



GRAND ST UPDATE

Brooklyn Community Board 1 - May 21, 2019



Grand St

Project Route and Design

Route provides bicycle connection across Williamsburg Bridge



Safety Statistics



Council District 34

- Council district with the highest number of fatalities in Brooklyn (3rd highest in NYC)
- Pedestrians are more than half of fatalities in the district
- Half of the fatalities occurred overnight
- A quarter of the fatalities involved a truck
- Motorcyclists accounted for 20% of the fatalities
- 15% of the fatalities involved a driver without a valid drivers license

Fatalities in Council District 34, 2014 - 2019					
Year	Peds	Cyclist	Motorcycle	Motor Vehicle	Total
2014	5	2	1	1	8
2015	3	0	0	1	4
2016	3	2	0	0	5
2017	1	2	5	1	9
2018	6	0	3	1	10
2019*	3	1	0	0	4
Total	21	7	9	4	41

*YTD as of April 17, 2019

Grand St

Analysis

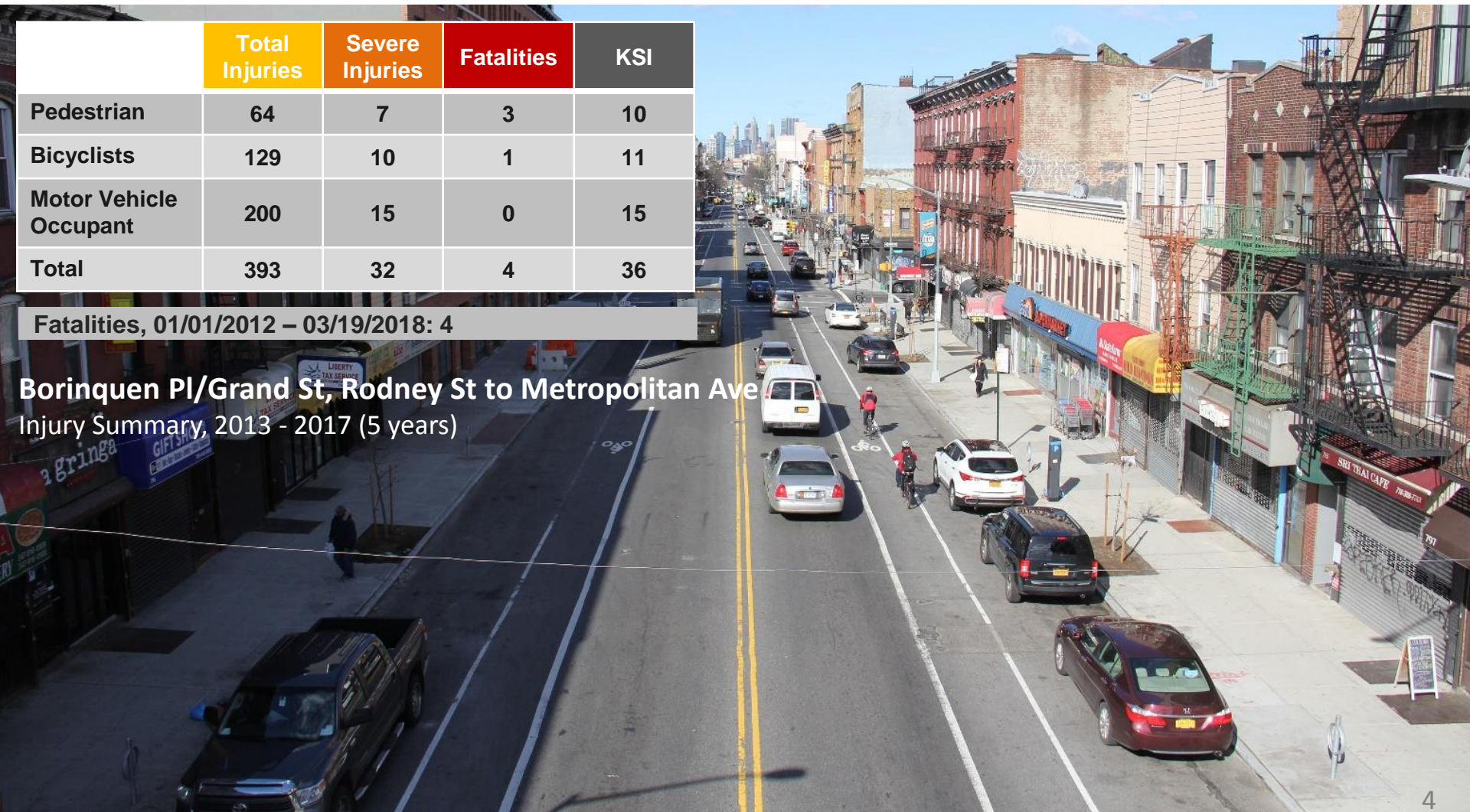
Safety Statistics

Borinquen PI/Grand St between Rodney St and Metropolitan Ave is a Vision Zero Priority Area with 3 pedestrian fatalities and 1 cyclist fatality between 2012 and 2018

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	64	7	3	10
Bicyclists	129	10	1	11
Motor Vehicle Occupant	200	15	0	15
Total	393	32	4	36

Fatalities, 01/01/2012 – 03/19/2018: 4

Borinquen PI/Grand St, Rodney St to Metropolitan Ave
Injury Summary, 2013 - 2017 (5 years)

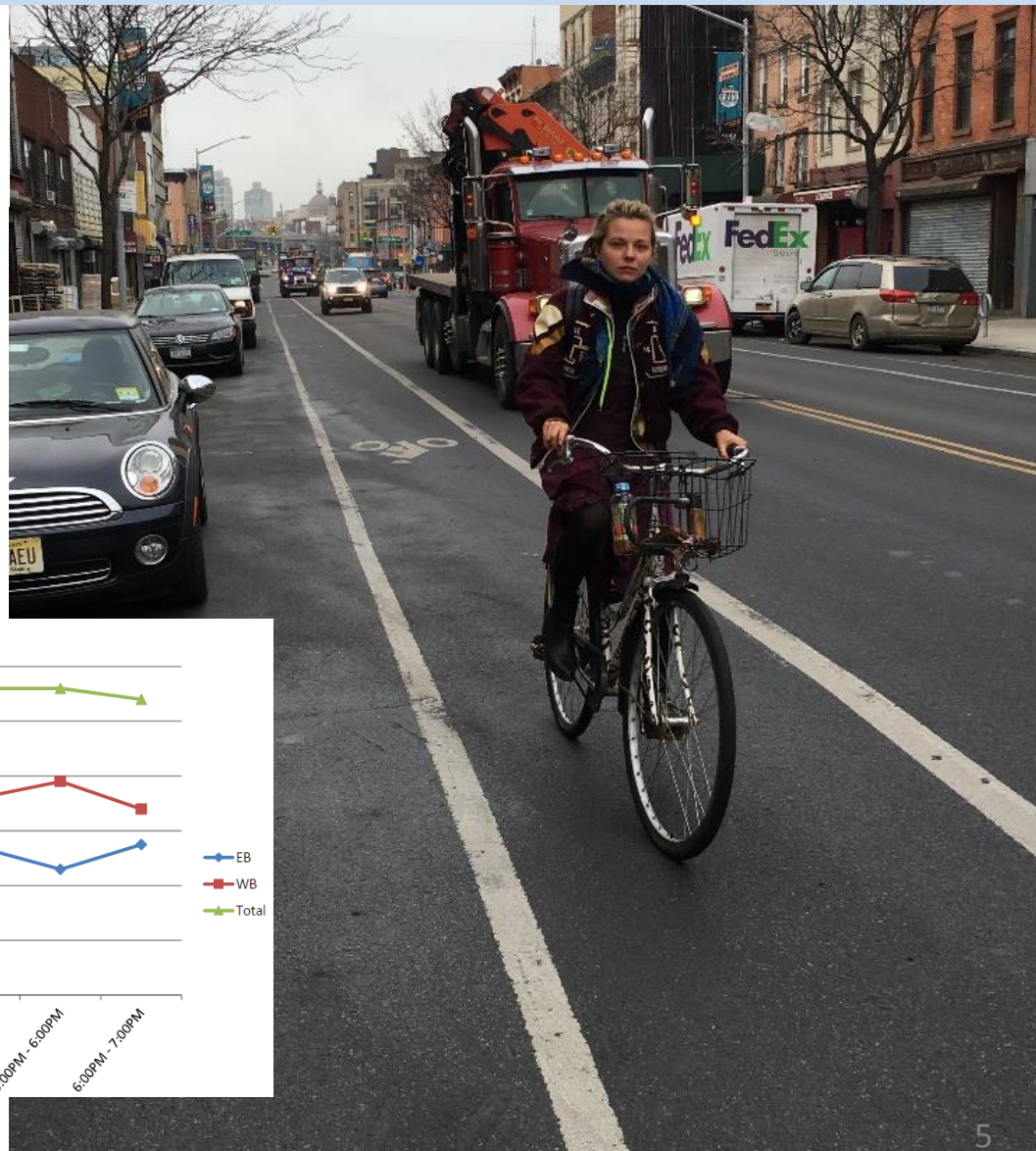


Grand St

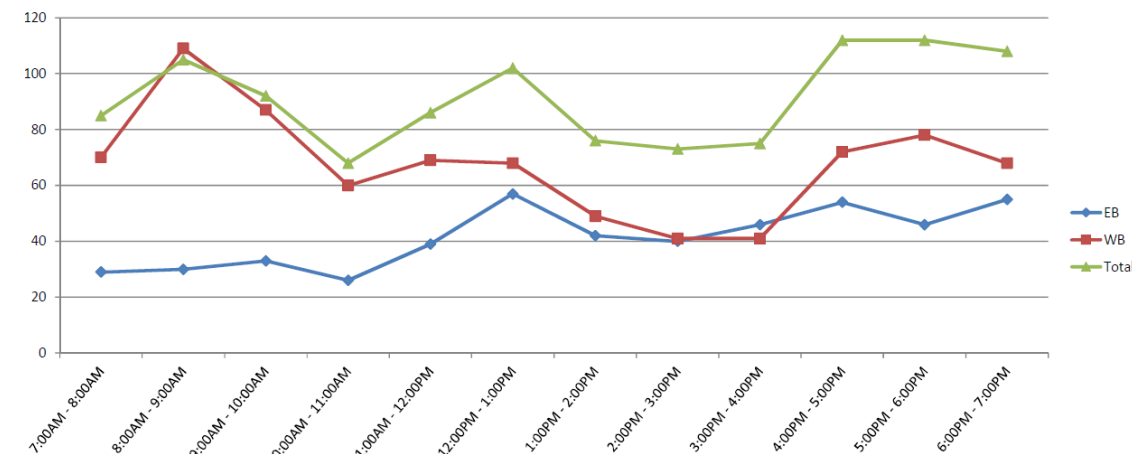
Analysis

High Bicycle Ridership

- On a typical a weekday 1000+ cyclists use Grand St
- Counts were collected over a 12 hr period in September, 2016 and September, 2018



12-Hour Bicycle Count (7:00 AM - 7:00 PM)

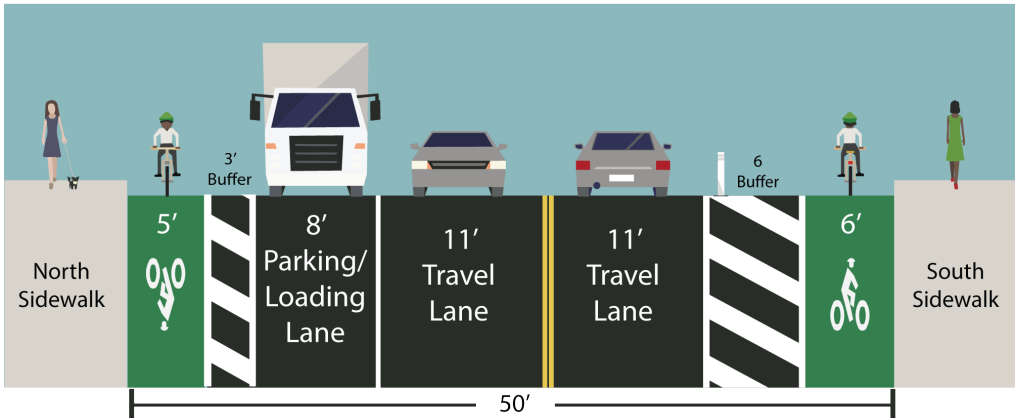


Weekday Counts – Sept 2018

Grand St

Project Route and Design

Typical design, Grand St



Bike lane separated with flexible delineators on the south side and parking on the north side



Grand St (Bushwick Ave – Humboldt St)



Design Justification

- Response to request for safety improvements following a number of severe injuries and fatalities
- High volume of cyclists with direct access to Williamsburg Bridge and across Newtown Creek
- Installation started in October 2018 in preparation for L Project, put on hold due to weather

Grand St

Design Updates – Union Ave to Waterbury St

- **Finish** project: finish installing green paint, install delineators where necessary, and add turn treatments
- **Will not install** bus lanes, shuttle stops, and vehicle restrictions
- **Relocating** three bus stops back to the before condition
 - Catherine St to Olive St,
 - Bushwick Ave/Graham Ave: near side to far side
- **Offset Crossings** installed where feasible
- **Pedestrian island** to be installed at Manhattan Ave
- **Gaining** 8 additional parking spaces on the north side

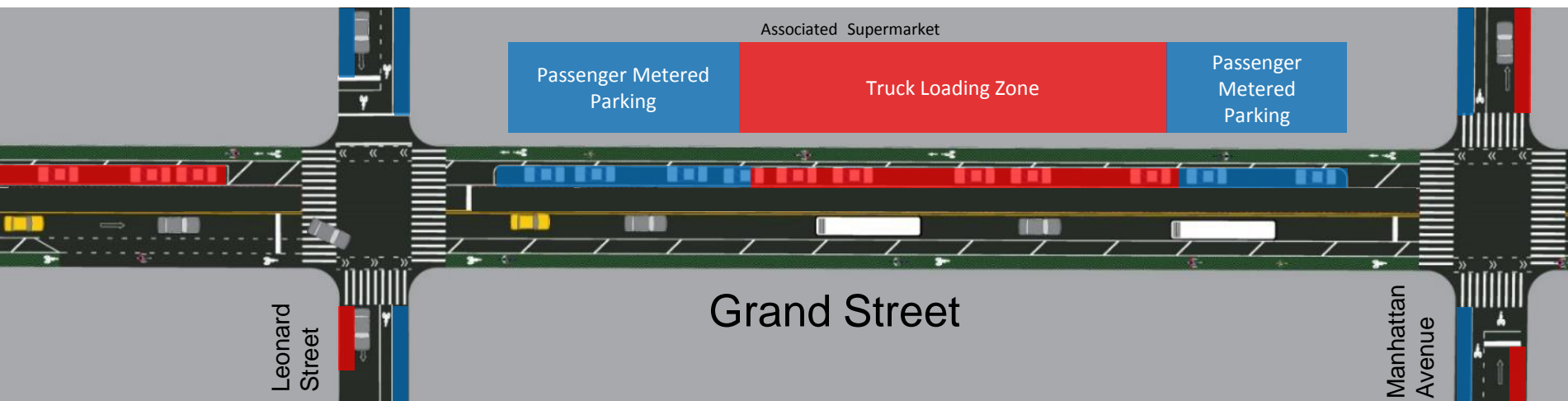


Grand St

Making It Work

Curb Management

- **Wide buffer** maintains emergency access
- **Updated parking regulations** to accommodate loading activities and provide local customer access
 - **Increase turnover.** Add commercial and metered parking on the side streets to help provide parking supply along the corridor
 - **Increase customer access.** Reduce parking time limits from 2 to 1 hour on Grand St to improve turnover at the curb
 - **Dedicate commercial space** on every block from Union St to Bushwick Ave that becomes passenger metered parking from 4pm to 10pm

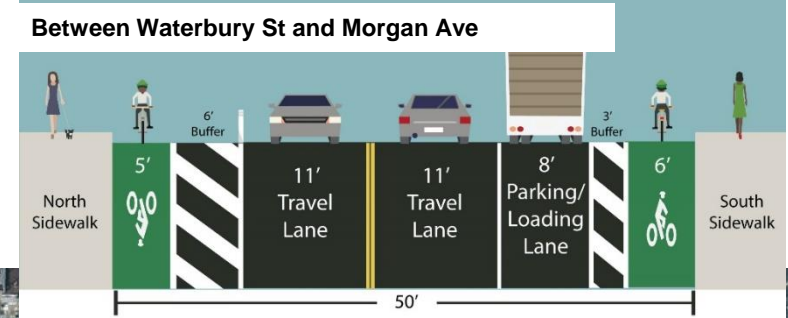
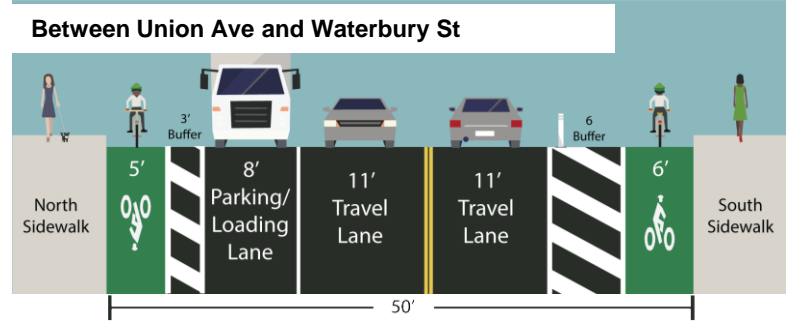


Example siting of loading zones
Siting of loading zones are done on a block-by-block basis

Grand St

Design Updates – Waterbury St to Morgan Ave

- **Improve** curb access along the south curb
- **Update** design to accommodate higher volume of south side loading between Waterbury St and Morgan Ave
- **Provide flexibility** on south side with wider bike lane at 6 feet
- **Gain 4 additional parking spots**



Markings implementation started in October 2018 and was put on hold December 2018 for the winter due to weather and construction overlap

Remaining work to be installed Spring 2019

- Green paint and lane lines
- Bike symbol markings
- Parking regulation & meter updates

Updates based on feedback, examples include:

- No vehicle restrictions and shuttle bus stops
- Relocating three bus stops back to the before condition (Catherine St to Olive St, Bushwick Ave/Graham Ave: near side to far side)
- Updated turn treatments at Graham Ave, Manhattan Ave, and Lorimer St
- Updated design between Waterbury St and Morgan Ave
- Updated parking regulations to accommodate loading and customer access



THANK YOU!

Questions?



NYC DOT



NYC DOT



nyc_dot

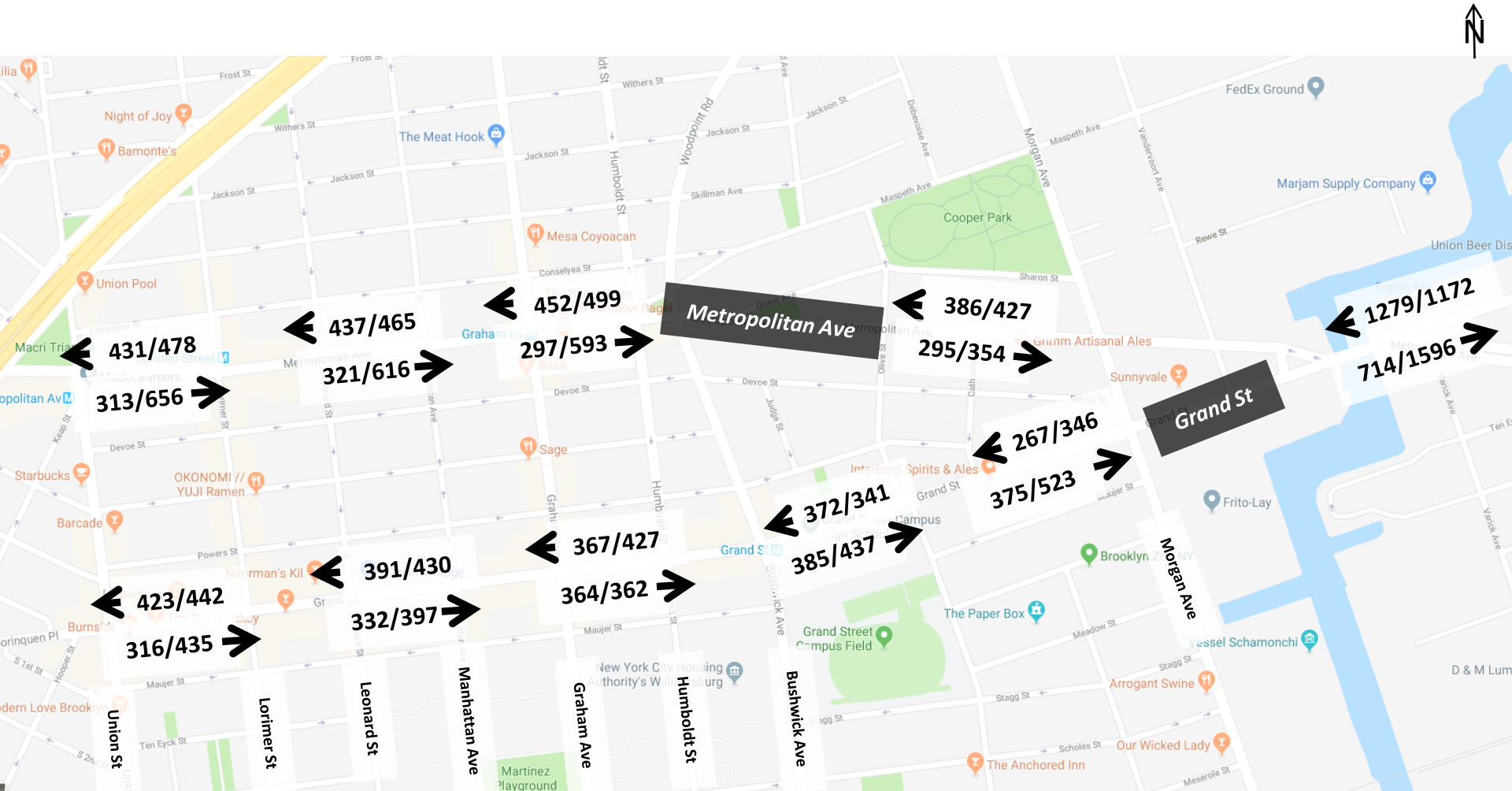


NYC DOT

Appendix

Project Background

Peak Hour Vehicle Volume Collected 2018 (AM/PM)



Peak hours: 7:15-8:15am, 5:00-6:00pm

CURB MANAGEMENT: PARKING/LOADING DESIGN AND REGULATIONS

Continue to explore design and regulation options

- Parking regulations to mitigate parking in buffer or bike lane
- Additional locations delineated for pick ups/drop offs
- Maintain emergency access
- Commercial floating loading
- Additional loading zones

Curb Regulation Signs



No Stopping

No Standing

No Parking

Is waiting allowed?

No

No

No

Can I stop to load or unload a package or merchandise at curbside?

No

No

Yes

Can I stop to drop off or pick up passengers?

No

Yes

Yes

Adjusted Loading Zones



29th St, MN

Hotel Loading Zones



29th St, MN

COUNCIL DISTRICT 34

Traffic Fatalities

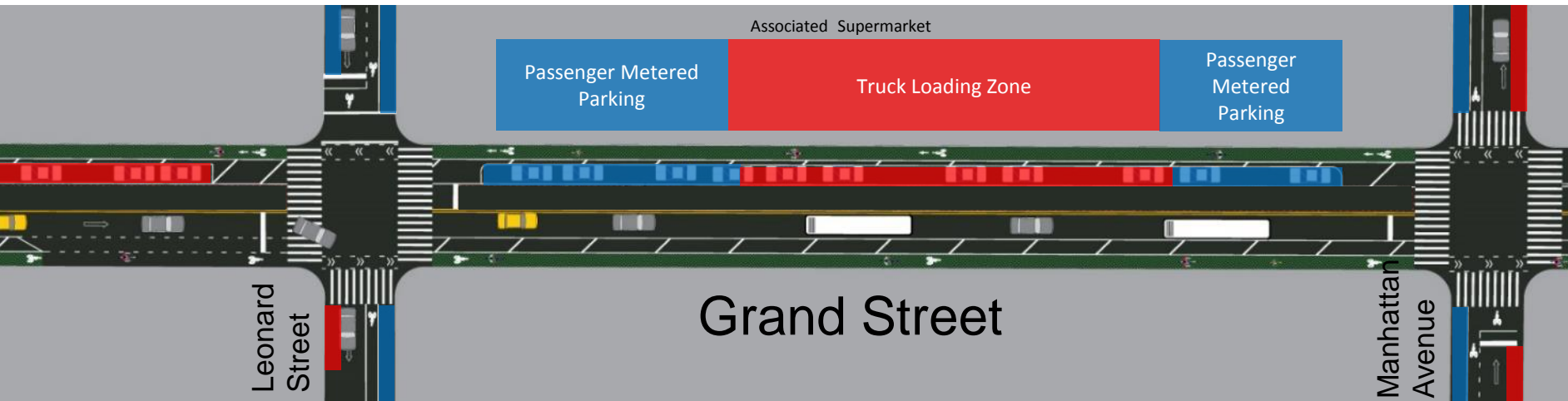
Fatality Analysis

- Driver behavior
 - Speed was noted in 15% of the fatalities
 - 20% of the fatalities involved a turning vehicle not yielding to a pedestrian
- Location
 - 63% of the fatalities occurred at a Vision Zero Priority Geographies
 - 75% of the bike fatalities occurred where there was no bike facility
 - Broadway, Metropolitan Ave and Grand Ave are the most dangerous corridors
- Time of Day
 - 3-6AM is the most dangerous time

CURBSIDE REGULATIONS

Rearranging curbside space for commercial and passenger vehicles

- Dedicate commercial space on every block from Bushwick to Union that becomes passenger metered parking from 4pm to 10pm
- Reduce parking time limits from 2 to 1 hour on Grand St to improve turnover at the curb
- Add commercial and metered parking on the side streets to help provide parking supply along the corridor



WHAT WE SAW- PARKING BEHAVIOR

What did our data collection show us?

Relatively low occupancies around 50-60% consistent from 2015 and 2018 data

Most vehicles are only parking at the curb for 1 hour or less



WHAT WE SAW- TRUCKS

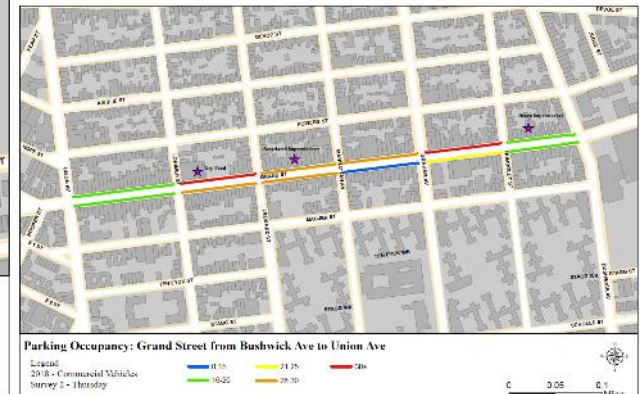
(BUSHWICK AVE TO UNION AVE)

What did our data collection show us?



Three large supermarkets along the north side of the corridor generate high volumes of deliveries

Only two locations had dedicated loading zones on-street



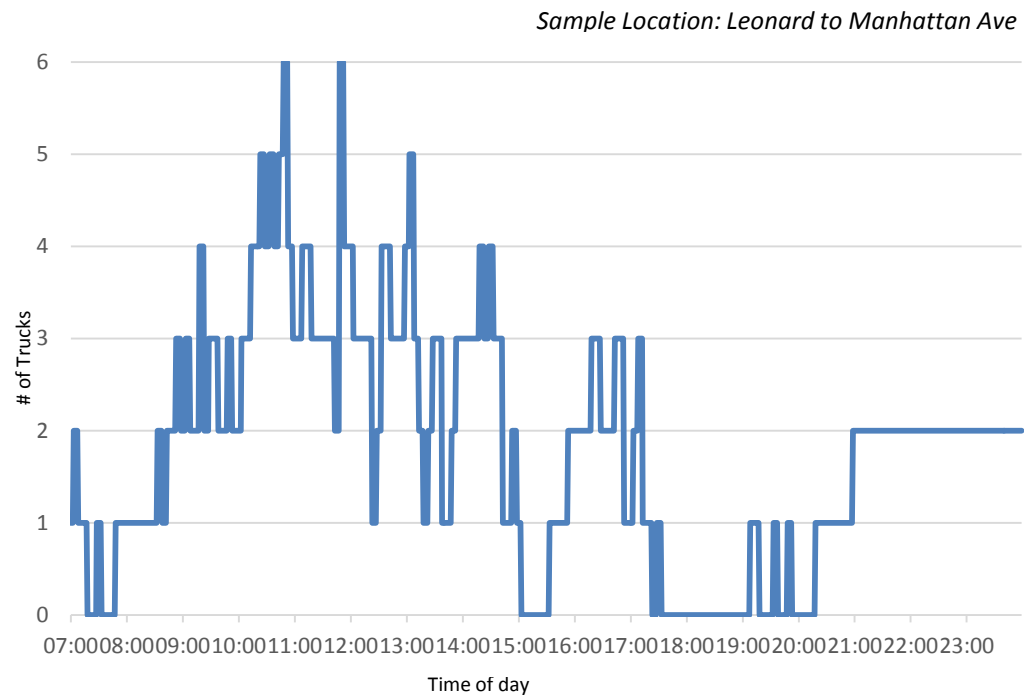
WHAT WE SAW- TRUCKS

(BUSHWICK AVE TO UNION AVE)

What did our data collection show us?

Most trucks were able to access the curb

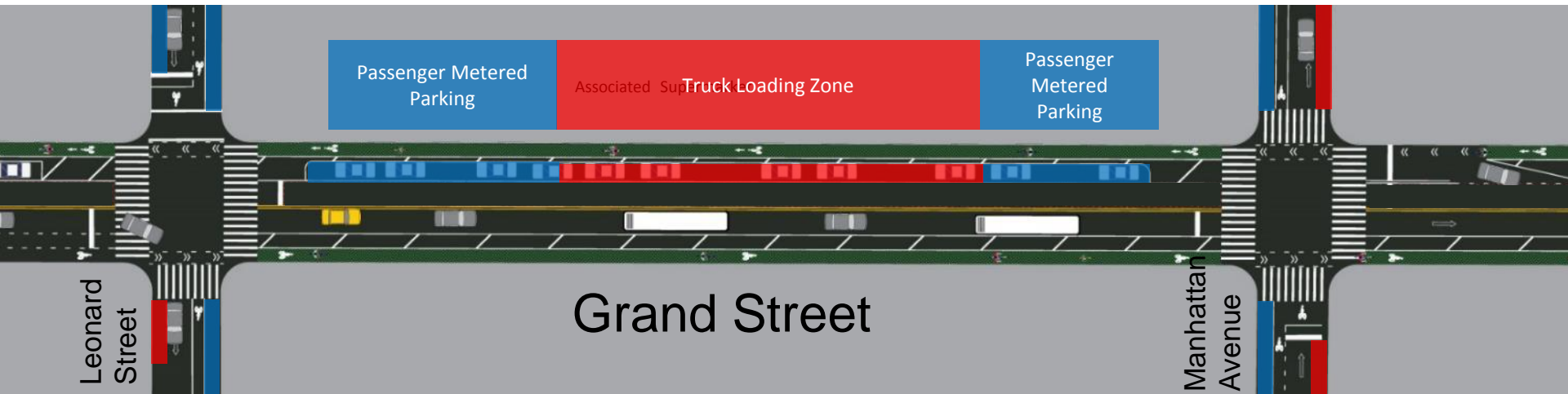
Truck activity was higher during the morning and midday period



SET ASIDE COMMERCIAL SPACE FOR DELIVERIES

Dedicated curbside space for trucks

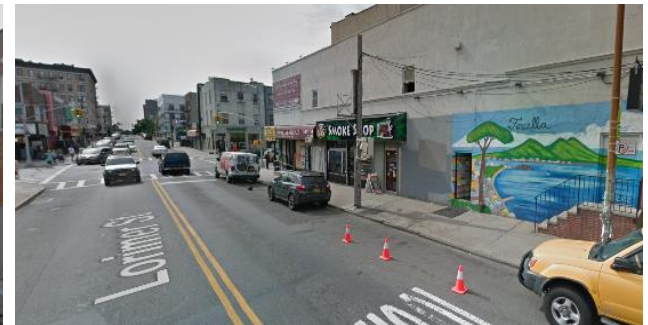
- Extend the 2 existing loading zones on Grand St
- Add 4 new loading zones between Humboldt St and Union St
- After 4pm revert new loading zones to passenger metered parking
- Add 4-6 new smaller loading zones on side streets between Bushwick and Union St



PROVIDING LOCAL CUSTOMER ACCESS

Provide motorists and customers alternative parking opportunities

- Reduce parking time limits from 2 to 1 hour on Grand St to improve turnover at the curb
- Open up spaces on side streets with longer 2 hour time limits for motorists who need access to Grand St
- Only meter adjacent to commercial uses on selected side streets
- Expand regulations till 10pm to match demand along Grand St



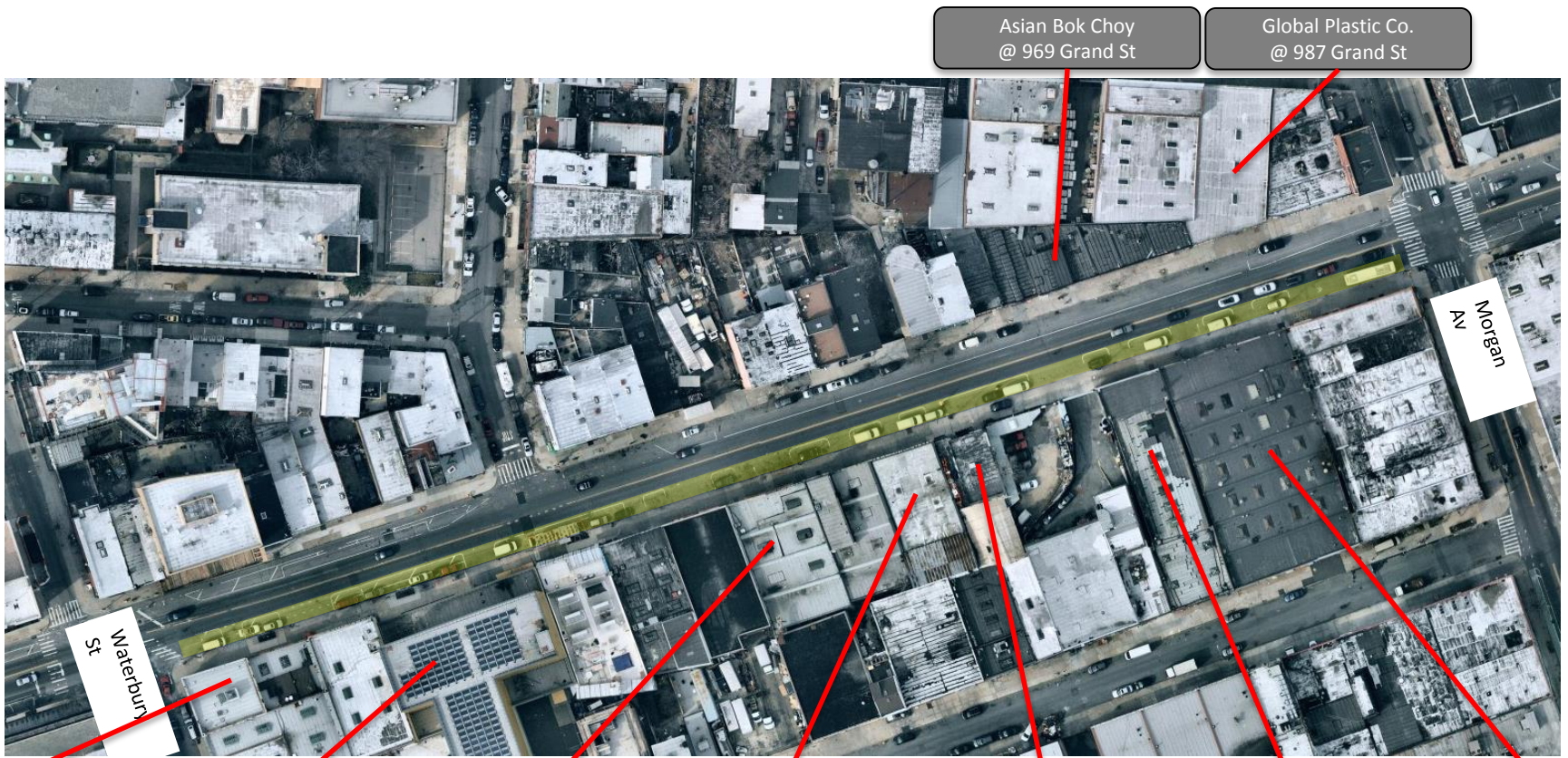
Top: Lorimer St between Power St and Grand St
Left: Leonard St between Powers St and Grand St

FREIGHT FIELD OBSERVATIONS

Industrial Core of Grand St (Catherine St to Morgan Ave)

- Double parked trucks are concentrated around mid-block industrial businesses (i.e. Preuss Inc.) due to limited curb space and dedicated loading zones on the south curb
- Deliveries can take longer than 15-30 minutes along the south curb (goods are often of an industrial nature – i.e. fuel tanks and industrial materials) and loading/unloading often requires the use of forklifts or other heavy equipment
- The majority of deliveries to the south curb come from a standard box truck or tractor trailer; the types of goods that are loaded/unloaded cannot easily be reduced into smaller loads for hand trucks

Field observations make the case for improvements in curb access along the south curb



Asian Bok Choy
@ 969 Grand St

Global Plastic Co.
@ 987 Grand St

Morgan
Av

Waterbury
St

Better Life Home Décor
@ 900 Grand St

Safeguard Self Storage
@ 930 Grand St

Preuss Inc.
@ 950 Grand St

Driveline Inc.
@ 966 Grand St

Urban D.C.
Restoration Contractors
@ 970 Grand St

Vame Iron Works
@ 984 Grand St

Good Will Mechanical
Corp @ 1000 Grand St

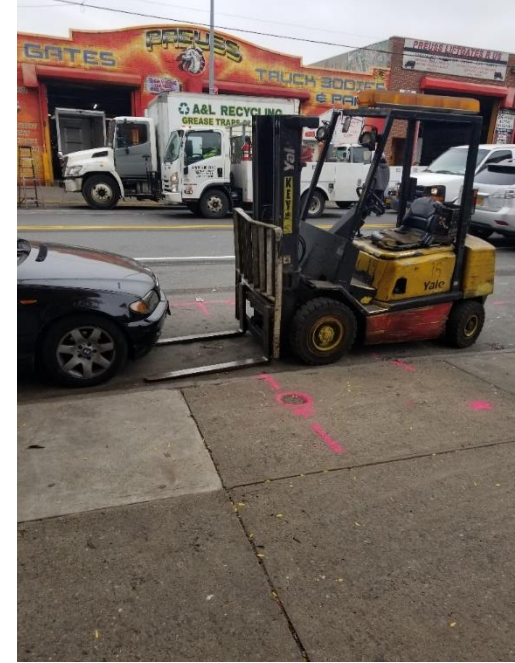
Field Observations – Grand Street Industrial Area (AM/Midday Peak) Loading Constraints



Freight activity peaks in the late morning between 10AM-12PM; trucks/vans of various dimensions make deliveries, many of which take more than 15 minutes (near 966 Grand St – Driveline Inc.)



Curb access is severely limited between Safeguard Self Storage (930 Grand St) and Good Will Mechanical Corp (1000 Grand St) along the south curb



Loading and unloading activities often involve the use of heavy equipment on the north and south curbs – most deliveries are of heavier goods such as fuel tanks (near 950 Grand St – Preuss Inc.)

Field Observations – Grand Street Industrial Area (AM/Midday Peak)

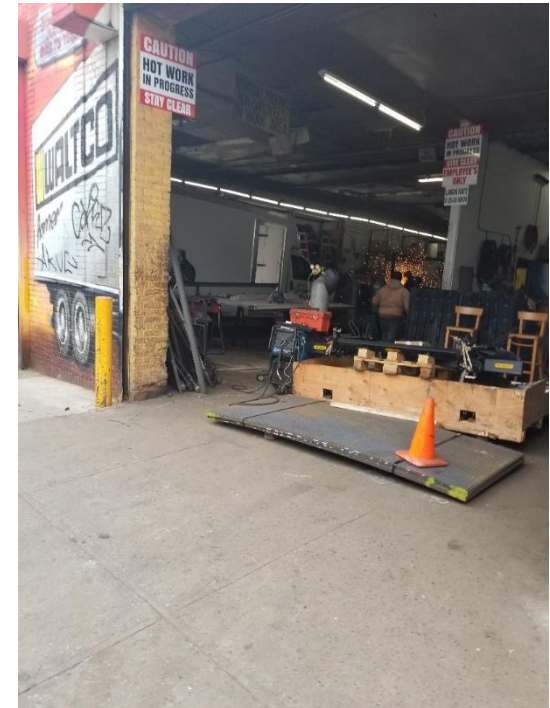
Types of Goods and Services Transported



The Good Will Mechanical Corp (1000 Grand St) appears to chiefly deal with repairs/services of trucks – multiple FedEx trucks were observed in the loading dock and parked in front of the business



Fuel tanks and welding supplies are examples of the types of goods delivered to industrial businesses on Grand St (near 942 Grand St – Interboro Spirits and Ales)



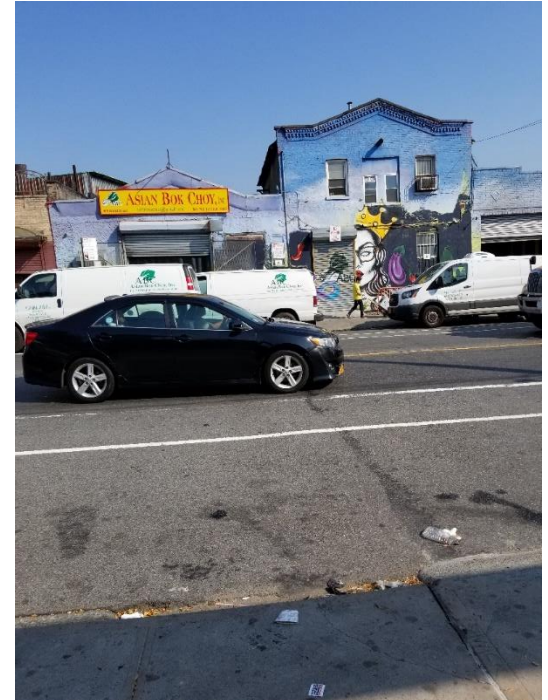
Preuss Inc. (950 Grand St) manufactures hydraulic lift gates for trucks and trailers; as a result, they attract a high volume of trucks as part of their core clientele



970 Grand St – Construction Company



Near 984 Grand St – Vame Iron Works Corp.



969 Grand St – Asian Bok Choy Inc.

Sample of loading/unloading operations and equipment along the south (970 and 984 Grand Street) and north curbs (969 Grand Street) of Grand Street between Catherine Street and Morgan Avenue

Grand Street Corridor

Balancing the needs of all users

Transit

- Making high-frequency bus service a viable option for displaced L train customers

Bike

- Creating a safe cycling route on direct route to the Williamsburg Bridge

Local deliveries, shoppers and local residents

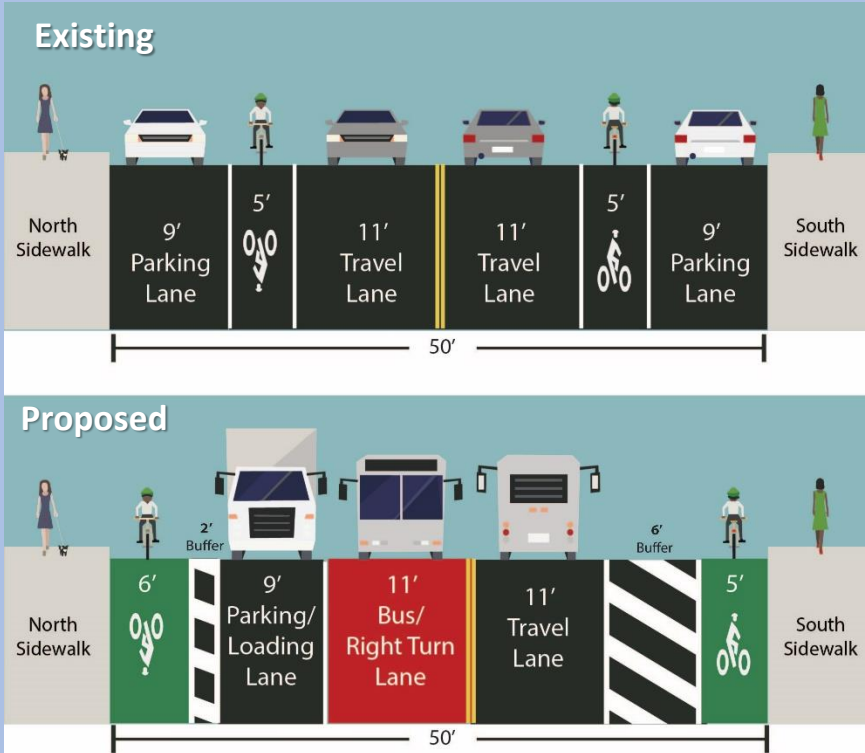
- Prioritizing loading during the daytime hours, general parking in the evening

Through traffic

- Informing motorists of best alternatives to access Williamsburg Bridge IBZ, industrial areas, highways



Grand Street Design



Features:

Westbound bus lane from Bushwick Avenue to Union Avenue

- Parking protected bike lane
- Floating parking/ loading space

Eastbound bus lane from Rodney Street to Keap Street

- Buffer protected bike lane
- Through traffic allowed east of Keap Street on the south side of the street

The bus lane will not be enforced until the L train shuts down in April 2019

Grand Street Local Access



- **Local Access:**
 - Turn right on to Grand Street
 - Exit at next right turn
- Left turns prohibited at most intersections
- Enforceable with bus lane cameras
- DOT will conduct outreach local businesses and residents about access policy
- Traffic analysis on the effect of bus priority on Grand Street, Metropolitan Ave, and neighborhood streets is ongoing
- Eastbound through traffic permitted east of Keap Street
- **The bus lane will not be enforced until the L train shuts down in April 2019**

Grand Street Local Access



- Provides bus priority for buses crossing the Williamsburg Br
- Eastbound through traffic permitted east of Keap Street
- Westbound local access allowed to each block, must make next right turn

Education and Enforcement

Bike lights, bell, and Bike Smart giveaways:

While distributing giveaways, NYPD and DOT have the chance to talk to cyclists about traffic laws and safe cycling

Targeted enforcement to increase safety:

- Focus and deploy enforcement resources to intersections with high rates of cyclist KSI
- Tailor enforcement to address the most dangerous driver and cyclist behaviors
- Violations are increasing as part of Vision Zero push for enforcement as well as general increase in cyclists

NYPD: Bicycle Moving Violations

