

**Early Progress Plans Demonstrating Progress Toward  
Attaining the 8-hour National Air Quality Standard for Ozone  
and  
Setting Transportation Conformity Budgets  
for  
Ventura County  
Antelope Valley - Western Mojave Desert  
Coachella Valley  
Eastern Kern County  
Imperial County**

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**Early Progress Plans Demonstrating Progress  
Toward Attaining the Federal 8-hour National Air Quality  
Standard for Ozone**

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## RECOMMENDATION

Air Resources Board (ARB or the Board) staff recommends that the Board adopt the ozone Early Progress Plans in this report as amendments to the State Implementation Plan (SIP) in order to establish transportation conformity emissions budgets for Ventura County, Antelope Valley - Western Mojave Desert, Coachella Valley, Eastern Kern County and Imperial County. Normally, these conformity budgets would be set with reasonable further progress (RFP) plans. However, the U.S. Environmental Protection Agency (U.S. EPA) is revising its regulations setting out the requirements for RFP plans and will not be able to approve RFP plans for these areas until that revision is complete. Setting conformity budgets with these early progress plans will allow transportation planning to move forward in the interim.

## BACKGROUND

Transportation conformity is a provision of the federal Clean Air Act that requires transportation planning agencies to demonstrate that their transportation plans, funding programs, and projects are consistent with (“conform to”) the SIP. One part of demonstrating conformity is a comparison, by transportation planning agencies, of vehicle emissions from transportation plans to emissions budgets in the SIP. An emissions budget is the level of emissions from on-road motor vehicles that ensures an area makes progress toward clean air and ultimately meets air quality standards by the mandated deadline.

Normally, emissions budgets would be set with an RFP plan. However, U.S. EPA is revising its RFP regulations for areas whose air quality is dominated by pollution from upwind regions. Until those revisions are complete, U.S. EPA will not approve RFP plans and related conformity budgets for these types of areas.

The transportation planning process still needs conformity budgets, and U.S. EPA’s inability to approve RFP plans creates a timing problem. To keep the transportation planning process moving, ARB staff has prepared early progress plans for the sole purpose of establishing transportation conformity emission budgets for the four nonattainment areas caught up by U.S. EPA’s revisions, and for Imperial County, whose pending reclassification will generate a need for transportation conformity emissions budgets.

An early progress plan is an optional plan and must simply show some progress toward attainment. The inventories for each of the five areas decline in the future with already adopted controls, thereby demonstrating progress. The plans are simple, containing the inventory demonstrating progress and the associated budgets.

## INVENTORIES AND CONFORMITY BUDGETS

The inventories presented below for stationary, area-wide and other mobile sources for all areas are consistent with the emission inventories submitted to U.S. EPA as part of the State Strategy for California's 2007 State Implementation Plan adopted by the Board in September 2007. These inventories contain reductions from adopted regulations only. Consequently, these early progress plans do not create any new regulatory SIP commitments.

The on-road mobile inventories and the transportation conformity budgets are estimated using California's EMFAC2007 on-road mobile emissions model. EMFAC2007 was approved by U.S. EPA on January 18, 2008. Transportation conformity budgets are estimated the year before an area's attainment year. This is consistent with U.S. EPA guidance, which states that attainment should be demonstrated for the last full ozone season before an area's attainment year. Motor vehicle activity data used for all areas except Eastern Kern County was updated by the Southern California Association of Governments (SCAG) in December, 2007 from SCAG's Draft 2008 Regional Transportation Plan transportation model runs. Transportation activity data for Eastern Kern County is from the Kern Council of Governments provided in January 2008.



**Ventura County**

<b>Ventura County Summer Planning Emissions Inventory*</b>					
Adjusted for Rules and Programs through December 31, 2006					
		<b>Tons per Day</b>		<b>Reductions, 2002-2009</b>	
		<b>2002</b>	<b>2009</b>	<b>Tons per Day</b>	<b>Percent</b>
<b>ROG</b>					
	Stationary	10.7	10.0		
	Area-wide	14.1	14.1		
	On-road Mobile	20.2	12.0		
	Other Mobile	15.2	14.0		
	<b>Total ROG</b>	<b>60.3</b>	<b>50.0</b>	<b>10.3</b>	<b>17%</b>
<b>NOx</b>					
	Stationary	6.5	6.3		
	Area-wide	1.3	1.3		
	On-road Mobile	30.1	18.5		
	Other Mobile	37.5	36.3		
	<b>Total NOx</b>	<b>75.3</b>	<b>62.4</b>	<b>12.9</b>	<b>17%</b>
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a 17 percent reduction in both ROG and NOx in 2009 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

<b>Ventura County</b>		
<b>Transportation Conformity Budgets</b>		
<b>Summer Planning Emissions in Tons per Day</b>		
	<b>2009</b>	
	<b>ROG</b>	<b>NOx</b>
<b>On-Road Emissions from EMFAC2007</b>	<b>12.0</b>	<b>19.0</b>
<b>Off Model Reductions*</b>	<b>0.0</b>	<b>-0.5</b>
<b>Net On-Road Emissions</b>	<b>12.0</b>	<b>18.5</b>
<b>Conformity Budget**</b>	<b>13</b>	<b>19</b>
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for Ventura County in 2009. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments in January 2008.

**Antelope Valley – Western Mojave Desert**

<b>Antelope Valley – Western Mojave Desert Summer Planning Emissions Inventory*</b>					
Adjusted for Rules and Programs through December 31, 2006					
		<b>Tons per Day</b>		<b>Reductions, 2002-2009</b>	
		<b>2002</b>	<b>2009</b>	<b>Tons per Day</b>	<b>Percent</b>
<b>ROG</b>					
	Stationary	12.0	13.2		
	Area-wide	10.9	11.0		
	On-road Mobile	25.9	20.8		
	Other Mobile	20.1	24.4		
	<b>Total ROG</b>	<b>68.9</b>	<b>69.5</b>	<b>-0.6</b>	<b>-1%</b>
<b>NOx</b>					
	Stationary	44.2	50.4		
	Area-wide	1.0	1.0		
	On-road Mobile	84.5	73.0		
	Other Mobile	50.4	40.0		
	<b>Total NOx</b>	<b>180.0</b>	<b>164.4</b>	<b>15.6</b>	<b>9%</b>
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a combined percent reduction of ozone precursors of 8 percent in 2009 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

<b>Antelope Valley - Western Mojave Desert</b>		
<b>Transportation Conformity Budgets</b>		
<b>Summer Planning Emissions in Tons per Day</b>		
	<b>2009</b>	
	<b>ROG</b>	<b>NOx</b>
<b>On-Road Emissions from EMFAC2007</b>	<b>20.9</b>	<b>77.6</b>
<b>Off Model Reductions*</b>	<b>0.0</b>	<b>-4.6</b>
<b>Net On-Road Emissions</b>	<b>20.8</b>	<b>73.0</b>
<b>Conformity Budget**</b>	<b>21</b>	<b>74</b>
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for the Antelope Valley – Western Mojave Desert in 2009. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments in January 2008.

**Coachella Valley**

<b>Coachella Valley Summer Planning Emissions Inventory*</b>					
Adjusted for Rules and Programs through December 31, 2006					
		<b>Tons per Day</b>		<b>Reductions, 2002-2012</b>	
		<b>2002</b>	<b>2012</b>	<b>Tons per Day</b>	<b>Percent</b>
<b>ROG</b>					
	Stationary	1.7	2.7		
	Area-wide	4.7	4.7		
	On-road Mobile	10.5	6.4		
	Other Mobile	5.3	4.8		
	<b>Total ROG</b>	<b>22.3</b>	<b>18.6</b>	<b>3.7</b>	<b>17%</b>
<b>NOx</b>					
	Stationary	0.9	0.9		
	Area-wide	0.5	0.4		
	On-road Mobile	41.0	25.5		
	Other Mobile	9.3	8.3		
	<b>Total NOx</b>	<b>51.8</b>	<b>35.1</b>	<b>14.7</b>	<b>32%</b>
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a 17 percent reduction in ROG and a 32 percent reduction in NOx in 2012 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

<b>Coachella Valley</b>		
<b>Transportation Conformity Budgets</b>		
<b>Summer Planning Emissions in Tons per Day</b>		
	<b>2012</b>	
	<b>ROG</b>	<b>NOx</b>
<b>On-Road Emissions from EMFAC2007</b>	<b>6.5</b>	<b>27.5</b>
<b>Off Model Reductions*</b>	<b>0.0</b>	<b>-2.0</b>
<b>Net On-Road Emissions</b>	<b>6.4</b>	<b>25.5</b>
<b>Conformity Budget**</b>	<b>7</b>	<b>26</b>
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for the Coachella Valley for 2012. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments.

**Eastern Kern County**

<b>Eastern Kern County Summer Planning Emissions Inventory*</b>					
Adjusted for Rules and Programs through December 31, 2006					
		<b>Tons per Day</b>		<b>Reductions, 2002-2008</b>	
		<b>2002</b>	<b>2008</b>	<b>Tons per Day</b>	<b>Percent</b>
<b>ROG</b>					
	Stationary	1.0	1.0		
	Area-wide	1.5	1.4		
	On-road Mobile	4.3	3.8		
	Other Mobile	4.7	4.5		
	<b>Total ROG</b>	<b>11.4</b>	<b>10.8</b>	<b>0.7</b>	<b>6%</b>
<b>NOx</b>					
	Stationary	18.2	20.6		
	Area-wide	0.1	0.1		
	On-road Mobile	16.7	15.0		
	Other Mobile	14.1	11.5		
	<b>Total NOx</b>	<b>49.1</b>	<b>47.3</b>	<b>1.9</b>	<b>4%</b>
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a combined percent reduction of ozone precursors of 10 percent in 2008 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

<b>Eastern Kern County</b>		
<b>Transportation Conformity Budgets</b>		
<b>Summer Planning Emissions in Tons per Day</b>		
	<b>2008</b>	
	<b>ROG</b>	<b>NOx</b>
<b>On-Road Emissions from EMFAC2007</b>	<b>4.1</b>	<b>19.9</b>
<b>Off Model Reductions*</b>	<b>-0.3</b>	<b>-4.9</b>
<b>Net On-Road Emissions</b>	<b>3.8</b>	<b>15.0</b>
<b>Conformity Budget**</b>	<b>4</b>	<b>16</b>
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for Eastern Kern County for 2008. EMFAC2007 emission factors were used with motor vehicle activity provided by the Kern County Council of Governments in January 2008.



**Imperial County**

<b>Imperial County Summer Planning Emissions Inventory*</b>					
Adjusted for Rules and Programs through December 31, 2006					
		<b>Tons per Day</b>		<b>Reductions, 2002-2009</b>	
		<b>2002</b>	<b>2009</b>	<b>Tons per Day</b>	<b>Percent</b>
<b>ROG</b>					
	Stationary	1.3	1.4		
	Area-wide	20.8	20.6		
	On-road Mobile	8.8	6.9		
	Other Mobile	6.4	7.4		
	<b>Total ROG</b>	<b>37.4</b>	<b>36.3</b>	<b>1.1</b>	<b>3%</b>
<b>NOx</b>					
	Stationary	8.5	8.9		
	Area-wide	0.9	0.9		
	On-road Mobile	20.9	16.7		
	Other Mobile	12.6	10.1		
	<b>Total NOx</b>	<b>42.9</b>	<b>36.6</b>	<b>6.3</b>	<b>15%</b>
* Summer Planning Inventory v.1.06					

As shown above, the emissions inventory from all sources shows a 3 percent reduction in ROG and a 15 percent reduction in NOx in 2009 compared to the 2002 base year. This demonstrates significant progress toward attainment of the federal 8-hour standard.

<b>Imperial County</b>		
<b>Transportation Conformity Budgets</b>		
<b>Summer Planning Emissions in Tons per Day</b>		
	<b>2009</b>	
	<b>ROG</b>	<b>NOx</b>
<b>On-Road Emissions from EMFAC2007</b>	<b>6.9</b>	<b>17.6</b>
<b>Off Model Reductions*</b>	<b>0.0</b>	<b>-0.9</b>
<b>Net On-Road Emissions</b>	<b>6.9</b>	<b>16.7</b>
<b>Conformity Budget**</b>	<b>7</b>	<b>17</b>
* Reductions from adopted rules not reflected in EMFAC2007		
** Budget obtained by rounding up to the nearest ton		

Presented above are the transportation conformity budgets for Imperial County for 2009. EMFAC2007 emission factors were used with motor vehicle activity provided by the Southern California Association of Governments in January 2008.