

NONATTAIN-MEN	POPULATION						DAILY VMT				
	1980	1990	1995	Percent Annual	Percent Annual	Percent Annual	1990	1995* or 1996**	Percent Annual	Daily VMT Per Capita	
Atlanta	1,989,341	2,653,159	3,038,050	2.9%	2.7%	2.9%	81,472,984	105,218,456	**	4.4%	34.6
Baltimore	2,173,989	2,348,219	2,432,993	0.8%	0.7%	0.8%	49,900,000	55,900,000	*	2.3%	23.0
Boston	4,945,835	5,204,103	5,274,317	0.5%	0.3%	0.4%	59,816,200	64,412,700	**	1.2%	12.2
Charlotte	566,838	686,574	760,939	1.9%	2.1%	2.0%	14,515,000	18,442,000	*	4.9%	24.2
Chicago	7,171,420	7,332,926	7,641,329	0.2%	0.8%	0.4%	127,402,856	140,834,243	*	2.0%	18.4
Denver	1,618,461	1,848,319	2,085,158	1.3%	2.4%	1.7%	39,100,000	50,900,000	**	4.5%	24.4
Houston	3,118,480	3,731,029	4,164,393	1.8%	2.2%	2.0%	90,400,000	105,800,000	*	3.2%	25.4
Milwaukee	1,693,289	1,735,364	1,780,769	0.2%	0.5%	0.3%	33,072,000	35,900,000	*	1.7%	20.2
No. New Jersey	4,961,510	5,108,929	5,243,598	0.3%	0.5%	0.4%	125,153,923	129,352,902 ^a	**	0.6% ^b	24.7
New York	11,063,184	11,379,764	11,462,260	0.3%	0.1%	0.2%	133,577,052	132,284,161	*	-0.2% ^c	11.5
Philadelphia	3,682,450	3,728,991	3,731,703	0.1%	0.0%	0.1%	64,565,000	70,195,000	**	1.4%	18.8
Phoenix	1,600,093	2,238,498	2,563,582	3.4%	2.7%	3.2%	49,600,000	57,000,000	*	2.8%	22.2
Portland	1,050,418	1,174,291	1,300,729	1.1%	2.1%	1.4%	20,413,000	22,437,000	*	1.9%	17.2
Salt Lake City	765,606	913,897	1,023,765	1.8%	2.3%	2.0%	20,130,479	25,864,357	**	4.3%	25.3
San Francisco	5,179,759	6,020,147	6,302,933	1.5%	0.9%	1.3%	113,389,000	123,666,900	*	1.8%	19.6

Table 1-2

Nonattainment Classifications for Study Sites by Pollutant

NONATTAINMENT AREA	1990 OZONE	1990 CARBON MONOXIDE	1990 PM-10
Atlanta	Serious		
Baltimore	Severe 1	Moderate 2 Redesignated to Attainment 1995	
Boston	Serious	Moderate 2 Redesignated to Attainment 1996	
Charlotte	Moderate Redesignated to Attainment 1995	Not Classified Redesignated to Attainment 1995	
Chicago	Severe 2		Moderate
Denver	Transitional	Moderate 2 Reclassified to Serious 1997	Moderate
Houston	Severe 2		
Milwaukee	Severe 2		
Northern New Jersey	Severe 2	Moderate 2	
New York	Severe 2	Moderate 2	Moderate
Philadelphia	Severe 1	Moderate 1 Redesignated to Attainment 1996	
Phoenix	Moderate Reclassified to Serious 1997	Moderate 1 Reclassified to Serious 1996	Moderate Reclassified to Serious 1996
Portland	Marginal Redesignated to Attainment 1997	Moderate 1 Redesignated to Attainment 1997	
Salt Lake City	Moderate Redesignated to Attainment 1997	Not Classified	Moderate
San Francisco	Moderate Redesignated to Attainment 1995; Proposed Reclassification to Nonattainment 1997	Moderate 1 Redesignated to Attainment 1998	

Table 3-1

Types of Conformity Problems by Nonattainment Area

Nonattainment Area	Emission Budget Test	Emission Build/No-Build Test	Modeling Requirements	Timely TCM Implementation	Fiscal Constraint	SIP Failures	Human Error
Atlanta	X					X**	
Baltimore		X*				X	
Boston		X			X		X
Charlotte	X						X
Chicago		X	X				
Denver	X				X		
Houston	X	X			X	X**	
Milwaukee		X*					
New Jersey		X*					
New York		X*	X				
Philadelphia		X*					
Phoenix		X	X				
Portland							X
Salt Lake	X					X	
San Francisco				X			

Although these areas have reported very close calls passing the build/no-build test, particularly for NOx, they have not necessarily had to make any adjustments and have not experienced conformity delays as a result.

*

These are technical SIP failures that had no discernable impact on local planning.

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Table 3-2

Problems Meeting the Conformity Requirements by Nonattainment Area¹

Area	Problem	Impact
Atlanta	1996 - Budget Test (NOx for ozone) 1997 - Budget Test (NOx for ozone)	1996 - Conformity determination could not be completed; MPO advanced only grandfathered and exempt projects. 1997 - Conformity determination could not be completed. After EPA-DOT dispute resolved, MPO adopted Interim TIP with only grandfathered and exempt projects. Conformity lapsed: January 1998.
Baltimore	1995 - Non-implementation of ECO 1997 - Legislature made I/M voluntary	1995 - MPO developed Regional Commuter Assistance Program to make up for lost emission reductions from ECO program. 1997 - Governor vetoed voluntary I/M program in part because a non-mandatory program would have caused EPA disapproval of the 15% SIP, with consequences for conformity.
Boston	1994 - Data Entry Error 1994 - Fiscal Constraint 1995 - Build/no-build Test (for CO, VOC and NOx)	1994 - Conformity determination delayed for 2-3 months until problem discovered. 1994 - Conformity approval delayed while STIP fiscal constraint resolved. 1995 - MPO added CMAQ project to TIP for off-model analysis.
Charlotte	1994 - Budget Test (NOx and VOC for ozone) 1996 - Budget Test (NOx and VOC for ozone)	1994 - Conformity analysis completed by creating budget reconciliation methodology. 1996 - Conformity determination could not be completed. MPO advanced only grandfathered and exempt projects. Conformity lapsed: January 1997, with no resolution by early 1998.

¹Milwaukee, New Jersey and Philadelphia are not included in this table because they reported only problems with the build/no-build tests that did not cause a delay to the conformity determination.

Area	Problem	Impact
Chicago	1994 - Build/no-build Test (NO _x for ozone) 1994 - Network model assumptions questioned 1995 - Network model enhancements not in place	1994 - MPO completed off-model analysis for replacement buses. 1994 - Conformity determination delayed while MPO justified its low VMT estimates. 1995 - MPO advanced only grandfathered and exempt projects.
Denver	1994 - Budget Test (PM ₁₀) 1996 - Budget Test (PM ₁₀ & NO _x for PM ₁₀)	1994 - Conformity lapsed: November 1994 for approximately one year, until September 1995. Amended PM ₁₀ budgets. 1996 - MPO negotiated local agreements for sanding and sweeping measures, and air agency tightened I/M NO _x test for future years.
Houston	1994 - Build/no-build Test (NO _x for ozone) 1994 - Budget Test (VOC for ozone) 1997 - Budget Test (VOC for ozone)	1994 - Conformity delayed while waiting for a temporary NO _x waiver. 1994 - MPO spread large highway projects out over several years and scaled back the Grand Parkway. 1997 - Air agency made technical corrections to submitted VOC budget.
New York	1995 - No network based transportation demand model 1996 - No network based transportation demand model	1995 - MPO advanced only grandfathered and exempt projects. 1996 - MPO received extension of 1994 TIP to advance grandfathered and exempt projects. In 1997, a new interim network model was approved, new budgets were submitted, and conformity determined.
Phoenix	1994 - Build/no-build Test (NO _x for ozone) 1995 - Network model enhancements not complete	1994 - Conformity determination delayed several months until NO _x waiver approved; MPO advanced only grandfathered and exempt projects 1995 - Conformity determination delayed until MPO completed model enhancements
Portland	1994 - Human Error (incorrect assumptions used in conformity analysis)	1994 - Conformity lapsed for one year; MPO advanced only grandfathered and exempt projects
Salt Lake	1993 - Incomplete SIP without protective finding. 1994 - Budget Test (NO _x for PM ₁₀) 1995 - Budget Test (NO _x for ozone)	1993 - Conformity frozen until SIP found complete in 1994. 1994 - Conformity lapsed November 1994 to October 1995; MPO received permission from EPA to use MOBILE 4 for conformity analysis of NO _x for PM ₁₀ . 1995 - Air agency added ten years to the ozone maintenance plan.

Area	Problem	Impact
San Francisco	1996 - Timely Implementation of TCMs questioned	1996 - MPO made more detailed accounting of TCM problems and steps to alleviate them.

Table 4-1

Core Public Agencies in Transportation and Air Quality Planning, by Nonattainment Area

NONATTAINMENT AREA	METROPOLITAN PLANNING ORGANIZATION	STATE TRANSPORTATION AGENCY	STATE AIR QUALITY AGENCY	LEAD AGENCY FOR SIP DEVELOPMENT
Atlanta	Atlanta Regional Commission (ARC)	Georgia Department of Transportation (GDOT)	Georgia Department of Natural Resources (DNR)	State AQ agency
Baltimore	Baltimore Metropolitan Council (BMC)	Maryland Department of Transportation (MDOT)	Maryland Department of the Environment (MDE)	State AQ agency
Boston	Boston MPO	The Executive Office of Transportation and Construction (EOTC)	Massachusetts Department of Environmental Protection (DEP)	State AQ agency
Charlotte	Mecklenburg/Union MPO	North Carolina Department of Transportation (NCDOT)	North Carolina Department of Environment and Natural Resources (DENR)	State AQ agency
Chicago	Chicago Area Transportation Study (CATS)	Illinois Department of Transportation (IDOT)	Illinois Environmental Protection Agency (IEPA)	State AQ agency
Denver	Denver Regional Council of Governments (DRCOG)	Colorado Department of Transportation (CDOT)	Colorado Department of Public Health and Environment (CDPHE)	Regional Air Quality Council (RAQC)
Houston	Houston-Galveston Area Council (HGAC)	Texas Department of Transportation (TxDOT)	Texas Natural Resources Conservation Commission (TNRCC)	State AQ agency

NONATTAINMENT AREA	METROPOLITAN PLANNING ORGANIZATION	STATE TRANSPORTATION AGENCY	STATE AIR QUALITY AGENCY	LEAD AGENCY FOR SIP DEVELOPMENT
Milwaukee	Southeastern Wisconsin Regional Planning Commission (SEWRPC)	Wisconsin Department of Transportation (WisDOT)	Wisconsin Department of Natural Resources (DNR)	State AQ agency
New York	New York Metropolitan Transportation Council (NYMTC)	New York State Department of Transportation (NYSDOT)	New York State Department of Environmental Conservation (DEC or EnCon)	State AQ agency
Northern New Jersey	North Jersey Transportation Planning Authority (NJTPA)	New Jersey Department of Transportation (NJDOT)	New Jersey Department of Environmental Protection (NJDEP)	State AQ agency
Philadelphia	Delaware Valley Regional Planning Com. (DVRPC)	Pennsylvania Department of Transportation (PennDOT)	Pennsylvania Department of Environmental Protection (DEP)	State AQ agency
Phoenix	Maricopa Association of Governments (MAG)	Arizona Department of Transportation (ADOT)	Arizona Department of Environmental Quality (DEQ)	The MPO
Portland	Metropolitan Service District (Metro)	Oregon Department of Transportation (ODOT)	Oregon Department of Environmental Quality (DEQ)	State AQ agency
Salt Lake City	Wasatch Front Regional Council (WFRC)	Utah Department of Transportation (UDOT)	Utah Department of Environmental Quality (DEQ)	State AQ agency
San Francisco	Metropolitan Transportation Commission (MTC)	California Department of Transportation (Caltrans)	California Environmental Protection Agency (CalEPA)	Joint: Bay Area Air Quality Mgmt District, Assoc. of Bay Area Govts, and MTC

	Percent Annual Population Growth ('90-'95)	Percent Annual VMT Growth ('90-'95 or '90-'96)	Daily VMT Per Capita ('95 or '96)^b
<i>Higher-Growth Areas</i>			
Atlanta	2.7%	4.4%	34.6
Phoenix	2.7%	2.8%	22.2
Denver	2.4%	4.5%	24.4
Salt Lake City	2.3%	4.3%	25.3
Houston	2.2%	3.2%	25.4
Charlotte	2.1%	4.9%	24.2
Portland	2.1%	1.9%	17.2
<i>Lower-Growth Areas</i>			
San Francisco	0.9%	1.8%	19.6
Chicago	0.8%	2.0%	18.4
Baltimore	0.7%	2.3%	23.0
No. New Jersey	0.5%	0.6% ^a	24.7
Milwaukee	0.5%	1.7%	20.2
Boston	0.3%	1.2%	12.2
New York	0.1%	-0.2% ^c	11.5
Philadelphia	0.0%	1.4%	17.3

^a1990-1999 rate

^b1996 per capita rates calculated using 1995 population data.

^cNYMTC does not regard negative VMT growth in this period

as indicative of future trends.

The sources of data for this table are reported in Appendix IV.