

4.0 Analyses of Individual Nonattainment Areas

4.1 Region 1 Nonattainment Areas

4.1.1 Connecticut

Attachment 1

CONNECTICUT Area Designations For the 24-Hour Fine Particle National Ambient Air Quality Standard

The table below identifies the counties in Connecticut that EPA has designated as not attaining the 2006 24-hour fine particle (PM_{2.5}) standard.¹ A county (or part therefore) is designated as nonattainment if it has an air quality monitor that is violating the standard or if the county is determined to be contributing to a violation of the standard.

Area	Connecticut-Recommended Nonattainment Counties	EPA's Designated Nonattainment Counties
New York City Metropolitan Area	New Haven Fairfield	New Haven Fairfield

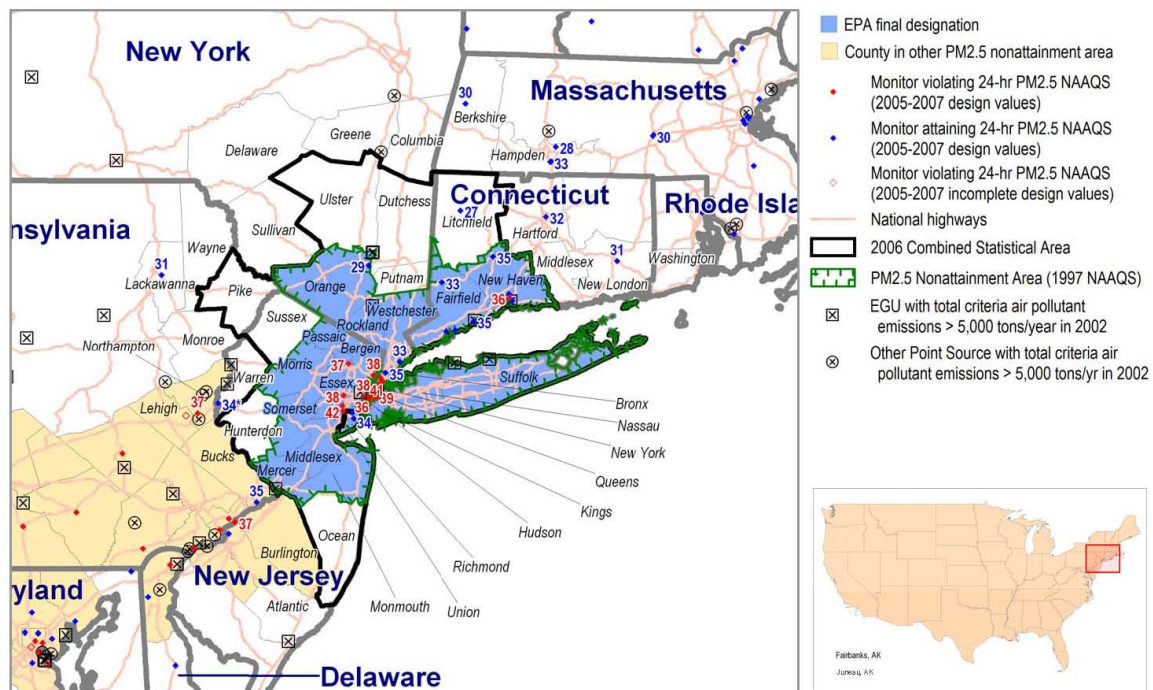
EPA has designated the remaining counties in the state as “attainment/unclassifiable.”

EPA Technical Analysis for the Connecticut Portion of the New York City Metropolitan Area

Introduction

Pursuant to section 107(d) of the Clean Air Act, EPA must designate as nonattainment those areas that violate the NAAQS and those areas that contribute to violations. This technical analysis for the Connecticut portion of the New York-Northern New Jersey-Long Island, NY-NJ-CT area (i.e., New York City metropolitan area) identifies the counties with monitors that violate the 24-hour PM_{2.5} standard and evaluates nearby counties for contributions to fine particle concentrations in the area. EPA has evaluated these counties based on the weight of evidence of the following nine factors recommended in EPA guidance and any other relevant information:

¹ EPA designated nonattainment areas for the 1997 fine particle standards in 2005. In 2006, the 24-hour PM_{2.5} standard was revised from 65 micrograms per cubic meter (average of 98th percentile values for 3 consecutive years) to 35 micrograms per cubic meter; the level of the annual standard for PM_{2.5} remained unchanged at 15 micrograms per cubic meter (average of annual averages for 3 consecutive years).



For this area, EPA previously established PM_{2.5} nonattainment boundaries for the 1997 PM_{2.5} NAAQS that included New Haven and Fairfield Counties in Connecticut.

In December 2007, Connecticut recommended that the same Connecticut counties be designated as “nonattainment” for the 2006 24-hour PM_{2.5} standard based on air quality data from 2004-2006. These data are from Federal Reference Method (FRM) monitors located in the state (letter from Connecticut DEP to EPA, December 14, 2007).

In August 2008, EPA notified Connecticut of its intended designations. In this letter, EPA also requested that if Connecticut wished to provide comments on EPA’s intended designation, it should do so by October 20, 2008. EPA stated that it would consider any additional information (e.g., on power plants or partial county areas) provided by the state in making final decisions on the designations.

Based on EPA's technical analysis described below, EPA has designated Fairfield and New Haven Counties in Connecticut, the same counties that were previously designated for the 1997 PM_{2.5} air-quality standard, as nonattainment for the 2006 24-hour PM_{2.5} standard as part of the New York City metropolitan nonattainment area, based upon currently available information. These counties are listed in the table below.

New York City Metropolitan Area	State-Recommended Nonattainment Counties	EPA-Final Designated Nonattainment Counties
Connecticut	New Haven Fairfield	New Haven Fairfield

The following is a technical analysis for the EPA Region 1 portion of the New York City metropolitan area.

Factor 1: Emissions data

For this factor, EPA evaluated county level emission data for the following PM_{2.5} components and precursor pollutants: “PM_{2.5} emissions total,” “PM_{2.5} emissions carbon,” “PM_{2.5} emissions other,” “SO₂,” “NO_x,” “VOCs,” and “NH₃.” “PM_{2.5} emissions total” represents direct emissions of PM_{2.5} and includes: “PM_{2.5} emissions carbon,” “PM_{2.5} emissions other,” primary sulfate (SO₄), and primary nitrate. (Although primary sulfate and primary nitrate, which are emitted directly from stacks rather than forming in atmospheric reactions with SO₂ and NO_x, are part of “PM_{2.5} emissions total,” they are not shown in Table 1 as separate items). “PM_{2.5} emissions carbon” represents the sum of organic carbon (OC) and elemental carbon (EC) emissions, and “PM_{2.5} emissions other” represents other inorganic particles (crustal). Emissions of SO₂ and NO_x, which are precursors of the secondary PM_{2.5} components sulfate and nitrate, are also considered. VOCs (volatile organic compounds) and NH₃ (ammonia) are also potential PM_{2.5} precursors and are included for consideration.

Emissions data were derived from the 2005 National Emissions Inventory (NEI), version 1. See http://www.epa.gov/ttn/naaqs/pm/pm25_2006_techinfo.html.

EPA also considered the Contributing Emissions Score (CES) for each county. The CES is a metric that takes into consideration emissions data, meteorological data, and air quality monitoring information to provide a relative ranking of counties in and near an area. Note that this metric is not the exclusive manner for considering data for these factors. A summary of the CES is included in attachment 2, and a more detailed description can be found at: http://www.epa.gov/ttn/naaqs/pm/pm25_2006_techinfo.html#C.

Table 1 shows emissions of PM_{2.5} and precursor pollutants components (given in tons per year) and the CES for violating and potentially contributing counties in the New York City metropolitan area. Counties that are part of the New York City metropolitan nonattainment area for the 1997 PM_{2.5} NAAQS are shown in boldface. Counties are listed in descending order by CES.

Table 1. PM_{2.5} Related Emissions and Contributing Emissions Score

County	State Recommended Nonattainment?	CES	PM _{2.5} emissions total (tpy)	PM _{2.5} emissions carbon (tpy)	PM _{2.5} emissions other (tpy)	SO ₂ (tpy)	NO _x (tpy)
Kings, NY	Yes	100	2,230	1,053	1,176	8,274	27,886
New York, NY	Yes	100	3,522	1,864	1,658	13,060	36,742
Hudson, NJ	Yes	100	2,933	671	2,261	27,305	26,889
Suffolk, NY	Yes	100	4,408	1,836	2,572	47,134	54,932
Fairfield, CT	Yes	100	3,056	1,630	1,426	9,533	26,382
Union, NJ	Yes	100	1,092	603	488	3,806	20,040
New Haven, CT	Yes	97	2,871	1,642	1,230	8,250	21,693
Queens, NY	Yes	78	2,976	1,430	1,545	18,460	40,922
Essex, NJ	Yes	77	942	637	304	4,647	22,221
Bronx, NY	Yes	58	1,106	535	571	3,703	14,362
Richmond, NY	Yes	Not Available	790	307	483	2,623	9,466
Bergen, NJ	Yes	48	1,219	886	333	1,691	23,827
Westchester, NY	Yes	43	1,751	947	805	4,770	24,755

Middlesex, NJ	Yes	42	1,549	951	598	3,129	29,172
Nassau, NY	Yes	41	2,149	1,091	1,058	6,203	31,877
Morris, NJ	Yes	24	1,498	953	545	1,177	13,774
Monmouth, NJ	Yes	21	1,506	989	517	1,789	16,771
Rockland, NY	Yes	20	1,296	327	968	12,711	12,777
Orange, NY	Yes	19	2,637	934	1,704	32,973	18,631
Mercer, NJ	Yes	16	1,658	579	1,079	17,891	17,640
Middlesex, CT	No	15	1,173	641	533	2,684	6,941
Somerset, NJ	Yes	15	801	451	349	577	7,886
Hartford, CT	No	14	2,713	1528	1,185	5,301	24,631
Passaic, NJ	Yes	12	755	471	284	733	8,770
Litchfield, CT	No	8	1,671	949	721	1,234	4,400

[Note: the table may not include all counties considered in the technical analysis. Counties not shown had no factors that indicated that they should be candidates for a nonattainment status.]

The five Connecticut counties shown on Table 1 comprise the areas that were considered in this technical analysis as candidates for a nonattainment designation for the 2006 PM_{2.5} 24-hour standard. See the technical analysis for EPA Region 2 for the areas that were considered as candidates for a nonattainment designation in that region.

Based on emissions levels and CES values, New Haven and Fairfield Counties in Connecticut rank well above the other Connecticut counties. CES scores are also quite low for the adjacent Connecticut counties (i.e., 15, 14, and 8 for Middlesex, Hartford, and Litchfield Counties, respectively), which indicates a low potential for emissions from these counties to contribute significantly to PM_{2.5} levels at violating monitors.

Factor 2: Air quality data

This factor considers the 24-hour PM_{2.5} design values (in µg/m³) for air-quality monitors in counties in the New York City metropolitan area based on data for the 2005-2007 period. A monitor's design value indicates whether that monitor attains a specified air-quality standard. The 24-hour PM_{2.5} standard is met when the 3-year average of a monitor's 98th percentile values is 35 µg/m³ or less. A design value is only valid if minimum data completeness criteria are met.

The 24-hour PM_{2.5} design values for counties in the New York City metropolitan area are shown in Table 2.

Table 2. Air Quality Data.

County	State Recommended Nonattainment?	24-hr PM _{2.5} Design Values, 2005-07 (µg/m ³)
Bronx, NY	Yes	39
Kings, NY	Yes	36
Nassau, NY	Yes	33
New York, NY	Yes	39
Orange, NY	Yes	29
Queens, NY	Yes	33
Richmond, NY	Yes	34
Rockland, NY	Yes	No monitor
Suffolk, NY	Yes	30
Westchester, NY	Yes	33
Bergen, NJ	Yes	38
Middlesex, NJ	Yes	32
Monmouth, NJ	Yes	No monitor
Essex, NJ	Yes	39
Mercer, NJ	Yes	34
Hudson, NJ	Yes	42
Union, NJ	Yes	42
Morris, NJ	Yes	32
Passaic, NJ	Yes	37
Somerset, NJ	Yes	No monitor
Fairfield, CT	Yes	35*
New Haven, CT	Yes	36
Litchfield, CT	No	27
Hartford, CT	No	32
Middlesex, CT	No	No monitor

*The 2004-2006 24-hr PM_{2.5} design value for Fairfield County is 36 µg/m³

[Note: Counties that are part of the New York City Metropolitan nonattainment area for the 1997 PM_{2.5} NAAQS are shown in boldface.]

In EPA Region 1, air-quality monitors in only two counties in Connecticut, New Haven and Fairfield Counties (FRM monitors), showed a violation of the 24-hour PM_{2.5} standard based on data from the 2004-2006 and 2005-2007 periods. Therefore, these counties are included in the New York City metropolitan nonattainment area. However, the absence of a violating monitor alone is not a sufficient reason to eliminate counties as candidates for nonattainment status. Each county has been evaluated based on the weight of evidence of the nine factors and other relevant information.

Under this factor, we also consider fine-particle composition monitoring data. Air quality monitoring data on the composition of fine particle mass are available from the EPA Chemical Speciation Network and the IMPROVE monitoring network. Analysis of these data for the New York City metropolitan area indicates that the days with the highest fine-particle concentrations occur predominantly in the warm season and, for Fairfield and New Haven counties in Connecticut, when the average prevailing surface wind direction was from the southwest, which is the direction of New York City.

As shown in Figures 2 and 3, during these high PM_{2.5} days, total PM_{2.5} mass for the New York City metropolitan area is dominated by total carbon in both the warm and cold season months (i.e. 75 percent in the warm season, and 67 percent in the cold season). Sulfates and nitrates comprise most of the remaining PM_{2.5} mass during the cold season (12 and 18 percent, respectively). However, during the warm season, sulfates comprise most of the remaining PM_{2.5} (25 percent), and nitrates are insignificant. Analysis of the composition of total PM_{2.5} mass in the New York City metropolitan area showed a composition similar to many other urban areas in the eastern United States, and suggests that strategies to reduce PM_{2.5} may differ depending on the season.

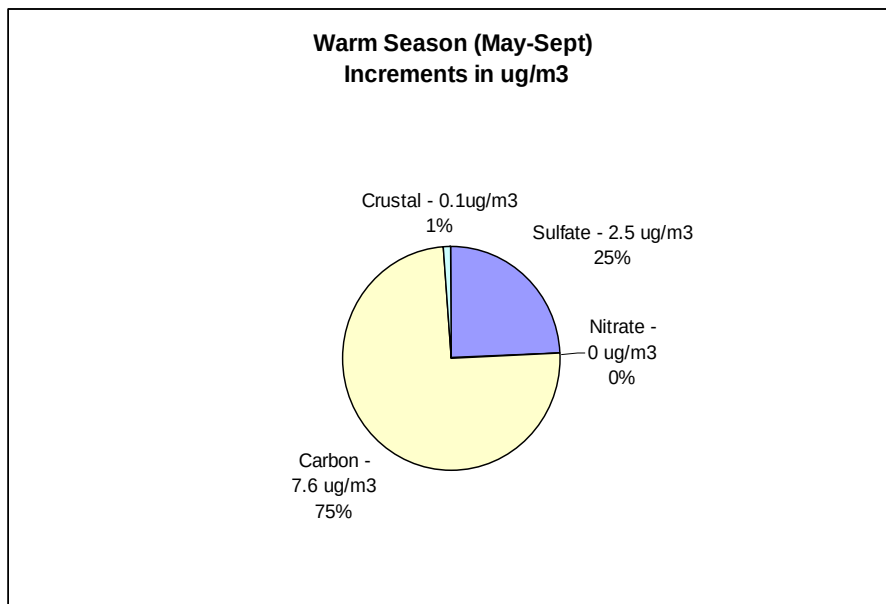


Figure 2. PM_{2.5} composition of warm-season for the New York City Metropolitan area.

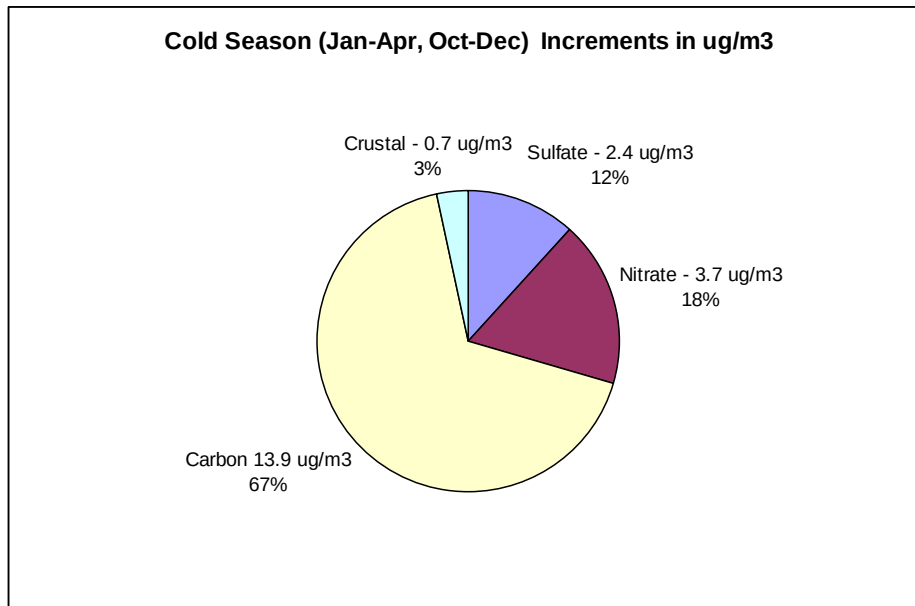


Figure 3. PM_{2.5} composition of cold-season for the New York City Metropolitan area.

[Note: Eligible monitors for providing design value data generally include State and Local Air Monitoring Stations (SLAMS) at population-oriented locations with an FRM monitor. All data from Special Purpose Monitors (SPM) using an FRM eligible for comparison to the relevant NAAQS, subject to the requirements given in the October 17, 2006 Revision to Ambient Air Monitoring Regulations (71 FR 61236). All monitors used to provide data must meet the monitor siting and eligibility requirements given in 71 FR 61236 to 61328 in order to be acceptable for comparison to the 24-hr PM_{2.5} NAAQS for designation purposes.]

Factor 3: Population density and degree of urbanization (including commercial development)

Table 3 shows the 2005 population for counties in the New York City metropolitan area, as well as the population density for each county. Population data give an indication of whether it is likely that population-based emissions might contribute to violations of the 24-hour PM_{2.5} standard. Table 3 is sorted by 2005 population.

Table 3. Population and population density.

County	2005 Population	2005 Population Density (pop/sq mi)
Kings, NY	2,511,408	37,206
Queens, NY	2,256,576	20,477
New York, NY	1,606,275	70,451
Suffolk, NY	1,472,086	1369
Bronx, NY	1,364,566	31.882
Nassau, NY	1,331,620	4289
Westchester, NY	947,719	1989
Bergen, NJ	902,308	3718
Fairfield,	901,086	1385
Hartford, Connecticut	875,422	1168
New Haven,	844,510	1358
Middlesex, NJ	789,283	2487
Essex, NJ	789,166	6099
Monmouth, NJ	634,841	1308
Hudson, NJ	602,970	11,208
Union, NJ	530,710	5035
Passaic, NJ	496,985	2525
Morris, NJ	490,084	1019
Richmond, NY	475,014	7625

Orange, NY	372,750	445
Mercer, NJ	366,070	1601
Somerset, NJ	319,830	1049
Rockland, NY	294,636	1479
Litchfield,	189,358	201
Middlesex,	162,824	422

Note: Counties that are part of the New York City Metropolitan nonattainment area for the 1997 PM_{2.5} NAAQS are shown in boldface.

Counties within New York City (e.g., Kings, Queens, New York, Bronx) have high population and high population densities relative to the remainder of the area. Of the five candidate counties for a nonattainment designation in CT, three (Fairfield, New Haven, and Hartford) have moderately sized populations and population densities relative to other counties in the New York City metropolitan area. Analysis of this factor suggests that Litchfield and Middlesex counties in Connecticut are not likely to have population-based emissions that contribute to violations of the 24-hour PM_{2.5} standard in the New York City metropolitan area.

Factor 4: Traffic and commuting patterns

This factor considers the number of commuters in each county who drive to another county within the New York City metropolitan area, the percent of total commuters in each county who commute to other counties within the New York City metropolitan area, as well as the total Vehicle Miles Traveled (VMT) for each county in millions of miles (see Table 4). A county with numerous commuters is generally an integral part of an urban area and is likely contributing to fine particle concentrations in the area.

Table 4. Traffic and Commuting Patterns.

County	2005 VMT (millions of miles)	Number Commuting to any violating counties	Percent Commuting to any violating counties	Number Commuting into NYC statistical area	Percent Commuting into NYC statistical area
Kings, NY	4,899	861,160	96	895,130	99
Queens, NY	7,839	833,770	90	925,290	99
New York, NY	4,378	718,530	95	742,870	99
Bergen, NJ	9,124	394,140	92	424,530	99
Fairfield, Connecticut	7,649	387,340	93	413,090	99

Bronx, NY	4,721	374,820	90	412,900	100
New Haven, Connecticut	6,948	343,410	89	353,820	91
Essex, NJ	5,611	281,290	86	325,570	99
Hudson, NJ	2,543	244,470	93	262,640	99
Nassau, NY	11,920	201,260	33	616,330	100
Passaic, NJ	3,302	186,060	89	208,770	99
Union, NJ	4,704	181,030	76	237,010	100
Westchester, NY	9,166	141,680	33	421,720	99
Richmond, NY	2,002	97,040	51	190,220	100
Middlesex, NJ	8,014	90,710	25	358,740	99
Suffolk, NY	19,815	81,780	12	667,130	100
Morris, NJ	5,398	77,050	32	236,040	99
Monmouth, NJ	6,230	55,040	19	287,550	99
Rockland, NY	2,731	43,780	33	131,200	99
Somerset, NJ	2,702	32,080	21	148,750	99
Litchfield, Connecticut	1,557	25,520	27	78,750	84
Orange, NY	4,696	24,190	16	150,080	99
Hartford, Connecticut	7,951	20,400	5	24,380	6
Middlesex, Connecticut	1,786	14,320	18	14,660	18
Mercer, NJ	2,668	11,130	7	150,970	93

The listing of counties in Table 4 reflects a ranking based on the number of people commuting to other counties. The counties that are in the nonattainment area for the 1997 PM_{2.5} NAAQS are shown in boldface.

The counties in the New York City metropolitan area with the largest numbers of commuters (more than 700,000 vehicles per year) that travel to counties with violating

monitors are from three New York counties (Kings, Queens, and New York). All other counties in the current New York City nonattainment area have less than 400,000 vehicles that make these trips. Of the Connecticut counties, however, Fairfield and New Haven Counties both have a moderately high number of commuters (about 400,000 and 350,000, respectively) that travel to counties with violating monitors compared to the other three Connecticut counties (that all have less than 26,000). Also note that three Connecticut counties (Fairfield, New Haven, and Hartford) score relatively high for VMT when compared to other counties in the New York City metropolitan area.

However, the above traffic analysis may not adequately take into account heavy-duty truck traffic from Connecticut to both New York and New Jersey. Traffic count data from the New York State Department of Transportation for 2003 indicate that average annual daily traffic crossing the NY-Connecticut border in both directions on Route 1 was 10,017 vehicles (2001), on Interstate 95 was 121,214 vehicles (1998), and on the Hutchinson/Merritt Parkway was 41,177 vehicles (2001). Furthermore, there were about 66,476 vehicles (2003) entering and leaving Connecticut daily via Interstate 84 north of Westchester County. (See <https://www.nysdot.gov/portal/page/portal/divisions/engineering/technical-services/hds-respository/westchestertvbk.pdf>).

Fairfield and New Haven Counties are a conduit for a large percentage of the truck traffic that flows throughout New England. Information from the Federal Highway Administration illustrates that Interstate 95 is the major thoroughfare for truck traffic entering and exiting Connecticut. Moreover, freight shipments via truck from and to Connecticut are expected to increase at least until 2035. (See ops.fhwa.dot.gov/freight/freight_analysis/state_info/connecticut/profile_ct.htm).

Figure 4 shows the Federal Highway Administration's estimate of average annual daily truck traffic in 2020 for the New York City metropolitan area.

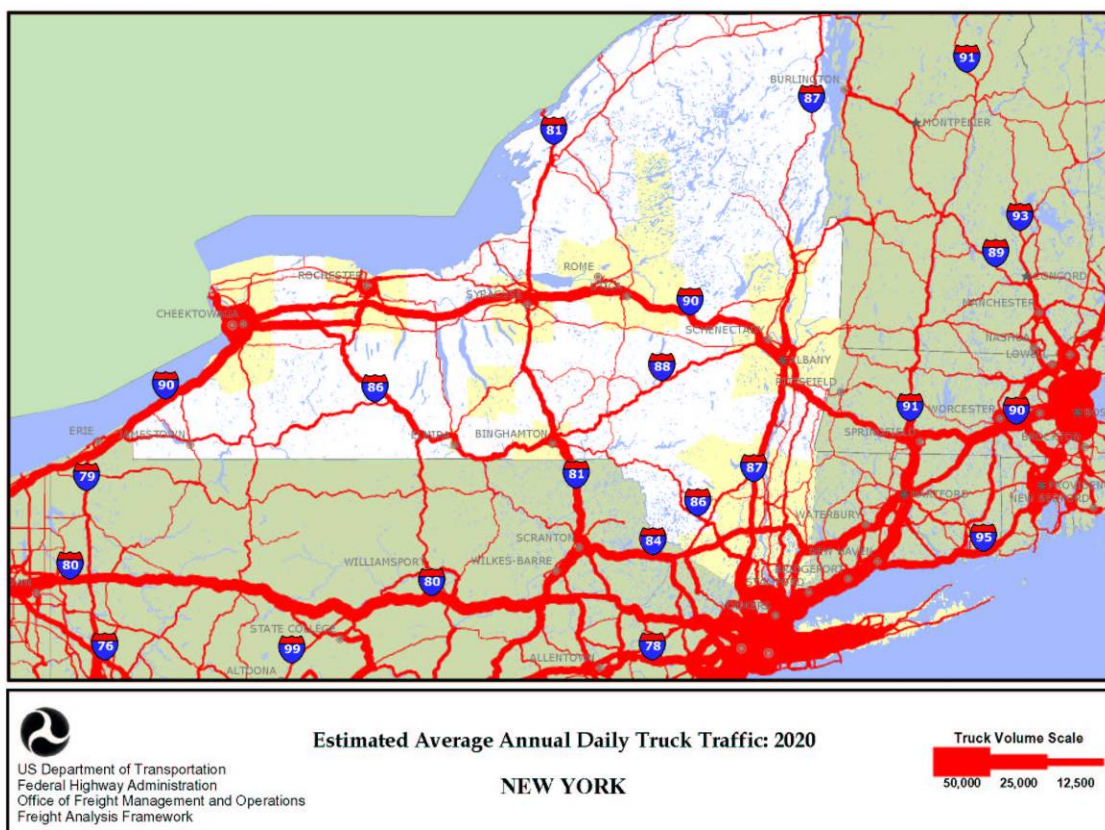


Figure 4. Estimated Average Annual Daily Truck Traffic in 2020

This factor on traffic and commuting patterns highlights Fairfield and New Haven counties in Connecticut as those Connecticut counties most likely to contribute to PM_{2.5} violations at air-quality monitors in the New York City metropolitan area.

Note: The 2005 VMT data used for Tables 4 and 5 of this technical analysis have been derived using methodology such as that described in "Documentation for the 2005 Mobile National Emissions Inventory, Version 2," December 2008, prepared for the Emission Inventory Group, U.S. EPA. This document may be found at:
ftp://ftp.epa.gov/EmissionInventory/2005_nei/mobile_sector/documentation/2005_mobile_nei_version_2_report.pdf

Factor 5: Growth rates and patterns

This factor considers population growth for 2000-2005 and growth in vehicle miles traveled for 1996-2005 for counties in the New York metropolitan area, as well as patterns of population and VMT growth. A county with rapid population or VMT growth is generally an integral part of an urban area and likely to be contributing to fine particle concentrations in the area.

Table 5 shows population, population growth, VMT, and VMT growth for counties in the New York metropolitan area. Counties are listed in descending order based on VMT growth between 1996 and 2005.

Table 5. Population and VMT Growth and Percent Change.

Location	Population (2005)	Population % change (2000-2005)	2005 VMT (millions of mi annually)	VMT % change (1996 to 2005)
Suffolk, NY	1,472,086	3	19,815	191
Westchester, NY	947,719	2	9,166	123
Rockland, NY	294,636	2	2,731	111
Nassau, NY	1,331,620	0	11,920	89
Middlesex, NJ	789,283	5	8,014	56
Morris, NJ	490,084	4	5,398	56
Bergen, NJ	902,308	2	9,124	52
Litchfield, Connecticut	189,358	4	1,557	46
Orange, NY	372,750	9	4,696	39
Somerset, NJ	319,830	7	2,702	39
Monmouth, NJ	634,841	3	6,230	37
Union, NJ	530,710	1	4,704	31
Middlesex, Connecticut	162,824	5	1,786	29
New Haven, Connecticut	844,510	2	6,948	10
Fairfield, Connecticut	901,086	2	7,649	9
Richmond, NY	475,014	7	2,002	8
Hartford, Connecticut	875,422	2	7,951	8
Passaic, NJ	496,985	1	3,302	3

Essex, NJ	789,166	0	5,611	(1)
Queens, NY	2,256,576	1	7,839	(18)
Bronx, NY	1,364,566	2	4,721	(20)
Mercer, NJ	366,070	4	2,668	(22)
Hudson, NJ	602,970	(1)	2,543	(37)
New York, NY	1,606,275	4	4,378	(40)
Kings, NY	2,511,408	2	4,899	(57)

Note: The counties that are in the nonattainment area for the 1997 PM_{2.5} NAAQS are shown in boldface.

In general, except for New York and Suffolk Counties in NY, the most populated counties in the New York City metropolitan area (i.e., those with populations greater than 800,000), experienced lower growth rates from 2000 to 2005 than suburban counties. As Table 5 shows, most of the high growth-rate counties (i.e., 4 to 9 percent population change from 2000 to 2005) are suburban counties in New York, New Jersey, and Connecticut. In Connecticut, the most populated counties (Fairfield, Hartford, and New Haven) experienced a slower population growth rate (2 percent) during this period.

In the Connecticut counties, this pattern of higher population growth for the less populated counties at the outskirts of the New York City metropolitan area also held for VMT growth. The percent growth in VMT for Middlesex and Litchfield Counties from 1996 to 2005 was 26 and 49 percent, respectively. In the more urban Fairfield, Hartford, and New Haven Counties, VMT grew by 10 percent or less during the same period.

This factor played a role in our decision process as it showed that there were many counties in the New York City metropolitan area where there is continued growth in both population and VMT. This indicated that, for counties with high growth, we needed to carefully evaluate other factors and circumstances, such as pollutant emissions, air quality data, meteorology, and geography, to identify candidate areas for a nonattainment designation.

Factor 6: Meteorology (weather/transport patterns)

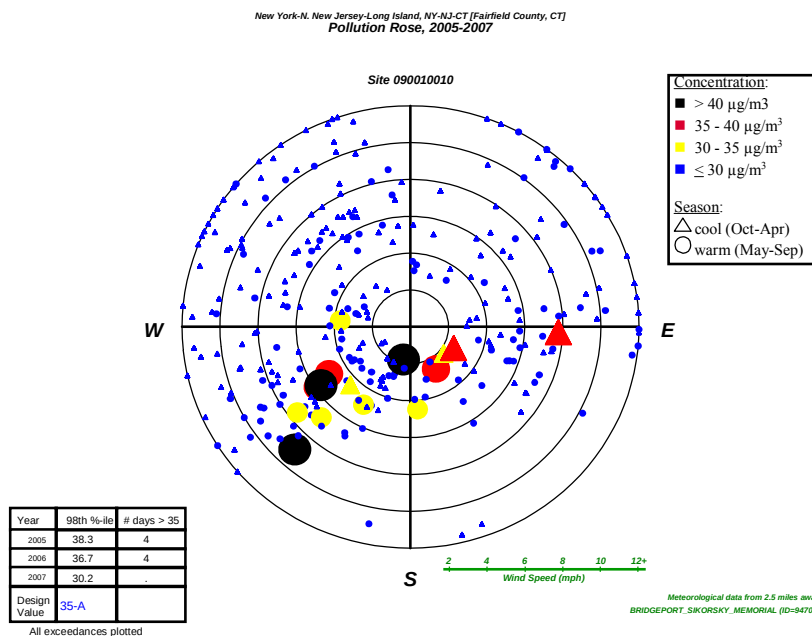
For this factor, EPA considered data from National Weather Service instruments and other meteorological monitoring sites in the area. Wind-direction and wind-speed data for 2005-07 were analyzed, with an emphasis on “high PM_{2.5} days” for each of two seasons (an October-April “cold” season and a May-September “warm” season). These high days are defined as days where any FRM air-quality monitors had 24-hour PM_{2.5} concentrations above 95 percent on a frequency distribution curve of PM_{2.5} 24-hour values.

For each air quality monitoring site, EPA developed a “pollution rose” to understand the prevailing wind direction and wind speed on the days with highest fine particle concentrations. The figure identifies 24-hour $PM_{2.5}$ values by color; days exceeding $35 \mu g/m^3$ are denoted with a red or black icon. A dot indicates the day occurred in the warm season; a triangle indicates the day occurred in the cool season. The center of the figure indicates the location of the air quality monitoring site, and the location of the icon in relation to the center indicates the direction from which the wind was blowing on that day. An icon that is close to the center indicates a low average wind speed on that day. Higher wind speeds are indicated when the icon is further away from the center.

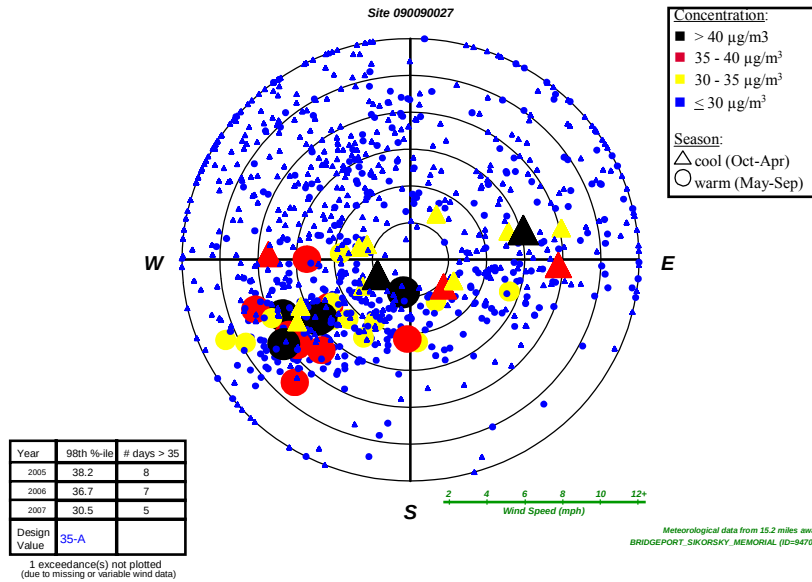
The meteorology factor is also considered in each county’s Contributing Emissions Score because the method for deriving this metric included an analysis of trajectories of air masses for high $PM_{2.5}$ days.

Figure 5 shows pollution roses for violating monitors in Fairfield and New Haven Counties. These pollution roses show the average prevailing surface wind direction and $PM_{2.5}$ concentration for high $PM_{2.5}$ days. The pollution roses show that 24-hour $PM_{2.5}$ concentrations are influenced by emissions from any direction at various times, but these data also suggest that emissions from some directions relative to the violation are more likely to contribute to the violation than emissions from other directions.

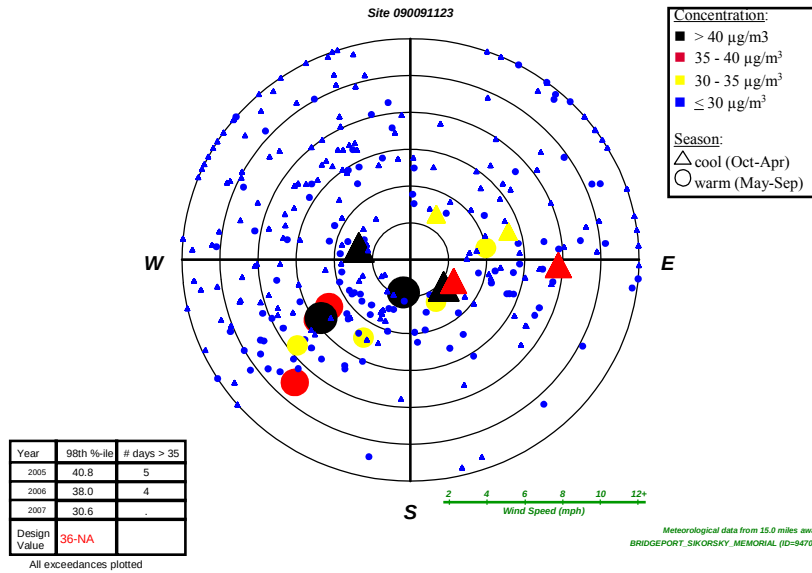
Figure 5. Pollution Roses for Connecticut Counties in the New York City Metropolitan Area.

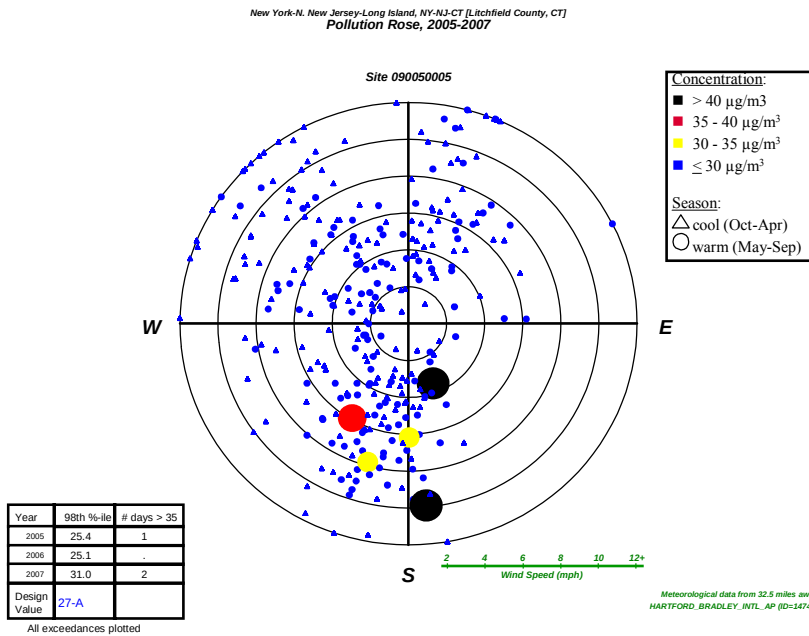
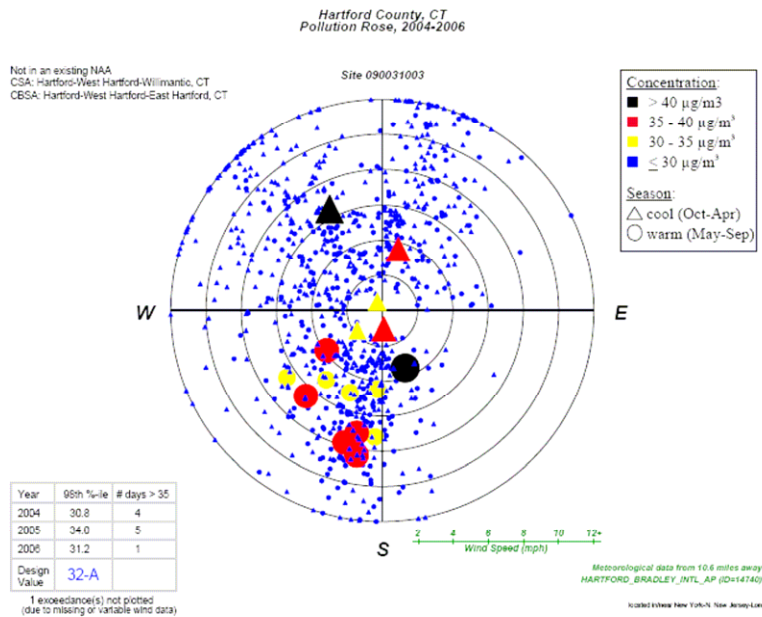


New York-N. New Jersey-Long Island, NY-NJ-CT [New Haven County, CT]
Pollution Rose, 2005-2007



New York-N. New Jersey-Long Island, NY-NJ-CT [New Haven County, CT]
Pollution Rose, 2005-2007





EPA's analysis of meteorology for the New York City Metropolitan area shows that, in general for the entire area, PM_{2.5} emissions during high PM_{2.5} days primarily originated from, or passed through, locations from a southerly to a southwesterly direction.

This is also generally true for the five Connecticut counties considered herein for a nonattainment designation for the 2006 PM_{2.5} 24-hour NAAQS. Pollution roses for Fairfield and New Haven counties show a strong tendency for higher levels of PM_{2.5} when the average prevailing surface wind direction is from the southwest, which is the direction of New York City. Pollution roses for Hartford and Litchfield Counties also show an influence from the southwest (particularly Hartford), but also show some component of elevated PM_{2.5} originating from southeastern and northerly directions. (There are no pollution roses for Middlesex County because there are no PM_{2.5} monitors in this county.)

Based on analysis of this factor, EPA concludes that Litchfield, Middlesex, and Hartford Counties, which are further removed geographically and meteorologically from other counties in the New York City metropolitan area and contain no violating PM_{2.5} monitors are low-ranked candidates for a 24-hour PM_{2.5} nonattainment designation. This conclusion is also supported by the CES scores for the Connecticut counties, which are much lower for Middlesex, Hartford, and Litchfield Counties (15, 14, and 8, respectively) than for Fairfield and New Haven (100 and 97, respectively), indicating that emissions from Middlesex, Hartford, or Litchfield Counties are unlikely to contribute significantly to PM_{2.5} levels at violating monitors in the New York City area.

Note: the meteorology factor is also considered in each county's Contributing Emissions Score because the method for deriving this metric included an analysis of trajectories of air masses for high PM_{2.5} days.

Factor 7: Geography/topography (mountain ranges or other air basin boundaries)

The geography/topography analysis looks at physical features of the land that might have an effect on the air shed and, therefore, on the distribution of PM_{2.5} over the New York City metropolitan area.

The New York City metropolitan area does not have any geographical or topographical barriers significantly limiting air-pollution transport within its air shed. Therefore, this factor did not play a significant role in the decision-making process.

Factor 8: Jurisdictional boundaries (e.g., existing PM_{2.5} areas)

In evaluating the jurisdictional boundary factor, EPA gave special consideration to areas that were already designated nonattainment in 2005 for violating the 1997 fine particle standards. Analysis of chemical composition data in these areas indicates that the same components that make up most of the PM_{2.5} mass in the area on an annual average basis (such as sulfate and direct PM_{2.5} carbon in many eastern areas) also are key contributors to the PM_{2.5} mass on days exceeding the 24-hour PM_{2.5} standard. These data indicate that in many cities, the same source categories that contribute to violations of the annual standard also contribute to exceedances of the 24-hour standard.

Most areas that were originally designated nonattainment for the PM_{2.5} standards still have not attained the standards. Thus, EPA has generally concluded that counties that were designated as having emissions sources contributing to fine particle concentrations which continue to exceed the 1997 standards (all areas violated the annual standard, three also violated the previous 24-hour standard) also contribute to fine particle concentrations on the highest days. For this reason, EPA believes that for most existing nonattainment areas, the nonattainment area for the 2006 24-hour standard should be the same. Consideration also should be given to existing boundaries and organizations as they may facilitate air quality planning and the implementation of control measures to attain the standard. Areas already designated as nonattainment represent important boundaries for state air quality planning.

From a New England perspective, the major jurisdictional boundary for the New York City metropolitan area (and adjacent counties) is the state line between New York and Connecticut.

Areas designated as 8-hour ozone nonattainment areas are also important boundaries for state air-quality planning. On April 15, 2004, Fairfield, New Haven, and Middlesex counties in Connecticut were included in the 8-hour ozone nonattainment area associated with the New York City metropolitan area. Other Connecticut counties included in this technical analysis (i.e., Litchfield and Hartford Counties) are also designated as 8-hour ozone nonattainment areas, but are not associated with the New York City area (see 40 CFR 81.307). To the degree appropriate, based upon violations and contributions to violations of the ozone and PM_{2.5} NAAQS in a particular area, EPA believes it may be helpful for air planning purposes and for attainment of both NAAQS, for there to be some consistency between ozone and PM_{2.5} nonattainment area boundaries.

Factor 9: Level of control of emission sources

Under this factor, the existing level of control of emission sources is taken into consideration. The emissions data used by EPA in this technical analysis and provided in Table 1 (under Factor 1) represent emissions levels taking into account any control strategies implemented in the New York City Metropolitan area before 2005 on stationary, mobile, and area sources. Data are presented for PM_{2.5} components that are directly emitted (carbonaceous PM_{2.5} and crustal PM_{2.5}) and for pollutants which react in the atmosphere to form fine particles (e.g. SO₂, NO_x, VOC, and ammonia).

Conclusion

EPA concludes that Fairfield and New Haven Counties in Connecticut, which are the same counties that were previously designated for the 1997 annual PM_{2.5} air-quality standard, should be included as part of the New York City metropolitan nonattainment area. This decision is based on the fact that Fairfield and New Haven counties had monitors that violated the 2006 24-hour fine particle (PM_{2.5}) standard based on data from the 2004-2006 and 2005-2007 periods, and on a weight-of-evidence analysis of nine factors recommended in EPA guidance, and analytical tools and data such as pollution

roses, fine particle composition monitoring data, back trajectory analyses, and contributing emission scores (CESs).

EPA also concludes that Connecticut counties adjacent to the New York City Metropolitan area (Hartford, Litchfield, and Middlesex) do not contribute to any violating monitors and, therefore, should not be included in the PM_{2.5} nonattainment area. Specifically, none of these counties had violating monitors, and all had emissions levels and CES values that ranked well below those for New Haven and Fairfield Counties. In addition, Middlesex and Litchfield counties have low populations and population densities relative to other counties in the New York City metropolitan area. Despite higher population levels in Hartford County, this county as well as Litchfield and Middlesex counties are further removed geographically and meteorologically from other counties in the New York City metropolitan area. Based on these considerations and other relevant information, we conclude that these adjacent counties are unlikely to contribute significantly to violations of the 24-hour PM_{2.5} standard in the New York City metropolitan area.

Additional information regarding responses to specific State comments can be found in EPA's Response to Comments document at <http://www.epa.gov/pmdesignations/2006standards/tech.htm>.

Attachment 2

Description of the Contributing Emissions Score

The CES is a metric that takes into consideration emissions data, meteorological data, and air quality monitoring information to provide a relative ranking of counties in and near an area. Using this methodology, scores were developed for each county in and around the relevant metro area. The county with the highest contribution potential was assigned a score of 100, and other county scores were adjusted in relation to the highest county. The CES represents the relative maximum influence that emissions in that county have on a violating county. The CES, which reflects consideration of multiple factors, should be considered in evaluating the weight of evidence supporting designation decisions for each area.

The CES for each county was derived by incorporating the following significant information and variables that impact PM_{2.5} transport:

- Major PM_{2.5} components: total carbon (organic carbon (OC) and elemental carbon (EC)), SO₂, NO_x, and inorganic particles (crustal).
- PM_{2.5} emissions for the highest (generally top 5%) PM_{2.5} emission days (herein called “high days”) for each of two seasons, cold (Oct-Apr) and warm (May-Sept)
- Meteorology on high days using the NOAA HYSPLIT model for determining trajectories of air masses for specified days
- The “urban increment” of a violating monitor, which is the urban PM_{2.5} concentration that is in addition to a regional background PM_{2.5} concentration, determined for each PM_{2.5} component
- Distance from each potentially contributing county to a violating county or counties

A more detailed description of the CES can be found at:

http://www.epa.gov/ttn/naaqs/pm/pm25_2006_techinfo.html#C

FREIGHT

Freight Shipments To, From, and Within Connecticut

The following tables summarize data from the new and improved version of the Freight Analysis Framework (FAF^{2.2}). FAF^{2.2} integrates data from several sources to estimate commodity flows and related freight transportation activity among major metropolitan areas, states, regions, and international gateways. FAF^{2.2} data should not be compared with the original FAF data because estimation methods have been improved and data coverage is more complete. Additional information is available at www.ops.fhwa.dot.gov/freight/freight_analysis/faf.

Shipments by Weight: 2002 and 2035 (Millions of Tons)

2002							2035					
Within State			From State		To State		Within State		From State		To State	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	52.5	100	29.2	100	49.7	100	104.1	100	68.6	100	102.7	100
Truck	48.5	92	20.9	72	31.0	62	96.6	93	50.5	74	73.3	71
Rail	<0.1	<1	0.6	2	2.3	5	<0.1	<1	1.1	2	4.4	4
Water	<0.1	<1	<0.1	<1	2.6	5	<0.1	<1	<0.1	<1	1.6	2
Air, air & truck	<0.1	<1	<0.1	<1	<0.1	<1	<0.1	<1	<0.1	<1	<0.1	<1
Truck & rail	0.1	<1	<0.1	<1	0.2	<1	0.3	<1	<0.1	<1	0.3	<1
Other intermodal ¹	0.1	<1	0.4	1	0.4	<1	0.3	<1	1.2	2	1.0	1
Pipeline & unknown ²	3.8	7	7.2	25	13.3	27	6.9	7	15.8	23	22.0	21

¹Other intermodal includes U.S. Postal Service and courier shipments and all intermodal combinations except air and truck; ²Pipeline and unknown shipments are combined because data on region-to-region flows by pipeline are statistically uncertain. Note: Numbers may not add to totals due to rounding.

Shipments by Value: 2002 and 2035 (\$ Millions)

2002							2035					
Within State			From State		To State		Within State		From State		To State	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	31,583.8	100	72,027.5	100	72,583.5	100	66,200.9	100	201,790.0	100	221,490.4	100
Truck	28,534.1	90	53,136.4	74	51,437.9	71	60,757.2	92	131,676.5	65	150,691.7	68
Rail	<0.1	<1	188.1	<1	1,566.0	2	<0.1	<1	507.5	<1	3,602.4	2
Water	<0.1	<1	1.0	<1	397.7	<1	<0.1	<1	1.3	<1	194.4	<1
Air, air & truck	7.0	<1	892.4	1	820.3	1	4.3	<1	2,891.4	1	2,789.4	1
Truck & rail	8.9	<1	6.0	<1	388.1	<1	18.8	<1	19.8	<1	1,020.1	<1
Other intermodal ¹	1,367.7	4	14,409.1	20	12,609.3	17	2,304.4	3	60,796.3	30	55,078.1	25
Pipeline & unknown ²	1,666.0	5	3,394.5	5	5,364.1	7	3,116.3	5	5,897.3	3	8,114.3	4

¹Other intermodal includes U.S. Postal Service and courier shipments and all intermodal combinations except air and truck; ²Pipeline and unknown shipments are combined because data on region-to-region flows by pipeline are statistically uncertain. Note: Numbers may not add to totals due to rounding.

Top Commodities by Weight and Value: 2002

Tons (millions)			Value (\$ millions)		
Within State	From State	To State	Within State	From State	To State
Total 52.5	Total 29.2	Total 49.7	Total 31,583.8	Total 72,027.5	Total 72,583.5
Gravel 9.8	Coal, n.e.c. ¹ 7.1	Coal, n.e.c. ¹ 13.9	Mixed freight 5,204.7	Machinery 10,232.5	Machinery 8,039.3
Mixed freight 7.7	Unknown 2.0	Fuel oils 3.1	Machinery 3,888.2	Pharmaceuticals 6,953.4	Electronics 7,760.7
Coal, n.e.c. ¹ 5.0	Waste/scrap 1.9	Gasoline 2.7	Plastics/rubber 1,679.7	Electronics 5,910.2	Mixed freight 5,906.1
Other ag prods. 4.8	Mixed freight 1.8	Base metals ² 2.4	Unknown 1,508.0	Mixed freight 5,881.9	Textiles/leather 4,102.5
Waste/scrap 3.9	Chemical prods. 1.4	Other ag prods. 2.3	Coal, n.e.c. ¹ 1,414.5	Precision instr. 4,539.5	Coal, n.e.c. ¹ 3,867.9

¹Coal and petroleum products, not elsewhere classified; ²Base metal in primary or semi-finished forms and in finished basic shapes.

Top Trading Partners: 2002

Tons (millions)			Value (\$ millions)		
Number	Percent		Number	Percent	
Total 78.9	100		Total 144,611.0	100	
Foreign 11.2	14		Foreign 9,896.0	7	
NY 21.2	27		NY 25,863.8	18	
MA 10.9	14		MA 20,956.7	14	
NJ 8.9	11		NJ 14,369.7	10	
RI 5.5	7		PA 7,636.4	5	

Note: Numbers may not add to totals due to rounding.

Top Trading Partners: 2035

Tons (millions)			Value (\$ millions)		
Number	Percent		Number	Percent	
Total 171.3	100		Total 423,280.4	100	
Foreign 25.1	15		Foreign 33,411.0	8	
NY 36.3	21		MA 60,675.7	14	
MA 29.7	17		NY 59,669.3	14	
RI 17.6	10		CA 37,878.6	9	
NJ 10.8	6		NJ 25,254.0	6	

Note: Numbers may not add to totals due to rounding.

For more information, please contact

Tianjia Tang
202-366-2217
Tianjia.Tang@dot.gov

FHWA-HOP-07-017
EDL 14334



Freight Analysis Framework



U.S. Department
of Transportation

Federal Highway
Administration

LIST OF STATE ROUTES IN WESTCHESTER COUNTY

SELECT A ROUTE TO VIEW MOST RECENT TRAFFIC COUNTS FOR THAT ROUTE

[CLICK HERE FOR MORE INFORMATION](#)

1	116	133
6	117	134
6N	118	137
9	119	138
9A	120	139
9D	120A	141
22	121	172
35	123	202
87I	124	287I
95I	125	433
100	127	448
100A	128	684I
100B	129	
100C	132	

907K	Cross County Parkway	984E	Yonkers Avenue
907W	Hutchinson River Parkway (Westchester)	984G	
981U		984H	Riverdale Ave Arterial
981V	Memorial Highway	984J	East Spur 684I
982B	Midland Avenue	984L	
982C	Putnam Avenue	984M	
982J		987D	Saw Mill River Parkway
983B	Nepperhan Ave Arterial	987F	Sprain Brook State Parkway
983C	Yonkers Avenue	987G	Taconic State Parkway
983D	Spring Street	987H	Bear Mountain Parkway

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
1	0.17	BRONX CO LINE	ACC HUTCHINSON R PKWY	99	18824
1	0.68	ACC HUTCHINSON R PKWY	PELHAMDALE AVE	95	12726
1	0.59	PELHAMDALE AVE	ACC RT 95I	02	15764
1	2.18	ACC RT 95I	NEW ROCHELLE E CITY LN	95	17497
1	1.43	TOWN OF MAMORONECK	RT 125 LARCHMONT	96	15920
1	1.23	RT 125 LARCHMONT	MAMARONECK RD	03	20695
1	0.60	MAMARONECK RD	RT 127 MAMARONECK	97	17589
1	2.17	RT 127 MAMARONECK	PLAYLAND PKY	02	11966
1	0.92	PLAYLAND PKY	RT 120	02	8752
1	0.45	RT 120	ACC RT 95I	97	11163
1	0.35	ACC RT 95I	RYE N CITY LN ACC 287I	97	16206
1	0.76	VILLAGE OF PORT CHESTER	GRACE CHURCH ST	02	17801
1	0.24	GRACE CHURCH ST	WESTCHESTER AVE	02	18561
1	0.92	WESTCHESTER AVE	CONN STATE LINE END 1	02	10017
6	0.24	ROCKLAND CO LINE	RT 9D	03	17900
6	3.57	RT 9D	START 9 OLAP	03	12703
6	0.12	START 9 OLAP	PEEKSKILL N CITY LN BMP	00	23442
6	0.61	CITY OF PEEKSKILL	END 9 START 35 OLAPS	99	33360
6	0.85	END 9 START 35 OLAPS	END 35 202 OLAPS	03	8860
6	1.42	END 35 202 OLAPS	PEEKSKILL E CITY LN	03	14541
6	0.26	TOWN OF CORTLANDT	RT 987H BEAR MOUNTAIN PKWY	03	20589
6	2.31	RT 987H BEAR MOUNTAIN PKWY	MOHEGAN AVE	03	18375
6	1.93	MOHEGAN AVE	RT 132 SHRUB OAK	99	21854
6	0.21	RT 132 SHRUB OAK	ACC TACONIC STATE PKWY 987G	02	32679
6	0.38	ACC TACONIC STATE PKWY 987G	LEE BLVD	02	36674
6	0.48	LEE BLVD	HILL BLVD	02	17921
6	0.98	HILL BLVD	RT 6N JEFFERSON VALLEY	03	20588
6	1.65	RT 6N JEFFERSON VALLEY	PUTNAM CO LINE	01	17497
6N	0.76	RT 6 JEFFERSON VALLEY	PUTNAM CO LINE	99	3149
9	0.64	BRONX CO LN	MC CLEAN AVE	99	11897
9	1.41	MC CLEAN AVE	END 9A OLAP	99	14883
9	2.83	END 9A OLAP	YONKERS N CITY LN	02	9196
9	1.20	VILLAGE OF HASTINGS ON HUDSO	FARRAGUT PKY	03	7357
9	1.79	FARRAGUT PKY	ASHFORD AVE DOBBS FRRY	03	11863
9	3.42	ASHFORD AVE DOBBS FRRY	RT 119 TARRYTOWN	02	17058
9	0.63	RT 119 TARRYTOWN	BENEDICT AVE	03	24478
9	0.98	BENEDICT AVE	RT 448	03	18246
9	1.70	RT 448	RT 117 N TARRYTOWN	00	14883
9	3.73	RT 117 N TARRYTOWN	RT 133 OSSINING	03	19411
9	1.65	RT 133 OSSINING	START 9A OLAP	03	19227
9	4.12	START 9A OLAP	ACC 9A MONTROSE	03	49918
9	3.03	ACC 9A MONTROSE	RT 9A WELCHER AVE	02	34151
9	1.45	RT 9A WELCHER AVE	RT 35 START 6 202 OLAPS	99	31025
9	0.61	RT 35 START 6 202 OLAPS	RT 987H BEAR MT PKWY PEEKSKI	99	33360
9	0.12	TOWN OF CORTLANDT	END 6 202 OLAPS	00	23442
9	1.85	END 6 202 OLAPS	MANITOU RD	01	15034
9	0.34	MANITOU RD	PUTNAM CO LINE	02	15539
9A	0.64	BRONX CO LN	MC CLEAN AVE	99	11897
9A	1.41	MC CLEAN AVE	END 9 OLAP	99	14883
9A	1.90	END 9 OLAP	OLD NEPPERHAN AVE	03	13537
9A	0.15	OLD NEPPERHAN AVE	ACC SAWMILL RIVER PKWY	00	21131
9A	1.75	ACC SAWMILL RIVER PKWY	YONKERS N CITY LN	02	9269
9A	2.18	VILLAGE OF HASTINGS ON HUDSO	ACC RT 87I ARDSLEY	02	7771
9A	1.41	ACC RT 87I ARDSLEY	RT 100B WOODLANDS	03	13408
9A	2.55	RT 100B WOODLANDS	RT 119 ELMSFORD	01	7223

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
9A	0.28	RT 119 ELMSFORD	ACC RT 287I ELMSFORD	03	24931
9A	1.13	ACC RT 287I ELMSFORD	ACC RT 100C	02	21084
9A	1.40	ACC RT 100C	ACC SMRP NB	03	22363
9A	1.08	ACC SMRP NB	RT 141	02	18171
9A	0.20	RT 141	START 100 OLAP	02	18304
9A	1.13	START 100 OLAP	ACC RT 117	02	32582
9A	0.86	ACC RT 117	TOWN OF MOUNT PLEASANT VILLA	02	30946
9A	1.12	TOWN OF MOUNT PLEASANT VILLA	END 100 OLP SAWMILL RD	02	42396
9A	1.52	END 100 OLP SAWMILL RD	ACC RT 133 OSSINING	02	37130
9A	1.35	ACC RT 133 OSSINING	RT 134	03	39050
9A	1.51	RT 134	START 9 OLAP	00	30958
9A	0.65	START 9 OLAP	END RT 9 OLAP CROTON POINT	02	49893
9A	1.93	END RT 9 OLAP CROTON POINT	OLD POST RD	99	5719
9A	1.70	OLD POST RD	ACC 9 MONTROSE	02	5768
9A	3.10	ACC 9 MONTROSE	PEEKSKILL S CITY LN	03	11581
9A	0.16	CITY OF PEEKSKILL	RT 9 END 9A	03	12974
9D	0.26	RTS 6 202	PUTNAM CO LINE	01	4065
22	2.48	BRONX CO LN	RT 907K CROSS COUNTY PKWY	02	8398
22	1.39	RT 907K CROSS COUNTY PKWY	WINTER MILL RD	98	5894
22	1.05	WINTER MILL RD	MILL RD	02	12612
22	3.90	MILL RD	MAMARONECK RD	01	13429
22	0.72	MAMARONECK RD	WHITE PLAINS S CITY LN	02	12747
22	1.24	CITY OF WHITE PLAINS	RT 125	02	10404
22	0.28	RT 125	WESTCHESTER AVE	03	17818
22	0.22	WESTCHESTER AVE	JCT RT 119	03	29844
22	0.86	JCT RT 119	RT 287I CROSS WEST EXP	97	21795
22	0.60	RT 287I CROSS WEST EXP	WHITE PLAINS N CITY LN	03	21783
22	0.18	TOWN OF NORTH CASTLE	CR 150 CENTRAL W PKWY	02	13809
22	0.53	CR 150 CENTRAL W PKWY	RD TO VALHALLA BROADWAY	03	21061
22	3.91	RD TO VALHALLA BROADWAY	START 120 OLAP	01	13331
22	0.23	START 120 OLAP	END 120 OLAP	02	16339
22	1.19	END 120 OLAP	RT 128	01	16162
22	0.60	RT 128	RT 684I	01	23445
22	0.42	RT 684I	RT 433	02	17622
22	2.84	RT 433	CHESTNUT RIDGE RD	01	8191
22	3.00	CHESTNUT RIDGE RD	ST RT 172 OLAP	03	3764
22	1.02	ST RT 172 OLAP	END RT 172 OLAP	02	14866
22	0.41	END RT 172 OLAP	RT 121 BEDFORD	02	11197
22	3.03	RT 121 BEDFORD	OLD RT 137	03	4965
22	1.84	OLD RT 137	RT 35	03	6774
22	1.30	RT 35	CONNECTION FROM 684I NB	03	4153
22	0.85	CONNECTION FROM 684I NB	RT 138	99	3987
22	2.50	RT 138	START 116 OLAP	02	4821
22	0.07	START 116 OLAP	END 116 OLAP	01	10084
22	1.11	END 116 OLAP	CR 138 HARDSCRABBLE RD	03	9267
22	1.03	CR 138 HARDSCRABBLE RD	RT 100 START 202 OLAP	01	7283
22	0.26	RT 100 START 202 OLAP	PUTNAM CO LN	03	8804
35	0.85	RT 9 START 6 202 OLAPS PKSKL	END 6 OLAP	03	8860
35	1.64	END 6 OLAP	CONKLIN AVE	00	10103
35	1.02	CONKLIN AVE	RT 987H BEAR MT PKWY	03	13351
35	2.62	RT 987H BEAR MT PKWY	ACC TACONIC STATE PKWY	03	28264
35	0.70	ACC TACONIC STATE PKWY	RT 132 YORKTOWN	03	19229
35	1.72	RT 132 YORKTOWN	BALDWIN RD(TOWN RD)	03	21206
35	0.31	BALDWIN RD(TOWN RD)	START 118 OLAP	02	20242
35	1.47	START 118 OLAP	END 118 202 OLAPS	03	16469
35	3.44	END 118 202 OLAPS	RT 100	01	16673

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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
35	0.72	RT 100	CR 34 CHERRY ST	03	29530
35	0.85	CR 34 CHERRY ST	ACC RT 684I	02	24745
35	0.40	ACC RT 684I	RT 22 KATONAH	03	21417
35	3.44	RT 22 KATONAH	START 121 OLAP	01	15382
35	0.66	START 121 OLAP	END 121 OLAP	02	16595
35	2.02	END 121 OLAP	RT 124	03	16736
35	2.56	RT 124	RT 123	02	10583
35	0.21	RT 123	CONNECTICUT STATE LINE	02	7257
87I	1.42	BRONX CO LN	INTER 2 YONKERS AVE	02	83324
87I	0.76	INTER 2 YONKERS AVE	INTER 4 CROSS CO PKWY	01	97001
87I	1.81	INTER 4 CROSS CO PKWY	INTER 6 TUCKAHOE RD	91	43259
87I	0.83	INTER 6 TUCKAHOE RD	INTER 6A RIDGE HILL RD	98	41809
87I	3.02	INTER 6A RIDGE HILL RD	INTER 7 RT 9A	03	53614
87I	2.49	INTER 7 RT 9A	INTER 7A SAW MILL RIVER PKWY	00	44010
87I	0.98	INTER 7A SAW MILL RIVER PKWY	INTER 8 START RT 287I OLAP	00	55891
87I	1.54	INTER 8 START RT 287I OLAP	INTER 9 RT 9	98	95669
87I	1.82	INTER 9 RT 9	ROCKLAND CO LINE	03	137000
95I	1.09	BRONX CO LN	INTER 15 RT 1	00	107777
95I	1.41	INTER 15 RT 1	INTER 16 NORTH AVE CEDAR ST	00	106892
95I	1.20	INTER 16 NORTH AVE CEDAR ST	INTER 17 CHATSWORTH AVE	02	117370
95I	1.90	INTER 17 CHATSWORTH AVE	INTER 18A FENIMORE RD	98	88440
95I	0.90	INTER 18A FENIMORE RD	INTER 18B MAMARONECK AVE WES	00	99765
95I	2.44	INTER 18B MAMARONECK AVE WES	INTER 19 PLAYLAND PKWY	00	95354
95I	1.23	INTER 19 PLAYLAND PKWY	INTER 20 RT 1	00	105957
95I	0.40	INTER 20 RT 1	INTER 22 MIDLAND AVE	00	75231
95I	0.90	INTER 22 MIDLAND AVE	CONNECTICUT STATE LINE	98	121214
100	1.11	JCT RT 907K CROSS CO PKWY OV	ACC SPRAIN BROOK PKWY	99	50253
100	0.61	ACC SPRAIN BROOK PKWY	TUCKAHOE RD	02	42845
100	2.49	TUCKAHOE RD	YONKERS N CITY LN	01	47622
100	0.55	TOWN OF GREENBURGH	CR 78 ARDSLEY RD	00	34818
100	2.13	CR 78 ARDSLEY RD	RT 100A HARTSDALE	03	27584
100	0.83	RT 100A HARTSDALE	WHITE PLAINS S CITY LN	02	24765
100	0.76	CITY OF WHITE PLAINS	WHITE PLNS N LN ST 119 OLAP	02	26399
100	0.31	START RT 119 OVLP TOWN OF GR	ACC RT 287I	99	31184
100	0.31	ACC RT 287I	END 119 OLAP	02	25912
100	0.23	END 119 OLAP	ACC RT 287I	02	12787
100	1.72	ACC RT 287I	VIRGINIA AVE	03	8009
100	1.21	VIRGINIA AVE	RTS 100A 100C	03	12917
100	1.41	RTS 100A 100C	ACC SPRAINBRK PKWY	03	4110
100	1.18	ACC SPRAINBRK PKWY	START 141 OLAP	99	7802
100	0.08	START 141 OLAP	END 141 OLAP	99	17853
100	0.09	END 141 OLAP	START 9A OLAP ACC SMRP	99	13360
100	1.13	START 9A OLAP ACC SMRP	RT 117	02	32582
100	1.98	RT 117	END 9A OLAP SAWMILL RD	02	42396
100	2.58	END 9A OLAP SAWMILL RD	START 133 OLAP	03	6287
100	0.14	START 133 OLAP	ACC TACONIC STATE PKWY	02	18500
100	0.25	ACC TACONIC STATE PKWY	END 133 OLAP	02	20280
100	0.46	END 133 OLAP	RT 120	03	10573
100	1.67	RT 120	RT 134	02	8421
100	0.65	RT 134	CR 5 SEVEN BRIDGE RD	03	11817
100	1.06	CR 5 SEVEN BRIDGE RD	RT 118 CROTON LAKE	02	11090
100	4.36	RT 118 CROTON LAKE	RT 35 WHITEHALL COR	01	9123
100	0.58	RT 35 WHITEHALL COR	RT 139	02	16530
100	2.47	RT 139	RT 138 WRIGHTS COR	02	9253
100	0.92	RT 138 WRIGHTS COR	JCT 202 END 100	02	15621

NEW YORK STATE DEPARTMENT OF TRANSPORTATION					
2003 Traffic Volume Report for WESTCHESTER COUNTY					
Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
100A	1.52	RT 100 HARTSDALE	RT 100B	02	15137
100A	0.69	RT 100B	ACC RT 119 ELMSFORD	03	9416
100A	0.12	ACC RT 119 ELMSFORD	RT 287I	00	19481
100A	1.88	RT 287I	RT 100C END RT 100A	03	9768
100B	1.53	RT 9A N OF SECOR RD	SPRAIN BROOK PKWY UNDER WITH	03	7364
100B	0.41	SPRAIN BROOK PKWY UNDER WITH	RT 100A HARTSDALE AVE	03	18629
100B	0.94	RT 100A HARTSDALE AVE	RT 119 END 100B	03	12529
100C	0.20	RT 9A E OF EASTVIEW	OLD SAW MILL RD	02	11655
100C	0.90	OLD SAW MILL RD	ACC SPRAIN BROOK PKWY	03	17230
100C	0.14	ACC SPRAIN BROOK PKWY	RT 100 END 100C	03	21876
116	1.32	RTS 100 202	RT 684I	02	5949
116	0.09	RT 684I	START RT 22 OLAP	03	6914
116	0.07	START RT 22 OLAP	END RT 22 OLAP	01	10084
116	3.88	END RT 22 OLAP	OLD RT 124 SALEM CTR	02	2718
116	0.54	OLD RT 124 SALEM CTR	START 121 OLAP	02	2145
116	1.13	START 121 OLAP	END 121 OLAP N SALEM	02	4891
116	1.09	END 121 OLAP N SALEM	CONN STATE LN END 116	02	3461
117	2.62	RT 9 SLEEPY HOLLOW	RT 448	03	11192
117	0.31	RT 448	ACC RTS 100 9A	02	15322
117	1.09	ACC RTS 100 9A	ACC SAWMILL RIVER PKWY	03	12595
117	1.28	ACC SAWMILL RIVER PKWY	RT 141 PLEASANTVILLE	03	5139
117	1.45	RT 141 PLEASANTVILLE	START RT 120 OLAP	02	7921
117	2.99	START RT 120 OLAP	RT 128 MT KISCO	02	17823
117	0.55	RT 128 MT KISCO	RT 172 MT KISCO	99	15875
117	0.85	RT 172 MT KISCO	RT 133 MT KISCO	02	15776
117	2.62	RT 133 MT KISCO	ACC SAWMILL RIVER PKWY	02	15097
117	0.97	ACC SAWMILL RIVER PKWY	HARRIS RD	02	5366
117	0.84	HARRIS RD	INT NB SAW MILL END RT 117	03	6284
118	1.28	RT 100 N OF CROTON LK	RT 129	02	5694
118	3.06	RT 129	START 35 202 OLAPS	99	10314
118	1.47	START 35 202 OLAPS	END 35 OLAP	03	16469
118	2.82	END 35 OLAP	END 202 OLAP	02	6298
118	1.85	END 202 OLAP	PUTNAM CO LINE	01	9246
119	1.41	RT 9 TARRYTOWN	BENEDICT AVE	00	13574
119	0.42	BENEDICT AVE	ACC RTS 87I 287I	03	36416
119	0.50	ACC RTS 87I 287I	ACC SAWMILL RIVER PKWY	03	25879
119	0.08	ACC SAWMILL RIVER PKWY	RT 9A ELMSFORD	03	27896
119	1.01	RT 9A ELMSFORD	ACC RT 100A KNOLLWD RD	00	21592
119	0.69	ACC RT 100A KNOLLWD RD	RT 100B	03	22514
119	0.13	RT 100B	START 100 OLAP	03	28997
119	0.62	START 100 OLAP	END 100 OLAP	02	25912
119	1.20	CITY OF WHITE PLAINS	RT 22 JCT END RT 119	02	42347
120	0.90	RT 1 CITY OF RYE	RYE N CITY LN	02	9768
120	0.92	VILLAGE OF HARRISON	CR 104 POLLY PARK RD	96	4151
120	0.33	CR 104 POLLY PARK RD	START 120A OLAP	02	4392
120	0.08	START 120A OLAP	RT 120A OLAP ENDS	96	4514
120	0.26	RT 120A OLAP ENDS	WESTCHESTER AVE	97	23914
120	1.01	WESTCHESTER AVE	JCT RT 907W HUTCHINSON RIVER	02	6514
120	1.01	JCT RT 907W HUTCHINSON RIVER	CR 18 ANDERSON HILL RD	02	9478
120	2.08	CR 18 ANDERSON HILL RD	LAKE ST	01	7136
120	1.00	LAKE ST	ACC RT 684I	02	7579
120	0.38	ACC RT 684I	RT 120A	99	7404

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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
120	1.72	RT 120A	START 22 OLAP KING ST	02	8093
120	0.23	START 22 OLAP KING ST	END 22 OLAP KING ST	02	16339
120	4.07	END 22 OLAP KING ST	START RT 117 OLAP	99	12215
120	0.61	START RT 117 OLAP	GREELEY AVE	01	10428
120	0.13	GREELEY AVE	ACC SAW MILL RIVER PKY	03	13584
120	1.92	ACC SAW MILL RIVER PKY	CR 21 SEVEN BRIDGE RD	03	8808
120	0.65	CR 21 SEVEN BRIDGE RD	START 133 OLAP	03	7401
120	0.53	START 133 OLAP	END 133 OLAP	02	11850
120	0.20	END 133 OLAP	RT 100 END 120	03	2744
120A	0.08	RT 120 OLAP BEGINS	RT 120 OLAP END	96	4514
120A	0.37	RT 120 OLAP END	CR 64B LINCOLN AVE	97	15924
120A	1.48	CR 64B LINCOLN AVE	KING ST PORTCHESTER	99	16968
120A	0.76	KING ST PORTCHESTER	PUTNAM AVE	99	7909
120A	1.61	PUTNAM AVE	HUTCHINSON RIVER PKWY	97	13955
120A	0.60	HUTCHINSON RIVER PKWY	CONNECTICUT STATE LINE	02	17229
120A	0.67	CONNECTICUT STATE LINE	NEW YORK STATE LINE	00	14640
120A	0.72	CONNECTICUT STATE LINE TOWN	CONNECTICUT STATE LINE	02	13595
120A	2.20	CONNECTICUT STATE LINE	NEW YORK STATE LINE	96	9192
120A	0.06	CONNECTICUT STATE LINE TOWN	RT 120 END 120A	99	3757
121	1.74	RT 22 N OF BEDFORD VIL	RT 137	02	3980
121	2.90	RT 137	START 35 OLAP	02	2764
121	0.66	START 35 OLAP	END 35 OLAP	02	16595
121	2.53	END 35 OLAP	RT 138 WACCABUC RD	02	5694
121	1.99	RT 138 WACCABUC RD	JUNE RD	02	4204
121	0.87	JUNE RD	START 116 OLAP	02	3169
121	1.13	START 116 OLAP	END 116 OLAP	02	4891
121	1.93	END 116 OLAP	PUTNAM CO LN	02	4423
123	4.68	CONN STATE LINE	RT 35 END 123	02	8024
124	4.62	RT 137 POUNDRIDGE	RT 983D RT 124 E LEG	03	4349
124	0.34	RT 983D RT 124 E LEG	RT 35 END RT 124-LEFT LEG	99	2321
125	2.24	RT 1 LARCHMONT	QUAKER RIDGE RD	02	8431
125	0.74	QUAKER RIDGE RD	JCT RT 907W HUTCHINSON RIVER	03	14503
125	2.35	JCT RT 907W HUTCHINSON RIVER	WHITE PLAINS S CITY LN	03	8657
125	1.46	CITY OF WHITE PLAINS	BRYANT AV	02	8485
125	0.71	BRYANT AV	RT 22 END 125	00	6443
127	1.20	RT 1 HARRISON	HALSTEAD AVE HARRISON	02	7031
127	0.60	HALSTEAD AVE HARRISON	CR 94 UNION AVE	00	11840
127	2.06	CR 94 UNION AVE	WHITE PLAINS S CITY LN	97	16048
127	1.75	CITY OF WHITE PLAINS	BRYANT AVE	02	13334
127	0.75	BRYANT AVE	RT 287I END RT 127	01	10487
128	0.98	RT 22 ARMONK	COX AVE	03	8554
128	4.55	COX AVE	RT 117 END 128	03	4778
129	1.36	RT 9A SOUTH RIVERSIDE AVE	QUAKER BRDS RD	02	5823
129	4.15	QUAKER BRDS RD	UNDERHILL RD	02	6463
129	2.24	UNDERHILL RD	RT 118 END 129	01	3419
132	2.49	RTS 35 202 YORKTOWN	ACC TACONIC STATE PKWY	02	8487
132	0.26	ACC TACONIC STATE PKWY	RT 6 END 132	98	16368
133	0.30	RT 9 OSSINING	RT 134 W OF OSSINING	02	15190
133	1.02	RT 134 W OF OSSINING	ACC RT 9A	02	9815

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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
133	1.99	ACC RT 9A	START 100 OLAP	03	7447
133	0.14	START 100 OLAP	ACC TACONIC STATE PKWY	02	18500
133	0.25	ACC TACONIC STATE PKWY	END 100 OLAP	02	20280
133	0.47	END 100 OLAP	START 120 OLAP	02	10393
133	0.53	START 120 OLAP	END 120 OLAP	02	11850
133	1.61	END 120 OLAP	CR 5 SEVEN BRIDGES RD	03	6298
133	1.83	CR 5 SEVEN BRIDGES RD	ACC SAWMILL RIVER PKWY	03	9532
133	0.57	ACC SAWMILL RIVER PKWY	RT 117 END 133	03	19366
134	1.41	RT 133 NE OF OSSINING	RT 9A	03	2493
134	3.02	RT 9A	ACC TACONIC STATE PKWY	03	7039
134	1.55	ACC TACONIC STATE PKWY	CR 1323 PINES BR RD	02	3654
134	0.37	CR 1323 PINES BR RD	RT 100 END 134	02	4571
137	2.47	CONNECTICUT STATE LN	RT 172	03	4595
137	0.17	RT 172	RT 124	02	7722
137	2.87	RT 124	RT 121 END 137	02	3194
138	1.78	RT 100	RT 22	03	9101
138	3.41	RT 22	RTS 121 END 138	02	6472
139	2.81	RT 100 THORNS COR	RT 202 END 139	99	10897
141	0.14	RT 9A HAWTHORNE	START 100 OLAP	99	4749
141	0.08	START 100 OLAP	END 100 OLAP	99	17853
141	3.27	END 100 OLAP	RT 117 END 141	03	11150
172	2.13	RT 117 MT KISCO	ACC RT 684I	02	19627
172	1.76	ACC RT 684I	START RT 22 OLAP	02	13368
172	1.02	START RT 22 OLAP	END 22 OLAP	02	14866
172	3.98	END 22 OLAP	RT 137 END 172	03	7116
202	0.24	ROCKLAND CO LN RT 6 OVERLAP	RT 9D	03	17900
202	3.57	RT 9D	START 9 OLAP	03	12703
202	0.12	START 9 OLAP	PEEKSKILL N CITY LN BMP	00	23442
202	0.61	CITY OF PEEKSKILL	END 9 START 35 OLAPS	99	33360
202	0.85	END 9 START 35 OLAPS	END 6 OLAP	03	8860
202	1.24	END 6 OLAP	PEEKSKILL E CITY LN	00	10103
202	1.42	TOWN OF CORTLANDT	ACC BEAR MT PKWY	03	13351
202	2.62	ACC BEAR MT PKWY	ACC TACONIC STATE PKWY	03	28264
202	0.70	ACC TACONIC STATE PKWY	RT 132	03	19229
202	2.03	RT 132	START 118 OLAP	02	20242
202	1.47	START 118 OLAP	END 35 OLAP	03	16469
202	2.82	END 35 OLAP	END 118 OLP W SHENOROK	02	6298
202	1.86	END 118 OLP W SHENOROK	RT 139 LINCOLN AVE	02	11907
202	2.52	RT 139 LINCOLN AVE	JCT RT 100 SOMERS	02	5974
202	0.31	JCT RT 100 SOMERS	RT 116	02	14312
202	1.74	RT 116	START RT 22 OLAP	02	11370
202	0.26	START RT 22 OLAP	PUTNAM CO LN	03	8804
287I	1.82	ROCKLAND CO LINE	INTER 9 RT 9	03	137000
287I	1.54	INTER 9 RT 9	INTER 8 END RT 87I OLAP	98	95669
287I	0.77	INTER 8 END RT 87I OLAP	ACC RT 119	98	88367
287I	0.68	ACC RT 119	ACC RT 9A WESTBOUND ONLY	00	100388
287I	0.97	ACC RT 9A WESTBOUND ONLY	ACC RT 100A	98	113247
287I	0.81	ACC RT 100A	ACC RT 100	01	134387
287I	1.09	ACC RT 100	ACC RT 22	96	95004
287I	1.33	ACC RT 22	ACC RTS 119 & 127	01	115536
287I	0.66	ACC RTS 119 & 127	ANDERSON HILL RD WPLNS ECL	98	87430

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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
287I	0.60	TOWN OF HARRISON	ACC RT 684I	98	105251
287I	1.18	ACC RT 684I	ACC HUTCHINSON RIVER PKWY	00	100570
287I	0.70	ACC HUTCHINSON RIVER PKWY	ACC RT 120	00	95190
287I	2.10	ACC RT 120	JCT RT 1	00	81290
287I	0.44	JCT RT 1	RT 95I END 287I	01	75847
433	0.70	CONNECTICUT STATE LINE	RT 22 END 433	03	4718
448	3.90	RT 9 N OF TARRYTOWN	RT 117 END 448	02	3875
684I	4.42	RT 287I WESTCHESTER CO	ACC RT 120	00	60987
684I	3.15	ACC RT 120	ACC RT 22	99	60183
684I	5.07	ACC RT 22	ACC RT 172	00	59958
684I	4.11	ACC RT 172	ACC SAWMILL RIVER PKWY	00	56192
684I	0.96	ACC SAWMILL RIVER PKWY	ACC RTE 35	00	50223
684I	2.19	ACC RTE 35	ACC RT 138	98	68637
684I	2.46	ACC RT 138	ACC RT 116	00	64546
684I	2.51	ACC RT 116	PUTNAM CO LINE	03	75513
907K	0.13	CTY YONKERS SMRP JCT	INT YONKERS AVE	00	77188
907K	0.87	INT YONKERS AVE	INT NYS THRUWAY	01	87654
907K	0.78	INT NYS THRUWAY	INT BRONX RIVER PKWAY	99	58241
907K	1.10	INT BRONX RIVER PKWAY	INT COLUMBIA AVE	96	118710
907K	0.21	INT COLUMBIA AVE	ACCESS HUTCHINSON SOUTH	97	116895
907K	0.74	EASTCHESTER STL	HUTCHINSON RIVER PARKWAY NOR	99	56858
907W	0.28	BRONX CO LINE RT 908A VIL PE	INT RT 1	02	80408
907W	0.73	INT RT 1	EXIT 9	00	74285
907W	0.92	EXIT 9	EXIT 12 E LINCOLN AVE	01	90370
907W	0.38	EXIT 12 E LINCOLN AVE	EXIT 13 CROSS CO PKWY	99	89256
907W	0.44	EXIT 13 CROSS CO PKWY	EXIT 14 PELHAMDALE AVE	99	46792
907W	2.00	EXIT 14 PELHAMDALE AVE	EXIT 17 NORTH AVE	03	102832
907W	2.02	EXIT 17 NORTH AVE	EXIT 21 RT 125 WEAVER ST	03	98144
907W	1.02	EXIT 21 RT 125 WEAVER ST	EXIT 22 MAMARONECK RD	03	101868
907W	0.94	EXIT 22 MAMARONECK RD	EXIT 23 MAMARONECK AVE	03	103705
907W	1.58	EXIT 23 MAMARONECK AVE	EXIT 25 RT 127 NORTH ST	03	94700
907W	1.12	EXIT 25 RT 127 NORTH ST	RT 287I	03	98854
907W	0.30	RT 287I	RT 684I TO BREWSTER	01	68375
907W	0.41	RT 684I TO BREWSTER	EXIT 27 RT 120	01	51749
907W	0.83	EXIT 27 RT 120	EXIT 28 LINCOLN AVE	01	47074
907W	0.72	EXIT 28 LINCOLN AVE	EXIT 29 RIDGE ST	01	44991
907W	0.57	EXIT 29 RIDGE ST	EXIT RT 120A KING ST	01	42905
907W	0.06	EXIT RT 120A KING ST	RYE NTL CONN STATE LINE	01	41177
981U	0.26	MT JOY PL	NB RAMPS RT I95	02	12603
981V	0.60	RT 1	LOOP WITH ACC TO RTI95	01	11701
981V	0.09	LOOP WITH ACC TO RTI95	WESTCHESTER CO CITY OF NEW R	01	15884
982B	0.94	RYE CITY LINE	RT 1 VILLAGE OF PORTCHESTER	01	13692
982C	0.10	RT 120A	JCT HALSTEAD AVE	01	9601
982C	0.64	JCT HALSTEAD AVE	WESTCHESTER CO VILLAGE OF PO	01	10375
982J	1.01	MAIN ST	END AT BRIDGE OVER RT 95I	01	23674
982J	0.30	CROSS ST	RT 95I SOUTH BOUND RAMP	01	13191
983B	0.65	SOUTH BROADWAY	WALSH RD	98	38159
983B	1.83	WALSH RD	TUCKAHOE RD	01	10480

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Touring Route	Section Length	Start Description	End Description	Count	
				Year	AADT
983C	0.71	NEPPERHAN AVE ART	END AT SAW MILL PKWY	96	45242
983D	0.37	RT 124 JCT RT LEG	RT 35 JCT EAST CONNECTION	96	1207
984E	2.51	SAW MILL RIVER PKWY	BRONX RIVER ROAD	96	15343
984G	0.50	RT 684I CUL-DE-SAC	RT 120	01	4146
984H	1.57	NEW YORK CITY LINE BRONX CO	WARBURTON AVE END ROUTE	01	14261
984J	1.46	HUTCHINSON RIVER PKWY	RT 684I SB	01	28270
984L	0.47	RT 9A	RT 87I SOUTH BOUND RAMP	01	23251
984M	0.06	SAW MILL RIVER PARKWAY 987D	RT 9A	00	3543
987D	1.73	BRONX CO LINE CITY YONKERS	INT CROSS COUTY PKWY	99	77598
987D	0.87	INT CROSS COUTY PKWY	INT PALMER AVENUE	01	53328
987D	1.85	INT PALMER AVENUE	EXECUTIVE BLVD - EXIT 9	01	53586
987D	0.65	EXECUTIVE BLVD - EXIT 9	CITY OF YONKERS VILLAGE HAST	99	50229
987D	2.67	WESTCHESTER CO VILL HASTINGS	INT 87I TWY	03	47844
987D	1.00	INT 87I TWY	WHITE PLNS RD ACC 287I	03	39956
987D	4.33	WHITE PLNS RD ACC 287I	INT OLD SAW MILL RD	99	46424
987D	1.07	INT OLD SAW MILL RD	ACC RT 9A	00	46707
987D	1.54	ACC RT 9A	INT TSP/HAWTHORNE INT	00	43510
987D	2.33	INT TSP/HAWTHORNE INT	INT BEDFORD RD RT 117	00	43561
987D	2.36	INT BEDFORD RD RT 117	INT RT 120	00	31871
987D	4.02	INT RT 120	INT RT 133	01	29254
987D	2.88	INT RT 133	INT RT 117 N JCT	99	30953
987D	2.53	INT RT 117 N JCT	TOWN BEDFORD JUNCTION I684 A	03	31789
987F	0.88	BRONX CO LINE RT 907G BRONX	INT RT 100	99	79041
987F	3.12	INT RT 100	INT JACKSON AVE	00	93055
987F	3.60	INT JACKSON AVE	INT RT 100B	01	82031
987F	1.31	INT RT 100B	INT 287I	00	86323
987F	1.48	INT 287I	ACC RT 100C	00	77915
987F	1.18	ACC RT 100C	RT 100 BROADHURST AVE	00	74207
987F	1.08	RT 100 BROADHURST AVE	END AT RT 987G INT	00	66313
987G	2.85	VALHALLA CIR TWN MT PLEASAN	INT RT 987F SPAIN BRK PKY	99	19725
987G	0.45	INT RT 987F SPAIN BRK PKY	RAMP TO SAW MILL RIVER PKWY	03	102400
987G	0.70	RAMP TO SAW MILL RIVER PKWY	ROUTE 117 OFF RAMP	03	67531
987G	0.67	ROUTE 117 OFF RAMP	ROUTE 9A CONNECTION NORTHBOU	00	68286
987G	0.96	ROUTE 9A CONNECTION NORTHBOU	PLEASANTVILLE RD OFF RAMP	03	75327
987G	2.87	PLEASANTVILLE RD OFF RAMP	RTS 100 + 133 OFF RAMP	00	58119
987G	2.34	RTS 100 + 133 OFF RAMP	RT 134 OFF RAMP	03	70144
987G	6.30	RT 134 OFF RAMP	RTS 35 202 OFF RAMP	99	59940
987G	0.22	RTS 35 202 OFF RAMP	BEAR MT PKWY UNDER WITH CONN	00	43497
987G	2.40	BEAR MT PKWY UNDER WITH CONN	RT 132 UNDER	03	48002
987G	0.37	RT 132 UNDER	RT 6 UNDER	99	36916
987G	0.22	RT 6 UNDER	PUTNAM CO. LINE	03	30114
987H	2.21	ACC RTS 6 9 202	PEEKSKILL CITY LINE	02	17277
987H	0.73	WESTCHESTER CO TOWN OF CORTL	RT 6 JCT	99	16424
987H	0.91	RT 6 JCT	RTS 35 202	01	12294
987H	0.73	JCT RTS 202 35 ST AGAN	JCT 987G END 987H	03	5920

INTRODUCTION AND EXPLANATION OF DATA

The New York State Department of Transportation collects, summarizes, and interprets information on the volume of traffic traveling the State's highway system. Each AADT (Annual Average of Daily Traffic) entry represents the number of vehicles traveling over a designated section of highway. This report provides the latest available traffic count data for each section of the State highway system, parkways and selected toll facilities. Data from previous years is available in the printed report which can be obtained as described below.

Traffic count sections are arranged in route number sequence for each county in the State. The data are shown by sections of routes. These are short portions of a route over which traffic volumes are approximately equal. Sections begin and end at points where there is an appreciable change in traffic volume, such as major intersections with other highways or at locations of major traffic-generating features. Traffic count sections may range in length from less than a tenth of a mile to more than ten miles.

Following is an explanation of the traffic volume data as displayed.

1. Route Number The route numbers shown in this report consist of:

Touring Routes: Highways with official Interstate, U.S., or New York State route designations. Route numbers are posted along the highway and are shown on road maps available to the public. These numbers do not imply ownership, they are placed for the aid and convenience of the traveling public.

Reference Routes: State owned highways without assigned touring route numbers. For record keeping purposes, these routes are assigned a four character alpha-numeric designation. The first character is 9, the second character identifies the NYSDOT region, the third character is a numeric from 0 to 6, and the fourth character is alphabetic. Route 910B is Wolf Road in Albany (Region 1) for example.

Parkways: State owned and/or operated by the Department of Transportation or other government units. The numbers used to designate parkways are similar to those used for reference routes with a 7, 8 or 9 for the third character.

2. Section Length

Each traffic count section length is listed to the nearest hundredth of a mile.

3. Start Description

Beginning of the count section.

4. End Description

End of the count section.

5. Count Year

Calendar year the count data was collected.

6. AADT

Annual Average Daily Traffic (AADT) is the total traffic volume in both directions.

Short term counts obtained from portable counters with road tube input are converted to estimated annual average daily traffic (AADT) volumes by adjusting for the vehicle mix (cars, trucks, buses, etc.), day of the week, and seasonality. Vehicle mix is estimated from several hundred vehicle classification counts taken around the state each year. Day of the week and seasonal adjustment factors are developed from data collected continuously (24 hrs/day, 365 days/yr) at approximately 100 permanent count stations.

Daily volumes on highways may vary widely from the AADT. Considerably higher or lower values often result in areas of seasonal activities and when counting weekend versus weekday traffic.

This data is extracted from the annual Traffic Volume Report prepared by the Traffic Monitoring Unit of the Highway Data Services Bureau, New York State Department of Transportation. Complimentary single copies of the full report are available to government agencies, libraries and education institutions. These requests should be on official letterhead and directed to the Traffic Monitoring Unit.

Others may purchase the report in printed form or on a computer disk (ASCII or DBF format) for \$10 by mail or in person from:

Plan Sales Unit
New York State Department of Transportation
50 Wolf Road
Albany, New York 12232

Tel.: (518) 457-2124

Checks should be made payable to NYSDOT. Please include your Employer ID or Social Security Number on the check.

Questions concerning this report should be directed to:

Traffic Monitoring Unit - Highway Data Services Bureau
New York State Department of Transportation
POD 32
50 Wolf Road
Albany, New York 12232

Tel.: (518) 457-7203