

APPENDIX NO. 1
CONFORMITY ANALYSIS

SYRACUSE METROPOLITAN TRANSPORTATION COUNCIL

Regional Emissions Analysis

for

SMTC Long-Range Transportation Plan – 2001 Update
Air Quality Conformity Determination

Using the U.S. Environmental Protection Agency's (EPA)
MOBILE 5B Emissions Model

and

The Latest Emissions Control Programs
for Onondaga County per the
New York State Department of Environmental Conservation (NYSDEC)

Prepared by:

The New York State Department of Transportation (NYSDOT)
Environmental Analysis Bureau

and

The Syracuse Metropolitan Transportation Council (SMTC)

April 2001

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**SMTC Long-Range Transportation Plan – 2001 Update
Conformity Analysis:
April 2001**

Introduction

This regional emissions analysis is prepared to comply with the requirements of the Federal Clean Air Act Amendments of 1990 and the associated Federal and State Transportation conformity regulations. The regulations, both the U.S. Environmental Protection Agency's (EPA) transportation conformity rule (40 CFR Parts 51 and 93) and the New York State Department of Environmental Conservation's (NYSDEC) transportation conformity regulation (6 NYCRR Part 240) require that each time the Syracuse Metropolitan Transportation Council (SMTC) adopts or approves a Transportation Improvement Program (TIP), Long-Range Transportation Plan (LRTP) or an amendment/update to the TIP or LRTP, it be determined that the proposed action is in conformity with the applicable State Implementation Plan (SIP) for air quality prepared by NYSDEC.

The remainder of this report presents the results and documentation of the regional emissions analysis and the air quality conformity determination conducted for the proposed 2001 Update to SMTC's Long-Range Transportation Plan.

Status of Applicable SIP

The existing State Implementation Plan (SIP) for air quality for Onondaga County contains estimated existing and future emissions of carbon monoxide (CO) as part of the Clean Air Act requirement to produce a "Maintenance Plan" when the NYSDEC demonstrated to the EPA that Syracuse and Onondaga County had attained the National Ambient Air Quality Standards (NAAQS). This Maintenance Plan establishes a comparison between existing "base year" emissions, (per the Clean Air Act this year is either 1990 or another year as established by the SIP: 1991 for Onondaga) and future estimated emissions. The Maintenance Plan must demonstrate that emissions of CO in future years will remain below the levels established in the base year when the standards are first attained, therefore assuring the continued maintenance of the standards, or NAAQS.

The Onondaga County SIP of 1992, that established the Maintenance Plan referenced above, used a now outdated version of the EPA's emissions model, "MOBILE" version 4.1. In addition, the NYSDEC has changed some of the proposed future emission control programs, most notably the vehicle inspection and maintenance program that was anticipated in the Maintenance Plan. It has now been changed to a "gas-cap integrity test" to check for emissions leaks, as part of the New York State annual vehicle safety and emissions inspection program. It includes testing of the vehicle's emissions control

equipment for evidence of tampering, and will include testing of new vehicle on-board diagnostic systems related to the vehicle's emissions control system.

These differences between the previous SIP assumptions and those required for a proper air quality conformity analysis according to the EPA's transportation conformity rule have resulted in difficulties in directly comparing the updated regional emissions analysis for the SMTC TIP and LRTP updates with the CO emissions budget of the SIP. The conformity analysis must use the latest planning assumptions and the latest emissions model, both of which have changed significantly since the SIP's on-road mobile source emissions budget for Onondaga County was prepared.

In order to produce a process to appropriately determine transportation conformity while the NYSDEC prepared the next version of the SIP Maintenance Plan, interagency consultation was initiated during SMTC's previous LRTP conformity determination. The involved State, local and Federal agencies have agreed that the updated regional emissions analysis that incorporates the latest planning assumptions, latest future emissions control programs estimated by the NYSDEC, and the latest EPA emissions model could be used to demonstrate conformity of the SMTC TIP and LRTP with the SIP.

Results of the Regional Emissions Analysis

The following pages show the complete results of the regional emissions analysis, using the EPA's MOBILE 5B model and the latest SMTC transportation demand model results. The existing and future estimated emissions are presented in the table on page 6, and the non-exempt transportation projects included in the analysis are presented on page 7. This analysis demonstrates that with the adopted 2001 Update to the SMTC LRTP, CO emissions in future years will remain below the levels established by the SIP base year. Therefore, since on-road mobile source emissions will remain under the levels when the region first attained the Federal CO standard, continued maintenance of the CO NAAQS is assured, and the SMTC 2001 Update and the existing LRTP remain in conformity with the SIP.

As an additional measure of the future CO emissions in Onondaga County, the preliminary updated on-road mobile source emission levels developed by the NYSDEC were analyzed for comparison purposes. These updated emissions estimates have not yet been submitted to the EPA as part of a new SIP Revision/Maintenance Plan, so they do not represent an official emissions budget, but they are the latest estimated future year targets that are expected to be submitted to EPA, once the other tasks required for the new Maintenance Plan SIP are completed. The new CO emissions estimates for Onondaga County were developed by the NYSDEC using the latest EPA emissions model, MOBILE 5B, and the referenced changes to the planned emission control programs that have been made since NYSDEC produced the original Maintenance Plan SIP in November 1992. In addition, the new estimates (provided by the NYSDEC) include an updated inventory of Daily Vehicle Miles Traveled (DVMT) produced by the NYSDOT, based on the Highway Performance Monitoring System (HPMS) data produced for the USDOT Federal Highway

Administration (FHWA), and updated future forecasts of DVMT produced for the historical trend of existing HPMS traffic counts. The comparisons made show that for each future year, emissions with the proposed SMTC 2001 LRTP Update will be below the draft target levels for on-road mobile source emissions in Onondaga County that the NYSDEC expects to eventually include in the updated Maintenance Plan SIP.

Status of Required SIP TCMs

The table on the following page presents the current status and schedule of the official Transportation Control Measures (TCMs) contained in the SIP for Syracuse and Onondaga County. The referenced Federal and State air quality conformity regulations require that each time the SMTC adopts or approves a new TIP or LRTP, a determination that all required TCMs are being implemented in a timely fashion be made. As the TCM table shows, all of the required TCMs have been completed with the exception of one and this single remaining project is on the TIP and on schedule.

Conclusions

In conclusion, the proposed 2001 Update to the SMTC's LRTP has complied with the requirements of the Clean Air Act, and is in conformity with the New York State Implementation Plan (SIP) for air quality.

The following pages provide the documentation of the required regional emissions analysis conducted to determine air quality conformity. The analysis demonstrates that with the adopted 2001 Update to the SMTC's LRTP, emissions of carbon monoxide will remain below the levels established in the base year when Syracuse and Onondaga County first attained the Federal CO standards. Therefore, continued maintenance of the CO NAAQS is assured, and the SMTC TIP and LRTP remain in conformity with the SIP.

SMTC 2001 LRTP Update, April 2001

**Summary of Regional Emissions Analysis Results
MOBILE 5B With Updated SMTC TModel 2**

	Base Year 1990	
	VMT	CO Emissions g/day
Peak	3902845	144135328
Off-Peak	8596519	311796030
Total	12499364	455931358
Total tons/day CO=		502.58

	Forecast Year 2003	
	VMT	CO Emissions g/day
Peak	4196595	97967586
Off-Peak	9240875	209608961
Total	13437470	307576547
Total tons/day CO=		339.05

	Forecast Year 2005	
	VMT	CO Emissions g/day
Peak	4338176	89204210
Off-Peak	9552721	190489551
Total	13890897	279693761
Total tons/day CO=		308.31

	Forecast year 2015	
	VMT	CO Emissions g/day
Peak	4636311	41353453
Off-Peak	10214608	87650501
Total	14850919	129003954
Total tons/day CO=		142.2

	Forecast Year 2020	
	VMT	CO Emissions g/day
Peak	4692666	34416170
Off-Peak	10333591	72719541
Total	15026257	107135711
Total tons/day CO=		118.1

Non-Exempt Projects Included in Modeling for Conformity Analysis

PIN	PROJECT	GENERAL SCOPE	TCM?
3035.19	County Route 57 Improvements – Phase IV	Reconstruction to add turning lanes at intersection of SR 31 and CR 57.	
3037.56	Route 31 Bridge at Belgium Over the Seneca River	Widening of Route 31 to reduce vehicle hours of delay and safety deficiencies.	
3752.81	Kirkpatrick/Court/Solar	Realign Court/Kirkpatrick, expand Kirkpatrick to 4 lanes, rehabilitate Solar Street	
3034.72	Overlap of Routes 5 and 92 from Erie Blvd. Through Lyndon Corners	Final scope undetermined; widening and signal improvements at intersections over a one-mile stretch of Route 5.	
3037.53	Route 31 – Soule Road to Henry Clay Blvd.	Widening of Route 31 to reduce vehicle hours of delay and safety deficiencies	
3037.59	Route 31 – CR 57 to Soule Road	Widening of Route 31 to reduce vehicle hours of delay and safety deficiencies	
3802.10	Baldwinsville By-Pass	Roadway from Rt. 31 in Lysander to Rt. 48 in Van Buren – including the bridge over river	
3802.75	Syracuse Signal System Interconnect	Improvement, interconnection, and computerization of up to 145 signal controllers in downtown Syracuse, includes downtown and University Hill area.	✓
3803.79	Clinton Square	Closure of Erie Boulevard, new traffic pattern and subsequent pedestrian improvements.	

Transportation Control Measures (TCMs) Update

PIN	PROJECT	1994-1999	2001-2006	COMMENTS
3035.19	RT 57, phase IV, Gaskin to RT 31	Construction - 11/96		Implemented
3104.12	RT 635, RT 5 to RT 298	Construction - 11/94		Implemented
3104.13	RT 298, Syracuse to Carrier Circle	Construction - 11/98	Construction – 4/02	To be implemented 4/02
3752.06	Harrison Street Traffic Signal	Construction - 9/95		Implemented
3752.07	Buckley Road Improvements at Bear Road	Construction - 11/95		Implemented
3802.72	OnCenter Signs	Construction - 1/94		Implemented
3802.75	Downtown Syracuse Signal Interconnect System	Engineering - 11/96		Implemented
3803.07	Connections Ride Sharing Program	CNYRTA receives Connections funding every year for their ongoing Ride Share work.		
3803.12	AVL System	Construction - 10/96		Implemented
3820.74	Fare Collection System	Construction - 10/96		Implemented
3820.89	Shelter Schedule Panels	Construction - 10/94		Implemented

Of 11 specific projects listed in the Onondaga County's State Implementation Plan (SIP) as Transportation Control Measures (TCMs), ten have been implemented. One TCM project, pavement rehabilitation and traffic operation improvements, scheduled for State Route 298, Syracuse to Carrier Circle (PIN 310413) has experienced a delay in schedule. The project was originally programmed on the 1998-2002 Transportation Improvement Program (TIP) for construction in 2001. The project will be carried over on the 2001-2006 TIP for letting of the construction phase in April of 2002. It is anticipated that all TCM projects will be fully implemented during the 2001-2006 TIP.

Off Peak Period CO Emissions From MOBILE5B
SYRACUSE-ONONDAGA

1990

Class	Speed	CO	VMT	CO SUM
11	44.2	19.81	199469.00	3951052.00
14	37.7	41.52	174618.00	7250902.50
19	33.1	52.04	150091.00	7809998.50

TOTAL OFF PEAK HOUR :			524178.00	19011953.07
TOTAL OFF PEAK PERIOD:			8596519.20	311796030.33

2003 LRTP

Class	Speed	CO	VMT	CO SUM
11	44.2	16.29	219469.00	3575033.75
14	37.7	23.89	183456.00	4381980.50
19	33.1	30.05	160543.00	4824020.00

TOTAL OFF PEAK HOUR :			563468.00	12781034.24
TOTAL OFF PEAK PERIOD:			9240875.20	209608961.49

2005 LRTP

Class	Speed	CO	VMT	CO SUM
11	44.1	14.74	225709.00	3327250.75
14	37.6	20.84	190654.00	3973980.50
19	33.1	25.97	166120.00	4313985.00

TOTAL OFF PEAK HOUR :			582483.00	11615216.54
TOTAL OFF PEAK PERIOD:			9552721.20	190489551.32

2015 LRTP

Class	Speed	CO	VMT	CO SUM
11	44.0	5.45	250582.00	1364972.75
14	37.6	9.31	196116.00	1826010.63
19	33.1	12.23	176144.00	2153559.50

TOTAL OFF PEAK HOUR :			622842.00	5344542.76
TOTAL OFF PEAK PERIOD:			10214608.80	87650501.31

2020 LRTP

Class	Speed	CO	VMT	CO SUM
11	44.0	4.12	252846.00	1042387.94
14	37.6	7.76	199286.00	1547224.63
19	33.1	10.36	177965.00	1844505.75

TOTAL OFF PEAK HOUR :			630097.00	4434118.35
TOTAL OFF PEAK PERIOD:			10333590.80	72719540.98

Peak Period CO Emissions From MOBILE5B
SYRACUSE-ONONDAGA

1990

Class	Speed	CO	VMT	CO SUM
11	42.7	20.16	388406.00	7830956.00
14	37.2	41.92	362331.00	15188680.00
19	32.8	52.41	304086.00	15935858.00

TOTAL PEAK HOUR :			1054823.00	38955494.07
TOTAL PEAK PERIOD:			3902845.10	144135328.04

2003 LRTP

Class	Speed	CO	VMT	CO SUM
11	42.4	17.09	426395.00	7286101.00
14	37.1	24.33	381266.00	9277586.00
19	32.8	30.36	326554.00	9914039.00

TOTAL PEAK HOUR :			1134215.00	26477725.94
TOTAL PEAK PERIOD:			4196595.50	97967585.98

2005 LRTP

Class	Speed	CO	VMT	CO SUM
11	42.2	15.51	438406.00	6799712.00
14	37.0	21.24	396460.00	8419665.00
19	32.7	26.33	337614.00	8889870.00

TOTAL PEAK HOUR :			1172480.00	24109246.14
TOTAL PEAK PERIOD:			4338176.00	89204210.72

2015 LRTP

Class	Speed	CO	VMT	CO SUM
11	41.6	5.84	485926.00	2839387.00
14	37.0	9.51	408287.00	3883487.00
19	32.7	12.41	358844.00	4453735.00

TOTAL PEAK HOUR :			1253057.00	11176609.04
TOTAL PEAK PERIOD:			4636310.90	41353453.44

2020 LRTP

Class	Speed	CO	VMT	CO SUM
11	41.5	4.43	489580.00	2167170.00
14	37.0	7.93	415246.00	3291588.50
19	32.6	10.57	363462.00	3842909.25

TOTAL PEAK HOUR :			1268288.00	9301667.65
TOTAL PEAK PERIOD:			4692665.60	34416170.29

2001 - 2006
Syracuse Metropolitan Transportation Council
Transportation Improvement Program
Conformity Analysis Data

Facility Type	Class	1990 VMT & Avg. Speed		1997 VMT & Avg. Speed		L RTP 2003 VMT & Avg. Speed		L RTP 2005 VMT & Avg. Speed		L RTP 2015 VMT & Avg. Speed		L RTP 2020 VMT & Avg. Speed	
		VMT	Avg. Tot Speed	VMT	Avg. Tot Speed	VMT	Avg. Tot Speed	VMT	Avg. Tot Speed	VMT	Avg. Tot Speed	VMT	Avg. Tot Speed
Peak Hour Expressway Incl. Ramps	1,7,8	388,406	42.74	411,435	42.49	426,395	42.41	438,406	42.19	485,926	41.62	489,580	41.53
Peak Hour Arterial	2,3,4	362,331	37.19	376,745	37.12	381,266	37.13	396,460	37.05	408,287	36.99	415,246	36.95
Peak Hour Other Incl. Cen. Con.	5,6,9	304,086	32.82	319,716	32.77	326,554	32.75	337,614	32.67	358,844	32.66	363,462	32.64
TOTAL		1,054,823	35.90	1,107,896	35.85	1,134,215	35.82	1,172,480	35.74	1,253,057	35.63	1,268,288	35.59
Off Peak Expressway Incl. Ramps	1,7,8	199,469	44.24	186,986	44.22	219,469	44.2	225,709	44.14	250,582	44.05	252,846	44.03
Off Peak Arterial	2,3,4	174,618	37.68	181,285	37.67	183,456	37.65	190,654	37.63	196,116	37.62	199,286	37.61
Off Peak Other Incl. Cen. Con.	5,6,9	150,091	33.10	147,331	33.08	160,543	33.08	166,120	33.07	176,144	33.07	177,965	33.06
TOTAL		524,178	36.41	515,602	36.40	563,468	36.40	582,483	36.39	622,842	36.37	630,097	36.36

SMTC/NFTC

Expansion Factors For "EMCAL" Peak Runs 1993

<u>Urban</u>	<u>Weighted Ave</u>	<u>Rural</u>
Peak Period 3.7	3.7	Peak Period = 3.8
Off Peak Period = 8.5	16.4	Off Peak Period = 7.5

Based on Table 3.2-16 "Summary Of Speed Regimes For New York City And Upstate Areas"

Peak: 0.06761 = Peak Hour #1
 0.07644 = Peak Hour #2
 0.08218 = Peak Hour #3
 0.0753 = Peak Hour #4
 0.30153 = Peak Hours
 Total: 3.669141 = Total Divided By Highest Hour
 3.7 = Peak Factor (Urban)

Peak: 1.0
 - .30153 = Total Peak
 = .69847 = Total Off Peak
 8.5 = Total Divided By ½ The Highest Hour
 (To Represent An Off Peak Hour)
 16.4 = Off Peak Factor (Urban)

2 X Off Peak VMT/Hour = Peak Hour VMT

$$\begin{array}{l}
 \text{Off Peak} \\
 \text{Urban}
 \end{array}
 = \frac{[(2 \times 8.5) \times 206780^*] + [(2 \times 7.5) \times 85917^{**}]}{292697^{***}} = 16.4$$

* Urban VMT (Statewide)

** Rural VMT (Statewide)

***Total VMT (Urban/Rural)

MOBILE5B Input File for 1990

```

5      PROMPT - vertical flag input, no prompting
UPSTATE -- No IM      or STAGE II                ATP only
1      TAMFLG - default tampering rates
1      SPDFLG - one speed per scenario for all IV
1      VMFLAG - NOTE vmt mix modeled by other analysis programs
3      MYMRFG - Upstate registration rates to be used
1      NEWFLG - default exhaust emission rates
1      IMFLAG - No I/M program
1      ALHFLG - no additional correction factor inputs
2      ATPFLG - Anti-Tampering Program
1      RLFLAG - No refueling loss controls
2      LOCFLG - read in local area parameters as 2nd req sc rec
2      TEMFLG - calculate exhaust temperatures from ambient T
4      OUTPMT - portrait 80 column descriptive output format
4      PRTRFLG - print exhaust HC, CO and NOx emission factor results
1      IDLFLG - do not print idle emissions results
3      NMHFLG - print VOC
1      HCFLAG - do not print HC components
.0486.0893.0956.0987.0979.0909.0856.0602.0528.0505
.0484.0480.0384.0281.0149.0082.0063.0061.0053.0038
.0035.0030.0026.0022.0111      Upstate LDG
.0392.0787.0986.0977.1045.0837.0767.0568.0451.0351
.0340.0576.0487.0356.0204.0128.0133.0109.0101.0067
.0059.0051.0041.0033.0154      Upstate LT1
.0523.0929.0995.0755.0834.0672.0535.0378.0328.0313
.0345.0748.0663.0497.0301.0190.0190.0172.0141.0095
.0081.0067.0056.0043.0149      Upstate LT2
.0322.0683.0739.0633.0632.0538.0455.0320.0282.0303
.0320.0558.0455.0409.0292.0372.0316.0358.0288.0228
.0222.0207.0188.0166.0714      Upstate HDG
.0486.0893.0956.0987.0979.0909.0856.0602.0528.0505
.0484.0480.0384.0281.0149.0082.0063.0061.0053.0038
.0035.0030.0026.0022.0111      Upstate LDD ( LDG Used)
.0392.0787.0986.0977.1045.0837.0767.0568.0451.0351
.0340.0576.0487.0356.0204.0128.0133.0109.0101.0067
.0059.0051.0041.0033.0154      Upstate LTD ( LT1 Used)
.0667.0936.0972.1032.0846.0811.0679.0406.0376.0401
.0393.0451.0343.0255.0153.0212.0226.0212.0138.0104
.0099.0073.0051.0041.0123      Upstate HDD
.0154.0283.0355.0533.0808.0753.0537.0775.1172.0886
.0847.2897.0000.0000.0000.0000.0000.0000.0000.0000
.0000.0000.0000.0000.0000      Upstate MCY
84 84 20 2222 21 075. 22112221      Upstate ATP, Compliance Rate = 75%
90WIN_23 SYR 23U E 16.4 30.2 15.0 15.0 90 1 1 1
1 90 42.7 24.9 3.8 2.2 3.8 1      23U 3 11 ONONDAGA 388406.00
1 90 37.2 24.9 36.7 15.5 36.7 1      23U 3 14 ONONDAGA 362331.00
1 90 32.8 24.9 44.0 21.9 44.0 1      23U 3 19 ONONDAGA 304086.00
1 90 44.2 24.9 3.8 2.2 3.8 1      23U 3 11 ONONDAGA 199469.00
1 90 37.7 24.9 36.7 15.5 36.7 1      23U 3 14 ONONDAGA 174618.00
1 90 33.1 24.9 44.0 21.9 44.0 1      23U 3 19 ONONDAGA 150091.00

```

MOBILE5B Input File for 2003 - 2020

```

5      PROMPT - vertical flag input, no prompting
UPS NOx -- No IM      or STAGE II      Upstate ATP with GasCap Check, CR=98%
1      TAMFLG - default tampering rates
1      SPDFLG - one speed per scenario for all IV
1      VMFLAG - NOTE vmt mix modeled by other analysis programs
4      MYMRFG - Upstate registration rates to be used
2      NEWFLG - default exhaust emission rates
1      IMFLAG - No I/M program
1      ALHFLG - no additional correction factor inputs
2      ATPFLG - Anti-Tampering Program
1      RLFLAG - No refueling loss controls
2      LOCFLG - read in local area parameters as 2nd req sc rec
2      TEMFLG - calculate exhaust temperatures from ambient T
4      OUTFMT - portrait 80 column descriptive output format
4      PRNFLG - print exhaust HC, CO and NOx emission factor results
1      IDLFLG - do not print idle emissions results
3      NMHFLG - print VOC
1      HCFLAG - do not print HC components
.13531 .13172 .12823 .12483 .12152 .11830 .11516 .11210 .10912 .10622
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.05420 .05152 .04898 .04656 .04427
LDD 96 Mile Accum
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.0383.0478.0652.0725.0654.0570.0583.0569.0695.0797
.0727.0734.0550.0425.0264.0185.0137.0107.0176.0136
.0091.0049.0034.0036.0243 Upstate LT1 96Reg
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.0138.0084.0058.0057.0283 Upstate LT2 96Reg
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.0440.0455.0392.0335.0229.0217.0223.0229.0339.0268
.0261.0195.0270.0197.1762 Upstate HDG 96Reg
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.0038.0026.0018.0018.0210 Upstate LDD(LDG Used)
.0383.0478.0652.0725.0654.0570.0583.0569.0695.0797
.0727.0734.0550.0425.0264.0185.0137.0107.0176.0136
.0091.0049.0034.0036.0243 Upstate LTD(LT1 Used)
.0565.0740.0879.0710.0669.0543.0550.0589.0561.0558
.0558.0472.0411.0326.0192.0174.0191.0187.0189.0145

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.0103.0069.0095.0091.0433 Upstate HDD 96Reg
 .0295.0421.0400.0379.0415.0358.0258.0310.0404.0370
 .0456.5934.0000.0000.0000.0000.0000.0000.0000.0000

.0000.0000.0000.0000.0000 Upstate MCY 96Reg
 001 Revised HDDV NOx
 1 7 3 04 50 01.840 00.000 2004 = 3.75 g/mi

84 84 50 2222 21 098. 22112222 Upstate ATP with GasCap Check, CR=98%
 99WIN_23 SYR 23U E 16.4 30.2 15.0 15.0 90 1 1 1
 5 03 42.4 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 426395.00
 5 03 37.1 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 381266.00
 5 03 32.8 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 326554.00
 5 03 44.2 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 219469.00
 5 03 37.7 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 183456.00
 5 03 33.1 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 160543.00
 5 05 42.2 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 438406.00
 5 05 37.0 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 396460.00
 5 05 32.7 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 337614.00
 5 05 44.1 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 225709.00
 5 05 37.6 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 190654.00
 5 05 33.1 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 166120.00
 5 15 41.6 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 485926.00
 5 15 37.0 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 408287.00
 5 15 32.7 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 358844.00
 5 15 44.0 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 250582.00
 5 15 37.6 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 196116.00
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 5 20 41.5 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 489580.00
 5 20 37.0 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 415246.00
 5 20 32.6 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 363462.00
 5 20 44.0 24.9 3.8 2.2 3.8 1 23U 3 11 ONONDAGA 252846.00
 5 20 37.6 24.9 36.7 15.5 36.7 1 23U 3 14 ONONDAGA 199286.00
 5 20 33.1 24.9 44.0 21.9 44.0 1 23U 3 19 ONONDAGA 177965.00

Syracuse Metropolitan Transportation Council (SMTC)

2001 - 2006 Transportation Improvement Program (TIP)

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Long-Range Transportation Plan (LRTP)

Air Quality Conformity Analysis Supplement

1.) Emissions Model

Regional emissions analysis for the SMTC 2001 TIP and LRTP was conducted by the NYSDOT Environmental Analysis Bureau and includes the most updated vehicle mix (1996) available from NYSDEC.

2.) §93.110 - Latest Planning Assumptions

Since the last conformity analysis (1999) there have been no changes made to the SMTC regional travel demand model. The conformity analysis for the SMTC 2001 TIP and LRTP was based on the most recent planning assumptions. Estimates of current and future population, employment, travel and congestion were obtained from the Syracuse-Onondaga County Planning Agency (SOCPA) and were included in the SMTC Model analysis for 2001 - 2006. The base year used in the model for both the population and employment forecasts was 1999. In addition, as referenced in the Overview of the TIP, the Central New York Regional Transportation Authority (CNYRTA) has a fully compliant and FTA approved plan. Transit operating policies (including fares and service levels) and assumed transit ridership have not changed since the previous conformity determination.