Broadway – Amsterdam – West 71st Street

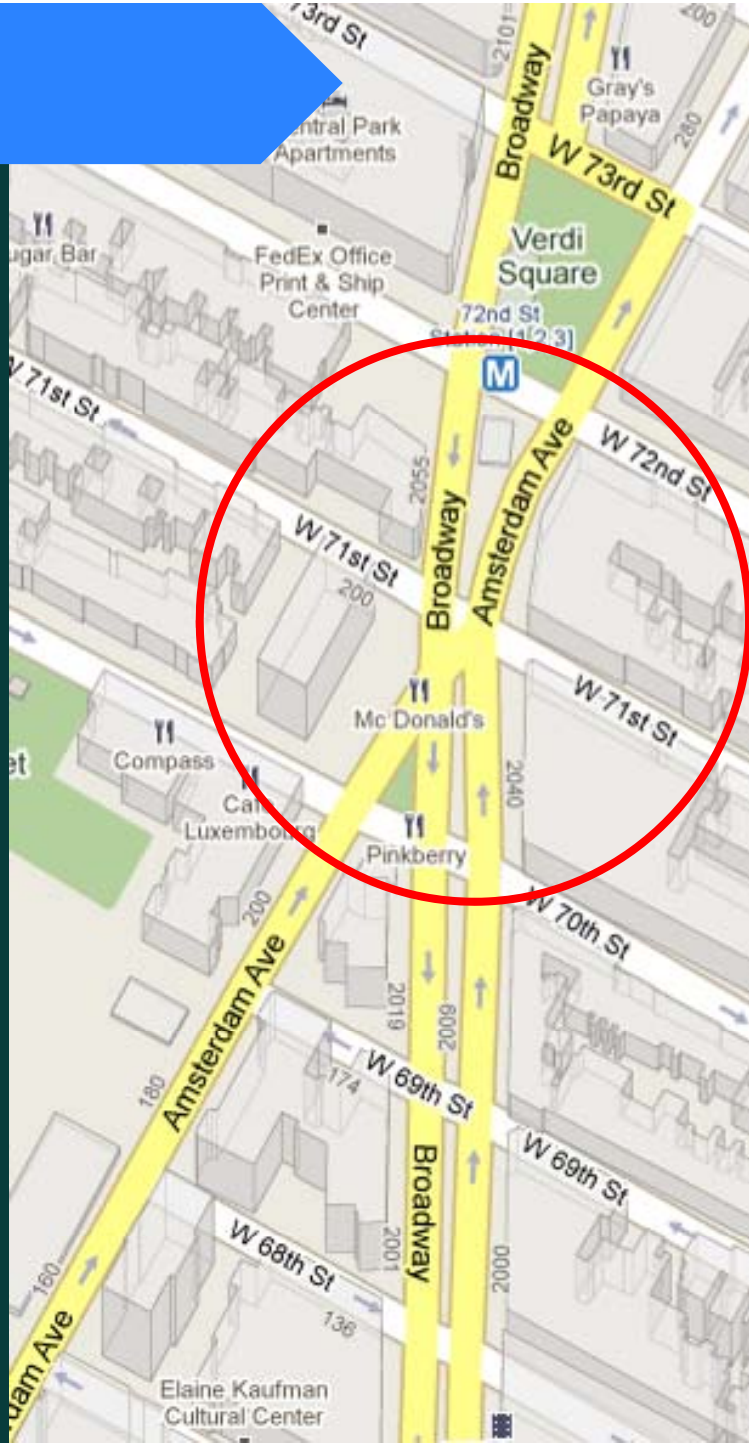
Pedestrian Safety Intersection Redesign

2011

Commissioner Janette Sadik-Khan New York City Department of Transportation
Office of Research, Implementation and Safety
Presentation given to Community Board 7 August 3, 2011

Project Background

- Elected Officials interest in improving intersection
- Upper West Side Senior Pedestrian focus area
- Upper West Side Transportation Study
- NYPD High Crash Location
- CB 7 requested pedestrian safety improvements
- Community group support



Existing Conditions

- Irregular, multi-legged intersection
- Wide streets with long crossing distances
- High pedestrian volumes due to heavy transit and retail uses
- High percentile of crashes for all modes

Ranked in 94th Percentile for pedestrian crashes

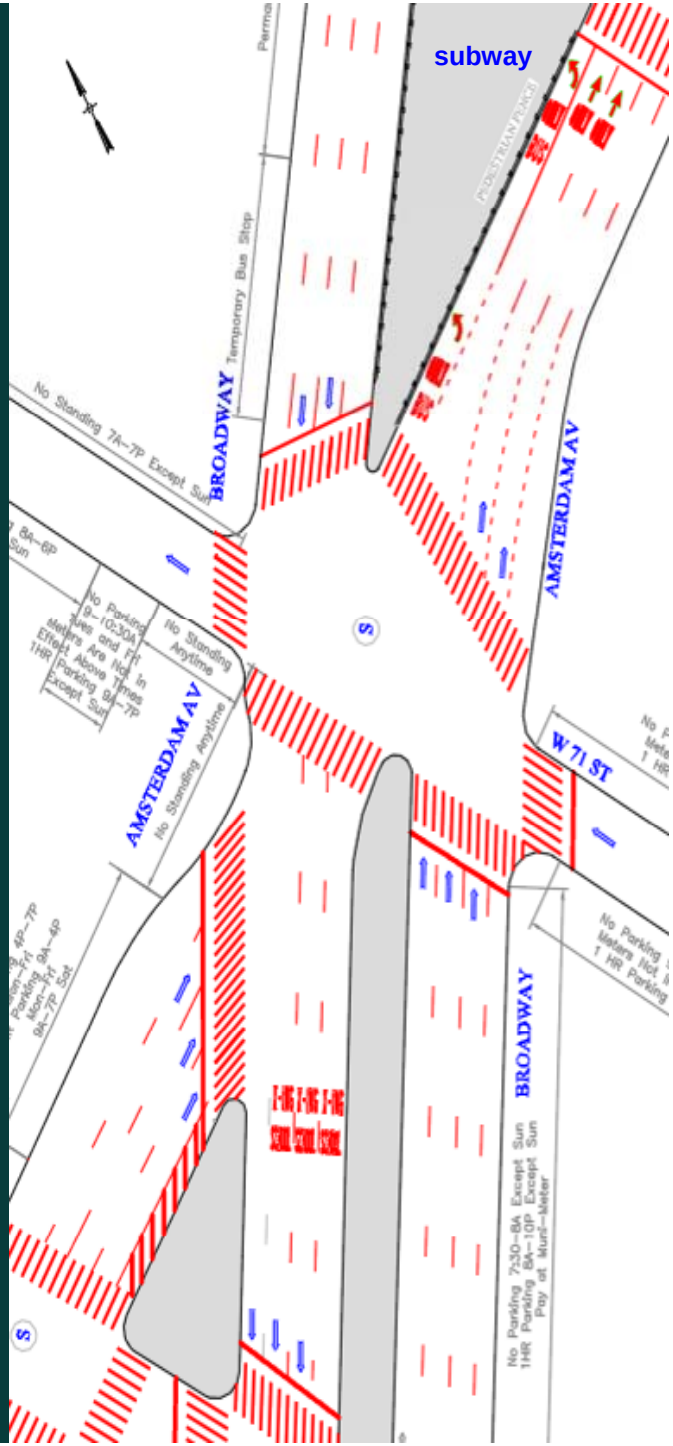
On Street from Street to Street

2004-2008 (Five Years)

	Total Injuries	Avg Inj/Yr	Severity Percentile of Borough Intersections*
Pedestrian	15	3	94%
Bicyclist	4	0.8	88%
Motor Vehicle Occupant	18	3.6	80%
Total Injuries	37	7.4	90%

Source Data: NYS Dept. of Motor Vehicles (Injuries and Severity)
NYCDOT (Fatalities)

* Percentile of Borough Intersections: Percentage of intersections in the same borough with fewer crashes per year, after accounting for severity of crashes.



Existing Conditions

West 71st St. and Amsterdam, facing north

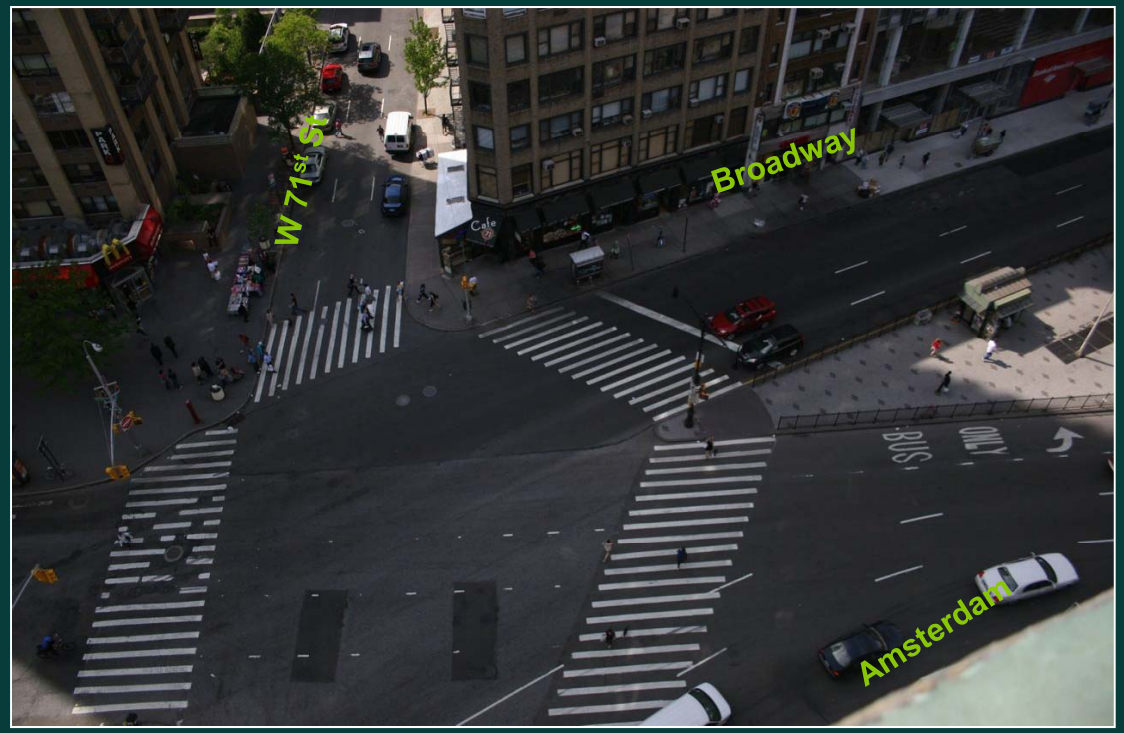
- Long crossing distances and not enough time to cross the street
- Multiple pedestrian/vehicle conflict points
- Heavy vehicular volumes with numerous trucks and buses

SB Broadway and NB Broadway/Amsterdam, facing north

West 71st St at Broadway and Amsterdam, facing south

Benefits of Proposal

- Shorter, safer pedestrian crossings
- Better street alignment
- Additional pedestrian space
- Additional crossing opportunities
- More time to cross the street
- Reduces pedestrian/vehicular conflicts
- Slows turning vehicles



Proposal

Remove a moving lane on southbound Broadway

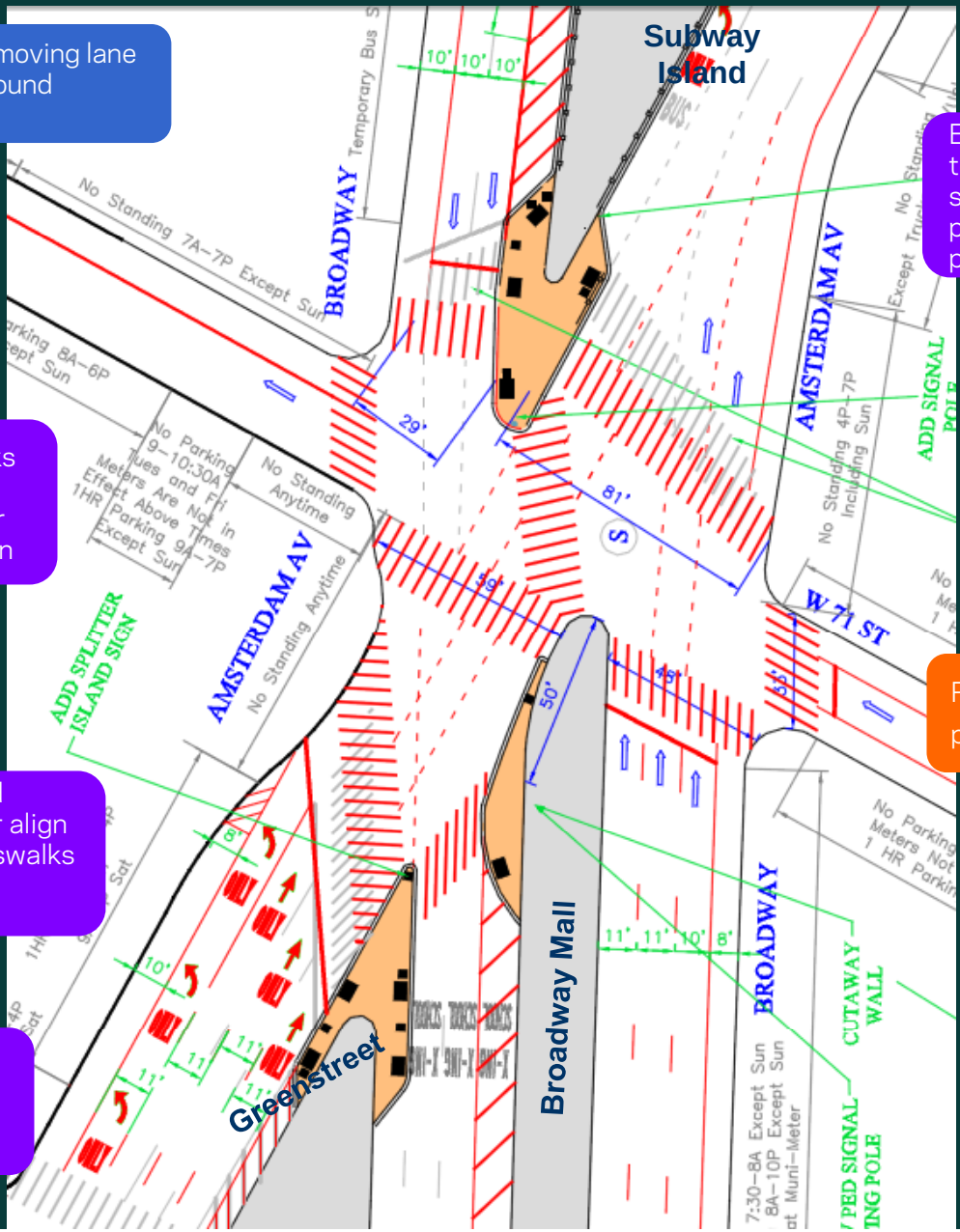
Extend subway island to better align and shorten crosswalks and provide more pedestrian space

Provide granite blocks and other pedestrian protective devices for seating and protection

Provide additional pedestrian crosswalks

Extend island and medians to better align and shorten crosswalks and provide more pedestrian space

Provide northbound left turn lane on Amsterdam Ave



Proposal

Broadway at Amsterdam and West 71st Street

Level of Service (LOS) Summary

Intersection Approach[1]	Mvmt[2]	Existing Conditions									Proposed Conditions								
		AM Peak (8:00 - 9:00 am)			MD Peak (1:00 - 2:00 pm)			PM Peak (5:00 - 6:00 pm)			AM Peak (8:00 - 9:00 am)			MD Peak (1:00-2:00 pm)			PM Peak (5:00-6:00 pm)		
		v/c Ratio	Avg Delay	LOS	v/c Ratio	Avg Delay	LOS	v/c Ratio	Avg Delay	LOS	v/c Ratio	Avg Delay	LOS	v/c Ratio	Avg Delay	LOS	v/c Ratio	Avg Delay	LOS
Broadway at Amsterdam and West 71st Street																			
WB - West 71st Street	TR	0.47	29.3	C	0.35	27.2	C	0.26	25.4	C	0.47	29.3	C	0.38	27.4	C	0.26	24.7	C
NB - Amsterdam Avenue	L										0.35	35.3	D	0.29	32.4	C	0.24	30.8	C
	T	0.53	32.8	C	0.74	37.0	D	0.77	37.0	D	0.66	38.4	D	0.82	42.1	D	0.95	53.6	D
NB - Broadway	T	0.55	30.2	C	0.72	34.2	C	0.76	35.1	D	0.56	28.3	C	0.78	36.2	D	0.90	44.7	D
SB - Broadway	TR	0.63	31.4	C	0.62	31.2	C	0.63	31.1	C	0.81	37.1	D	0.86	42.4	D	0.95	53.9	D
Overall Intersection			31.3	C		33.9	C		34.3	C		34.2	C		39.3	D		49.3	D

- Delay for SB Broadway at midday peak would increase by ~10 seconds
- Delay for NB & SB Broadway and NB Amsterdam Ave at PM peak would each increase by ~10-20 seconds
- All other movements remain relatively unchanged

Next Steps

- Implementation
  - Operational: August 29, 2011
  - Capital construction: Anticipated late 2012

Example of Operational Changes

The Bronx Hub

Questions?

Thank You

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