

7th Avenue and West 23rd Street

High Pedestrian Crash Location

Community Board 4 – January 19th, 2011

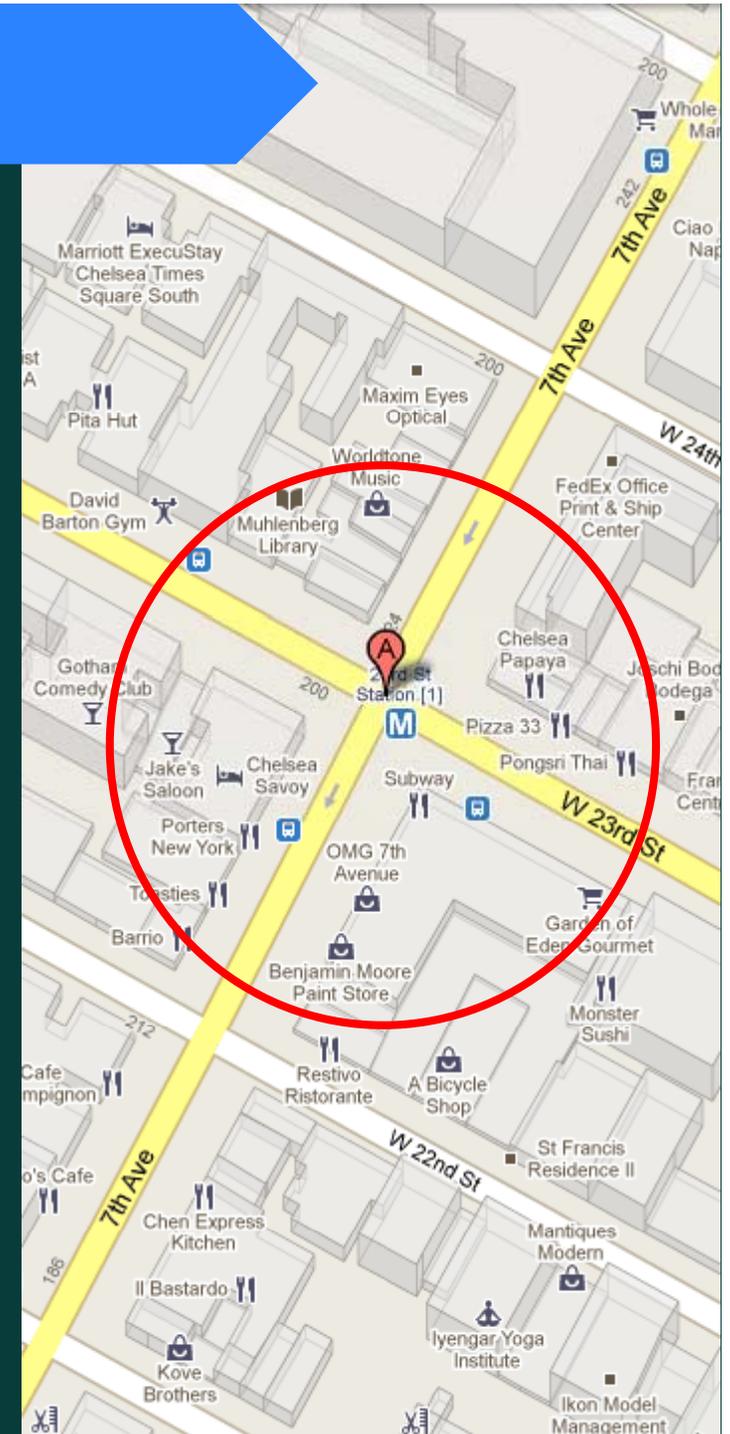
2011



Commissioner Janette Sadik-Khan New York City Department of Transportation
Office of Research, Implementation and Safety

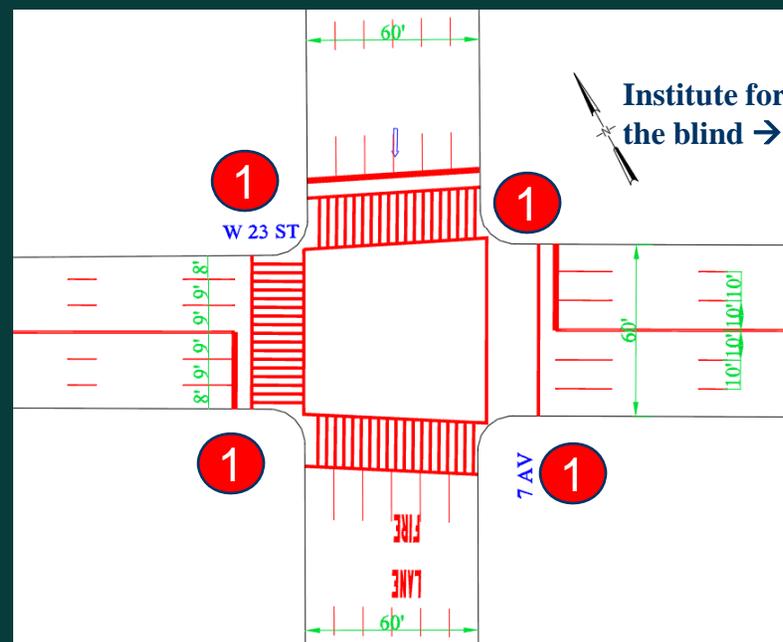
Project Background

- 2007 High Ped Crash Location
- West Midtown Safe Streets for Seniors pedestrian focus area



Existing Conditions

- Busy Manhattan commercial intersection
- High pedestrian volumes due to heavy transit and retail uses
- Bus and truck routes on both streets
- Existing LPI, audible signal (for blind)
- High percentile of crashes for all modes
- West 23rd Street width changes: 52' to 60'



Ranks in 99th Percentile for pedestrian crashes

7th Avenue and 23rd Street

2004-2008 (Five Years)

	Total Injuries	Avg Inj/Yr	Severity Percentile of Borough Intersections*
Pedestrian	20	4	99%
Bicyclist	3	0.6	97%
Motor Vehicle Occupant	32	6.4	96%
Total Injuries	55	11	99%

Fatalities, 2004-present:	2
Pedestrian	1
Bicyclist	0
Motor Vehicle Occupants	1

Existing Conditions



7th Ave and W 23rd St, west crosswalk, looking west



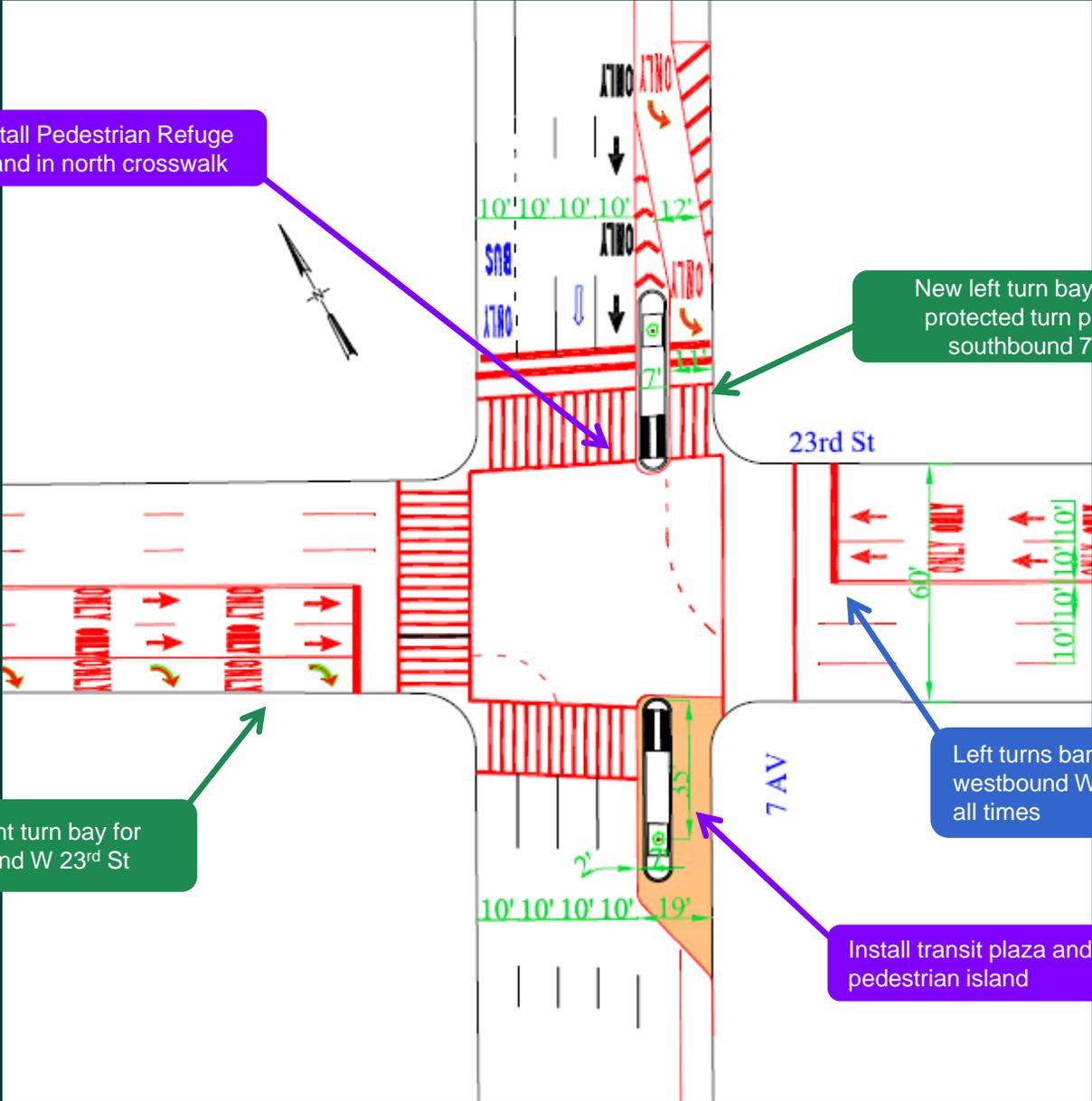
7th Ave and W 23rd St, east crosswalk, looking south

- Long crossing distances
- Multiple pedestrian/vehicle conflict points
- Heavy vehicular volumes with numerous trucks and buses



7th Ave and W 23rd St, southeast corner, looking south

Proposal



Install Pedestrian Refuge island in north crosswalk

New left turn bay with 13s protected turn phase for southbound 7th Ave

New right turn bay for eastbound W 23rd St

Left turns banned from westbound W 23rd St at all times

Install transit plaza and pedestrian island

Signal Timing Changes

- Provide a lagging left phase for the southbound to eastbound left turns
 - Provides 40 seconds of protected crossings in east crosswalk (previously 9 seconds)
- Ban westbound to southbound left turns at all times
 - Reduces pedestrian/vehicle conflicts in the south crosswalk
- New phasing plan increases protected crossing time to 39% from 31%)

EXISTING		PROPOSED	
Crosswalk	Phasing	Crosswalk	Phasing
North	38s (protected)	North	31s (protected)
South	38s (right conflicts)	South	31s (right conflicts)
East	9s (protected), 43s (left conflicts)	East	40s (protected)
West	9s (protected), 43s (right conflicts)	West	59s (right conflicts)
TOTAL	31% Protected	TOTAL	39% Protected

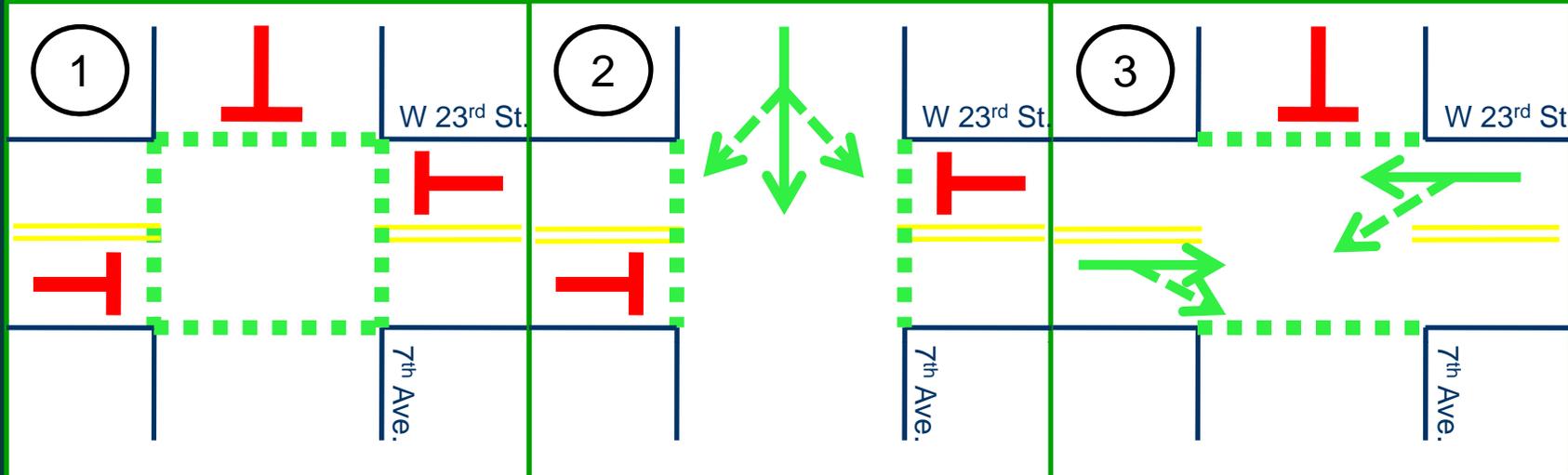
Signal Timing Changes

Existing Signal Timing

LPI: 9 Seconds

SB 7th Ave: 43 Seconds

EB & WB 23rd St: 38 Seconds

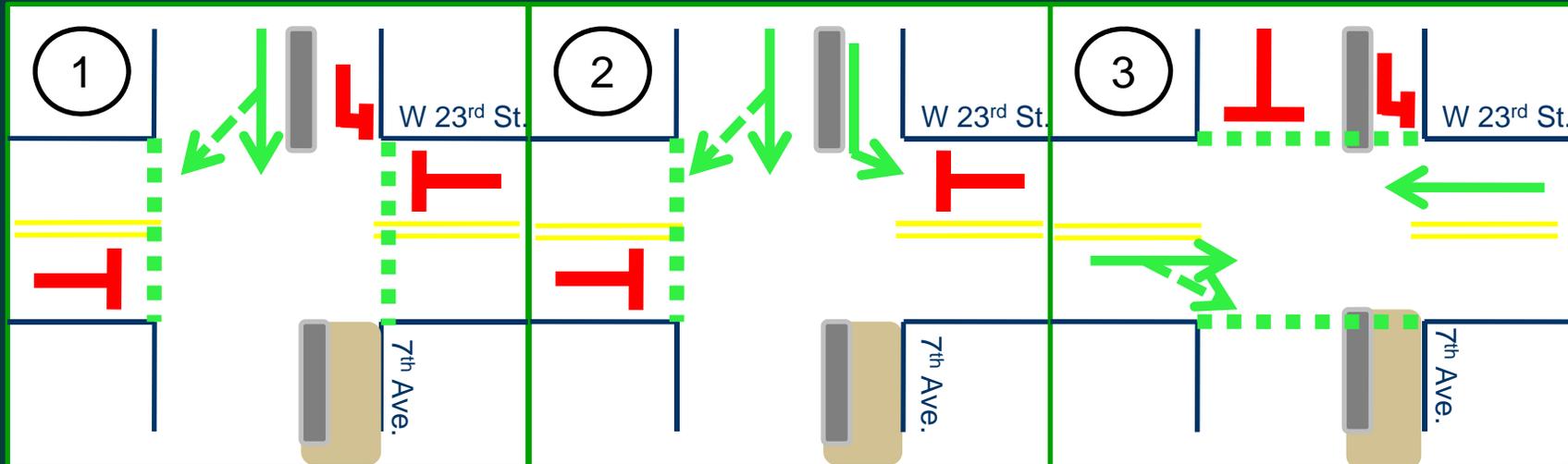


Proposed Signal Timing

SB 7th Ave: 30 Seconds

SB 7th Ave + SB Left : 29 Seconds

EB & WB 23rd St: 31 Seconds



Tradeoffs

- 4 parking spots on the NE corner of 7th Ave will be converted into the southbound left turn bay
- 3 commercial parking spots on the SW corner of W 23rd St converted to eastbound right turn lane
 - Hotel loading zone will remain
- 13 second southbound protected left turn phase will give pedestrians in the south and west crosswalks the most time
- Westbound to southbound left turns will be banned

Benefits

- Creates shorter, safer pedestrian crossings
- Provides predictable turning movements
- Provides two green pedestrian refuge islands
- Reduces pedestrian/vehicular conflicts



Questions?

Thank
You

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