

CHAPTER 7

REDESIGNATION REQUEST AND MAINTENANCE PLAN

Introduction

Santa Barbara County Ozone Air Quality

Redesignation Request

Permanent and Enforceable Emission Reductions

Maintenance Plan

Contingency Provisions

Federal Planning Requirements

Conclusions

7. REDESIGNATION REQUEST AND MAINTENANCE PLAN

7.1 INTRODUCTION

This chapter of the 2001 Clean Air Plan (2001 Plan) formally requests that the U.S. Environmental Protection Agency (USEPA) redesignate Santa Barbara County in attainment of the federal 1-hour ozone standard. This request, and Maintenance Plan, complies with Sections 107(d)(3)(E) and 175A of the Federal Clean Air Act Amendments of 1990 (Federal Act) and all relevant policies and procedures of the USEPA.

Santa Barbara County is located in the South Central Coast Air Basin along with Ventura and San Luis Obispo Counties. Historically, only the southern region of Santa Barbara County was designated nonattainment for the federal 1-hour ozone standard. Under the Federal Act, the USEPA expanded nonattainment area to include the entire county.

Santa Barbara County has historically experienced design values (described in Chapter 2) that violate the federal 1-hour ozone standard. In recent years, however, the number of both state and federal ozone standard violations has decreased. By the end of 1999, every monitoring station in the county met the requirements for attainment of the federal 1-hour ozone standard.

This achievement is proof that the quality of the air we breathe in the county has improved and allows the Santa Barbara County Air Pollution Control District (APCD) Board of Directors to submit a formal request to the USEPA to redesignate the county as an attainment area for the federal 1-hour ozone standard. To be redesignated, the APCD must have an approved Maintenance Plan that includes an attainment inventory, future year projections of the inventory demonstrating continued attainment, a commitment to continue air monitoring, procedures to verify continued attainment, and contingency provisions that will promptly correct any violation of the federal ozone standard which occurs after redesignation. In addition, the APCD must show that it has complied with all applicable Federal Act requirements.

7.2 SANTA BARBARA COUNTY OZONE AIR QUALITY

As detailed in Chapter 2, ambient levels of ozone measured in Santa Barbara County have decreased over time. This section discusses the county's current federal ozone classification and provides an attainment demonstration for the federal 1-hour ozone standard using monitored data.

7.2.1 FEDERAL OZONE STANDARD AND CLASSIFICATION

The federal 1-hour ozone standard was set at 0.12 parts per million (ppm) in 1979. Under the Federal Act, attainment of the federal ozone standard is determined based on a "design value" concept. The design value represents the fourth highest 1-hour ozone concentration measured during a 3-year period at any individual monitoring station. If the design value for any station violates the standard (i.e., is greater than 0.12 ppm), then the county is designated nonattainment.

The southern region of Santa Barbara County was designated a federal ozone nonattainment area in 1978. Pursuant to Section 181 of the Federal Act, the entire county was classified as a "moderate" nonattainment area by USEPA in 1991, based on a monitored design value of 0.140 ppm measured at the Carpinteria monitoring station. Section 181 of the Federal Act provides the following design value specifications and associated attainment dates:

“(a) CLASSIFICATION AND ATTAINMENT DATES FOR 1989 NONATTAINMENT AREAS.--(1) Each area designated nonattainment for ozone pursuant to Section 107(d) shall be classified at the time of such designation, under table 1, by operation of law, as a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area based on the design value for the area. The design value shall be calculated according to the interpretation methodology issued by the Administrator most recently before the enactment of the Clean Air Act Amendments of 1990. For each area classified under this subsection, the primary standard attainment date for ozone shall be as expeditiously as practicable but not later than the date provided in Table 1.

Table 1		
Area Class	Design Value¹	Primary Standard Attainment Date²
Marginal	0.121 up to 0.138	3 years after enactment
Moderate	0.138 up to 0.160	6 years after enactment
Serious	0.160 up to 0.180	9 years after enactment
Severe	0.180 up to 0.280	15 years after enactment
Extreme	0.280 and above	20 years after enactment
¹ The design value is measured in parts per million (ppm).		
² The primary standard attainment date is measured from the date of the enactment of the Clean Air Act Amendments of 1990.”		

As a “moderate” nonattainment area, Santa Barbara County was required to comply with the federal 1-hour ozone standard by November 15, 1996. Analysis of air quality data collected from 1994 through 1996 revealed that the county did not meet that goal. On December 10, 1997, the USEPA issued a final action finding that Santa Barbara County had not attained the federal 1-hour ozone standard by the statutory attainment date for “moderate” nonattainment areas. As a result, the entire Santa Barbara County nonattainment area was reclassified as a “serious” nonattainment area by operation of federal law.

7.2.2 ATTAINMENT DEMONSTRATION USING MONITORED DATA

The decrease in ambient ozone concentrations measured in Santa Barbara County is evident in the decline of monitored federal 1-hour ozone design values in recent years. Table 7-1 summarizes the design values monitored in the county from 1987 through 2000. The data document that the County experienced "moderate" ozone levels in the late 1980's, "marginal" concentrations during most of the 1990's (except for 1991-1993 where we met the test for attainment), and demonstrated attainment of the federal ozone standard during the 1997-1999 and 1998-2000 periods. Table 7-2 provides a station-specific summary of the maximum 1-hour ozone concentrations measured during the 1997-1999 period. While it is clear that we attained the standard during this period, the Las Flores Canyon site was only one exceedance away from violating the standard (the same is true for the 1998-2000 period). These data suggest that in order for the county to maintain the federal ozone standard, additional emission reductions will be required to increase our margin of safety with respect to the federal 1-hour ozone standard.

7.3 REDESIGNATION REQUEST

The Santa Barbara County Air Pollution Control District formally requests that the USEPA redesignate Santa Barbara County to attainment status with respect to the federal 1-hour ozone standard. To grant this request, USEPA must first verify that the county has met the five criteria contained in Section 107(d)(3)(E) of the Federal Act as described below:

1. USEPA has determined that the national ambient air quality standard for ozone has been attained.

This determination relies on monitored air quality data and is summarized in Section 7.2.2 of this chapter – “Attainment Demonstration Using Monitored Data.”

2. USEPA must fully approve the applicable implementation plan under Section 110(k).

A discussion of the applicable implementation plan’s compliance with Section 110(k) is provided in Section 7.6.1 of this chapter – “State Implementation Plan Requirements.”

3. USEPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

A discussion of the permanent and enforceable emission reduction measures is provided in Section 7.4 of this chapter – “Permanent and Enforceable Emission Reductions.”

4. The State has met all applicable requirements for the area under Section 110 and Part D.
Compliance with applicable requirements under Section 110 and Part D is discussed in Section 7.6.1 of this chapter – “State Implementation Plan Requirements.”

5. USEPA has fully approved a Maintenance Plan, including contingency provisions, for the area under Section 175A.

Each major element required as part of the Maintenance Plan is included in Section 7.5 of this chapter – “Maintenance Plan.”

7.4 PERMANENT AND ENFORCEABLE EMISSION REDUCTIONS

The USEPA must be able to determine that the improvement in local air quality is due to emission reductions that are permanent and enforceable. Economic factors and/or unusual weather patterns can influence local pollutant concentrations and sometimes “mask” the true air quality of a given area. This section will provide information to document that the improvements in local air quality are not the result of an economic downturn, that meteorology conditions varied during recent years, and that both local and state emission control measures resulted in significant emission reductions that are both permanent and enforceable.

7.4.1 Economic Effects

To assess the economic conditions in the area as they relate to air quality, a summary of vehicle miles traveled (VMT) collected by the Highway Performance Monitoring System from 1990 through 2000 is presented below. VMT generally increases during favorable economic conditions and since mobile sources account for more than half of the county’s human-generated air pollution,

VMT can be used as an indicator of economic conditions and the impact on air quality during this period. As the data show, VMT declined slightly during 1991 and again in 1995. From 1996 through 1999, however, VMT increased significantly during a period of increased growth for California and Santa Barbara County. These data clearly show that VMT (and the economy) during this later period grew and that the improvement in local air quality was not the result of an economic downturn.

Estimated Vehicle Miles Traveled (VMT) from 1990-1999
In Santa Barbara County (units: 1000 miles)

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
VMT	8,269	8,201	8,227	8,522	8,591	8,539	8,582	8,979	9,267	9,416

7.4.2 Effects of Weather

In general, ozone formation is correlated with higher temperatures. In order to detect climatic variations in temperatures that may influence local air quality concentrations, the data summarized below compare the average April-October temperatures recorded at Santa Barbara Airport between 1999 and 2000 with the 74-year average April-October (our “ozone season”) temperature. As seen from the data, average April-October temperatures ranged from 61.85 to 67.95 °F with a 74-year average temperature of 64.13 °F. The data also show that the average April-October temperature data collected from 1997 to 2000 were quite variable. As discussed in Chapter 2, various weather conditions that existed between 1997 and 1999 may have contributed to improved air quality. El Nino conditions existed during 1997 and 1998, followed by La Nina conditions during 1999. Both conditions may have inhibited ozone formation during this period. However, the temperature departures during this period were not so anomalous to suggest that weather was the principle cause for attaining the federal 1-hour ozone standard, especially in light of our long-term trend of air quality improvement. Chapter 2 also documents that local federal 1-hour ozone exceedances appear to be related to a combination of meteorological conditions that are conducive to local

ozone formation and to transport from outside the county (i.e., Southern California). These varying conditions emphasize the need to further reduce emissions to increase our margin of safety to provide for continued attainment of the federal 1-hour ozone standard.

**Comparison of Mean Temperature During April-October
To the 74-Year April-October Average
At Santa Barbara Airport
(°F)**

Year	Mean Temp	74-Year Mean	Difference
1990	65.14	64.13	1.01
1991	61.85	64.13	-2.28
1992	66.67	64.13	2.54
1993	63.86	64.13	-0.27
1994	64.19	64.13	0.06
1995	63.93	64.13	-0.20
1996	65.12	64.13	0.99
1997	67.95	64.13	3.82
1998	64.96	64.13	0.83
1999	63.08	64.13	-1.05
2000	65.08	64.13	0.95

7.4.3 Emission Control Measures

Emission control measures have the most direct impact on air local quality. Numerous Clean Air Plans (1979, 1982, 1989, 1991, 1993, 1994, 1998, and 2001) have been developed for Santa Barbara County resulting in a very comprehensive program of stationary and transportation control measures. In addition, the State of California has adopted some of the most far-reaching control strategies in the nation as part of the 1994 State Implementation Plan. While it is difficult to quantify the exact amount of air pollution reduced from these programs over the last 20 years (due to changing emission estimation techniques), the declining trend in air pollution concentrations over the long term clearly demonstrates that permanent and enforceable control measures have resulted in cleaner air for Santa Barbara County. Chapters 4 and 5 of this 2001 Plan document the control measures adopted and implemented by state and local agencies.

7.5 MAINTENANCE PLAN

Section 175A of the Federal Act outlines the process and form of the Maintenance Plan.

“(a) **PLAN REVISION.** Each state which submits a request under Section 107(d) for redesignation of a nonattainment area for any air pollutant as an area which has attained the national primary ambient air quality standard for that air pollutant shall also submit a revision to the applicable State Implementation Plan to provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance.

(b) **SUBSEQUENT PLAN REVISIONS.** Eight years after redesignation of any area as an attainment area under Section 107(d), the State shall submit to the administrator an additional revision of the applicable SIP for maintaining the national primary ambient air quality standard for 10 years after expiration of the 10-year period referred to in subsection (a).

(c) **NONATTAINMENT REQUIREMENTS APPLICABLE PENDING PLAN APPROVAL.** Until such plan revision is approved and an area is redesignated as attainment for any area designated as a nonattainment area, the requirements of this part shall continue in force and effect with respect to such area.

(d) **CONTINGENCY PROVISIONS.** Each plan revision submitted under this section shall contain such contingency provisions as the administrator deems necessary to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area. Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area. The failure of any area redesignated as an attainment area to maintain

the national ambient air quality standard concerned shall not result in a requirement that the State revise its State implementation plan unless the administrator, in the administrator's discretion, requires that State to submit a revised State implementation plan."

The Federal Act allows USEPA up to 18 months from the receipt of a complete Maintenance Plan to either approve or deny a redesignation request. The Federal Act also requires a demonstration of maintenance for 10 years after the redesignation. Therefore, the planning horizon for this Maintenance Plan is from 1999 to 2015 to allow for USEPA processing time.

The following sections provide each major element required in a Maintenance plan.

7.5.1 ATTAINMENT INVENTORY (1999)

The term "attainment inventory" refers to the maximum level of emissions of both ROC and NO_x in Santa Barbara County that will provide for continued attainment of the federal 1-hour ozone standard. Since 1997-1999 was the 3-year monitoring period that demonstrated attainment of the standard, it follows that 1999 will be used as the attainment inventory. As previously discussed, the standard was attained by a very narrow margin. This necessitates setting the 1999 attainment inventory as the upper limit of the county's ability to continue to attain the federal 1-hour ozone standard.

The 1999 attainment inventory was prepared pursuant to USEPA guidance on emission inventories for nonattainment areas and is based on "typical summer day" emissions of ozone precursors. The methodologies are documented in Chapter 3 of this 2001 Plan. Emissions of ROC and NO_x are estimated for the onshore area of Santa Barbara County (including the state tidelands), the Outer Continental Shelf (OCS), and the combination of onshore and OCS. Figures 7-1 through 7-6 present the attainment inventory for 1999 (and future years 2005, 2010, and 2015). The 1999 attainment inventory for ROC and NO_x is summarized below. Per USEPA guidance, our maintenance demonstration must include emissions from the onshore area combined with the OCS. Therefore, our 1999 attainment inventory is 43.69 tons per day for ROC and 77.64 tons per day for NO_x.

**1999 ROC and NO_x Attainment Inventory
Onshore and Outer Continental Shelf (OCS)
(Tons per day)**

	Onshore	OCS	Onshore & OCS
ROC	40.85	2.84	43.69
NO _x	48.56	29.08	77.64
ROC & NO _x	89.41	31.92	121.33

7.5.2 MAINTENANCE DEMONSTRATION

The 1999 attainment inventory represents the upper limit of both ROC and NO_x emissions that can be accommodated within Santa Barbara County while still maintaining the ozone standard.

Therefore, future emissions must stay below these levels in order to assure maintenance of the standard. Specifically, ROC emissions must stay below 43.69 tons per day while NO_x emissions must stay below 77.64 tons per day.

Future emission estimates are developed for the years 2005, 2010, and 2015 accounting for growth in the county and all enforceable mobile source and stationary source controls that are documented in Chapters 4 and 5. The methodologies used to forecast emissions are consistent with USEPA guidance and are summarized in Chapter 6 and Appendix A. Figures 7-1 through 7-6 present the ROC and NO_x emission forecasts from 1999 through 2015. The following observations can be made from these figures:

- Onshore ROC emissions decrease significantly (35%) from 1999 to 2015.
- Outer Continental Shelf ROC emissions increase slightly (6%) from 1999 to 2015.
- Onshore and Outer Continental Shelf ROC emissions combined decrease significantly (32%) from 1999 to 2015.

- Onshore NOx emissions decrease significantly (39%) from 1999 to 2015.
- Outer Continental Shelf NOx emissions increase significantly (more than 65%) from 1999 to 2015.
- Onshore and Outer Continental Shelf NOx emissions combined decrease slightly (0.1%) from 1999 to 2015.

These emission forecasts show that both ROC and NOx emissions for onshore and OCS sources combined will continue to decline during the planning horizon, demonstrating maintenance of the federal 1-hour ozone standard. However, the NOx emission increases projected for the OCS are alarming due to the significant growth in international marine vessel activities anticipated to occur through 2015. In fact, the projected increase in NOx emissions on the OCS almost completely eliminates the onshore decrease in NOx emissions due to local and state control measures. These data clearly show that international marine vessel emissions are a significant source of NOx emissions and that additional actions by the federal government and USEPA will be required to reduce these emissions.

7.5.3 CONTINUED AMBIENT AIR QUALITY MONITORING

USEPA guidance requires that ambient air quality monitoring (performed in accordance with 40 CFR Part 58) be continued in redesignated areas for attainment status verification. In order to verify continued attainment, the APCD will prepare an annual design value summary to verify that the standard was maintained during the most current 3-year period of record. Air quality data from all monitoring stations operating in the county will be used to track our attainment status.

7.5.4 CONTINUED ATTAINMENT VERIFICATION

Forecasts developed for this 2001 Plan depend on many assumptions regarding the growth and control of point, area, and mobile source emissions. USEPA guidance requires that the inventories used for a Maintenance Plan be periodically reviewed to verify that these assumptions are still valid and that the county is expected to remain in attainment. As described in Chapter 11, the APCD is

required to update the 1991 Air Quality Attainment Plan every three years, in order to comply with the more health protective state 1-hour ozone standard. The triennial updates must assess the overall effectiveness of the county's air pollution control strategy, correct for deficiencies in meeting interim measures of progress, and incorporate new data or projections into the emissions inventory. Although these requirements relate to the county's progress toward attaining the state ozone standard, this periodic review process will assure that the assumptions used in this 2001 plan are updated and that attainment of the less health protective federal 1-hour ozone standard is periodically verified.

7.5.5 CONTINGENCY PROVISIONS

Section 175A(d) of the Federal Act requires that a Maintenance Plan include any necessary contingency provisions to promptly correct any standard violation that occurs after the area is redesignated as an attainment area. USEPA guidance provides that the Maintenance Plan should clearly identify measures to be adopted, a schedule and procedure for adoption and implementation, time limits for action, and specific thresholds or triggers which will be used to determine when the contingency measures must be implemented. As discussed in Chapter 4, the measures proposed in this 2001 Plan for state purposes represent contingency measures for federal purposes. Each measure specifies the schedule for adoption, implementation, and emissions reductions associated with each measure. This 2001 Plan goes beyond the contingency measure implementation threshold guidance because the APCD intends to adopt these measures as specified in Table 4-3 and in Appendix B.3 in order to meet the state 1-hour ozone standard. If we experience a violation of the federal 1-hour ozone standard prior to 2015, we will evaluate and expedite our rule adoption process in coordination with USEPA.

7.6 FEDERAL PLANNING REQUIREMENTS

This section discusses how Santa Barbara County has complied with all USEPA planning requirements so that USEPA can formally redesignate Santa Barbara County as an attainment area for the federal 1-hour ozone standard.

7.6.1 STATE IMPLEMENTATION PLAN REQUIREMENTS

The first clean air plan for Santa Barbara County was developed in 1979 and updated in 1982. These two plans were prepared in response to mandates established by the federal Clean Air Act of 1977. At that time, only the southern portion of the county (the region south of the crest of the Santa Ynez Mountains) violated the federal 1-hour ozone standard. The 1982 update predicted attainment of the federal ozone standard by 1984, but acknowledged that pollution generated on the OCS was not included in the plan, and therefore the county's ability to attain the ozone standard was uncertain.

The predicted attainment of the federal ozone standard did not occur. As a consequence, the USEPA called for an update to the 1982 Air Quality Attainment Plan on March 17, 1986. On May 26, 1988, the USEPA issued a subsequent mandate that our planning efforts address air quality for the entire county. This new mandate was issued in response to the failure of many regions of the country to attain the federal 1-hour ozone standard by 1987. In response, the APCD prepared the 1989 Air Quality Attainment Plan (1989 AQAP), which was adopted by the APCD Board of Directors in June of 1990 and was designed to bring the southern portion of the county into attainment with the federal 1-hour ozone standard.

Pursuant to new planning requirements mandated under the Federal Act, the 1993 Rate-of-Progress Plan (1993 ROP) was adopted by the Santa Barbara County Air Pollution Control District Board of Directors and formally submitted to the USEPA to provide for a 15% reduction in ROC emissions between 1990 and 1996. USEPA subsequently found the 1993 ROP incomplete for specific items, prompting amendments to the 1993 ROP in Chapter 9 of the 1994 Clean Air Plan (1994 CAP). The 1994 CAP was adopted by the APCD Board of Directors and formally submitted to the USEPA on November 15, 1994 to demonstrate attainment for the federal 1-hour ozone standard by the November 15, 1996 attainment deadline for "moderate" nonattainment areas.

On January 8, 1997, the USEPA approved several elements of the 1994 CAP, including the amendments to the 1993 Rate-of-Progress Plan, the base year emission inventory, and the control strategy. USEPA did not approve the attainment demonstration element due to violations of the federal 1-hour standard that occurred during 1994-1996. This element was withdrawn from the 1994 CAP submittal.

On December 10, 1997, the USEPA issued a final action finding that Santa Barbara County had not attained the federal 1-hour ozone standard by the statutory attainment date for “moderate” nonattainment areas of November 15, 1996. As a result, the entire Santa Barbara County nonattainment area was reclassified as a “serious” nonattainment area by operation of federal law. The USEPA action mandated that we continue progress toward the federal 1-hour ozone standard through the development of a revised Clean Air Plan. The 1998 CAP was adopted by the APCD Board of Directors on December 17, 1998 and forwarded by the ARB to the USEPA on March 19, 1999. The 1998 CAP addressed all the new federal planning requirements for “serious” nonattainment areas and was approved by the USEPA on August 14, 2000 (65 FR 49499-49501).

The APCD has consistently prepared plans in response to actions from USEPA. These plans have provided the basis for the air quality programs and adopted emission control measures in place today. We are confident that the submittal of this 2001 Clean Air Plan will assure the county’s compliance with all applicable requirements under federal law. It is critical that these programs remain in place and continue to reduce emissions in order to increase our margin of safety with respect to the federal 1-hour ozone standard and assure that the county continues to comply with this standard.

7.7 CONCLUSIONS

This chapter officially requests the USEPA to redesignate Santa Barbara County as an attainment area for the federal 1-hour ozone standard and provides a Maintenance Plan to document, verify, and ensure the continued attainment of this standard. The Maintenance Plan complies with Sections

107(d)(3)(E) and 175A of the Federal Act and all relevant policies and procedures of the USEPA.

The major conclusions of this chapter are as follows:

1. Santa Barbara County has consistently prepared plans in response to actions from USEPA that have provided the basis for the air quality programs and control measures in place today. It is important that these programs and control measures remain in place.
2. The air quality in Santa Barbara County has steadily improved over time and now complies with the federal 1-hour ozone standard.
3. Varying weather conditions may have inhibited ozone formation from 1997 through 1999. It does not appear, however, that conditions were so anomalous to suggest that weather was the principle cause for attaining the federal 1-hour ozone standard, especially in light of our long-term trend of air quality improvement.
4. Forecast emissions trends indicate that the emissions of VOC and NO_x through 2015 will be below our 1999 attainment inventory demonstrating that we will maintain the federal 1-hour ozone standard for the required 10 years after redesignation.
5. Our air quality is impacted by pollution from areas outside the county that may impact our ability to maintain the federal 1-hour ozone standard.
6. Significant increases in NO_x emissions from international marine vessels almost eliminate the NO_x reductions forecast to occur onshore by 2015. Additional action by the federal government and USEPA will be required to reduce the emissions and impacts from this significant source.
7. Additional emission reductions are needed to increase our margin of safety and assure that we will continue to attain the federal 1-hour ozone standard.

Table 7-1

Summary of Design Values From 1987-2000
For Santa Barbara County Compared To The Federal Act Classification Scheme

MONITORING PERIOD	DESIGN VALUE (PPM)	MONITORING STATIONS	FEDERAL CLASSIFICATION SCHEME
1987-1989	0.140	CARPINTERIA	MODERATE NONATTAINMENT
1988-1990	0.153	LAS FLORES CANYON	MODERATE NONATTAINMENT
1989-1991	0.153	LAS FLORES CANYON	MODERATE NONATTAINMENT
1990-1992	0.137	LAS FLORES CANYON	MARGINAL NONATTAINMENT
1991-1993	0.123	GTC B PARADISE ROAD	ATTAINMENT
1992-1994	0.129	CARPINTERIA	MARGINAL NONATTAINMENT
1993-1995	0.126	LAS FLORES CANYON	MARGINAL NONATTAINMENT
1994-1996	0.130	LAS FLORES CANYON	MARGINAL NONATTAINMENT
1995-1997	0.130	LAS FLORES CANYON	MARGINAL NONATTAINMENT
1996-1998	0.130	LAS FLORES CANYON	MARGINAL NONATTAINMENT
1997-1999	0.108	LAS FLORES CANYON CARPINTERIA	ATTAINMENT
1998-2000	0.108	LAS FLORES CANYON	ATTAINMENT

Table 7-2

Design Value Report for Monitoring Stations in Santa Barbara County
Federal 1-Hour Ozone Standard 1997-1999 (ppb)

Monitoring Station	1st	2nd	3rd	4th
Carpinteria	122	113	108	108
GTC B	95	92	90	88
Lompoc HS&P	100	94	89	88
Paradise Road	125	116	110	107
Exxon Las Flores Canyon	137	135	130	108
VAFB Power Plant	95	90	88	85
El Capitan	99	88	87	84
Goleta	103	95	94	91
Lompoc H Street	80	78	77	77
Santa Barbara	98	98	98	94
Santa Maria	73	70	69	68
Santa Ynez	104	99	98	90
Santa Rosa Island	93	82	82	81

Figure 7-1
2001 Clean Air Plan Onshore
ROC Emissions Forecast
(Tons per day)

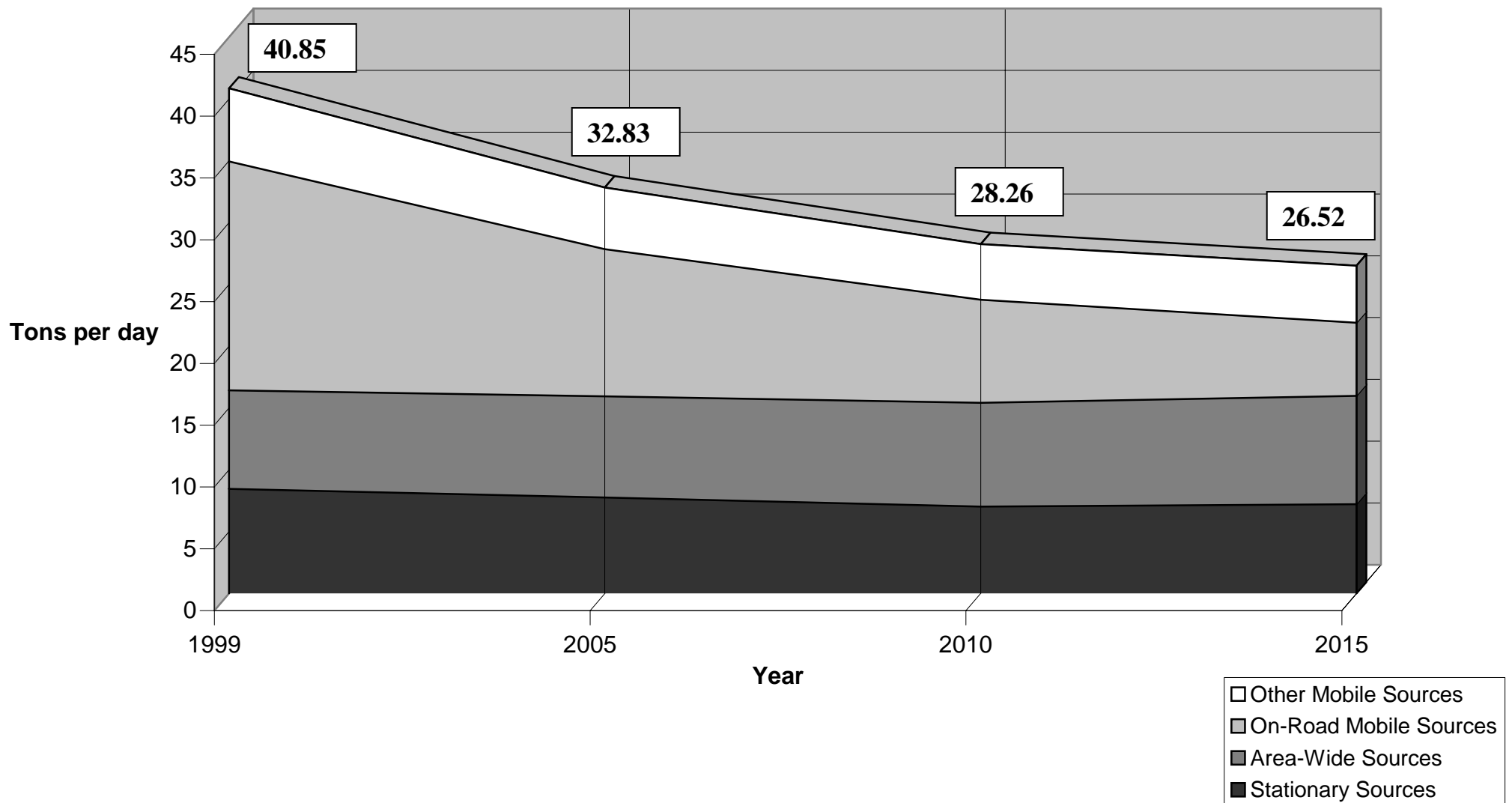


Figure 7-2
2001 Clean Air Plan Outer Continental Shelf
ROC Emissions Forecast
(Tons per day)

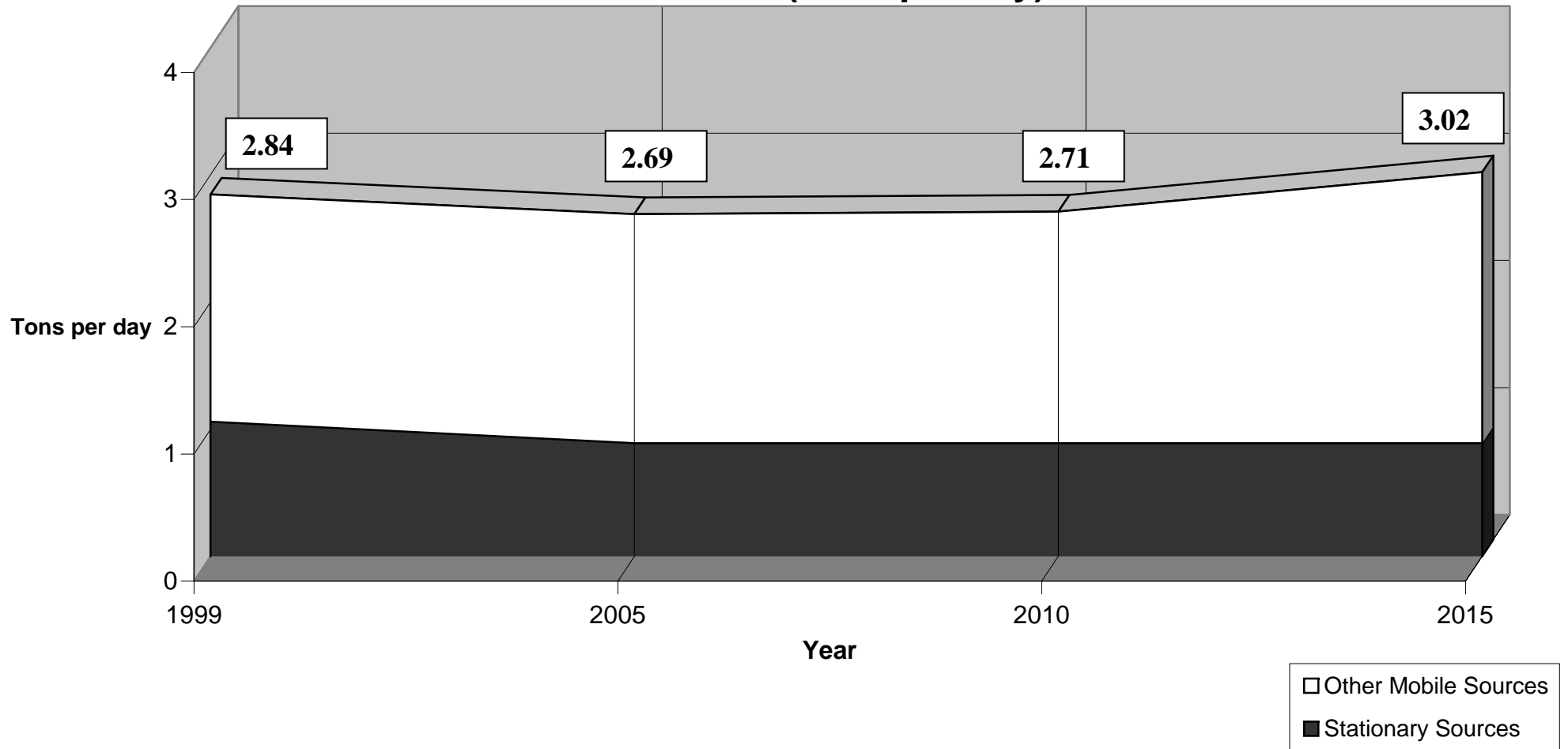


Figure 7-3
2001 Clean Air Plan Onshore & Outer Continental Shelf
ROC Emissions Forecast
(Tons per day)

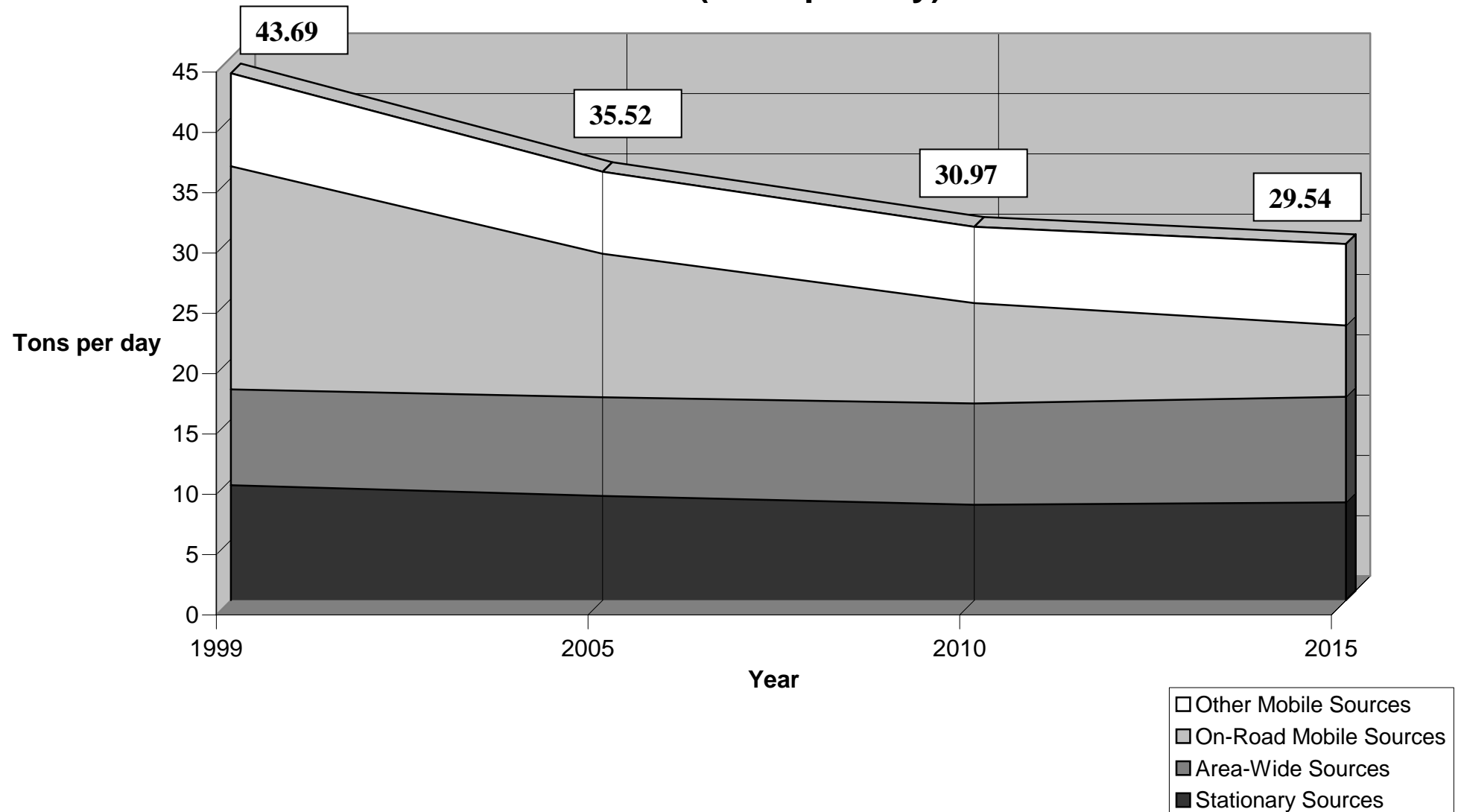


Figure 7-4
2001 Clean Air Plan Onshore
NOx Emissions Forecast
(Tons per day)

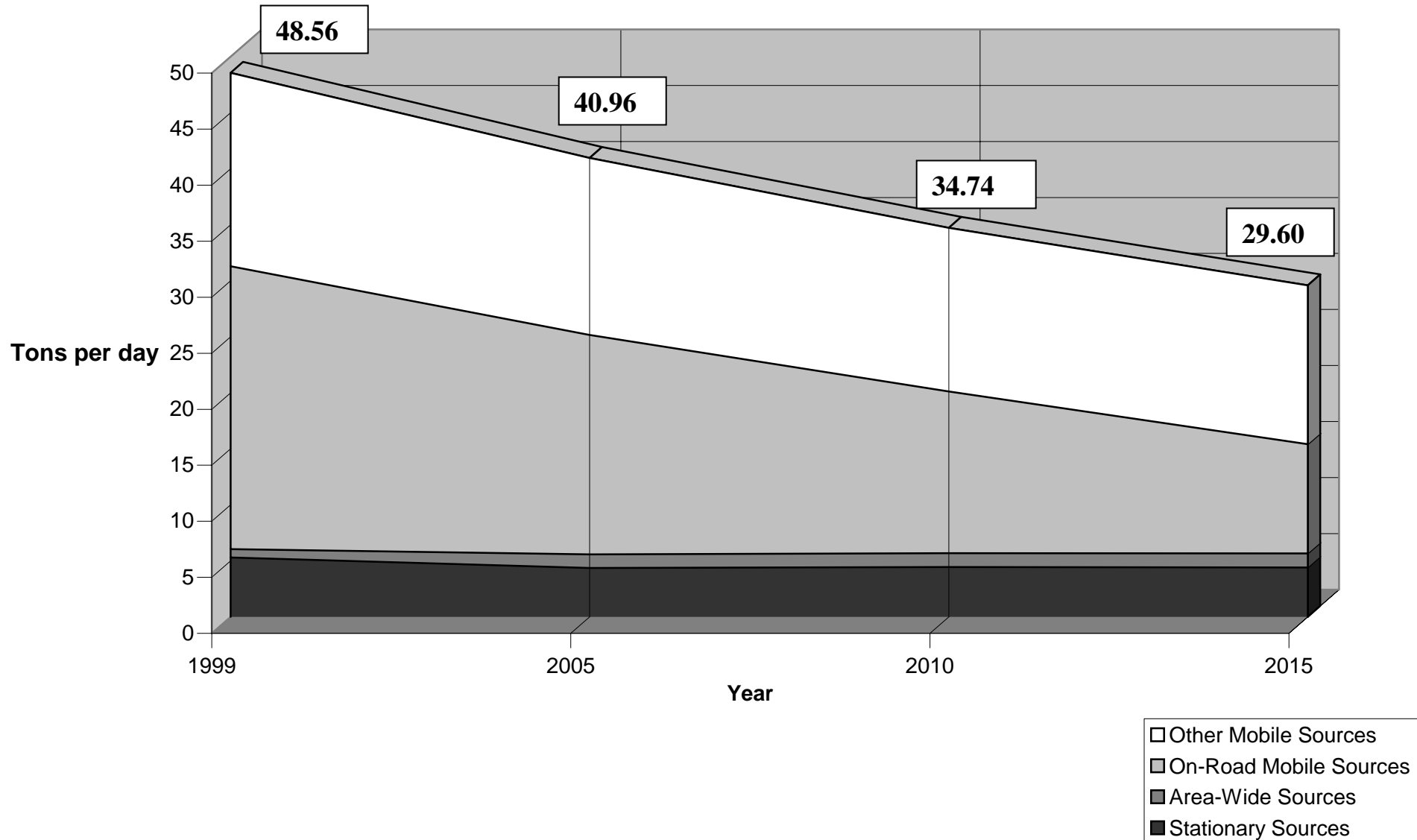
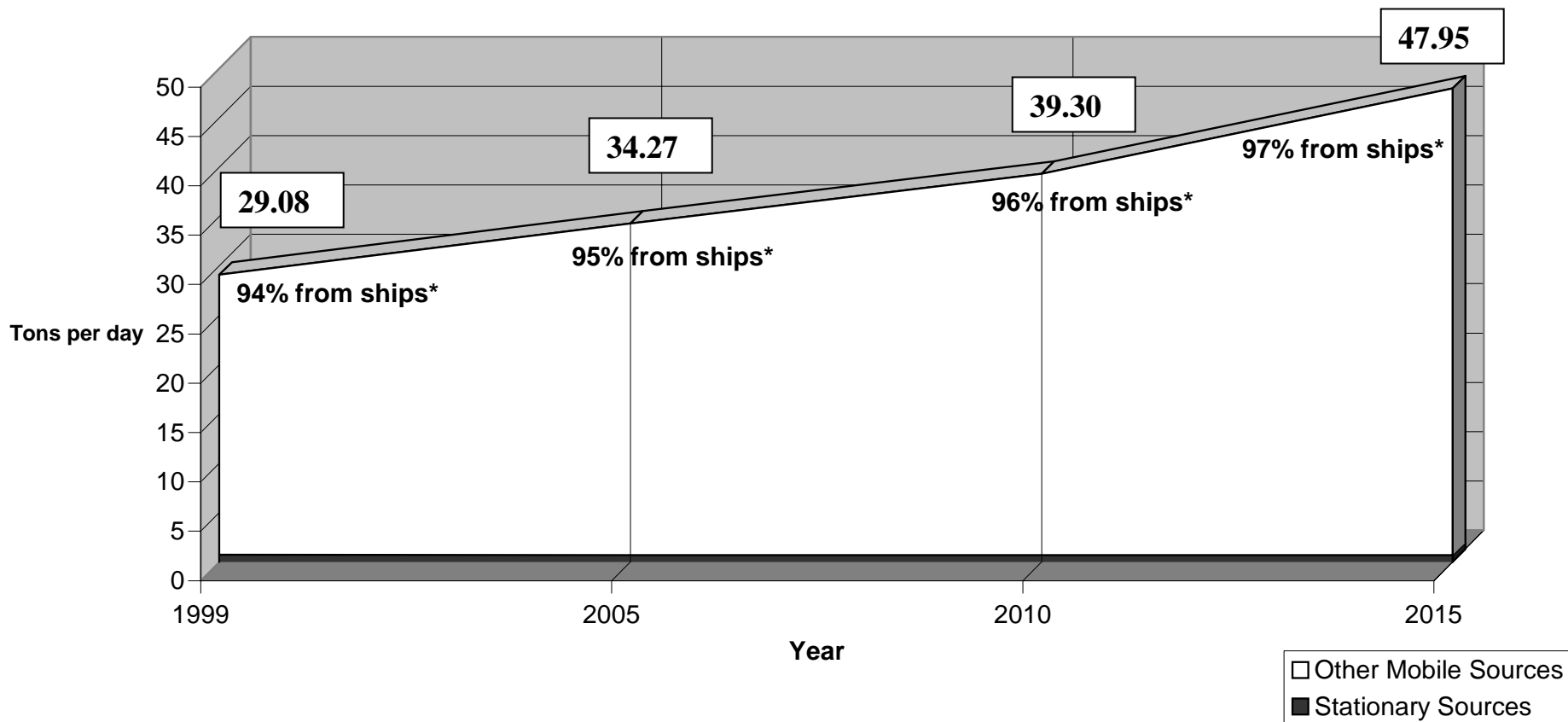
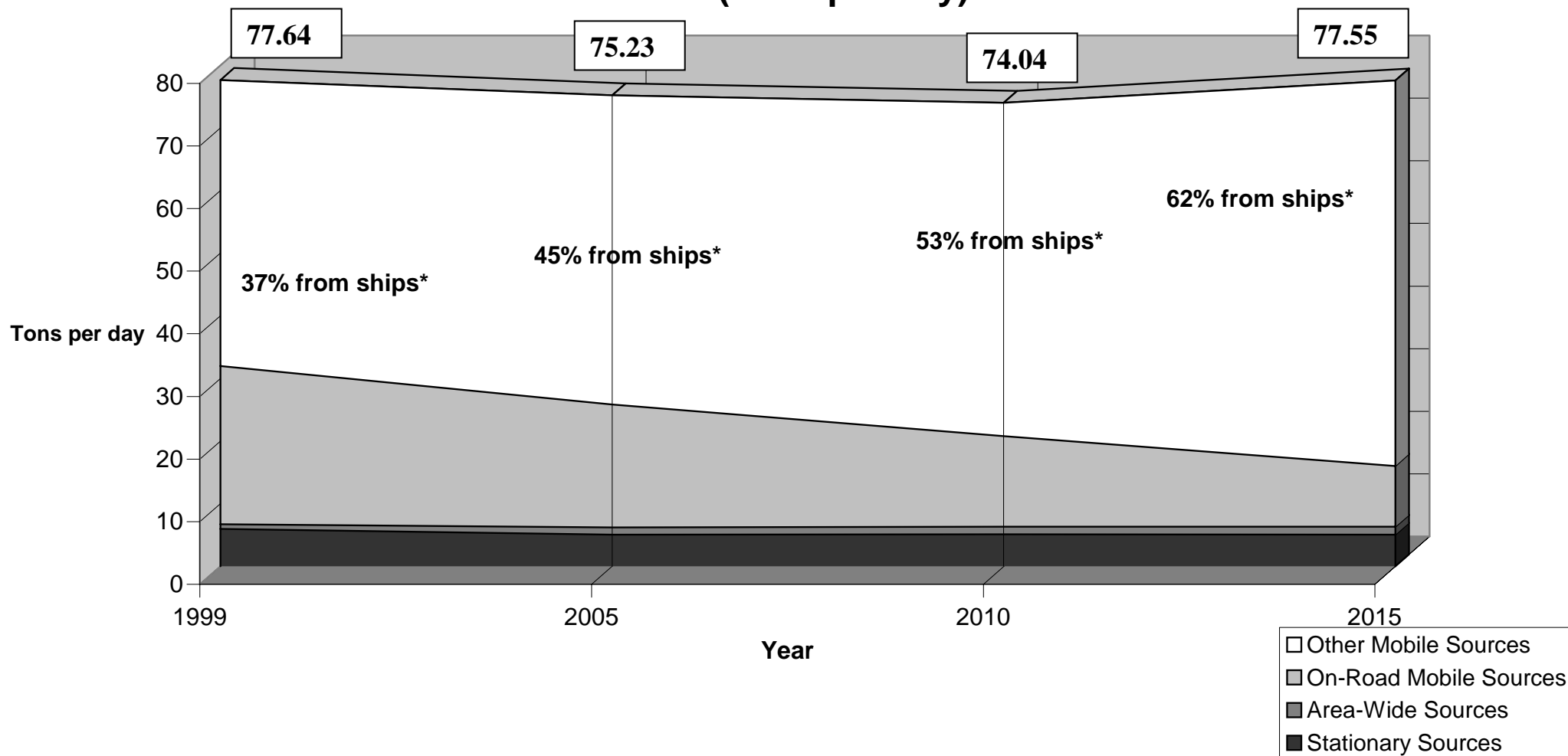


Figure 7-5
2001 Clean Air Plan Outer Continental Shelf
NOx Emissions Forecast
(Tons per day)



*Percentage of Other Mobile emissions from International Marine Vessels (Steam & Motor Ships In-Transit - Foreign &

Figure 7-6
2001 Clean Air Plan Onshore & Outer Continental Shelf
NOx Emissions Forecast
(Tons per day)



*Percentage of Other Mobile emissions from International Marine Vessels (Steam & Motor Ships In-Transit - Foreign & U.S.)