

***“SECOND AVENUE SUBWAY PROJECT”***  
*Managing Construction and its Challenges in One of the  
Country’s Densest Urban Environments*

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*Senior Vice President/Program Executive*  
**MTA CAPITAL CONSTRUCTION**  
**STATE OF NEW YORK**

**2013 Rail Conference**



# Why Do We Need the Second Avenue Subway?

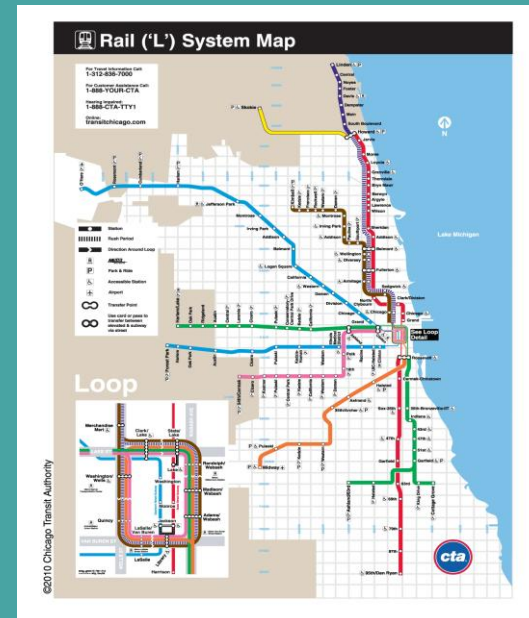


# Answer...Congestion

- Reduce congestion on the Lexington Avenue Line **4** **5** **6**
- “Every weekday, the 4,5,6 carries 1.5 million passengers, more than the weekday rail ridership of Boston and Chicago combined.”

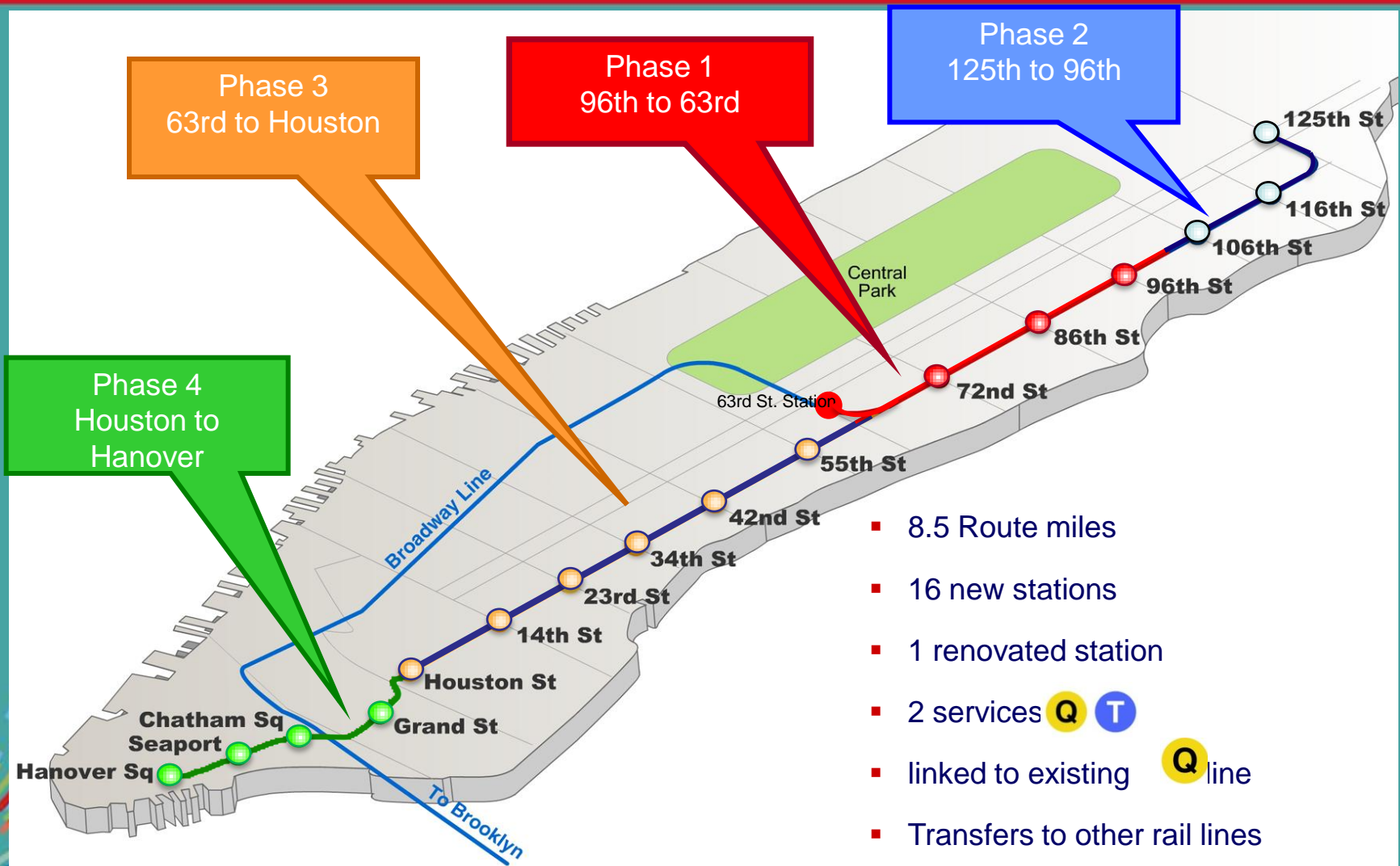


Boston



Chicago

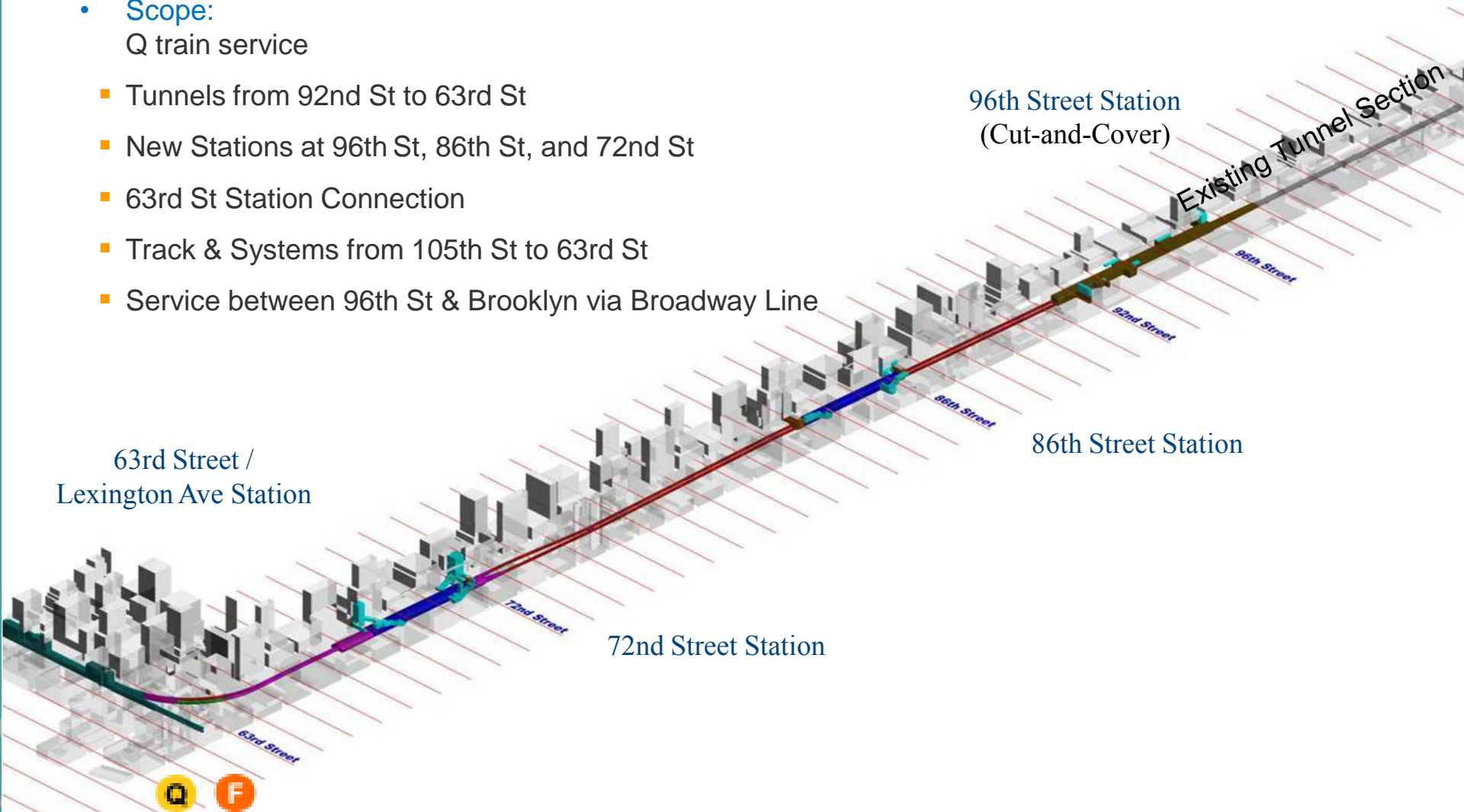
# Complete Project Profile





# Phase 1 Overview

- Scope:
  - Q train service
  - Tunnels from 92nd St to 63rd St
  - New Stations at 96th St, 86th St, and 72nd St
  - 63rd St Station Connection
  - Track & Systems from 105th St to 63rd St
  - Service between 96th St & Brooklyn via Broadway Line



Phase 1: Target Cost-\$4.451B--- Ridership 200,000 --- Target Completion Date-2016

# Current Project Status

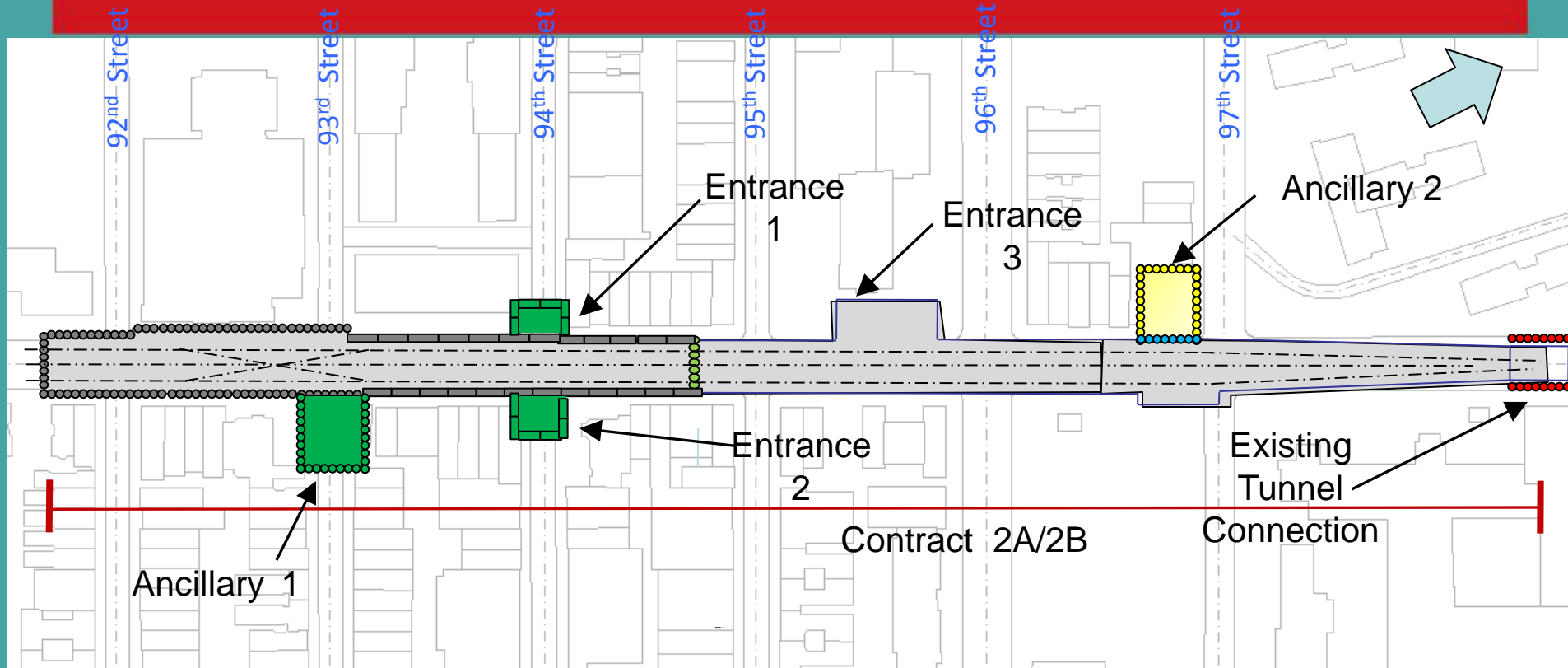
- 7 Active Construction Contracts
- 2 Construction Contracts Completed:
  - Tunnel Boring Machine Tunneling
  - 86<sup>th</sup> St Station Utility Relocation, and Access Shafts
- Final Procurement for Phase 1, 86<sup>th</sup> St. Station Systems and Finishes, June award
- Construction % Complete – 47.2% (as of May 2013)



# Stations Construction Progress



# 96th Street Station



## 96th Street Station - Site Work & Heavy Civil/MEP and Finishes

Contract Value: \$325,000,000

Award Date: May 28, 2009

Site Work and Heavy Civil Contract  
Percent Complete: 94.50%

Contract Value: \$324,600,000

Award Date: June 22, 2012

Station Structure, Systems and  
Finishes Percent Complete: 13.90%

June 2012 start of  
Station Contract



2012 06 28



May 2013





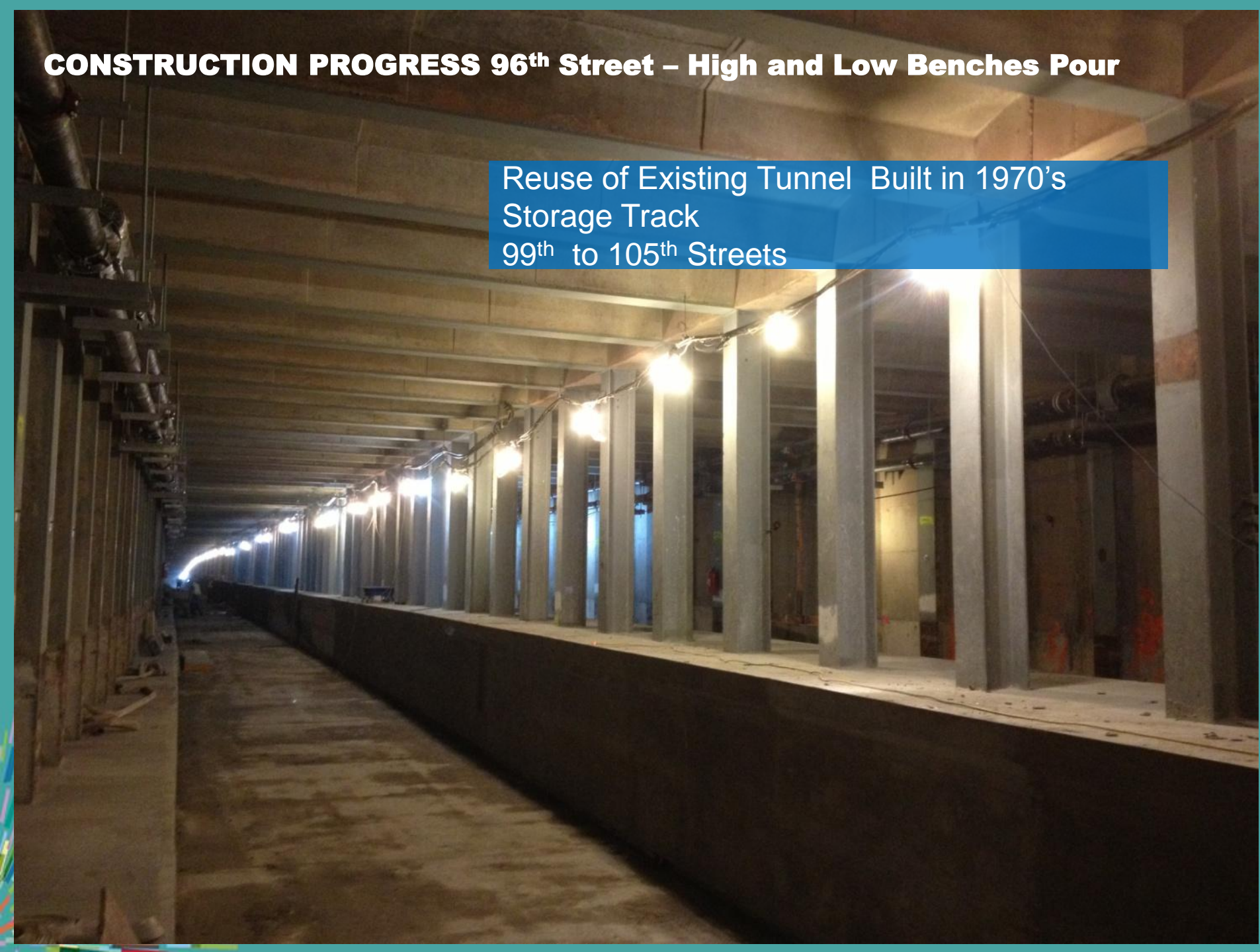
**CONSTRUCTION PROGRESS 96<sup>th</sup> Street – Waterproofing and Rebar Installation for Concrete Walls from 93<sup>rd</sup> Street to 95<sup>th</sup> Street**





## **CONSTRUCTION PROGRESS 96<sup>th</sup> Street – High and Low Benches Pour**

Reuse of Existing Tunnel Built in 1970's  
Storage Track  
99<sup>th</sup> to 105<sup>th</sup> Streets



# 86th Street Station



C5A - Contract Value: \$34,070,039

Award Date: July 8, 2009

Utility Relocation, Road Decking, and Excavation:  
Completed : November 2011

C5B - Contract Value: \$301,860,000

Award Date: August 4, 2011

Cavern Mining and Lining Contract Percent  
Complete: 54.07%

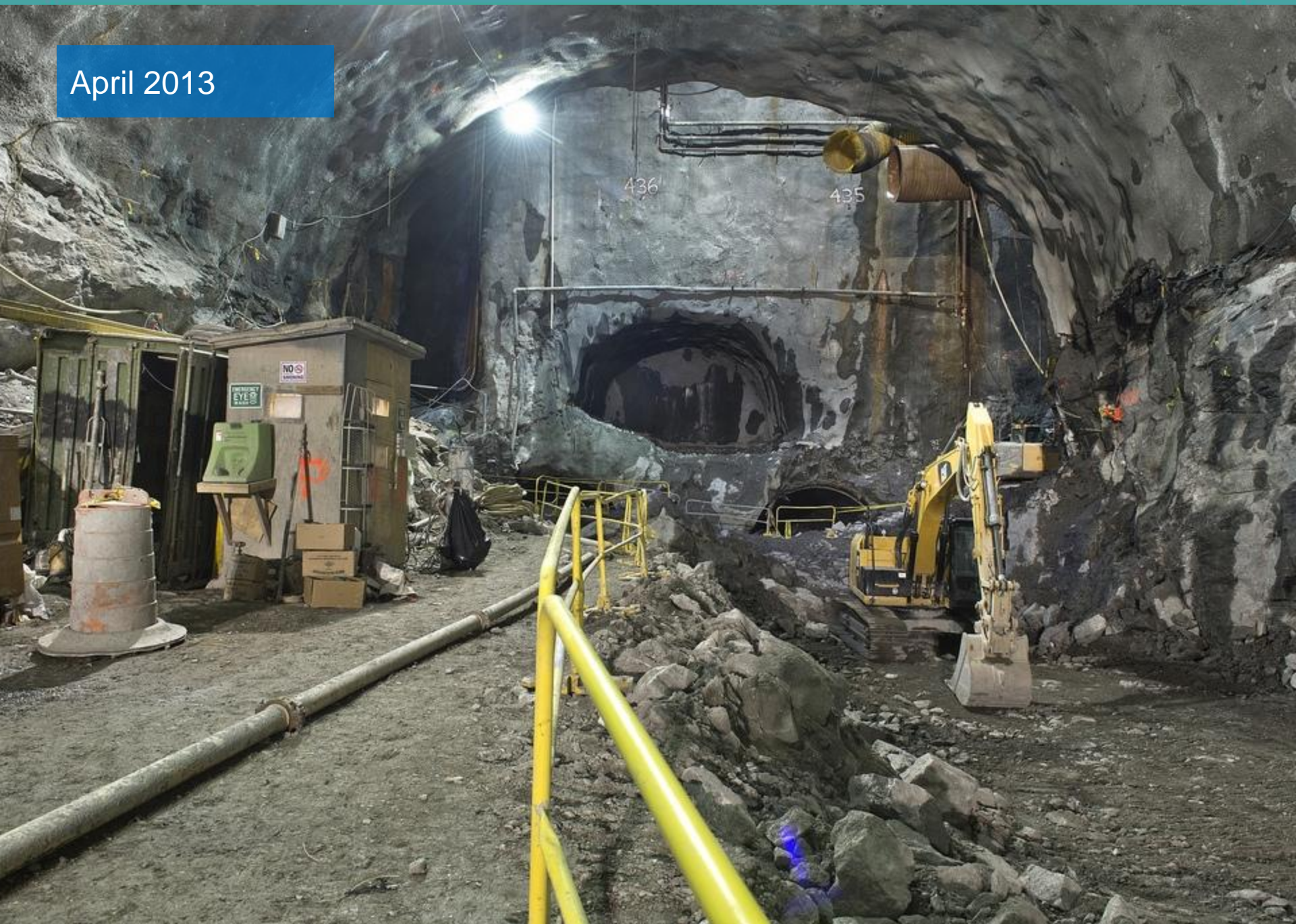


February 2013





April 2013





May 2013



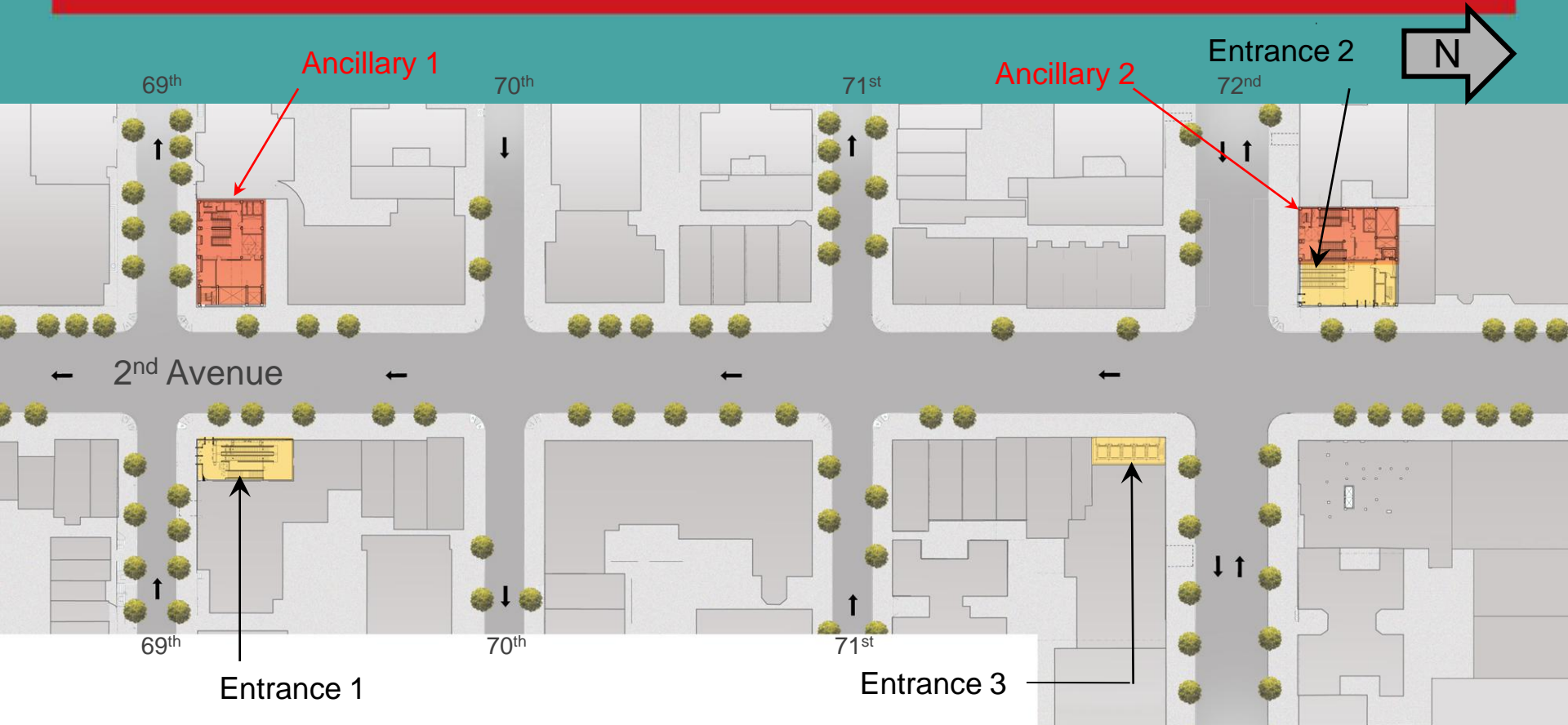
05/20/2013 09:47



# 86th Street Cavern Blast Video



# 72nd Street Station



Contract Value: \$447,180,260  
Award Date: October 1, 2010  
Percent Complete: 79.91%



March 2012



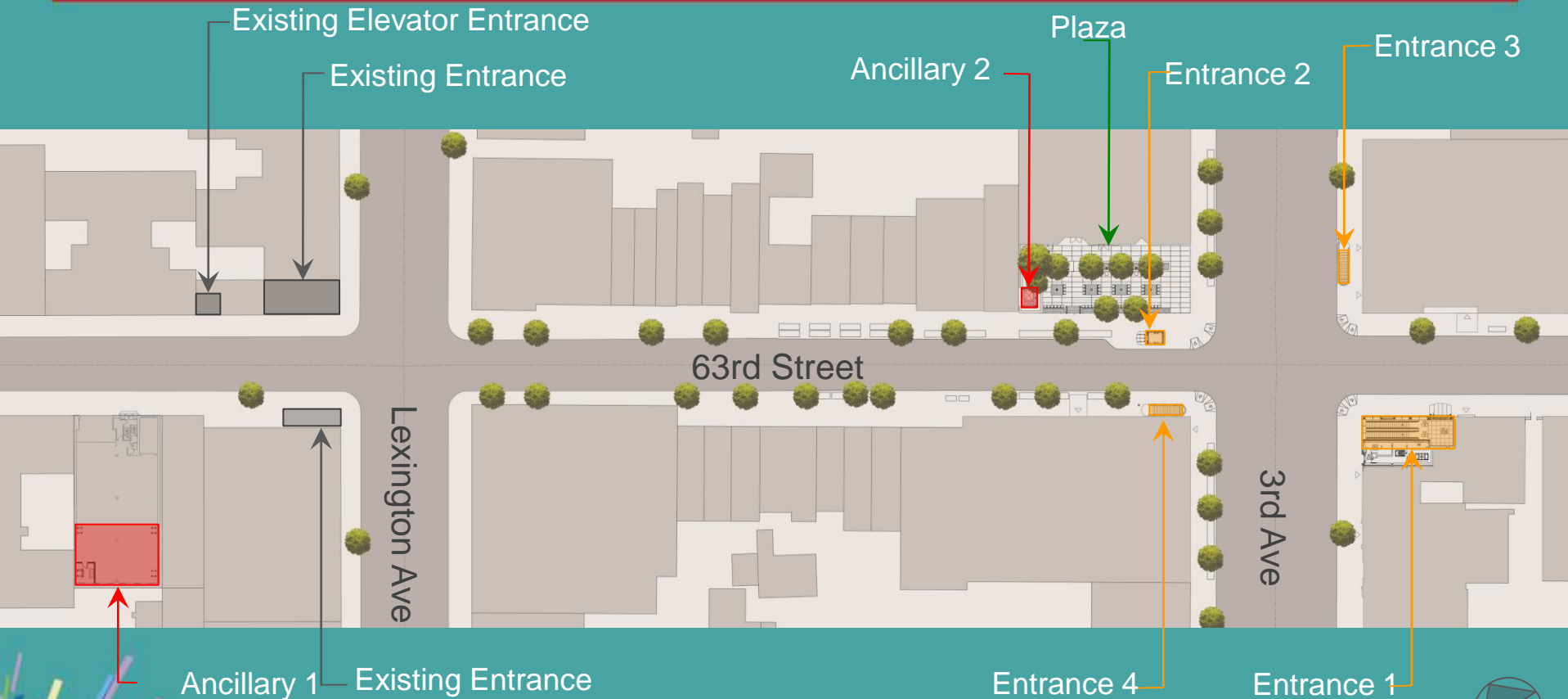


May 2013





# Rehabilitation of Existing 63rd Street Station

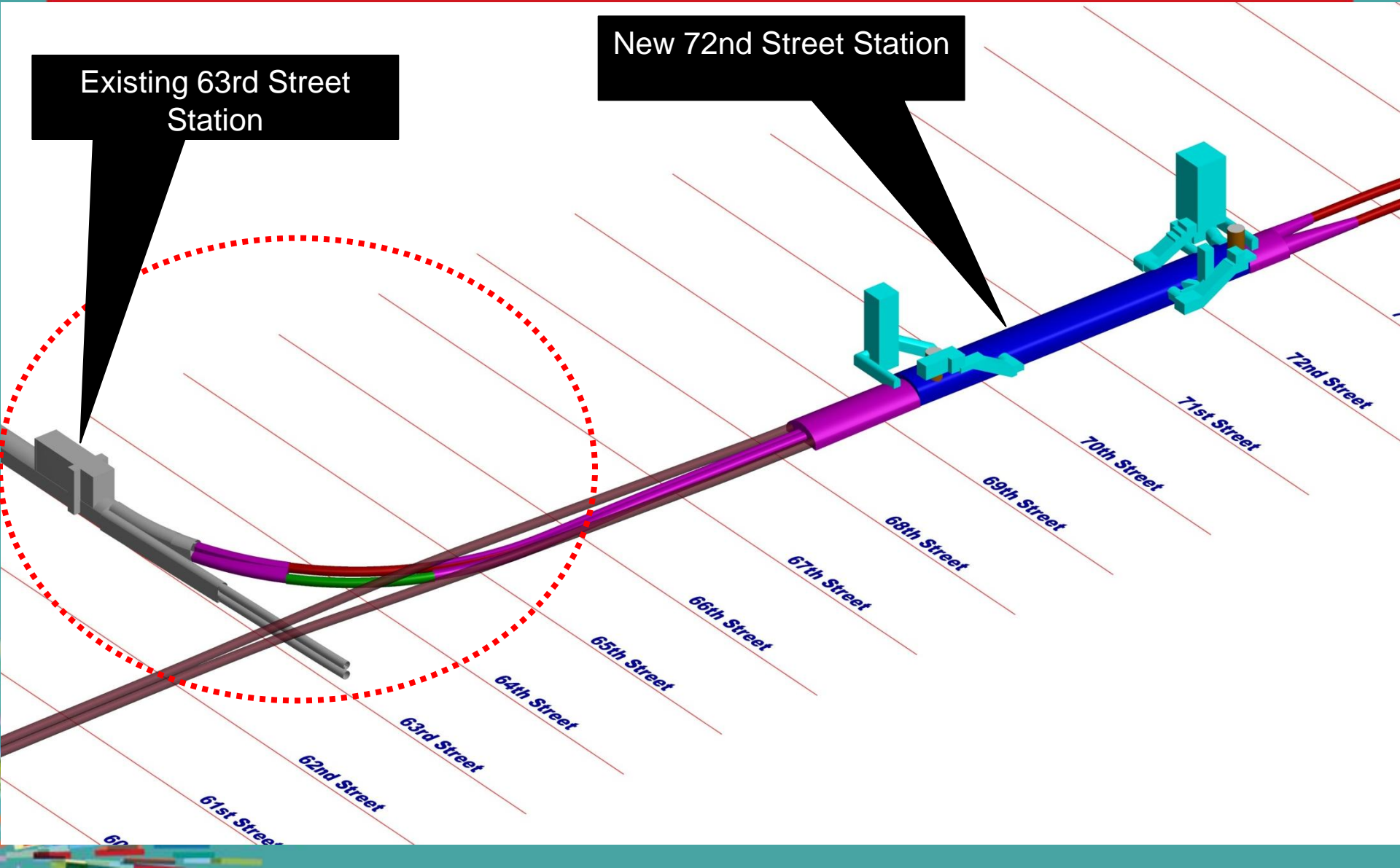


Contract Value: \$176,450,000

Award Date: January 13, 2011

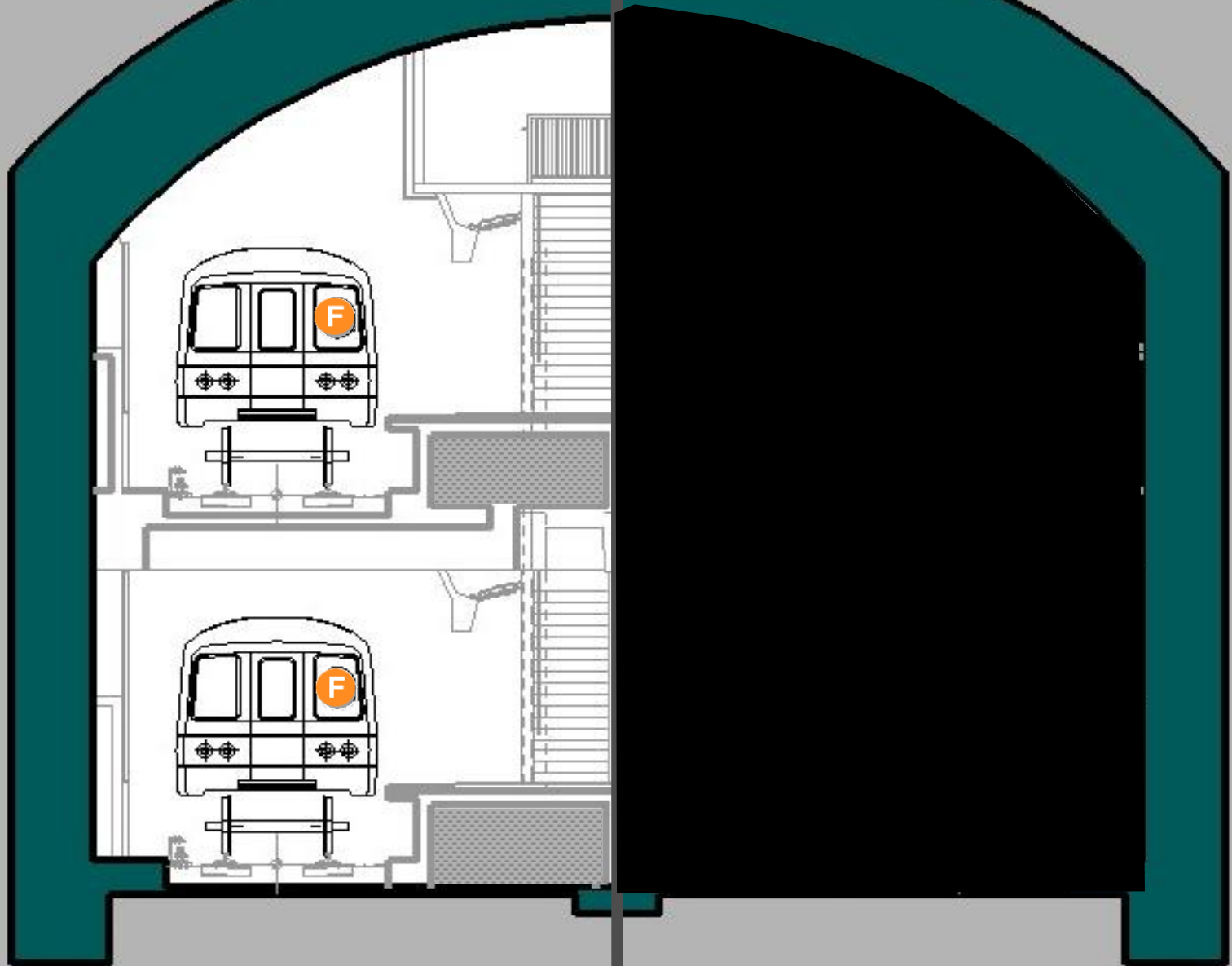
Percent Complete: 45%

# Lexington Av 63rd Street Station – Scope of Work at Platforms





# CONTRACT 3: 63rd Street Station



# 63rd Street Station Upper Platform



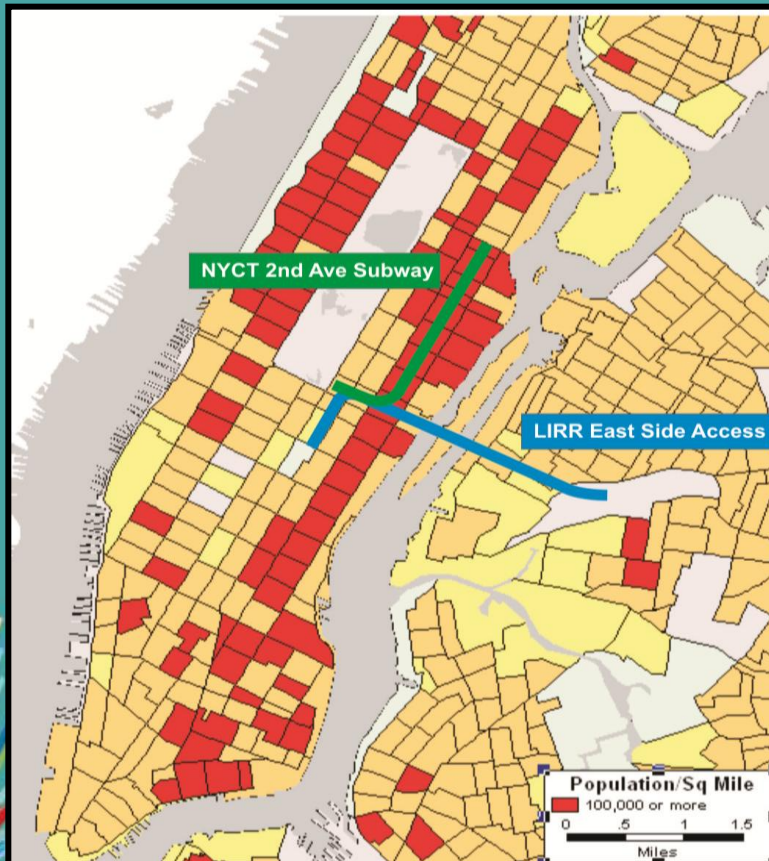
# Challenges





# The Biggest Challenge: Building in the Densest Populated Areas in the U.S.

## Manhattan Population Density



- 211 census tracts of over 100,000 residents/sq. mi. in N.Y.C.
- Only 3 other census tracts with this density in the US – Los Angeles, San Francisco and Boston
- And 3 other tracts which are prisons: San Quentin in Marin County Ca. , Maryland Penitentiary in Baltimore and Trenton State Prison.

# Mitigating Construction Impacts to Community

*Utility Relocation/Cut and Cover, Building Demolition, Blasting/Mining, Traffic, and Trucking Created a Full Spectrum of Major Disturbances to Community!*

# Utility Relocation





# Traffic



# Trucking



## Other Challenges

- *Project Timeline Longer Than Usual – 9 Years of Heavy Construction*
- *No Precedent For Mega Project Construction at the MTA; Major Paradigm Shift for Project Staff, Construction Management Team, and Contractors*
- *First time in over 70 years NYC is seeing transit expansion on this scale*
- *Mistrust by Community in SAS Project Corridor, Opposition Coalesced Early*



# Major Issues

## External

- Complaints from Community, Elected Officials and Citizens
- Many Irrate and Disgruntled Individuals at Community Board Meetings
- Interaction with Community Limited to the Few 'Representatives' at Quarterly CB Meetings
- Negative Press at an All Time High

## Internal

- Lack of Effective Communication
- Minimum Management Field Presence
- Contractors Disregard Towards Construction Environment

***...Creating an Environment of Mistrust***



## Early Missteps

- **Not Enough Resources and Staffing Allocated**
  - Original staffing plan only included 4 community liaisons, 2 of them part time and not based in the field
- **Doing Business As Usual**
  - Sticking to Standard MTA Community Outreach; Quarterly Community Board Meetings and Updates on MTA Website
- **Did Not Adequately Identify Extent of Day-to-Day Construction Impacts on Community**
  - Underestimated Construction Impact; Environmental Mitigation Not Sufficient for Major Noise, Visual, and Air Quality Disturbances

# A Blast from the Not Too Distant Past

**NEWYORKPOST**

## Strangled on Second Ave.

No help for biz killed by subway job

The New York Times

N.Y. / Region

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION

Mistake in Second Avenue Subway Work Cuts Gas Off

**DAILY NEWS**

NEW YORK

Construction for 2nd Ave. subway digs grave for local businesses

**NEWYORKPOST**

## Lung hazard at 2nd Ave. Subway

By JENNIFER FERMINO Transit Reporter  
Last Updated: 4:58 AM, March 19, 2012  
Posted: 12:23 AM, March 19, 2012

**NEWYORKPOST**

## Flies latest Second Avenue Subway-dig nuisance

By EDMUND DEMARCHE and TOM NAMAKO  
Last Updated: 8:13 AM, October 18, 2010  
Posted: 1:55 AM, October 18, 2010

The New York Times

N.Y. / Region

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION

Subway Work on 2nd Avenue Hobbles Stores



The New York Times

**City Room**



October 5, 2010, 5:19 pm

## Readers Tell of More Second Avenue Subway Woes

By JOSEPH BERGER

The noise, dust and occasional explosions associated with construction of the long-awaited Second Avenue subway are driving away customers from businesses along the avenue and plunging many shops and restaurants into deep financial trouble, two dozen merchants said.

f RECOMMEND  
t TWITTER  
in LINKEDIN  
E-MAIL  
PRINT



## Reversing the Tide

- Philosophical and Effectual Change Required Leadership Intervention, Starting at the Top
- MTA CC Senior Managers
  - Rebuilding Trust Started at the Top
  - Personally Visited Affected Businesses on Regular Basis; Building Relationships with Business Owners and Community Stakeholders
  - Walking Sites to Understand Condition of Construction Sites and Impact to the Corridor
  - Reset Expectations for Project Staff

## Philosophy: Build Trust by Actively Engaging

- New Relational Engagement Strategy for Community and Media
- Tailor Outreach; Different Tactics for Business and Community
- Expand and realign Community Outreach Team
- *Build Trust, Communicate Often and Openly, and Deliver on Promises Made*



# Community Engagement Model



# Enhanced Engagement Tools

## *More Face-to-Face Meetings*

- Public Workshops; Entire Community Invited
- Construction Advisory Committees; One per station area monthly/quarterly; Stakeholder Reps Only

## *Communications*

- Public Workshop Reports with Actions Taken
- Monthly Newsletters with Easy to Understand Construction Outlook
- Daily Emails on Blasting and Overnight Drilling
- Improved Website

## *Community Information Center (in construction)*






# Second Avenue Subway Public Workshop

Wednesday, June 27, 2012  
6:00 p.m. - 7:45 p.m.

Temple Israel  
112 East 75th Street  
between Park and Lexington Avenues

## Workshop Agenda

- 6:00 PM Sign-in and Display Board Viewing/Discussions
- 6:10 PM Opening Statements and Workshop Overview  
*Michael Horodniceanu (MTA Capital Construction)*  
*Sam Schwartz (Breakout Session Leader)*
- 7:25 PM Breakout Session
- 8:15 PM Breakout Session Wrap-up and Ad Hoc Discussions
- 9:00 PM Workshop Highlights and Closing Statements
- 9:55 PM Workshop Ends

## Project Overview

AS project is divided into four phases. When completed, it will run 8.5 miles along Second Avenue from 125th Street to the Financial District in Lower Manhattan, stopping at 16 new MTA stations. Phase 1 of the project is the most convenient for riders. When completed, it will also provide additional space for walking and cycling.



Phase 1 of the project is the most convenient for riders. When completed, it will also provide additional space for walking and cycling.

completed in

additional  
audience.

## Second Avenue Subway

## Public Workshop November 2011 Follow-Up Report

February 2012



# Second Avenue Subway

Issue 1 - February 2012

## 96th Street Station Area

### Project Overview

The Second Avenue Subway (SAS) project is New York City's first major expansion of the subway system in over 60 years. The first phase of the SAS project will provide service from 96th Street to 63rd Street. Line service will divert west along the 63rd Street line, stop at the Lexington Ave/63rd Street Station, and then continue on the Line to Midtown/Brooklyn, or transfer to the



Future entrance of the 96th Street Station on Second Avenue

### Station Overview



Overview map of future station entrances and ancillary

The future 96th Street Station will have three accessible elevators from street level. The construction of the station is scheduled to be completed in September 2011.

- 1) Mining of tunnels between 96th Street and 93rd Street.
- 2) Construction of heavy civil/structural work by June 2013.

Work at this station includes utility relocation, slurry wall construction, cut and cover tunnel, invert slab of the main station box, entrances, and ancillary structures.

The follow-on contract work including building of the station structure, systems, and construction will be complete in November 2015.

# Second Avenue Subway

Issue 1 - February 2012

## 86th Street Station Area

### Project Overview

The Second Avenue Subway (SAS) project is New York City's first major expansion of the subway system in over 60 years. The first phase of the SAS project will provide service from 96th Street to 63rd Street. Line service will divert west along the 63rd Street line, stop at the Lexington Ave/63rd Street Station, and then continue on the Line to Midtown/Brooklyn, or transfer to the



Future entrance at the northeast corner of 83rd Street and Second Avenue

### Station Overview



Overview map of future station entrances and ancillary

The future 86th Street Station will have two new elevators at the southeast corner of 86th Street and Second Avenue. The construction of the station is scheduled to be completed in September 2011. This contract's work is scheduled to be completed by June 2013. A follow-on contract will be awarded for construction and plumbing systems, construction of the ancillary and sidewalks in the station area.

The future 72nd Street Station will have two new elevators at the southeast corner of 72nd Street and Second Avenue. The construction of the station is scheduled to be completed in September 2011. This contract's work is scheduled to be completed by June 2013. A follow-on contract will be awarded for construction and plumbing systems, construction of the ancillary and sidewalks in the station area.

A follow-on contract mechanical, electrical, and plumbing systems, construction of the ancillary and sidewalks in the station area.

# Second Avenue Subway

Issue 1 - February 2012

## 72nd Street Station Area

### Project Overview

The Second Avenue Subway (SAS) project is New York City's first major expansion of the subway system in over 60 years. The first phase of the SAS project will provide service from 96th Street to 63rd Street. Line service will divert west along the 63rd Street line, stop at the Lexington Ave/63rd Street Station, and then continue on the Line to Midtown/Brooklyn, or transfer to the



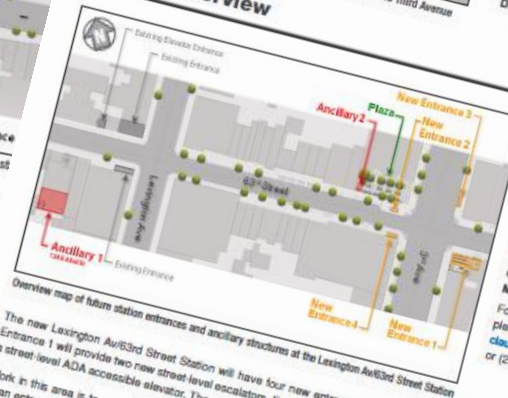
Cross-section of the future station entrance

### Station Overview



Overview map of future station entrances and ancillary

### Station Overview



The new Lexington Ave/63rd Street Station will have four new entrances at the intersection of 63rd Street and Third Avenue. Entrance 1 will provide two new street-level escalators, Entrances 3 and 4 will provide new staircases, and Entrance 2 will provide a street-level ADA accessible elevator. The station will also have four new elevators from the mezzanine to the platform level. Work in this area is to reconstruct the existing Lexington Ave/63rd Street Station, which includes the removal and upgrade of the structure, construction of the station box, and construction of the station entrances and ancillary buildings. The station will also have four new elevators from the mezzanine to the platform level. Work in this area is to reconstruct the existing Lexington Ave/63rd Street Station, which includes the removal and upgrade of the structure, construction of the station box, and construction of the station entrances and ancillary buildings. The station will also have four new elevators from the mezzanine to the platform level.

# Second Avenue Subway

Issue 1 - February 2012

## Lexington Av / 63rd St Station Area

### Project Overview

The Second Avenue Subway (SAS) project is New York City's first major expansion of the subway system in over 60 years. The first phase of the SAS project will provide service from 96th Street to 63rd Street. Line service will divert west along the 63rd Street line, stop at the Lexington Ave/63rd Street Station, and then continue on the Line to Midtown/Brooklyn, or transfer to the



Future station entrance at the southeast corner of 63rd Street and Third Avenue

- This first phase of the project, when operational in December 2016, will provide the following benefits:
- Improved subway access for Manhattan's East Side, bringing transit service closer to those who walk a long distance to the Lexington Avenue Line.
- Reduced overcrowding and improved reliability on the Lexington Avenue Line, the city's most heavily used subway line.
- Improved subway access for people with disabilities, as all new stations will be in compliance with the Americans with Disabilities Act (ADA).

### 63rd Street Station Upgrade

Contractor:  
Judlau Contracting

Budget:  
\$185.3 Million

Award Date:  
January 2011

Contract Forecast Completion:  
May 2014

For community related concerns, please contact Claudia Wilson at [claudia.wilson@mta.com](mailto:claudia.wilson@mta.com) or (212) 792-9716.



## Community Underground Tours

### *Locals Only Underground Tour - a Rare Opportunity to See History in the Making*

- Held once a month on Saturdays
- Led by President of MTA Capital Construction
- Attended by SAS Program Executive, Construction Management and Community Outreach Staff
- Photo souvenirs and T Line Caps provided
- Always a ‘sold out’ event









# The Community Tour Impact

Another satisfied customer. Good for us

C

-----Original Message-----

From: [REDACTED]

To: Claudia Wilson

Subject: Thank you

Sent: Feb 23, 2013 5:43 PM

Claudia,

It was a pleasure meeting you in person. Thank you again for finding a spot for me on the

Second Avenue subway tour. I th

educational and a remarkable vis

due to your enthusiasm, as well a

team. It is obvious that a signific

community but to reduce the tem

outreach and will spread the wor

[REDACTED]

East 84th Street

Sent from my Verizon Wireless

Claudia,

Just wanted to thank you again for everything related to the tour! Was so

amazing...and...ok, I'll change my answer to your question:

Yes! It does help to deal with the blasts trauma to see the results. Absolutely.

That said, I still hope they go back to earlier blast times. The evening routine is a tough

one.

(Made easier only by your heads up)

Hope you get to sleep in tomorrow!

Regards,

A fully mucked up Nancy & Rob

*"I thoroughly enjoyed the tour, finding it to be both very educational and a remarkable visual experience.."*

*"It is obvious that a significant effort is being made to not only inform the affected community but to reduce the temporary burden as much as possible. I applaud your outreach and will spread the word to my neighbors."*

*"Yes! It does help with the blast trauma to see the results. Absolutely."*



## Enhanced Environmental Mitigation

- *Using muck house enclosures as a noise, dust, and odor containment system*
- *Lessons learned – different muck conveyance system for 86<sup>th</sup> Street Station structures contract (Air filtration system – Scrubbers)*











09/24/2012 11





09/13/2012 08:38

# The Good Neighbor Initiative (GNI)

## *A Field Team Which Addresses a Broad Range of Quality of Life Issues*

- Focuses on Environmental Enhancements, Enforcement of Construction Site Upkeep and Maintenance
- Fence Wrap
- Retail Signage
- Sidewalk Width
- Pedestrian Safety
- Lighting Issues
- Environmental Compliance; Regular Inspections w/Contractor and Construction Management Team



71

STREET

## We're Open!

between 71st & 72nd streets  
during construction

**The Garden Florist**  
1082 2nd Ave Tel: 212 527 4786

**Fancy Cleaners and Tailors**  
1084 2nd Ave Tel: 212 794 9273

**Rose Nails**  
1084 2nd Ave Tel: 212 870 0900

**Shanghai Chinese Restaurant**  
1086 2nd Ave Tel: 212 258 0666

**Yeki's Hairstyling**  
1086 2nd Ave Tel: 212 330 3882

**Cafe Greco**  
1090 2nd Ave Tel: 212 737 4300

**FR Outlets Inc.  
Design & Upholstery**  
1090 2nd Ave Tel: 212 764 4242

**Klausner Plumbing  
& Heating Supply**  
1090 2nd Ave Tel: 212 764 3000

**Manhattan Brick Oven  
Pizza & Grill**  
800 E. 70th St Tel: 212 688 0015



MTA  
New York City



## Improving, non-stop.

Constructing the Second Avenue Subway

### What's happening?

The Second Avenue Subway is the longest subway project in New York City history. The project will improve the subway system and provide a new line of transit from 71st Street to 125th Street.

### Why is it important?

The project will provide a new line of transit from 71st Street to 125th Street, improving the subway system and providing a new line of transit.

### What's the impact?

The project will improve the subway system and provide a new line of transit from 71st Street to 125th Street.

### What's the timeline?

The project will improve the subway system and provide a new line of transit from 71st Street to 125th Street.

## Establishing Partnerships

- *Elected Officials*
- *Manhattan Chamber of Commerce*
  - *Shop Second Avenue Campaign to Promote Small Businesses in the Corridor*
- *Mayor's Office and City Agencies*





# It's Worth It!

The many inviting shops, restaurants, and services on Second Avenue are open while MTA Capital Construction builds the Second Avenue Subway. Shop Second Avenue... It's Worth it!

The [Manhattan Chamber of Commerce](#) is a partner with MTA Capital Construction in support of local establishments as construction continues on the Second Avenue Subway.

Visit <http://2ndavenueshopper.wordpress.com/home> for information about events and specials.



Click on one of the blocks on the left to find your neighborhood shops, restaurants, and services.

Click here for more information about your neighborhood:

[Community Board 8](#)  
[Community Board 11](#)  
[Neighborhood Data](#)





# Media Strategy

- *Proactive Engagement with Media*
- *Create Opportunities to Pitch a Positive Story*
  - Outreach to Schools
  - Announcing Good News; Releasing Project Milestones
  - Exclusive Press Opportunities – SAS in NY Times Magazine
  - Television and Cable Networks



## The 6th Floor



EAVESDROPPING ON THE TIMES MAGAZINE

August 6, 2012, 9:34 am | 6 Comments

### Going Underground: Behind the Scenes of Our Second Avenue Subway Cover Shoot

By KATHY RYAN



Kathy Ryan/The New York Times

Richard Barnes (left) taking photos in the tunnels.



# “What’s next? Peace in the Middle East?”

**NEW YORK POST**

## UES subway tunnel of love

By JENNIFER FERMINO

Last Updated: 3:14 PM, March 10, 2012

Posted: 1:35 AM, March 10, 2012

What's next? Peace in the Middle East?

The Upper East Side's community board extended an olive branch to its bitter enemy the MTA, thanking it for a slew of Second Avenue Subway initiatives recently enacted to ease construction pain.

In an out-of-left-field love letter, CB 8's chair and co-chairs gush over the MTA's new community newsletters, locals-only construction tours and informational public workshops.

The neighborhood has been at war with the MTA throughout the \$4.45 billion project.

[jennifer.fermino@nypost.com](mailto:jennifer.fermino@nypost.com)

*In an out-of-left-field love letter, CB 8's chair and co-chairs gush over the MTA's new community newsletters, locals-only construction tours and informational public workshops.*

Phase 2



Phase 1



Phase 3



Phase 4



**Future Full Build  
4 Phases**

MTA Metropolitan Transportation Authority  
**MTA New York City Subway**



**THANK YOU**