

**Washington Metropolitan Area Transportation Authority
Board Action/Information Summary**

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| <input type="checkbox"/> Action <input checked="" type="checkbox"/> Information | MEAD Number: | Resolution: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
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PURPOSE

To brief the Board on a staff proposal to potentially restructure the Blue Line operation to provide direct service from Franconia Springfield to the eastern portion of downtown using the Yellow Line bridge.

DESCRIPTION

The Blue Line Realignment is a strategy for improved reliability and system access, and is consistent with the Core Capacity and the APTA Peer Review. This service strategy would change the operating service pattern during the peak periods to provide better service to the growing eastern portion of downtown DC, improve reliability, and optimize the portal capacity at Rosslyn. Also, it would improve the “traffic congestion” of the Blue and Orange Lines merging onto one line at Rosslyn.

Under this staff proposal, one half of the service (five trains per hour) leaving Franconia Springfield will travel through the Rosslyn portal to Largo, which is the current Blue Line travel pattern. The other half (five trains per hour) of the trains leaving Franconia Springfield will split from the current Blue Line at Pentagon, cross the Yellow Line Bridge, and continue to Greenbelt. The Orange Line would operate from Vienna to both New Carrollton and Largo. This new scenario provides a direct route from the southern portion of the system (South Fairfax County in Virginia) to the eastern portion of the District of Columbia, relief at the Rosslyn portal, and faster travel for the majority of customers boarding the Yellow and Blue Line stations south of Pentagon.

FUNDING IMPACT

There is no funding impact for this information item.

NEXT STEPS

This is an information item only. The next step in the process is to review the proposal with the RAC, JCC and the public to solicit their input. The public input process would take place over the next 2 – 3 months. Then, staff would revise the proposal based on the public's comments, and bring it back to the Board.



Blue Line Realignment

Presented to the Board of Directors:

Customer Service Operations and Safety
Committee

February 14, 2008





Purpose

- To present to the committee the proposed Blue Line realignment proposal prior to initiating a public input process.



Reasons to Propose a Blue Line Realignment

- More growth has occurred in the eastern portion of Downtown D.C. causing a shift in some travel patterns.
- Improve rail reliability at the Rosslyn Portal.
- Utilize available capacity on the Yellow Line Bridge.



Benefits of Blue Line Realignment

- Service better tailored to changing ridership patterns.
- Increased capacity to get more Virginians into the District of Columbia.
- Blue Line riders from south of Pentagon to L'Enfant Plaza will save 12 minutes on their trip.
- More reliable service on both Orange and Blue Lines.
- No additional cost to alter service patterns.
- Direct service from Franconia-Springfield to Greenbelt.



Growth at Downtown Stations

- More growth has occurred in the eastern portion of Downtown.
 - When looking at station boarding growth over the last 5 years the most significant growth has been in the eastern parts of Downtown.

| Station Boarding Comparisons 2002-2007 | | | | |
|--|----------------|----------------|---------------|-----------|
| | 2002 | 2007 | Change | % Change |
| Eastern Downtown | | | | |
| Gallery Place | 13,800 | 21,900 | 8,100 | 59% |
| Navy Yard | 3,100 | 4,200 | 1,100 | 35% |
| Eastern Market | 4,800 | 5,900 | 1,100 | 23% |
| Capitol South | 7,300 | 8,500 | 1,200 | 16% |
| Federal Center SW | 4,700 | 5,300 | 600 | 13% |
| Archives | 7,800 | 8,500 | 700 | 9% |
| Anacostia | 7,200 | 7,600 | 400 | 6% |
| L'Enfant Plaza | 21,100 | 21,900 | 800 | 4% |
| Judiciary Square | 10,600 | 10,100 | -500 | -5% |
| Waterfront | 4,000 | 3,200 | -800 | -20% |
| Sub-Total | 84,400 | 97,100 | 12,700 | 15% |
| Western Downtown | | | | |
| Foggy Bottom | 18,500 | 20,600 | 2,100 | 11% |
| Union Station | 30,300 | 32,900 | 2,600 | 9% |
| Metro Center | 28,700 | 29,800 | 1,100 | 4% |
| McPherson Square | 16,000 | 16,400 | 400 | 3% |
| Farragut West | 23,600 | 24,100 | 500 | 2% |
| Federal Triangle | 10,400 | 10,400 | 0 | 0% |
| Smithsonian | 12,000 | 11,600 | -400 | -3% |
| Sub-Total | 139,500 | 145,800 | 6,300 | 5% |
| Total for Downtown Stations | 223,900 | 242,900 | 19,000 | 8% |



Shift in Travel Demand

- This change has resulted in more people from south of the Pentagon taking the Yellow Line across to Downtown.

| | 2002 | 2007 | Change | % Change |
|--|--------|--------|--------|----------|
| Blue Line Ridership Rosslyn to Foggy Bottom | 12,200 | 11,700 | -500 | -4% |
| Yellow Line Ridership Pentagon to L'Enfant | 12,500 | 14,100 | 1,600 | 13% |

- There has been a 13 % growth in riders Between Pentagon and L'Enfant, while the ridership between Rosslyn and Foggy Bottom has declined 4%.



Improve Rail Reliability at the Rosslyn Portal

- For the AM peak hour (trains arriving at Rosslyn between 7:45 am and 8:45 am) 26 trains are scheduled.
 - 16 Orange Line trains and 10 Blue Line trains.
- This throughput is the system design maximum throughput capacity of a train every 135 seconds.
- Any type of minor delay results in trains backing up and a cascading effect that delays all trains entering the portal.
 - Any delay on either the Blue or the Orange Line affects the performance of both Lines.



Blue Line Realignment Proposal

- During the weekday peak periods the Blue Line presently operates approximately every 6 minutes between Franconia/Springfield and Largo Station (10 trains per hour).
- The proposal is to shift some Peak period Blue Line trains to operate via Yellow Line bridge to L'Enfant Plaza and on to Greenbelt.
 - During the peak periods 4 trains per hour would operate between Franconia/Springfield and Greenbelt increasing capacity by 8000 passenger trips.
 - Add 4 Orange Line trains from West Falls Church to Downtown.
 - This proposal adds capacity from Virginia to Downtown via the Blue Line to L'Enfant Plaza and the Orange Line through Rosslyn.
 - To maintain the current peak period headways between Largo and Downtown, four trips per hour would operate between Largo and Vienna by utilizing existing trippers currently operating between Vienna and New Carrollton.

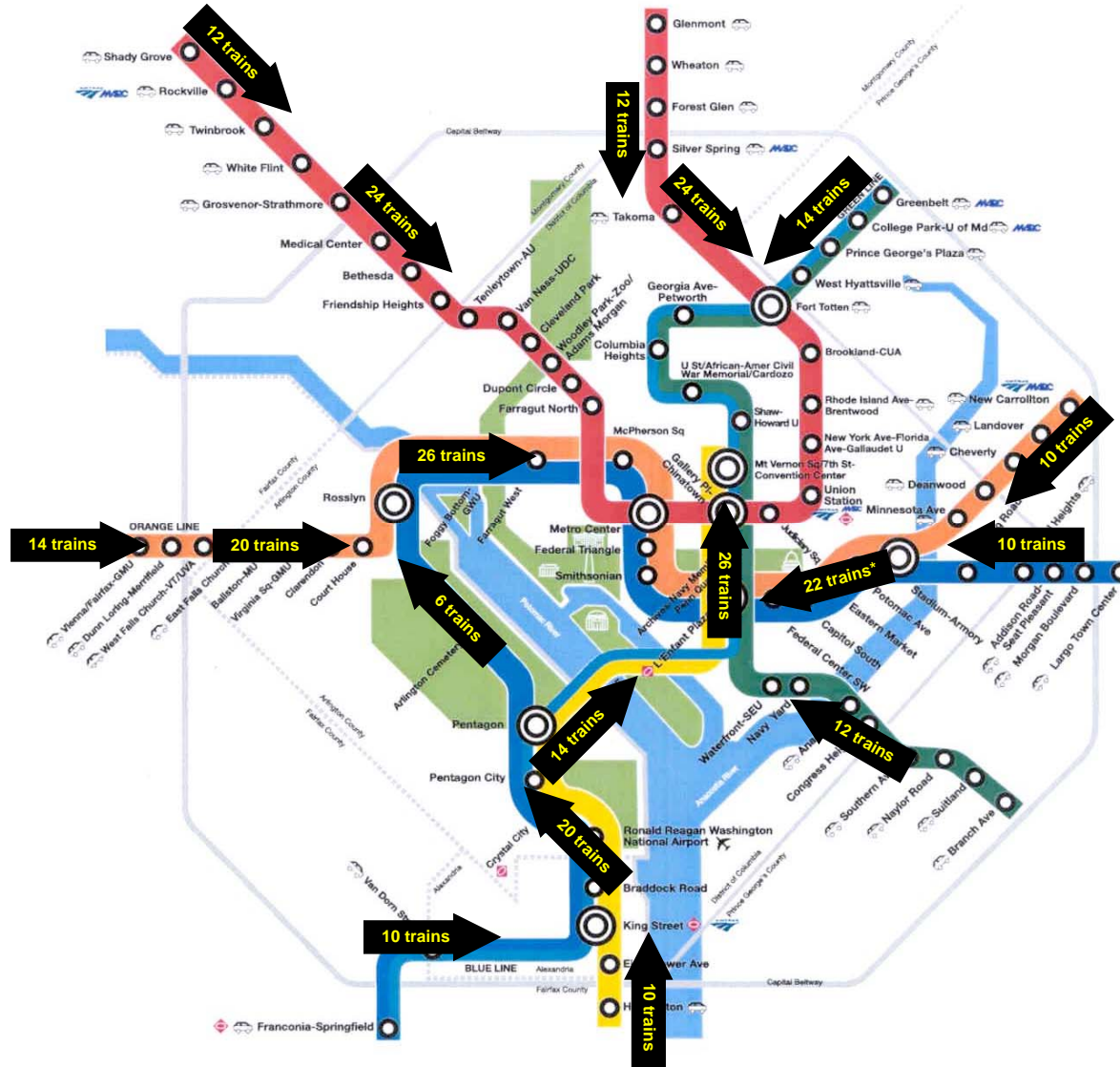


Current Peak Train Throughputs





Proposed Peak Train Throughputs





Impact on the Customer

Pros:

- Service better tailored to ridership patterns.
- Virginia riders from south of the Pentagon will get more service to eastern portion of downtown D.C. each hour.
- Four additional Orange Line trains from West Falls Church headed downtown D.C. per hour.
- More reliable service on both the Blue and Orange Lines.
- Travel times for 17,000 riders will be reduced by up to 12 minutes.
- No added cost for service.
- Direct peak period service from Franconia-Springfield to Greenbelt.

Cons:

- Direct Blue Line service to Rosslyn, Foggy Bottom will be reduced to every 12 minutes.
- Travel time for 13,000 riders will be increased by up to 12 minutes.

Other:

- Will require customers to learn new system map.



Public Feedback

- In order to provide guidance for the planning of the proposed Blue Line Realignment, Metro will seek feedback from riders.
- Presentation to Riders Advisory Council and Jurisdictional Coordinating Committee for their input.
- Interviews will be conducted with Metrorail customers boarding at King Street, Van Dorn Street and Franconia-Springfield stations.
- It is anticipated that a total of 200 interviews will be conducted with Metrorail customers.
- Additionally, interviews will be conducted with key stakeholders from the communities affected by the change in service.



Next Steps

- Review the proposal with the public and solicit input. This will take place over the next 4-5 months.
- Based on public input, the proposal will be revised and brought back to the Board with recommendations.