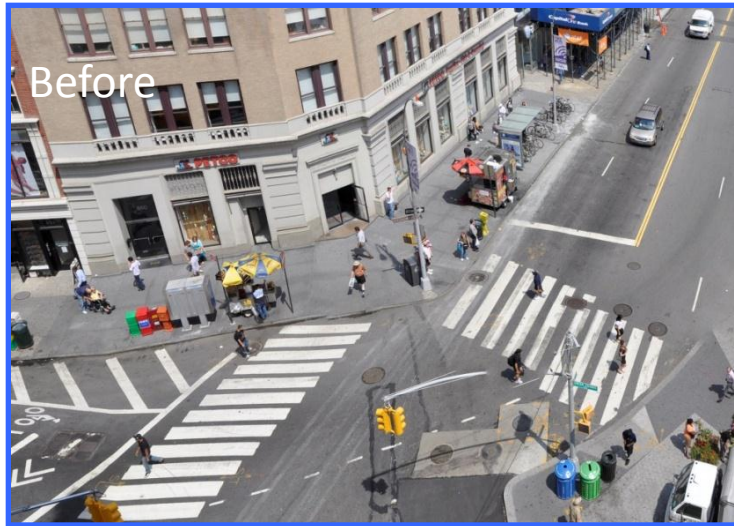


Broadway: Union Square



Project Summary



Implemented September 2010:

- Converted E. 17th Street from two-way to one-way
- Installed 12,784 sq. ft. of pedestrian plaza space on Broadway and E. 17th Street
- Upgraded 1.3 miles of bicycle facilities
- Eliminated conflicting vehicle movements at USW and E. 14th Street



Project Summary



Before

Implemented September 2010:

- Constructed landscaped pedestrian safety islands
- Added farmer's market parking
- Implemented side street traffic mitigation measures, particular focus on 18th Street
- Restricted turns off Park Avenue



After

Post-Implementation Adjustments

- Signal timing adjustments to 22nd Street at Broadway and Park Avenue
- Neckdown removed at 17th Street and Park Avenue
- Neckdown radius altered for easier turns off Broadway at 22nd Street
- New flexible delineators to clearly mark parking on Broadway from 23rd Street to 21st Street
- Signal timing changes on 12th Street to improve traffic flow

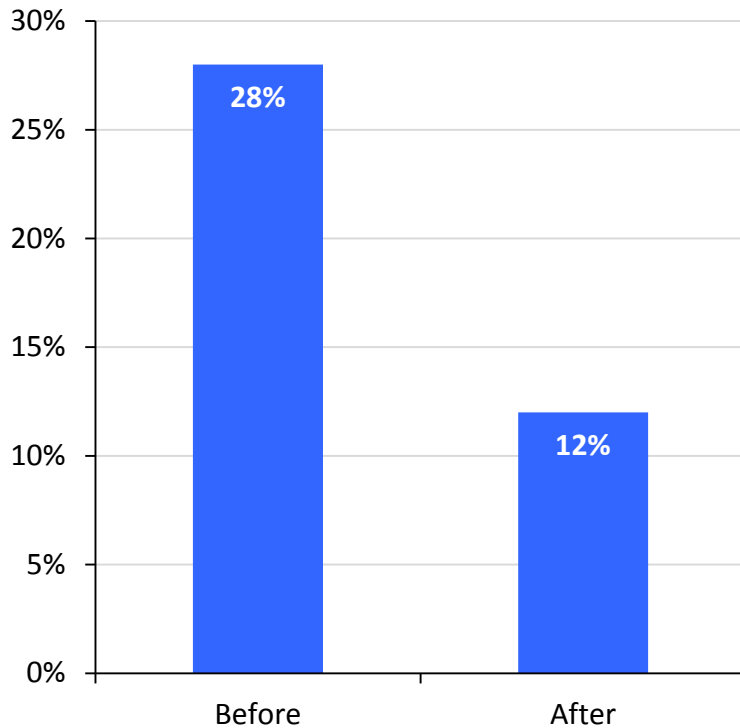


Safety

- BEFORE: 28% of vehicles exceeded 30mph speed limit (average speed 27mph)
- AFTER: 12% of vehicles exceeded 30mph speed limit (average speed 25mph)

Percentage of Drivers Travelling above Speed Limit

Broadway between 20th and 19th Streets



Before: radar speeds 7-9a and 8-10p July 27&29 2010, sample size 1300 vehicles
After: radar speeds 7-9a and 8-10p October 26&28 2010, sample size 400 vehicles

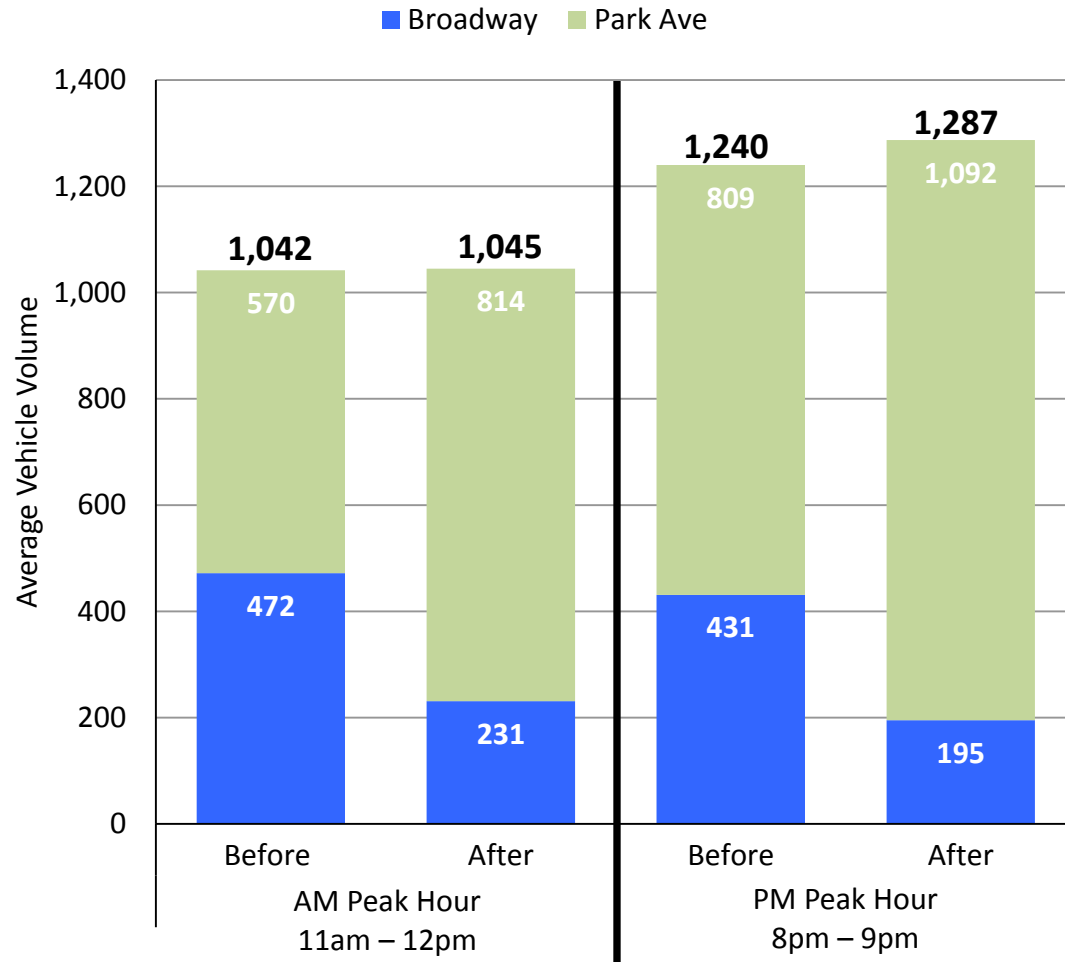
Mobility

- Combined southbound traffic volume of Broadway and Park Avenue was maintained



Average Vehicle Volume

Park Ave between 19th and 18th, Broadway between 18th and 17th



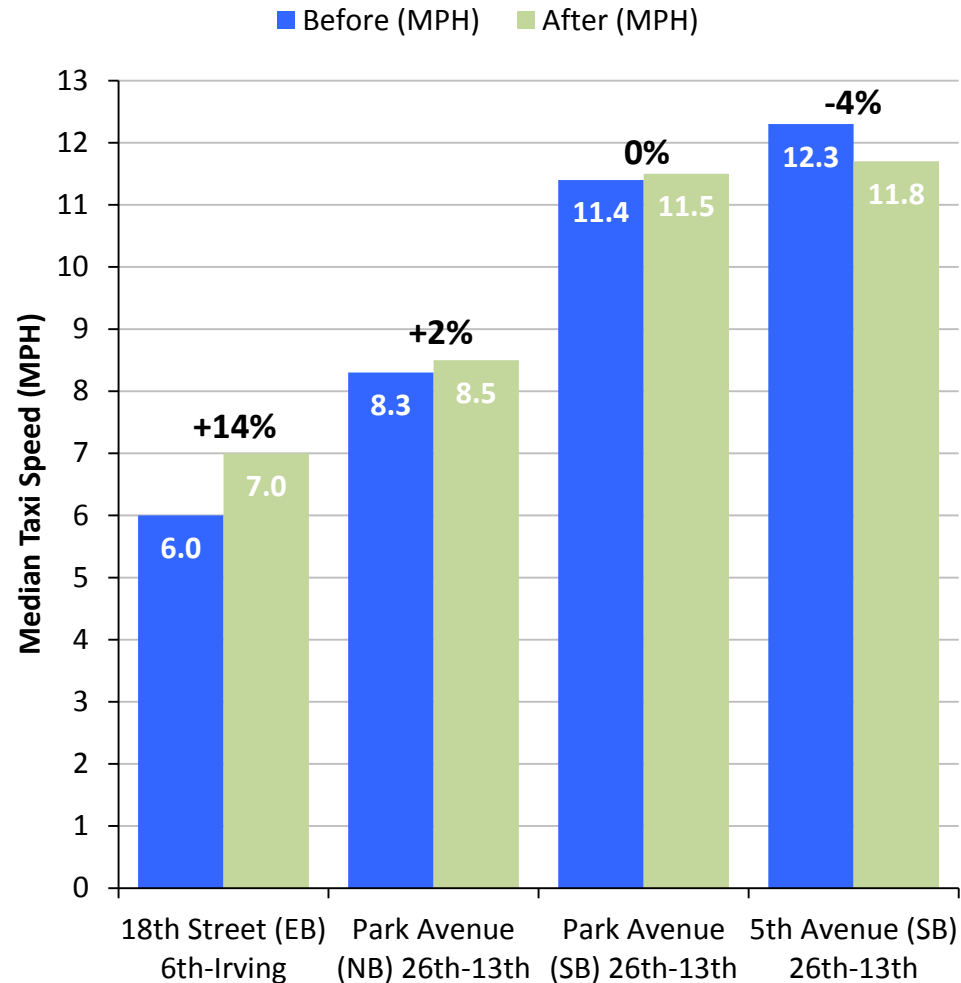
Before: Average midweek peak volume week of May 16, 2010

After: Average midweek peak volume week of October 24, 2010

Mobility

- Median speed for trips taken on 18th Street within the project area (6th Avenue to Irving Place) improved by 14%
- Speeds on Park Avenue remained relatively unchanged in both the northbound and southbound direction
- Median speeds for trips on 5th Avenue between 26th and 13th Streets decreased modestly

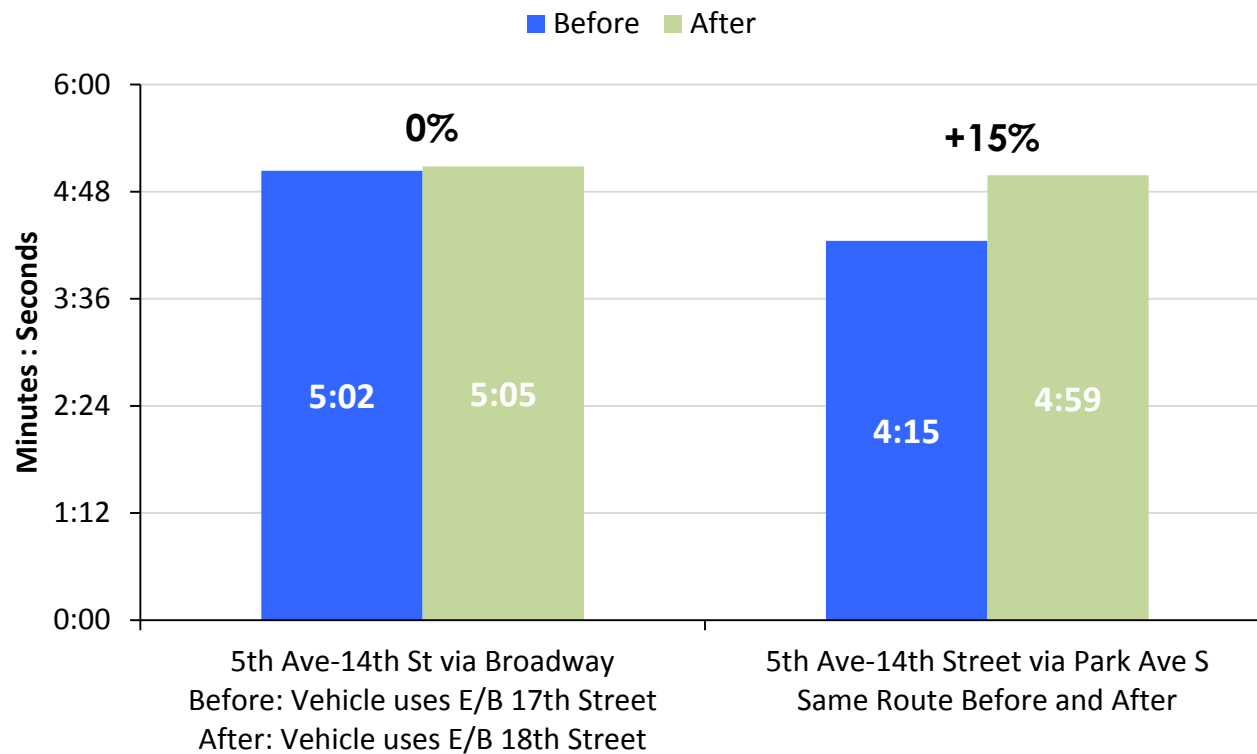
Project Area Taxi Speeds



Source: TLC GPS Data, Taxi Global Positioning System (GPS) data are provided by the Taxi and Limousine Commission (TLC) with results compiled by DOT. The GPS devices track the average speed of taxis in revenue service including time moving freely, stopped at traffic signals and delayed in congestion. Before results represent the median of average taxi travel speed taken Sun-Sat 7a-12p & 4p-9p from October 18th – 31st, 2009. After results represent the median of average taxi travel speed taken Sun-Sat 7a-12p & 4p-9p from October 17th – 30th, 2010.

Mobility

- Vehicles traveling from 5th Avenue/24th Street to 14th Street/Park Avenue South who used Broadway via 17th (before) or 18th Street (after) saw no change in travel times, however those using Park Avenue via 23rd Street saw a 15% increase.

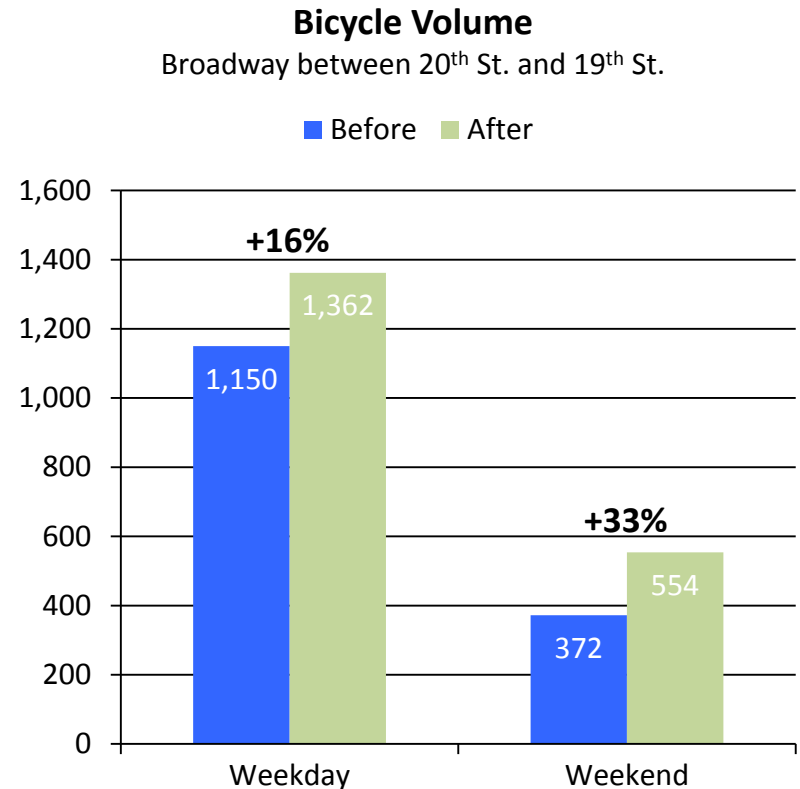


Note: Field travel time survey. Before results were taken in July 2010 while after results were taken in October 2010. In the before and after periods 78 runs were taken on both routes on a Tuesday, Wednesday and Thursday between 7am and 8pm.



Mobility

- Bicycle volumes on Broadway increased by 16% on weekdays and 33% on the weekends.

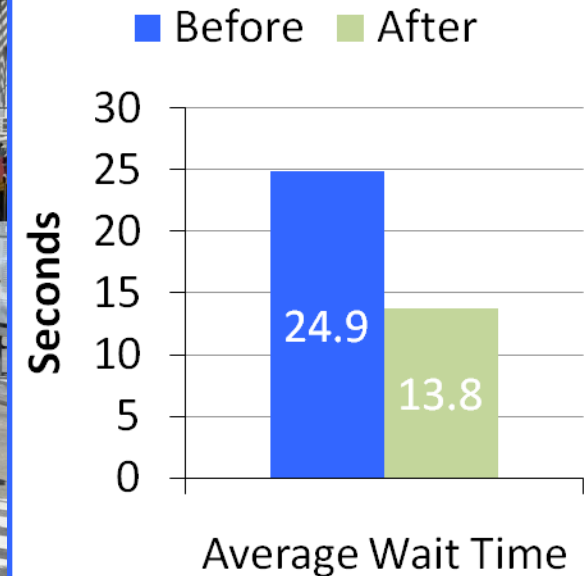


Note: Data from single weekday counts and single weekend counts between 7a & 7p on 6/2/2010, 6/5/2010, 7/21/2010, and 7/23/2010

Mobility

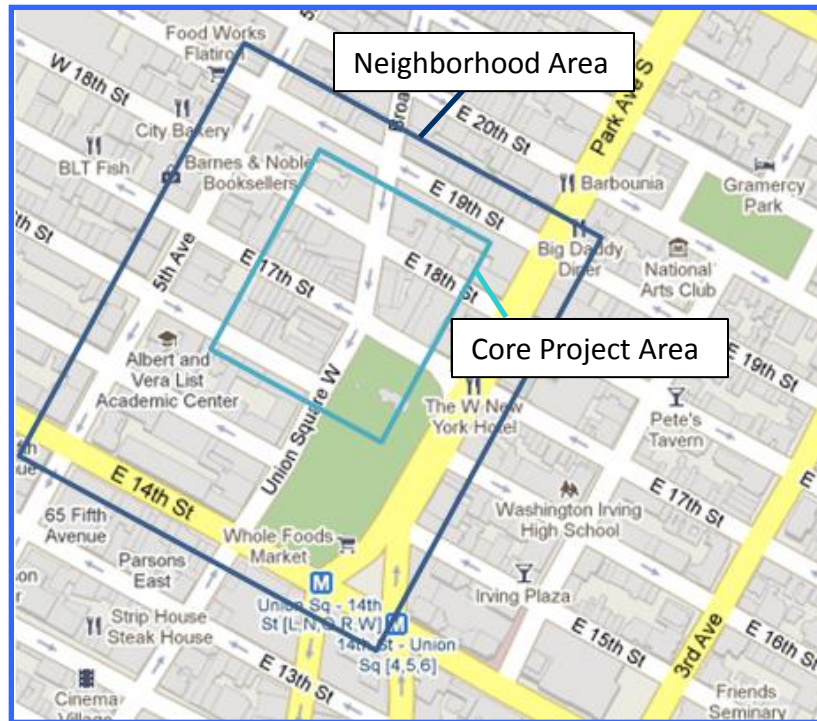
East Crosswalk of Broadway at 17th Street

- The crossing is 42% shorter (from 43ft to 25ft)
- “Walk” time more than doubled from 11 to 24 seconds
- Pedestrian wait time reduced by 45%



Economic Vitality

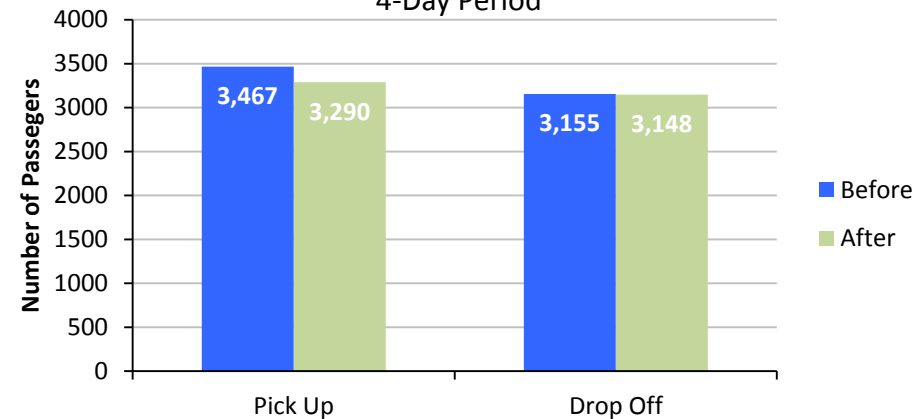
- The number of taxi pickups and drop offs in the project area were relatively unchanged before and after the project



Taxi Passenger Volume

Core Area

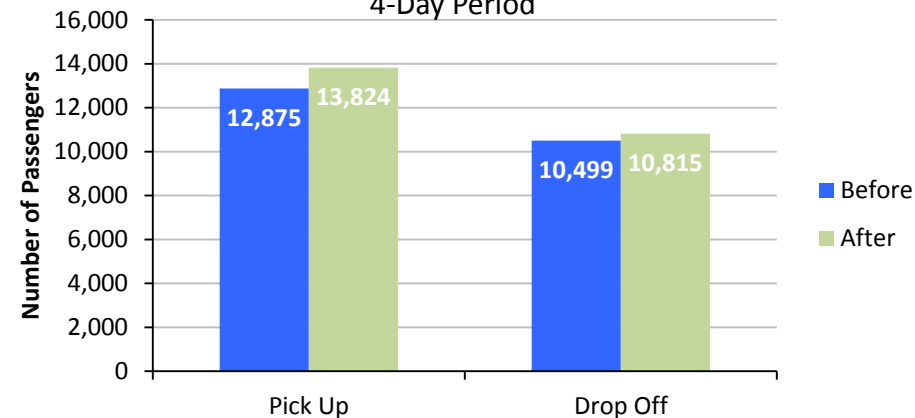
4-Day Period



Taxi Passenger Volume

Neighborhood Area

4-Day Period



Economic Vitality: Local Response

Unions Square Partnership Survey Results:

- 74% of respondents reported that they like the new traffic configuration
- 20% of store owners/ managers say the plazas have improved business and none have reported a negative impact

Greenmarket Response:

“Overall, having the pedestrian aisle along 17th Street has greatly benefited [the] Greenmarket.”

- Michael Hurwitz, Director

Sources: Union Square Partnership 4th Annual Community Opinion Survey and Union Square Business Survey

NEW YORK CITY DEPARTMENT OF TRANSPORTATION



Issues & Potential Enhancements

Issues Being Monitored	Potential Enhancements
<ul style="list-style-type: none">• Illegal left turns at Union Square West and 14th Street	<ul style="list-style-type: none">• Consider additional traffic network modifications• Install flexible delineators on 14th Street centerline
<ul style="list-style-type: none">• Cross-town traffic congestion	<ul style="list-style-type: none">• Install turn lanes at heavy turn locations
<ul style="list-style-type: none">• Southbound express bus operations at Broadway & 23rd Street and Park Avenue & 23rd Street	<ul style="list-style-type: none">• Explore new bus routes on alternate cross streets
<ul style="list-style-type: none">• Longevity of existing plaza elements	<ul style="list-style-type: none">• Prioritize capital funding to upgrade elements and enhance plazas

Thank You

