

National Capital Region Transportation Planning Board

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Memorandum

December 2, 2005

To: TPB Technical Committee

From: Mike Clifford

Subject: PM2.5 Air Quality Conformity Report: Errata

At the November 16, 2005 TPB meeting staff presented the draft report on the air quality conformity assessment of the 2005 CLRP and FY2006 – 11 TIP with respect to fine particles standards (PM2.5). That report is currently undergoing a 30 day public comment period.

Following the release of the draft report, TPB staff has continued its technical review of the emissions analyses conducted for the assessment. In the course of this review staff has identified: (1) a number of minor updates to some of the PM2.5 and NOx precursor emissions calculations (resulting in changes in the tenth of a ton per day range), and (2) the omission of school bus and transit bus emissions in the seasonal and annual totals in the direct PM2.5 emissions summary table and bar chart (resulting in changes in the several tons per year range).

While these transit and school bus emissions calculations were documented in detail in Attachment D of the report, and the associated daily emissions totals were included in the direct PM2.5 summary table (Exhibit 7) in the body of the report, the corresponding seasonal and annual totals for these two components were not reflected in that table.

Replacement Exhibits 7, 8 and 9, which reflect each of these corrections, are attached to this memo. Exhibits 7 and 8 have also been modified to detail the seasonal totals for each travel component. With these corrections, mobile source emissions reductions are seen to provide somewhat greater benefits than previously reported.

Attachments (3)

EXHIBIT 7
AIR QUALITY CONFORMITY SUMMARY TABLE
Direct PM2.5 Emissions
Mobile Source Emissions Inventories
for 2005 CLRP and FY 2006-2011 TIP
(Tons)

		Days	NOx							
			2002		2010		2020		2030	
			Daily	seasonal	Daily	seasonal	Daily	seasonal	Daily	seasonal
WINTER	Major Roads	90	3.93	353.34	2.30	206.55	1.83	164.88	1.91	172.08
	Local Roads	90	0.17	15.66	0.12	11.16	0.12	11.16	0.13	12.06
	School Buses	58	0.34	19.64	0.06	3.60	0.02	1.37	0.02	1.13
	Transit Buses	90	0.27	23.87	0.04	3.80	0.02	1.92	0.02	1.57
	Auto Access	65	0.01	0.84	0.01	0.68	0.01	0.78	0.01	0.85
	Total (Daily)		4.72		2.53		2.01		2.10	
	SEASON TOTAL			413.35		225.78		180.11		187.69
SPRING	Major Roads	92	3.84	353.37	2.37	217.58	1.93	177.56	2.03	186.39
	Local Roads	92	0.17	15.27	0.13	12.05	0.13	12.24	0.14	12.88
	School Buses	58	0.33	18.90	0.06	3.47	0.02	1.36	0.02	1.13
	Transit Buses	92	0.26	23.64	0.04	3.78	0.02	1.94	0.02	1.60
	Auto Access	66	0.01	0.79	0.01	0.71	0.01	0.84	0.01	0.91
	Total (Daily)		4.60		2.61		2.12		2.22	
	SEASON TOTAL			411.98		237.59		193.93		202.91
SUMMER	Major Roads	92	4.02	369.38	2.45	225.40	2.02	185.38	2.11	194.49
	Local Roads	92	0.17	15.82	0.13	12.33	0.14	12.70	0.15	13.62
	School Buses	40	0.33	13.05	0.06	2.35	0.02	0.92	0.02	0.78
	Transit Buses	92	0.26	23.68	0.04	3.68	0.02	1.94	0.02	1.60
	Auto Access	66	0.01	0.81	0.01	0.73	0.01	0.86	0.01	0.94
	Total (Daily)		4.78		2.69		2.21		2.31	
	SEASON TOTAL			422.74		244.49		201.80		211.42
FALL	Major Roads	91	3.84	348.99	2.27	206.21	1.91	173.99	2.00	181.73
	Local Roads	91	0.17	15.65	0.13	11.56	0.13	12.01	0.14	12.74
	School Buses	58	0.28	16.51	0.05	3.16	0.02	1.22	0.02	1.13
	Transit Buses	91	0.23	21.30	0.04	3.35	0.02	1.78	0.02	1.58
	Auto Access	65	0.01	0.83	0.01	0.68	0.01	0.81	0.01	0.88
	Total (Daily)		4.54		2.49		2.10		2.19	
	SEASON TOTAL			403.28		224.96		189.81		198.07
ANNUAL TOTAL				1,651.35		932.82		765.65		800.09

EXHIBIT 8
AIR QUALITY CONFORMITY SUMMARY TABLE
PM2.5 NOx Precursor Emissions
Mobile Source Emissions Inventories
for 2005 CLRP and FY 2006-2011 TIP
(Tons)

	Days	NOx							
		2002		2010		2020		2030	
		Daily	seasonal	Daily	seasonal	Daily	seasonal	Daily	seasonal
WINTER									
Major Roads-Starts	90	18.09	1627.83	7.95	715.32	3.56	320.49	2.76	247.95
Major Roads-VMT	90	223.72	20135.07	107.47	9672.39	35.14	3162.24	26.75	2407.14
Local Roads	90	11.06	995.04	5.69	512.01	2.44	219.60	2.06	185.40
School Buses	58	5.63	326.26	3.61	209.25	0.69	39.96	0.27	15.93
Transit Buses	90	6.30	566.79	4.22	379.88	1.15	103.55	0.34	30.45
Auto Access	65	1.94	126.23	0.91	59.41	0.42	27.41	0.37	23.80
Total (Daily)		266.73		129.85		43.40		32.54	
SEASON TOTAL			23,777.22		11,548.26		3,873.25		2,910.66

	Days	NOx							
		2002		2010		2020		2030	
		Daily	seasonal	Daily	seasonal	Daily	seasonal	Daily	seasonal
SPRING									
Major Roads-Starts	92	15.34	1411.46	7.20	662.77	3.31	304.43	2.62	240.86
Major Roads-VMT	92	209.27	19252.75	101.03	9294.30	33.98	3126.34	26.43	2431.28
Local Roads	92	9.82	903.07	5.25	483.00	2.33	214.36	2.02	185.84
School Buses	58	5.56	322.53	3.43	198.91	0.67	38.66	0.27	15.89
Transit Buses	92	6.24	574.22	4.06	373.68	1.12	102.75	0.34	31.12
Auto Access	66	1.65	108.62	0.82	54.33	0.40	26.16	0.35	23.20
Total (Daily)		247.88		121.79		41.80		32.03	
SEASON TOTAL			22,572.65		11,066.99		3,812.69		2,928.19

	Days	NOx							
		2002		2010		2020		2030	
		Daily	seasonal	Daily	seasonal	Daily	seasonal	Daily	seasonal
SUMMER									
Major Roads-Starts	92	13.85	1274.29	6.63	609.96	3.05	280.14	2.41	221.81
Major Roads-VMT	92	214.72	19754.42	103.20	9494.31	34.86	3207.49	27.26	2507.46
Local Roads	92	10.38	955.33	5.48	504.07	2.49	229.08	2.19	201.48
School Buses	40	5.56	222.39	3.43	137.18	0.67	26.66	0.27	10.96
Transit Buses	92	6.24	574.22	4.06	373.68	1.12	102.75	0.34	31.12
Auto Access	66	1.61	106.23	0.81	53.14	0.39	25.96	0.35	23.26
Total (Daily)		252.37		123.60		42.58		32.82	
SEASON TOTAL			22,886.89		11,172.34		3,872.08		2,996.09

	Days	NOx							
		2002		2010		2020		2030	
		Daily	seasonal	Daily	seasonal	Daily	seasonal	Daily	seasonal
FALL									
Major Roads-Starts	91	15.93	1449.27	6.68	607.88	3.10	282.37	2.54	230.69
Major Roads-VMT	91	208.43	18967.13	91.87	8359.81	32.43	2950.77	25.57	2326.60
Local Roads	91	10.27	934.75	4.85	441.08	2.21	201.11	1.96	178.36
School Buses	58	5.48	318.00	3.16	183.43	0.56	32.36	0.27	15.89
Transit Buses	91	6.02	548.07	3.81	346.87	1.04	94.65	0.34	30.79
Auto Access	65	1.75	113.43	0.76	49.24	0.37	24.32	0.34	22.11
Total (Daily)		247.88		111.12		39.71		31.01	
SEASON TOTAL			22,330.64		9,988.30		3,585.59		2,804.43

ANNUAL TOTAL			91,567.40		43,775.88		15,143.61		11,639.37
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