

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Regional Transit System Plan

Technical Advisory Group – Meeting 3
May 20, 2010



Agenda

- I. Welcome & Introductions
- II. RTSP Update
 - I. Jurisdictional Briefings
 - II. Website Development
- III. RTSP Process & Strategy Development
- IV. Discussion of Strategies to Model & Evaluate
- V. Next Steps
- VI. Adjourn

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Jurisdictional Meetings

- City of Alexandria
- Arlington County (TBD)
- District of Columbia
- DRPT/VDOT
- Fairfax City, Falls Church and NVTC
- Fairfax County
- Frederick County & City of Frederick
- Loudoun County
- MDOT/MTA
- MWCOG/TPB
- Montgomery County DOT
- Montgomery County/M-NCPPC
- NCPC
- Prince George's County DPW & T and M-NCPPC
- Prince William & PRTC
- TPB Tech Comm. (TBD)


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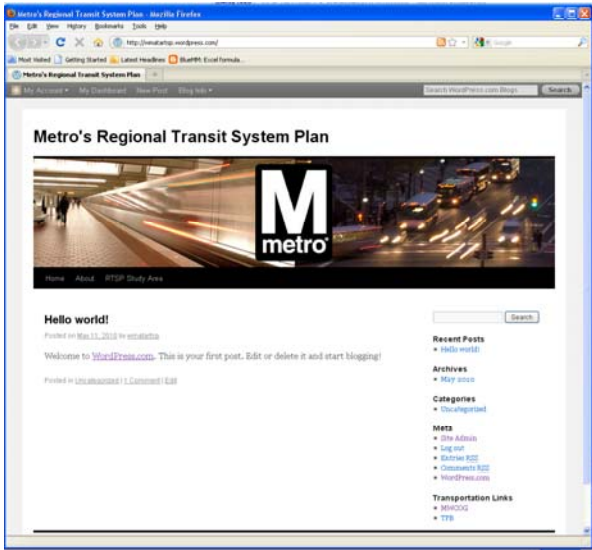
Website Development

- Purpose of RTSP Website
 - Forum for transit discussions among visitors
 - Source of feedback for project team
 - Links to other transit organizations/agencies
- General Website Content
 - Project Home
 - FAQ's
 - Technical Advisory Group (TAG)
 - Community Briefings/Workshops
 - Project Newsletters/Documents/Reports
 - Links
 - Contact Us/Get Involved
- Evaluating the best hosting mechanism
- Launch during Summer/Fall 2010

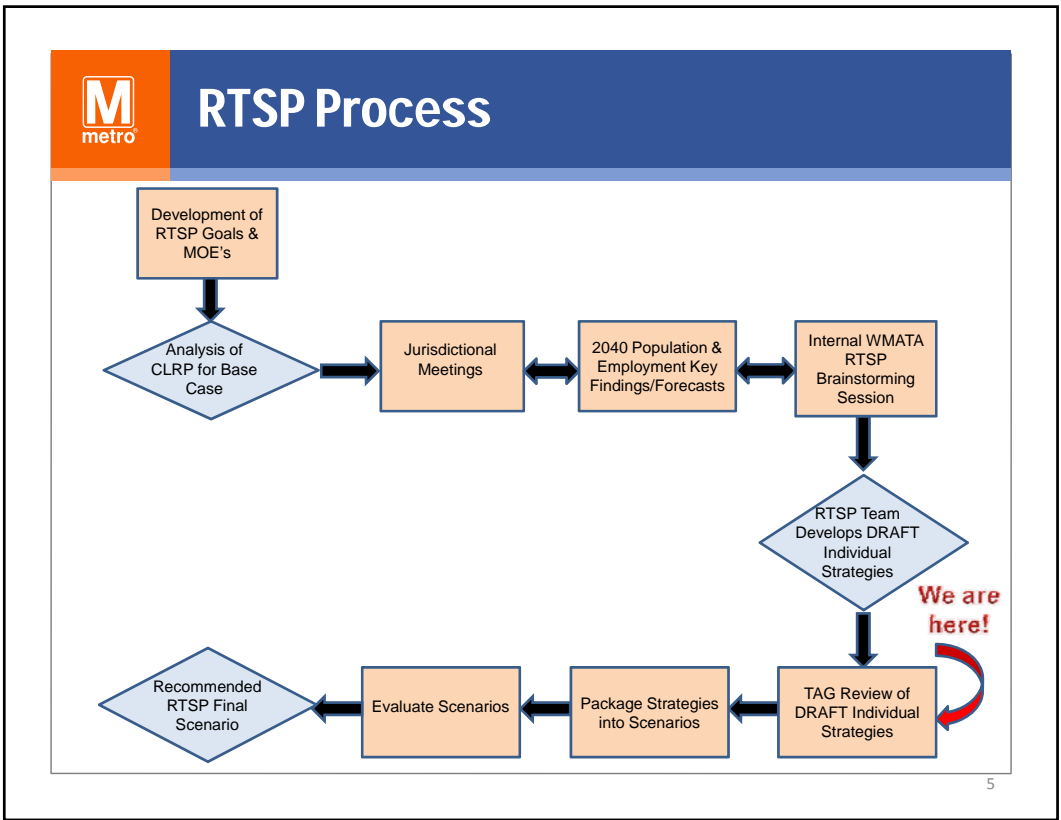
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Website Development



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The table is titled "RTSP Project Goals & Strategies" and features the Metro logo in the top left. It is organized into two columns: "Goal" and "Strategy".

Goal	Strategy
Core Capacity Transit capacity to serve the regional employment core.	<ul style="list-style-type: none"> •Enhancing Existing Surface Transit •New Surface Transit Connections •Rail Enhancements •New rail lines through the Core
Access - Adequate pedestrian, bicycle, automobile and bus access to high-quality transit.	<ul style="list-style-type: none"> •Urban Design •Park-and-Ride with feeder service to rail
Surface Transit Corridors - Priority for surface transit including express bus on HOV, rapid bus on arterials, light rail, and streetcar projects.	<ul style="list-style-type: none"> •New Surface Transit
New & Emerging Markets - New connections between regional activity centers.	<ul style="list-style-type: none"> •Rail extension to new markets/activity centers

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RTSP Measures of Effectiveness (MOE's)

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	Metrail Parking Sufficiency	Reduce Dependence on Automobile to Access Metrorail	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	●	●	●	●	●	●	○	○	●	●	●

Key	
●	Very Poor
●	Poor
○	Neutral
●	Good
●	Excellent



Transit Mode Characteristics

Transit Mode	Capacity (Persons per vehicle)	Guideway	Station/Stop Spacing
Bus	Standard: 80 (40 seated, 40 standing); Articulated: 120 (60 seated, 60 standing)	Mixed Traffic or Exclusive ROW	1-2 Blocks
Bus Rapid Transit (BRT)	80 (40 seated, 40 standing)	Mixed Traffic or Exclusive ROW	.5 - 1 mile
Modern Streetcar	127 (35 seated, 92 standing)	Mixed Traffic, fixed guideway	.25 mile
Light Rail Transit	160 (90 seated, 70 standing)	Mixed Traffic or Exclusive ROW	.5 - 1 mile
Heavy Rail	170-300	Exclusive fixed guideway	.33 - 2 miles
Commuter Rail	120 (single level)- 240 (double level)	Exclusive fixed guideway	4 - 7 miles



Strategy 3 – Enhancing Existing Surface Transit

- **Purpose – Enhance existing bus network to provide a high level of service**
 - Runningway Improvements (TSP, Queue Jumps, Bus Lanes, HOT/HOV Lanes)
 - Enhanced levels of service, increased frequencies
 - BRT-style stop spacing

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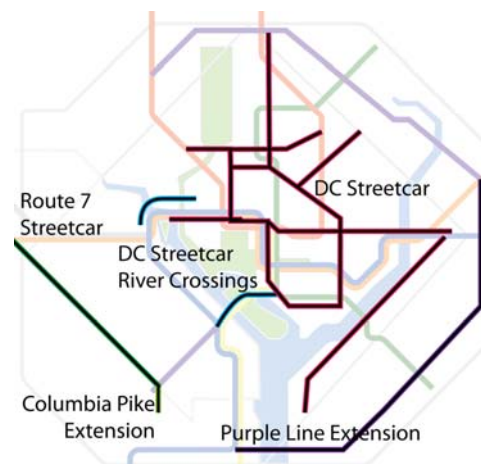


Strategy 4 – New Surface Transit Connections

- **Purpose – Develop new surface transit network to connect regional activity centers**

Includes Strategy 3 – Enhancing Existing Surface Transit, in addition to other surface transit services:

- LRT
- Streetcar
- Commuter Rail Services



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Strategy 5 – Rail Enhancements: RAIL INTER-LINE CONNECTIONS

- **Purpose – Target core throughput improvements at congested stations and lines**
 - 1) Orange/Silver-Blue inter-lining south of Rosslyn to allow a Silver Split running between the two airports
 - BENEFIT: Faster reach to Ballston, Tysons and airports within Virginia
 - 2) Blue-Yellow inter-lining north of Pentagon to allow I-66 corridor rail lines going through 14th Street Bridge
 - BENEFIT: Utilize throughput capacity on 14th Street Bridge
 - 3) Yellow-Green inter-lining south of L'Enfant Plaza to allow a Yellow Line split to Anacostia/Navy Yard

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Strategy 5 – Rail Enhancements: RAIL INTER-LINE CONNECTIONS

- 1) Connect Orange and Blue at Rosslyn
- 2) Connect Yellow and Blue at Pentagon
- 3) Connect Yellow and Green near L'Enfant Plaza



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Strategy 5 – Rail Enhancements: CORE STATION IMPROVEMENTS

- **Purpose – Target core throughput improvements at congested stations and lines**
 - Build pedestrian tunnels at Farragut North –Farragut West, Gallery Place-Metro Center
 - Expand Union Station Capacity with more vertical circulation
 - Expand transfer capacity at L'Enfant, Gallery Place, Metro Center and Rosslyn

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Strategy 6 – New Rail Lines Through the Core: EAST-WEST

- Alternative 1: Silver Line into Georgetown, ending at Union Station
 - BENEFIT: Relieve Rosslyn portal, shorten Silver Line, and restore Blue Line service (from Blue Line Split)
- Alternative 2: New Blue Line into Georgetown, continuing to Largo
 - BENEFIT: Separate Blue Line from Orange/Silver completely and support growth in new core markets
- Alternative 3: New Blue Line into Georgetown, through Potomac Park, Monumental Core, to Largo
 - BENEFIT: Separate Blue Line from Orange/Silver completely and support unmet demand in the core

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Strategy 6 – New East-West Rail Line

Alternative 1



Alternative 2



Alternative 3



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Strategy 6 – New Rail Lines Through the Core: NORTH-SOUTH

- Alternative: Separate Yellow Line from Green Line
 - BENEFIT: Relieve capacity constraint at L'Enfant Plaza, and provide service to emerging market to the east
 - BENEFIT: Potential East Potomac Park Station

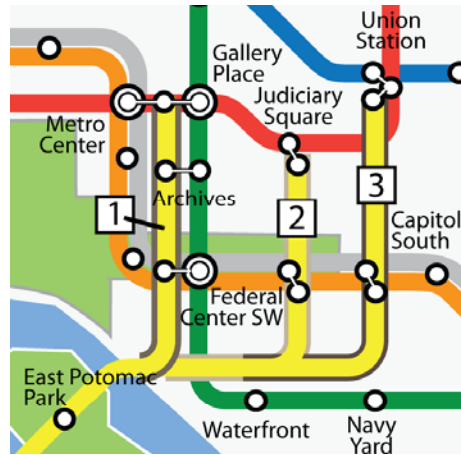
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Strategy 6 – New North-South Rail Line

Possible Alignments

- 1) 10th Street
- 2) 3rd Street
- 3) North Capitol Street



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Strategy 7 – Park-and-Ride Lots and Bus Shuttles

Metrorail Parking Capacity

Metrorail Segment	2008 Metrorail Parking Lot Utilization	2040 Metrorail Parking Lot Utilization*
Red Line - Shady Grove-Grosvenor	83%	94%
Red Line - Medical Center-Friendship Heights	N/A	N/A
Red Line - Tenleytown-Woodley Park	N/A	N/A
Red Line - Dupont Circle-Union Station	N/A	N/A
Red Line - New York Ave-Takoma	91%	113%
Red Line - Silver Spring-Glenmont	91%	123%
Green Line - Greenbelt-West Hyattsville	86%	89%
Green/Yellow Line - Georgia Avenue-U Street-Cordozo	N/A	N/A
Green/Yellow Line - Shaw-Howard U. - L'Enfant Plaza	N/A	N/A
Green Line - Waterfront-Congress Heights	89%	102%
Green Line - Southern Avenue-Branch Avenue	103%	126%
Yellow/Blue - Fran-Springfield, Van Dorn & Huntington	98%	121%
Yellow/Blue - Eisenhower Ave-Braddock Road	N/A	N/A
Yellow/Blue - National Airport-Arlington Cemetery	N/A	N/A
Orange Line - Vienna/Fairfax/GMU-West Falls Church	102%	87%
Orange Line - East Falls Church-Court House	117%	134%
Orange/Blue Line - Rosslyn-Capitol South	N/A	N/A
Orange/Blue Line - Eastern Market-Stadium Armory	N/A	N/A
Orange Line - Minnesota Avenue-New Carrollton	89%	53%
Blue Line - Benning Road-Largo Town Center	94%	133%
Silver Line - Tysons East-Route 772	N/A	40%
TOTALS	93%	89%
TOTALS WITHOUT SILVER LINE	93%	101%

Parking Lot Utilization

100% <

< 99%

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Strategy 7 – Park-and-Ride Lots and Bus Shuttles

- Station area circulators to reduce demand for parking for trips generated within 1/2 –mile of station
- Remote area Park-and-Ride connected with feeder service to rail stations



Strategy 8- Urban Design





Strategy 9 – Metrorail Extensions

- Greenbelt to BWI-Marshall Airport
- Vienna to Centreville/Rte. 28
- New Carrollton to Bowie
- Springfield to Dale City
- Branch Avenue to White Plains



NOTE: Extensions may impact core capacity

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Next Steps

- Refinement of Strategies based on TAG Feedback
- Strategy Modeling and Evaluation; Development of 4 more strategies
- TAG Meeting 4 – July 1, 2010 (Tentative)
- Strategy Modeling & Evaluation; Development of Scenarios
- TAG Meeting 5 – September 16, 2010
- Evaluation of Scenarios
- TAG Meeting 6 – December 2, 2010

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Thank You



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