# The Gold Book

Voluntary State and local government initiatives to clean the air



FINAL DRAFT - 2014 REVISION

PRESENTATION TO MWAQC JULY, 31, 2014

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# Long History of Delivering Clean Air





"They truly can be proud of the efforts they have made and the achievements that have resulted."

Remarks on signing the Clean Air Act, President Lyndon Johnson, December 1963 COG celebrates first year with No Code Red Days in 2005



### Legacy of Local Leadership Delivering Clean Air



- 1970: COG begins issuing daily air quality readings
- 1974: COG's Commuter Club formed
- 1990: COG adopts Million Tree Planting resolution
- 1991: MWAQC founded
- 1996: Ozone Action Day program begins
- 1997: ENDZONE Partners founded
- 2000: ENDZONE becomes Clean Air Partners
- 2000: 20% Telework Goal established with BOT
- 2001: Bike to Work Day launched
- 2008: Car Free Day launched
- 2008: COG Board Adopts NCR Climate Report
- 2014: Commuter Connections celebrates 40 years



# **Air Quality Challenges and Opportunities**

Standard	NAAQS Date	Effective Designation Date/Classification	SIP Status	Attainment Status
1hr Ozone (125 ppb)	1979	January 6, 1992/Serious, March 25, 2003/Severe	Submitted 2004	Attained in 2005
8hr Ozone (84 ppb)	1997	June 15, 2004/Moderate	Submitted 2007	Attained in 2009
PM2.5 (15 ug/m3)	1997	April 5, 2005/ not applicable	Submitted 2008	Redesignation Request Submitted in 2013
8hrOzone (75 ppb)	2008	July 20, 2012/Marginal	No SIP required	Attainment Deadline 2015
Possible New 8hr Ozone Standard?	2014?	Pending	Pending	Anticipated Attainment Deadline of 2020

# **State Implementation Plans (SIPs)**



- · Air Quality Plan for the Region
- Permanent, Federally Enforceable
- EPA / Clean Air Act Requirement for Non-Attainment Areas
- SIPs typically include:
  - **▼** Emission Inventories
  - **▼** Adopted Control Measures
  - **▼** Attainment Demonstration
  - ▼ Contingency Plan



# **Federal & State Mandatory Measures**



- Power Plant Emission Limits
- Vehicle Emission Standards
- Fuel Sulfur Standards
- Fuel Efficiency Standards
- Non-road Vehicle Standards
- Product Formulations



Wet Scrubber Installed at Morgantown Coal Plant - 2009

- Building Codes and Appliance Standards
- Transportation Control Measures (TCMs)

### **Voluntary Bundle - Local Measures Included in SIP**



### Quantifiable & Enforceable

- Wind Energy Purchases
- LED Traffic Signal Retrofits
- Renewable Portfolio Standards
- Clean Energy Rewards Programs
- Urban Heat Island/Tree Planting
- Building Efficiency/Green Buildings
- High Electricity Demand Day (HEDD) Initiative

### The Gold Book



- Compendium of voluntary state and local actions that improve air quality
  - o Not in Voluntary Bundle difficult to quantify or enforce
  - o First version: 2004, revised in 2009 & 2014
- Goals:
  - Improve awareness of initiatives around the region
  - Identify opportunities for expansion
  - Learn and borrow from other local governments



## 2014 Revision Process and Schedule



#### • MWAQC:

- o Requests Update to Gold Book Sept 2013
- o First Draft Briefing, Review February 26, 2014
- o Approve Final Draft July 2014

#### MWAQC-TAC Review

- o Approve Framework & List of Measures January 7, 2014
- o First & Second Draft Briefing, Review February-May 2014

#### ACPAC Review

- o First & Second Draft Briefing, Review December 2013-March 2014
- o Comments submitted April 4, 2014

#### • TBP-Tech Review

- o Second Draft Briefing, Review June 6, 2014
- o COG DTP comments submitted June 19, 2014

### 2014 Revisions



#### Structure

Changed from implementation status to subject area

#### Content

- New initiatives added, past programs removed
- Updated information on regional implementation with assistance from COG DEP and DTP staff
- Modified in response to comments received from: MWAQC, MWAQC-TAC, ACPAC, TPB-Tech and COG staff

# Climate, Energy & Sustainability Plans

- State Climate & Energy Plans
- Regional Climate Plan
- **Local Climate & Energy Plans**
- **Energy Security & Assurance Plans**
- **Local Air Quality Plans**

# **Local Government Air Quality Plans**



- Transportation Options
  - Public transit
  - Bicycle & pedestrian initiatives
- Vehicle Emission Reduction
  - Reduce idling & congestion
  - Alternative fuel vehicles
- VOC-reducing measures
  - o Low VOC-paints, defer refueling, striping & pesticide application
- Episodic Measures
  - o High Electricity Demand Day Initiative
- Tree Canopy & Green Space



capital bikeshare

(Not a comprehensive list)



# **Regional Partnerships**



- Clean Air Partners
  - Educational & public awareness programs
- Green Cooperative Purchasing
- Urban Heat Island Mitigation
  - Cool roofs & pavements
  - Green streets policy
  - Tree Canopy Management
- Public-Private Partnerships
  - Higher Education
  - Airports





### **Green Power & Grid Modernization**



- Renewable Energy Portfolio Standards
- Local Government Green Power Purchases
- Community Renewable Energy Purchasing
- Maryland Game Changers Program
- Rooftop Solar Challenge





# **Energy Efficiency**



- Financing Options
  - o PACE, On-bill-repayment, Green Banks
- Energy Performance Contracting
- DC Sustainable Energy Utility
- High Performance Building Codes
- Green Leasing
- Smart Grid & Advanced Metering





# **Transportation Demand Reduction**



- Transit-Oriented Development
  - o Regional Activity Centers, Strategic Investment Plan
- Commuter Connections
  - o Car & vanpool matching, "Pool Rewards," Bike to Work Day
- Telecommute Initiatives
- Safe Routes to Schools





# **Transportation Options**



- Public Transit
- Commuter Rail
- Bus Priority Enhancements
- Variably Priced Lanes
- Vehicle Share Programs
- Bicycle & Pedestrian programs



## **Vehicle Emission Reduction**



- Alternative Fuel Vehicles
- Traffic Signal Optimization
- Idling & Emissions Enforcement
- Voluntary Diesel Retrofit program
- Incident Management & Communication
  - MATOC & Safety Service Patrols





# **New & Additional Ideas**



### **Energy:**

- Microgrids
- Combined Heat & Power
- Biogas & Cogeneration
- Hoteling



- Eco-Driving
- Usage-Based Car Insurance
- Parking Management





## **Next Steps**



In response to ACPAC and TPB-Tech comments:

- Provide resources to make the Gold Book a more useful tool for regional local governments
  - Identify priority measures
  - Identify cost-effective measures
  - Assist local governments in implementing or expanding initiatives to improve regional air quality

## **For More Information**



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### Draft available at:

http://www.mwcog.org/environment/committee/committee/documents.asp?COMMITTEE\_ID=14