ITEM 9- Action
February 18, 2009

Approval of Scope of Work for
Air Quality Conformity Assessment for the 2009 Financially Constrained Long Range Transportation Plan (CLRP) and FY 2010-2015 Transportation Improvement Program (TIP)

Staff Recommendation:

- receive briefing on the comments received and recommended responses on the enclosed scope of work for the air quality conformity assessment for the 2009 CLRP and FY 2010-2015 TIP.
- approve the scope of work for the air quality conformity assessment

Issues: None

Background: At the January 28 meeting, the Board was briefed on the draft scope of work for the air quality conformity assessment for the 2009 CLRP and FY 2010-2015 TIP, which was released for a public comment period that ended February 14.

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

MEMORANDUM

February 11, 2009

To: Transportation Planning Board

From: Jane A. Posey

Subject: Approval of the Scope of Work for the Air Quality Conformity Assessment of the 2009 Constrained Long Range Plan (CLRP) and the FY2010 – 2015 Transportation Improvement Program (TIP)

Introduction

At the January 28, 2009 TPB meeting, staff briefed the Board on a draft scope of work for the air quality conformity assessment for the 2009 CLRP and the FY2010 – 2015 TIP, which had been released for public comment at the Citizens Advisory Committee (CAC) meeting on January 15th. This memo transmits comments received to date on the draft scope of work, recommended responses to comments, and the draft scope of work, as revised to reflect the responses to comments.

Scope of Work

Consistent with the CLRP and TIP *Call for Projects* document approved by the TPB at its October 15, 2008 meeting, this scope reflects the necessary tasks and public comment / interagency consultation requirements to assess conformity, to be performed on a schedule leading to adoption of the plan and program by the TPB in July 2009.

These work efforts address conformity requirements associated with: the 1-hour and 8-hour ozone standards (volatile organic compounds (VOC) and nitrogen oxides (NOx) as ozone precursor pollutants); fine particles (PM2.5) standards (directly emitted particles and precursor NOx); and maintenance of the wintertime carbon monoxide (CO) standard.

Comments / Responses

Comment: The attached (2) comments letters from the Virginia and Maryland Departments of Transportation contain recommendations to change the HOV assumptions in the travel demand modeling. Currently all HOV facilities are converted to HOV3+ in the 2010, and beyond, forecast years. The recommended change is to defer the conversion of HOV 3+ until 2020.

Response: The recommended changes will be made, and are reflected on the *Policy and Technical Input Assumptions* section of the scope of work.

Comment: The attached comment letter from the Washington Metropolitan Area Transit Authority contains a recommendation to change the transit capacity constraint assumptions in the travel demand modeling. Currently transit trips to and through the center of the region (Arlington core, including the Pentagon, and the District core) are constrained at 2010 levels for future forecast years. The recommendation is to constrain trips at a 2020 level for later forecast years.

Response: The recommended change will be made, and is reflected on the *Policy and Technical Input Assumptions* section of the scope of work.

Next Steps

At the February 18, 2009 TPB meeting staff will brief the Board on any additional comments received and recommended responses, and the Board will be asked to approve the scope of work.

Attachments (4):

Scope of Work
January 26, 2009 VDOT letter
February 9, 2009 MDOT letter
February 6, 2009 WMATA letter

AIR QUALITY CONFORMITY ASSESSMENT: 2009 CONSTRAINED LONG RANGE PLAN AMENDMENTS AND FY2010-2015 TRANSPORTATION IMPROVEMENT PROGRAM

DRAFT SCOPE OF WORK

I. INTRODUCTION

Projects solicited for the 2009 Constrained Long Range Plan (CLRP) and the FY2010-2015 Transportation Improvement Program (TIP) are scheduled to be finalized at the February 18, 2009 TPB meeting. This scope of work reflects the tasks and schedule designed for the air quality conformity assessment leading to adoption of the plan and program on July 15, 2009. This work effort addresses requirements associated with attainment of the 8-hour ozone standard (volatile organic compounds (VOC) and nitrogen oxides (NOx) as ozone precursor pollutants), and fine particles ($PM_{2.5}$) standards (direct particles and precursor NOx), as well as maintenance of the wintertime carbon monoxide (CO) standard.

The plan and program must meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently on January 24, 2008, and (3) as detailed in periodic FHWA / FTA and EPA guidance. These regulations specify both technical criteria and consultation procedures to follow in performing the assessment.

This scope of work provides a context in which to perform the conformity analyses and presents an outline of the work tasks required to address all regulations currently applicable.

II. REQUIREMENTS AND APPROACH

A. **Criteria** (See Exhibit 1)

As described in the 1990 Clean Air Act Amendments, conformity is demonstrated if transportation plans and programs:

1. Are consistent with most recent estimates of mobile source emissions,

2. Provide expeditious implementation of TCMs, and

3. Contribute to annual emissions reductions.

Assessment criteria for ozone, CO, and $PM_{2.5}$ are discussed below.

Ozone season pollutants will be assessed by comparing the "action" scenarios to both the existing 1-hour VOC and NOx emissions budgets, as well as "new" 8-hour budgets contained in the State Implementation Plan (SIP) submitted by the Metropolitan Washington Air Quality Committee (MWAQC) to EPA in June 2007.

The region is in maintenance for mobile source wintertime CO and, as in prior conformity assessments, is required to show that pollutant levels do not exceed the approved budget.

$PM_{2.5}$ pollutants will be assessed both by comparing the "action" scenarios to a 2002 base and by comparing the pollutant levels to the budgets submitted by the MWAQC to EPA in April, 2008. $PM_{2.5}$ emissions will be inventoried for yearly totals (instead of on a daily basis as performed for Ozone and CO).

B. Approach (See Table 1 – Summary of Technical Approach)

The analytical approach is similar to that applied and documented in the air quality conformity assessment of the 2008 CLRP and the FY2009-2014 TIP. In addition to the highlighted elements below, explicit inputs include: a summary list of major policy and technical input assumptions, shown as Attachment A; and all transportation network elements which will be finalized at the February 18, 2009 TPB meeting.

TABLE 1 – Summary of Technical Approach

	Ozone	Wintertime CO	$PM_{2.5}$
Pollutant:	VOC, NOx	CO	Direct particles, Precursor NOx
Emissions Assessment Criteria:	Existing 1-hour ozone budgets & 8-hour ozone budgets	Approved wintertime CO emissions budget	Reductions from base 2002 inventory & comparison to budgets
Emissions Analysis Time-frame:	Daily	Daily	Annual
Geography:	1-hour ozone non-attainment area 8-hour ozone non-attainment area (1-hr. area less Stafford)	DC, Arl., Alex., Mont., Pr. Geo.	1-hr. area less Stafford and Calvert counties
Network Inputs:	Regionally significant projects		
Land Activity:	Round 7.2		
Modeled Area:	Expanded Cordon (2191 zone)		
Travel Demand Model:	Version 2.2		
Mobile Model:	MOBILE6.2 emissions factors, consistent with the procedures utilized to establish the VOC and NOx mobile source emissions budgets	MOBILE6.2 Consistent with procedures used to establish the budget	MOBILE6.2 'Seasonal' approach, consistent with procedures used to establish the budget
Emissions Factor Refinements:	Use of 2008 vehicle registration data for all jurisdictions		

III. CONSULTATION

1. Execute TPB consultation procedures (as outlined in the consultation procedures report adopted by the TPB on May 20, 1998).

2. Participate in meetings of MWAQC, its Technical Advisory Committee and its Conformity Subcommittee to discuss the scope of work activities, TERM development process, and other elements as needed; discuss at TPB meetings or forums, as needed, the following milestones:

   - CLRP / TIP Call for Projects
   - Scope of work
   - TERM proposals
   - Project submissions: documentation and comments
   - Analysis of TERMs, list of mitigation measures
   - Conformity assessment: documentation and comments
   - Process: comments and responses

IV. WORK TASKS

1. Receive project inputs from programming agencies and organize into conformity documentation listings (endorsement of financially constrained project submissions scheduled for February 18, 2009)

   - Project type, limits, NEPA approval, etc.
   - Phasing with respect to forecast years
   - Transit operating parameters, e.g. schedules, service, fares
   - Action scenarios

2. Utilize Round 7.2 Cooperative Forecasts

   - Households by auto ownership, population and employment
   - Zonal data files

3. Prepare forecast year highway, HOV, and transit networks

   - Update GIS highway database
   - Filter database to create 2010, 2020, and 2030 highway networks
   - Rebuild networks for modeling
   - Update / edit transit files
   - Update fares, as necessary

4. Prepare 2002 travel, emissions factors and emissions estimates, if necessary (i.e., if land-use inputs change)

   - Execute travel demand modeling
   - Develop Mobile6.2 emission factors
   - Calculate emissions (daily for ozone season VOC and NOx; yearly for $PM_{2.5}$ direct particles and precursor NOx)

5. Prepare 2010 travel and emissions estimates

   - Execute travel demand modeling
   - Develop Mobile6.2 emission factors
   - Calculate emissions (daily for ozone season VOC and NOx for ozone standard requirements; daily for winter CO; yearly for $PM_{2.5}$ direct particles and precursor NOx)

6. Prepare 2020 travel and emissions estimates

   - Tasks as in year 2010 analysis
   - ~~Apply "transit constraint" using 2020 levels (unless additional funding is identified to enable removal of peak period capacity constraints in the core part of the Metrorail system)~~

7. Prepare 2030 travel and emissions estimates

   - Tasks as in year 2020 analysis
   - Apply "transit constraint" using 2020 levels

8. Identify extent to which TIP and plan provide for expeditious implementation of TCMs contained in ozone state implementation plans and emissions mitigation requirements of previous TIP and CLRP commitments (TERMs)

   - In the CLRP / TIP Call for Projects document staff identified previous TCM and TERM commitments and requested a status report from the implementing agencies
   - Staff will review these reports as they are received and update the TERM tracking sheet that was included in the November 19, 2008 air quality conformity report
   - The status reports and the updated TERM tracking sheet will be included in the air quality conformity report.

9. Coordinate / analyze emissions reductions associated with CMAQ and similar projects

   - Obtain project-specific emissions reductions from programming agencies
   - Summarize daily ozone season VOC and NOx reductions for each milestone year
   - Summarize annual direct $PM_{2.5}$ and precursor NOx $PM_{2.5}$ pollutant reductions; explore additional TERMS
   - With oversight from the Travel Management Subcommittee, as needed, propose and analyze additional measures for their emissions benefits, costs, cost effectiveness, and other evaluation criteria

10. Analyze results of above technical analysis

    - Reductions from 1990 (ozone season VOC and NOx and winter CO) and 2002 base (ozone season VOC and NOx, winter CO, and $PM_{2.5}$)
    - 1-hour and 8-hour ozone season VOC and NOx budgets, direct $PM_{2.5}$ and precursor NOx budgets, and winter CO emissions budgets
    - With oversight from the Travel Management Subcommittee, the Technical Committee and the TPB, identify and recommend additional measures should the plan or program fail any test and incorporate measures into the plan

11. Assess conformity and document results in a report

    - Document methods
    - Draft conformity report
    - Forward to technical committees, policy committees
    - Make available for public and interagency consultation
    - Receive comments
    - Address comments and present to TPB for action
    - Finalize report and forward to FHWA, FTA and EPA

V. SCHEDULE

The schedule for the execution of these work activities is shown in Exhibit 2. The time line shows completion of the analytical tasks, preparation of a draft report, public and interagency review, response to comments and action by the TPB on July 15, 2009.

Exhibit 1

Conformity Criteria

All Actions at all times:

Sec. 93.110	Latest planning assumptions.
Sec. 93.111	Latest emissions model.
Sec. 93.112	Consultation.

Transportation Plan:

Sec. 93.113(b)	TCMs.
Sec. 93.118 and/or Sec. 93.119	Emissions budget and /or Interim emissions.

TIP:

Sec. 93.113(c)	TCMs.
Sec. 93.118 and/or Sec. 93.119	Emissions budget and /or Interim emissions.

Project (From a Conforming Plan and TIP):

Sec. 93.114	Currently conforming plan and TIP.
Sec. 93.115	Project from a conforming plan and TIP.
Sec. 93.116	CO, PM_{10}, and $PM_{2.5}$ hot spots.
Sec. 93.117	PM_{10} and $PM_{2.5}$ control measures.

Project (Not From a Conforming Plan and TIP):

Sec. 93.113(d)	TCMs.
Sec. 93.114	Currently conforming plan and TIP.
Sec. 93.116	CO, PM_{10}, and $PM_{2.5}$ hot spots.
Sec. 93.117	PM_{10} and $PM_{2.5}$ control measures.
Sec. 93.118 and/or Sec. 93.119	Emissions budget and/or Interim emissions

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Sec. 93.110 Criteria and procedures: Latest planning assumptions.

The conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination.

Sec. 93.111 Criteria and procedures: Latest emissions model.

The conformity determination must be based on the latest emission estimation model available.

Sec. 93.112 Criteria and procedures: Consultation.

Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.

Sec. 93.113 Criteria and procedures: Timely implementation of TCMs.

The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.

Sec. 93.114 Criteria and procedures: Currently conforming transportation plan and TIP.

There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.

Sec. 93.115 Criteria and procedures: Projects from a plan and TIP.

The project must come from a conforming plan and program.

Sec. 93.116 Criteria and procedures: Localized CO, PM_{10}, and $PM_{2.5}$ violations (hot spots).

The FHWA/FTA project must not cause or contribute to any new localized CO, PM_{10}, and/or $PM_{2.5}$ violations or increase the frequency or severity of any existing CO, PM_{10}, and /or $PM_{2.5}$ violations in CO, PM_{10}, and $PM_{2.5}$ nonattainment and maintenance areas.

Sec. 93.117 Criteria and procedures: Compliance with PM_{10} and $PM_{2.5}$ control measures.

The FHWA/FTA project must comply with PM_{10} and $PM_{2.5}$ control measures in the applicable implementation plan.

Sec. 93.118 Criteria and procedures: Motor vehicle emissions budget

The transportation plan, TIP, and projects must be consistent with the motor vehicle emissions budget(s).

Sec. 93.119 Criteria and procedures: Interim emissions in areas without motor vehicle budgets

The FHWA/FTA project must satisfy the interim emissions test(s).

NOTE: See EPA's conformity regulations for the full text associated with each section's requirements.

Exhibit 2

Schedule for the 2009 Financially Constrained Long-Range Transportation Plan (CLRP) and FY 2010–2015 Transportation Improvement Program (TIP)

September 11, 2008	TPB Citizen Advisory Committee Hosts a Public Meeting on the TIP and CLRP Development Process
*September 17, 2008	TPB is Briefed on Draft Call for Projects
*October 15, 2008	TPB Releases Final Call for Projects-- Transportation Agencies Begin Submitting Project Information through On-Line Database
December 5, 2008	**DEADLINE:** Transportation Agencies Complete Submission of Draft On-Line Project Inputs. Technical Committee Reviews Draft Plan and TIP Project Submissions and Draft Scope of Work for the Air Quality Conformity Assessment
January 9, 2009	Tech Committee Reviews Plan and TIP Project Submissions and Draft Scope of Work
January 15, 2009	Plan and TIP Project Submissions and Draft Scope of Work Released for Public Comment
*January 28, 2009	TPB is Briefed on Project Submissions and Draft Scope of Work
February 14, 2009	Public Comment Period Ends
*February 18, 2009	TPB Reviews Public Comments and is asked to Approve Project Submissions and Draft Scope of Work
April 24, 2009	DEADLINE: Transportation Agencies Complete TIP Project Submissions and Finalize Congestion Management Documentation Forms (where needed) and CLRP Forms[1]. (Submissions must not impact conformity inputs; note that the deadline for conformity inputs was December 5, 2008).
*May 20, 2009	TPB Receives Status Report on the Draft Plan, TIP and Conformity Assessment
June 11, 2009	Draft Plan, TIP and Conformity Assessment Released for Public Comment at Citizens Advisory Committee (CAC) and the TPB Citizen Advisory Committee Hosts a Public Meeting on the Draft TIP.
*June 17, 2009	TPB Briefed on the Draft Plan, TIP and Conformity Assessment
July 11, 2009	Public Comment Period Ends
*July 15, 2009	TPB Reviews Public Comments and Responses to Comments, and is Presented the Draft Plan, TIP and Conformity Assessment for Adoption

*TPB Meeting

[1] By this date, the CLRP forms must include information on the Planning Factors, Environmental Mitigation, Congestion Management Information, and Intelligent Transportation Systems; separate Congestion Management Documentation Forms (where needed) must also be finalized.

WORK SCOPE ATTACHMENT A

POLICY AND TECHNICAL INPUT ASSUMPTIONS
AIR QUALITY CONFORMITY ANALYSIS OF 2009 CLRP AND FY2010-2015 TIP

1. Land Activity

- Round 7.2 Cooperative Forecasts

2. Policy and Project Inputs

- Highway, HOV and transit projects and operating parameters
- Financially constrained project submissions to be advanced by the TPB on 2/18/2009

3. Travel Demand Modeling Methods

- Version 2.2 Travel Model (as refined in preparation of 2008 CLRP / FY2009 TIP)
- All HOV facilities at HOV-3 in ~~2010~~ 2020
- Transit "capacity constraint" procedures (~~2010~~ 2020 constrains later years)

4. Emissions Factors

- Develop MOBILE6.2 emissions factors using 2008 vehicle registration data
- Seasonal $PM_{2.5}$ factors for total directly emitted particles and precursor NOx
- No oxygenated fuels assumed for wintertime carbon monoxide conditions

5. Emissions Modeling Methods / Credits

- Yearly $PM_{2.5}$ emissions (total $PM_{2.5}$ and precursor NOx) using seasonal traffic adjustments and above emissions factors
- Offline emissions analyses

6. Conformity Assessment Criteria

- Emissions budgets for ozone precursors, $PM_{2.5}$ pollutants, and wintertime CO
- Analysis years: 2010, 2020, and 2030

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

DAVID S. EKERN, P.E.
COMMISSIONER

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)

January 26, 2009

Mr. Ronald F. Kirby
Director, Department of Transportation Planning
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington, D.C. 20002-4239

Dear Mr. Kirby:

In response to the request for comments on the Draft Scope of work for the Air Quality Conformity Assessment for the 2009 CLRP and FY 2010-2015 TIP made during the Transportation Planning Board meeting on December 17, 2008, I am addressing the policy assumption of all Northern Virginia HOV facilitates operating at HOV3+ in 2010. At this time the HOV lanes on I-66 and Dulles Toll Road have an occupancy requirement of 2 or more people and there is no plan to change that occupancy requirement by next year. As such, for the purposes of regional air quality conformity analyses, please defer the HOV 3+ assumption for I-66 and Dulles Toll Road from 2010 to the next conformity analyses year (2020). Please include this policy assumption in your upcoming and subsequent air quality conformity assessment work. VDOT will notify you when there are any changes warranted to this assumption in the future.

Should you have any questions on the matter, please contact Ms. Jo Anne Sorenson, Assistant District Administrator for Planning, Development and Investment Management at 703-383-2461.

Sincerely,

Morteza Salehi
District Administrator
Northern Virginia District, VDOT

Cc: Ms. Jo Anne Sorenson, Assistant District Administrator

Maryland Department of Transportation
The Secretary's Office

Martin O'Malley
Governor
Anthony G. Brown
Lt. Governor
John D. Porcari
Secretary
Beverley K. Swaim-Staley
Deputy Secretary

February 9, 2009

Mr. Ronald F. Kirby
Director
Department of Transportation Planning
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E. - Suite 300
Washington DC 20002

Dear Mr. Kirby:

In response to your request for comments on the Draft Scope of Work for the Air Quality Conformity Assessment for the 2009 Constrained Long Range Plan and 2010-2015 Transportation Improvement program, I would like to address the policy assumption in the "Travel Demand Modeling Methods" that all HOV facilities operate at HOV-3 in 2010. At this time, Maryland has two HOV facilities on I-270 and US 50 that operate as HOV-2 facilities. While future considerations will likely be made to consider changing the occupancy requirement, there are no plans to change the occupancy in the near future. We recommend that you defer the HOV 3 assumption for Maryland facilities to 2020. Please make these changes to your Work Scope Policy and Technical Input Assumptions and in subsequent air quality conformity assessment work.

If you have any questions or concerns, please do not hesitate to contact Ms. Lyn Erickson at 410-865-1279, toll-free at 888-713-1414 or via email at lerickson@mdot.state.md.us. Of course, please feel free to contact me directly.

Sincerely,

Donald A. Halligan, Director
Office of Planning and Capital Programming

cc: Ms. Lyn Erickson, Manager, Regional Planning, Office of Planning and Capital Programming, Maryland Department of Transportation
Ms. Heather Murphy, Deputy Director, Office of Planning and Capital Programming, Maryland Department of Transportation
Mr. Michael Nixon, MPO Manager, Regional Planning, Office of Planning and Capital Programming, Maryland Department of Transportation

My telephone number is
Toll Free Number 1-888-713-1414, TTY Users Call Via MD Relay
7201 Corporate Center Drive, Hanover, Maryland 21076

February 6, 2009

Mr. Ronald Kirby
Director, Department of Transportation Planning
Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002

Dear Mr. Kirby:

We appreciate the opportunity to comment on the Draft Scope of Work for Air Quality Assessment for the 2009 CLRP and FY2010-2015 TIP. We have focused on Attachment A of the scope containing technical input assumptions, specifically the application of transit capacity constraint procedures.

The transit capacity constraint was originally added to conformity analysis in 2000 in recognition of Metro's capital funding shortfall and the expectation that rail ridership would exceed peak period capacity entering the core unless the rail fleet were expanded to allow for 8-car trains. Initially transit demand was constrained to 2005 transit demand levels. In 2005, with the adoption of the Metro Matters funding agreement, WMATA requested that COG/TPB push out the constraint to be effective for forecast years beyond 2013.

In the past few years, WMATA conducted updated ridership forecasts of the Metrorail system out through the year 2030. These forecasts were presented to the TPB Technical Committee in June 2008. The new forecasts were developed using TPB's Round 7.0 Cooperative Land Use Forecasts, Travel Demand Forecasting Model Version 2.1D and a transit mode choice post processing tool. The future transit network used the CLRP assumptions, including completion of the Metrorail Extension in the Dulles Corridor by 2020.

Using the results from the Metrorail ridership forecasts, WMATA conducted a capacity analysis to assess the congestion condition on Metrorail during the morning peak hour. The Metrorail congestion level measures the passenger volume on the maximum load segments in relation to system capacity, which is defined as an average of 120 passengers per car during the peak hour.

Washington Metropolitan Area Transit Authority

600 Fifth Street, NW
Washington, DC 20001
202/962-1234

By Metrorail:
Judiciary Square—Red Line
Gallery Place-Chinatown—
Red, Green and
Yellow Lines
By Metrobus:
Routes D1, D3, D6, P6,
70, 71, 80, X2

A District of Columbia, Maryland and Virginia Transit Partnership

The assessment of current and future Metrorail congestion conditions considered both the growth in rail ridership as well as system capacity enhancements scheduled to take place, including operation of 8-car consists on 50% of peak period trains by 2010.

The attached two charts illustrate the resulting A.M. peak hour congestion levels on each line of the Metrorail system from 2005 through 2030. The top chart indicates the congestion levels associated with the ongoing deployment of 50% 8-car trains that are funded by the Metro Matters funding agreement. The operations of 50% 8-car trains in 2010 will keep the peak hour congestion manageable on the Metrorail lines up to 2020. Between 2005 and 2020, average passenger loads on each of the lines are expected to be less than 120 passengers per car during the A.M. peak hour, below Metro's system capacity standard of 120 passengers per car. Without additional railcars beyond what is funded, the system will start to approach capacity around 2020. The Orange/Dulles rail lines between Courthouse and Rosslyn are likely to become severely congested in 2020, exceeding the system capacity.

The bottom chart assumes additional funding would be available for Metro to operate 100% of the peak period trains with 8-car consists by 2020. Under this scenario, the system would be able to extend the managable congestion condition during the peak hour for approximately another 5 to 10 years. However, Metrorail could face worsening congestion conditions on Orange/Dulles, Yellow, Blue and Green Lines prior to the 2030 timeframe, without other additional capacity expansions to accommodate the projected transit ridership growth.

At the December 2008 TPB meeting, WMATA staff presented a summary of Metro's 2011-2020 Capital Needs Inventory totaling over $11.3 Billion. We are continuing to work with our regional partners to finalize a new capital funding arrangement, effective July 1, 2010. However, at this time it is unclear how much of Metro's system maintenance or capacity enhancement projects will be funded.

Given the likely ridership growth and funding agreement schedule, WMATA offers the following recommendations concerning the use of the capacity constraint:

- The capacity constraint should only be applied to conformity analysis for years beyond 2020. For the 2009 analysis, this essentially means that the constraint should not be used.

- WMATA will actively participate in the 2009 update of the financial element of the CLRP, and will address the long-term financial constraints as part of that process.

- For long-term scenario planning, it is important that unconstrained transit demand be evaluated as the basis for identifying needs and regional transportation priorities. At the same time, the constraints on Core Capacity must be recognized as a real need beyond 2020.

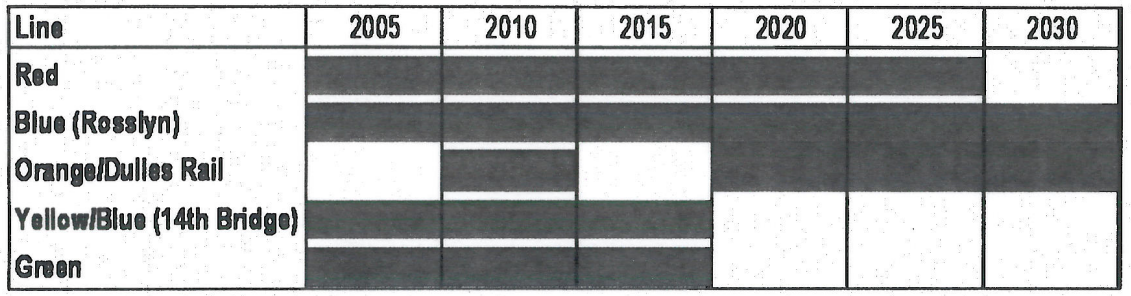
Please feel free to contact me at 202-962-2730 or Tom Harrington at 202-962-2294 to discuss this issue further.

Sincerely,

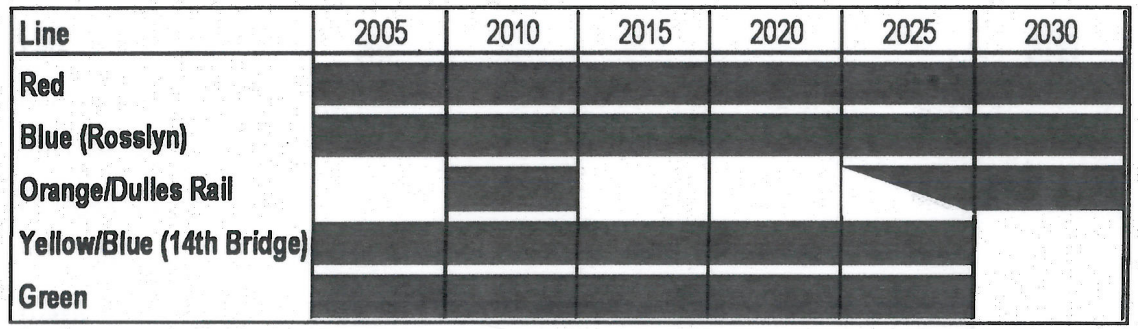
Nat Bottigheimer
Assistant General Manager
Planning and Joint Development

Attachment

Rail System Capacity



- If we do not expand the fleet after Metro Matters



- If we expand the fleet for 100% 8-car train service