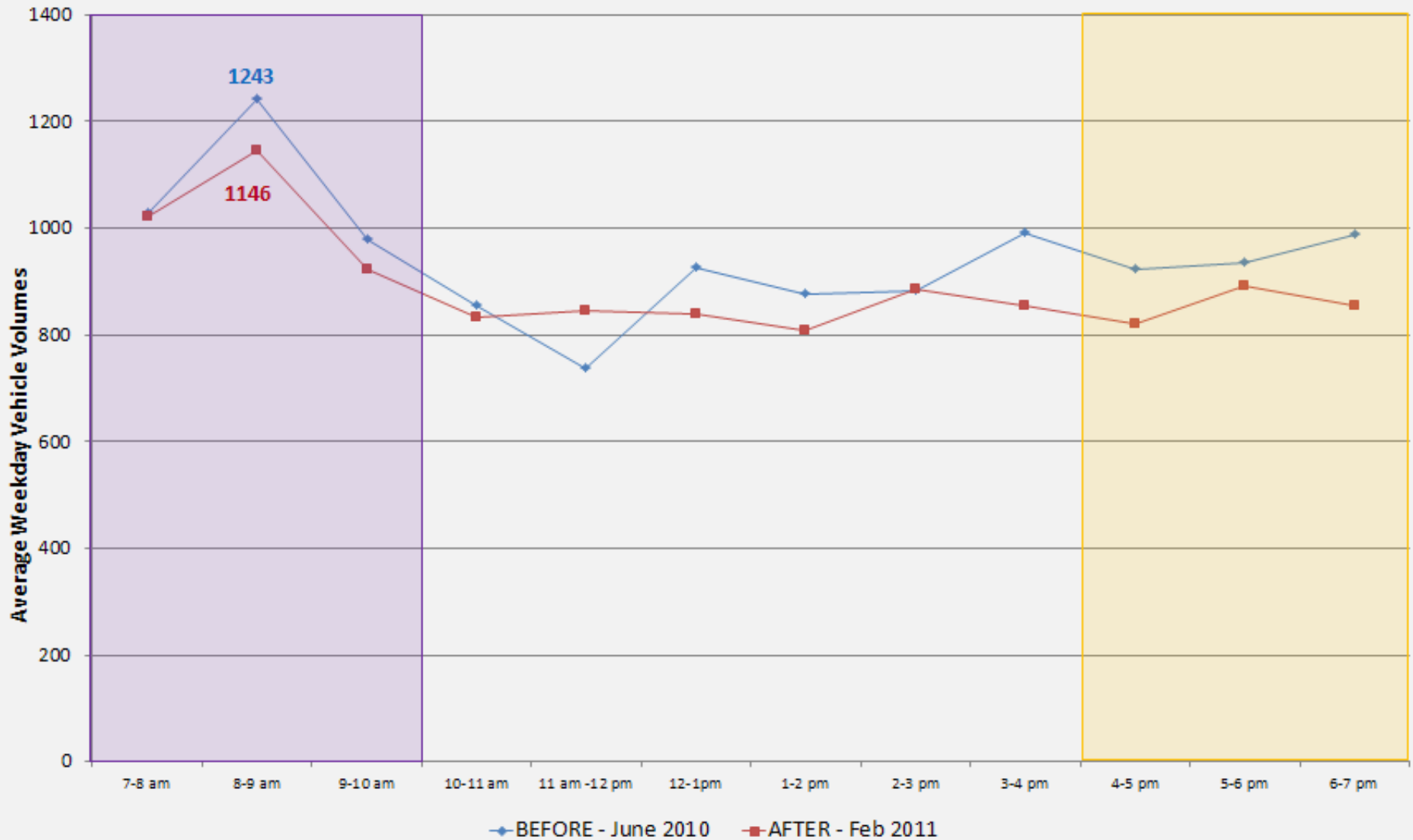
Decreased rates of sidewalk ridership at all monitored locations

■ Before (May 2010) ■ After (Average: April 2011 - September 2011)



# Traffic Data

## Columbus Avenue Average Weekday Vehicle Volumes (7a-7p) Before and After

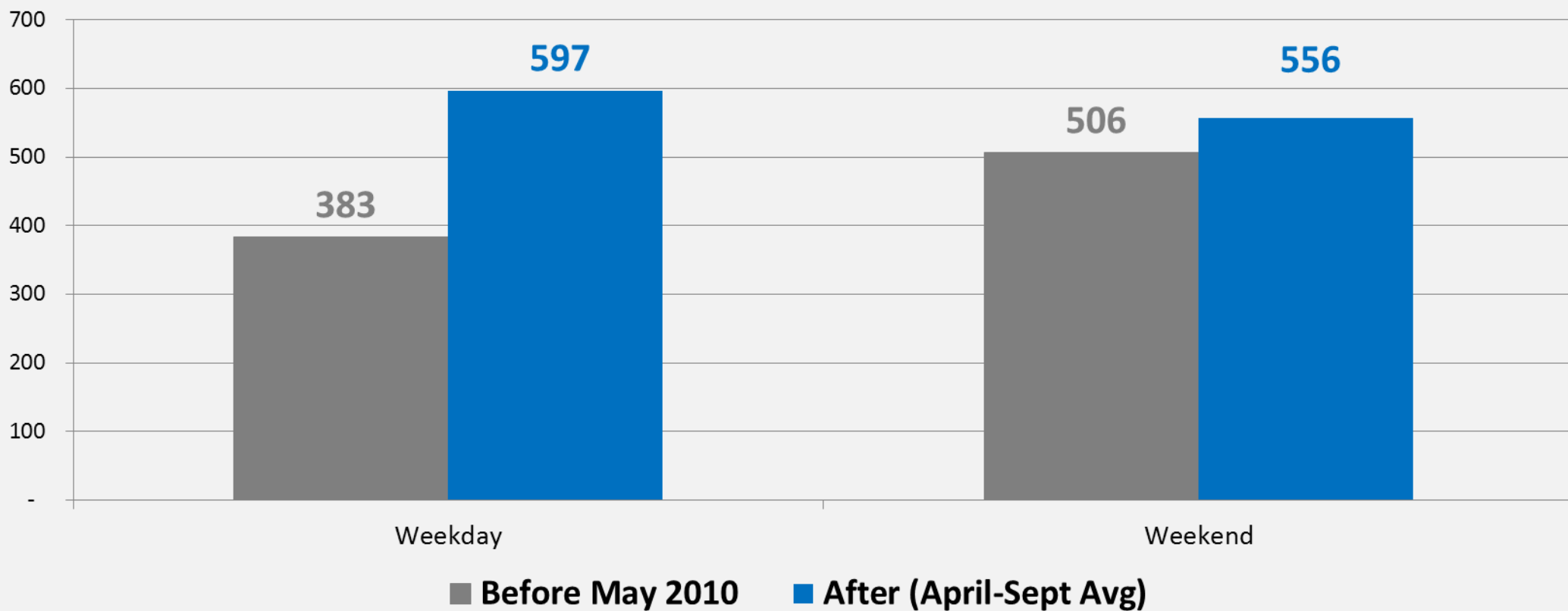


Vehicle traffic volumes processed along avenue remain similar



# Traffic Data – Bicycle Counts

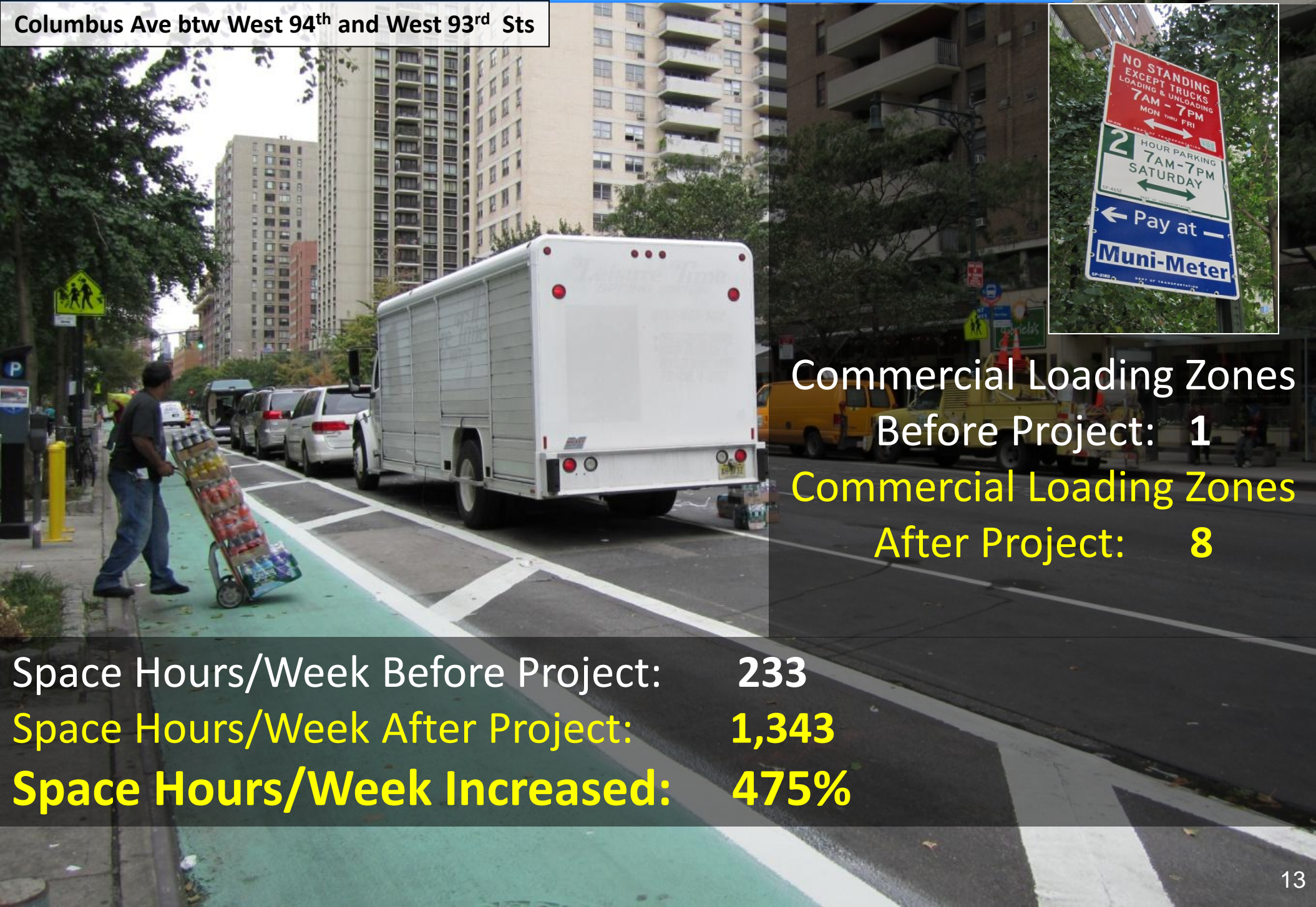
**Columbus Avenue Bicycle Volumes (7a-7p)  
Before and After**



**56% increase in weekday volumes**

# Traffic Data – Commercial Loading

Columbus Ave btw West 94<sup>th</sup> and West 93<sup>rd</sup> Sts

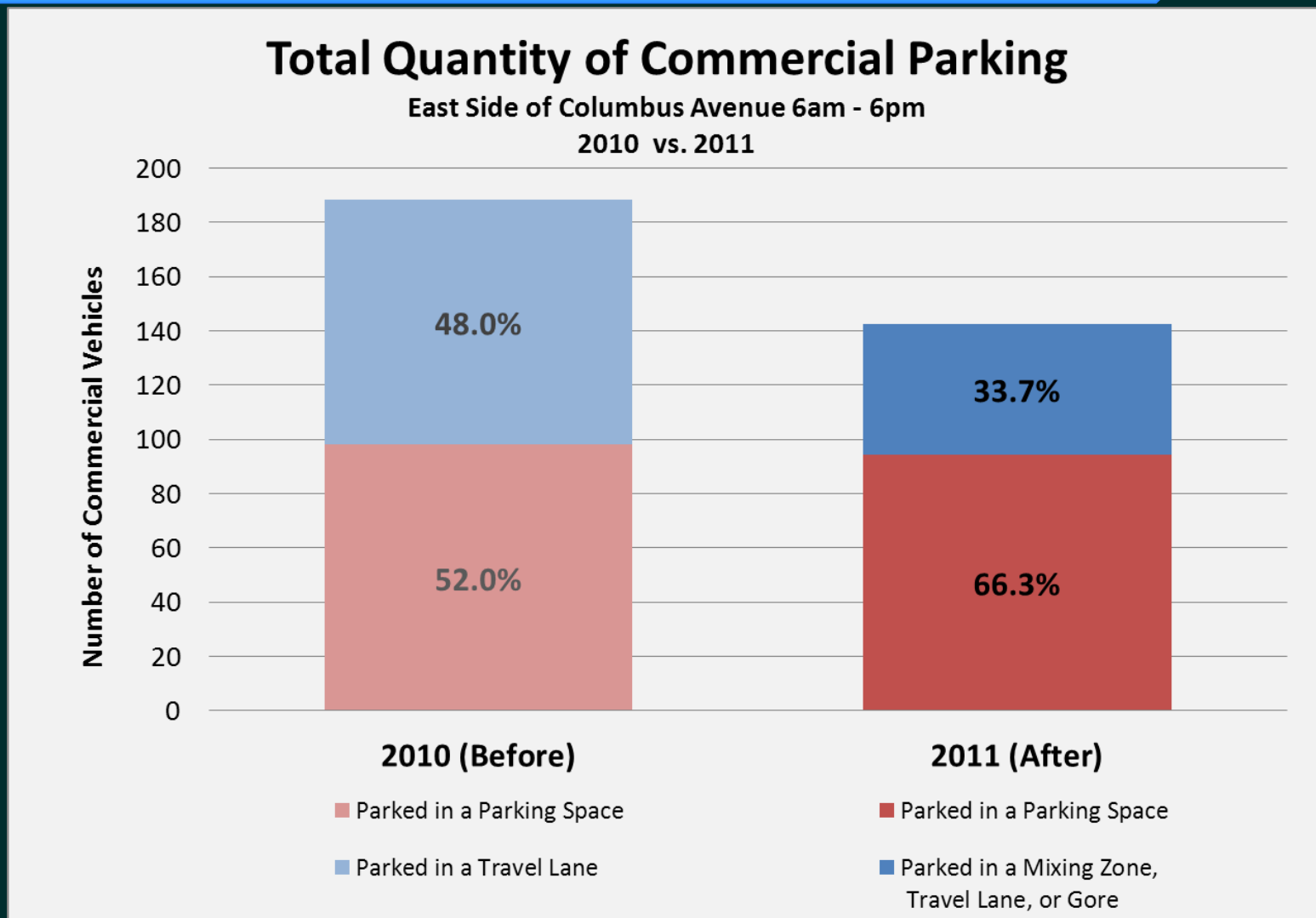


Commercial Loading Zones  
Before Project: 1  
Commercial Loading Zones  
After Project: 8

Space Hours/Week Before Project: 233  
Space Hours/Week After Project: 1,343  
Space Hours/Week Increased: 475%



# Double Parking – Before and After



Lower total number of commercial vehicles parked in travel lanes

Lower proportion of commercial vehicles parked in travel lanes

Commercial loading survey (6a-6p) average of two observation days 7/27/2010 & 7/30/2010 (before) and average of two observation days 7/19/2011 & 7/29/2011; Locations: Btw. W. 95<sup>th</sup> and W. 94<sup>th</sup> Sts, btw. W. 94<sup>th</sup> and W. 93<sup>rd</sup> Sts, btw. W. 91<sup>st</sup> and W. 90<sup>th</sup> Sts, btw. W. 90<sup>th</sup> and W. 89<sup>th</sup> Sts, btw. W. 83<sup>rd</sup> and W. 82<sup>nd</sup> Sts, btw. W. 82<sup>nd</sup> and W. 81<sup>st</sup> Sts.



Questions?

Thank  
You