APPENDIX G:

TRANSPORTATION DEMAND FACTORS MEMORANDUM (TDF)

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Sam Schwartz
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Memorandum

To: Mehdi Amjadi, NYCDCP
From: Aviva Laurenti, P.E., PTOE
Date: May 18, 2017
Re: Bay Street Rezoning Travel Demand Factors (TDF) Memorandum
Project No: 15-01-3000

Sam Schwartz has prepared a preliminary transportation screening for the proposed Bay Street Rezoning, which considers the rezoning of 17 projected development sites along Bay Street between Victory Boulevard and Sands Street, as well as multiple disposition sites. The disposition sites include 55 Stuyvesant Place, the Department of Sanitation (DSNY) facility at the intersection of Jersey Street and Victory Boulevard, 54 Central Avenue, 8 projected development sites at Canal Street and Broad Street, and Stapleton Phase III Sites A and B. **Figure 1** shows the location of the various development areas considered as part of this project; **Figures 2 and 3** show the detailed sites included in the Bay Street and Canal Street development areas.

In accordance with the *2014 CEQR Technical Manual*, this Travel Demand Factors (TDF) memorandum estimates the projected trips from the Proposed Project following a two-tiered screening process. The Level 1 screening assessment includes a trip generation analysis to determine whether the Proposed Project would result in more than 50 vehicle trips, 200 subway/rail or bus riders, or 200 pedestrian trips in a peak hour. The Level 2 screening is a trip assignment review that identifies intersections with 50 or more vehicle trips, pedestrian elements with 200 or more pedestrian trips, 50 bus trips in a single direction on a single route, or 200 passengers at a subway station or line during any analysis peak hour which would require detailed analyses.

A. Assumed Development Program

For the purposes of this TDF memo, the horizon year for the Proposed Project is 2030. The Proposed Project would include the following land uses:

- Community Facility
- Office Space
- Local Retail
- Medical Office Building
- Restaurant
- Residential Dwelling Units; Affordable and Market-Rate
- On-Site, Off-Street parking spaces

Table 1 defines the Proposed Project, by land use, for each parcel and each development site in units of square feet (sf) or dwelling units (du). In some cases, the rezoning would result in a negative increment compared to what can be built as-of-right based on current zoning. Cumulatively, however, the Proposed Project would result in a positive development increment.

Figure 1
Bay Street Rezoning Sites



Figure 2
Bay Street Area Rezoning Sites



Figure 3
Canal Street Area Rezoning Sites

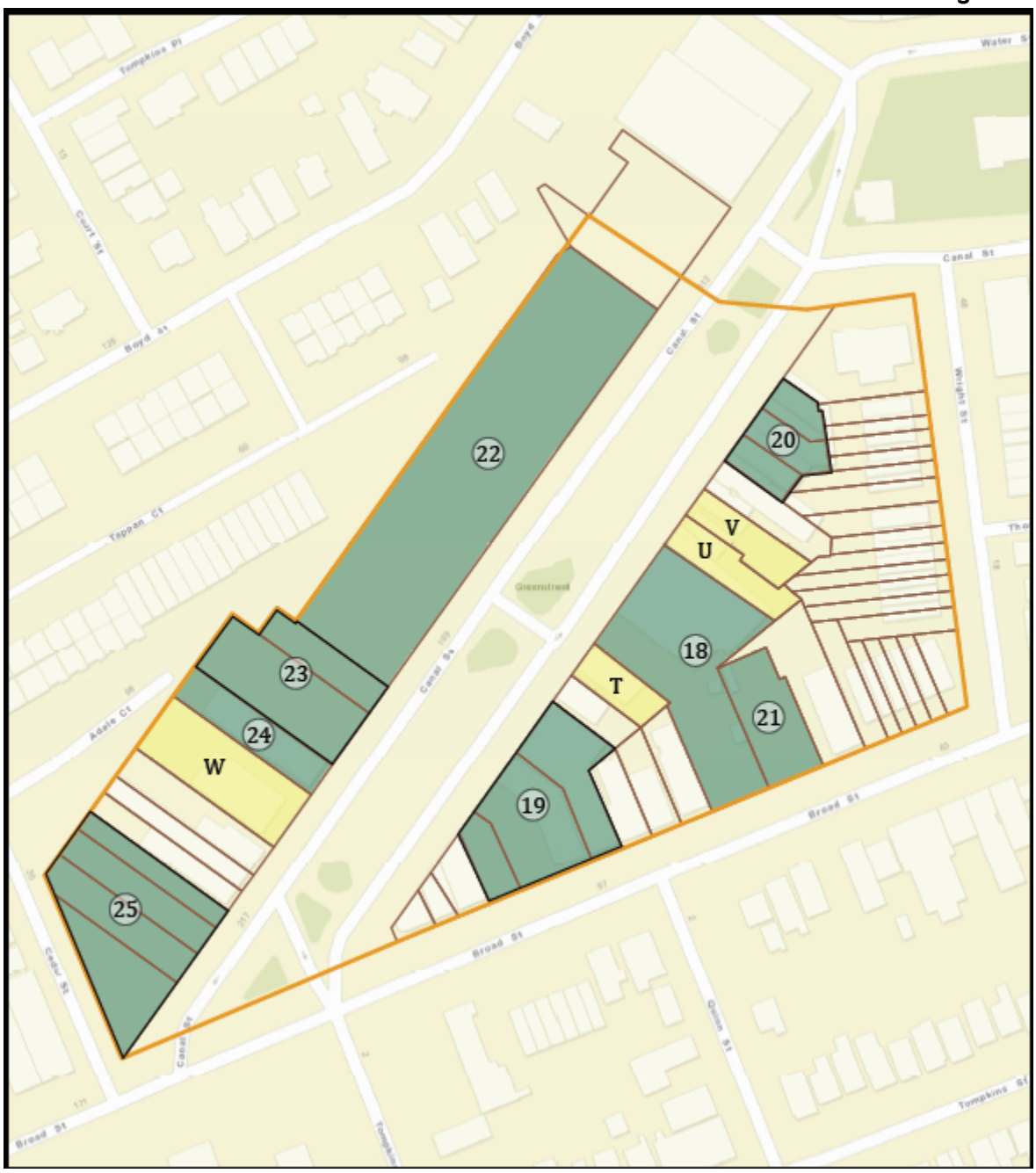


Table 1
Bay Street Rezoning Project Increment

	Site	Community Facility (sf)	Office (sf)	Local Retail (sf)	Medical Office (sf)	Restaurant (sf)	Residential Units (du)	Parking (spaces)
Bay Street Rezoning	1	-27,759	0	2,800	0	0	47	-25
	2	20,000	186,135	15,328	20,000	20,000	0	247
	3	0	0	8,000	0	0	204	51
	4	15,354	0	-35,467	0	5,000	189	80
	5	21,000	0	-24,050	0	10,000	477	-1
	6	0	0	-1,736	0	4,000	32	14
	7	0	-49,980	11,035	0	-9,585	154	66
	8	0	0	2,030	0	0	28	12
	9	0	0	-2,970	0	0	65	28
	10	0	0	5,000	0	5,000	63	27
	11	0	0	480	0	0	80	34
	12	0	8,000	-7,800	0	6,000	42	19
	13	0	0	-3,664	0	0	39	16
	14	0	0	-1,568	0	3,000	14	6
	15	0	-1,724	6,774	0	0	0	0
	16	0	0	4,200	0	0	12	2
	17	0	0	-20,274	0	8,000	140	60
Canal Street Site	18	0	0	-2,400	0	0	37	16
	19	-1,796	0	-2,940	0	0	24	2
	20	0	0	-4,690	0	0	11	0
	21	0	0	0	0	0	8	-4
	22	0	-6,800	-2,700	0	0	85	-5
	23	0	0	-1,800	0	0	26	-10
	24	0	0	-880	0	0	9	0
	25	0	-3,000	0	0	0	36	-15
Jersey St Garage		0	0	35,000	0	0	108	189
54 Central Ave		0	85,129	0	0	0	0	138
55 Stuyvesant		0	0	0	0	0	0	0
Stapleton A		0	0	43,000	0	0	319	227
Stapleton B1		0	0	0	0	0	308	116
Total		**26,799**	**217,760**	**20,708**	**20,000**	**51,415**	**2,557**	**1,290**

Preliminary Transportation Planning Factors

The transportation planning factors used in forecasting travel demand for the Proposed Project are shown in **Tables 2, 3, and 4** for the Bay Street/Canal Street/Stapleton sites, Jersey Street site, and 54 Central Ave/55 Stuyvesant Place sites. These three tables provide different mode split assumptions for residential and office land uses based on census tracts specific to where the sites are located. The trip generation results are shown in **Tables 5 through 8** by peak hour for each mode. Trip generation estimates were prepared for the following critical peak hours:

- Weekday Morning (AM): 7:45 AM to 8:45 AM
- Weekday Midday (MD): 2:30 PM to 3:30 PM
- Weekday Afternoon (PM): 4:45 PM to 5:45 PM
- Saturday MD: 2:15 PM to 3:15 PM

The peak hours were determined in collaboration with the New York City Department of City Planning (NYCDCP) and New York City Department of Transportation (NYCDOT) to be consistent with a parallel traffic study effort conducted by the New York City Economic Development Corporation (NYCEDC) to develop transportation improvements for a partially overlapping study area within Staten Island.

Table 2
Bay Street/Canal Street/Stapleton Sites Travel Demand Factors

	Land Use:	Residential	Local Retail	Office	Community Facility	Restaurant	Medical Office Building
Daily Person Trip Generation		(1)	(1)	(1)	(7)	(5)	(6)
	Weekday	8.075	205	18.0	50.7	203.44	127
	Saturday	9.6	240	3.9	13.7	253.4	127
	Unit	per dwelling unit	per room	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Daily Truck Trip Generation		(1)	(1)	(1)	(4)	(5)	(1)
	Weekday	0.06	0.35	0.32	0.04	0.79	0.32
	Saturday	0.02	0.04	0.01	0.00	0.79	0.01
	Unit	per dwelling unit	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Modal Split		**AM/PM** **MD/Sat** (2)	**Weekday** **Saturday** (3)	**AM/PM** **MD/Sat** (2) (3)	**Weekday** **Saturday** (4)	**AM/PM/Sat** **MD** (5)	**Weekday** **Saturday** (6)
	Auto	35.4% 22.6%	9.0% 9.0%	66.9% 56.4%	25.0% 25.0%	25.0% 15.0%	44.0% 44.0%
	Taxi	0.5% 0.5%	2.0% 2.0%	0.0% 0.5%	0.0% 0.0%	3.0% 3.0%	2.0% 2.0%
	Bus	33.6% 33.6%	7.0% 7.0%	19.8% 3.6%	49.0% 49.0%	6.0% 6.0%	31.7% 31.7%
	Railroad	18.3% 18.3%	7.0% 7.0%	4.2% 8.5%	1.0% 1.0%	6.0% 6.0%	17.3% 17.3%
	Walk/Bike	12.2% 25.0%	75.0% 75.0%	9.1% 31.0%	25.0% 25.0%	60.0% 70.0%	5.0% 5.0%
		100.0% 100.0%	100.0% 100.0%	100.0% 100.0%	100.0% 100.0%	100.0% 100.0%	100.0% 100.0%
Vehicle Occupancy		(2, 3)	(3)	(2, 3)	(4)	(5)	(6)
	Auto	1.26	1.65	1.06	1.50	2.00	1.50
	Taxi	1.40	1.40	1.40	1.40	2.00	1.50
Linked Trips (1,5)		0% 0%	40% 25%	0% 0%	0% 0%	15% 15%	0% 0%
Temporal Distribution		(1)	(1)	(1)	(7)	(5)	(6)
	AM	10.0%	3.0%	12.0%	6.1%	1.0%	4.0%
	MD	5.0%	19.0%	15.0%	9.9%	8.7%	11.0%
	PM	11.0%	10.0%	14.0%	8.1%	10.4%	12.0%
	Sat MD	8.0%	10.0%	17.0%	11.8%	6.0%	11.0%
Truck Temporal Distribution		(1)	(1)	(1)	(4)	(5)	(1)
	AM	12.0%	8.0%	10.0%	7.7%	9.7%	10.0%
	MD	9.0%	11.0%	11.0%	11.0%	7.6%	11.0%
	PM	2.0%	2.0%	2.0%	1.0%	1.0%	2.0%
	Sat MD	9.0%	11.0%	11.0%	0.0%	7.6%	11.0%
Directional Distribution		**In** **Out** (3)	**In** **Out** (3)	**In** **Out** (3)	**In** **Out** (4)	**In** **Out** (5)	**In** **Out** (6)
	AM	16.0% 84.0%	50.0% 50.0%	93.0% 7.0%	66.0% 34.0%	50.0% 50.0%	89.0% 11.0%
	MD	59.0% 41.0%	50.0% 50.0%	46.0% 54.0%	58.0% 42.0%	50.0% 50.0%	51.0% 49.0%
	PM	75.0% 25.0%	50.0% 50.0%	3.0% 97.0%	34.0% 66.0%	50.0% 50.0%	48.0% 52.0%
	Sat MD	59.0% 41.0%	50.0% 50.0%	46.0% 54.0%	47.0% 53.0%	50.0% 50.0%	51.0% 49.0%
Truck Directional Distribution		(1)	(1)	(1)	(1)	(1)	(1)
	AM	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%
	MD	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%
	PM	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%
	Sat MD	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%

Notes

(1) 2014 CEQR Technical Manual. Table 16-2. For the local retail land use, a 40% linked trip credit was applied to auto trips only and a 25% linked trip credit was applied to remaining trips.

(2) Residential modal split based on American Community Survey 5-year estimates, Table B08006: Means of Transportation to Work for the average of Census Tracts 3/7/9/11/21 (Richmond County) and residential auto vehicle occupancy for Census Tract 21 (Richmond County). Weekday MD and Saturday modal splits were adjusted to increase the walk trips to account for local midday residential trips. Office modal split and auto vehicle occupancy based on CTPP 2006-2010 Five-year estimates for Census Tract 21 (Richmond County). Ferry trips were split proportionally to the bus and railroad (SIR).

(3) New Stapleton Waterfront Development Plan Tech Memo, Tables O-14 and O-15. Taxi vehicle occupancy based on the New Stapleton Waterfront Development Plan Tech Memo.

(4) Flushing Commons EIS, Table 14-16 (YMCA).

(5) Staten Island Lighthouse Point EAS, Table I-14. Ferry trips were split proportionally to the bus and railroad (SIR). A 15% linked trip credit was applied for the restaurant land use.

(6) NYCDOT. Assumed Saturday modal split, vehicle occupancy, temporal distribution, and directional distribution to be the same as Weekday MD. Non-auto mode split based on Sam Schwartz assumptions of 5% walk, and proportional split to bus and railroad/SIR based on Residential Journey to Work modal split.

(7) ITE Trip Generation Manual, 9th Edition, Volume 2: Recreational Community Center (Land Use 495).

Table 3
Jersey Street Site Travel Demand Factors

	Land Use:	Residential	Local Retail	Office	Community Facility	Restaurant	Medical Office Building
Daily Person Trip Generation		(1)	(1)	(1)	(7)	(5)	(6)
	Weekday	8.075	205	18.0	50.7	203.44	127
	Saturday	9.6	240	3.9	13.7	253.4	127
	Unit	per dwelling unit	per room	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Daily Truck Trip Generation		(1)	(1)	(1)	(4)	(5)	(1)
	Weekday	0.06	0.35	0.32	0.04	0.79	0.32
	Saturday	0.02	0.04	0.01	0.00	0.79	0.01
	Unit	per dwelling unit	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Modal Split		**AM/PM** **MD/Sat**	**Weekday** **Saturday**	**AM/PM** **MD/Sat**	**Weekday** **Saturday**	**AM/PM/Sat** **MD**	**Weekday** **Saturday**
		(2)	(3)	(2) (3)	(4)	(5)	(6)
	Auto	35.4% 22.6%	9.0% 9.0%	72.8% 56.4%	25.0% 25.0%	25.0% 15.0%	44.0% 44.0%
	Taxi	0.5% 0.5%	2.0% 2.0%	0.0% 0.5%	0.0% 0.0%	3.0% 3.0%	2.0% 2.0%
	Bus	39.8% 39.8%	7.0% 7.0%	17.1% 3.6%	49.0% 49.0%	7.0% 7.0%	37.6% 37.6%
	Railroad	12.1% 12.1%	7.0% 7.0%	4.4% 8.5%	1.0% 1.0%	5.0% 5.0%	11.4% 11.4%
	Walk/Bike	12.2% 25.0%	75.0% 75.0%	5.7% 31.0%	25.0% 25.0%	60.0% 70.0%	5.0% 5.0%
		100.0% 100.0%	100.0% 100.0%	100.0% 100.0%	100.0% 100.0%	100.0% 100.0%	100.0% 100.0%
Vehicle Occupancy		(2, 3)	(3)	(2, 3)	(4)	(5)	(6)
	Auto	1.11	1.65	1.06	1.50	2.00	1.50
	Taxi	1.40	1.40	1.40	1.40	2.00	1.50
Linked Trips (1,5)		0% 0%	40% 25%	0% 0%	0% 0%	15% 15%	0% 0%
Temporal Distribution		(1)	(1)	(1)	(7)	(5)	(6)
	AM	10.0%	3.0%	12.0%	6.1%	1.0%	4.0%
	MD	5.0%	19.0%	15.0%	9.9%	8.7%	11.0%
	PM	11.0%	10.0%	14.0%	8.1%	10.4%	12.0%
	Sat MD	8.0%	10.0%	17.0%	11.8%	6.0%	11.0%
Truck Temporal Distribution		(1)	(1)	(1)	(4)	(5)	(1)
	AM	12.0%	8.0%	10.0%	7.7%	9.7%	10.0%
	MD	9.0%	11.0%	11.0%	11.0%	7.6%	11.0%
	PM	2.0%	2.0%	2.0%	1.0%	1.0%	2.0%
	Sat MD	9.0%	11.0%	11.0%	0.0%	7.6%	11.0%
Directional Distribution		**In** **Out**	**In** **Out**	**In** **Out**	**In** **Out**	**In** **Out**	**In** **Out**
		(3)	(3)	(3)	(4)	(5)	(6)
	AM	16.0% 84.0%	50.0% 50.0%	93.0% 7.0%	66.0% 34.0%	50.0% 50.0%	89.0% 11.0%
	MD	59.0% 41.0%	50.0% 50.0%	46.0% 54.0%	58.0% 42.0%	50.0% 50.0%	51.0% 49.0%
	PM	75.0% 25.0%	50.0% 50.0%	3.0% 97.0%	34.0% 66.0%	50.0% 50.0%	48.0% 52.0%
	Sat MD	59.0% 41.0%	50.0% 50.0%	46.0% 54.0%	47.0% 53.0%	50.0% 50.0%	51.0% 49.0%
Truck Directional Distribution		(1)	(1)	(1)	(1)	(1)	(1)
	AM	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%
	MD	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%
	PM	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%
	Sat MD	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%

Notes

(1) 2014 CEQR Technical Manual. Table 16-2. For the local retail land use, a 40% linked trip credit was applied to auto trips only and a 25% linked trip credit was applied to remaining trips.
(2) Residential modal split based on American Community Survey 5-year estimates, Table B08006: Means of Transportation to Work for the average of Census Tracts 3/7/9/11/21 (Richmond County) and residential auto vehicle occupancy for Census Tract 11 (Richmond County). Weekday MD and Saturday modal splits were adjusted to increase the walk trips to account for local midday residential trips. Office modal split and auto vehicle occupancy based on CTPP 2006-2010 Five-year estimates for Census Tract 11 (Richmond County). Ferry trips were added to the bus trips.
(3) New Stapleton Waterfront Development Plan Tech Memo, Tables O-14 and O-15. Taxi vehicle occupancy based on the New Stapleton Waterfront Development Plan Tech Memo.
(4) Flushing Commons EIS, Table 14-16 (YMCA).
(5) Staten Island Lighthouse Point EAS, Table I-14. Ferry trips were added to the bus trips. A 15% linked trip credit was applied for the restaurant land use.
(6) NYCDOT. Assumed Saturday modal split, vehicle occupancy, temporal distribution, and directional distribution to be the same as Weekday MD. Non-auto mode split based on Sam Schwartz assumptions of 5% walk, and proportional split to bus and railroad/SIR based on Residential Journey to Work modal split.
(7) ITE Trip Generation Manual, 9th Edition, Volume 2: Recreational Community Center (Land Use 495).

Table 4

54 Central Ave/55 Stuyvesant Place Site Travel Demand Factors

	Land Use:	Residential	Local Retail	Office	Community Facility	Restaurant	Medical Office Building
Daily Person Trip Generation	Weekday	(1) 8.075	(1) 205	(1) 18.0	(7) 50.7	(5) 203.44	(1) 127
	Saturday	9.6	240	3.9	13.7	253.4	127
	Unit	per dwelling unit	per room	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Daily Truck Trip Generation	Weekday	(1) 0.06	(1) 0.35	(1) 0.32	(4) 0.04	(5) 0.79	(1) 0.32
	Saturday	0.02	0.04	0.01	0.00	0.79	0.01
	Unit	per dwelling unit	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Modal Split		AM/PM / MD/Sat (2)	Weekday / Saturday (3)	AM/PM / MD/Sat (2) (3)	Weekday / Saturday (4)	AM/PM/Sat / MD (5)	Weekday / Saturday (6)
	Auto	35.4% / 35.4%	9.0% / 9.0%	67.5% / 56.4%	25.0% / 25.0%	25.0% / 15.0%	44.0% / 44.0%
	Taxi	0.5% / 0.5%	2.0% / 2.0%	0.6% / 0.5%	0.0% / 0.0%	3.0% / 3.0%	2.0% / 2.0%
	Bus	22.2% / 22.2%	7.0% / 7.0%	13.7% / 3.6%	49.0% / 49.0%	5.0% / 5.0%	31.7% / 31.7%
	Railroad	12.1% / 12.1%	7.0% / 7.0%	9.2% / 8.5%	1.0% / 1.0%	5.0% / 5.0%	17.3% / 17.3%
	Walk/Bike	29.8% / 29.8%	75.0% / 75.0%	9.1% / 31.0%	25.0% / 25.0%	62.0% / 72.0%	5.0% / 5.0%
		100.0% / 100.0%	100.0% / 100.0%	100.0% / 100.0%	100.0% / 100.0%	100.0% / 100.0%	100.0% / 100.0%
Vehicle Occupancy	Auto	(2, 3) 1.12	(3) 1.65	(2, 3) 1.08	(4) 1.50	(5) 2.00	(6) 1.50
	Taxi	1.40	1.40	1.40	1.40	2.00	1.50
Linked Trips (1,5)		0% / 0%	40% / 25%	0% / 0%	0% / 0%	15% / 15%	0% / 0%
Temporal Distribution	AM	(1) 10.0%	(1) 3.0%	(1) 12.0%	(7) 6.1%	(5) 1.0%	(6) 4.0%
	MD	5.0%	19.0%	15.0%	9.9%	8.7%	11.0%
	PM	11.0%	10.0%	14.0%	8.1%	10.4%	12.0%
	Sat MD	8.0%	10.0%	17.0%	11.8%	6.0%	11.0%
Truck Temporal Distribution	AM	(1) 12.0%	(1) 8.0%	(1) 10.0%	(4) 7.7%	(5) 9.7%	(1) 10.0%
	MD	9.0%	11.0%	11.0%	11.0%	7.6%	11.0%
	PM	2.0%	2.0%	2.0%	1.0%	1.0%	2.0%
	Sat MD	9.0%	11.0%	11.0%	0.0%	7.6%	11.0%
Directional Distribution		In / Out (3)	In / Out (3)	In / Out (3)	In / Out (4)	In / Out (5)	In / Out (6)
	AM	16.0% / 84.0%	50.0% / 50.0%	93.0% / 7.0%	66.0% / 34.0%	50.0% / 50.0%	89.0% / 11.0%
	MD	59.0% / 41.0%	50.0% / 50.0%	46.0% / 54.0%	58.0% / 42.0%	50.0% / 50.0%	51.0% / 49.0%
	PM	75.0% / 25.0%	50.0% / 50.0%	3.0% / 97.0%	34.0% / 66.0%	50.0% / 50.0%	48.0% / 52.0%
	Sat MD	59.0% / 41.0%	50.0% / 50.0%	46.0% / 54.0%	47.0% / 53.0%	50.0% / 50.0%	51.0% / 49.0%
Truck Directional Distribution		(1)	(1)	(1)	(1)	(1)	(1)
	AM	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%
	MD	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%
	PM	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%
	Sat MD	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%	50.0% / 50.0%

Notes

(1) 2014 CEQR Technical Manual. Table 16-2. For the local retail land use, a 40% linked trip credit was applied to auto trips only and a 25% linked trip credit was applied to remaining trips.
(2) Residential modal split and auto vehicle occupancy based on American Community Survey 5-year estimates, Table B08006: Means of Transportation to Work for the average of Census Tracts 3/7/9/11/21 (Richmond County). Office modal split and auto vehicle occupancy based on CTPP 2006-2010 Five-year estimates for Census Tracts 3/7 (Richmond County). Ferry trips were added to the walk/bike trips.
(3) New Stapleton Waterfront Development Plan Tech Memo, Tables O-14 and O-15. Taxi vehicle occupancy based on the New Stapleton Waterfront Development Plan Tech Memo.
(4) Flushing Commons EIS, Table 14-16 (YMCA).
(5) Staten Island Lighthouse Point EAS, Table I-14. Ferry trips were added to the walk/bike trips. A 15% linked trip credit was applied for the restaurant land use.
(6) NYCDOT. Assumed Saturday modal split, vehicle occupancy, temporal distribution, and directional distribution to be the same as Weekday MD. Non-auto mode split based on Sam Schwartz assumptions of 5% walk, and proportional split to bus and railroad/SIR based on Residential Journey to Work modal split.
(7) ITE Trip Generation Manual, 9th Edition, Volume 2: Recreational Community Center (Land Use 495).

A description of the transportation planning factors for each individual land use is provided below.

Community Facility

The Proposed Project would consist of a total of 26,799 sf of community facility space. The daily trip generation rates and temporal distributions were obtained from the *ITE Trip Generation*, 9th Edition, Land use Code 495 (Recreational Community Center). Daily truck trip generation, modal split, vehicle occupancy, truck temporal distribution, and directional distribution were obtained from the *Flushing Commons FEIS* (2010), Table 14-16, for the YMCA land use.

Office

The Proposed Project would consist of 217,760 sf of office space. The daily trip generation rates, temporal distribution, daily truck trip generation rates, and truck temporal distribution were obtained from the *2014 CEQR Technical Manual*, Table 16-2. Taxi vehicle occupancy and directional distributions were obtained from the *New Stapleton Waterfront Development Plan Tech Memo* (2014), Tables O-14 and O-15, for the office land use. Weekday AM and PM modal split and auto vehicle occupancy were calculated from the Census Transportation Planning Products (CTPP) 5-year reverse journey to work estimates for Census Tract 21 for the Bay Street, Canal Street, and Stapleton sites; Census Tract 11 for the Jersey Street site; and Census Tracts 3 and 7 for the 54 Central Avenue and 55 Stuyvesant Place sites (shown on **Figure 4**). Ferry trips were split proportionally to the bus, Staten Island Railway (SIR), and walk-only trips. Weekday MD and Saturday MD modal splits were adjusted to increase walk trip percentages to account for local

midday trips, based on similar assumptions from the *New Stapleton Waterfront Development Plan Tech Memo.*

Local Retail
The Proposed Project would consist of a total of 20,708 sf of local retail space. The daily trip generation rates, temporal distribution, daily truck trip generation rates, and truck temporal distribution were obtained from the *2014 CEQR Technical Manual*, Table 16-2. Modal split, auto vehicle occupancy, and directional distribution were obtained from the *New Stapleton Waterfront Development Plan Tech Memo* (2014), Tables O-14 and O-15, for the local retail land use.

Medical Office
The Proposed Project would consist of 20,000 sf of medical office space. The daily trip generation rates, temporal distribution, modal split, vehicle occupancy, and directional distribution were provided by NYCDOT. It was assumed that Saturday MD travel characteristics were the same as Weekday MD. The daily truck trip generation rates and truck temporal distribution were obtained from the *2014 CEQR Technical Manual*, Table 16-2, for the office land use.

Restaurant
The Proposed Project would consist of 51,415 sf of restaurant space. The daily trip generation rates, modal split, vehicle occupancy, temporal distribution, daily truck trip generation rates, truck temporal distribution, and directional distribution were obtained from the *Staten Island Lighthouse Point EAS*, Table I-14. The ferry modal split was added to the bus modal split.

Residential (Market Rate and Affordable)
The residential component of the Proposed Project would consist of 2,557 residential dwelling units. The daily trip generation rates, temporal distribution, daily truck trip generation rates, and truck temporal distribution were obtained from the *2014 CEQR Technical Manual*, Table 16-2. Taxi vehicle occupancy and directional distributions were obtained from the *New Stapleton Waterfront Development Plan Tech Memo* (2014), Tables O-14 and O-15, for the residential land use. Modal split for the Weekday AM and PM peak hours were calculated from the American Community Survey (ACS) 5-year estimates: Sex of Workers by Means of Transportation to Work for the average of Census Tracts 3, 7, 9, 11, and 21. Auto vehicle occupancy for the Weekday AM and PM peak hours were calculated from the American Community Survey (ACS) 5-year estimates: Sex of Workers by Means of Transportation to Work for Census Tract 21 for the Bay Street, Canal Street, and Stapleton sites; Census Tract 11 for the Jersey Street site; and the average of Census Tracts 3, 7, 9, 11, and 21 for the 54 Central Avenue and 55 Stuyvesant Place sites. Ferry trips were split proportionally to the bus, Staten Island Railway (SIR), and walk-only trips. Weekday MD and Saturday MD modal splits were adjusted to increase walk trip percentages to account for local midday trips, based on similar assumptions from the *New Stapleton Waterfront Development Plan Tech Memo.*

Linked Trips
Linked trips are those that have multiple destinations within the Project Site and are typical for multi-use sites. A linked trip credit was applied to the local retail land use based on the mode of travel; a 40% linked trip credit was applied for auto trips, and a 25% linked trip credit was applied for all other modes. A linked trip credit of 15% was also applied to the restaurant land use.

Figure 4
Census Map

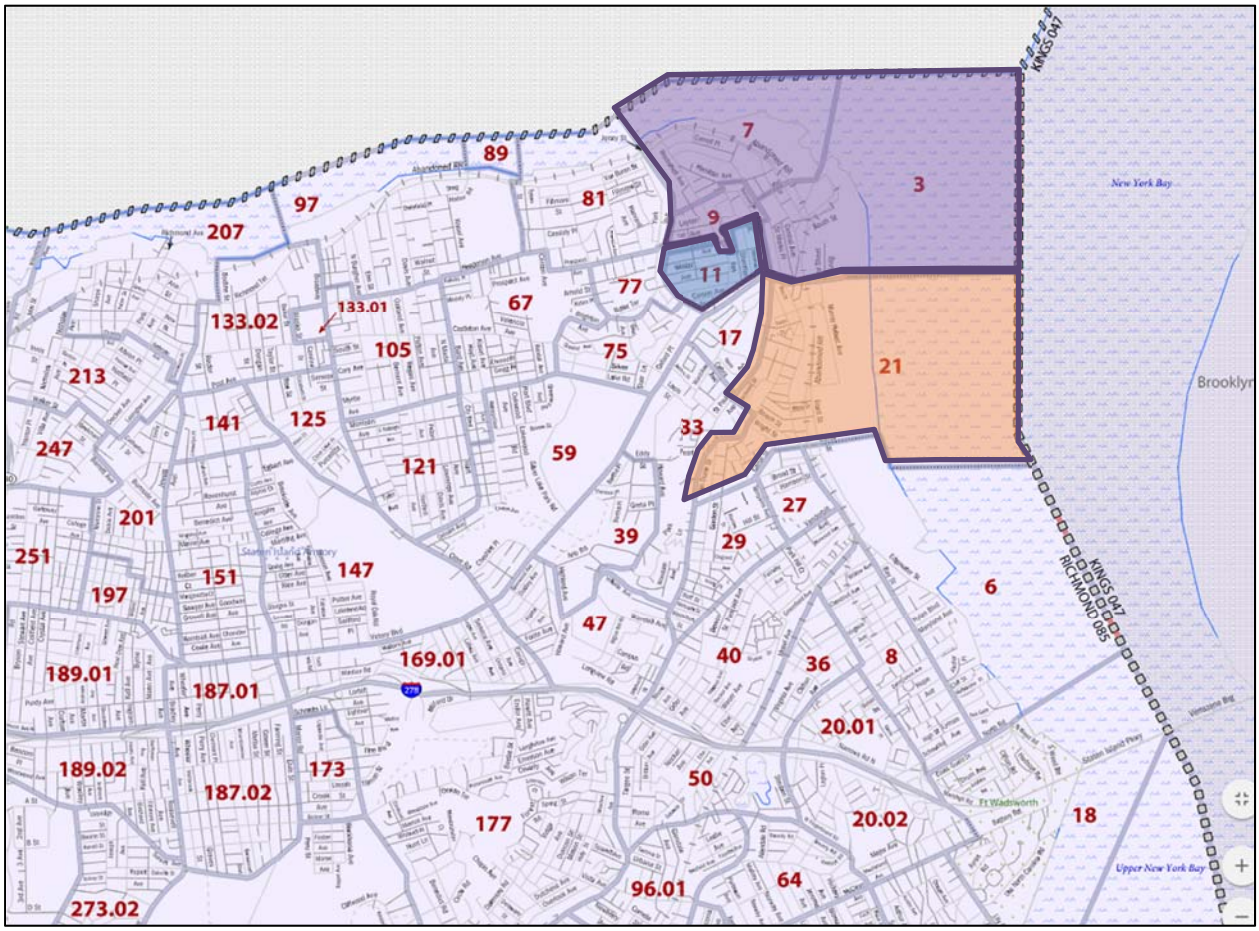


Table 5

Project Increment: Weekday AM Peak Hour Trip Generation Estimates

Auto	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	58	301	-2	-2	181	14	9	5	8	8	27	3	**281**	**329**	**610**
Canal Street	11	45	-2	-2	-12	-1	0	-1	0	0	0	0	**-3**	**41**	**38**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	106	8	0	0	0	0	0	0	**106**	**8**	**114**
Jersey	5	23	4	4	0	0	0	0	0	0	0	0	**9**	**27**	**36**
Stapleton A	12	61	4	4	0	0	0	0	0	0	0	0	**16**	**65**	**81**
Stapleton B1	11	59	0	0	0	0	0	0	0	0	0	0	**11**	**59**	**70**
Total	97	489	4	4	275	21	9	4	8	8	27	3	**420**	**529**	**949**

Taxi	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	5	5	-6	-6	0	0	0	0	0	0	1	1	**0**	**0**	**0**
Canal Street	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**
Jersey	0	0	2	2	0	0	0	0	0	0	0	0	**2**	**2**	**4**
Stapleton A	1	1	2	2	0	0	0	0	0	0	0	0	**3**	**3**	**6**
Stapleton B1	1	1	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**
Total	7	7	-2	-2	1	1	0	0	0	0	1	1	**7**	**7**	**14**

Truck	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	6	6	-1	-1	2	2	0	0	0	0	0	0	**7**	**7**	**14**
Canal Street	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**
Jersey	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Stapleton A	1	1	1	1	0	0	0	0	0	0	0	0	**2**	**2**	**4**
Stapleton B1	1	1	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**
Total	8	8	0	0	3	3	0	0	0	0	0	0	**11**	**11**	**22**

SIR	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	38	199	-7	-7	13	1	-1	0	1	1	16	2	**60**	**196**	**256**
Canal Street	6	30	-2	-2	-1	0	0	0	0	0	0	0	**3**	**28**	**30**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	16	1	0	0	0	0	0	0	**16**	**1**	**17**
Jersey	2	9	6	6	0	0	0	0	0	0	0	0	**8**	**15**	**22**
Stapleton A	8	40	7	7	0	0	0	0	0	0	0	0	**15**	**47**	**62**
Stapleton B1	7	38	0	0	0	0	0	0	0	0	0	0	**7**	**38**	**45**
Total	61	316	3	3	28	2	-1	0	1	1	16	2	**108**	**324**	**433**

Bus	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	69	359	-7	-7	56	5	28	14	1	1	29	4	**176**	**376**	**552**
Canal Street	11	53	-2	-2	-4	0	-2	-1	0	0	0	0	**3**	**50**	**52**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	23	2	0	0	0	0	0	0	**23**	**2**	**25**
Jersey	6	29	6	6	0	0	0	0	0	0	0	0	**12**	**35**	**46**
Stapleton A	14	73	7	7	0	0	0	0	0	0	0	0	**21**	**80**	**101**
Stapleton B1	13	70	0	0	0	0	0	0	0	0	0	0	**13**	**70**	**83**
Total	113	584	3	3	75	7	26	13	1	1	29	4	**247**	**612**	**860**

Walk	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	46	240	-75	-75	52	4	28	16	50	50	10	2	**111**	**237**	**348**
Canal Street	3	20	-27	-27	-2	0	-1	-1	0	0	0	0	**-27**	**-8**	**-34**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	16	1	0	0	0	0	0	0	**16**	**1**	**17**
Jersey	2	9	61	61	0	0	0	0	0	0	0	0	**63**	**70**	**132**
Stapleton A	5	26	74	74	0	0	0	0	0	0	0	0	**79**	**100**	**180**
Stapleton B1	5	25	0	0	0	0	0	0	0	0	0	0	**5**	**25**	**30**
Total	61	320	34	34	66	5	27	15	50	50	10	2	**248**	**426**	**673**

Table 6

Project Increment: Weekday MD Peak Hour Trip Generation Estimates

Auto	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	68	50	-24	-24	95	110	14	10	32	32	42	40	**227**	**218**	**445**
Canal Street	13	6	-11	-11	-7	-7	-1	0	0	0	0	0	**-6**	**-12**	**-18**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	55	65	0	0	0	0	0	0	**55**	**65**	**120**
Jersey	5	4	22	22	0	0	0	0	0	0	0	0	**27**	**26**	**53**
Stapleton A	13	10	27	27	0	0	0	0	0	0	0	0	**40**	**37**	**77**
Stapleton B1	13	9	0	0	0	0	0	0	0	0	0	0	**13**	**9**	**22**
Total	112	79	14	14	143	168	13	10	32	32	42	40	**356**	**343**	**699**

Taxi	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	0	0	-18	-18	2	2	0	0	18	18	4	4	**6**	**6**	**12**
Canal Street	0	0	-8	-8	0	0	0	0	0	0	0	0	**-8**	**-8**	**-16**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	2	2	0	0	0	0	0	0	**2**	**2**	**4**
Jersey	0	0	14	14	0	0	0	0	0	0	0	0	**14**	**14**	**28**
Stapleton A	0	0	18	18	0	0	0	0	0	0	0	0	**18**	**18**	**36**
Stapleton B1	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total	0	0	6	6	4	4	0	0	18	18	4	4	**32**	**32**	**64**

Truck	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	3	3	-2	-2	2	2	0	0	0	0	0	0	**3**	**3**	**6**
Canal Street	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**
Jersey	0	0	1	1	0	0	0	0	0	0	0	0	**1**	**1**	**2**
Stapleton A	1	1	1	1	0	0	0	0	0	0	0	0	**2**	**2**	**4**
Stapleton B1	1	1	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**
Total	5	5	0	0	3	3	0	0	0	0	0	0	**8**	**8**	**16**

SIR	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	69	47	-43	-43	16	18	0	-1	23	23	25	24	**90**	**68**	**158**
Canal Street	11	7	-16	-16	-1	-1	0	0	0	0	0	0	**-6**	**-10**	**-16**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	9	11	0	0	0	0	0	0	**9**	**11**	**20**
Jersey	3	2	36	36	0	0	0	0	0	0	0	0	**39**	**38**	**77**
Stapleton A	14	10	44	44	0	0	0	0	0	0	0	0	**58**	**54**	**112**
Stapleton B1	13	9	0	0	0	0	0	0	0	0	0	0	**13**	**9**	**22**
Total	110	75	21	21	24	28	0	-1	23	23	25	24	**203**	**170**	**373**

Bus	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	127	90	-43	-43	6	7	41	30	23	23	45	43	**199**	**150**	**349**
Canal Street	20	16	-16	-16	0	0	-2	-1	0	0	0	0	**2**	**-1**	**1**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	4	4	0	0	0	0	0	0	**4**	**4**	**8**
Jersey	10	7	36	36	0	0	0	0	0	0	0	0	**46**	**43**	**89**
Stapleton A	26	18	44	44	0	0	0	0	0	0	0	0	**70**	**62**	**132**
Stapleton B1	25	17	0	0	0	0	0	0	0	0	0	0	**25**	**17**	**42**
Total	208	148	21	21	10	11	39	29	23	23	45	43	**346**	**275**	**621**

Walk	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	174	120	-473	-473	110	128	44	32	454	454	14	14	**323**	**275**	**597**
Canal Street	16	10	-169	-169	-4	-4	-1	-1	0	0	0	0	**-158**	**-164**	**-322**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	33	39	0	0	0	0	0	0	**33**	**39**	**72**
Jersey	6	5	383	383	0	0	0	0	0	0	0	0	**389**	**388**	**778**
Stapleton A	19	13	471	471	0	0	0	0	0	0	0	0	**490**	**484**	**974**
Stapleton B1	18	13	0	0	0	0	0	0	0	0	0	0	**18**	**13**	**31**
Total	233	161	212	212	139	163	43	31	454	454	14	14	**1095**	**1035**	**2130**

Table 7

Project Increment: Weekday PM Peak Hour Trip Generation Estimates

Auto	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	296	101	-15	-15	5	220	7	13	61	61	43	47	**397**	**427**	**824**
Canal Street	44	17	-4	-4	0	-15	-1	-1	0	0	0	0	**39**	**-3**	**36**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	4	129	0	0	0	0	0	0	**4**	**129**	**133**
Jersey	23	8	12	12	0	0	0	0	0	0	0	0	**35**	**20**	**55**
Stapleton A	60	20	14	14	0	0	0	0	0	0	0	0	**74**	**34**	**108**
Stapleton B1	58	19	0	0	0	0	0	0	0	0	0	0	**58**	**19**	**77**
Total	481	165	7	7	9	334	6	12	61	61	43	47	**607**	**626**	**1233**

Taxi	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	5	5	-10	-10	0	0	0	0	18	18	4	4	**17**	**17**	**34**
Canal Street	0	0	-6	-6	0	0	0	0	0	0	0	0	**-6**	**-6**	**-12**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**
Jersey	0	0	8	8	0	0	0	0	0	0	0	0	**8**	**8**	**16**
Stapleton A	1	1	10	10	0	0	0	0	0	0	0	0	**11**	**11**	**22**
Stapleton B1	1	1	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**
Total	7	7	2	2	1	1	0	0	18	18	4	4	**32**	**32**	**64**

Truck	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**
Canal Street	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Jersey	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Stapleton A	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Stapleton B1	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**

SIR	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	195	66	-23	-23	1	15	0	0	28	28	25	27	**226**	**113**	**340**
Canal Street	28	9	-8	-8	0	-1	0	0	0	0	0	0	**20**	**0**	**19**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	19	0	0	0	0	0	0	**1**	**19**	**20**
Jersey	9	3	19	19	0	0	0	0	0	0	0	0	**28**	**22**	**50**
Stapleton A	39	13	23	23	0	0	0	0	0	0	0	0	**62**	**36**	**98**
Stapleton B1	38	13	0	0	0	0	0	0	0	0	0	0	**38**	**13**	**51**
Total	309	104	11	11	2	33	0	0	28	28	25	27	**375**	**203**	**578**

Bus	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	354	119	-23	-23	2	69	19	38	28	28	46	50	**426**	**281**	**708**
Canal Street	53	19	-8	-8	0	-5	-1	-3	0	0	0	0	**44**	**3**	**46**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	28	0	0	0	0	0	0	**1**	**28**	**29**
Jersey	29	10	19	19	0	0	0	0	0	0	0	0	**48**	**29**	**77**
Stapleton A	71	24	23	23	0	0	0	0	0	0	0	0	**94**	**47**	**141**
Stapleton B1	69	23	0	0	0	0	0	0	0	0	0	0	**69**	**23**	**92**
Total	576	195	11	11	3	92	18	35	28	28	46	50	**682**	**411**	**1093**

Walk	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	234	78	-249	-249	2	66	20	38	470	470	14	16	**491**	**419**	**910**
Canal Street	20	6	-89	-89	0	-3	-1	-1	0	0	0	0	**-70**	**-87**	**-157**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	19	0	0	0	0	0	0	**1**	**19**	**20**
Jersey	9	3	202	202	0	0	0	0	0	0	0	0	**211**	**205**	**416**
Stapleton A	26	9	248	248	0	0	0	0	0	0	0	0	**274**	**257**	**531**
Stapleton B1	25	8	0	0	0	0	0	0	0	0	0	0	**25**	**8**	**33**
Total	314	104	112	112	3	82	19	37	470	470	14	16	**932**	**821**	**1752**

Table 8

Project Increment: Saturday MD Peak Hour Trip Generation Estimates

Auto	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	128	89	-17	-17	23	28	4	3	43	43	42	40	**223**	**186**	**409**
Canal Street	20	16	-5	-5	-2	-3	0	0	0	0	0	0	**13**	**8**	**21**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	14	16	0	0	0	0	0	0	**14**	**16**	**30**
Jersey	10	7	14	14	0	0	0	0	0	0	0	0	**24**	**21**	**45**
Stapleton A	26	18	17	17	0	0	0	0	0	0	0	0	**43**	**35**	**78**
Stapleton B1	25	17	0	0	0	0	0	0	0	0	0	0	**25**	**17**	**42**
Total	209	147	9	9	35	41	4	3	43	43	42	40	**342**	**283**	**625**

Taxi	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	4	4	-10	-10	0	0	0	0	16	16	4	4	**14**	**14**	**28**
Canal Street	0	0	-4	-4	0	0	0	0	0	0	0	0	**-4**	**-4**	**-8**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Jersey	0	0	10	10	0	0	0	0	0	0	0	0	**10**	**10**	**20**
Stapleton A	2	2	12	12	0	0	0	0	0	0	0	0	**14**	**14**	**28**
Stapleton B1	1	1	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**
Total	7	7	8	8	0	0	0	0	16	16	4	4	**35**	**35**	**70**

Truck	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Canal Street	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Jersey	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Stapleton A	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Stapleton B1	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**

SIR	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	133	94	-26	-26	4	4	0	0	20	20	25	24	**156**	**116**	**271**
Canal Street	20	14	-10	-10	0	0	0	0	0	0	0	0	**10**	**4**	**15**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	2	3	0	0	0	0	0	0	**2**	**3**	**5**
Jersey	6	4	22	22	0	0	0	0	0	0	0	0	**28**	**26**	**54**
Stapleton A	26	18	27	27	0	0	0	0	0	0	0	0	**53**	**45**	**98**
Stapleton B1	26	18	0	0	0	0	0	0	0	0	0	0	**26**	**18**	**44**
Total	211	148	13	13	6	7	0	0	20	20	25	24	**275**	**212**	**487**

Bus	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	241	169	-26	-26	1	1	11	10	20	20	45	43	**292**	**217**	**508**
Canal Street	37	26	-10	-10	0	0	-1	-1	0	0	0	0	**26**	**15**	**42**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	1	1	0	0	0	0	0	0	**1**	**1**	**2**
Jersey	19	14	22	22	0	0	0	0	0	0	0	0	**41**	**36**	**77**
Stapleton A	49	34	27	27	0	0	0	0	0	0	0	0	**76**	**61**	**137**
Stapleton B1	47	33	0	0	0	0	0	0	0	0	0	0	**47**	**33**	**80**
Total	393	276	13	13	2	2	10	9	20	20	45	43	**483**	**363**	**846**

Walk	Residential		Local Retail		Office		Community Facility		Restaurant		Medical Office		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Bay Street	330	230	-292	-292	28	32	12	10	342	342	14	14	**434**	**336**	**771**
Canal Street	27	20	-104	-104	-1	-1	0	0	0	0	0	0	**-78**	**-85**	**-163**
55 Stuy	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
54 Central	0	0	0	0	8	9	0	0	0	0	0	0	**8**	**9**	**17**
Jersey	12	9	236	236	0	0	0	0	0	0	0	0	**248**	**245**	**494**
Stapleton A	36	25	290	290	0	0	0	0	0	0	0	0	**326**	**315**	**642**
Stapleton B1	35	24	0	0	0	0	0	0	0	0	0	0	**35**	**24**	**59**
Total	440	308	131	131	35	40	12	10	342	342	14	14	**974**	**845**	**1819**

B. Trip Generation Results

The results of the trip generation estimates for the Proposed Project are shown in **Table 9**.

Table 9

Project Increment Trip Generation Estimate Summary

Peak Hour	Vehicle (Auto/Taxi/Truck)	SIR	Bus	Bike/Walk Only
Weekday AM	985	433	860	673
Weekday MD	779	373	621	2,130
Weekday PM	1,299	578	1,093	1,752
Saturday MD	695	487	846	1,819

The results show that the Proposed Project would generate more than 50 vehicle trips in a peak hour (a maximum of 1,299 trips during the Weekday PM peak hour). Therefore, in accordance with the *2014 CEQR Technical Manual*, a Level 2 screening was performed to distribute the new vehicular trips to the surrounding roadway network and identify study locations for quantitative analyses.

The results show that the Proposed Project would generate more than 200 SIR trips in a peak hour (a maximum of 578 trips during the Weekday PM peak hour). Therefore, in accordance with the *2014 CEQR Technical Manual*, a Level 2 screening was performed to distribute the new rail trips to the surrounding transit network and identify rail stations for quantitative analyses.

The Proposed Project would generate more than 50 bus trips in a peak hour (a maximum of 1,093 trips in the Weekday PM peak hour). Therefore, in accordance with the *2014 CEQR Technical Manual*, a Level 2 screening was performed to distribute the new bus trips to the surrounding transit network and identify bus routes for quantitative analyses.

The results also show that the Proposed Project would generate more than 200 pedestrians in a peak hour (a maximum of 3,423 SIR, bus, and walk-only trips during the Weekday PM peak hour). Therefore, in accordance with the *2014 CEQR Technical Manual*, a Level 2 screening was performed to distribute the new pedestrian trips to the surrounding pedestrian network and identify study locations for quantitative analyses.

C. Trip Assignment

Vehicle

Vehicle trip assignments were developed for autos, taxis, and trucks for each site and each land use. Residential and office vehicle trip assignment assumptions were based on the Proposed Project's geographic location relative to major arterials and commuter routes for residents and office workers of the area based on available census data[1]. Local retail, restaurant, community facility, and medical office vehicle trip assignments were based on population density and were assumed to be the same for the four land use categories. Auto trips were assigned to each site and assumed to park on-site or on-street on one of the block faces of the project site. Pedestrian trips generated by the parked vehicles were added to the pedestrian network.

The auto, taxi, and truck assignment percentages to each major portal within the study area are summarized in **Tables 10 through 15** and shown on **Figures 5 through 30**. The vehicular project increment for the four peak hours are shown on **Figures 31 through 34**.

[1] OnTheMap v.6.5. *U.S. Census Bureau, Center for Economic Studies.* 2014 Census Data.

Table 10

Bay Street Sites 1, 3-6, 9-17 Vehicle Assignment Percentages

	Bay Street Sites 1, 3, 4, 5a, 5b, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17											
	Residential				Office				Local Retail & Other Land Uses			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
Portals	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck
School Road (to/from Bay Street)	32%	35%	32%	35%	15%	35%	15%	35%	6%	35%	6%	35%
Hylan Boulevard (to/from Bay Street)	16%		16%		15%		15%		8%		8%	
Vanderbilt Avenue / Greenfield Avenue (to/from Bay Street)									6%		6%	
Richmond Terrace	15%	25%	15%	25%	6%	25%	6%	25%	3%	25%	3%	25%
Franklin Avenue (to/from Richmond Terrace)									1%		1%	
Jersey Street (to/from Richmond Terrace)		5%		5%		5%		5%	1%	5%	1%	5%
Westervelt Avenue (to/from Richmond Terrace)									1%		1%	
Clove Road (to/from Richmond Terrace)		5%		5%	3%	5%	3%	5%	3%	5%	3%	5%
Other Intersections (to/from Richmond Terrace)									6%		6%	
Victory Boulevard	7%	4%	7%	4%	15%	4%	15%	4%	8%	4%	8%	4%
Forest Avenue (to/from Victory Boulevard)	3%	1%	3%	1%	7%	1%	7%	1%	8%	1%	8%	1%
Bay Street (to/from Vanderbilt Avenue)	10%	5%	10%	5%	14%	5%	14%	5%	10%	5%	10%	5%
Tompkins Avenue (to/from Vanderbilt Avenue)		5%		5%	8%	5%	8%	5%	5%	5%	5%	5%
Victory Boulevard (to/from Jersey Street)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Bay Street (to/from Broad Street)	10%	10%	10%	10%	9%	10%	9%	10%	15%	10%	15%	10%
Van Duzer Street / St. Pauls Avenue	2%		2%		3%		3%					
St. Marks Place / Montgomery Avenue									5%		5%	
Victory Boulevard (to/from Westervelt Avenue)									5%		5%	
Beach Street - Cebra Avenue									5%		5%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 11

Bay Street Sites 2, 7 and Stapleton Site Vehicle Assignment Percentages

	Bay Street Sites 2, 7 and Stapleton A, B1											
	Residential				Office				Local Retail & Other Land Uses			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
Portals	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck
School Road (to/from Bay Street)	32%	35%	32%	35%	15%	35%	15%	35%	6%	35%	6%	35%
Hylan Boulevard (to/from Bay Street)	16%		16%		15%		15%		8%		8%	
Vanderbilt Avenue / Greenfield Avenue (to/from Bay Street)									6%		6%	
Richmond Terrace	15%	25%	15%	25%	6%	25%	6%	25%	3%	25%	3%	25%
Franklin Avenue (to/from Richmond Terrace)									1%		1%	
Jersey Street (to/from Richmond Terrace)		5%		5%		5%		5%	1%	5%	1%	5%
Westervelt Avenue (to/from Richmond Terrace)									1%		1%	
Clove Road (to/from Richmond Terrace)		5%		5%	3%	5%	3%	5%	3%	5%	3%	5%
Other Intersections (to/from Richmond Terrace)									6%		6%	
Victory Boulevard	7%	4%	7%	4%	15%	4%	15%	4%	8%	4%	8%	4%
Forest Avenue (to/from Victory Boulevard)	3%	1%	3%	1%	7%	1%	7%	1%	8%	1%	8%	1%
Bay Street (to/from Vanderbilt Avenue)	10%	5%	10%	5%	14%	5%	14%	5%	10%	5%	10%	5%
Tompkins Avenue (to/from Vanderbilt Avenue)		5%		5%	8%	5%	8%	5%	5%	5%	5%	5%
Victory Boulevard (to/from Jersey Street)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Bay Street (to/from Broad Street)	10%	10%	10%	10%	9%	10%	9%	10%	15%	10%	15%	10%
Van Duzer Street / St. Pauls Avenue	2%		2%		3%		3%					
St. Marks Place / Montgomery Avenue									5%		5%	
Victory Boulevard (to/from Westervelt Avenue)									5%		5%	
Beach Street - Cebra Avenue									5%		5%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 12
Canal Street Sites Vehicle Assignment Percentages

	Canal Street & Broad Street Site											
	Residential				Office				Local Retail & Other Land Uses			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
Portals	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck
School Road (to/from Bay Street)	16%	17.5%	16%	17.5%	7.5%	17.5%	7.5%	17.5%	3%	17.5%	3%	17.5%
Victory Boulevard (to/from the south)												
Beach Street - Cebra Avenue (to/from Bay Street)												
Victory Boulevard (to/from Bay Street, not cutting through Beach Street - Cebra Avenue)												
Tompkins Avenue (to/from the south)	24%	17.5%	24%	17.5%	23%	17.5%	23%	17.5%	10%	17.5%	10%	17.5%
Vanderbilt Avenue / Greenfield Avenue (to/from Bay Street)									3%		3%	
Hylan Boulevard (to/from Bay Street)	8%		8%		7.5%		7.5%		4%		4%	
Richmond Terrace	15%	25%	15%	25%	6%	25%	6%	25%	3%	25%	3%	25%
Stuyvesant Place / Richmond Terrace (to/from Richmond Terrace)												
Franklin Avenue (to/from Richmond Terrace)									1%		1%	
Westervelt Avenue (to/from Richmond Terrace)									1%		1%	
Clove Road (to/from Richmond Terrace)		5%		5%	3%	5%	3%	5%	3%	5%	3%	5%
Other Intersections (to/from Richmond Terrace)									6%		6%	
Victory Boulevard		4%		4%		4%		4%		4%		4%
Beach Street/Cebra Avenue (to/from Victory Boulevard)	7%		7%		15%		15%		7.5%		7.5%	
Forest Avenue (to/from Victory Boulevard)	3%	1%	3%	1%	7%	1%	7%	1%	7.5%	1%	7.5%	1%
Bay Street (to/from Vanderbilt Avenue)												
Targee Street / Van Duzer Street (to/from Vanderbilt Avenue)												
Tompkins Avenue (to/from Vanderbilt Avenue)	10%	10%	10%	10%	14%	10%	14%	10%	15%	10%	15%	10%
Richmond Terrace (to/from Jersey Street)		5%		5%		5%		5%	1%	5%	1%	5%
Victory Boulevard (to/from Jersey Street)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Bay Street (to/from Broad Street)												
Targee Street / Van Duzer Street (to/from Broad Street)												
Canal Street (to/from Broad Street)	10%	10%	10%	10%	9%	10%	9%	10%	15%	10%	15%	10%
Van Duzer Street / St. Pauls Avenue												
St. Pauls Avenue / Van Duzer Street	2%		2%		3%		3%					
St. Marks Place / Montgomery Avenue									5%		5%	
Montgomery Avenue / St. Marks Place												
Richmond Terrace (to/from Westervelt Avenue)												
Victory Boulevard (to/from Westervelt Avenue)									5%		5%	
Beach Street - Cebra Avenue									5%		5%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 13
Jersey Street Site Vehicle Assignment Percentages

	Jersey Street & Victory Boulevard Site											
	Residential				Office				Local Retail & Other Land Uses			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
Portals	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck
School Road (to/from Bay Street)	16%	17.5%	16%	17.5%	7.5%	17.5%	7.5%	17.5%	3%	17.5%	3%	17.5%
Victory Boulevard (to/from the south)	24%		24%		30%		30%		10%		10%	
Beach Street - Cebra Avenue (to/from Bay Street)	*12%*		*12%*		*7.5%*		*7.5%*		*5%*		*5%*	
Victory Boulevard (to/from Bay Street, not cutting through Beach Street - Cebra Avenue)	*12%*	*27.5%*	*12%*	*27.5%*	*7.5%*	*27.5%*	*7.5%*	*27.5%*	*5%*	*27.5%*	*5%*	*27.5%*
Tompkins Avenue (to/from the south)												
Vanderbilt Avenue / Greenfield Avenue (to/from Bay Street)									3%		3%	
Hylan Boulevard (to/from Bay Street)	8%		8%		7.5%		7.5%		4%		4%	
Richmond Terrace	15%	25%	15%	25%	6%	25%	6%	25%	3%	25%	3%	25%
Stuyvesant Place / Richmond Terrace (to/from Richmond Terrace)												
Franklin Avenue (to/from Richmond Terrace)									1%		1%	
Westervelt Avenue (to/from Richmond Terrace)									1%		1%	
Clove Road (to/from Richmond Terrace)		5%		5%	3%	5%	3%	5%	3%	5%	3%	5%
Other Intersections (to/from Richmond Terrace)									6%		6%	
Victory Boulevard		17.5%		17.5%		17.5%		17.5%	7.5%	17.5%	7.5%	17.5%
Beach Street/Cebra Avenue (to/from Victory Boulevard)												
Forest Avenue (to/from Victory Boulevard)	10%	5%	10%	5%	7%	5%	7%	5%	7.5%	5%	7.5%	5%
Bay Street (to/from Vanderbilt Avenue)	5%		5%		3%		3%		2.5%		2.5%	
Targee Street / Van Duzer Street (to/from Vanderbilt Avenue)	5%	5%	5%	5%	11%	5%	11%	5%	7.5%	5%	7.5%	5%
Tompkins Avenue (to/from Vanderbilt Avenue)		5%		5%	8%	5%	8%	5%	5%	5%	5%	5%
Richmond Terrace (to/from Jersey Street)		5%		5%		5%		5%	1%	5%	1%	5%
Victory Boulevard (to/from Jersey Street)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Bay Street (to/from Broad Street)		5%		5%		5%		5%		5%		5%
Targee Street / Van Duzer Street (to/from Broad Street)	5%	5%	5%	5%	4.5%	5%	4.5%	5%	7.5%	5%	7.5%	5%
Canal Street (to/from Broad Street)	5%		5%		4.5%		4.5%		7.5%		7.5%	
Van Duzer Street / St. Pauls Avenue	1%		1%		1.5%		1.5%					
St. Pauls Avenue / Van Duzer Street	1%		1%		1.5%		1.5%					
St. Marks Place / Montgomery Avenue									5%		5%	
Montgomery Avenue / St. Marks Place												
Richmond Terrace (to/from Westervelt Avenue)												
Victory Boulevard (to/from Westervelt Avenue)									5%		5%	
Beach Street - Cebra Avenue									5%		5%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 14

54 Central Avenue Site Vehicle Assignment Percentages

	54 Central Avenue Site											
	Residential				Office				Local Retail & Other Land Uses			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
Portals	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck
School Road (to/from Bay Street)	16%	17.5%	16%	17.5%	7.5%	17.5%	7.5%	17.5%	3%	17.5%	3%	17.5%
Victory Boulevard (to/from the south)	24%		24%		30%		30%		10%		10%	
Beach Street - Cebra Avenue (to/from Bay Street)												
Victory Boulevard (to/from Bay Street, not cutting through Beach Street - Cebra Avenue)												
Tompkins Avenue (to/from the south)												
Vanderbilt Avenue / Greenfield Avenue (to/from Bay Street)									3%		3%	
Hylan Boulevard (to/from Bay Street)	8%		8%		7.5%		7.5%		4%		4%	
Richmond Terrace	15%	25%	15%	25%	6%	25%	6%	25%	3%	25%	3%	25%
Stuyvesant Place / Richmond Terrace (to/from Richmond Terrace)												
Franklin Avenue (to/from Richmond Terrace)									1%		1%	
Westervelt Avenue (to/from Richmond Terrace)									1%		1%	
Clove Road (to/from Richmond Terrace)		5%		5%	3%	5%	3%	5%	3%	5%	3%	5%
Other Intersections (to/from Richmond Terrace)									6%		6%	
Victory Boulevard		17.5%		17.5%		17.5%		17.5%	7.5%	17.5%	7.5%	17.5%
Beach Street/Cebra Avenue (to/from Victory Boulevard)												
Forest Avenue (to/from Victory Boulevard)	10%	5%	10%	5%	7%	5%	7%	5%	7.5%	5%	7.5%	5%
Bay Street (to/from Vanderbilt Avenue)	5%		5%		3%		3%		2.5%		2.5%	
Targee Street / Van Duzer Street (to/from Vanderbilt Avenue)	5%	5%	5%	5%	11%	5%	11%	5%	7.5%	5%	7.5%	5%
Tompkins Avenue (to/from Vanderbilt Avenue)		5%		5%	8%	5%	8%	5%	5%	5%	5%	5%
Richmond Terrace (to/from Jersey Street)		5%		5%		5%		5%	1%	5%	1%	5%
Victory Boulevard (to/from Jersey Street)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Bay Street (to/from Broad Street)	5%	5%	5%	5%	4.5%	5%	4.5%	5%	7.5%	5%	7.5%	5%
Targee Street / Van Duzer Street (to/from Broad Street)	5%	5%	5%	5%	4.5%	5%	4.5%	5%	7.5%	5%	7.5%	5%
Canal Street (to/from Broad Street)												
Van Duzer Street / St. Pauls Avenue	2%		2%		3.0%		3.0%					
St. Pauls Avenue / Van Duzer Street												
St. Marks Place / Montgomery Avenue									2.5%		2.5%	
Montgomery Avenue / St. Marks Place									2.5%		2.5%	
Richmond Terrace (to/from Westervelt Avenue)												
Victory Boulevard (to/from Westervelt Avenue)									5%		5%	
Beach Street - Cebra Avenue									5%		5%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 15

55 Stuyvesant Place Site Vehicle Assignment Percentages

	55 Stuyvesant Place Site											
	Residential				Office				Local Retail & Other Land Uses			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
Portals	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck	Auto	Taxi/ Truck
School Road (to/from Bay Street)	16%	17.5%	16%	17.5%	7.5%	17.5%	7.5%	17.5%	3%	17.5%	3%	17.5%
Victory Boulevard (to/from the south)	24%		24%		30%		30%		10%		10%	
Beach Street - Cebra Avenue (to/from Bay Street)												
Victory Boulevard (to/from Bay Street, not cutting through Beach Street - Cebra Avenue)												
Tompkins Avenue (to/from the south)												
Vanderbilt Avenue / Greenfield Avenue (to/from Bay Street)									3%		3%	
Hylan Boulevard (to/from Bay Street)	8%		8%		7.5%		7.5%		4%		4%	
Richmond Terrace												
Stuyvesant Place / Richmond Terrace (to/from Richmond Terrace)	15%	30%	15%	30%	6%	30%	6%	30%	3%	30%	3%	30%
Franklin Avenue (to/from Richmond Terrace)									1%		1%	
Westervelt Avenue (to/from Richmond Terrace)									1%		1%	
Clove Road (to/from Richmond Terrace)		5%		5%	3%	5%	3%	5%	3%	5%	3%	5%
Other Intersections (to/from Richmond Terrace)									6%		6%	
Victory Boulevard		17.5%		17.5%		17.5%		17.5%	7.5%	17.5%	7.5%	17.5%
Beach Street/Cebra Avenue (to/from Victory Boulevard)												
Forest Avenue (to/from Victory Boulevard)	10%	5%	10%	5%	7%	5%	7%	5%	7.5%	5%	7.5%	5%
Bay Street (to/from Vanderbilt Avenue)	5%		5%		3%		3%		2.5%		2.5%	
Targee Street / Van Duzer Street (to/from Vanderbilt Avenue)	5%	5%	5%	5%	11%	5%	11%	5%	7.5%	5%	7.5%	5%
Tompkins Avenue (to/from Vanderbilt Avenue)		5%		5%	8%	5%	8%	5%	5%	5%	5%	5%
Richmond Terrace (to/from Jersey Street)	5%	5%	5%	5%	5%	5%	5%	5%	3.5%	5%	3.5%	5%
Victory Boulevard (to/from Jersey Street)									2.5%		2.5%	
Bay Street (to/from Broad Street)	5%	5%	5%	5%	4.5%	5%	4.5%	5%	7.5%	5%	7.5%	5%
Targee Street / Van Duzer Street (to/from Broad Street)	5%	5%	5%	5%	4.5%	5%	4.5%	5%	7.5%	5%	7.5%	5%
Canal Street (to/from Broad Street)												
Van Duzer Street / St. Pauls Avenue	2%		2%		3%		3%					
St. Pauls Avenue / Van Duzer Street												
St. Marks Place / Montgomery Avenue									2.5%		2.5%	
Montgomery Avenue / St. Marks Place									2.5%		2.5%	
Richmond Terrace (to/from Westervelt Avenue)									2.5%		2.5%	
Victory Boulevard (to/from Westervelt Avenue)									2.5%		2.5%	
Beach Street - Cebra Avenue									5%		5%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Bay Street Rezoning EIS
Bay Street Sites & Stapleton - Office - Auto - Inbound
Figure 5



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - Office - Auto - Inbound
Figure 6



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

55 Stuyvesant, 54 Central, Jersey/Victory Sites - Office - Auto - Inbound

Figure 7



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Bay Street Sites & Stapleton - Office - Auto - Outbound
Figure 8



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - Office - Auto - Outbound
Figure 9



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

55 Stuyvesant, 54 Central, Jersey/Victory Sites - Office - Auto - Outbound

Figure 10


New Jersey
3%
6%
Various Intersections
Internal: 20%
7.5%
7.5%
3%
1%
1%
1%
6%
6%
6%
15%
10%
5%
8%
8%
6%
6%
Sites 2,7, and Stapleton only
Clove Lakes Park
Silver Lake
Henderson Av
Castleton Av
Cary Av
Jewett Av
Clove Rd
Forest Av
Victory Blvd
Manor Rd
Slosson Av
Lortel Av
Little Clove Rd
Todt Hill Rd
Willowbrook Rd
Lafayette Ave
Hamilton Ave
Wall St
Stuyvesant Pl
Bay St
St Marks Pl
Pike St
Brook St
Stanley Ave
Hannah St
Swan St
St. Julian Pl
Grant St
Baltic St
William St
Congress St
Wave St
Prospect St
Canal St
St Pauls Av
Van Duzer St
Cedar St
Hudson St
Tompkins Av
Edgewater Dr
Richmond Rd
Targee St
School Rd
28 Study Intersection
0 2000 5000 FEET
SCALE
Bay Street Rezoning EIS
Bay Street Sites & Stapleton - Local Retail - Auto - Inbound
Figure 11



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - Local Retail - Auto - Inbound
Figure 12



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

55 Stuyvesant, 54 Central, Jersey/Victory Sites - Local Retail - Auto - Inbound

Figure 13



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

Bay Street Sites & Stapleton - Local Retail - Auto - Outbound

Figure 14

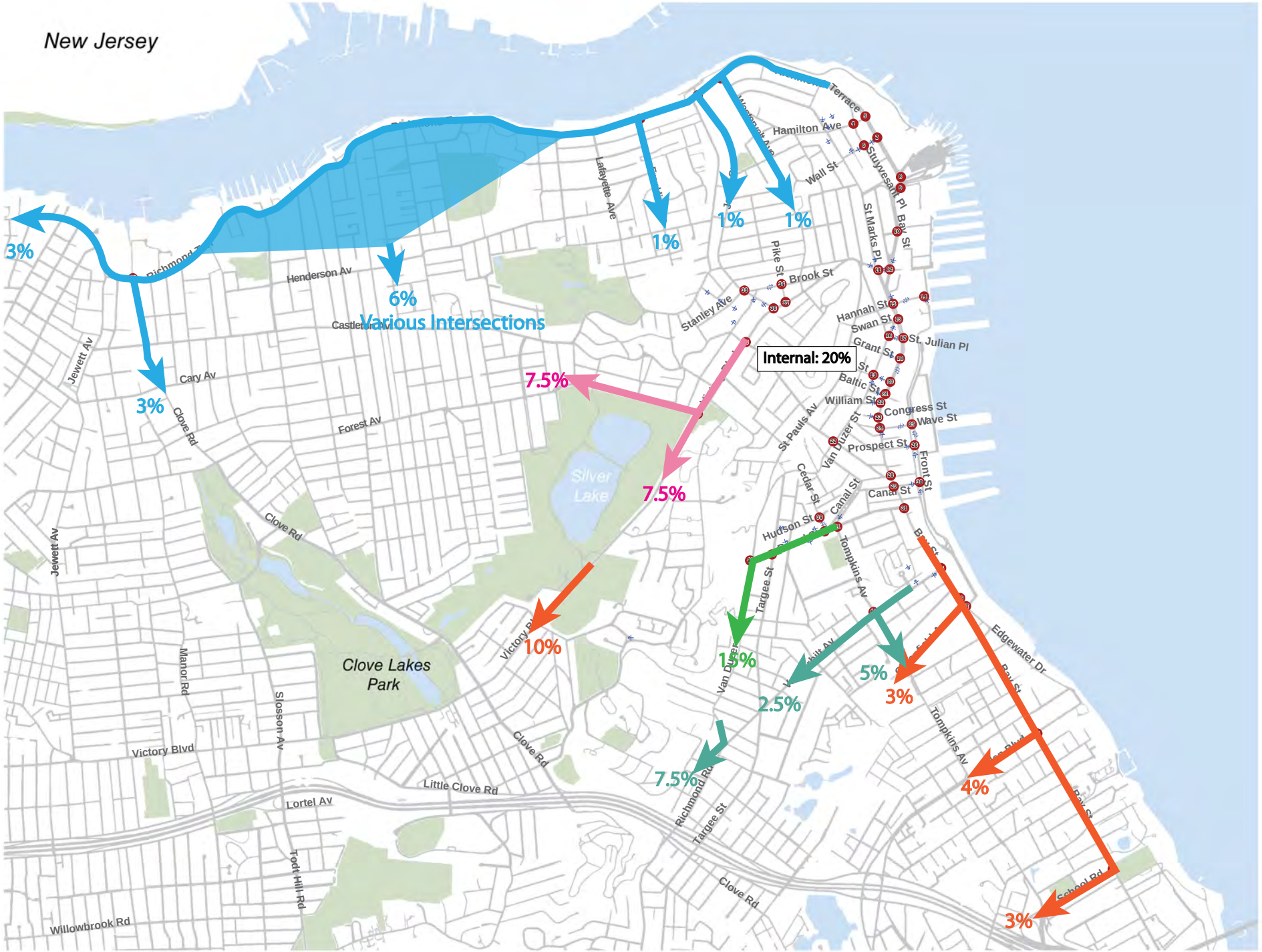


28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - Local Retail - Auto - Outbound
Figure 15



Bay Street Rezoning EIS

55 Stuyvesant, 54 Central, Jersey/Victory Sites - Local Retail - Auto - Outbound

Figure 16



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

Bay Street Sites & Stapleton - Residential - Auto - Inbound

Figure 17



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - Residential - Auto - Inbound
Figure 18



Bay Street Rezoning EIS

55 Stuyvesant, 54 Central, Jersey/Victory Sites - Residential - Auto - Inbound

Figure 19



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

Bay Street Sites & Stapleton - Residential - Auto - Outbound

Figure 20



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - Residential - Auto - Outbound
Figure 21



28 Study Intersection

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

55 Stuyvesant, 54 Central, Jersey/Victory Sites - Residential - Auto - Outbound

Figure 22



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

Bay Street Sites & Stapleton - All Land Uses - Truck/Taxi - Inbound

Figure 23



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - All Land Uses - Truck/Taxi - Inbound
Figure 24



Bay Street Rezoning EIS
54 Central and Jersey/Victory Sites - All Land Uses - Truck/Taxi - Inbound
Figure 25



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

55 Stuyvesant Site - All Land Uses - Truck/Taxi - Inbound

Figure 26



Bay Street Rezoning EIS

Bay Street Sites & Stapleton - All Land Uses - Truck/Taxi - Outbound

Figure 27



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS
Canal Street Site - All Land Uses - Truck/Taxi - Outbound
Figure 28



28 *Study Intersection*

0 2000 5000 FEET

SCALE

Bay Street Rezoning EIS

54 Central and Jersey/Victory Sites - All Land Uses - Truck/Taxi - Outbound

Figure 29



28 *Study Intersection*

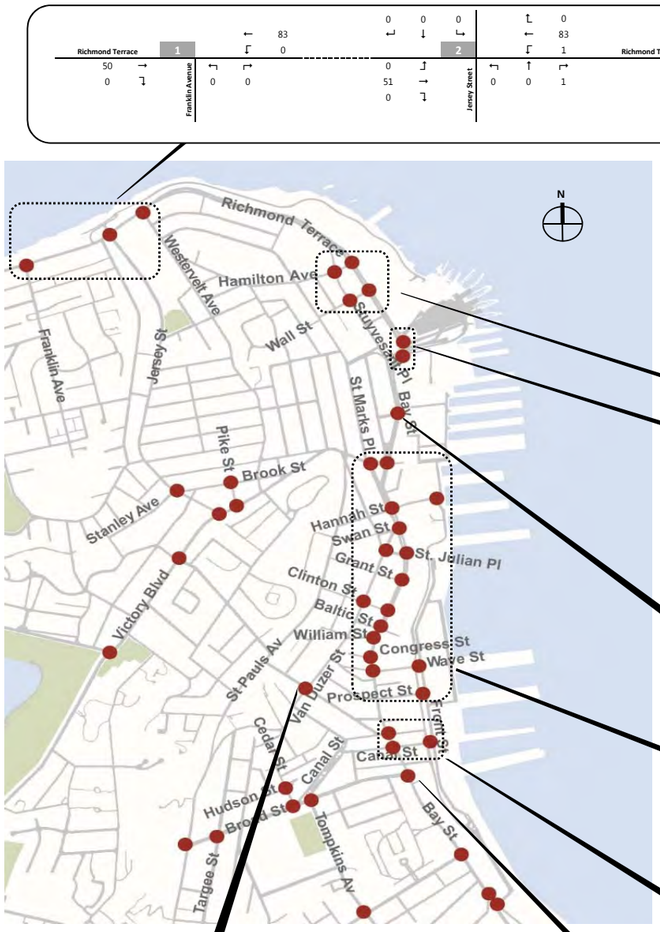
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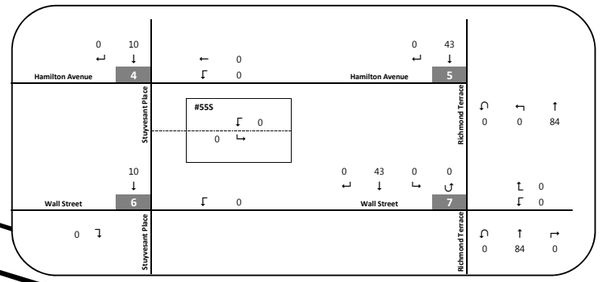
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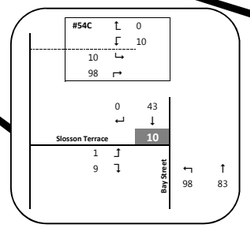
Bay Street Rezoning EIS

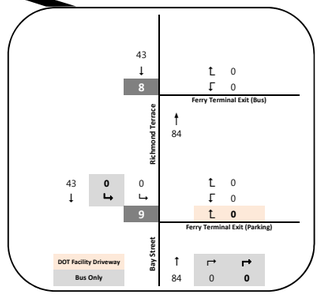
55 Stuyvesant Site - All Land Uses - Truck/Taxi - Outbound

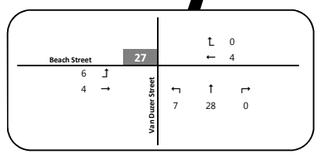
Figure 30



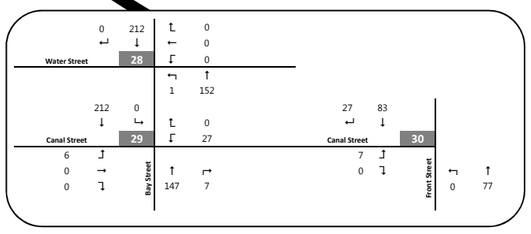


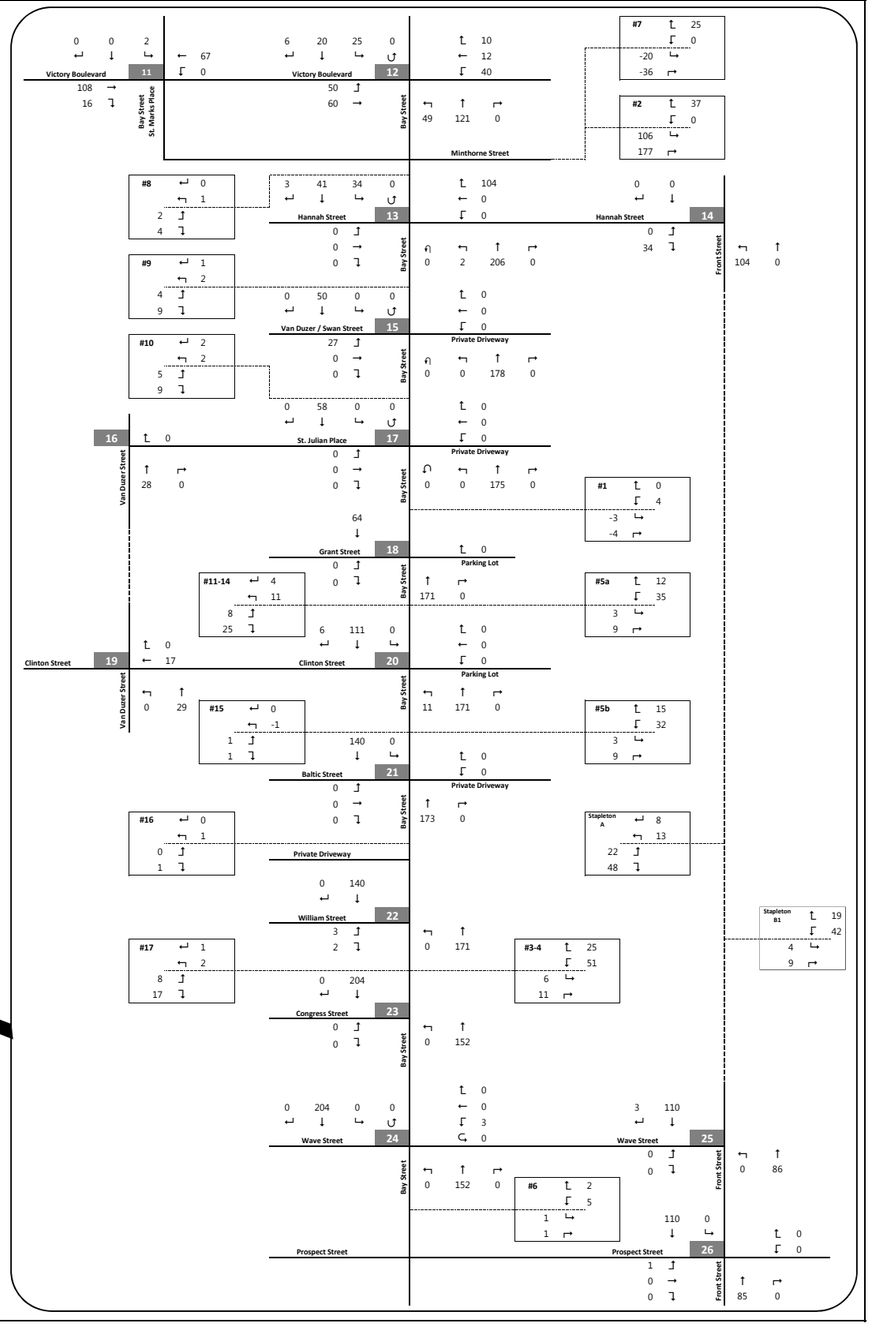








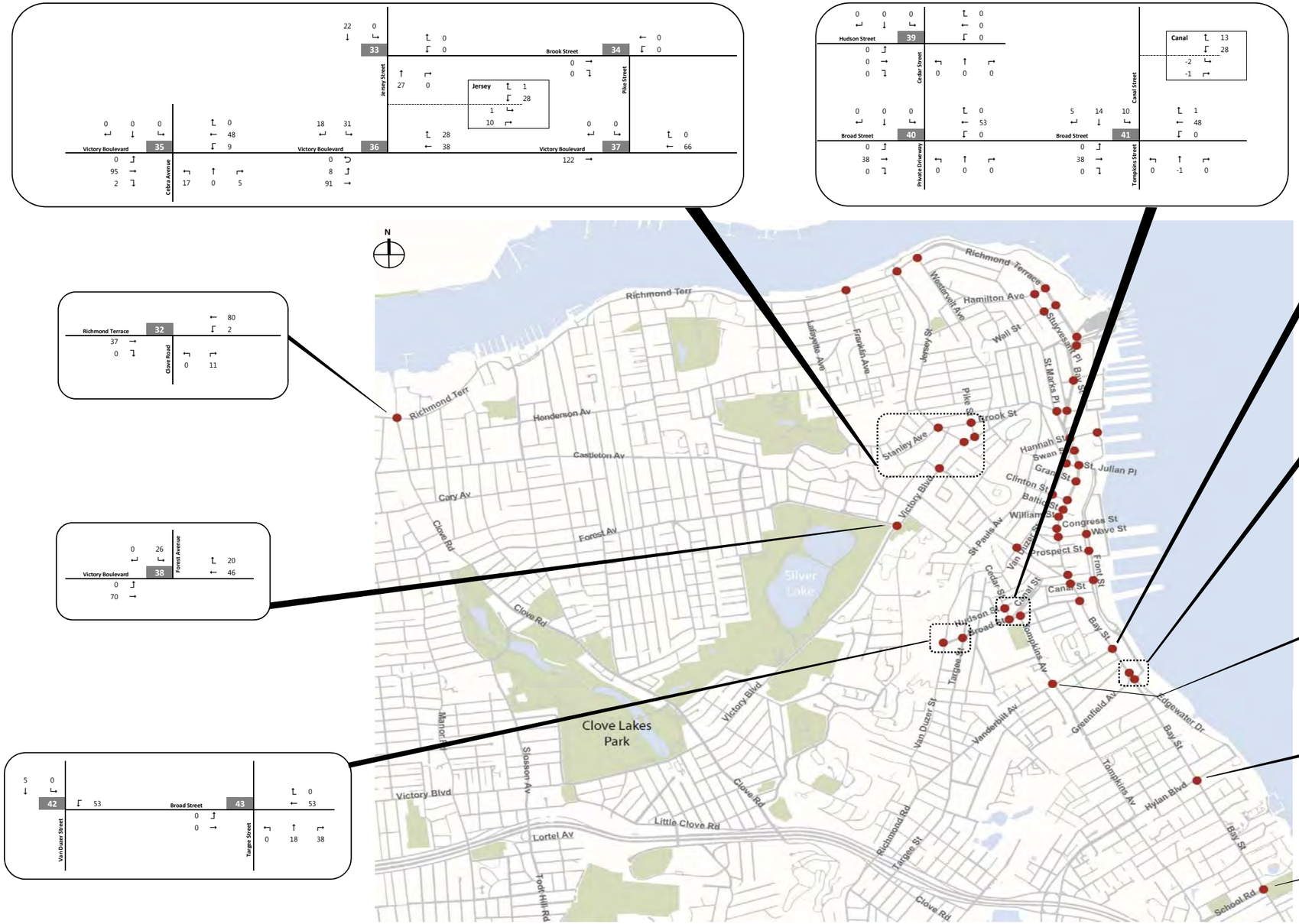




NOT TO SCALE

BAY STREET REZONING

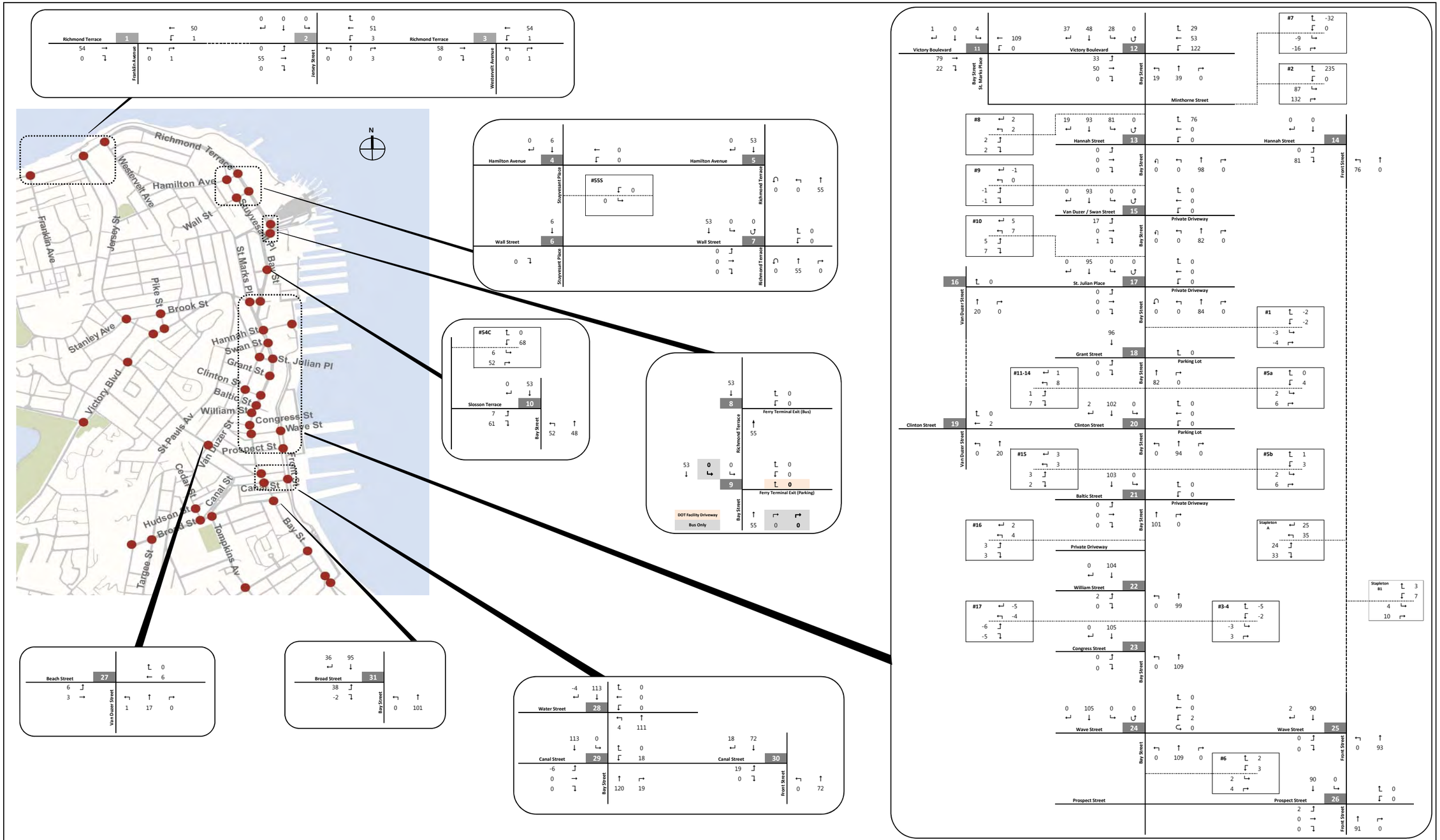
Total Proposed Project Increment
Weekday AM Peak Hour
Figure 31A



NOT TO SCALE

BAY STREET REZONING

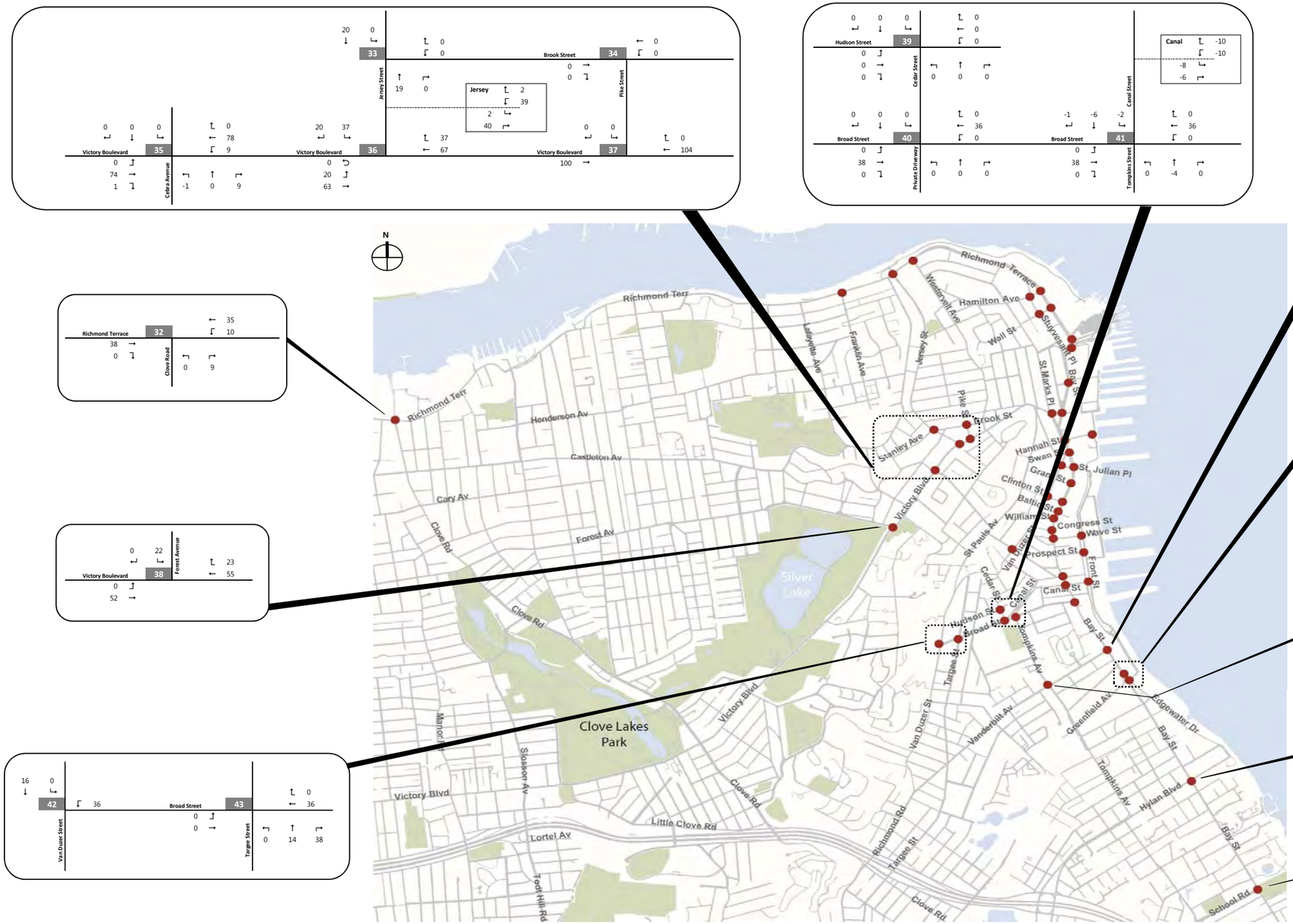
Total Proposed Project Increment
Weekday AM Peak Hour
Figure 31B



NOT TO SCALE

BAY STREET REZONING

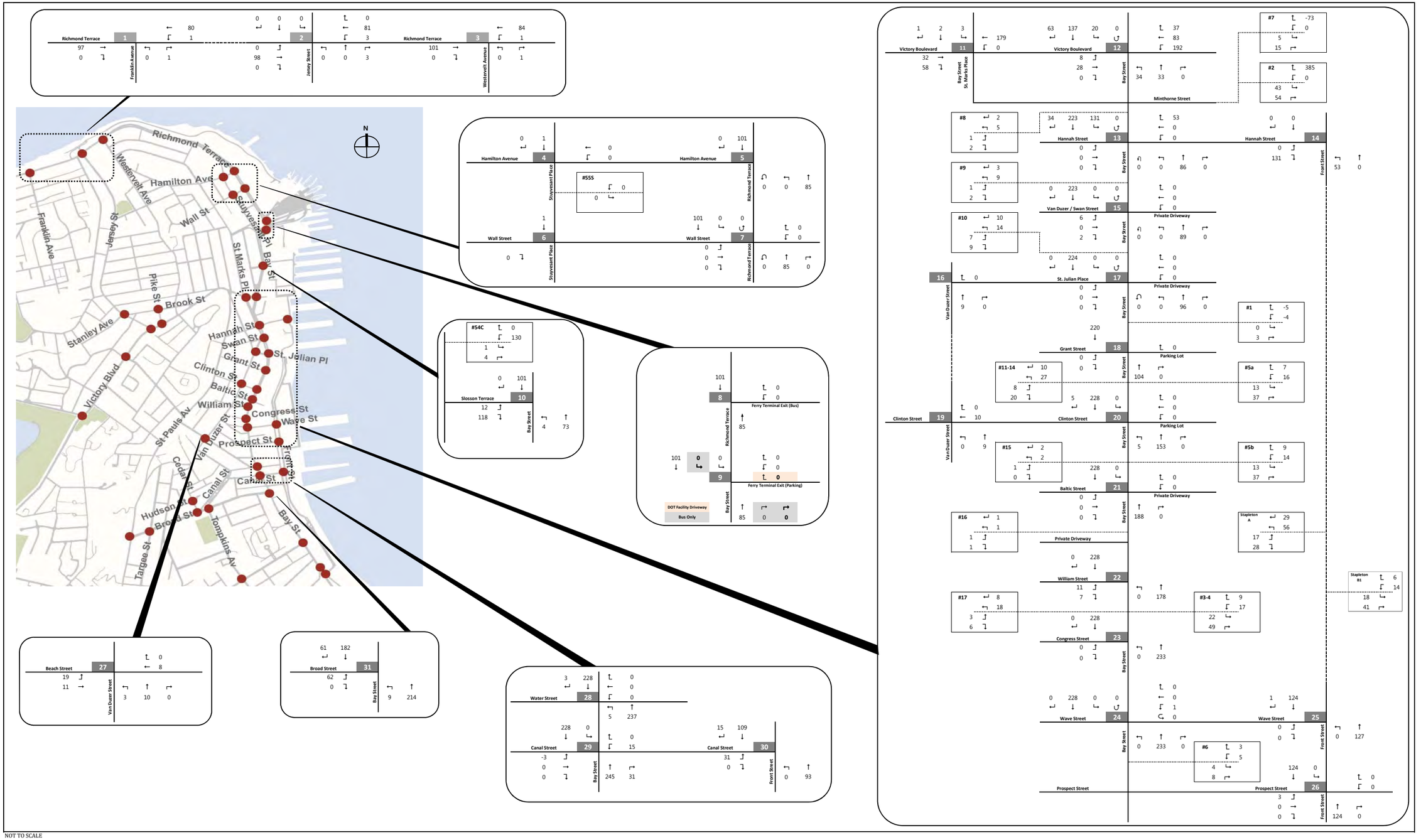
Total Proposed Project Increment
Weekday MD Peak Hour
Figure 32A



NOT TO SCALE

BAY STREET REZONING

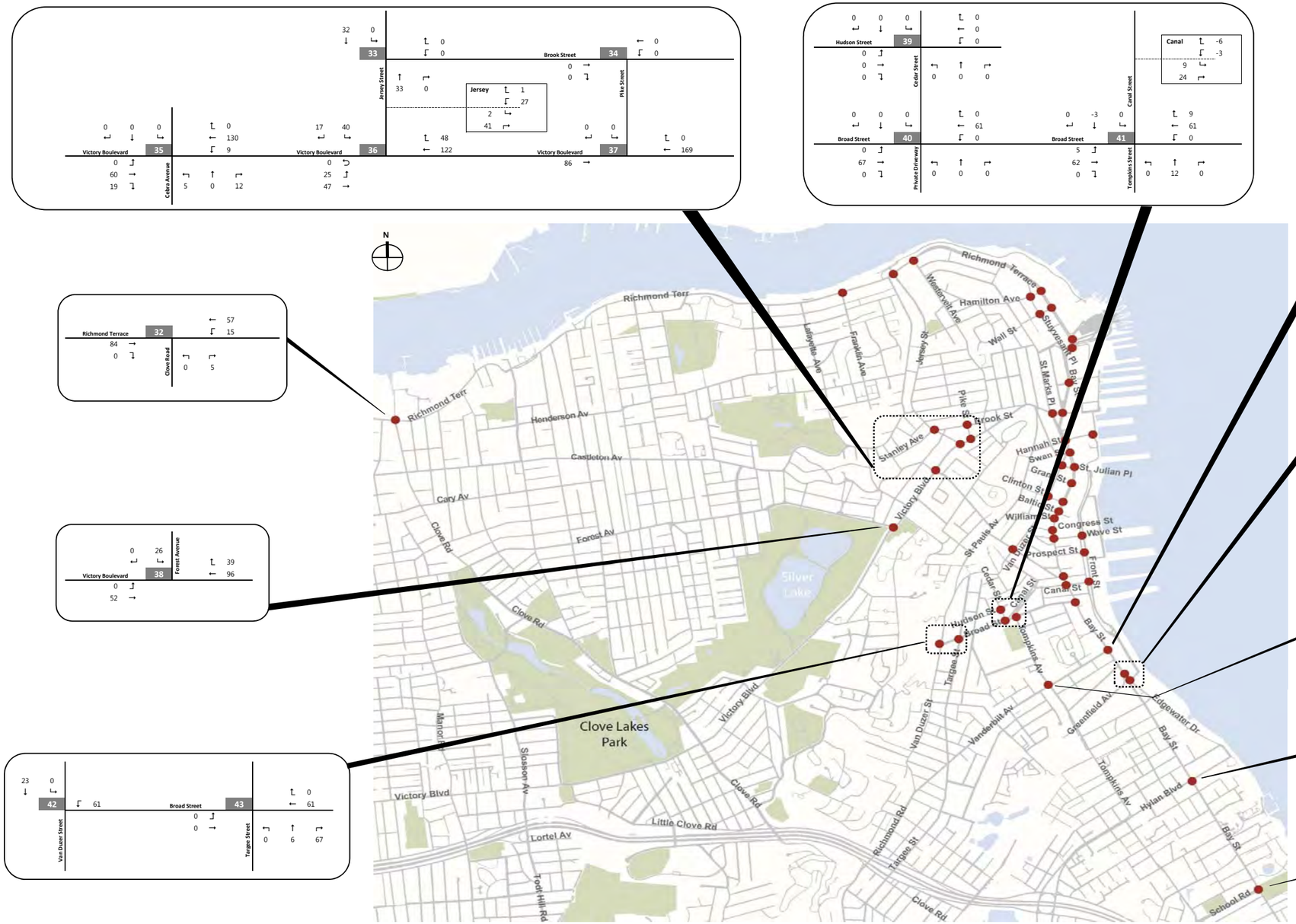
Total Proposed Project Increment
Weekday MD Peak Hour
Figure 32B



NOT TO SCALE

BAY STREET REZONING

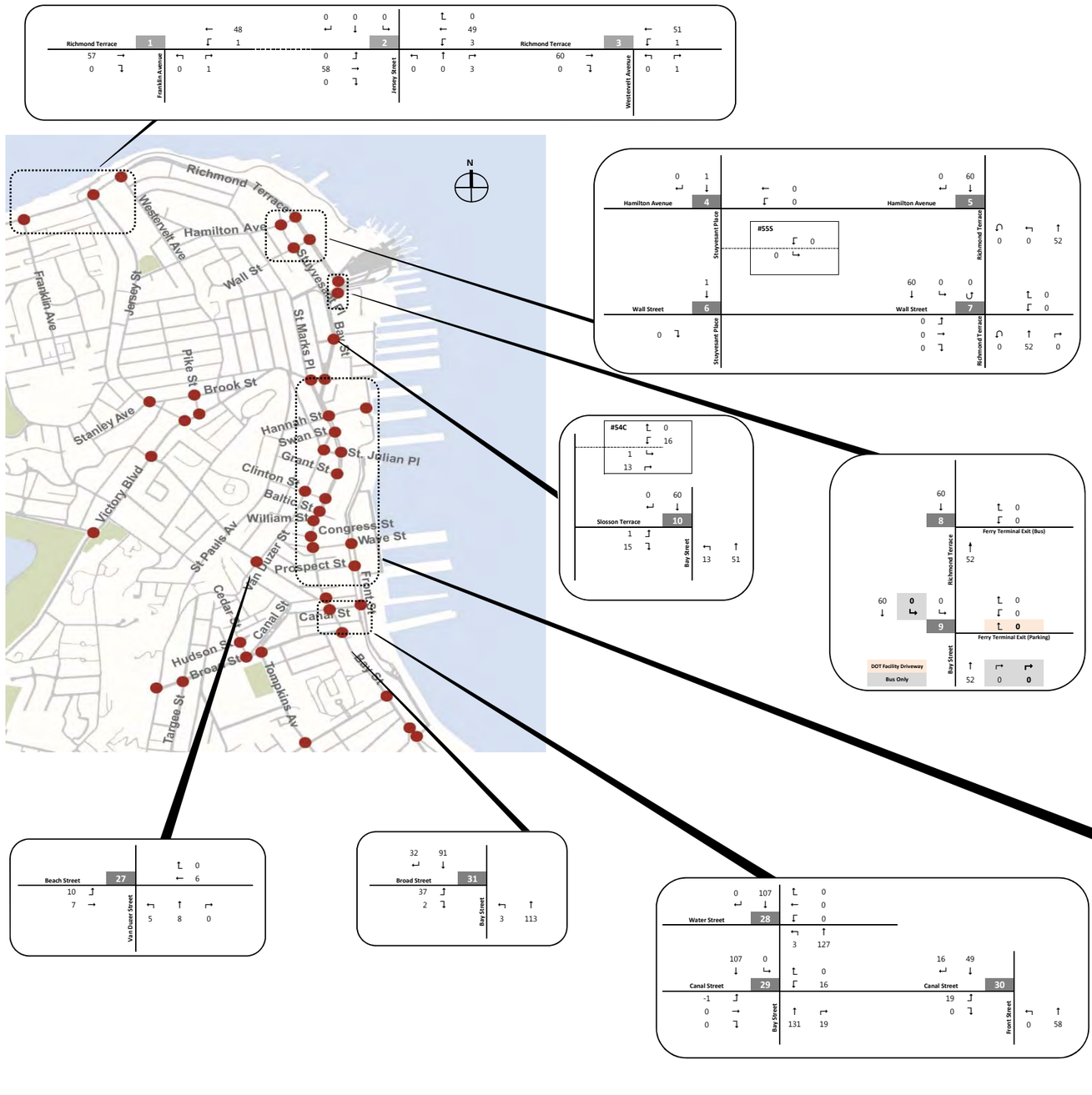
Total Proposed Project Increment
Weekday PM Peak Hour
Figure 33A

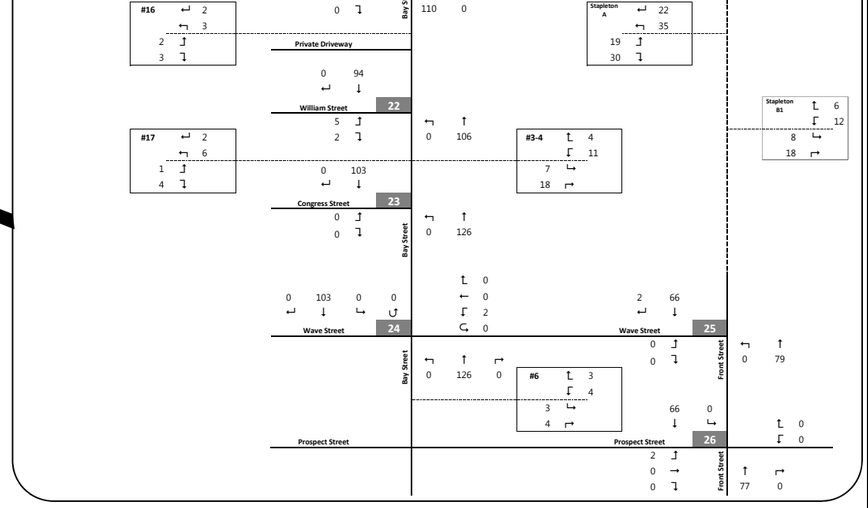


NOT TO SCALE

BAY STREET REZONING

Total Proposed Project Increment
Weekday PM Peak Hour
Figure 33B

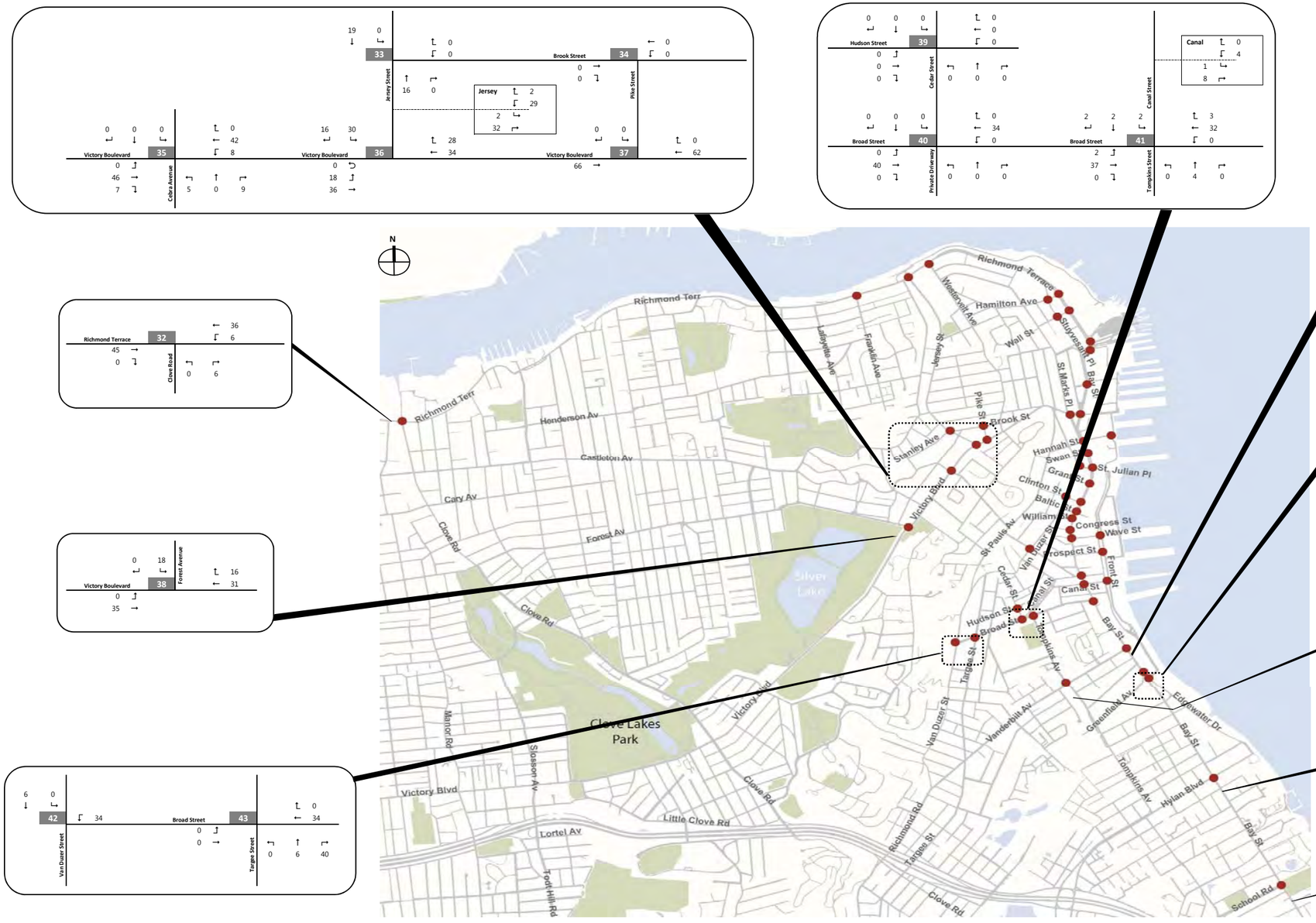




NOT TO SCALE

BAY STREET REZONING

Total Proposed Project Increment
Saturday MD Peak Hour
Figure 34A



NOT TO SCALE

BAY STREET REZONING

Total Proposed Project Increment
Saturday MD Peak Hour
Figure 34B

Transit and Pedestrians

Pedestrian trips (subway/rail, bus, and walk-only) were assigned to/from each Proposed Project site. As this is a rezoning and only high-level planning details are provided for each site, transit and pedestrian trips were assigned to the major street frontages for each site, assuming that is where the building entrances would be located. The transit and pedestrian project increment for the four peak hours are included in the Appendix.

Rail Trip Assignment Assumptions

The assignment of SIR trips generated by the Proposed Project is as follows:

- Bay Street sites
  - SIR trips generated by the Bay Street sites located north of Grant Street were assigned to the Tompkinsville SIR station and would enter/exit the station via Victory Boulevard and Minthorne Street.
  - SIR trips generated by Bay Street sites located south of Grant Street were assigned to the Stapleton SIR station and would enter/exit the station via Prospect Street.
- Canal Street sites
  - SIR trips generated by the Canal Street sites were assigned to the Stapleton SIR station and would enter/exit the station via Water Street.
- Jersey Street site
  - SIR trips generated by the Jersey Street site were assigned to the Tompkinsville SIR station and would enter/exit the station via Victory Boulevard.
- 54 Central Avenue/55 Stuyvesant Place sites
  - SIR trips generated by the 54 Central Avenue and 55 Stuyvesant Place sites were assigned to the St. George SIR station.
  - SIR trips generated by the 54 Central Avenue site would enter/exit the station via the pedestrian path to the north of Borough Hall and the bus exit ramp.
  - SIR trips generated by the 55 Stuyvesant Place site would enter/exit the station via the Wall Street ramp and stairs north of the St. George Ferry Terminal.

The resulting SIR trips by station are summarized in **Tables 16 through 19**.

Table 16
Weekday AM Peak Hour Project SIR Increment

Station	Entrance	In (out of project site)	Out (in project site)	Total
St. George	*Wall Street Ramp*	0	0	**0**
	Bus Exit Ramp	1	16	**17**
Tompkins	*Minthorne St*	54	46	**100**
	Victory Blvd	62	19	**81**
Stapleton	*Prospect St*	180	25	**205**
	Water St	28	3	**30**
	TOTAL	**324**	**108**	**433**

Table 17
Weekday MD Peak Hour Project SIR Increment

Station	Entrance	In (out of project site)	Out (in project site)	Total
St. George	*Wall Street Ramp*	0	0	**0**
	Bus Exit Ramp	11	9	**20**
Tompkins	*Minthorne St*	109	113	**222**
	Victory Blvd	75	81	**156**
Stapleton	*Prospect St*	-15	6	**-9**
	Water St	-10	-6	**-16**
	TOTAL	**170**	**203**	**373**

Table 18
Weekday PM Peak Hour Project SIR Increment

Station	Entrance	In (out of project site)	Out (in project site)	Total
St. George	*Wall Street Ramp*	0	0	**0**
	Bus Exit Ramp	19	1	**20**
Tompkins	*Minthorne St*	92	102	**194**
	Victory Blvd	48	84	**132**
Stapleton	*Prospect St*	45	169	**213**
	Water St	0	20	**19**
	TOTAL	**203**	**375**	**578**

Table 19
Saturday MD Peak Hour Project SIR Increment

Station	Entrance	In (out of project site)	Out (in project site)	Total
St. George	*Wall Street Ramp*	0	0	**0**
	Bus Exit Ramp	3	2	**5**
Tompkins	*Minthorne St*	85	93	**178**
	Victory Blvd	63	73	**136**
Stapleton	*Prospect St*	57	97	**153**
	Water St	4	10	**15**
	TOTAL	**212**	**275**	**487**

Bus Trip Assignment Assumptions

The assignment of bus trips generated by the Proposed Project assumes project-generated trips would use bus stops closest to each site, and that the bus trips were split evenly to the routes serving each bus stop.

- Bay Street and Stapleton sites
  - Bus trips generated by the Bay Street and Stapleton sites were assigned to the S51/81, S74/84, S76/86, S52, and S78 routes to the bus stops closest to each specific development site.

  - It was assumed that half the bus trips would travel north towards the St. George Ferry terminal, and half would travel south along each bus route.
- Canal Street sites
  - Bus trips generated by the Canal Street sites were assigned to the S46/96, S48/98, S61/91, S62/92, S52, and S66 to the bus stops closest to each specific development site.
  - It was assumed that half the bus trips would travel north towards the St. George Ferry terminal, and half would travel south along each bus route.
- Jersey Street site
  - Bus trips generated by the Jersey Street site were assigned to the S51/81, S74/84, S76/86, S52, and S78 routes to the bus stops closest to each specific development site.
  - It was assumed that half the bus trips would travel north towards the St. George Ferry terminal, and half would travel south/west along each bus route.
- 54 Central Avenue site
  - Bus trips generated by the 54 Central Avenue site were assigned to the S42/52, S46/96, S48/98, S51/81, S61/91, S62/92, S66, S74/84, S76/86, and S78/88 routes to the bus stops closest to each specific development site.
  - It was assumed that none of the bus trips generated by the 54 Central Avenue site would travel to or from the ferry terminal. Most trips would travel on buses that serve destinations to the south with the exception of trips added to the S42/52 routes, which travel north of the ferry terminal.
- 55 Stuyvesant Place sites
  - Bus trips generated by the 55 Stuyvesant Place site were assigned to the S40/90, S44/94, S42/52 to the bus stops closest to each specific development site.
  - It was assumed that half the bus trips would travel north along each bus route, and half the bus trips would travel south, split between the 40/90 and 44/94 routes.

The resulting bus trips by route and direction are summarized in **Tables 20 through 23**.

Table 20
Weekday AM Peak Hour Project Bus Increment by Route

Direction	Route	In (out of project site)	Out (to project site)	Total
To Ferry Terminal	**40/90**	0	0	0
	42/52	0	6	6
	44/94	0	0	0
	46/96	3	5	8
	48/98	3	5	8
	51/81	110	30	140
	61/91	3	5	8
	62/92	3	5	8
	66	3	1	4
	74/84	34	27	61
	76/86	110	26	136
	78	34	26	61
	Total	**302**	**136**	**438**
From Ferry Terminal	**40/90**	0	0	0
	42/52	24	0	24
	44/94	0	0	0
	46/96	3	1	4
	48/98	3	1	4
	51/81	48	35	83
	61/91	3	1	4
	62/92	3	1	4
	66	3	1	4
	74/84	52	36	88
	76/86	48	35	83
	78	123	1	123
	Total	**311**	**111**	**422**
	TOTAL	**612**	**247**	**860**

Table 21
Weekday MD Peak Hour Project Bus Increment by Route

Direction	Route	In (out of project site)	Out (to project site)	Total
To Ferry Terminal	**40/90**	0	0	0
	42/52	0	10	10
	44/94	0	0	0
	46/96	3	4	8
	48/98	3	4	8
	51/81	34	38	71
	61/91	3	4	8
	62/92	3	4	8
	66	3	4	7
	74/84	23	37	61
	76/86	34	37	71
	78	23	37	60
	Total	**131**	**180**	**311**
From Ferry Terminal	**40/90**	0	0	0
	42/52	10	0	10
	44/94	0	0	0
	46/96	4	4	7
	48/98	4	4	7
	51/81	20	49	69
	61/91	4	4	7
	62/92	4	4	7
	66	4	4	7
	74/84	19	50	69
	76/86	19	49	68
	78	56	1	57
	Total	**144**	**167**	**310**
	TOTAL	**275**	**346**	**621**

Table 22
Weekday PM Peak Hour Project Bus Increment by Route

Direction	Route	In (out of project site)	Out (to project site)	Total
To Ferry Terminal	**40/90**	0	0	0
	42/52	0	13	13
	44/94	0	0	0
	46/96	2	4	6
	48/98	2	4	6
	51/81	58	78	136
	61/91	2	4	6
	62/92	2	4	6
	66	2	4	6
	74/84	30	81	111
	76/86	58	77	135
	78	30	77	108
	Total	**189**	**346**	**535**
From Ferry Terminal	**40/90**	0	0	0
	42/52	10	0	10
	44/94	0	0	0
	46/96	5	4	9
	48/98	5	4	9
	51/81	35	98	133
	61/91	5	4	9
	62/92	5	4	9
	66	5	4	9
	74/84	33	109	142
	76/86	32	98	131
	78	87	11	98
	Total	**222**	**336**	**558**
	TOTAL	**411**	**682**	**1093**

Table 23
Saturday MD Peak Hour Project Bus Increment by Route

Direction	Route	In (out of project site)	Out (to project site)	Total
To Ferry Terminal	**40/90**	0	0	0
	42/52	0	11	11
	44/94	0	0	0
	46/96	3	3	6
	48/98	3	3	6
	51/81	56	54	110
	61/91	3	3	6
	62/92	3	3	6
	66	3	3	6
	74/84	25	56	81
	76/86	56	54	110
	78	25	54	79
	Total	**177**	**246**	**424**
From Ferry Terminal	**40/90**	0	0	0
	42/52	14	0	14
	44/94	0	0	0
	46/96	3	3	6
	48/98	3	3	6
	51/81	27	69	96
	61/91	3	3	6
	62/92	3	3	6
	66	3	3	6
	74/84	29	76	104
	76/86	27	69	96
	78	74	7	80
	Total	**186**	**237**	**423**
	TOTAL	**363**	**483**	**846**

Ferry Trip Assignment Assumptions

Given the local nature of local retail, community facility, restaurant, and medical office land uses, it was assumed that only the residential and office components of the Proposed Project would generate trips that would use the Staten Island Ferry (ferry). Office and residential ferry modal split and trips were estimated based on Weekday AM and PM modal split data from the 2014 American Community Survey (ACS) 5-year reverse journey to work estimates and Sex of Workers by Means of Transportation to Work estimates, respectively. The ferry mode share was based on Census Tract 21 for the Bay Street, Canal Street, and Stapleton sites; Census Tract 11 for the Jersey Street site; and Census Tracts 3 and 7 for the 54 Central Avenue and 55 Stuyvesant Place sites.

Based on the census modal splits for ferry, the Proposed Project would generate 259 ferry trips during the Weekday AM peak hour and 286 ferry trips during the Weekday PM peak hour. A summary of project-generated ferry trips are shown in **Table 24.**

Table 24
Peak Hour Project Ferry Increment Summary

WAM						
	Residential		Office		**Total**	
	In (to project site)	**Out (of project site)**	**In (to project site)**	**Out (of project site)**	**In**	**Out**
Total	**38**	**216**	**5**	**0**	**43**	**216**
WMD						
	Residential		Office		**Total**	
	In (to project site)	**Out (of project site)**	**In (to project site)**	**Out (of project site)**	**In**	**Out**
Total	**74**	**47**	**4**	**4**	**78**	**51**
WPM						
	Residential		Office		**Total**	
	In (to project site)	**Out (of project site)**	**In (to project site)**	**Out (of project site)**	**In**	**Out**
Total	**211**	**68**	**0**	**7**	**211**	**75**
SatMD						
	Residential		Office		**Total**	
	In (to project site)	**Out (of project site)**	**In (to project site)**	**Out (of project site)**	**In**	**Out**
Total	**140**	**99**	**0**	**1**	**140**	**100**

Walk Trip Assignment Assumptions

Walk trips generated by the Proposed Project were assigned as follows:

- Bay Street and Stapleton sites
  - The Bay Street rezoning area, including the Stapleton site, were divided into four sub-areas for the purpose of assigning pedestrian (walk-only) trips: Victory Boulevard to St. Julian Place, St. Julian Place to Baltic Street, Baltic Street to Prospect Street, and the Stapleton area along Front Street between Hannah Street and Baltic Streets. It was assumed that 25% of trips generated by sites within each sub-area would remain within the sub-area, and the remaining 75% of walk-only trips would be assigned to exit the sub-area along each street. The walk-only pedestrian trips were balanced at the boundaries between each sub-area so that the number of pedestrians leaving one sub-area was equal to the number of pedestrians arriving within the adjacent sub-area. At locations where there was an imbalance, pedestrian trips were carried through the adjacent sub-areas to be conservative.
  - The pedestrian trips were assigned to each portal (either the sub-area boundary or the roadways) based on estimated population density.
- Canal Street, Jersey Street, 54 Central Avenue, and 55 Stuyvesant Place sites
  - Pedestrian (walk-only) trips generated by the remainder of the sites were assigned to the adjacent roadways based on estimated population density.

D. Level 2 Screening Results

Vehicle

The results of the Level 2 Screening analysis for vehicle traffic show that the Proposed Project would generate more than 50 vehicle trips at 49 intersections during at least one of the study peak hours as shown in **Figures 31 through 34**.

Therefore, the following vehicle study locations, shown on **Figure 35**, were included in the study area:

1. St Marks Place/Bay Street @ Victory Boulevard (Signalized)
2. Bay Street @ Victory Boulevard (Signalized)
3. Bay Street @ Hannah Street (Signalized)
4. Bay Street @ Swan Street (Signalized)
5. Bay Street @ St Julian Place (Unsignalized)
6. Bay Street @ Grant Street (Unsignalized)
7. Bay Street @ Clinton Street (Signalized)
8. Bay Street @ Baltic Street (Unsignalized)
9. Bay Street @ Williams Street (Unsignalized)
10. Bay Street @ Congress Street (Unsignalized)
11. Bay Street @ Wave Street (Unsignalized)
12. Bay Street @ Vanderbilt Avenue (Signalized)
13. Front Street @ Hannah Street (Unsignalized)
14. Front Street @ Wave Street (Unsignalized)
15. Front Street @Prospect Street (Unsignalized)
16. Front Street @ Canal Street (Unsignalized)
17. Van Duzer Street @ St Julian Place (Unsignalized)
18. Van Duzer Street @ Clinton Street (Signalized)
19. Hamilton Avenue @ Stuyvesant Place (Unsignalized)
20. Richmond Terrace @ Hamilton Avenue (Signalized)
21. Wall Street @ Stuyvesant Place (Unsignalized)
22. Wall Street @ Richmond Terrace (Signalized)
23. Hudson Street @ Cedar Street (Unsignalized)
24. Broad Street @ Cedar Street (Unsignalized)
25. Canal Street @ Broad Street (Signal)
26. Jersey Street @ Brook Street (Unsignalized)
27. Brook Street @ Pike Street (Unsignalized)
28. Jersey Street @ Victory Boulevard (Signalized)
29. Pike Street @ Victory Boulevard (Unsignalized)
30. Richmond Terrace @ Jersey Street (Signalized)
31. Richmond Terrace @ Ferry Terminal (cars) (Signalized)
32. Richmond Terrace @ Ferry Terminal (bus) (Signalized)
33. Bay Street @ Slosson Terrace (Signalized)
34. Victory Boulevard @ Cebra Avenue (Signalized)
35. Victory Boulevard @ Forest Avenue (Signalized)
36. Bay Street @ Water Street (Unsignalized)

37. Bay Street @ Canal Street (Signalized)
38. Bay Street @ Broad Street (Signalized)
39. Broad Street @ Targee Street (Signalized)
40. Broad Street @ Van Duzer Street (Signalized)
41. Vanderbilt Avenue @ Tompkins Street (Signalized)
42. Bay Street @ Hylan Boulevard (Signalized)
43. Bay Street @ School Road (Signalized)
44. Bay Street @ Greenfield Street (Unsignalized)
45. Bay Street @ Edgewater Drive (Signalized)
46. Richmond Terrace @ Westervelt Avenue (Signalized)
47. Richmond Terrace @ Franklin Avenue (Unsignalized)
48. Richmond Terrace @ Clove Road (Signalized)
49. Van Duzer Street @ Beach Street (Signalized)

In accordance with the *2014 CEQR Technical Manual*, detailed quantitative analyses will be performed at these four intersections during the Weekday AM, Weekday MD, Weekday PM, and Saturday MD peak hours.

SIR

The results of the Level 2 Screening analysis for SIR trips show that the Proposed Project would generate greater than 200 SIR trips at the following SIR elements. Therefore, a detailed SIR analysis will be required for the following elements:

- SIR line haul analysis
- Tompkinsville Station
    - Control Area
    - Platform stairway
    - Stairway from Minthorne Street
- St. George Station
    - Control Area
    - North and south stairways that connect the St. George Ferry Terminal and SIR station
- Stapleton station
    - Stairway from Prospect Street



Bay Street Rezoning EIS
Vehicular Study Locations
Figure 35

Bus

The results of the Level 2 Screening analysis for bus trips show that the Proposed Project would generate greater than 50 bus trips in a single direction on the following routes during at least one of the study peak hours. Therefore, a detailed bus analysis will be required for the following routes:

- S51/81
- S74/84
- S76/86
- S78

Staten Island Ferry

A preliminary analysis is provided in the TDF memo to determine the number of project-generated ferry trips. The ferry assessment is provided for informational purposes only, as the *2014 CEQR Technical Manual* does not provide guidelines for determining impacts related to ferry service. Further assessment was determined not to be warranted.

Pedestrian

The results of the Level 2 Screening analysis for pedestrians show that the Proposed Project would generate more than 200 pedestrian trips at the following pedestrian elements during at least one of the study peak hours as shown in the attachment. The pedestrian elements at Clinton Street and Bay Street (2 sidewalks, 3 crosswalks, and 2 corners), and at Wave Street and Bay Street (4 sidewalks, 4 crosswalks, and 4 corners) did not meet the Level 2 screening analysis thresholds, but were included in the analysis at the request of NYCDOT. The pedestrian study locations are shown on **Figure 36** and summarized below.

- Bay Street and Victory Boulevard (4 elements)

Crosswalks	Corners	Sidewalks
South	SE	SE corner, N-S leg
	SW	

- Bay Street and Hannah Street (9 elements)

Crosswalks	Corners	Sidewalks
North	NE	NE corner, N-S leg
East	SE	NE corner, E-W leg
	NW	SE corner, N-S leg
		SE corner, E-W leg

- Bay Street and Swan Street (2 elements)

Crosswalks	Corners	Sidewalks
	SW	SW corner, N-S leg

- Bay Street and Grant Street (3 elements)

Crosswalks	Corners	Sidewalks
North		
South		
West		

- Bay Street and Clinton Street (7 elements)

Crosswalks	Corners	Sidewalks
North	SW	NE corner, N-S leg
South	NW	NW corner, N-S leg
West		

- Bay Street and Baltic Street (6 elements)

Crosswalks	Corners	Sidewalks
North		NE corner, N-S leg
East		NW corner, N-S leg
South		
West		

- Bay Street and Wave Street (12 elements)

Crosswalks	Corners	Sidewalks
North	NE	NE corner, N-S leg
East	SE	SE corner, N-S leg
South	SW	SW corner, N-S leg
West	NW	NW corner, N-S leg

- Front Street and Hannah Street (5 elements)

Crosswalks	Corners	Sidewalks
West	SW	SE corner, N-S leg
	NW	SW corner, N-S leg

- Front Street and Wave Street (2 elements)

Crosswalks	Corners	Sidewalks
		NE corner, N-S leg
		NW corner, N-S leg

- Pike Street and Brook Street (1 element)

Crosswalks	Corners	Sidewalks
		SW corner, E-W leg

- Jersey Street and Victory Boulevard (6 elements)

Crosswalks	Corners	Sidewalks
North	NE	NE corner, N-S leg
East		NE corner, E-W leg
		SE corner, E-W leg

- Bay Street and Minthorne Street (4 elements)

Crosswalks	Corners	Sidewalks
East	NE	SE corner, E-W leg
	SE	

- Minthorne Street and Victory Boulevard (3 elements)

Crosswalks	Corners	Sidewalks
		SE corner, N-S leg
		SE corner, E-W leg
		SW corner, E-W leg

- Front Street and Baltic Street (2 elements)

Crosswalks	Corners	Sidewalks
		NE corner, N-S leg
		NW corner, N-S leg

In accordance with the *2014 CEQR Technical Manual*, a detailed quantitative analysis will be performed at these pedestrian elements during the Weekday AM, Weekday MD, Weekday PM, and Saturday MD peak hours.

Conclusion

Based on the Level 1 and Level 2 screening analyses, the Proposed Project would meet or exceed the *2014 CEQR Technical Manual* thresholds at 49 intersections, 66 pedestrian elements, 4 bus routes, and 7 elements of the SIR. At these locations, detailed transportation analyses will be performed to identify any potential significant adverse impacts as a result of the proposed rezoning.

Please contact me at (212) 598-9010 x116 or Jeff Smithline, P.E., PTOE, at (212) 598-9010 x119 if you have any questions or comments on this TDF memo.



Sidewalk
Corner
Crosswalk

Bay Street Rezoning EIS
Pedestrian Study Locations
Figure 36