



May 18, 2010

TO: Members of the MAG Air Quality Technical Advisory Committee

FROM: Doug Kukino, Glendale, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Tuesday, May 25, 2010 - 1:30 p.m.  
MAG Office, Suite 200 - Saguaro Room  
302 North 1<sup>st</sup> Avenue, Phoenix

A meeting of the MAG Air Quality Technical Advisory Committee has been scheduled for the time and place noted above. Members of the Air Quality Technical Advisory Committee may attend the meeting either in person, by videoconference or by telephone conference call. Those attending by videoconference must notify the MAG site three business days prior to the meeting. If you have any questions regarding the meeting, please contact Chair Kukino or Lindy Bauer at 602-254-6300.

Please park in the garage underneath the building, bring your ticket, and parking will be validated. For those using transit, Valley Metro/Regional Public Transportation Authority will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

In 1996, the Regional Council approved a simple majority quorum for all MAG advisory committees. If the MAG Air Quality Technical Advisory Committee does not meet the quorum requirement, members who arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged. If you are unable to attend the meeting, please make arrangements for a proxy from your entity to represent you.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Jason Stephens at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

## TENTATIVE AGENDA

1. Call to Order

2. Call to the Audience

An opportunity will be provided to members of the public to address the Air Quality Technical Advisory Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Air Quality Technical Advisory Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

3. Approval of the April 29, 2010 Meeting Minutes

4. Evaluation of Proposed CMAQ Projects for the Federal Fiscal Year 2010 Interim Year End Closeout

An evaluation of proposed Congestion Mitigation and Air Quality Improvement Projects submitted for Federal FY 2010 Interim Year End Closeout has been conducted. Projects were requested by April 19, 2010. Twenty-seven projects were evaluated. The proposed projects are listed in order of cost-effectiveness based on the total CMAQ funds for the project. The results will be presented for a possible recommendation to forward the evaluation to the May 27, 2010 MAG Transportation Review Committee meeting for use in prioritizing projects. Please refer to the enclosed material.

## COMMITTEE ACTION REQUESTED

2. For information.

3. Review and approve the April 29, 2010 meeting minutes.

4. For information, discussion, and possible recommendation to forward the CMAQ evaluation to the May 27, 2010 MAG Transportation Review Committee meeting for use in prioritizing projects.

5. Salt River Pima Maricopa Indian Community Environmental Protection and Natural Resources Air Quality Program

The mission of the Salt River Pima Maricopa Indian Community (SRPMIC) Air Quality Program is to assess the SRPMIC air shed and develop and implement a progressive regulatory program to address local air quality issues, such as PM-10 and ozone. With funding assistance from the Environmental Protection Agency, Region IX, the Air Quality Program has established a network of five ambient air monitoring sites to identify and assess various air pollution sources impacting the community. An active regulatory component is being developed whereby the Community could establish its jurisdictional authority for air pollution sources within the exterior reservation boundaries. The overarching goal of the program is to protect the health and welfare of Community members by maintaining and enhancing the Community's air quality. An update will be provided by the Salt River Pima Maricopa Indian Community.

6. Information Requested on Existing or Imminent Sustainability Efforts for Possible Sustainable Communities Planning Grant Program Application

The U.S. Department of Housing and Urban Development (HUD) is partnering with the U.S. Department of Transportation and the Environmental Protection Agency (EPA) to support the development of regional plans for sustainable development through the Sustainable Communities Planning Grant Program. On April 19, 2010, the MAG Regional Council Executive Committee directed MAG staff to gather information related to the program. In response, staff convened meetings with the officers of the MAG technical committees, potential community partners, and other councils of

5. For information and discussion.

6. For information and discussion.

governments. At this time, MAG is soliciting information about existing or imminent sustainability efforts that may support a regional application.

Approximately \$100 million will be made available when the Notice of Funding Availability is released in June 2010. Up to \$5 million will be potentially available to large metropolitan areas. Additional support will be available to implement the projects proposed in the regional sustainable development plans. Securing an award now may position MAG well in the future if such plans become a requirement through the reauthorization of federal transportation funding.

The attached planning inventory form is designed to collect information pertaining to the six livability principles set forth by HUD. The data collected will form the foundation for a regional application, provide a way to identify gaps or opportunities for action, and establish a baseline for measuring future progress. Your insights and assistance will increase the region's ability to competitively and positively address sustainability issues. Input from the MAG technical committees is requested by June 4, 2010. Please refer to the enclosed information.

7. Call for Future Agenda Items

The next meeting of the Committee has been tentatively scheduled for Thursday, June 24, 2010 at 1:30 p.m. The Chairman will invite the Committee members to suggest future agenda items.

7. For information and discussion.

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
AIR QUALITY TECHNICAL ADVISORY COMMITTEE MEETING

Thursday, April 29, 2010  
MAG Office  
Phoenix, Arizona

MEMBERS ATTENDING

Doug Kukino, Glendale, Chairman  
Gaye Knight, Phoenix, Vice Chair  
Paul Lopez for Sue McDermott, Avondale  
Elizabeth Biggins-Ramer, Buckeye  
\*Jim Weiss, Chandler  
\*Jamie McCullough, El Mirage  
Kurt Sharp for Tami Ryall, Gilbert  
Cato Esquivel, Goodyear  
#Greg Edwards for Scott Bouchie, Mesa  
#Maher Hazine for William Mattingly, City of Peoria  
Larry Person, Scottsdale  
#Antonio DeLaCruz, Surprise  
Oddvar Tveit, Tempe  
#Mark Hannah, Youngtown  
#Ramona Simpson, Queen Creek  
\*Walter Bouchard, Citizen Representative  
\*Corey Woods, American Lung Association of Arizona  
Grant Smedley, Salt River Project  
Brian O'Donnell, Southwest Gas Corporation  
\*Mark Hajduk, Arizona Public Service Company  
#Gina Grey, Western States Petroleum Association  
\*Randi Alcott, Valley Metro/RPTA  
\*Dave Berry, Arizona Motor Transport Association  
Jeannette Fish, Maricopa County Farm Bureau  
\*Russell Bowers, Arizona Rock Products Association

\*Greater Phoenix Chamber of Commerce  
#Amanda McGennis, Associated General Contractors  
\*Spencer Kamps, Homebuilders Association of Central Arizona  
#Mannie Carpenter, Valley Forward  
Erin Taylor, University of Arizona Cooperative Extension  
Joonwon Joo for Beverly Chenausky, Arizona Department of Transportation  
Diane Arnst, Arizona Department of Environmental Quality  
\*Wienke Tax, Environmental Protection Agency  
Jo Crumbaker, Maricopa County Air Quality Department  
\*Duane Yantorno, Arizona Department of Weights and Measures  
\*Ed Stillings, Federal Highway Administration  
\*Judi Nelson, Arizona State University  
#Christopher Horan, Salt River Pima-Maricopa Indian Community

\*Members neither present nor represented by proxy.  
#Participated via telephone conference call.  
+Participated via video conference call.

OTHERS PRESENT

Lindy Bauer, Maricopa Association of Governments  
Julie Hoffman, Maricopa Association of Governments  
Randy Sedlacek, Maricopa Association of Governments  
Cathy Arthur, Maricopa Association of Governments  
Dean Giles, Maricopa Association of Governments  
Patrisia Magallon, Maricopa Association of Governments  
Adam Xia, Maricopa Association of Governments  
Taejoo Shin, Maricopa Association of Governments  
Bob Downing, Maricopa County Air Quality Department

Matt Poppen, Maricopa County Air Quality Department  
Eric Raisanen, Maricopa County Air Quality Department  
Michelle Wilson, City of Glendale  
Scott DiBiase, Pinal County Air Quality  
Steven Peplau, Arizona Department of Environmental Quality

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on April 29, 2010. Doug Kukino, City of Glendale, Chair, called the meeting to order at approximately 1:34 p.m. Gina Grey, Western States Petroleum Association; Mark Hannah, Town of Youngtown; Amanda McGennis, Associated General Contractors; Ramona Simpson, Town of Queen Creek; Mannie Carpenter, Valley Forward; Antonio DeLaCruz, City of Surprise; Maher Hazine, City of Peoria; Chris Horan, Salt River Pima-Maricopa Indian Community; and Greg Edwards, City of Mesa, attended the meeting via telephone conference call.

2. Call to the Audience

Mr. Kukino stated that according to the MAG public comment process, members of the audience who wish to speak are requested to fill out comment cards, which are available on the tables adjacent to the doorways inside the meeting room. Citizens are asked not to exceed a three minute time period for their comments. Public comment is provided at the beginning of the meeting for nonagenda items and nonaction agenda items. He noted that no public comment cards had been received.

3. Approval of the March 25, 2010 Meeting Minutes

The Committee reviewed the minutes from the March 25, 2010 meeting. Larry Person, City of Scottsdale, moved and Gaye Knight, City of Phoenix, seconded and the motion to approve the March 25, 2010 meeting minutes carried unanimously.

4. Chair and Vice Chair Appointments

Lindy Bauer, MAG, discussed the MAG Committee Operating Policies and Procedures that were approved by the MAG Regional Council on July 22, 2009. According to the policies and procedures, officer positions for technical committees have one-year terms, with possible reappointment to serve up to one additional term by consent of the committee. She noted that the chair and vice chair appointments of the MAG Air Quality Technical Advisory Committee are due to expire on June 30, 2010. Ms. Bauer added that the Committee may choose to do one of the following: 1) recommend reappointment of the current chair and vice chair to serve a second one-year term, or 2) have a new chair and vice chair appointed by the Regional Council Executive Committee. She commented that if the Committee chose option two, letters of interest would be solicited and sent to the MAG Regional Council Chair by June 1, 2010. The MAG Regional Council Executive Committee would then make new appointments by June 21, 2010.

Brian O'Donnell, Southwest Gas Corporation, made a motion to recommend the reappointment of the current chair and vice chair to serve a second one-year term. Amanda McGennis, Associated General Contractors, seconded, and the motion to recommend reappointment of the current chair and vice chair to serve a second one-year term carried unanimously.

5. Draft 2008 PM-10 Periodic Emissions Inventory

Bob Downing, Maricopa County Air Quality Department, presented the Draft 2008 PM-10 Periodic Emissions Inventory. He stated that the County is required to prepare a complete, comprehensive inventory according to the Clean Air Act, the 2002 Consolidated Emissions Reporting Rule, and the 2009 Air Emissions Reporting Rule. Mr. Downing added that since the region is a nonattainment area,

this inventory is a primary tool for tracking progress in meeting and demonstrating attainment with the National Ambient Air Quality Standards (NAAQS). In addition, the inventory serves as a basis for modeling and motor vehicle emission budgets.

Mr. Downing highlighted a few of the requirements for preparing and reporting emissions inventories that were included in the 2009 Air Emissions Reporting Rule. He stated that comprehensive, county-level inventories every three years are now required nationwide. Mr. Downing noted that Maricopa County has been developing periodic inventories since it was designated a nonattainment area and additional requirements will continue for areas in nonattainment. He indicated that the list of pollutants that the County is required to report has also been extended to include PM-2.5 and ammonia (NH<sub>3</sub>). In addition, Mr. Downing mentioned that the timetable for developing the inventory will be shortened from 17 months to 12 months by 2011. He noted that this may be of interest to those that are involved in preparing the data and those that use the information in the inventory. Mr. Downing also commented that the new rule provides counties and entities the option to report model input data as an alternative to County emissions estimates. He indicated that this may be problematic for large counties in western states.

Mr. Downing provided an overview of the Draft 2008 PM-10 Periodic Emissions Inventory. He stated that Maricopa County estimated emissions for the entire County and the PM-10 nonattainment area. He added that the inventory includes estimates of total annual emissions and typical day emissions for each source category. Mr. Downing indicated that the pollutants included in the inventory include PM-10, PM-2.5, nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>x</sub>), and NH<sub>3</sub>. He stated that a detailed written report has been published for a 30-day review and comment period. In addition, an electronic data set is being prepared and will be submitted to EPA. Mr. Downing noted that the County is also preparing an inventory for ozone. He indicated that the inventory will report on volatile organic compounds (VOC), NO<sub>x</sub>, and carbon monoxide (CO) for the County and the ozone nonattainment area. The estimates will reflect annual totals and a typical ozone season day. Mr. Downing noted that the ozone inventory will also include a written report and electronic data sets.

Mr. Downing stated that the written report is a 150 page "cookbook" for each source category and has been posted to the County website. He added that the purpose of the report is to document the data sources, approaches, calculation methods, assumptions made when data was not available, and the citations of any documentation that was used. Mr. Downing indicated that posting the documentation for public review assists the County with determining if other data sources or approaches are available. He commented that the electronic data submission to EPA will become part of the National Emissions Inventory.

Mr. Downing provided a brief overview of the source categories addressed in the Maricopa County inventories which include: point, area (nonpoint), onroad mobile, nonroad mobile, and biogenic sources. He mentioned that biogenic sources do not play a role in the Draft 2008 PM-10 Periodic Emissions Inventory; however, biogenics can be a significant contributor in the ozone report, which will soon be prepared.

Mr. Downing presented a map of Maricopa County and the PM-10 nonattainment area which are the areas addressed in the inventory. He also provided an overview of the various types of methods used to estimate emissions from approximately 70 source categories. Mr. Downing indicated that surveys of 2008 activity for some of the source categories were conducted including over 1,000 large air quality permitted industrial facilities. He added that there was also a major effort at airports to collect

detailed activity data, ground support equipment and auxiliary power unit. He noted that this information was provided by MAG and assists Maricopa County in developing more accurate emission estimates. Mr. Downing indicated that surveys were also conducted for local fire departments, natural gas suppliers and locomotives.

Mr. Downing stated that the second major approach used by the County was collecting and analyzing data from other agencies. He added that the County received state-permitted portable source activity from the Arizona Department of Environmental Quality (ADEQ); state vehicle miles traveled data from the Arizona Department of Transportation (ADOT); land use, demographics, and economic data from MAG; earthmoving permit activity and permit information from the Maricopa County Air Quality Department; and data from others.

Mr. Downing stated that another approach for estimating emissions from source categories included specialized emission models. He stated that the Emission and Dispersion Modeling System (EDMS) is a Federal Aviation Administration model that provides emission estimates for aircraft activity, ground support equipment, and auxiliary power units. Mr. Downing indicated that the NONROAD model is an EPA model that calculates emissions from most of the nonroad equipment sectors such as industrial, agricultural, mining, and recreational. Mr. Downing mentioned that MOBILE 6.2 is a model used by MAG to calculate emissions from the onroad mobile sources. He commented that MAG also models biogenics using the MEGAN model. He noted that biogenics are a significant contributor to the ozone inventory.

Mr. Downing stated that Maricopa County may also use national and state emission estimates for sources such as publicly-owned treatment works and architectural coatings. He added that the County has also developed new approaches for windblown dust. Mr. Downing indicated that previous approaches for windblown dust that looked at a square city block or the entire western United States may not work when estimating emissions on a county-level scale. The results of the new approaches will be discussed later in the presentation.

Mr. Downing presented the Draft 2008 PM-10 Periodic Emissions Inventory pie chart. He stated that the source categories have been grouped into 20 categories. Mr. Downing noted that the cross-hatched areas of the pie chart represent the windblown dust emissions segregated by land use classes. Grant Smedley, Salt River Project, inquired about the impact of ammonia and PM-2.5 on the pie chart. Mr. Downing responded that the pie chart being presented is only for PM-10. He added that the modelers determine the best way to represent the atmospheric chemistry of how emissions from ammonia become part of particulates. Mr. Smedley inquired if there are pie charts in the report for the different pollutants. Mr. Downing responded no; however, the last page of the handout includes the PM-10 emissions inventory in a tabular format. The table includes the annual PM-10 emissions in the nonattainment area for each source category in comparison to 2005 annual emissions.

Mr. Downing summarized the key findings from the Draft 2008 PM-10 Periodic Emissions Inventory. He stated that the overall inventory for PM-10 is approximately ten percent less than 2005. Mr. Downing commented that the economy has contributed to decreases in emissions from construction and major stationary sources in comparison to the last inventory. He indicated that there have been increases in contributions from paved and unpaved roads and windblown dust in the past three years.

Jeannette Fish, Maricopa County Farm Bureau, asked if the increased contributions are based on percentages or volume. Mr. Downing replied that the increases are most likely calculated using both

percentages and total emissions. He added that the County is presenting the data in various levels of analysis. Mr. Downing noted that the inventory results are presented in the pie chart and in the table. In addition to the 2008 emissions inventory results, the data from the 2005 inventory is also presented for comparison.

Ms. Knight commented on some of the changes between the 2005 and 2008 inventories. She indicated that airport ground support equipment increased 75 percent, paved road fugitive dust emissions went up 25 percent, unpaved road fugitive dust increased approximately 40 percent, and agriculture decreased 19 percent. She inquired about the increases in emissions from paved and unpaved roads. Mr. Downing responded that the table was developed as a tool for the County to compare the emissions from 2005 and 2008.

Mr. Kukino asked about the methodology used for the inventory. He inquired if the 2005 and 2008 PM-10 Periodic Emission Inventories are comparable. Cathy Arthur, MAG, responded that different methodologies were used for the inventories. She stated that after the 2005 PM-10 Periodic Emissions Inventory was completed, the MAG 2007 Five Percent Plan for PM-10 was prepared. Ms. Arthur added that the methodologies for paved roads and unpaved roads were changed in the Five Percent Plan for PM-10. She indicated that the 2008 emissions inventory is consistent with the Five Percent Plan for PM-10 with the exception of the unpaved road inventory. Ms. Arthur added that MAG recently completed the 2009 unpaved road inventory for both public and private unpaved roads as well as alleys. She indicated that alleys had not been part of the unpaved road inventory in the past. Ms. Arthur commented that different methodologies were used to improve the emission estimates for the 2008 inventory.

Mr. O'Donnell referred to the windblown dust category in the table which indicates 7,300 tons of PM-10 in 2005 versus 18,000 tons of PM-10 in 2008. He inquired if the difference is due to a change in methodologies. Ms. Arthur replied that is correct and added that Matt Poppen, Maricopa County Air Quality Department, is the expert on the windblown dust emissions. She added that the methodologies are different and the 2008 PEI should reflect a better estimate.

Mr. Downing stated that Maricopa County developed the table as an internal tracking tool. He indicated that the County annotated the most striking changes between the 2005 and 2008 inventories. Mr. Downing added that some of the changes are due to the new reporting requirements. He mentioned that in past years, the County over reported to EPA. The EPA has only required that the top 50 major facilities be reported as individual points; however, since the County has had a robust permitting and data collection network, more facilities have been reported as point sources than were needed. Mr. Downing mentioned that under the new reporting requirements, Maricopa County has made adjustments. Therefore, some of the differences are due to individual source categories being reported under a different category.

Mr. Person commented that since there is higher percentage of emissions from unpaved road fugitive dust for 2008, it looks like more unpaved roads are being built. He inquired if this is a realistic way to read the data on the table. Mr. Person asked if the Committee should be comparing the 2005 and 2008 inventories since there were changes to the methodology. Mr. Downing responded that the summary data being presented was designed as a tool. He encouraged the Committee to review the 150 page report on the website if there are questions on the summary. Mr. Downing added that the report documents how the data was prepared. Ms. Bauer stated that additional notes could be included

in the table to explain the changes to unpaved road and paved road fugitive dust emissions so people will not assume there have been large increases.

Mr. Kukino asked how the new inventory will be used. He stated that EPA has not acted on the MAG 2007 Five Percent Plan for PM-10, which is based on the 2005 inventory. He inquired if the new inventory will impact the Plan approval or planning process.

Ms. Knight indicated that perhaps notes could be added to sources with changes more than 25 percent. Mr. Downing responded that the feedback from the Committee is very useful. Mr. O'Donnell commented that a note should be added only to significant sources. Mannie Carpenter, Valley Forward, inquired if the summary was available online. Mr. Downing responded that the summary is currently not online. Mr. Kukino stated that MAG staff will provide the information to those attending the meeting by audio conference call.

Mr. Person commented that citizens may feel uncertain about the modeling since the estimated emissions vary so much. He referred to the differences in emissions shown in Figure ES-8 between the 2010 PM-10 emissions with committed control and contingency measures and the Draft 2008 PM-10 Periodic Emissions Inventory, which may be of concern to citizens. He inquired about the reliability of the models. Mr. Downing responded that he is just seeing Figure ES-8 for the first time; however, he is encouraged since the numbers are similar when the same methodologies are being used. Ms. Arthur indicated that Figure ES-8 was prepared by MAG. Mr. Kukino stated that Mr. Person raised a good point and this information is provided to many people.

Ms. Arthur stated that when the 2008 inventory is compared to what was submitted in the Five Percent Plan for PM-10, which is represented in Figure ES-8, the numbers are very closely aligned. She noted that the totals are within two percent. Ms. Arthur mentioned that the close comparison between the 2008 inventory and 2010 with control and contingency measures may indicate an accelerated reduction in emissions likely attributed to the economy. She added that the economy has had an impact on the construction emissions. Ms. Arthur stated that the blue areas in the pie chart represent the construction categories which show a decrease in emissions from 24 percent in the Five Percent Plan for PM-10 to 14 percent in the 2008 inventory. She stated that most of the remaining differences are represented in the windblown dust inventory, which is 25 percent of the total. Previously, windblown dust was seven percent. She indicated that we now have a better handle on how to estimate PM-10 emissions from windblown dust. Ms. Arthur noted that while there are big changes, generally it means improvements in the data or the techniques used to estimate emissions. She commented that windblown dust is an example of a tremendous change. Ms. Arthur indicated that the best methodology available at the time is used. She noted that the County had hired ENVIRON to conduct the modeling for windblown dust for the 2005 inventory; however, the answers were not reasonable.

Mr. Downing stated that the ENVIRON model worked well on a 15-state basis. However, when it was used for just Maricopa County, the data produced was not what they expected, it was counter intuitive. Ms. Arthur added that sometimes there can be challenges with scaling down large regional models. She indicated that Mr. Poppen has done a great deal of research on techniques that estimate windblown dust. Ms. Arthur noted that the windblown dust data in the 2008 inventory is based on local data, which is different from the Western Regional Air Partnership modeling.

Oddvar Tveit, City of Tempe, inquired about running the 2005 data through the model with the new methodologies to get a better comparison. He commented on the different outcomes due to changes

in the methodology. Mr. Tveit discussed the sources and added that these types of inconsistencies may need to be explained in the report. He commented on adjusting the 2005 data and then presenting it against the 2008 inventory. Ms. Arthur responded that the results would be more consistent if the same methodologies were used; however, there were also different conditions in 2008 versus 2005. For example, wildfires were down in 2008; therefore, the emissions from this source were lower. She noted that these conditions are uncontrollable. In addition, the number of days per year with windblown dust events change from year to year. Mr. Downing stated that since windblown dust is a significant category, the County had applied the new approach to the 2005 data and found that it would have been a closer comparison. He also commented on the changes in meteorology from 2005 to 2008. Ms. Arthur added that the calculations in the 2008 inventory were based on 366 days. Mr. Downing mentioned that there were also changes in land use between 2005 and 2008.

Ms. Bauer stated that EPA has changed the models several times over the years. She discussed the experience Ms. Arthur has had with the various EPA emission models and added that the latest version is the MOVES model. Ms. Bauer indicated that biogenics is a newer component that shows vegetation contributes to ozone formation. She commented that conditions are always changing. Ms. Bauer referred to the economy and the impact on construction emissions. She also mentioned the big change for the windblown dust category in the inventory.

Mr. Kukino commented on the decrease in PM-10 emissions from 2005 to 2008. He inquired about how this will impact the MAG 2007 Five Percent Plan for PM-10. Ms. Arthur responded that the decrease in emissions confirms that the Five Percent Plan for PM-10 is working. She indicated that the region was one year into the Plan and the inventory is showing reductions. She added that the 2008 inventory will be submitted to EPA; however, it is yet to be determined how the inventory will affect the Plan. Ms. Arthur noted that 2007 was used as the base year for determining the five percent per year reductions. She added that the inventory does not directly impact the Plan but confirms that the region is reducing PM-10. Mr. Downing added that the data in the tables represent annual emissions for the entire PM-10 nonattainment area. He noted that the table does not show why a particular monitor may have exceeded the standard. Ms. Arthur stated that the report is a regional inventory and does not provide activity information for each of the monitors.

Ms. Arthur indicated that the majority of the decreases in PM-10 emissions from construction are now being absorbed in the windblown dust category. Ms. Arthur also stated that the onroad mobile sources (exhaust/tire wear/brake wear, paved roads, unpaved roads) represented 41 percent of the total emissions in 2008 as well as in the Five Percent Plan for PM-10. She mentioned that it is encouraging from a modeling standpoint that the percent contribution has remained consistent. Ms. Arthur added that MAG will provide notes to Maricopa County to include in the table to further explain changes in emissions from 2005 to 2008.

Ms. Arthur addressed an earlier question by Mr. Person regarding unpaved roads. She indicated that the major difference between the Five Percent Plan for PM-10 and the new inventory is that it is now known which roads are private and which are public. Ms. Arthur mentioned that previously, assumptions were made about all unpaved roads growing over time; however, it is the private unpaved roads that are growing. She commented that there is now better information on the growth of unpaved roads. She noted that the lot splits are causing the growth; however, they are not growing as quickly as previously anticipated. Ms. Arthur indicated that the major difference now is that the region has

better information on public versus private roads as well as the average daily traffic. She added that these things have changed the unpaved road inventory for the better.

Ms. Knight complimented those involved with preparing the information. She added that perhaps the explanations for some of the trends and changes in the 2008 inventory could be included in the report as a paragraph or bullet points to assist those reading the document. Ms. Arthur responded that they will include language to discuss the changes in the inventory.

Mr. Kukino inquired about the timeline for inventories on the other pollutants. Mr. Downing responded that the Draft 2008 PM-10 Periodic Emissions Inventory is out for a 30-day public review and comment period. He added that the comments will be accepted through the end of May 2010. A final report will be prepared in June. He indicated that similar documentation will begin to be prepared for ozone.

Ms. Fish stated that the inventory shows that emissions decreased by 11.6 percent from 2005 to 2008. She inquired if the region could receive credit in the Five Percent Plan for PM-10 for two years. Ms. Arthur responded that the base used for 2007 is much higher than the 2005 inventory. Therefore, the percent reductions are based on a different starting point. Ms. Arthur added that the region was also only one year into the Plan in 2008. She mentioned that construction emissions are down due to fewer acres, but also the rule effectiveness has increased from 51 to 83 percent. Ms. Arthur mentioned that credit can be taken in the Plan for the increase in rule effectiveness. She noted that the base in the Plan includes approximately 97,000 tons of PM-10 emissions and the 2008 inventory is about 75,000 tons.

Mr. Downing stated that the feedback has been very useful, especially for the two-page summary. He commented on using the summary as a tool for others. Ms. Arthur added that notes on the summary table could be used as bullet points in the inventory to document the changes.

#### 6. Call for Future Agenda Items

Ms. Bauer commented that a presentation from the Salt River Pima-Maricopa Indian Community on their Air Quality Program was mentioned as a possible future agenda item at the last meeting. She stated that this item could potentially be included on the agenda for the next meeting. Chris Horan, Salt River Pima-Maricopa Indian Community, indicated that he would be willing to give a presentation.

Ms. Knight inquired about an update from Pinal County as a future agenda item. Ms. Fish inquired about a recent study in Pinal County. Diane Arnst, ADEQ, responded that the 2009 improvement was not included. She added that EPA will be providing feedback on the Governor's recommendation for the PM-10 boundary and designation in Pinal County. She indicated that once they hear back from EPA, there will be opportunity for the Governor to submit additional information if there is a disagreement. Ms. Arnst mentioned that the design value is based on three years of data and 2009 through 2011 would be the earliest. She noted that there were 40 exceedances in 2009.

Mr. Kukino announced that the next meeting of the Committee has been tentatively scheduled for Tuesday, May 25, 2010 at 1:30 p.m. With no further comments, the meeting was adjourned at 2:36 p.m.

May 18, 2010

TO: Members of the MAG Air Quality Technical Advisory Committee

FROM: Dean Giles, Air Quality Planning Program Specialist

SUBJECT: EVALUATION OF PROPOSED CMAQ PROJECTS FOR THE FEDERAL  
FISCAL YEAR 2010 INTERIM YEAR END CLOSEOUT

The Maricopa Association of Governments has conducted an evaluation of proposed Congestion Mitigation and Air Quality Improvement projects submitted for the Federal Fiscal Year 2010 Interim Year End Closeout. The results of the project evaluation are provided in the attachment ranked by cost-effectiveness based on the total CMAQ funds for the project. This information is being presented to the MAG Air Quality Technical Advisory Committee for a possible recommendation to forward the Congestion Mitigation and Air Quality Improvement (CMAQ) evaluation to the MAG Transportation Review Committee for use in prioritizing projects at their May 27, 2010 meeting.

#### PROJECT EVALUATION

Currently, the amount of funding available for FY 2010 Closeout is still being evaluated by MAG staff. By April 19, 2010, twenty-seven projects requesting approximately \$25.2 million were evaluated for estimated emissions reductions. The cost-effectiveness was calculated on the total CMAQ funds for each project.

In accordance with CMAQ guidance, MAG staff evaluated the projects for the estimated emissions reductions benefits and calculated the cost-effectiveness using the CMAQ methodologies. Beginning in 1999, MAG developed and applied methodologies for assessing emission reduction benefits for proposed CMAQ projects in accordance with federal guidance for the CMAQ Program. The latest version of the CMAQ methodologies is dated April 16, 2009.

The projects have been ranked in order from most cost-effective to least cost-effective in the attachment. In general, the methodologies for calculating cost-effectiveness involve the estimation of emissions reductions for total organic gases (TOG), nitrogen oxides (NO<sub>x</sub>), and PM-10, measured in kilograms per day. The annualized cost-effectiveness of each project is measured in CMAQ dollars per metric ton of total emissions reduced.

The Environmental Protection Agency MOBILE6.2 emission model was used to estimate TOG and NO<sub>x</sub> exhaust emission factors, and PM-10 exhaust, tire wear, and brake wear emission factors, for the

implementation year of the project. The emission factors from the EPA AP-42 guidance were used to estimate reentrained PM-10 emissions on paved and unpaved roads, where appropriate.

The purpose of the CMAQ Program is to provide federal funding for transportation-related projects and programs designed to assist nonattainment and maintenance areas in complying with federal air quality standards. On October 20, 2008, the Federal Highway Administration published Final Guidance on the Congestion Mitigation and Air Quality Improvement Program that incorporates Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU) provisions. A CMAQ fact sheet is enclosed.

The evaluation of proposed CMAQ projects for the Federal FY 2010 Interim Year End Closeout in the attachment is being presented to the MAG Air Quality Technical Advisory Committee (AQTAC) for a possible recommendation to forward the air quality evaluations to the MAG Transportation Review Committee (TRC) for use in prioritizing projects for funding. Consistent with the FY 2009 Draft MAG Federal Fund Programming Principles, a description of the role of the AQTAC in the Congestion Mitigation and Air Quality Improvement Project Evaluation Process is enclosed. If you have any questions or need additional information, please contact me at (602) 254-6300.

Attachment

**PROPOSED CMAQ PROJECTS FOR THE FEDERAL FY 2010 INTERIM YEAR END CLOSEOUT - RANKED BY COST EFFECTIVENESS**

Agency	TIP Number	Location	Description of Work	Fiscal Year	Emissions Reduction Weighted TOG (kg/day)	Emissions Reduction Weighted NOX (kg/day)	Emissions Reduction Weighted PM-10 (kg/day)	Emissions Reduction Weighted Total (kg/day)	Cost Effectiveness (\$/metric ton) <sup>1</sup>	CMAQ Funds Requested	Notes (below)
Glendale	New	Various Locations Citywide	Modernize traffic signals	2010	29.56	34.03		63.59	\$6,653	\$707,250	2
Glendale	New	Various Locations Citywide	Upgrade traffic signal controllers	2010	9.85	11.34		21.20	\$6,653	\$235,750	2
Scottsdale	New	Various Locations Citywide	Purchase and install traffic signal controllers and cabinets	2010	30.78	16.61		47.40	\$6,942	\$550,000	2
Tempe	TMP10-803	Citywide	Install Video Detection System	2010	18.95	10.23		29.18	\$9,112	\$138,969	2
Glendale	New	Various Locations Citywide	22 Closed Circuit Television (CCTV) cameras and 6 Ethernet installations	2010	5.44	6.26		11.69	\$10,614	\$207,460	2
Valley Metro	New	Arizona Avenue/Country Club Drive	Avenue/Country Club Drive bus rapid transit (BRT) route.	2010	3.36	3.02	6.89	13.27	\$16,833	\$811,288	3
Avondale	AVN08-811	City of Avondale Municipal Operations Service Center Building	Construction of Interim Traffic Operation Center	2010	11.01	5.94		16.96	\$31,330	\$888,000	4
Mesa	MES08-604	East Mesa (Various Locations)	New CCTV, Video Detection Cameras	2010	5.31	6.38		11.69	\$61,321	\$359,400	2
Surprise	SUR11-714D	Bell Road US60(Grand Avenue) to 114th Avenue	Design of Multiuse Path	2010	1.13	0.51	0.49	2.14	\$86,225	\$175,000	5,6
Surprise	SUR11-715	Peoria Ave: Litchfield Rd to Jackrabbit Rd	Design and construct fibre optic cable interconnection of existing and future ITS facilities	2010	2.32	2.05		4.37	\$95,793	\$700,000	4
Glendale	GLN09-609	Skunk Creek/Union Hills Dr.	Design and construct multi-use path under Union Hills Dr.	2010	0.33	0.15	0.14	0.63	\$131,162	\$300,000	5,6
Mesa	MES11-703	Citywide	New Cabinets, Controllers	2010	2.21	2.77		4.98	\$144,277	\$500,000	2
Phoenix	PHX07-315	7th Ave at the ACDC Canal	Construct multi-use underpass	2010	0.79	0.36	0.34	1.49	\$210,279	\$1,189,932	5,6
Mesa	MES 13-905	Consolidated Canal: Lindsay Road to Baseline Road	Design and Construct 10-foot wide concrete path	2010	0.71	0.32	0.31	1.35	\$214,831	\$471,000	5,6
Surprise	SUR08-612	Surprise Traffic Management Center <sup>7</sup>	Develop an ITS Strategic Plan document in line with regional ITS planning efforts.	2010	2.52	2.61		5.13	\$226,386	\$190,000	4
Mesa	MES10-810	Alma School Rd., Southern Ave., Baseline Rd., Guadalupe Rd. (ITS Phase 4B)	Fiber, cameras, detection, cabinets, controllers.	2010	3.84	2.02		5.86	\$265,609	\$1,893,027	2
Avondale	New	City of Avondale City Center Design	100% design plans for the MAG/Avondale Transit Study	2010	0.62	0.60	1.29	2.51	\$274,681	\$630,000	8
Litchfield Park	LPK13-901	Wigwam Boulevard at Litchfield Road Bypass	Acquire right of way and construct multi-use underpass	2010	0.16	0.07	0.07	0.30	\$281,126	\$800,000	5,6
Glendale	New	Downtown Alleyway: 58th Ave. to 57th Ave.	Design downtown alleyway for safe pedestrian circulation	2010	0.16	0.05	0.04	0.26	\$371,964	\$200,000	5
Chandler	CHN14-102	Loop 101 (Price Freeway) at Galveston Street	Construct multi-use path and bridge over the Loop 101 (Price Freeway) at Galveston Street	2010	0.48	0.22	0.21	0.91	\$415,810	\$3,540,000	5,6
Chandler	CHN08-610C	Loop 101 (Price Freeway) at Galveston Street	Construct multi-use path and bridge over the Loop 101 (Price Freeway) at Galveston Street	2010	0.48	0.22	0.21	0.91	\$415,810	\$318,250	5,6
Mesa	MES08-602R	North-South Pedestrian Path: Phase 2 - 1st Street to Convention Center	Construct pedestrian improvements	2010	0.09	0.03	0.03	0.15	\$420,966	\$83,717	5

**PROPOSED CMAQ PROJECTS FOR THE FEDERAL FY 2010 INTERIM YEAR END CLOSEOUT - RANKED BY COST EFFECTIVENESS**

Agency	TIP Number	Location	Description of Work	Fiscal Year	Emissions Reduction Weighted TOG (kg/day)	Emissions Reduction Weighted NOX (kg/day)	Emissions Reduction Weighted PM-10 (kg/day)	Emissions Reduction Weighted Total (kg/day)	Cost Effectiveness (\$/metric ton) <sup>1</sup>	CMAQ Funds Requested	Notes (below)
Mesa	MES09-809	Dobson Road, Broadway Road, Alma School Road (ITS Phase 4A)	Fiber, cameras, detection, cabinets, controllers.	2010	1.48	0.78		2.26	\$436,005	\$992,746	2
Mesa	MES12-815	Brown Rd., Higley Rd. (ITS Phase 5)	Fiber, cameras, detection, cabinets, controllers.	2010	2.31	1.22		3.53	\$439,108	\$1,934,406	2
Tempe	TMP10-620	Broadway Road - Rural Road to Mill Avenue	Construct bicycle and pedestrian facility improvements	2010	0.69	0.31	0.30	1.30	\$534,044	\$1,200,000	5,6
Phoenix	PHX13-903	32nd St: Washington St to McDowell Rd	Design 32nd St Pedestrian Enhancement (Washington St to McDowell Rd)	2010	0.17	0.05	0.05	0.27	\$587,935	\$480,150	5
Tempe	TMP 10-629	Salt River: SR143 Hohokam Freeway to Priest Drive	Construct multi-use path	2010	0.18	0.08	0.08	0.35	\$871,891	\$1,250,000	5,6

**Notes:**

1. Cost Effectiveness is expressed as the total CMAQ Project cost (in dollars) per annual emissions reduction (in metric tons).
2. Supports the TCM in the Revised MAG 1999 Serious Area CO Plan and CO Maintenance Plan: "Coordinate Traffic Signal Systems."
3. Supports the TCM in the Revised MAG 1999 Serious Area CO Plan and CO Maintenance Plan: "Mass Transit Alternatives."
4. Supports the Transportation Control Measure (TCM) in the Revised 1999 Serious Area CO Plan and CO Maintenance Plan: "Develop Intelligent Transportation Systems."
5. Supports the TCM in the Revised MAG 1999 Serious Area CO Plan and CO Maintenance Plan: "Encouragement of Pedestrian Travel."
6. Supports the TCM in the Revised MAG 1999 Serious Area CO Plan and CO Maintenance Plan: "Encouragement of Bicycle Travel."
7. Emission Reductions are based on future ITS project implementation that results from the Strategic Plan.
8. Supports the TCM in the Revised MAG 1999 Serious Area CO Plan and CO Maintenance Plan: "Park and Ride Lots."

**ROLE OF THE MAG AIR QUALITY TECHNICAL ADVISORY COMMITTEE  
IN THE CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ)  
PROJECT EVALUATION PROCESS**

CMAQ Projects for the Transportation Improvement Program

- Forward the evaluation of proposed CMAQ projects for the MAG Transportation Improvement Program to the MAG Transportation Review Committee and modal committees for use in prioritizing projects.
- Rank the Air Quality Projects to be forwarded to the MAG Transportation Review Committee.

Sequence of Committee Actions: Air Quality Technical Advisory Committee, Transportation Review Committee and Modal Technical Advisory Committees, Management Committee, Transportation Review Committee, Regional Council.

PM-10 Certified Street Sweeper Projects

- Recommend a prioritized list of proposed PM-10 Certified Street Sweeper Projects for CMAQ funding and retain the prioritized list for any additional CMAQ funds that may become available due to year-end closeout, including redistributed obligation authority, or additional funding received by this region.

Sequence of Committee Actions: Air Quality Technical Advisory Committee, Management Committee, Regional Council.

Paving Unpaved Road Projects

- Rank the proposed Paving Unpaved Road Projects for CMAQ funding and forward to the MAG Transportation Review Committee.

Sequence of Committee Actions: Air Quality Technical Advisory Committee, Transportation Review Committee, Management Committee, Transportation Policy Committee, Regional Council.

# MAG COMMITTEE STRUCTURE

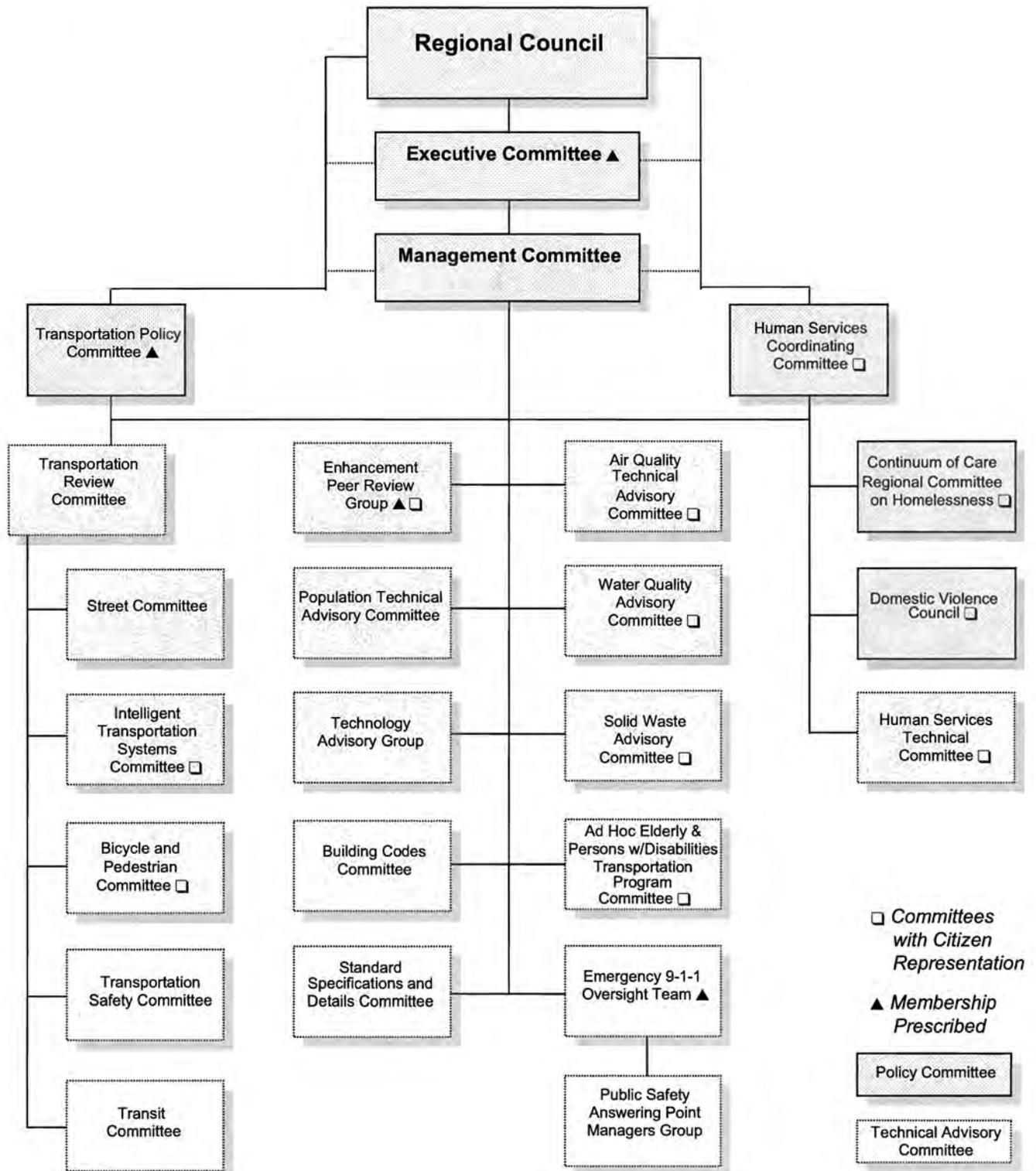


Figure 7: MAG Committee Structure

## **CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM FACT SHEET**

According to the final Congestion Mitigation and Air Quality Improvement (CMAQ) Program Guidance, published October 20, 2008, the purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards for ozone, carbon monoxide, and particulate matter. Table 1 provides a description of the 16 project categories contained in federal CMAQ guidance as well as general activities and projects eligible for CMAQ funding. Table 1 also includes the CMAQ eligible projects and programs added from transportation reauthorization, Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU). Table 2 provides a list of ineligible CMAQ activities and projects.

The SAFETEA-LU directs States and MPOs to give priority to two categories of funding. First, to diesel retrofits, particularly where necessary to facilitate contract compliance, and other cost-effective emission reduction activities, taking into consideration air quality and health effects. Second, priority is to be given to cost-effective congestion mitigation activities that provide air quality benefits.

The development of a CMAQ-eligible project may occur through a public-private partnership. Private entity proposals that benefit the general public by clearly reducing emissions require a legal written agreement between the public agency and private or nonprofit entity specifying the use of funds, roles and responsibilities of participating entities, cost sharing arrangements for capital investments and/or operating expenses, and how the disposition of land, facilities, and equipment should original terms of the agreement be changed. Eligible costs under this section may not include costs to fund an obligation imposed on private sector or nonprofit entities under the CAA or any other federal law except where the incremental portion of a project that exceeds the obligation under Federal law.

**Table 1. Eligible CMAQ Activities and Projects**

- 1. Transportation control measures (TCMs) found in 42 U.S.C. §7408(f)(1)**
  - programs for improved public transit
  - restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles
  - employer-based transportation management plans, including incentives
  - trip-reduction ordinances
  - traffic flow improvement programs that achieve emission reductions
  - fringe and transportation corridor parking facilities serving multiple-occupancy vehicle programs or transit service
  - programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use
  - programs for the provision of all forms of high-occupancy, shared ride services
  - programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place
  - programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas
  - programs to control extended idling of vehicles
  - programs to reduce motor vehicle emissions from extreme cold-start conditions
  - employer-sponsored programs to permit flexible work schedules
  - programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity
  - programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest

2. **Extreme Low-Temperature Cold Start Programs**
  - retrofitting vehicles and fleets with water and oil heaters
  - installing electrical outlets and equipment in publicly-owned garages or fleet storage facilities
3. **Alternative Fuels and Vehicles**
  - establishment of publicly-owned fueling facilities and other infrastructure needed to fuel alternative-fuel vehicles, unless privately-owned fueling stations are in place and reasonably accessible
  - support the conversion of private fueling facility to support alternative fuels through a public-private partnership
  - purchase of publicly-owned non-transit alternative fuel vehicles, including passenger vehicles, refuse trucks, street cleaners, and others
  - costs associated with converting fleets to run on alternative fuels
  - for private vehicles, the cost difference between alternative fuel vehicles and comparable conventional fuel vehicles
  - hybrid vehicles that have lower emission rates than their non-hybrid counterparts
  - hybrid passenger vehicles that meet EPA low emission and energy efficiency requirements for certification under the HOV exception provisions of SAFETEA-LU
  - projects involving heavier vehicles, including refuse haulers and delivery trucks may be eligible based on a comparison of the emissions projections of these larger candidate vehicles and other comparable models
4. **Congestion Reduction & Traffic Flow Improvements**
  - traditional traffic flow improvements, such as the construction of roundabouts, HOV lanes, left-turn or other managed lanes are eligible provided they demonstrate net emissions benefits
  - Intelligent Transportation Systems (ITS) projects such as traffic signal synchronization projects, traffic management projects, and regional multimodal traveler information systems, traffic signal control systems, freeway management systems, electronic toll-collection systems, transit management systems, and incident management programs
  - Value/Congestion Pricing projects that generate an emissions reduction, including, but not limited to: tolling infrastructure, such as transponders and other electronic toll or fare payment systems; small roadway modifications to enable tolling; marketing, public outreach efforts to expand and encourage the use of eligible pricing measures; and support services, such as transit in a newly tolled corridor
  - innovative pricing approaches supported through the Value Pricing Pilot Program
  - operating expenses for traffic flow improvements for a period not to exceed three years if shown to produce air quality benefits, if the expenses are incurred from new or additional services, and if previous funding mechanisms, such as fares or fees for services, are not displaced
  - projects or programs that involve the purchase of integrated, interoperable emergency communications equipment
5. **Transit Improvements**
  - new transit facilities (e.g., lines, stations, terminals, transfer facilities) are eligible if they are associated with new or enhanced mass transit service
  - rehabilitation of a facility may be eligible if the vast majority of the project involves physical improvements that will increase capacity and results in an increase in transit ridership
  - new transit vehicles (bus, rail, or van) to expand fleet or replace existing vehicles
  - diesel engine retrofits, such as replacement engines and exhaust after-treatment devices, are eligible if certified or verified by the EPA or CARB
  - other transit equipment may be eligible if it represents a major system-wide upgrade that will significantly improve speed or reliability of transit service, such as advanced signal and communications systems
  - fuel, whether conventional or alternative fuel, is an eligible expense only as part of a project providing operating assistance for new or expanded transit service, including fuel and fuel additives considered diesel retrofit technologies by EPA or CARB
  - operating assistance, including labor, fuel, maintenance, and related expenses, to introduce new transit service or expand existing transit service is eligible for a maximum of 3 years
  - regular transit fares may be subsidized as part of a comprehensive area-wide program to prevent exceedances of NAAQS during periods of high pollutant levels; must be combined with a marketing program to inform SOV drivers of other transportation options
6. **Bicycle and Pedestrian Facilities and Programs**
  - construction of bicycle and pedestrian facilities (paths, bike racks, support facilities, etc.) that are not exclusively recreational and reduce vehicle trips
  - non-construction outreach projects related to safe bicycle use
  - establishment and funding of State bicycle/pedestrian coordinator positions for promoting and facilitating nonmotorized transportation modes through public education, safety programs, etc.

## **7. Travel Demand Management**

- activities explicitly aimed at reducing SOV travel and associated emissions including fringe parking, traveler information services, shuttle services, guaranteed ride home programs, market research and planning in support Transportation Demand Management implementation, carpools, vanpools, traffic calming measures, parking pricing, variable road pricing, telecommuting, and employer-based commuter choice programs
- capital expenses and up to 3 years of operating assistance to administer and manage new or expanded TDM programs
- marketing and outreach efforts to expand use of TDM measures may be funded indefinitely, but only if broken out as distinct line items
- telecommuting activities including planning, preparing technical and feasibility studies, and training

## **8. Public Education and Outreach Activities**

- a wide range of public education and outreach activities, including activities that promote new or existing transportation services, developing messages and advertising materials (including market research, focus groups, and creative), placing messages and materials, evaluating message and material dissemination and public awareness, technical assistance, programs that promote the Tax Code provision related to commute benefits, transit “store” operations, and any other activities that help forward less-polluting transportation options

## **9. Transportation Management Associations**

- TMA start-up costs and up to 3 years of operating assistance

## **10. Carpooling and Vanpooling**

- carpools and vanpools marketing covers existing, expanded, and new activities to increase the use of carpools and vanpools and includes the purchase and use of computerized matching software and outreach to employers and guaranteed ride home programs
- vanpool vehicle capital costs include purchasing or leasing vans that do not directly compete with or impede private sector initiatives; vanpool operating expenses are limited to 3 years and include empty-seat subsidies, maintenance, insurance, administration, and other related expenses

## **11. Freight/Intermodal**

- projects and programs (e.g. new diesel engine technology or retrofits of vehicles or engines, nonroad mobile freight projects) that provide a transportation function and target freight capital costs including rolling stock or ground infrastructure are eligible provided that air quality benefits can be demonstrated

## **12. Diesel Engine Retrofits & Other Advanced Truck Technologies**

- applicable to onroad motor vehicles and nonroad construction equipment, project types in the diesel retrofit area include: diesel engine replacement, full engine rebuilding and reconditioning, the purchase and installation of after-treatment hardware including particulate matter traps and oxidation catalysts, and other technologies, and support for heavy-duty vehicle retirements programs
- purchase and installation of emission control equipment on school buses
- refueling projects (e.g., ultra-low sulfur diesel), but only if required to support the installation of emissions control equipment, repowering, rebuilding, or other retrofits of nonroad engines and only until the standards are effective and the fuel becomes commonly available through the regional supply and logistics chain. Eligible costs are limited to the difference between standard nonroad diesel fuel and ULSD
- outreach activities that provide information exchange and technical assistance to diesel owners and operators on retrofit options
- under a public-private partnership, projects for upgrading long-haul heavy-duty diesel trucks with advanced technologies, such as idle reduction devices, cab and trailer aerodynamic fixtures, and single-wide or other efficient tires are eligible

## **13. Idle Reduction**

- capital costs of off-board projects (e.g., truck stop electrification projects) that reduce emissions and are located within, or in proximity to and primarily benefitting a nonattainment or maintenance area
- capital costs of on-board projects (e.g., auxiliary power units, direct fired heaters, etc.) the heavy-duty vehicle must travel within, or in proximity to and primarily benefitting a nonattainment or maintenance area

## **14. Training**

- funds to support training and educational development for the transportation workforce must be directly related to implementing air quality improvements and be approved in advance by the FHWA Division Office

**15. Inspection/Maintenance (I/M) Programs**

- for publicly or privately owned I/M facilities that constitute new or additional efforts eligible activities include construction of facilities, purchase of equipment, I/M program development, and one-time start-up activities, such as updating quality assurance software or developing a mechanic training curriculum
- operating expenses are eligible for a maximum of three years
- State or local I/M program related administrative costs are eligible in States that rely on privately owned I/M facilities
- privately-owned I/M facilities such as service stations, that own the equipment and conduct emission test-and-repair services, requires a public-private partnership
- establishment of “portable” I/M programs, including remote sensing providing that they are public services, reduce emissions, and meet relevant regulations

**16. Experimental Pilot Projects**

- an “experimental” project or program must be defined as a transportation project and be expected to reduce emissions by decreasing vehicle miles traveled (VMT), fuel consumption, congestion, or by other factors

**17. In particulate matter nonattainment or maintenance areas, examples of eligible projects and programs include:**

- paving dirt roads
- street sweeping equipment

**Table 2. Ineligible CMAQ Activities and Projects**

- 1. Projects outside of the nonattainment or maintenance area boundaries, except in cases where the project is located in close proximity to the nonattainment or maintenance area and the benefits will be realized primarily within the nonattainment or maintenance area**
- 2. Light-duty vehicle scrappage programs**
- 3. Projects that add new capacity for single-occupancy vehicle (SOV) are ineligible for CMAQ funding unless construction is limited to high occupancy vehicle (HOV) lanes**
- 4. Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are ineligible for CMAQ funding as they only maintain existing levels of highway and transit service, and therefore do not reduce emissions**
- 5. Administrative costs of the CMAQ program may not be defrayed with program funds**
- 6. Projects that do not meet the specific eligibility requirements under United States Code titles 23 or 49**
- 7. Stand-alone projects to purchase fuel, except in certain states**
- 8. Routine preventive maintenance for vehicles is not eligible as it only returns the vehicles to baseline conditions**
- 9. Operating assistance for truck stop electrification projects is not an eligible activity since these projects generate their own revenue stream and can therefore recover all operating expenses**

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**

**[Docket No. FR-5396-N-01]**

**Sustainable Communities Planning Grant Program  
Advance Notice and Request for Comment**

**AGENCY:** Office of Sustainable Housing and Communities, Office of the Deputy Secretary,  
HUD.

**ACTION:** Advance Notice and Request for Comments.

**SUMMARY:** This notice announces HUD's intention to offer funding through a competition made available as a Notice of Funding Availability (NOFA) under its Sustainable Communities Planning Grant Program (Program).

As part of the Administration's efforts to increase transparency in government operations and to expand opportunities for stakeholders to engage in decision-making, HUD is seeking comments on the Program through this Advance Notice. Feedback received through this process will permit HUD and its partners to better understand how this Program can support cooperative regional planning efforts that integrate housing, transportation, environmental impact, and economic development. HUD is seeking input from State and local governments, regional bodies, community development entities, and a broad range of other stakeholders on how the Program should be structured in order to have the most meaningful impact on regional planning for sustainable development.

The goal of the Program is to support multi-jurisdictional regional planning efforts that integrate housing, economic development, and transportation decision-making in a manner that empowers jurisdictions to consider the interdependent challenges of economic growth, social

equity and environmental impact simultaneously. Three funding categories are being considered:

(1) Funding to support the preparation of Regional Plans for Sustainable Development that address housing, economic development, transportation, and environmental quality in an integrated fashion where such plans do not currently exist;

(2) Funding to support the preparation of more detailed execution plans and programs to implement existing regional sustainable development plans (that address housing, economic development, transportation, and environmental quality in an integrated fashion); and

(3) Implementation funding to support regions that have regional sustainable development plans and implementation strategies in place and need support for a catalytic project or program that demonstrates commitment to and implementation of the broader plan.

This Program is being initiated in close coordination with the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA).

**DATES:** All comments, to be considered in response to this Advance Notice, must be received no later than midnight Eastern Standard Time on Friday, March 12, 2010. Comments will not be accepted after that date.

**ADDRESSES:** Electronic responses are preferred and should be addressed to:

[sustainablecommunities@hud.gov](mailto:sustainablecommunities@hud.gov) or may be submitted through the [www.hud.gov/sustainability](http://www.hud.gov/sustainability) website. Written comments may also be submitted and post-marked by the deadline and addressed to Office of Sustainable Housing and Communities, Department of Housing and Urban Development, 451 7th Street, S.W. Room 10180, Washington, DC 20410. HUD is expanding the opportunity for comment by establishing a Wiki to encourage public dialogue at the following link: [www.hud.gov/OSHCwiki](http://www.hud.gov/OSHCwiki).

**OUTREACH SESSIONS:** HUD and its partner agencies will conduct a series of listening sessions and webcasts to ensure the broadest possible dissemination of information about the Program and to receive feedback from interested parties. Further information will be available at [www.hud.gov/sustainability](http://www.hud.gov/sustainability) shortly after the publication of this Advance Notice, and through such interactive forums that will be described on [www.hud.gov/sustainability](http://www.hud.gov/sustainability).

**AVAILABILITY OF FUNDING AND TIMELINES:** This notice invites comments on the proposed award of funding for the Sustainable Communities Planning Grant Program. This notice is **not** a solicitation of proposals for the Program.

The Program was authorized by the Consolidated Appropriations Act, 2010 (Pub. L. 111-117) (the Appropriations Act, approved December 16, 2009). For the Program, \$100,000,000 will be made available, through the NOFA that will follow this Advance Notice, to support the integration of housing, transportation and land use planning.

The following maximum funding levels are proposed:

- **Small metropolitan or rural areas.** The grant amount awarded under the Program to an eligible entity that represents a small metropolitan or rural area with a population of not more than 499,999 may not exceed \$2,000,000.
- **Large metropolitan areas.** The grant amount awarded under the Program to an eligible entity that represents a large metropolitan area with a population of 500,000 or more may not exceed \$5,000,000.

HUD will expect that at least 20 percent of the overall costs of the projects awarded under this grant will include leveraged funding from other public, philanthropic and private sources including in-kind contributions.

Pursuant to the Appropriations Act, not less than \$25,000,000 shall be awarded in the Small Metropolitan Area category.

HUD will award funding by soliciting proposals through a final NOFA for the Program that will be developed after consideration of comments obtained through this Advance Notice and in outreach sessions. The final NOFA will be broadly announced through appropriate and familiar means and will provide further details on the finalized requirements and application process, pursuant to and in compliance with all applicable statutes and regulations, including, but not limited to, the Paperwork Reduction Act (44 U.S.C. 3501 et seq.).

HUD will set aside approximately \$2,000,000 for technical assistance services to assist the awardees in implementing their proposals. A separate NOFA will be released describing the process for obtaining these technical assistance funds. The Appropriations Act also appropriates \$40,000,000 for a Community Planning Challenge (CPC) Grants Program. HUD will publish a separate NOFA for the CPC program.

It is HUD's intent to meet the following schedule in developing the NOFA for the Program:

February 16-March 1, 2010—Regional Listening Sessions (locations and dates to be posted at [www.hud.gov/sustainability](http://www.hud.gov/sustainability))

Week of March 1, 2010—Webcast Briefings

March 12, 2010—Comments on Draft Description due C.O.B. to HUD

Week of April 12, 2010—NOFA published

Approx. June 5, 2010—Applications due to HUD

Approx. August 2, 2010—Announcement of Awardees

## **I. Background**

A top priority of the Administration is to build economically competitive, healthy, opportunity-rich communities. In the Appropriations Act, Congress provided a total of \$150,000,000 to HUD for a Sustainable Communities Initiative to improve regional planning efforts that integrate housing and transportation decisions, and increase State, regional and local capacity to incorporate livability, sustainability, and social equity principles into land use and zoning. Of that total, \$100,000,000 is available for regional integrated planning initiatives, which is the subject of this Advance Notice.

The Sustainable Communities Initiative was conceived to advance development patterns that achieve improved economic prosperity, environmental sustainability, and social equity in metropolitan regions and rural communities. Recognizing the fundamental role that public investment plays in achieving these outcomes, the Administration charged three agencies whose programs impact the physical form of communities—HUD, DOT, and EPA—to lead the way in reshaping the role of the Federal government in helping communities obtain the capacity to embrace a more sustainable future. As a result, HUD, DOT, and EPA have formed the Partnership for Sustainable Communities (the Partnership). HUD will take the lead in funding, evaluating and otherwise supporting integrative regional planning for sustainable development. DOT will focus on (a) building the capacity of transportation agencies to integrate their planning and investments into broader plans and action to promote sustainable development; and (b) investing in transportation infrastructure that directly supports sustainable development and livability principles, as discussed below. EPA will enhance its role as a provider of technical assistance and developer of environmental sustainability metrics and practices. The three

agencies have made a commitment to coordinate activities, integrate funding requirements and adopt a common set of performance metrics for use by grantees. The Partnership is a commitment by these three Federal agencies to work together to coordinate policies and programs in support of six Livability Principles:

- 1. Provide more transportation choices.** Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- 2. Promote equitable, affordable housing.** Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility, and lower the combined cost of housing and transportation.
- 3. Enhance economic competitiveness.** Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers as well as expanded business access to markets.
- 4. Support existing communities.** Target Federal funding toward existing communities - through such strategies as transit-oriented, mixed-use development and land recycling - to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.
- 5. Coordinate policies and leverage investment.** Align Federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

**6. Value communities and neighborhoods.** Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

The Partnership for Sustainable Communities has observed that regions that have already adopted a more integrated approach to regional planning tend to exhibit a variety of desirable qualities including: more diversified and resilient economies; improved employer attraction and retention; more opportunities to lead healthier and more affordable lifestyles; lower per capita public infrastructure costs; lower vehicle miles traveled (VMT) per capita and, thus, reduced air pollution; and lower rates of concentrated poverty. These regions have built a shared vision for the future that allows greater and more broad-based support of community development and investment decisions. However, these effects are not guaranteed, and communities face a number of competing objectives in these areas. In addition, the best ways to measure progress are rightly debated as policy goals and methodologies evolve.

While the benefits of integrated regional planning are numerous, the incentives, institutions, and funding for such efforts are not widely available. Decisions made by local jurisdictions about the locations of housing, shopping, and employment are often disjointed both within and across jurisdictions and are, therefore, unable to incorporate either the impact on accessibility to different types of destinations or the broader impact on mobility and livability in a region. This fragmented approach results in a host of unintended consequences including: spatial mismatch between affordable housing and opportunities for employment and education; long and expensive commutes; permanent loss of agricultural land; reduced water quality in streams, lakes, and other water bodies; higher emissions of greenhouse gasses and other damaging pollutants.

Despite the presence of Metropolitan Planning Organizations, Councils of Governments, and other regional planning entities, there is too often a misalignment of transportation, housing, and infrastructure systems due in part to the lack of coordination when plans by different agencies are prepared separately. While separate resources may be available for housing, economic development, water infrastructure, and transportation planning, few funding sources help communities address challenges and opportunities in an integrated fashion.

## **II. Sustainable Communities Planning Grant Program**

The Sustainable Communities Planning Grant Program (the Program) is intended to help build the capacity of communities to address the complex challenges of growth and revitalization in the 21<sup>st</sup> century in a comprehensive, multi-disciplinary way. Funding from this Program will support the development and implementation of Sustainable Regional Development Plans. A priority will be placed on supporting regions that demonstrate a commitment to take well-developed plans and move them into implementation. The Appropriations Act directs the Secretary of HUD to establish a regional planning grant program that provides grants to assist regional entities and consortia of local governments with integrated housing, transportation, economic development, water infrastructure, and environmental planning. HUD's Office of Sustainable Housing and Communities is working in partnership with DOT and EPA to define all aspects of this Program. HUD will serve as the lead agency for all grants and will consult with its agency partners throughout the Program.

The final product of a Sustainable Communities Planning Grant will be a Regional Plan for Sustainable Development and/or implementation strategy that meet the requirements of existing HUD, DOT, and EPA programs, such as Consolidated Plans, Long Range

Transportation Plans and Stormwater Master Plans. Building on these requirements, a Regional Plan for Sustainable Development would be a plan that:

- (A) Identifies housing, transportation, economic development, land use, environmental, energy, green space and water infrastructure priorities and goals in a region;
- (B) Establishes locally-appropriate performance goals and measures the future outcomes of baseline and alternative growth and reinvestment scenarios against those goals, and includes standardized metrics developed by the Partnership;
- (C) Provides strategies for meeting those priorities and goals;
- (D) Prioritizes projects that facilitate the implementation of the regional plan; and identifies responsible implementing entities (public or private) and funding sources; and
- (E) Engages residents and stakeholders substantively in the development of the shared vision and its implementation plan early and throughout the process.

### **III. Solicitation of Comments on Proposed Program Structure**

As noted above, HUD and its partners are soliciting comments through this Advance Notice on how the Program should be structured, what funding categories and activities are most appropriate to support, which entities should be eligible grantees, and how best to evaluate regional needs, so that the Program has the most meaningful impact on regional planning for sustainable development. The discussion below outlines in general terms the key questions HUD is considering in preparing the final NOFA for the Program and identifies some specific issues for comment. HUD encourages meaningful input on the Program more generally as well. HUD has provided the avenues for input in the ADDRESSES section of this notice and highlights that it has established a Wiki site to allow additional comment and dialogue regarding addressing these issues.

### **A. Proposed Funding Categories and Eligible Activities**

HUD and its partner agencies recognize that regions are at different stages of readiness and capacity to engage in efforts to plan for a sustainable future. Some regions have formed multi-jurisdictional and multi-sector coalitions that are ready to embark on an effort to envision a future to help direct growth or stimulate investment sustainably. Other regions have already adopted a sustainable vision, but lack the resources to put in place the specific strategies that ensure follow-through and implementation of that vision. A few regions are on the cutting edge and have demonstrated the capacity to plan for the long-term, build broad-based coalitions in support of sustainable communities and use an array of tools to incent investment in development, land preservation, and infrastructure that implements their sustainable vision.

Given this broad spectrum, the Partnership is considering supporting activities to meet the needs of each of these three categories of regions. In this comment period, HUD specifically seeks feedback on the extent to which these categories are of benefit to potential applicants, the types of activities that should be allowed in each category, and the extent to which the Program should support project-level implementation investments. HUD is also soliciting feedback on appropriate common performance metrics for each funding category.

**Category 1: Regional Plans for Sustainable Development.** Funds would support stakeholder-driven visioning and scenario planning exercises that will address and harmonize plans for the location, scale and type of housing, education and job centers; identify appropriate transportation and water infrastructure; and proactively consider risks from disasters and climate change. Applicants would be expected to identify a set of locally-appropriate performance metrics that are consistent with the Partnership's Livability Principles, as well as the Partnership's own metrics, and then measure the outcomes of proposed growth/reinvestment scenarios against those

metrics. Funding in this category would support data analysis, urban design and outreach efforts to achieve broad consensus among groups, citizens, and decision-makers for a single vision/scenario and to have that plan adopted by all appropriate regional governmental bodies.

HUD seeks comments on the following questions:

- What specific types of eligible activities would support this effort and which parties should be part of the regional planning process?
- What elements should be part of the plan, such as a region-wide vision and statement of goals, long term development and infrastructure investment map, implementation strategy and/or funding plan?
- How can citizens best participate, such as through a requirement for participation in a minimum number of public meetings to ensure broad regional consensus?
- Should Regional Plans for Sustainable Development be expected to harmonize and be consistent with HUD, DOT, and EPA-required plans and, if so, how? Should Regional Plans for Sustainable Development show a linkage to local formula-based programs supported by HUD, DOT, and EPA; and, if so, to what extent should such linkage be required?

**Category 2: Detailed Execution Plans and Programs.** Funds in this category would support the preparation and adoption of detailed plans and programs to implement an adopted integrated regional sustainable vision. Because implementation needs will vary significantly from region to region depending on the goals of a sustainable plan and the gaps that exist, the funds from this category would likely support a wide range of implementation activities but still be measured against the common and consistent metrics and outcome goals highlighted in the previous section. For example, inter-jurisdictional affordable and fair housing strategies, regional transportation investment programs, corridor transit-oriented development plans, sector or area

plans, land banking and acquisition strategies, revenue sharing strategies, economic development strategies, plans to improve access to community amenities, and other specific activities that help ensure that the goals of the regional vision are implemented. Regional coalitions would be eligible to apply for this category on the basis of demonstrating the adoption of a regional vision that is substantially consistent with the Livability Principles, program goals and metrics identified in the published NOFA.

HUD seeks comments on the following questions:

- What specific types of activities should be eligible for funding in this category?
- What criteria should be used to evaluate whether a previously adopted regional vision is consistent with the Livability Principles discussed above?
- Should the amount of local and contributed resources to support, expand, and enhance the development of implementation strategies be rewarded in application scoring or are there other means to leverage other funds and resources?

**Category 3: Implementation Incentives.** Recognizing that those regions that have already fully embraced sustainable regional planning provide important models to the nation, the Partnership is considering ways in which the Program can reward and incent further action by cutting edge regions.

First, HUD is evaluating the extent to which applicants that have an adopted Regional Sustainable Development Plan and appropriate implementation programs in place could be pre-certified as having met HUD, DOT, and EPA's criteria for sustainability and livability factors in other discretionary federal funding programs.

Second, HUD is considering providing a limited number of grants to complete a financing package for projects that would accelerate the implementation of a Regional

Sustainable Development Plan. As envisioned, this category would support pre-development costs, capital costs for a regionally significant development or infrastructure investment, or land acquisition investments. We are considering how to make best use of new federal dollars in the context of existing programs and their requirements—and also in the context of innovative practices in the field. Applicants would need to demonstrate that they have in place an adopted regional vision that is substantially consistent with the Livability Principles, metrics identified in the published NOFA to measure performance, and have commitments from affected participating partners to initiate implementation efforts, but have funding gaps that could be closed within the grant limits for this program.

HUD seeks comments on the following questions:

- Would “pre-certification” be an added value and, if so, what programs should this approach apply to? What criteria should be considered for meeting the “pre-certification” status?
- Is the direct support of implementation activities appropriate within this Program given the limited amount of resources and the expected modest size of grants?
- What criteria should be used to judge that an applicant successfully demonstrates that it has an adopted regional vision and that the project for funding under this category is truly catalytic?
  - Specifically, what criteria should be considered for a project to be catalytic?
  - What types of activities might be included, the timeframe by what time the project should be completed, and how much leveraging should be considered appropriate for demonstrating that the proposed investment will serve as a the region’s commitment to a sustainable future?

## **B. Entities Eligible for Funding**

In the Program, HUD is considering as an eligible entity a multi-jurisdictional and multi-sector partnership consisting of a consortium of units of general local government and all government, civic, philanthropic and business entities with a responsibility for implementing a Regional Plan for Sustainable Development.

HUD seeks input on the following questions:

- Should certain entities be required partners in multi-jurisdictional regions such as a metropolitan planning organization as defined in 23 CFR 450.104, or a rural planning organization or network of rural planning organizations in a rural area?
- What definitions should HUD use to define a rural multi-jurisdictional region eligible for funding?
- What units of government should be allowed to serve as a lead agency for funding purposes?
- What should demonstrate commitment on the part of each member organization, and whether there should be a minimum number of member organizations?

## **C. Selection Criteria**

In evaluating an application for a grant, HUD, in partnership with DOT and EPA, will evaluate whether the application furthers the creation of livable communities by advancing regional planning that integrates housing, transportation, and environmental decisions and the extent to which the applicant represents a strong collaboration effort for the region in question.

HUD seeks input on how to judge the capacity of the regional entity to carry out the proposed Program, including the extent of technical and organizational capacity to conduct the project in the proposed time frame, past experience in implementing a planning process, and/or

an implementation project as proposed, and extent to which the consortium has developed partnerships throughout an entire metropolitan or rural area, including, as appropriate, partnerships with the entities described above. Specifically, should a needs assessment be required as an application submission requirement, and, if so, what data elements should be mandatory in judging need and the scope of the needs assessment to ensure that it addresses the comprehensive needs of the region?

While HUD specifically seeks comment on the foregoing questions, HUD welcomes additional information that will help inform the Sustainable Communities Planning Grant Program.

Date: February 4, 2010

/s/  
Ron Sims  
Deputy Secretary

[FR-5396-N-01]

Maricopa Association of Governments \* HUD Sustainable Communities Planning Grant Program \* Planning Inventory

Name: \_\_\_\_\_ Committee/Organization: \_\_\_\_\_ Contact Info: \_\_\_\_\_

Sustainability Principle	Activity	Timeline	Funding*	Resources*	Your Role	Impact
<i>Provide more transportation choices: Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce the nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.</i>						
<i>Promote equitable, affordable housing: Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility, and lower the combined cost of housing and transportation.</i>						
<i>Enhance economic competitiveness: Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers as well as expanded business access to markets.</i>						
<i>Support existing communities: Target federal funding toward existing communities – through such strategies as transit-oriented, mixed-use development and land recycling – to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.</i>						
<i>Coordinate policies and leverage investment: Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.</i>						
<i>Value communities and neighborhoods: Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.</i>						

\*Cite source and status