A C Line Review

Presentation to the Riders Alliance

MTA New York City Transit

February 23, 2016

Agenda

- MTA Commitment
  - **Review** all subway lines
  - **Completed** F, L, G, A C
- What a Line Review Addresses
- NYC Transit Loading Guidelines
- Operational Feasibility
- Service Design and Scheduling
- Ridership, Crowding, and C Train Length
- Recommendations

What a Line Review Addresses

- Adequacy of service design
  - Routing
  - Number of trains scheduled
  - Hours of service
- Reliability of operations
  - Causes of delays
  - Other operational challenges
- Conditions on the line
  - Rolling stock, stations, and infrastructure
- Communications
  - Internal, for service management
  - Between NYCT and our customers

Goal: Identify potential "more bang for the buck" short- to medium-term improvements

NYC Transit Loading Guidelines

- Impartial allocation of service citywide
  - Ridership levels at "peak load points"
  - Maximum time between trains ("headway")
  - Time of day / Day of week

Excerpt from NYCT Loading Guidelines				
	Peak		Off-peak	
Train Type	Passengers Per Train	Max. Avg. Headway	Passengers Per Train	Max. Avg. Headway
600' Train (like A)	1,400	10*	700	10 – 20*
480' Train (like C)	1,160	10*	500	10 – 20*

* 20 to 24-min. max. headway for branches and shuttles, like Rockaways.

- Heavier loads rush hours vs. off-peak
- More trains on busy lines than less busy lines (E vs. C)
- Operational feasibility

Operational Feasibility

- Safety
- Infrastructure Capacity – tracks, signals, yards, shops
- Running times
- Number of trains available
- Construction and maintenance work
- Operations and maintenance personnel

Why Is the C Train So Slow?

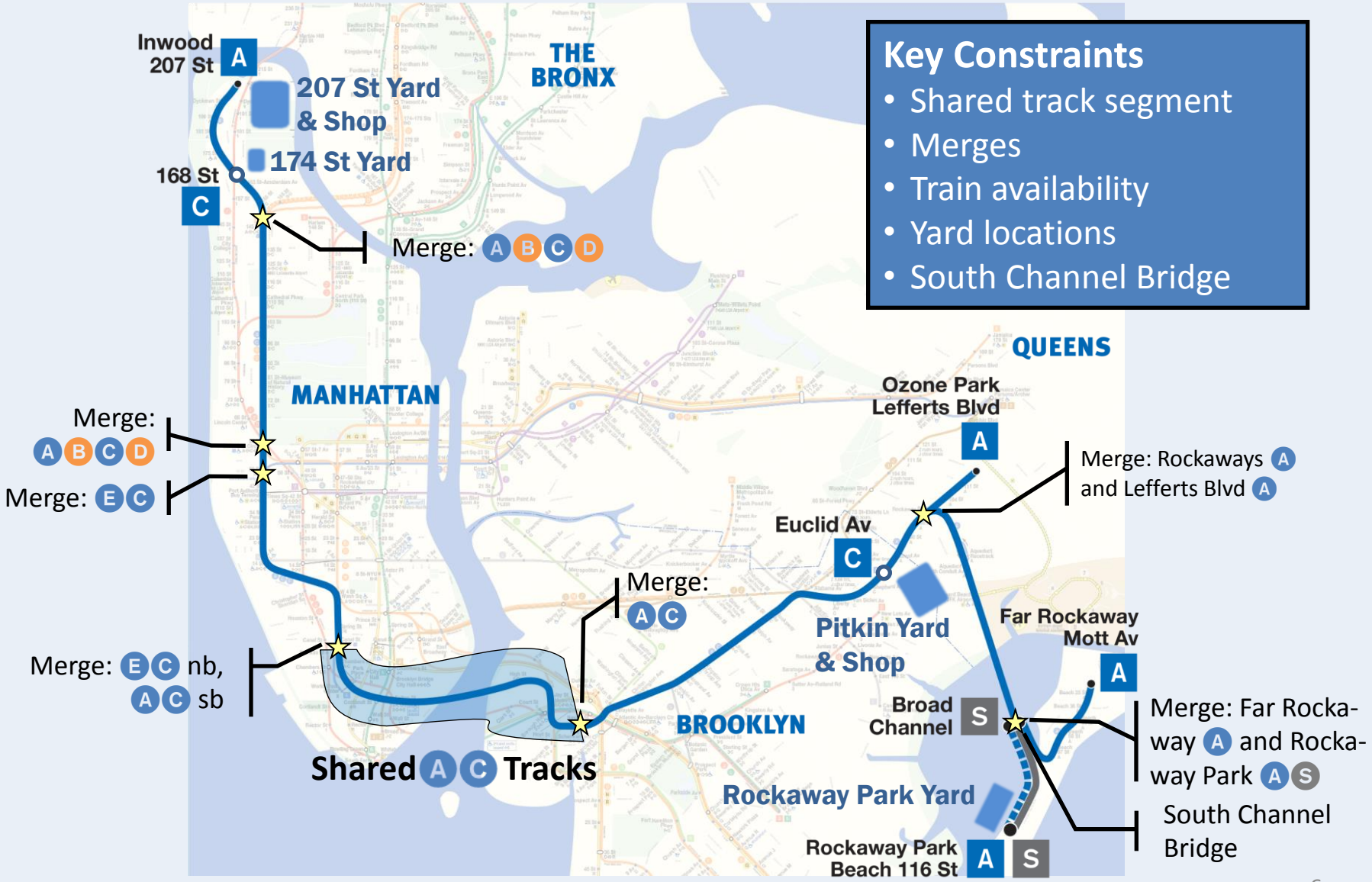
While the average wait for a C train is longer than that for other local lines, it offers a relatively fast ride.

Construction and maintenance off-peak may slow trains

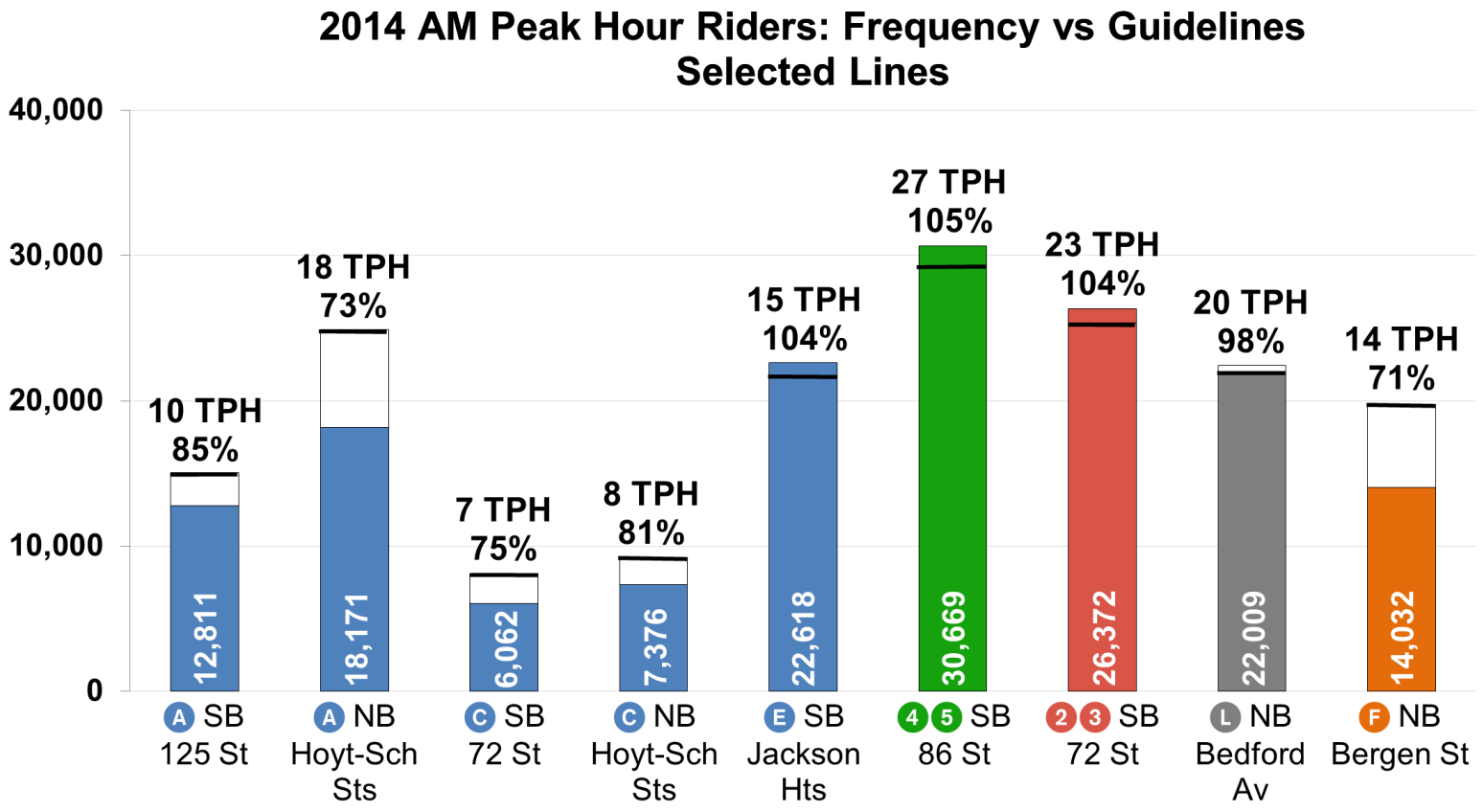
- Worker protection
- Capacity loss due to slower speeds

	Line	Avg. Speed (mph)	Average Headway (minutes) AM Peak Hour	Average Headway (minutes) Weekday Off-Peak
	C	15.7	8	10
Other All-local Lines	G	16.8	7	8 - 10
	M	14.9	6	10
	L	14.3	3	4 - 5
	R	13.9	6	10
	1	13.8	3	5 - 6

Service Design and Scheduling



Ridership and Crowding

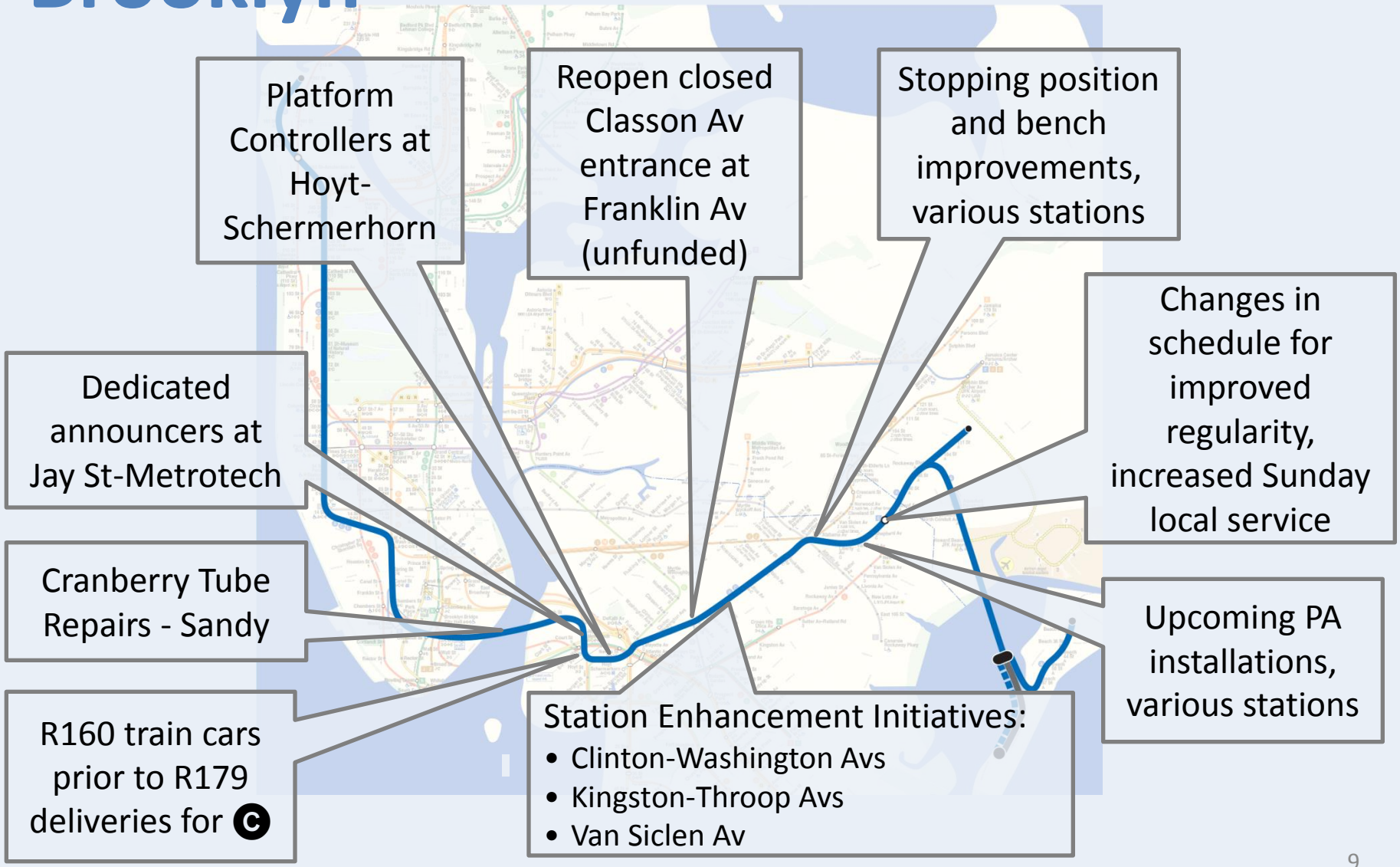


2014 Peak Hour C Trains Overcrowded
Hoyt-Schermerhorn: 18%
Clinton-Washington Avs: 11%

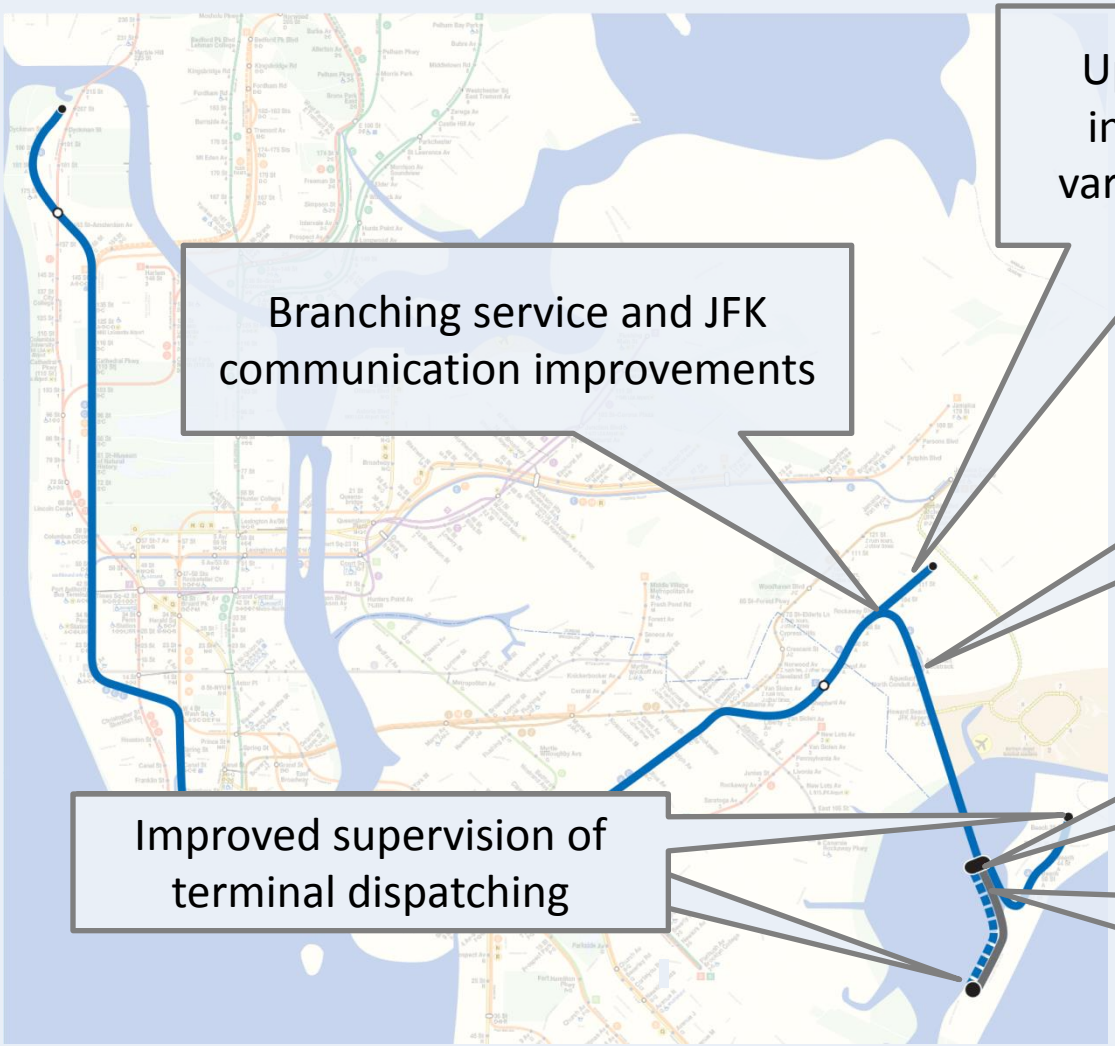
Ridership and C Train Length

- All C trains are currently 480’ long
- Making C trains as long as A trains (600’) would require 44 cars
  - Increase C capacity by 25%
  - Improve cross-platform transfers
- Longer C trains not recommended
  - C ridership is currently within Guidelines
    - Forecasts show steady growth, but not enough to exceed capacity
- Not enough cars available to lengthen C trains
    - Fleet expansion for C not in in Capital Program
    - Capital cost of 44 cars – over $100 million
- Adjusting C stopping locations to improve convenience
  - 12 of 33 locations completed
  - Also relocating benches to align with stopping locations (completed)

Recommendations & Improvements: Brooklyn



Recommendations & Improvements: Queens



Upcoming PA installations, various stations

Branching service and JFK communication improvements

Schedules changes for regularity and fewer long late morning gaps in service.

Improved connection procedures at Broad Channel toward the Rockaways

Improved supervision of terminal dispatching

Efforts to reduce peak South Channel Bridge openings. Coast Guard jurisdiction.

Recommendations & Improvements: Manhattan

Reopen closed entrances at 168 St and 50 St (unfunded)

8 Av Communications-Based Train Control

Stopping position and bench improvements, various stations