# Subway Mitigations Pedestrian Mobility Bus Service

ESD Community Advisory Committee Working Group Briefing June 22, 2021





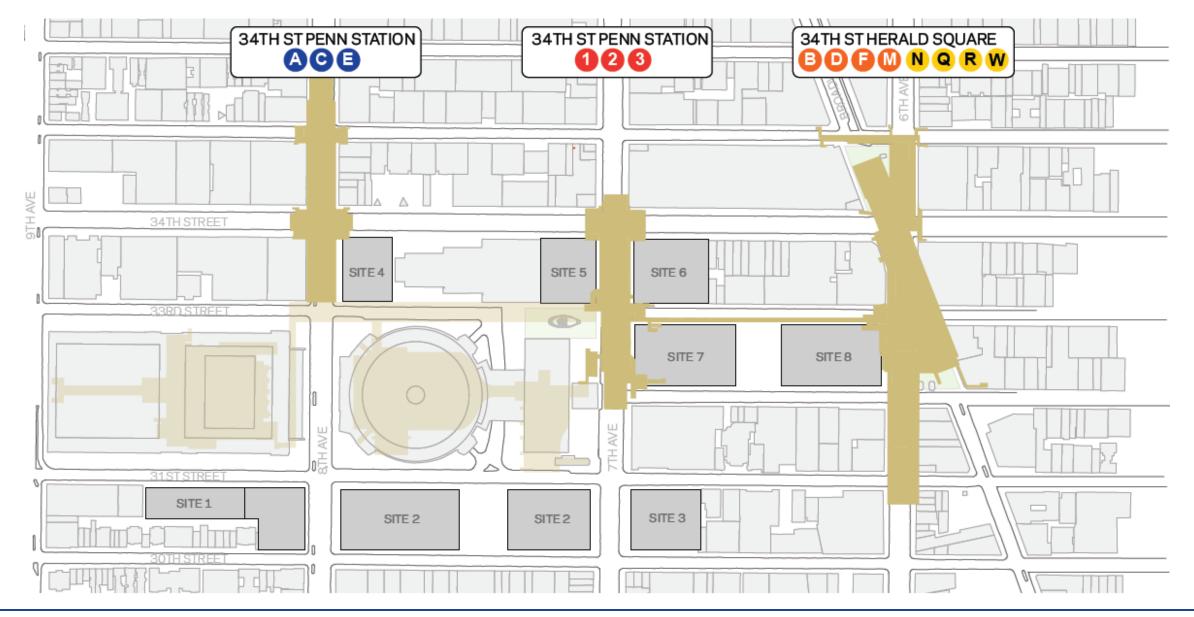
72 Street Subway Station Q 🖉

June 2021



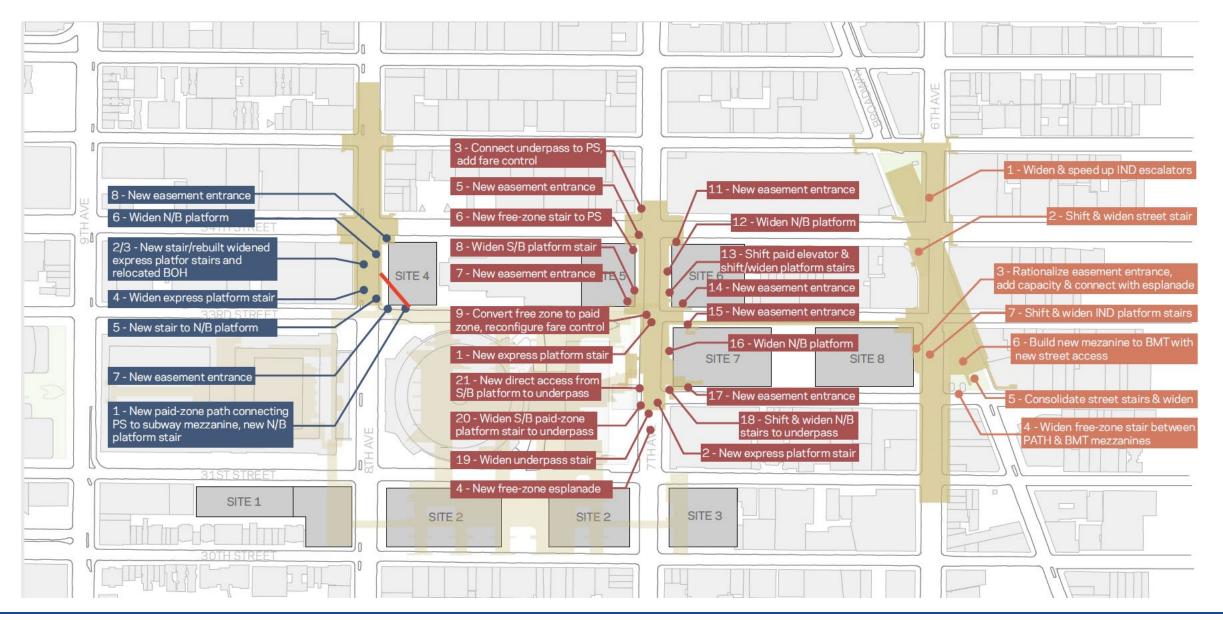


# **District Subway Stations**



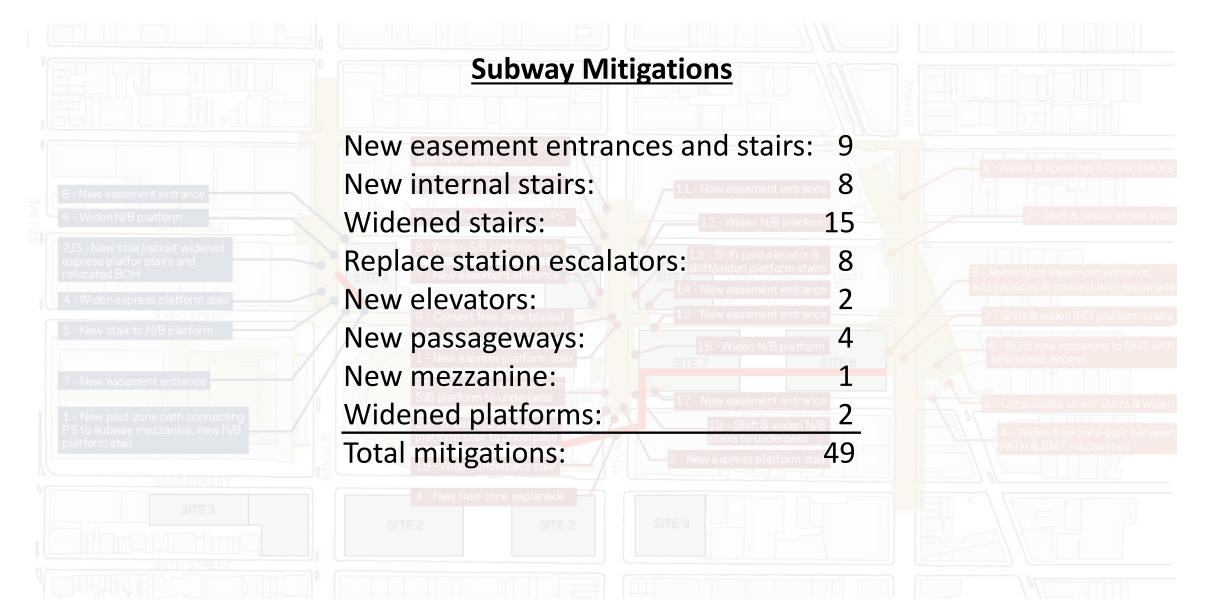
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# **Subway Mitigations Map**

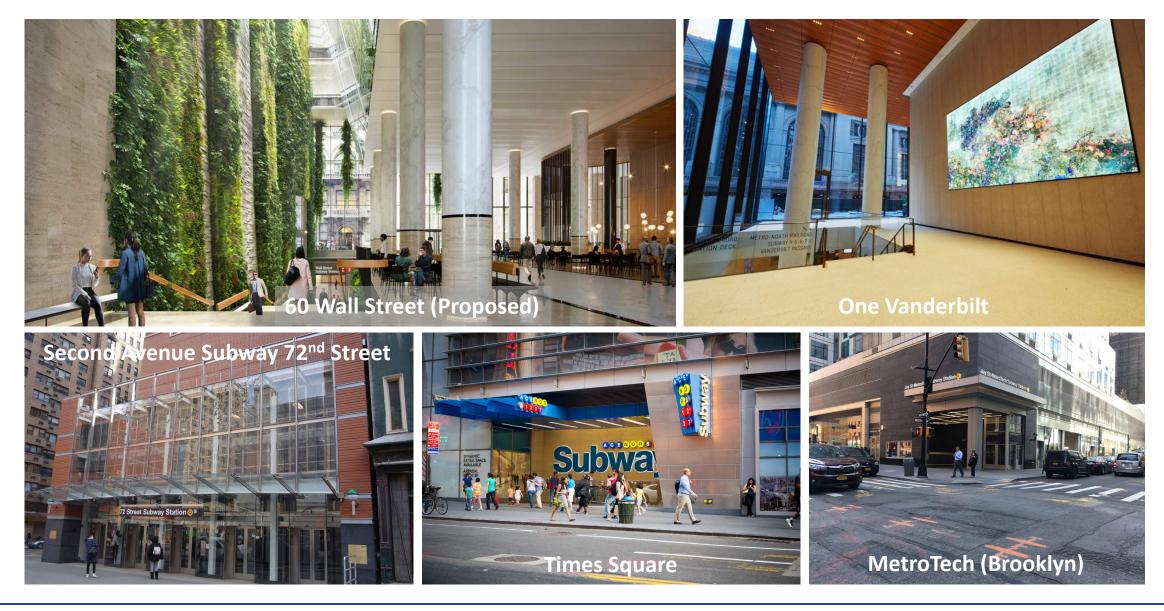


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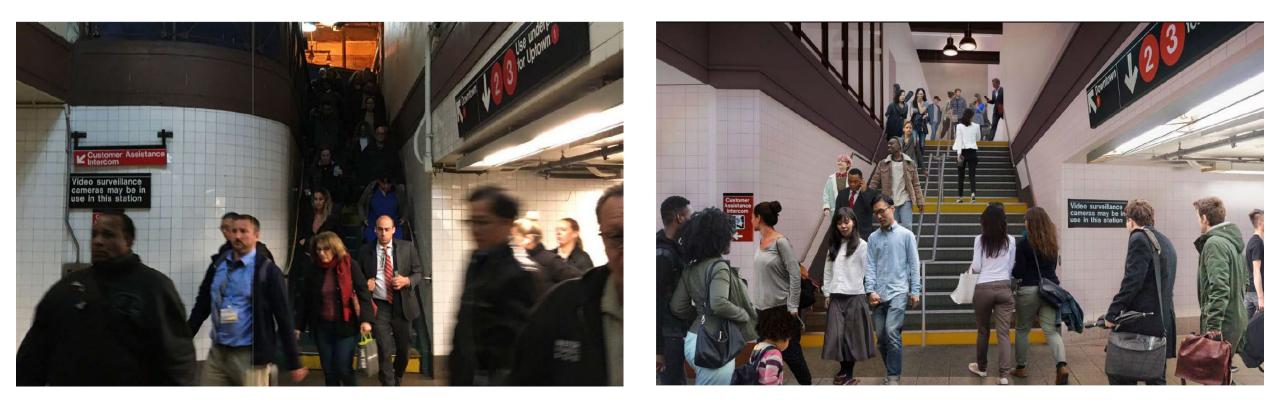
# **Subway Mitigations Summary**



### In-Building Subway Entrances: Examples



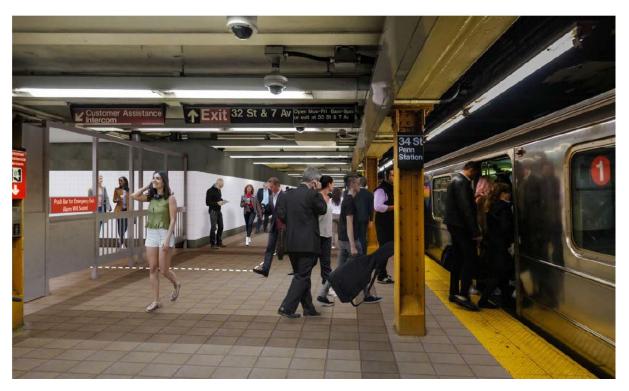
#### Stair Widening: 7<sup>th</sup> Avenue IRT 32<sup>nd</sup> Street entrance from Penn Station





#### Platform Widening: 7th Avenue IRT uptown local platform







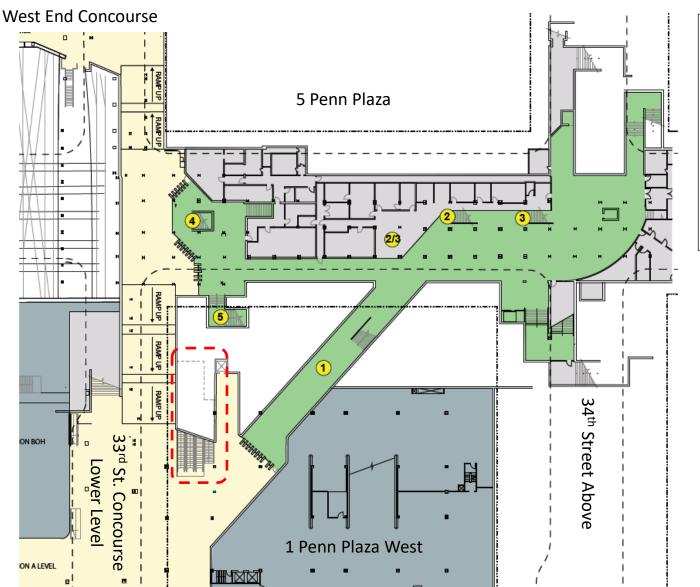


# 8<sup>th</sup> Avenue Subway Station: Mitigation summary

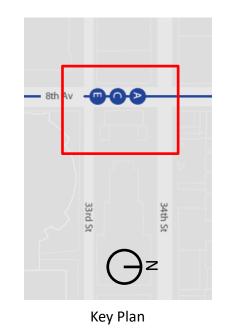


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#### 8<sup>th</sup> Avenue Subway Station: Mezzanine level mitigations

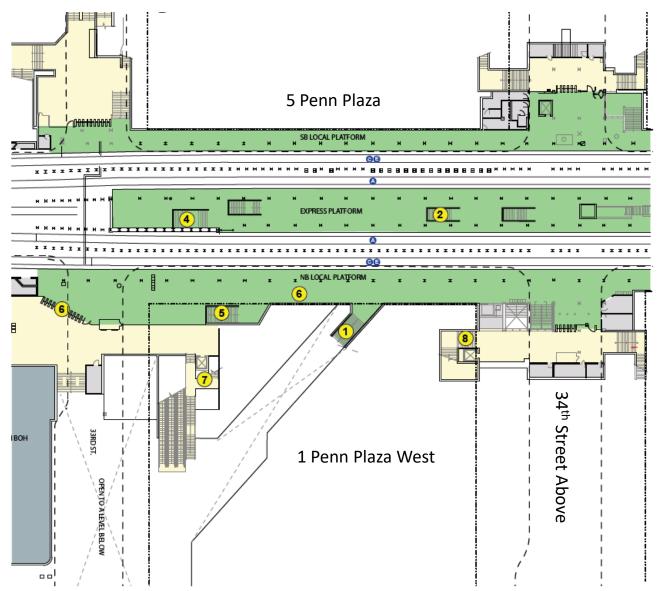


- 1. Build new 20' passageway to connect 33rd st Penn Station concourse with IND mezzanine between 33rd & 34th st. Includes new 10' stair up to uptown local platform. Flairs to 30' wide for fare control line.
- 2. Build new 7.5' stair to express platform south of 34th st. Requires relocation of NYCT BOH space.
- 3. Flip and widen stair M27 (express platform at 34th st). New width to be 7.5. Requires relocation of NYCT BOH space.
- 4. Widen stair M24 express platform at 33rd st underpass) from 8.7' to 10'.
- 5. Build new 10' stair from N067 paid-zone (33rd st. underpass) to uptown local platform
- 6. Widen uptown local platform between 33rd and 34th street. Width to be confirmed.
- 7. New easement street stair to N072 at northeast corner of 33rd and 34th st & 8th ave. Can be combined with new Penn Station entrance.
- New 10' easement street stair and ADA elevator to N070 elevator to N070 at southeast corner of 34th and 8th

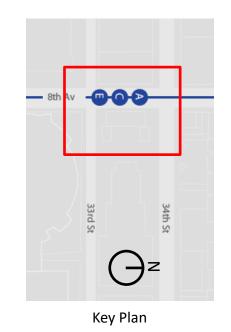




#### 8<sup>th</sup> Avenue Subway Station: Platform level mitigations



- Build new 20' passageway to connect 33rd st Penn Station concourse with IND mezzanine between 33rd & 34th st. Includes new 10' stair up to uptown local platform. Flairs to 30' wide for fare control line.
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- 4. Widen stair M24 express platform at 33rd st underpass) from 8.7' to 10'.
- 5. Build new 10' stair from N067 paid-zone (33rd st. underpass) to uptown local platform
- 6. Widen up town local platform between 33rd and 34th street. Width to be confirmed.
- 7. New easement street stair to N072 at northeast corner of 33rd and 34th st & 8th ave. Can be combined with new Penn Station entrance.
- New 10' easement street stair and ADA elevator to N070 elevator to N070 at southeast corner of 34th and 8th



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# 7<sup>th</sup> Avenue Subway Station: Mitigation summary

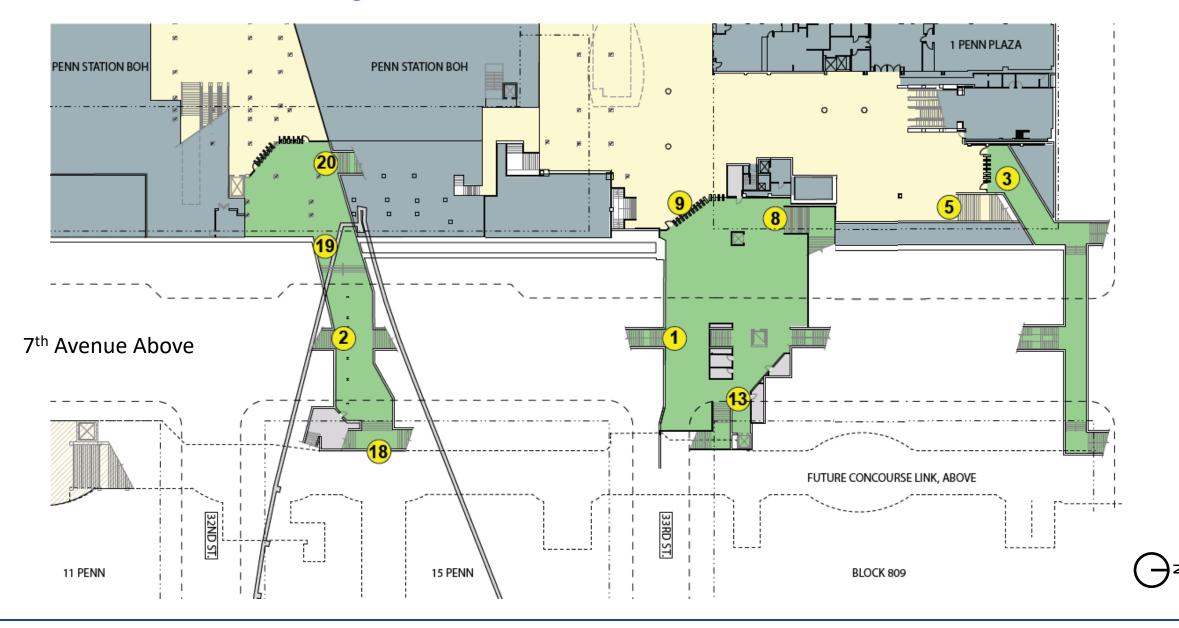


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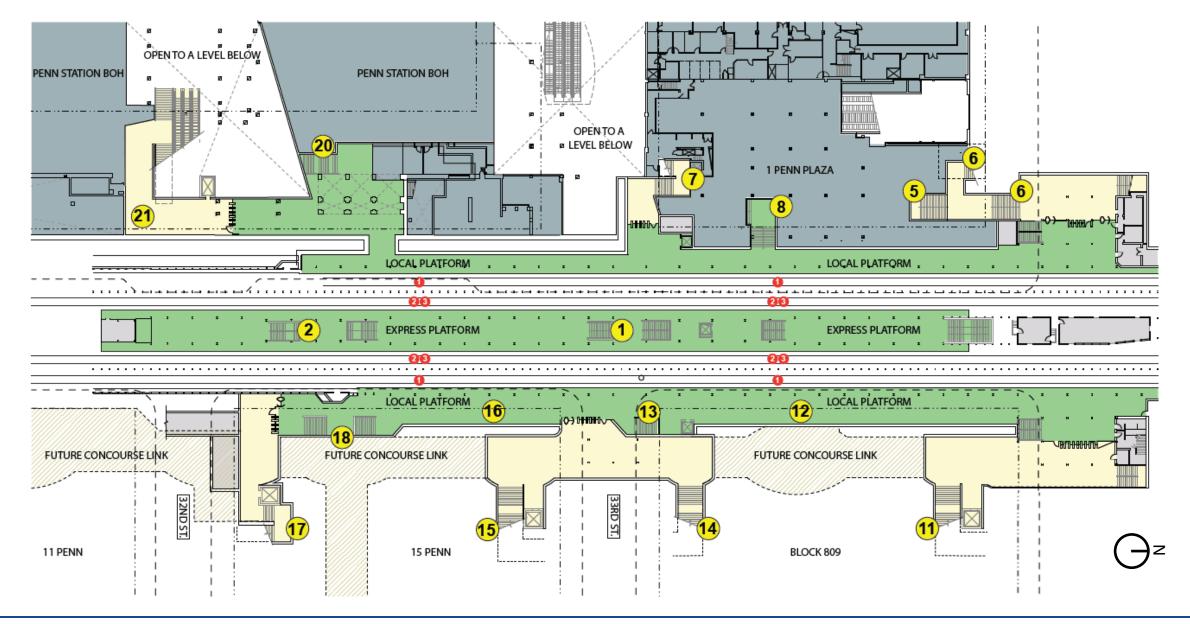
### 7<sup>th</sup> Avenue Subway Station: Mezzanine level mitigations



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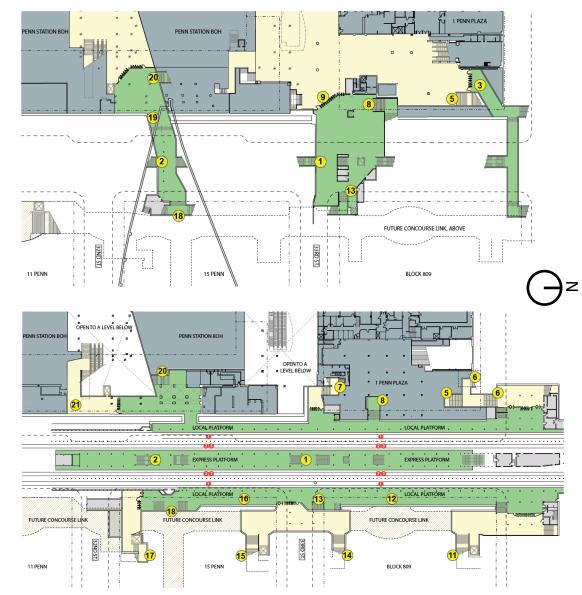
MTA

### 7<sup>th</sup> Avenue Subway Station: Platform level mitigations





# 7<sup>th</sup> Avenue IRT Subway Station: Mitigation descriptions



- 1. New 10' stair to express platform at 33rd st. underpass
- 2. New 10' stair to express platform at 32nd st. underpass
- New connecting Passageway and fare control from PS level A to existing 34th st subway underpass. 20' wide.
- Free-zone passageway from PS level A to Herald Square subway station. Passageway to connect with PS below 32nd st.
- 5. New easement street stair fro control area R142 up to southwest corner of 34th & 7th. May be combined with relocated entrance to PS
- 6. New 10' free-zone stair from R142 down to PS level A. Part of new PS entry.
- New 10' easement street stair from fair control area serving downtown local platform to northwest corner of 33rd & 7th.
- 8. Relocate and widen paid-zone stair from R138 up to downtown local platform. Expand up to 15' wide & include ADA elevator
- Expand & reconfigure R138 control line westerly PS level A. Convert 33rd st underpass to paid zone. Possible second free-zone passageway North connecting under 7th ave.
   Not used.

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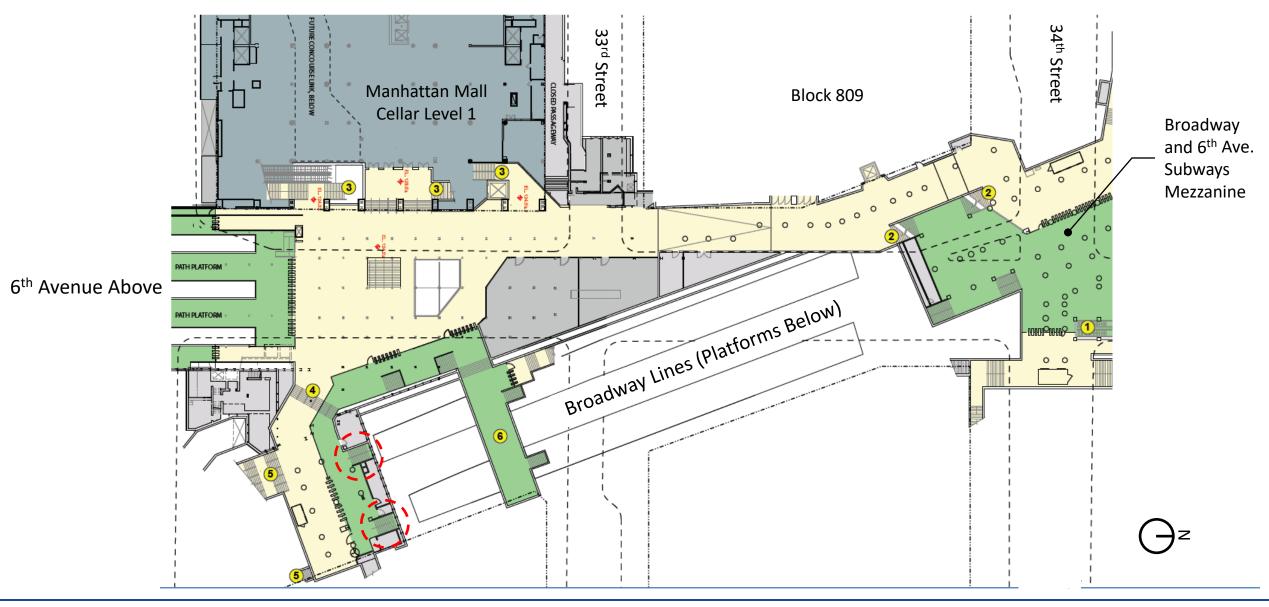
- 11.Replace easement street stair from control area R141 up to southeast corner of 34th & 7th. Stair to be 10 wide for subway, wider if concourse system is adopted
- 12. Widen uptown local platform from 33rd to 34th into basement of redeveloped block 809. Shift paid zone ADA elevator accordingly.
- 13. Widen & combine ML2 & ML6 from R138 to uptown platform & R139. Final width depends on adoption of concourse system & number 7.
- 14. Replace easement stair & sidewalk stair from R139 northeast corner of 33rd & 7th. 10' wide
- 15. Replace easement street stair & elevator up to southeast corner o 33rd & 7th. 10' 15' wide.
- 16. Widen up town local platform from 32nd to 33rd st in basement of 15 Penn
- 17. Replace easement stair from R137 up to northeast corner of 32nd & 7th. 10' wide
- Widen paid-zone stair system 08, 09,010 connecting 32nd underpass with uptown local platform
- 19. Widen paid-zone stair U10/14 at west end of 32nd st underpass. Widen stair by  $7.5^\prime$
- 20. Widen stair 05/06 downtown platform down to 32nd st underpass and R135 ) from 5' to 10'
- New direct access from reopened Guastavino/downlwn local platform up to westside of 7th ave & 32nd. Can be part of PS entrance.



### Herald Square Subway Station: Mitigation summary

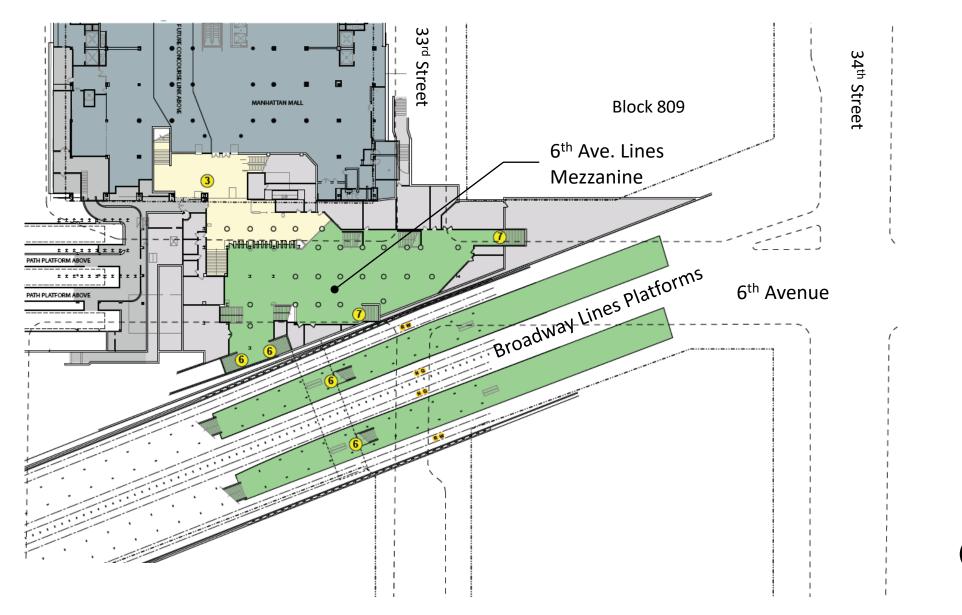


# Herald Square Subway Station: New mezzanine level mitigations



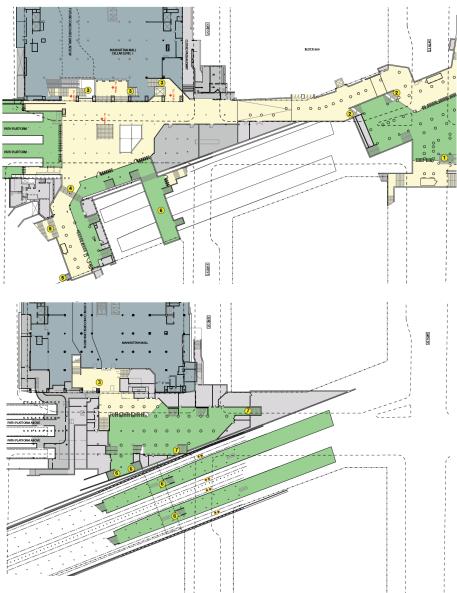


### Herald Square Subway Station: 6th Ave. mezzanine level mitigations

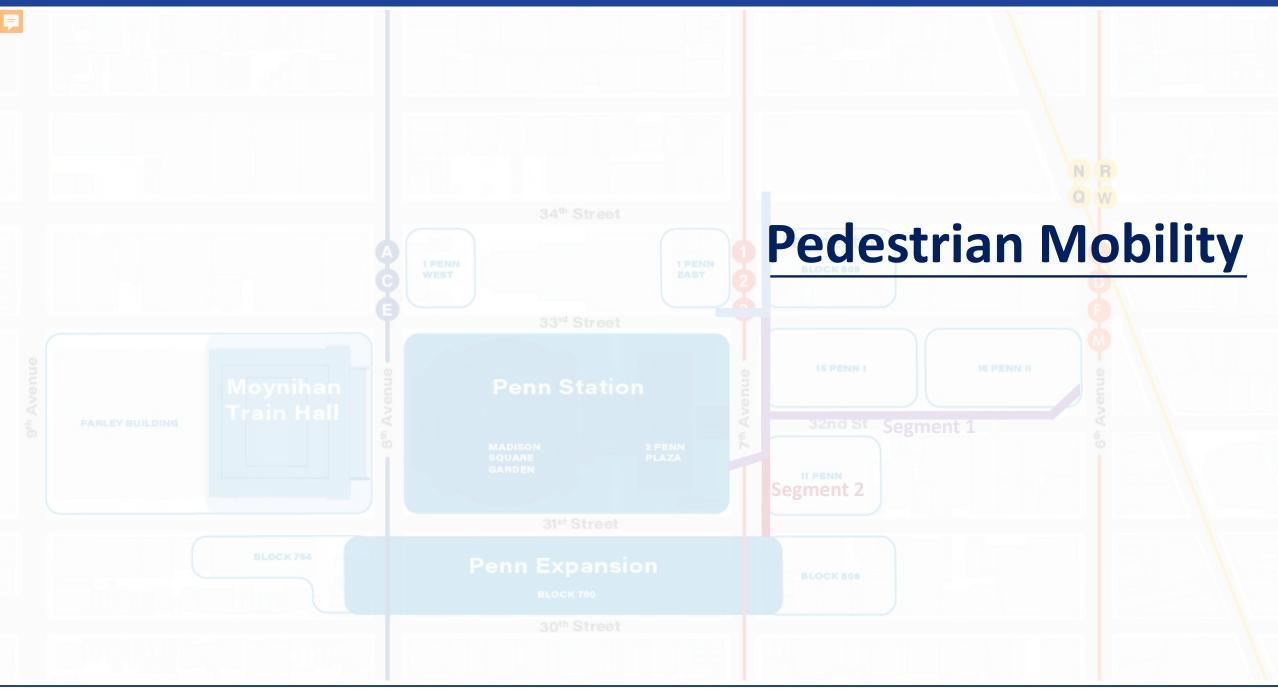




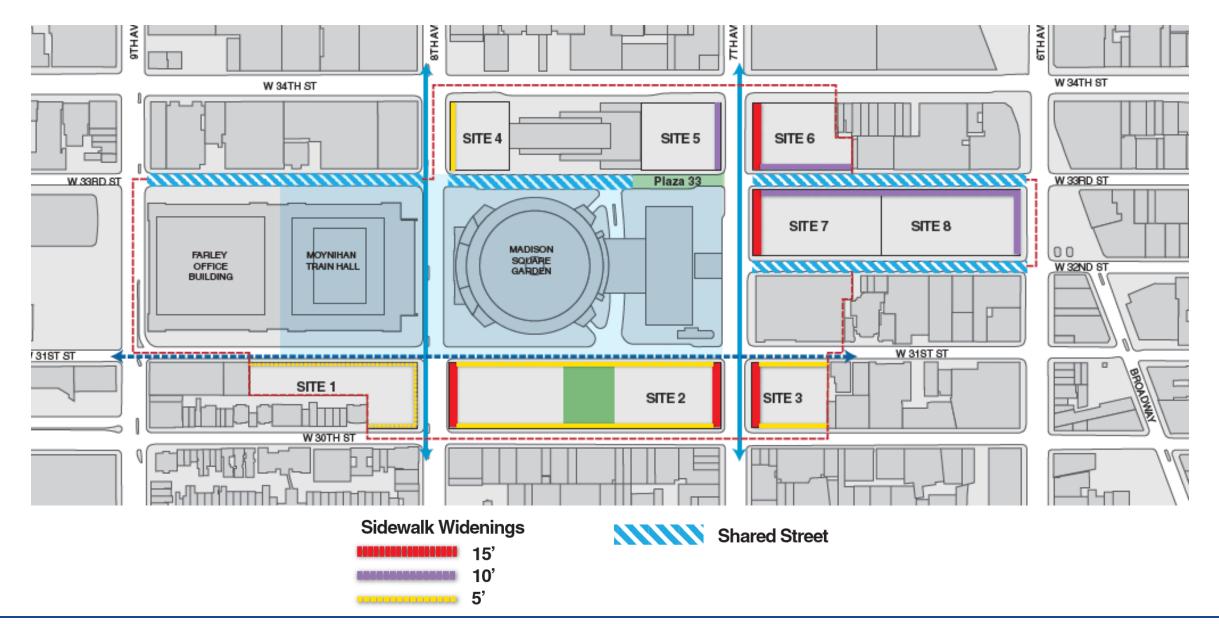
# Herald Square Subway Station: Mitigation details



- L. Replace all IND platform escalators. Existin escalators are 24" tread 90 fpm speed. New escalators would be 32" tread, 120 fpm speed, if engineering allows. Total of eight escalators.
- 2. At southwest corner of 6th Ave & 34th st. relocate and widen street stair serving N506 free-zone and PATH corridor
- 3. Rationalize and expand capacity of easement entrances in Manhattan Mall serving both PATH mezz and IND mezz levels. Design and capacity dependent upon if an underground concourse to Pen Station is adopted. Would include escalators between IND mezz adn street level and additional street access at 33rd street
- 4. Widen stair HM302 between PATH mezz and A025 free-zone (Broadway at 32nd st). Additional width about 10 feet.
- 5. Consolidate and expand three stairs on the northside of 32nd st HM300, BMT S2 and BMT S1. Consolidated stair would be 25 feet wide.
- 6. Build new mezzanine above BWY BMT platforms and drop down new 7 ft stairs to each island platform. Mezzanine would connect with PATH mezzanine (new turnstiles to access free-zone) and with paid-zone transfer to IND. Mezzanine could include a new 10 ft street stair ascending north, along with fare control.
- 7. On southend of IND platforms widen stairs P11 and P12 up to N507 mezzanine. Stairs ould grow from 8.5 ft to 10 ft wide.



### **Shared Streets and Sidewalk Widenings**



#### **2038 Full Build:** Pedestrian Level-of-Service – AM peak



### 2038 Full Build: Pedestrian Level-of-Service - PM peak

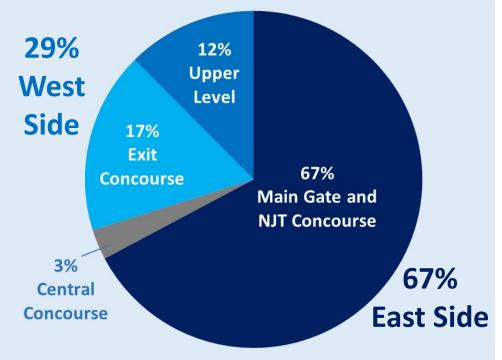


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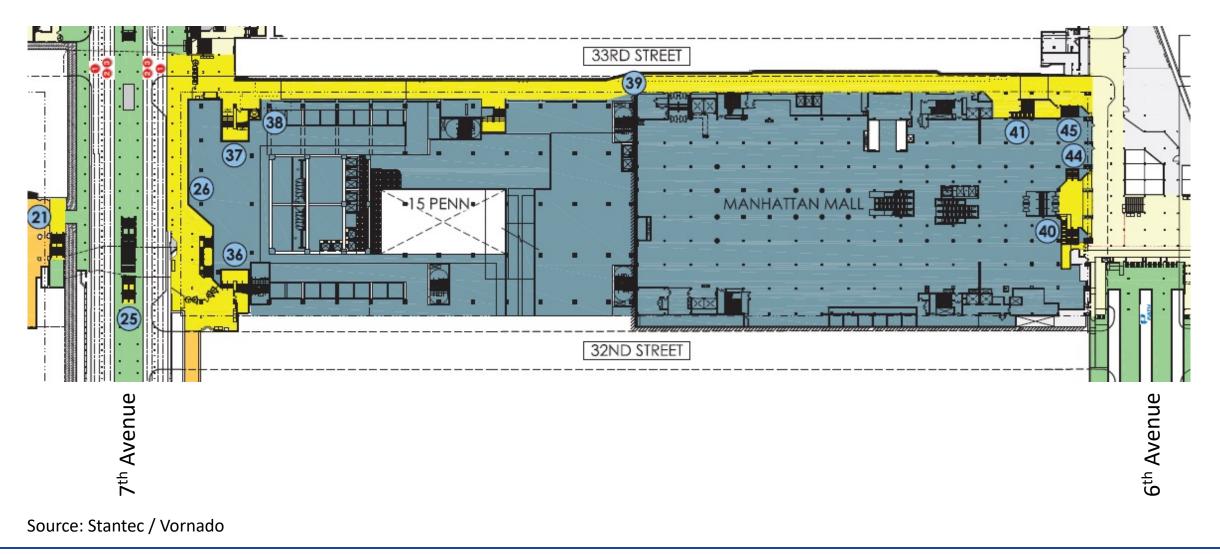
#### **Penn Station Customer Desire Lines**



#### Where are they boarding trains?



### 15 Penn Special Permit: Re-opening the Gimbels passageway



### **2038 Full Build:** 7<sup>th</sup> Avenue subway line-haul significant adverse impacts

#### Table 14-51

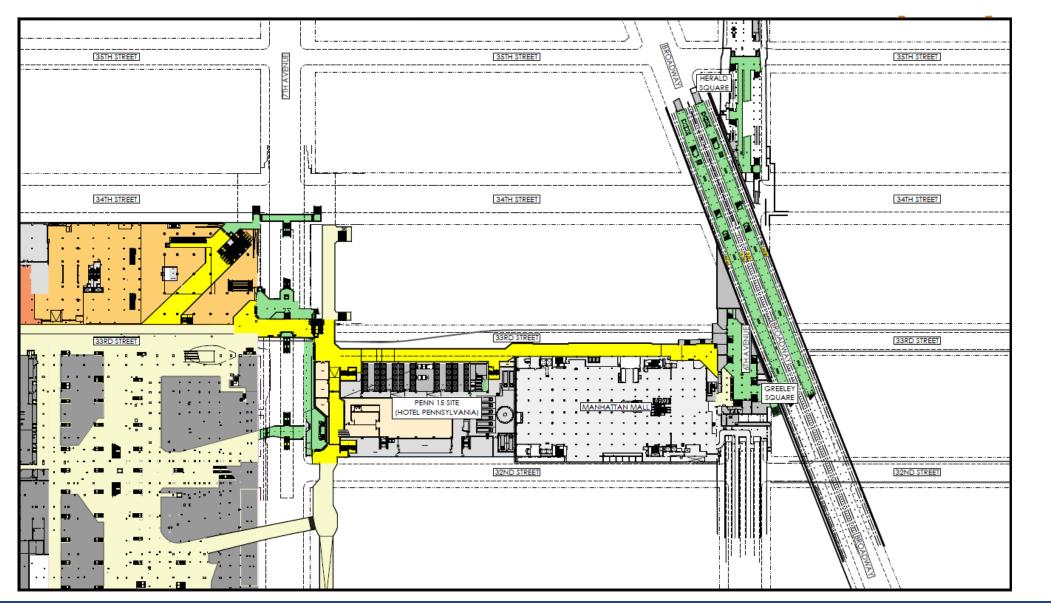
#### 2038 With Action Condition – Significant Adverse Subway Line-Haul Impacts

Analysis	Direction of	Impacted Subway Lines				
Peak Hour	Travel	34th-Herald Square	34th-Seventh Avenue		venue	34th-Eighth Avenue
Weekday AM	Northbound	М				
	Southbound	D		2/3		Α
Weekday PM	Northbound			1, 2/3		
Notes: The 34th Street-Herald Square Subway Station serves the B, D, F, M, N, Q, R, and W Subway Lines; the 34th Street (Seventh						
Avenue)-Penn Station Subway Station serves the Nos. 1, 2, and 3 Subway Lines; and the 34th Street (Eighth Avenue)-Penn						
Station Subway Station serves the A, C, and E Subway Lines.						

Source: Empire Station Complex Draft EIS, Transportation Chapter

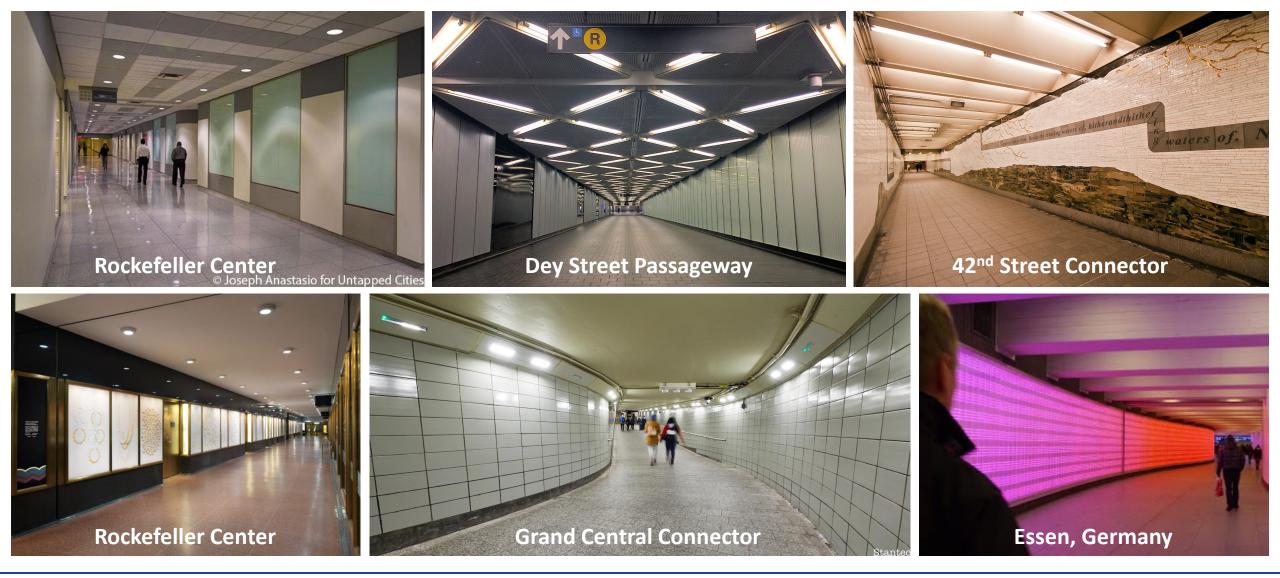


# Gimbels Passageway: Alternative 1 (VNO/Stantec)



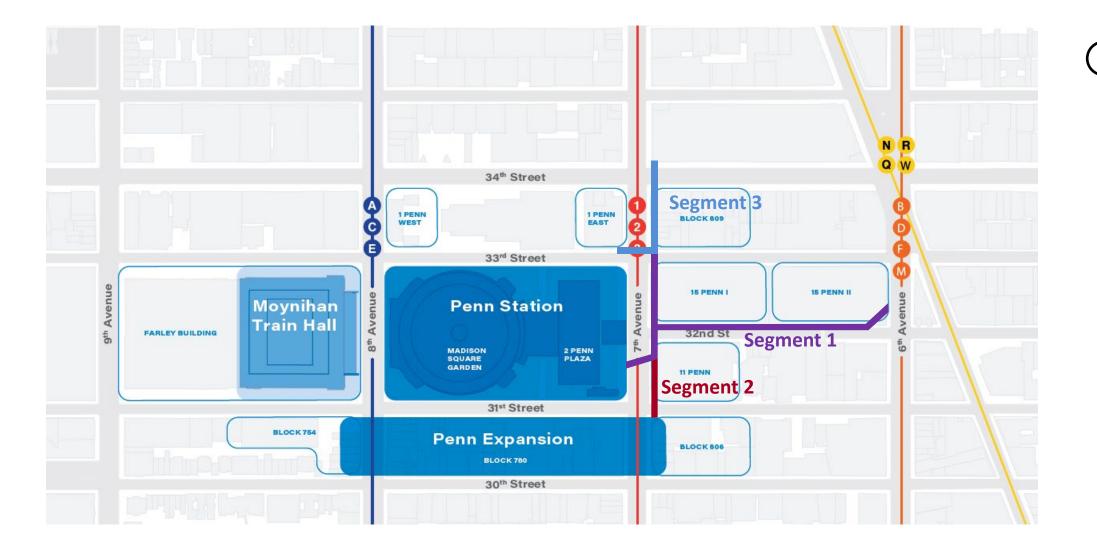
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#### **Underground Pedestrian Concourses:** Examples

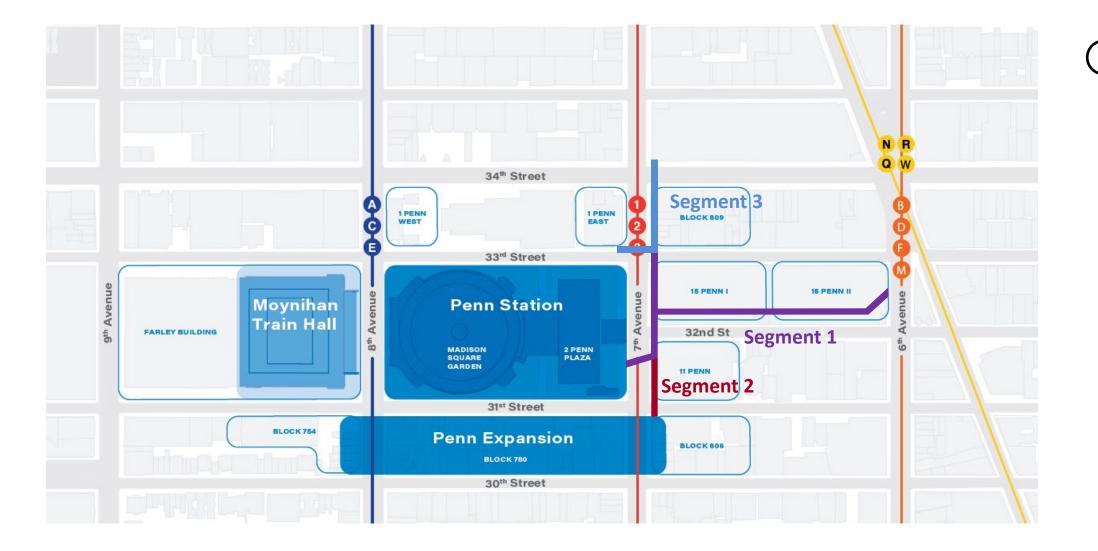




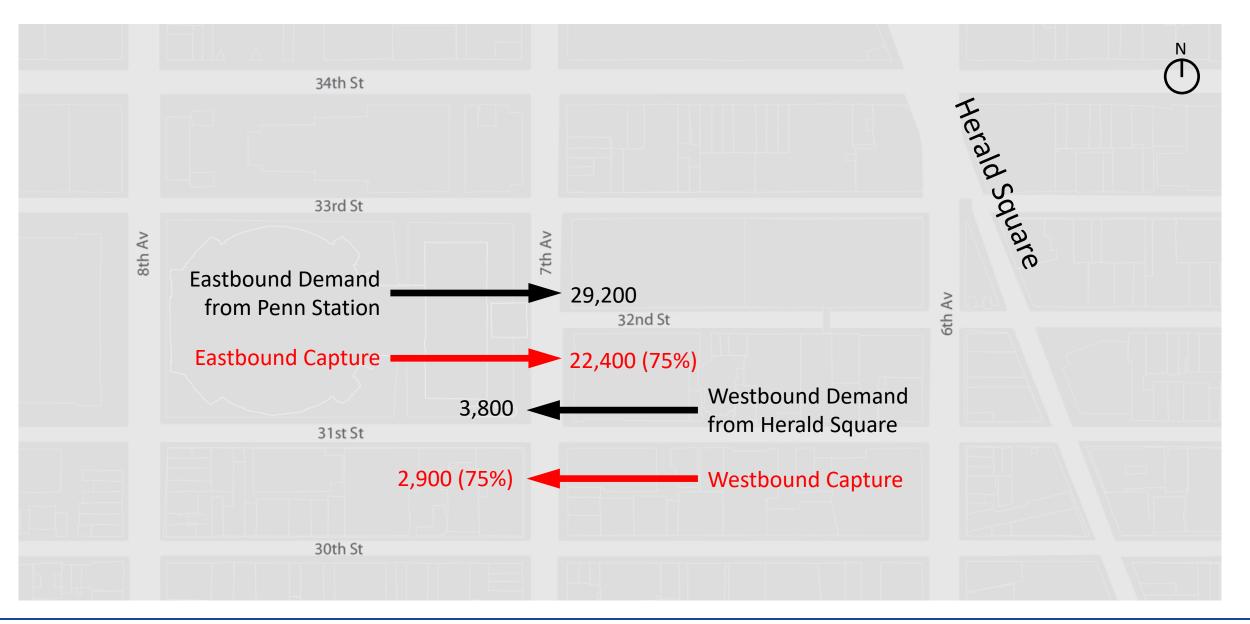
# **Underground Concourse:** Alternative 2



# **Underground Concourse:** Alternative 3



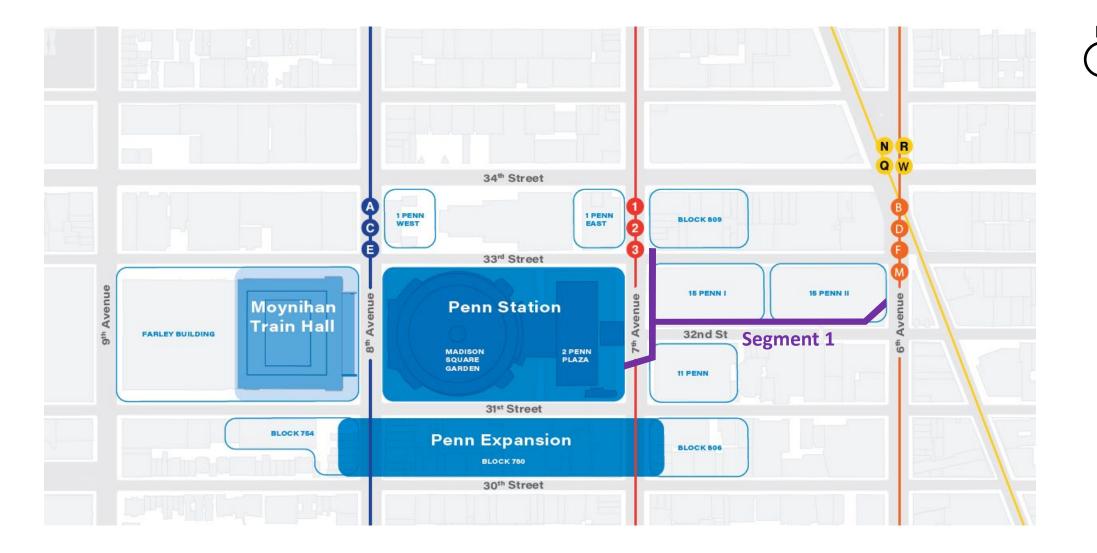
# **2038 Full Build:** Pedestrian crossings of 7<sup>th</sup> Avenue captured - AM peak



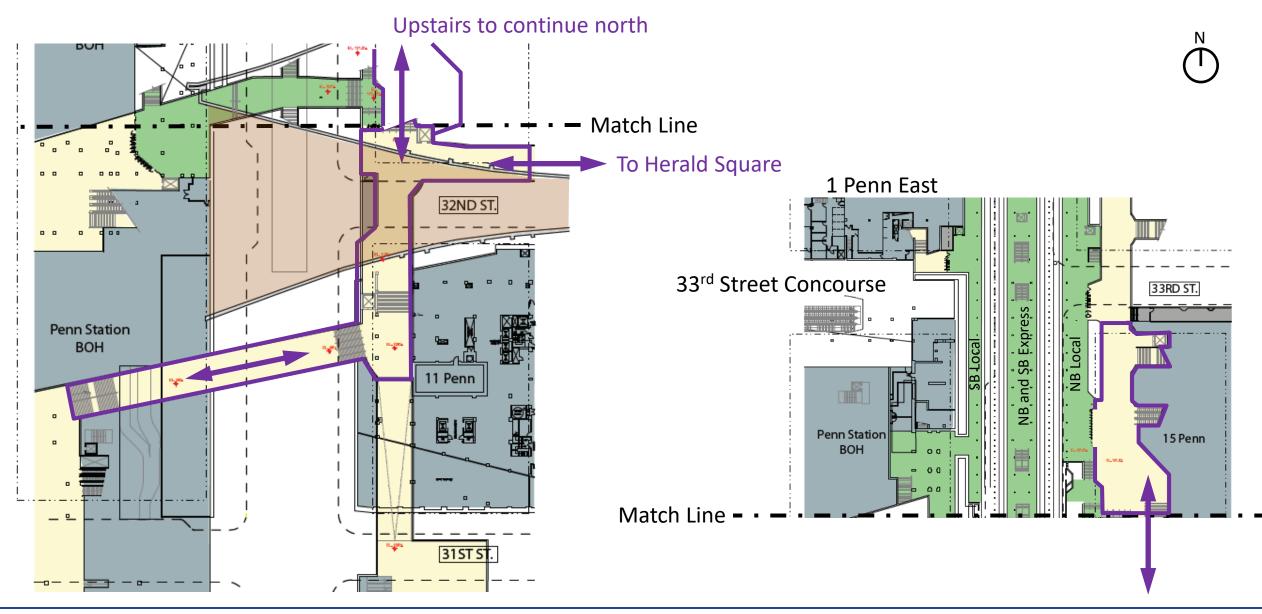
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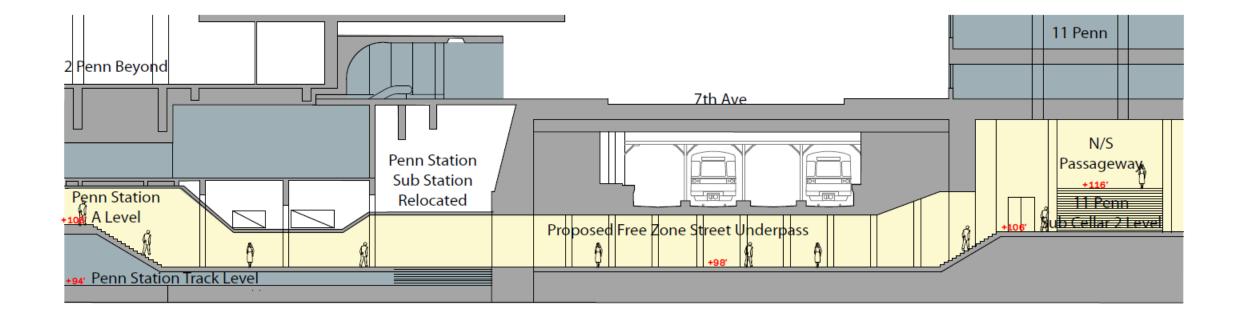
# Underground Concourse: Segment 1



#### Segment 1: 7<sup>th</sup> Avenue undercrossing and north-south passageway



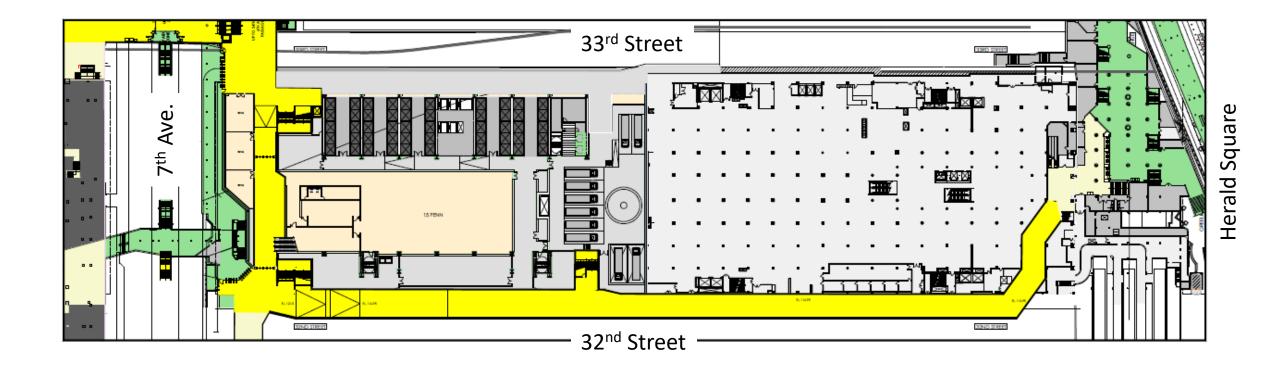
#### **Segment 1**: Section of 7<sup>th</sup> Avenue Underpass between 31<sup>st</sup> and 32<sup>nd</sup> Streets



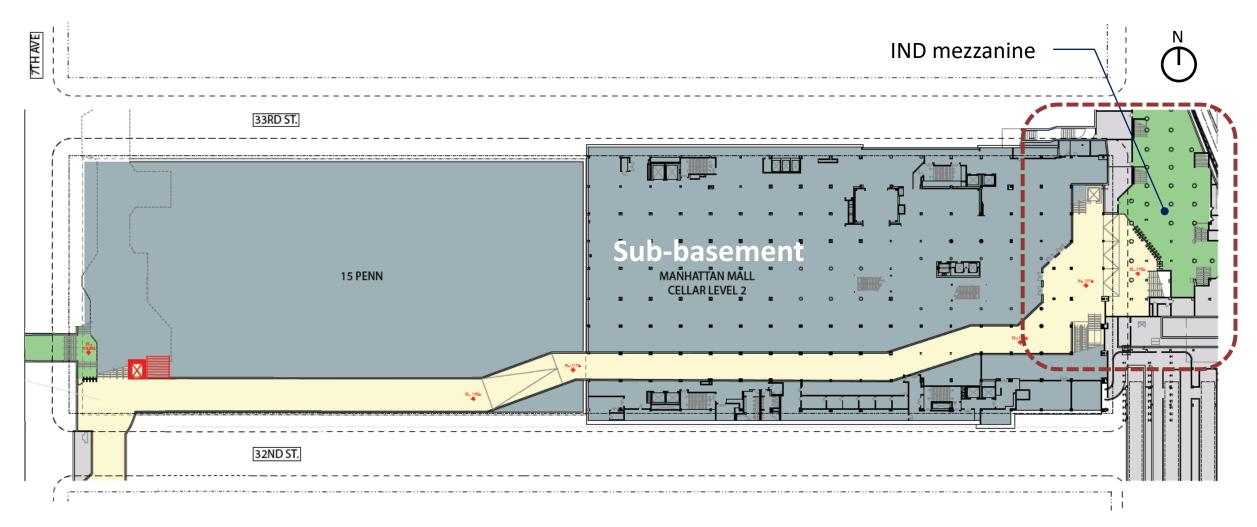
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# **Segment 1:** Alternative 2

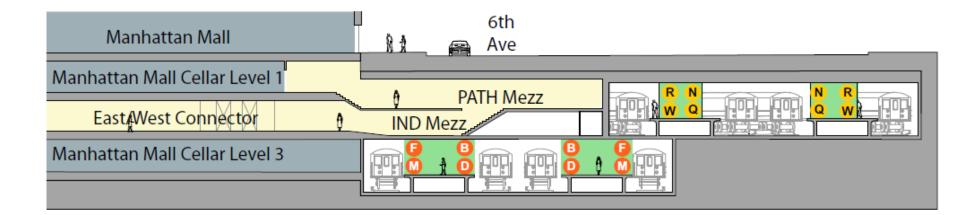


# Segment 1: Alternative 3

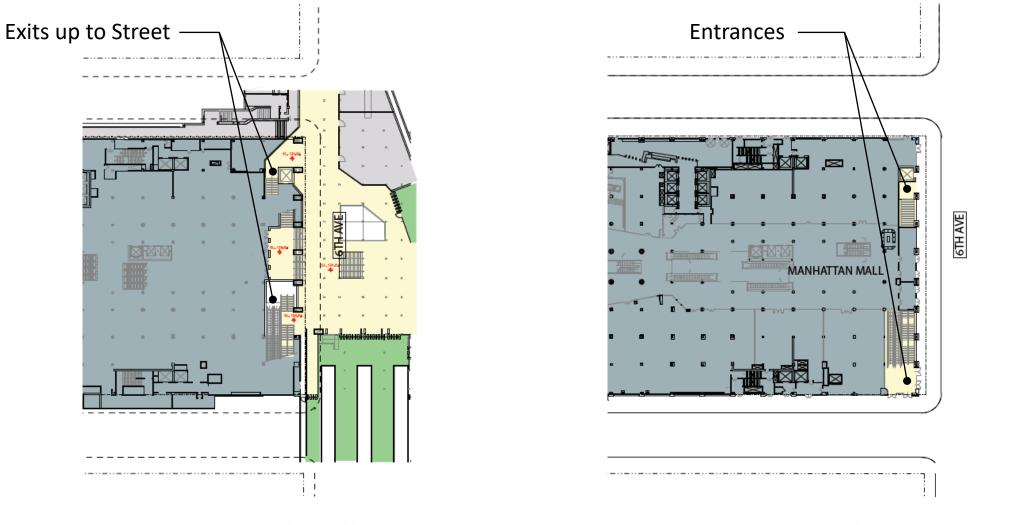


#### Entirely inside 15 Penn and Manhattan Mall

# **Segment 1:** Option 3 – Section at 6<sup>th</sup> Avenue



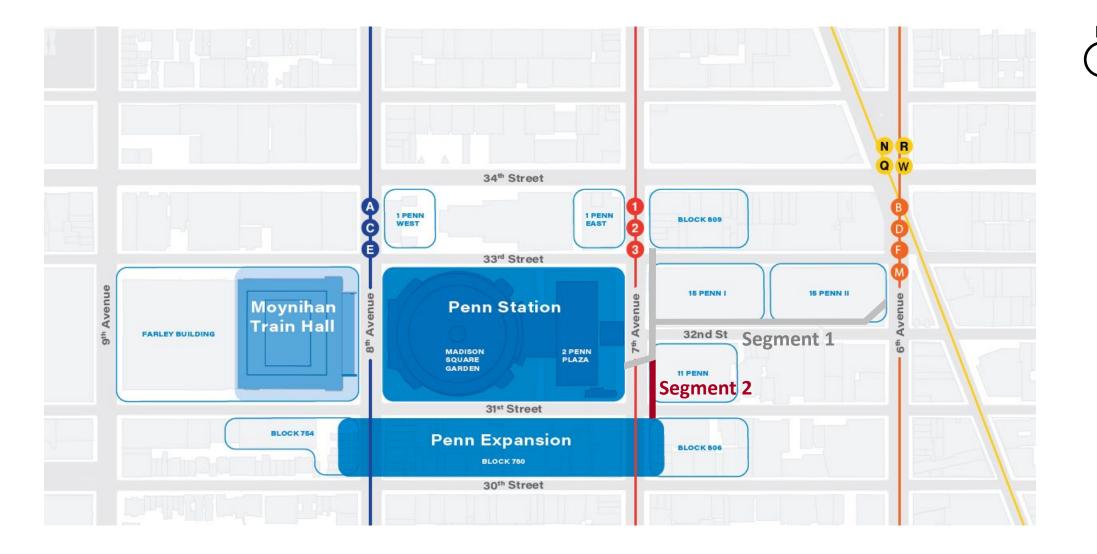
#### Segment 1: Herald Square Connector at Sixth Avenue



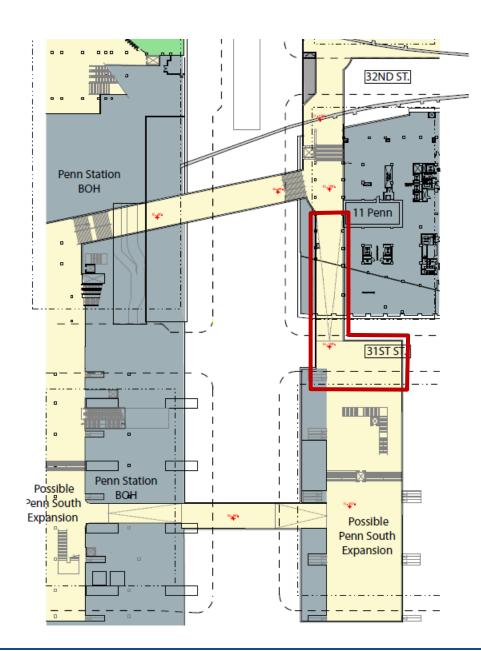
#### Plan at Manhattan Mall Cellar Level 1

#### Plan at Manhattan Mall Street Level

## Underground Concourse: Segment 2





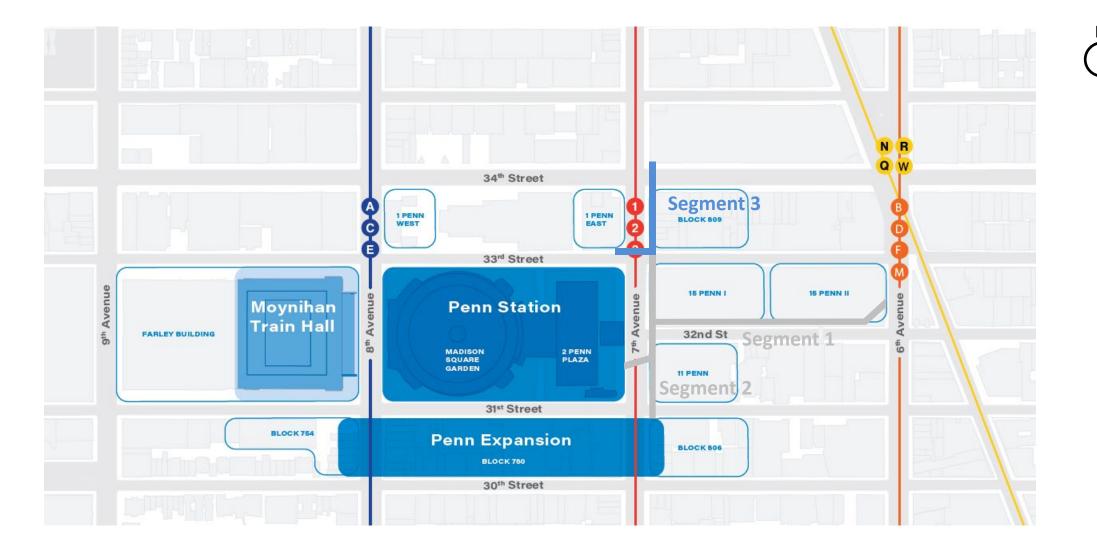


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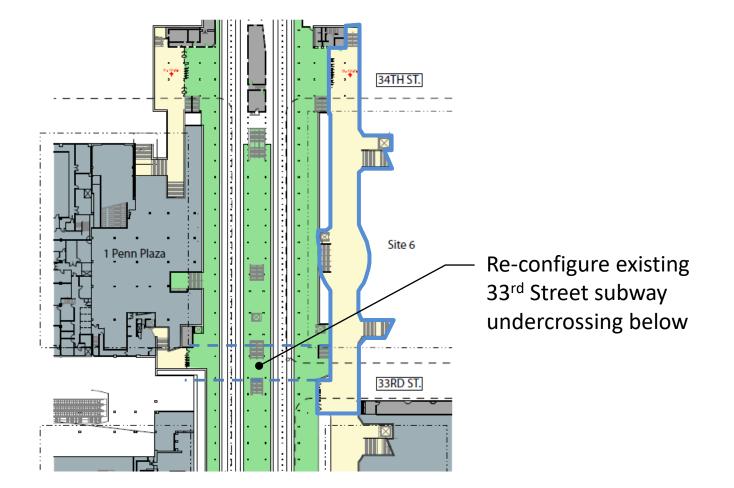


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## Underground Concourse: Segment 3



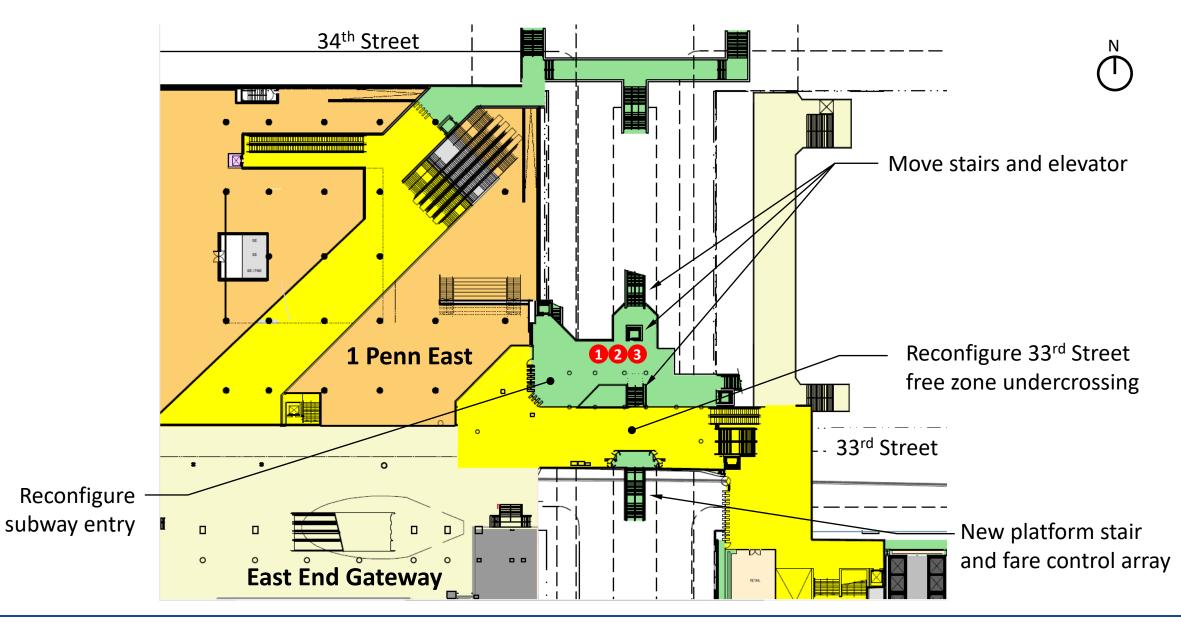
### Underground Concourse: Segment 3



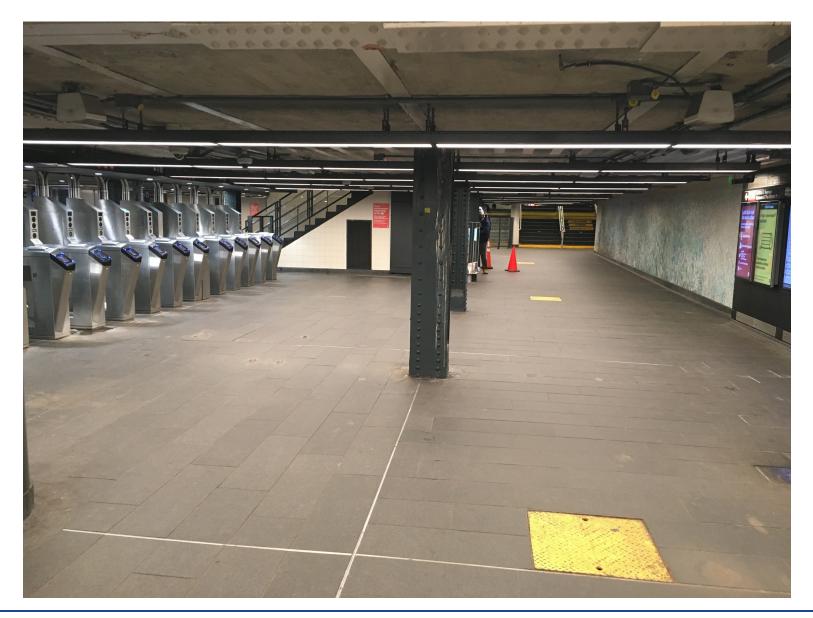
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#### Segment 3: Use existing free-zone passage under 7<sup>th</sup> Avenue



#### **Segment 1**: Existing free zone undercrossing at 33<sup>rd</sup> Street











#### **2038 Incremental Bus Trips**







Table TA-Ts2 Level 2 Screening—Phase 2 With Action Incremental Bus Trips by Bus Boute and Direction

AM hbound minal Bus 1,715 Bus Route 208 319 180 272 Bus Rout 19 9 21 8 21	70 5 0 0 0 0 es 1 0 4 9	PM Inbound 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PM Outbound 1,571 200 299 162 238 11 20 9 21
1,715 Bus Route 208 319 180 272 Bus Route 19 9 21 8	Routes           70           s           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           4           9	79 0 0 0 0 2 4 7	1,571 200 299 162 238 11 20 9
1,715 Bus Route 208 319 180 272 Bus Route 19 9 21 8	70 5 0 0 0 0 es 1 0 4 9	0 0 0 0 2 4 7	200 299 162 238 11 20 9
319 208 319 180 272 Bus Rout 19 9 21 8	s 0 0 0 es 1 0 4 9	0 0 0 0 2 4 7	200 299 162 238 11 20 9
319 208 319 180 272 Bus Rout 19 9 21 8	s 0 0 0 es 1 0 4 9	0 0 0 0 2 4 7	200 299 162 238 11 20 9
319 208 319 180 272 Bus Rout 19 9 21 8	s 0 0 0 es 1 0 4 9	0 0 0 0 2 4 7	200 299 162 238 11 20 9
208 319 180 272 Bus Rout 19 9 21 8	0 0 0 es 1 0 4 9	0 0 0 2 4 7	299 162 238 11 20 9
319 180 272 Bus Rout 19 9 21 8	0 0 0 es 1 0 4 9	0 0 0 2 4 7	299 162 238 11 20 9
319 180 272 Bus Rout 19 9 21 8	0 0 0 es 1 0 4 9	0 0 0 2 4 7	299 162 238 11 20 9
180 272 Bus Route 19 9 21 8	0 0 es 1 0 4 9	0 0 2 4 7	162 238 11 20 9
180 272 Bus Route 19 9 21 8	0 0 es 1 0 4 9	0 0 2 4 7	162 238 11 20 9
272 Bus Rout 19 9 21 8	0 es 1 0 4 9	0 2 4 7	238 11 20 9
272 Bus Rout 19 9 21 8	0 es 1 0 4 9	0 2 4 7	238 11 20 9
Bus Rout 19 9 21 8	es 1 0 4 9	2 4 7	11 20 9
Bus Rout 19 9 21 8	es 1 0 4 9	2 4 7	11 20 9
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21 8	4	7	9
8	9		-
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	4	6	9
8	1	1	21
21	0	1	8
8	1	1	21
21	0	1	8
8	1	1	21
24	0	2	12
11	1	1	24
21	0	1	8
8	1	1	21
21	0	1	8
8	1	1	21
21	0	15	8
8	1	1	21
14	0	0	0
0	0	0	12
266	25	53	284
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\*List of express bus routes with assigned trips include the following: Brooklyn – BM1, BM2, BM3, BM4, BM5, X27, X37, X38

Queens – QM1, QM2, QM3, QM4, QM5, QM6, QM10, QM12, QM13, QM14, QM15, QM16, QM17, QM18, QM20, QM24, QM31, QM32, QM33, QM34, QM35, QM40, QM42

Bronx - BxM2, BxM3, BxM4, BxM6, BxM7, BxM8, BxM9, BxM10, BxM11

Staten Island – SIM3, SIM4C, SIM6, SIM8, SIM10, SIM11, SIM14, SIM17, SIM22, SIM23, SIM24, SIM25, SIM26, SIM30, SIM31, SIM33C, SIM42



#### 34<sup>th</sup> Street Corridor: Buses



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# **MTA's Bus Planning Program**



ᢙ > MTA projects

## **Bus Network Redesign**

For languages other than English, use the Google Translate tool at the bottom of this page.

#### **Projects on pause**

The Borough Bus Network Redesigns are on pause due to the COVID-19 pandemic. We'll let you know when we resume so we can continue our work to create a better bus network together.



# **NTCDOT's Plan**

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### **Better Buses Action Plan**



#### **Bus Priority Tools**



Upgraded Bus Lane

**Potential Protected** 

Bus Lane











Bus Queue Jump Signal 0-0









**Traffic Flow** Improvement

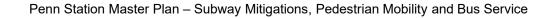








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