

# Columbus Avenue Bicycle Path 1-Year Post-Implementation Report



# 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 supports proposed design on Columbus Ave

August 2010: Implementation begins

March 2011: Split-phase signals at two-way crosstown streets installed, project is completed

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

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

December 2012: DOT reports 1-year assessment to CB 7



# Project Summary

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

## Improvements Implemented:

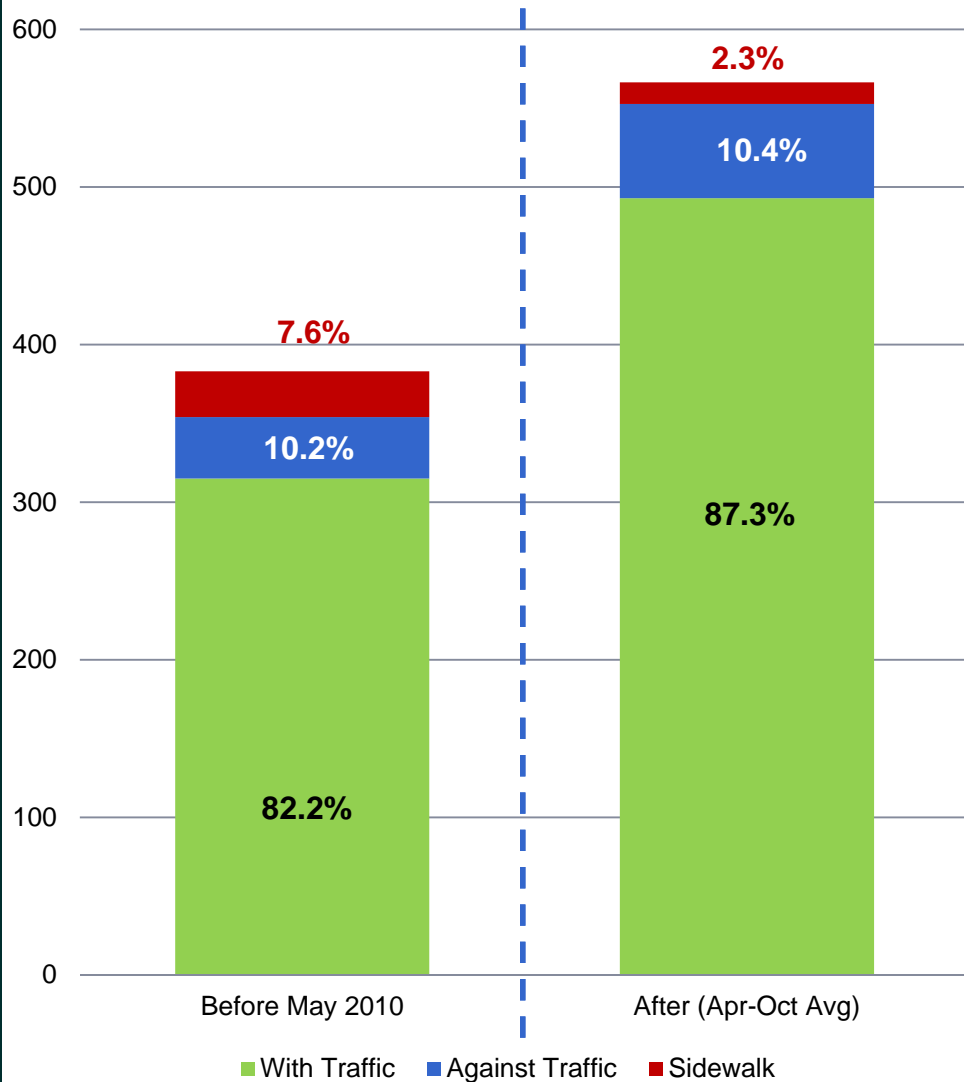
- Protected Bike Path
- Pedestrian Safety Islands
- Shorter Crossing Distance
- Mixing Zones
- Left-turn Lanes & Left-turn Signals
- Truck Loading & Unloading Zones





# Traffic Data – Cycling Volume & Characteristics

**Columbus Ave (btw. 91st-90th Streets)  
Before/After Weekday Ridership (7a-7p)**



**48%** increase in weekday volumes

Illegal sidewalk cycling **decreased** at all monitored locations

Wrong way cycling volume remained constant

Note: After period includes averages of data from April – October in both 2011 and 2012.

# Traffic Data – Bicycle Facility Usage

**Columbus Avenue  
April - October Weekday Average  
Facility Ridership (7a-7p) at Two  
Locations**



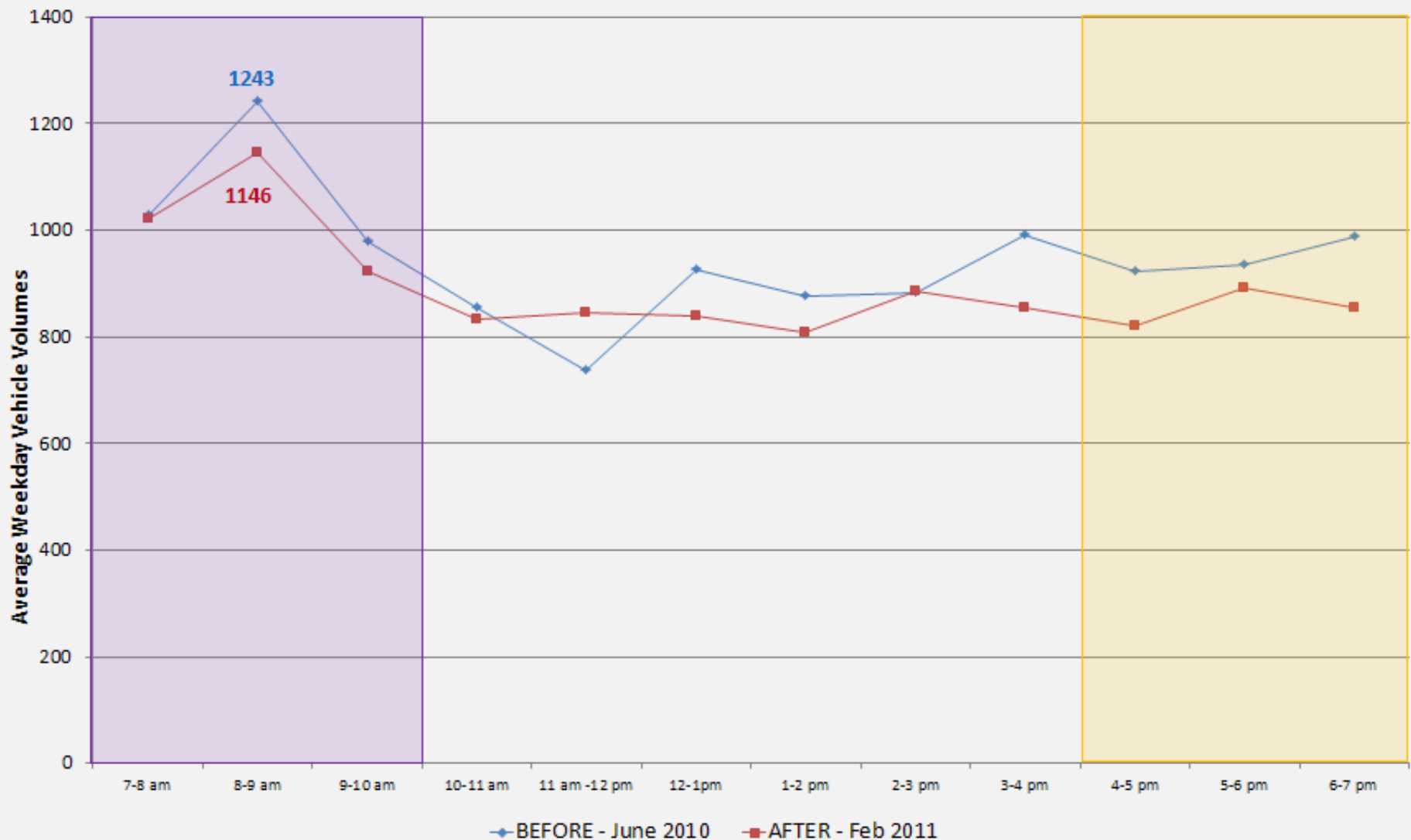
Bike Path usage over 65%

Cyclists use of street varies by location

Sidewalk riding remains constant by location

# Traffic Data – Vehicle Volumes

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

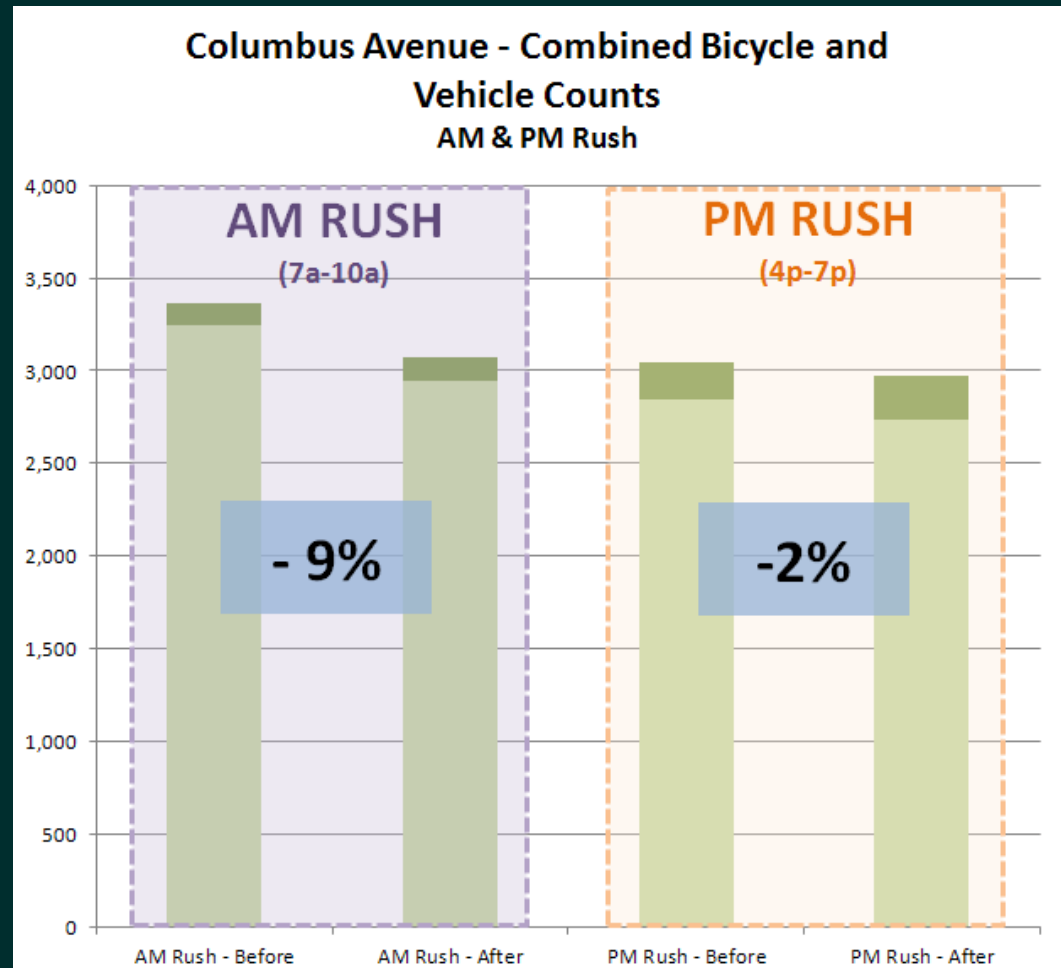


Vehicle traffic volumes processed along avenue remain similar

Note: Traffic counts conducted 6/4/2010 – 6/10/2010; 2/23/2011 – 3/1/2011. Location: Between W. 96<sup>th</sup> and W. 95<sup>th</sup> Streets

# Traffic Data – Roadway Mobility

- 14% and 18% increase in AM and PM weekday cycling volumes
- 9% and 2% decrease in overall traffic on corridor



	Before	After	Before	After
Bicycle Counts	111	127	200	236
Motor Vehicle Counts	3,250	2,948	2,847	2,739
Total	3,361	3,075	3,047	2,975

Bicycle counts conducted: 5/25/2010; April – Oct 2011, April-May 2012 (average). Average of two locations: Bet. West 91<sup>st</sup> & West 90<sup>th</sup> Sts, West 78<sup>th</sup> & West 77<sup>th</sup> Sts  
 Motor vehicle counts conducted: 6/4/10-6/9/10, 3/25/12-3/31/12. Bet. West 96<sup>th</sup> & West 95<sup>th</sup> Sts

# Safety Data – Vehicle Speeds

## Columbus Avenue – Before/After Radar Speed Studies

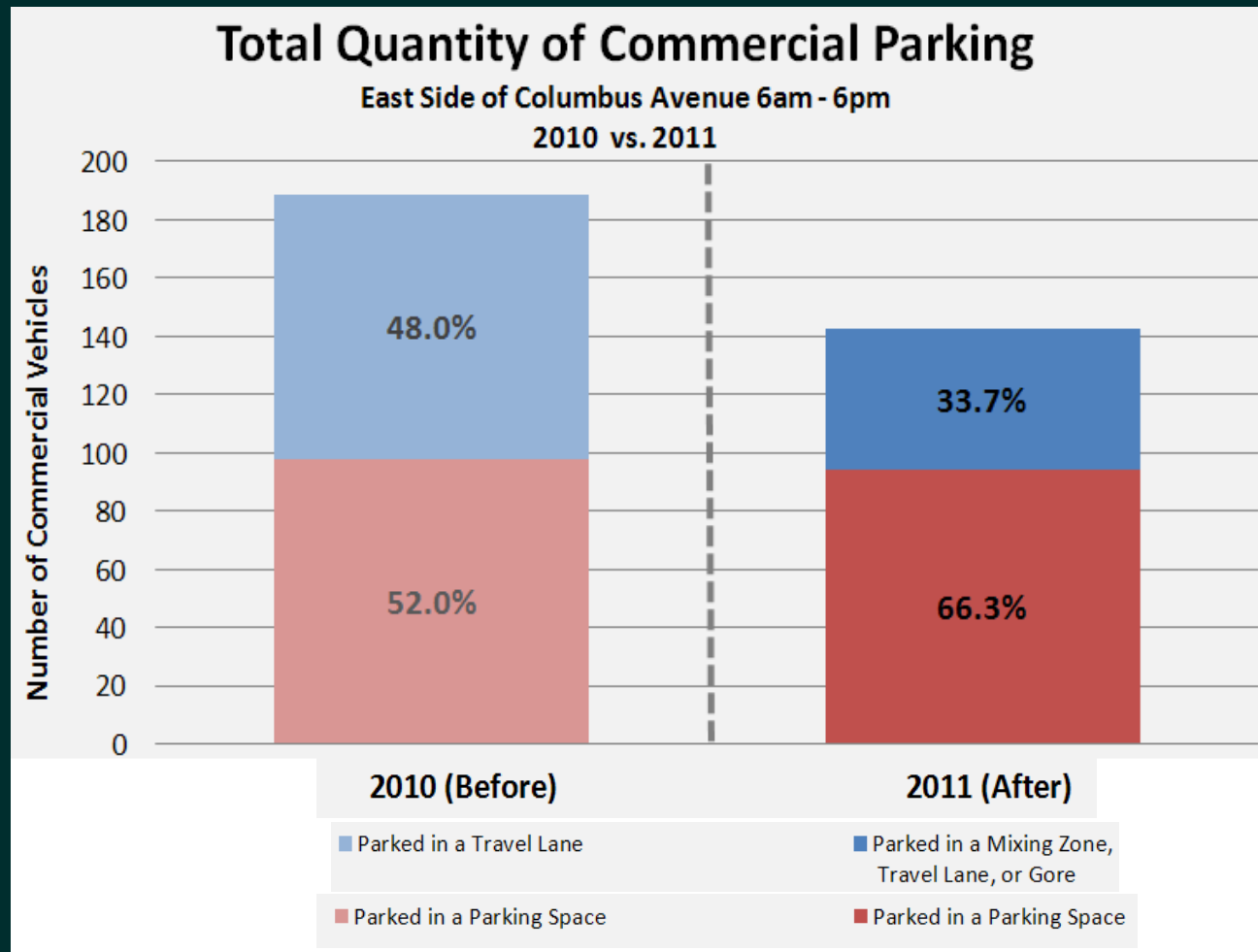
Between W. 87<sup>th</sup> and W. 86<sup>th</sup> Streets

	BEFORE	AFTER
	May 2010	March 2012
	87th - 86th Sts	87th - 86th Sts
Average Speed (mph)	26.8	22.3
Percent of Vehicles Over 30 mph Speed Limit	14%	6%

Percentage of vehicles exceeding the speed limit decreased to 6% from 14%



# Double Parking – Before and After



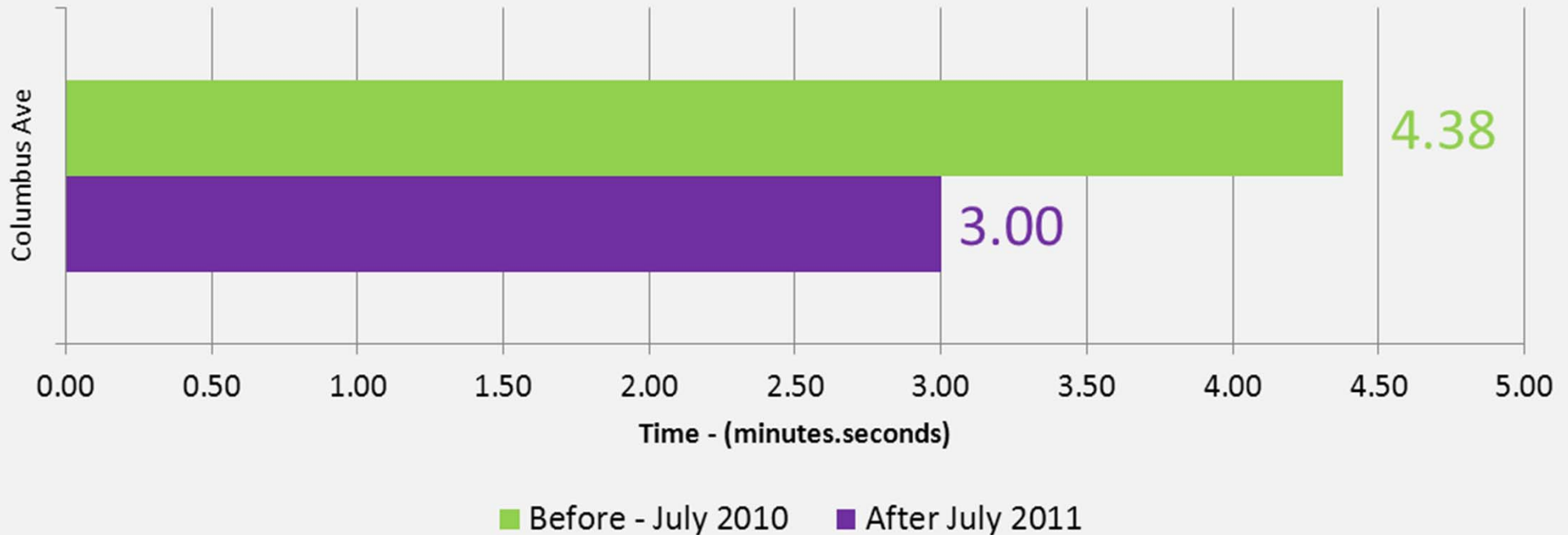
Lower total number of commercial vehicles parked in travel lanes

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.*

# Travel Times – Before and After

**Columbus Ave - Average Travel Time  
(W. 96-W. 77 St) - AM peak period**



Weekday travel times are derived from average of runs conducted once every 30 minutes along the corridor

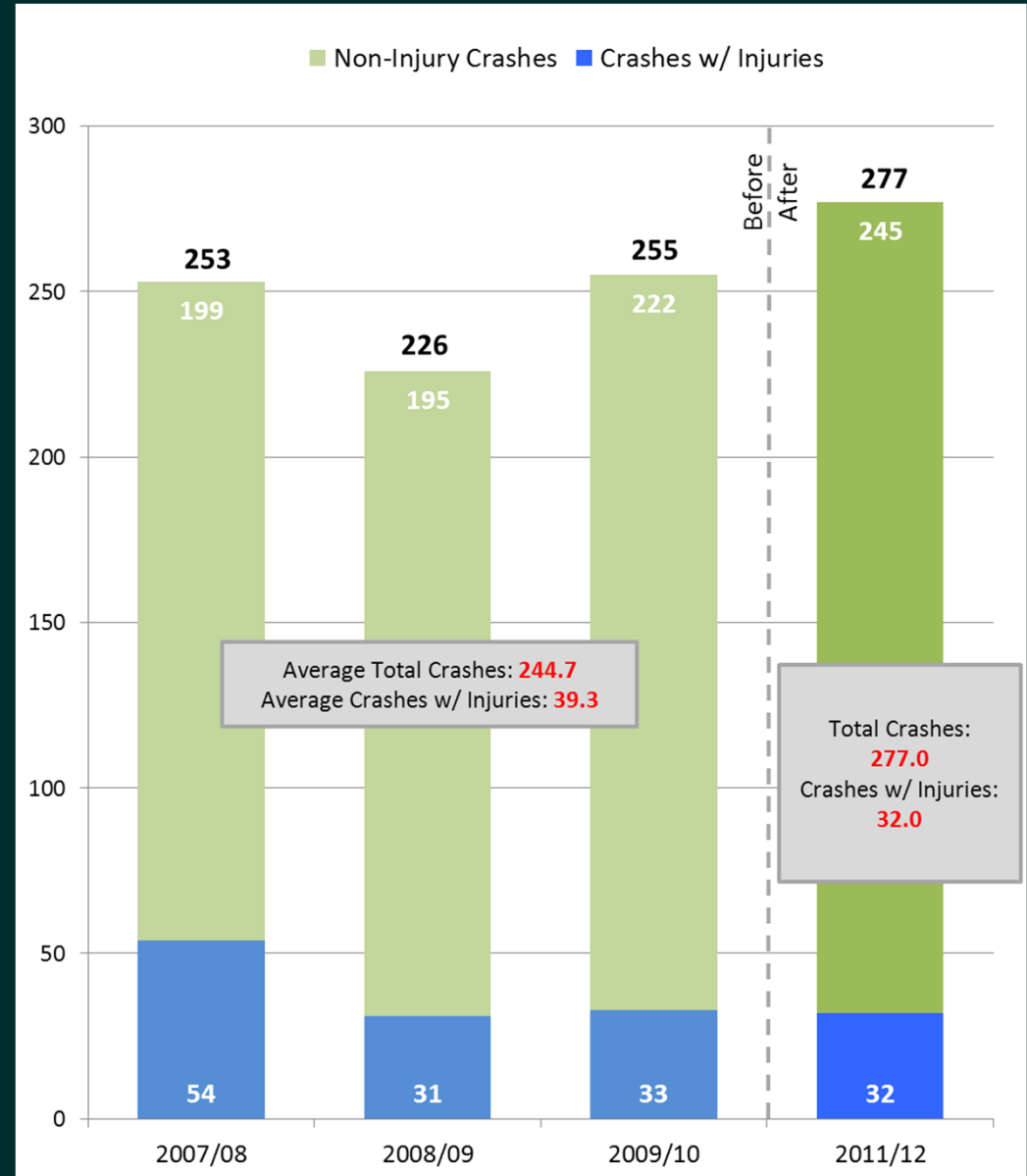
Increased roadway capacity contributes to shorter travel times

# Safety Data – Crash Analysis

## Columbus Avenue – Before/After Preliminary Crash Analysis

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

- Crashes w/injuries decreased **19 %**



Each before year period is the 12-month period beginning August 1 and ending July 31. The 1-yr after period is April 1, 2011 to March 31, 2012. The implementation period of August 1, 2010 to March 31, 2011 is excluded.  
Source: NYPD AIS/TAMS Crash Database



# Safety Data – Crash Analysis

## Columbus Avenue – Before/After Preliminary Crash Analysis

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

	Before				After		Change	
	'07/ '08	'08/ '09	'09/ '10	Average	'11/ '12	Average	Actual	Percent
Total Crashes	253	226	255	<b>244.7</b>	277	<b>277.0</b>	32.3	<b>13%</b>
Crashes w/ Injuries	54	31	33	<b>39.3</b>	32	<b>32.0</b>	-7.3	<b>-19%</b>
Motor Vehicle Occupant	28	10	12	<b>16.7</b>	16	<b>16.0</b>	-0.7	<b>-4%</b>
Pedestrian	27	20	19	<b>22.0</b>	13	<b>13.0</b>	-9.0	<b>-41%</b>
Cyclist	8	2	5	<b>5.0</b>	7	<b>7.0</b>	2.0	<b>40%</b>
Total Injuries	63	32	36	<b>43.7</b>	36	<b>36.0</b>	-7.7	<b>-18%</b>

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Source: NYPD AIS/TAMS Crash Database

- Total crashes w/ injuries are **down 19%**

# Economic Vitality

## Columbus Avenue BID at 100% Occupancy (March 2012)



Source: [CommercialObserver.com](http://CommercialObserver.com) Note: Columbus BID boundaries  
– West 82<sup>nd</sup> St to West 67<sup>th</sup> St



Street Re-design Area  
Columbus Ave BID



# Economic Vitality

Trees planted in all applicable concrete pedestrian island locations

Local groups have adopted each pit adding additional greenery

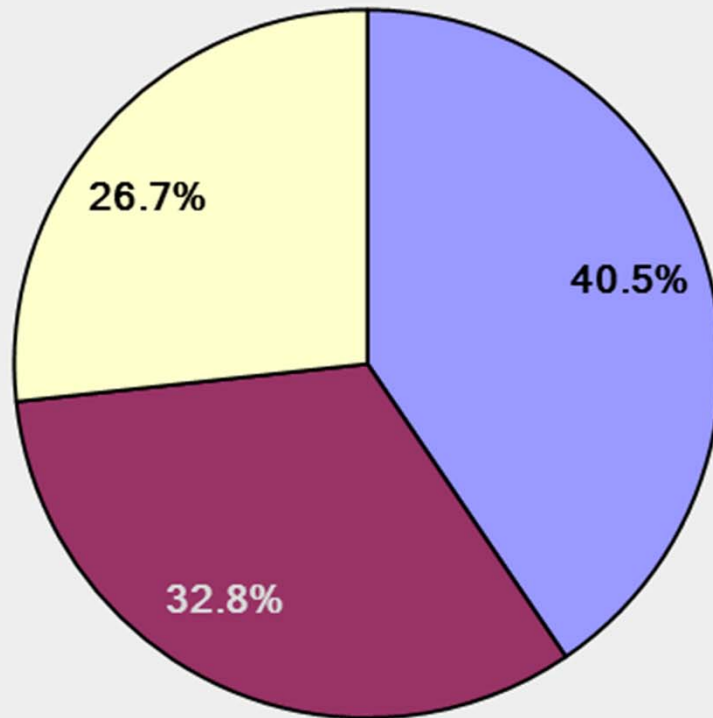




# Community Response to Design

## Councilmember Brewer Community Survey 73% respondents support current bike path design (October 2011)

In general, what do you think of the current design?



- The current design works for all road users (motorists, cyclists and pedestrians).
- The current design is a good start but needs some changes to make it work better.
- The current design does not work and should be substantially changed.



Questions?

Thank  
You