# Core Stations Capacity Enhancements

### Program Description:

Pedestrian flow, vertical transportation and platform capacity issues will be improved at Metro Center, Gallery Place/Chinatown, L'Enfant Plaza, Farragut North, Union Station and Farragut West, six of the busiest stations in the system.

#### Program Justification:

The 2002 Core Capacity Study evaluated available capacity versus the entry/exit and passenger transfer volumes for each station. Metro Center, Gallery Place/Chinatown, L'Enfant Plaza, Farragut North, Union Station and Farragut West were identified as stations with high exit and entry demand. As ridership grows over time these stations will face overcrowded conditions making it difficult for customers to transfer and navigate these stations. Improvements will be needed to move passengers from the platform to the mezzanine area and to the street level in order to ensure that platforms are clear before the next train arrives. Additionally, capacity issues need to be address to resolve pedestrian bottlenecks and separate customers waiting on the platform from those leaving the station.

Improvements to be implemented include: entrance escalators/stairs, passageways to mezzanine, fare collection equipment, mezzanine to platform escalators/stairs, platform widening, escalators/stairs between upper/lower platform, and lower level platform occupancy. The application of these improvements varies by station design and needs.

For example, transfer stations, where two or more lines intersect and allow customers to transfer, are of particular concern. To address projected increases, platform-to-platform and mezzanine-to-platform transportation, will need to be built to meet demand and resolve pedestrian bottlenecks at Metro Center, L'Enfant Plaza, and Union Station

Asset Category:	PASSENGER FACILITIES	Alignment with Metro's Strategic Goals:	
Investment Category:	DEMAND FOCUS	Create a Safety Culture	✓ Deliver quality services
		Retain and Attract the Best and the	Uses Every Resource Wisely
Sponsor Department:	PLJD	Brightest	
Contact:	David Couch	Total Budget for FY2011-FY2020 (in	YOE \$000s):
Program Management:	ESVC		
Operated by:	RAIL	\$6	12,112
Maintained by:	PLNT		



# Gallery Place/Metro Center Pedestrian Connection

## Program Description:

Provide a pedestrian tunnel connecting the Metro Center East Mezzanine and Gallery Place-Chinatown West Mezzanine.

### Program Justification:

The 2002 Core Capacity Study identified this project as an effective strategy to connect the system's two largest transfer points, relieving the most congested segment in the system. In addition, it will also reduce the number of transfers at L'Enfant Plaza station. The connection will allow patrons to transfer between the Blue, Orange, Red, Yellow and Green lines without taking a one stop ride on the Red Line.

The connection would be a level path supported on top of the existing track vaults. The length of the passageway is approximately 750 feet. The area of passageway would be about 18,000 square feet, including connections to existing underground entrance and new emergency exit stairs. The new entrance with stairs and escalator in the Gallery Place West Mezzanine would be about 2,000 square feet. There is the potential to have retail along the passageway.

Asset Category:	PASSENGER FACILITIES	Alignment with Metro's Strategic Goals:	
Investment Category:	DEMAND FOCUS	Create a Safety Culture	Deliver quality services
		Retain and Attract the Best and the Brightest	Uses Every Resource Wisely
Sponsor Department:	PLJD	Dirgitest	
Contact:	David Couch	Total Budget for FY2011-FY2020 (in	YOE \$000s):
Program Management:	ESVC		
Operated by:	RAIL	\$1	28,042
Maintained by:	PLNT		



## Bus Capacity Enhancements: Running Way Improvements

### Program Description:

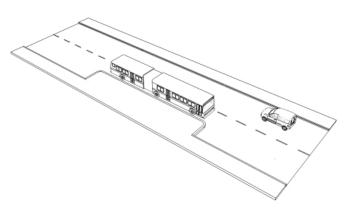
This program supports the Bus Priority Corridor Plan, a strategy for improving bus service travel times, reliability, capacity, productivity and system access through investments in bus stops, runningway enhancements, street operations management and safety and security strategies to reduce travel times and provide more reliable and safe service.

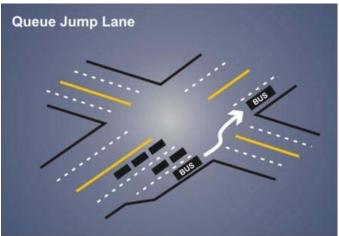
#### Program Justification:

This program includes funding to assist local governments and State DOTs to implement road and traffic measures to support the Bus Priority Corridor Plan. Capital investments include: bus priority treatments along regional roadways improvements (e.g., transit signal priority implementation, queue jumpers, bus bulbs), corridor identity improvements (e.g., painted markings) and traffic management improvements (e.g., left-turn enhancements). This program will improve transit speed and reliability, give bus priority travel time compared to automobile, and enhance transit identity and image.

The benefit to Metro riders is improved service quality, reliability, performance and the strengthening of a transit market that positively influences development patterns.

Asset Category:	PASSENGER FACILITIES	Alignment with Metro's Strategic Goals:	
Investment Category:	DEMAND FOCUS	☐ Create a Safety Culture	
Sponsor Department:	PLJD	Retain and Attract the Best and the Uses Every Resource Wisely Brightest	
Contact:	Thomas Harrington	Total Budget for FY2011-FY2020 (in YOE \$000s):	
Program Management:	ESVC		
Operated by:	BUS	\$120,449	
Maintained by:	PLNT		





# Farragut North/Farragut West Pedestrian Connection

## Program Description:

Provide a pedestrian tunnel with a moving walkway to connect the Farragut North and Farragut West Metrorail stations.

#### Program Justification:

The Pedestrian Connection between Farragut North and Farragut West will shorten the travel time going from Virginia toward NW Washington and vice versa by eliminating the need to go to Metro Center to transfer. On a weighted average basis across all markets, the pedestrian tunnel is expected to shorten each user's travel time by about 2.0 minutes. Tunnel users would collectively save about 900 hours per day or 260,000 hours per year in travel times based on 2003 ridership data. Besides saving customer time, the Farragut tunnel would free up space in Metro Center and reduce the transfer demand by up to 11 percent.

The design of this project is based on a 2004 feasibility study. The passageway is designed for ADA accessibility at both stations. New elevators are added at Farragut North from the passageway to the platform and new elevators at Farragut West from the existing mezzanine to the platform and to the street.

Asset Category:	PASSENGER FACILITIES	Alignment with Metro's Strategic Goals:	
Investment Category:	DEMAND FOCUS	Create a Safety Culture	Deliver quality services
Sponsor Department:	PLJD	Retain and Attract the Best and the Brightest	Uses Every Resource Wisely
Contact:	David Couch	Total Budget for FY2011-FY2020 (in	) YOE \$000s):
Program Management:	ESVC	,	
Operated by:	RAIL	4	\$72,035
Maintained by:	PLNT		



## **Bicycle & Pedestrian Facilities: Capacity Improvements**

### Program Description:

This program will (1) increase bicycle parking capacity at Metrorail stations to meet current and future demands; and (2) improve connections to stations from local communities where existing pathways are lacking. Connections could include tunnels, bridges, at-grade sidewalk construction and safety improvements (e.g., lighting).

#### Program Justification:

Bicycle Parking: Due to increased population, denser development around stations and higher gas prices, it has become clear that Metro's current bicycle parking capacity is insufficient to meet demand. Providing bicycle parking at stations is a highly cost-effective means of improving access to rail stations.

The Metro staff routinely receives requests for more bicycle parking at suburban stations (e.g. Vienna, West Hyattsville) and at stations closer to the system core (e.g., Georgia Ave – Petworth). Field observations conducted in 2008, showed multiple stations with bicycles locked to any available fixed structure (e.g. sign posts, light poles, phone booths) which is illegal in some jurisdictions. Options to increase bicycle parking capacity at rail stations include: free-standing bicycle parking structures with double-decked parking and key / swipe-card entry bicycle cages in existing garages. Metro will conduct a Bicycle and Pedestrian facilities study in FY09 to determine the best parking solutions and locations.

Station Connections: In a number of stations, pedestrian access is below average and in some stations customers have identified pathways that with improvements could provide more direct access for the surrounding communities. By improving this access, Metro may encourage customers to walk (or bike) to a station rather than drive or ride the bus.

Improved lighting and security along station pathways should also be implemented as safe connections are as important to those who walk to stations as direct connections.

Asset Category:	PASSENGER FACILITIES	Alignment with Metro's Strategic Goals:	
Investment Category:	DEMAND FOCUS	Create a Safety Culture Deliver quality services	
		□ Retain and Attract the Best and the	
Sponsor Department:	PLJD	Brightest	
Contact:	Thomas Harrington	Total Budget for FY2011-FY2020 (in YOE \$000s):	
Program Management:	ESVC		
Operated by:	RAIL	\$40,301	
Maintained by:	PLNT		



# Dual Accessible Pathways - Core Elevator Project

## Program Description:

This program will guarantee vertical access by installing back up elevators at the following 7 key Metrorail transfer stations: Metro Center, L'Enfant Plaza, Gallery Place/Chinatown, Fort Totten, Pentagon, Stadium-Armory and Rosslyn.

#### Program Justification:

Currently a single elevator outage can make an entire transfer station and all the lines it serves inaccessible to people with disabilities, travelers with luggage and customers with other devices such as strollers. Providing backup elevators at key locations is a cost effective solution. The 2002 Core Capacity Study supports increasing access via entrances and passages at major key stations. Rosslyn is currently being completed, but the following stations are included in this program: Metro Center (2011, \$6.8M), L'Enfant Plaza (2012, \$8.7M), Gallery Place/Chinatown (2013, \$3.9M), Fort Totten (2014, \$5.6M), Pentagon (2015, \$2.9M), Stadium-Armory (2016, \$6.1M).

Guaranteeing an accessible path at the key transfer stations will save operating money because no bus bridge support will be needed when an elevator goes out of service. The present method of responding to elevator outages, bus shuttles, is costly and provides customers with a time consuming alternative. Guaranteed access greatly improves Metro's quality of service. Program will also enable routine maintenance to be performed without impacting access resulting in overall maintenance savings.

Asset Category:	PASSENGER FACILITIES	Alignment with Metro's Strategic Goals:	
Investment Category:	DEMAND FOCUS	<ul> <li>Create a Safety Culture</li> <li>Deliver quality services</li> <li>Retain and Attract the Best and the</li> <li>Uses Every Resource Wisely</li> </ul>	
Sponsor Department:	ACCS	Brightest	
Contact:	Glenn Millis	Total Budget for FY2011-FY2020 (in YOE \$000s):	
Program Management:	ESVC		
Operated by:	RAIL	\$33,955	
Maintained by:	ELES		



