



Washington Metropolitan Area Transit Authority

Regional Transit System Plan

Presentation to the
TPB Technical Committee

June 3, 2011



Background

1999 Transit Service Expansion Plan

Four main elements:

- (1) Improve Access to and capacity of the Metrorail system
- (2) Improve bus service levels and expand to new service areas
- (3) Selectively add stations, entrances and station capacity to the existing Metrorail system
- (4) Expand fixed guideway services

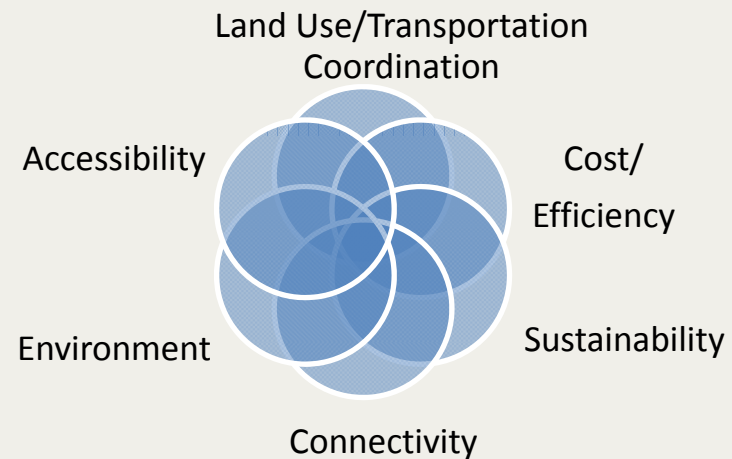


Regional Transit System Plan (RTSP)

Project Objectives

- ❑ Develop a 30 year vision that connects the transit system, customers, and the community with a regional transit network comprised of:
 - Local Bus
 - Bus Rapid Transit
 - Light Rail
 - Streetcar
 - Metrorail
 - Commuter Rail

- ❑ Support regional transportation goals established in the TPB Vision and the Greater Washington 2050 Coalition's Region Forward plan



Regional Growth Trends

- 2010 to 2040 regional growth:
 - 31% population growth
 - 35% household growth
 - 39% employment growth

| Jurisdiction | Population Growth (percent of total) | Employment Growth (percent of total) |
|------------------------------------|--------------------------------------|--------------------------------------|
| Core (DC/Arl CBD) | 2% | 5% |
| Central Jurisdictions Outside Core | 10% | 14% |
| Inner Suburbs | 29% | 38% |
| Outer Suburbs | 59% | 43% |

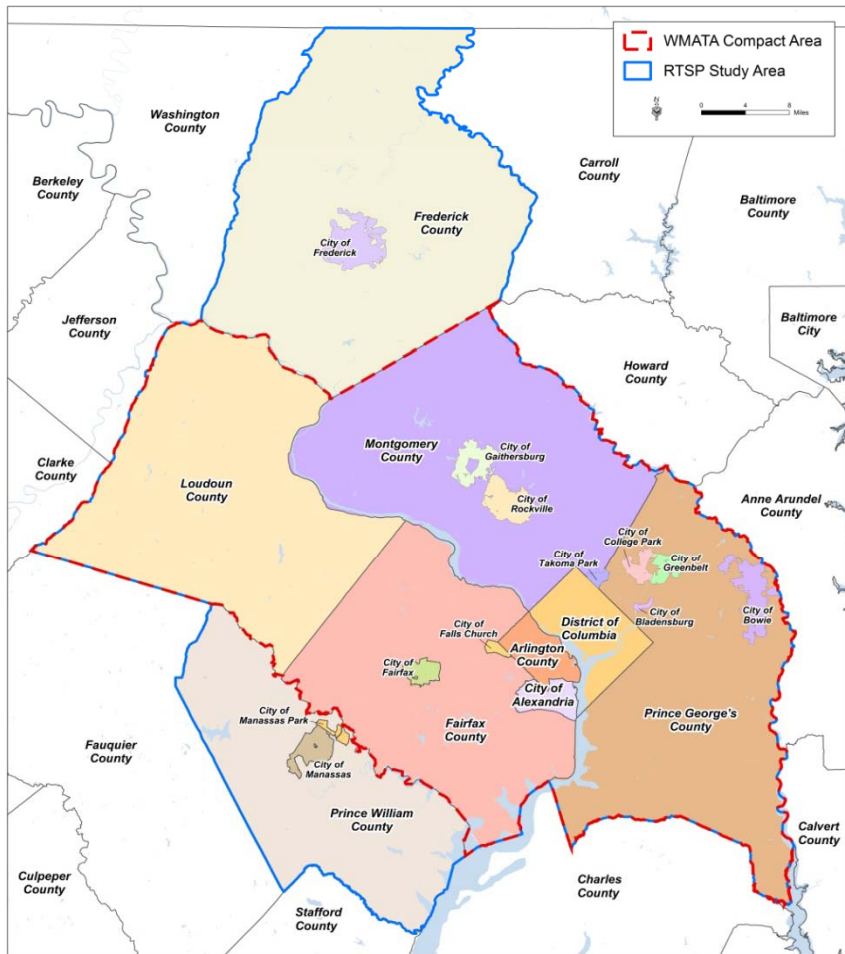
- Different growth rates across region have implications for transportation

- Traditional commute to core growing at modest rate - direct impact on core capacity issues
- Suburban-to-suburban trips represent a key growth market

| Markets | 2008 to 2040 | |
|-----------------------------|---|---------|
| | Growth in Weekday Home-Based Work Trips | Percent |
| Traditional Commute to Core | 86,000 | 12% |
| Commute to Central Juris. | 153,000 | 41% |
| Reverse Commute | 62,000 | 35% |
| Central Circulation | 76,000 | 39% |
| Suburb-Suburb | 1,236,000 | 45% |



Key Long Range Issues to Address



Core Capacity

- Increasing current transit capacity to the core to meet current and projected future demand and promote continued employment growth



System Access

- Improving current station access for pedestrians, cyclists, bus and automobile operators



Surface Transit Corridors

- Providing priority for surface transit corridors including express bus on HOV, rapid bus on arterials, light rail, commuter rail, and streetcar projects



New and Emerging Markets

- Identifying, connecting, and improving transit access to regional activity centers



Strategies Being Evaluated

- About 20 different strategies developed/modeled to date that address key long range issues

| Core Capacity Strategies | Access Strategies | Surface Transit Strategies | New Connections Strategies |
|---------------------------------|---|-----------------------------------|--|
| New rail lines through the core | In-fill stations & pedestrian connections | Enhanced bus priority corridors | Metrorail extensions to activity centers |
| Rail inter-lining | Improved pedestrian networks | Enhanced commuter rail service | Commuter rail extensions |
| Enhanced bus priority corridors | PNR lots with shuttles to rail | Enhanced BRT network | BRT/LRT/Streetcar extensions |

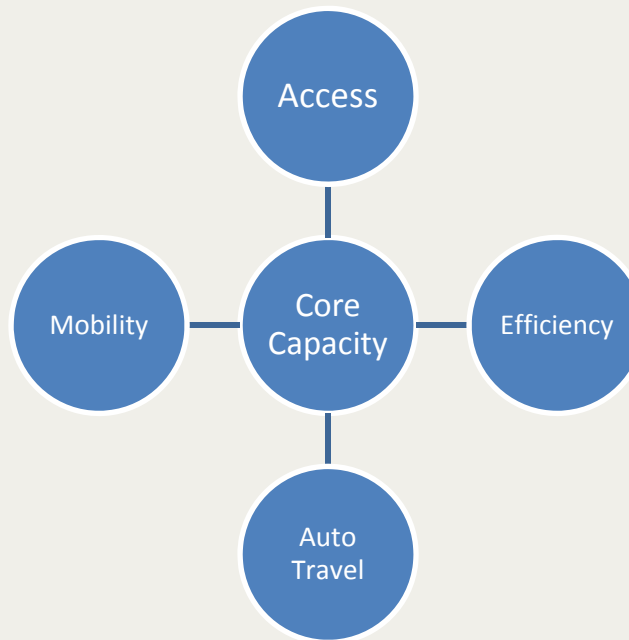


Measures of Effectiveness

| Alternative | Measures of Effectiveness | | | | | | | | | | |
|----------------------------------|-------------------------------------|-----------------------------|------------------|-------------------------|-----------------------------------|----------------------------------|--|---------------------------|------------------------|--------------------------------|--------------------|
| | Core Capacity | | | Access | | | | Mobility | | Efficiency | Auto Travel |
| | Sufficient Capacity to Serve Demand | Reserve Capacity/Redundancy | Station Capacity | Transit System Coverage | Service to Major Activity Centers | Metrotransit Parking Sufficiency | Reduce Dependence on Automobile to Access Metrotransit | Region-wide Transit Share | Transit Access to Jobs | Passenger Miles Per Route Mile | Auto VMT and Trips |
| Base | | | | | | | | | | | |
| Existing Conditions in 2008 | ⬇️ | ⬇️ | ⬇️ | ○ | ● | ⬇️ | ○ | ○ | ○ | ○ | ⬇️ |
| 2040 Constrained Long Range Plan | ● | ● | ● | ⬇️ | ⬇️ | ● | ○ | ○ | ⬇️ | ⬆️ | ● |

➤ All strategies are compared to 2040 base case & evaluated by a set of measures

➤ MOE's address five key areas

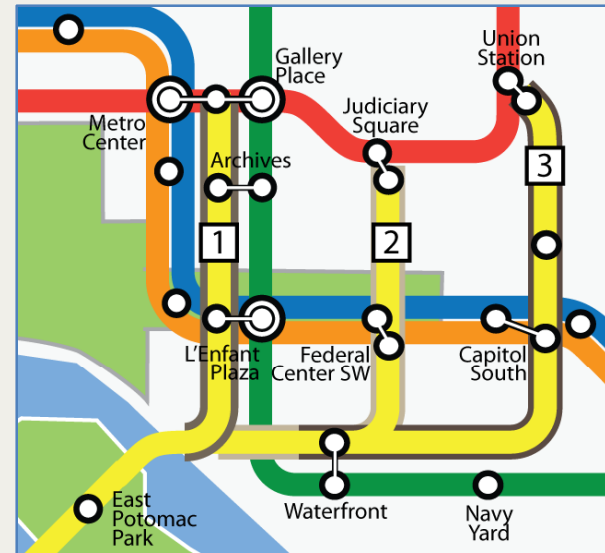


| Key | |
|-----|-----------|
| ● | Very Poor |
| ⬇️ | Poor |
| ○ | Neutral |
| ⬆️ | Good |
| ● | Excellent |



Core Capacity Strategies

- Major Issues:
 - Even with 8-car trains, peak capacity for trips to the core will reach capacity before 2040
 - Highest priority stations for capacity improvement are largely in the Core, especially at major transfer stations
- Key strategies being evaluated:
 - New Rail Lines through the core: additional Yellow and Blue Lines
 - Inter-line rail connections and station pedestrian connections



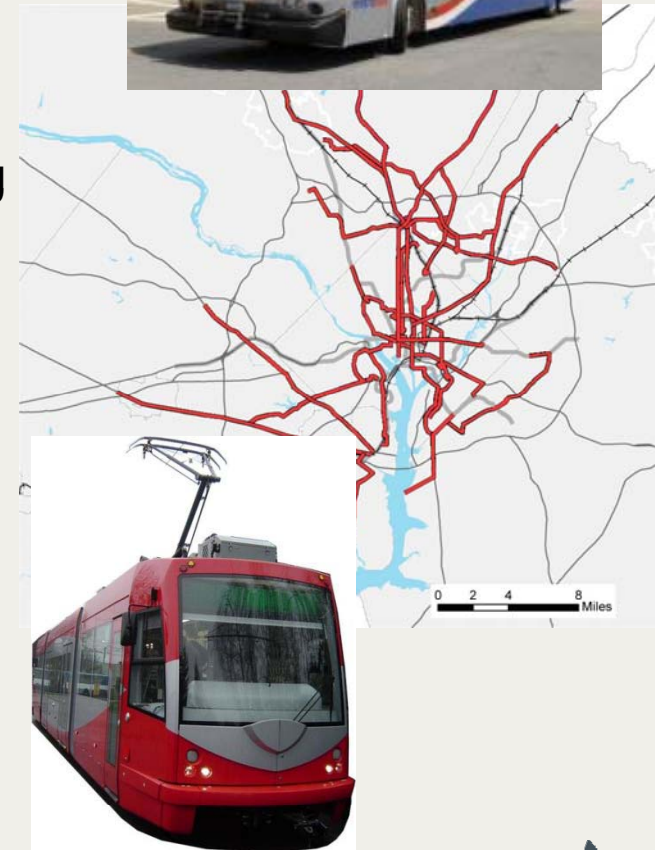
Access Strategies

- Major Issues:
 - Very high cost to accommodate unmet parking demand of potentially 40,000 spaces; need to look at most cost-effective ways to provide access
 - At many stations, a significant portion of customers using parking come from less than 3 miles away
- Key strategies being evaluated:
 - Improving pedestrian environment around stations
 - Park-and-Ride with feeder service to rail
 - New infill stations



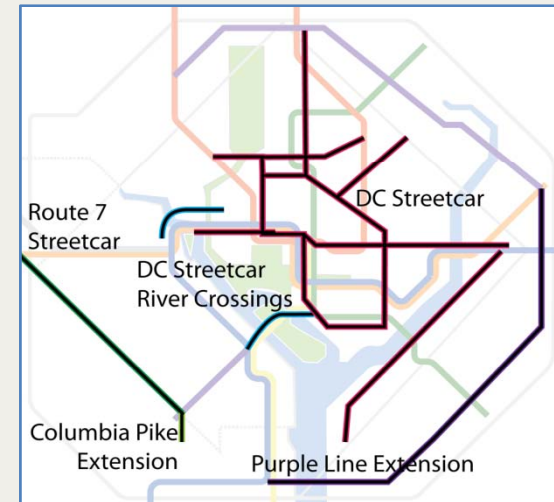
Surface Transit Strategies

- Major Issues:
 - Traffic congestion is threatening the efficiency of the region's bus network
 - Regional LRT and streetcar proposals are being developed independently
- Key strategies being evaluated:
 - Enhanced existing surface network including running way improvements, high-frequency service, rapid bus and BRT
 - LRT/Streetcar integration



New Connections Strategies

- Major Issues:
 - A number of the region's fastest growing activity centers are not served by Metrorail
 - New connections between activity centers are needed, particularly for the fast-growing suburban-to-suburban travel market
- Key strategies being evaluated:
 - New surface transit connections - LRT, Streetcar, Commuter Rail Services
 - Metrorail extensions to new markets/activity centers



Stakeholder Outreach

- Technical advisory group (TAG) has been providing guidance
- Project website/blog used to share information and gather input
- Two rounds of public workshops planned in each jurisdiction will allow opportunities for more input

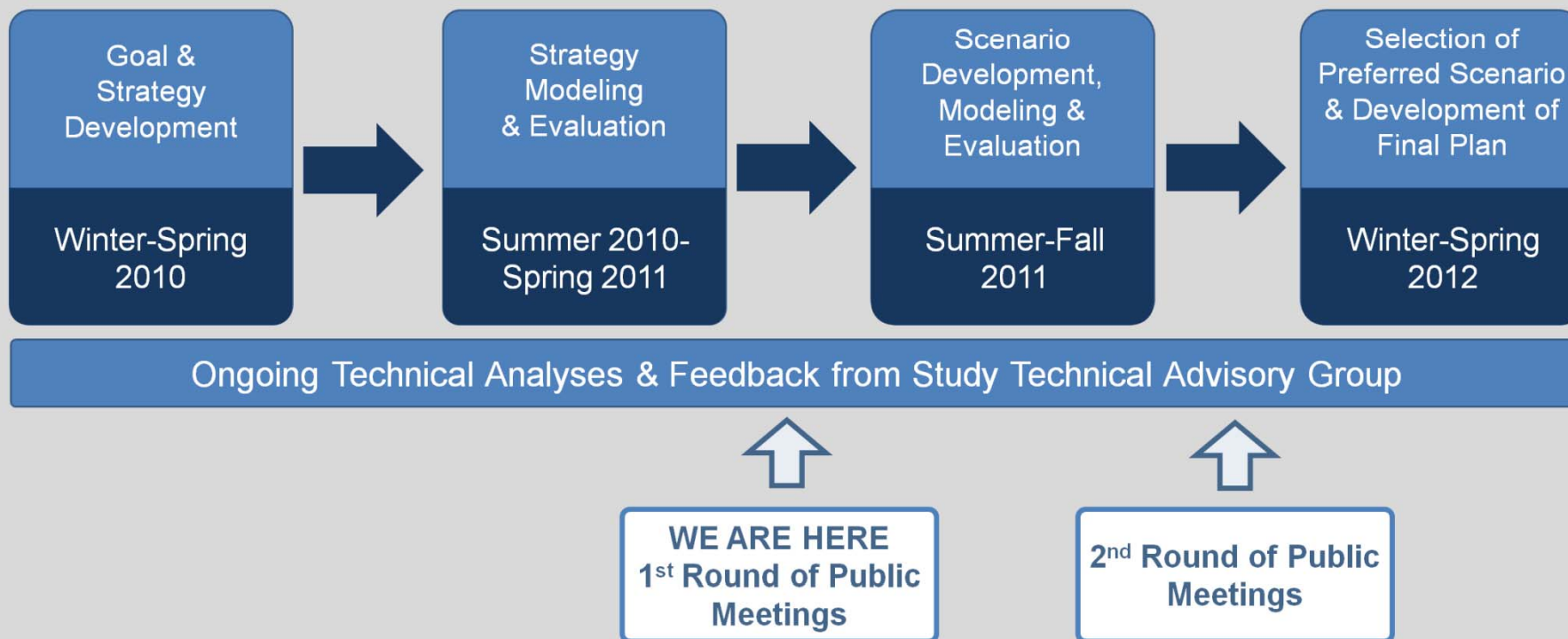


Metro-hosted public workshops:

- RTSP Purpose & Process
- Participant Break-out & Planning Team Exercises
- Planning Team Presentations
- Next Steps
- Open House/Project Board Review



Next Steps



How You Can Stay Informed

<http://planitmetro.com>



THANK YOU!

Tom Harrington
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WMATA

