

**SECTION 1
INTRODUCTION AND EMISSIONS SUMMARIES**

1.1 Introduction

This document presents the 2002 Louisiana 8-Hour Ozone National Ambient Air Quality Standard Base Year Emissions Inventory. The Baton Rouge Ozone Nonattainment Area, hereafter referred to as the Baton Rouge Area, includes Ascension, Iberville, East Baton Rouge, Livingston, and West Baton Rouge Parishes. This inventory addresses carbon monoxide (CO), oxides of nitrogen (NO_x), and volatile organic compounds (VOC) emissions from stationary point, stationary nonpoint, nonroad mobile, and onroad mobile emissions sources.

1.2 Peak Ozone Season

The Peak Ozone Season (POS) is the consecutive five-month period with the highest frequency of National Ambient Air Quality Standards (NAAQS) exceedances occurring in the inventory area.

The POS for the Baton Rouge Area includes the months of May, June, July, August, and September. Table 1.2 displays the ozone exceedance days for the Baton Rouge Area for the three-year period 2000 thru 2002.

Table 1.2: Ozone Exceedance Days for the Baton Rouge Area

	2000	2001	2002
Months	Exceedance Days	Exceedance Days	Exceedance Days
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	1	0	0
June	0	0	0
July	4	1	0
August	6	0	1
September	0	0	1
October	0	0	0
November	0	0	0
December	0	0	0
Total	11	1	2

Map 1.3-1: Regional Urban Airshed Modeling (RUAM) 4 km Domain



Map 1.3-2: RUAM 2 km Domain

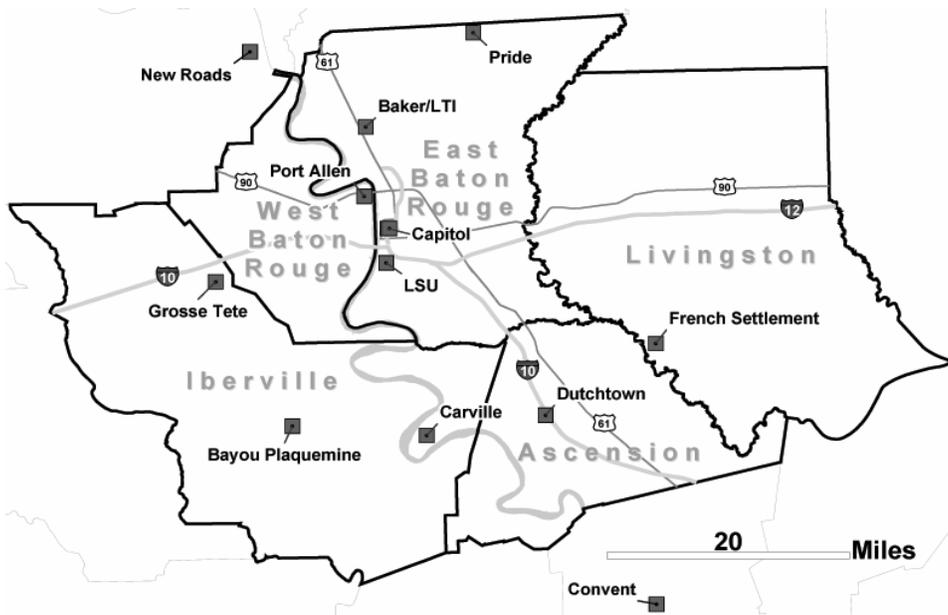


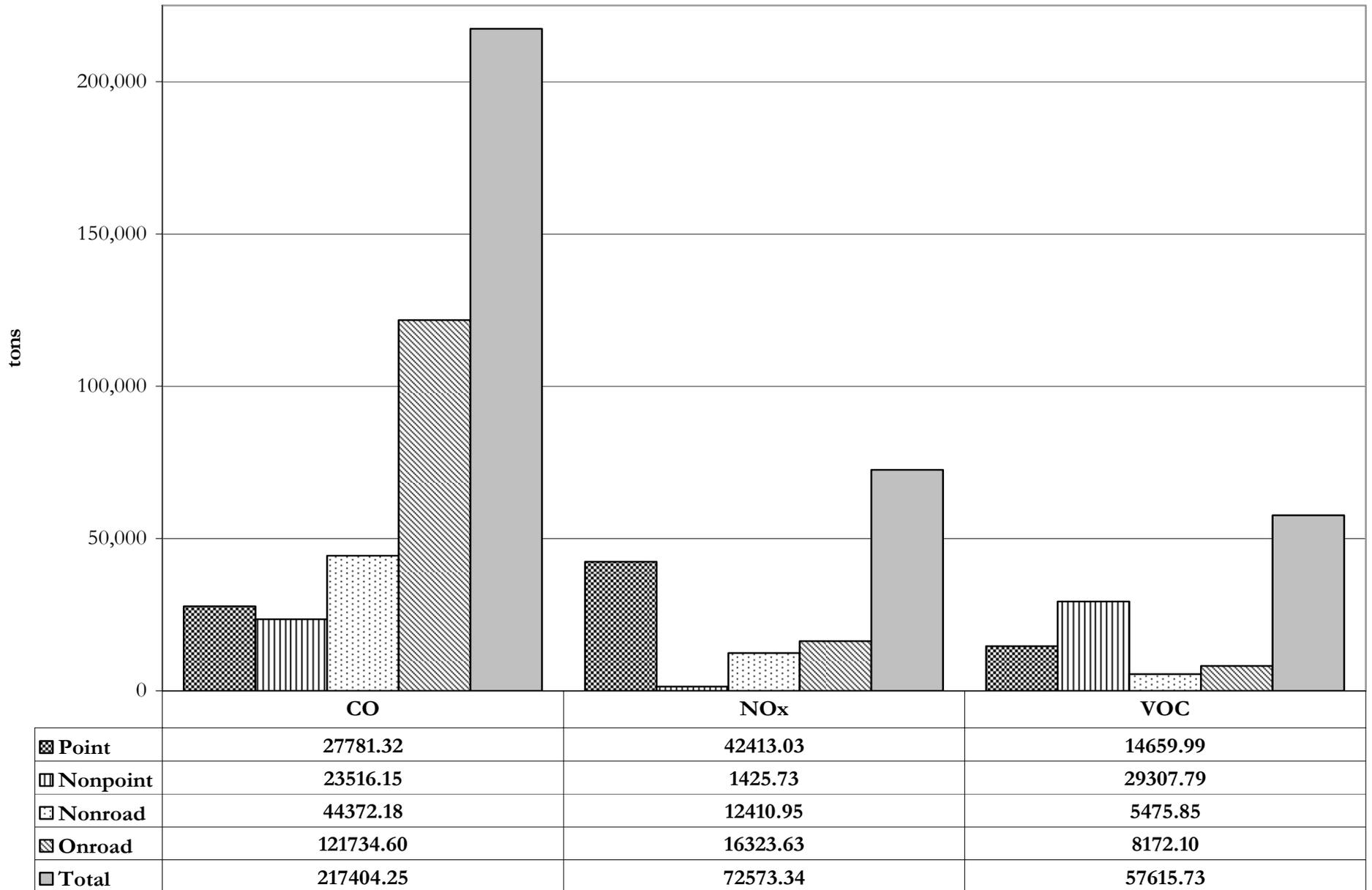
Table 1.8: 2002 Emissions Summary for the Baton Rouge Area

CO Emissions Summary										
Parish	Point Sources		Nonpoint Sources		Nonroad Mobile Sources		Onroad Mobile Sources		Total	
	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual
	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)
Ascension	19.05	6953.20	14.10	5147.64	9.52	3476.11	48.25	17612.37	90.92	33189.32
E. Baton Rouge	34.91	12742.93	5.98	2181.76	71.69	26167.24	173.17	63205.24	285.75	104297.17
Iberville	16.48	6016.61	21.98	8023.73	4.32	1577.27	25.25	9218.00	68.03	24835.61
Livingston	1.41	515.13	15.83	5777.46	8.83	3222.52	54.62	19935.10	80.69	29450.21
W. Baton Rouge	4.26	1553.45	6.54	2385.56	27.20	9929.04	32.23	11763.89	70.23	25631.94
Total	76.11	27781.32	64.43	23516.15	121.57	44372.18	333.52	121734.60	595.62	217404.25

NOx Emissions Summary										
Parish	Point Sources		Nonpoint Sources		Nonroad Mobile Sources		Onroad Mobile Sources		Total	
	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual
	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)
Ascension	35.55	12976.00	0.78	285.72	7.61	2776.79	7.47	2726.83	51.41	18765.34
E. Baton Rouge	34.88	12729.58	1.26	461.48	12.62	4604.64	18.61	6794.47	67.37	24590.17
Iberville	40.50	14781.86	1.00	364.40	5.41	1973.34	4.48	1636.59	51.39	18756.19
Livingston	0.58	212.15	0.50	182.33	1.24	452.24	8.76	3196.67	11.08	4043.39
W. Baton Rouge	4.69	1713.44	0.36	131.80	7.13	2603.94	5.39	1969.07	17.57	6418.25
Total	116.20	42413.03	3.91	1425.73	34.00	12410.95	44.72	16323.63	198.82	72573.34

VOC Emissions Summary										
Parish	Point Sources		Nonpoint Sources		Nonroad Mobile Sources		Onroad Mobile Sources		Total	
	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual
	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)	(tons/day)	(tons/year)
Ascension	9.37	3421.40	9.13	3333.39	0.84	307.98	3.27	1195.36	22.61	8258.13
E. Baton Rouge	19.58	7145.10	34.21	12485.85	5.14	1877.85	11.69	4265.07	70.62	25773.87
Iberville	6.50	2372.06	13.42	4897.34	0.54	198.60	1.67	610.55	22.13	8078.55
Livingston	1.24	451.38	13.64	4978.71	1.24	454.22	3.74	1363.70	19.86	7248.01
W. Baton Rouge	3.48	1270.05	9.90	3612.50	7.23	2637.20	2.02	737.42	22.63	8257.17
Total	40.16	14659.99	80.30	29307.79	15.00	5475.85	22.39	8172.10	157.85	57615.73

CHART 1.8: 2002 Emissions Summary for the Baton Rouge Area



Facilities included in this inventory were identified from the following sources:

- Existing 1990 Base Year Emissions Inventory list
- Review and comparison of the Toxic Emissions Data Inventory (TEDI) and the Toxic Release Inventory (TRI) databases including the Compliance Data Management System (CDS)
- Review of permit and other agency files

The facilities are listed by parish number and emissions inventory number. Below, in Table 2.3-1, the parish codes for the nonattainment parishes are listed.

Table 2.3-1: Louisiana Nonattainment Parish Codes

Parish Name	Parish Code
Ascension	0180
East Baton Rouge	0840
Iberville	1280
Livingston	1740
West Baton Rouge	3120

Table 2.3-2 summarizes emissions from the stationary point sources by parish. Appendix C lists stationary point source emissions by parish and facility.

Table 2.3-2: 2002 Stationary Point Source Emissions Summary for the Baton Rouge Area in tons per year

Parish	CO	NO_x	VOC
Ascension	6953.20	12976.00	3421.40
E. Baton Rouge	12742.93	12729.58	7145.10
Iberville	6016.61	14781.86	2372.06
Livingston	515.13	212.15	451.38
W. Baton Rouge	1553.45	1713.44	1270.05
Total	27781.32	42413.03	14659.99

3.8 Emissions Summaries

**Table 3.8: 2002 Stationary Nonpoint Source Emissions Summary
for the Baton Rouge Area in tons per year**

Parish	CO	NO_x	VOC
Ascension	5147.64	285.72	3333.39
E. Baton Rouge	2181.76	461.48	12485.85
Iberville	8023.73	364.40	4897.34
Livingston	5777.46	182.33	4978.71
W. Baton Rouge	2385.56	131.80	3612.50
Total	23516.15	1425.73	29307.79

Appendix F includes specific emissions data on fuel combustion and other industrial processes for stationary nonpoint sources.

related to boating activity (such as annual hours of operation, engine load factors, and temporal variations in activity). These assumptions vary by equipment type but not by geographic area. The activity data files used by the NONROAD 2004 model were updated with information gathered through a bottom-up survey of representative groups of recreational boat owners. The survey was designed to gather data on vessel characteristics, hours of use, fuel consumption, engine loads, and temporal and geographic usage patterns. The data assembled through this survey were then incorporated in the NONROAD 2004 model, along with state specific data on temperatures and fuel characteristics.

4.3 Emissions Summary

The following table summarizes emissions from the nonroad mobile sources for the Baton Rouge Area. Appendix G includes specific information on nonroad mobile sources for the SCCs presented by STI.

**Table 4.3: 2002 Nonroad Mobile Source Emissions Summary
for the Baton Rouge Area in tons per year**

Parish	CO	NO_x	VOC
Ascension	3476.11	2776.79	307.98
E. Baton Rouge	26167.24	4604.64	1877.85
Iberville	1577.27	1973.34	198.60
Livingston	3222.52	452.24	454.22
W. Baton Rouge	9929.04	2603.94	2637.20
Total	44372.18	12410.95	5475.85

**Table 5.4-1: 2002 Onroad Mobile Monthly Emissions Summary
for the Baton Rouge Area in tons**

Month	VOC	NO_x	CO
January	658.91	1387.92	11107.15
February	615.32	1295.06	9894.58
March	676.26	1410.73	9937.66
April	694.73	1376.75	9542.91
May	696.76	1371.20	9769.37
June	715.43	1358.30	10292.00
July	728.75	1382.53	10745.81
August	715.45	1343.49	10470.52
September	656.02	1244.22	9406.61
October	690.82	1352.19	9585.69
November	647.43	1354.90	9761.42
December	675.70	1447.68	11220.22
Total*	8171.58	16324.96	121733.93

**Table 5.4-2: 2002 Onroad Mobile Emissions Summary
for the Baton Rouge Area in tons per year**

Parish	CO	NO_x	VOC
Ascension	17612.37	2726.83	1195.36
E. Baton Rouge	63205.24	6794.47	4265.07
Iberville	9218.00	1636.59	610.55
Livingston	19935.10	3196.67	1363.70
W. Baton Rouge	11763.89	1969.07	737.42
Total*	121734.6	16323.63	8172.10

**Totals differ due to rounding.*