2002 Annual Report on Air Quality in New England

United States Environmental Protection Agency, Region 1
Office of Environmental Measurement and Evaluation
North Chelmsford, MA 01863

October 2003
Ecosystems Assessment Unit
http://www.epa.gov/region01/lab/reportsdocuments.html

This Report has been prepared by the ECA Group at OEME with special thanks to;
Andrea Newman, Veridian Corp for the maps

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Table of Contents

2002 ANNUAL REPORT ON AIR QUALITY
IN NEW ENGLAND

This report represents 2002 annual air quality information for all states in New England. The majority of the data included in this report were submitted to EPA by the states from their ambient monitoring networks in accordance with 40 CFR 58. The only data from industrial monitors which have been included are from the Massachusetts Industrial Network, EPA-required networks in New Hampshire and Maine's licensing program which supplements the state network.

This report reflects the status of the AIRS database as of April 2003. The majority of data used have been evaluated and verified by EPA. However, for those monitors that appear to be violating an applicable ambient air quality standard, the data may require further evaluation by both EPA and the states. For both the 8-hour ozone standard and the PM2.5 standard, EPA has not yet designatd areas as either attainment or nonattainment.

A table of the National Ambient Air Quality Standards (NAAQS) follows this introduction.

There is a list of health effects of the criteria pollutants after the NAAQS.

The following table lists, by state, a summary of criteria pollutant data from sites in each state in New England, and from industrial sites in New Hampshire, Massachusetts, and Maine. The information presented compares the measured values to each NAAQS; it includes the number of violations, the maximum and second high values, and the annual means (arithmetic mean or average for SO2, PM10 and NO2). An annual mean is not valid for intermittent data unless there are four valid quarters. For PM10, 75% of the scheduled samples must be available for a quarter to be considered valid. For continuous data, 75% of the year must be available to calculate a valid annual average.

Included with this table, are graphs of selected air quality monitoring sites that show a ten-year span of data for PM10, CO, SO2, and NO2. A graph of the number of days ozone exceeded the standard during the last five years is used. PM2.5 has only been monitored for three years, the chart reflects this.

State maps are included which display the location of monitoring sites.

Precision and accuracy data submitted by the six New England states is graphed in a chart following the data tables. The 95% probability limit for six criteria pollutants are given as a network average for each state.

Finally there are maps of the current areas in New England designated nonattainment by EPA. As stated above, EPA has not yet done designations for the 8-hour ozone and the PM2.5 standards.

The last section is a list of AIRS state and regional Air Quality Contacts and Emission data contacts, their addresses and phone numbers.

NATIONAL AIR QUALITY STANDARDS[a]

For Criteria Pollutants

Pollutant	Averaging Time	Primary Standards[b]	Secondary Standards[c]
SO_2	Annual Arithmetic Mean	80 ug/m^3 (0.03 ppm)	
	24 hours	365 ug/m^3 (0.14 ppm)	
	3 hours	--	1300 ug/m^3 (0.5 ppm)
Pmfine[fg]	Annual (3-year average)	15.0 ug/m^3	Same as Primary
	24 hours	3-year average of 98th percentile values $\leq$65 ug/m^3	Same as Primary
PM_{10}[df]	Annual Arithmetic Mean	50 ug/m^3	Same as Primary
	24 hours	150 ug/m^3	Same as Primary
CO	8 hours	9 ppm	Same as Primary
	1 hour	35 ppm	Same as Primary
O_3[e]	1 hour	0.125 ppm	Same as Primary
	8 hour	0.08 ppm	Same as Primary
NO_2	Annual Arithmetic	(0.05 ppm)	Same as Primary
	Mean	100 ug/m^3	
Pb	Calendar Quarter Arithmetic Mean	1.5 ug/m^3	Same as Primary

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[a] National standards, other than those based on annual arithmetic means, are not to be exceeded more than once a year.

[b] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[c] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[d] PM_{10} replaced TSP as the ambient particulate standard effective July 31, 1987, and includes only those particles with an aerodynamic diameter of $\leq$ a nominal 10 microns. Expected number of exceedances shall not be more than one per year (3 year average) as determined by Appendix K and N of 40CFR Part 50.

[e] 1-Hour: Expected number of exceedance days shall not be more than one per year (3 year average) as determined by Appendix H of 40CFR Part 50.

8-Hour: The standards are met at an ambient air quality site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm as determined by Appendix I of 40CRF 50.

[f] Measurement of PM10 is at Standard Temperature and Pressure (STP). Measurement of PM2.5 for purposes of comparison to the standards shall be reported based on actual ambient temperature and pressure at the monitoring site during the measurement period.

[g] Appendix N of 40 CFR Part 50 gives the specific procedures for determining whether the PM2.5 Primary and Secondary Annual and 24 Hour Standards are attained.

Health Effects of Criteria Pollutants

Lead (Pb)

Brain damage, kidney damage, and gastrointestinal distress are seen from short-term exposure to high levels of lead. Long-term exposure to lead in humans results in effects on the blood, central nervous system, blood pressure, kidneys, and Vitamin D metabolism. Children are particularly sensitive to the chronic effects of lead, with slowed cognitive development, reduced growth and other effects reported. The major sources of lead air pollution are lead smelters and battery manufacturing plants.

Ozone (O_3)

Ozone can irritate the respiratory system, causing coughing, throat irritation, and/or an uncomfortable sensation in the chest. Ozone can reduce lung function and make it more difficult to breathe deeply and vigorously. Ozone can aggravate asthma and increase susceptibility to respiratory infections. It injures vegetation, and has adverse effects on materials. Ozone is generally highest on sultry summer afternoons. Ozone is formed in the atmosphere by the reaction of nitrogen oxides, and hydrocarbons in the presence of sunlight.

Sulfur Dioxide (SO_2)

Children and adults with asthma who are active outdoors are most vulnerable to the health effects of sulfur dioxide. The primary effect they experience, even with brief exposure, is a narrowing of the airways, which may cause symptoms such as wheezing, chest tightness, and shortness of breath. Long-term exposure to both sulfur dioxide and fine particles can cause respiratory illness, alter the lung's defense mechanisms, and aggravate existing cardiovascular disease. It combines with water to form acid aerosols and sulfuric acid mist which falls to earth as acid rain, causing plant and structural damage, and acidifying bodies of water. Major sources include power plants and industrial boilers.

Nitrogen Dioxide (NO_2)

In children and adults with respiratory disease, nitrogen dioxide can cause respiratory symptoms such as coughing, wheezing, and shortness of breath, and affect lung function. In children, short-term exposure can increase the risk of respiratory illness. Studies suggest that long-term exposure may cause permanent structural changes in the lungs. The sources of nitrogen dioxide are motor-vehicle exhaust, and fuel combustion sources such as electric power generating facilities.

Carbon Monoxide (CO)

People with cardiovascular disease, such as angina, may experience chest pain and more cardiovascular symptoms if they are exposed to carbon monoxide, particularly while exercising. In healthy individuals, exposure to higher levels of carbon monoxide can affect mental alertness and vision. Carbon monoxide forms when the carbon in fuels does not completely burn. Motor vehicles are the most significant source.

Particulate Matter ($PM_{2.5}$ and PM_{10})

Both fine and coarse particles can accumulate in the respiratory system. When exposed to particulate matter (PM), people with existing heart or lung are at increased risk of premature death or admission to hospitals or emergency rooms. Children and people with existing lung disease may not be able to breathe as deeply or vigorously as they normally would, and they may experience symptoms such as coughing and shortness of breath. PM can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, causing more use of medication and more doctor visits. PM includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Sources of fine particles include all types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. Sources of coarse particles include crushing or grinding operations, and dust from paved or unpaved roads.

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Site Maps, Narratives, Summary Data, and Charts for the Criteria Pollutants in the six New England States

Abbreviations and Symbols used in the Ambient Air Quality Data Section

SITE ID Site Identification number

POC Parameter Occurrence Code - differentiates between monitors for a given pollutant

MT Monitor type:
1=NAMS National Air Monitoring Station,
2=SLAMS State/Local Air Monitoring Station,
3=Other,
4=Industrial, Industrially owned Air Monitoirn Station,
6,7,8=PAMS Photochemical Assessment Air Monitoring Station
0=Unknown,
C=Non EPA Federal

YR Year

REP ORG Reporting Organization

#OBS Number of Observations

MAX 24-HR:
- 1ST Highest 24-hour value recorded in the year
- 2ND Second highest 24-hour value for the year
- 3RD Third highest 24-hour value for the year.
- 4TH Fourth highest 24-hour value for the year.

ARITH MEAN Arithmetic mean

WTD ARITH MEAN Weighted arithmetic mean

GEO MEAN Geometric mean

GEO STD Geometric standard deviation

QUARTERLY ARITH MEANS:
- 1ST First quarter arithmetic mean
- 2ND Second quarter arithmetic mean
- 3RD Third quarter arithmetic mean
- 4TH Fourth quarter arithmetic mean

MEANS > 1.5 Number of quarterly means greater than 1.5 ug/m^3 for lead

MAX VALUES:
- 1ST Highest 24-hour value recorded for the year
- 2ND Second highest 24-hour value recorded for the year.

METH Method

MAX 1-HR:
- 1ST Highest 1-hour value recorded in the year
- 2ND Second highest 1-hour value recorded in the year

OBS > 35 Number of observations greater than 35 ppm for CO

MAX 8-HR:
- 1ST Highest 8-hour value recorded in the year
- 2ND Second highest 8-hour value recorded in the year

OBS > 9 Number of 8-hour ave. greater than 9 ppm for CO

OBS > 365 Number of 24-hour ave. greater than 365 ug/m^3 for SO_2

MAX 3-HR:
- 1ST Highest 3-hour value recorded in the year
- 2ND Second highest 3-hour value recorded in the year

Obs > 1300 Number of 3-hour ave. greater than 1300 ug/m^3 for SO_2

NUM MEAS The valid number of days measured

NUM REQ The valid number of days in the ozone season

NUM OBS Number of Observations

SCHEDULED NUM OBS Number of observations scheduled

% OBS Percent completed of number of observations scheduled

VALID DAILY 1-HR MAXIMUM:
Maximum hourly values for
- 1ST the highest day
- 2ND the second highest day
- 3RD the third highest day
- 4TH the fourth highest day

VALS > .125: MEAS Number of measured daily maximum $\geq$ 0.125 ppm

VALS > .125: EST Number of expected violations

MISS DAYS ASSUMED < STANDARD
Number of missing days assumed to be less than the standard

THE DATA IN THE FOLLOWING SECTION CONSISTS OF BOTH STATE AND PRIVATE NETWORKS.

2002 SUMMARY OF NEW ENGLAND AMBIENT AIR QUALITY AND ATMOSPHERIC DEPOSITION

The air quality in New England fluctuates with annual weather patterns. In general warm and dry summers result in higher concentrations of regional pollutants such as ozone and haze, than cold wet summers. Recent summer weather patterns in New England have shown an almost biannual pattern of warm and cool summers, and no pattern in seasonal precipitation. During 2002 the summer was the hottest summer in New England since 1983. On the whole, significantly less precipitation fell on portions of the region than recent years. Overall, there were more recorded unhealthy ozone days in 2002 than in any year since 1988.

The maximum 1-hr ozone concentrations in 2002 were recorded in Connecticut (168 ppb ozone), Maine (149 ppb ozone), Rhode Island (142 ppb ozone), New Hampshire (145 ppb ozone) and Massachusetts (152 ppb ozone). As many as thirty-six (34) ozone monitoring sites measured 1-hr ozone concentrations above or equal to 125 ppb ozone. These levels were much higher compared to 2000, when only eight ozone monitoring sites measured 1-hr ozone levels $\geq$125 ppb ozone or 2001 when 23 sites recorded values above .125 ppb. Fourty-eight (48) ozone monitoring sites in New England recorded violations of the 8-hr ozone standard (the fourth highest 8-hr average ozone concentration $\geq$85 ppb ozone). The maximum single 8-hr average ozone concentration was recorded in Connecticut and Massachusetts (134 ppb 8-hr average ozone). Even Vermont had one monitoring site that exceeded the 8-hr ozone standard.

Since 1993, the New England Photochemical Assessment Monitoring Stations (PAMS) have routinely measured air pollutants that contribute to the regional formation of ozone. These monitoring stations are located in each of the New England states, except Vermont. The 2002 regional PAMS data for ambient concentrations of hydrocarbon pollutants (total non-methane hydrocarbons-TNMOC) indicate that most, but not all, of the PAMS Type 2 core sites and downwind Type 3 and Type 4 sites are experiencing a continued decline in TMOC ambient concentrations from the mid-1990's. For the Connecticut upwind Type 1 PAMS site, the TNMOC measurements were higher than the ambient concentrations that were recorded during the most recent five years.

For particulate matter, the highest annual average concentrations of fine particulate matter (PM2.5) were measured in urban locations in Massachusetts (14.9 ug/m3) and Connecticut (16.4 ug/m3). Although the data are incomplete, they appear representative, when compared to coarse particulate matter (PM10) levels in the same locations. The highest annual average concentrations of PM10 were also recorded in Connecticut (34 ug/m3) and Massachusetts (31 ug/m3). None of the PM10 monitoring sites approached the PM10 primary or secondary NAAQS for PM10. The primary annual and acute (24-hr) exposure standards for fine particulate matter (PM2.5) are based on a three year consecutive average and the fourth highest maximum 24-hr concentration (within a single calendar year), respectively. No PM2.5 monitoring sites have been designated non-attainment for either the annual or acute fine particulate matter standards. During the past three years, almost every fine particulate monitoring site in New England experienced start-up problems with measuring PM2.5. The initial start-up problems and sporadic or recurrent problems with some instruments, generally during the cold months, resulted in virtually no complete data for any of the New England states for the period 1999 - 2001. In 2002 data capture improved to the point where there is sufficient data of good quality to determine the attainment status for fine particulate matter sites throughout New England, although Massachusetts and New Hampshire still have many sites with incomplete data capture. In 2002 no sites in New England measured 24-hr PM2.5 concentrations exceeding the acute (fourth highest 24-hr) fine particulate standard. Where high quality data exist for 1999-2002, these data show attainment of the annual fine particulate standard in Connecticut (except one site in New Haven), Maine, New Hampshire, Vermont and Rhode Island. Additional data will be necessary to determine the annual PM2.5 NAAQS attainment status of several urban areas in Massachusetts.

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Air Quality Summary – Connecticut

Six carbon monoxide (CO) ambient monitoring sites operated in 2002. The highest recorded maximum 8-hour concentration (5.9 ppm) was recorded at the Hartford Courthouse site. This contrasts with previous 8-hour maximum measurements in 2001 (6.1ppm), 2000 (8.5 ppm), 1999 (5.6 ppm), and 1998 (7.9 ppm). The trend graphs for the past ten years show maximum concentrations of CO well below the national standards and indicate a slight downward trend in concentrations.

There have been no exceedances or violations of the quarterly lead (Pb) national standard for many years. By the end of 1996, the Connecticut ambient air monitoring program was reduced to one site, Waterbury. In 2002 the Waterbury monitoring site reported a maximum quarterly average Pb concentration of 0.02 ug/m3 (less than 2% of the NAAQS). Monitoring for lead in Connecticut was terminated late in 2002.

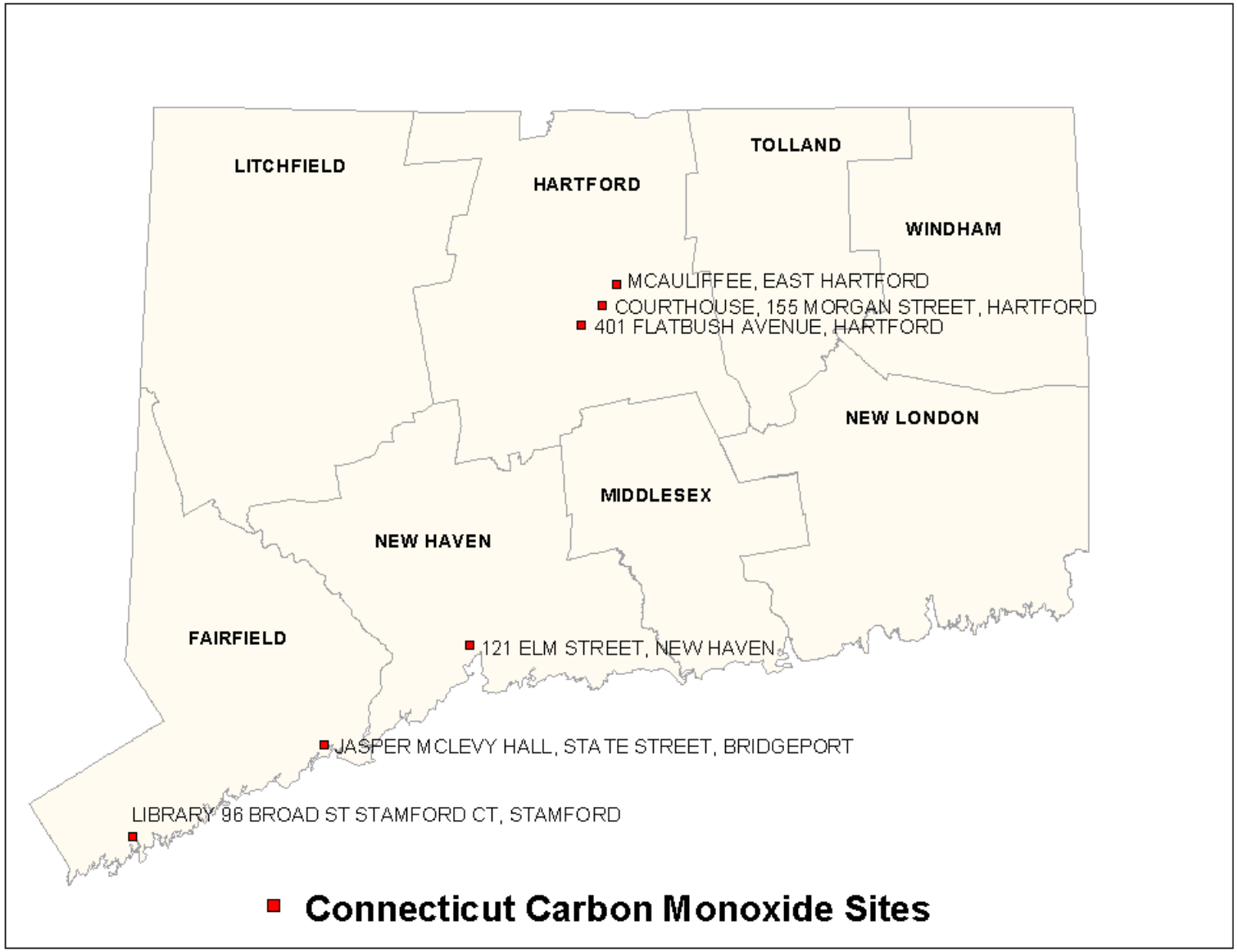
Not one of the four ambient air monitoring sites that measured nitrogen dioxide (NO2) measured any violations of the NAAQS during 2002. New Haven reported concentrations that were roughly 50% of the NAAQS. The Photochemical Assessment Monitoring Stations (PAMS) located in East Hartford, Westport, Hamden and Stafford Springs all reported concentration of NO2 well below the NAAQS. The ten-year graphs for these sites show relatively constant annual concentrations of NO2, and minor year-to-year fluctuations.

In 2002, all eleven ozone (O3) monitoring sites exceeded the 1-hour ozone standard and/or were in violation of the 1-hour NAAQS. In 2001 ten of eleven sites exceeded this standard and in 2000 only five sites had comparable concentrations. In 1999 all of the ozone monitoring sites in Connecticut reported exceedances above the 1-hour NAAQS. Seven of eleven sites exceeded the NAAQS in 1998, and ten of eleven ozone monitoring sites exceeded the NAAQS in 1997. The observed increases of NAAQS exceedances corresponds to summer weather conditions. Warm and dry summers, with more frequent periods of air stagnation and/or pollution transport conditions, generally record increased exceedances of the ozone NAAQS. The Greenwich Point ozone monitoring site measured the highest 1-hour maximum ozone concentration (168 ppb) and the second highest 1-hour maximum ozone concentration (161 ppb) was recordrd in Hamden. The ten-year trend graph for ozone indicates that virtually no upward or downward trend exists in the number of days with 1-hour ozone NAAQS exceedances for the sites recording ozone concentrations in Connecticut.

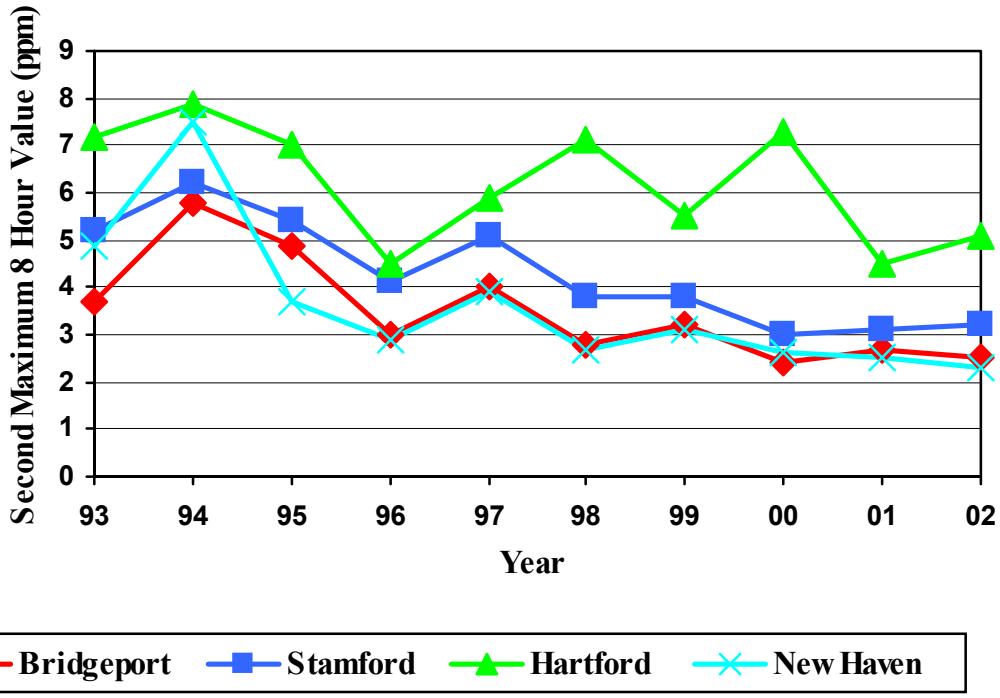
During 2002, all eleven ozone monitoring sites reported a fourth-highest daily 8-hour average ozone concentration above the level of the 8-hour NAAQS. The highest 8-hour ozone concentrations were measured in Madison (134 ppb), Stratford (129 ppb), and Groton (127 ppb). These data contrast to those recorded in 2001, 2000 and 1998, when the maximum 8-hour concentrations were 133, 124 ppb and 118 ppb respectively. The number of days with 8-hour exceedances of the NAAQS in 2002 was the highest number in over ten years.

None of the fourteen monitoring sites that collected particulate matter of less than 10 microns (PM10), recorded exceedances of either the 24-hour or the annual NAAQS for PM10. As in 2001and in 2000, the Stiles Street site in New Haven recorded the single highest 24-hour measurement (96 ug/m3). Similarly, the Stiles Street fine particulate monitoring site also recorded the highest weighted arithmetic average concentration (34 ug/m3). Of the fourteen PM2.5 monitoring sites in Connecticut that measured particulate matter in 2002, the New Haven area reported the highest concentrations.

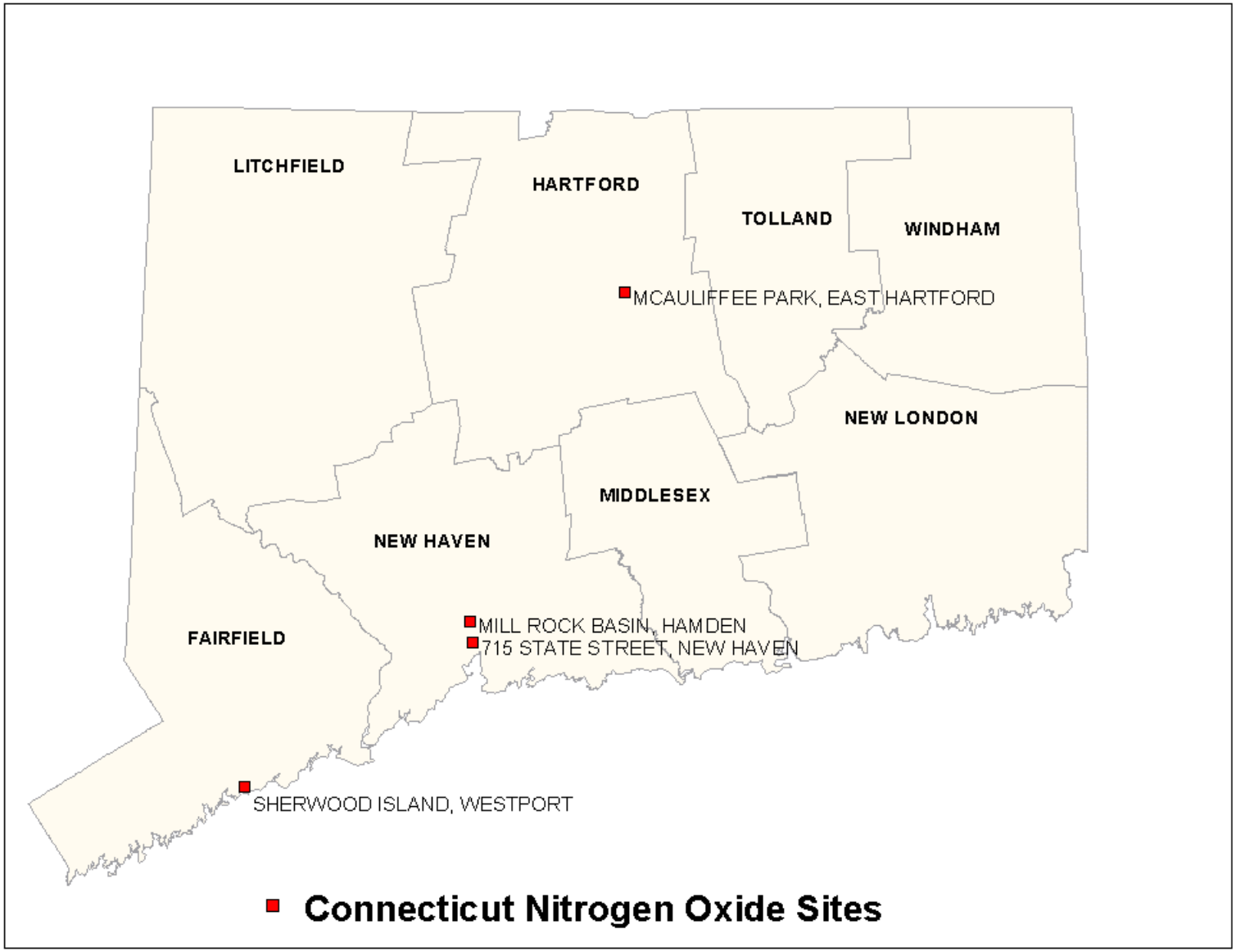
There were no exceedances or violations at any of the Connecticut ambient monitoring sites (four sites) for either the 24-hour or 3-hour sulfur dioxide (SO2) NAAQS. The highest annual arithmetic mean SO2 concentration was measured at New Haven (7 ppb). Stamford measured the highest 24-hour concentration (37 ppb) which was roughly 26% of the NAAQS. The ten-year trend graphs for SO2 show decreasing SO2 concentrations with some year-to-year variability.


LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
MCAULIFFEE, EAST HARTFORD
COURTHOUSE, 155 MORGAN STREET, HARTFORD
401 FLATBUSH AVENUE, HARTFORD
NEW LONDON
MIDDLESEX
NEW HAVEN
FAIRFIELD
121 ELM STREET, NEW HAVEN
JASPER MCLEVY HALL, STATE STREET, BRIDGEPORT
LIBRARY 96 BROAD ST STAMFORD CT, STAMFORD
Connecticut Carbon Monoxide Sites

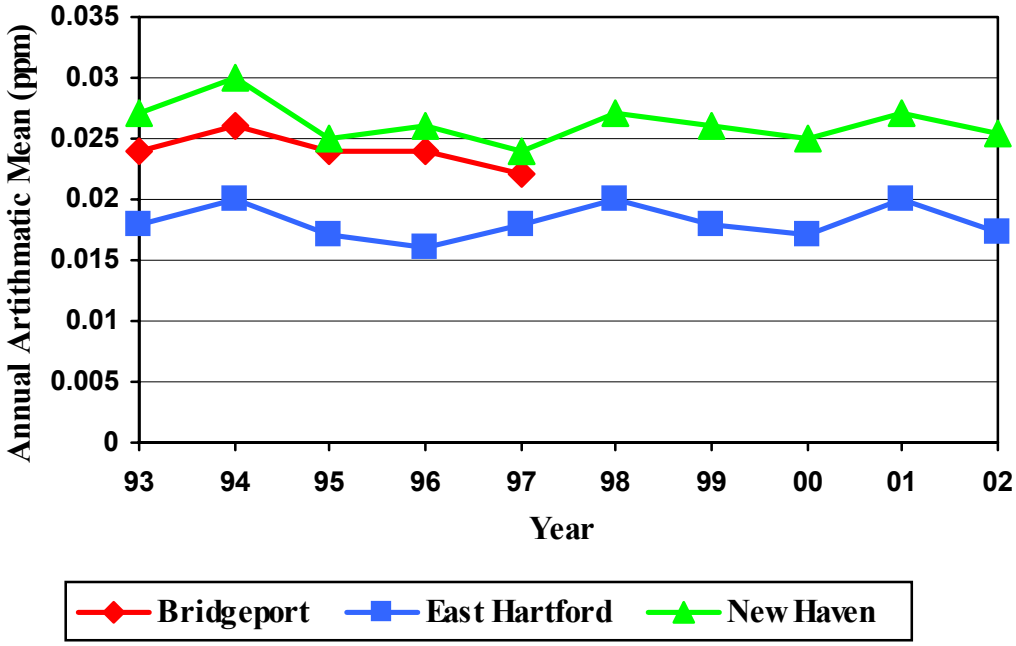
Connecticut Carbon Monoxide



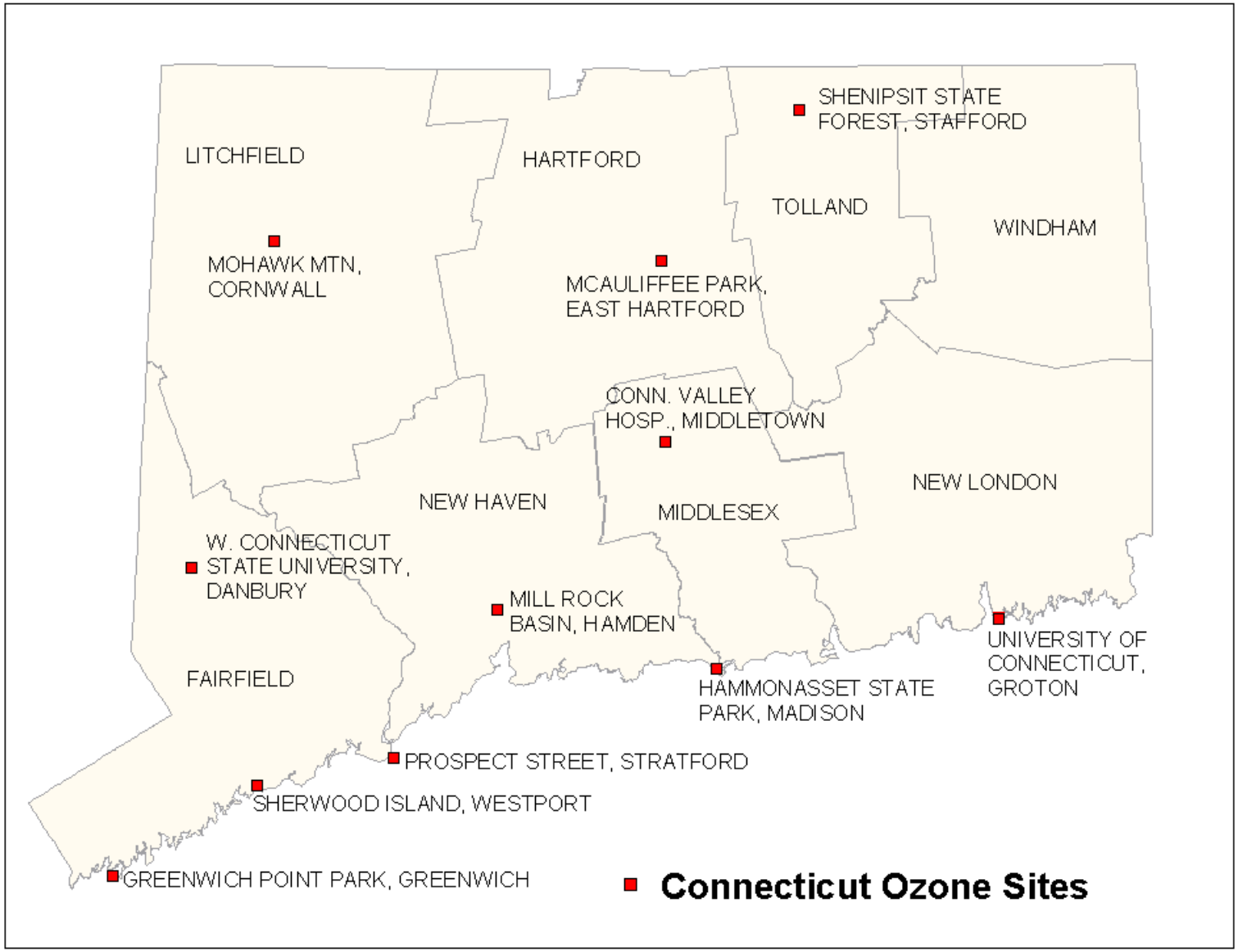
Connecticut													
Carbon Monoxide													
All Values are in Units of Parts Per Million													
								1-hour	1-hour		8-hour	8-hour		
	P								2nd			2nd		
	O	Org					#	Highest	Highest		Highest	Highest		Method
Site ID	C	Type	City	County	Address		Obs	Value	Value	# > 35	Value	Value	# > 9	Used
09-001-0004	1	251	BRIDGEPORT	FAIRFIELD	JASPER MCLEVY HALL,		8203	4.7	4.1	0	2.7	2.5	0	54
09-001-0020	1	251	STAMFORD	FAIRFIELD	LIBRARY 96 BROAD S		8359	4.4	4.4	0	3.5	3.2	0	54
09-003-0013	1	251	HARTFORD	HARTFORD	401 FLATBUSH AVENUE		5005	4.1	3.3	0	2.1	2.1	0	54
09-003-0017	1	251	HARTFORD	HARTFORD	COURTHOUSE, 155 MOR		8694	10.1	9.5	0	5.9	5.1	0	54
09-003-1003	1	251	EAST HARTFC	HARTFORD	MCAULIFFEE PARK		3632	2.9	2.9	0	2.2	1.9	0	54
09-009-0025	1	251	NEW HAVEN	NEW HAVEN	121 ELM STREET		8549	3.7	3.4	0	2.6	2.3	0	54


LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
MCAULIFFEE PARK, EAST HARTFORD
NEW LONDON
MIDDLESEX
NEW HAVEN
MILL ROCK BASIN, HAMDEN
715 STATE STREET, NEW HAVEN
FAIRFIELD
SHERWOOD ISLAND, WESTPORT
Connecticut Nitrogen Oxide Sites

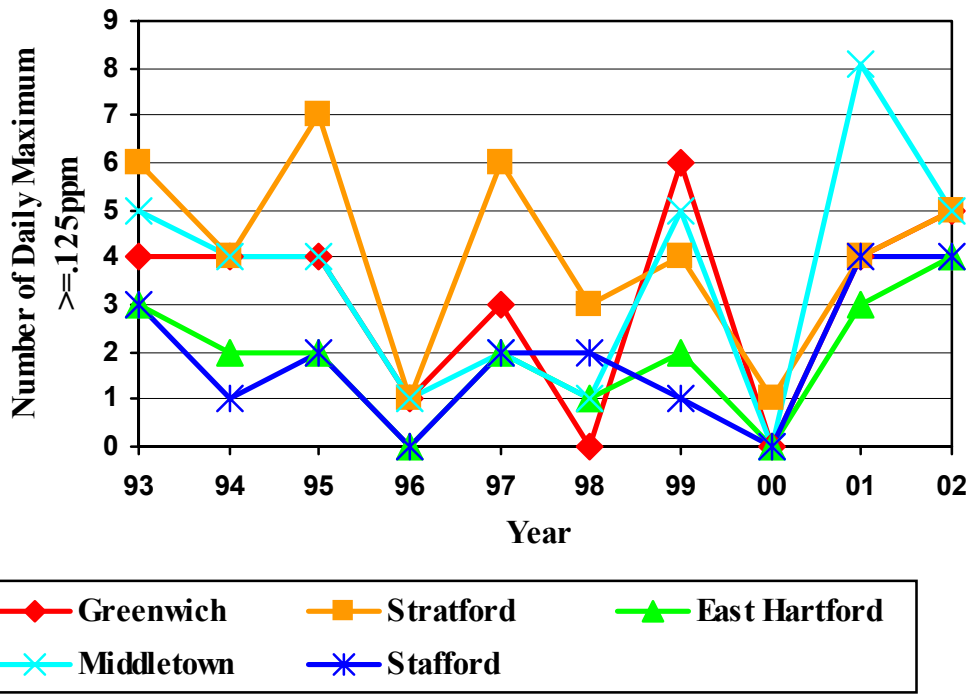
Connecticut Nitrogen Dioxide



Connecticut											
Parameter: Nitrogen Dioxide											
All Values are in Units of Parts Per Million											
								1-hour	1-hour		
	P								2nd	Annual	
	O	Rept.					#	Highest	Highest	Arith.	
Site ID	C	Org.	City	County	Address	Metho	Obs	Value	Value	Mean	
09-001-9003	1	0251	WESTPORT	FAIRFIELD	SHERWOOD ISLAND STA	074	8516	0.102	0.089	0.0187	
09-003-1003	1	0251	EAST HARTF	HARTFORD	MCAULIFFEE PARK	074	8281	0.064	0.064	0.0172	
09-009-1123	1	0251	NEW HAVEN	NEW HAVEN	715 STATE STREET	074	8603	0.110	0.092	0.0254	
09-009-9005	1	0251	HAMDEN	NEW HAVEN	MILL ROCK BASIN	074	4210	0.084	0.081	0.0142	*
*Indicates that the mean does not satisfy summary criteria											


SHENIPSIT STATE FOREST, STAFFORD
LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
MOHAWK MTN, CORNWALL
MCAULIFFEE PARK, EAST HARTFORD
CONN. VALLEY HOSP., MIDDLETOWN
NEW LONDON
NEW HAVEN
MIDDLESEX
W. CONNECTICUT STATE UNIVERSITY, DANBURY
MILL ROCK BASIN, HAMDEN
UNIVERSITY OF CONNECTICUT, GROTON
FAIRFIELD
HAMMONASSET STATE PARK, MADISON
PROSPECT STREET, STRATFORD
SHERWOOD ISLAND, WESTPORT
GREENWICH POINT PARK, GREENWICH
Connecticut Ozone Sites

Connecticut Ozone 1-Hour



Parameter: Ozone (1-Hour)
All Values are in Units of Parts Per Million

Site ID	P O C	Rep. Org.	City	County	Address	Num Meas	Num Req	Highest Value	2nd Highest Value	3rd Highest Value	4th Highest Value	Day Ma ≥ 0.12	Est. Day ≥ 0.125	Missing Days < 0.125	Method used	Design Value
09-001-0017	1	0251	GREENWICH	FAIRFIELD	GREENWICH POINT PAR	182	183	0.168	0.150	0.149	0.131	5	5.0	1	053	0.14
09-001-1123	1	0251	DANBURY	FAIRFIELD	TRAILER, W. CONNECT	182	183	0.152	0.141	0.141	0.129	6	6.0	1	053	0.13
09-001-3007	1	0251	STRATFORD	FAIRFIELD	USCG LIGHTHOUSE , P	181	183	0.153	0.145	0.135	0.133	5	5.0	2	053	0.14
09-001-9003	1	0251	WESTPORT	FAIRFIELD	SHERWOOD ISLAND STA	166	183	0.151	0.143	0.138	0.133	6	6.6	1	053	0.14
09-003-1003	1	0251	EAST HARTFC	HARTFORD	MCAULIFFEE PARK	180	183	0.153	0.132	0.126	0.125	4	4.0	1	053	0.13
09-005-0005	1	0251	CORNWALL	LITCHFIELD	MOHAWK MTN MICROWAV	169	183	0.139	0.131	0.120	0.117	2	2.1	2	053	Incom
09-007-0007	1	0251	MIDDLETOWN	MIDDLESEX	CONN. VALLEY HOSP.,	182	183	0.158	0.141	0.138	0.135	5	5.0	1	053	0.14
09-009-3002	1	0251	MADISON	NEW HAVEN	HAMMONASSET STATE P	181	183	0.155	0.146	0.132	0.132	5	5.0	2	053	0.14
09-009-9005	1	0251	HAMDEN	NEW HAVEN	MILL ROCK BASIN	181	183	0.162	0.161	0.133	0.130	7	7.0	1	053	0.13
09-011-0008	1	0251	GROTON	NEW LONDC	UNIVERSITY OF CONNE	164	183	0.146	0.134	0.122	0.116	2	2.2	5	053	0.13
09-013-1001	1	0251	STAFFORD	TOLLAND	ROUTE 190, SHENIPSI	182	183	0.147	0.147	0.131	0.129	4	4.0	1	053	0.12

Connecticut Ozone 8-Hour

Connecticut															
Parameter: Ozone (8-Hour)															
All Values are in Units of Parts Per Million															
	P						Valid	Num		2nd	3rd	4th	Days		
	O	Rept.				#	Days	Required	Highest	Highest	Highest	Highes	Max ≥	Methods	Design
Site ID	C	Org.	City	County	Address	Obs	Meas	Days	8-Hr Val	8-Hr Val	8-Hr Val	8-Hr V	0.085	Reporte	Values
09-001-0017	1	251	GREENWICH	FAIRFIELD	GREENWICH POINT PAR	98	179	183	0.12	0.11	0.106	0.1	19	53	0.095
09-001-1123	1	251	DANBURY	FAIRFIELD	TRAILER, W. CONNECT	99	182	183	0.121	0.12	0.11	0.11	18	53	0.098
09-001-3007	1	251	STRATFORD	FAIRFIELD	USCG LIGHTHOUSE , P	98	180	183	0.129	0.115	0.104	0.1	20	53	0.098
09-001-9003	1	251	WESTPORT	FAIRFIELD	SHERWOOD ISLAND STA	90	164	183	0.117	0.114	0.111	0.11	20	53	0.086
09-003-1003	1	251	EAST HARTFO	HARTFORD	MCAULIFFEE PARK	96	175	183	0.126	0.104	0.1	0.1	11	53	0.090
09-005-0005	1	251	CORNWALL	LITCHFIELD	MOHAWK MTN MICROWAV	89	162	183	0.121	0.117	0.1	0.1	14	53	Incom.
09-007-0007	1	251	MIDDLETOWN	MIDDLESEX	CONN. VALLEY HOSP.,	97	178	183	0.126	0.11	0.11	0.11	17	53	0.100
09-009-3002	1	251	MADISON	NEW HAVEN	HAMMONASSET STATE P	98	179	183	0.134	0.126	0.114	0.11	20	53	0.099
09-009-9005	1	251	HAMDEN	NEW HAVEN	MILL ROCK BASIN	96	176	183	0.124	0.122	0.106	0.1	15	53	0.095
09-011-0008	1	251	GROTON	NEW LONDON	UNIVERSITY OF CONNE	89	162	183	0.127	0.114	0.102	0.1	7	53	0.089
09-013-1001	1	251	STAFFORD	TOLLAND	ROUTE 190, SHENIPSI	99	182	183	0.116	0.112	0.111	0.1	14	53	0.094

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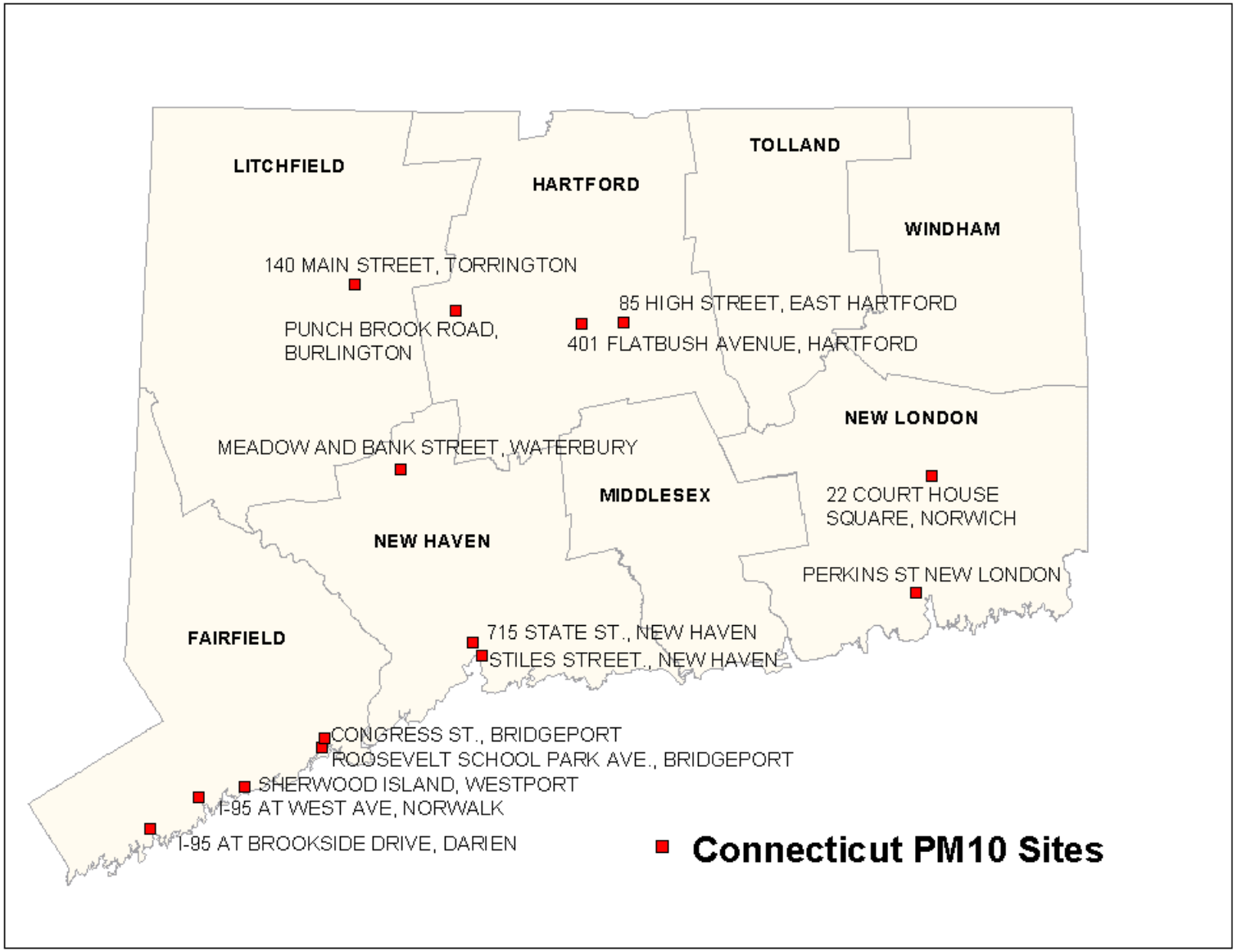
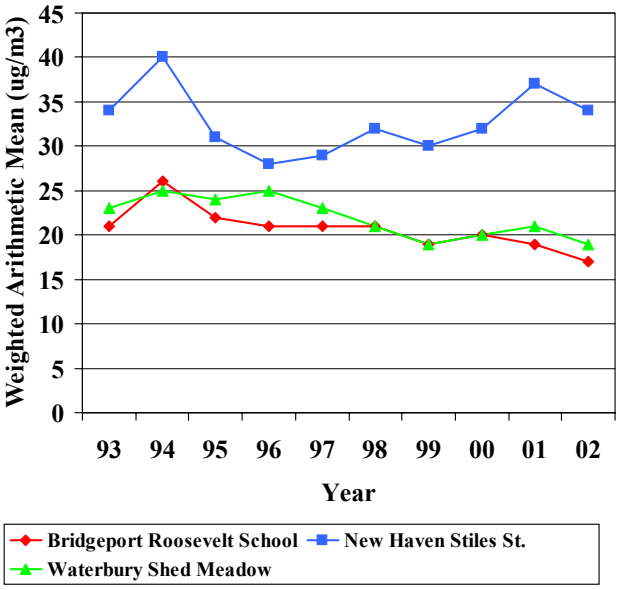
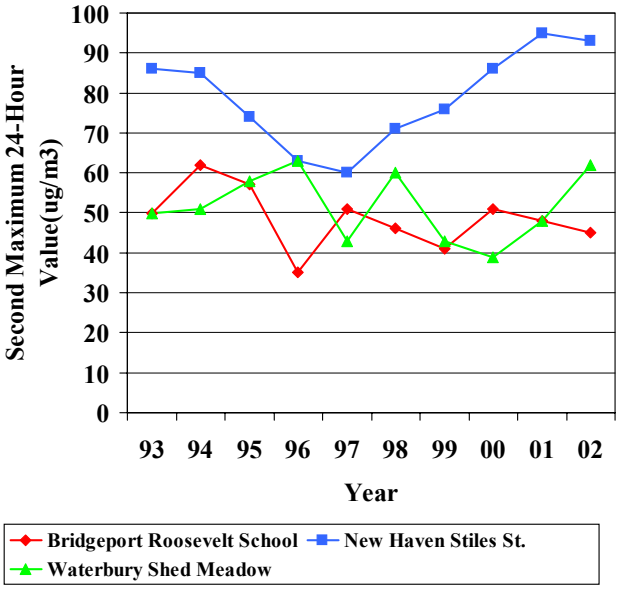
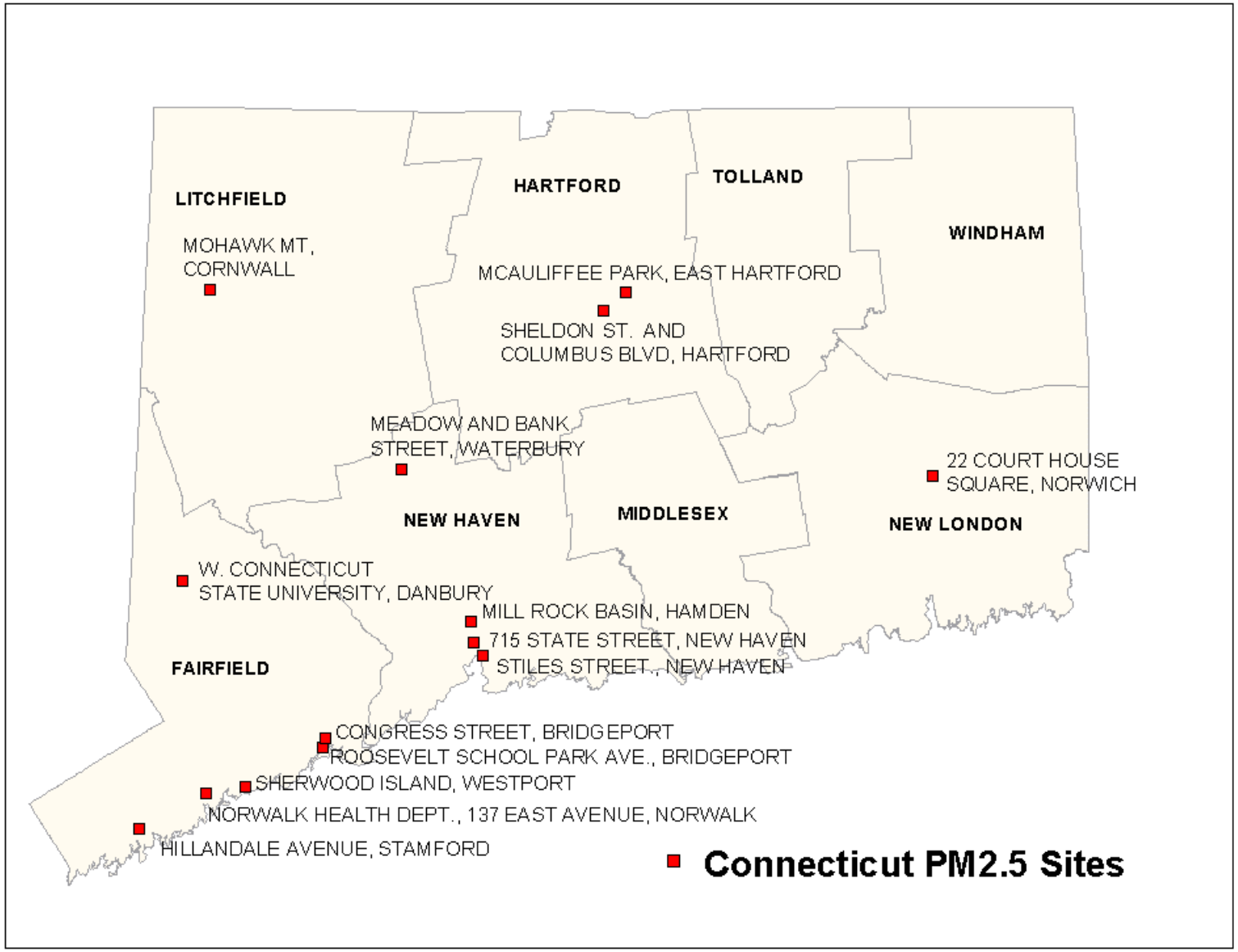

LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
140 MAIN STREET, TORRINGTON
PUNCH BROOK ROAD, BURLINGTON
85 HIGH STREET, EAST HARTFORD
401 FLATBUSH AVENUE, HARTFORD
NEW LONDON
MEADOW AND BANK STREET, WATERBURY
MIDDLESEX
22 COURT HOUSE SQUARE, NORWICH
NEW HAVEN
PERKINS ST NEW LONDON
FAIRFIELD
715 STATE ST., NEW HAVEN
STILES STREET., NEW HAVEN
CONGRESS ST., BRIDGEPORT
ROOSEVELT SCHOOL PARK AVE., BRIDGEPORT
SHERWOOD ISLAND, WESTPORT
I-95 AT WEST AVE, NORWALK
I-95 AT BROOKSIDE DRIVE, DARIEN
Connecticut PM10 Sites

Connecticut PM10



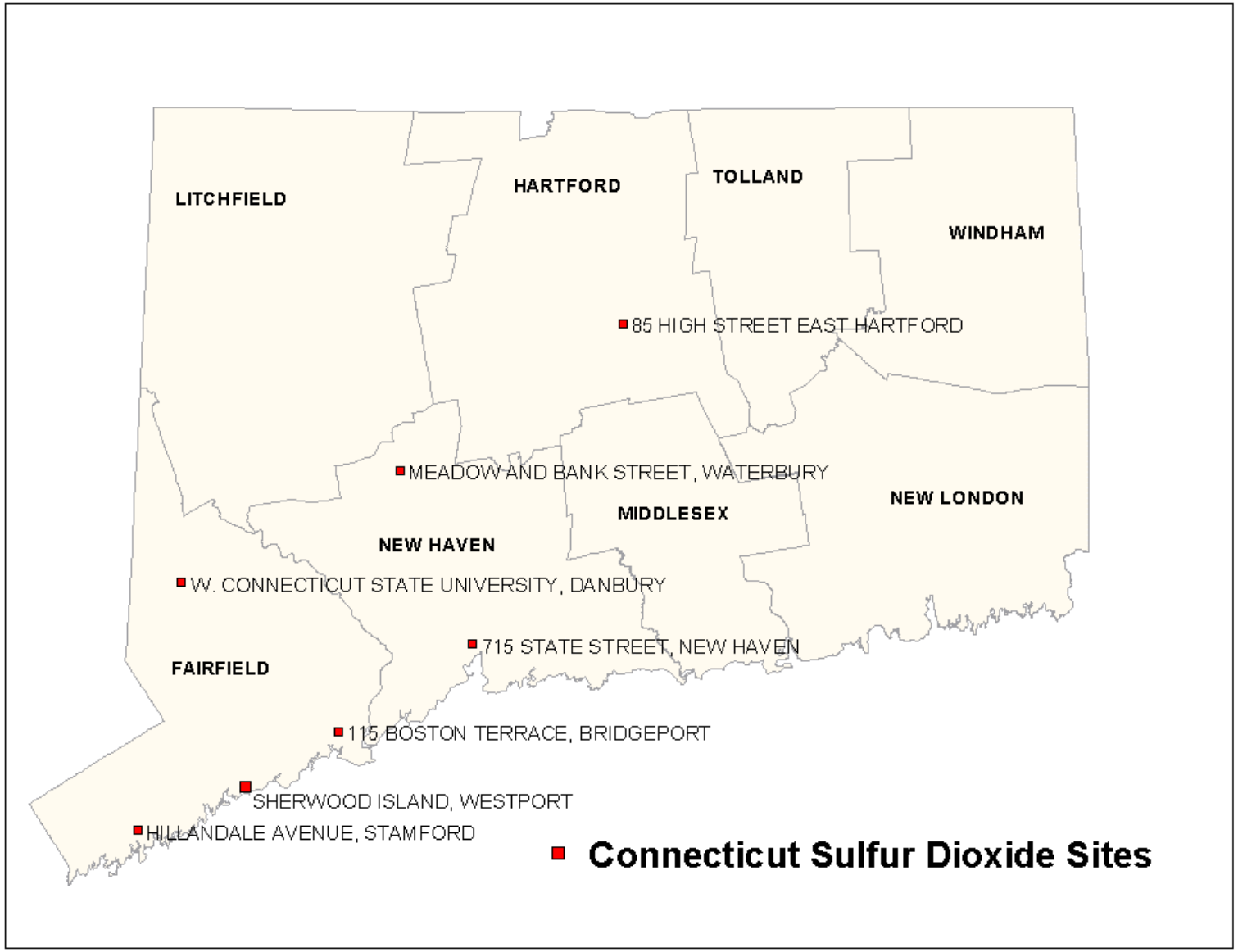


Connecticut																
Parameter: PM 10																
									2nd	3rd	4th	Days	Est. D	Wtd.		
		Rep.						High	High	Highe	Highes	Max	Max	Arith.		Metho
SITE ID	PO	Org	City	County	Address	# Obs	# Re	Valu	Valu	Value	Value	>150	>150	Mean		Used
09-001-0010	1	0251	BRIDGEPORT	FAIRFIELD	ROOSEVELT SCHOOL	59	61	86	45	39	38	0	0	17		62
09-001-0113	1	0251	BRIDGEPORT	FAIRFIELD	SHED CONGRESS ST	59	61	85	43	42	39	0	0	17		62
09-001-1401	1	0251	DARIEN	FAIRFIELD	I-95 AT BROOKSID	59	61	80	40	40	32	0	0	17		62
09-001-2014	1	0251	NORWALK	FAIRFIELD	I-95 AT WEST AVE	58	61	83	68	62	54	0	0	28		62
09-001-9003	1	0251	WESTPORT	FAIRFIELD	SHERWOOD ISLAND	58	61	75	31	30	28	0	0	14		62
09-003-0013	1	0251	HARTFORD	HARTFORD	401 FLATBUSH AVE	35	36	72	35	32	28	0	0	20	*	62
09-003-2001	1	0251	BURLINGTON	HARTFORD	PUNCH BROOK ROAD	56	61	76	29	23	22	0	0	11		62
09-003-2006	1	0251	EAST HARTFORD	HARTFORD	85 HIGH STREET E	48	61	68	44	33	31	0	0	16	*	62
09-003-2006	9	0251	EAST HARTFORD	HARTFORD	85 HIGH STREET E	48	61	68	50	34	34	0	0	16	*	62
09-005-6001	1	0251	TORRINGTON	LITCHFIELD	140 MAIN STREET	56	61	43	40	35	33	0	0	14		62
09-009-0018	1	0251	NEW HAVEN	NEW HAVEN	STILES STREET.	56	61	88	70	52	46	0	0	27		62
09-009-0018	3	0251	NEW HAVEN	NEW HAVEN	STILES STREET.	352	365	96	93	92	91	0	0	34		79
09-009-0018	4	0251	NEW HAVEN	NEW HAVEN	STILES STREET.	8500	365	96	93	92	91	0	0	34		79
09-009-1123	1	0251	NEW HAVEN	NEW HAVEN	715 STATE STREET	58	61	85	47	38	37	0	0	18		62
09-009-1123	2	0251	NEW HAVEN	NEW HAVEN	715 STATE STREET	53	61	80	48	38	37	0	0	18		62
09-009-2123	1	0251	WATERBURY	NEW HAVEN	SHED MEADOW AND	55	61	73	62	50	44	0	0	19	*	62
09-009-2123	2	0251	WATERBURY	NEW HAVEN	SHED MEADOW AND	58	61	73	62	53	48	0	0	19		62
09-011-0009	1	0251	NEW LONDON	NEW LONDON	PERKINS ST TURN-	57	61	76	42	32	29	0	0	15		62
09-011-3002	1	0251	NORWICH	NEW LONDON	22 COURT HOUSE S	55	61	71	35	30	30	0	0	15		62
*Indicates that the mean does not satisfy summary criteria																

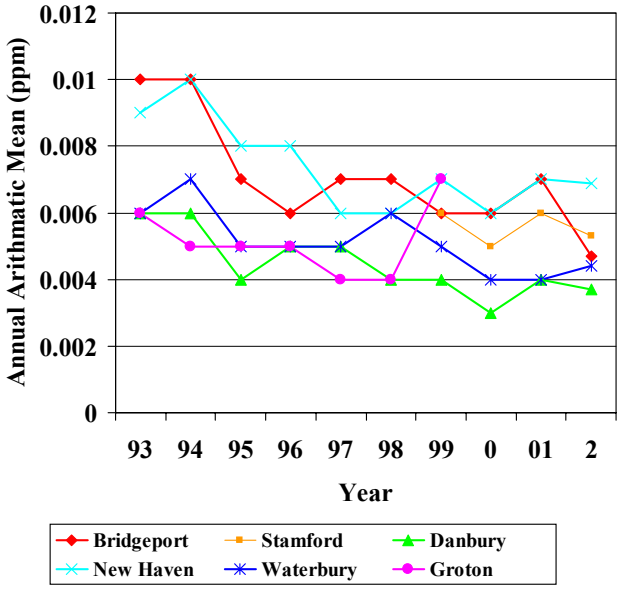

LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
MOHAWK MT, CORNWALL
MCAULIFFEE PARK, EAST HARTFORD
SHELDON ST. AND COLUMBUS BLVD, HARTFORD
MEADOW AND BANK STREET, WATERBURY
22 COURT HOUSE SQUARE, NORWICH
NEW HAVEN
MIDDLESEX
NEW LONDON
W. CONNECTICUT STATE UNIVERSITY, DANBURY
MILL ROCK BASIN, HAMDEN
715 STATE STREET, NEW HAVEN
STILES STREET., NEW HAVEN
FAIRFIELD
CONGRESS STREET, BRIDGEPORT
ROOSEVELT SCHOOL PARK AVE., BRIDGEPORT
SHERWOOD ISLAND, WESTPORT
NORWALK HEALTH DEPT., 137 EAST AVENUE, NORWALK
HILLANDALE AVENUE, STAMFORD
Connecticut PM2.5 Sites

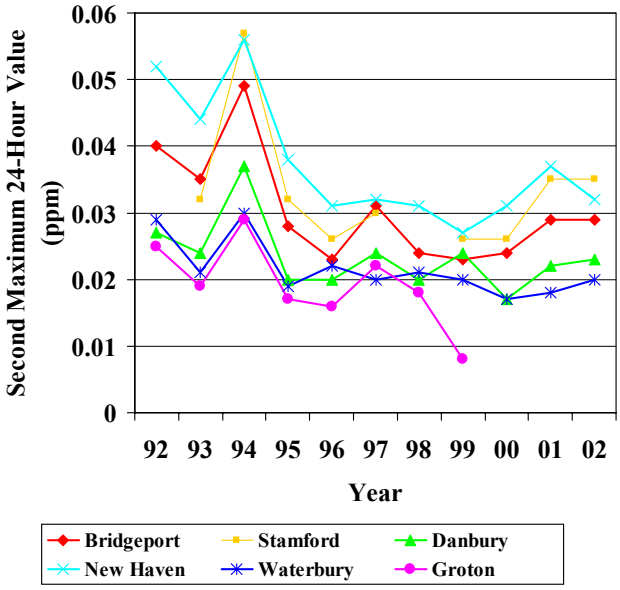
Connecticut PM2.5

Connecticut														
Parameter: PM 2.5														
All Values are in UG/CU Meters Local Conditions														
	P							2nd	3rd	4th	98th	Wtd.		
	O	Rept.				#	Highest	Highest	Highest	Highest	Perce	Arith.		Metho
Site ID	C	Org.	City	County	Address	Obs	Value	Value	Value	Value	Value	Mean		Used
09-001-0010	1	0251	BRIDGEPORT	FAIRFIELD	ROOSEVELT SCHOOL	113	79.8	35.7	34.6	32.9	34.6	13.3		118
09-001-0010	2	0251	BRIDGEPORT	FAIRFIELD	ROOSEVELT SCHOOL	58	80.9	35.3	34.0	33.0	35.3	12.9		118
09-001-0113	1	0251	BRIDGEPORT	FAIRFIELD	SHED CONGRESS ST	115	82.7	37.1	34.5	33.2	34.5	13.5		118
09-001-0113	3	0251	BRIDGEPORT	FAIRFIELD	SHED CONGRESS ST	5664	76.0	49.0	42.0	41.0	38.0	10.0	*	711
09-001-0113	4	0251	BRIDGEPORT	FAIRFIELD	SHED CONGRESS ST	237	72.2	49.4	41.6	40.6	38.4	10.2	*	711
09-001-1123	1	0251	DANBURY	FAIRFIELD	TRAILER, W. CONN	106	74.8	34.0	33.0	30.7	33.0	13.1		118
09-001-2124	1	0251	STAMFORD	FAIRFIELD	HILLANDALE AVENU	104	77.8	36.4	34.6	34.5	34.6	13.3	*	118
09-001-3005	1	0251	NORWALK	FAIRFIELD	NORWALK HEALTH D	111	79.3	39.1	35.0	34.3	35.0	13.2		118
09-001-9003	1	0251	WESTPORT	FAIRFIELD	SHERWOOD ISLAND	115	81.5	33.4	33.1	30.8	33.4	12.1		117
09-001-9003	5	1217	WESTPORT	FAIRFIELD	SHERWOOD ISLAND	59	38.8	34.3	29.6	24.3	34.3	11.8	*	810
09-003-1003	1	0251	EAST HARTFO	HARTFORD	MCAULIFFEE PARK	295	67.9	56.0	52.0	46.3	38.4	11.8		118
09-003-1018	1	0251	HARTFORD	HARTFORD	CORNER OF SHELDO	110	68.2	37.9	32.6	32.0	32.6	13.2	*	118
09-003-1018	3	0251	HARTFORD	HARTFORD	CORNER OF SHELDO	8694	59.0	49.0	49.0	38.0	26.0	9.0		711
09-003-1018	4	0251	HARTFORD	HARTFORD	CORNER OF SHELDO	364	59.1	49.2	48.9	38.4	25.7	9.1		711
09-005-0005	3	0251	CORNWALL	LITCHFIELD	MOHAWK MTN MICRO	3648	52.0	41.0	31.0	28.0	31.0	8.0	*	711
09-005-0005	4	0251	CORNWALL	LITCHFIELD	MOHAWK MTN MICRO	155	49.3	41.0	30.7	27.9	27.9	7.2	*	711
09-009-0018	1	0251	NEW HAVEN	NEW HAVEN	STILES STREET.	307	83.4	60.6	54.1	46.3	41.9	16.4		118
09-009-0018	2	0251	NEW HAVEN	NEW HAVEN	STILES STREET.	53	83.6	35.1	34.5	33.8	35.1	17.3		118
09-009-1123	1	0251	NEW HAVEN	NEW HAVEN	715 STATE STREET	102	80.7	38.3	35.3	32.4	35.3	13.8	*	118
09-009-1123	2	0251	NEW HAVEN	NEW HAVEN	715 STATE STREET	56	82.2	35.4	32.3	32.2	35.4	13.5		118
09-009-2123	1	0251	WATERBURY	NEW HAVEN	SHED MEADOW AND	117	73.9	36.9	33.3	32.6	33.3	13.6		118
09-009-2123	2	0251	WATERBURY	NEW HAVEN	SHED MEADOW AND	57	75.3	39.5	33.5	30.9	39.5	13.6		118
09-009-9005	1	0251	HAMDEN	NEW HAVEN	MILL ROCK BASIN	114	76.7	31.7	30.8	29.4	30.8	11.6		118
09-011-3002	1	0251	NORWICH	NEW LONDON	22 COURT HOUSE S	105	73.4	32.9	29.6	25.7	29.6	11.7	*	118
*Indicates that the mean does not satisfy summary criteria														


LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
85 HIGH STREET EAST HARTFORD
MEADOW AND BANK STREET, WATERBURY
MIDDLESEX
NEW LONDON
NEW HAVEN
W. CONNECTICUT STATE UNIVERSITY, DANBURY
715 STATE STREET, NEW HAVEN
FAIRFIELD
115 BOSTON TERRACE, BRIDGEPORT
SHERWOOD ISLAND, WESTPORT
HILLANDALE AVENUE, STAMFORD
Connecticut Sulfur Dioxide Sites

Connecticut Sulfur Dioxide





Connecticut																
Parameter: Sulfur Dioxide																
All Values are in Units of Parts Per Million																
							24-	24-		3-hour	3-hour		1-hour	1-hour		
	P						hour	hour			2nd			2nd		
	O	Org				#		2nd	Obs	Highest	Highest	Obs	Highest	Highest	Arith.	Method
Site ID	C	Type	City	County	Address	Obs	Highest	Highest	> 0.1	Value	Value	> 0.5	Value	Value	Mean	Used
09-001-0012	1	0251	BRIDGEPORT	FAIRFIELD	115 BOSTON TE	8344	0.029	0.029	0	0.042	0.039	0	0.058	0.052	0.0047	60
09-001-1123	1	0251	DANBURY	FAIRFIELD	TRAILER, W. C	8283	0.025	0.023	0	0.039	0.036	0	0.041	0.040	0.0037	60
09-001-2124	1	0251	STAMFORD	FAIRFIELD	HILLANDALE AV	8299	0.037	0.035	0	0.056	0.051	0	0.060	0.059	0.0053	60
09-001-9003	1	0251	WESTPORT	FAIRFIELD	SHERWOOD ISLA	7897	0.028	0.026	0	0.035	0.032	0	0.042	0.037	0.0036	60
09-003-2006	1	0251	EAST HARTFORD	HARTFORD	85 HIGH STREE	8332	0.020	0.018	0	0.029	0.028	0	0.033	0.030	0.0037	60
09-009-1123	2	0251	NEW HAVEN	NEW HAVEN	715 STATE STR	8260	0.036	0.032	0	0.060	0.053	0	0.075	0.062	0.0069	60
09-009-2123	1	0251	WATERBURY	NEW HAVEN	SHED MEADOW A	8287	0.022	0.020	0	0.032	0.030	0	0.039	0.036	0.0044	60

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Ambient Air Quality Summary - Maine Summary

Low-level, highly sensitive CO monitors have been operating at the Cape Elizabeth PAMS site and the Acadia National Park PAMS site. Measurements of CO at these sites are made to help understand ozone formation, summertime photochemistry and pollution transport along the Maine coast.

Ambient air monitoring for lead (Pb) has been discontinued because the concentration of lead in the air in Maine was very low, well below the NAAQS.

Ambient air concentrations of nitrogen dioxide (NO2) were recorded at two sites in Maine. No sites recorded NO2 concentrations approaching the NAAQS. A long-path UV DOAS monitor measured NO2 as part of BEAM monitoring effort in Portland. The other NO2 monitor was located at the PAMS site in Kittery. In addition, the Acadia National Park and the Cape Elizabeth PAMS sites also measured ambient concentrations of reactive nitrogen compounds as part of a program to understand photochemistry and transport of airborne pollutants along the coast.

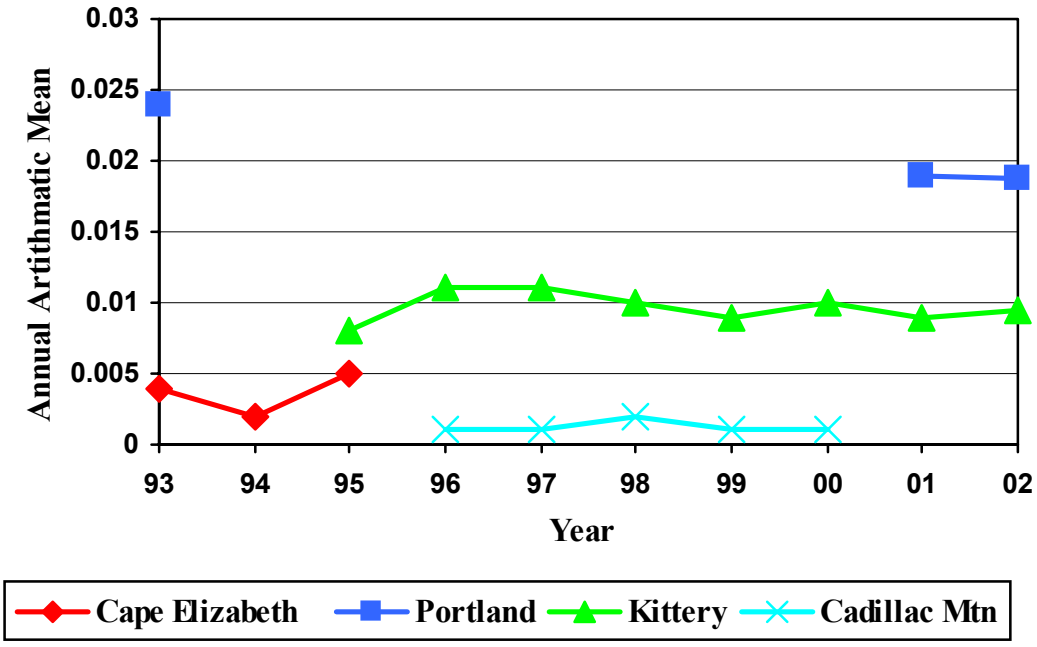
During 2002, five of Maine's twelve ozone monitoring sites reported ozone concentrations over 125 ppb. This compares with 2001, 2000 and 1999 when three, none and three monitoring sites, respectively measured exceedances of the 1-hour ozone standard. The highest 1-hour ozone concentrations were recorded at the Kittery (149 ppb), Bar Harbor (141 ppb) and Kennebunkport (136 ppb) monitoring sites. Nine ozone monitoring sites recorded a fourth highest 8-hour average ozone concentration above the level of the 8-hour NAAQS. These include the Kennebunkport (121 ppb), Kittery (112 ppb), and Acadia National Park (111 ppb) sites. The pattern of the highest ozone concentrations in the last decade being measured in 2002 was reflected in the Maine data.

In 2002 no particulate matter sites which measured particles of 10 microns or less (PM10) reported either 24-hour or annual violations of the NAAQS. The highest PM10 concentrations were measured at the Ashland site (112 ug/m3, ~75% of the 24-hour NAAQS). The Tukey's Bridge PM10 monitor site in Portland recorded the highest annual PM10 concentrations (25 ug/m3, ~50% of the NAAQS). The ten-year trend in PM10 shows decreasing concentrations. Maine began monitoring fine particulate matter (PM2.5) in 1999. Since then 17 PM2.5 monitoring sites have been established in the state. Data for these sites indicate that none of the sites have recorded PM2.5 concentrations that would result in exceedances of the 24-hour or annual NAAQS for PM2.5. Typically annual average PM2.5 concentrations are approximately 75% of the NAAQS in urban area in Maine.

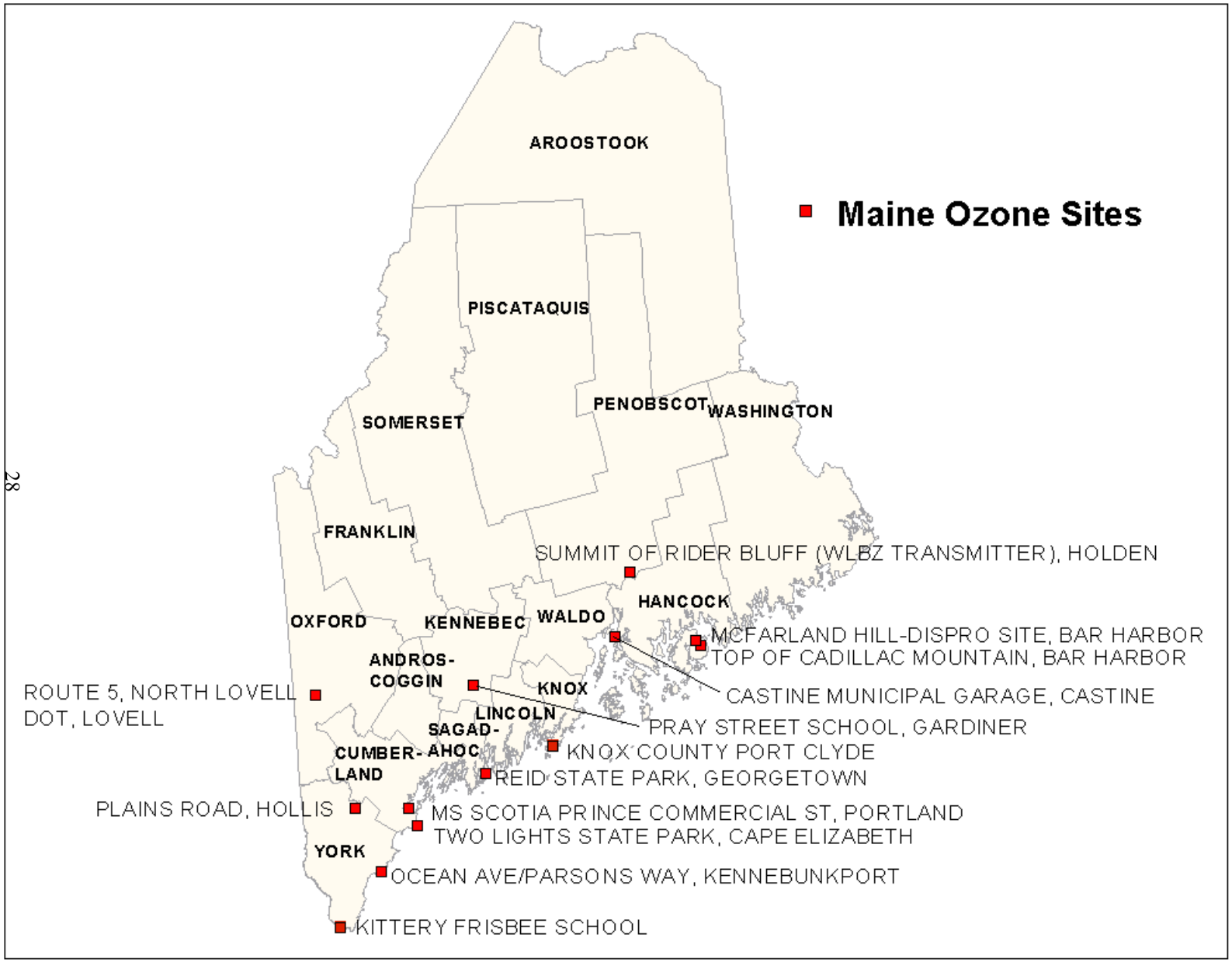
There were no exceedances or violations of the sulfur dioxide (SO2) NAAQS during 2002 in Maine. The highest annual arithmetic mean concentration was reported at the Lewiston site (4 ppb). The Easton monitoring site recorded the highest 24-hour second maximum at 27 ppb. The highest 3-hour second maximum concentration was also recorded in Easton (77 ppb). The ten-year trends in SO2 concentrations are well below NAAQS and show small year-to-year changes.


AROOSTOOK
PISCATAQUIS
SOMERSET
PENOBSCOT
WASHINGTON
FRANKLIN
HANCOCK
WALDO
OXFORD
KENNEBEC
ANDROS-
COGGIN
KNOX
LINCOLN
SAGAD-
AHOC
CUMBER-
LAND
26 MARGINAL WAY, PORTLAND
YORK
Maine Nitrogen Oxide Sites
KITTERY, FRISBEE SCHOOL

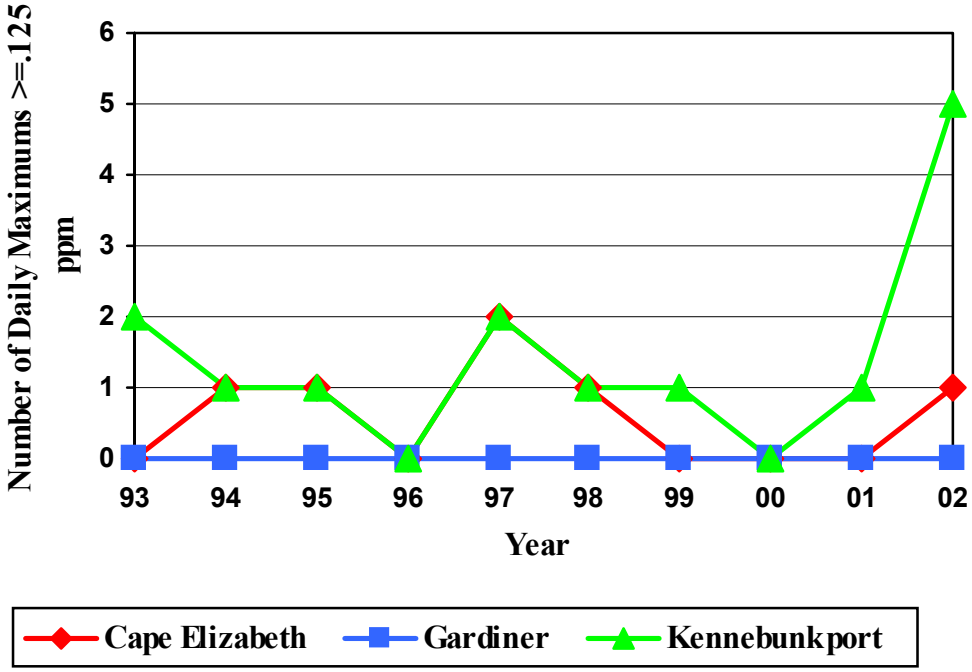
Maine Nitrogen Dioxide



Maine										
Parameter: Nitrogen Dioxide										
All Values are in Units of Parts Per Million										
								1-hour	1-hour	
	P								2nd	Annual
	O	Rept.					#	Highest	Highest	Arith.
Site ID	C	Org.	City	County	Address	Method	Obs	Value	Value	Mean
23-005-0027	1	0635	PORTLAND	CUMBERLAND	26 MARGINAL WAY, PO	075	8660	0.079	0.077	0.0188
23-031-3002	1	0762	KITTERY	YORK	FRISBEE SCHOOL, GOO	014	8466	0.066	0.061	0.0095


Maine Ozone Sites
AROOSTOOK
PISCATAQUIS
SOMERSET
PENOBSCOT
WASHINGTON
FRANKLIN
SUMMIT OF RIDER BLUFF (WLBZ TRANSMITTER), HOLDEN
HANCOCK
OXFORD
KENNEBEC
WALDO
MCFARLAND HILL-DISPRO SITE, BAR HARBOR
TOP OF CADILLAC MOUNTAIN, BAR HARBOR
ANDROS-
COGGIN
ROUTE 5, NORTH LOVELL
DOT, LOVELL
KNOX
CASTINE MUNICIPAL GARAGE, CASTINE
LINCOLN
PRAY STREET SCHOOL, GARDINER
SAGAD-
AHOC
KNOX COUNTY PORT CLYDE
CUMBER-
LAND
REID STATE PARK, GEORGETOWN
PLAINS ROAD, HOLLIS
MS SCOTIA PRINCE COMMERCIAL ST, PORTLAND
TWO LIGHTS STATE PARK, CAPE ELIZABETH
YORK
OCEAN AVE/PARSONS WAY, KENNEBUNKPORT
KITTERY FRISBEE SCHOOL

Maine Ozone 1-Hour



Maine																
Parameter: Ozone (1-Hour)																
All Values are in Units of Parts Per Million																
	P								2nd	3rd	4th			Missing		
	O	Rep.				Num	Num	Highest	Highest	Highest	Highest	Day	Est. Da	Days	Method	Design
Site ID	C	Org.	City	County	Address	Meas	Req	Value	Value	Value	Value	≥ 0.1	≥ 0.12	< 0.12	used	Value
23-005-2003	1	0635	CAPE ELIZABETH	CUMBERLAND	TWO LIGHTS STATE PA	183	183	0.125	0.122	0.122	0.121	1	1.0	0	047	0.111
23-009-0102	1	0635	BAR HARBOR	HANCOCK	TOP OF CADILLAC MOU	180	183	0.141	0.127	0.127	0.119	3	3.0	1	047	0.120
23-009-0103	1	0635	BAR HARBOR	HANCOCK	MCFARLAND HILL-DISP	172	183	0.119	0.116	0.115	0.102	0	0.0	1	047	0.112
23-009-0301	1	0635	NOT IN A CITY	HANCOCK	CASTINE MUNICIPAL G	183	183	0.120	0.109	0.100	0.091	0	0.0	0	047	Incom.
23-011-2005	1	0635	GARDINER	KENNEBEC	PRAY STREET SCHOOL	158	183	0.113	0.102	0.101	0.100	0	0.0	3	047	0.100
23-013-0004	2	0635	PORT CLYDE	KNOX	PORT CLYDE, MARSHAL	165	183	0.118	0.110	0.109	0.105	0	0.0	1	047	0.109
23-017-3001	1	0635	LOVELL	OXFORD	ROUTE 5, NORTH LOVE	177	183	0.093	0.074	0.074	0.072	0	0.0	0	047	0.078
23-019-4008	1	0635	HOLDEN	PENOBSCOT	SUMMIT OF RIDER BLU	172	183	0.111	0.107	0.105	0.103	0	0.0	1	047	Incom.
23-023-0004	1	0635	GEORGETOWN	SAGADAHOC	REID STATE PARK, GE	174	183	0.131	0.123	0.118	0.107	1	1.0	5	047	Incom.
23-031-0038	1	0635	WEST BUXTON	YORK	PLAINS ROAD, HOLLIS	183	183	0.121	0.114	0.102	0.095	0	0.0	0	047	Incom.
23-031-2002	1	0635	KENNEBUNKPORT	YORK	OCEAN AVE/PARSONS W	181	183	0.136	0.130	0.128	0.126	5	5.1	0	047	0.120
23-031-3002	1	0762	KITTERY	YORK	FRISBEE SCHOOL, GOO	181	183	0.149	0.128	0.120	0.105	2	2.0	1	011	0.117
23-901-0001	1	0635	NOT IN A CITY	MOBILE MONITOR	MS SCOTIA PRINCE CO	153	183	0.127	0.114	0.111	0.110	1	1.2	0	056	Mobile

Maine Ozone 8-Hour

Maine															
Parameter: Ozone (8-Hour)															
All Values are in Units of Parts Per Million															
	P						Valid	Num		2nd	3rd	4th	Days		
	O	Rept.				#	Days	Requi	Highest	Highest	Highest	Highest	Max >	Methods	Design
Site ID	C	Org.	City	County	Address	Obs	Meas.	Days	8-Hr Valu	8-Hr Valu	8-Hr Valu	8-Hr Va	0.09	Reporte	Value
23-005-2003	1	635	CAPE ELIZABETH	CUMBERLAND	TWO LIGHTS STATE PA	99	182	183	0.103	0.102	0.102	0.096	5	47	0.086
23-009-0102	1	635	BAR HARBOR	HANCOCK	TOP OF CADILLAC MOU	97	178	183	0.111	0.106	0.106	0.1	8	47	0.093
23-009-0103	1	635	BAR HARBOR	HANCOCK	MCFARLAND HILL-DISP	94	172	183	0.109	0.1	0.09	0.089	6	47	0.084
23-009-0301	1	635	NOT IN A CITY	HANCOCK	CASTINE MUNICIPAL G	0	183	183	0.09	0.089	0.085	0.082	3	47	Incom.
23-011-2005	1	635	GARDINER	KENNEBEC	PRAY STREET SCHOOL	86	157	183	0.094	0.093	0.09	0.088	4	47	0.078
23-013-0004	2	635	PORT CLYDE	KNOX	PORT CLYDE, MARSHAL	89	163	183	0.097	0.095	0.092	0.088	5	47	0.083
23-017-3001	1	635	LOVELL	OXFORD	ROUTE 5, NORTH LOVE	97	177	183	0.085	0.067	0.064	0.06	1	47	0.060
23-019-4008	1	635	HOLDEN	PENOBSCOT	SUMMIT OF RIDER BLU	93	171	183	0.097	0.091	0.09	0.089	4	47	Incom.
23-023-0004	1	635	GEORGETOWN	SAGADAHOC	REID STATE PARK, GE	90	164	183	0.101	0.1	0.097	0.096	5	47	Incom.
23-031-0038	1	635	WEST BUXTON	YORK	PLAINS ROAD, HOLLIS	0	183	183	0.1	0.095	0.086	0.083	3	47	Incom.
23-031-2002	1	635	KENNEBUNKPORT	YORK	OCEAN AVE/PARSONS W	98	179	183	0.121	0.115	0.109	0.101	10	47	0.090
23-031-3002	1	762	KITTERY	YORK	FRISBEE SCHOOL, GOO	98	179	183	0.112	0.11	0.107	0.094	12	11	0.084
23-901-0001	1	635	NOT IN A CITY	MOBILE MONITORS	MS SCOTIA PRINCE CO	84	153	183	0.099	0.09	0.09	0.09	7	56	Mobile

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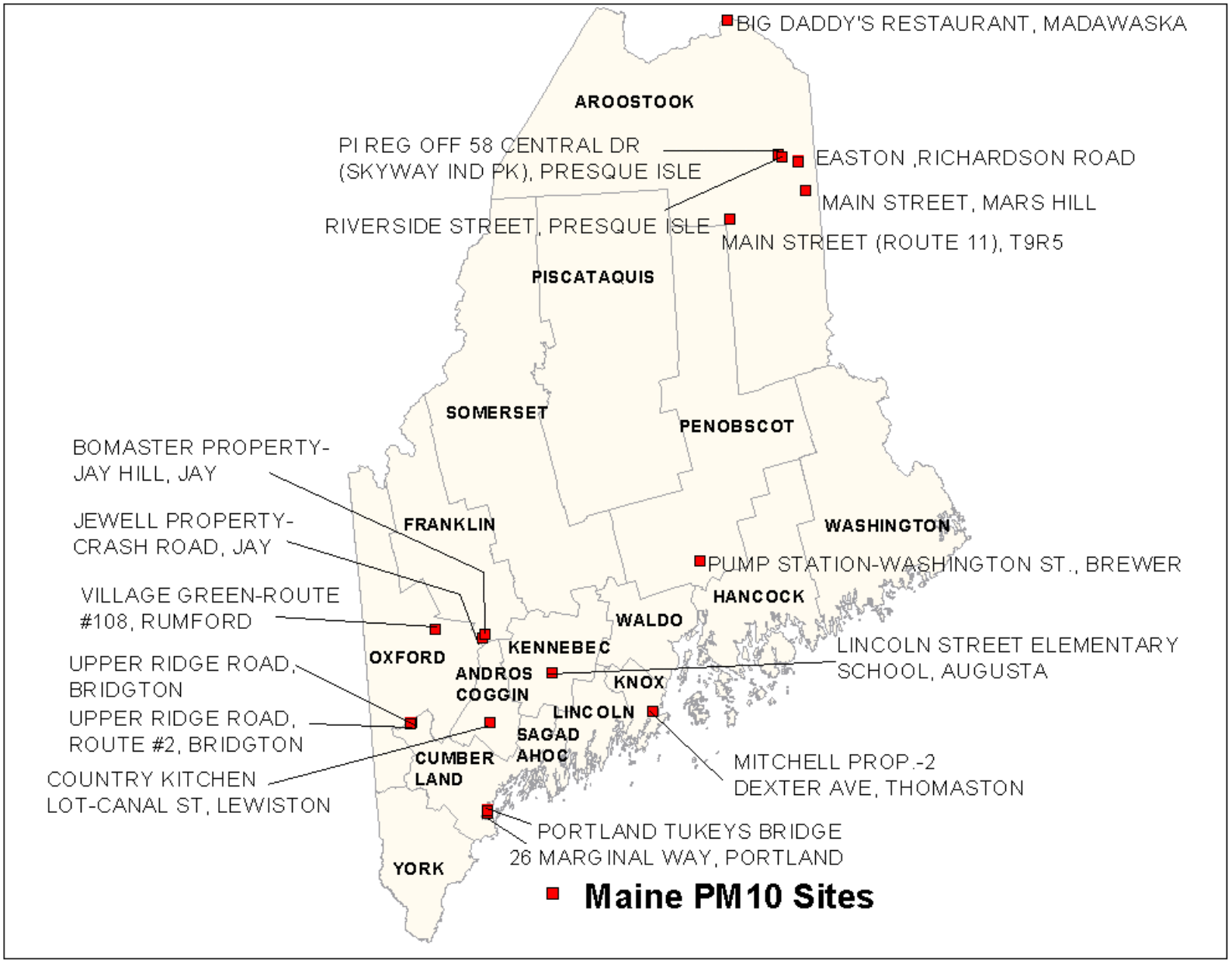
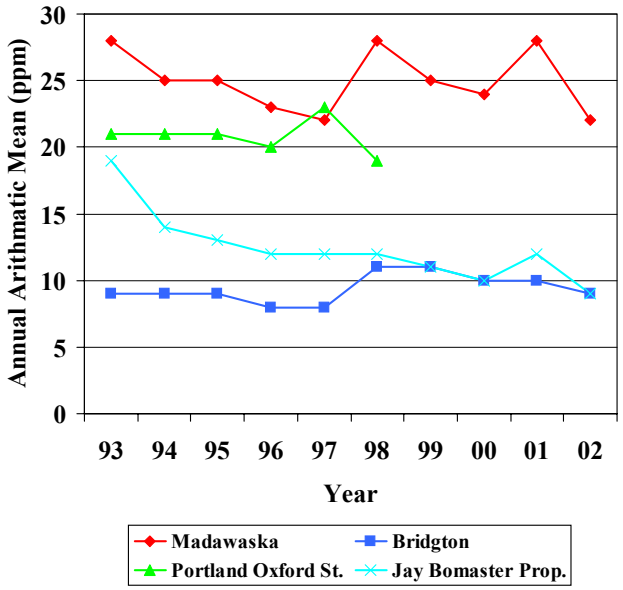
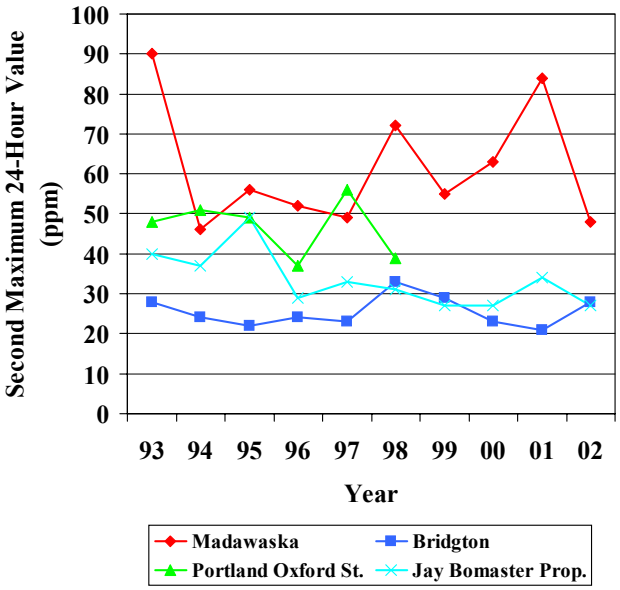
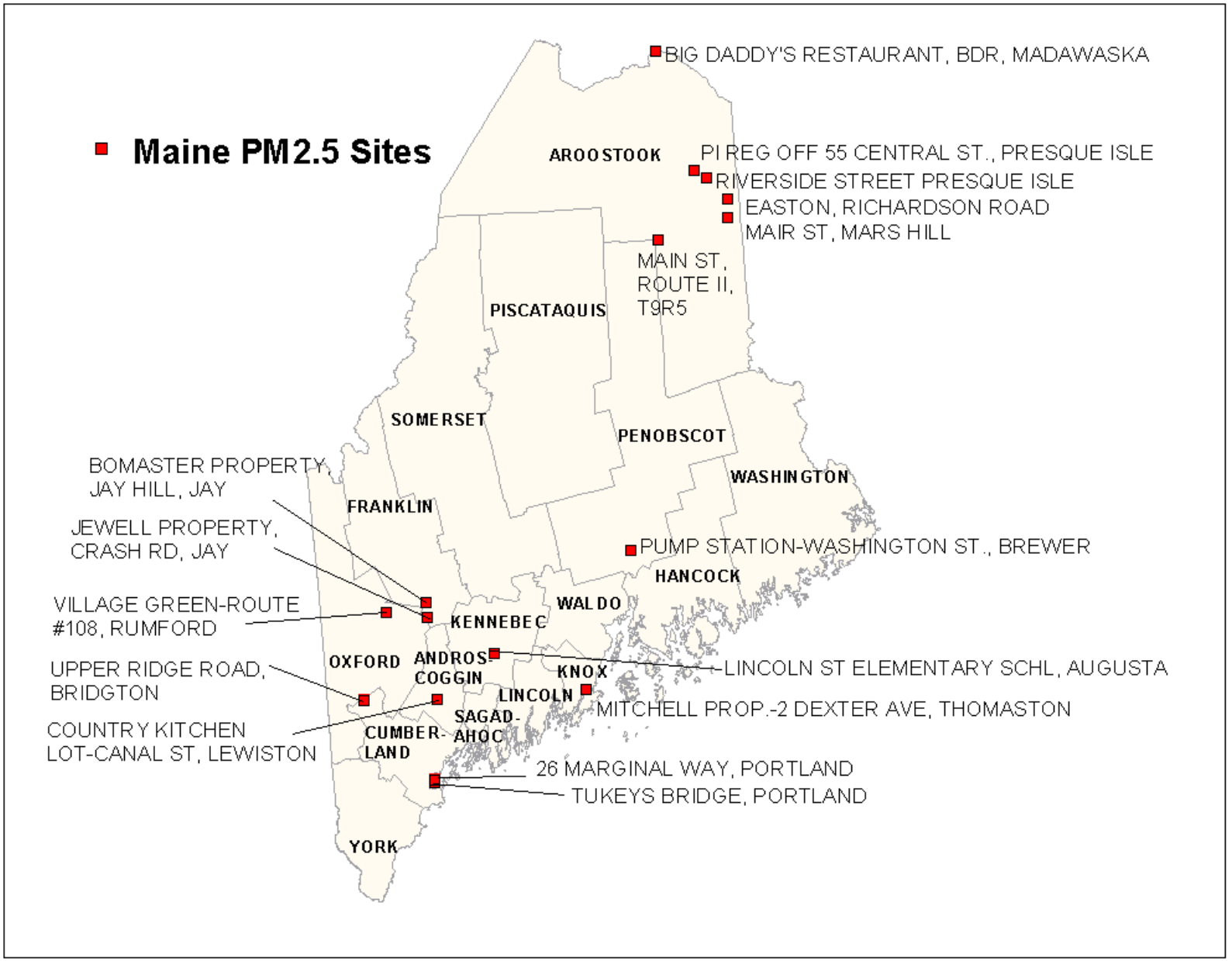

BIG DADDY'S RESTAURANT, MADAWASKA
AROOSTOOK
PI REG OFF 58 CENTRAL DR
(SKYWAY IND PK), PRESQUE ISLE
EASTON ,RICHARDSON ROAD
MAIN STREET, MARS HILL
RIVERSIDE STREET, PRESQUE ISLE
MAIN STREET (ROUTE 11), T9R5
PISCATAQUIS
SOMERSET
PENOBSCOT
BOMASTER PROPERTY-
JAY HILL, JAY
JEWELL PROPERTY-
CRASH ROAD, JAY
FRANKLIN
WASHINGTON
PUMP STATION-WASHINGTON ST., BREWER
HANCOCK
VILLAGE GREEN-ROUTE
#108, RUMFORD
WALDO
KENNEBEC
OXFORD
LINCOLN STREET ELEMENTARY
SCHOOL, AUGUSTA
UPPER RIDGE ROAD,
BRIDGTON
ANDROS
COGGIN
KNOX
UPPER RIDGE ROAD,
ROUTE #2, BRIDGTON
LINCOLN
SAGAD
AHOC
CUMBER
LAND
MITCHELL PROP.-2
DEXTER AVE, THOMASTON
COUNTRY KITCHEN
LOT-CANAL ST, LEWISTON
PORTLAND TUKEYS BRIDGE
26 MARGINAL WAY, PORTLAND
YORK
Maine PM10 Sites

Maine PM 10



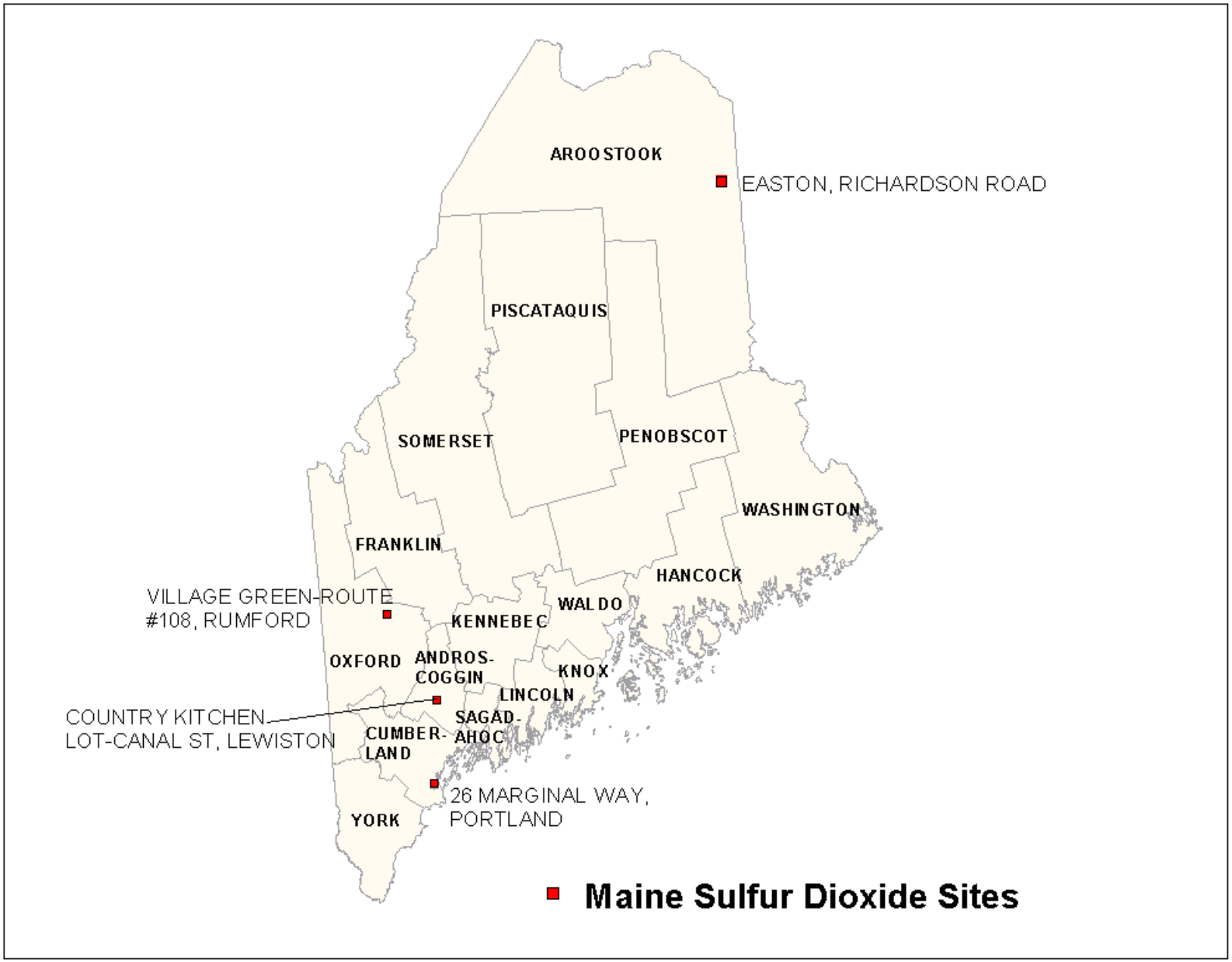


Maine														
Parameter: PM 10														
										2nd	3rd	4th	Days	Est. D	Wtd.
		Rep.						Highest	Highest	Highest	Highe	Max	Max	Arith.
SITE ID	PO	Org	City	County	Address	# Obs	# Req.	Value	Value	Value	Value	>150	>150	Mean
23-001-0011	1	0635	LEWISTON	ANDROSCOGG	COUNTRY KITCHEN	51	61	79	70	52	44	0	0	19
23-003-0013	1	0635	MADAWASKA	AROOSTOOK	BIG DADDY'S REST	14	15	84	27	22	20	0	0	20
23-003-0013	2	0635	MADAWASKA	AROOSTOOK	BIG DADDY'S REST	59	61	84	48	44	42	0	0	22
23-003-1008	1	0635	PRESQUE ISLE	AROOSTOOK	PI REG OFF 58 CE	60	61	71	34	24	22	0	0	12
23-003-1011	2	0635	PRESQUE ISLE	AROOSTOOK	RIVERSIDE STREET	8576	365	97	68	65	55	0	0	17
23-003-1014	1	0635	MARS HILL	AROOSTOOK	MAIN STREET MARS	41	46	63	54	40	31	0	0	20
23-003-1016	1	0635	ASHLAND	AROOSTOOK	MAIN STREET RT 11	50	61	112	79	39	31	0	0	19
23-003-1018	1	0635	EASTON	AROOSTOOK	RICHARDSON ROAD	58	61	70	53	37	35	0	0	16
23-005-0002	2	0635	BRIDGTON	CUMBERLAND	UPPER RIDGE ROAD	61	61	41	28	27	24	0	0	9
23-005-0015	1	0635	PORTLAND	CUMBERLAND	TUKEY'S BRIDGE-B	57	61	63	62	59	55	0	0	25
23-005-0027	1	0635	PORTLAND	CUMBERLAND	26 MARGINAL WAY,	57	61	62	53	52	49	0	0	24
23-007-0003	1	0635	JAY	FRANKLIN	JEWELL PROPERTY-	60	61	39	29	25	24	0	0	11
23-007-0004	3	0528	JAY	FRANKLIN	BOMASTER PROPERT	60	61	33	27	24	22	0	0	9
23-011-0016	1	0635	AUGUSTA	KENNEBEC	LINCOLN STREET E	57	61	91	64	60	39	0	0	19
23-013-2001	1	0314	THOMASTON	KNOX	MITCHELL PROP.-2	58	122	36	32	30	30	0	0	12
23-017-2007	1	0635	RUMFORD	OXFORD	VILLAGE GREEN-RO	61	61	33	31	23	22	0	0	10
23-019-0002	2	0635	BANGOR	PENOBSCOT	PUMP STATION-WAS	60	61	69	36	34	34	0	0	17

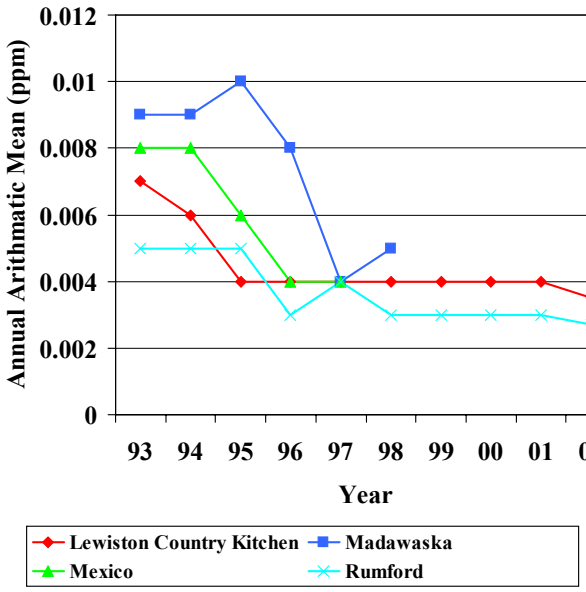

Maine PM2.5 Sites
BIG DADDY'S RESTAURANT, BDR, MADAWASKA
AROOSTOOK
PI REG OFF 55 CENTRAL ST., PRESQUE ISLE
RIVERSIDE STREET PRESQUE ISLE
EASTON, RICHARDSON ROAD
MAIR ST, MARS HILL
MAIN ST, ROUTE II, T9R5
PISCATAQUIS
SOMERSET
PENOBSCOT
WASHINGTON
BOMASTER PROPERTY, JAY HILL, JAY
FRANKLIN
JEWELL PROPERTY, CRASH RD, JAY
PUMP STATION-WASHINGTON ST., BREWER
HANCOCK
VILLAGE GREEN-ROUTE #108, RUMFORD
WALDO
KENNEBEC
OXFORD
ANDROS-COGGIN
LINCOLN ST ELEMENTARY SCHL, AUGUSTA
KNOX
UPPER RIDGE ROAD, BRIDGTON
LINCOLN
MITCHELL PROP.-2 DEXTER AVE, THOMASTON
SAGAD-AHOC
COUNTRY KITCHEN LOT-CANAL ST, LEWISTON
CUMBER-LAND
26 MARGINAL WAY, PORTLAND
TUKEYS BRIDGE, PORTLAND
YORK

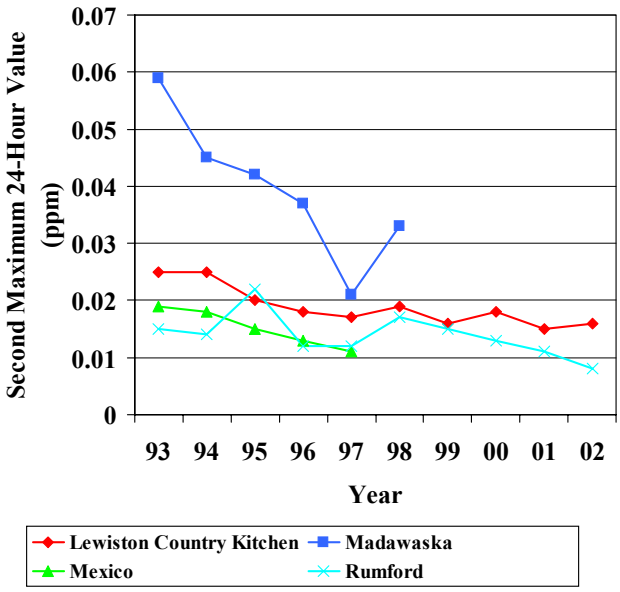
Maine PM2.5

Maine														
Parameter: PM 10														
									2nd	3rd	4th	Days	Est. Day	Wtd.
		Rep.						Highest	Highest	Highest	Highes	Max	Max	Arith.
SITE ID	P	Org	City	County	Address	# Obs	# Req.	Value	Value	Value	Value	>150	>150	Mean
23-001-0011	1	0635	LEWISTON	ANDROSCOGGIN	COUNTRY KITCHEN	51	61	79	70	52	44	0	0	19
23-003-0013	1	0635	MADAWASKA	AROOSTOOK	BIG DADDY'S REST	14	15	84	27	22	20	0	0	20
23-003-0013	2	0635	MADAWASKA	AROOSTOOK	BIG DADDY'S REST	59	61	84	48	44	42	0	0	22
23-003-1008	1	0635	PRESQUE ISLE	AROOSTOOK	PI REG OFF 58 CE	60	61	71	34	24	22	0	0	12
23-003-1011	2	0635	PRESQUE ISLE	AROOSTOOK	RIVERSIDE STREET	8576	365	97	68	65	55	0	0	17
23-003-1014	1	0635	MARS HILL	AROOSTOOK	MAIN STREET MARS	41	46	63	54	40	31	0	0	20
23-003-1016	1	0635	ASHLAND	AROOSTOOK	MAIN STREET (ROU	50	61	112	79	39	31	0	0	19
23-003-1018	1	0635	EASTON	AROOSTOOK	RICHARDSON ROAD	58	61	70	53	37	35	0	0	16
23-005-0002	2	0635	BRIDGTON	CUMBERLAND	UPPER RIDGE ROAD	61	61	41	28	27	24	0	0	9
23-005-0015	1	0635	PORTLAND	CUMBERLAND	TUKEY'S BRIDGE-B	57	61	63	62	59	55	0	0	25
23-005-0027	1	0635	PORTLAND	CUMBERLAND	26 MARGINAL WAY,	57	61	62	53	52	49	0	0	24
23-007-0003	1	0635	JAY	FRANKLIN	JEWELL PROPERTY-	60	61	39	29	25	24	0	0	11
23-007-0004	3	0528	JAY	FRANKLIN	BOMASTER PROPERT	60	61	33	27	24	22	0	0	9
23-011-0016	1	0635	AUGUSTA	KENNEBEC	LINCOLN STREET E	57	61	91	64	60	39	0	0	19
23-013-2001	1	0314	THOMASTON	KNOX	MITCHELL PROP.-2	58	122	36	32	30	30	0	0	12
23-017-2007	1	0635	RUMFORD	OXFORD	VILLAGE GREEN-RO	61	61	33	31	23	22	0	0	10
23-019-0002	2	0635	BANGOR	PENOBSCOT	PUMP STATION-WAS	60	61	69	36	34	34	0	0	17


AROOSTOOK
EASTON, RICHARDSON ROAD
PISCATAQUIS
SOMERSET
PENOBSCOT
WASHINGTON
FRANKLIN
HANCOCK
VILLAGE GREEN-ROUTE
#108, RUMFORD
WALDO
KENNEBEC
OXFORD
ANDROS-
COGGIN
KNOX
LINCOLN
COUNTRY KITCHEN
LOT-CANAL ST, LEWISTON
SAGAD-
AHOC
CUMBER-
LAND
26 MARGINAL WAY,
PORTLAND
YORK
Maine Sulfur Dioxide Sites

Maine Sulfur Dioxide





Maine																	
Parameter: Sulfur Dioxide																	
All Values are in Units of Parts Per Million																	
							24-	24-		3-hour	3-hour		1-hour	1-hour			
	P							hour			2nd			2nd			
	O	Org				#		2nd	Obs	Highest	Highest	Obs	Highest	Highest	Arith.		Metho
Site ID	C	Type	City	County	Address	Obs	Highest	Highest	> 0.14	Value	Value	> 0.5	Value	Value	Mean		Used
23-001-0011	1	635	LEWISTON	ANDROSCOGGIN	COUNTRY KITCH	8067	0.016	0.016	0	0.031	0.030	0	0.058	0.039	0.0035		60
23-003-1018	1	635	EASTON	AROOSTOOK	RICHARDSON RO	4285	0.027	0.023	0	0.077	0.048	0	0.090	0.076	0.0029	*	60
23-005-0027	1	635	PORTLAND	CUMBERLAND	26 MARGINAL W	8697	0.015	0.013	0	0.031	0.024	0	0.042	0.038	0.0030		60
23-017-2007	2	106	RUMFORD	OXFORD	VILLAGE GREEN	8581	0.009	0.008	0	0.015	0.014	0	0.022	0.021	0.0027		9
*Indicates that the mean does not satisfy summary criteria																	

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Ambient Air Quality Summary – Massachusetts

Massachusetts maintains nine carbon monoxide (CO) monitoring sites. Four sites are located in Boston (Kenmore Square, Harrison Ave - Roxbury, Breman Street-East Boston, and the Federal Post Office Building), two sites are located in Springfield (East Columbus Avenue and Liberty Street), two sites are located in Worcester (Central Street and Franklin Street), and a single site in Lowell (Old City Hall). No exceedances of the 8-hour NAAQS for CO was recorded at any site in Massachusetts during 2002 (and 2001, 2000, 1999, 1998, and 1997). Over the past five years, the concentrations of CO were highest in 1999. The annual fluctuations in CO concentrations are evident in the ten year records. The data show an overall decrease in the concentration of CO over the past ten years.

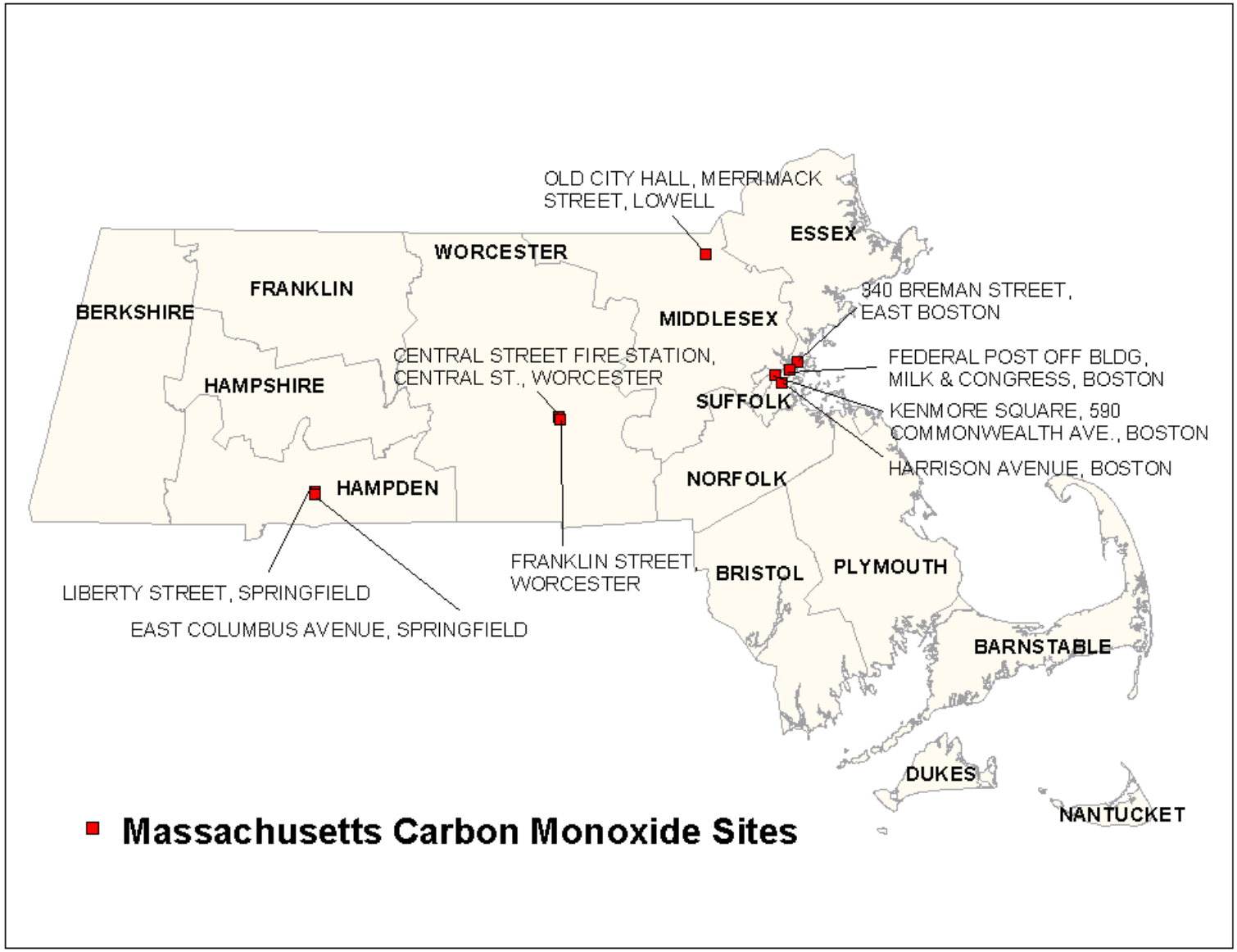
In 1996, Massachusetts discontinued ambient air monitoring of lead (Pb) at all sites, except one site in Boston. The maximum quarterly average concentration of lead at the Kenmore Square (Boston) site (0.01 ug/m3) was well below (~1%) the NAAQS for lead.

Nitrogen dioxide (NO2) measurements were made at 16 monitoring sites in Massachusetts during 2002. The highest concentrations of NO2 were recorded at monitors in Boston, Springfield and Worcester. The lowest concentrations were measured at the Truro, Quabbin Summit (Ware) and Newbury sites. The highest NO2 concentrations were recorded at Kenmore Square (25 ppb) and the lowest concentrations at Truro, Newbury and the Quabbin Summit were 5, 7 and 7 ppb, respectively. No upward or downward trend in NO2 concentration can be detected in the ten-year trend data.

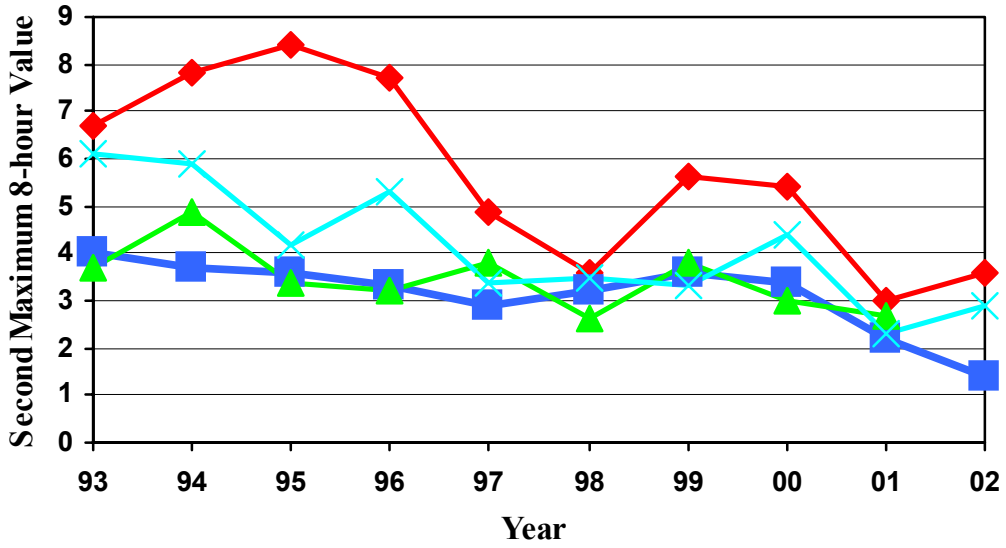
During 2002, fifteen ozone monitoring sites measured ozone (03) in Massachusetts with eleven sites measuring at least one day over 125 ppb. The highest 1-hour concentrations of ozone were recorded at the Lynn (152 ppb) Blue Hill (150 ppb), Newbury (148 ppb), and Boston Long Island (138 ppb). This compares to 2001 when six sites recorded levels above 125 ppb, and 2000 when only Truro measured high (141 ppb) concentrations of ozone. In 2002, fourteen of the fifteen ozone monitoring sites recorded a fourth highest 8-hour average ozone concentration above the level of the 8-hour NAAQS. In comparison, during 2001 eleven of the fifteen ozone monitoring sites recorded a fourth highest 8-hour average ozone concentration above the level of the 8-hour NAAQS and not one site in Massachusetts during 2000 recorded an 8-hr average ozone concentration above the 8-hour ozone NAAQS.

In Massachusetts, during 2002, three forms of particulate matter were measured at various ambient monitoring sites. Total Suspended Particles (TSP) were measured at four sites. The highest TSP concentrations were measured at East Boston. Eight sites measured particulate matter (PM10). With the exception of the Quabbin Summit site, all of the PM10 monitoring sites were located in urban areas. The highest annual average concentrations of PM10 were recorded at the Boston-City Square (31 ug/m3) and Boston-Kenmore Square (25 ug/m3) monitoring sites. The highest 24-hour PM10 concentration was recorded at the Springfield site (78 ug/m3). In contrast the lowest PM10 concentrations were recorded at the Quabbin Summit site (12 ug/m3 annual average). Over the past 10 years the concentration of PM10 has shown some variability in the urban areas. In 1999, Massachusetts established a fine particulate matter (PM2.5) monitoring network. Since 1999, 26 PM2.5 monitoring sites have been deployed in urban, suburban and rural areas. The highest PM2.5 concentrations have been measured in the urban areas in Boston and Springfield. In 2002, the Kenmore Square and North Street sites measured annual average PM2.5 concentrations of 13.5 ug/m3 and 13.4 ug/m3, respectively. These values were lower that in 2001with the measured concentrations at these sites being 16.6 and 16.0 ug/m3 respectively.

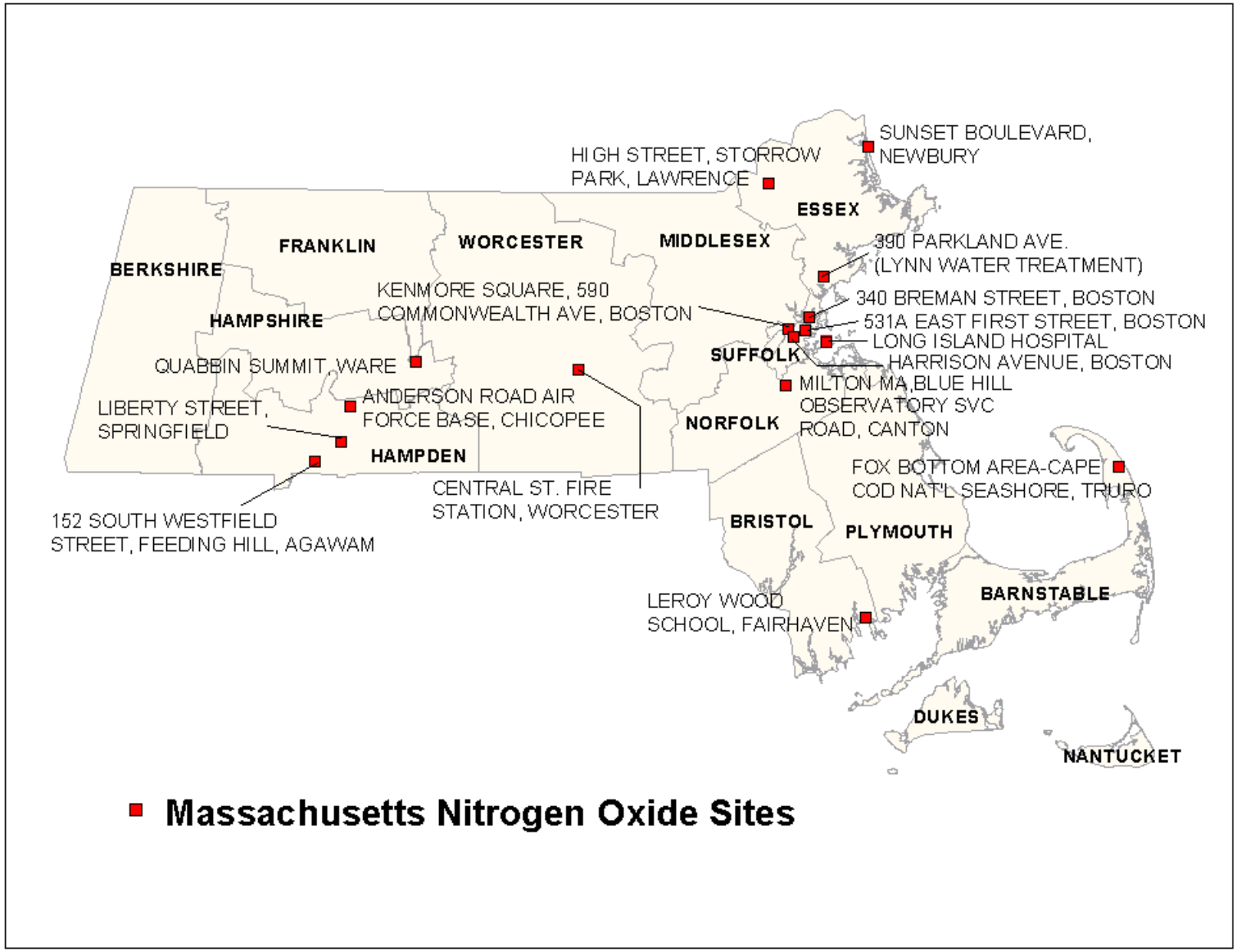
Eleven sulfur dioxide (SO2) monitoring sites were operated in Massachusetts during 2002. No exceedances or violation of the annual or 24-hour (primary) or the 3-hour (secondary) NAAQS for SO2 was recorded in 2002. The highest short-term (3-hour) SO2 concentrations were recorded at the East First Street monitoring site in Boston (192 ppb). The highest annual and 24-hour SO2 concentrations were recorded in Boston (East First Street), well below the NAAQS. All SO2 measurement sites in Massachusetts showed a general decline in SO2 concentrations over the past ten years.


OLD CITY HALL, MERRIMACK STREET, LOWELL
ESSEX
WORCESTER
FRANKLIN
BERKSHIRE
MIDDLESEX
340 BREMAN STREET, EAST BOSTON
CENTRAL STREET FIRE STATION, CENTRAL ST., WORCESTER
FEDERAL POST OFF BLDG, MILK & CONGRESS, BOSTON
HAMPSHIRE
SUFFOLK
KENMORE SQUARE, 590 COMMONWEALTH AVE., BOSTON
HARRISON AVENUE, BOSTON
NORFOLK
HAMPDEN
FRANKLIN STREET WORCESTER
BRISTOL
PLYMOUTH
LIBERTY STREET, SPRINGFIELD
EAST COLUMBUS AVENUE, SPRINGFIELD
BARNSTABLE
DUKES
NANTUCKET
Massachusetts Carbon Monoxide Sites

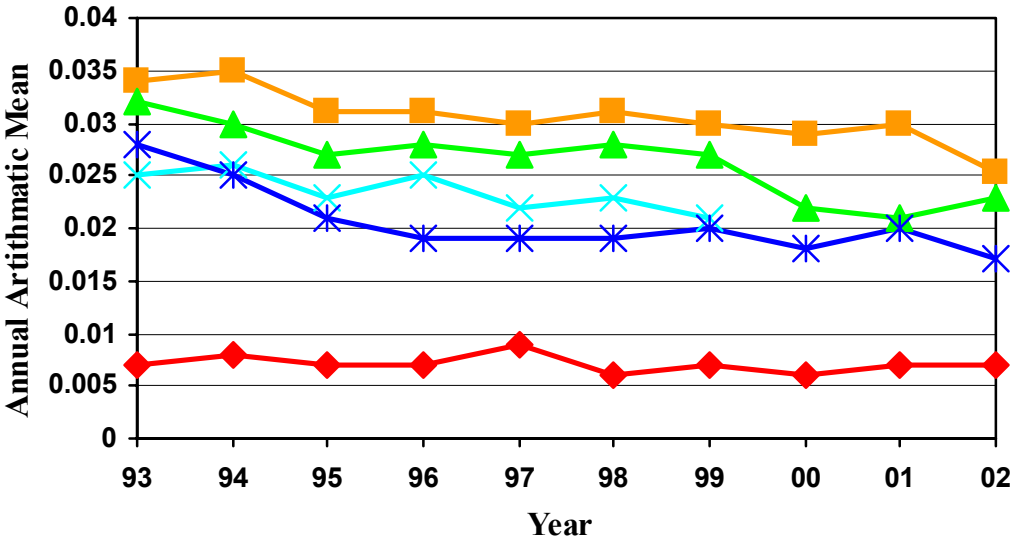
Massachusetts CO



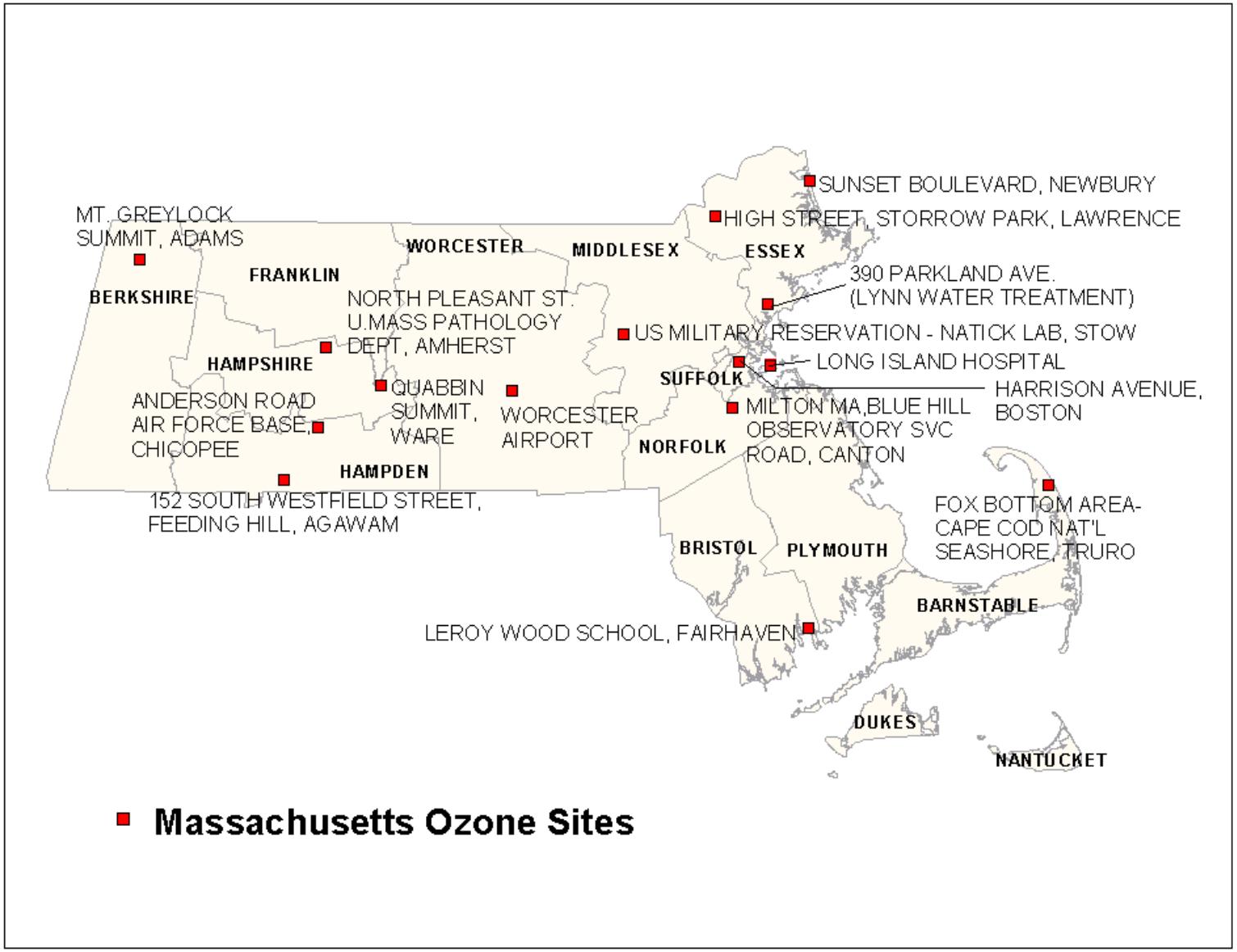
Massachusetts													
Carbon Monoxide													
All Values are in Units of Parts Per Million													
								1-hour	1-hour		8-hour	8-hour		
	P								2nd			2nd		
	O	Org				#	Highest	Highest		Highest	Highest		Methods
Site ID	C	Type	City	County	Address	Obs	Value	Value	# > 35	Value	Value	# > 9	Used
25-013-0016	1	660	SPRINGFIELD	HAMPDEN	LIBERTY STREET PARK	8186	4.6	4.5	0	4.2	3.3	0	multiple
25-013-2007	1	660	SPRINGFIELD	HAMPDEN	EAST COLUMBUS AVENU	7845	6.5	5.5	0	4	3.6	0	93
25-017-0007	1	660	LOWELL	MIDDLESEX	OLD CITY HALL, MERR	8202	3.6	3.6	0	2.6	2.4	0	93
25-025-0002	1	660	BOSTON	SUFFOLK	KENMORE SQUARE, 590	7063	2.8	2.5	0	1.6	1.4	0	93
25-025-0021	1	660	BOSTON	SUFFOLK	340 BREMAN STREET,	7613	3.5	2.7	0	2	1.8	0	67
25-025-0038	1	660	BOSTON	SUFFOLK	FEDERAL POST OFF BL	4762	3.9	3.7	0	3.1	2.2	0	67
25-025-0042	1	660	BOSTON	SUFFOLK	HARRISON AVENUE	7996	4.2	3.7	0	2.7	2.3	0	67
25-027-0020	1	660	WORCESTER	WORCESTER	CENTRAL STREET FIRE	8014	4.6	4.5	0	3.3	2.9	0	93
25-027-0022	1	660	WORCESTER	WORCESTER	FRANKLIN STREET PAR	7707	3.3	3.2	0	2.6	2.1	0	93


SUNSET BOULEVARD, NEWBURY
HIGH STREET, STORROW PARK, LAWRENCE
ESSEX
FRANKLIN
WORCESTER
MIDDLESEX
390 PARKLAND AVE. (LYNN WATER TREATMENT)
BERKSHIRE
KENMORE SQUARE, 590 COMMONWEALTH AVE, BOSTON
340 BREMAN STREET, BOSTON
HAMPSHIRE
531A EAST FIRST STREET, BOSTON
LONG ISLAND HOSPITAL
SUFFOLK
HARRISON AVENUE, BOSTON
QUABBIN SUMMIT, WARE
MILTON MA,BLUE HILL OBSERVATORY SVC ROAD, CANTON
ANDERSON ROAD AIR FORCE BASE, CHICOPEE
LIBERTY STREET, SPRINGFIELD
NORFOLK
HAMPDEN
FOX BOTTOM AREA-CAPE COD NAT'L SEASHORE, TRURO
CENTRAL ST. FIRE STATION, WORCESTER
152 SOUTH WESTFIELD STREET, FEEDING HILL, AGAWAM
BRISTOL
PLYMOUTH
BARNSTABLE
LEROY WOOD SCHOOL, FAIRHAVEN
DUKES
NANTUCKET
Massachusetts Nitrogen Oxide Sites

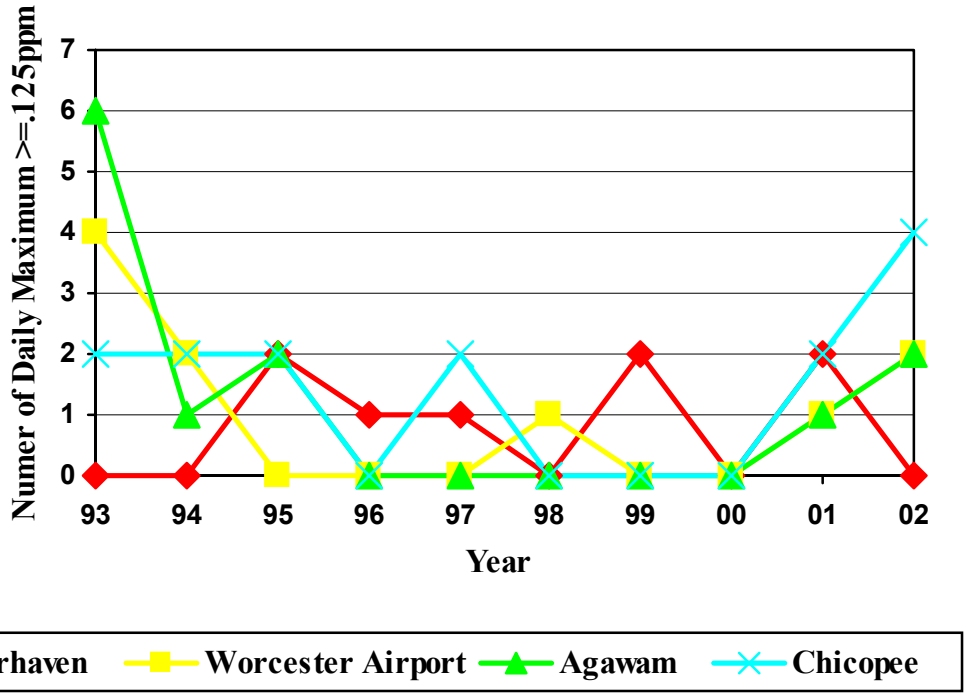
Massachusetts NO2



Massachusetts											
Parameter: Nitrogen Dioxide											
All Values are in Units of Parts Per Million											
								1-hour	1-hour		
	P								2nd	Annual	
	O	Rept.					#	Highest	Highest	Arith.	
Site ID	C	Org.	City	County	Address	Metho	Obs	Value	Value	Mean	
25-001-0002	1	0660	TRURO	BARNSTABLE	FOX BOTTOM AREA	074	1938	0.038	0.036	0.0047	
25-005-1002	1	0660	FAIRHAVEN	BRISTOL	LEROY WOOD SCHOOL	074	4016	0.026	0.026	0.0042	*
25-009-0005	1	0660	LAWRENCE	ESSEX	HIGH STREET, STORRO	074	3563	0.050	0.049	0.0109	*
25-009-2006	1	0660	LYNN	ESSEX	390 PARKLAND AVE.	082	7465	0.068	0.063	0.0110	
25-009-4004	1	0660	NEWBURY	ESSEX	SUNSET BOULEVARD	074	6132	0.036	0.036	0.0065	*
25-013-0003	1	0660	AGAWAM	HAMPDEN	152 SOUTH WESTFIELD	074	2263	0.044	0.043	0.0112	*
25-013-0008	1	0660	CHICOPEE	HAMPDEN	ANDERSON ROAD	082	8367	0.060	0.060	0.0159	
25-013-0016	1	0660	SPRINGFIELD	HAMPDEN	LIBERTY STREET PARK	082	8378	0.073	0.071	0.0213	
25-015-4002	1	0660	WARE	HAMPSHIRE	QUABBIN SUMMIT	082	5950	0.048	0.048	0.0069	*
25-021-3003	1	0660	MILTON	NORFOLK	MILTON MA,BLUE HILL	082	4160	0.039	0.035	0.0062	*
25-025-0002	1	0660	BOSTON	SUFFOLK	KENMORE SQUARE	082	6770	0.071	0.068	0.0253	
25-025-0021	1	0660	BOSTON	SUFFOLK	340 BREMAN STREET,	074	7251	0.081	0.081	0.0230	
25-025-0040	1	0345	BOSTON	SUFFOLK	531A EAST FIRST STR	074	8505	0.093	0.092	0.0207	
25-025-0041	1	0660	BOSTON	SUFFOLK	LONG ISLAND HOSPITAL	074	5953	0.069	0.066	0.0119	*
25-025-0042	1	0660	BOSTON	SUFFOLK	HARRISON AVENUE	074	7431	0.079	0.077	0.0241	
25-027-0020	1	0660	WORCESTER	WORCESTER	CENTRAL STREET FIRE	074	8270	0.092	0.078	0.0172	
*Indicates thtat the mean does not satisfy the summary criteria											


SUNSET BOULEVARD, NEWBURY
HIGH STREET, STORROW PARK, LAWRENCE
MT. GREYLOCK SUMMIT, ADAMS
WORCESTER
MIDDLESEX
ESSEX
FRANKLIN
BERKSHIRE
390 PARKLAND AVE. (LYNN WATER TREATMENT)
NORTH PLEASANT ST. U.MASS PATHOLOGY DEPT, AMHERST
US MILITARY RESERVATION - NATICK LAB, STOW
LONG ISLAND HOSPITAL
HAMPSHIRE
SUFFOLK
HARRISON AVENUE, BOSTON
ANDERSON ROAD AIR FORCE BASE, CHICOPEE
QUABBIN SUMMIT, WARE
WORCESTER AIRPORT
MILTON MA,BLUE HILL OBSERVATORY SVC ROAD, CANTON
NORFOLK
HAMPDEN
152 SOUTH WESTFIELD STREET, FEEDING HILL, AGAWAM
FOX BOTTOM AREA-CAPE COD NAT'L SEASHORE, TRURO
BRISTOL
PLYMOUTH
BARNSTABLE
LEROY WOOD SCHOOL, FAIRHAVEN
DUKES
NANTUCKET
Massachusetts Ozone Sites

Massachusetts Ozone 1-Hour



Massachusetts																
Parameter: Ozone (1-Hour)																
All Values are in Units of Parts Per Million																
	P								2nd	3rd	4th			Missing		
	O	Rep.				Num	Num	Highest	Highest	Highest	Highest	Day Ma	Est. Day	Days	Method	Design
Site ID	C	Org.	City	County	Address	Meas	Req	Value	Value	Value	Value	≥ 0.125	≥ 0.125	< 0.125	used	Value
25-001-0002	1	0660	TRURO	BARNSTABL	FOX BOTTOM AREA	174	183	0.130	0.118	0.115	0.107	1	1.0	2	087	0.138
25-003-4002	1	0660	ADAMS	BERKSHIRE	MT. GREYLOCK SUM	158	183	0.120	0.103	0.101	0.094	0	0.0	1	087	Incom.
25-005-1002	1	0660	FAIRHAVEN	BRISTOL	LEROY WOOD SCHOC	173	183	0.115	0.113	0.098	0.094	0	0.0	2	087	0.125
25-009-0005	1	0660	LAWRENCE	ESSEX	HIGH STREET	178	183	0.125	0.124	0.124	0.104	1	1.0	1	087	0.082
25-009-2006	1	0660	LYNN	ESSEX	390 PARKLAND AVE.	179	183	0.152	0.145	0.124	0.118	2	2.0	1	087	0.117
25-009-4004	1	0660	NEWBURY	ESSEX	SUNSET BOULEVARD	180	183	0.148	0.145	0.120	0.118	2	2.0	2	087	0.112
25-013-0003	1	0660	AGAWAM	HAMPDEN	152 SOUTH WESTFIEL	181	183	0.145	0.142	0.115	0.112	2	2.0	2	087	0.100
25-013-0008	1	0660	CHICOPEE	HAMPDEN	ANDERSON ROAD	180	183	0.139	0.132	0.131	0.128	4	4.0	2	087	0.113
25-015-0103	1	0660	AMHERST	HAMPSHIRE	N. PLEASANT ST.	180	183	0.131	0.118	0.112	0.097	1	1.0	3	087	0.104
25-015-4002	1	0660	WARE	HAMPSHIRE	QUABBIN SUMMIT	181	183	0.139	0.134	0.115	0.109	2	2.0	2	087	0.117
25-017-1102	1	0660	STOW	MIDDLESEX	US MILITARY RES.	169	183	0.123	0.122	0.122	0.112	0	0.0	1	087	0.110
25-021-3003	1	0660	MILTON	NORFOLK	MILTON MA,BLUE HILL	182	183	0.150	0.133	0.120	0.120	2	2.0	1	087	Incom.
25-025-0041	1	0660	BOSTON	SUFFOLK	LONG ISLAND HOSPIT	183	183	0.138	0.136	0.126	0.124	3	3.0	0	087	0.115
25-025-0042	1	0660	BOSTON	SUFFOLK	HARRISON AVENUE	167	183	0.097	0.090	0.088	0.086	0	0.0	7	087	0.094
25-027-0015	1	0660	WORCESTER	WORCESTE	WORCESTER ARPT	114	183	0.131	0.127	0.121	0.109	2	3.2	1	087	0.113

Massachusetts Ozone 8-Hour

Massachusetts															
Parameter: Ozone (8-Hour)															
All Values are in Units of Parts Per Million															
	P						Valid	Num		2nd	3rd	4th	Days		
	O	Rept.				#	Days	Required	Highest	Highest	Highest	Highes	Max ≥	Method	Design
Site ID	C	Org.	City	County	Address	Obs	Meas	Days	8-Hr Val	8-Hr Val	8-Hr Val	8-Hr V	0.085	Reporte	Values
25-001-0002	1	660	TRURO	BARNSTABLE	FOX BOTTOM AREA	95	173	183	0.112	0.105	0.105	0.09	9	87	0.093
25-003-4002	1	660	ADAMS	BERKSHIRE	MT. GREYLOCK SUMMIT	86	157	183	0.101	0.096	0.091	0.09	4	87	Incom.
25-005-1002	1	660	FAIRHAVEN	BRISTOL	LEROY WOOD SCHOOL	95	173	183	0.105	0.102	0.087	0.09	5	87	0.090
25-009-0005	1	660	LAWRENCE	ESSEX	HIGH STREET, STORRO	95	174	183	0.109	0.105	0.102	0.09	6	87	0.070
25-009-2006	1	660	LYNN	ESSEX	390 PARKLAND AVE.	97	178	183	0.123	0.122	0.109	0.1	13	87	0.090
25-009-4004	1	660	NEWBURY	ESSEX	SUNSET BOULEVARD	98	179	183	0.126	0.12	0.103	0.09	9	87	0.086
25-013-0003	1	660	AGAWAM	HAMPDEN	152 SOUTH WESTFIELD	96	176	183	0.118	0.112	0.101	0.1	6	87	0.083
25-013-0008	1	660	CHICOPEE	HAMPDEN	ANDERSON ROAD	97	177	183	0.118	0.115	0.108	0.11	10	87	0.092
25-015-0103	1	660	AMHERST	HAMPSHIRE	NORTH PLEASANT ST.	98	180	183	0.107	0.096	0.091	0.09	4	87	0.078
25-015-4002	1	660	WARE	HAMPSHIRE	QUABBIN SUMMIT	98	180	183	0.11	0.107	0.096	0.1	10	87	0.080
25-017-1102	1	660	STOW	MIDDLESEX	US MILITARY RESERVA	89	163	183	0.11	0.107	0.106	0.1	8	87	0.089
25-021-3003	1	660	MILTON	NORFOLK	MILTON MA,BLUE HILL	99	181	183	0.134	0.116	0.112	0.11	17	87	Incom.
25-025-0041	1	660	BOSTON	SUFFOLK	LONG ISLAND HOSPITAL	99	181	183	0.126	0.117	0.102	0.1	10	87	0.089
25-025-0042	1	660	BOSTON	SUFFOLK	HARRISON AVENUE	91	167	183	0.092	0.089	0.077	0.08	2	87	0.072
25-027-0015	1	660	WORCESTER	WORCESTER	WORCESTER AIRPORT	60	110	183	0.118	0.102	0.097	0.09	8	87	0.085

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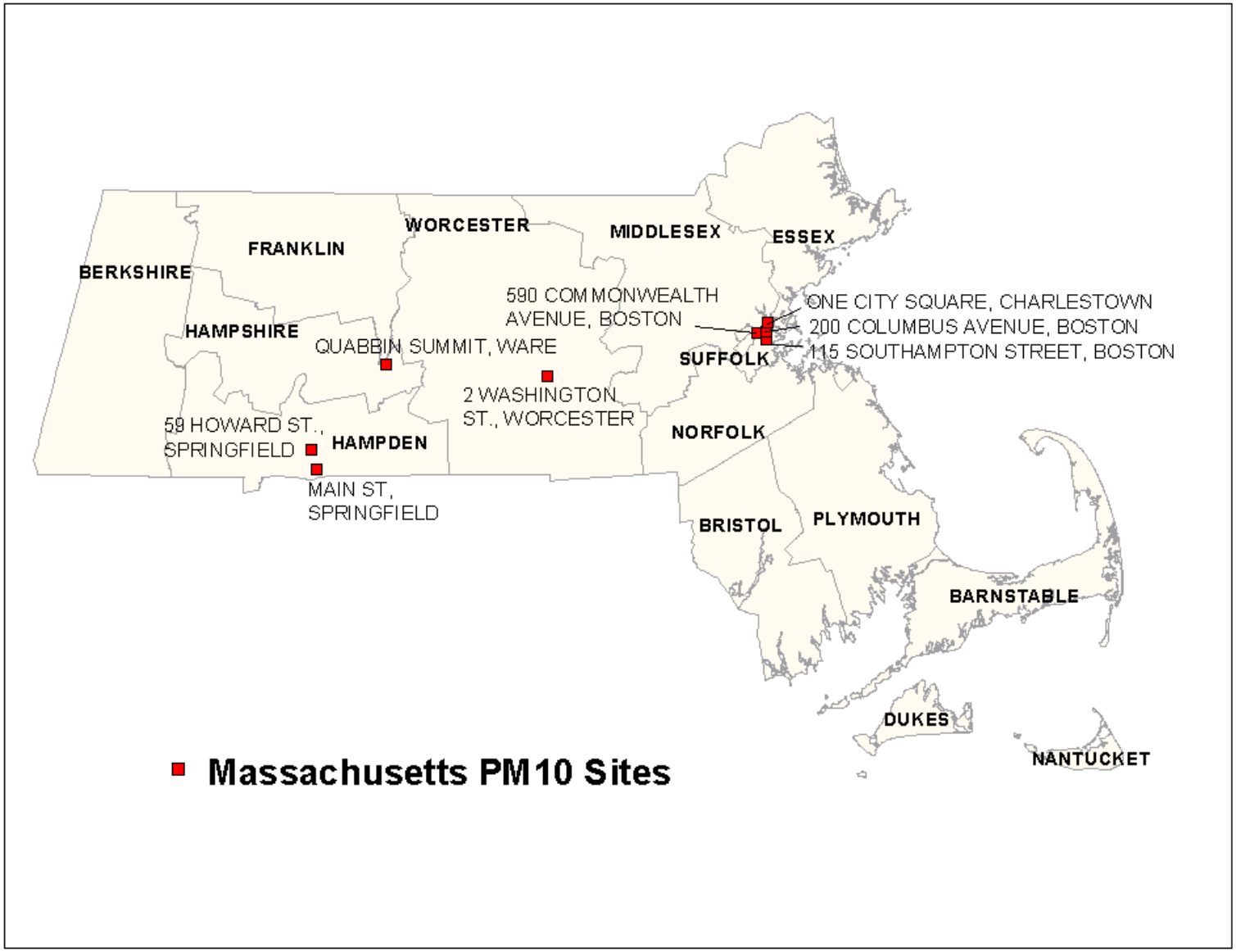
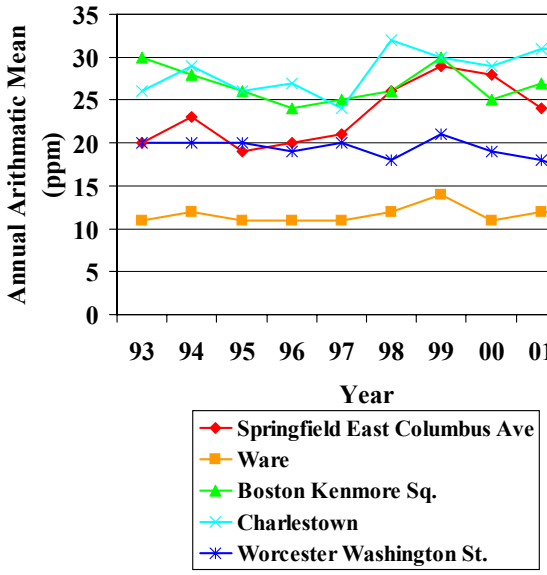
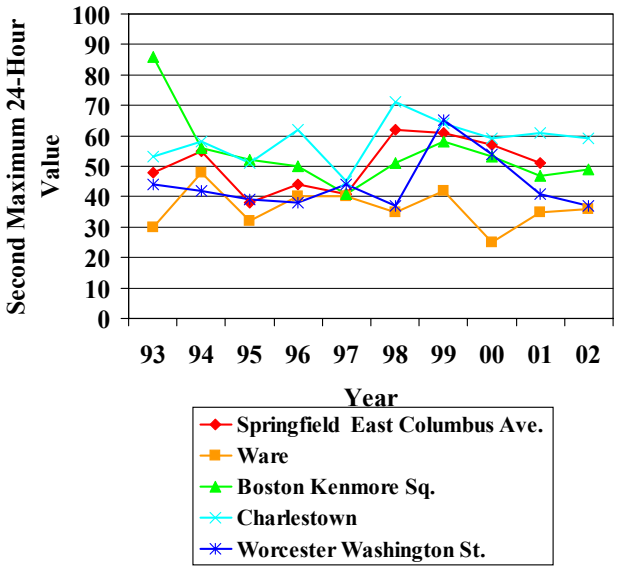
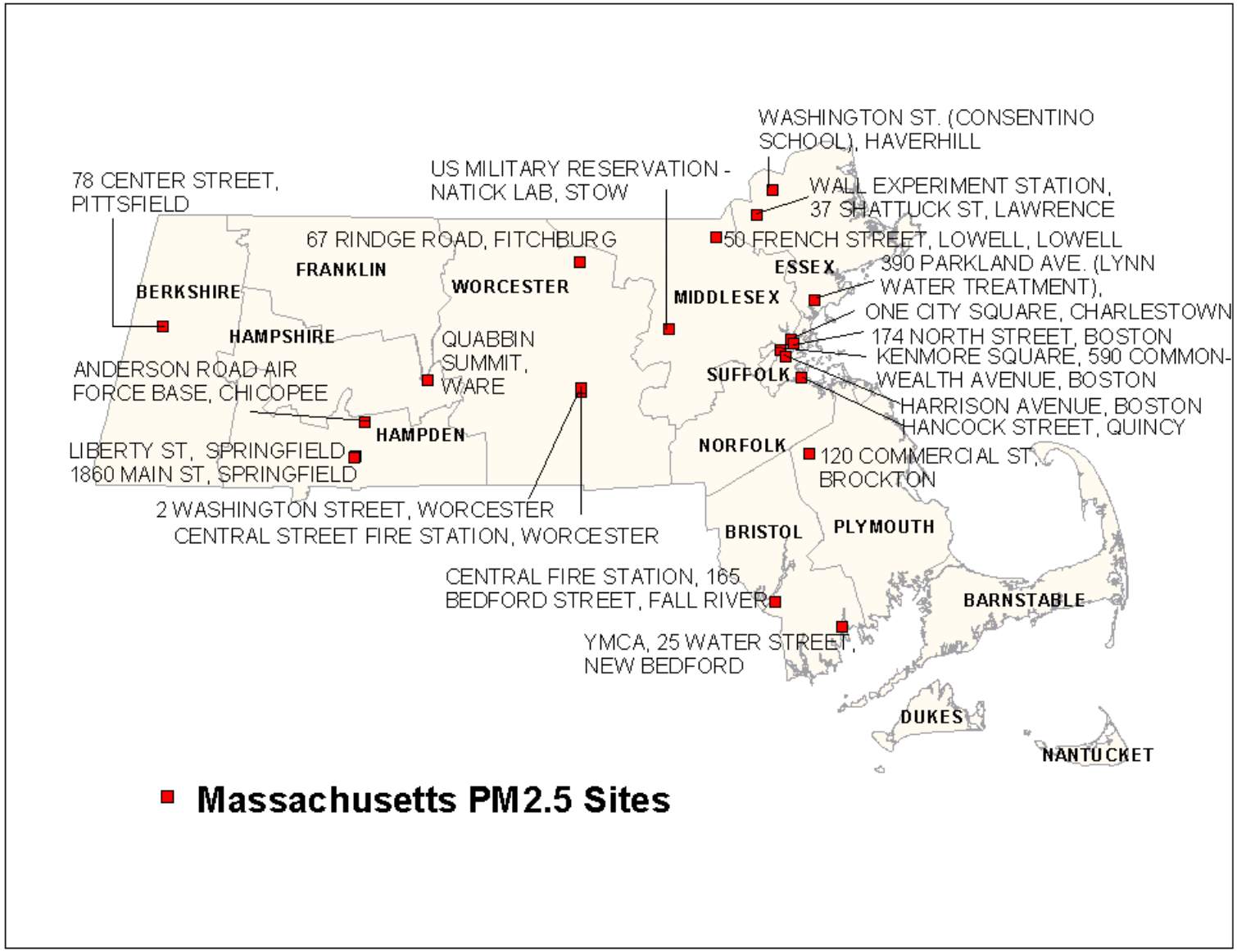

BERKSHIRE
FRANKLIN
WORCESTER
MIDDLESEX
ESSEX
HAMPSHIRE
590 COMMONWEALTH AVENUE, BOSTON
ONE CITY SQUARE, CHARLESTOWN
200 COLUMBUS AVENUE, BOSTON
115 SOUTHAMPTON STREET, BOSTON
QUABBIN SUMMIT, WARE
SUFFOLK
2 WASHINGTON ST., WORCESTER
59 HOWARD ST., SPRINGFIELD
HAMPDEN
NORFOLK
MAIN ST., SPRINGFIELD
BRISTOL
PLYMOUTH
BARNSTABLE
DUKES
NANTUCKET
Massachusetts PM10 Sites

Massachusetts PM10



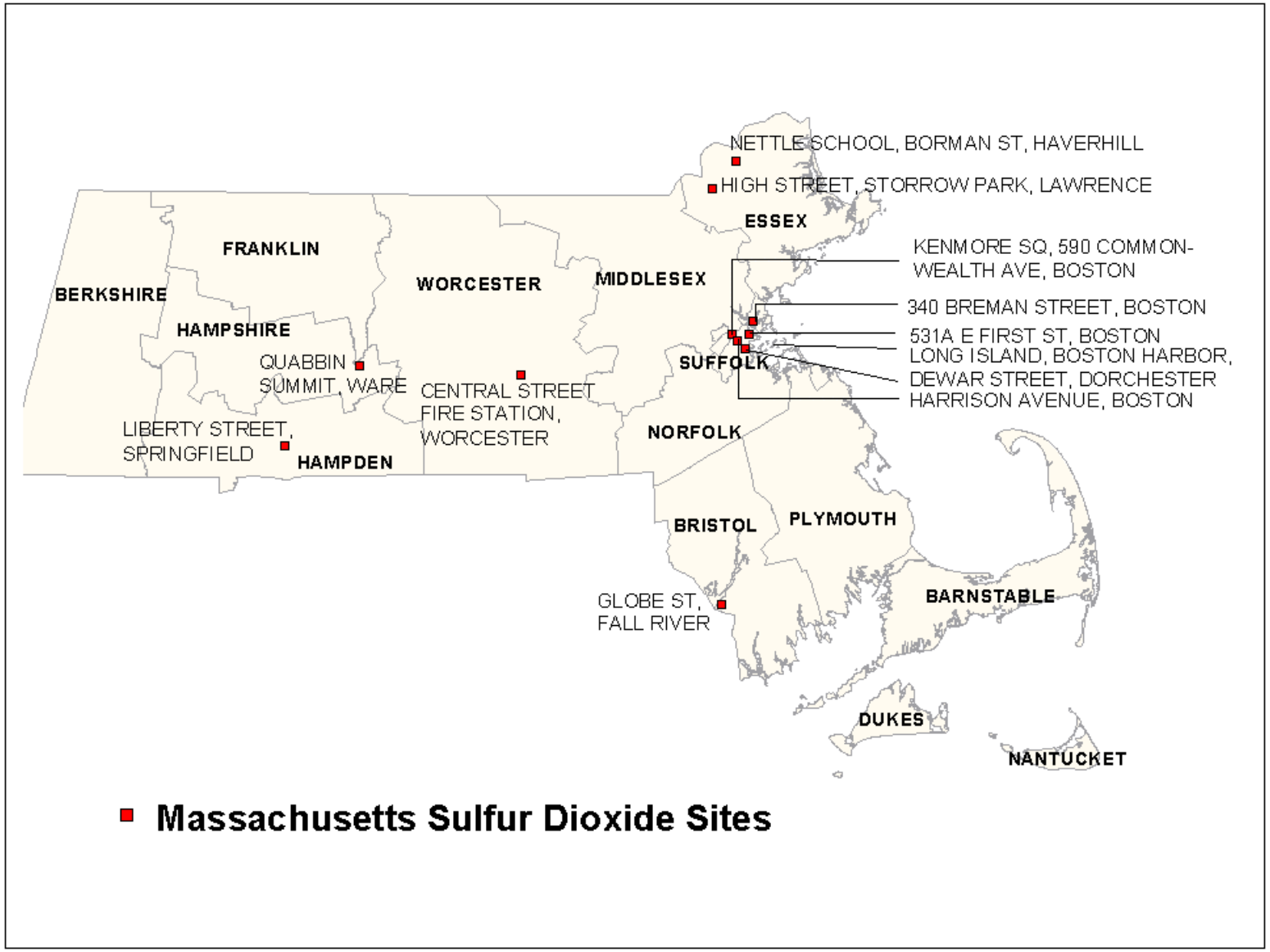


Massachusetts																
Parameter: PM 10																
									2nd	3rd	4th	Days	Est. D	Wtd.		
		Rep.						Highest	Highest	Highest	Highe	Max	Max	Arith.		Meth
SITE ID	PC	Org	City	County	Address	# Ob	# Req.	Value	Value	Value	Value	>150	>150	Mean		Usec
25-013-0011	2	0660	SPRINGFIELD	HAMPDEN	59 HOWARD STREET	52	61	73	54	45	37	0	0	21		63
25-013-0011	3	0660	SPRINGFIELD	HAMPDEN	59 HOWARD STREET	52	61	76	56	52	38	0	0	22		63
25-013-2009	1	0660	SPRINGFIELD	HAMPDEN	1860 MAIN STREET	59	61	78	46	45	43	0	0	21		63
25-015-4002	1	0660	WARE	HAMPSHIRE	QUABBIN SUMMIT	59	61	73	36	32	28	0	0	12		62
25-025-0002	1	0660	BOSTON	SUFFOLK	KENMORE SQUARE,	46	61	58	49	45	44	0	0	25	*	63
25-025-0012	1	0660	BOSTON	SUFFOLK	115 SOUTHAMPTON	45	61	62	33	33	30	0	0	16	*	62
25-025-0012	2	0660	BOSTON	SUFFOLK	115 SOUTHAMPTON	39	61	61	48	40	33	0	0	24	*	62
25-025-0024	1	0660	BOSTON	SUFFOLK	200 COLUMBUS AVE	41	61	65	54	53	40	0	0	23	*	63
25-025-0027	1	0660	BOSTON	SUFFOLK	ONE CITY SQUARE,	14	61	59	59	49	39	0	0	31	*	63
25-025-0027	3	0660	BOSTON	SUFFOLK	ONE CITY SQUARE,	8	61	69	46	35	27	0	0	30	*	63
25-027-0016	1	0660	WORCESTER	WORCESTER	2 WASHINGTON STR	54	61	74	37	37	35	0	0	16		62
*Indicates thtat the mean does not satisfy the summary criteria																

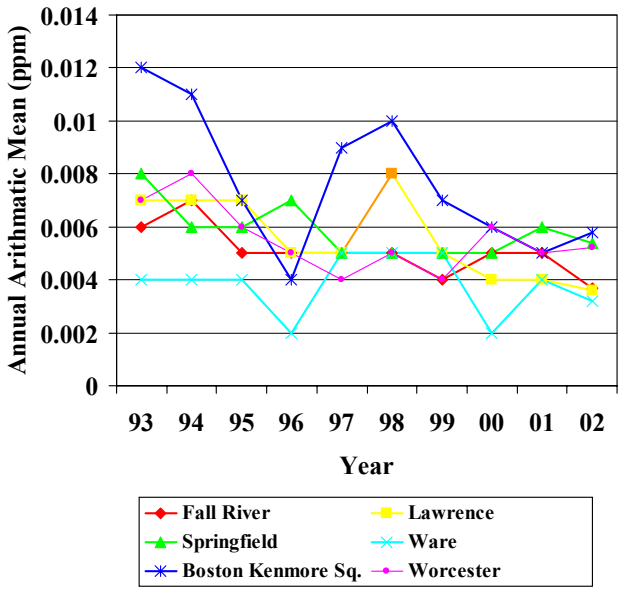

WASHINGTON ST. (CONSENTINO SCHOOL), HAVERHILL
US MILITARY RESERVATION - NATICK LAB, STOW
78 CENTER STREET, PITTSFIELD
WALL EXPERIMENT STATION, 37 SHATTUCK ST, LAWRENCE
67 RINDGE ROAD, FITCHBURG
50 FRENCH STREET, LOWELL, LOWELL
FRANKLIN
ESSEX
390 PARKLAND AVE. (LYNN WATER TREATMENT),
BERKSHIRE
WORCESTER
MIDDLESEX
ONE CITY SQUARE, CHARLESTOWN
HAMPSHIRE
174 NORTH STREET, BOSTON
QUABBIN SUMMIT, WARE
KENMORE SQUARE, 590 COMMON-WEALTH AVENUE, BOSTON
ANDERSON ROAD AIR FORCE BASE, CHICOPEE
SUFFOLK
HARRISON AVENUE, BOSTON
HANCOCK STREET, QUINCY
HAMPDEN
NORFOLK
LIBERTY ST, SPRINGFIELD
1860 MAIN ST, SPRINGFIELD
120 COMMERCIAL ST, BROCKTON
2 WASHINGTON STREET, WORCESTER
CENTRAL STREET FIRE STATION, WORCESTER
BRISTOL
PLYMOUTH
CENTRAL FIRE STATION, 165 BEDFORD STREET, FALL RIVER
BARNSTABLE
YMCA, 25 WATER STREET, NEW BEDFORD
DUKES
NANTUCKET
Massachusetts PM2.5 Sites

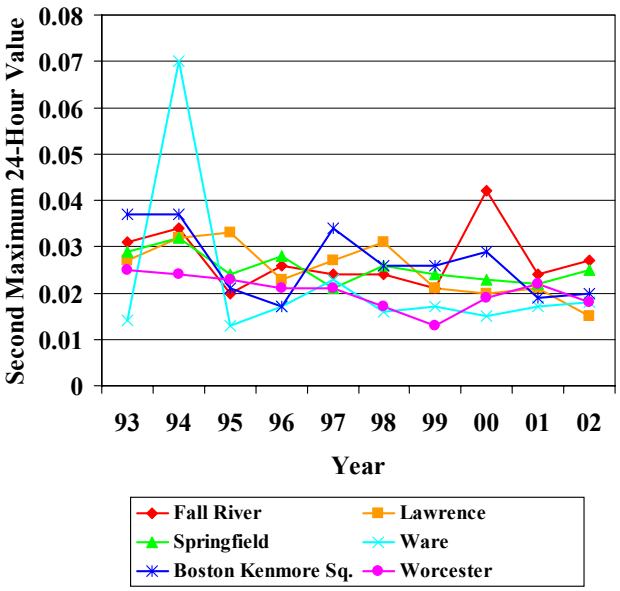
Massachusetts PM2.5

Massachusetts														
Parameter: PM 2.5														
All Values are in UG/CU Meters Local Conditions														
	P							2nd	3rd	4th	98th	Wtd.		
	O	Rept.				#	Highest	Highest	Highest	Highest	Perce	Arith.		Metho
Site ID	C	Org.	City	County	Address	Obs	Value	Value	Value	Value	Value	Mean		Used
25-003-5001	1	0660	PITTSFIELD	BERKSHIRE	78 CENTER STREET	93	75.4	36.2	31.5	30.2	36.2	12.1	*	120
25-005-2004	1	0660	NEW BEDFOR	BRISTOL	YMCA, 25 WATER S	115	65.3	37.2	26.4	25.5	26.4	10.8		120
25-005-3001	1	0660	FALL RIVER	BRISTOL	CENTRAL FIRE STA	107	70.6	36.3	29.5	27.8	29.5	11.6		120
25-009-2006	1	0660	LYNN	ESSEX	390 PARKLAND AVE	91	62.2	52.9	29.3	26.2	52.9	10.5	*	120
25-009-5005	1	0660	HAVERHILL	ESSEX	WASHINGTON ST.	81	60.2	51.8	28.9	28.3	51.8	9.9	*	120
25-009-6001	1	0660	LAWRENCE	ESSEX	WALL EXPERIMENT	60	30.3	26.8	26.0	23.1	26.8	10.4	*	119
25-013-0008	1	0660	CHICOPEE	HAMPDEN	ANDERSON ROAD AI	228	65.2	56.0	49.7	44.8	36.8	11.1	*	120
25-013-0008	5	1217	CHICOPEE	HAMPDEN	ANDERSON ROAD AI	42	28.0	24.9	22.3	21.6	28.0	9.6	*	830
25-013-0016	1	0660	SPRINGFIELD	HAMPDEN	LIBERTY STREET P	303	78.4	66.8	56.0	52.3	56.0	13.7		120
25-013-0016	2	0660	SPRINGFIELD	HAMPDEN	LIBERTY STREET P	87	67.1	57.4	34.1	34.1	57.4	14.0		120
25-013-2009	1	0660	SPRINGFIELD	HAMPDEN	1860 MAIN STREET	111	67.0	37.5	37.1	34.8	37.1	13.3		120
25-015-4002	1	0660	WARE	HAMPSHIRE	QUABBIN SUMMIT	108	33.7	25.0	24.3	24.2	24.3	8.3		120
25-017-0008	1	0660	LOWELL	MIDDLESEX	50 FRENCH STREET	103	65.1	30.6	29.2	28.5	29.2	11.3	*	120
25-017-1102	1	0660	STOW	MIDDLESEX	US MILITARY RESE	65	68.9	29.9	27.4	26.1	29.9	9.9	*	120
25-021-0007	1	0660	QUINCY	NORFOLK	HANCOCK STREET	118	66.9	65.2	48.1	33.8	48.1	12.2		120
25-021-0007	2	0660	QUINCY	NORFOLK	HANCOCK STREET	108	75.4	61.5	52.8	25.6	61.5	12.2		120
25-023-0004	1	0660	BROCKTON	PLYMOUTH	120 COMMERCIAL ST	111	65.3	60.3	37.2	35.9	37.2	12.1		120
25-023-0004	2	0660	BROCKTON	PLYMOUTH	120 COMMERCIAL ST	85	64.6	36.7	26.5	26.4	36.7	11.9		120
25-025-0002	1	0660	BOSTON	SUFFOLK	KENMORE SQUARE	113	64.2	47.4	29.6	29.4	29.6	13.4		120
25-025-0027	1	0660	BOSTON	SUFFOLK	ONE CITY SQUARE	187	64.1	54.1	50.8	47.6	50.8	13.6	*	120
25-025-0027	2	0660	BOSTON	SUFFOLK	ONE CITY SQUARE	46	64.2	29.3	27.9	27.1	64.2	10.5	*	120
25-025-0042	1	0660	BOSTON	SUFFOLK	HARRISON AVENUE	264	59.0	52.4	51.2	44.0	33.0	11.4	*	120
25-025-0042	2	0660	BOSTON	SUFFOLK	HARRISON AVENUE	6092	67.0	63.0	58.0	56.0	48.0	15.0	*	731
25-025-0042	5	1217	BOSTON	SUFFOLK	HARRISON AVENUE	69	65.1	28.3	27.5	27.0	28.3	12.1	*	820
25-025-0042	6	1217	BOSTON	SUFFOLK	HARRISON AVENUE	63	60.8	26.3	26.1	26.0	26.3	12.3	*	820
25-025-0043	1	0660	BOSTON	SUFFOLK	174 NORTH STREET	86	63.1	29.8	28.2	27.3	29.8	13.5	*	120
25-025-0043	2	0660	BOSTON	SUFFOLK	174 NORTH STREET	5337	78.0	76.0	71.0	66.0	52.0	15.0	*	731
25-027-0016	1	0660	WORCESTER	WORCESTER	2 WASHINGTON STR	99	74.7	33.7	29.5	28.1	33.7	11.4	*	120
25-027-0020	1	0660	WORCESTER	WORCESTER	CENTRAL STREET	334	72.9	56.2	46.8	45.5	46.8	11.8		120
25-027-0020	2	0660	WORCESTER	WORCESTER	CENTRAL STREET	100	75.3	33.6	33.0	31.1	33.6	12.7		120
25-027-0020	3	0660	WORCESTER	WORCESTER	CENTRAL STREET	2162	33.0	24.0	22.0	21.0	24.0	7.0	*	731
25-027-2004	1	0660	FITCHBURG	WORCESTER	67 RINDGE ROAD	112	76.0	33.4	27.3	25.6	27.3	10.0		120
*Indicates thtat the mean does not satisfy the summary criteria														


NETTLE SCHOOL, BORMAN ST, HAVERHILL
HIGH STREET, STORROW PARK, LAWRENCE
ESSEX
KENMORE SQ, 590 COMMON-
WEALTH AVE, BOSTON
340 BREMAN STREET, BOSTON
531A E FIRST ST, BOSTON
LONG ISLAND, BOSTON HARBOR,
DEWAR STREET, DORCHESTER
HARRISON AVENUE, BOSTON
FRANKLIN
BERKSHIRE
WORCESTER
MIDDLESEX
HAMPSHIRE
QUABBIN
SUMMIT, WARE
SUFFOLK
CENTRAL STREET
FIRE STATION,
WORCESTER
LIBERTY STREET,
SPRINGFIELD
HAMPDEN
NORFOLK
BRISTOL
PLYMOUTH
GLOBE ST,
FALL RIVER
BARNSTABLE
DUKES
NANTUCKET
Massachusetts Sulfur Dioxide Sites

Massachusetts Sulfur Dioxide





Massachusetts																	
Parameter: Sulfur Dioxide																	
All Values are in Units of Parts Per Million																	
							24-	24-		3-hour	3-hour		1-hour	1-hour			
	P						hour	hour			2nd			2nd			
	O	Org				#		2nd	Obs	Highest	Highest	Obs	Highest	Highest	Arith.		Meth
Site ID	C	Type	City	County	Address	Obs	Highest	Highest	> 0.1	Value	Value	> 0.5	Value	Value	Mean		Used
25-005-1004	1	660	FALL RIVER	BRISTOL	GLOBE STREET	7331	0.027	0.027	0	0.107	0.080	0	0.126	0.114	0.0037		77
25-009-0005	1	660	LAWRENCE	ESSEX	HIGH STREET,	6411	0.016	0.015	0	0.037	0.034	0	0.045	0.040	0.0036	*	60
25-013-0016	1	660	SPRINGFIELD	HAMPDEN	LIBERTY STREE	8505	0.025	0.025	0	0.039	0.038	0	0.053	0.051	0.0054		60
25-015-4002	1	660	WARE	HAMPSHIRE	QUABBIN SUMM	8537	0.020	0.018	0	0.021	0.021	0	0.022	0.022	0.0032		77
25-025-0002	1	660	BOSTON	SUFFOLK	KENMORE SQUA	7307	0.022	0.020	0	0.042	0.038	0	0.060	0.049	0.0058		61
25-025-0019	1	345	BOSTON	SUFFOLK	LONG ISLAND,	8702	0.014	0.014	0	0.027	0.022	0	0.038	0.030	0.0042		60
25-025-0020	1	345	BOSTON	SUFFOLK	DEWAR STREET	8714	0.016	0.015	0	0.037	0.033	0	0.063	0.053	0.0044		60
25-025-0021	1	660	BOSTON	SUFFOLK	340 BREMAN ST	7930	0.014	0.014	0	0.032	0.029	0	0.042	0.033	0.0018		60
25-025-0021	2	345	BOSTON	SUFFOLK	340 BREMAN ST	8724	0.018	0.018	0	0.036	0.035	0	0.057	0.050	0.0052		60
25-025-0040	1	345	BOSTON	SUFFOLK	531A EAST FIR	8687	0.045	0.021	0	0.192	0.101	0	0.227	0.197	0.0060		60
25-025-0042	1	660	BOSTON	SUFFOLK	HARRISON AVEN	8139	0.017	0.016	0	0.031	0.030	0	0.040	0.036	0.0050		60
25-027-0020	1	660	WORCESTER	WORCESTER	CENTRAL STREE	8363	0.018	0.018	0	0.027	0.025	0	0.032	0.030	0.0052		60
*Indicates thtat the mean does not satisfy the summary criteria																	

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Ambient air Quality Summary - New Hampshire

In 2002, there were no violations of the 8-hour or 1-hour NAAQS for carbon monoxide (CO) at the two CO monitoring site in New Hampshire. This is the sixth year in a row during which no exceedances occurred. The last exceedances of the 8-hour CO NAAQS occurred in Manchester (13.5 ppm) during the winter of 1996. In 2002, Nashua reported the highest second maximum 8-hour average CO concentration (3.7 ppm) which was roughly 40% of the standard. The most recent ten year trend for CO indicates that CO levels show moderate year-to-year fluctuations, but tend to be well below the NAAQS.

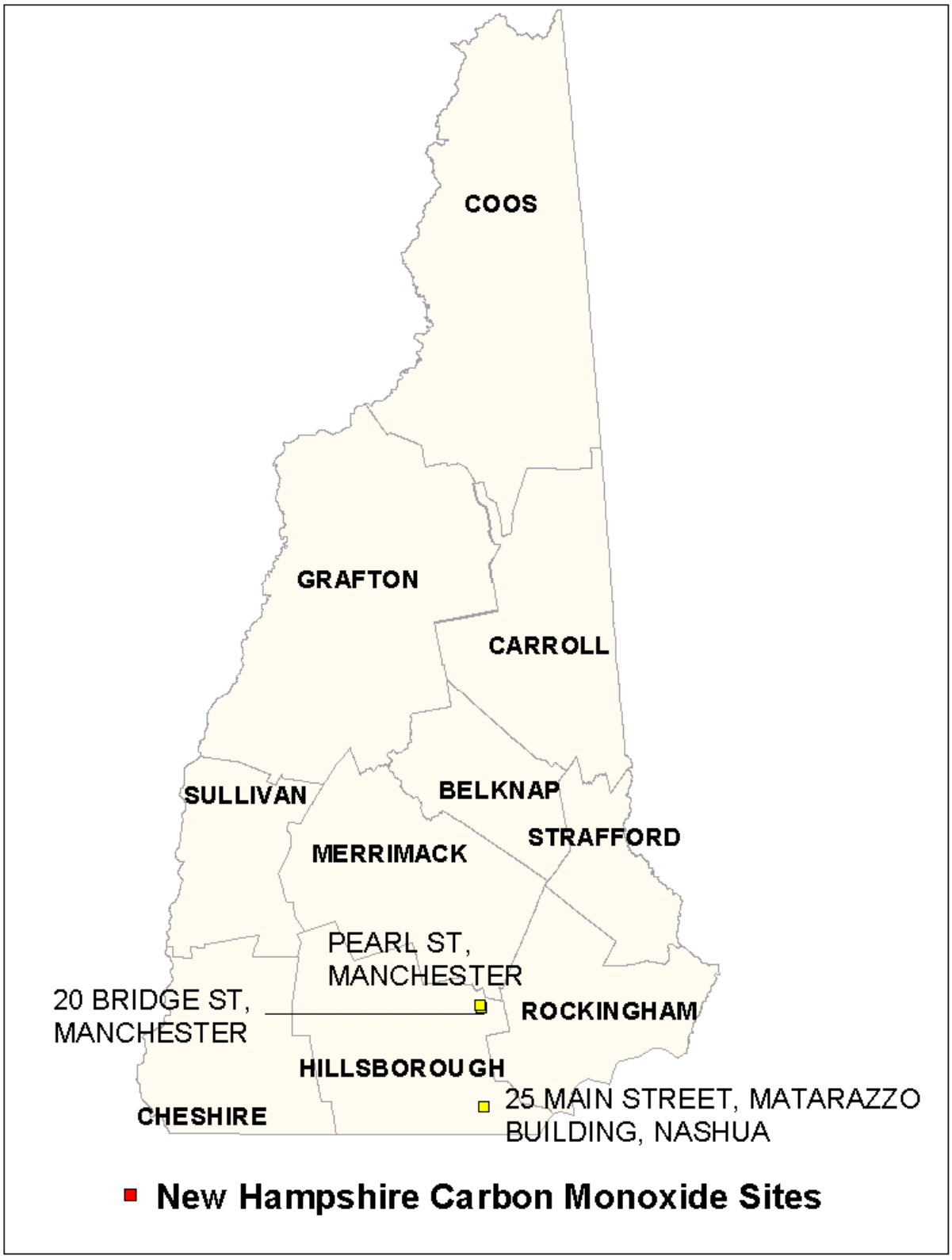
During 1996, New Hampshire discontinued ambient air monitoring for lead (Pb). Historically, lead concentrations in ambient air in New Hampshire have declined to the point where virtually no lead is present. In 2002 nitrogen dioxide (NO2) monitoringwas conducted at four sites. The Portsmouth and Manchester monitoring sites recorded the highest NO2 concentrations in New Hampshire (well below the standard). The ten-year trend in NO2 indicates that there has been no upward or downward trend in concentration.

Five of the sixteen ozone monitors in New Hampshire violated the 1-hour NAAQS in 2002. Portsmouth reported the highest 1-hour daily maximum ozone concentration (145 ppb). In 2001 only three sites reported concentrations above 125 ppb and there were no reported exceedances of the 1-hour ozone NAAQS in 2000. For the 8-hour ozone standard, nine of the sixteen O3 sites reported a fourth highest 8-hr average ozone concentration of at least 85 ppb in 2001. The maximum 8-hour average in 2002 was in Peterborough (Pack Monadnock site), which recorded an 8-hour concentration of 111 ppb.

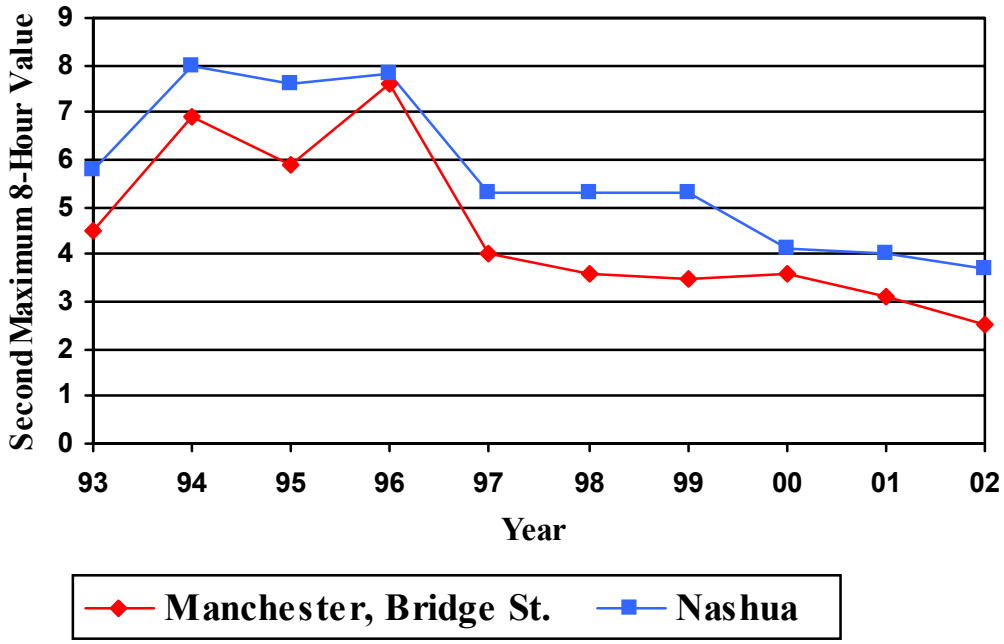
None of the nine particulate matter-PM10 (with a mass mean diameter of less than 10 microns) sites in New Hampshire had exceedances or violations of the annual or 24-hr NAAQS for PM10 over the past six years (1997-2002). The highest 24-hour concentrations in 2002 were recorded in Northumberland, with a highest second maximum of 82 ug/m3 (roughly 55% of the NAAQS). The highest maximum annual average PM10 was also recorded in Northumberland (19 ug/m3 or ~38% of the NAAQS). Over the past ten years, all of the PM10 monitors in New Hampshire recorded PM10 concentrations below the national standards. Yearly variability is common, however, due to differences in weather and local PM10 emissions.

In 1999, New Hampshire established a network of fine particulate monitors (PM2.5). By 2002, thirteen monitoring sites provided data on the concentration of PM2.5 in the state. Over the past several years the highest concentrations of PM2.5 have been in the Portsmouth, Nashua, Manchester and Keene urban areas. The lowest PM2.5 levels were recorded in Laconia.

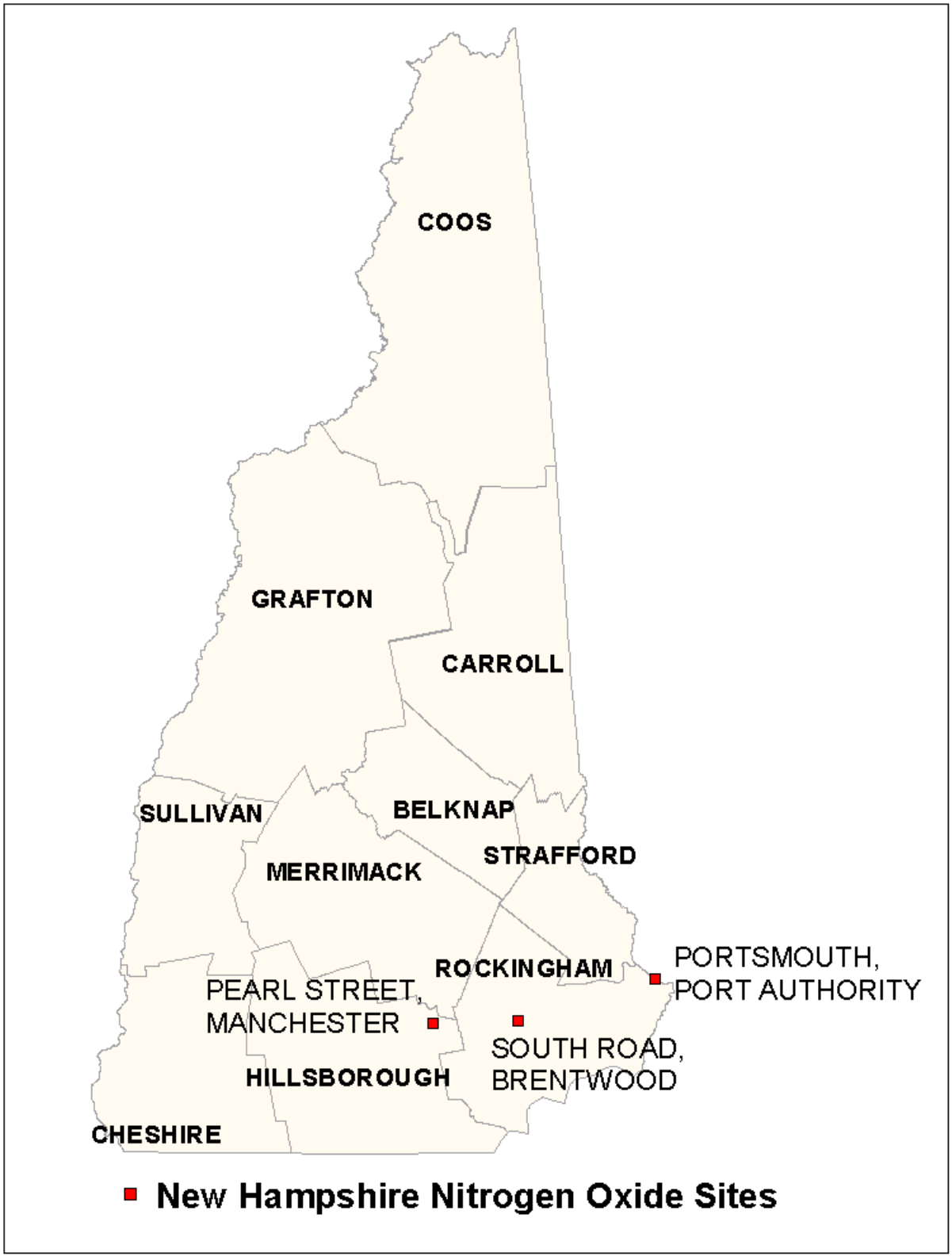
During 2002, no exceedance or violation of the sulfur dioxide NAAQS for any of the sites in New Hampshire occurred. The highest annual SO2 concentrations were recorded in Keene (5 ppb or ~17% of the NAAQS). Pembroke reported the highest 24-hour second maximum SO2 concentration of 59 ppb (~42% of the NAAQS), and reported the highest 3-hour SO2 second maximum concentration (128 ppb). Statewide, the ten-year data trend for SO2 shows no obvious upward or downward trend in SO2 concentration.


COOS
GRAFTON
CARROLL
SULLIVAN
BELKNAP
STRAFFORD
MERRIMACK
PEARL ST,
MANCHESTER
20 BRIDGE ST,
MANCHESTER
ROCKINGHAM
HILLSBOROUGH
CHESHIRE
25 MAIN STREET, MATARAZZO
BUILDING, NASHUA
New Hampshire Carbon Monoxide Sites

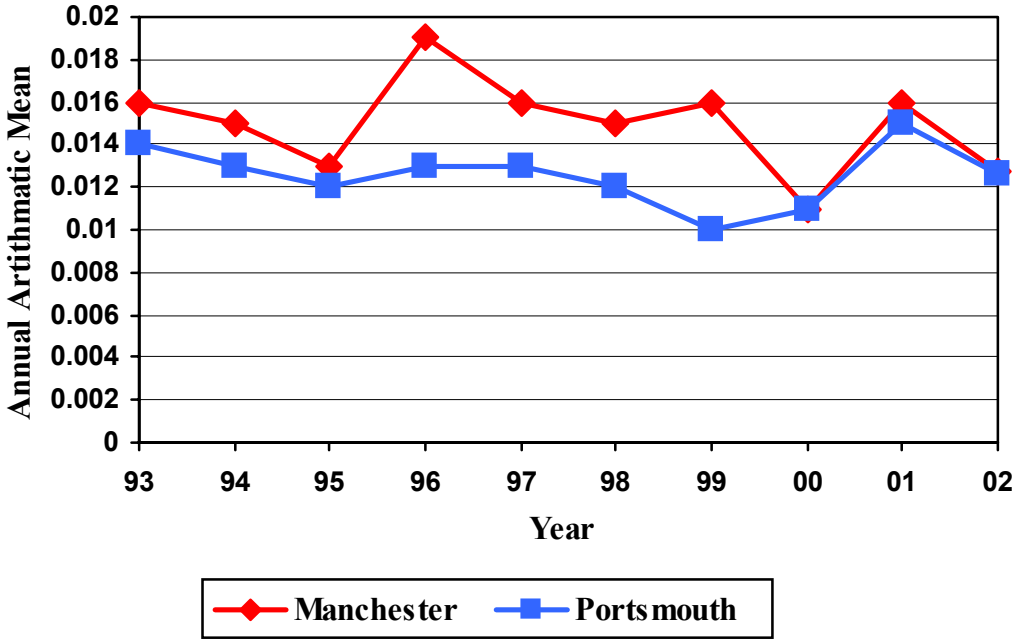
New Hampshire Carbon Monoxide



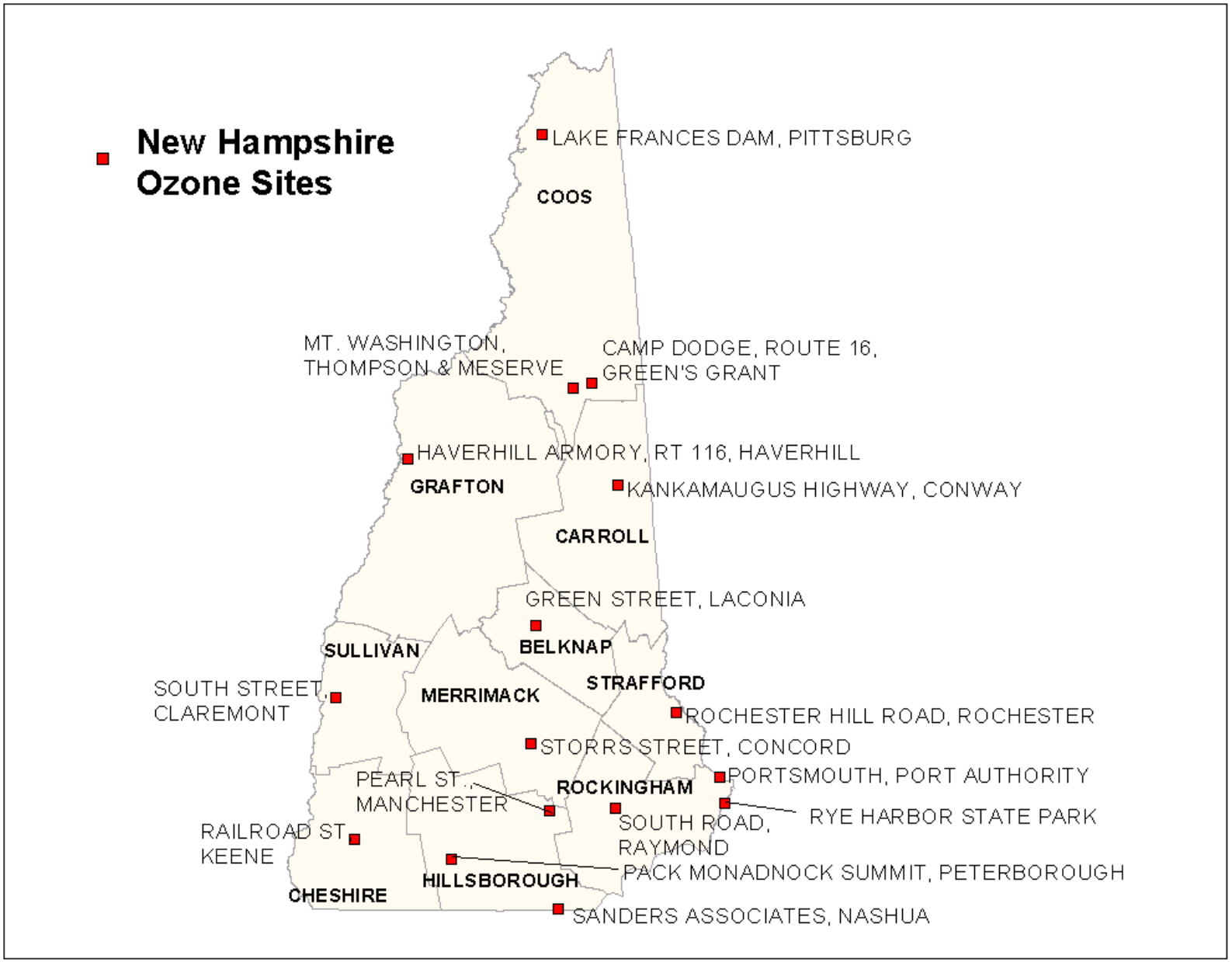
New Hampshire													
Carbon Monoxide													
All Values are in Units of Parts Per Million													
							1-hour	1-hour		8-hour	8-hour		
	P							2nd			2nd		#
	O	Org				#	Highest	Highest		Highest	Highest		Methods
Site ID	C	Type	City	County	Address	Obs	Value	Value	# > 35	Value	Value	# > 9	Used
33-011-0020	1	762	MANCHESTEF	HILLSBOROUGH	PEARL ST	8686	4.1	3.7	0	2.8	2.5	0	11
33-011-1009	1	762	NASHUA	HILLSBOROUGH	25 MAIN STREET	8696	6	5.9	0	3.9	3.7	0	11


COOS
GRAFTON
CARROLL
SULLIVAN
BELKNAP
STRAFFORD
MERRIMACK
ROCKINGHAM
PORTSMOUTH,
PORT AUTHORITY
PEARL STREET,
MANCHESTER
SOUTH ROAD,
BRENTWOOD
HILLSBOROUGH
CHESHIRE
New Hampshire Nitrogen Oxide Sites

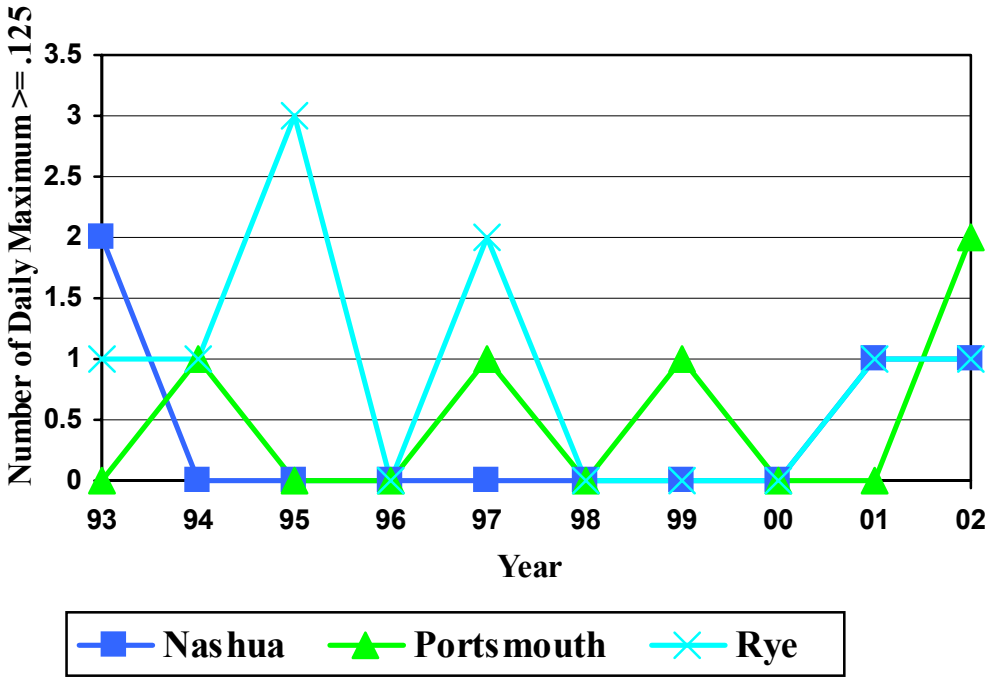
New Hampshire Nitrogen Dioxide



New Hampshire										
Parameter: Nitrogen Dioxide										
All Values are in Units of Parts Per Million										
								1-hour	1-hour	
	P								2nd	Annual
	O	Rept.					#	Highest	Highest	Arith.
Site ID	C	Org.	City	County	Address	Metho	Obs	Value	Value	Mean
33-011-0020	1	0762	MANCHESTE	HILLSBOROUGI	PEARL ST	014	8573	0.055	0.052	0.0127
33-015-0013	1	0762	BRENTWOOI	ROCKINGHAM	SOUTH ROAD	014	8437	0.044	0.043	0.0061
33-015-0015	1	0762	PORTSMOUT	ROCKINGHAM	PORTSMOUTH, PORT AU	014	8599	0.065	0.059	0.0126


New Hampshire
Ozone Sites
LAKE FRANCES DAM, PITTSBURG
COOS
MT. WASHINGTON,
THOMPSON & MESERVE
CAMP DODGE, ROUTE 16,
GREEN'S GRANT
HAVERHILL ARMORY, RT 116, HAVERHILL
GRAFTON
KANKAMAUGUS HIGHWAY, CONWAY
CARROLL
GREEN STREET, LACONIA
BELKNAP
SULLIVAN
STRAFFORD
SOUTH STREET,
CLAREMONT
MERRIMACK
ROCHESTER HILL ROAD, ROCHESTER
STORRS STREET, CONCORD
PORTSMOUTH, PORT AUTHORITY
PEARL ST.,
MANCHESTER
ROCKINGHAM
RYE HARBOR STATE PARK
SOUTH ROAD,
RAYMOND
RAILROAD ST.,
KEENE
PACK MONADNOCK SUMMIT, PETERBOROUGH
HILLSBOROUGH
CHESHIRE
SANDERS ASSOCIATES, NASHUA

New Hampshire Ozone 1-Hour



New Hampshire																	
Parameter: Ozone (1-Hour)																	
All Values are in Units of Parts Per Million																	
	P								2nd	3rd	4th	Days w/	Est	Missing			
	O	Rep.				Num	Num	Highest	Highest	Highest	Highest	Max	Day	Days	Method	Design	
Site ID	C	Org.	City	County	Address	Meas	Req	Value	Value	Value	Value	≥ 0.125	≥ 0.125	< 0.125	used	Values	
33-001-2004	1	0762	LACONIA	BELKNAP	GREEN STREET, LACO	180	183	0.101	0.098	0.094	0.092	0	0.0	3	011	Incom.	
33-003-1002	1	0762	CONWAY	CARROLL	KANKAMAUGUS HIGH	183	183	0.096	0.085	0.080	0.080	0	0.0	0	011	0.087	
33-005-0007	1	0762	KEENE	CHESHIRE	RAILROAD STREET	182	183	0.112	0.093	0.092	0.091	0	0.0	1	011	0.096	
33-007-4001	1	0043	NOT IN A CIT	COOS	MT. WASHINGTON	121	183	0.122	0.106	0.093	0.090	0	0.0	1	011	Incom.	
33-007-4002	1	0043	NOT IN A CIT	COOS	CAMP DODGE, ROUTE	138	183	0.086	0.084	0.082	0.077	0	0.0	1	011	Incom.	
33-007-4003	1	0043	PITTSBURG	COOS	LAKE FRANCES DAM	110	183	0.088	0.083	0.080	0.079	0	0.0	0	011	Incom.	
33-009-0008	1	0762	HAVERHILL	GRAFTON	HAVERHILL ARMORY,	183	183	0.113	0.108	0.085	0.083	0	0.0	0	011	0.084	
33-011-0020	1	0762	MANCHESTE	HILLSBOROU	PEARL ST	181	183	0.111	0.108	0.107	0.105	0	0.0	2	011	Incom.	
33-011-1010	1	0762	NASHUA	HILLSBOROU	SANDERS ASSOCIATE	182	183	0.135	0.120	0.115	0.102	1	1.0	1	011	0.103	
33-011-5001	1	0762	PETERBORC	HILLSBOROU	PACK MONADNOCK S	72	92	0.139	0.123	0.116	0.114	1	1.3	1	000	Incom.	
33-013-0007	1	0762	CONCORD	MERRIMACK	STORRS STREET	182	183	0.110	0.103	0.095	0.094	0	0.0	1	011	0.086	
33-015-0012	1	0762	RYE	ROCKINGHA	RYE HARBOR STATE F	182	183	0.137	0.123	0.112	0.109	1	1.0	1	011	0.123	
33-015-0013	1	0762	BRENTWOO	ROCKINGHA	SOUTH ROAD	174	183	0.118	0.114	0.109	0.102	0	0.0	3	011	0.101	
33-015-0015	1	0762	PORTSMOUT	ROCKINGHA	PORTSMOUTH, PORT	175	183	0.145	0.125	0.111	0.109	2	2.1	3	011	Incom.	
33-017-3002	1	0762	ROCHESTER	STRAFFORD	ROCHESTER HILL ROA	183	183	0.144	0.116	0.110	0.106	1	1.0	0	011	0.103	
33-019-0003	1	0762	CLAREMONT	SULLIVAN	SOUTH STREET	180	183	0.124	0.100	0.095	0.088	0	0.0	1	011	0.096	

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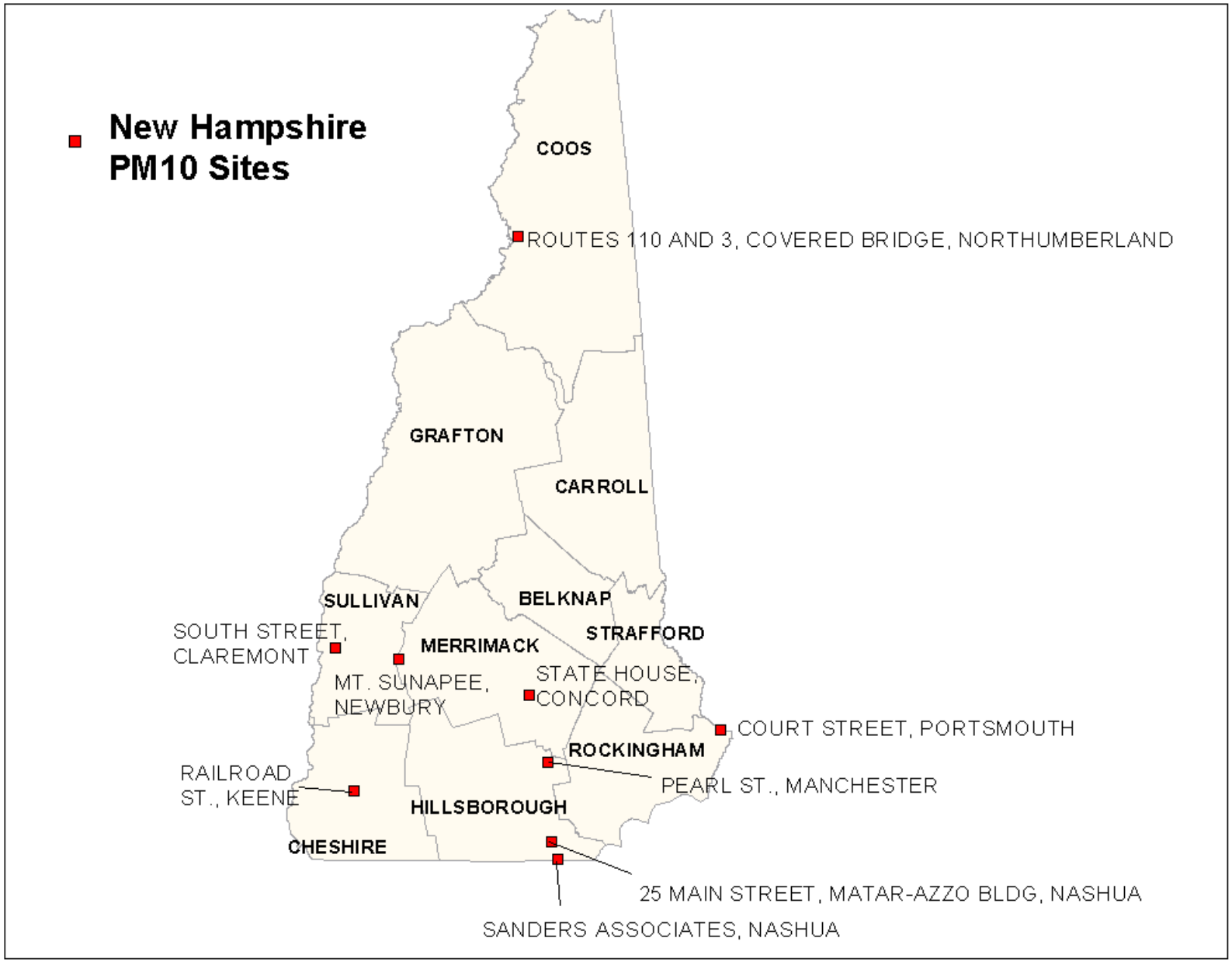
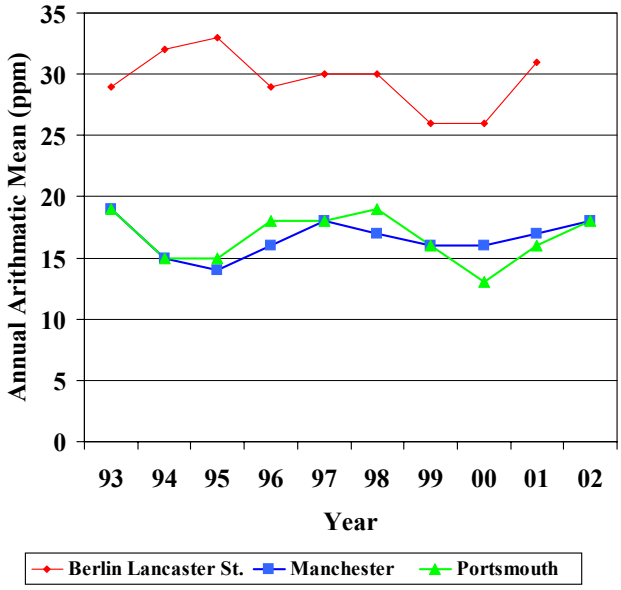
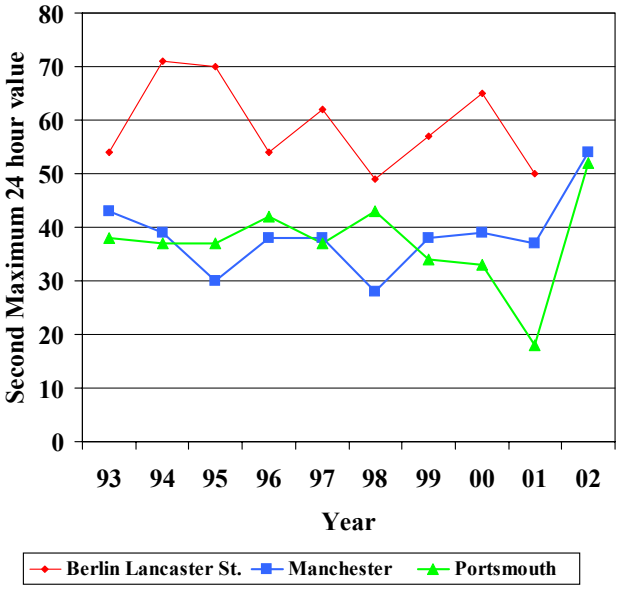
New Hampshire Ozone 8-Hour

New Hampshire															
Parameter: Ozone (8-Hour)															
All Values are in Units of Parts Per Million															
	P						Valid	Num		2nd	3rd	4th	Days		
	O	Rept.				#	Days	Required	Highest	Highest	Highest	Highest	Max >	Methods	Design
Site ID	C	Org.	City	County	Address	Obs	Meas.	Days	8-Hr Valu	8-Hr Valu	8-Hr Valu	8-Hr Va	0.085	Reported	Values
33-001-2004	1	762	LACONIA	BELKNAP	GREEN STREET, LACON	99	181	183	0.09	0.09	0.085	0.08	3	11	Incom.
33-003-1002	1	762	CONWAY	CARROLL	KANKAMAUGUS HIGHWAY	0	183	183	0.091	0.076	0.071	0.07	1	11	0.067
33-005-0007	1	762	KEENE	CHESHIRE	RAILROAD STREET	99	182	183	0.098	0.084	0.084	0.084	1	11	0.073
33-007-4001	1	43	NOT IN A CITY	COOS	MT. WASHINGTON	66	120	183	0.109	0.107	0.086	0.085	4	11	Incom.
33-007-4002	1	43	NOT IN A CITY	COOS	CAMP DODGE, ROUTE 1	75	138	183	0.08	0.075	0.07	0.069	0	11	Incom.
33-007-4003	1	43	PITTSBURG	COOS	LAKE FRANCES DAM	58	106	183	0.085	0.075	0.075	0.071	1	11	Incom.
33-009-0008	1	762	HAVERHILL	GRAFTON	HAVERHILL ARMORY, R	0	183	183	0.096	0.083	0.072	0.071	1	11	0.068
33-011-0020	1	762	MANCHESTER	HILLSBOROUGH	PEARL ST	99	181	183	0.091	0.089	0.088	0.085	4	11	Incom.
33-011-1010	1	762	NASHUA	HILLSBOROUGH	SANDERS ASSOCIATES,	99	181	183	0.11	0.109	0.098	0.094	5	11	0.085
33-011-5001	1	762	PETERBOROUGH	HILLSBOROUGH	PACK MONADNOCK SUMM	78	72	92	0.111	0.107	0.106	0.101	7	0	Incom.
33-013-0007	1	762	CONCORD	MERRIMACK	STORRS STREET	99	182	183	0.091	0.091	0.086	0.085	4	11	0.074
33-015-0012	1	762	RYE	ROCKINGHAM	RYE HARBOR STATE PA	99	182	183	0.11	0.099	0.089	0.089	7	11	0.083
33-015-0013	1	762	BRENTWOOD	ROCKINGHAM	SOUTH ROAD	93	171	183	0.104	0.098	0.093	0.091	10	11	0.080
33-015-0015	1	762	PORTSMOUTH	ROCKINGHAM	PORTSMOUTH, PORT AU	96	175	183	0.104	0.1	0.098	0.09	8	11	Incom.
33-017-3002	1	762	ROCHESTER	STRAFFORD	ROCHESTER HILL ROAD	0	183	183	0.105	0.095	0.093	0.09	6	11	0.077
33-019-0003	1	762	CLAREMONT	SULLIVAN	SOUTH STREET	98	179	183	0.094	0.086	0.086	0.082	3	11	0.073

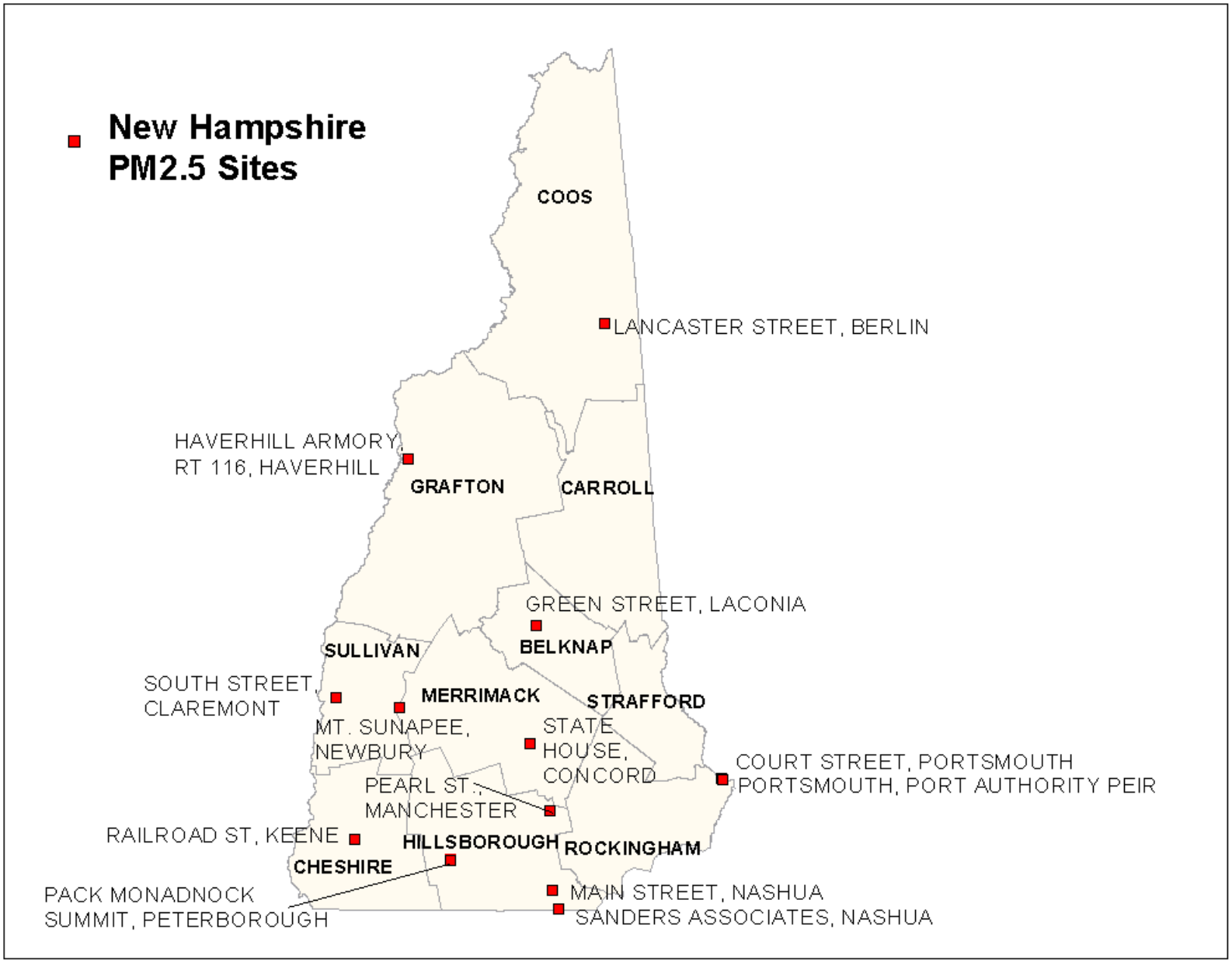

New Hampshire
PM10 Sites
COOS
ROUTES 110 AND 3, COVERED BRIDGE, NORTHUMBERLAND
GRAFTON
CARROLL
SULLIVAN
BELKNAP
SOUTH STREET,
CLAREMONT
MERRIMACK
STRAFFORD
MT. SUNAPEE,
NEWBURY
STATE HOUSE,
CONCORD
COURT STREET, PORTSMOUTH
ROCKINGHAM
RAILROAD
ST., KEENE
PEARL ST., MANCHESTER
HILLSBOROUGH
CHESHIRE
25 MAIN STREET, MATAR-AZZO BLDG, NASHUA
SANDERS ASSOCIATES, NASHUA

New Hampshire PM10



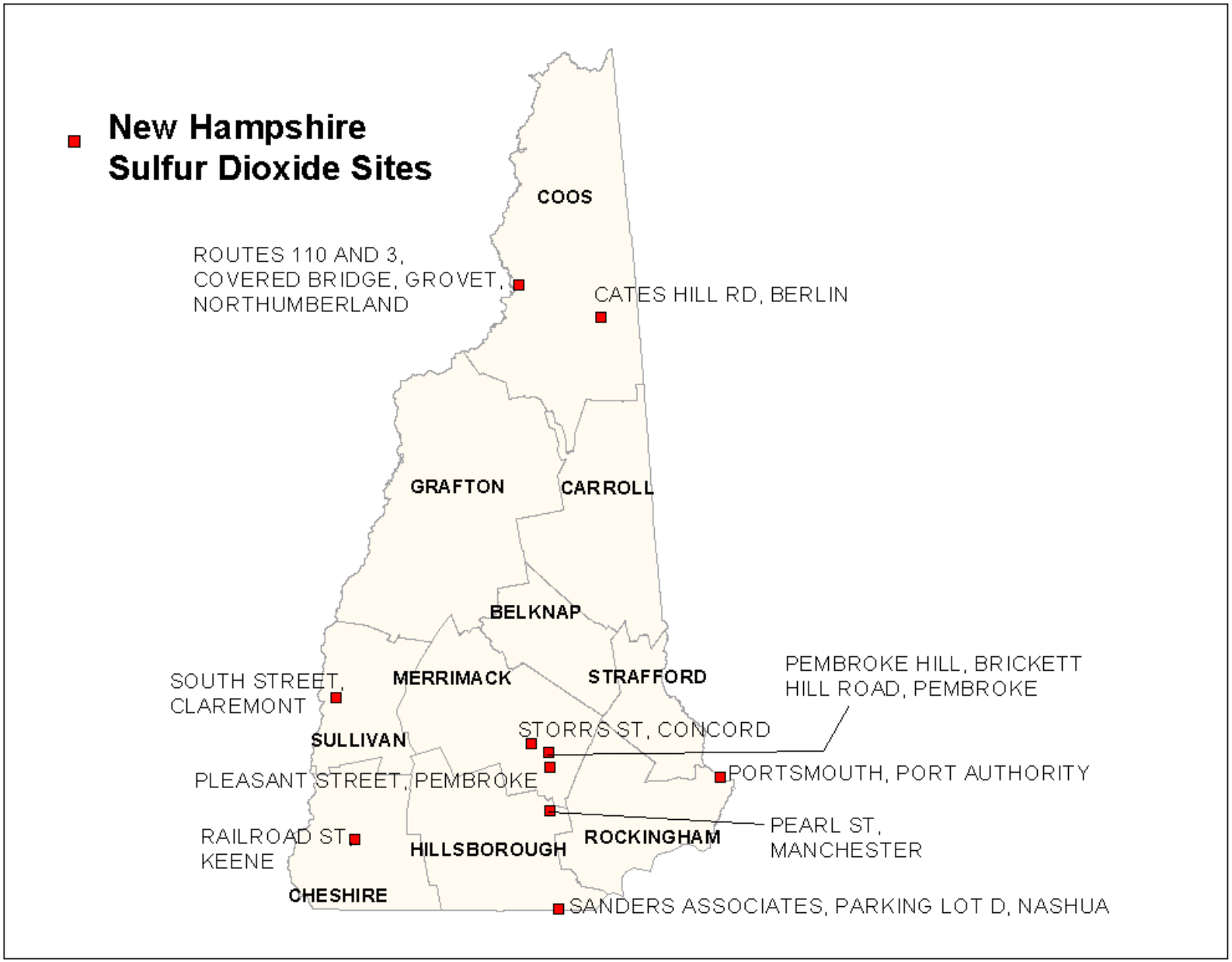


New Hampshire																
Parameter: PM 10																
									2nd	3rd	4th	Days	Est. D	Wtd.		
		Rep.						Highest	Highest	Highest	Highe	Max	Max	Arith.		Met
SITE ID	PC	Org	City	County	Address	# Ob	# Req.	Value	Value	Value	Value	>150	>150	Mean		Use
33-005-0007	1	0762	KEENE	CHESHIRE	RAILROAD STREET	56	61	74	48	43	36	0	0	18		64
33-007-1007	1	0546	NORTHUMBERL	COOS	ROUTES 110 AND 3	35	46	82	55	33	30	0	0	19	*	64
33-011-0020	1	0762	MANCHESTER	HILLSBOROUGI	PEARL ST	55	61	79	54	49	42	0	0	18		64
33-011-0020	2	0762	MANCHESTER	HILLSBOROUGI	PEARL ST	59	61	80	59	47	47	0	0	17		64
33-011-1007	1	0762	NASHUA	HILLSBOROUGI	MAIN STREET	4	10	18	11	9	7	0	0	11	*	64
33-011-1010	1	0762	NASHUA	HILLSBOROUGI	SANDERS ASSOCIAT	59	61	76	52	42	37	0	0	14		64
33-013-0003	1	0762	CONCORD	MERRIMACK	NO. STATE HOUSE	57	61	65	48	46	44	0	0	14		64
33-013-5001	1	0762	NOT IN A CITY	MERRIMACK	MT. SUNAPEE	15	15	12	7	6	6	0	0	4	*	64
33-015-0006	1	0762	PORTSMOUTH	ROCKINGHAM	COURT STREET	55	61	54	52	47	46	0	0	18	*	64
33-019-0003	1	0762	CLAREMONT	SULLIVAN	SOUTH STREET	60	61	75	43	39	36	0	0	14		64
33-019-0003	2	0762	CLAREMONT	SULLIVAN	SOUTH STREET	61	61	73	39	39	35	0	0	13		64
*Indicates that the mean does not satisfy summary criteria																

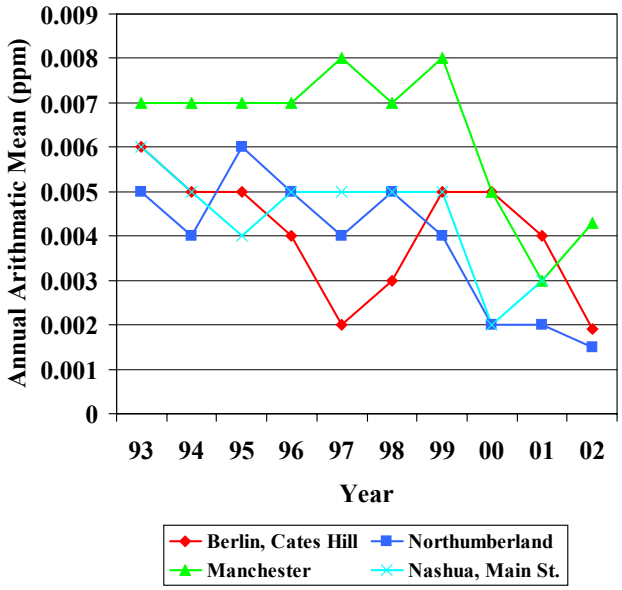

New Hampshire
PM2.5 Sites
COOS
LANCASTER STREET, BERLIN
HAVERHILL ARMORY,
RT 116, HAVERHILL
GRAFTON
CARROLL
GREEN STREET, LACONIA
BELKNAP
SULLIVAN
SOUTH STREET,
CLAREMONT
MERRIMACK
STRAFFORD
MT. SUNAPEE,
NEWBURY
STATE
HOUSE,
CONCORD
COURT STREET, PORTSMOUTH
PORTSMOUTH, PORT AUTHORITY PEIR
PEARL ST.,
MANCHESTER
RAILROAD ST, KEENE
HILLSBOROUGH
ROCKINGHAM
CHESHIRE
PACK MONADNOCK
SUMMIT, PETERBOROUGH
MAIN STREET, NASHUA
SANDERS ASSOCIATES, NASHUA

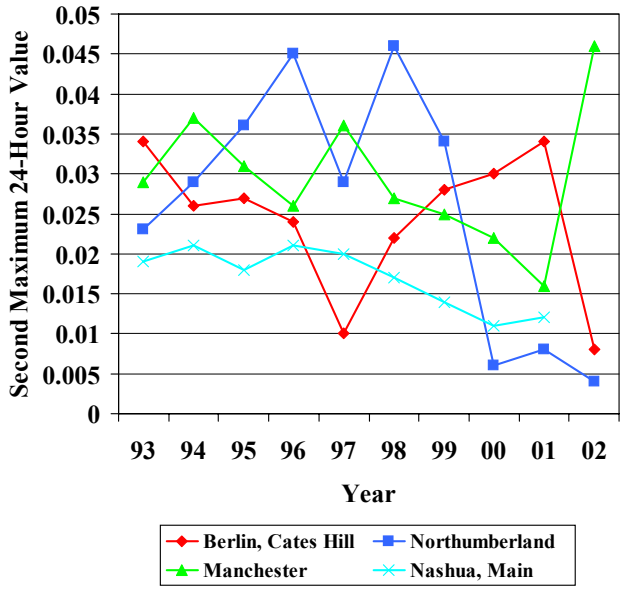
New Hampshire PM2.5

New Hampshire														
Parameter: PM 2.5														
All Values are in UG/CU Meters Local Conditions														
	P							2nd	3rd	4th	98th	Wtd.		
	O	Rept.				#	Highest	Highest	Highest	Highest	Perce	Arith.		Metho
Site ID	C	Org.	City	County	Address	Obs	Value	Value	Value	Value	Value	Mean		Used
33-001-2004	1	0762	LACONIA	BELKNAP	GREEN STREET, LA	60	29.2	26.8	17.2	16.7	26.8	6.7		119
33-001-2004	2	0762	LACONIA	BELKNAP	GREEN STREET, LA	59	43.9	29.2	26.6	17.0	29.2	7.2		119
33-005-0007	1	0762	KEENE	CHESHIRE	RAILROAD STREET	59	70.3	32.6	30.2	27.8	32.6	11.8		119
33-007-0014	1	0762	BERLIN	COOS	LANCASTER STREET	118	34.7	30.9	30.4	26.5	30.4	8.8		120
33-007-0014	2	0762	BERLIN	COOS	LANCASTER STREET	60	30.5	30.1	25.3	15.5	30.1	8.1		120
33-009-0008	1	0762	HAVERHILL	GRAFTON	HAVERHILL ARMORY	29	36.4	15.5	14.8	14.6	36.4	8.3	*	120
33-009-0008	3	0762	HAVERHILL	GRAFTON	HAVERHILL ARMORY	4967	42.0	40.0	39.0	38.0	34.0	9.0	*	703
33-011-0020	1	0762	MANCHESTER	HILLSBOROUGH	PEARL ST	121	63.0	35.9	32.6	31.2	32.6	11.0		120
33-011-0020	2	0762	MANCHESTER	HILLSBOROUGH	PEARL ST	59	63.2	32.2	31.4	29.1	32.2	10.3		120
33-011-0020	3	0762	MANCHESTER	HILLSBOROUGH	PEARL ST	5849	58.0	42.0	41.0	40.0	34.0	8.0	*	703
33-011-0020	5	1217	MANCHESTER	HILLSBOROUGH	PEARL ST	53	63.5	32.4	32.3	29.6	32.4	11.2		820
33-011-1007	1	0762	NASHUA	HILLSBOROUGH	MAIN STREET	22	35.0	29.4	28.1	22.3	35.0	12.8	*	120
33-011-1010	1	0762	NASHUA	HILLSBOROUGH	SANDERS ASSOCIAT	96	68.5	33.1	28.1	25.4	33.1	10.0	*	120
33-011-5001	1	0762	PETERBOROU	HILLSBOROUGH	PACK MONADNOCK S	31	74.1	31.5	26.6	21.5	74.1	9.0	*	119
33-011-5001	3	0762	PETERBOROU	HILLSBOROUGH	PACK MONADNOCK S	1048	8.0	8.0	6.0	6.0	8.0	3.0	*	703
33-013-0003	1	0762	CONCORD	MERRIMACK	NO. STATE HOUSE	116	55.9	31.3	30.7	28.2	30.7	9.9		120
33-013-5001	1	0762	NOT IN A CITY	MERRIMACK	MT. SUNAPEE	26	10.6	9.8	9.7	9.5	10.6	4.5	*	119
33-015-0006	1	0762	PORTSMOUTH	ROCKINGHAM	COURT STREET	115	43.0	35.2	31.4	30.6	31.4	10.5		120
33-015-0014	1	0762	PORTSMOUTH	ROCKINGHAM	PORTSMOUTH, PEIR	120	44.7	35.5	31.2	29.9	31.2	9.9		120
33-015-0014	5	1217	PORTSMOUTH	ROCKINGHAM	PORTSMOUTH, PEIR	112	43.8	34.8	31.2	30.7	31.2	10.3		820
33-019-0003	1	0762	CLAREMONT	SULLIVAN	SOUTH STREET	60	67.3	31.7	30.7	24.9	31.7	9.6		0
*Indicates that the mean does not satisfy summary criteria														


New Hampshire
Sulfur Dioxide Sites
COOS
ROUTES 110 AND 3,
COVERED BRIDGE, GROVET,
NORTHUMBERLAND
CATES HILL RD, BERLIN
GRAFTON
CARROLL
BELKNAP
SOUTH STREET,
CLAREMONT
MERRIMACK
STRAFFORD
PEMBROKE HILL, BRICKETT
HILL ROAD, PEMBROKE
STORRS ST, CONCORD
SULLIVAN
PLEASANT STREET, PEMBROKE
PORTSMOUTH, PORT AUTHORITY
PEARL ST,
MANCHESTER
RAILROAD ST
KEENE
HILLSBOROUGH
ROCKINGHAM
CHESHIRE
SANDERS ASSOCIATES, PARKING LOT D, NASHUA

New Hampshire Sulfur Dioxide





New Hampshire																	
Parameter: Sulfur Dioxide																	
All Values are in Units of Parts Per Million																	
							24-	24-		3-hour	3-hour		1-hour	1-hour			
	P						hour	hour			2nd			2nd			
	O	Org				#		2nd	Obs	Highest	Highest	Obs	Highest	Highest	Arith.		Metho
Site ID	C	Type	City	County	Address	Obs	Highest	Highest	> 0.14	Value	Value	> 0.5	Value	Value	Mean		Used
33-005-0007	1	762	KEENE	CHESHIRE	RAILROAD STRE	8540	0.026	0.023	0	0.041	0.040	0	0.053	0.046	0.0047		23
33-007-0019	1	546	BERLIN	COOS	CATES HILL RD	4242	0.009	0.008	0	0.034	0.026	0	0.055	0.053	0.0019	*	39
33-007-1007	1	1142	NORTHUMBERI	COOS	ROUTES 110 AN	6193	0.006	0.004	0	0.007	0.007	0	0.008	0.007	0.0015	*	23
33-011-0020	1	762	MANCHESTER	HILLSBOROUC	PEARL ST	8412	0.081	0.046	0	0.122	0.105	0	0.124	0.122	0.0043		23
33-011-1010	1	762	NASHUA	HILLSBOROUC	SANDERS ASSO	8636	0.019	0.014	0	0.035	0.031	0	0.040	0.038	0.0023		23
33-013-0007	1	762	CONCORD	MERRIMACK	STORRS STREE	8419	0.011	0.011	0	0.049	0.036	0	0.131	0.077	0.0023		23
33-013-1003	1	762	PEMBROKE	MERRIMACK	PEMBROKE HILL	8347	0.032	0.026	0	0.092	0.086	0	0.194	0.122	0.0041		23
33-013-1006	1	762	PEMBROKE	MERRIMACK	PLEASANT STRE	2184	0.059	0.039	0	0.128	0.100	0	0.147	0.131	0.0063	*	23
33-015-0015	1	762	PORTSMOUTH	ROCKINGHAM	PORTSMOUTH, F	8322	0.033	0.020	0	0.107	0.061	0	0.109	0.108	0.0041		23
33-019-0003	1	762	CLAREMONT	SULLIVAN	SOUTH STREET	1376	0.012	0.012	0	0.022	0.019	0	0.026	0.025	0.0055	*	23
*Indicates that the mean does not satisfy summary criteria																	

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Air Quality Summary - Rhode Island

No exceedance or violation of the 1-hour or 8-hour carbon monoxide (CO) NAAQS was recorded at the two CO monitoring sites in Rhode Island. The Dorrance Street site in Providence reported the highest 8-hour second maximum CO level (3.9 ppm) which was slightly higher than the previous year. Over the past five years the highest 8-hour second maximum concentration of CO at this site was in 1997 at 6.1 ppm. Lower concentrations of CO were recorded at the East Providence site. The ten-year trend of CO concentrations shows a slight downward trend.

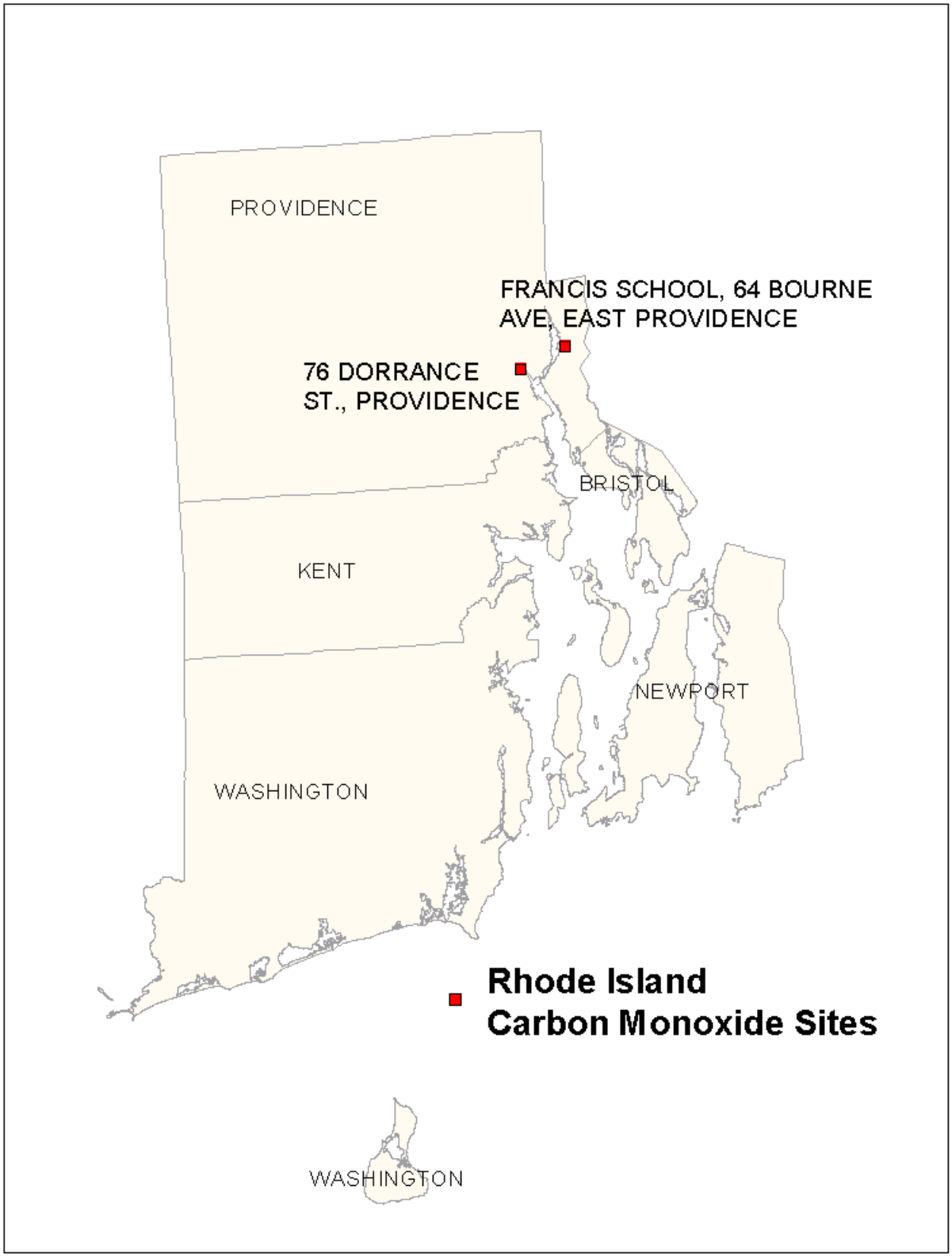
Rhode Island discontinued its ambient air monitoring of lead several years ago because of the extremely low levels of lead that had been recorded in the state.

Rhode Island operated three nitrogen dioxide (NO2) monitoring sites during 2002. NO2 monitors were located at each of the Photochemical Assessment Monitoring Stations (PAMS) sites and at the Rockefeller Library in Providence. This latter site recorded the highest annual arithmetic mean concentration of NO2 (18 ppb). The trend lines for NO2 concentrations, over the past ten years, have remained almost flat.

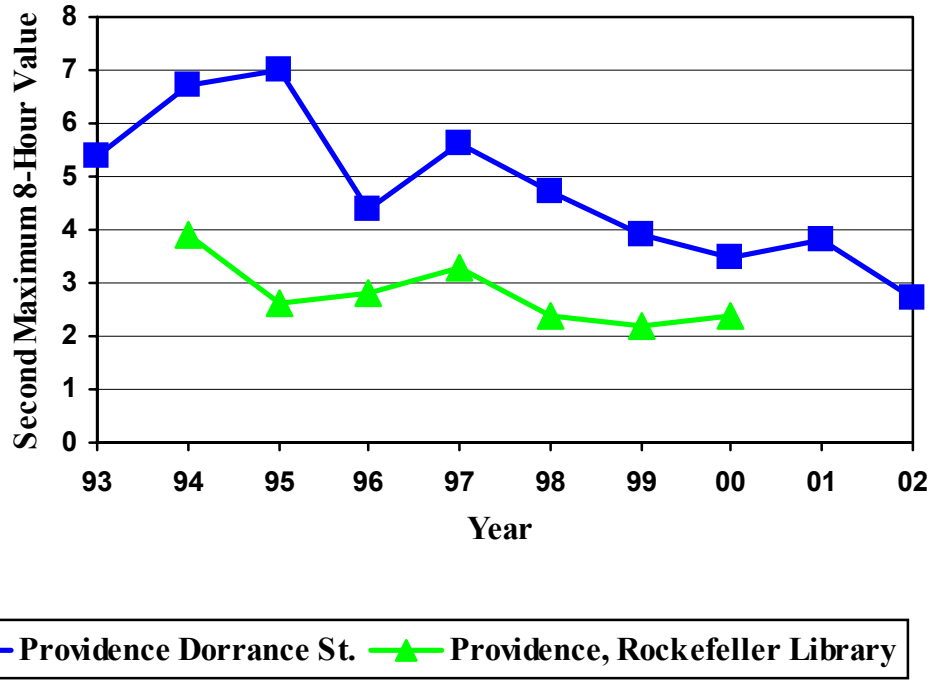
Two of the three ozone monitoring sites in Rhode Island reported exceedances of the 1-hour ozone (O3) NAAQS during 2002. More sites exceeded the standard (3) in 2001 than in any of the previous five years. All three ozone sites reported a fourth highest 8-hr average ozone concentration of at least 85 ppb. The Alton Jones site recorded the highest ozone concentration of 142 ppb and the highest 8-hour average concentration (120 ppb ozone).

None of the seven particulate matter (PM10) sites in Rhode Island had any exceedances or violations of the annual or 24-hour standards over the past five years. The Vernon Street site in Pawtucket reported both the highest 24-hour second maximum value (85 ug/m3) and the highest annual arithmetic mean (22 ug/m3). The ten-year graphs for PM10 show no discernable upward or downward trends. In 2002, Rhode Island operated a network of seven fine particulate matter (PM2.5) sites. During 2002, concentrations of PM2.5 were highest in the Providence area.

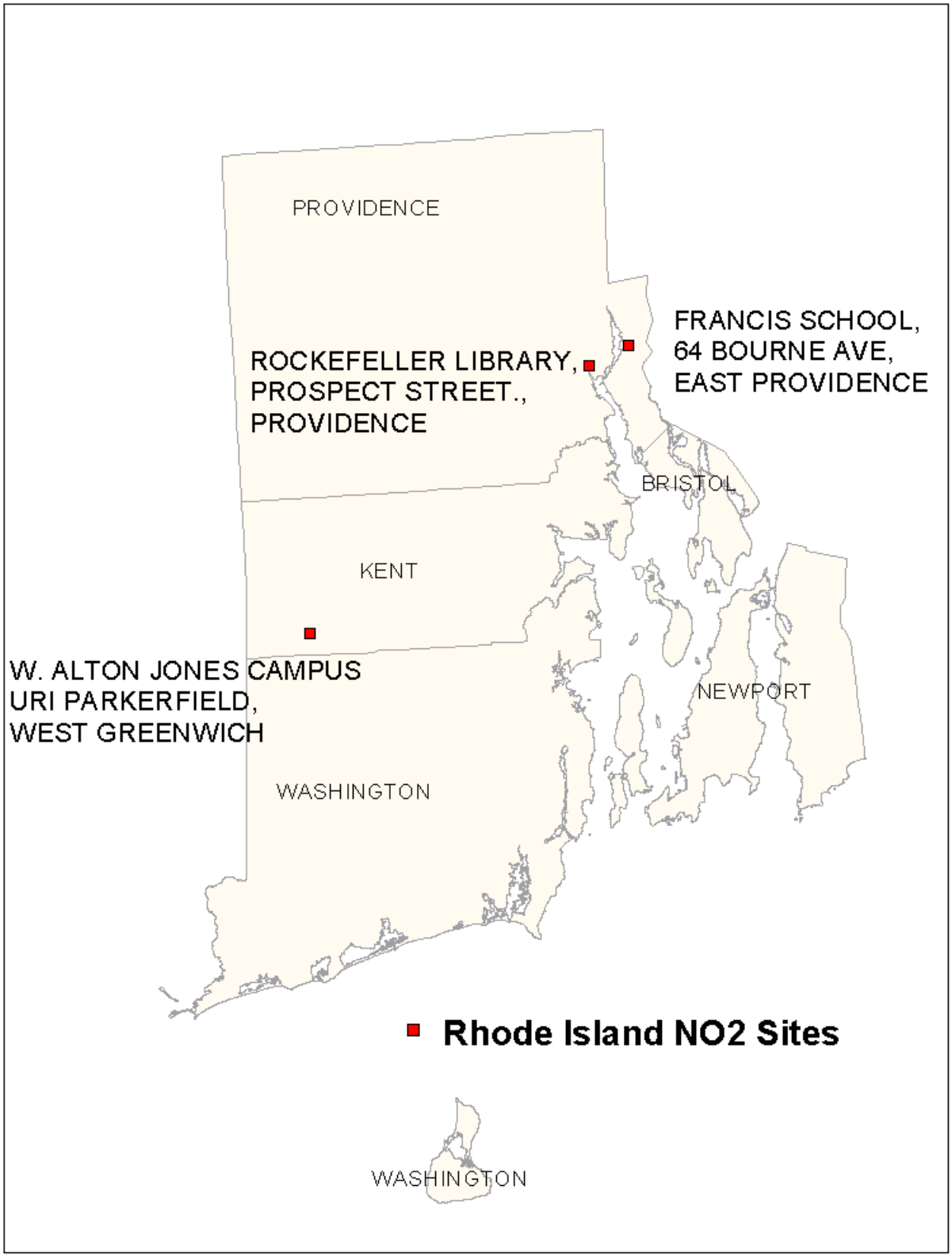
Two air quality monitoring sites measured sulfur dioxide (SO2) in Rhode Island during 2002. There were no exceedances or violations of the annual, 24-hour, or 3-hour NAAQS. The Rockefeller Library site in Providence reported the highest arithmetic mean concentration of SO2 (6 ppb), which was ~20% of the NAAQS, the highest 24-hour second maximum concentration (22 ppb), and the highest 3-hour second maximum concentration of SO2 (39 ppb). The ten year trend for SO2 concentrations in Rhode Island shows a slight downward trend.


PROVIDENCE
FRANCIS SCHOOL, 64 BOURNE AVE, EAST PROVIDENCE
76 DORRANCE ST., PROVIDENCE
BRISTOL
KENT
NEWPORT
WASHINGTON
Rhode Island Carbon Monoxide Sites
WASHINGTON

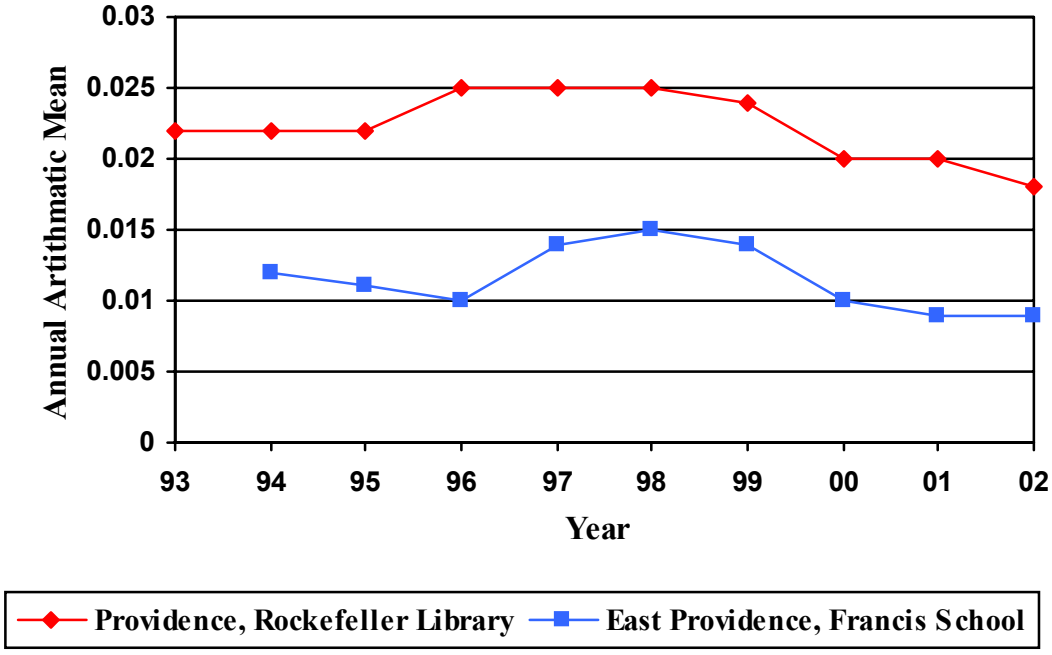
Rhode Island Carbon Dioxide



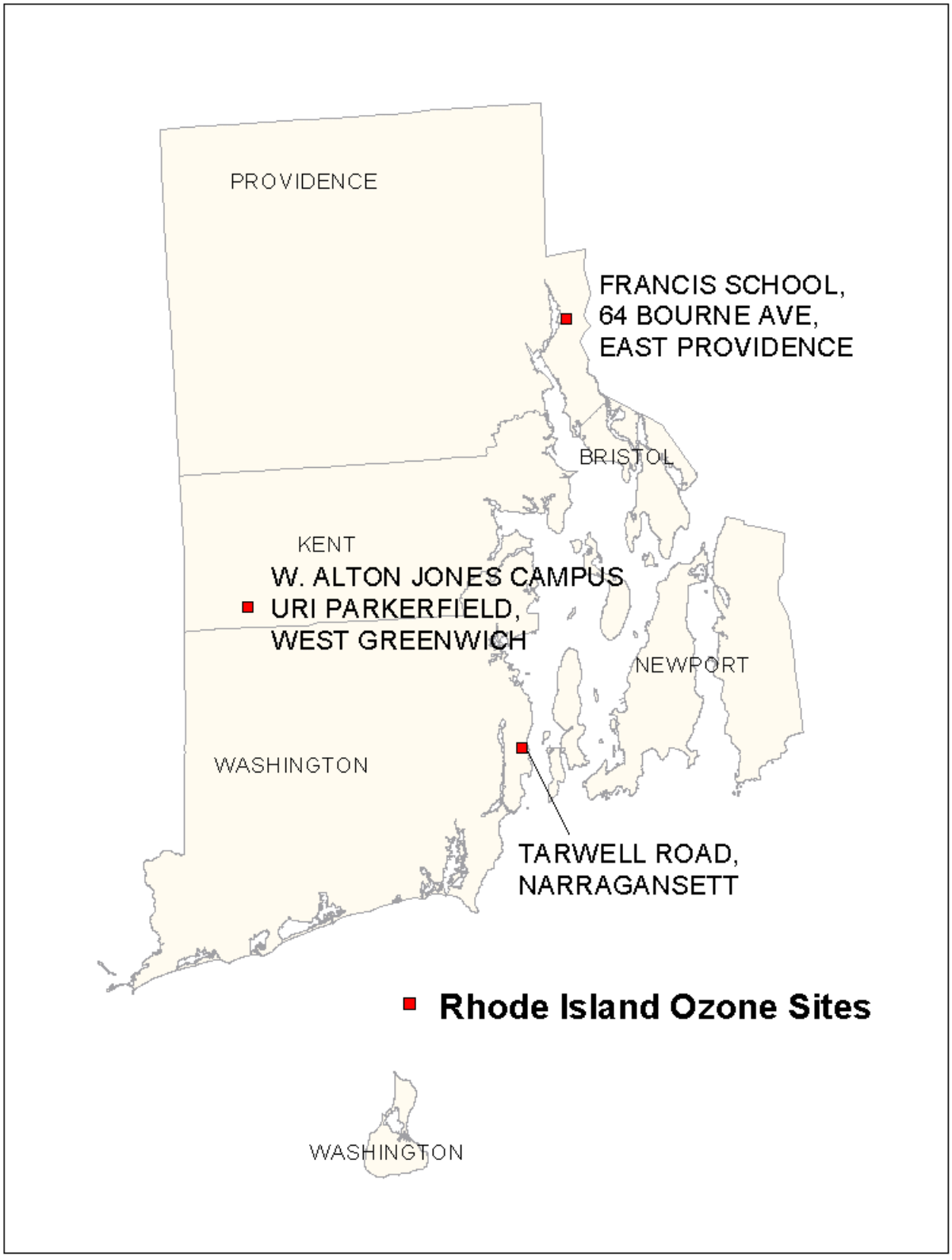
Rhode Island													
Carbon Monoxide													
All Values are in Units of Parts Per Million													
							1-hour	1-hour		8-hour	8-hour		
	P							2nd			2nd		#
	O	Org				#	Highest	Highest		Highest	Highest		Methods
Site ID	C	Type	City	County	Address	Obs	Value	Value	# > 35	Value	Value	# > 9	Used
44-007-1009	1	907	PROVIDENCE	PROVIDENCE	76 DORRANCE STREET.	8217	4.1	3.9	0	3.1	2.7	0	11
44-007-1010	1	907	EAST PROVID	PROVIDENCE	FRANCIS SCHOOL, 64	8024	3.8	3.5	0	3	2.6	0	11


PROVIDENCE
FRANCIS SCHOOL,
64 BOURNE AVE,
EAST PROVIDENCE
ROCKEFELLER LIBRARY,
PROSPECT STREET.,
PROVIDENCE
BRISTOL
KENT
W. ALTON JONES CAMPUS
URI PARKERFIELD,
WEST GREENWICH
NEWPORT
WASHINGTON
Rhode Island NO2 Sites
WASHINGTON

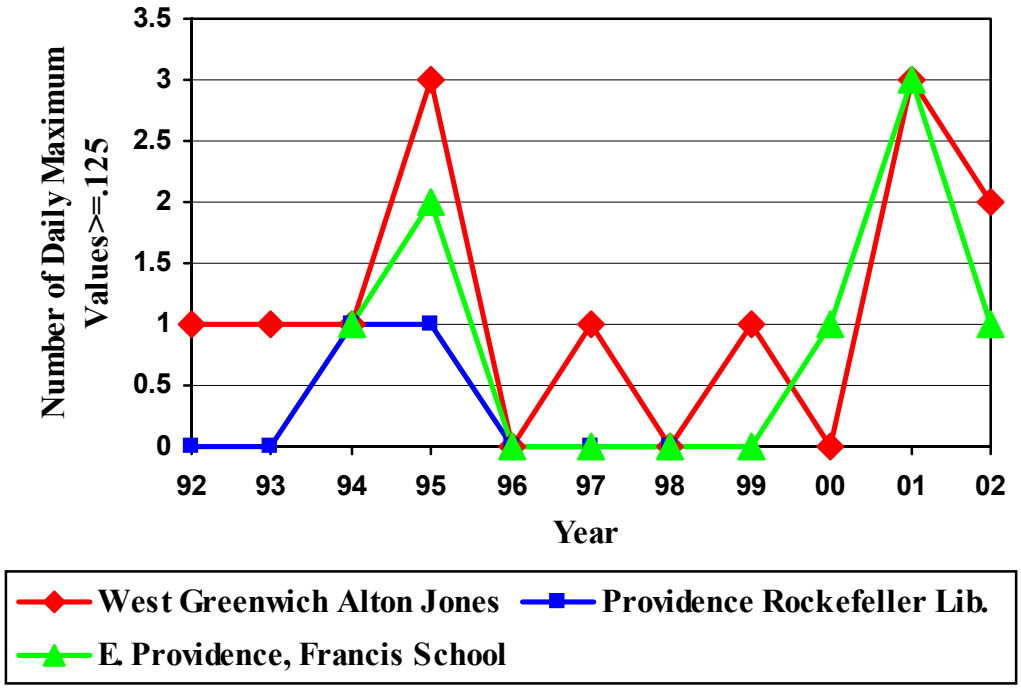
Rhode Island Nitrogen Dioxide



Rhode Island											
Parameter: Nitrogen Dioxide											
All Values are in Units of Parts Per Million											
								1-hour	1-hour		
	P								2nd	Annual	
	O	Rept.					#	Highest	Highest	Arith.	
Site ID	C	Org.	City	County	Address	Metho	Obs	Value	Value	Mean	
44-003-0002	1	0907	NOT IN A CIT	KENT	W. ALTON JONES CAMP	014	1991	0.022	0.019	0.0029	*
44-007-0012	2	0907	PROVIDENCE	PROVIDENCE	ROCKEFELLER LIBRARY	014	8036	0.068	0.067	0.0181	
44-007-1010	1	0907	EAST PROVI	PROVIDENCE	FRANCIS SCHOOL, 64	014	1942	0.038	0.038	0.0093	*
*Indicates that the mean does not satisfy summary criteria											


PROVIDENCE
FRANCIS SCHOOL,
64 BOURNE AVE,
EAST PROVIDENCE
BRISTOL
KENT
W. ALTON JONES CAMPUS
URI PARKERFIELD,
WEST GREENWICH
NEWPORT
WASHINGTON
TARWELL ROAD,
NARRAGANSETT
Rhode Island Ozone Sites
WASHINGTON

Rhode Island Ozone 1-Hour and 8-Hour

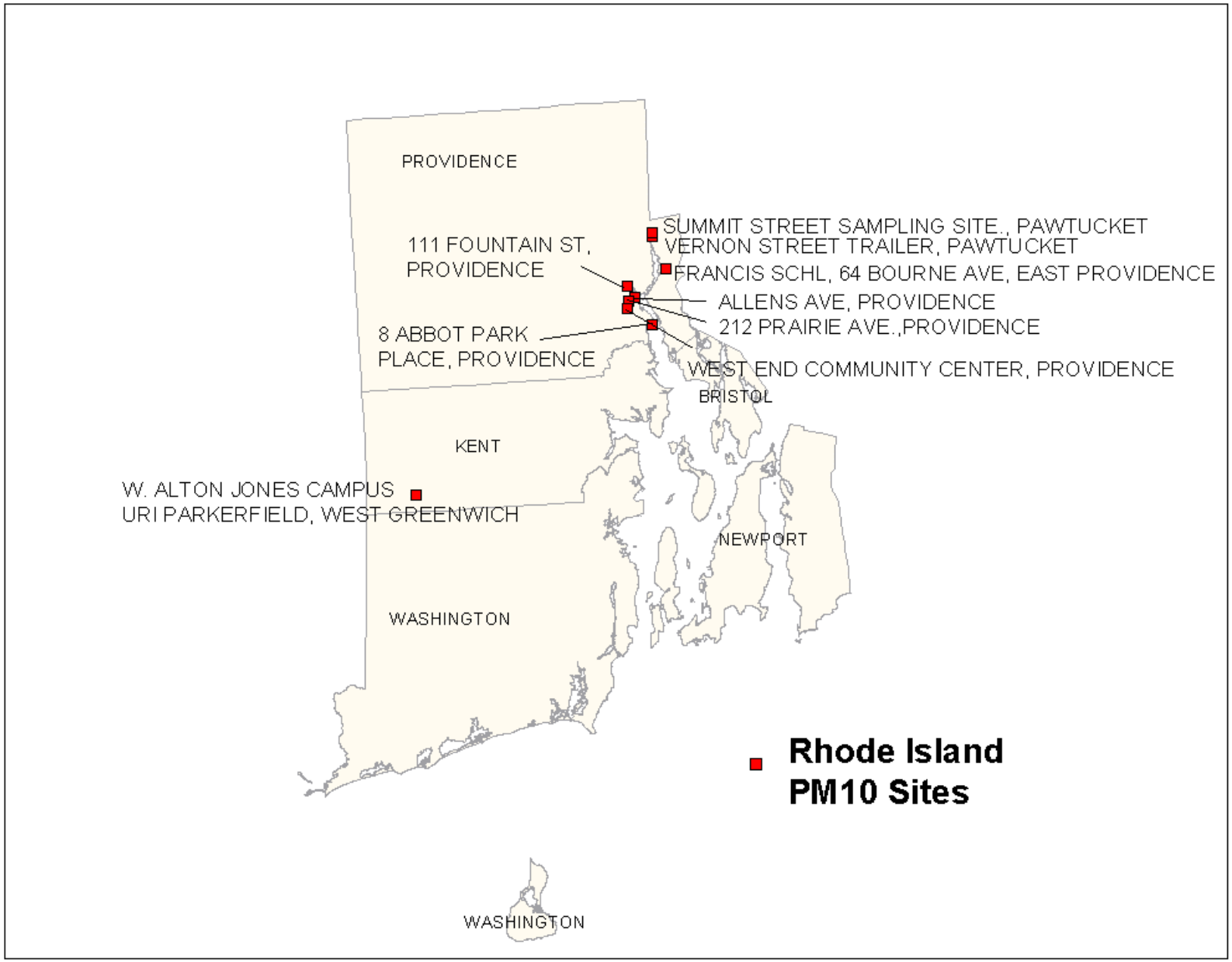


Rhode Island Ozone 1-Hour

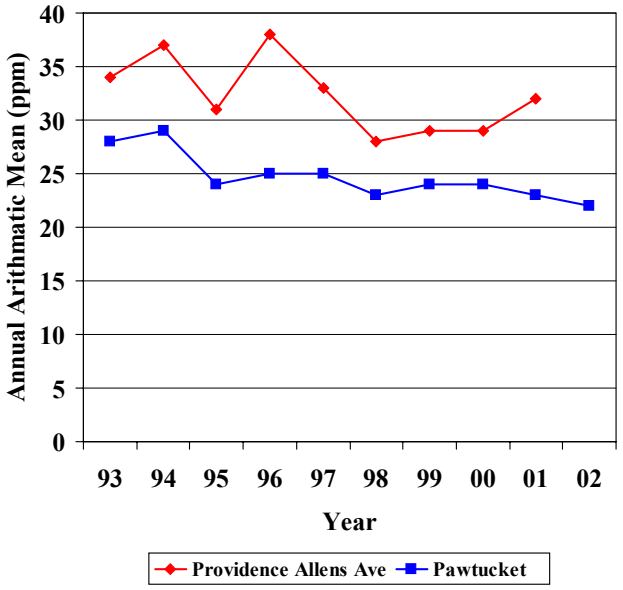
Rhode Island																	
Parameter: Ozone (1-Hour)																	
All Values are in Units of Parts Per Million																	
	P								2nd	3rd	4th			Missing			
	O	Rep.				Num	Num	Highest	Highest	Highest	Highest	Day Ma	Est. Day	Days	Method	Design	
Site ID	C	Org.	City	County	Address	Meas	Req	Value	Value	Value	Value	≥ 0.125	≥ 0.125	< 0.125	used	Value	
44-003-0002	1	0907	NOT IN A CITY	KENT	W. ALTON JONES CAM	172	183	0.142	0.130	0.118	0.117	2	2.1	4	014	0.127	
44-007-1010	1	0907	EAST PROVID	PROVIDENC	FRANCIS SCHOOL, 64	172	183	0.131	0.124	0.115	0.115	1	1.0	3	014	0.125	
44-009-0007	1	0907	NARRAGANSE	WASHINGTC	TARWELL ROAD, NAR	182	183	0.123	0.120	0.113	0.113	0	0.0	1	014	0.144	

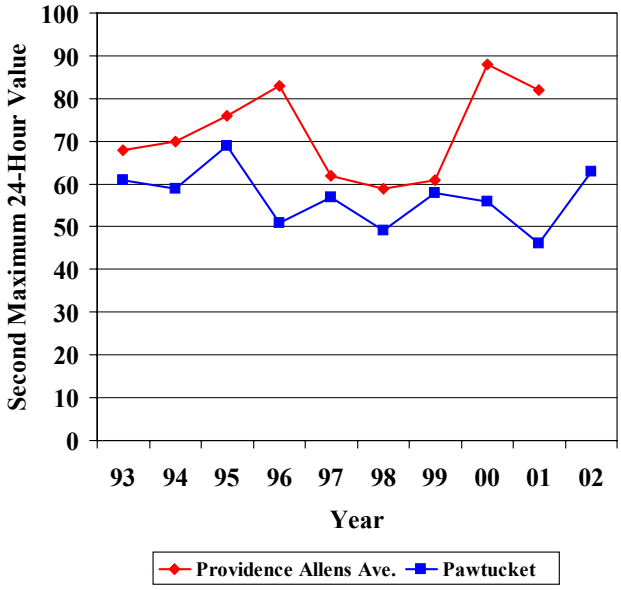
Rhode Island Ozone 8-Hour

Rhode Island															
Parameter: Ozone (8-Hour)															
All Values are in Units of Parts Per Million															
	P						Valid	Num		2nd	3rd	4th	Days		
	O	Rept.				#	Days	Required	Highest	Highest	Highest	Highes	Max ≥	Methods	Design
Site ID	C	Org.	City	County	Address	Obs	Meas	Days	8-Hr Val	8-Hr Val	8-Hr Val	8-Hr V	0.085	Reporte	Value
44-003-0002	1	907	NOT IN A CITY	KENT	W. ALTON JONES CAMP	90	165	183	0.12	0.111	0.101	0.1	12	14	0.097
44-007-1010	1	907	EAST PROVID	PROVIDENCE	FRANCIS SCHOOL, 64	86	157	183	0.12	0.103	0.097	0.09	9	14	0.091
44-009-0007	1	907	NARRAGANSE	WASHINGTON	TARWELL ROAD, NARRA	98	180	183	0.112	0.101	0.098	0.09	8	14	0.093

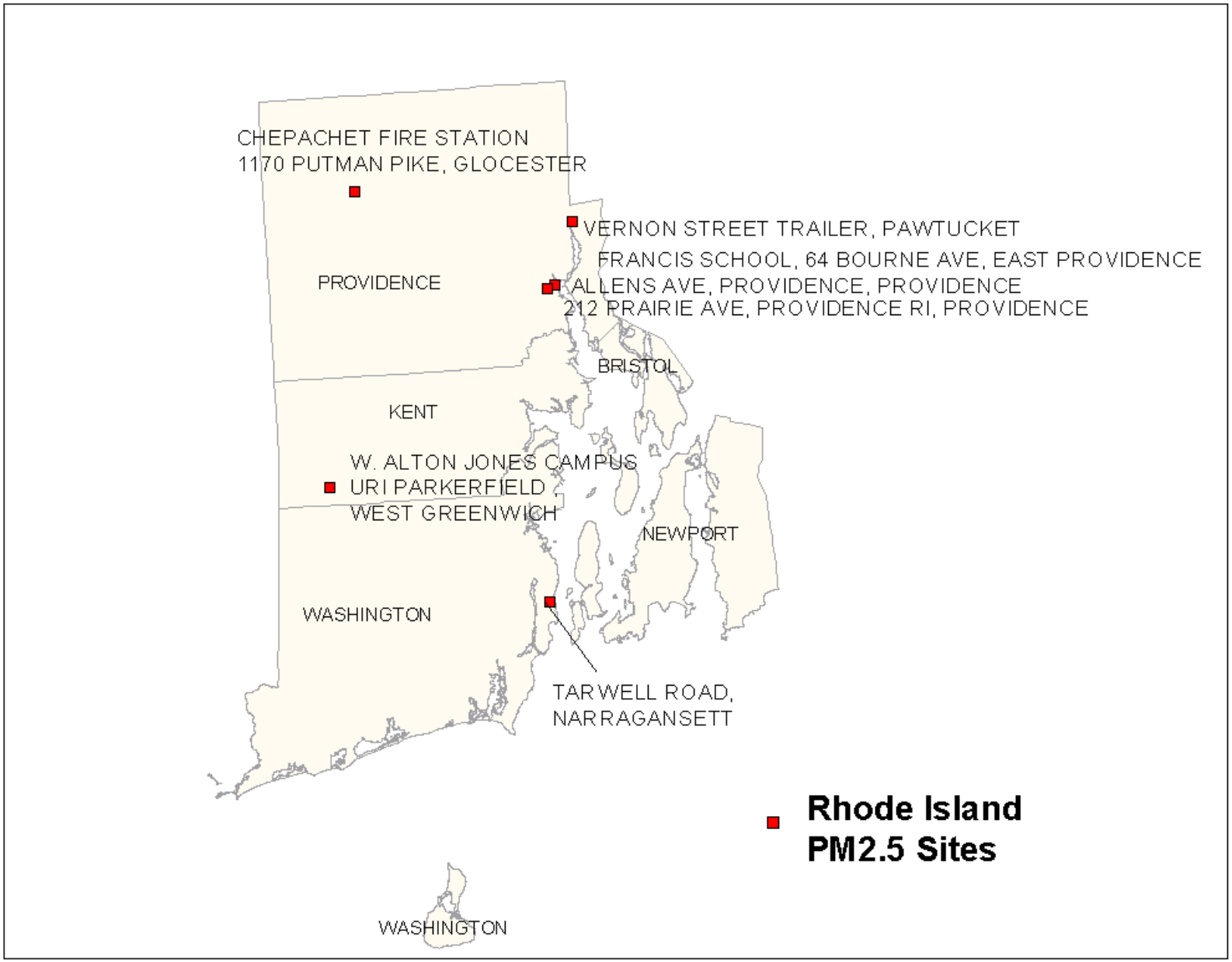

PROVIDENCE
SUMMIT STREET SAMPLING SITE., PAWTUCKET
111 FOUNTAIN ST, PROVIDENCE
VERNON STREET TRAILER, PAWTUCKET
FRANCIS SCHL, 64 BOURNE AVE, EAST PROVIDENCE
ALLENS AVE, PROVIDENCE
212 PRAIRIE AVE.,PROVIDENCE
8 ABBOT PARK PLACE, PROVIDENCE
WEST END COMMUNITY CENTER, PROVIDENCE
BRISTOL
KENT
W. ALTON JONES CAMPUS URI PARKERFIELD, WEST GREENWICH
NEWPORT
WASHINGTON
Rhode Island PM10 Sites
WASHINGTON

Rhode Island PM10



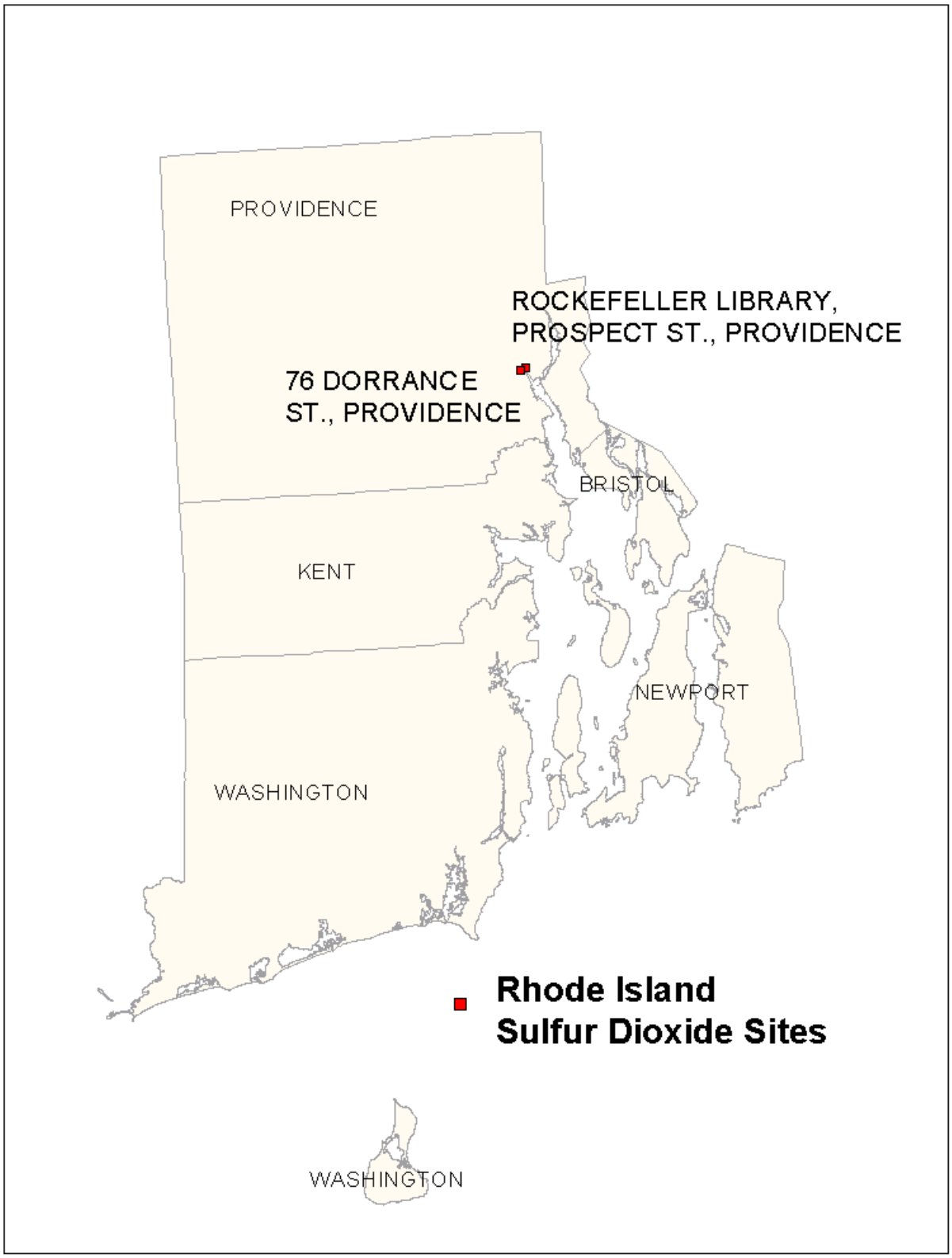


Rhode Island														
Parameter: PM 10														
									2nd	3rd	4th	Days	Est. D	Wtd.
		Rep.						Highest	Highest	Highest	Highe	Max	Max	Arith.
SITE ID	PC	Org	City	County	Address	# Ob	# Req.	Value	Value	Value	Value	>150	>150	Mean
44-003-0002	1	0907	NOT IN A CITY	KENT	W. ALTON JONES C	61	61	71	43	28	28	0	0	11
44-007-0021	1	0907	PROVIDENCE	PROVIDENCE	111 FOUNTAIN ST	57	61	82	44	36	36	0	0	19
44-007-0021	2	0907	PROVIDENCE	PROVIDENCE	111 FOUNTAIN ST	59	61	83	43	35	34	0	0	19
44-007-0022	1	0907	PROVIDENCE	PROVIDENCE	212 PRAIRIE AVE,	61	61	83	42	40	37	0	0	19
44-007-0022	2	0907	PROVIDENCE	PROVIDENCE	212 PRAIRIE AVE,	24	30	37	28	25	24	0	0	16
44-007-0024	1	0907	PROVIDENCE	PROVIDENCE	8 ABBOTT PARK PL	22	30	29	24	23	21	0	0	13
44-007-0025	1	0907	PROVIDENCE	PROVIDENCE	WEST END COMMUNI	20	30	34	25	24	21	0	0	14
44-007-0026	1	0907	PAWTUCKET	PROVIDENCE	VERNON STREET TR	61	61	85	63	49	41	0	0	22
44-007-1010	1	0907	EAST PROVIDE	PROVIDENCE	FRANCIS SCHOOL,	25	30	32	25	21	20	0	0	13

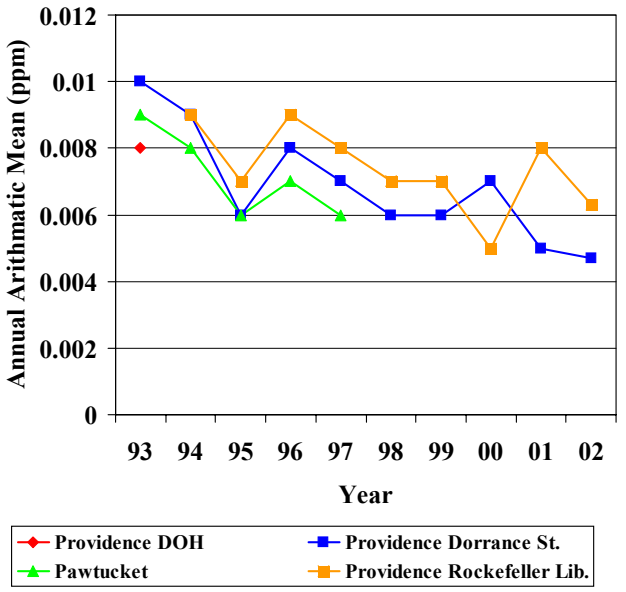

CHEPACHET FIRE STATION
1170 PUTMAN PIKE, GLOCESTER
VERNON STREET TRAILER, PAWTUCKET
FRANCIS SCHOOL, 64 BOURNE AVE, EAST PROVIDENCE
ALLENS AVE, PROVIDENCE, PROVIDENCE
212 PRAIRIE AVE, PROVIDENCE RI, PROVIDENCE
PROVIDENCE
BRISTOL
KENT
W. ALTON JONES CAMPUS
URI PARKERFIELD ,
WEST GREENWICH
NEWPORT
WASHINGTON
TARWELL ROAD,
NARRAGANSETT
Rhode Island
PM2.5 Sites
WASHINGTON

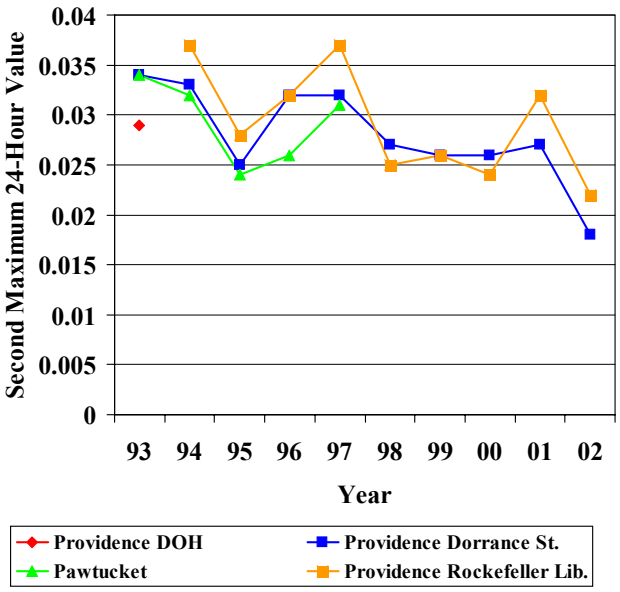
Rhode Island PM2.5

Rhode Island														
Parameter: PM 2.5														
All Values are in UG/CU Meters Local Conditions														
	P							2nd	3rd	4th	98th	Wtd.		
	O	Rept.				#	Highest	Highest	Highest	Highest	Percentile	Arith.		Methods
Site ID	C	Org.	City	County	Address	Obs	Value	Value	Value	Value	Value	Mean		Used
44-003-000	1	0907	NOT IN A (	KENT	W. ALTON JONES C	120	68.3	35.3	24.6	23.4	24.6	8.7		120
44-007-002	1	0907	PROVIDEI	PROVIDENCE	ALLENS AVE, PROV	9	19.6	18.5	15.1	13.5	19.6	12.4	*	120
44-007-002	1	0907	PROVIDEI	PROVIDENCE	212 PRAIRIE AVE,	347	71.4	55.4	37.8	37.3	32.3	10.9		120
44-007-002	2	0907	PROVIDEI	PROVIDENCE	212 PRAIRIE AVE,	57	32.2	26.9	25.9	25.6	26.9	9.9		120
44-007-002	5	1217	PROVIDEI	PROVIDENCE	212 PRAIRIE AVE,	31	74.3	35.6	27.7	26.4	74.3	11.2	*	820
44-007-002	1	0907	PROVIDEI	PROVIDENCE	CHEPACHET FIRE S	115	73.0	25.9	25.1	24.0	25.1	9.5		120
44-007-002	1	0907	PAWTUCI	PROVIDENCE	VERNON STREET TR	103	75.7	34.9	30.3	30.3	30.3	13.4	*	120
44-007-10	1	0907	EAST PR(	PROVIDENCE	FRANCIS SCHOOL,	346	77.1	58.7	41.2	38.2	30.8	10.9		120
44-007-10	2	0907	EAST PR(	PROVIDENCE	FRANCIS SCHOOL,	50	73.4	25.2	22.4	19.8	73.4	10.6	*	120
44-007-10	5	1217	EAST PR(	PROVIDENCE	FRANCIS SCHOOL,	28	73.6	29.4	28.8	28.4	73.6	13.7	*	820
44-009-000	1	0907	NARRAGA	WASHINGTON	TARWELL ROAD, NA	116	26.7	25.7	23.7	21.7	23.7	7.5		120
*Indicates that the mean does not satisfy summary criteria														


PROVIDENCE
ROCKEFELLER LIBRARY,
PROSPECT ST., PROVIDENCE
76 DORRANCE
ST., PROVIDENCE
BRISTOL
KENT
NEWPORT
WASHINGTON
Rhode Island
Sulfur Dioxide Sites
WASHINGTON

Rhode Island Sulfur Dioxide





Rhode Island															
Parameter: Sulfur Dioxide															
All Values are in Units of Parts Per Million															
								24-	24-		3-hour	3-hour		1-hour	1-hour	
	P							hour	hour			2nd			2nd	
	O	Org					#		2nd	Obs	Highest	Highest	Obs	Highest	Highest	Arith.
Site ID	C	Type	City	County	Address	Obs	Highest	Highest	> 0.14	Value	Value	> 0.5	Value	Value	Mean
44-007-0012	2	907	PROVIDENCE	PROVIDENCE	ROCKEFELLER I	8286	0.029	0.022	0	0.049	0.039	0	0.057	0.053	0.0063
44-007-1009	1	907	PROVIDENCE	PROVIDENCE	76 DORRANCE S	8076	0.022	0.018	0	0.038	0.035	0	0.049	0.047	0.0047

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Air Quality Summary – Vermont

The state of Vermont operated one carbon monoxide (CO) monitoring site during 2002. The highest first and second 8-hour concentrations of CO, recorded at the Rutland site, were 2.3 ppm and 2.3 ppm CO respectively.

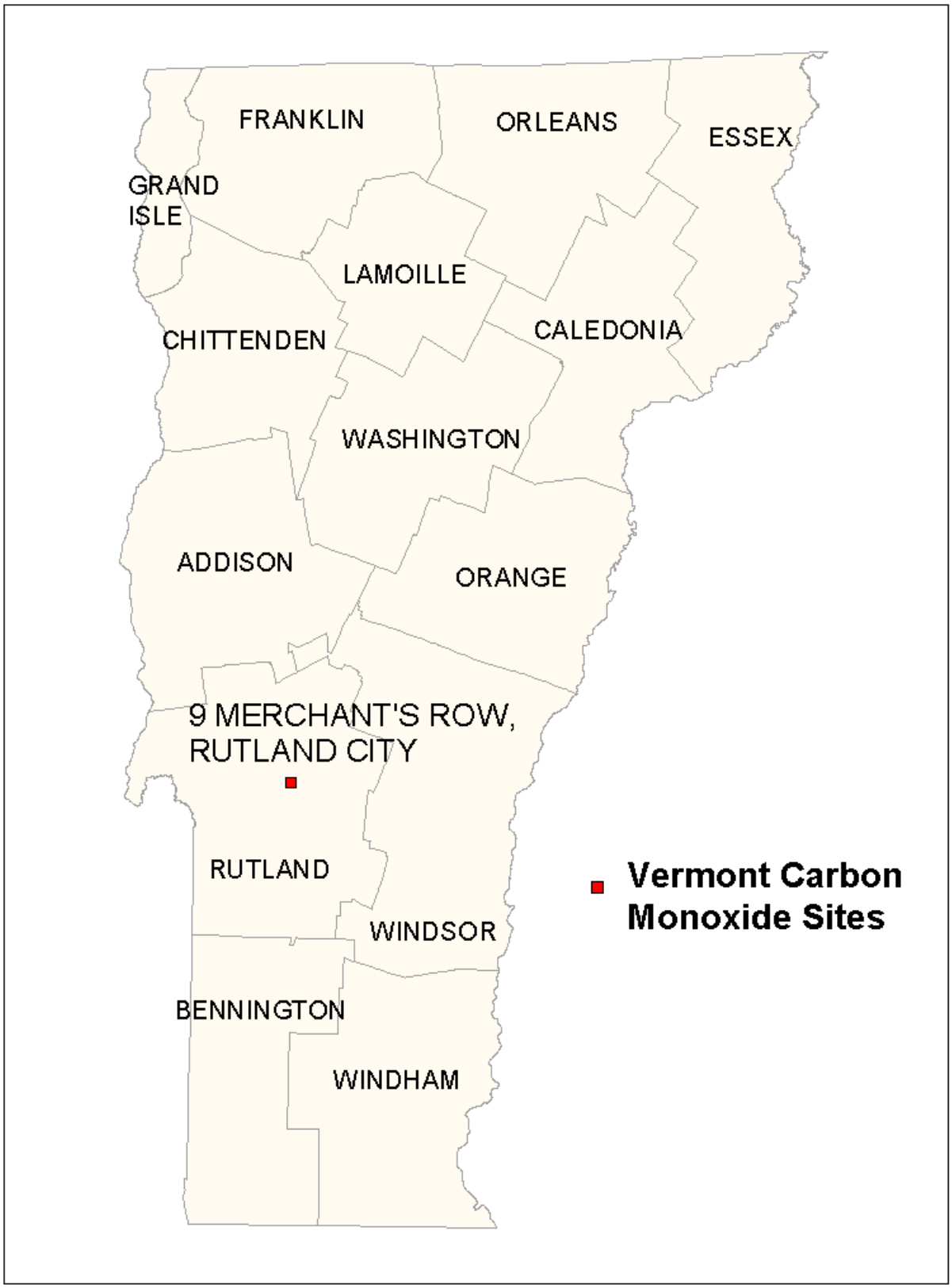
During 2001, Vermont did not conduct ambient air lead monitoring. Historical ambient air concentrations of lead in Vermont have been extremely low and ambient monitoring for this pollutant has not been warranted.

Two nitrogen dioxide (NO2) monitoring sites (Rutland and Burlington) operated in 2002. No exceedances of the NAAQS for NO2 were recorded for either site. The last ten years of NO2 data indicate that the concentrations of NO2 have remained relatively steady and low in comparison with the NAAQS. The maximum annual concentration of NO2 (13 ppb or ~ 25% of the NAAQS) was measured at the Rutland site.

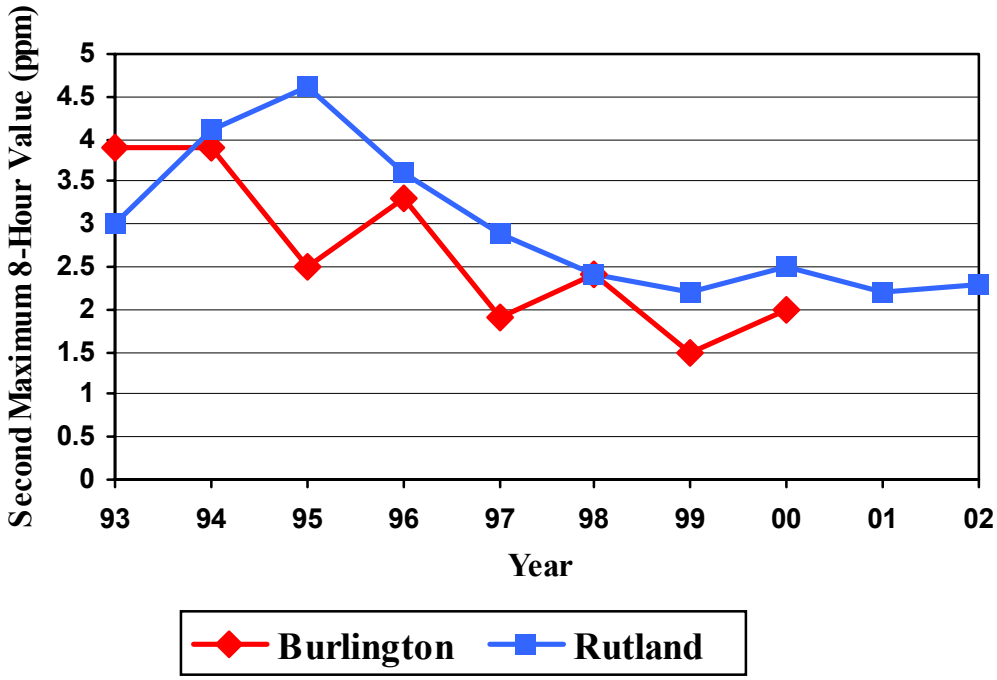
One of the two ozone monitoring sites in Vermont recorded 1-hour concentrations of ozone in excess of the NAAQS. The highest 1-hour concentration of ozone (125 ppb) was recorded at the Underhill site. The highest 1-hour ozone concentration recorded at the Bennington site was 124 ppb. This is the first recorded exceedance of the 1-hour ozne standard since 1987. The Bennington site recorded a fourth highest 8-hour average ozone concentration above the level of the 8-hour ozone NAAQS. The highest 8-hour average ozone concentration (96 ppb) in Vermont was recorded at the Underhill site.

During 2002 Vermont maintained five monitoring sites that measured coarse particulate matter (PM10). Data for 2002 continue the ten-year trend of low PM10 concentrations recorded by Vermont monitoring sites. The highest 24-hour PM10 concentration was recorded at the Rutland monitoring site (83 ug/m3). Rutland also recorded the highest annual average (weighted) PM10 concentration (18 ug/m3). These concentrations are well below the NAAQS. The lowest PM10 concentrations were recorded at the Underhill site. The annual average PM10 concentration at this site was 10 ug/m3, and the maximum 24-hour concentration was 70 ug/m3. Over the past three years, Vermont has established a network of five fine particulate matter (PM2.5) monitoring sites. PM2.5 concentrations for these sites have been below the NAAQS. The highest concentrations of fine particulate matter have been recorded at the Rutland site.

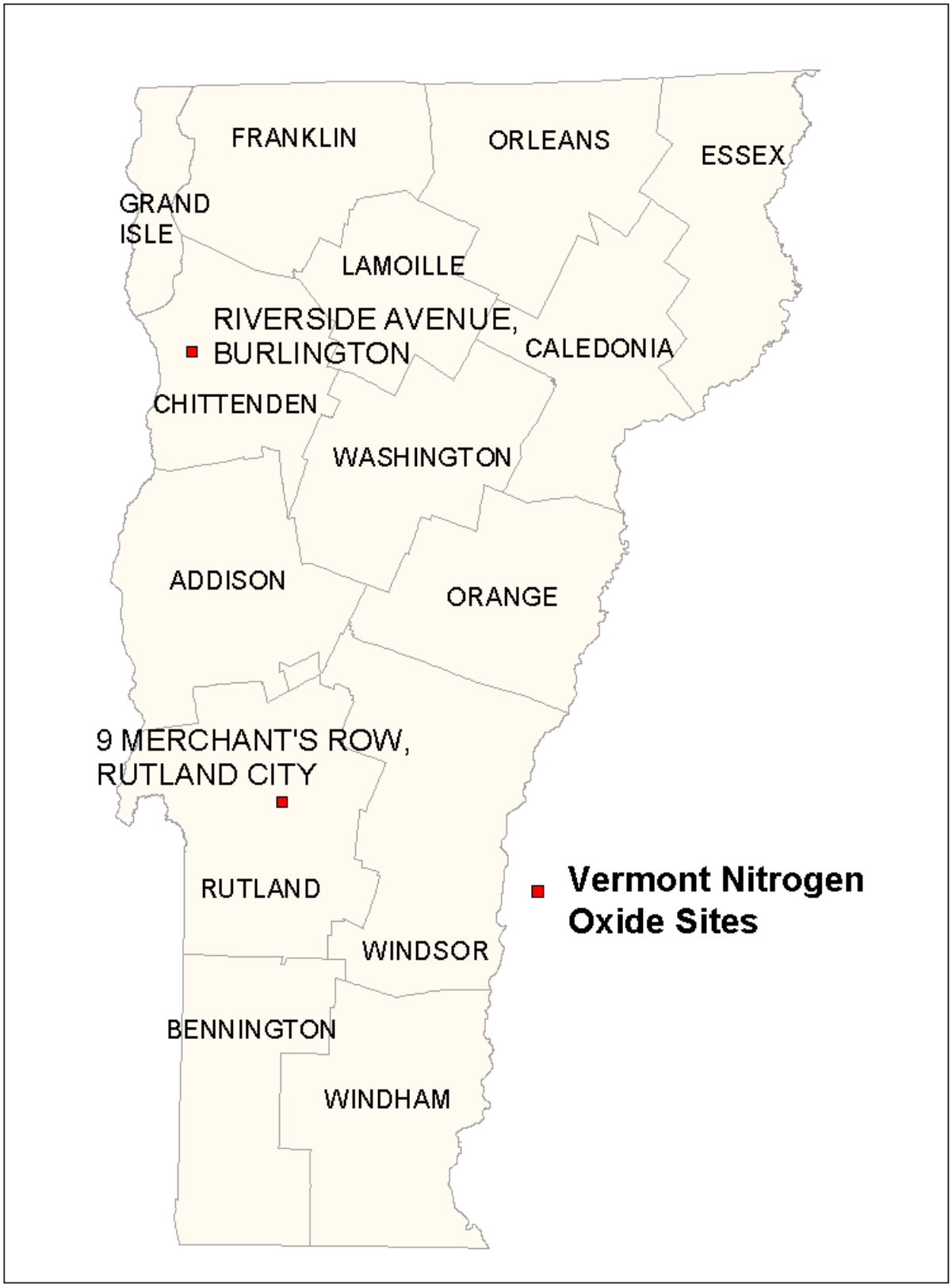
Vermont operated one sulfur dioxide (SO2) monitoring site during 2002. The Rutland site recorded a maximum 3-hour SO2 concentration of 86 ppb. The 24-hour highest average SO2 concentration was 36 ppb. The historical data (ten-year trend) indicate a general decline in the concentration of SO2, with the exception of 1994.


FRANKLIN
ORLEANS
ESSEX
GRAND ISLE
LAMOILLE
CHITTENDEN
CALEDONIA
WASHINGTON
ADDISON
ORANGE
9 MERCHANT'S ROW, RUTLAND CITY
RUTLAND
WINDSOR
BENNINGTON
WINDHAM
Vermont Carbon Monoxide Sites

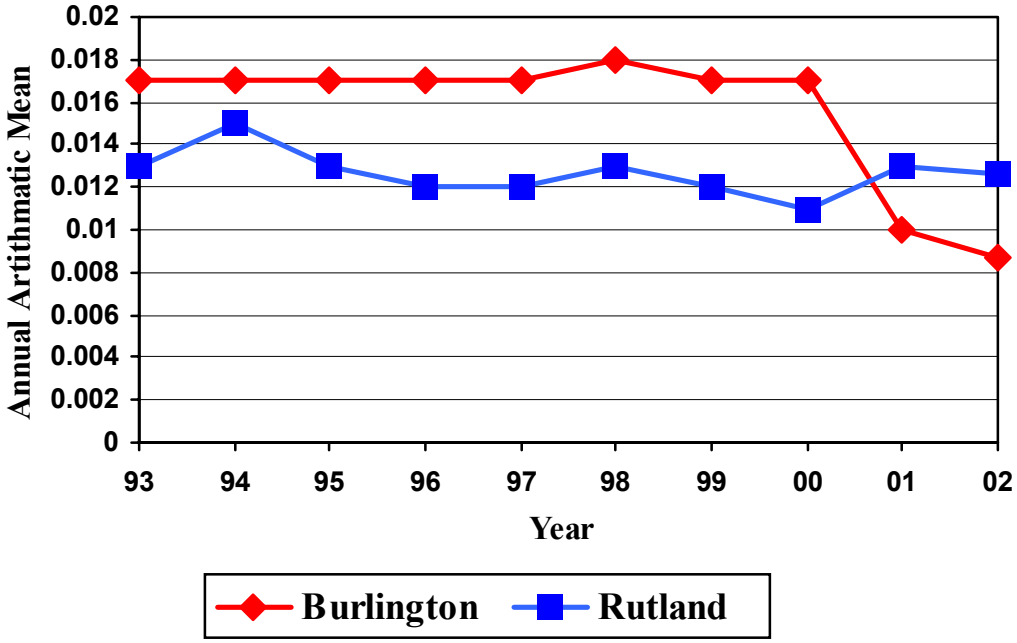
Vermont Carbon Dioxide



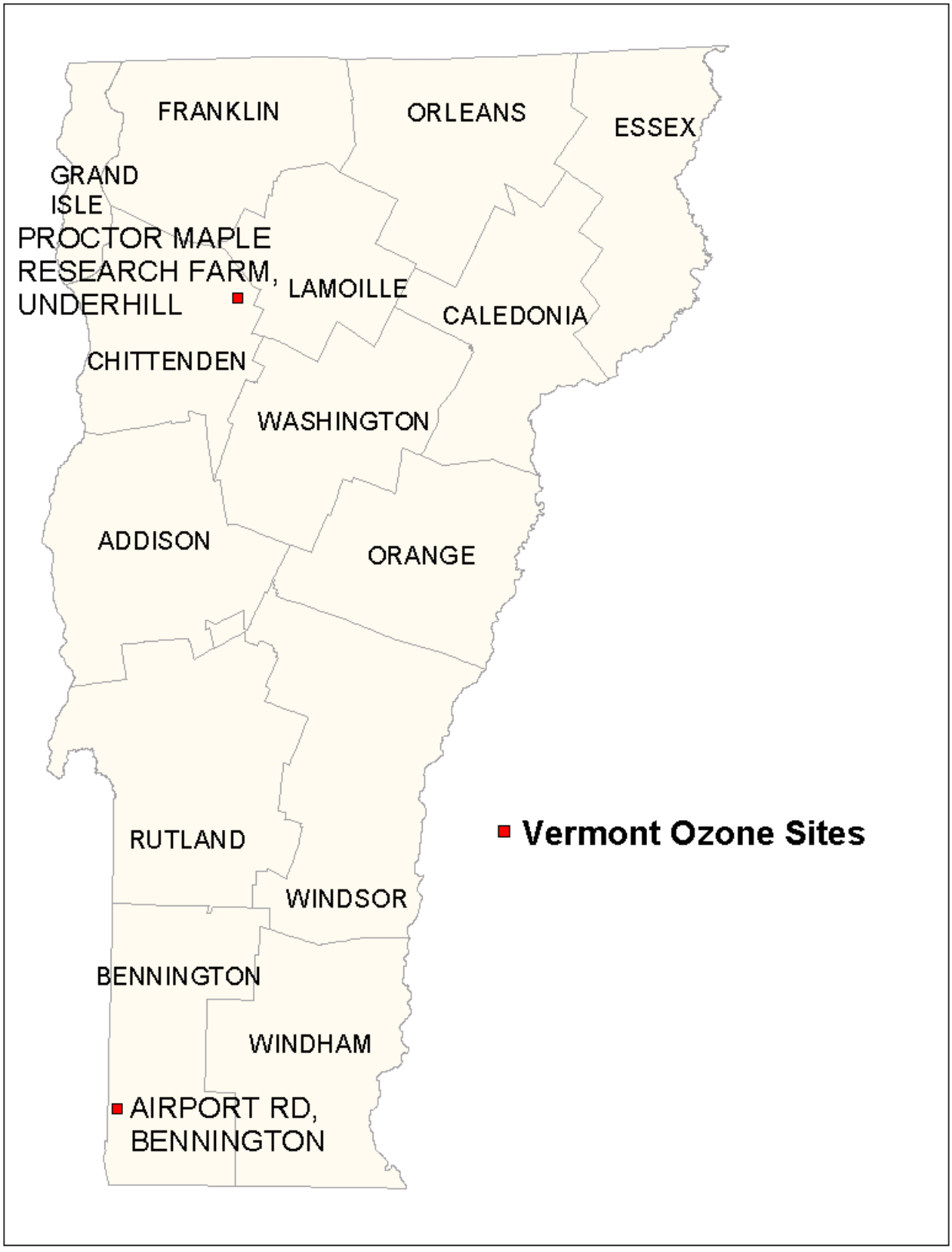
Vermont													
Carbon Monoxide													
All Values are in Units of Parts Per Million													
							1-hour	1-hour		8-hour	8-hour		
	P							2nd			2nd		#
	O	Org				#	Highest	Highest		Highest	Highest		Methods
Site ID	C	Type	City	County	Address	Obs	Value	Value	# > 35	Value	Value	# > 9	Used
50-021-0002	1	1119	RUTLAND	RUTLAND	PARKING LOT ADJ. TO	8267	4.1	3.8	0	2.3	2.3	0	Multiple


FRANKLIN
ORLEANS
ESSEX
GRAND ISLE
LAMOILLE
RIVERSIDE AVENUE, BURLINGTON
CALEDONIA
CHITTENDEN
WASHINGTON
ADDISON
ORANGE
9 MERCHANT'S ROW, RUTLAND CITY
RUTLAND
WINDSOR
BENNINGTON
WINDHAM
Vermont Nitrogen Oxide Sites

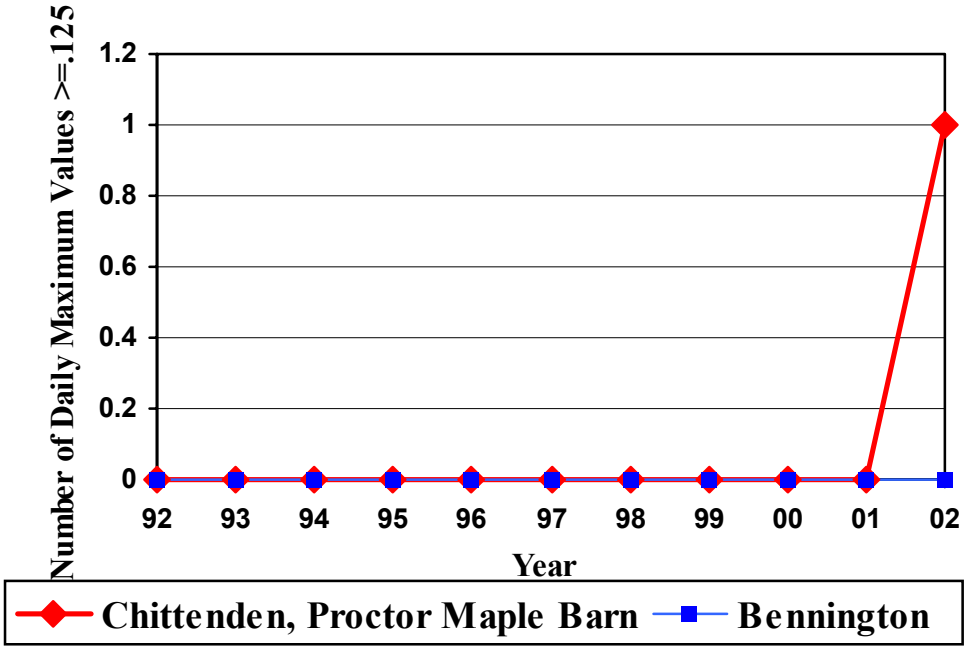
Vermont Nitrogen Dioxide



Vermont										
Parameter: Nitrogen Dioxide										
All Values are in Units of Parts Per Million										
								1-hour	1-hour	
	P								2nd	Annual
	O	Rept.					#	Highest	Highest	Arith.
Site ID	C	Org.	City	County	Address	Metho	Obs	Value	Value	Mean
50-007-0013	1	1119	BURLINGTON	CHITTENDEN	RIVERSIDE AVENUE, B	074	7047	0.051	0.050	0.0087
50-021-0002	1	1119	RUTLAND	RUTLAND	PARKING LOT ADJ. TO	074	7646	0.068	0.063	0.0126


FRANKLIN
ORLEANS
ESSEX
GRAND ISLE
PROCTOR MAPLE RESEARCH FARM, UNDERHILL
LAMOILLE
CALEDONIA
CHITTENDEN
WASHINGTON
ADDISON
ORANGE
RUTLAND
WINDSOR
BENNINGTON
WINDHAM
AIRPORT RD, BENNINGTON
Vermont Ozone Sites

Vermont Ozone 1-Hour and 8-Hour

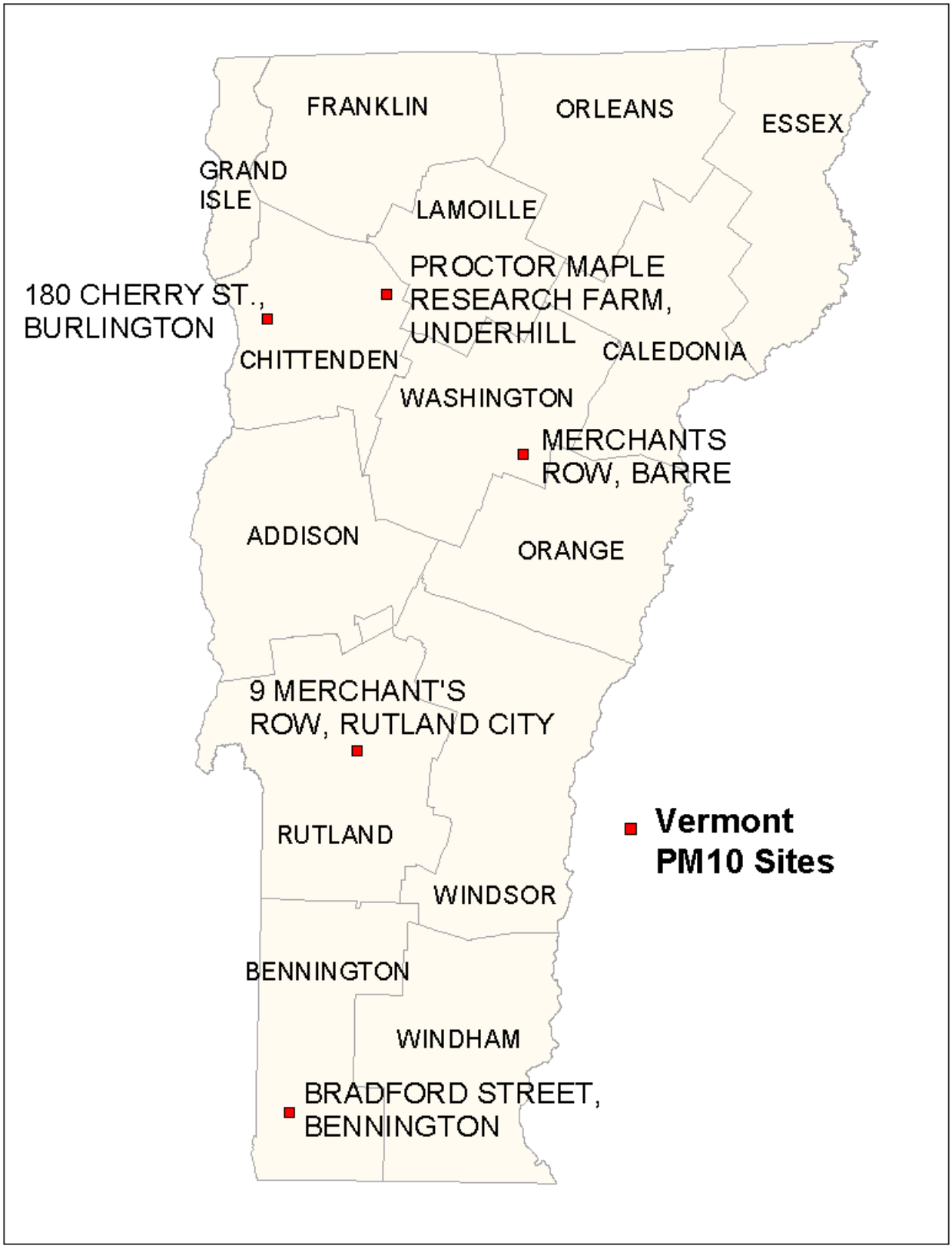


Vermont Ozone 1-Hour

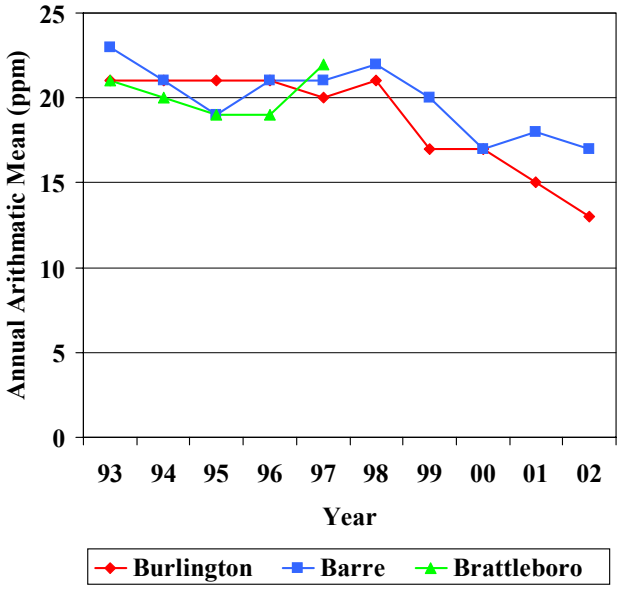
Vermont																
Parameter: Ozone (1-Hour)																
All Values are in Units of Parts Per Million																
	P								2nd	3rd	4th			Missing		
	O	Rep.				Num	Num	Highest	Highest	Highest	Highest	Day Max	Est. Day	Days	Method	Design
Site ID	C	Org.	City	County	Address	Meas	Req	Value	Value	Value	Value	≥ 0.125	≥ 0.125	< 0.125	used	Value
50-003-0004	1	1119	BENNINGTON	BENNINGTON	AIRPORT RD	176	183	0.124	0.098	0.096	0.093	0	0.0	1	087	0.104
50-007-0007	1	1119	UNDERHILL	CHITTENDEN	PROCTOR MAPLE	177	183	0.125	0.095	0.093	0.091	1	1.0	1	087	0.091

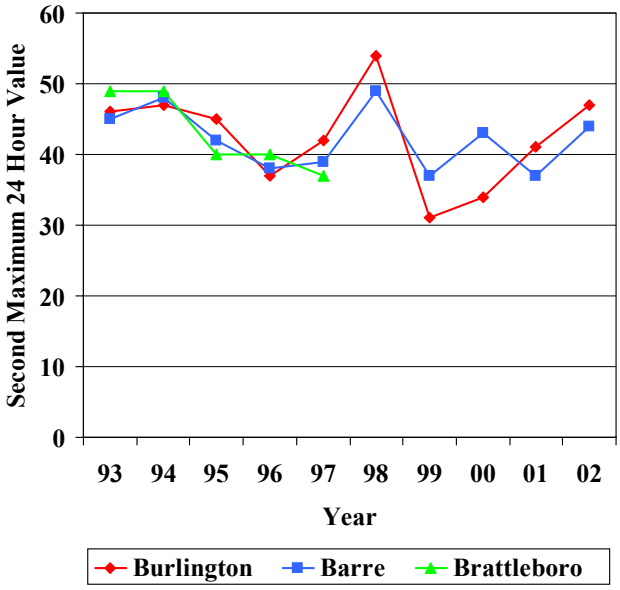
Vermont Ozone 8-Hour

Vermont															
Parameter: Ozone (8-Hour)															
All Values are in Units of Parts Per Million															
	P						Valid	Num		2nd	3rd	4th	Days		
	O	Rept.				#	Days	Required	Highest	Highest	Highest	Highest	Max ≥	Methods	Design
Site ID	C	Org.	City	County	Address	Obs	Meas.	Days	8-Hr Value	8-Hr Value	8-Hr Value	8-Hr Value	0.085	Reported	Value
50-003-000	1	1119	BENNINGT	BENNINGT	AIRPORT RD	96	175	183	0.091	0.088	0.088	0.086	4	87	0.080
50-007-000	1	1119	UNDERHIL	CHITTEND	PROCTOR MAPLE	96	176	183	0.096	0.089	0.085	0.084	3	87	0.077

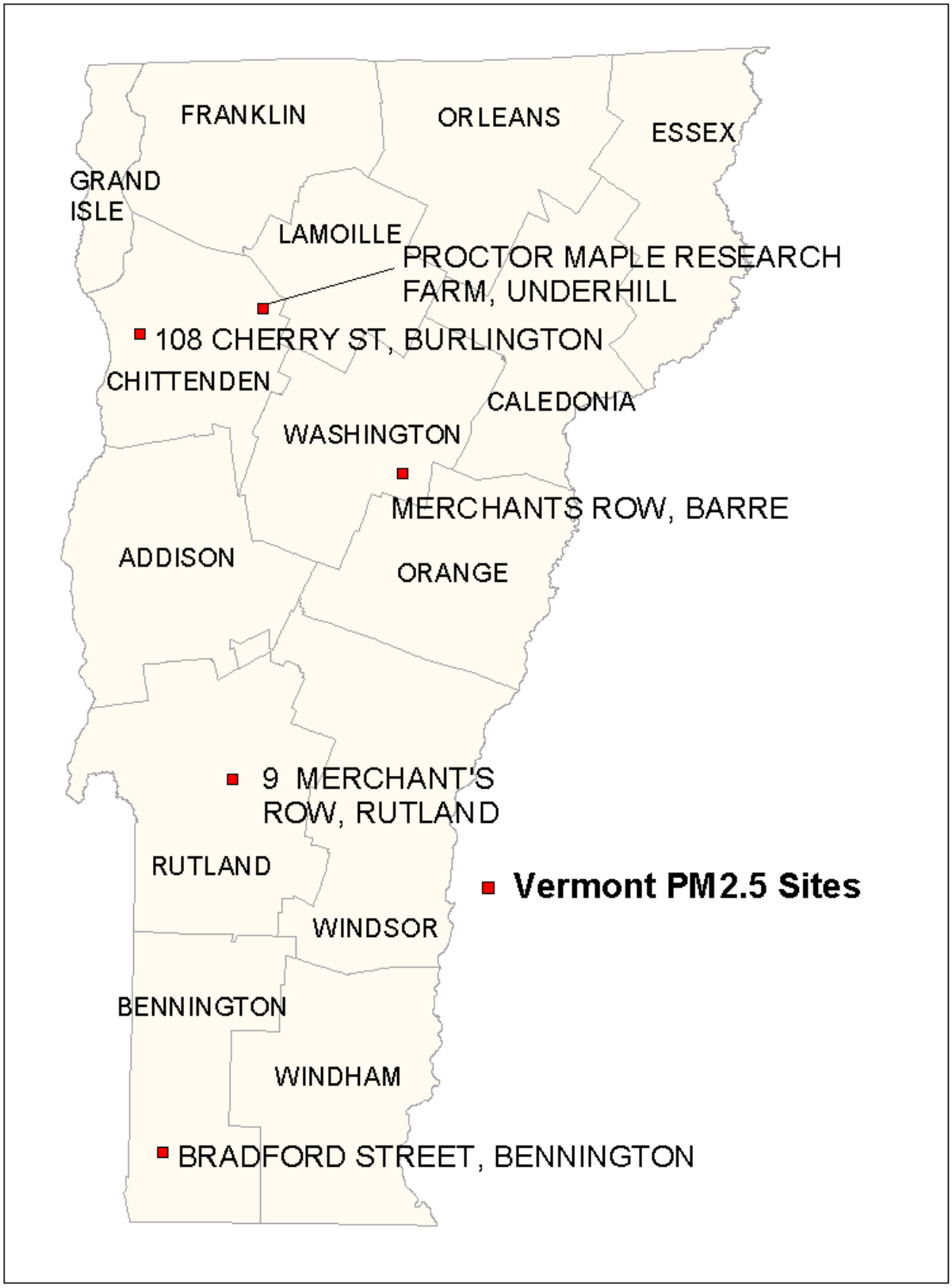

FRANKLIN
ORLEANS
ESSEX
GRAND ISLE
LAMOILLE
PROCTOR MAPLE RESEARCH FARM, UNDERHILL
180 CHERRY ST., BURLINGTON
CHITTENDEN
CALEDONIA
WASHINGTON
MERCHANTS ROW, BARRE
ADDISON
ORANGE
9 MERCHANT'S ROW, RUTLAND CITY
RUTLAND
WINDSOR
BENNINGTON
WINDHAM
BRADFORD STREET, BENNINGTON
Vermont PM10 Sites

Vermont PM10





Vermont														
Parameter: PM 10														
										2nd	3rd	4th	Days	Est. D	Wtd.
		Rep.						Highest	Highest	Highest	Highe	Max	Max	Arith.
SITE ID	PC	Org	City	County	Address	# Ob	# Req.	Value	Value	Value	Value	>150	>150	Mean
50-003-0005	1	1119	BENNINGTON	BENNINGTON	BRADFORD STREET	59	61	79	43	40	26	0	0	14
50-007-0007	1	1119	UNDERHILL	CHITTENDEN	PROCTOR MAPLE RE	58	61	70	44	41	21	0	0	10
50-007-0012	1	1119	BURLINGTON	CHITTENDEN	108 CHERRY STREE	58	61	70	47	24	23	0	0	13
50-021-0002	1	1119	RUTLAND	RUTLAND	PARKING LOT ADJ.	58	61	83	50	47	47	0	0	18
50-023-0005	1	1119	BARRE	WASHINGTON	MERCHANTS ROW, B	55	61	72	44	41	32	0	0	17
50-023-0005	2	1119	BARRE	WASHINGTON	MERCHANTS ROW, B	56	61	73	44	40	32	0	0	17


FRANKLIN
ORLEANS
ESSEX
GRAND ISLE
LAMOILLE
PROCTOR MAPLE RESEARCH FARM, UNDERHILL
108 CHERRY ST, BURLINGTON
CHITTENDEN
CALEDONIA
WASHINGTON
MERCHANTS ROW, BARRE
ADDISON
ORANGE
9 MERCHANT'S ROW, RUTLAND
RUTLAND
Vermont PM2.5 Sites
WINDSOR
BENNINGTON
WINDHAM
BRADFORD STREET, BENNINGTON

Vermont PM2.5

Vermont														
Parameter: PM 2.5														
All Values are in UG/CU Meters Local Conditions														
	P							2nd	3rd	4th	98th	Wtd.		
	O	Rept.				#	Highest	Highest	Highest	Highest	Perce	Arith.		Metho
Site ID	C	Org.	City	County	Address	Obs	Value	Value	Value	Value	Value	Mean		Used
50-003-0004	2	1119	BENNINGTON	BENNINGTON	AIRPORT RD, BENN	440	13.0	12.0	8.0	8.0	13.0	6.0	*	703
50-003-0005	1	1119	BENNINGTON	BENNINGTON	BRADFORD STREET	118	69.2	35.2	31.9	31.4	31.9	11.0		Multip
50-007-0007	1	1119	UNDERHILL	CHITTENDEN	PROCTOR MAPLE RE	118	61.9	37.4	37.1	35.0	37.1	8.1		Multip
50-007-0012	1	1119	BURLINGTON	CHITTENDEN	108 CHERRY STREE	121	61.4	39.2	38.0	35.1	38.0	9.9		Multip
50-007-0012	2	1119	BURLINGTON	CHITTENDEN	108 CHERRY STREE	119	62.6	39.2	38.8	35.5	39.2	10.0		118
50-007-0012	3	1119	BURLINGTON	CHITTENDEN	108 CHERRY STREE	8737	62.0	39.0	38.0	35.0	33.0	13.0		740
50-007-0012	5	1217	BURLINGTON	CHITTENDEN	108 CHERRY STREE	119	63.0	40.4	38.2	35.0	38.2	10.6		810
50-021-0002	1	1119	RUTLAND	RUTLAND	PARKING LOT ADJ.	113	72.0	36.8	36.0	35.8	36.0	11.8		Multip
50-021-0002	4	1119	RUTLAND	RUTLAND	PARKING LOT ADJ.	8194	71.0	39.0	39.0	39.0	34.0	9.0		703
50-021-0002	5	1119	RUTLAND	RUTLAND	PARKING LOT ADJ.	505	35.0	34.0	30.0	29.0	35.0	16.0	*	761
50-023-0005	1	1119	BARRE	WASHINGTON	MERCHANTS ROW, B	117	36.0	33.9	33.3	30.9	33.3	11.2		Multip
*Indicates that the mean does not satisfy summary criteria														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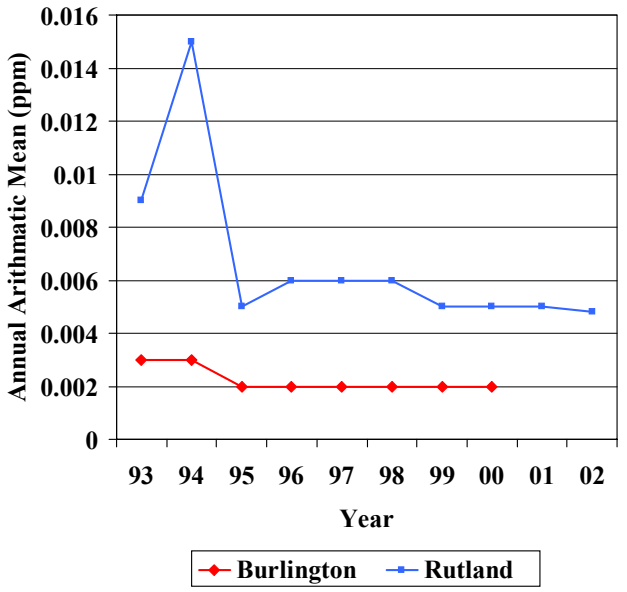
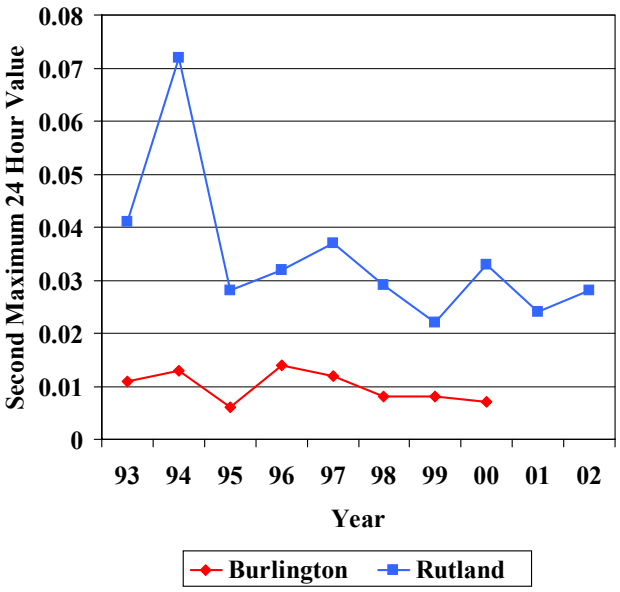
CHITTENDEN
CALEDONIA
WASHINGTON
ADDISON
ORANGE
9 MERCHANT'S ROW, RUTLAND CITY
RUTLAND
WINDSOR
BENNINGTON
WINDHAM
Vermont Sulfur Dioxide Sites

Vermont Sulfur Dioxide





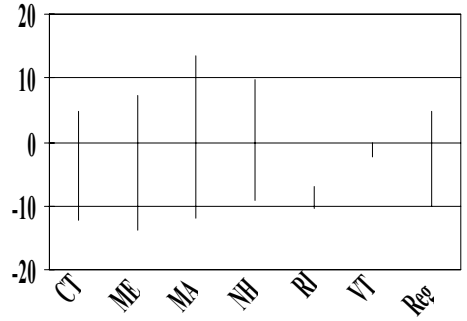
Vermont															
Parameter: Sulfur Dioxide															
All Values are in Units of Parts Per Million															
								24-	24-		3-hour	3-hour		1-hour	1-hour	
	P							hour	hour			2nd			2nd	
	O	Org					#		2nd	Obs	Highest	Highest	Obs	Highest	Highest	Arith.
Site ID	C	Type	City	County	Address	Obs	Highes	Highest	> 0.14	Value	Value	> 0.5	Value	Value	Mean
50-021-0002	1	1119	RUTLAND	RUTLAND	PARKING LOT A	8192	0.036	0.028	0	0.086	0.051	0	0.112	0.084	0.0048

Accuracy Data

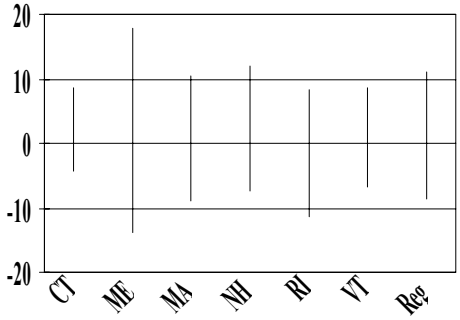
Acceptable 95% probability limits as established by the QA Division of EPA.

Limits	Accuracy
Satisfactory	<± 20%
High	± 21% to ±25%
Excessive	>±25%

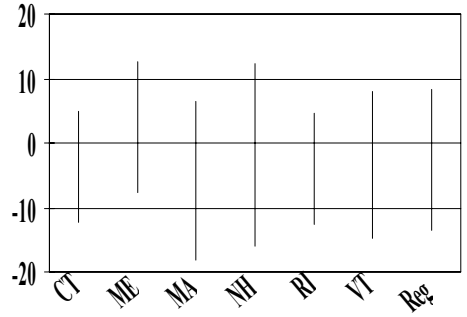
SO2 Accuracy Data



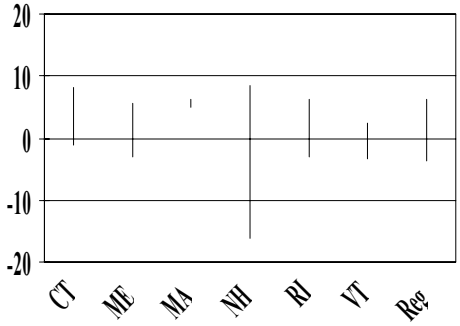
O3 Accuracy Data



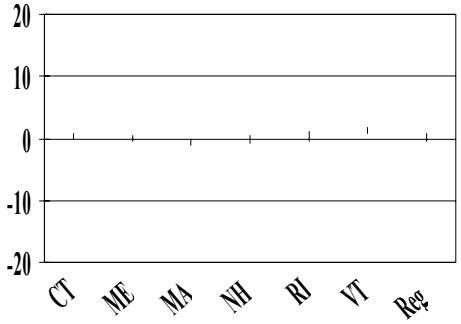
NO2 Accuracy Data



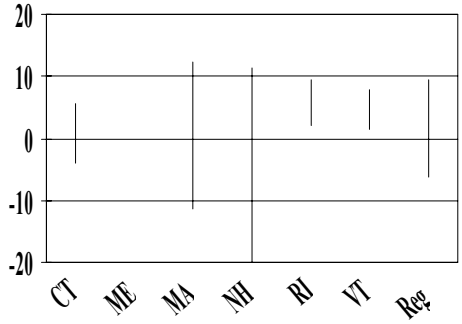
PM10 Accuracy Data



PM2.5 Accuracy Data



CO Accuracy Data

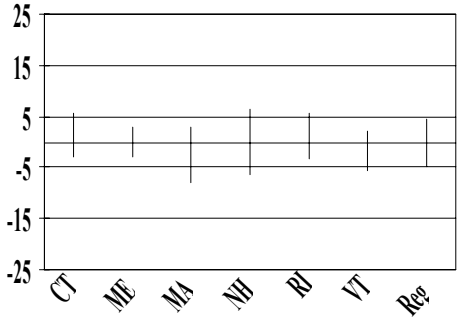


Precision Data

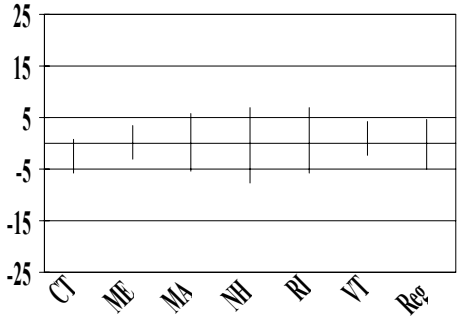
Acceptable 95% probability limits as established by the QA Division of EPA.

Limits	Precision
Satisfactory	<± 15%
High	± 16% to ±20%
Excessive	>±20%

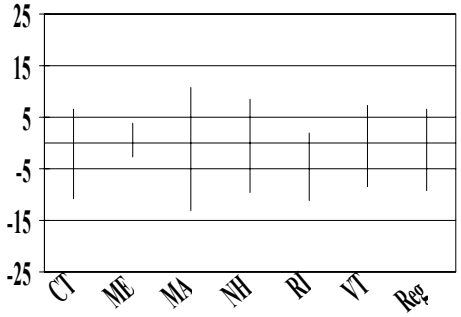
SO2Precision Data



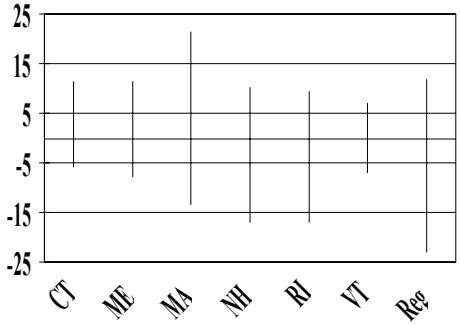
O3 Precision Data



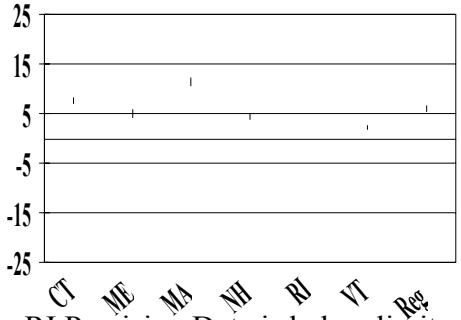
NO2 Precisiony Data



PM10 Precision Data

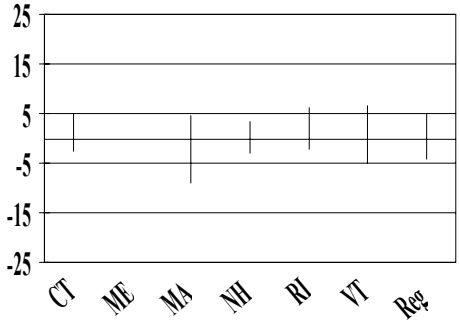


PM2.5 Precision Data



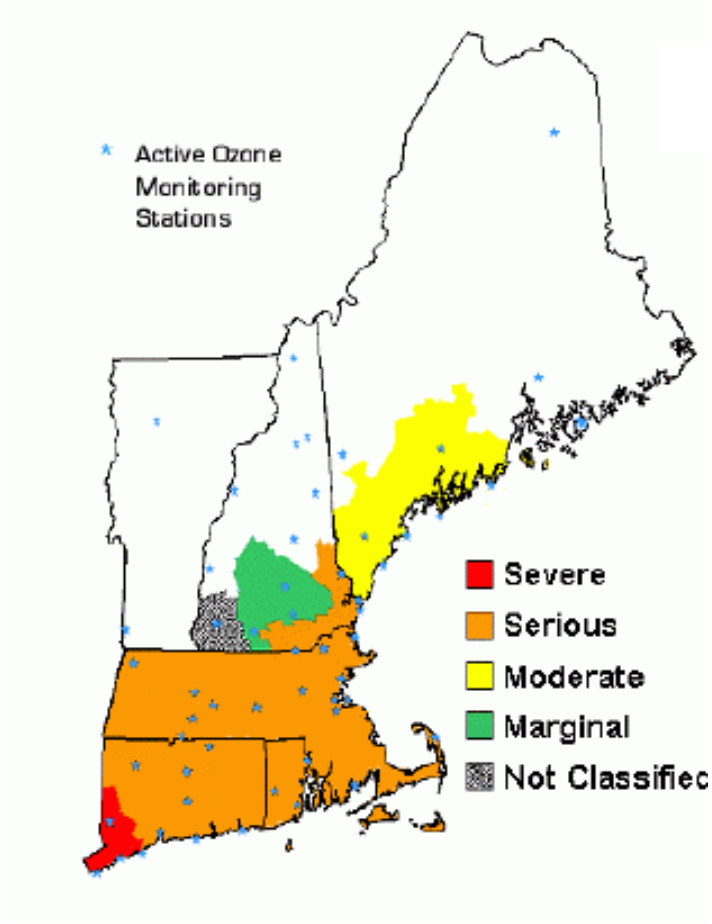
RI Precision Data is below limit.

CO Preision Data

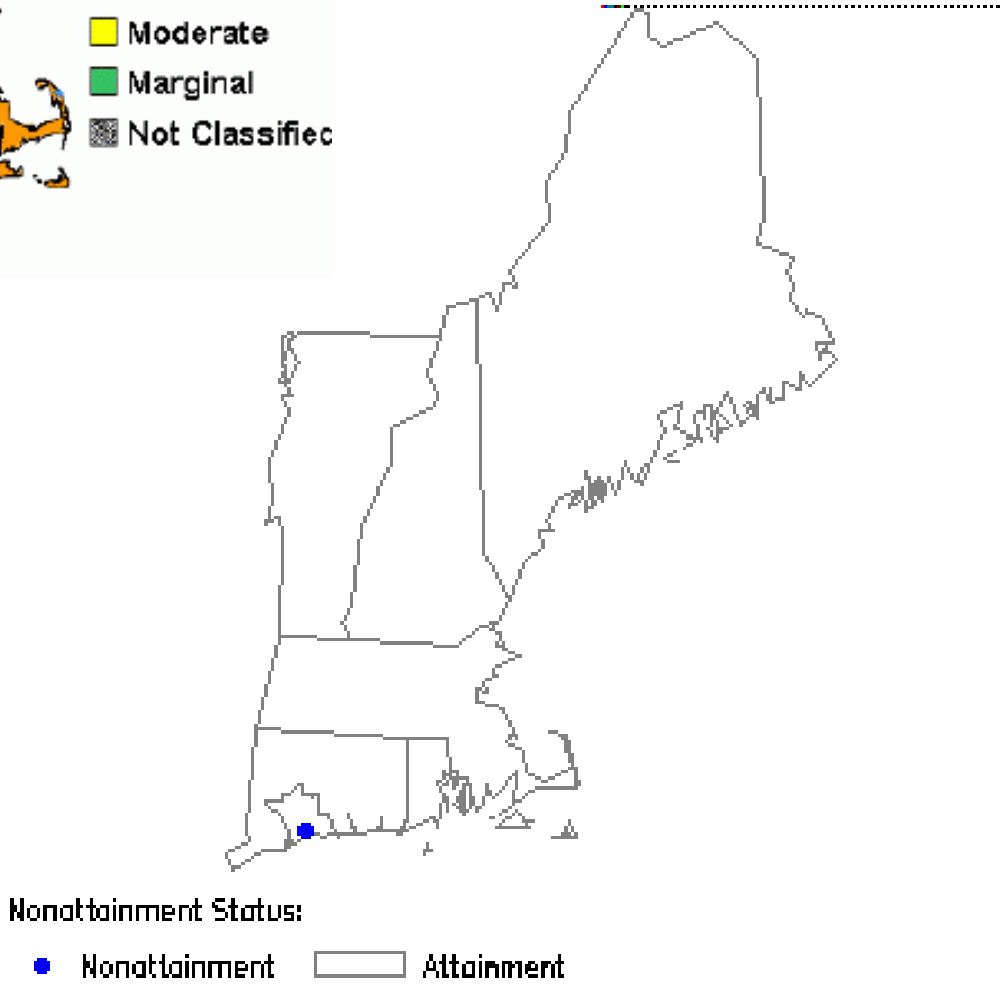


Non-Attainment Areas
for 1-Hour Ozone and PM 10

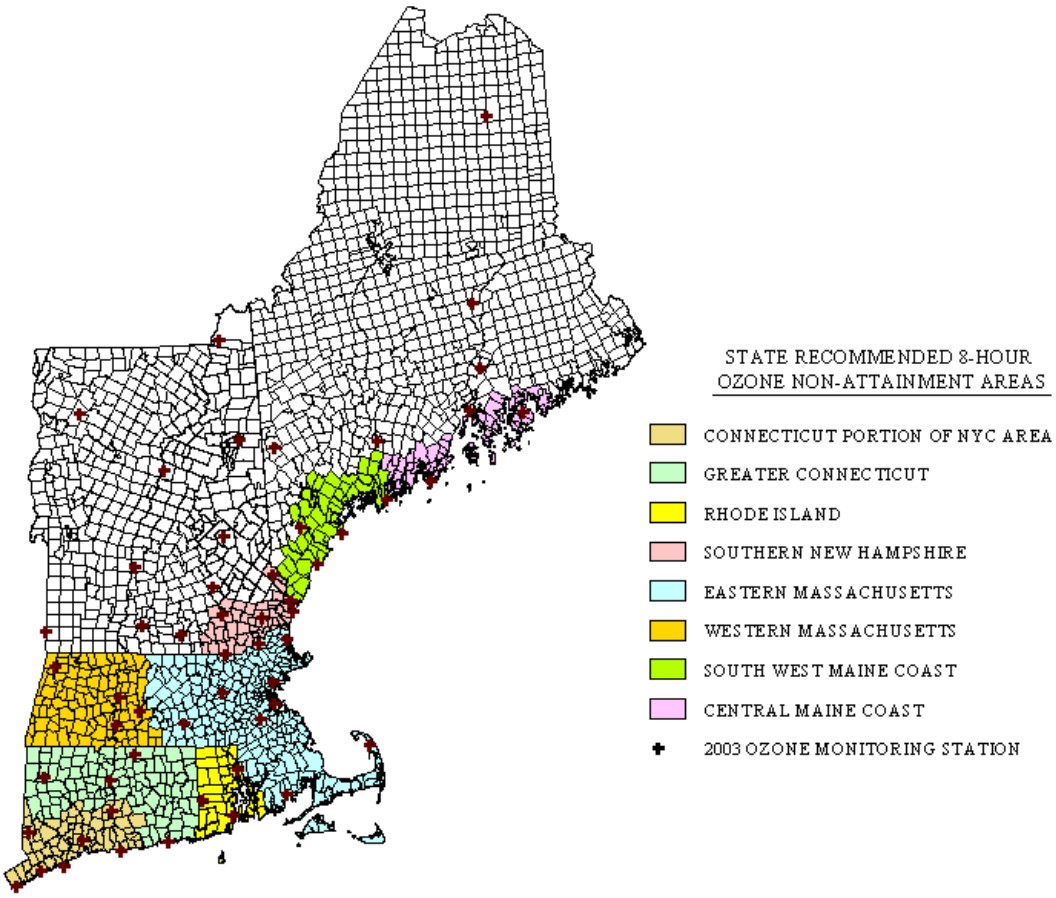
1-Hour Ozone Non-Attainment



PM 10 Non-Attainment



Non-Attainment Areas for 8-Hour Ozone



During the summer of 2003, the New England States submitted recommendations to EPA as to which areas should be designated nonattainment for the 8-hour ozone standard based on 2000-2002 air quality data. A map of the New England States' 8-hour nonattainment recommendations is below. EPA will designate areas as nonattainment for the new ozone standard by April 15, 2004, based on 2001-2003 data.

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Vermont:
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Air Pollution Control Division
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(802) 241-3842
GeorgeA@qtm.anr.state.vt.us

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Department of Environmental Management
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Massachusetts: Ken Santlal
Division of Air Quality Control
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Department of Environmental Services
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Agency of Natural Resources
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