

# Green and Yellow Lines Presentation

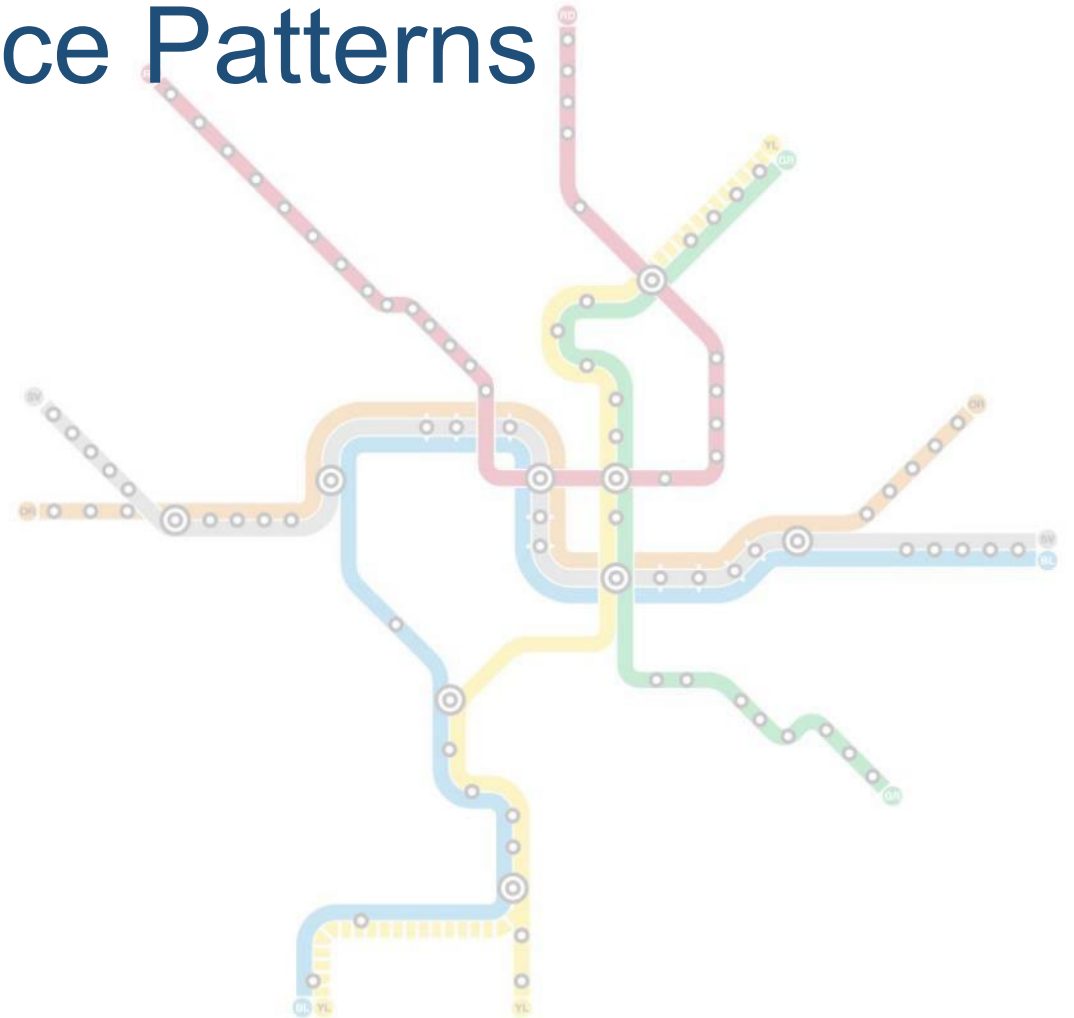
Rider's Advisory Council

April 5, 2023



# Green and Yellow Line Service Patterns

- Yellow Line Restoration: May 7, 2023
- FY2024 Proposed Budget Service Improvements
- Background: infrastructure constraints





# Yellow Line Return to Service

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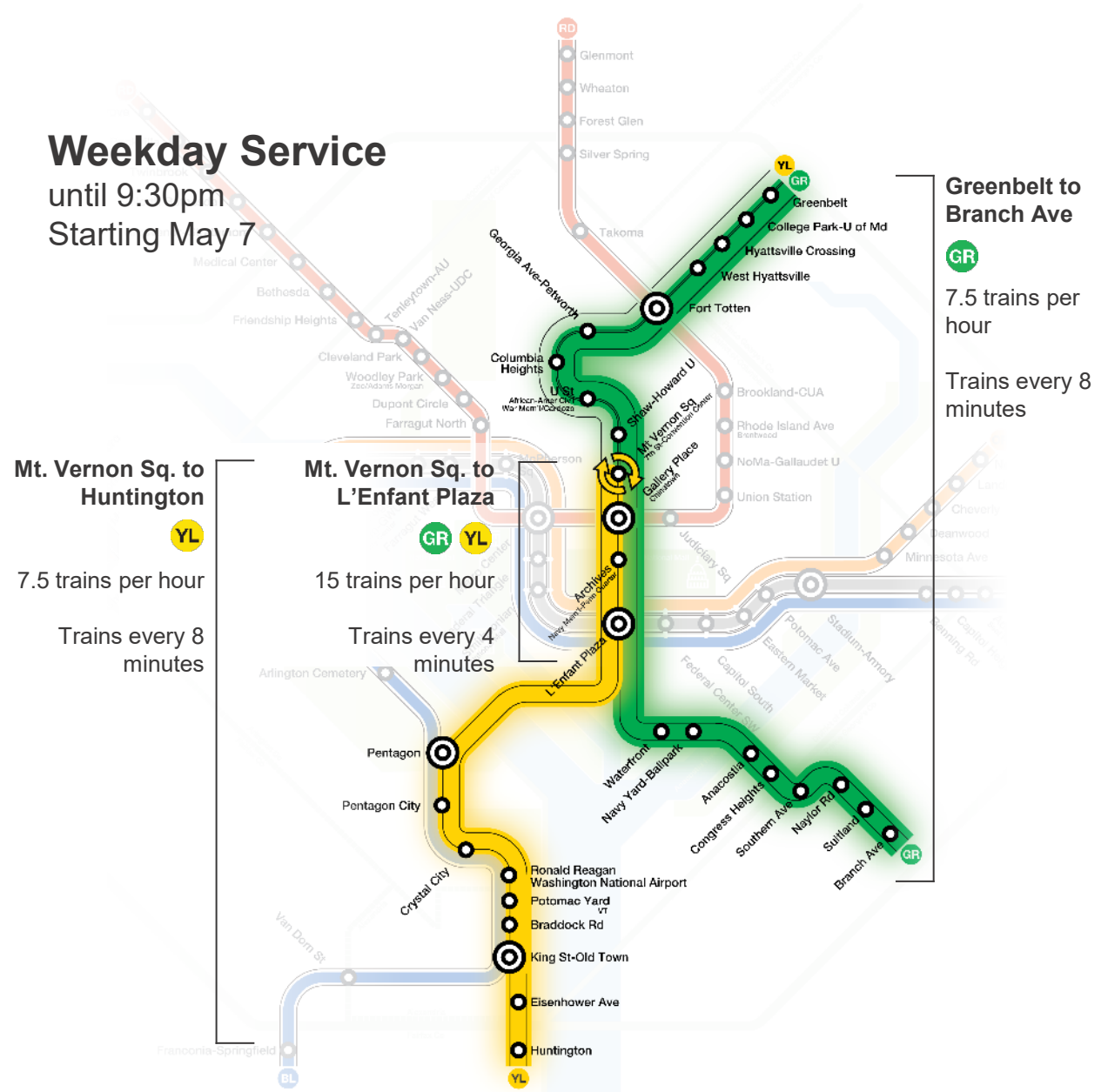
May 7, 2023

## Yellow Line Returns to Service

Yellow Line Service will resume May 7, operating between Huntington and Mt. Vernon Sq, with trains every 8 minutes on weekdays until 9:30pm, and every 12 minutes on weekends and after 9:30pm.

“Blue Plus” service between Huntington and New Carrollton will be discontinued; those resources will be used for the Yellow Line.

Green Line trains will continue to operate every 8 minutes all day.

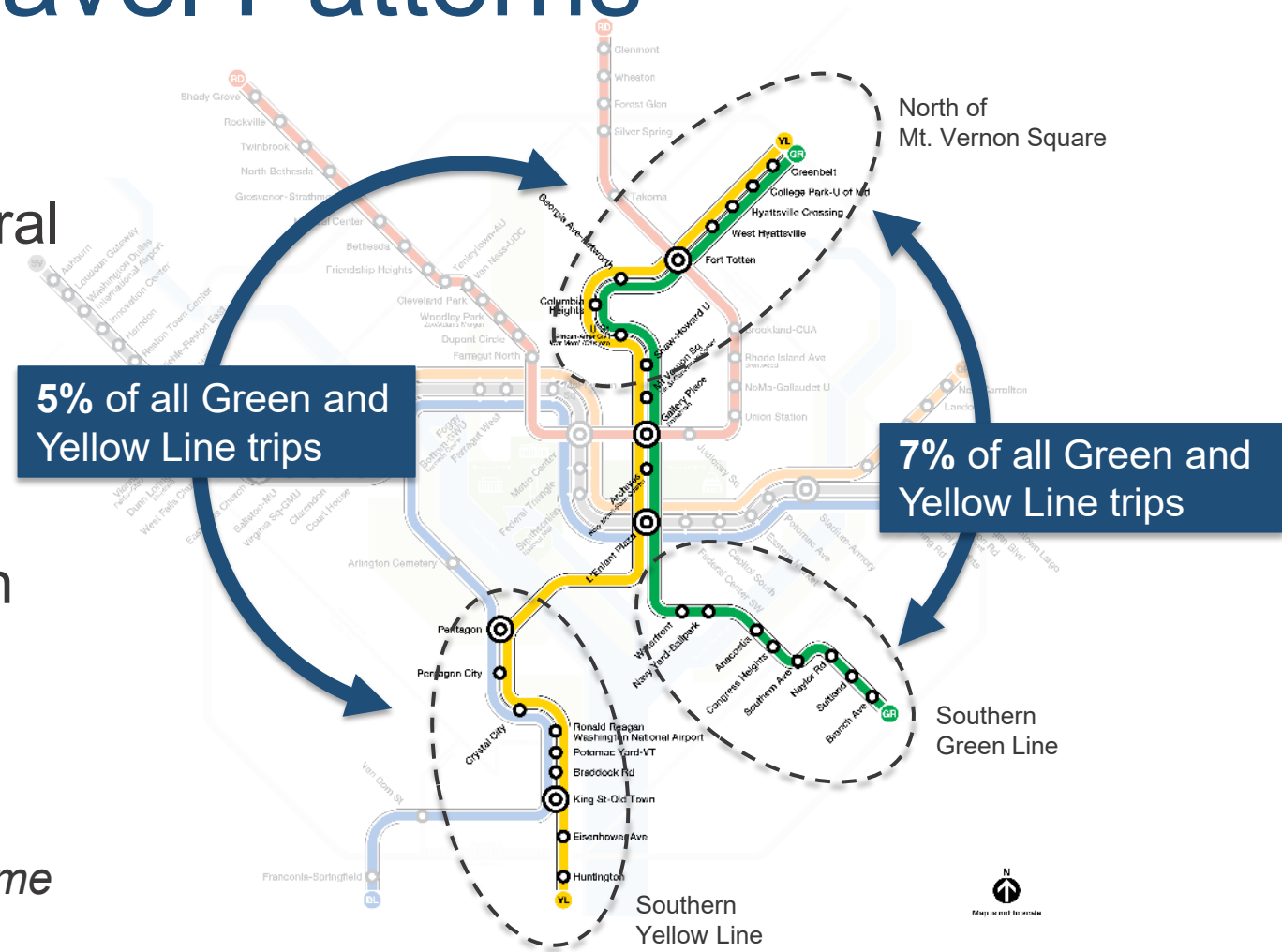


# Green and Yellow Travel Patterns

Most customer trips are to and from the core

### GREEN AND YELLOW LINE TRIPS

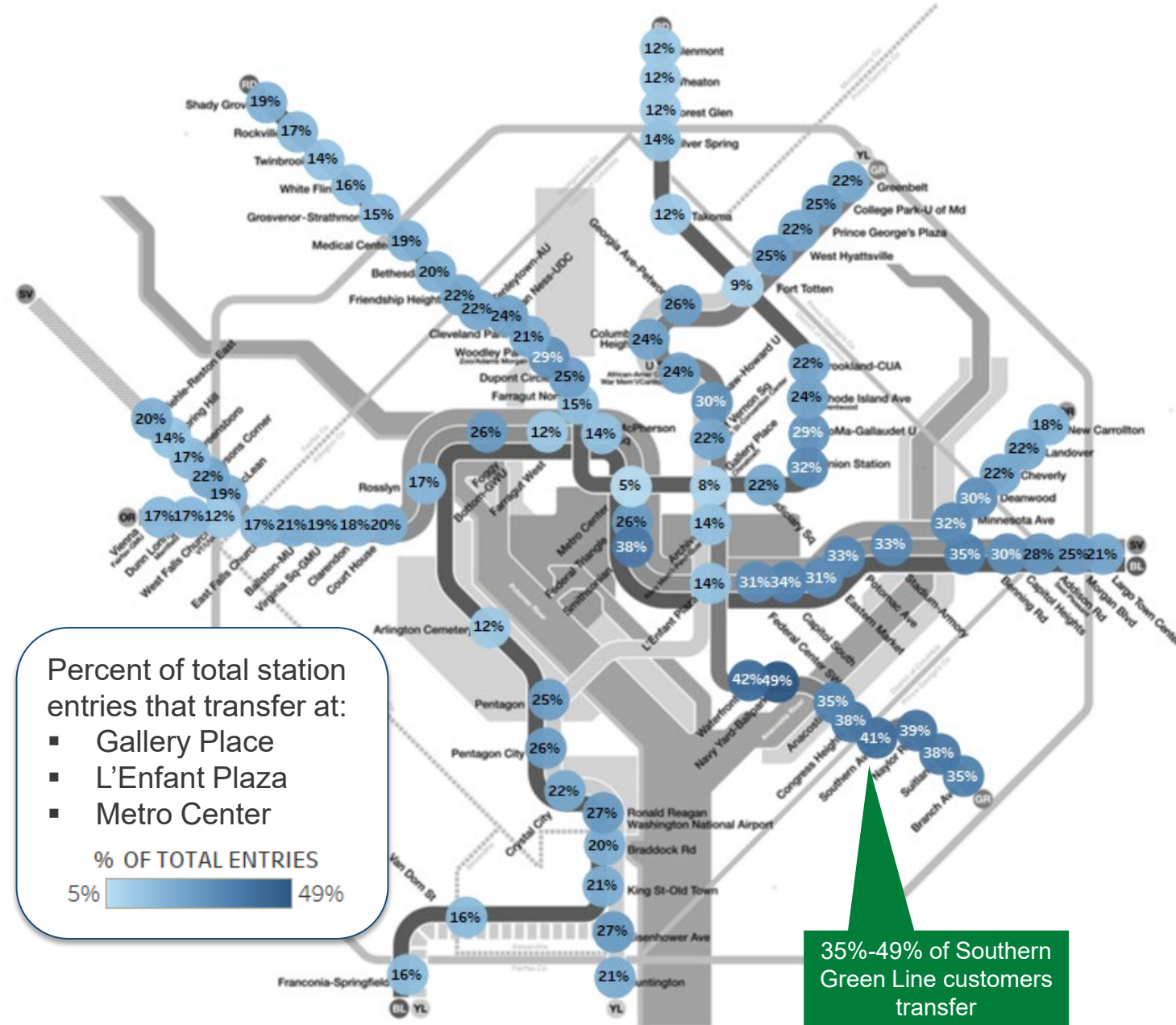
- 88% of trips are to or from the central segment or within one branch
  - 65% are to or from the central part of the system
  - 23% are within the same end of a line
- 12% are from one end of the Green or Yellow line to the other
  - 7% are between northern and southern Green Line
  - 5% are between northern and southern Yellow Line – *would require a 3-minute same platform transfer under proposal, partially offset by 2 to 3 minute reduced average wait for initial train*





## How many customers are transferring?

- Approximately 30% of customers transfer during their rail trips
- 86% of those transfers take place at Gallery Place, L'Enfant Plaza, and Metro Center
- For customers entering at non-transfer stations, transfer share ranges from 12% to 49%





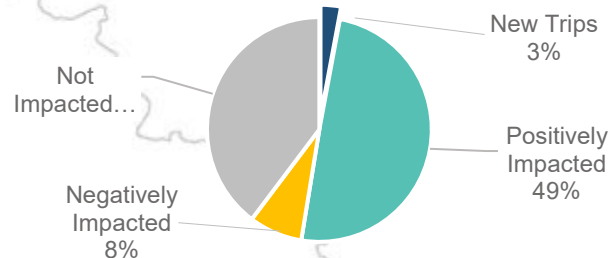
# FY2024 Proposed Budget

# Strengthening the Network with Frequency and Efficient Transfers

- Increase core frequency on Green, Yellow, and Orange Lines
- Focuses service where the network is carrying the most customers and areas with high ridership potential
- Offers benefits for customers across the entire network, enabling efficient and predictable transfers and providing access to more destinations

Estimated Ridership Change (Annual)	Incremental Net Operating Budget Impact (\$, Millions, Annual)
3.4 million	\$ 19.0

**Annual Customer Trips**  
Baseline: 112.3m  
Proposal: 115.7m



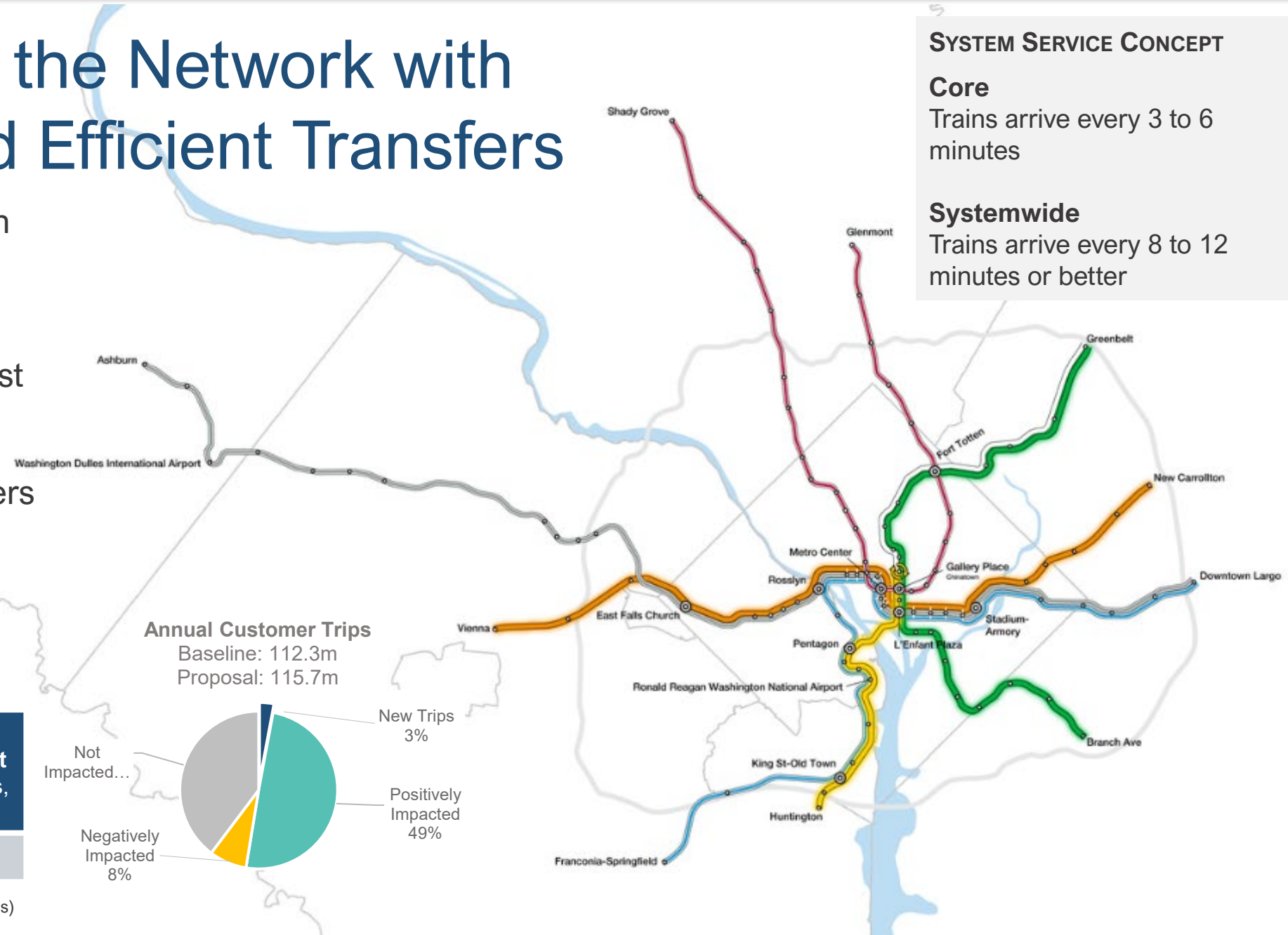
## SYSTEM SERVICE CONCEPT

### Core

Trains arrive every 3 to 6 minutes

### Systemwide

Trains arrive every 8 to 12 minutes or better





# FY 2024 Proposed Budget – Metrorail Service Optimization

## Green/Yellow Line Proposal

### Increased Green and Yellow Service with Yellow Line Short Turns

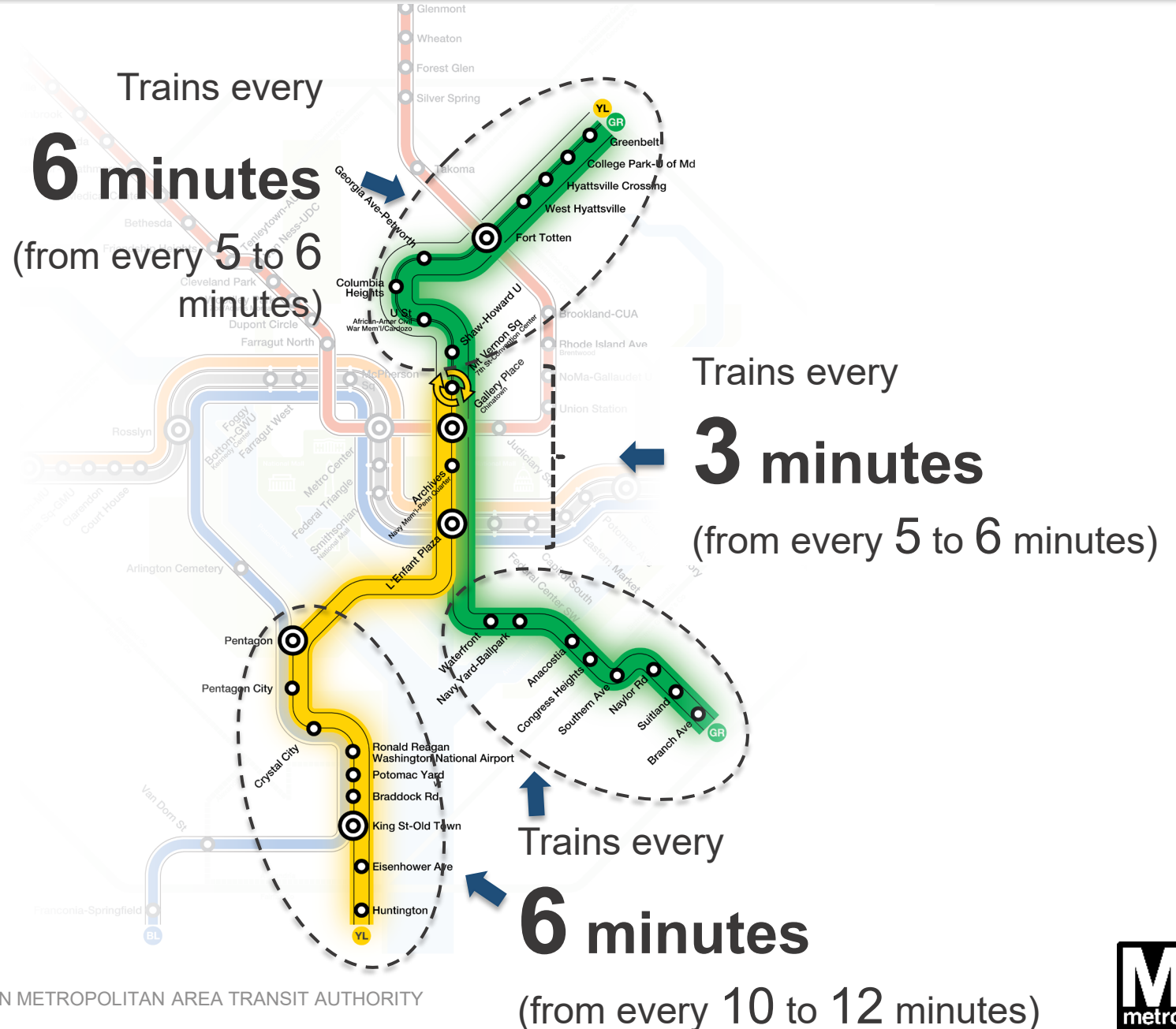
By running more trains, the entire Green and Yellow Lines will receive **6 minute service all day**, instead of only the combined parts

Balancing service requires turning Yellow Line trains at the Mt. Vernon Square pocket track

**34% more service** for Green and Yellow Line customers

3 out of 4 Green and Yellow line customers see more frequent service – **reducing wait times 33 to 50%**

Yellow Line service to resume in May with service between Huntington and Mt. Vernon Square, following reopening of Yellow Line bridge and tunnel



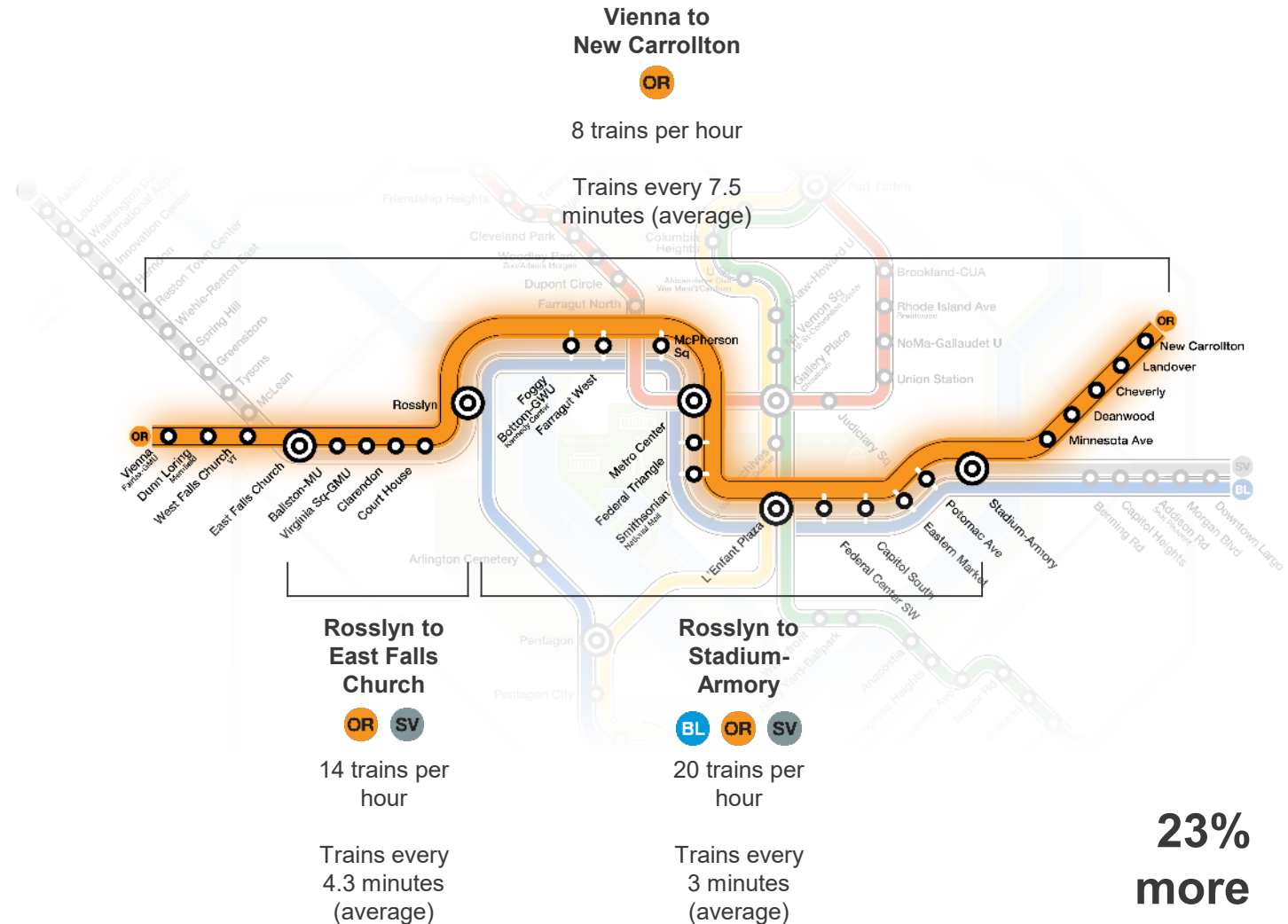
## Orange Line Proposal

### Improve Orange Line Service

**Run more Orange Line trains to provide 7.5 minute peak frequency and 10 minute all day frequency**

Improves potential connections at New Carrollton to Amtrak, MARC, and the future Purple Line and offers increased frequency in the busy Rosslyn to Ballston corridor

Current ridership on the eastern Orange and Blue/Silver branches is roughly even, and the New Carrollton branch historically had 10-25% more customers



**23%  
more  
service**

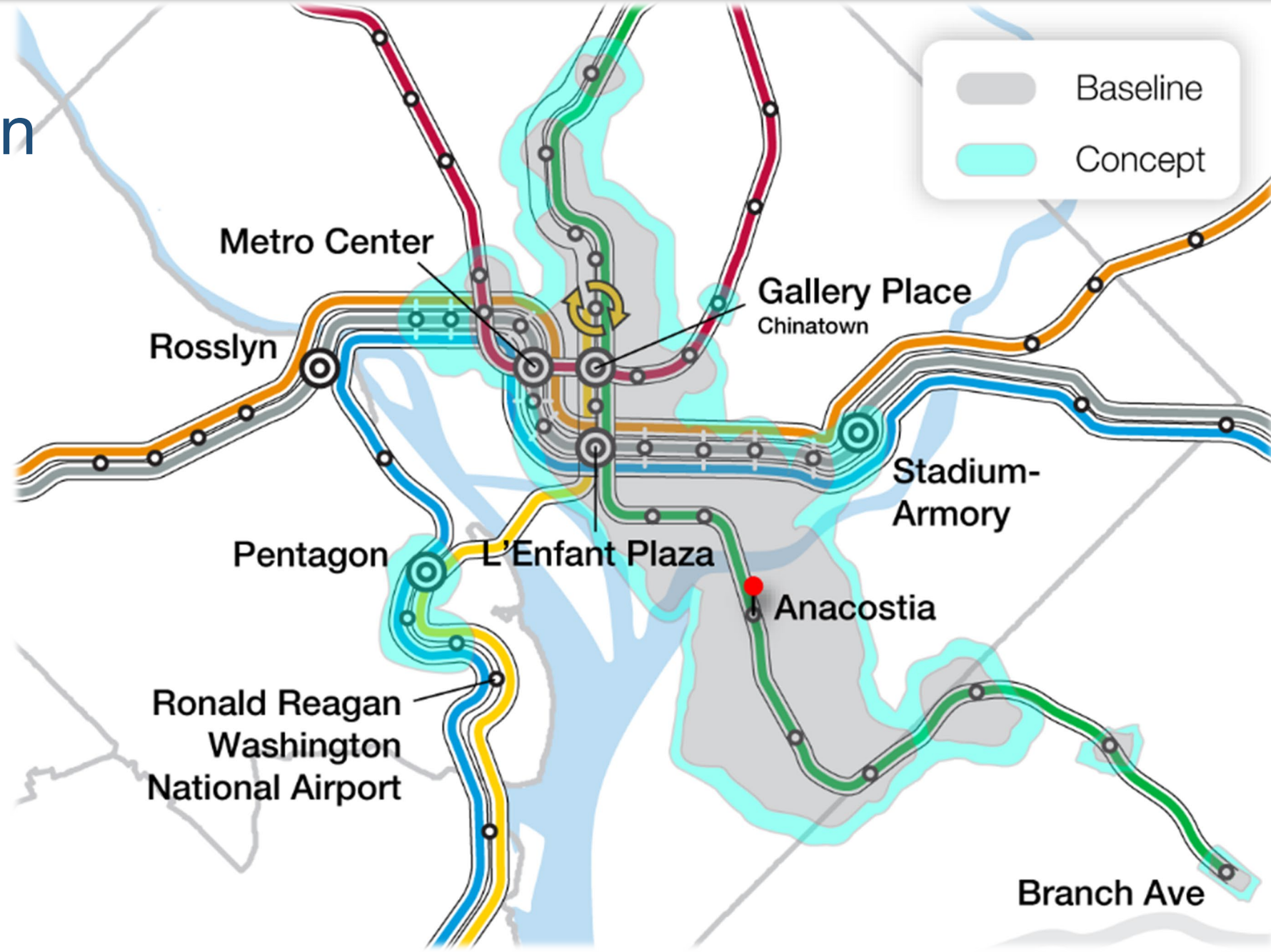
## Destination Access Example

### Anacostia Station

For a customer starting a short walk from Anacostia Metro Station...

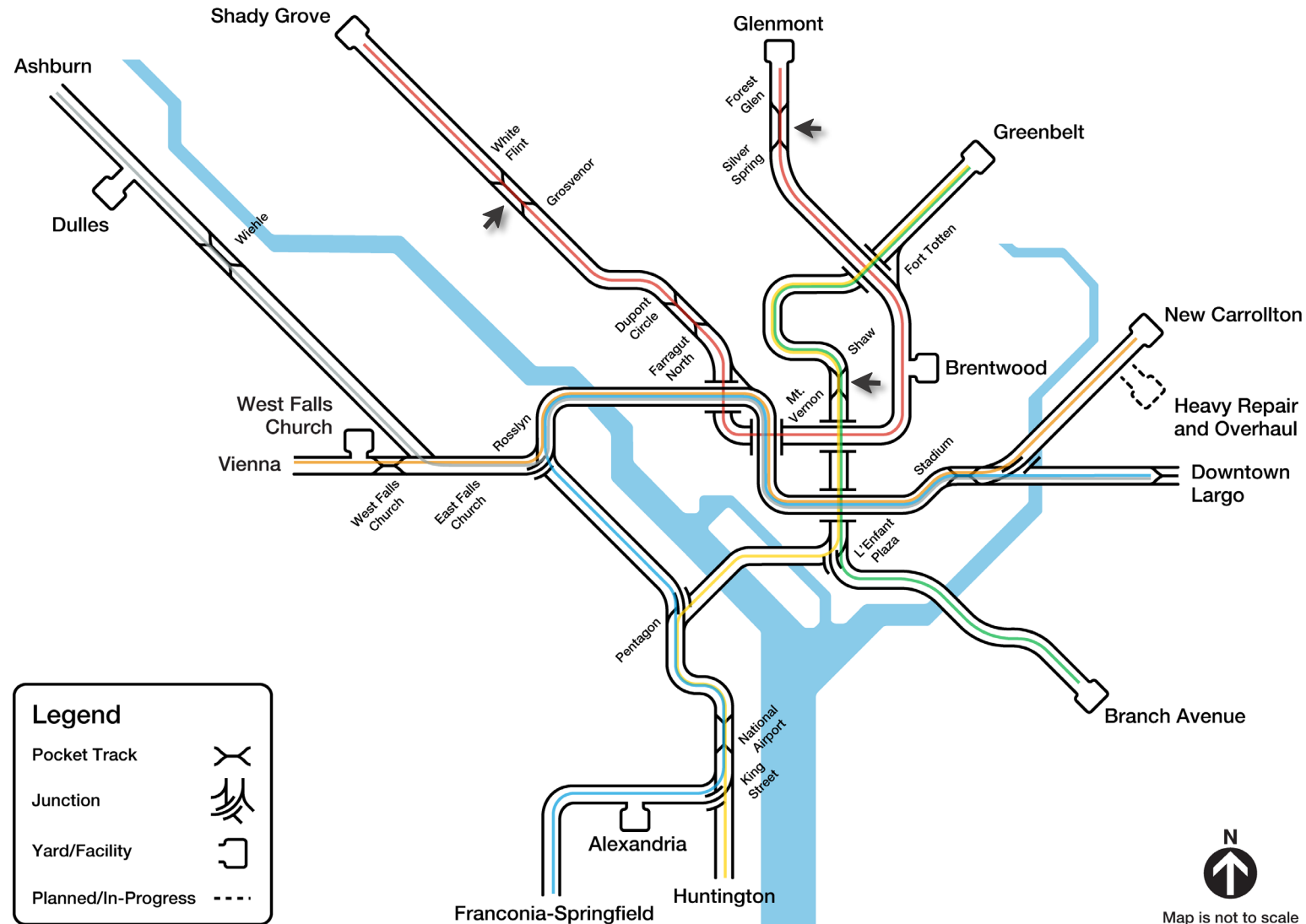
By reducing average **wait times for Green Line trains** and enabling further time savings with quicker **transfers to Yellow or Orange Lines**:

**Jobs accessible within 30 minutes increase approximately 25%**



## Infrastructure & Railcars

- Limited locations to reliably turn trains in service
  - New infrastructure investment could enable more service flexibility beyond FY2024
- With railcar fleet (including 7000 series) fully available, can deploy more trains in service than FY2023 budget baseline











# Appendix











# Metrorail Service Summary

## May 2023 Service Plan:

Line	Planned Service Headways
	8 min (peak hours) 8 min
	8 min
	8 min (peak hours) 12 min (late nights, weekends)
	12 min (peak hours) 15 min
	12 min (peak hours) 15 min
	12 min (peak hours) 15 min

## Proposed FY2024 Budget:

Line	Approved Service Headways
	5 min (peak hours) 6 min
	6 min
	6 min
	10 min (peak hours) 12 min
	7.5 min (peak hours) 10 min
	10 min (peak hours) 12 min

# What Service Optimization Could Accomplish



## Customer Focus / Drives Ridership

- Improve customers' access to destinations and grow system ridership
  - Increase service frequency in areas with high ridership potential
  - Minimize transfer wait times



## Equitable

- Increase access to opportunity
  - Focus on currently under-served areas
  - Especially benefit people of color and low-income customers



## Asset Optimization

- Optimize use of assets and value delivered from system investments
  - Use available railcar fleet
  - Maximize system design capacity and train throughput

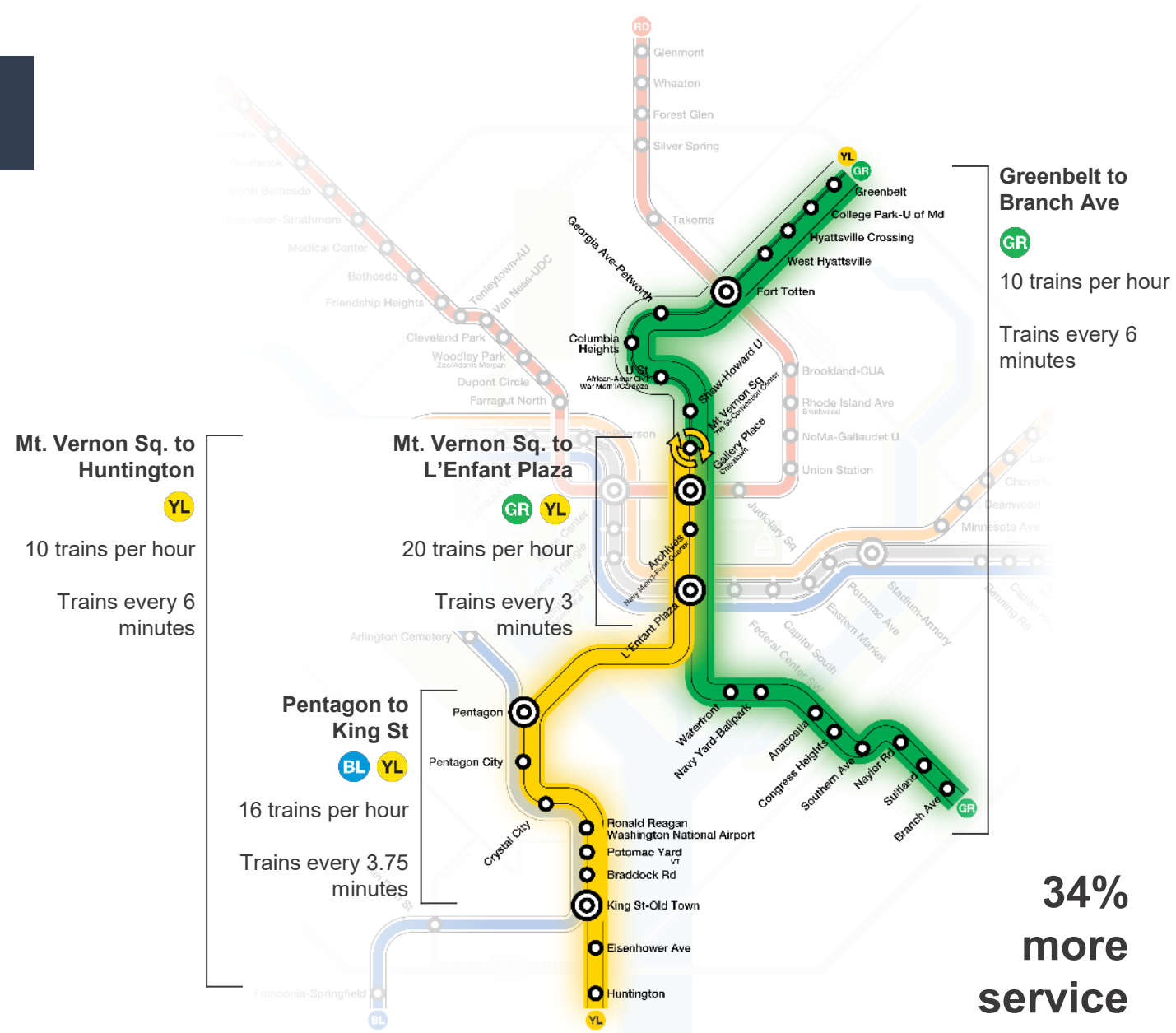
## Green/Yellow Line Proposal

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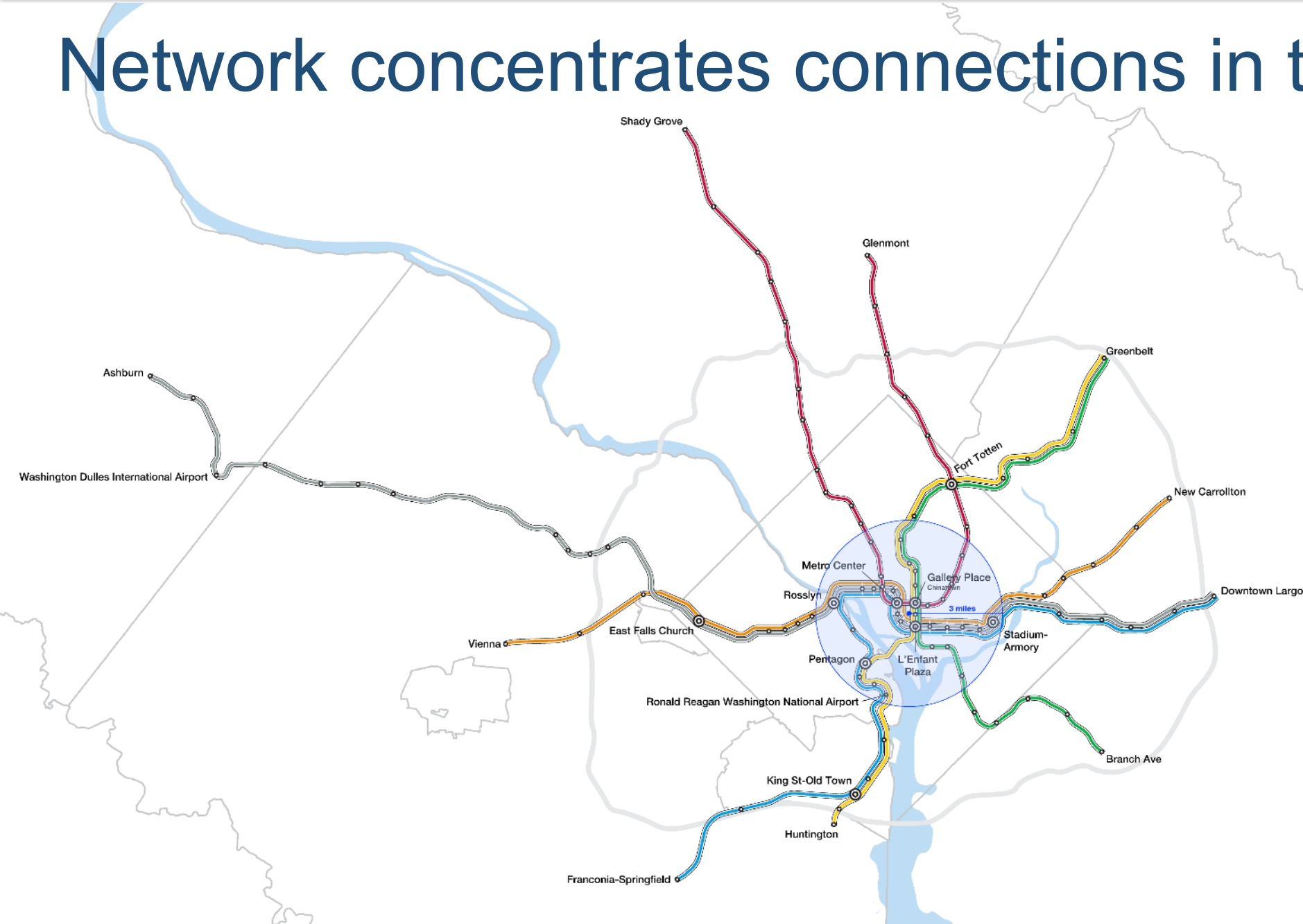
**By running more trains, the entire Green and Yellow Lines will receive six-minute service all day, instead of only the combined parts**

Opportunity to grow ridership with enhanced service for fast growing parts of system, games and other events at four major sports venues, airport travelers (DCA), and a new station (Potomac Yard)

Reduces transfer times at Gallery Place and L'Enfant Plaza, provides equity benefits on Southern Green Line, increases utilization of key assets (e.g., Yellow Line bridge)



# Network concentrates connections in the center



**Within a 3-mile radius from the system center:**

High concentration of stations, destinations, and customers

- 34 of 97 current stations (35%)
- 60% of station entries and exits
- 10 of the top 10 ridership stations
- 18 of the top 20 ridership stations

Where customers systemwide are traveling to and from

- 76% of weekday exits before 10 am – *where people are headed to*
- 75% of weekday entries after 7 pm – *where people are returning from*

Where customers transfer

- 92% of line transfers with 86% at Metro Center, Gallery Place, and L'Enfant Plaza