



Washington Metropolitan Area Transit Authority

Regional Transit System Plan

Presentation to the
Access for All Advisory Committee
April 28, 2011



Regional Transit System Plan

Regional Transit System Plan (RTSP)

Project Objective

- **Develop a 30+ year vision for a sustainable, integrated, multimodal, regional transit network comprised of:**
 - Local Bus and Circulators
 - Express Bus
 - Bus Rapid Transit
 - Light Rail / Streetcar
 - Metrorail
 - Commuter Rail



2



Regional Transit System Plan

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


3

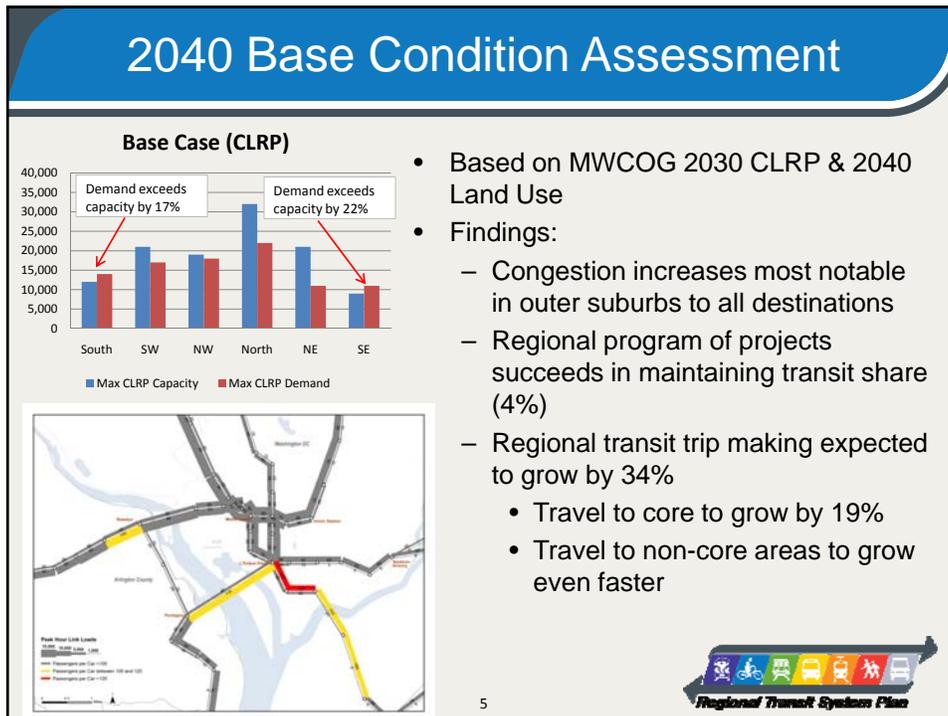

Regional Growth Trends

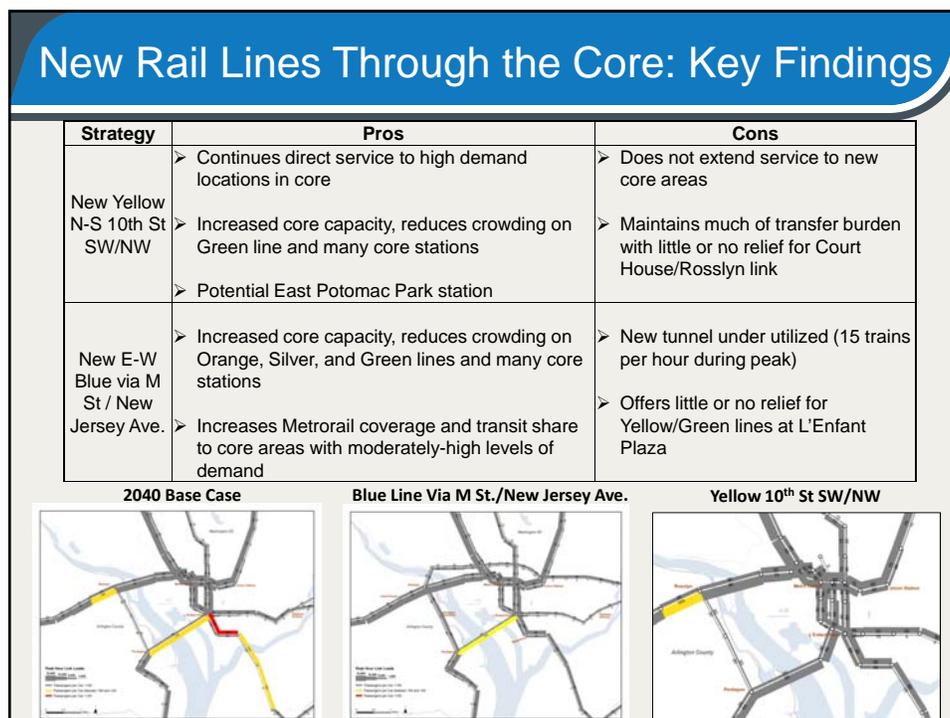
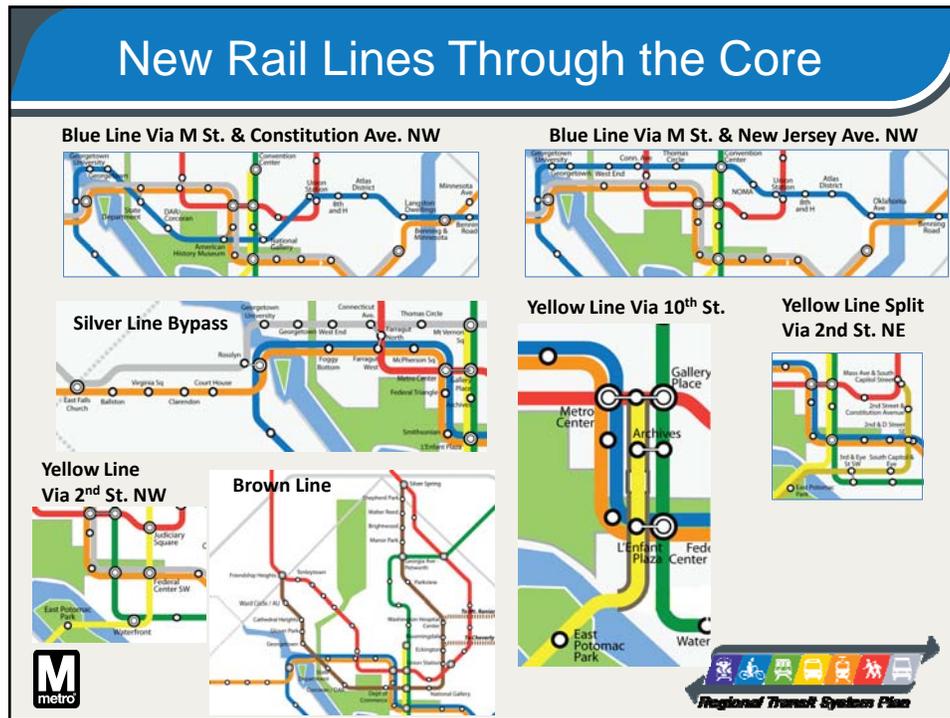
- 2010 to 2040 regional growth:
 - 31% population growth
 - 35% household growth
 - 39% employment growth
- Different growth rates across region have implications for transportation
 - Traditional commute to core growing at modest rate - direct impact on core capacity issues
 - Suburban-to-suburban trips represent a key growth market

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

| 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% |


4

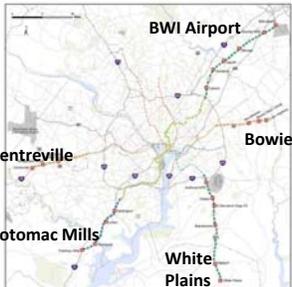





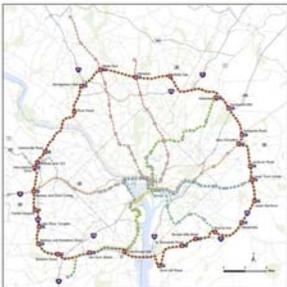
Rail Extensions & New Connections

- Metrorail extensions to new markets/activity centers

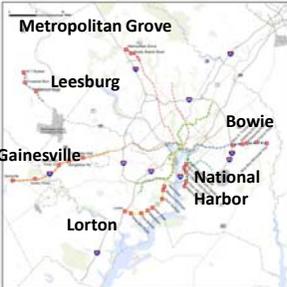
Extension A



Beltway Line



Extension B





9



Rail Extensions: Key Findings

| Strategy | Pros | Cons |
|------------------------|--|---|
| Metro Extensions Run A | <ul style="list-style-type: none"> ➢ Metro Extensions to outer suburbs results in 50,000 new transit trips and 73,000 new Metrorail boardings ➢ Addition of new Metrorail parking at new stations results in parking capacity relief at many existing Metrorail park-and-ride lots | <ul style="list-style-type: none"> ➢ Severe impact on Metrorail core capacity: <ul style="list-style-type: none"> ○ Peak hour loads as high as 155 passengers per car on Green Line ○ Peak hour loads on Blue Line to Rosslyn as high as 125 passengers per car |
| Metro Extensions Run B | <ul style="list-style-type: none"> ➢ Metro Extensions to outer suburbs results in 36,000 new transit trips and 44,000 new Metrorail boardings ➢ Addition of new Metrorail parking at new stations results in parking capacity relief at many existing Metrorail park-and-ride lots | <ul style="list-style-type: none"> ➢ Severe impact on Metrorail core capacity: <ul style="list-style-type: none"> ○ Peak hour loads as high as 130 passengers per car on Green Line ○ Higher peak loads on Orange Line between Clarendon and Rosslyn |

2040 Base Case



Extension A



Extension B





10

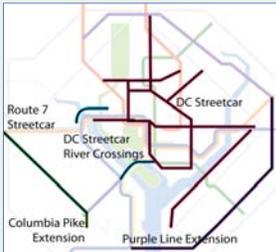


Surface Transit Strategies

- Enhanced surface transit options
 - Priority Corridor Network
- New surface transit connections
 - LRT, Streetcar, Commuter Rail Services








11


Surface Transit: Key Findings

- Enhanced PCN
 - Improves transit coverage and access to regional activity centers resulting in improved transit share and access to jobs
- Enhanced Commuter Rail
 - Modest demand for new reverse peak/outbound service
- Streetcar Network
 - Limited relief to crowding on Green line, modest relief to core capacity on other lines
- Light Rail Expansions
 - Relieves congestion on Green line, but worsens peak crowding on Yellow line

Summary of Weekday Transit Boardings by Mode: 2040

| | 2040 Base Case | PCN | PCN+ | Streetcar Network | LRT Expansion |
|------------------------------------|----------------|-----------|-----------|-------------------|---------------|
| Metrorail (Fare gate to fare gate) | 1,054,000 | 1,039,000 | 1,027,000 | 1,029,000 | 1,058,000 |
| Commuter Rail | 51,000 | 49,000 | 60,000 | 51,000 | 52,000 |
| Light Rail | 37,000 | 27,000 | 28,000 | 37,000 | 93,000 |
| Streetcar/BRT/Rapid Bus | 29,000 | 244,000 | 345,000 | 215,000 | 19,000 |
| Metrobus | 554,000 | 450,000 | 414,000 | 449,000 | 544,000 |
| Other Bus | 193,000 | 181,000 | 159,000 | 190,000 | 187,000 |
| Total Transit Boardings | 1,918,000 | 1,990,000 | 2,033,000 | 1,971,000 | 1,953,000 |
| % Growth vs. 2040 Max CLRP | | 3.8% | 6.0% | 2.8% | 1.8% |



Improved Walk Access Strategy

Examples of Good and Poor Walkability

Good Poor

Walkability Improvements

- Improving pedestrian networks near stations and promoting new development with small walkable blocks could significantly expand system access and ridership

PEF – Base Case

PEF – Improved Walkability

13

Improved Walk Access Strategy: Key Findings

Summary of Weekday Transit Linked Trips:2040

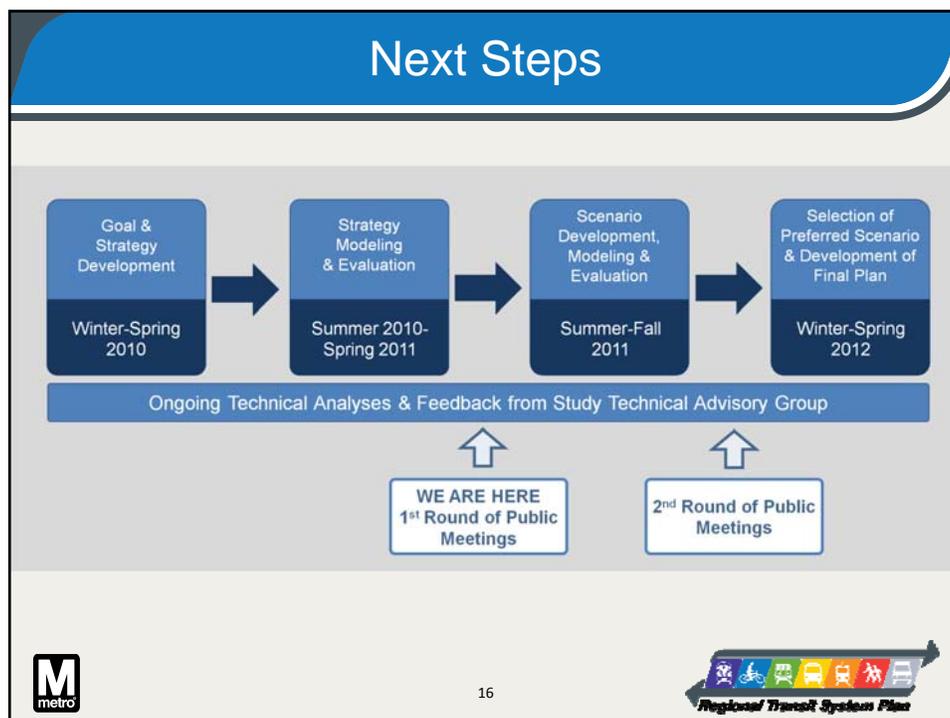
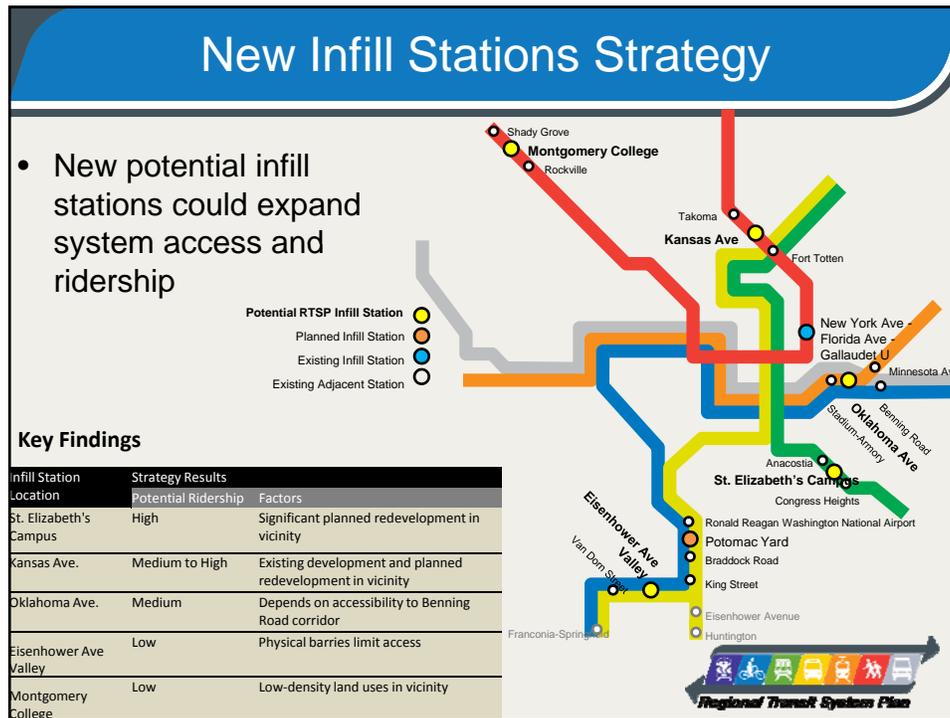
| | | 2040 Base (CLRP) | Improved Walkability |
|---------------------|------------------------------------|------------------|----------------------|
| Attraction Location | Core (DC/An CBD) | 754,000 | 766,000 |
| | Central Jurisdictions Outside Core | 322,000 | 361,000 |
| | Inner Suburbs | 277,000 | 360,000 |
| | Outer Suburbs | 4,000 | 4,000 |
| | Region-wide | 1,357,000 | 1,491,000 |
| | Percent growth vs. 2040 Max CLRP | ----- | 9.9% |

| Strategy | Pros | Cons |
|----------------------|--|--|
| Improved Walkability | <ul style="list-style-type: none"> ➢ Total transit trips increase by 9.9% vs. Max CLRP ➢ Reduces parking overflow by reducing short drive access to rail trips ➢ Increased utilization of reverse peak direction Metrorail capacity | <ul style="list-style-type: none"> ➢ Higher peak loads on Metrorail due to improved transit access/egress |

2040 Base Case

Improved Walkability

14



Public Engagement Strategy

- **How will we engage the public?**
 - Jurisdictional Briefings
 - Metro's staff briefs jurisdictional representative upon request by TAG members
 - Metro-hosted Workshops
 - Two rounds of two workshops in each jurisdiction
 - Working with TAG members and CIVR to determine locations
 - Metro will provide media notification & inform local representatives
- **What will be discussed at the Workshops?**
 - RTSP Purpose/People/Process/Product
 - Participant Break-out & Planning Team Exercises
 - Planning Team Presentations
 - RTSP Next Steps
 - Open House/Project Board Review






17



How You Can Stay Informed

<http://planitmetro.com>



THANK YOU!

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18

