

Review of the Line: Appendices

Appendix A: Annual System Entries by Station

2012 Station Ridership Rank	Station	2003	2010	2011	2012	2003-2012 % Change	2011-2012 Riders Change	2011-2012 % Change
70	Court Sq (E,G,M,7)*	6,669,877	7,249,807	6,334,869	5,340,581	-19.93%	-994,288	-15.70%
408	21 St (G)	241,231	319,984	364,597	469,173	94.49%	104,576	28.68%
182	Greenpoint Av (G)	2,301,183	2,200,679	2,490,286	2,521,422	9.57%	31,136	1.25%
184	Nassau Av (G)	2,155,562	2,126,804	2,396,169	2,479,649	15.03%	83,480	3.48%
114	Lorimer St (L)/Metropolitan Av (G)	3,213,748	4,394,498	4,479,022	4,643,512	44.49%	164,490	3.67%
356	Broadway (G)	955,062	941,243	995,856	1,023,397	7.16%	27,541	2.77%
395	Flushing Av (G)	603,868	553,739	616,083	655,317	8.52%	39,234	6.37%
302	Myrtle-Willoughby Aves (G)	1,057,088	1,223,378	1,383,197	1,440,313	36.25%	57,116	4.13%
220	Bedford-Nostrand Aves (G)	1,143,237	1,895,163	2,012,606	2,138,852	87.09%	126,246	6.27%
313	Classon Av (G)	937,288	1,207,680	1,308,232	1,355,886	44.66%	47,654	3.64%
280	Clinton-Washington Aves (G)	1,329,916	1,517,296	1,628,558	1,637,463	23.13%	8,905	0.55%
326	Fulton St (G)	710,085	1,098,862	1,179,034	1,280,063	80.27%	101,029	8.57%
156	Hoyt-Schermerhorn Sts (A,C,G)	2,657,635	2,923,091	2,968,639	2,990,881	12.54%	22,242	0.75%
136	Bergen St (F,G)	2,839,903	3,296,466	3,452,452	3,529,174	24.27%	76,722	2.22%
115	Carroll St (F,G)	2,730,529	3,025,719	3,598,477	3,961,111	45.07%	362,634	10.08%
-	Smith-9 Sts (F,G) **	1,129,230	1,501,360	577,571	-	-	-	-
113	4 Av (F,G)/9 St (R) ***	2,798,588	3,672,622	4,020,665	4,300,400	53.66%	279,735	6.96%
127	7 Av (F,G) ** ***	3,328,654	3,397,045	3,934,545	3,699,471	11.14%	-235,074	-5.97%
248	15 St-Prospect Park (F,G) ** ***	1,722,748	1,922,348	1,449,241	1,852,346	7.52%	403,105	27.81%
283	Fort Hamilton Pkwy (F,G) ** ***	1,229,338	1,509,737	1,292,131	1,538,039	25.11%	245,908	19.03%
154	Church Av (F,G) ** ***	2,859,021	2,968,167	3,271,729	3,081,142	7.77%	-190,587	-5.83%
Average: 296.6	G Only Stations	11,434,520	13,084,828	14,374,618	15,001,535	31.20%	626,917	4.36%
	All G Stations	42,613,791	48,945,688	49,753,959	49,938,192	17.19%	184,233	0.37%
Average: 224.1	All G Stations except Smith/9 Sts	41,484,561	47,444,328	49,176,388	49,938,192	20.38%	761,804	1.55%
Range: 1-418	System Wide	1,413,177,943	1,604,198,017	1,640,434,672	1,654,582,265	17.08%	14,147,593	0.86%

* The free out of station transfer between the EGM and the 7 was made an in-station Metrocard transfer in 2011.

The 7 platform was closed for a portion of 2012 for construction.

** Smith-9 Sts was closed as part of the Culver Viaduct rehabilitation from June, 2011 through 2012. Bypasses also affected ridership at other noted stations.

*** The Church Av extension began in 2009

Appendix B: Selected Performance Indicators

Key Passenger Environment Survey Results, 2nd Half 2012

Station Results			G		System-wide		Diff (%None & Light)	
			Surveyed Before Morning Peak	Surveyed After Morning Peak	Surveyed Before Morning Peak	Surveyed After Morning Peak	Surveyed Before Morning Peak	Surveyed After Morning Peak
Litter Condition in Stations <i>Presence of Litter</i> Includes all components of station: mezzanine, passageway, platform, stairways and trackbed	<i>Includes trackbed component</i>	None	3%	1%	1%	3%	5%	17%
		Light	79%	77%	76%	59%		
		Moderate	18%	20%	22%	35%		
		Heavy	0%	1%	1%	3%		
	<i>Measured without trackbed component</i>	None	32%	31%	42%	24%	3%	-3%
		Light	59%	45%	46%	55%		
		Moderate	9%	24%	11%	19%		
		Heavy	0%	0%	1%	2%		
Floor and Seat Cleanliness Conditions in Stations <i>Degree of Dirtiness</i>		None	62%	51%	51%	46%	1%	6%
		Light	26%	39%	36%	38%		
		Moderate	12%	10%	12%	14%		
		Heavy	0%	0%	1%	2%		
Graffiti Conditions in Stations <i>Presence of Graffiti</i>		None		68%		84%	0%	
		Light		32%		16%		
		Moderate		0%		0%		
		Heavy		0%		0%		
Subway Car Results			G		System-wide		Diff (%None & Light)	
			at Terminal	in Service	at Terminal	in Service	at Terminal	in Service
Litter Condition in Cars <i>Presence of Litter</i>	<i>Includes trackbed component</i>	None	92%	75%	96%	65%	0%	2%
		Light	7%	19%	3%	27%		
		Moderate	0%	0%	0%	1%		
		Heavy	1%	6%	1%	7%		
Cleanliness of Car Floors and Seats <i>Degree of Dirtiness</i>		None	97%	92%	98%	87%	0%	3%
		Light	2%	3%	1%	5%		
		Moderate	0%	0%	0%	1%		
		Heavy	1%	5%	1%	7%		
No Interior Graffiti			97%		99%		-2%	
No Scratchtied Windows			93%		93%		0%	
Climate Control Conditions in Cars <i>% of cars with average interior temp. between 58F and 78F</i>			100%		91%		9%	

Note: Difference greater than ±6% is considered statistically significant

Mean Distance Between Failure (Miles) for Car Classes in  Service

Car Class	Years Built	Car Age	Oct. 2012	Nov. 2012	Dec. 2012	Jan. 2013	Feb. 2013	Mar. 2013
R68	1986-89	24-27	130,661	130,081	129,797	129,654	136,557	140,413
R68A	1986-89	24-27	144,977	138,300	130,990	123,944	121,508	118,047
System	1964-2010	3-49	164,538	163,515	162,138	162,993	162,812	163,739

Note: Numbers reported are 12-month rolling averages

Appendix C: Stopping Position and Bench Location Improvements

Proposed Bench Relocations:

Station	Number of Benches	Number to Move	Rationale and Directions for Move
Nassau Av	1 sb, 2 nb	1	Currently, the bench on the southbound platform is on the southernmost part of the platform beyond the future stopping position. Relocate the bench between the 1st and 2nd car at the new train stopping location.
Metropolitan Av	2 nb, 2 sb	1	The southernmost bench on the southbound platform is just beyond the 1st car of the current stopping location and far beyond the recommended train position. Relocate the bench between the 1st and 2nd car of the new train stopping location.
Bedford-Nostrand Avs	2 nb, 2 sb	2	The two northernmost benches potentially exacerbate end-loading because they are at the front of the northernmost cars. Move to the middle of the 2nd car southbound and the middle of the 3rd car northbound about 200 feet back. This also decreases bench distance for those entering at Bedford Avenue
Bergen St	3 nb, 3 sb	1	Currently there are 3 benches located toward the northern end of the southbound platform, and there are no benches toward the middle or the southern end of the platform. The middle bench should be relocated between the 1 st and 2 nd car of the G . This will also better serve F riders, as benches only exist adjacent to the back quarter of each southbound train, despite entrances at both ends of the platform.
Carroll St	2 nb, 1 sb	1	The bench on the southbound platform should be centered between the 2nd and 3rd car of the G to better serve both F and G riders on the northern half of the platform.

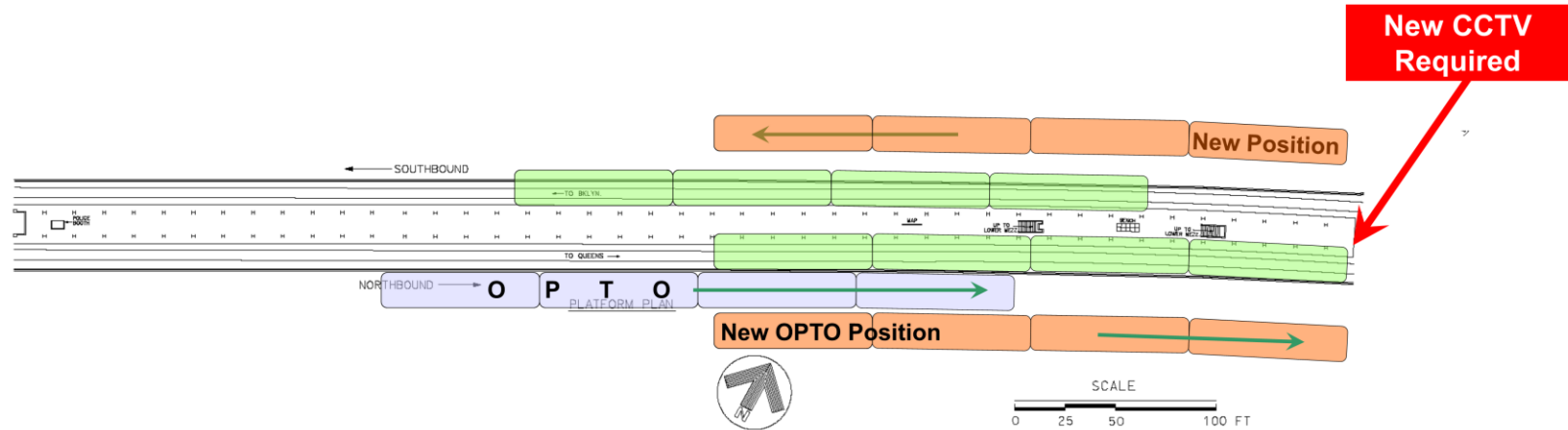
Diagrams of Bench and Stopping Position Changes

21 St:

North-justify all trains, to align with the control area.

New CCTV required for northbound OPTO stopping position.

- Current Position**
- Current OPTO Position (when different)**
- New Position**



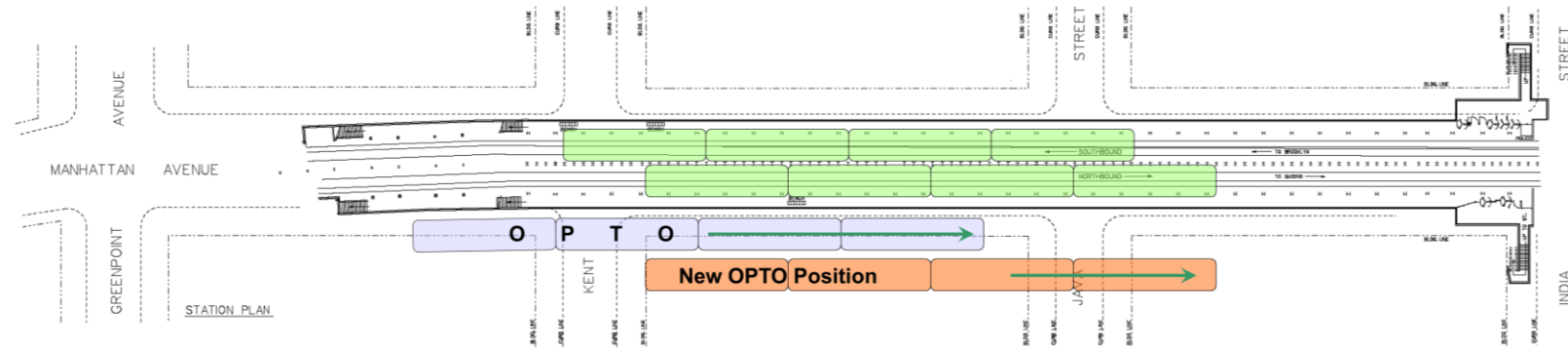
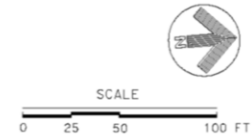
Greenpoint Av:

Move the OPTO position to the existing weekday position for consistency.

Current Position

Current OPTO Position (when different)

New Position



66% of station entries at south entrance

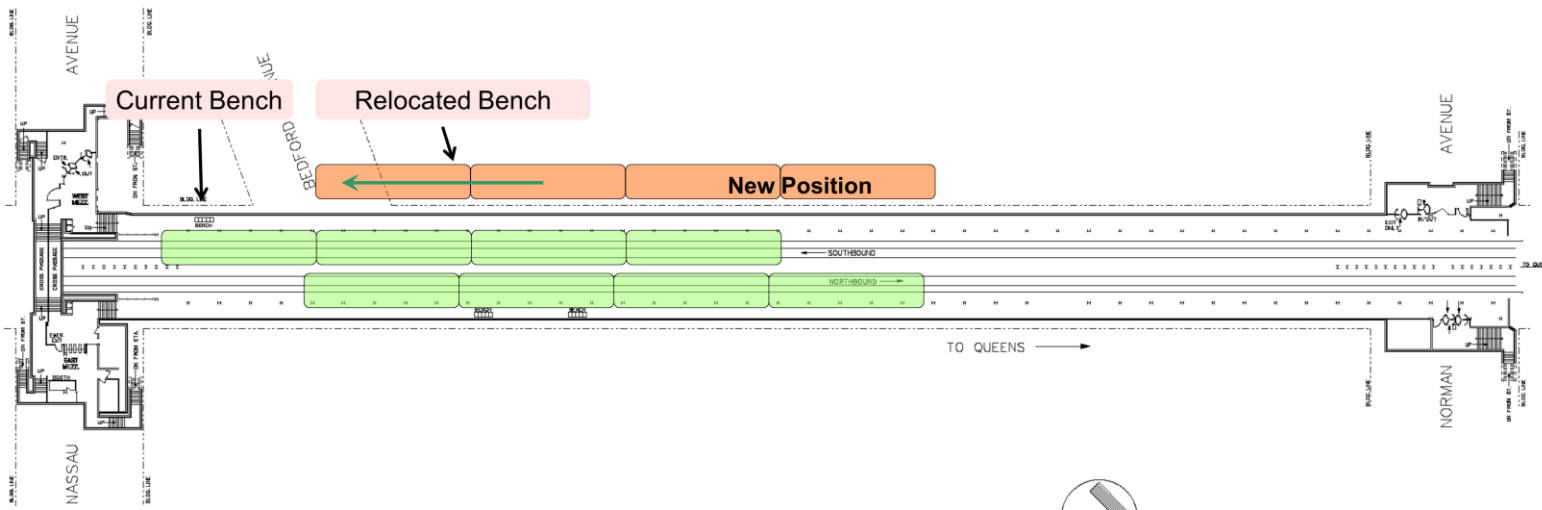
34% of station entries at north entrances

Nassau Av:

Move southbound position one car north to better serve the third of customers using that side

Relocate bench to remain adjacent to train position

Current Position
New Position



65% of station entries at south entrances

SCALE
0 25 50 100 FT

35% of station entries at north entrances

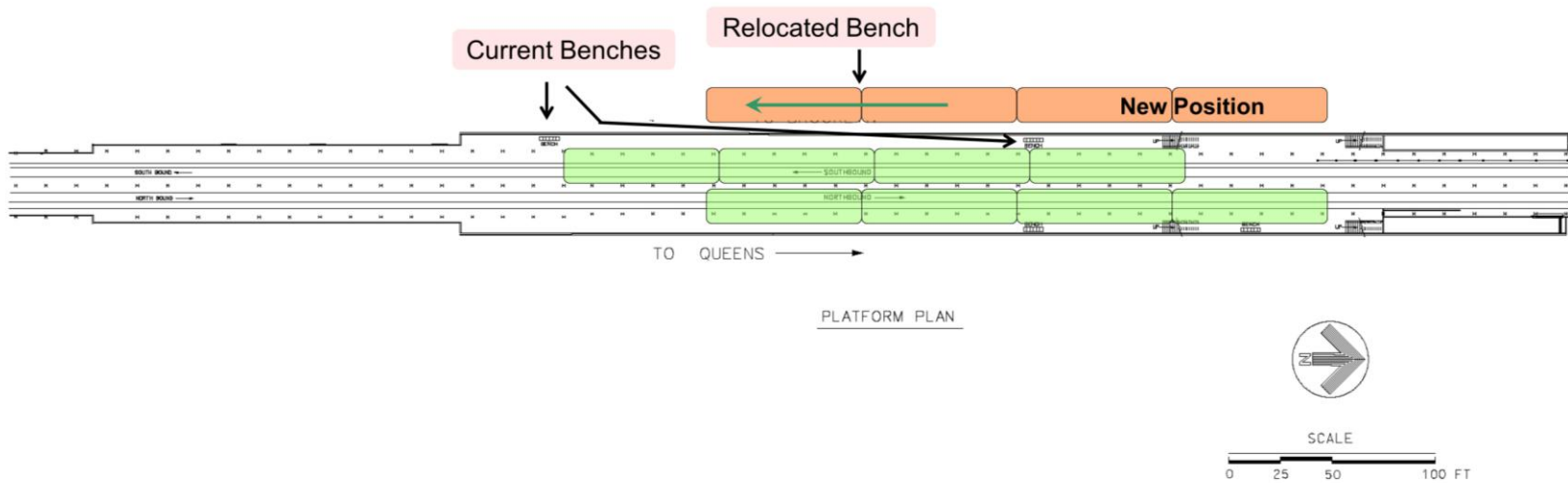
Metropolitan Av:

North-justify all trains on southbound track to align with the control area and better serve the L transfer and station entrance/exit.

Relocate southernmost bench between 1st and 2nd Car

Current Position

New Position



Broadway:

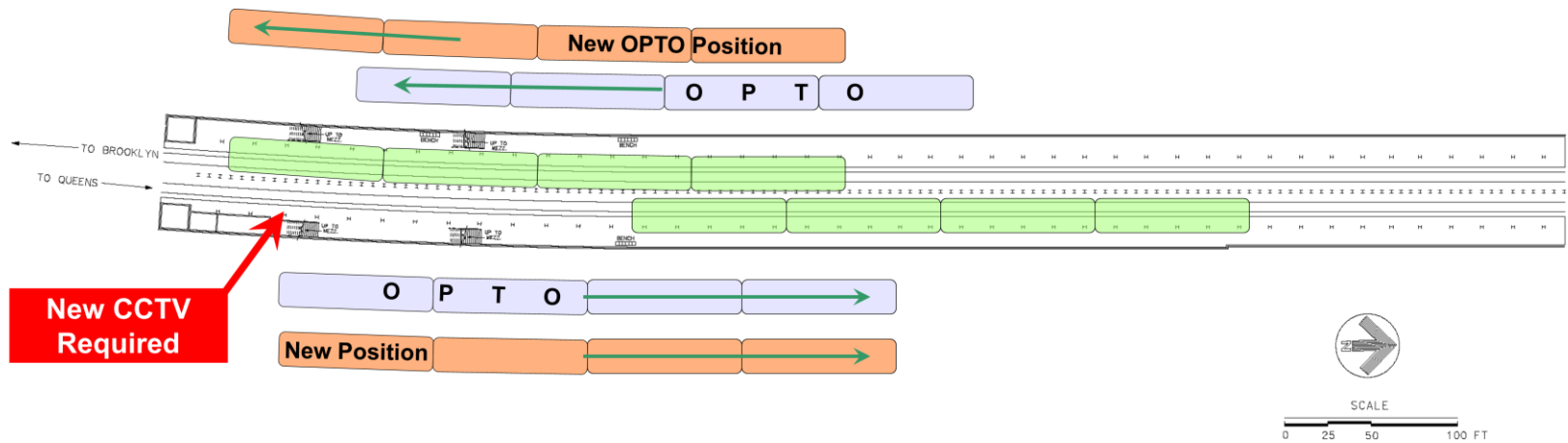
Move the weekday northbound stopping location to existing OPTO stopping location. *This will require a new CCTV.*

Move the OPTO southbound location to the existing southbound weekday stopping location.

Current Position

Current OPTO Position (when different)

New Position



Flushing Av:

Move the southbound OPTO stopping location to the current weekday stopping location to align with the station entrance/exit.

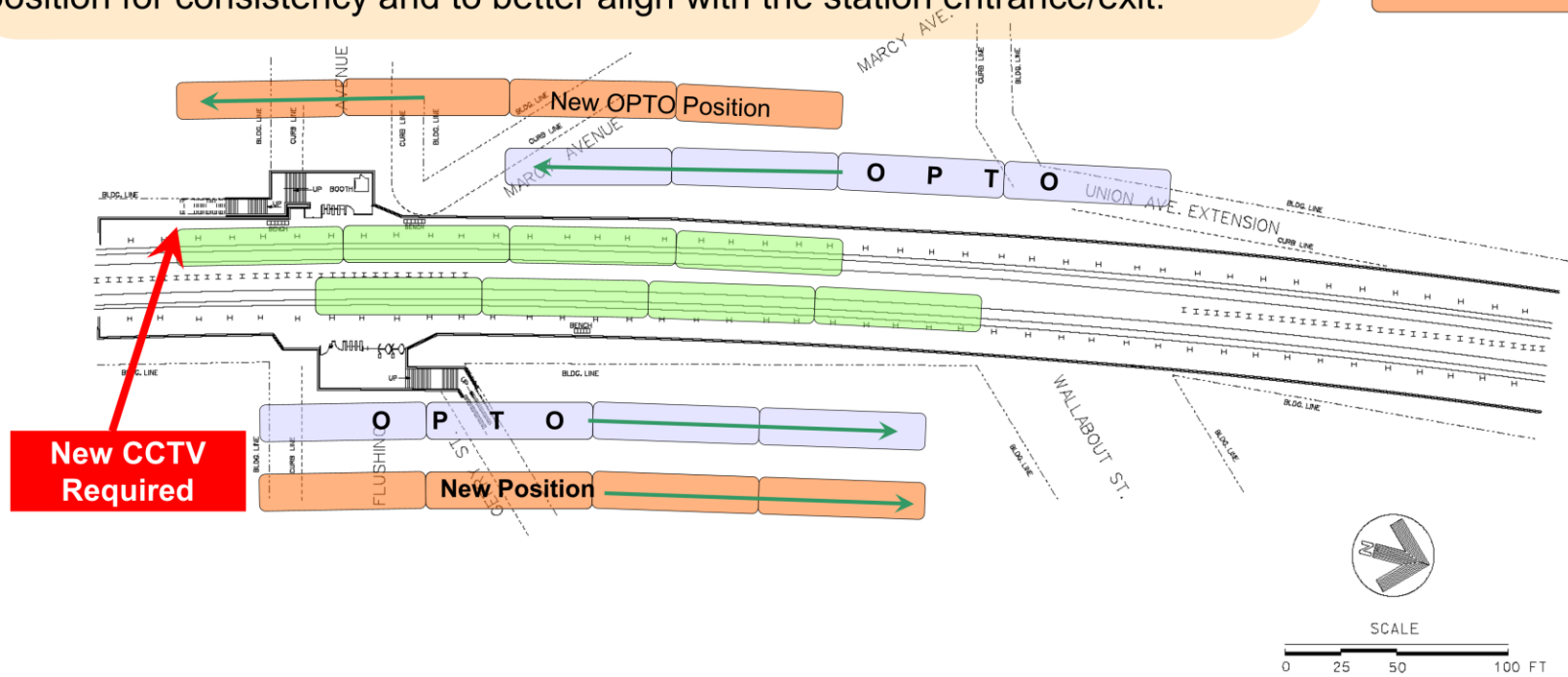
This will require a new CCTV.

Move the northbound weekday stopping position to the current OPTO stopping position for consistency and to better align with the station entrance/exit.

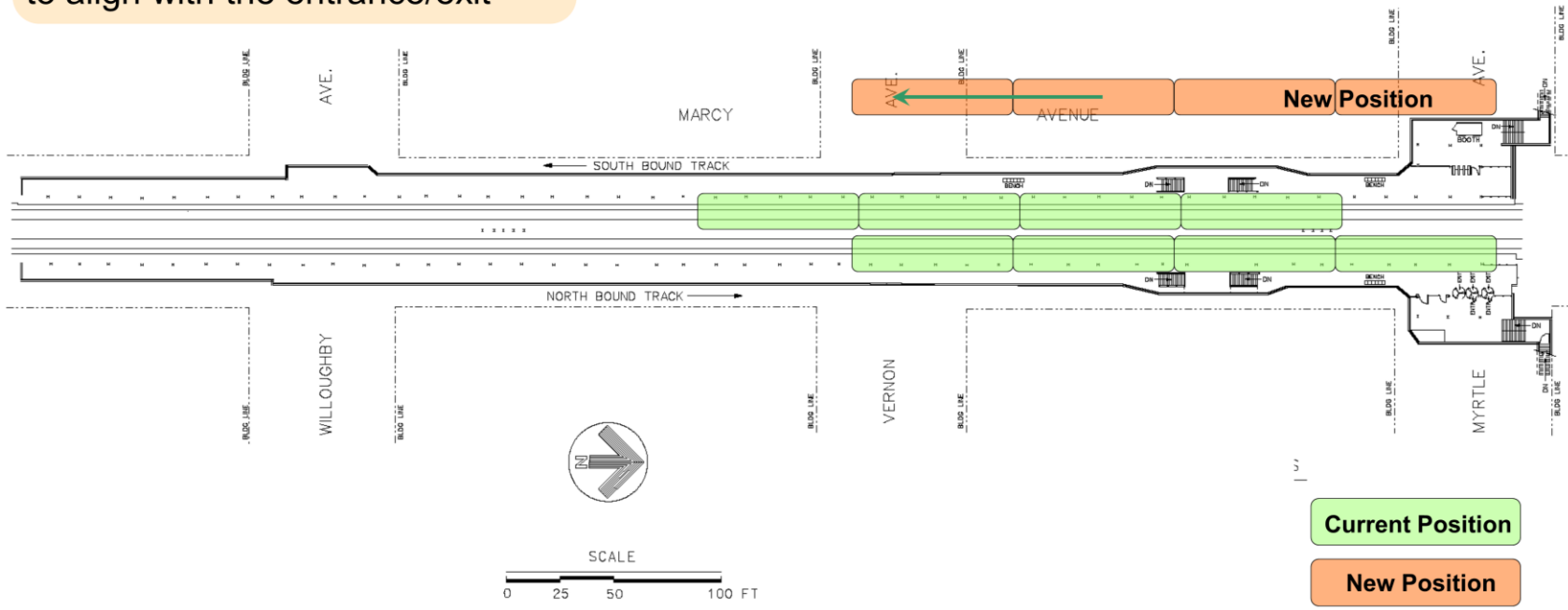
Current Position

Current OPTO Position (when different)

New Position



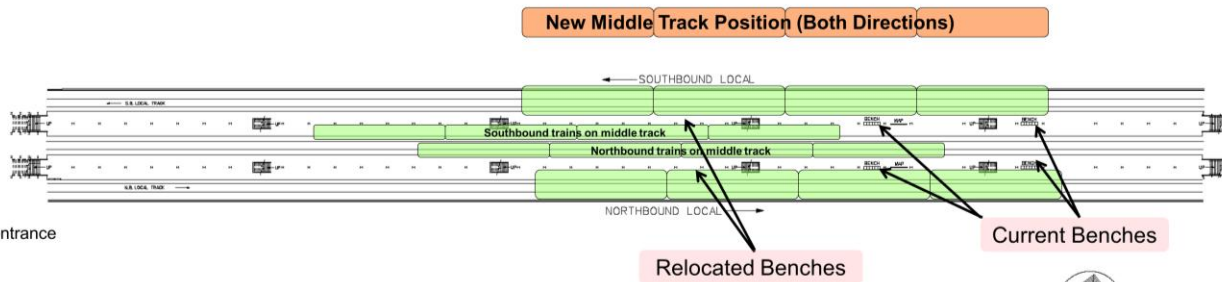
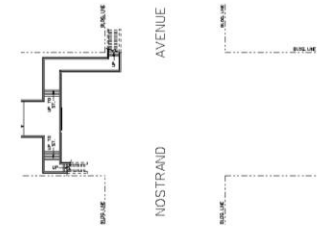
Myrtle-Willoughby Aves:
North-justify all southbound trains
to align with the entrance/exit



Bedford-Nostrand Avs:

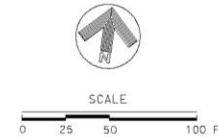
Relocate trains on the middle track to align with trains on outer tracks so that their locations correspond with passenger expectations and enable easier cross-platform transfers during service changes

Move the northernmost benches approximately 200 feet southbound to mitigate end-loading and to provide more convenient bench access for riders entering at Bedford Avenue



42% of station entries at south entrance

58% of station entries at north entrance

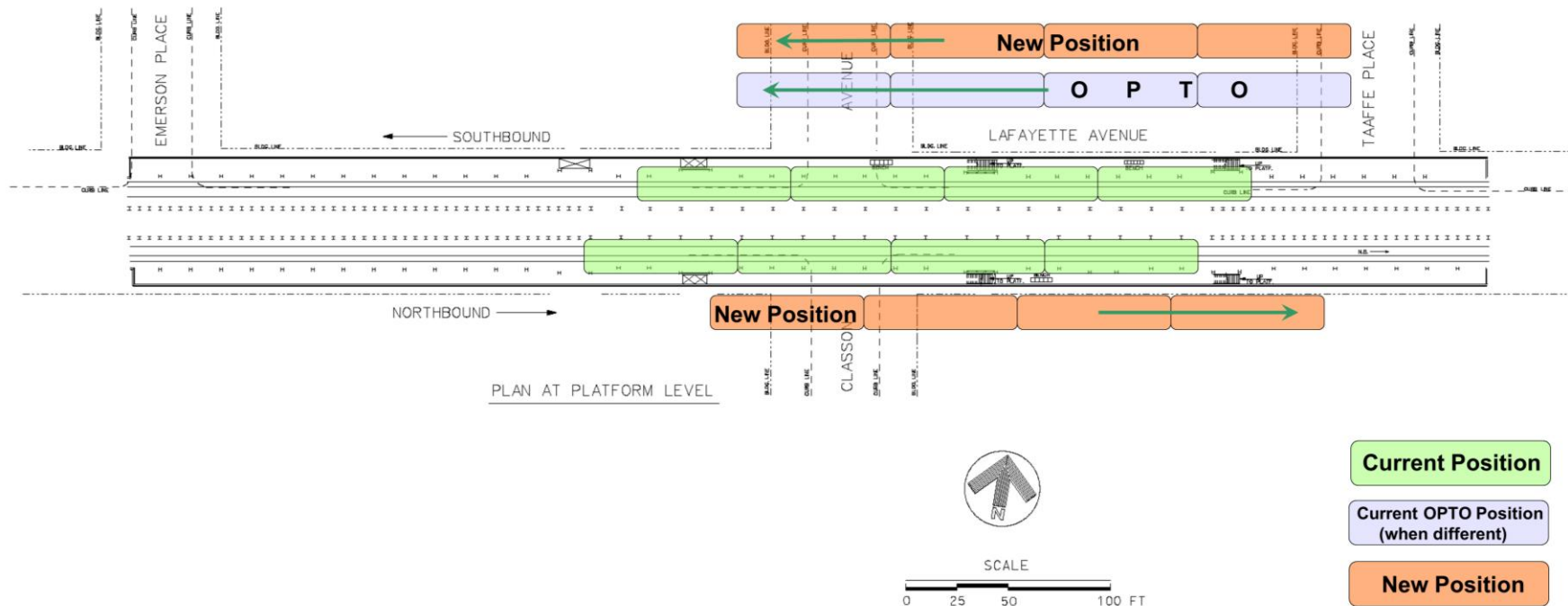


Current Position

New Position

Classon Av:

Move the southbound weekday stopping position to the southbound OPTO stopping position. Move all northbound positions northward. The current stopping positions potentially exacerbate end-loading. Moving the stopping position will better distribute loads.



Fulton St:

Relocate northbound trains approximately 150 feet south, as 81% of station entries are at the southern control area.

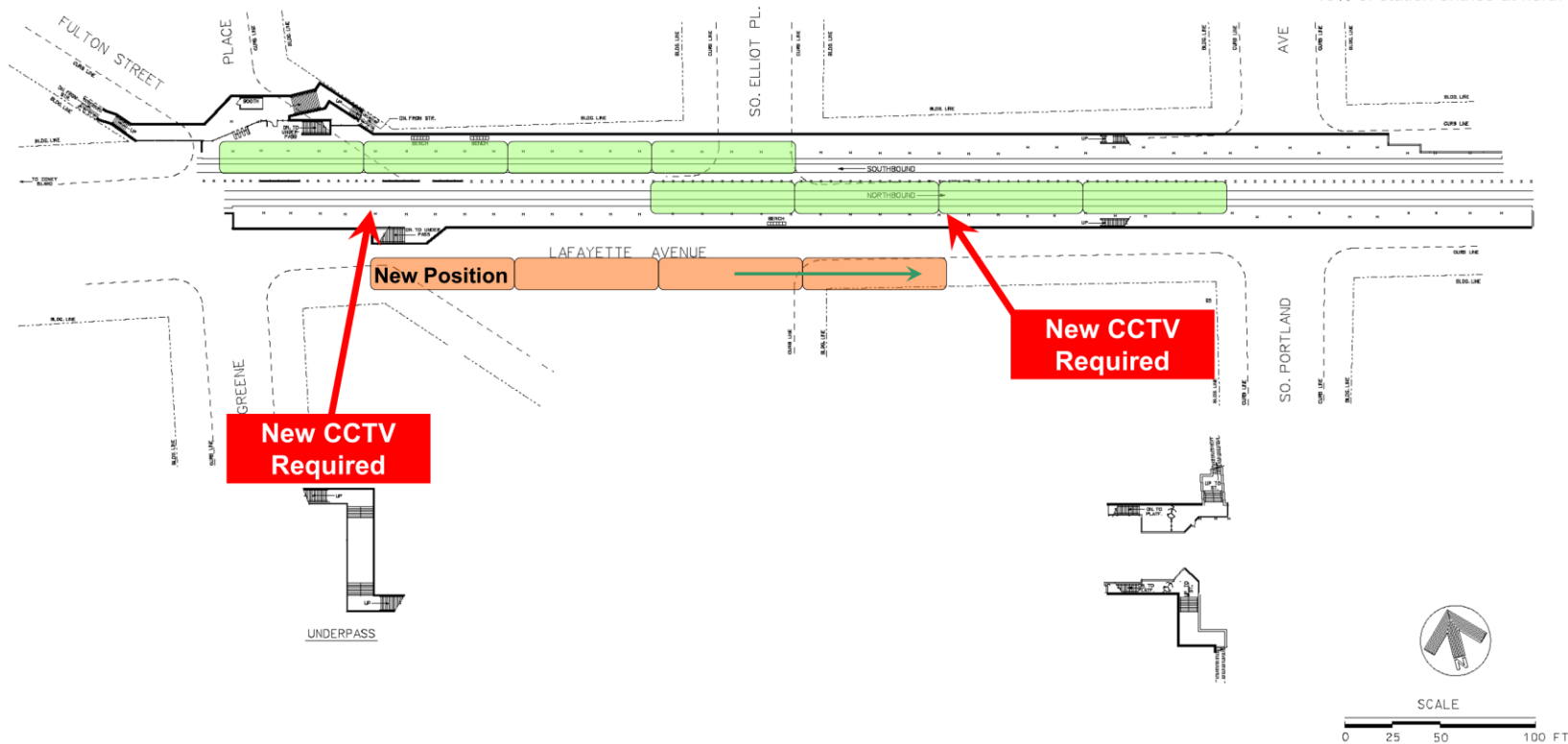
This will require new CCTVs.

Current Position

New Position

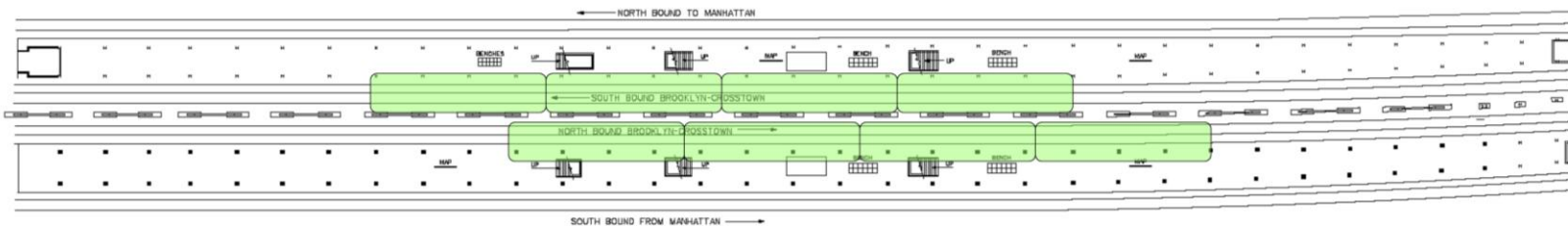
81% of station entries at south entrance

19% of station entries at north entrances



Hoyt-Schermerhorn Sts:

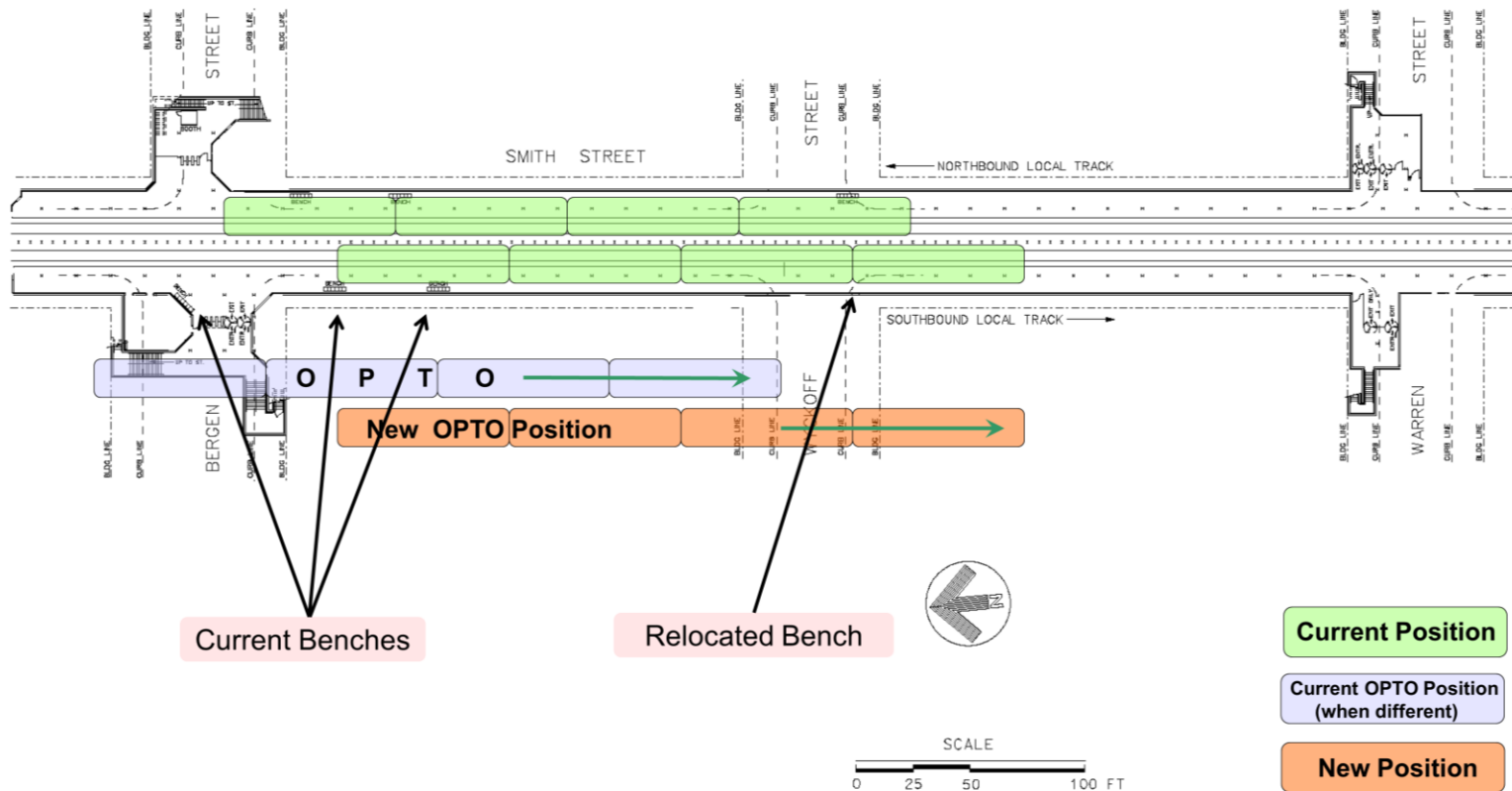
Relocate northbound trains approximately 40 feet south to position more train doors at the foot of the southernmost stair to minimize dwell time and encourage more even loading. The current northbound stopping position places only one door at the foot of the southernmost stair. Moving the train south will permit boarding through multiple doors at that location.



Bergen St:

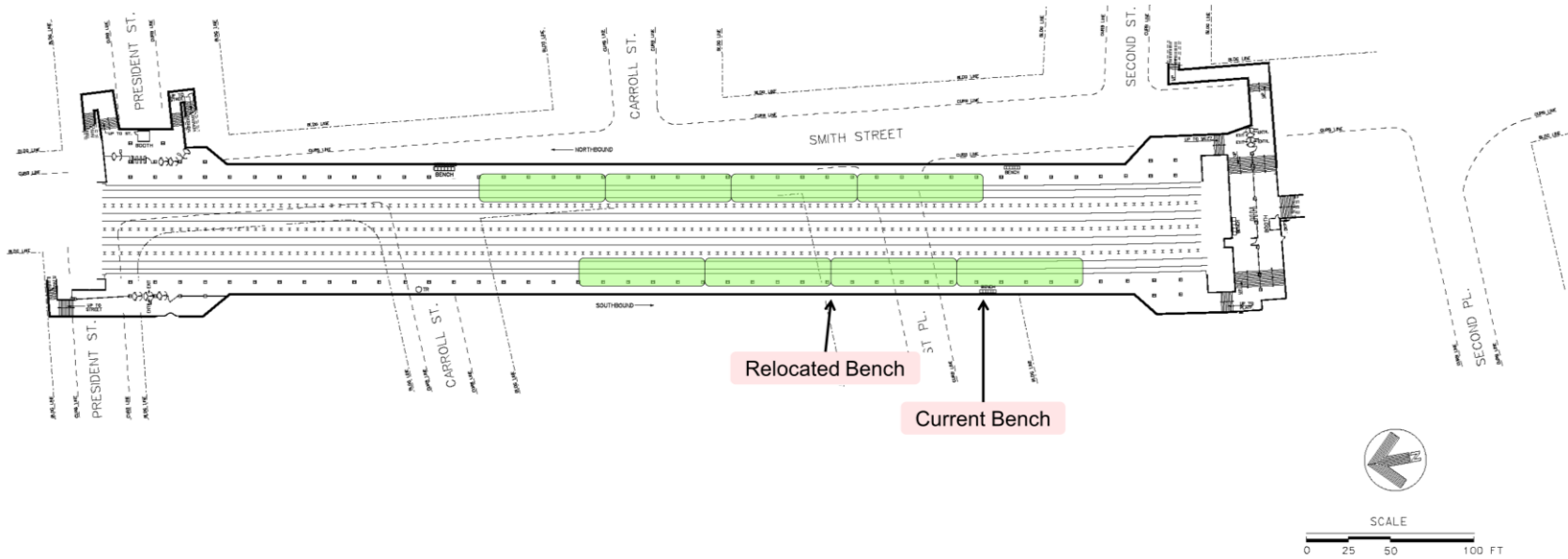
Relocate southbound OPTO to weekday position for consistency.

Currently there are 3 benches located toward the northern end of the southbound platform, and there are no benches toward the middle or the southern end of the platform. The center of the 3 benches should be relocated between the 1st and 2nd cars of the G. This will also better serve F riders as benches only exist adjacent to the back quarter of each train.



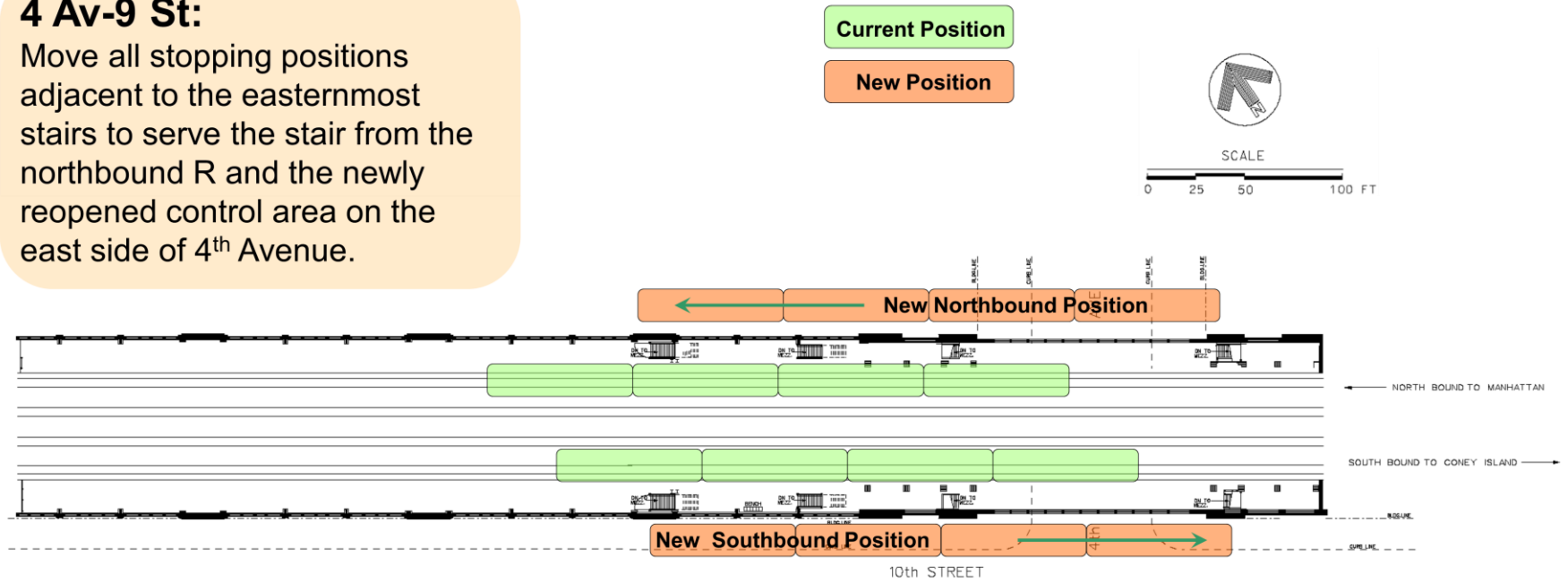
Carroll St:

The bench on the southbound platform should be centered between the 2nd and 3rd car of the G to better serve both F and G riders entering the northern half of the platform.



4 Av-9 St:

Move all stopping positions adjacent to the easternmost stairs to serve the stair from the northbound R and the newly reopened control area on the east side of 4th Avenue.



7 Av:
Move the OPTO position to the existing weekday position for consistency.

Current Position

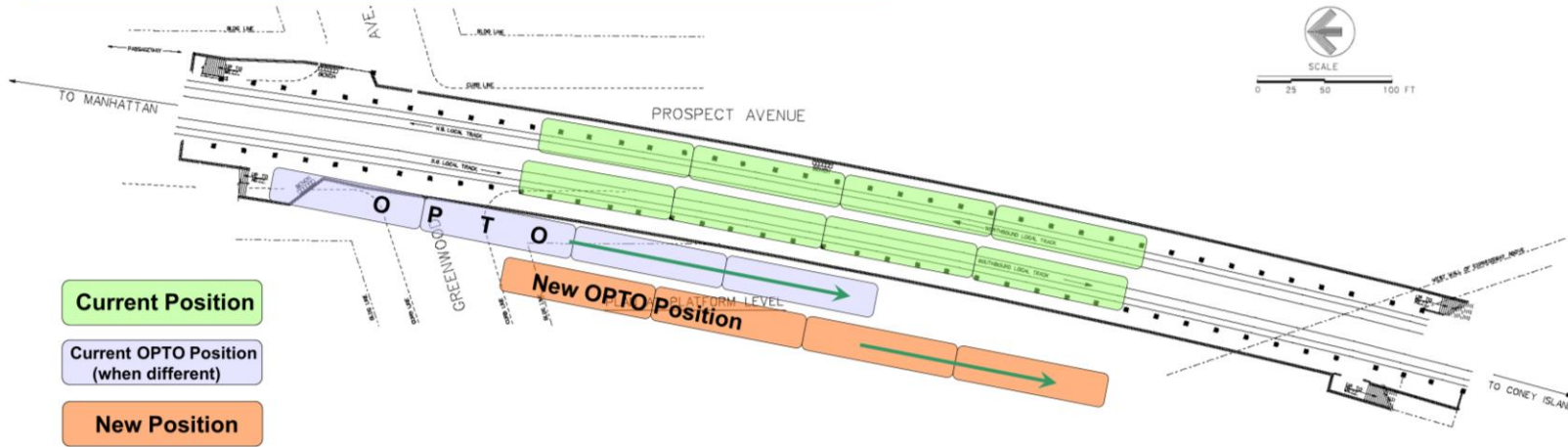
Current OPTO Position (when different)

New Position

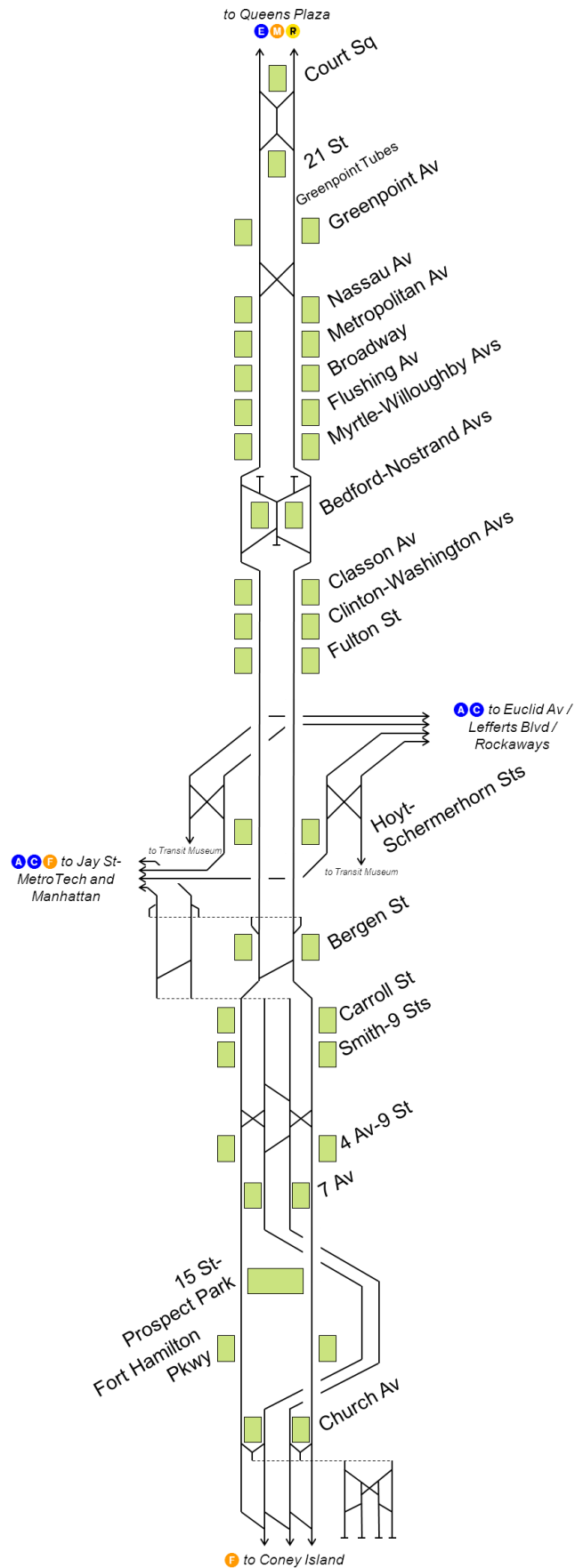


Ft Hamilton Pkwy:

Move the OPTO position to the existing weekday position for consistency.



Appendix D: Track Diagram



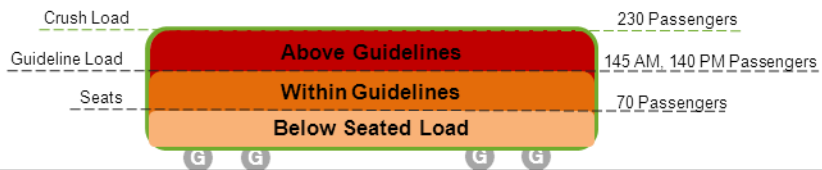
Appendix E: Component Conditions at **G Stations**

The first table lists the component categories evaluated at each station. The components are rated on a scale of 1 to 5, with 1 being the best (no deterioration) and 5 the worst (high level of deterioration). The second table summarizes the percentage of **G** station components rated as deficient – a rating of 3.5 or higher, indicating more than moderate deterioration.

Component	Component
Street Stairs	Platform Edges
Interior Stairs	Windscreen
Mezzanine Areas & Platform Areas:	Canopy
• Ceilings & walls	• Through-Spans
• Floors	• Columns
	Vents
	Other

Line	Station	Total Components	% Rated 3.5 or Worse
Crosstown Line Only	Court Square	29	0%
	21 St	48	33%
	Greenpoint Av	33	6%
	Nassau Av	34	0%
	Metropolitan Av	48	0%
	Broadway	33	18%
	Flushing Av	24	4%
	Myrtle-Willoughby Avs	38	0%
	Bedford-Nostrand Avs	58	7%
	Classon Av	39	8%
	Clinton-Washington Avs	45	11%
	Fulton St	39	8%
Shared	Hoyt-Schermerhorn Sts	63	6%
	Bergen St	66	15%
	Carroll St	37	3%
	Smith-9 Sts	22	0%
	4 Av	41	2%
	7 Av	68	4%
	15 St-Prospect Park	36	0%
	Fort Hamilton Pkwy	45	4%
	Church Av	65	11%

Appendix F: Average Peak Hour Loads by Car as Leaving Station (Spring 2013)ⁱ



SOUTHBOUND AM PEAK HOUR: Guideline is 145 Passengers/Car (580 Passengers/Train)

← South Car 1 Car 2 Car 3 Car 4

Court Sq: 258 Average Passengers/Train (45% of Guideline)



Nassau Av: 341 Average Passengers/Train (59% of Guideline)



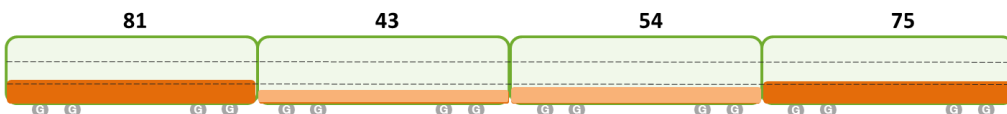
Metropolitan Av: 322 Average Passengers/Train (56% of Guideline)



Clinton-Washington Aves: 513 Average Passengers/Train (88% of Guideline)



Hoyt-Schermerhorn Sts: 252 Average Passengers/Train (43% of Guideline)



Bergen St: 169 Average Passengers/Train (29% of Guideline)



ⁱ Leave load observations were performed at each station on two days in each direction, at each peak period in spring, 2013. Although the sample size is relatively small, these observations are consistent with the larger samples of prior years.

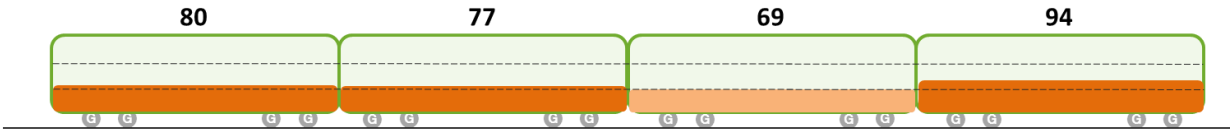
NORTHBOUND AM PEAK HOUR: Guideline is 145 Passengers/Car (580 Passengers/Train)

← NORTH Car 1 Car 2 Car 3 Car 4

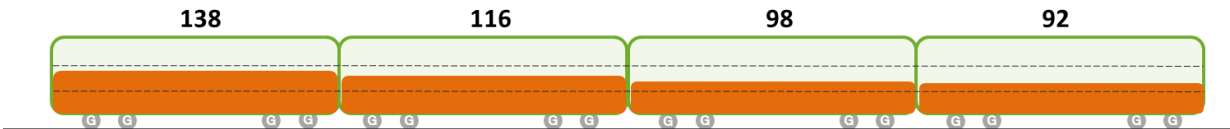
Bergen St: 256 Average Passengers/Train (44% of Guideline)



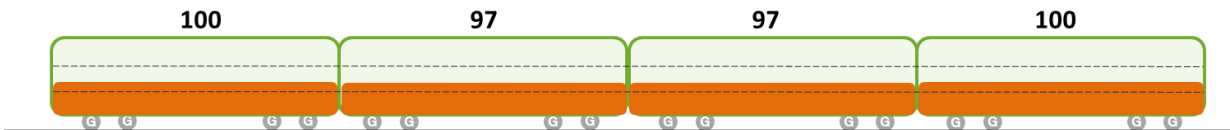
Hoyt-Schermerhorn Sts: 321 Average Passengers/Train (55% of Guideline)



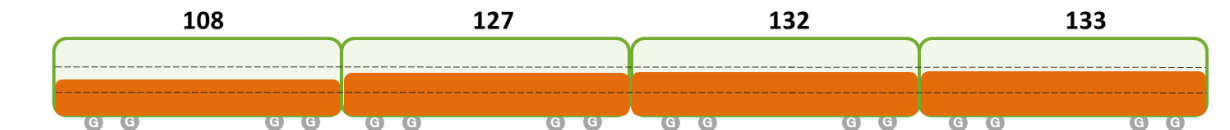
Broadway: 444 Average Passengers/Train (76% of Guideline)



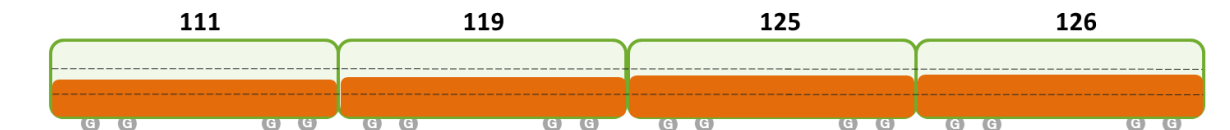
Metropolitan Av: 394 Average Passengers/Train (68% of Guideline)



Greenpoint Av: 500 Average Passengers/Train (86% of Guideline)



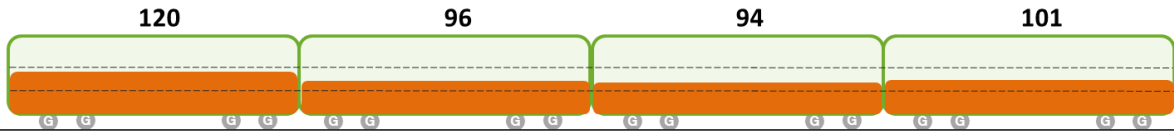
Court Sq: 481 Average Passengers/Train (83% of Guideline)



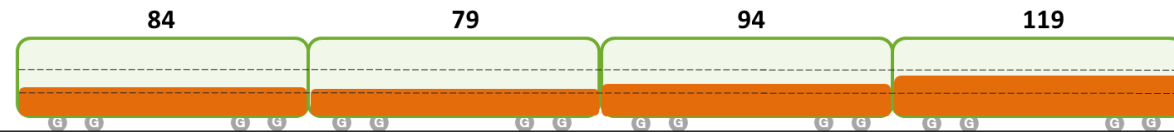
SOUTHBOUND PM PEAK HOUR: Guideline is 140 Passengers/Car (560 Passengers/Train)

← South Car 1 Car 2 Car 3 Car 4

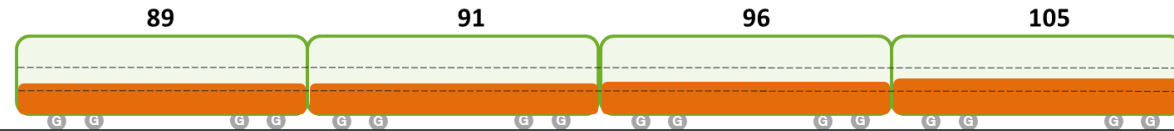
Court Sq: 411 Average Passengers/Train (73% of Guideline)



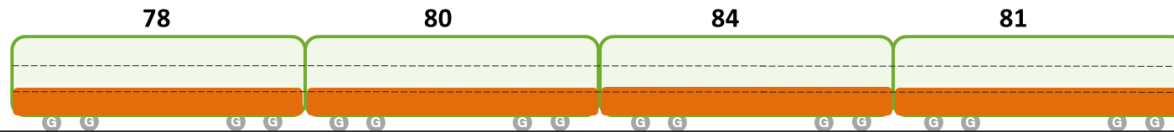
Nassau Av: 376 Average Passengers/Train (67% of Guideline)



Metropolitan Av: 381 Average Passengers/Train (68% of Guideline)



Clinton-Washington Avs: 323 Average Passengers/Train (58% Guideline)



Hoyt-Schermerhorn Sts: 269 Average Passengers/Train (48% of Guideline)



Bergen St: 222 Average Passengers/Train (40% of Guideline)



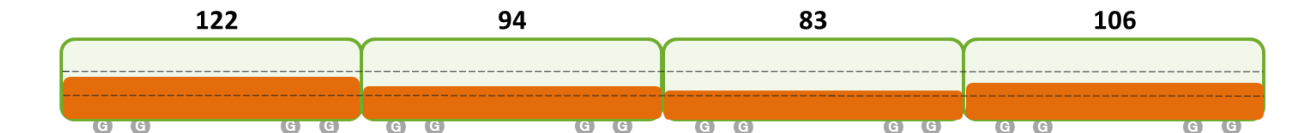
NORTHBOUND PM PEAK HOUR: Guideline is 140 Passengers/Car (560 Passengers/Train)

← NORTH Car 1 Car 2 Car 3 Car 4

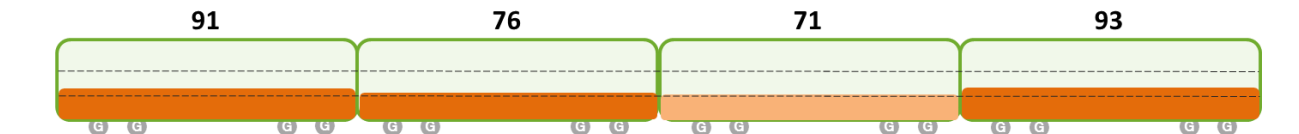
Bergen St: 198 Average Passengers/Train (35% of Guideline)



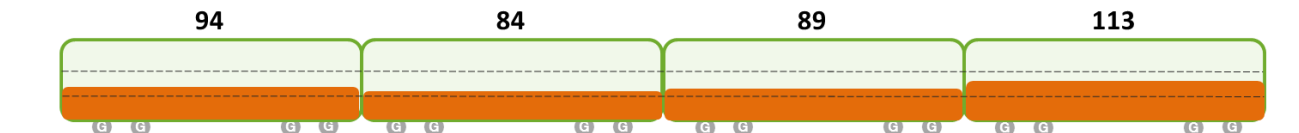
Hoyt-Schermerhorn Sts: 405 Average Passengers/Train (73% of Guideline)



Broadway: 331 Average Passengers/Train (59% of Guideline)



Metropolitan Av: 379 Average Passengers/Train (68% of Guideline)



Court Sq: 243 Average Passengers/Train (43% of Guideline)

