



Washington Metropolitan Area Transit Authority

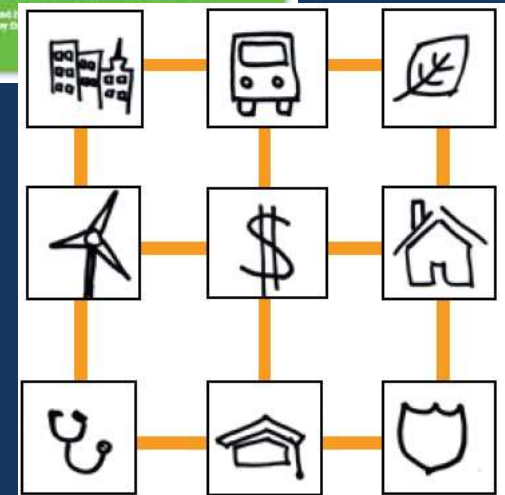
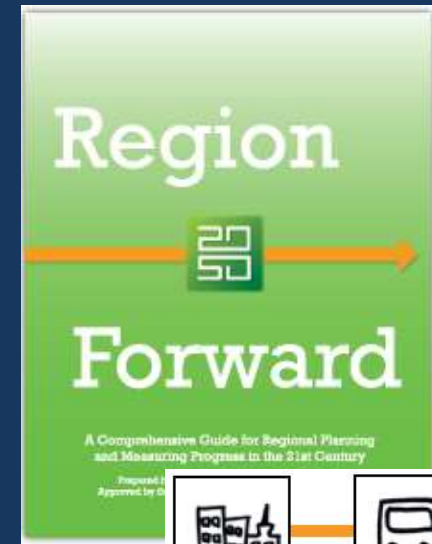
Strategic Issues for Regional Transit System Plan Development:

Connecting Homes and Jobs with Transit

Rail~volution Conference
October 19, 2011

Regional Transportation Direction

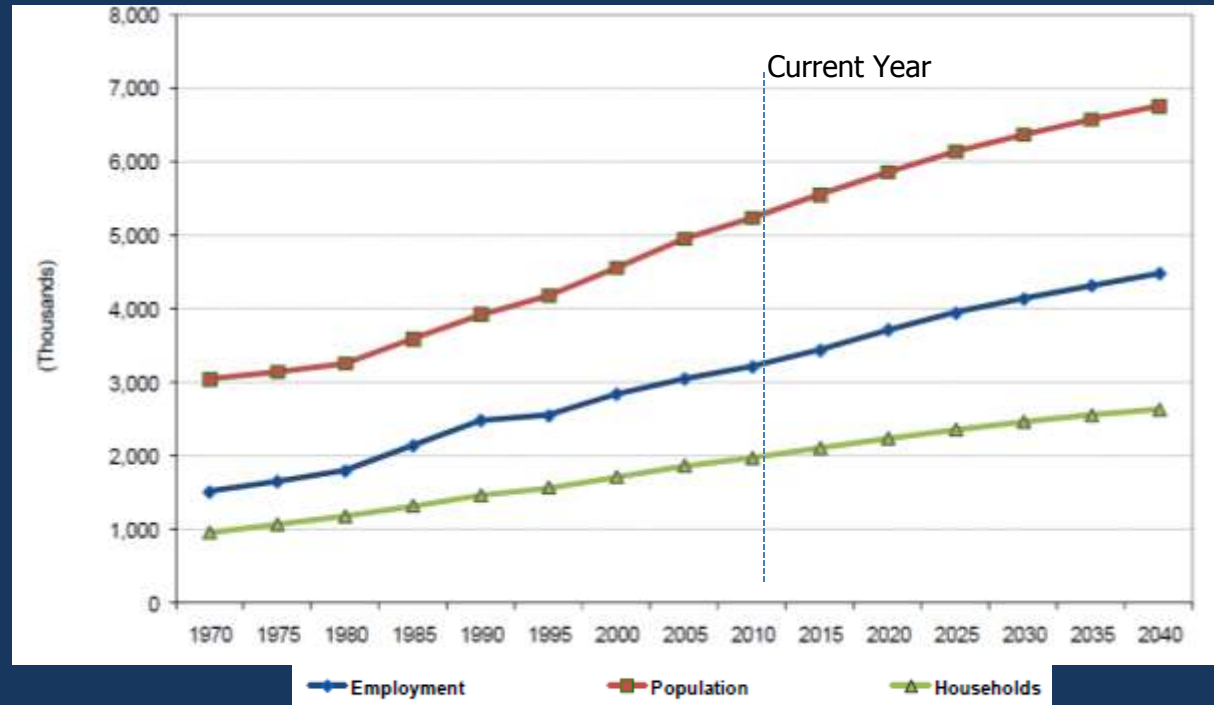
- TPB's Transportation Vision (1998)
 - Transportation focused goals to improve transport, increase efficiency, and connect areas of activity
- COG's Region Forward (2010)
 - Regional sustainability, accessibility, and livability goals, targets, and indicators focused on transit and activity centers
- Achieving the region's goals requires to transit to:
 - Increase transit mode share
 - Provide access to regional activity centers





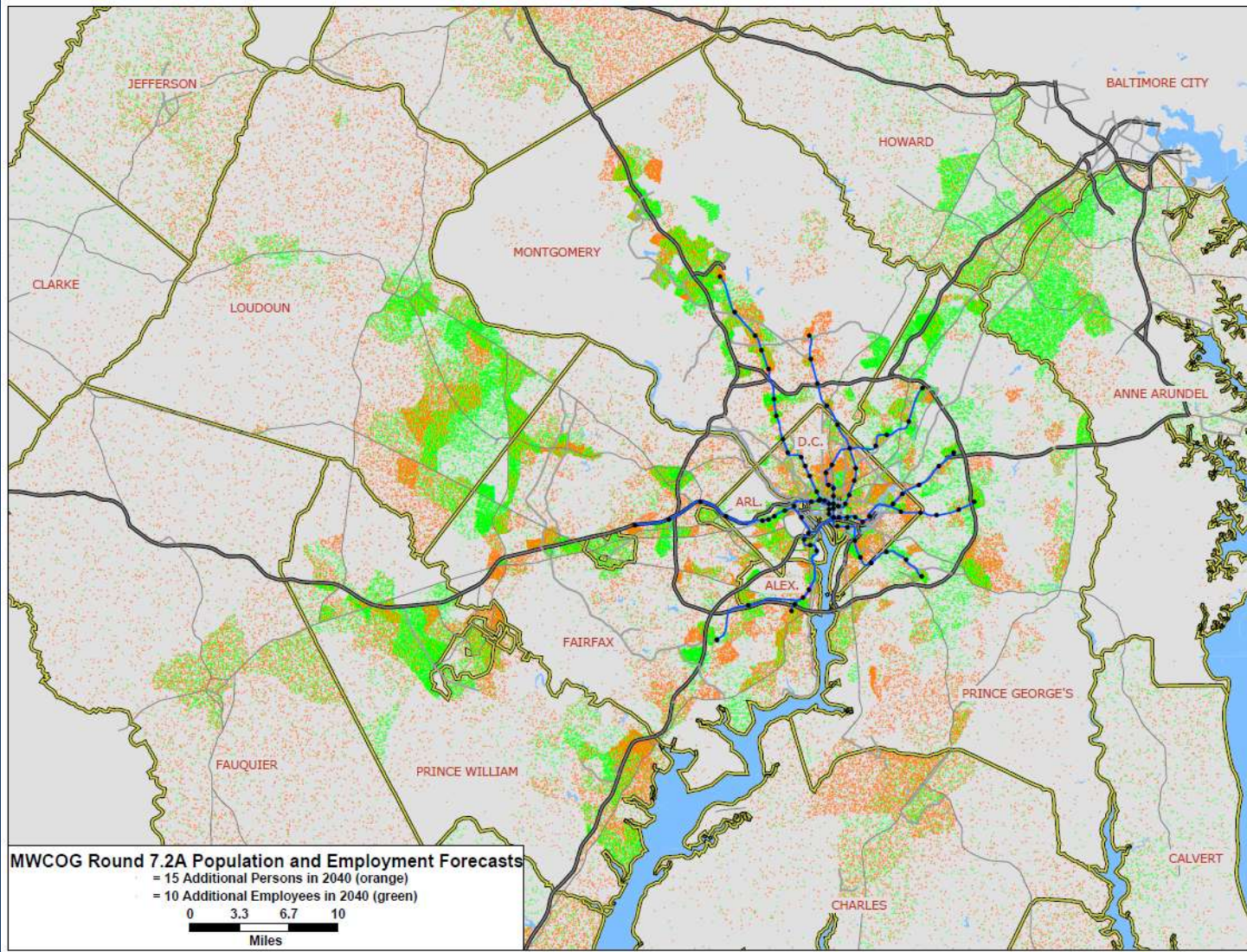
Regional Development: Population and Employment Projections

- 2010 - 2040
 - 29% population (1.5 million people)
 - 34% household (0.7 million households)
 - 39% employment (1.3 million jobs)





Population and Employment Projections



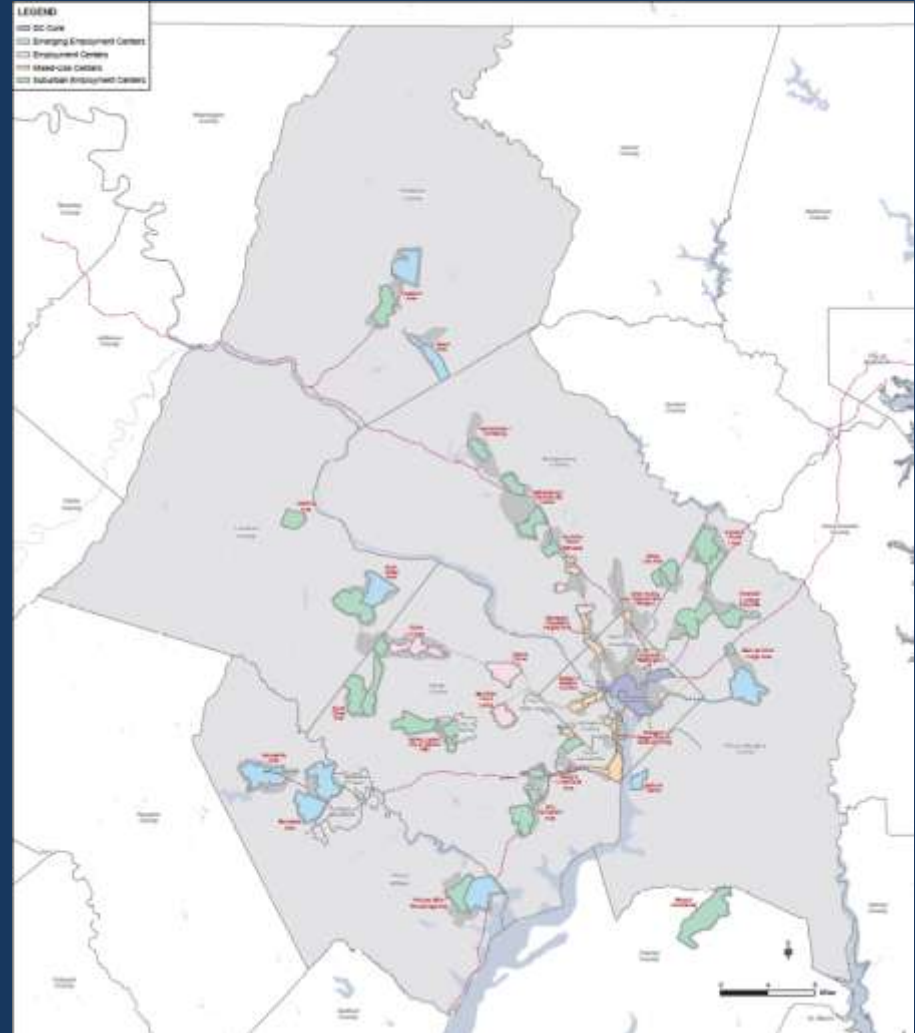
Population growth throughout outer suburbs

Employment concentrated in Ashburn, Manassas, I-95 N and S



Regional Development: 58 Activity Centers/28 Activity Clusters

- Focus for land-use and transport planning
- 90% of transit work trips in region to jobs in activity centers (2010)
- Capture 58% of new jobs between 2005-30
- Capture 25% of new households between 2005-30





Regional Development: Growth and Location Projections

- Significant population and employment growth in inner/outer suburbs
- Traditional travel to core growing modestly (12%)
- Suburb-to-suburb growing tremendously (45%)

Area	2010-2040 Population Growth (% of total)	2010-2040 Employment Growth (% of total)
Core (DC/Arl CBD)	2%	5%
Central Jurisdictions Outside Core	10%	14%
Inner Suburbs (Mont, Ffx, PG)	29%	38%
Outer Suburbs (Outside WMATA Compact Jurisdictions)	59%	43%

Commuting Market	2008-2040 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%



Regional Travel Projections (2011-40)

- 22% growth in VMT
- 4% reduction in VMT per capita
- 43% growth in transit used for work trips
- 27% growth in vehicle trips
- 38% growth in lane miles of congestion (AM peak)

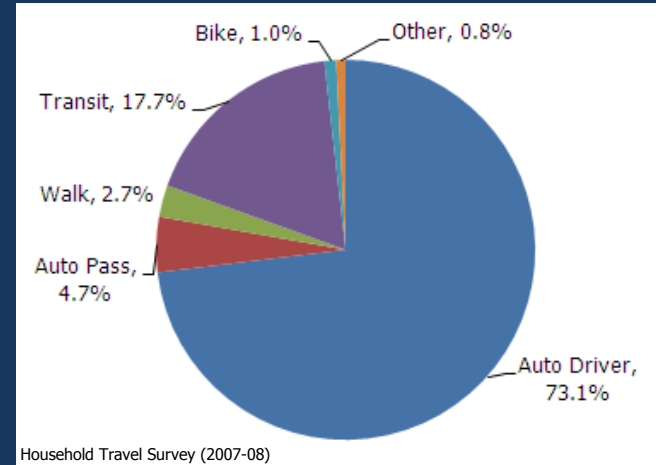




Central Core Transit Market Share

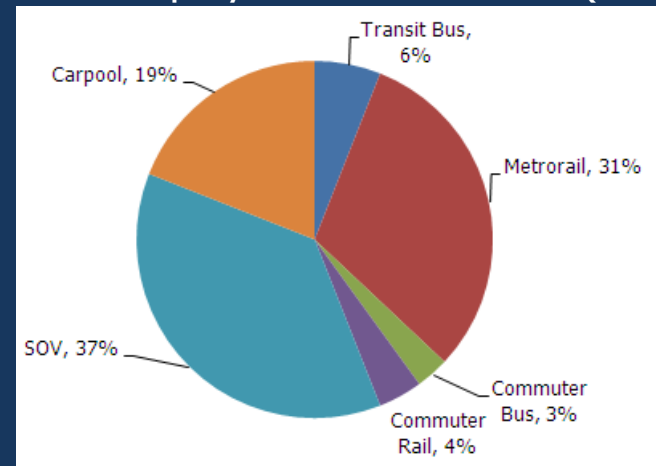
- 18% of regional work trips by transit
- 42% of core work trips by transit (2009)
- 37% of core work trips by WMATA (2009)
- National benchmarks:
 - San Francisco: 32% (2009)
 - Boston: 35% (2009)
 - Chicago: 27% (2009)

Regional Commuting Mode Share (2007-08)



Household Travel Survey (2007-08)

Central Employment Core Count (2009)

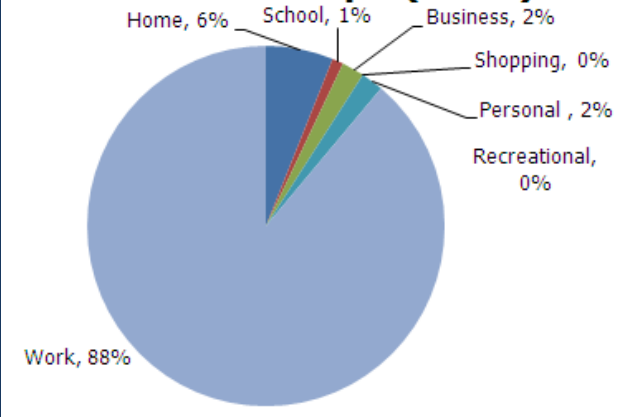




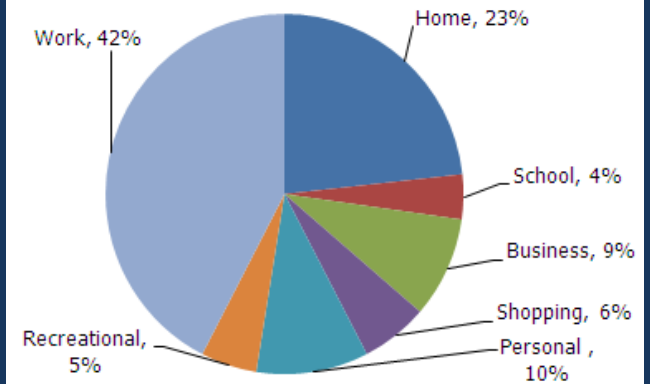
Role of Metrorail

- Built to bring commuters to the core
- Changing uses between 2002-07
 - PM off-peak use grew 22%
 - Non-work trips grew 20%
 - Growth of walk (18%) and bike (60%) station access
 - 20% of 2007 riders do not own a car

AM Peak Trips (2007)



Midday Trips (2007)





Regional Development: What if There Were No Transit?

- 1 million+ more auto trips
- 1,000 lane miles of highway to accommodate transit trips → 1,450 acres or a second Beltway
- Some Potomac crossings require 2-3 additional lanes per direction



Issue: Constrained Core Capacity

- Challenge
 - Short-term: Funding for 8-car trains, power, car storage
 - Long-term: Core peak capacity constrained even with 8-car trains
 - Long-term: Station capacity constrained at major transfer stations

- Opportunities
 - Enhance bus priority corridors
 - Inter-lining
 - New rail lines through the core



2040 Peak Hour Passenger Loads
100% 8-Car Trains



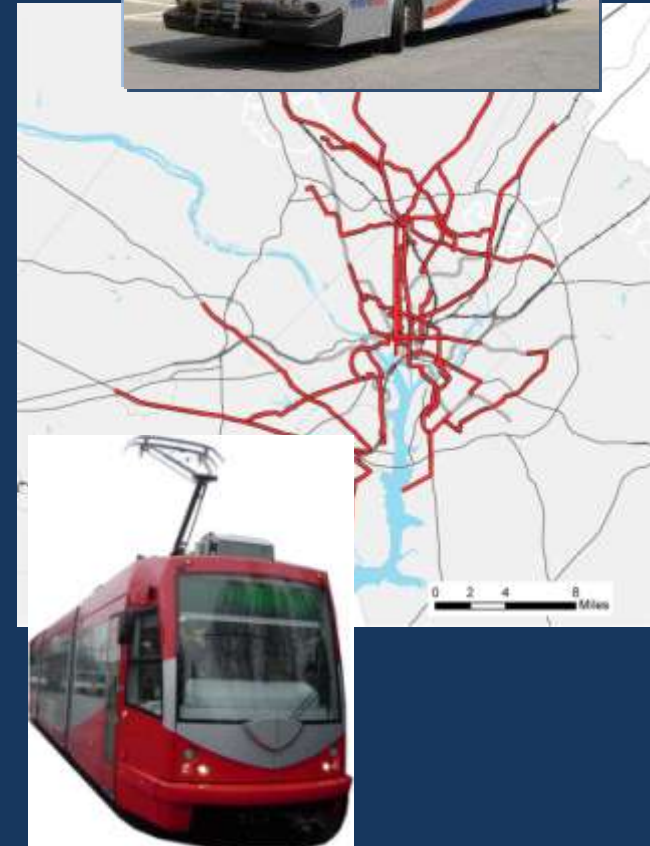
Issue: Last Mile(s) Station Access

- Issues
 - High cost of parking (40,000 spaces = \$1B)
 - 45% of Park & Ride users live within 3 miles of station
- Opportunities
 - In-fill stations and pedestrian connections
 - Improve pedestrian/bike networks
 - Mixed use joint development
 - Off-site Park & Ride lots with shuttles to station



Issue: Inefficient Surface Transit

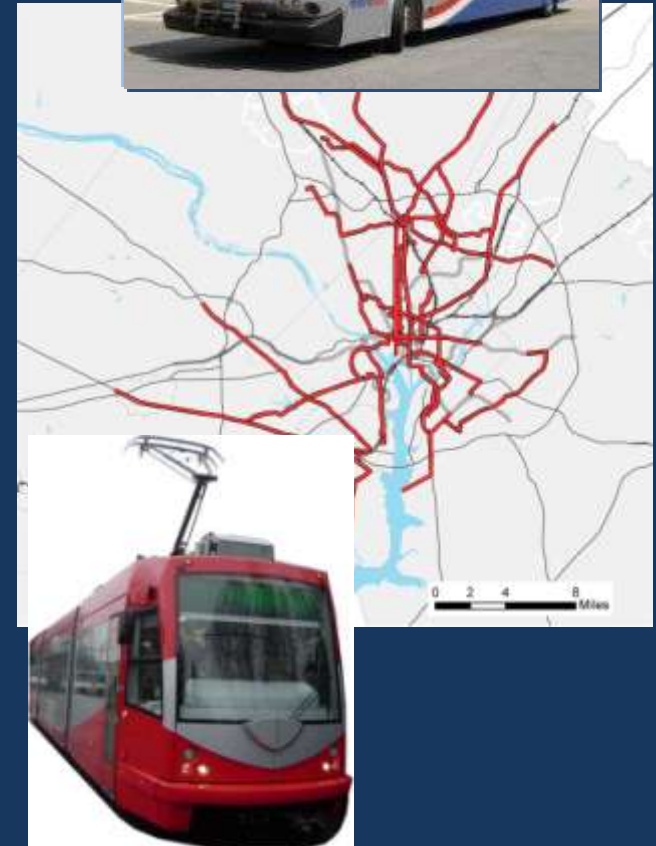
- Issues
 - Traffic congestion threatens bus network efficiency and reliability
- Opportunities
 - Running way improvements, high-frequency service, rapid bus, BRT
 - Value pricing/HOT lanes to support transit priority and funding





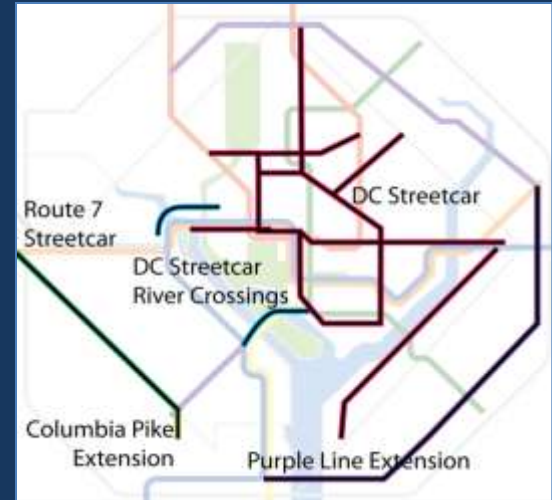
Issue: Future of the Region's Surface Transit System

- Issues
 - Local vs. regional surface transit provision
 - Streetcar/LRT projects led by jurisdictions
- Opportunities
 - Surface transit integration
 - Regional priority corridors
 - Fare integration and a regional fare system



Issue: Serving Activity Centers

- Issues
 - Fastest growing activity centers not served by Metrorail
 - Connections needed between suburban activity centers
- Opportunities
 - New surface transit connections
 - Reverse commute
 - Metrorail extensions to new markets





Issue: Rising Operating and Maintenance Costs

- Issues

- Annually O&M costs projected to rise at a faster rate than ridership
- Regional ability to afford current/future Metro service



- Opportunities

- Transit-oriented development supporting new markets
- Link transit funding to economic value created by transit service and access
- Operational efficiencies achieved through surface transit priority





Issue: Unfunded Capital Needs

- Issues
 - Lack of dedicated funding stream
 - Unfunded capital needs, which caps system capacity
- Opportunities
 - Value pricing/HOT lanes to support transit priority and funding
 - Value capture of surrounding development

