

## Appendix A

### **Air Quality Conformity Determination**

The Dayton/Springfield air quality Region (D/S Region) is comprised of the Counties of Clark, Greene, Miami, and Montgomery in southwest Ohio. All counties were re-designated to attainment/maintenance for the 8-hour ozone standard in August 2007; three counties (Clark, Greene, and Montgomery) are designated non-attainment for the annual PM2.5 standard.

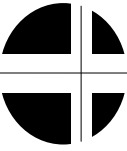
The Clark County-Springfield Transportation Coordinating Committee and the Miami Valley Regional Planning Commission have agreed that the MVRPC shall serve as the lead agency in the Dayton-Springfield Air Quality Control Region (AQCR) for purposes of air quality planning in cooperation with the Ohio Environmental Protection Agency, the Regional Air Pollution Control Agency, and the Ohio Department of Transportation. Conformity is completed in consultation with the CCSTCC, the OKI, the Ohio Department of Transportation (ODOT), the Ohio Environmental Protection Agency (OEPA) the United States Environmental Protection Agency (US EPA), and the Federal Highway and Transit Administrations (FHWA and FTA) .

The Clean Air Act and subsequent amendments require a Plan and TIP conformity determination for areas such as the Dayton/Springfield Region (Clark, Greene, Miami and Montgomery Counties). Because the Dayton/Springfield Region is represented by two different MPO close coordination is required between MVRPC and CCSTCC during this process. Board resolutions by each MPO will acknowledge the respective MPO's transportation plans and conformity processes assuring that the MPO's conformity determinations accurately reflect emissions of future transportation projects.

- Region wide ridesharing programs
- Biking and Pedestrians Alternative modes of traveling
- Improved and Expand Park & Ride Lots
- Air Alert Advisory Days
- Transit Improvements
- Traffic Flow Improvements

In the conformity restructuring rule, which was published as a proposal on August 13, 2010, the USEPA proposed to require an analysis year within 5 years of the conformity determination year for areas that are conducting the budget test. It is not sure when this proposed rule will be finalized. In anticipation of the rule, CCSTCC and MVRPC ran 2015 as an analysis year for ozone as well as PM2.5. It is acceptable to use MOBILE6.2 for the conformity analysis until the end of the grace period in March 2012 to estimate emissions from mobile sources in the Dayton-Springfield area.

The transportation conformity runs meet the latest planning assumption requirement. The modeling process used to develop each MPO emissions is calibrated using the latest population and land use data available and is validated using corresponding traffic count



data. The travel demand models for CCSTCC were validated to 2000 and 2005 for MVRPC.

The MOBILE inputs, conformity test and analysis years were established through a series of interagency consultation e-mails in December 2010, final interagency consultation can be found in Exhibit A.

The Dayton-Springfield region was designated as attainment/maintenance for the new ozone standard. The new 8-hour standard is violated when the 3-year average of the annual fourth highest daily maximum 8-hour ozone average concentration exceeds 0.08 ppm. The D/S Region was re-designated to attainment maintenance for the 8-hour ozone standard and new mobile budgets for the area approved (72FR45169), the new budgets (2005 and 2018) will be used to demonstrate conformity to the 8-hour ozone standard using the budget test.

#### *8-Hour Ozone Standard*

In April 2004, US EPA issued final designations regarding the 8-hour ozone standard. The 8-hour standard is violated when the 3-year average of the annual fourth highest daily maximum 8-hour ozone average concentration exceeds 0.08 ppm. All four counties (Clark, Greene, Miami, and Montgomery) in the Dayton/Springfield Region were designated as basic non-attainment for the new standard. The D/S Region was re-designated to attainment maintenance for the 8-hour ozone standard and new mobile budgets for the area approved (72FR45169), the new budgets (2005 and 2018) will be used to demonstrate conformity to the 8-hour ozone standard using the budget test.

Following interagency consultation analysis years were established as follows:

- 2015 - analysis year within 5 years of the conformity determination year (proposed rule)
- 2018 - 8-Hour Re-designation Plan budget year
- 2020 - Interim year
- 2030 - Plan(s) horizon year



**Table 1 – Dayton/Springfield Region 8-hour ozone Regional Emissions Analysis**

<b>Year</b>	<b>County</b>	<b>HC (tons/day)</b>	<b>NOX (tons/day)</b>
2015	GRE/MIA/MOT	12.097	19.894
2015	CLA	2.619	4.743
	Total 4-County	14.716	24.637
	2005 Budget	29.19	63.88
	Difference	<b>14.474</b>	<b>39.243</b>
2018	GRE/MIA/MOT	10.074	15.125
2018	CLA	2.224	3.658
	Total 4-County	12.298	18.783
	2018 Budget	14.73	21.42
	Difference	<b>2.432</b>	<b>2.637</b>
2020	GRE/MIA/MOT	9.419	13.357
2020	CLA	2.109	3.268
	Total 4-County	11.528	16.625
	2018 Budget	14.73	21.42
	Difference	<b>3.202</b>	<b>4.795</b>
2030	GRE/MIA/MOT	8.898	10.008
2030	CLA	2.105	2.553
	Total 4-County	11.003	12.561
	2018 Budget	14.73	21.42
	Difference	<b>3.727</b>	<b>8.859</b>



**Table 2 – Dayton/Springfield Region PM2.5 Regional Emissions Analysis**

A	B	C	D=(182)x(C)	E	F=(183*(E))	G=D+F
Year	County	Emissions (Avg Daily Winter)	Emissions (Winter - 182 days)	Emissions (Avg Daily Summer)	Emissions (Summer – 183 days)	Emissions (Annual)
2002-Base	GRE/MOT	0.858	156.156	0.935	171.105	327.3
2002-Base	CLA	0.207	37.674	0.235	43.005	80.7
Baseline						<b>407.9</b>
2015	GRE/MOT	0.328	59.696	0.364	66.612	126.3
2015	CLA	0.084	15.288	0.097	17.751	33.0
Total 3-county Baseline						159.3
Difference						<b>407.9</b>
Difference						<b>248.6</b>
2020	GRE/MOT	0.280	50.960	0.289	52.887	103.8
2020	CLA	0.074	13.468	0.080	14.640	28.1
Total 3-county Baseline						132.0
Difference						<b>407.9</b>
Difference						<b>276.0</b>
2030	GRE/MOT	0.274	49.868	0.282	51.606	101.5
2030	CLA	0.077	14.014	0.083	15.189	29.2
Total 3-county Baseline						130.7
Difference						<b>407.9</b>
Difference						<b>277.3</b>



**NOX [tons]**

A	B	C	D=(182)x(C)	E	F=(183*(E))	G=D+F
Year	County	Emissions (Avg Daily Winter)	Emissions (Winter - 182 days)	Emissions (Avg Daily Summer)	Emissions (Summer – 183 days)	Emissions (Annual)
2002-Base	GRE/MOT	50.599	9209.018	52.304	9571.632	18780.7
2002-Base	CLA	13.050	2375.100	14.172	2593.476	4968.6
					Baseline	<b>23749.2</b>
2015	GRE/MOT	16.037	2918.734	16.311	2984.913	5903.6
2015	CLA	4.411	802.802	4.704	860.832	1663.6
					Total 3-county Baseline	7567.3
					Difference	<b>16181.9</b>
2020	GRE/MOT	10.617	1932.294	10.963	2006.229	3938.5
2020	CLA	3.010	547.820	3.254	595.482	1143.3
					Total 3-county Baseline	5081.8
					Difference	<b>18667.4</b>
2030	GRE/MOT	7.803	1420.146	8.169	1494.927	2915.1
2030	CLA	2.327	423.514	2.543	465.369	888.9
					Total 3-county Baseline	3804.0
					Difference	<b>19945.3</b>