Indiana Department of Environmental Management

The States' View of the Air

State of Indiana

2014

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Indiana Department of Environmental Management
Office of Air Quality
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EXECUTIVE SUMMARY

Air quality across the nation has improved over the past ten years or more. The publication of misleading reports can unfortunately lead the public to believe otherwise. This analysis demonstrates the progress made from 2000 through 2012 for ozone and fine particles (PM-2.5). The national ambient air quality standards in place in 2012 were applied to all time periods in this analysis to demonstrate the progress made.

Figures 1 through 3 show the progress made for ozone, 24-hour PM-2.5 and annual PM-2.5. The bars represent the population of each period (based on the last year in the period). The portion that is green represents the number of people living in counties that measure air quality better than the standard. The portion of the bar that is red represents the number of people living in counties that measure air quality at levels above the standard. The blue portion of the bar represents the number of people that live in counties where air quality is not measured.

Compliance with standards is determined on a three year basis. In 2000 – 2002 approximately 49 million people lived in counties that measured ozone air quality levels better than the standard. By 2010 – 2012 this had increased to over 128 million people.

The situation for fine particles (PM-2.5) is very similar. In 2000 – 2002, 99 million people lived in counties where 24-hour PM-2.5 levels were measured below the standard. By 2010 – 2012 this had increased to 198 million people. Of note, is that monitoring for PM-2.5 is only conducted in counties with a total of 201 million people.

In the 2000 – 2002 period, 124 million people lived in counties where annual PM-2.5 levels were measured below the standard. By 2010 – 2012 this had increased to 201 million people. Approximately 150,000 people lived in counties where annual PM-2.5 levels were measured above the standard.

Even with the improvements made in air quality, there are still areas of the country that need further improvement. Figure 4 shows states that have 8 hour ozone nonattainment areas based on 2010 – 2012 data using the average air quality method described in this document. Thirty states, including the District of Columbia, would be included. Figure 5 shows the states that would be nonattainment based upon U.S. EPA methods. Only Arizona is added.

Figure 6 shows those states that violate the 24-hour PM-2.5 standard based on 2010 – 2012 data using average air quality data. Only five states are included. The U.S. EPA method adds Oregon. This is shown in Figure 7.

Figure 8 shows those states that violate the annual PM-2.5 standard based on 2010 – 2012 data using average air quality data. Only California is included. Figure 9 shows the results for the same period using U.S. EPA's method and includes only California.

The bottom line is that most areas of the country were meeting the PM-2.5 standard at the 2010 – 2012 review. There are still several areas of the country that violate the current ozone standard. Many areas have made considerable progress in lowering ozone levels, but further work remains to be done. During 2012, U.S. EPA lowered the annual PM-2.5 standard. Future analyses will focus on how areas are dealing with meeting this new standard.

Figure 1

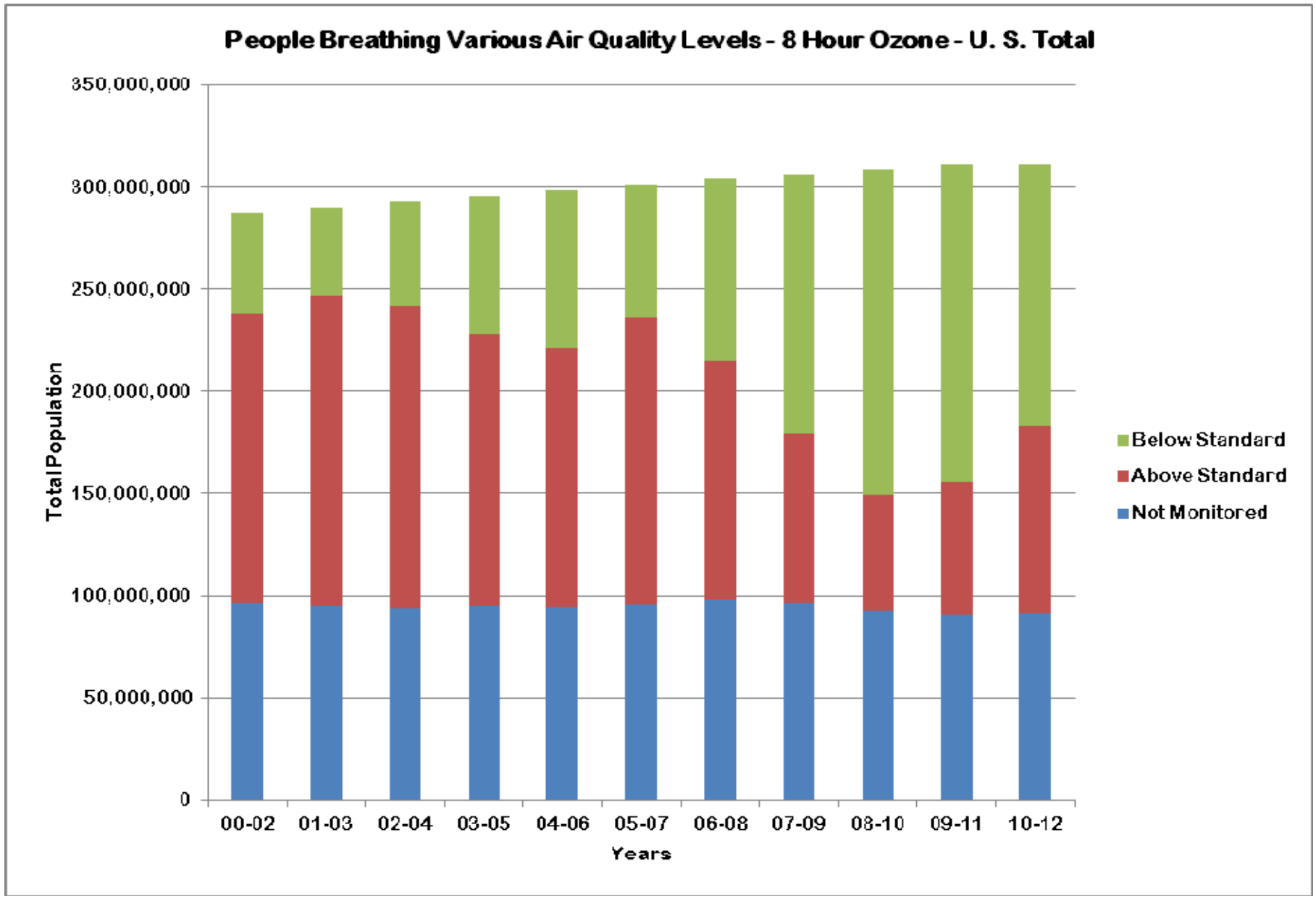

People Breathing Various Air Quality Levels - 8 Hour Ozone - U. S. Total
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure 2

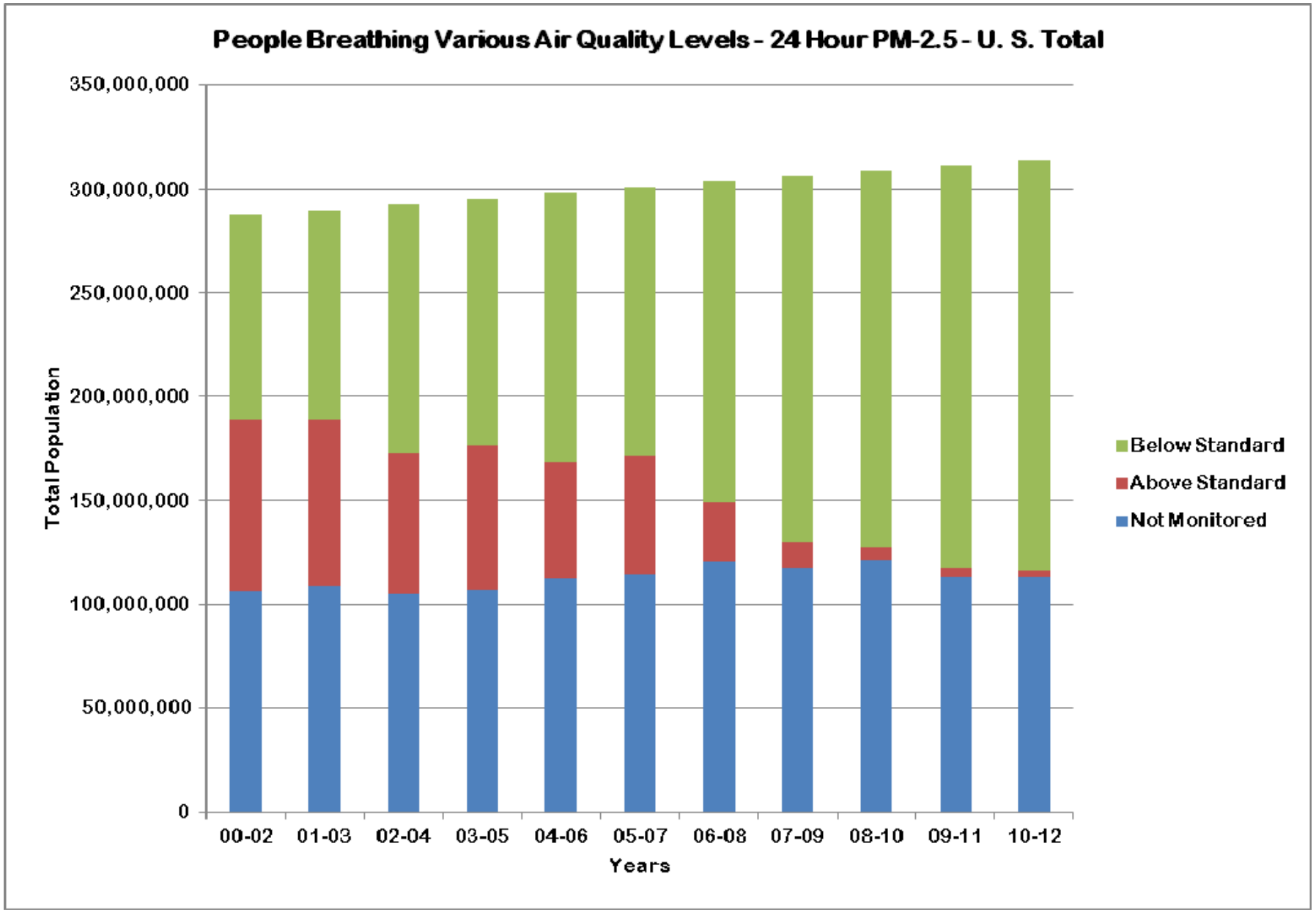

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - U. S. Total
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure 3

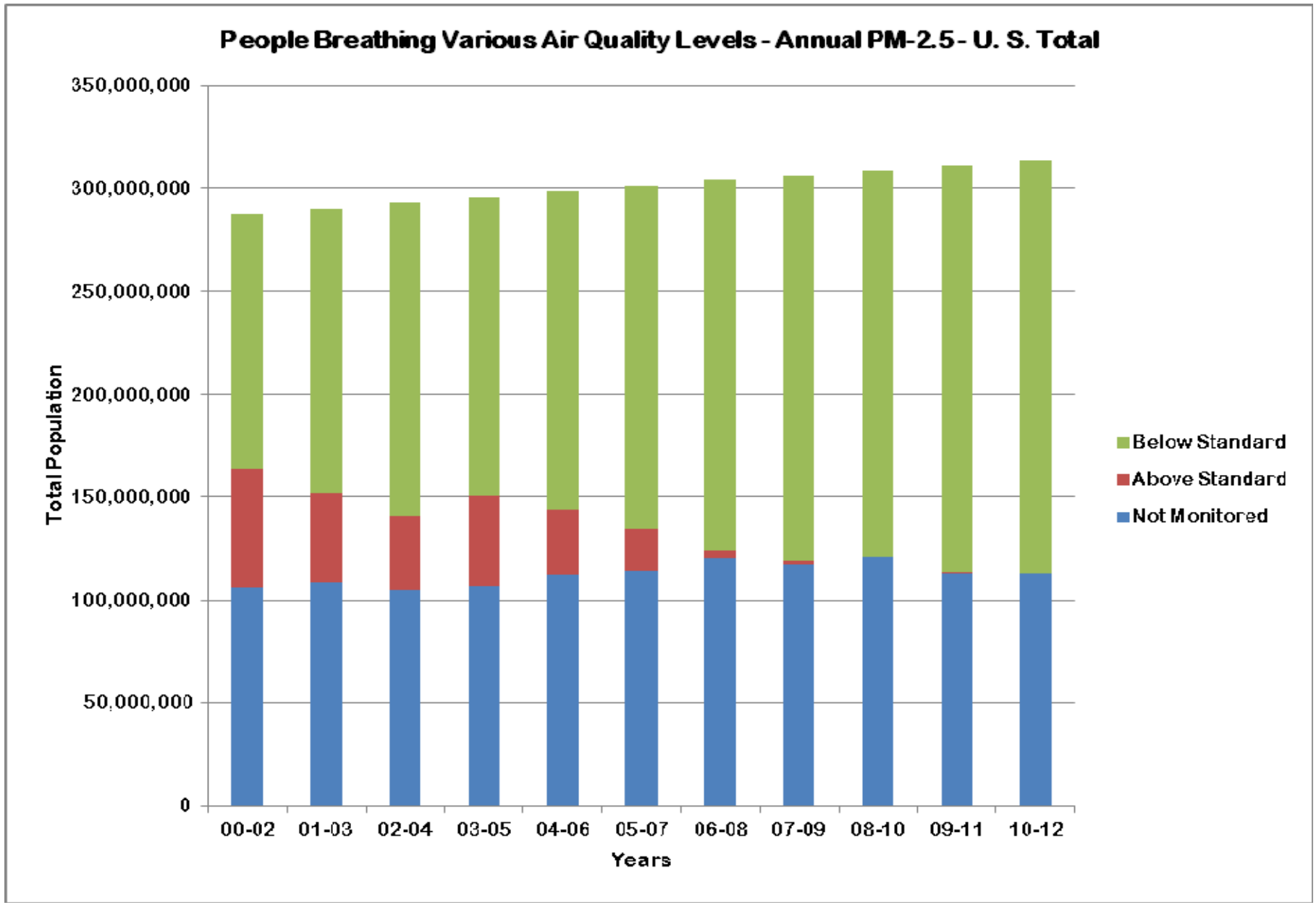

People Breathing Various Air Quality Levels - Annual PM-2.5 - U. S. Total
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure 4

Non-Attainment States Based on Average Data - 8 Hour Ozone (Map 1)

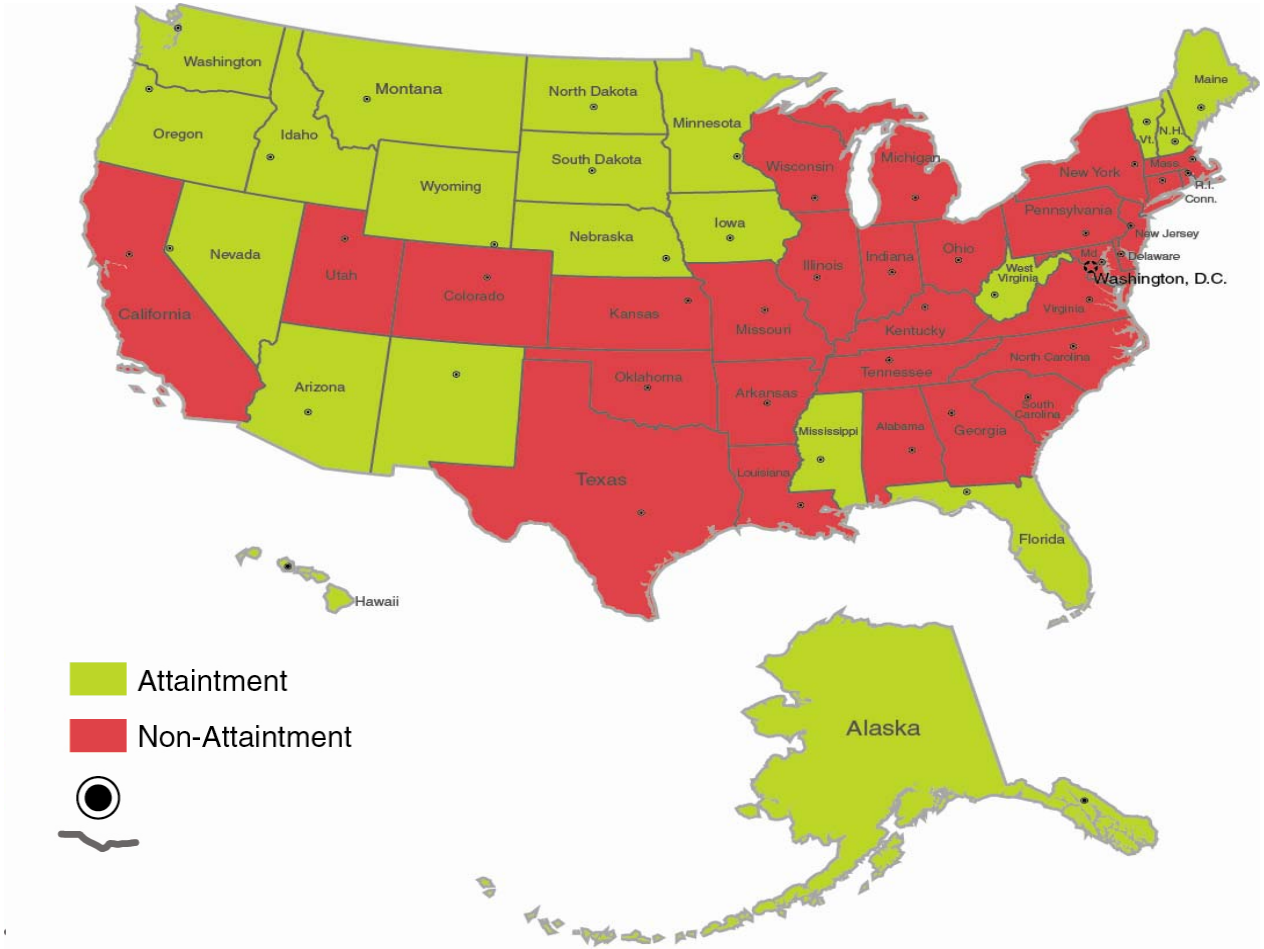


Figure 5

Non-Attainment States Based on U.S. EPA Method - 8 Hour Ozone (Map 2)

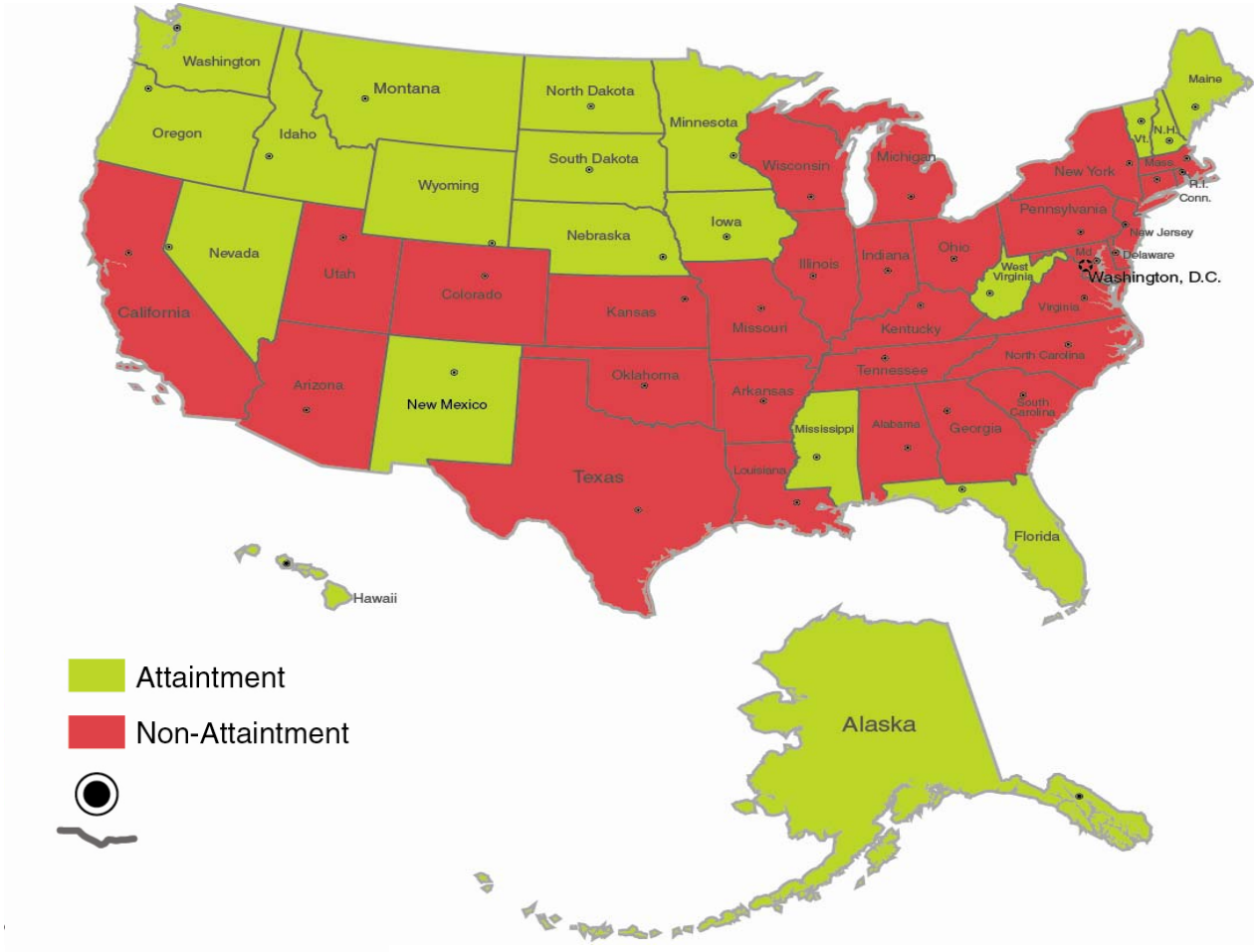


Figure 6

Non-Attainment States Based on Average Data - 24 Hour PM-2.5 (Map 3)

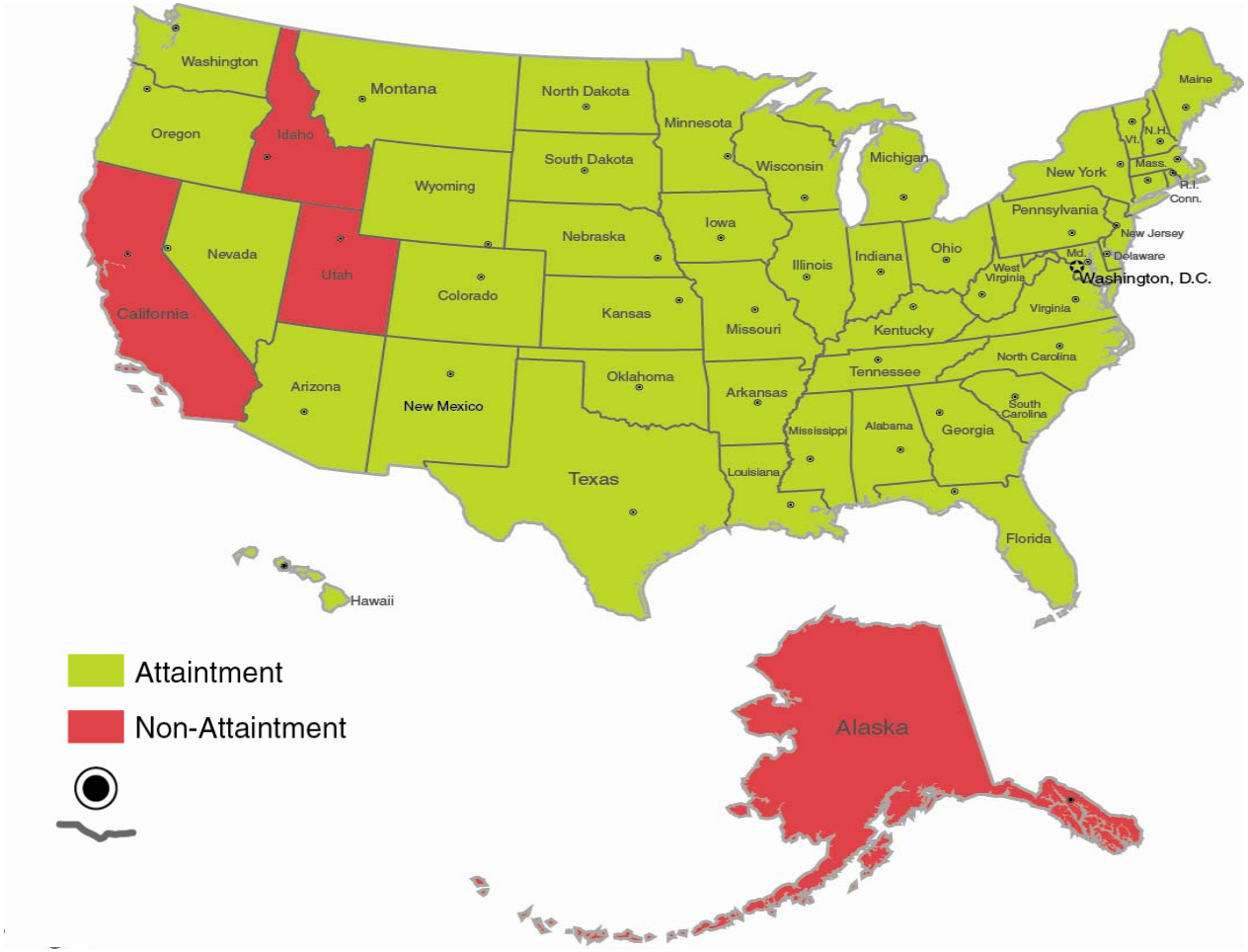


Figure 7

Non-Attainment States Based on U.S. EPA Method - 24 Hour PM-2.5 (Map 5)

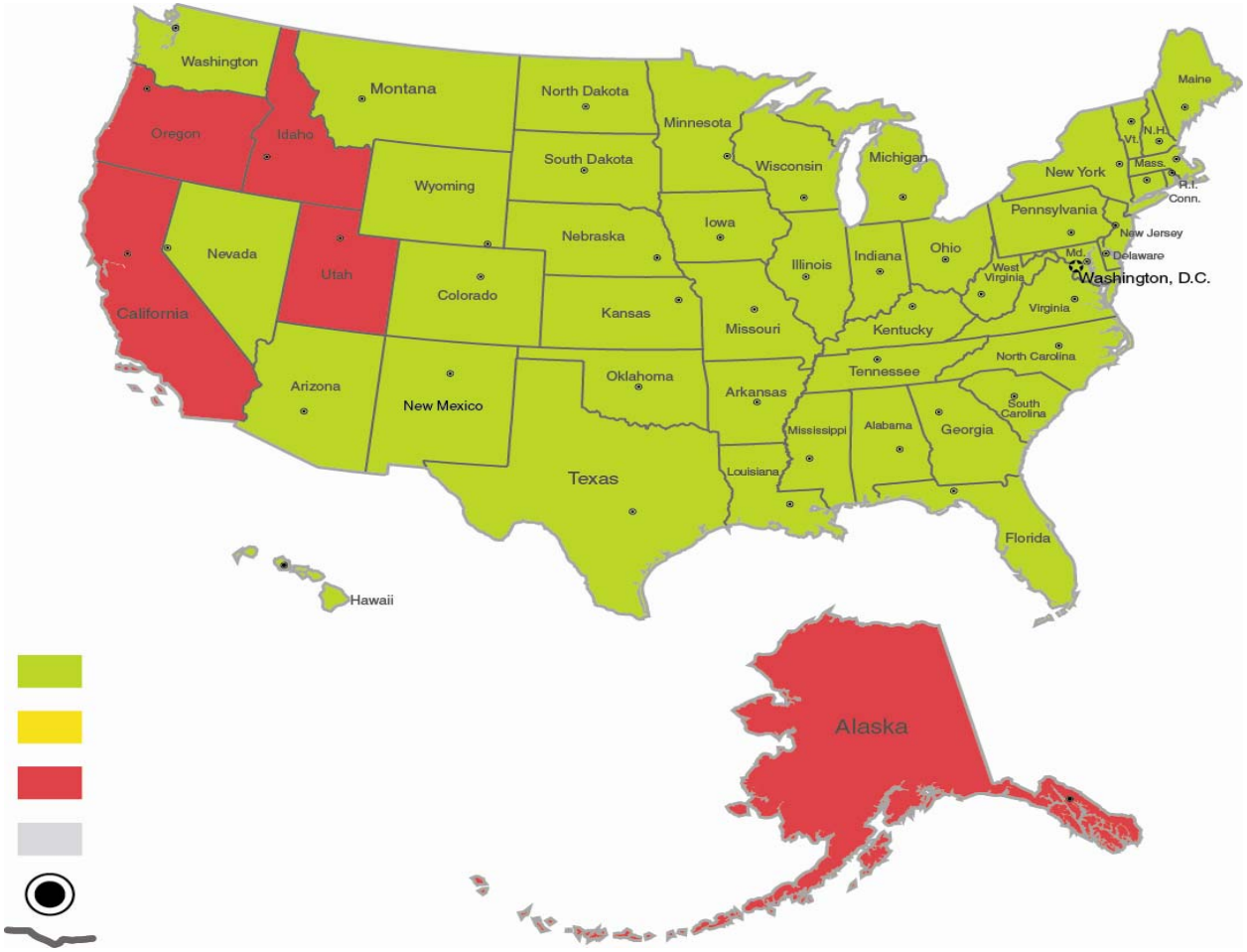


Figure 8

Non-Attainment States Based on Average Data - Annual PM-2.5 (Map 4)

Figure 9

Non-Attainment States Based on U.S. EPA Method - Annual PM-2.5 (Map 6)

The States' View of the Air – 2014

This is the third year for this report. It was originally intended as a complimentary document to the American Lung Association's (ALA) annual report called "The State of the Air."

This report starts with the same air quality data used by the ALA. For this report, it includes data for the period of 2000 – 2012. The review of data in this report differs from the ALA in a few significant ways. First, the design values used for both ozone and PM-2.5 are based on average values for each county. This is an important distinction. While U.S. EPA's guidance for attainment/nonattainment designation purposes focuses on the worst design value for a county, this is not consistent with what people are breathing. For example, if a county has ten monitors and nine have design values below the standard and one is slightly above the standard, U.S. EPA and ALA would assume that everyone in the county were breathing air at levels above the standard. That is obviously not correct. If you combine counties into metropolitan statistical areas (cities) consisting of several counties, the entire area would be assumed to be above the standard based on the one monitor described above. This report averages design values for all monitors in a county to determine the average level that is breathed by the residents of that county. This is not to say that some individuals could be exposed to higher levels. However, not all residents in a county are exposed to levels associated with the highest monitor.

A second difference is that when design values for a number of counties are being grouped to determine the overall value for a metropolitan statistical area, the individual design values for each county are weighted by the population of that county to determine a population weighted average value. This value is more consistent with what the population is being exposed to and is in line with what health research professionals use in their analyses.

A grading system has been established for ozone and PM-2.5 in this report. Any grading system is arbitrary in nature. The key to this grading system is that any area meeting the national ambient air quality standards should not be rated lower than a "C". In essence, we have set the standard as a "C". Any level between 90 and 100% of the standard is rated a "C". Any level between 80 and 90% of the standard is rated as "B". Any level below 80% is set as an "A". Any level between 101 and 110% of the standard is set as a "D". Any level above 110% of the standard is rated as an "F". This translates into the following ranges.

Table 1
Grading Scheme

Grade	Ozone (ppm)	24-hr PM-2.5 (µg/m3)	Annual PM-2.5 (µg/m3)
A	< 0.060	< 28.0	< 12.0
B	0.060 – 0.067	28.0 – 31.4	12.0 – 13.4
C	0.068 – 0.075	31.5 – 35.0	13.5 – 15.0
D	0.076 – 0.082	35.1 – 38.5	15.1 – 16.5
F	➢ 0.082	➢ 38.5	➢ 16.5

This grading scale will need to be revised in the future as the national ambient air quality standards for PM-2.5 and ozone are revised. However, these are the appropriate levels for the standards that were in place during the time period (2010 – 2012).

This report will not report population groups by county or state (those less than 18 or 65 and older, diabetics, etc.). It is very difficult to obtain this data for each state. Also, the methodology which apportions state totals to individual counties is questionable. It is based solely upon a comparison of age distribution of the state versus the county. In many cases other variables, may be important in making these allocations more accurately.

Information on health effects is not included in this report. Instead we provide links to U.S. EPA websites that contain this information.

Ozone: **http://epa.gov/airquality/ozonepollution/health.html**

PM-2.5: **http://epa.gov/airquality/particlepollution/health.html**

The remainder of this report contains tables that are similar to those that are in the ALA report. The ALA report focuses solely on a three year block of data and does not provide any perspective. Our report will look at three year blocks of data from 2000 through 2012 so that the reader can see how the air quality is changing over time.

Ozone

In the 2000 – 2002 period approximately 49 million people (17.2% of the U.S. population) lived in counties that met the ozone standard. During the same time period approximately 96 million people (33.4%) lived in counties where ozone was not monitored. By the 2010 – 2012 period over 128 million people (40.8%) lived in counties that met the ozone standard. During the same time period over 96 million people (29.2%) lived in counties where ozone was not monitored. Figure 1 shows the distribution of people by year.

24 – Hour PM-2.5

In the 2000 – 2002 period approximately 99 million people (34.4% of the U.S. population) lived in counties that met the 24-hour PM-2.5 standard. During this same time period approximately 106 million people (37.0%) lived in counties where PM-2.5 was not monitored. By the 2010 – 2012 period over 198 million people (62.9%) lived in counties that met the 24-hour PM-2.5 standard. During the same time period nearly 113 million people (36.0%) lived in counties where PM-2.5 was not monitored. Figure 2 shows the distribution of people by year.

Annual PM-2.5

In the 2000 – 2002 period approximately 124 million people (43.2% of the U.S. population) lived in counties that met the annual PM-2.5 standard. During the same time period approximately 106 million people (37.0%) lived in counties where PM-2.5 was not monitored. By the 2010 - 2012 period nearly 200 million people (63.9%) lived in counties that met the annual PM-2.5 standard. During the same time period nearly 113 million people (36.0%) lived in counties where PM-2.5 was not monitored. Figure 3 shows the distribution of people by year.

Note:

For the state summaries, the first table shows monitoring totals at the bottom that include county totals for areas that measure either Ozone or PM-2.5. The second set of tables includes totals monitored by pollutant.

Table 2

People Breathing Ozone

Grades	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	9,755,126	4,694,728	4,003,383	5,745,195	5,389,555	7,818,727	5,175,867	7,878,534	11,945,133	15,045,046	16,724,008
B	14,260,282	13,717,670	14,239,076	15,907,608	16,103,666	15,411,681	21,792,692	28,041,086	47,031,734	41,619,970	33,864,897
C	25,437,918	24,794,393	32,618,323	45,331,300	55,700,223	41,564,050	61,603,127	91,695,178	100,095,637	99,445,465	77,410,705
D	37,975,358	40,709,552	58,260,198	67,837,033	66,640,317	69,991,995	69,875,747	58,665,292	50,253,319	54,558,315	70,510,160
F	103,587,551	110,959,278	89,650,559	65,470,859	60,114,243	70,673,505	47,217,432	24,029,669	6,771,151	10,136,744	21,083,781
Subtotals	191,016,235	194,875,621	198,771,639	200,291,995	203,948,004	205,357,958	205,664,865	210,109,759	216,096,974	220,805,540	219,693,551
Not Monitored	96,608,958	95,232,312	94,833,659	95,224,604	94,431,908	95,873,249	98,429,101	96,661,870	92,648,564	90,786,377	91,722,257
Totals	287,625,193	290,107,933	292,805,298	295,516,599	298,379,912	301,231,207	304,093,966	306,771,529	308,745,538	311,591,917	314,004,040

Table 3

People Breathing Short-term Particle Pollution (24-hour PM-2.5)

Grades	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	35,071,374	42,179,887	47,987,105	38,859,132	51,528,084	56,939,943	68,136,521	102,193,083	129,250,050	151,875,673	163,015,549
B	33,921,410	25,781,038	34,167,227	38,423,718	36,478,624	36,276,741	47,155,529	41,508,829	44,699,084	22,316,651	32,498,178
C	30,006,231	33,645,250	37,783,393	41,572,116	41,820,903	36,628,468	39,248,888	33,240,113	7,321,166	19,930,676	2,074,996
D	35,391,648	31,751,170	31,741,258	26,928,939	27,526,257	30,095,048	21,438,609	6,011,530	2,941,847	36,546	184,186
F	46,872,140	47,775,569	36,918,678	42,898,526	28,657,056	27,274,244	7,577,282	6,510,203	3,738,532	4,300,575	3,042,948
Subtotals	181,262,803	181,112,924	187,597,671	188,682,431	186,010,924	187,214,434	183,557,829	189,463,257	187,950,679	198,785,021	200,815,857
Not Monitored	106,382,390	108,995,009	105,207,827	106,824,168	112,368,988	114,016,773	120,536,137	117,308,272	120,794,859	112,806,896	113,590,425
Totals	287,625,193	290,107,933	292,805,298	295,516,599	298,379,912	301,231,207	304,093,966	306,771,529	308,746,538	311,591,917	314,004,040

Table 4

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grades	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	56,836,194	61,489,443	71,607,095	70,701,800	78,176,385	83,106,618	92,885,878	122,487,530	170,370,433	171,038,744	187,795,282
B	34,560,157	36,925,364	39,692,401	38,788,817	38,827,535	36,294,350	46,112,538	47,329,098	13,296,633	13,927,988	10,897,521
C	32,860,806	39,864,699	40,884,495	35,514,269	37,400,045	47,480,532	40,727,883	17,797,628	3,851,434	12,850,514	1,978,594
D	28,087,112	24,632,741	18,873,078	24,657,312	26,418,093	17,360,943	2,492,617	921,478	442,179	967,775	0
F	28,918,534	18,227,667	16,540,592	19,020,433	5,185,566	2,971,991	1,338,913	948,523	0	0	152,218
Subtotals	181,252,803	181,112,924	187,597,671	188,682,431	186,010,924	187,214,434	183,557,829	189,463,257	187,950,679	198,785,021	200,815,857
Not Monitored	106,382,390	108,995,009	105,207,827	106,824,168	112,368,988	114,016,773	120,536,137	117,308,272	120,794,859	112,806,896	113,590,425
Totals	287,625,193	290,107,933	292,805,298	295,516,599	298,379,912	301,231,207	304,093,966	306,771,529	308,746,538	311,591,917	314,004,040

Table 5
High Cities - Year Round Particle Pollution (Annual PM-2.5)
(2010 -2012)

Rank	MSA	PW DV	Grade	2012 Population
1	**Madera, CA**	**18.9**	**F**	152,218
2	Modesto, CA	14.9	C	521,726
3	Bakersfield, CA	14.8	C	656,158
3	Visalia-Porterville, CA	14.8	C	451,977
5	Johnstown, PA	12.9	B	141,584
5	Terre Haute, IN	12.9	B	172,493
7	Hagerstown-Martinsburg, MD-WV	12.6	B	256,278
8	Canton-Massilon, OH	12.4	B	403,455
9	Cincinnati, OH-KY-IN	12.3	B	2,128,603
10	Indianapolis-Carmel-Anderson, IN	12.2	B	1,948,982
11	South Bend-Mishawaka, IN-MI	12.1	B	318,586
11	Lancaster, PA	12.1	B	526,823
11	Louisville-Jefferson County, KY-IN	12.1	B	1,251,351
11	Dayton, OH	12.1	B	800,972
11	Wheeling, WV-OH	12.1	B	146,420
16	Evansville, IN-KY	12.0	B	313,433
17	Springfield, OH	11.9	A	137,206
17	Owensboro, KY	11.9	A	116,030
17	Rome, GA	11.9	A	96,177
17	Riverside-San Bernardino-Ontario, CA	11.9	A	4,350,096
21	Weirton-Steubenville, WV-OH	11.8	A	122,547
21	Macon, GA	11.8	A	232,723
21	Lafayette, LA	11.8	A	474,415
21	Parkersburg-Vienna, WV	11.8	A	92,548

MSA – Metropolitan Statistical Area PW – Population Weighted DV – Design Value

Of the top 24 cities, only one has air quality that exceeds the national ambient air quality standard. Three cities are rated as C. Twelve cities are rated as B and eight are rated as A.

Table 6
Highest Cities – Short Term Particle Pollution (24-hour PM-2.5)
(2010 -2012)

Rank	MSA	PW DV	Grade	2012 Population
1	**Madera, CA**	**51**	**F**	152,218
2	**Bakersfield, CA**	**50**	**F**	656,158
3	**Modesto, CA**	**49**	**F**	521,726
4	**Visalia-Porterville, CA**	**47**	**F**	451,977
5	**Fairbanks, AK**	**46**	**F**	100,272
6	**Fresno, CA**	**41**	**F**	947,895
7	**Logan, UT-ID**	**36**	**D**	128,306
8	Ogden-Clearfield, UT	35	C	612,441
9	Salt Lake City, UT	33	C	1,123,712
9	South Bend-Mishawaka, IN-MI	33	C	318,586
11	Yakima, WA	31	B	246,977
11	Lancaster, PA	31	B	526,823
11	Hagerstown-Martinsburg, MD-WV	31	B	256,278
11	Johnstown, PA	31	B	141,584
11	Elkhart-Goshen, IN	31	B	199,619
16	Gettysburg, PA	30	B	101,482
16	Harrisburg-Carlisle, PA	30	B	553,980
16	Terre Haute, IN	30	B	172,493
19	Allentown-Nethlehem-Easton, PA-NJ	29	B	827,171
19	York-Hanover, PA	29	B	437,846
19	State College, PA	29	B	155,171
19	Provo-Orem, UT	29	B	550,845
19	Green Bay, WI	29	B	311,098
19	Riverside-San Bernardino-Ontario, CA	29	B	4,350,096
19	Los Angeles-Long Beach-Anaheim, CA	29	B	13,052,921
19	Indianapolis-Carmel-Anderson, CA	29	B	1,948,982

MSA – Metropolitan Statistical Area PW – Population Weighted DV – Design Value

Of the 26 highest cities, 6 have ratings of F, 1 is a D, 3 are C and 16 are B.

Table 7
Highest 8-Hour Ozone Cities
(2010 -2012)

Rank	MSA	PW DV	Grade	2012 Population
1	Riverside-San Bernardino-Ontario, CA	0.093	F	4,350,096
2	Fresno, CA	0.089	F	947,895
2	Visalia-Porterville, CA	0.089	F	451,977
4	Bakersfield, CA	0.088	F	656,158
5	Sheboygan, WI	0.087	F	115,009
6	Bridgeport-Stamford-Norwalk, CT	0.085	F	933,835
7	Baltimore-Columbia-Towson, MD	0.082	D	2,752,149
7	Dallas-Fort Worth-Arlington, TX	0.082	D	6,700,991
7	Hanford-Corcoran, CA	0.082	D	151,364
7	Merced, CA	0.082	D	262,305
7	Modesto, CA	0.082	D	521,726
7	Muskegon, MI	0.082	D	170,182
7	Niles-Benton Harbor, MI	0.082	D	156,067
7	Louisville-Jefferson County, KY-IN	0.082	D	1,251,351
15	Washington-Arlington-Alexandria, DC	0.081	D	5,860,340
15	Lancaster, PA	0.081	D	526,823
15	Norwich-New London, CT	0.081	D	274,170
15	Racine, WI	0.081	D	194,797
15	Salisbury, MD-DE	0.081	D	381,868
15	Philadelphia-Camden, PA	0.081	D	6,018,800
21	Houston, TX	0.080	D	6,177,035
21	Owensboro, KY	0.080	D	116,030
23	Atlanta-Sandy Springs-Roswell, GA	0.079	D	5,457,831
23	New York-Newark, NY-NJ	0.079	D	19,831,858
23	Dover, DE	0.079	D	167,626
23	Longview, WA	0.079	D	318,675
23	Tulsa, OK	0.079	D	951,880
23	St. Louis, MO-IL	0.079	D	2,795,294
23	Sacramento-Roseville, CA	0.079	D	2,196,482

MSA – Metropolitan Statistical Area PW – Population Weighted DV – Design Value

Of the 29 highest rated cities, six are rated F, while 23 are rated D.

Table 8

Highest Counties - Short Term Particle Pollution (24-hour PM-2.5)
(2010 -2012)

Rank	County/State	DV	Grade	2012 Population
1	**Madera, CA**	**51**	**F**	152,218
2	**Kern, CA**	**50**	**F**	856,158
3	**Stanislaus, CA**	**49**	**F**	521,726
4	**Tulare, CA**	**47**	**F**	451,977
5	**Fairbanks, AK**	**46**	**F**	100,272
6	**Shoshone, ID**	**42**	**F**	12,702
7	**Fresno, CA**	**41**	**F**	947,895
8	**Box Elder, UT**	**37**	**D**	50,171
8	**Lemhi, ID**	**37**	**D**	8,758
10	**Cache, UT**	**36**	**D**	115,520
10	**Inyo, CA**	**36**	**D**	18,495
12	Weber, UT	35	C	236,640
12	Davis, UT	35	C	315,809
14	Salt Lake, UT	34	C	1,063,842
14	Silver Bow, MT	34	C	34,403
16	Lake, OR	33	C	7,771
16	Lewis & Clark, MT	33	C	64,776
16	St. Joseph, IN	33	C	266,344
16	Spencer, IN	33	C	20,837
20	Klamath, OR	32	C	65,912
20	Plumas, CA	32	C	19,399
22	Berkeley, WV	31	B	107,048
22	Yakima, WA	31	B	246,977
22	Northampton, PA	31	B	299,267
22	Lancaster, PA	31	B	526,823
22	Delaware, PA	31	B	561,098
22	Cambria, PA	31	B	141,584
22	Elkhart, IN	31	B	199,619
22	Sacramento, CA	31	B	1,450,121

DV – Design Value

Of the 29 highest counties, seven are rated F, four are D, ten are C and eight are rated B.

Table 9
Highest Counties Year Round Particle Pollution (Annual PM-2.5)
(2010-2012)

Rank	County/State	DV	Grade	2012 Population
1	**Madera, CA**	**18.9**	**F**	**152,218**
2	**Stanislaus, CA**	**14.9**	**C**	**521,726**
3	**Tulare, CA**	**14.8**	**C**	**451,977**
3	**Kern, CA**	**14.8**	**C**	**856,158**
5	**Berkeley, WV**	**13.6**	**C**	**107,098**
6	**St. Bernard, LA**	**13.5**	**C**	**41,635**
7	**Delaware, PA**	**13.2**	**B**	**561,098**
8	**Shoshone, ID**	**13.2**	**B**	**12,702**
9	**Cambria, PA**	**12.9**	**B**	**141,584**
10	**Marshall, WV**	**12.8**	**B**	**32,674**
11	**Madison, WI**	**12.7**	**B**	**267,883**
12	**Brooke, WV**	**12.6**	**B**	**23,353**
13	**Hamilton, OH**	**12.5**	**B**	**802,038**
14	**Stark, OH**	**12.4**	**B**	**374,868**
14	**Butler, OH**	**12.4**	**B**	**370,589**
14	**Porter, IN**	**12.4**	**B**	**165,682**
14	**Marion, IN**	**12.4**	**B**	**919,977**
14	**Riverside, CA**	**12.4**	**B**	**2,267,783**
19	**Beaver, PA**	**12.3**	**B**	**170,245**
19	**Montgomery, OH**	**12.3**	**B**	**534,325**
19	**Dubois, IN**	**12.3**	**B**	**42,07144**
19	**Clayton, GA**	**12.3**	**B**	**265,888**
19	**Russell, AL**	**12.3**	**B**	**57,820**

DV – Design Value

Of the 23 highest counties, only one is rated a F. All others meet the National Ambient Air Quality Standards with five being rated as C, and 17 rated as B.

Table 10
Highest Ozone Counties
(2010 -2012)

Rank	County/State	DV	Grade	2012 Population
1	San Bernardino, CA	0.096	F	2,081,313
2	Riverside, CA	0.090	F	2,268,783
3	Tulare, CA	0.089	F	451,977
3	Fresno, CA	0.089	F	947,895
5	Camden, NJ	0.088	F	513,539
5	Harford, MD	0.088	F	248,622
5	Kern, CA	0.088	F	856,158
8	Sheboygan, WI	0.087	F	115,009
8	Fairfax, VA	0.087	F	1,118,602
8	Gloucester, NJ	0.087	F	289,586
8	Anne Arundel, MD	0.087	F	550,488
8	Oldham, KY	0.087	F	61,412
13	Arlington, VA	0.086	F	221,045
13	Ocean, NJ	0.086	F	580,470
13	Cecil, MD	0.086	F	101,696
16	Kenosha, WI	0.085	F	187,536
16	Middlesex, NJ	0.085	F	823,041
16	Prince Georges, MD	0.085	F	885,138
16	Fairfield, CT	0.085	F	933,835
20	Tarrant, TX	0.084	F	1,880,153
20	Allegan, MI	0.084	F	112,039
20	Charles, MD	0.084	F	150,592
20	Calvert, MD	0.084	F	89,628
20	Fulton, GA	0.084	F	977,773

DV – Design Value

Of the top 24 counties, all are rated as F.

Table 11
Cleanest U.S. Cities for Short-term Particle Pollution (24-hr PM-2.5)
(2010 -2012)

Rank	MSA	PW DV	Grade	2012 Population
1	Prescott, AZ	9	A	212,637
1	Santa Fe, NM	9	A	146,375
3	Tucson, AZ	11	A	992,394
4	Flagstaff, AZ	12	A	132,088
4	Cheyenne, WY	12	A	94,483
6	Sierra Vista-Douglas, AZ	13	A	132,088
6	Santa Cruz-Watsonville, CA	13	A	266,776
6	Urban Honolulu, HI	13	A	976,372
9	Casper, WY	14	A	78,621
9	Kahului-Wailuku-Lahaina, HI	14	A	158,316
9	Farmington, NM	14	A	128,529
9	Redding, CA	14	A	178,586
9	Palm Bay-Melbourne-Titusville, FL	14	A	547,307
9	Cape Coral-Fort Myers, FL	14	A	645,293
9	Salinas, CA	14	A	426,762
16	Miami-Fort Lauderdale, FL	15	A	4,058,826
16	Rapid City, SD	15	A	138,738
16	Pueblo, CO	15	A	160,852
16	Yuma, AZ	15	A	200,022
16	Las Vegas-Henderson, NV	15	A	2,000,759
16	North Port-Sarasota, FL	15	A	720,042
16	Bismarck, ND	15	A	120,060
23	Orlando-Kissimmee, FL	16	A	2,223,674
23	Colorado Springs, CO	16	A	668,353
23	Lakeland-Winter Haven, FL	16	A	616,158
23	Tampa-St. Petersburg, FL	16	A	2,842,878

MSA – Metropolitan Statistical Area PW – Population Weighted DV – Design Value

Of the 26 cleanest cities, all are rated as A.

Table 12
Cleanest U.S. Cities for Year Round Particle Pollution (Annual PM-2.5)
(2010 -2012)

Rank	MSA	PW DV	Grade	2012 Population
1	Prescott, AZ	4.0	A	212,637
2	Santa Fe, NM	4.5	A	146,375
3	Farmington, NM	4.7	A	128,529
4	Casper, WY	4.8	A	78,621
4	Cheyenne, WY	4.8	A	94,483
6	Pocatello, ID	5.1	A	83,800
7	Flagstaff, AZ	5.2	A	132,088
8	Anchorage, AK	5.3	A	392,535
8	Redding, CA	5.3	A	178,586
10	Tucson, AZ	5.4	A	992,394
11	Duluth, MN-WI	5.5	A	279,452
11	Rapid City, SD	5.5	A	138,738
13	Kahului-Wailuku-Lahaina, HI	5.7	A	158,316
14	Las Vegas-Henderson, NV	5.8	A	2,000,759
15	Urban Honolulu, HI	5.9	A	976,372
16	Burlington-South Burlington, VT	6.1	A	213,701
16	Reno, NV	6.1	A	433,843
16	Salinas, CA	6.1	A	426,762
19	Pueblo, CO	6.2	A	160,852
20	Seattle-Tacoma-Bellevue, WA	6.3	A	3,552,157
20	Albuquerque, NM	6.3	A	901,700
20	Colorado Springs, CO	6.3	A	668,353
20	Santa Cruz-Watsonville, CA	6.3	A	266,776
24	Fort Collins, CO	6.5	A	310,487
24	Boulder, CO	6.5	A	305,318
24	Palm Bay-Melbourne-Titusville, FL	6.5	A	547,307

MSA – Metropolitan Statistical Area PW – Population Weighted DV – Design Value

Of the 26 cleanest cities all are rated as A.

Table 13
Cleanest U.S. Cities for Ozone Air Pollution
(2010 - 2012)

Rank	MSA	PW DV	Grade	2012 Population
1	Urban Honolulu, HI	0.045	A	976,372
2	Anchorage, AK	0.046	A	392,535
2	Bellingham, WA	0.046	A	205,262
4	Santa Rosa, CA	0.047	A	491,829
5	Lincoln, NE	0.052	A	310,342
6	Santa Cruz-Watsonville, CA	0.053	A	266,776
7	Seattle-Tacoma-Bellevue, WA	0.056	A	3,552,157
7	Olympia-Turnwater, WA	0.056	A	258,332
9	Duluth, MN-WI	0.057	A	279,452
9	Bangor, ME	0.057	A	153,746
10	Mount Vernon-Anacortes, WA	0.057	A	118,222
10	Salinas, CA	0.057	A	426,762
12	Bismarck, ND	0.058	A	120,060
12	Portland-Vancouver, OR-WA	0.058	A	2,289,800
12	San Francisco-Oakland, CA	0.058	A	4,455,560
15	Bend-Redmond, OR	0.059	A	162,277
15	Eugene, OR	0.059	A	354,542
15	Naples-Marco Island, FL	0.059	A	332,427
15	Salem, OR	0.059	A	396,338
15	Spokane, WA	0.059	A	532,253
15	Tuscaloosa, AL	0.059	A	233,389
15	Omaha-Council Bluffs, NE-IA	0.059	A	885,624
22	Santa Maria-Santa Barbara, CA	0.060	A	431,249
23	Fargo, ND-MN	0.061	B	216,312
23	Lewiston-Auburn, ME	0.061	B	107,609
23	Medford, OR	0.061	B	206,412
23	St. Cloud, MN	0.061	B	190,471
23	Des Moines, IA	0.061	B	588,999
23	Rapid City, SD	0.061	B	138,738

MSA – Metropolitan Statistical Area PW – Population Weighted DV – Design Value

Of the cleanest 28 cities, 22 are rated A, while 6 are rated B.

Table 14
Cleanest Counties – Short Term Particle Pollution (24-hour PM-2.5)
(2010 -2012)

Rank	County/State	DV	Grade	2012 Population
1	Bannock, ID	8	A	83,800
2	Yavapai, AZ	9	A	212,637
2	Lake, CA	9	A	63,983
2	Santa Fe, NM	9	A	146,375
5	La Plata, CO	10	A	52,401
5	Pima, AZ	11	A	992,394
5	Billings, ND	11	A	905
8	Coconino, AZ	12	A	136,011
8	Hawaii, HI	12	A	189,191
8	Rosebud, MT	12	A	9,396
8	Jackson, SD	12	A	3,191
8	Laramie, WY	12	A	94,483
13	Cochise, AZ	13	A	132,088
13	Santa Cruz, AZ	13	A	266,776
13	Montezuma, CO	13	A	25,431
13	Honolulu, HI	13	A	976,372
13	Hancock, ME	13	A	54,558
13	Custer, ND	13	A	8,339
13	Park, WY	13	A	28,702
13	Teton, WY	13	A	21,675
21	Monterey, CA	14	A	426,762
21	Shasta, CA	14	A	178,586
21	Brevard, FL	14	A	547,307
21	Lee, FL	14	A	645,293
21	Miami-Dade, FL	14	A	2,591,035
21	Maui, HI	14	A	158,226
21	San Juan, NM	14	A	128,529
21	Mercer, ND	14	A	8,486
21	King, WA	14	A	2,007,440
21	Campbell, WY	14	A	47,874
21	Natrona, WY	14	A	78,621
21	Sweetwater, WY	14	A	45,267

DV – Design Value

The cleanest 32 counties are all rated as A.

Table 15
Cleanest Counties - Year Round Particle Pollution (Annual PM-2.5)
(2010 -2012)

Rank	County/State	DV	Grade	2012 Population
1	Lake, CA	3.5	A	63,983
2	Jackson, SD	3.8	A	3,191
3	Yavapai, AZ	4.0	A	212,637
4	La Plata, CO	4.2	A	52,401
5	Essex, NY	4.3	A	38,961
5	Custer, SD	4.3	A	8,339
7	Billings, ND	4.4	A	905
8	Santa Fe, NM	4.5	A	146,375
9	Hancock, ME	4.7	A	54,558
9	San Juan, NM	4.7	A	128,529
9	Park, WY	4.7	A	28,702
12	Laramie, WY	4.8	A	94,483
12	Natrona, WY	4.8	A	78,621
14	Rosebud, MT	4.9	A	9,396
15	Campbell, WY	5.0	A	47,874
15	Sublette, WY	5.0	A	10,368
15	Teton, WY	5.0	A	21,675
18	Bannock, ID	5.1	A	83,800
19	Anchorage, AK	5.2	A	298,610
19	Coconino, AZ	5.2	A	136,011
19	Siskiyou, CA	5.2	A	44,154
22	Shasta, CA	5.3	A	78,586
22	Ashland, WI	5.3	A	15,992
24	Pima, AZ	5.4	A	992,394
25	Matanuska, AK	5.5	A	93,925
25	St. Louis, MN	5.5	A	200,319

DV – Design Value

The cleanest 26 counties are all rated as A.

Table 16
Cleanest Counties - Ozone Air Pollution
(2010 -2012)

Rank	County/State	DV	Grade	2012 Population
1	Franklin, NY	0.038	A	51,795
2	Anchorage, AK	0.045	A	298,610
2	Honolulu, HI	0.045	A	976,372
4	Humboldt, CA	0.046	A	134,827
4	Whatcom, CA	0.046	A	205,262
6	San Francisco, CA	0.047	A	825,863
6	Sonoma, CA	0.047	A	491,829
8	Arostook, ME	0.051	A	70,868
8	Columbia, OR	0.051	A	49,286
10	Denali, AK	0.052	A	1,875
10	Marin, CA	0.052	A	256,069
10	Lancaster, NE	0.052	A	293,407
13	San Mateo, CA	0.053	A	739,311
13	Santa Cruz, CA	0.053	A	266,776
15	Oxford, ME	0.055	A	57,481
15	Carlton, MN	0.055	A	35,348
15	Flathead, MT	0.055	A	91,633
15	Powder River, MT	0.055	A	1,763
15	Pierce, WA	0.055	A	811,681
20	Churchill, NV	0.056	A	24,375
20	Clark, WA	0.056	A	438,287
20	King, WA	0.056	A	2,007,440
20	Thurston, WA	0.056	A	258,332
20	Big Horn, WY	0.056	A	11,794
25	Monterey, CA	0.057	A	426,762
25	Penobscot, ME	0.057	A	153,746
25	St. Louis, MN	0.057	A	200,319
25	Rosebud, MT	0.057	A	9,396
25	Multnomah, OR	0.057	A	759,256
25	Skagit, WA	0.057	A	118,222

DV – Design Value

Of the 30 cleanest counties, all are rated A.

STATE BY STATE ANALYSES

ALABAMA

Ozone

Significant progress has been made in ozone levels in Alabama. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to 2.1 million people (43.5%). Figure AL-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Alabama. In the 2000 – 2002 time period, approximately 1.5 million people (32.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this had increased to approximately 2.8 million people (59.0%). The remainder of the people in 2010 -2012 lived in counties where PM-2.5 was not measured. Figure AL-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Alabama. In the 2000 – 2002 time period, approximately 1.2 million people (25.8%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 2.8 million people (59.0%). The remainder of the people in 2010 – 2012 lived in counties where PM-2.5 was not measured. Figure AL-3 shows the distribution of people by year.

Table AL-1

2010 – 2012

		Ozone			Particle Pollution (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Baldwin	190,790	0.071	C	N	19	A	9.8	A	N
Clay	13.435	ND	---	N	21	A	10.0	A	N
Colbert	54,446	0.068	C	N	19	A	9.9	A	N
Dekalb	71,080	ND	---	N	21	A	10.7	A	N
Elmore	80.629	0.069	C	N	ND	---	ND	---	N
Etowah	104,392	0.063	B	N	22	A	10.9	A	N
Houston	103,402	0.065	B	N	19	A	9.8	A	N
Jefferson	**660,009**	**0.076**	**D**	Y	24	A	12.0	B	Y
Madison	343.080	0.073	C	N	21	A	10.7	A	N
Mobile	413,936	0.071	C	N	18	A	9.5	A	Y
Montgomery	230,149	0.069	C	N	22	A	10.8	A	N
Morgan	120,395	0.071	C	N	20	A	10.2	A	N
Russell	57,820	0.067	B	N	27	A	12.3	B	N
Shelby	200.941	0.075	C	N	21	A	10.5	A	N
Talladega	81,762	ND	---	N	22	A	10.4	A	N
Tuscaloosa	198,556	0.059	A	N	23	A	10.4	A	N
Subtotal	**2,924,822**								
Not Monitored	1,897,201								
Total	**4,822,023**								

DV – Design Value ND - No Data MM – Multiple Monitors

ALABAMA

Table AL-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	251,723	198,596
B	0	0	0	237,751	14,059	13,926	13,882	272,911	720,564	420,265	265,614
C	0	237,009	514,622	1,159,404	822,392	646,485	802,548	2,250,844	2,012,982	2,082,876	1,634,366
D	1,188,120	1,899,695	1,736,110	976,563	1,651,591	1,863,973	1,682,753	192,708	0	0	660,009
F	923,260	159,704	165,757	171,691	178,841	183,491	188,534	0	0	0	0
Subtotal	2,111,380	2,296,408	2,416,489	2,545,409	2,666,883	2,707,875	2,687,717	2,716,463	2,733,546	2,754,864	2,758,585
NM	2,368,709	2,207,083	2,114,240	2,024,396	1,962,098	1,964,965	2,030,489	2,041,475	2,046,190	2,047,876	2,063,438
Total	4,480,089	4,503,491	4,530,729	4,569,805	4,628,981	4,672,840	4,718,206	4,757,938	4,779,736	4,802,740	4,822,023

People Breathing Short-Term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	147,957	587,387	156,266	162,183	168,121	578,119	508,379	1,554,447	2,343,717	2,708,069	2,844,233
B	540,900	995,288	1,019,751	505,045	767,981	547,804	1,303,439	897,516	0	0	0
C	772,745	809,603	1,345,759	1,321,559	797,181	1,058,656	760,716	0	0	0	0
D	772,868	0	0	704,650	815,423	655,163	0	0	0	0	0
F	102,988	0	0	0	0	0	0	0	0	0	0
Subtotal	2,337,458	2,392,278	2,521,776	2,693,437	2,548,706	2,839,742	2,572,534	2,451,963	2,343,717	2,708,069	2,844,233
NM	2,142,631	2,111,213	2,008,953	1,876,368	2,080,275	1,833,098	2,145,672	2,305,975	2,436,019	2,094,671	1,977,790
Total	4,480,089	4,503,491	4,530,729	4,569,805	4,628,981	4,672,840	4,718,206	4,757,938	4,779,736	4,802,740	4,822,023

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	147,957	151,509	170,590	176,326	168,121	172,404	508,379	1,554,447	2,290,770	2,653,497	2,126,404
B	412,925	518,689	617,179	794,674	782,034	726,249	1,024,544	897,516	52,947	54,572	717,829
C	596,440	1,673,015	1,684,509	1,017,787	883,356	1,234,852	1,039,611	0	0	0	0
D	1,130,647	49,065	49,498	704,650	711,895	706,237	0	0	0	0	0
F	49,489	0	0	0	0	0	0	0	0	0	0
Subtotal	2,337,458	2,392,278	2,521,776	2,693,437	2,545,406	2,839,742	2,572,534	2,451,963	2,343,717	2,708,069	2,844,233
NM	2,142,631	2,111,213	2,008,953	1,876,368	2,083,575	1,833,098	2,145,672	2,305,975	2,436,019	2,094,671	1,977,790
Total	4,480,089	4,503,491	4,530,729	4,569,805	4,628,981	4,672,840	4,718,206	4,757,938	4,779,736	4,802,740	4,822,023

NM – Not Monitored

Figure AL-1

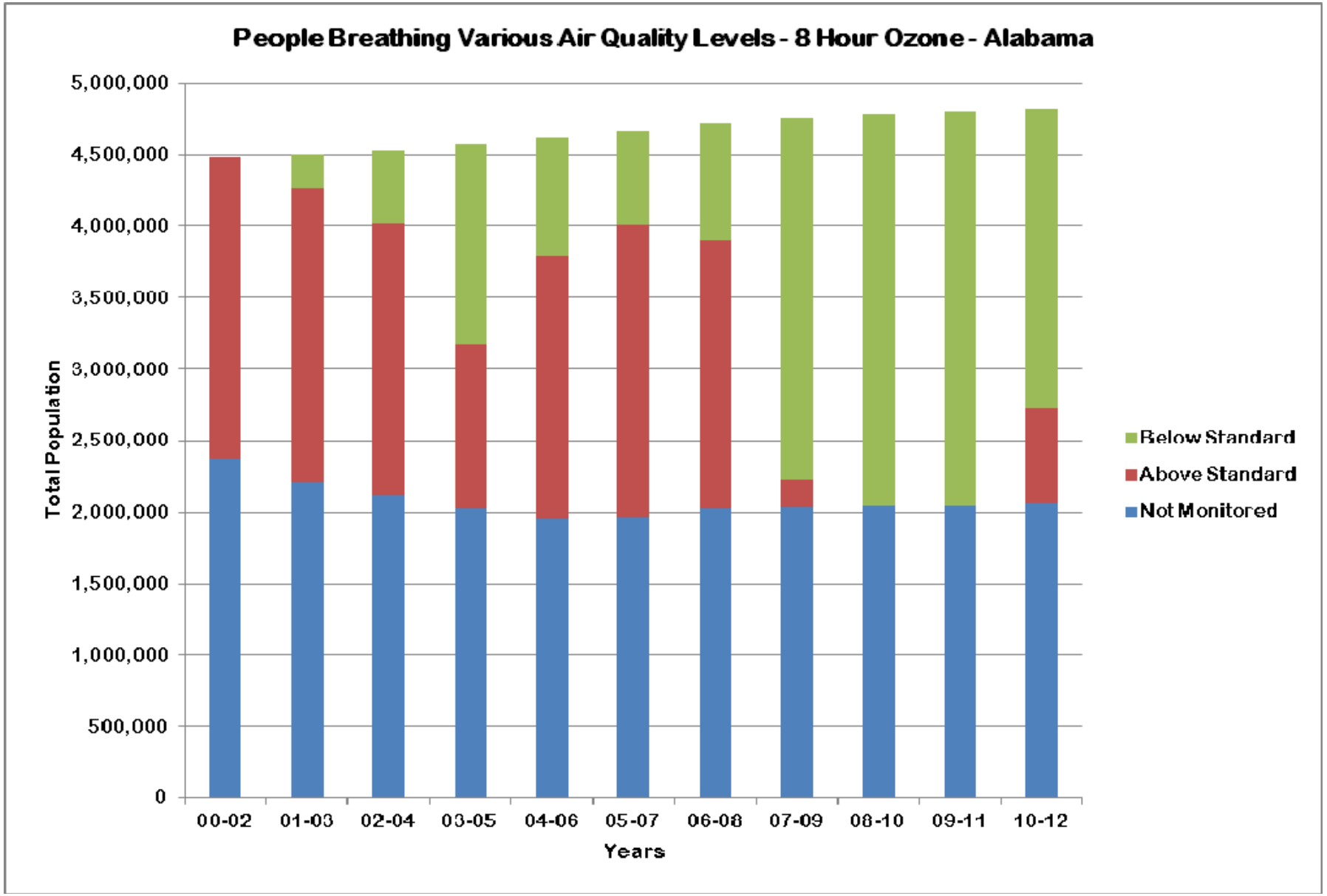

People Breathing Various Air Quality Levels - 8 Hour Ozone - Alabama
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AL-2

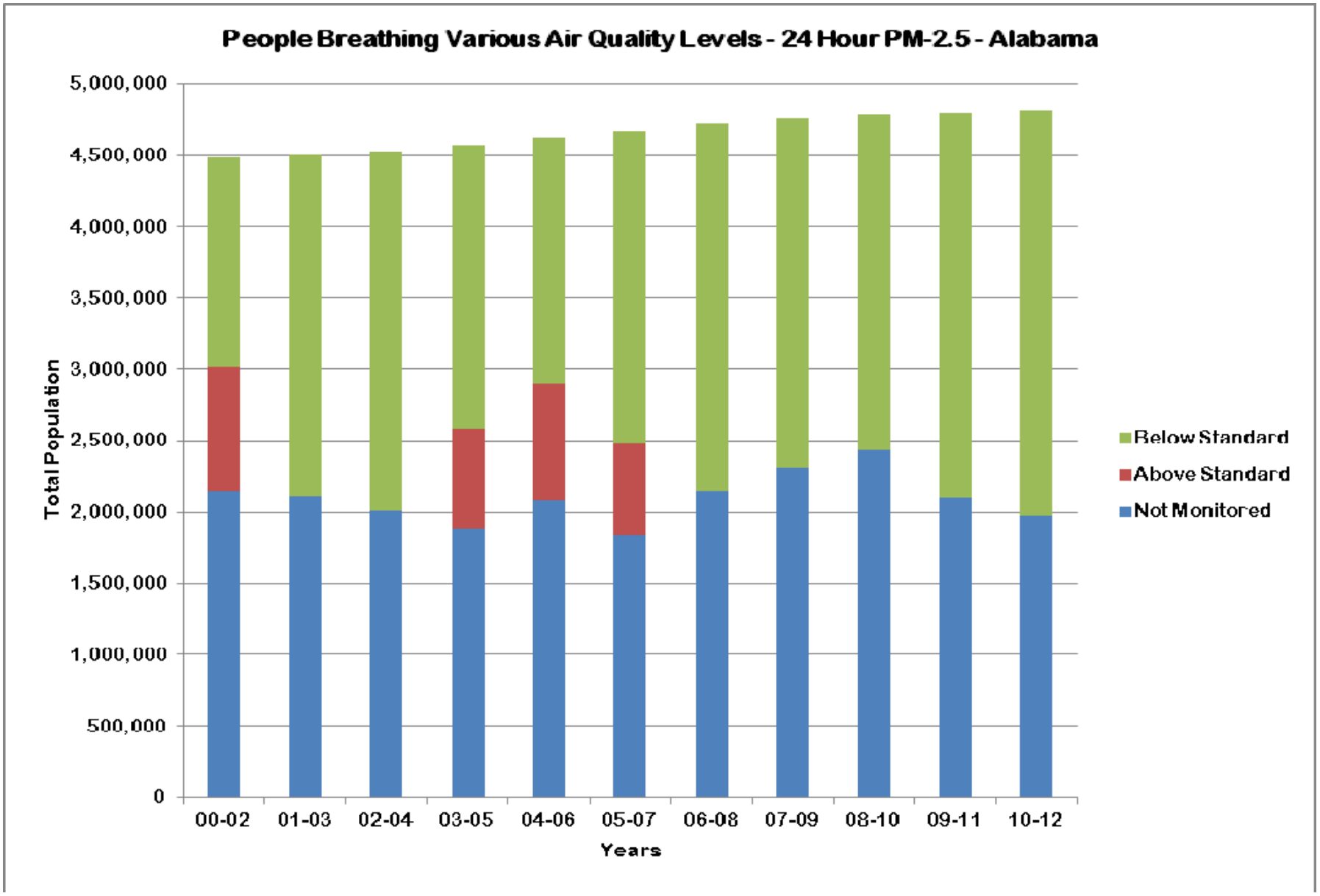
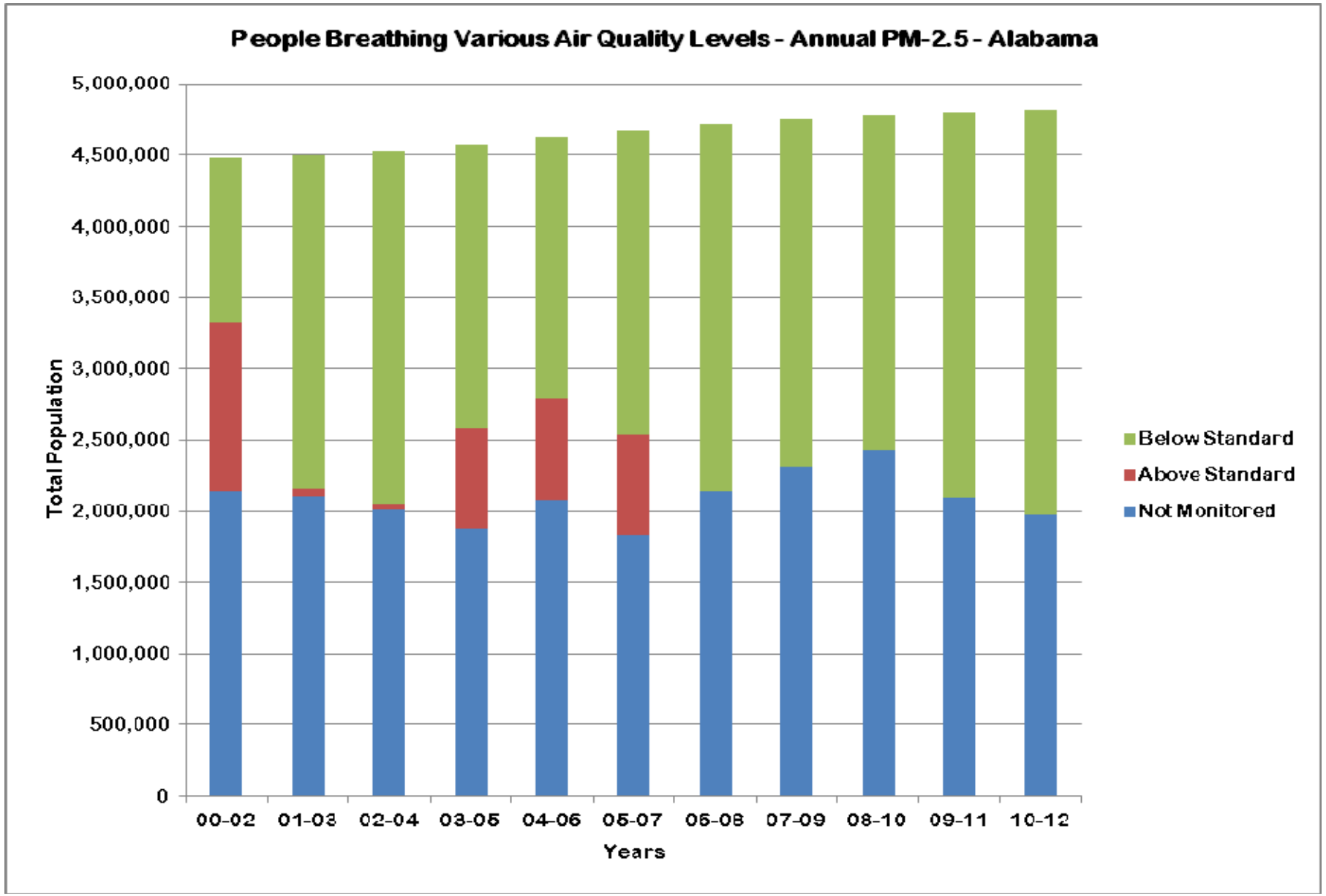

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Alabama
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AL-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Alabama
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

ALASKA

Ozone

Ozone levels in Alaska have historically been better than the standard. In the 2000 – 2002 time period, approximately two thousand people (0.3%) lived in counties that met the ozone standard and the rest of the population lived in counties where ozone was not measured. By 2010 – 2012 there were 300,000 people (41.1%) living in counties that met the ozone standard and the rest of the population lived in counties where ozone is not measured. Figure AK-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in Alaska. In the 2000 – 2002 time period, approximately four hundred thousand people (56.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 425,000 people (58.1%). Figure AK-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Alaska have historically been better than the standard. In the 2000 – 2002 time period, approximately 450,000 people (70.0%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 525,000 (71.8%). Figure AK-3 shows the distribution of people by year.

Table AK-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Anchorage	298,610	0.045	A	N	18	A	5.2	A	Y
Denali	1,875	0.052	A	N	ND	---	ND	---	---
Fairbanks	**100,272**	**ND**	**---**	**---**	**46**	**F**	11.3	A	Y
Juneau	32,556	ND	---	---	25	A	7.4	A	N
Matanuska	93,925	ND	---	---	23	A	5.5	A	Y
Subtotal	**527,238**								
Not Monitored	204,211								
Total	**731,449**								

DV – Design Value ND - No Data MM – Multiple Monitors

ALASKA

Table AK-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,862	1,825	1,877	1,834	1,837	1,803	1,803	1,817	1,826	1,855	300,485
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,862	1,825	1,877	1,834	1,837	1,803	1,803	1,817	1,826	1,855	300,485
NM	640,475	646,589	657,409	665,112	673,465	678,497	685,652	697,078	708,405	720,863	430,964
Total	642,337	648,414	659,286	666,946	675,302	680,300	687,455	698,895	710,231	722,718	731,449

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	298,941	303,386	305,587	276,494	280,085	278,792	281,554	287,677	323,101	327,734	425,091
B	64,353	67,162	0	31,003	30,808	81,402	84,079	0	0	0	0
C	0	0	0	0	0	0	31,110	30,857	0	0	0
D	0	0	0	0	0	30,682	0	0	0	0	0
F	86,095	86,885	89,043	90,431	90,545	93,545	94,552	95,238	97,581	99,192	100,272
Subtotal	449,389	457,433	394,630	397,928	401,438	484,421	491,295	413,772	420,682	426,926	525,363
NM	192,948	190,981	264,656	269,018	273,864	195,879	196,160	285,123	289,549	295,792	206,086
Total	642,337	648,414	659,286	666,946	675,302	680,300	687,455	698,895	710,231	722,718	731,449

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	363,294	457,433	394,630	397,928	401,438	484,421	491,295	413,772	420,682	426,926	525,363
B	86,095	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	449,389	457,433	394,630	397,928	401,438	484,421	491,295	413,772	420,682	426,926	525,363
NM	192,948	190,981	264,656	269,018	273,864	195,879	196,160	285,123	289,549	295,792	206,086
Total	642,337	648,414	659,286	666,946	675,302	680,300	687,455	698,895	710,231	722,718	731,449

NM – Not Monitored

Figure AK-1

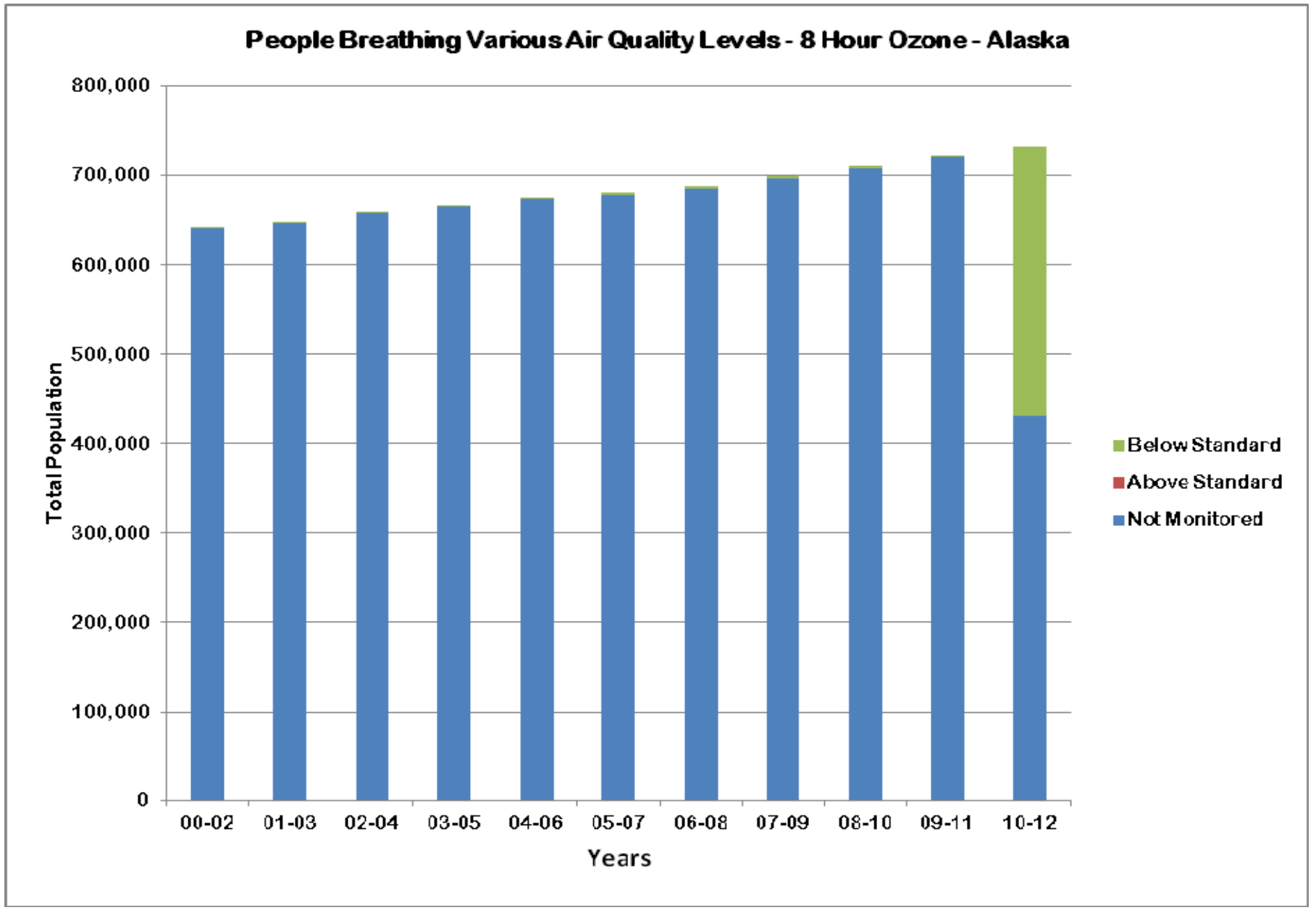

People Breathing Various Air Quality Levels - 8 Hour Ozone - Alaska
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AK-2

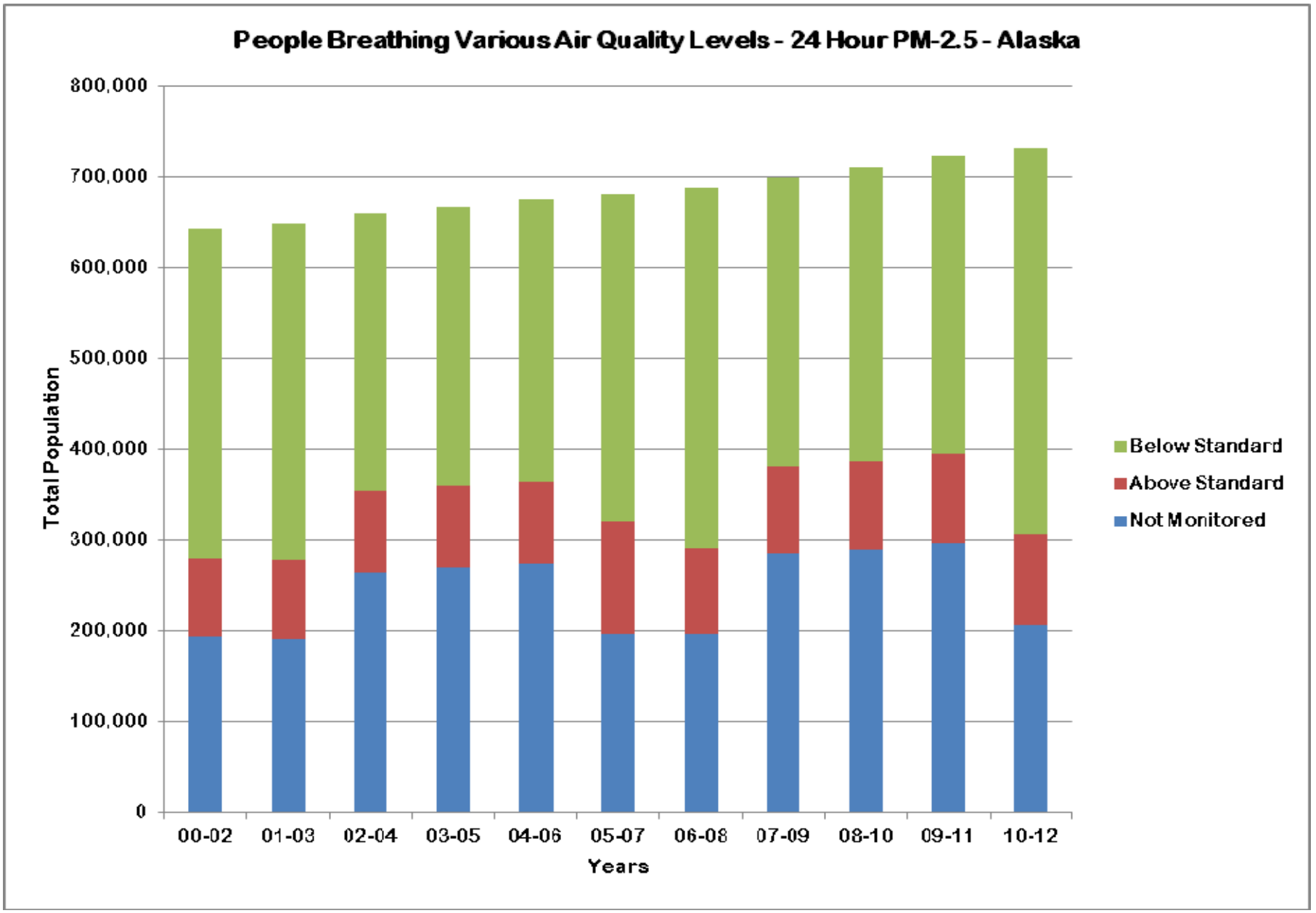
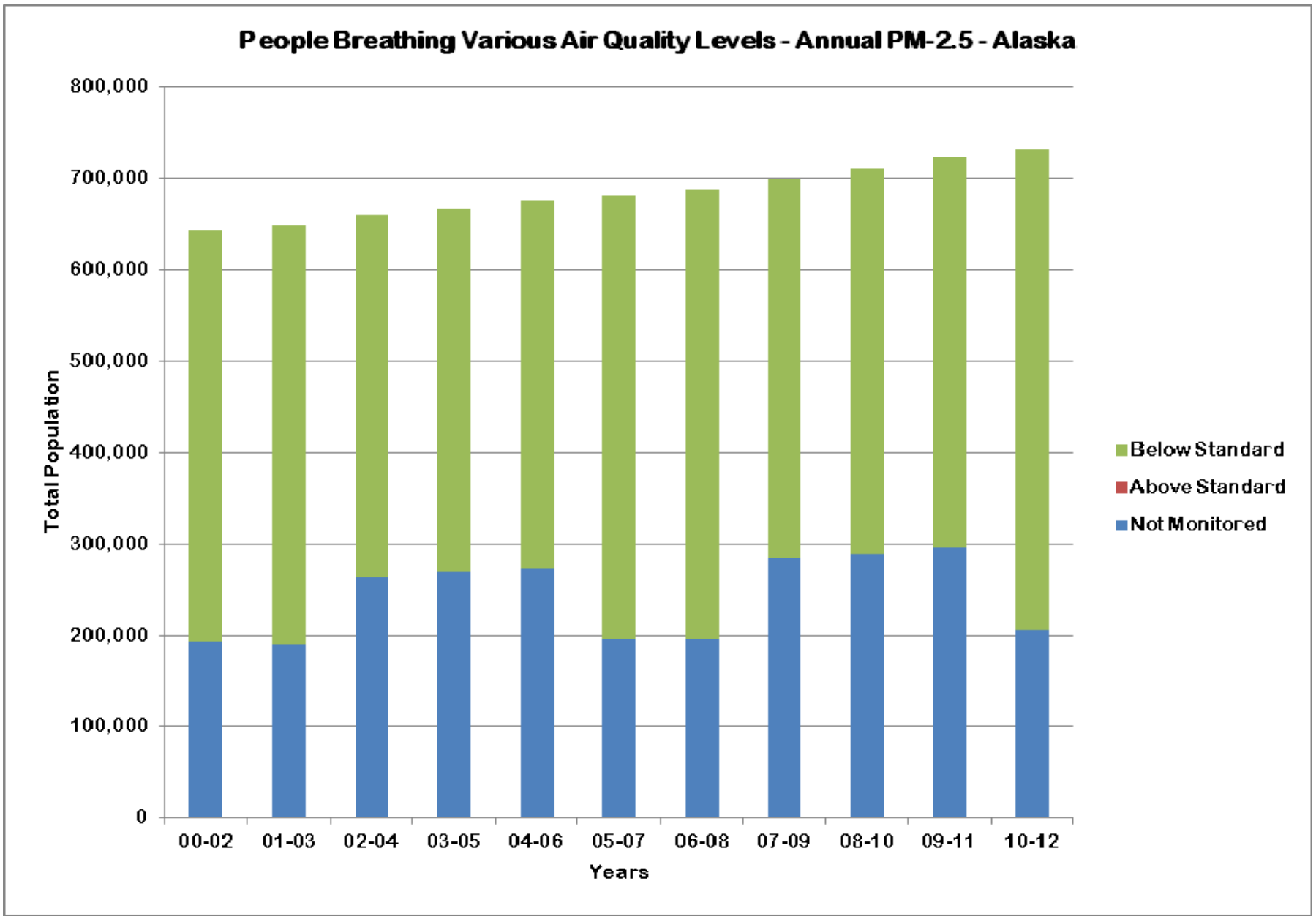

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Alaska
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AK-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Alaska
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

ARIZONA

Ozone

Significant progress has been made in ozone levels in Arizona. In the 2000 – 2002 time period, approximately 1.1 million people (20.7%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to over 6 million people (91.3%). Figure AZ-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Arizona have historically been better than the standard. In the 2000 – 2002 time period, approximately 3.5 million people (65.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this had increased to approximately 6 million people (92.3%). Figure AZ-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Arizona have historically been better than the standard. In the 2000 – 2002 time period, approximately 3.5 million people (65.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 6 million people (92.3%). The remainder of the people in 2010 – 2012 lived in counties where PM-2.5 was not measured. Figure AZ-3 shows the distribution of people by year.

Table AZ-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Cochise	132,088	0.073	C	N	13	A	6.7	A	N
Coconino	136,011	0.071	C	Y	12	A	5.2	A	N
Gila	53,144	0.075	C	N	ND	---	ND	---	---
La Paz	20,281	0.073	C	N	ND	---	ND	---	---
Maricopa	3,942,169	0.075	C	Y	22	A	9.2	A	Y
Navajo	107,094	0.070	C	N	ND	---	ND	---	---
Pima	992,394	0.068	C	Y	11	A	5.4	A	Y
Pinal	387,365	0.072	C	Y	21	A	9.8	A	Y
Santa Cruz	47,303	ND	---	---	28	B	9.9	A	N
Yavapai	212,637	0.070	C	N	9	A	4	A	N
Yuma	**200,022**	**0.077**	**D**	**N**	**15**	A	7.8	A	N
Subtotal	**6,230,508**								
Not Monitored	342,767								
Total	**6,573,275**								

DV – Design Value ND - No Data MM – Multiple Monitors

ARIZONA

Table AZ-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	1,105,661	1,087,712	1,308,855	0
C	1,115,422	1,129,413	1,149,693	1,513,001	1,757,666	1,814,975	5,463,207	4,662,446	4,728,491	4,805,469	5,983,183
D	3,255,388	3,510,558	3,825,154	3,769,459	3,695,425	3,765,206	244,639	0	0	0	200,022
F	177,362	0	0	0	0	0	0	0	0	0	0
Subtotal	4,548,172	4,639,971	4,974,847	5,282,460	5,453,091	5,580,181	5,707,846	5,768,107	5,816,203	6,114,324	6,183,205
NM	848,083	870,393	677,557	556,617	576,050	587,500	572,516	575,047	575,814	368,181	370,050
Total	5,396,255	5,510,364	5,652,404	5,839,077	6,029,141	6,167,681	6,280,362	6,343,154	6,392,017	6,482,505	6,553,255

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	248,560	4,473,618	1,244,048	1,333,447	1,716,903	5,485,657	5,335,026	5,392,747	5,649,950	5,732,493	6,002,686
B	3,295,397	40,625	3,459,483	3,581,949	3,642,884	0	0	47,011	47,420	47,676	47,303
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	44,298	0	0	0	0	0	0
F	0	0	0	0	0	45,338	46,144	0	0	0	0
Subtotal	3,543,957	4,514,243	4,703,531	4,915,396	5,404,085	5,530,995	5,381,170	5,439,758	5,697,370	5,780,169	6,049,989
NM	1,852,298	996,121	948,873	923,681	625,056	636,686	899,192	903,396	694,647	702,336	503,266
Total	5,396,255	5,510,364	5,652,404	5,839,077	6,029,141	6,167,681	6,280,362	6,343,154	6,392,017	6,482,505	6,553,255

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	3,503,948	4,541,243	4,703,531	4,915,396	5,359,787	5,485,657	4,999,715	5,042,917	5,697,370	5,780,169	6,049,989
B	40,009	0	0	0	44,298	0	381,455	396,841	0	0	0
C	0	0	0	0	0	45,338	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,543,957	4,541,243	4,703,531	4,915,396	5,404,085	5,530,995	5,381,170	5,439,758	5,697,370	5,780,169	6,049,989
NM	1,852,298	969,121	948,873	923,681	625,056	636,686	899,192	903,396	694,647	702,336	503,266
Total	5,396,255	5,510,364	5,652,404	5,839,077	6,029,141	6,167,681	6,280,362	6,343,154	6,392,017	6,482,505	6,553,255

NM – Not Monitored

Figure AZ-1

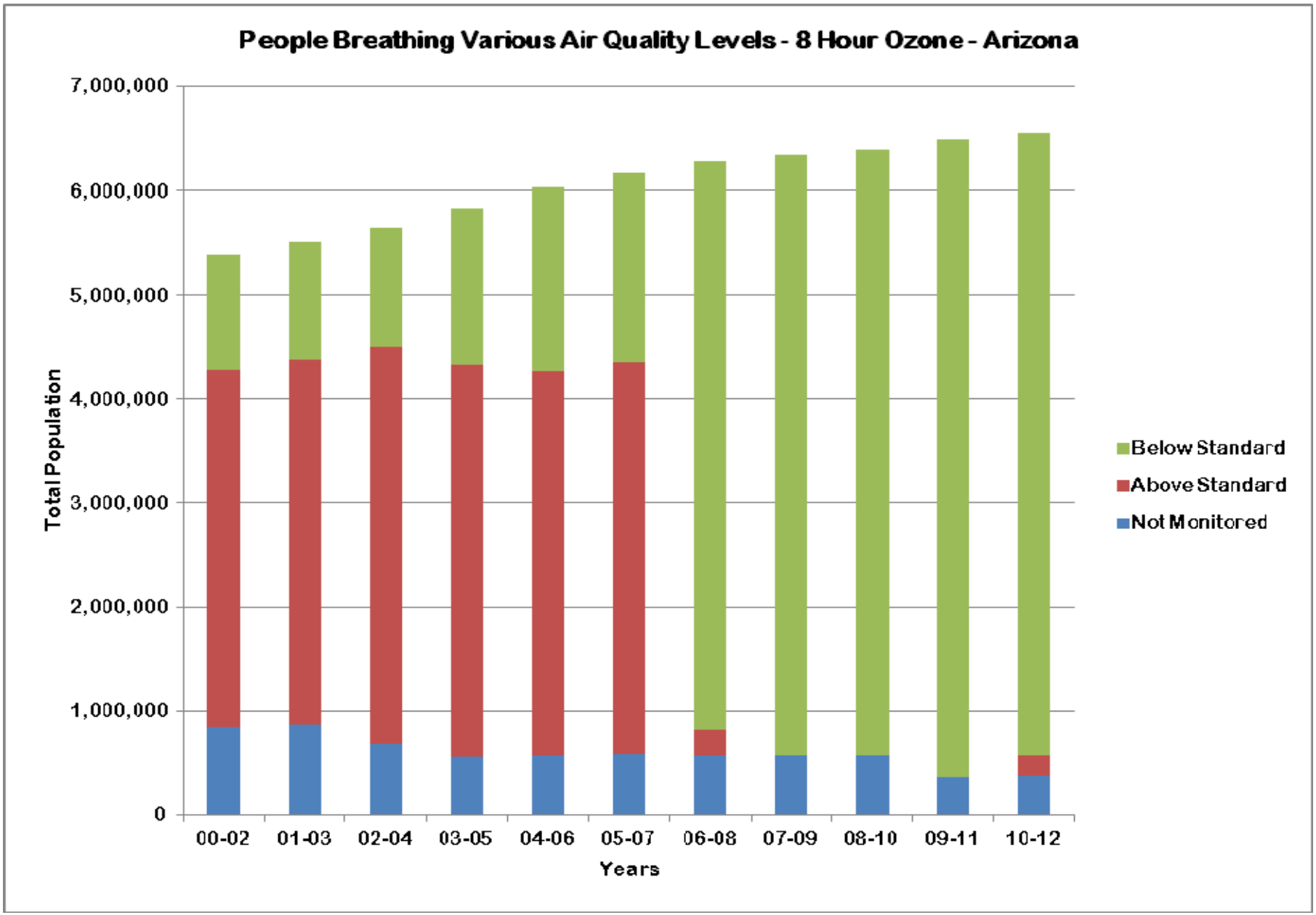

People Breathing Various Air Quality Levels - 8 Hour Ozone - Arizona
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AZ-2

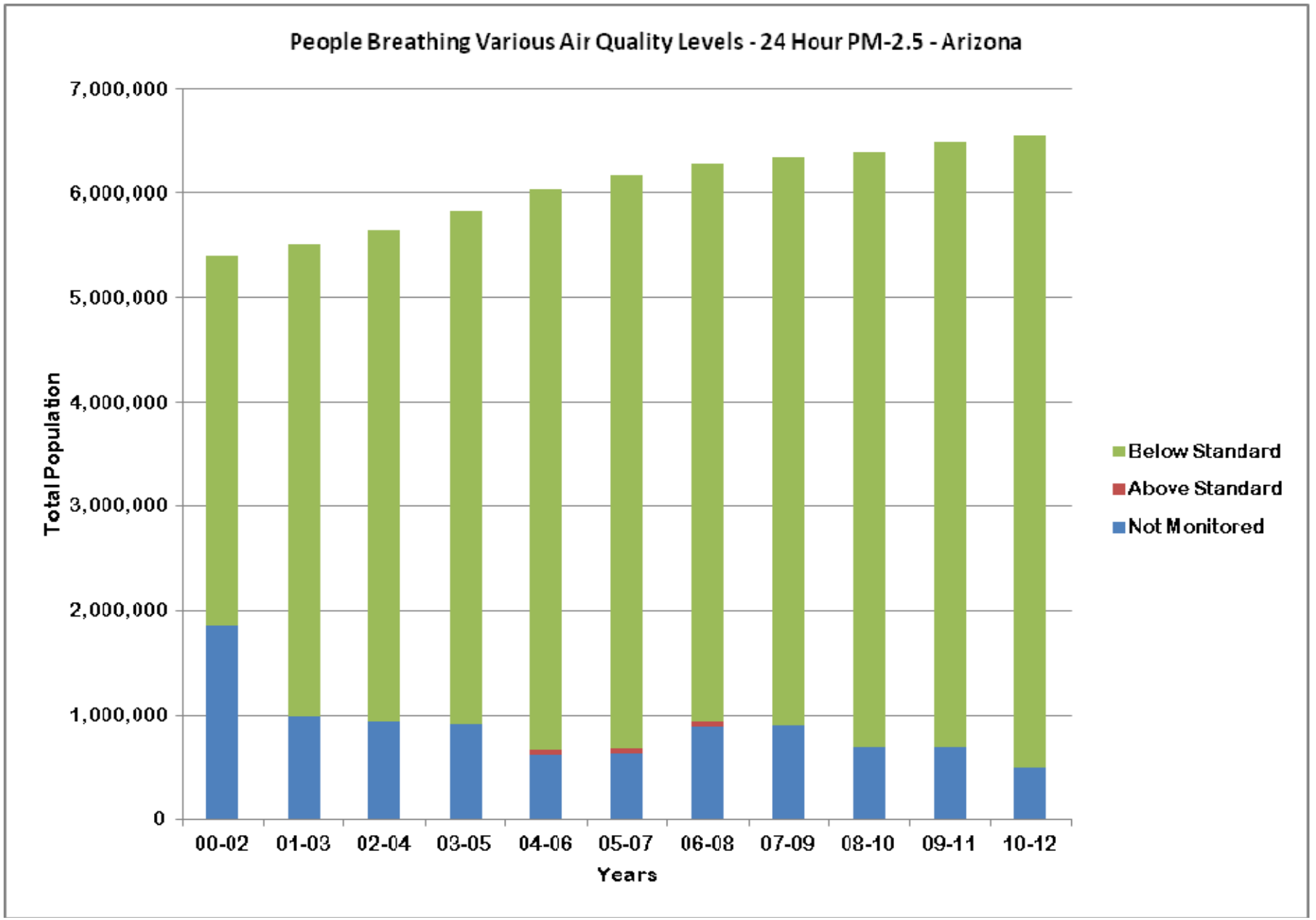
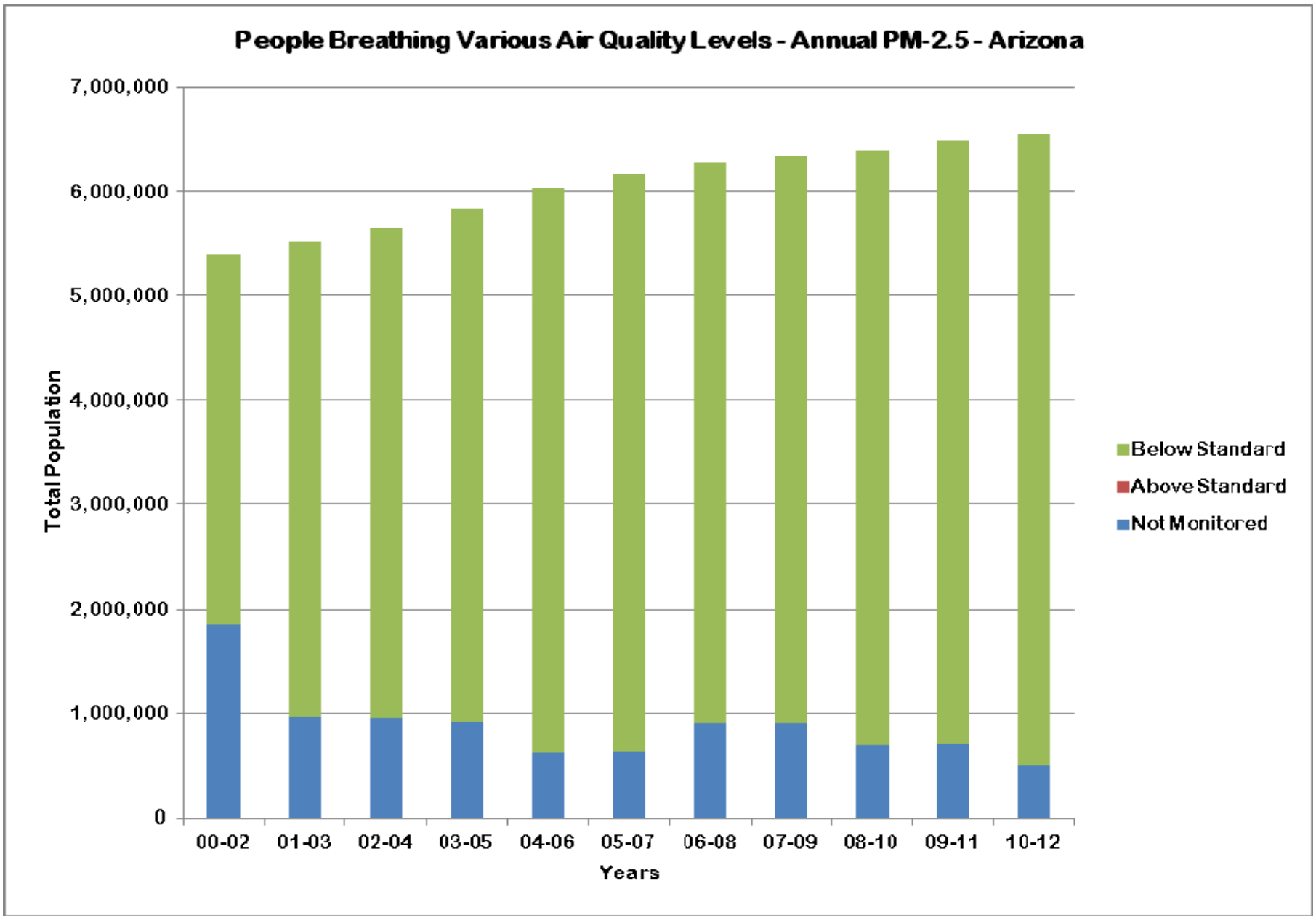

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Arizona
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AZ-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Arizona
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

ARKANSAS

Ozone

Significant progress has been made in ozone levels in Arkansas. In the 2000 – 2002 time period, approximately 9 thousand people (0.3%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 629 thousand people (21.3%). Figure AR-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Arkansas have historically been better than the standard. In the 2000 – 2002 time period, approximately 1 million people (38.2%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.1 million people (36.2%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure AR-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Arkansas have historically been better than the standard. In the 2000 – 2002 time period, approximately 670,000 people (24.8%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.1 million people (36.2%). The remainder of the population lived in areas where PM-2.5 was not measured. Figure AR-3 shows the distribution of people by year.

Table AR-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Arkansas	18,892	ND	---	---	21	A	10.8	A	N
Ashley	21,524	ND	---	---	23	A	10.8	A	N
Crittenden	**50,021**	**0.080**	**D**	N	23	A	11.2	A	N
Faulkner	118,704	ND	---	---	20	A	10.8	A	N
Garland	96,903	ND	---	---	22	A	11.0	A	N
Jackson	17,600	ND	---	---	22	A	10.2	A	N
Newton	8,086	0.069	C	N	ND	---	ND	---	---
Phillips	20,784	ND	---	---	20	A	10.6	A	N
Polk	20,471	0.074	C	N	22	A	10.8	A	N
Pope	62,765	ND	---	---	21	A	10.7	A	N
Pulaski	388,953	0.075	C	Y	24	A	11.8	A	Y
Union	40,867	ND	---	---	23	A	11.4	A	N
Washington	211,411	0.073	C	Y	22	A	10.8	A	N
Subtotal	**976,981**								
Not Monitored	1,972,150								
Total	**2,949,131**								

DV – Design Value ND - No Data MM – Multiple Monitors

ARKANSAS

Table AR-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	9,239	9,334	0	0	0	0	199,774	211,395	215,785	0
C	9,150	0	0	8,467	0	8,428	28,811	408,947	445,312	457,434	628,921
D	8,534	373,871	375,111	368,274	371,647	393,780	427,266	50,929	0	0	50,021
F	414,949	50,252	50,266	50,244	50,360	50,438	0	0	0	0	0
Subtotal	432,633	433,362	434,711	426,985	422,007	452,646	456,077	659,650	656,707	673,219	678,942
NM	2,273,294	2,291,454	2,314,975	2,354,112	2,399,754	2,396,004	2,418,477	2,237,193	2,259,211	2,264,760	2,270,189
Total	2,705,927	2,724,816	2,749,686	2,781,097	2,821,761	2,848,650	2,874,554	2,896,843	2,915,918	2,937,979	2,949,131

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	248,020	364,970	485,194	20,203	20,422	0	607,661	992,910	1,244,477	1,118,546	1,068,895
B	786,229	321,835	584,987	434,247	808,674	834,241	427,266	50,929	0	0	0
C	0	365,258	0	418,518	50,360	50,438	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,034,249	1,052,063	1,070,181	872,968	879,456	884,679	1,034,927	1,043,839	1,244,477	1,118,546	1,068,895
NM	1,671,678	1,672,753	1,679,505	1,908,129	1,942,305	1,963,971	1,839,627	1,853,004	1,671,441	1,819,433	1,880,236
Total	2,705,927	2,724,816	2,749,686	2,781,097	2,821,761	2,848,650	2,874,554	2,896,843	2,915,918	2,937,979	2,949,131

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	203,251	296,514	557,145	20,203	43,666	0	524,985	1,043,839	1,244,477	1,118,546	1,068,895
B	416,049	390,291	513,036	484,491	464,143	511,276	509,942	0	0	0	0
C	50,622	365,258	0	368,274	371,647	373,403	0	0	0	0	0
D	364,327	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,034,249	1,052,063	1,070,181	872,968	879,456	884,679	1,034,927	1,043,839	1,244,477	1,118,546	1,068,895
NM	1,671,678	1,672,753	1,679,505	1,908,129	1,942,305	1,963,971	1,839,627	1,853,004	1,671,441	1,819,433	1,880,236
Total	2,705,927	2,724,816	2,749,686	2,781,097	2,821,761	2,848,650	2,874,554	2,896,843	2,915,918	2,937,979	2,949,131

NM – Not Monitored

Figure AR-1

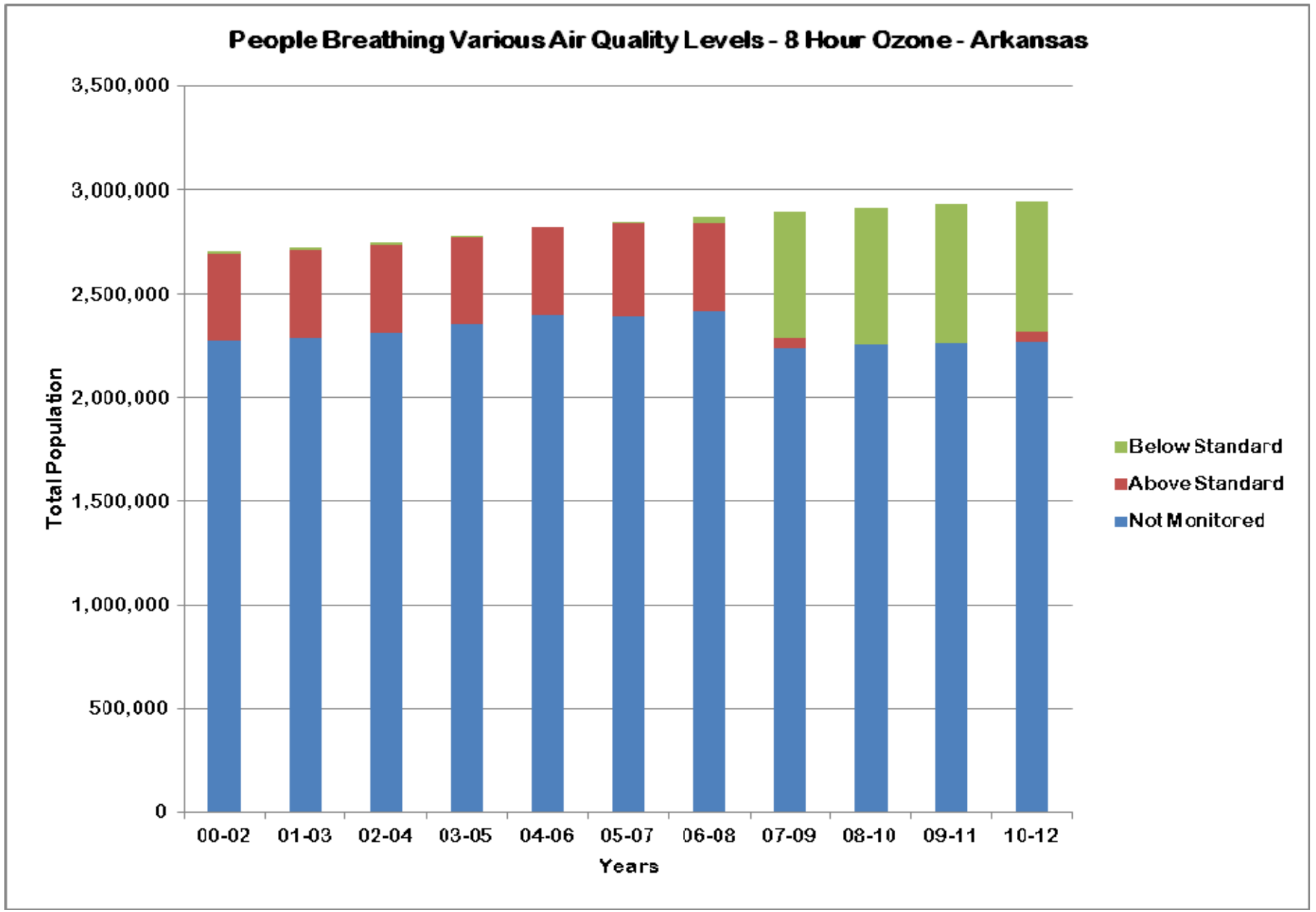

People Breathing Various Air Quality Levels - 8 Hour Ozone - Arkansas
Total Population
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AR-2

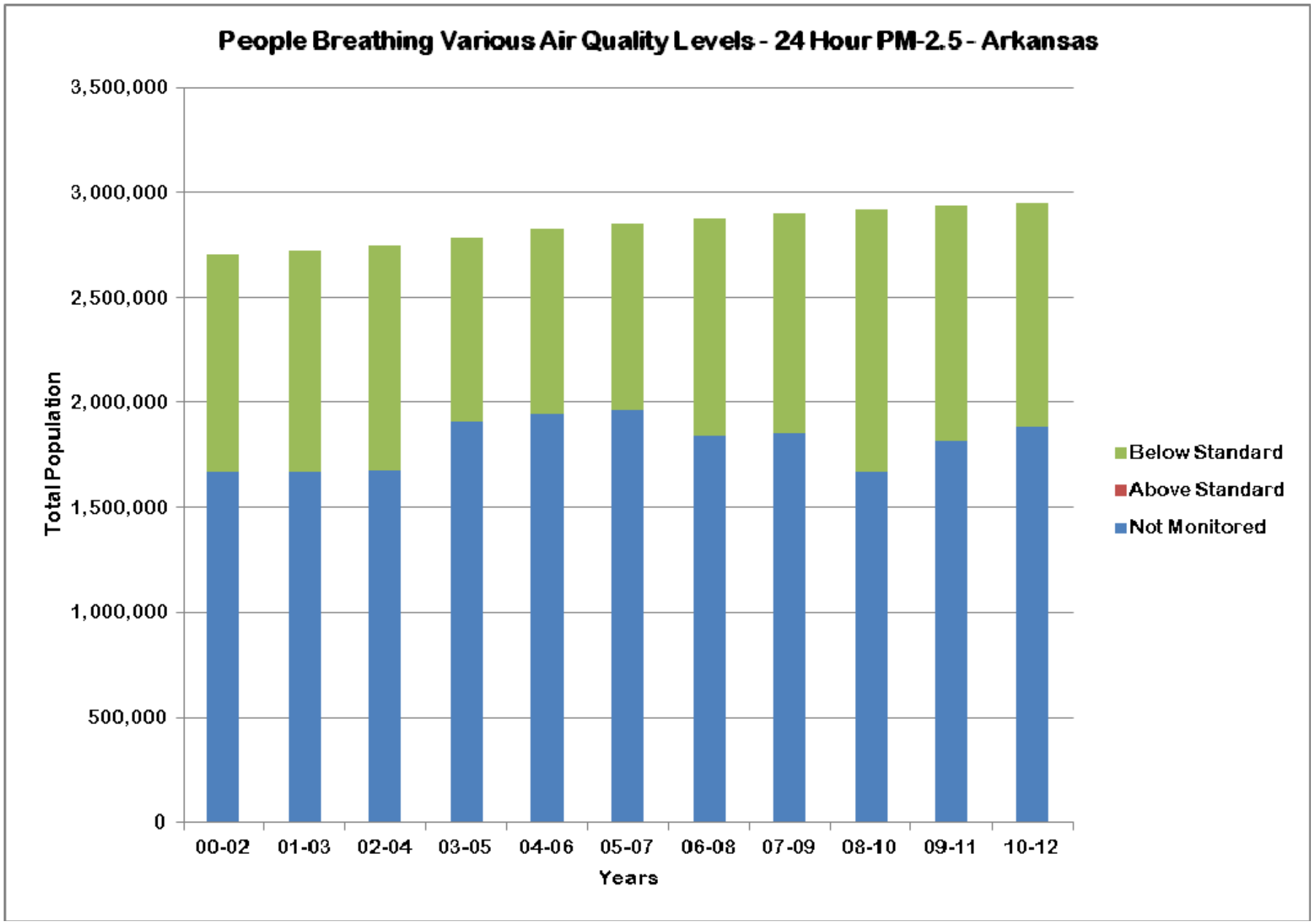
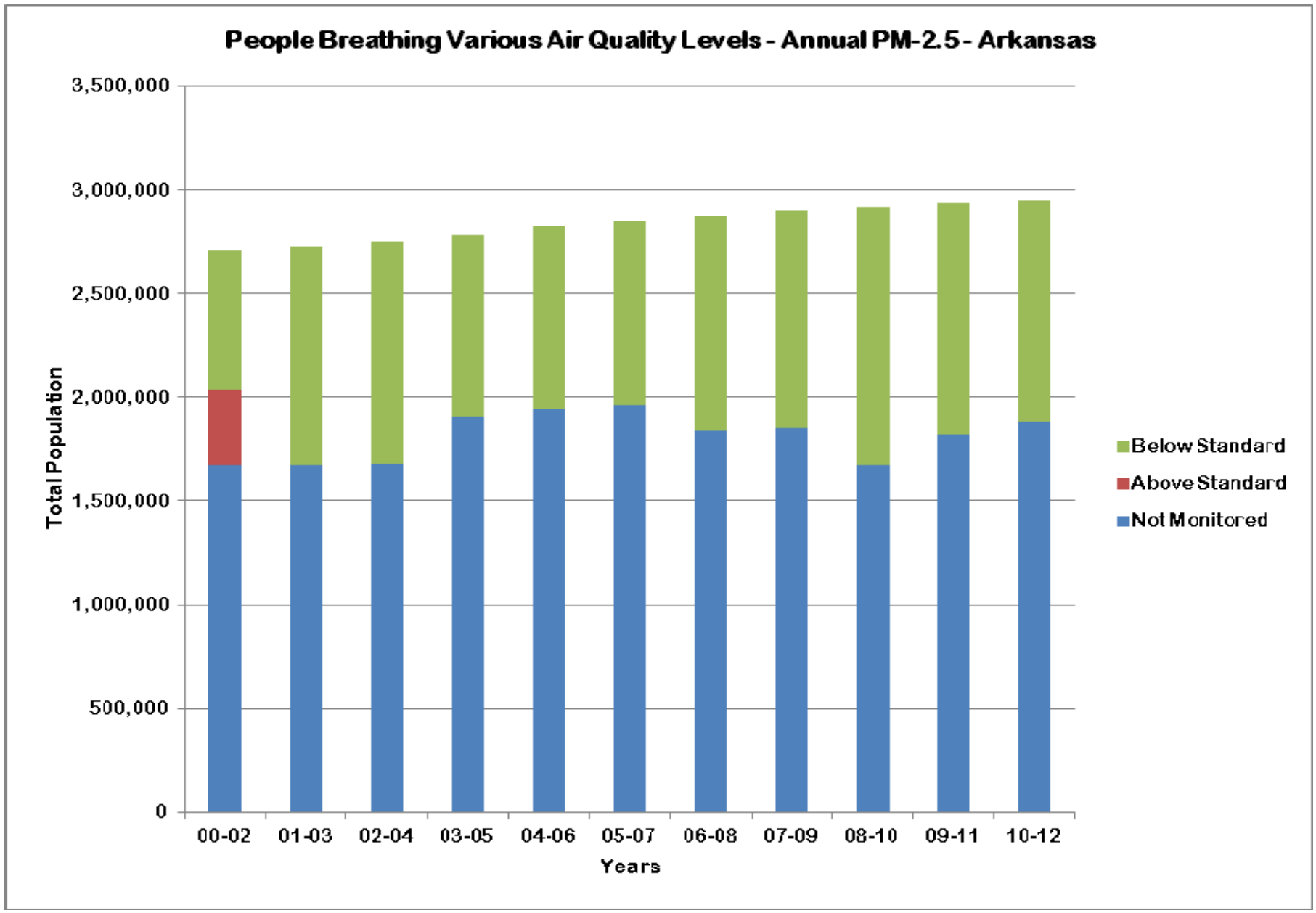

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Arkansas
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure AR-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Arkansas
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

CALIFORNIA

Ozone

Significant progress has been made in ozone levels in California. In the 2000 – 2002 time period, approximately 13.2 million people (37.7%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 17.7 million people (46.6%). Figure CA-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in California. In the 2000 – 2002 time period, approximately 2 million people (5.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this had increased to approximately 31.9 million people (83.8%). Figure CA-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in California. In the 2000 – 2002 time period, approximately 11.2 million people (32.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 34.7 million people (91.1%). Figure CA-3 shows the distribution of people by year.

CALIFORNIA

Table CA-1
2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Alameda	1,554,720	0.058	A	Y	24	A	9.1	A	N
Amador	37,035	0.074	C	N	ND	---	ND	---	---
Butte	**221,539**	**0.077**	**D**	**N**	ND	---	ND	---	---
Calaveras	**44,742**	**0.077**	**D**	**N**	ND	---	ND	---	---
Colusa	21,411	0.062	B	N	ND	---	ND	---	---
Contra Costa	1,079,597	0.073	C	Y	20	A	7.2	A	N
El Dorado	**180,561**	**0.082**	**D**	Y	ND	---	ND	---	---
Fresno	**947,895**	**0.089**	**F**	**Y**	**41**	**F**	11.7	A	Y
Glenn	27,992	0.063	B	N	ND	---	ND	---	---
Humboldt	134,827	0.046	A	Y	ND	---	ND	---	---
Imperial	176,948	0.072	C	Y	21	A	9.0	A	Y
Inyo	**18,495**	0.071	C	N	**36**	**D**	7.5	A	N
Kern	**856,158**	**0.088**	**F**	Y	**50**	**F**	14.8	C	Y
Kings	**151,364**	**0.082**	**D**	N	ND	**---**	ND	---	---
Lake	63,983	0.058	A	N	9	A	3.5	A	N
Los Angeles	**9,962,789**	**0.076**	**D**	Y	29	B	11.4	A	Y
Madera	**152,218**	ND	**---**	---	**51**	**F**	**18.9**	**F**	N
Marin	256,069	0.052	A	N	25	A	9.5	A	N
Mariposa	**17,905**	**0.078**	**D**	Y	ND	---	ND	---	---
Merced	**262,305**	**0.082**	**D**	N	ND	---	ND	---	---
Monterey	426,762	0.057	A	Y	14	A	6.1	A	N
Napa	139,045	0.063	B	N	ND	---	ND	---	---
Nevada	**98,292**	**0.078**	**D**	Y	15	A	6.1	A	N
Orange	3,090,132	0.066	B	Y	27	A	11.3	A	N
Placer	**361,682**	**0.080**	**D**	Y	19	A	7.2	A	N
Plumas	19,399	ND	**---**	---	32	C	10.3	A	N
Riverside	**2,268,783**	**0.090**	**F**	**Y**	28	A	12.4	B	Y
Sacramento	**1,450,121**	**0.079**	**D**	Y	31	B	9.0	A	Y
San Benito	56,884	0.067	B	Y	ND	---	ND	---	---
San Bernardino	**2,081,313**	**0.096**	**F**	**Y**	**30**	B	11.3	A	N
San Diego	3,177,063	0.066	B	Y	20	A	9.7	A	Y
San Francisco	825,863	0.047	A	N	24	A	9.4	A	N
San Joaquin	702,612	0.075	C	Y	ND	---	ND	---	---
San Luis Obispo	274,804	0.065	B	Y	20	A	7.4	A	N
San Mateo	739,311	0.053	A	N	24	A	8.5	A	N
Santa Barbara	431,249	0.060	B	Y	ND	---	ND	---	---
Santa Clara	1,837,504	0.068	C	Y	20	A	7.9	A	N
Santa Cruz	266,776	0.053	A	N	13	A	6.3	A	N
Shasta	178,586	0.066	B	Y	14	A	5.3	A	N
Siskiyou	44,154	0.060	B	N	16	A	5.2	A	N
Solano	420,757	0.065	B	Y	ND	---	ND	---	---
Sonoma	491,829	0.047	A	N	21	A	8.0	A	N
Stanislaus	**521,726**	**0.082**	**D**	**Y**	**49**	**F**	14.9	C	N
Sutter	95,022	0.070	C	N	26	A	6.8	A	Y
Tehama	63,406	0.075	C	Y	ND	---	ND	---	---
Tulare	**451,977**	**0.089**	**F**	Y	47	F	14.8	C	N
Tuolumne	54,008	0.074	C	N	ND	---	ND	**---**	**---**
Ventura	835,981	0.073	C	Y	19	A	8.8	A	N
Yolo	204,118	0.070	C	Y	20	A	6.6	A	N
Subtotal	**37,777,712**								
Not Monitored	263,718								
Total	**38,041,430**								

DV – Design Value ND - No Data MM – Multiple Monitors

CALIFORNIA

Table CA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	3,985,875	2,511,921	1,812,289	3,944,141	2,909,386	3,469,703	2,966,481	3,137,618	3,159,876	3,300,522	4,760,140
B	1,665,721	3,126,415	2,994,958	4,369,071	5,409,104	4,959,448	2,811,662	1,343,272	2,229,756	3,010,732	7,862,077
C	7,504,599	4,798,080	6,274,853	4,009,128	3,022,303	6,159,066	6,039,072	9,421,857	11,071,123	10,629,254	5,104,726
D	3,580,350	4,949,414	5,352,117	4,518,190	5,446,150	2,378,632	5,908,275	6,031,773	13,360,994	13,670,871	13,273,026
F	17,761,351	19,507,260	18,777,296	18,620,135	18,835,483	18,926,730	18,368,653	16,820,313	6,771,151	6,883,567	6,606,126
Subtotal	34,497,896	34,893,090	35,211,513	35,460,665	35,622,426	35,893,579	36,094,143	36,754,833	36,592,900	37,494,946	37,606,095
NM	373,947	360,069	363,063	367,278	398,776	356,732	510,194	206,396	661,056	196,966	435,335
Total	34,871,843	35,253,159	35,574,576	35,827,943	36,021,202	36,250,311	36,604,337	36,961,229	37,253,956	37,691,912	38,041,430

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,306,670	2,475,615	1,922,970	3,046,600	5,308,083	5,342,342	2,792,601	8,659,428	16,063,526	14,367,275	18,347,979
B	340,447	634,894	1,669,392	5,501,002	2,616,830	3,889,212	4,536,605	98,591	9,924,992	2,320,408	13,494,223
C	350,525	806,663	2,367,630	2,191,220	2,445,318	1,029,819	3,069,766	12,793,121	2,124,101	12,416,902	19,399
D	3,719,942	3,691,485	2,950,214	88,764	2,932,261	3,339,872	12,888,613	4,180,854	94,737	0	18,495
F	24,728,489	23,874,378	23,433,180	21,375,876	18,652,721	18,756,560	5,560,733	3,692,017	2,432,260	1,910,679	2,929,974
Subtotal	30,446,073	31,483,035	32,343,386	32,203,462	31,955,213	32,357,805	28,848,318	29,424,011	30,639,616	31,015,264	34,810,070
NM	4,425,770	3,770,124	3,231,190	3,624,481	4,065,989	3,892,506	7,756,019	7,537,218	6,614,340	6,674,648	3,231,360
Total	34,871,843	35,253,159	35,574,576	35,827,943	36,021,202	36,250,311	36,604,337	36,961,229	37,253,965	37,691,912	38,041,430

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	4,379,646	7,760,781	7,435,739	9,250,027	10,440,581	10,762,575	8,704,167	11,878,275	28,427,356	16,124,199	30,559,208
B	3,699,451	1,407,960	2,142,926	3,810,112	5,202,222	5,198,339	3,629,285	5,058,198	0	2,239,620	2,268,783
C	3,130,341	6,491,813	3,785,970	3,440,075	504,651	10,208,193	13,172,218	10,617,537	1,770,081	11,683,670	1,829,861
D	4,356,985	487,357	4,170,620	0	11,750,325	4,067,344	2,003,735	921,478	442,179	967,775	0
F	14,879,650	15,335,124	14,808,131	15,703,248	4,057,434	2,121,354	1,338,913	948,523	0	0	152,218
Subtotal	30,446,073	31,483,035	32,343,386	32,203,462	31,955,213	32,357,805	28,848,318	29,424,011	30,639,616	31,015,264	34,810,070
NM	4,425,770	3,770,124	3,231,190	3,624,481	4,065,989	3,892,506	7,756,019	7,537,218	6,614,340	6,674,648	3,231,360
Total	34,871,843	35,253,159	35,574,576	35,827,943	36,021,202	36,250,311	36,604,337	36,961,229	37,253,965	37,691,912	38,041,430

NM - Not Monitored

Figure CA-1

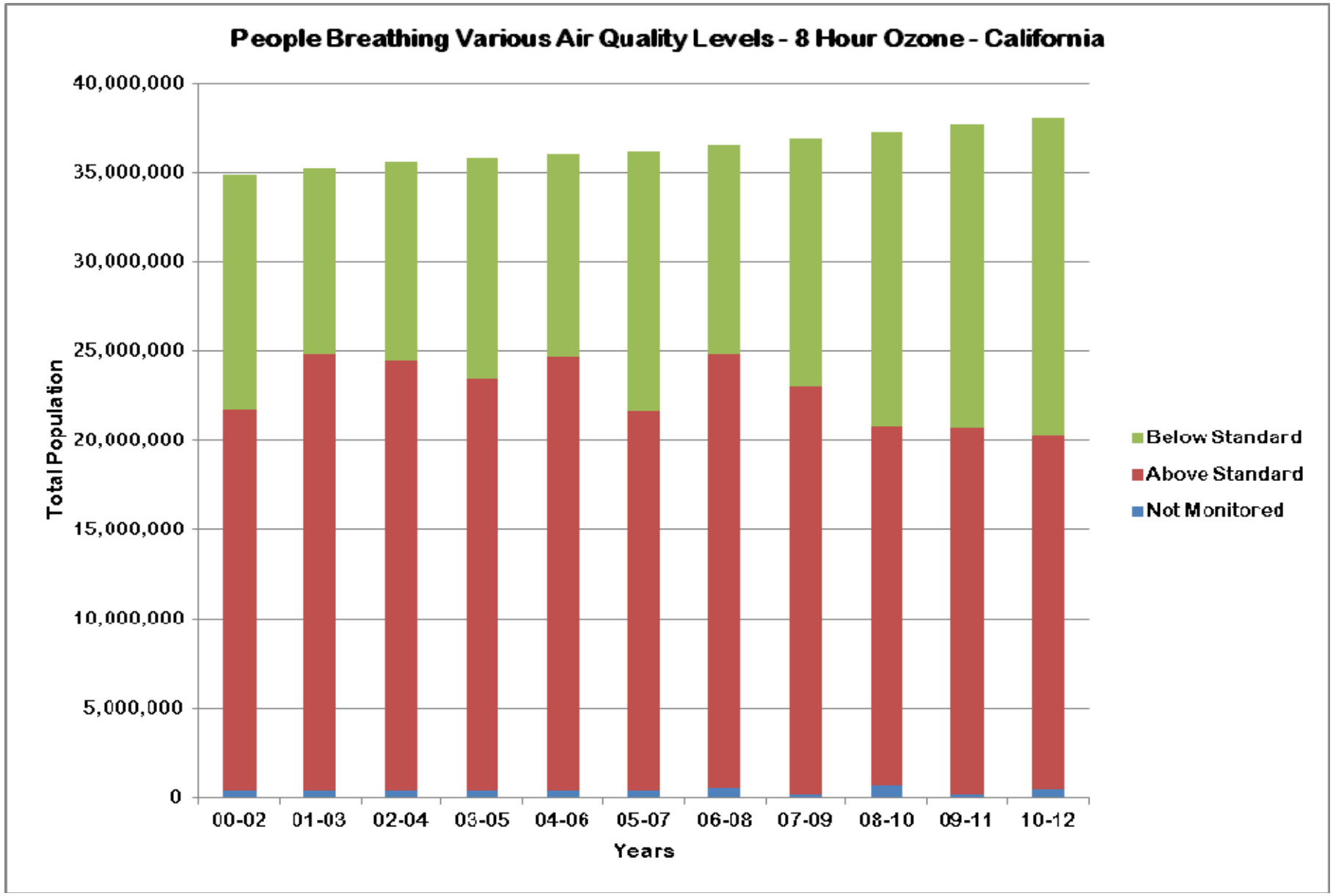

People Breathing Various Air Quality Levels - 8 Hour Ozone - California
Total Population
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure CA-2

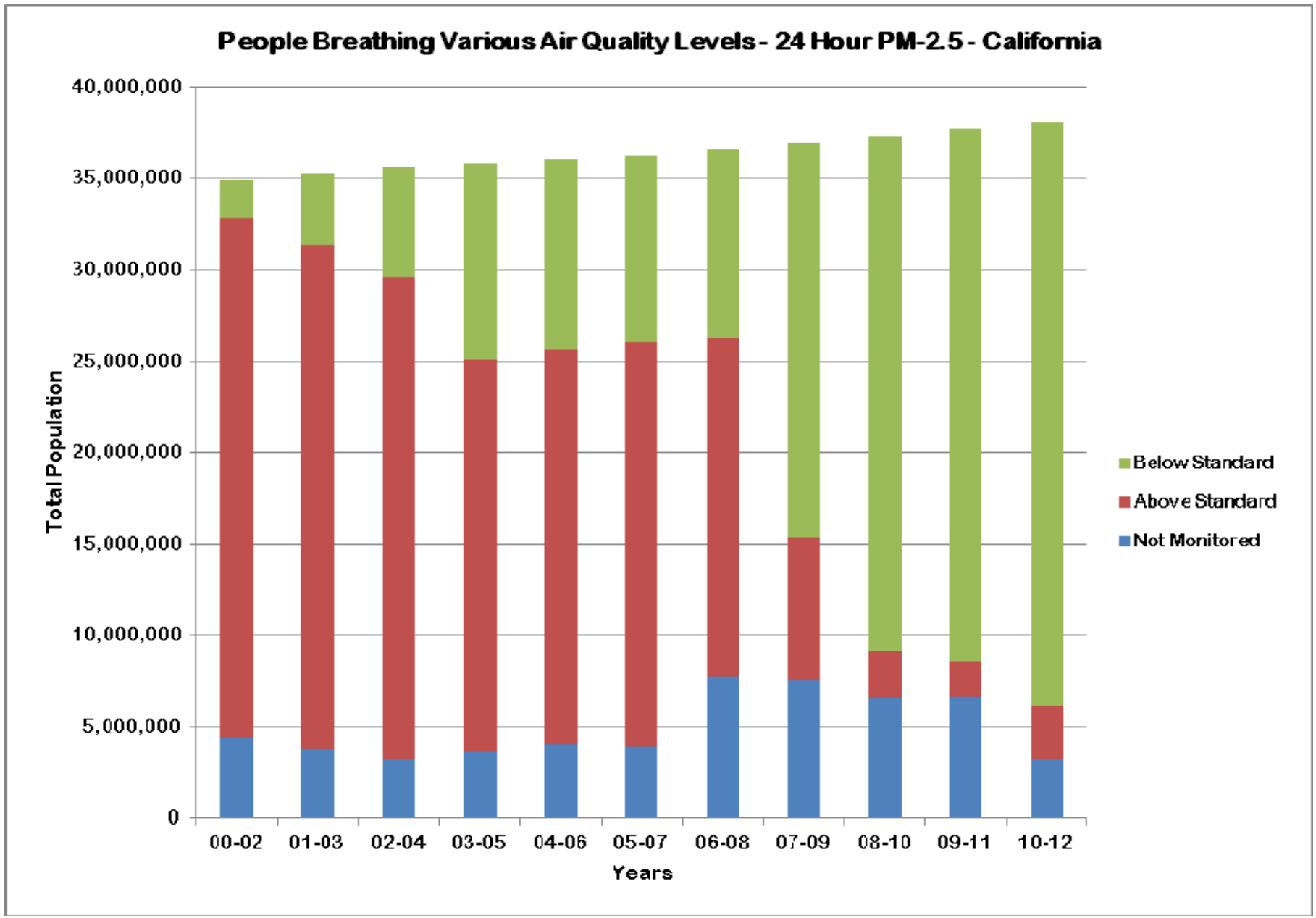
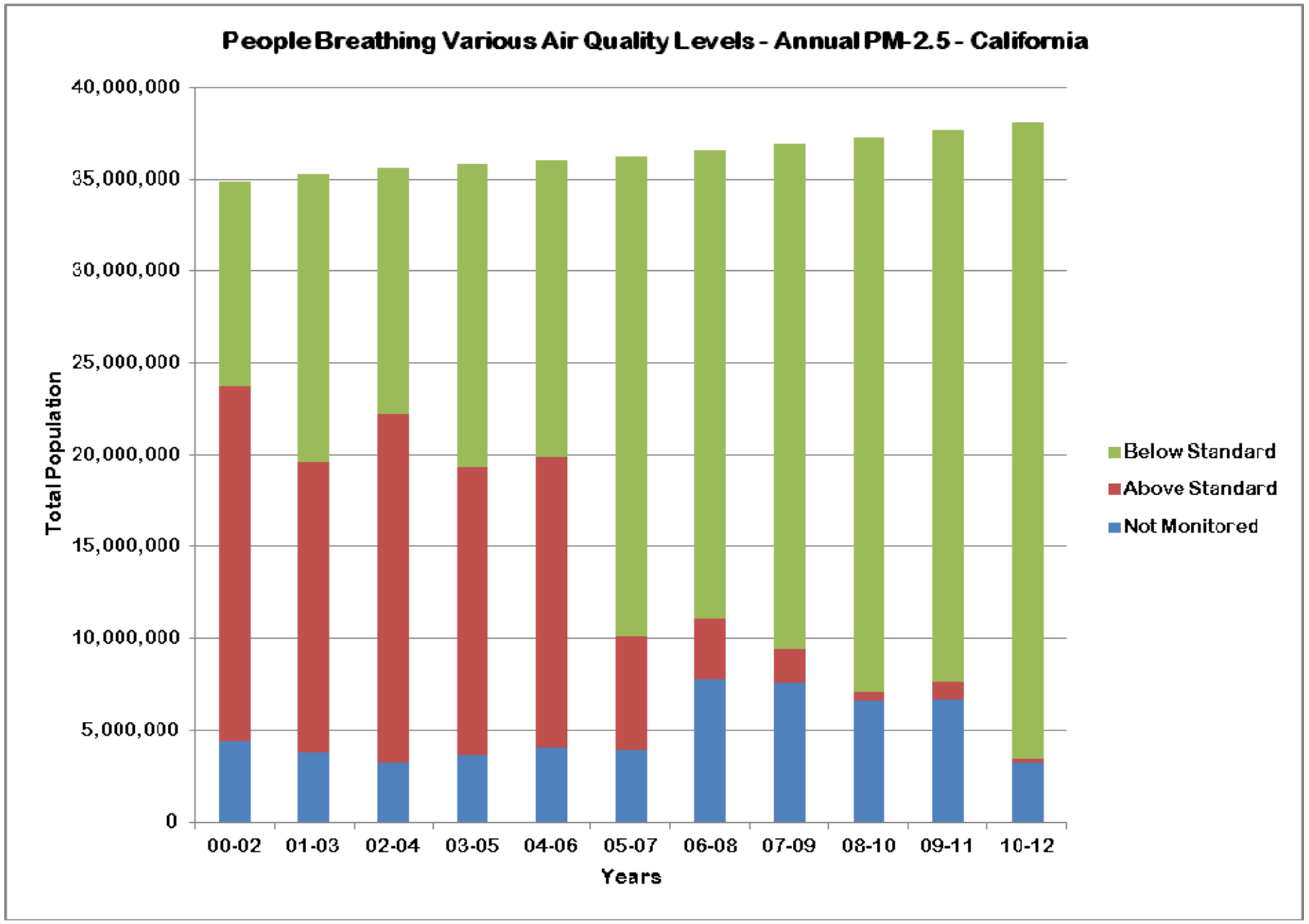

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - California
Total Population
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure CA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - California
Total Population
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

COLORADO

Ozone

Significant progress has been made in ozone levels in Colorado. In the 2000 – 2002 time period, approximately 2.1 million people (46.5%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 3.3 million people (63.3%). Figure CO-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Colorado. In the 2000 – 2002 time period, approximately 2.7 million people (60.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this had increased to approximately 3.9 million people (75.2%). The remainder of the population lived in areas where PM-2.5 is not measured. Figure CO-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in Colorado. In the 2000 – 2002 time period, approximately 2.7 million people (60.9%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 3.9 million people (75.2%). The remainder of the population lived in areas where PM-2.5 is not measured. Figure CO-3 shows the distribution of people by year.

COLORADO

Table CO-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Adams	459,598	ND	---	---	22	A	8.3	A	N
Arapahoe	595,546	0.074	C	Y	18	A	6.4	A	N
Boulder	305,318	ND	---	---	20	A	6.5	A	Y
Denver	634,265	0.070	C	Y	19	A	7.6	A	Y
Douglas	**298,215**	**0.079**	**D**	N	16	A	5.8	A	N
El Paso	644,964	0.071	C	Y	16	A	6.3	A	N
Garfield	56,953	0.066	B	N	ND	---	ND	---	---
Jefferson	545,358	0.075	C	Y	ND	---	ND	---	---
La Plata	52,401	0.070	C	Y	10	A	4.2	A	Y
Larimer	310,487	0.074	C	Y	21	A	6.5	A	N
Mesa	147,848	0.068	C	Y	28	B	7.8	A	N
Montezuma	25,431	0.068	C	Y	13	A	5.9	A	N
Pueblo	160,852	ND	---	---	15	A	6.2	A	N
Rio Blanco	6,857	0.064	B	N	ND	---	ND	---	---
Weld	263,691	0.075	C	N	22	A	7.5	A	Y
Subtotal	**4,507,784**								
Not Monitored	679,798								
Total	**5,187,582**								

DV – Design Value ND - No Data MM – Multiple Monitors

COLORADO

Table CO-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	45,869	46,121	0	0	0	0	0	0	0	0	0
B	370,753	401,719	431,537	47,575	48,574	49,343	0	0	768,986	1,485,726	698,075
C	1,669,710	547,549	1,131,879	2,092,508	2,133,645	1,878,193	1,965,716	2,254,273	2,058,592	2,057,392	2,585,726
D	1,245,698	2,138,434	1,591,109	1,267,020	1,283,984	1,592,070	1,063,304	1,106,537	285,465	292,167	295,215
F	0	220,352	0	0	0	267,177	275,500	0	0	0	0
Subtotal	3,332,030	3,354,175	3,154,525	3,407,103	3,466,203	3,786,783	3,304,520	3,360,810	3,113,043	3,835,285	3,579,016
NM	1,158,376	1,174,557	1,420,488	1,224,785	1,254,220	1,017,085	1,585,210	1,611,385	1,916,153	1,281,511	1,608,566
Total	4,490,406	4,528,732	4,575,013	4,631,888	4,720,423	4,803,868	4,889,730	4,972,195	5,029,196	5,116,796	5,187,582

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,176,342	2,402,036	3,031,521	2,872,310	3,194,550	3,066,181	2,552,170	2,452,448	3,391,600	3,635,017	3,750,768
B	556,790	552,588	0	0	0	415,746	424,913	583,551	0	0	147,848
C	0	0	0	0	0	0	0	0	146,723	147,083	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,733,132	2,954,624	3,031,521	2,872,310	3,194,550	3,481,927	2,977,083	3,035,999	3,538,323	3,782,100	3,898,616
NM	1,757,274	1,574,108	1,543,492	1,759,578	1,525,873	1,331,941	1,912,647	1,936,196	1,490,873	1,334,696	1,288,966
Total	4,490,406	4,528,732	4,575,013	4,631,888	4,720,423	4,803,868	4,889,730	4,972,195	5,029,196	5,116,796	5,187,582

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,733,132	2,954,624	3,031,521	2,872,310	3,194,550	3,481,927	2,977,083	3,035,999	3,538,323	3,782,100	3,898,616
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,733,132	2,954,624	3,031,521	2,872,310	3,194,550	3,481,927	2,977,083	3,035,999	3,538,323	3,782,100	3,898,616
NM	1,757,274	1,574,108	1,543,492	1,759,578	1,525,873	1,331,941	1,912,647	1,936,196	1,490,873	1,334,696	1,288,966
Total	4,490,406	4,528,732	4,575,013	4,631,888	4,720,423	4,803,868	4,889,730	4,972,195	5,029,196	5,116,796	5,187,582

NM – Not Monitored

Figure CO-1

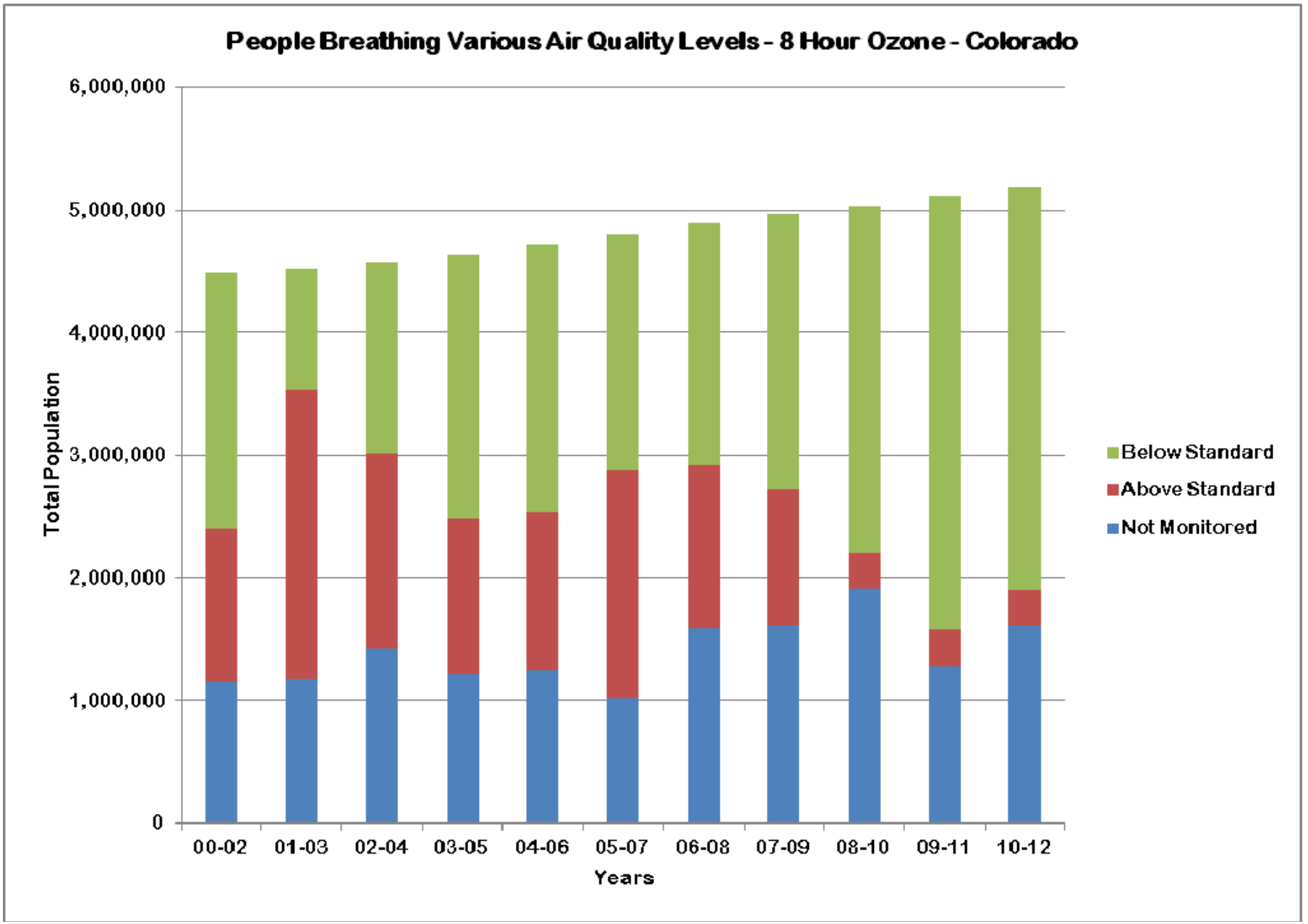
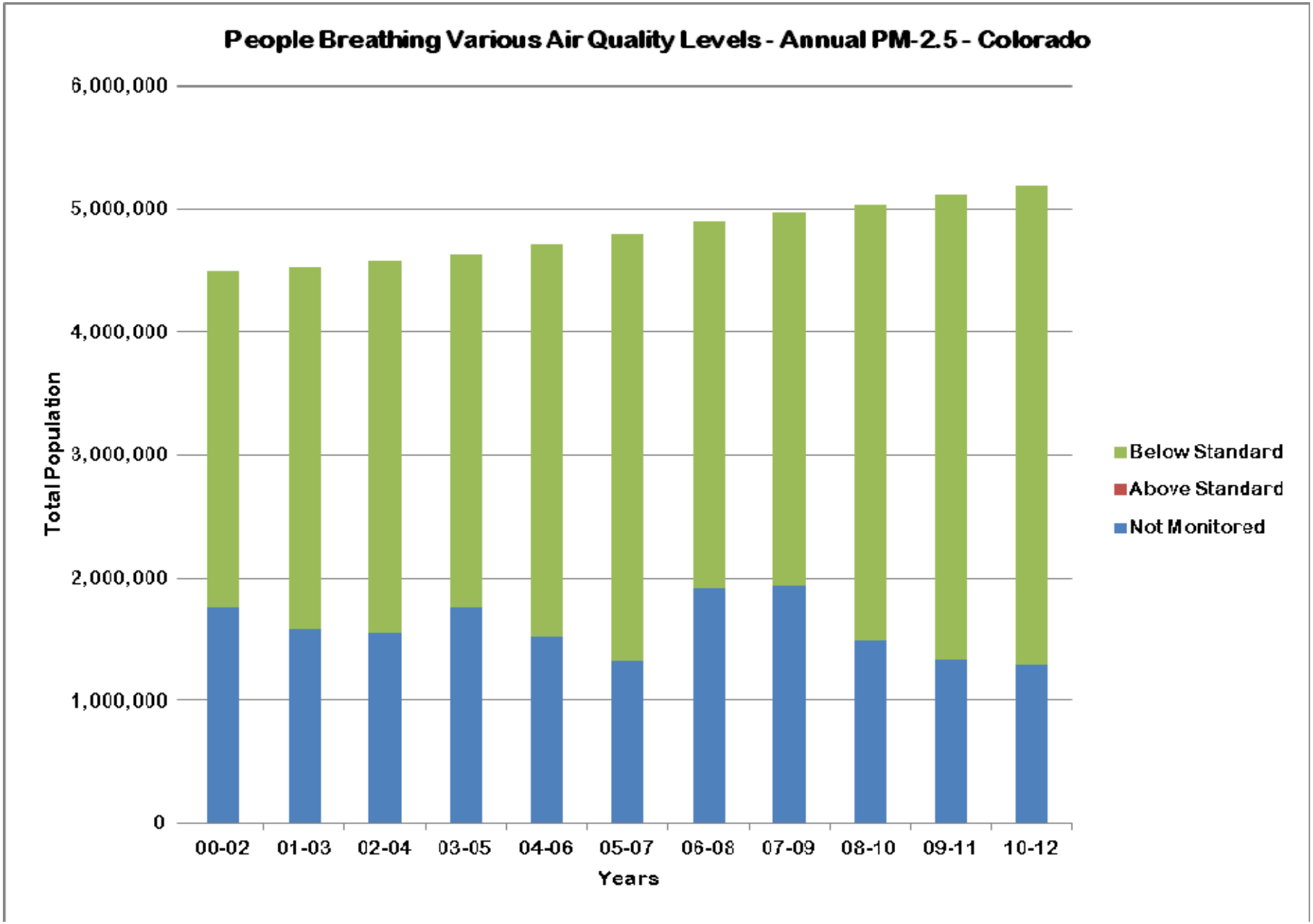

People Breathing Various Air Quality Levels - 8 Hour Ozone - Colorado
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure CO-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Colorado
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure CO-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Colorado
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

CONNECTICUT

Ozone

Significant progress has been made in ozone levels in Connecticut. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.1 million people (30.2%). Figure CT-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Connecticut. In the 2000 – 2002 time period, approximately 1.1 million people (32.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 - 2012 this had increased to approximately 3.2 million people (87.9%). In 2010 - 2012 the remainder of the population lived in areas where PM-2.5 is not measured. Figure CT-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in Connecticut. In the 2000 – 2002 time period, approximately 2.9 million people (82.7%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 3.2 million people (87.9%). The remainder of the population lived in areas where PM-2.5 is not measured. Figure CT-3 shows the distribution of people by year.

Table CT-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Fairfield	**933,835**	**0.085**	**F**	**Y**	24	A	9.1	A	Y
Hartford	897,258	0.075	C	N	22	A	8.4	A	Y
Litchfield	187,530	0.071	C	N	17	A	5.7	A	N
Middlesex	**165,602**	**0.081**	**D**	**N**	ND	---	ND	---	---
New Haven	**862,813**	**0.076**	**D**	**N**	24	A	9.2	A	Y
New London	**274,170**	**0.081**	**D**	**N**	21	A	8.1	A	N
Tolland	**151,539**	**0.077**	**D**	**N**	ND	---	ND	---	---
Subtotal	**3,472,747**								
Not Monitored	118,000								
Total	**3,590,747**								

DV – Design Value ND - No Data MM – Multiple Monitors

CONNECTICUT

Table CT-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	1,946,418	1,236,001	1,084,789
D	0	0	0	878,081	0	0	0	3,443,695	1,509,251	2,226,557	1,454,124
F	3,161,697	3,184,259	3,381,778	2,324,327	3,211,000	3,410,026	3,155,057	0	0	0	933,835
Subtotal	3,161,697	3,184,259	3,381,778	3,202,408	3,211,000	3,410,026	3,155,057	3,443,695	3,455,669	3,462,558	3,472,748
NM	297,052	300,077	114,316	304,548	306,460	117,244	390,522	118,112	118,428	118,151	117,599
Total	3,458,749	3,484,336	3,496,094	3,506,956	3,517,460	3,527,270	3,545,579	3,561,807	3,574,097	3,584,709	3,590,347

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	189,866	462,809	1,355,312	2,274,825	3,144,008	3,155,607
B	264,698	0	0	0	1,152,112	1,155,217	1,791,715	1,770,446	862,477	0	0
C	867,451	1,139,919	2,040,516	1,147,745	1,746,461	1,751,096	856,622	0	0	0	0
D	1,727,999	1,738,281	844,505	1,744,815	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,860,148	2,878,200	2,885,021	2,892,560	2,898,573	3,096,179	3,111,146	3,125,758	3,137,302	3,144,008	3,155,607
NM	598,601	606,136	611,073	614,396	618,887	431,091	434,433	436,049	436,795	436,701	434,740
Total	3,458,749	3,484,336	3,496,094	3,506,956	3,517,460	3,527,270	3,545,579	3,561,807	3,574,097	3,580,709	3,590,347

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	264,698	266,584	1,143,044	1,147,745	1,152,112	1,345,083	3,111,146	3,125,758	3,137,302	3,144,008	3,155,607
B	1,760,351	2,611,616	897,472	1,744,815	1,746,461	1,751,096	0	0	0	0	0
C	835,099	0	844,505	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,860,148	2,878,200	2,885,021	2,892,560	2,898,573	3,096,179	3,111,146	3,125,758	3,137,302	3,144,008	3,155,607
NM	598,601	606,136	611,073	614,396	618,887	431,091	434,433	436,049	436,795	436,701	434,740
Total	3,458,749	3,484,336	3,496,094	3,506,956	3,517,460	3,527,270	3,545,579	3,561,807	3,574,097	3,580,709	3,590,347

NM – Not Monitored

Figure CT-1

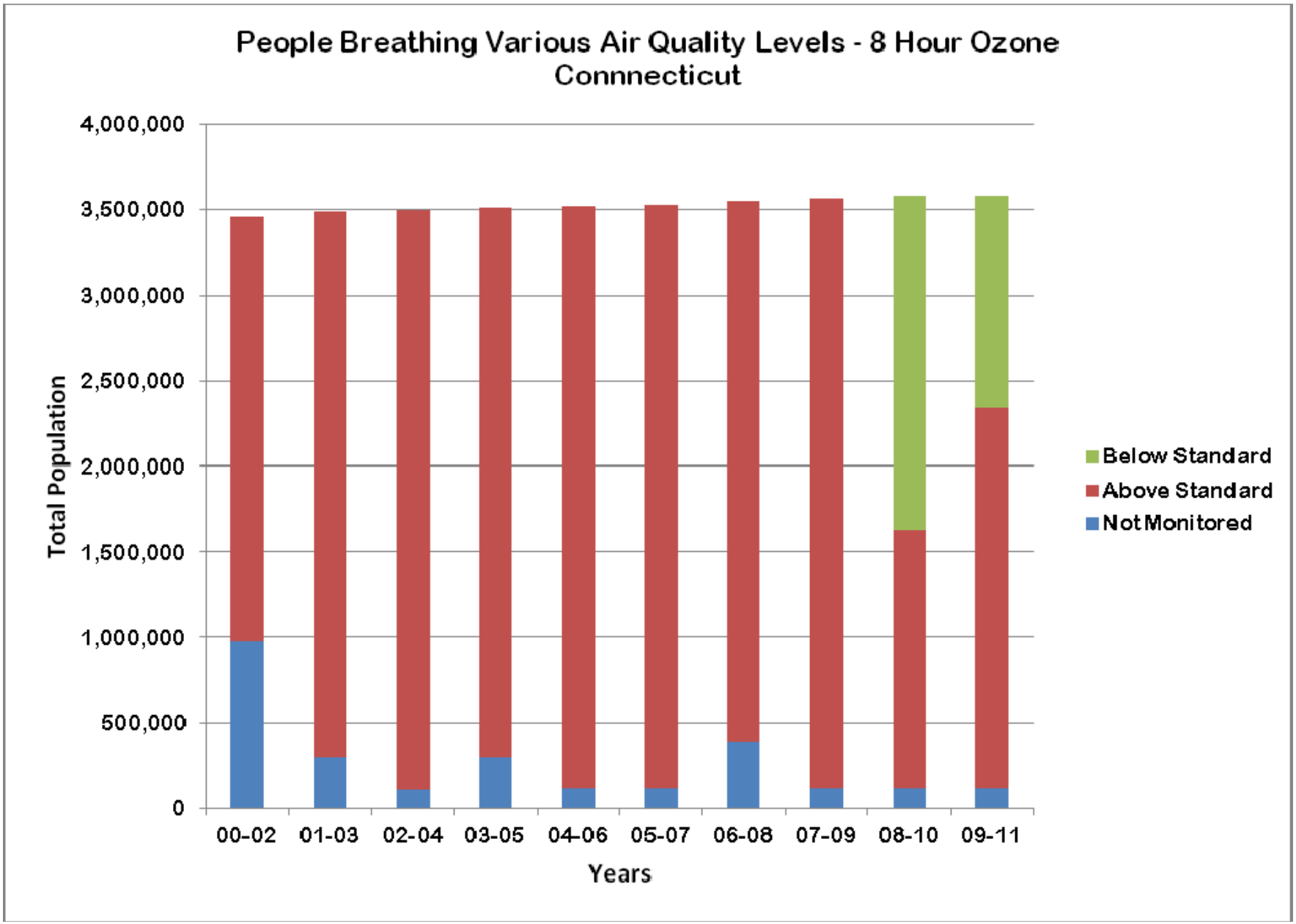

People Breathing Various Air Quality Levels - 8 Hour Ozone
Connnecticut
Total Population
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
Years
Below Standard
Above Standard
Not Monitored

Figure CT-2

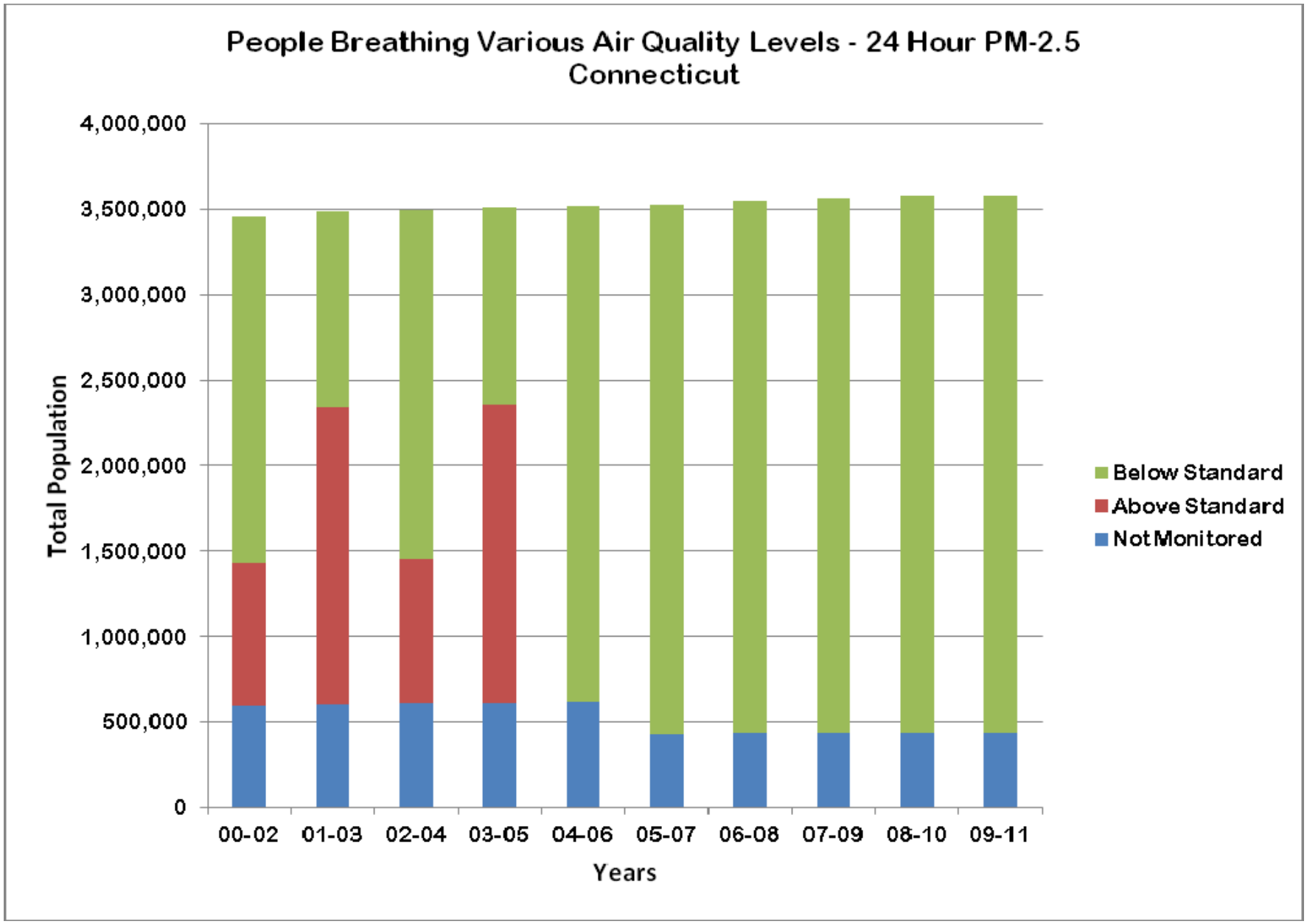
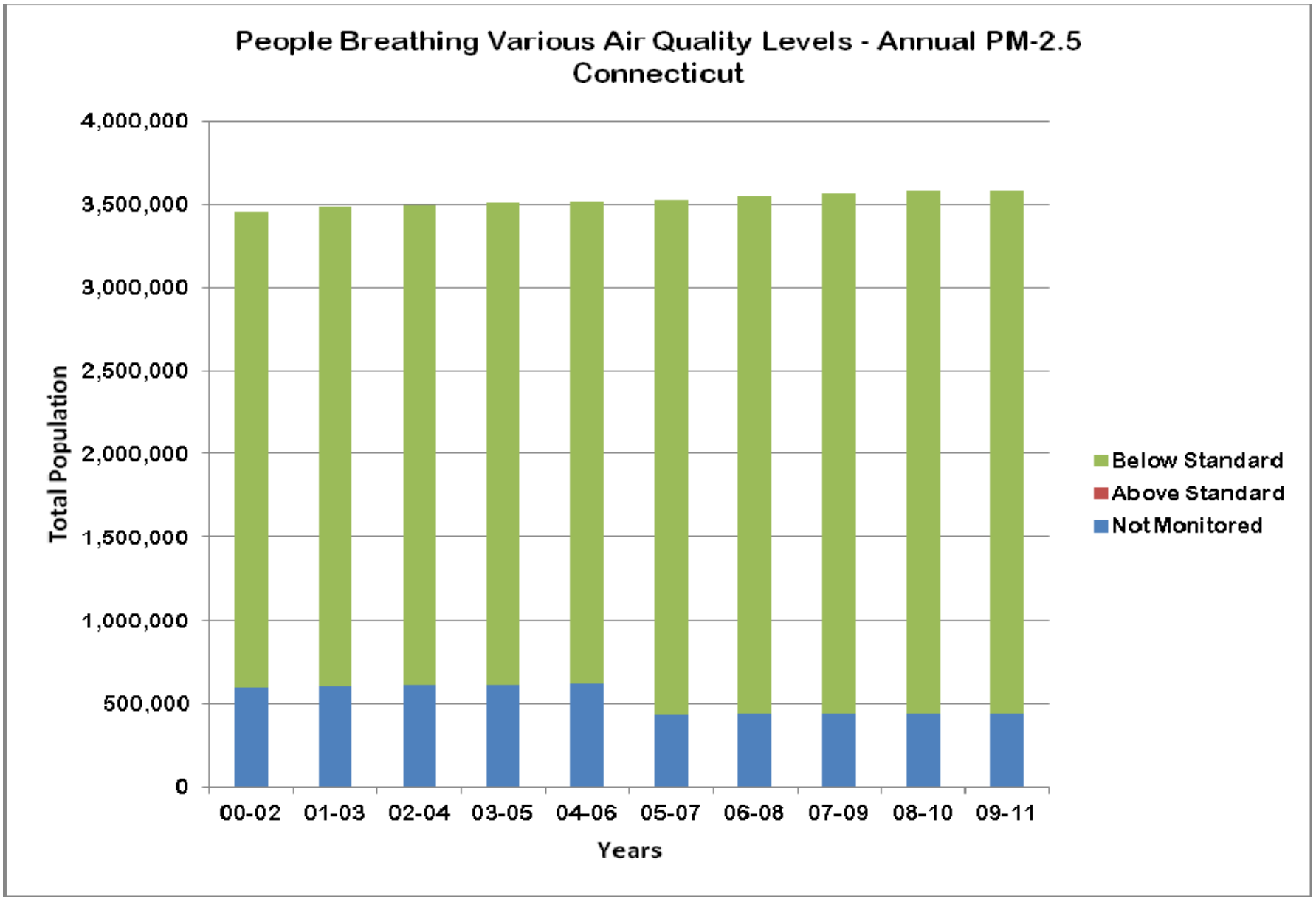

People Breathing Various Air Quality Levels - 24 Hour PM-2.5
Connecticut
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
Years
Below Standard
Above Standard
Not Monitored

Figure CT-3


People Breathing Various Air Quality Levels - Annual PM-2.5
Connecticut
Total Population
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
Years
Below Standard
Above Standard
Not Monitored

DELAWARE

Ozone

No progress has been made in ozone levels in Delaware. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this was still the case. Figure DE-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Delaware. In the 2000 – 2002 time period, approximately 0.1 million people (16.4%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.9 million people (100%). Figure DE-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Delaware. In the 2000 – 2002 time period, approximately 0.6 million people (79.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 0.9 million people (100%). Figure DE-3 shows the distribution of people by year.

Table DE-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Kent	**167,626**	**0.079**	**D**	**N**	22	**A**	8.7	**A**	**Y**
New Castle	**546,076**	**0.080**	**D**	**Y**	24	**A**	9.8	**A**	**Y**
Sussex	**203,390**	**0.081**	**D**	**Y**	24	**A**	8.9	**A**	**N**
Subtotal	**917,092**								
Not Monitored	**0**								
Total	**917,092**								

DV – Design Value ND - No Data MM – Multiple Monitors

DELAWARE

Table DE-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	696,979	700,789	164,834	0
D	0	0	0	667,928	859,268	871,749	883,874	194,751	197,145	742,301	917,092
F	806,169	818,003	830,803	177,222	0	0	0	0	0	0	0
Subtotal	806,169	818,003	830,803	845,150	859,268	871,749	883,874	891,730	897,934	907,135	917,092
NM	0	0	0	0	0	0	0	0	0	0	0
Total	806,169	818,003	830,803	845,150	859,268	871,749	883,874	891,730	897,934	907,135	917,092

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	354,832	897,934	907,135	917,092
B	0	0	0	0	0	0	883,874	536,898	0	0	0
C	131,824	134,605	658,286	845,150	859,268	871,749	0	0	0	0	0
D	510,158	683,398	172,517	0	0	0	0	0	0	0	0
F	164,187	0	0	0	0	0	0	0	0	0	0
Subtotal	806,169	818,003	830,803	845,150	859,268	871,749	883,874	891,730	897,934	907,135	917,092
NM	0	0	0	0	0	0	0	0	0	0	0
Total	806,169	818,003	830,803	845,150	859,268	871,749	883,874	891,730	897,934	907,135	917,092

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	354,832	897,934	907,135	917,092
B	131,824	303,234	311,859	321,807	332,094	341,194	883,874	536,898	0	0	0
C	510,158	514,769	518,944	523,343	527,174	530,555	0	0	0	0	0
D	164,187	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	806,169	818,003	830,803	845,150	859,268	871,749	883,874	891,730	897,934	907,135	917,092
NM	0	0	0	0	0	0	0	0	0	0	0
Total	806,169	818,003	830,803	845,150	859,268	871,749	883,874	891,730	897,934	907,135	917,092

NM – Not Monitored

Figure DE-1

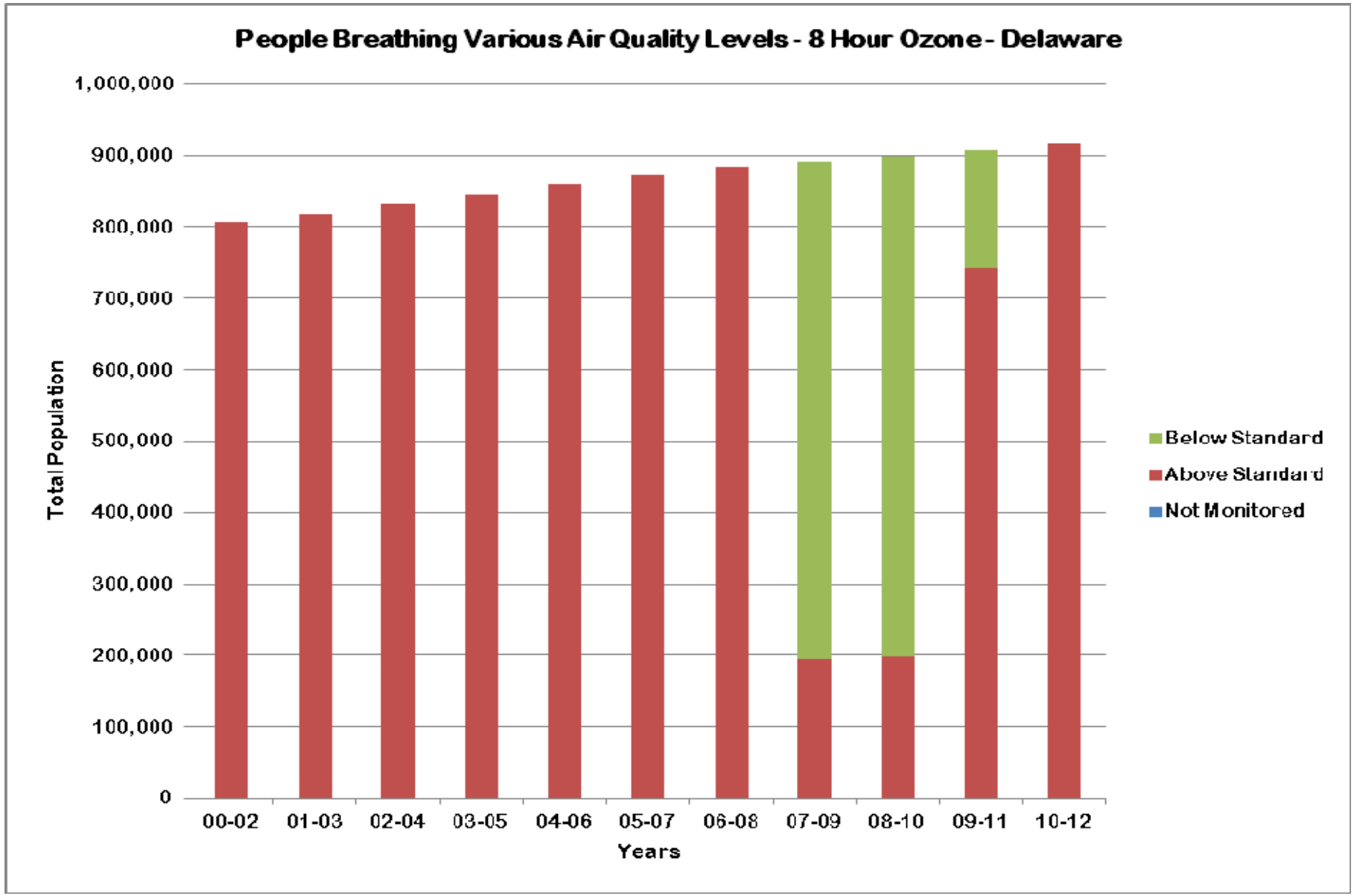

People Breathing Various Air Quality Levels - 8 Hour Ozone - Delaware
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure DE-2

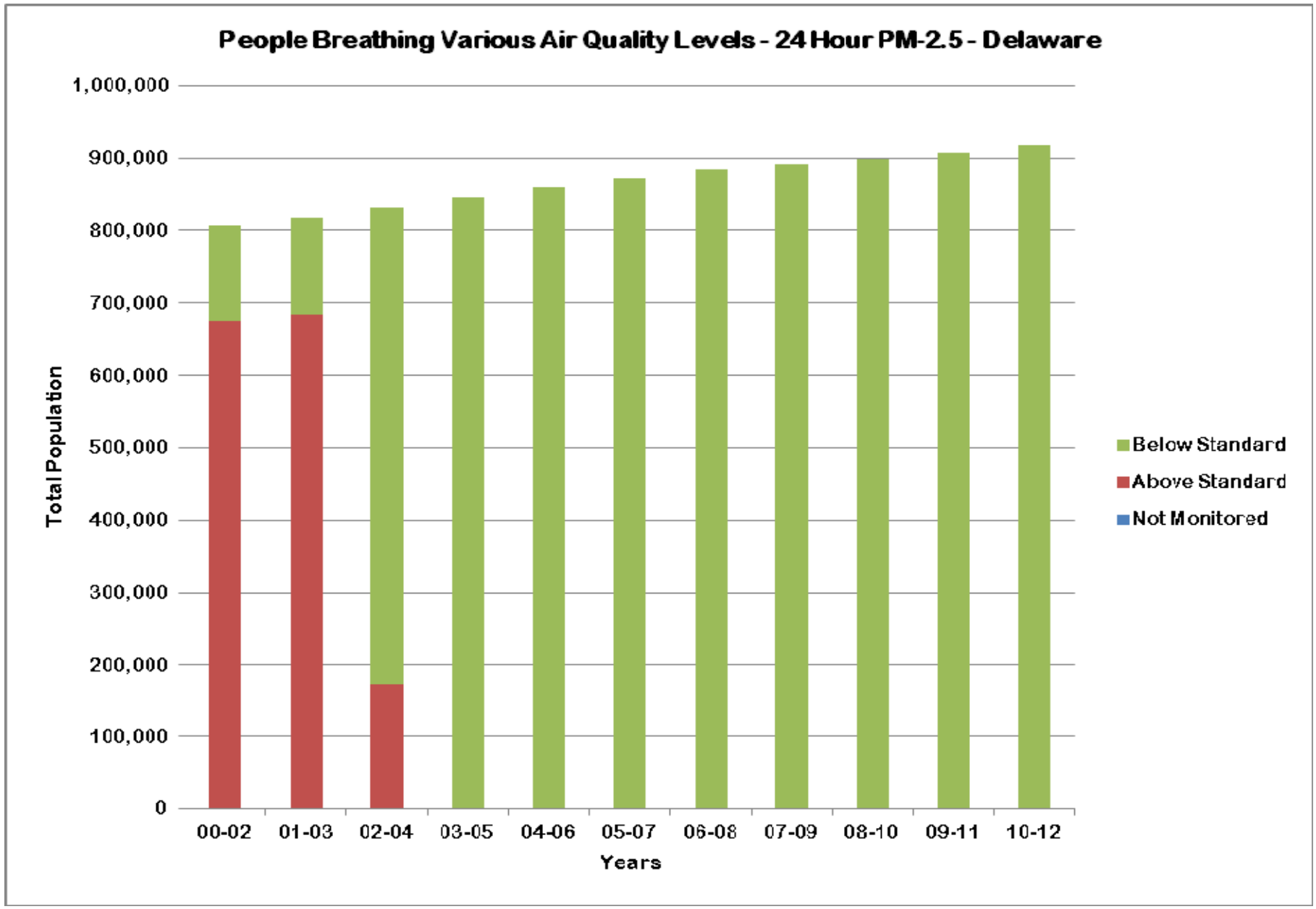
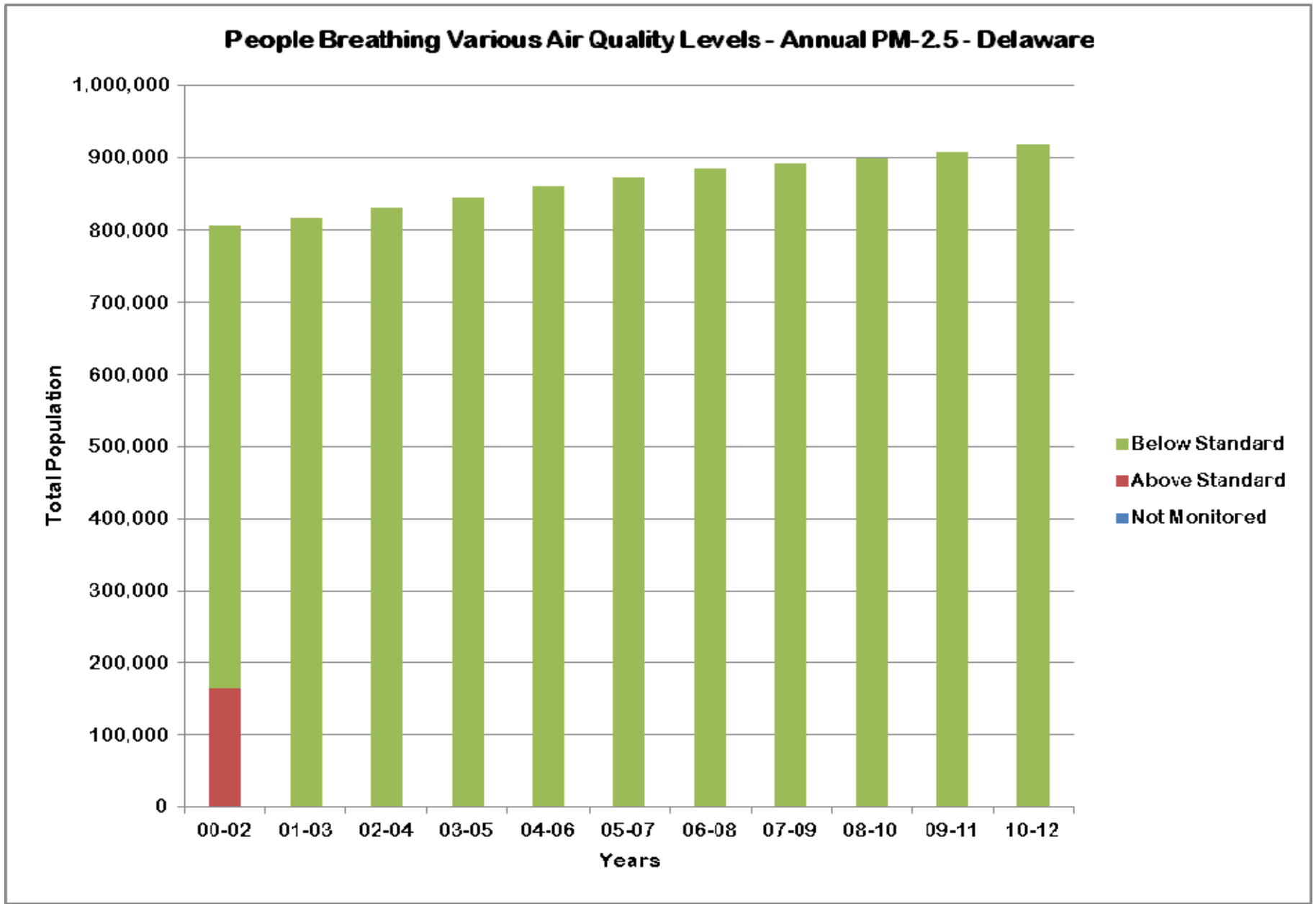

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Delaware
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure DE-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Delaware
Total Population
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

DISTRICT OF COLUMBIA

Ozone

No progress has been made in ozone levels in the District of Columbia. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this was still the case. Figure DC-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in the District of Columbia. In the 2000 – 2002 time period, no people lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 - 2012 this was approximately 0.6 million people (100%). Figure DC-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in the District of Columbia. In the 2000 – 2002 time period, no people lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 0.6 million people (100%). Figure DC-3 shows the distribution of people by year.

Table DC-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
District of C.	**632,323**	**0.083**	**F**	**Y**	**25**	**A**	**10.3**	A	Y
Subtotal	**632,323**								
Not Monitored	**0**								
Total	**632,323**								

DV – Design Value MM – Multiple Monitors

DISTRICT OF COLUMBIA

Table DC-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	567,136	570,681	0	0	0	601,723	617,996	0
F	573,158	568,502	567,754	0	0	574,404	580,236	592,228	0	0	632,323
Subtotal	573,158	568,502	567,754	567,136	570,681	574,404	580,236	592,228	601,723	617,996	632,323
NM	0	0	0	0	0	0	0	0	0	0	0
Total	573,158	568,502	567,754	567,136	570,681	574,404	580,236	592,228	601,723	617,996	632,323

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	601,723	617,996	632,323
B	0	0	0	0	0	0	580,236	592,228	0	0	0
C	0	0	0	0	570,681	574,404	0	0	0	0	0
D	0	0	567,754	567,136	0	0	0	0	0	0	0
F	573,158	568,502	0	0	0	0	0	0	0	0	0
Subtotal	573,158	568,502	567,754	567,136	570,681	574,404	580,236	592,228	601,723	617,996	632,323
NM	0	0	0	0	0	0	0	0	0	0	0
Total	573,158	568,502	567,754	567,136	570,681	574,404	580,236	592,228	601,723	617,996	632,323

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	592,228	601,723	617,996	632,323
B	0	0	0	0	0	0	580,236	0	0	0	0
C	0	0	567,754	567,136	570,681	574,404	0	0	0	0	0
D	573,158	568,502	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	573,158	568,502	567,754	567,136	570,681	574,404	580,236	592,228	601,723	617,996	632,323
NM	0	0	0	0	0	0	0	0	0	0	0
Total	573,158	568,502	567,754	567,136	570,681	574,404	580,236	592,228	601,723	617,996	632,323

NM - Not Monitored

Figure DC-1

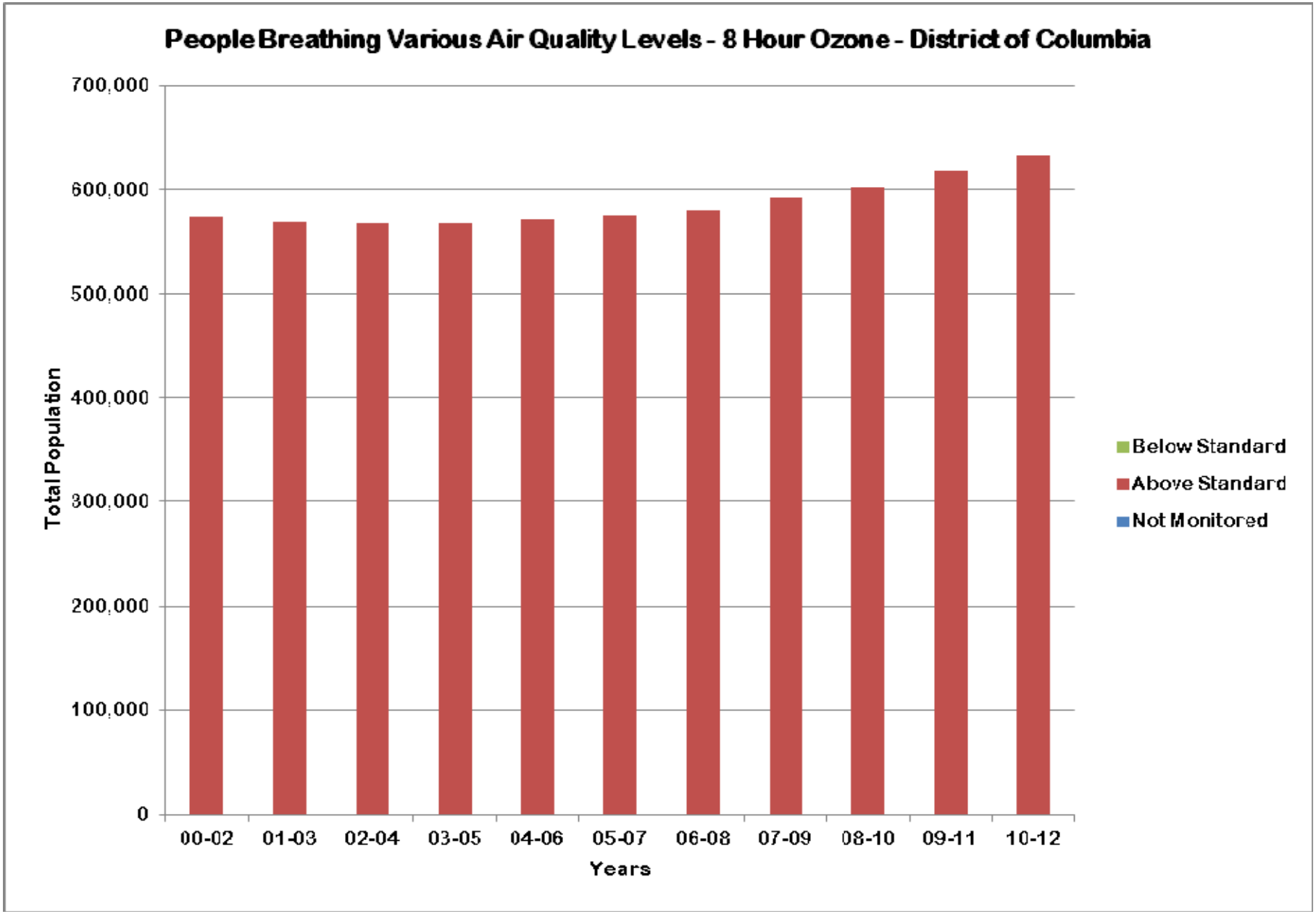

People Breathing Various Air Quality Levels - 8 Hour Ozone - District of Columbia
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure DC-2

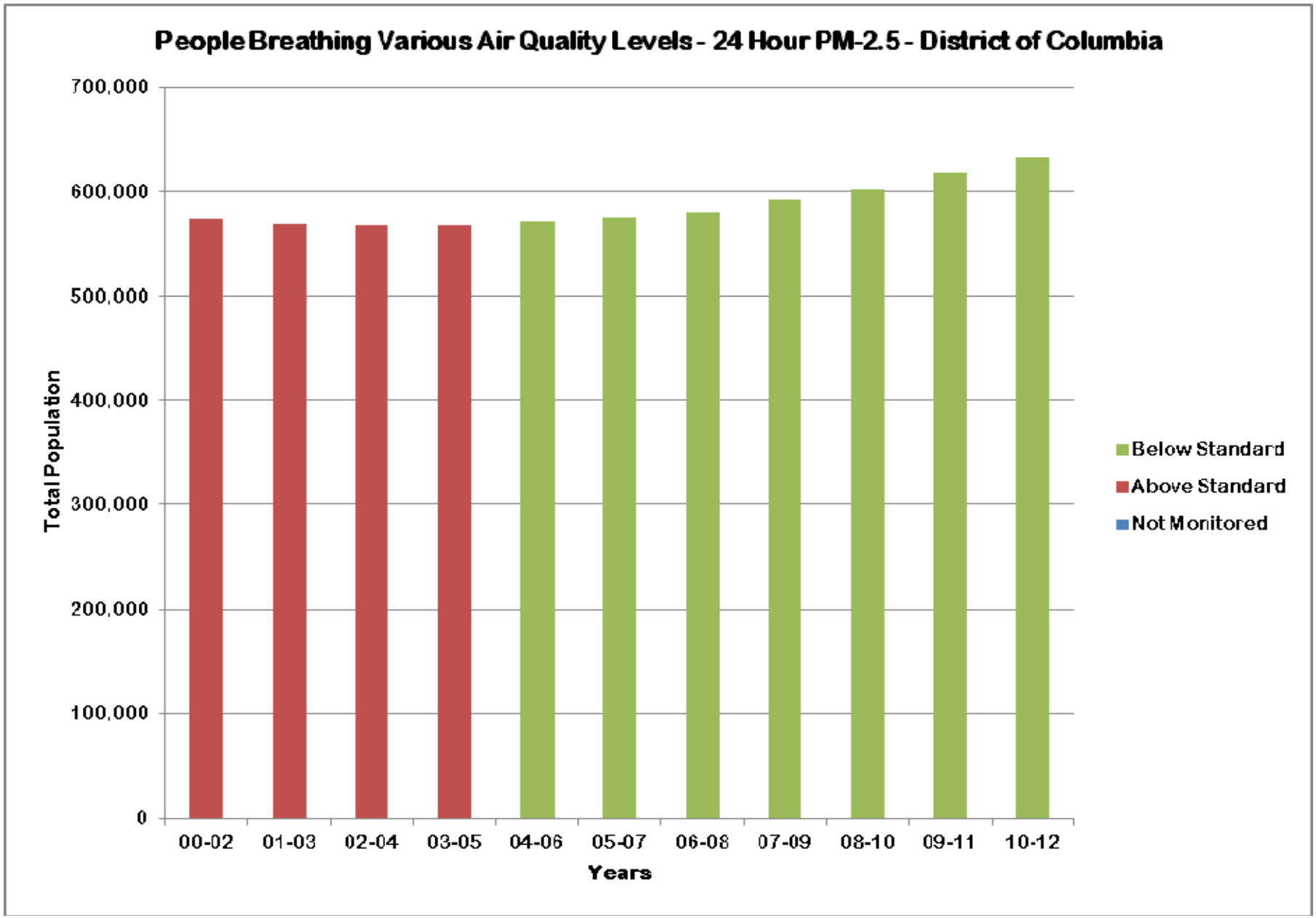
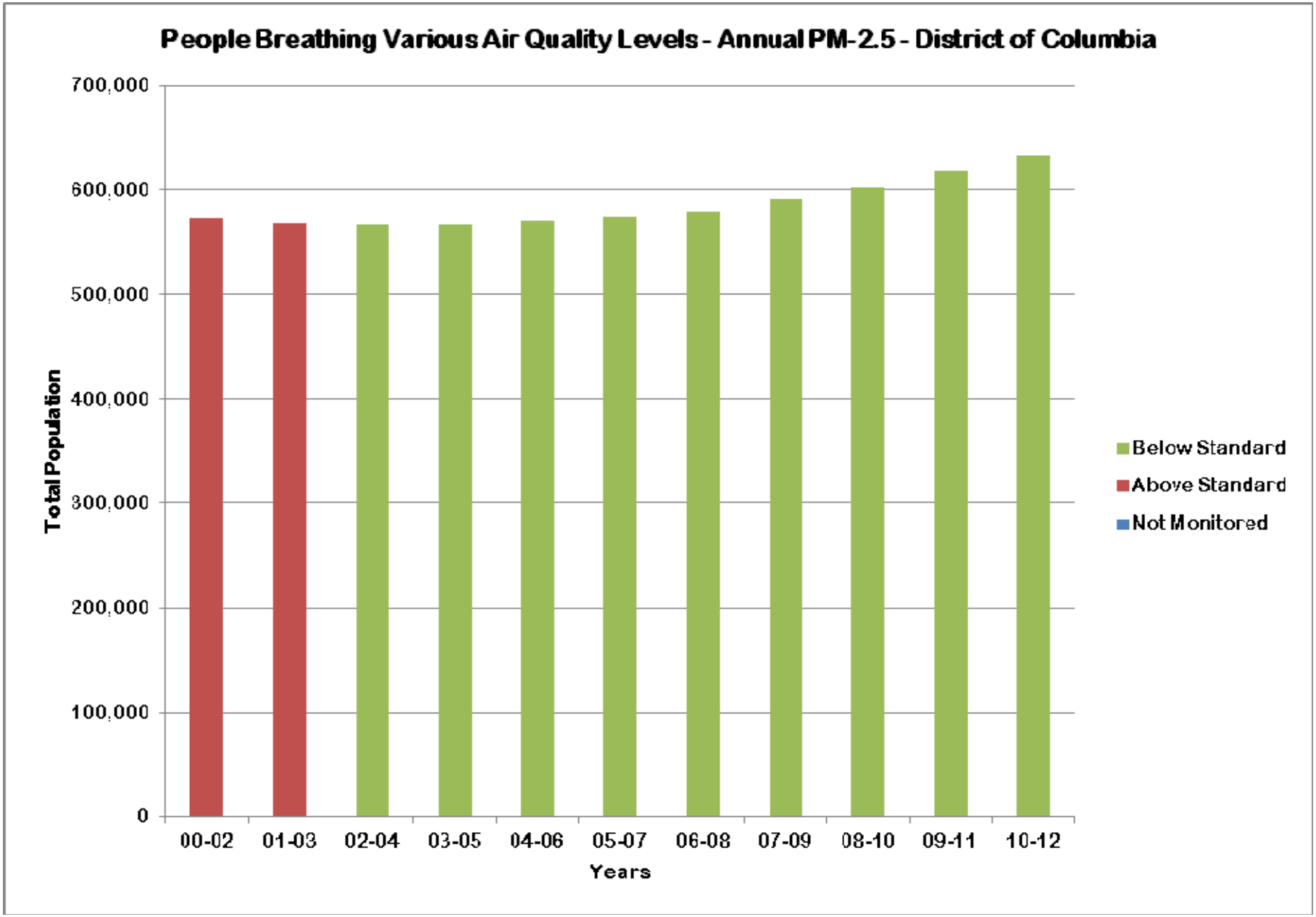

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - District of Columbia
Total Population
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure DC-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - District of Columbia
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

FLORIDA

Ozone

Significant progress has been made in ozone levels in Florida. In the 2000 – 2002 time period, approximately 14 million people (85.1%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to 16.8 million people (87.1%). In 2010 – 2012, the rest of the population lived in areas where ozone is not monitored. Figure FL-1 shows the distribution of people by year.

24-Hour PM-2.5

Measured air quality in Florida has always met the 24-hour PM-2.5 standard. In the 2000 – 2002 time period, approximately 12.4 million people (74.3%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 14.1 million people (73.2%). The rest of the population lived in areas where PM-2.5 is not measured. Figure FL-2 shows the distribution of people by year.

Annual PM-2.5

Measured annual PM-2.5 levels in Florida have always met the standard. In the 2000 – 2002 time period, approximately 12.4 million people (74.3%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 14.1 million people (73.2%). The rest of the population lived in areas where PM-2.5 is not measured. Figure FL-3 shows the distribution of people by year.

FLORIDA

Table FL-1
2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Alachua	251,417	0.066	B	N	20	A	7.7	A	N
Baker	27,086	0.063	B	N	ND	---	ND	---	---
Bay	171,903	0.069	C	N	ND	---	ND	--	---
Brevard	547,307	0.065	B	Y	14	A	6.5	A	N
Broward	1,815,137	0.059	A	Y	15	A	6.9	A	Y
Citrus	139,360	ND	---	---	17	A	7.3	A	N
Collier	221,427	0.059	A	N	ND	---	ND	---	---
Columbia	67,966	0.065	B	N	ND	---	ND	---	---
Duval	879,602	0.065	B	Y	20	A	8.1	A	Y
Escambia	302,715	0.071	C	Y	20	A	9.0	A	N
Highlands	98,128	0.064	B	N	ND	---	ND	---	---
Hillsborough	1,277,746	0.071	C	Y	16	A	7.6	A	N
Holmes	19,804	0.064	B	N	ND	---	ND	---	---
Lake	303,186	0.067	B	N	ND	---	ND	---	---
Lee	645,293	0.063	B	Y	14	A	7.0	A	N
Leon	283,769	0.066	B	Y	23	A	9.5	A	N
Manatee	333,895	0.065	B	Y	ND	---	ND	---	---
Marion	335,125	0.065	B	Y	ND	---	ND	---	---
Miami-Dade	2,591,035	0.064	B	Y	14	A	6.9	A	Y
Okaloosa	190,083	0.067	B	N	ND	---	ND	---	---
Orange	1,202,234	0.073	C	Y	15	A	7.0	A	N
Osceola	287,416	0.067	B	N	ND	---	ND	---	---
Palm Beach	356,545	0.063	B	Y	16	A	7.1	A	Y
Pasco	470,391	0.067	B	Y	ND	---	ND	---	---
Pinellas	921,319	0.066	B	Y	16	A	7.3	A	Y
Polk	616,158	0.069	C	Y	16	A	7.5	A	N
Santa Rosa	158,512	0.073	C	N	ND	---	ND	---	---
Sarasota	386,147	0.069	C	N	15	A	7.0	A	N
Seminole	430,838	0.070	C	N	17	A	7.4	A	N
Volusia	496,950	0.063	B	Y	17	A	7.2	A	N
Wakulla	30,818	0.065	B	N	ND	---	ND	---	---
Subtotal	**15,859,312**								
Not Monitored	3,458,256								
Total	**19,317,568**								

DV – Design Value ND - No Data MM – Multiple Monitors

FLORIDA

Table FL-2
People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,965,608	0	0	0	0	0	0	0	0	1,780,172	2,147,564
B	8,425,171	5,261,713	5,564,916	4,312,768	1,739,348	3,274,271	3,789,088	7,018,063	12,155,666	11,040,571	10,137,135
C	3,812,648	5,665,379	8,517,982	4,991,788	7,948,068	7,525,614	10,287,201	8,509,020	3,372,473	3,442,169	4,546,253
D	0	3,642,353	1,206,646	4,850,927	4,301,475	5,034,740	1,808,432	149,544	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	14,203,427	14,569,445	15,289,544	14,155,483	13,988,891	15,834,625	15,884,721	15,676,627	15,528,139	16,262,912	16,830,952
NM	2,485,943	2,434,640	2,125,774	3,686,555	4,178,099	2,533,217	2,642,584	2,976,017	3,273,171	2,794,630	2,486,616
Total	16,689,370	17,004,085	17,415,318	17,842,038	18,166,990	18,367,842	18,527,305	18,652,644	18,801,310	19,057,542	19,312,568

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	12,157,422	13,454,473	13,591,907	13,479,330	13,363,104	14,194,427	13,475,143	13,575,413	13,526,480	13,453,267	14,143,572
B	245,404	0	298,225	421,000	729,115	0	0	0	0	0	0
C	0	0	0	298,339	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	12,402,826	13,454,473	13,890,132	14,198,669	14,092,219	14,194,427	13,475,143	13,575,413	13,526,480	13,453,267	14,143,572
NM	4,286,544	3,549,612	3,525,186	3,643,369	4,074,771	4,173,415	5,052,162	5,077,231	5,274,830	5,604,275	5,173,996
Total	16,689,370	17,004,085	17,415,318	17,842,038	18,166,990	18,367,842	18,527,305	18,652,644	18,801,310	19,057,542	19,312,568

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	11,859,854	13,203,800	13,635,944	13,940,586	13,829,143	14,194,427	13,475,143	13,575,413	13,526,480	13,453,267	14,143,572
B	542,972	250,673	254,188	258,083	263,076	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	12,402,826	13,454,473	13,890,132	14,198,669	14,092,219	14,194,427	13,475,143	13,575,413	13,526,480	13,453,267	14,143,572
NM	4,286,544	3,549,612	3,525,186	3,643,369	4,074,771	4,173,415	5,052,162	5,077,231	5,274,830	5,604,275	5,173,996
Total	16,689,370	17,004,085	17,415,318	17,842,038	18,166,990	18,367,842	18,527,305	18,652,644	18,801,310	19,057,542	19,312,568

NM – Not Monitored

Figure FL-1

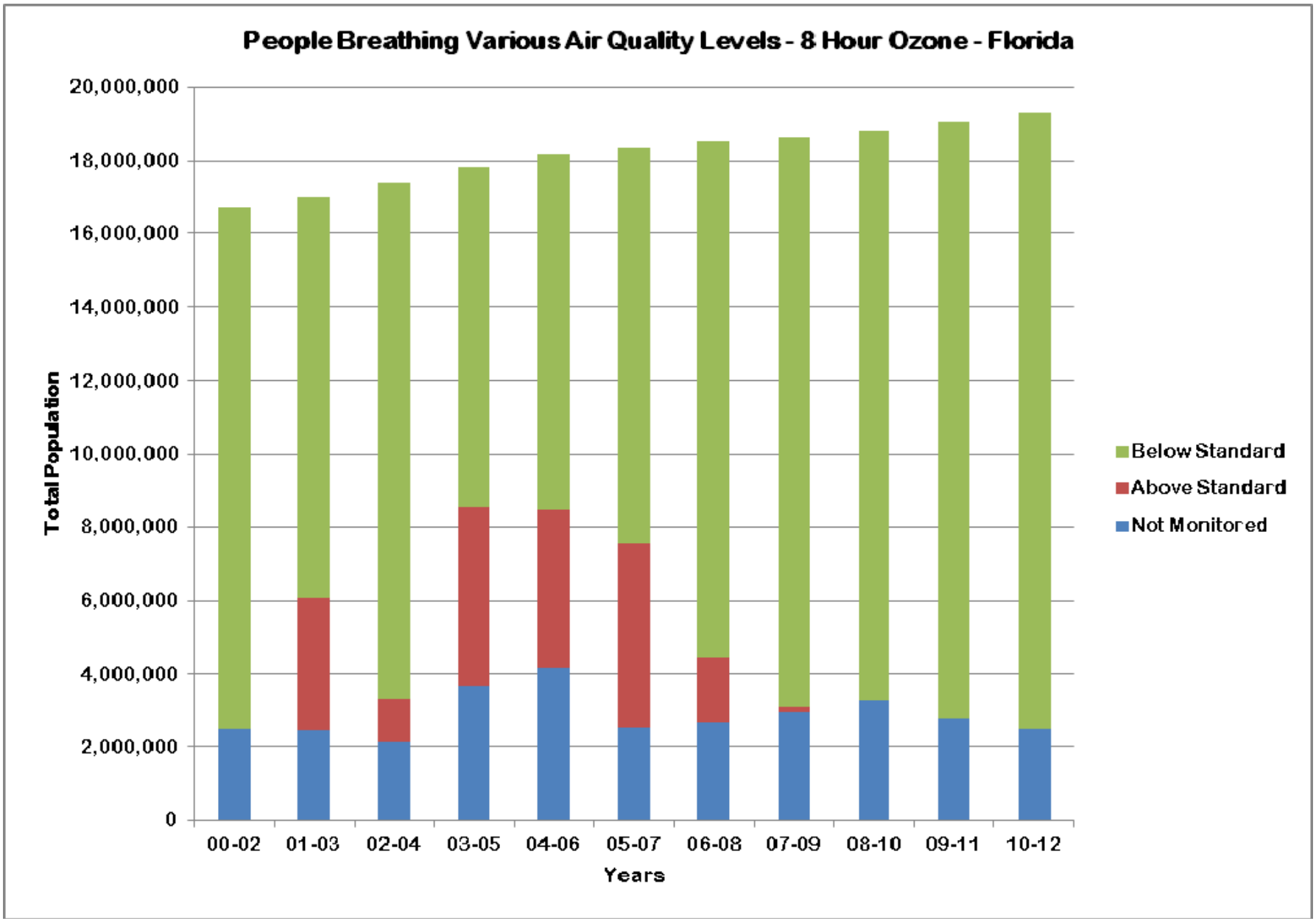

People Breathing Various Air Quality Levels - 8 Hour Ozone - Florida
Total Population
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure FL-2

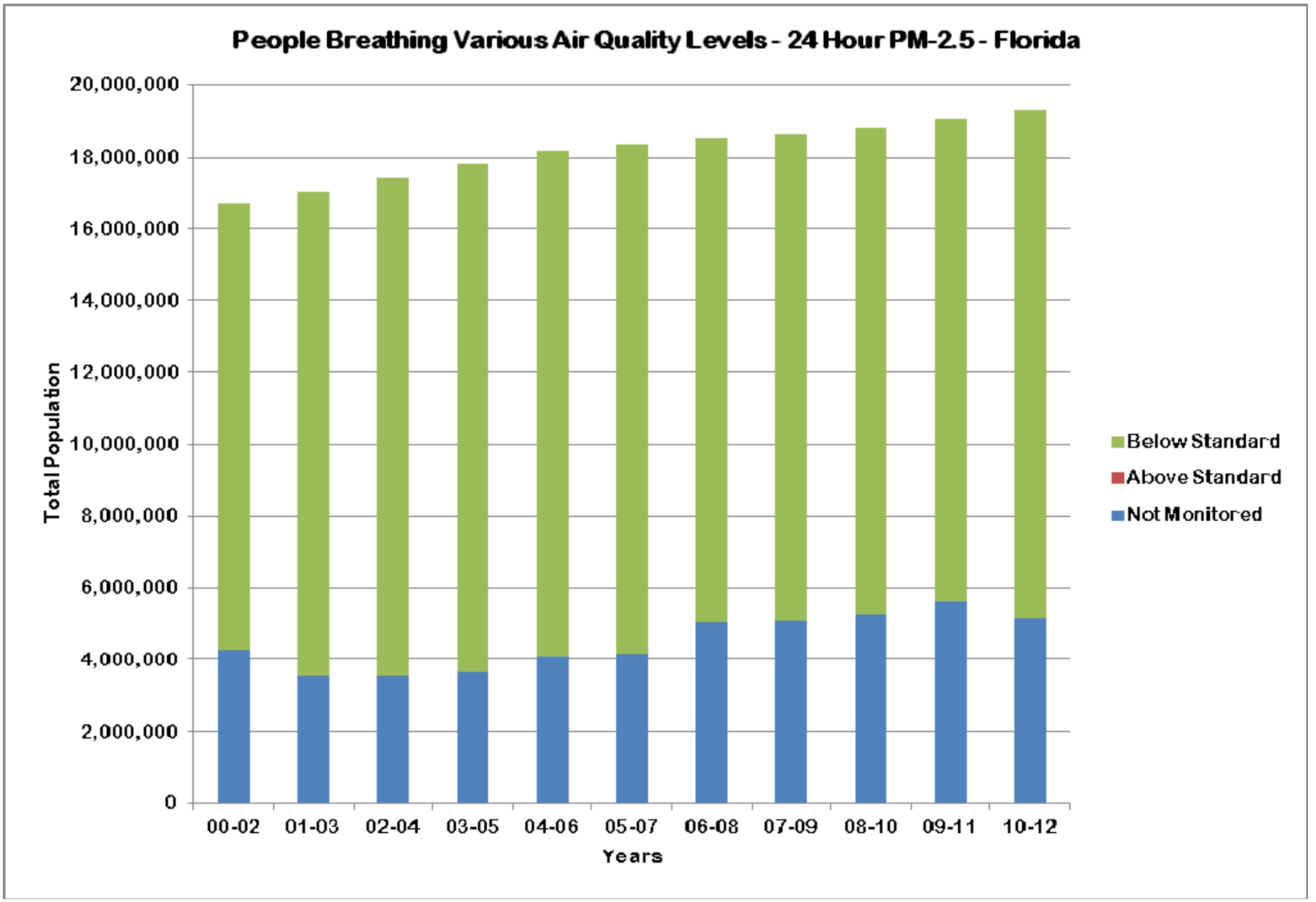
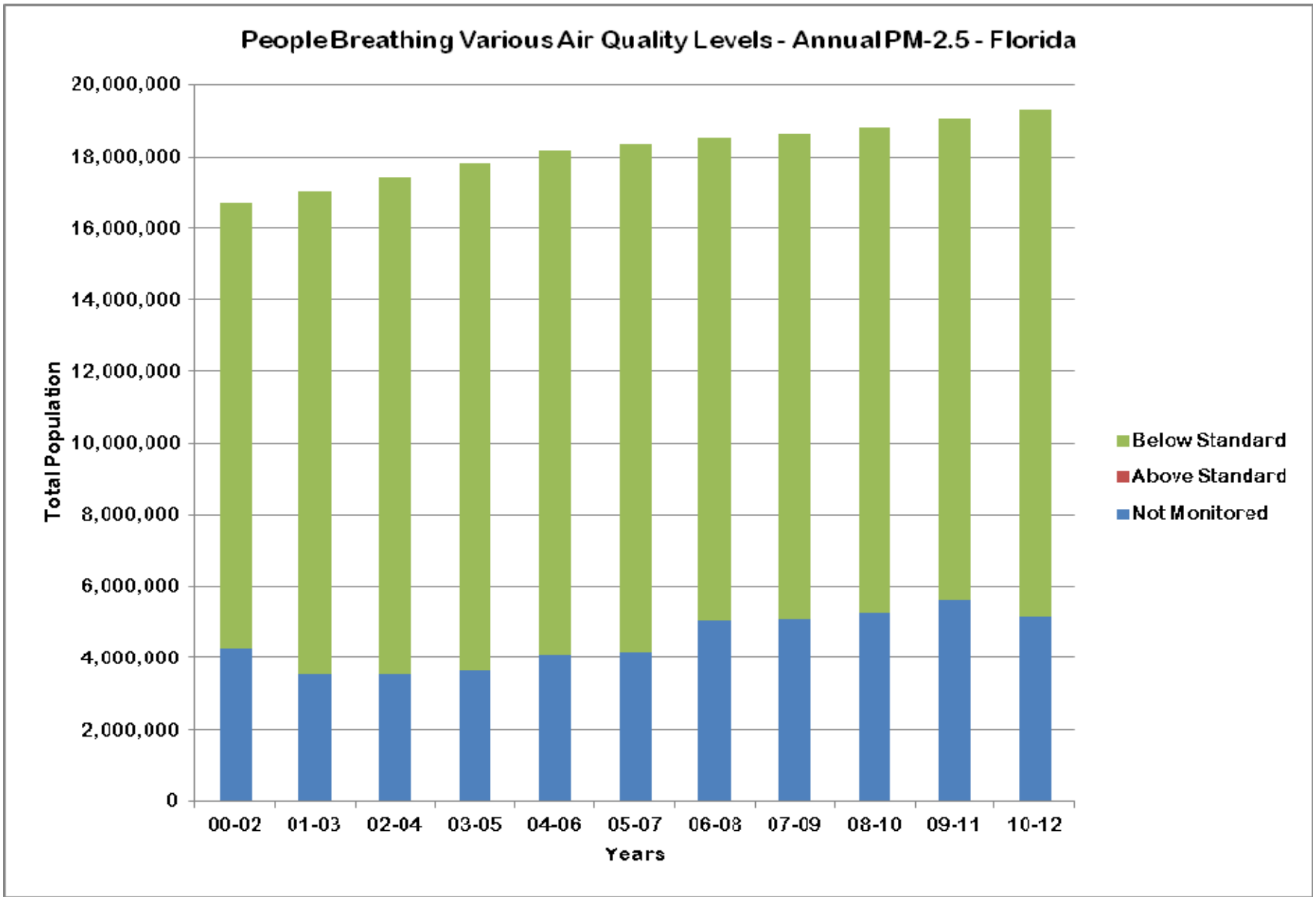

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Florida
Total Population
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure FL-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Florida
Total Population
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

GEORGIA

Ozone

Progress has been made in ozone levels in Georgia. In the 2000 – 2002 time period, approximately 0.3 million people (3.6%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to 1.7 million people (17.1%). Figure GA-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Georgia. In the 2000 – 2002 time period, approximately 0.9 million people (10.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 5.2 million people (52.8%) and the remainder of the population lived in areas where PM-2.5 is not measured. Figure GA-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Georgia. In the 2000 – 2002 time period, approximately 0.6 million people (7.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 5.2 million people (52.8%) and the remainder of the population lived in areas where PM-2.5 is not measured. Figure GA-3 shows the distribution of people by year.

GEORGIA

Table GA-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Bibb	**156,462**	**0.074**	**C**	**N**	**25**	**A**	**11.8**	**A**	**Y**
Chatham	**276,434**	**0.064**	**D**	**N**	**23**	**A**	**10.2**	**A**	**Y**
Chattooga	**25,725**	**0.068**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Clarke	**120,266**	**0.073**	**C**	**N**	**21**	**A**	**10.4**	**A**	**N**
Clayton	**265,888**	**ND**	**---**	**N**	**24**	**A**	**12.3**	**B**	**N**
Cobb	**707,442**	**0.078**	**D**	**N**	**22**	**A**	**11.2**	**A**	**Y**
Columbia	**131,687**	**0.071**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Coweta	**130,629**	**0.066**	**B**	**N**	**ND**	**---**	**ND**	**---**	**---**
Dawson	**22,422**	**0.067**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Dekalb	**707,089**	**0.080**	**D**	**N**	**22**	**A**	**11.3**	**A**	**Y**
Douglas	**133,971**	**0.075**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Floyd	**96,177**	**ND**	**---**	**---**	**24**	**A**	**11.9**	**A**	**N**
Fulton	**977,773**	**0.084**	**F**	**N**	**23**	**A**	**12.1**	**B**	**N**
Glynn	**81,022**	**0.062**	**B**	**N**	**ND**	**---**	**ND**	**---**	**---**
Gwinnett	**842,046**	**0.078**	**D**	**N**	**23**	**A**	**11.1**	**A**	**N**
Hall	**185,416**	**ND**	**---**	**---**	**22**	**A**	**10.5**	**A**	**N**
Henry	**209,053**	**0.083**	**F**	**N**	**ND**	**---**	**ND**	**---**	**---**
Houston	**146,136**	**ND**	**---**	**---**	**23**	**A**	**11.0**	**A**	**N**
Lowndes	**114,552**	**ND**	**---**	**---**	**22**	**A**	**9.6**	**A**	**N**
Murray	**39,392**	**0.072**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Muscogee	**198,413**	**0.067**	**B**	**N**	**24**	**A**	**11.5**	**A**	**Y**
Paulding	**144,800**	**0.073**	**C**	**N**	**20**	**A**	**10.2**	**A**	**N**
Richmond	**202,587**	**0.072**	**C**	**N**	**23**	**A**	**11.5**	**A**	**Y**
Rockdale	**85,820**	**0.079**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Sumter	**31,554**	**0.067**	**B**	**N**	**ND**	**---**	**ND**	**---**	**---**
Walker	**68,094**	**ND**	**---**	**---**	**21**	**A**	**10.0**	**A**	**N**
Washington	**20,879**	**ND**	**---**	**---**	**23**	**A**	**10.8**	**A**	**N**
Wilkinson	**9,577**	**ND**	**---**	**---**	**23**	**A**	**12.0**	**B**	**N**
Subtotal	**6,131,306**								
Not Monitored	**3,788,639**								
Total	**9,919,945**								

DV – Design Value ND - No Data MM – Multiple Monitors

GEORGIA

Table GA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	237,348	0	0	0	328,494	333,282	341,068	138,460	539,506	718,052
C	305,918	284,407	530,252	553,607	569,655	148,061	180,208	730,039	2,321,199	1,136,584	977,252
D	377,183	18,406	18,831	1,315,314	1,422,163	623,350	852,224	2,049,730	2,589,689	3,462,978	2,342,397
F	3,124,264	3,131,185	3,847,813	2,713,763	2,746,367	3,849,612	3,670,080	1,880,416	0	0	1,186,826
Subtotal	3,807,365	3,671,346	4,396,896	4,582,684	4,738,185	4,949,517	5,035,794	5,001,253	5,049,348	5,139,068	5,224,527
NM	4,700,891	4,951,447	4,372,356	4,343,238	4,417,628	4,400,471	4,469,049	4,619,593	4,638,305	4,673,392	4,695,418
Total	8,508,256	8,622,793	8,769,252	8,925,922	9,155,813	9,349,988	9,504,843	9,620,846	9,687,653	9,812,460	9,919,945

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	312,293	170,862	175,462	178,265	438,200	2,368,273	3,895,722	5,055,993	5,240,031
B	236,510	777,225	666,282	453,758	608,741	2,058,957	2,783,404	2,581,780	0	0	0
C	692,160	627,653	2,740,449	2,294,961	3,807,287	2,811,922	1,758,801	0	0	0	0
D	352,667	2,567,811	1,064,803	1,816,115	258,552	0	0	0	0	0	0
F	3,583,255	21,110	0	0	0	0	0	0	0	0	0
Subtotal	3,864,592	3,993,799	4,783,827	4,735,696	4,850,042	5,049,144	4,980,405	4,950,053	3,895,722	5,055,993	5,240,031
NM	4,643,664	4,628,994	3,985,425	4,190,226	4,305,771	4,300,844	4,524,438	4,670,793	5,791,931	4,756,467	4,679,914
Total	8,508,256	8,622,793	8,769,252	8,925,922	9,155,813	9,349,988	9,504,843	9,620,846	9,687,653	9,815,210	9,919,945

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	94,207	71,475	0	0	0	182,931	627,154	905,025	3,569,338	3,986,793
B	93,903	119,396	461,051	170,862	175,462	178,265	569,612	4,062,832	2,990,697	1,486,655	1,253,238
C	506,868	1,212,385	1,098,466	1,172,906	1,015,258	1,034,603	3,965,763	260,067	0	0	0
D	794,163	1,755,243	2,343,354	2,573,191	2,555,589	3,836,276	262,099	0	0	0	0
F	2,469,658	812,568	809,481	818,737	1,103,733	0	0	0	0	0	0
Subtotal	3,864,592	3,993,799	4,783,827	4,735,696	4,850,042	5,049,144	4,980,405	4,950,053	3,895,722	5,055,993	5,240,031
NM	4,643,664	4,628,994	3,985,425	4,190,226	4,305,771	4,300,844	4,524,438	4,670,793	5,791,931	4,756,487	4,679,914
Total	8,508,256	8,622,793	8,769,252	8,925,922	9,155,813	9,349,988	9,504,843	9,620,846	9,687,653	9,815,210	9,919,945

NM – Not Monitored

Figure GA-1

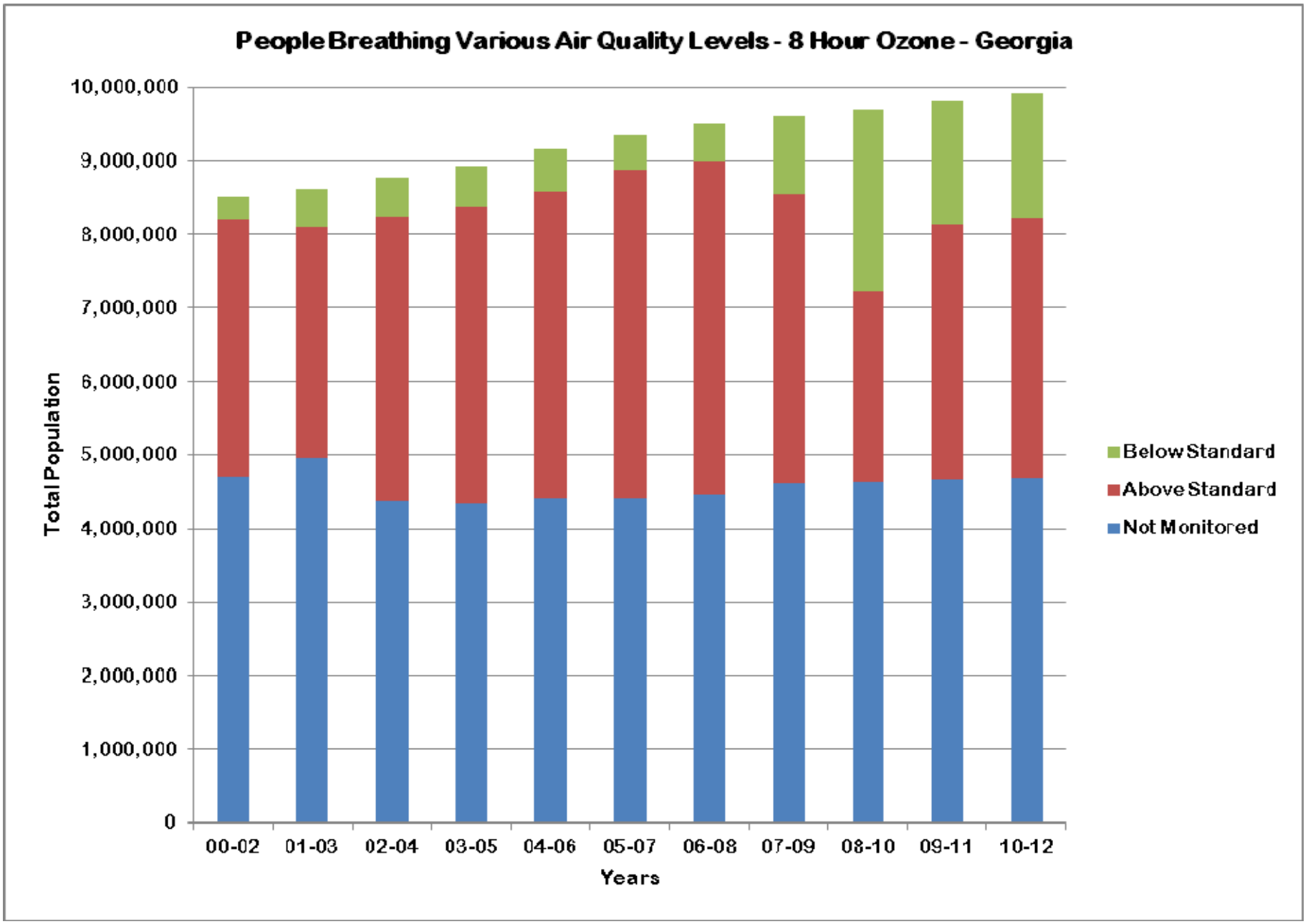

People Breathing Various Air Quality Levels - 8 Hour Ozone - Georgia
Total Population
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure GA-2

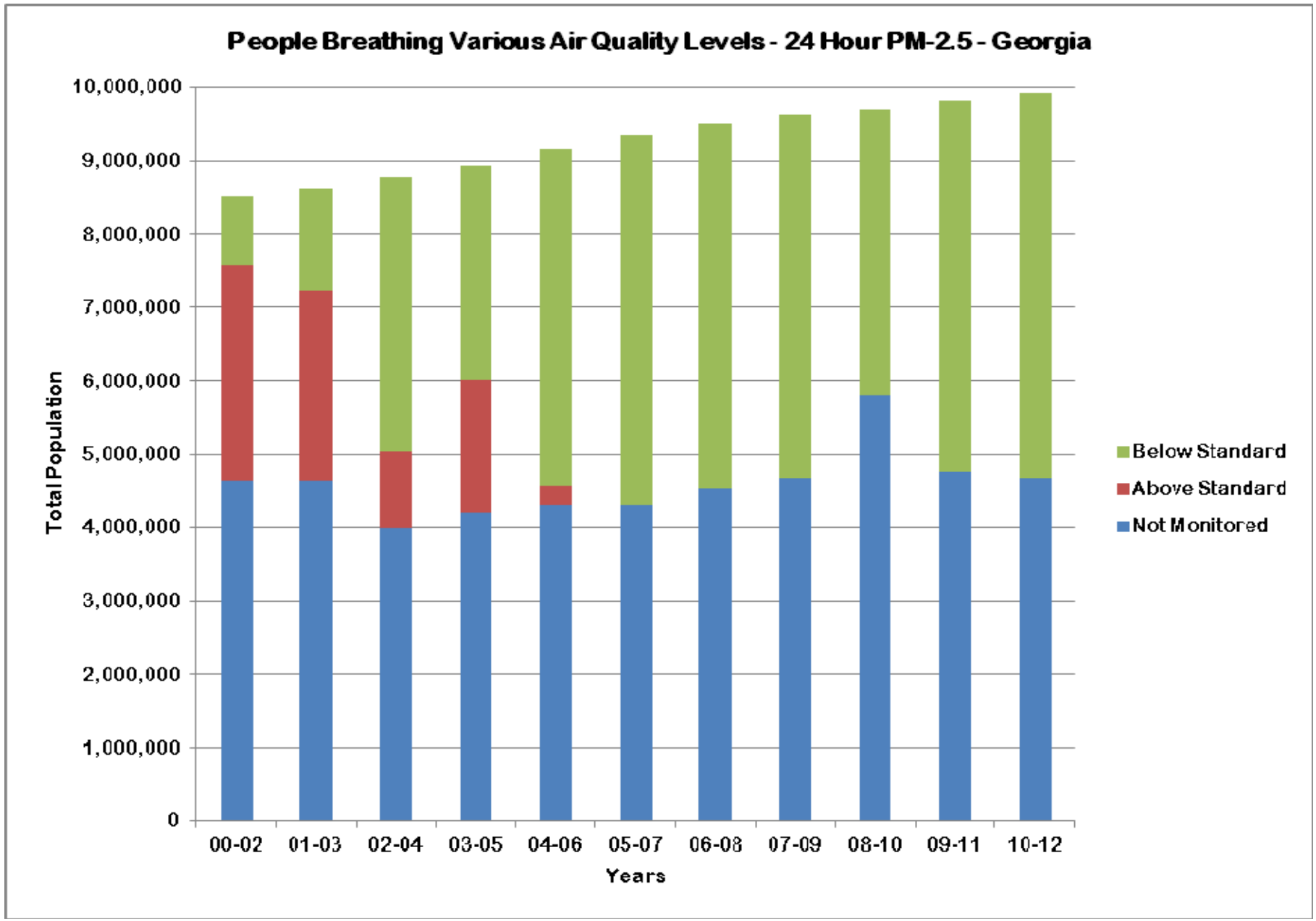
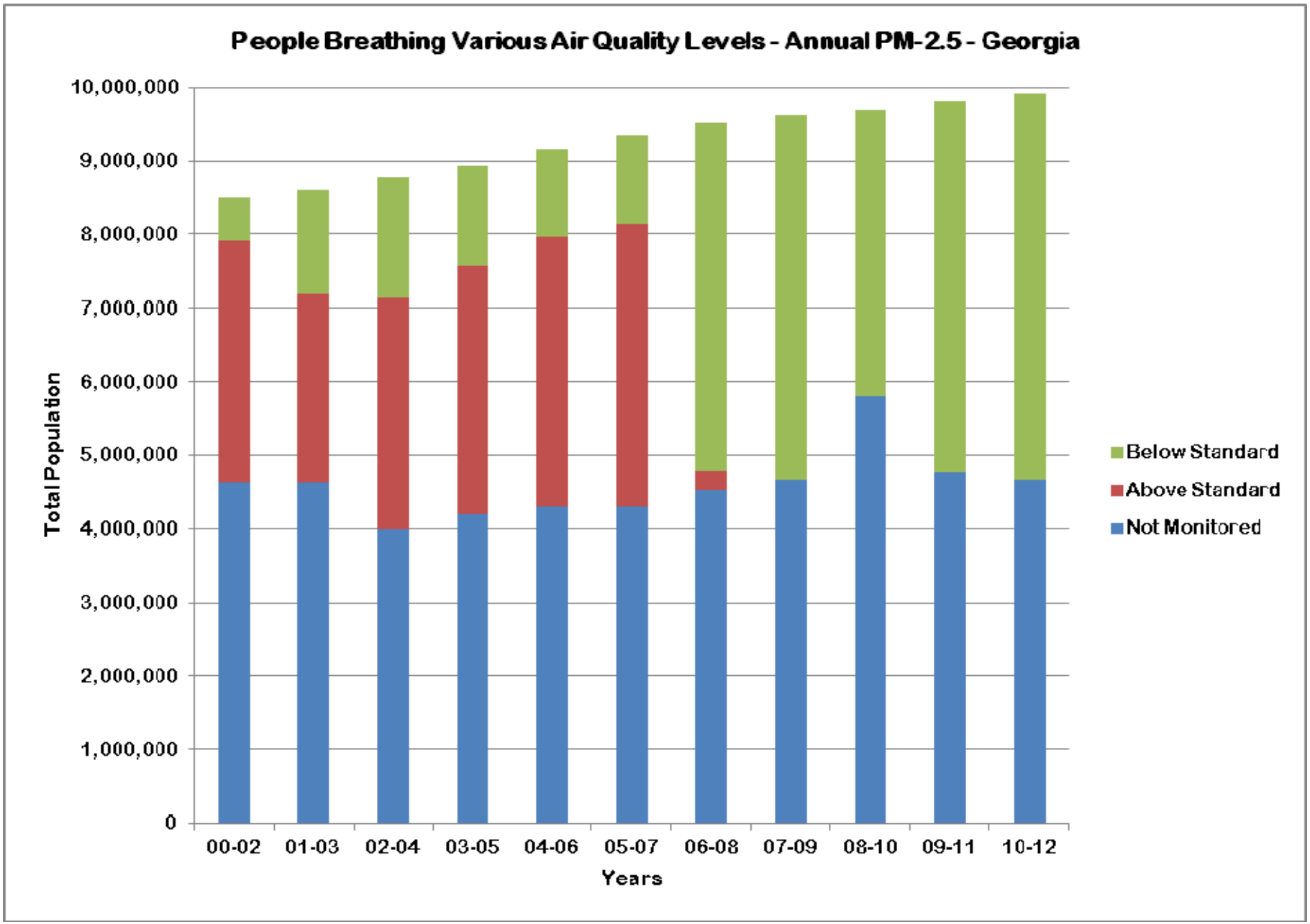

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Georgia
Total Population
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure GA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Georgia
Total Population
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

HAWAII

Ozone

Ozone levels in Hawaii have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.0 million people (84.3%) lived in counties that met the ozone standard. By 2010 – 2012 this had decreased to a little under 1.0 million people (70.1%). All people in both years either lived in counties with air quality rated as A or lived in counties where ozone was not measured. Figure HI-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Hawaii have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.0 million people (82.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.3 million people (95.1%). All people in both years either lived in counties with air quality rated as A or lived in counties where PM-2.5 was not measured. Figure HI-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Hawaii have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.0 million people (82.7%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.3 million people (95.1%). All people in both years either lived in counties with air quality rated as A or lived in counties where PM-2.5 was not measured. Figure HI-3 shows the distribution of people by year.

Table HI-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Hawaii	**189,191**	**ND**	**---**	**---**	**12**	**A**	**7.1**	**A**	**Y**
Honolulu	**976,372**	**0.045**	**A**	**N**	**13**	**A**	**5.9**	**A**	**Y**
Maui	**158,226**	**ND**	**---**	**---**	**14**	**A**	**5.7**	**A**	**N**
Subtotal	**1,323,789**								
Not Monitored	**68,524**								
Total	**1,392,313**								

DV – Design Value ND - No Data MM – Multiple Monitors

HAWAII

Table HI-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,045,049	1,052,753	907,997	918,181	926,954	925,335	933,680	943,177	953,207	966,363	976,372
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,045,049	1,052,753	907,997	918,181	926,954	925,335	933,680	943,177	953,207	966,363	976,372
NM	194,564	198,401	365,572	374,548	382,777	390,340	398,533	403,540	407,094	411,766	415,941
Total	1,239,613	1,251,154	1,273,569	1,292,729	1,309,731	1,315,675	1,332,213	1,346,717	1,360,301	1,378,129	1,392,313

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,024,923	1,031,780	1,048,505	1,061,515	1,072,621	925,335	933,680	943,177	953,207	1,310,258	1,323,789
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,024,923	1,031,780	1,048,505	1,061,515	1,072,621	925,335	933,680	943,177	953,207	1,310,258	1,323,789
NM	214,690	219,374	225,064	231,214	237,110	390,340	398,533	403,540	407,094	67,971	68,524
Total	1,239,613	1,251,154	1,273,569	1,292,729	1,309,731	1,315,675	1,332,213	1,346,717	1,360,301	1,378,129	1,392,313

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,024,923	1,031,780	1,048,505	1,061,515	1,072,621	925,335	933,680	943,177	953,207	1,310,258	1,323,789
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,024,923	1,031,780	1,048,505	1,061,515	1,072,621	925,335	933,680	943,177	953,207	1,310,258	1,323,789
NM	214,690	219,374	225,064	231,214	237,110	390,340	398,533	403,540	407,094	67,871	68,524
Total	1,239,613	1,251,154	1,273,569	1,292,729	1,309,731	1,315,675	1,332,213	1,346,717	1,360,301	1,378,129	1,392,313

NM – Not Monitored

Figure HI-1

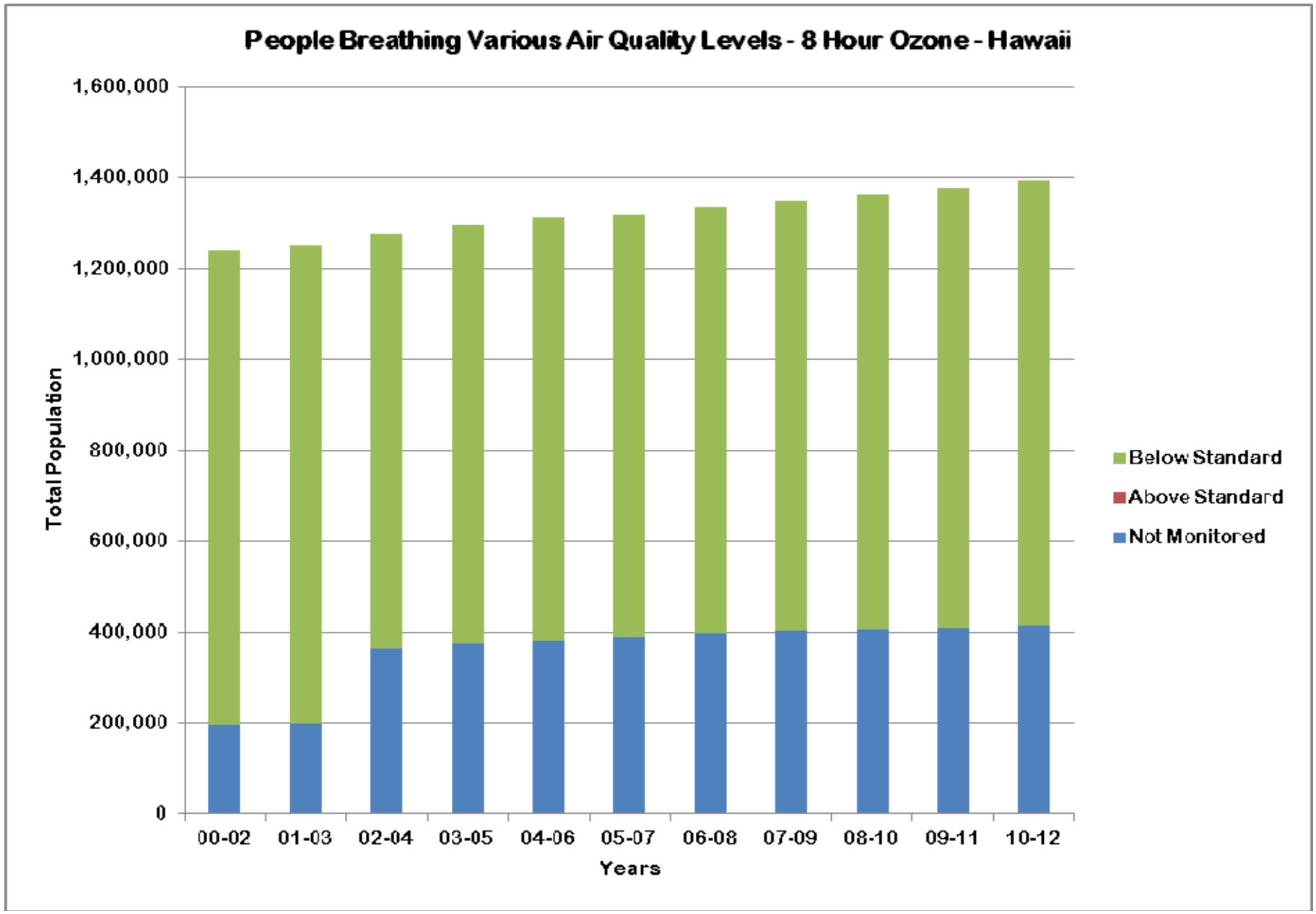

People Breathing Various Air Quality Levels - 8 Hour Ozone - Hawaii
Total Population
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure HI-2

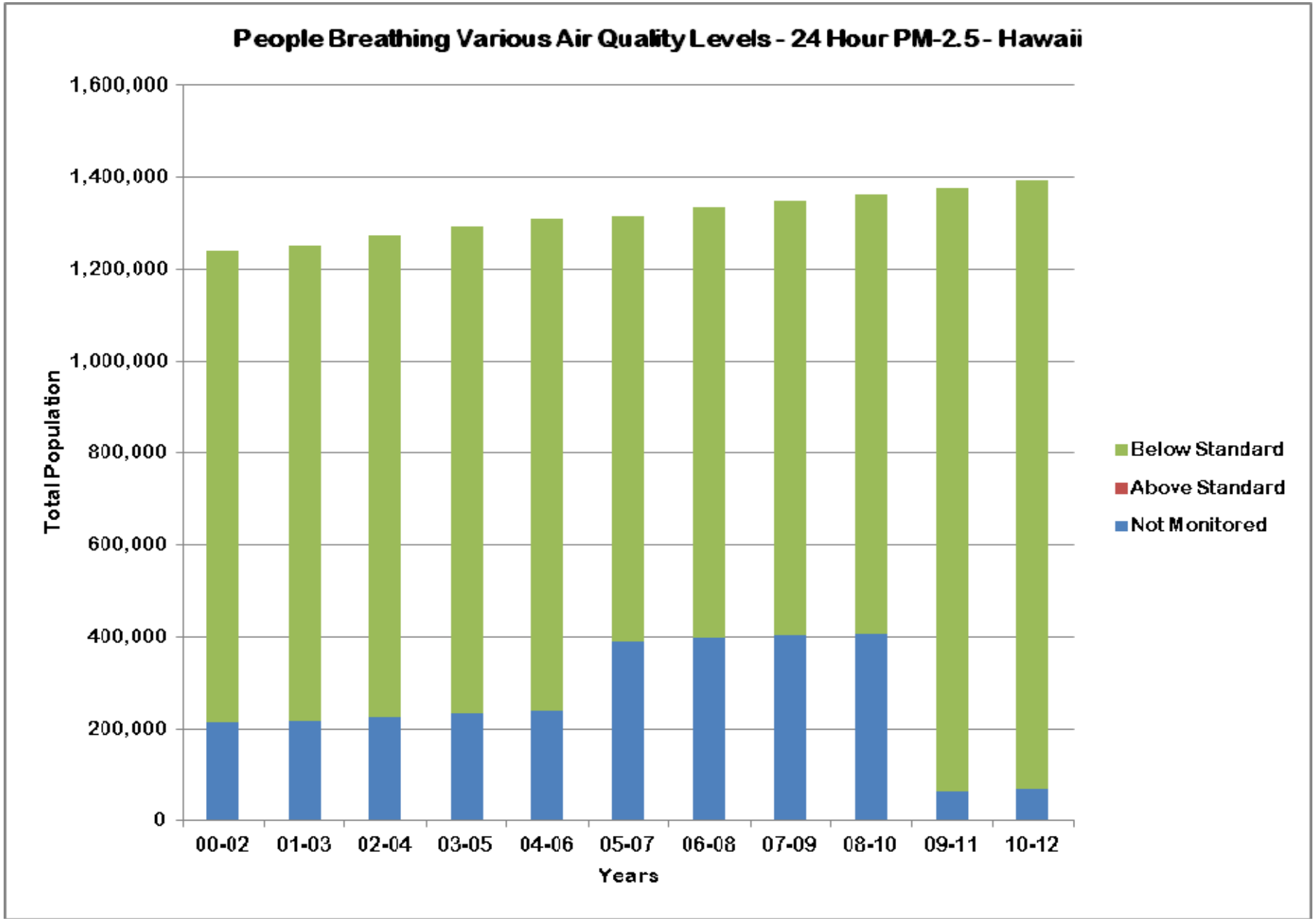
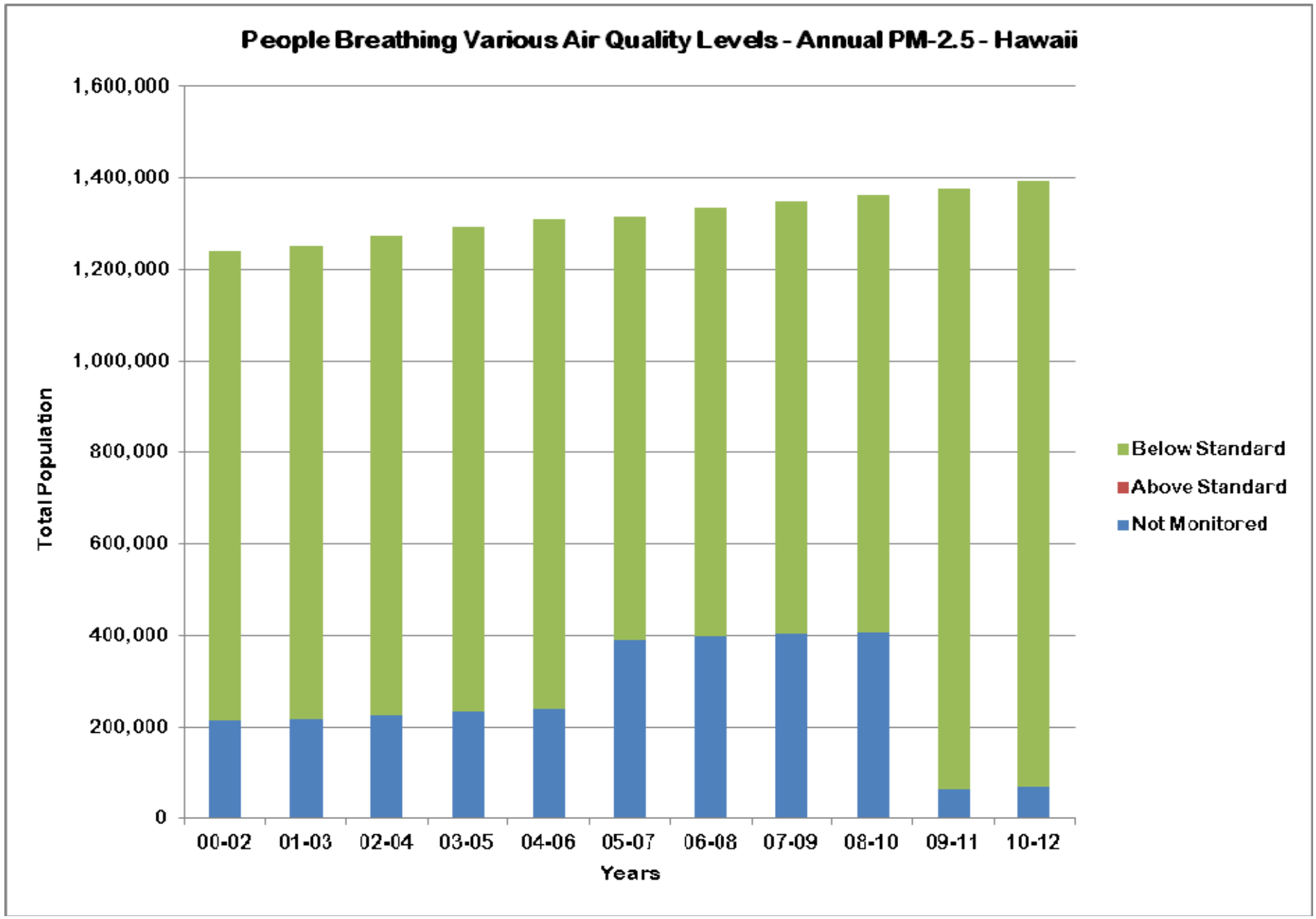

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Hawaii
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure HI-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Hawaii
Total Population
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

IDAHO

Ozone

Progress has been made in ozone levels in Idaho. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to nearly 0.4 million people (25.8%) and the rest of the population lived in areas where ozone is not monitored. Figure ID-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in Idaho. In the 2000 – 2002 time period, approximately 0.5 million people (38.0%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.5 million people (43.0%). Figure ID-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Idaho have historically been below the standard. In the 2000 – 2002 time period, approximately 0.7 million people (50.3%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was still approximately 0.7 million people (44.3%). Figure ID-3 shows the distribution of people by year.

Table ID-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Ada	409,867	0.067	B	N	20	A	6.2	A	N
Bannock	83,800	ND	---	---	8	A	5.1	A	N
Butte	2,740	0.064	B	N	ND	---	ND	---	---
Lemhi	8,758	ND	---	---	37	D	11.8	A	N
Canyon	193,888	ND	---	---	19	A	7.8	A	N
Shoshone	12,702	ND	---	---	42	F	13.2	B	N
Subtotal	711,755								
Not Monitored	883,973								
Total	1,595,728								

DV – Design Value ND - No Data MM – Multiple Monitors

IDAHO

Table ID-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	138,494	141,132	0
B	0	0	29,167	25,919	0	132,811	135,627	140,242	395,256	403,664	411,801
C	0	0	157,130	512,702	0	0	0	0	0	0	0
D	0	0	334,926	0	363,498	375,368	382,618	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	521,223	538,621	363,498	508,179	518,245	140,242	533,750	544,796	411,801
NM	1,340,372	1,363,380	870,579	889,620	1,105,171	996,926	1,016,075	1,414,197	1,033,832	1,040,189	1,183,927
Total	1,340,372	1,363,380	1,391,802	1,428,241	1,468,669	1,505,105	1,534,320	1,554,439	1,567,582	1,584,985	1,595,728

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	187,644	0	0	436,477	0	0	0	9,286	0	676,227	686,749
B	321,616	7,293	0	0	451,249	391,138	9,385	0	0	0	0
C	0	151,395	164,562	163,947	0	9,296	13,031	12,862	7,936	0	0
D	13,044	0	0	9,053	13,014	12,949	0	0	12,765	20,639	7,758
F	152,531	12,897	12,781	12,912	172,188	0	0	0	0	0	12,702
Subtotal	674,835	171,585	177,343	622,389	636,451	413,383	22,416	22,148	20,701	696,622	707,209
NM	665,537	1,191,795	1,214,459	805,852	832,218	1,091,722	1,511,904	1,532,291	1,546,881	888,119	888,519
Total	1,340,372	1,363,380	1,391,802	1,428,241	1,468,669	1,505,105	1,534,320	1,554,439	1,567,582	1,584,985	1,595,728

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	654,420	158,688	164,562	609,477	623,437	400,434	22,416	22,148	20,701	696,866	694,507
B	13,044	12,897	12,781	12,912	13,014	12,949	0	0	0	0	12,702
C	7,371	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	674,835	171,585	177,343	622,389	636,451	413,383	22,416	22,148	20,701	696,622	707,209
NM	665,537	1,191,795	1,214,459	805,852	832,218	1,091,722	1,511,904	1,532,291	1,546,881	888,119	888,519
Total	1,340,372	1,363,380	1,391,802	1,428,241	1,468,669	1,505,105	1,534,320	1,554,439	1,567,582	1,584,985	1,595,728

NM – Not Monitored

Figure ID-1

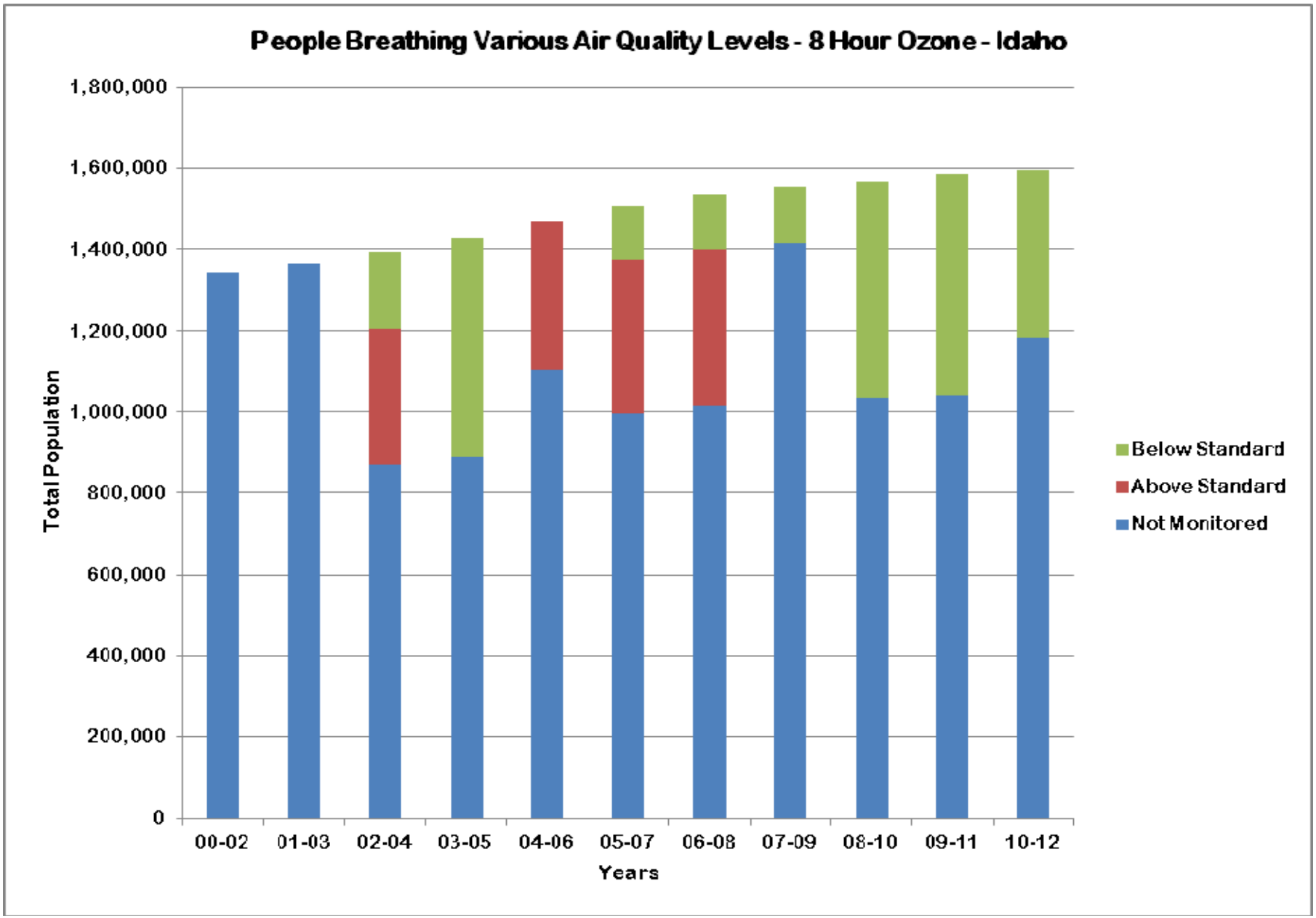
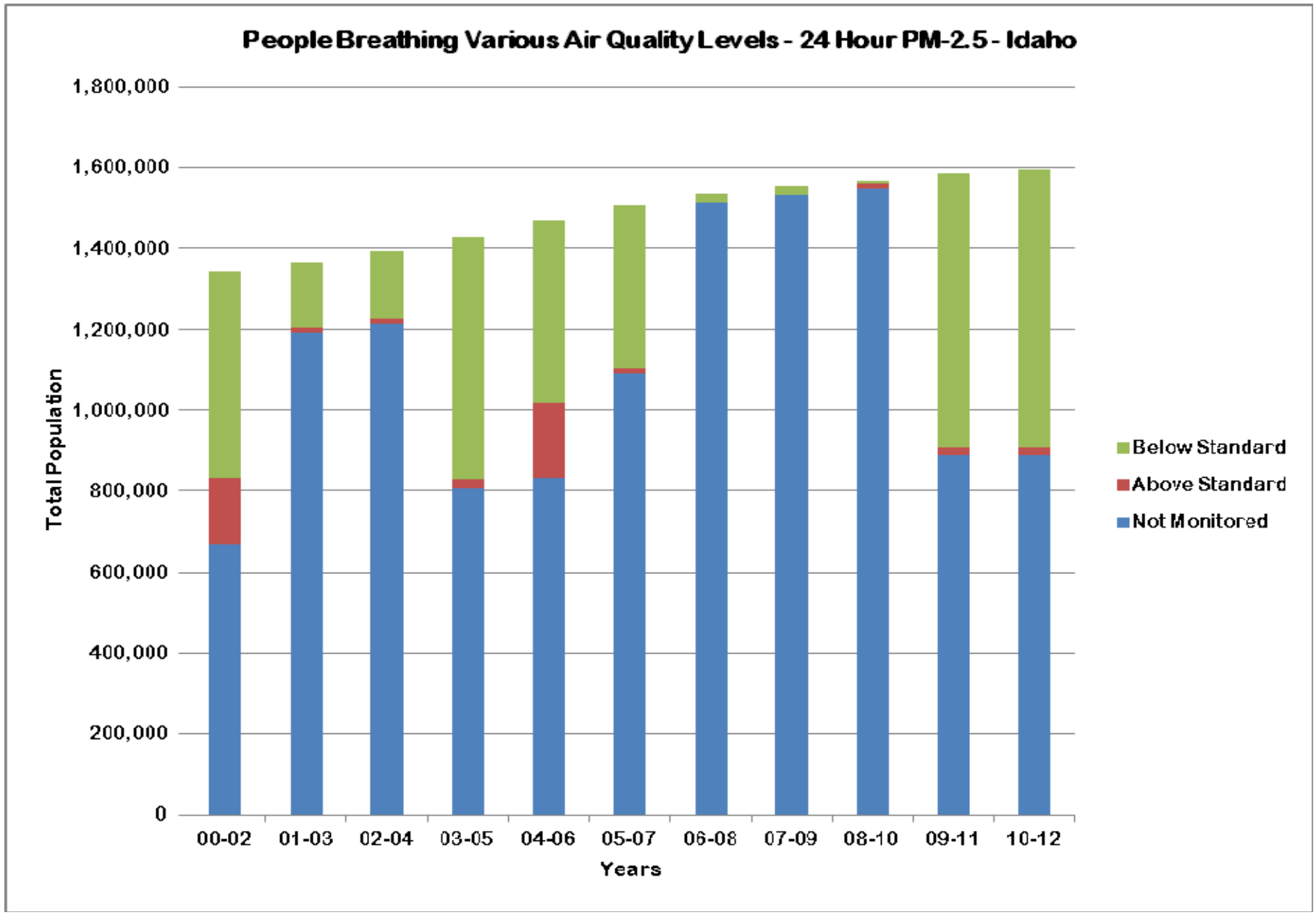

People Breathing Various Air Quality Levels - 8 Hour Ozone - Idaho
Total Population
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure ID-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Idaho
Total Population
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
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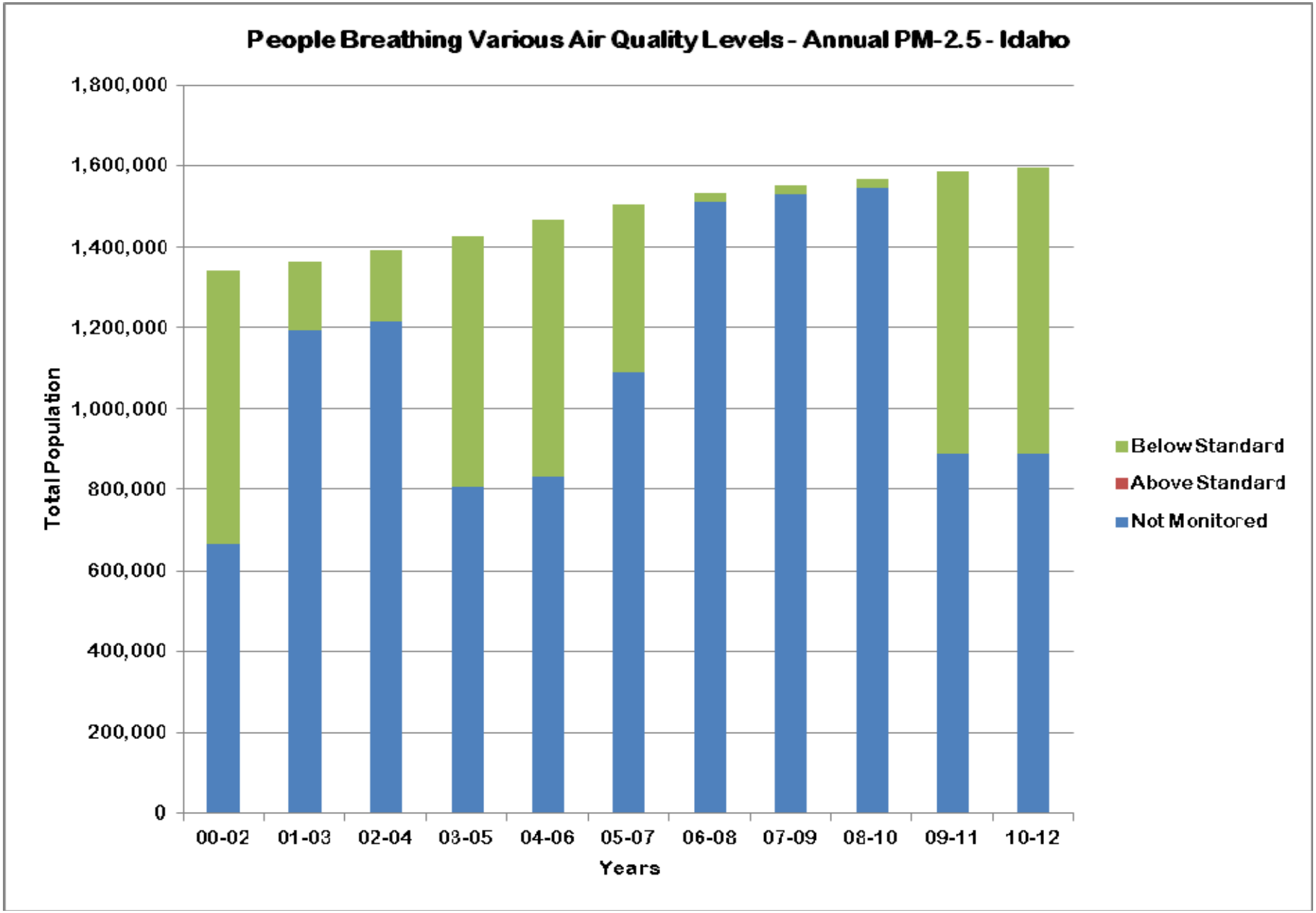
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure ID-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Idaho
Total Population
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

ILLINOIS

Ozone

Significant progress has been made in ozone levels in Illinois. In the 2000 – 2002 time period, approximately 1.3 million people (10.7%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to 9.2 million people (71.7%). Figure IL-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Illinois. In the 2000 – 2002 time period, approximately 4.0 million people (32.2%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 9.7 million people (75.0%) and the rest of the population lived in areas where PM-2.5 is not measured. Figure IL-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Illinois. In the 2000 – 2002 time period, approximately 3.4 million people (27.2%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 9.7 million people (75.0%) and the rest of the population lived in areas where PM-2.5 is not measured. Figure IL-3 shows the distribution of people by year.

ILLINOIS

Table IL-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Adams	67,197	0.069	C	N	23	A	10.2	A	N
Champaign	203,274	ND	---	---	22	A	9.9	A	N
Cook	5,231,351	0.075	C	Y	28	B	11.7	A	Y
Dupage	927,987	0.069	C	N	26	A	10.8	A	N
Effingham	34,353	0.070	C	N	ND	---	ND	---	---
Hamilton	**8,370**	**0.078**	**D**	N	21	A	10.0	A	N
Jersey	**22,742**	**0.079**	**D**	N	20	A	10.0	A	N
Kane	522,487	0.071	C	N	25	A	10.5	A	N
Lake	**702,120**	**0.082**	**D**	N	ND	---	ND	---	---
Macon	110,122	0.073	C	N	24	A	11.3	A	N
Macoupin	47,231	0.073	C	N	ND	---	ND	---	---
Madison	**267,883**	**0.080**	**D**	Y	26	A	12.7	B	Y
McHenry	308,145	0.071	C	N	26	A	10.1	A	Y
McLean	172,281	0.071	C	N	24	A	10.2	A	N
Peoria	137,254	0.068	C	Y	25	A	11.0	A	N
Randolph	32,956	0.071	C	N	18	A	9.3	A	N
Rock Island	147,457	0.059	A	N	22	A	10.2	A	N
Saint Clair	268,858	0.071	C	N	25	A	12.2	B	N
Sangamon	199,271	0.075	C	N	24	A	10.6	A	N
Will	682,518	0.066	B	N	25	A	10.5	A	N
Winnebago	292,069	0.068	C	N	23	A	9.8	A	N
Subtotal	**10,385,926**								
Not Monitored	2,489,329								
Total	**12,875,255**								

DV – Design Value ND - No Data MM – Multiple Monitors

ILLINOIS

Table IL-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	147,546	147,397	147,457
B	0	0	147,291	163,795	1,297,828	0	2,740,961	2,401,802	8,602,102	2,510,065	682,518
C	1,343,776	1,095,870	2,024,320	8,061,884	7,702,241	8,531,428	7,272,528	7,961,589	1,443,814	6,866,628	8,401,562
D	8,114,177	7,616,050	7,767,018	1,737,838	1,242,236	1,211,585	268,232	0	0	701,575	1,001,115
F	552,982	1,493,643	286,096	264,759	0	532,146	0	0	0	0	0
Subtotal	10,010,935	10,205,563	10,224,725	10,228,276	10,242,305	10,275,159	10,281,721	10,363,391	10,193,462	10,225,665	10,232,652
NM	2,514,621	2,353,443	2,365,048	2,381,627	2,401,650	2,420,707	2,465,317	2,433,387	2,637,170	2,634,087	2,642,603
Total	12,525,556	12,556,006	12,589,773	12,609,903	12,643,955	12,695,866	12,747,038	12,796,778	12,830,632	12,859,752	12,875,255

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	184,198	0	825,026	0	146,827	0	1,190,988	1,967,610	3,763,257	4,414,759	4,420,873
B	405,456	1,372,578	1,738,648	977,639	1,188,626	600,427	2,733,374	3,229,716	6,626,868	5,217,080	5,231,351
C	3,448,403	1,901,360	2,126,717	2,848,968	3,746,865	4,192,482	6,339,861	5,181,728	0	0	0
D	6,129,019	6,912,169	5,515,743	1,176,137	5,165,495	5,421,617	0	0	0	0	0
F	0	0	0	5,207,615	0	0	0	0	0	0	0
Subtotal	10,167,076	10,186,107	10,206,134	10,210,359	10,247,813	10,214,526	10,264,223	10,379,054	10,390,125	9,631,839	9,652,224
NM	2,358,480	2,369,899	2,383,639	2,399,544	2,396,142	2,481,340	2,482,815	2,417,724	2,440,507	3,227,913	3,223,031
Total	12,525,556	12,556,006	12,589,773	12,609,903	12,643,955	12,695,866	12,747,038	12,796,778	12,830,632	12,859,752	12,875,255

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	1,301,640	684,419	837,022	0	2,815,978	4,540,679	10,120,843	9,093,121	9,115,483
B	1,292,550	1,576,916	2,031,984	2,222,681	2,321,823	2,686,627	1,751,664	5,838,375	269,282	538,718	536,741
C	2,112,789	2,793,438	6,608,788	1,830,885	6,822,804	7,260,517	5,696,581	0	0	0	0
D	6,500,607	5,815,753	263,722	5,472,374	266,164	267,382	0	0	0	0	0
F	261,130	0	0	0	0	0	0	0	0	0	0
Subtotal	10,167,076	10,186,107	10,206,134	10,210,359	10,247,813	10,214,526	10,264,223	10,379,054	10,390,125	9,631,839	9,652,224
NM	2,358,480	2,369,899	2,383,639	2,399,544	2,396,142	2,481,340	2,482,815	2,417,724	2,440,507	3,227,913	3,223,031
Total	12,525,556	12,556,006	12,589,773	12,609,903	12,643,955	12,695,866	12,747,038	12,796,778	12,830,632	12,859,752	12,875,255

NM – Not Monitored

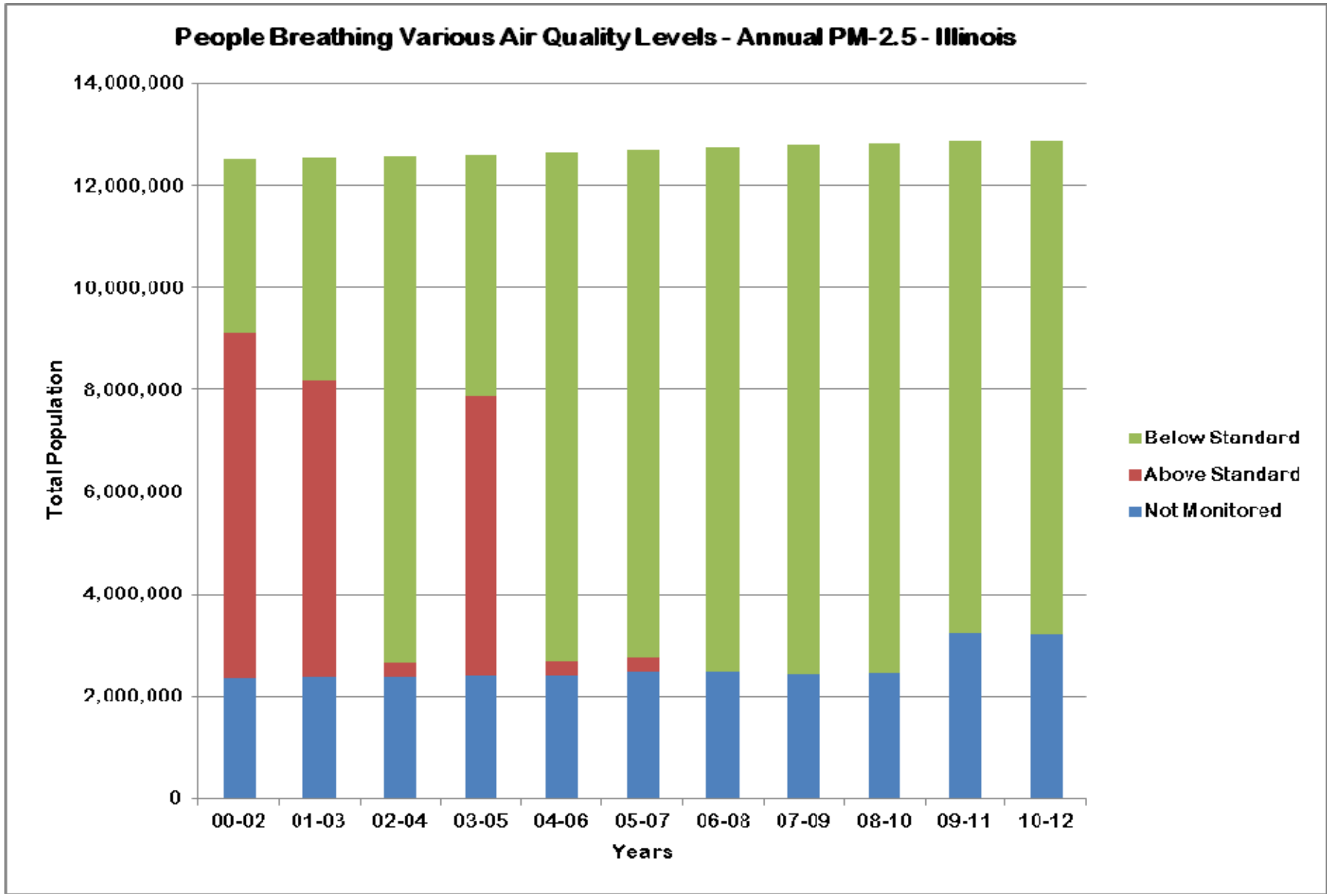
Figure IL-1


People Breathing Various Air Quality Levels - 8 Hour Ozone - Illinois
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure IL-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Illinois
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure IL-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Illinois
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Ozone

Significant progress has been made in ozone levels in Indiana. In the 2000 – 2002 time period, approximately 0.2 million people (3.5%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 4.0 million people (60.5%). Figure IN-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Indiana. In the 2000 – 2002 time period, approximately 1.3 million people (20.5%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 3.7 million people (56.2%) and the rest of the population lived in areas where PM-2.5 was not measured. Figure IN-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Indiana. In the 2000 – 2002 time period, approximately 1.0 million people (16.0%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 3.7 million people (56.2%) and the rest of the population lived in areas where PM-2.5 was not measured. Figure IN-3 shows the distribution of people by year.

INDIANA

Table IN-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Allen	360,412	0.071	C	Y	27	A	10.7	A	N
Boone	58,944	0.074	C	N	ND	---	ND	---	---
Carroll	20,095	0.072	C	N	ND	---	ND	---	---
Clark	**111,951**	**0.081**	**D**	N	26	A	12.1	B	N
Delaware	117,364	0.071	C	N	27	A	11.3	A	N
Dubois	42,071	ND	---	---	26	A	12.3	B	N
Elkhart	199,619	0.071	C	N	31	B	11.2	A	N
Floyd	**75,283**	**0.080**	**D**	N	25	A	12.1	B	Y
Greene	**32,940**	**0.079**	**D**	N	ND	---	ND	---	---
Hamilton	289,495	0.073	C	N	ND	---	ND	---	---
Hancock	70,933	0.067	B	N	ND	---	ND	---	---
Hendricks	150,434	0.069	C	N	ND	---	ND	---	---
Henry	49,345	ND	---	---	26	A	10.5	A	N
Huntington	36,987	0.066	B	N	ND	---	ND	---	---
Jackson	43,083	0.067	B	N	ND	---	ND	---	---
Johnson	143,191	0.071	C	N	ND	---	ND	---	---
Lake	493,618	0.071	C	Y	28	B	11.8	A	Y
LaPorte	**111,246**	**0.078**	**D**	Y	25	A	10.1	A	N
Madison	130,348	0.070	C	N	25	A	10.7	A	N
Marion	918,977	0.073	C	Y	29	B	12.4	B	Y
Monroe	141,019	ND	---	---	22	A	10.1	A	N
Morgan	69,356	0.069	C	N	ND	---	ND	---	---
Perry	19,462	0.075	C	N	ND	---	ND	---	---
Porter	165,682	0.068	C	Y	29	B	12.4	B	Y
Posey	25,599	0.072	C	N	ND	---	ND	---	---
Shelby	44,471	0.075	C	N	ND	---	ND	---	---
Spencer	266,344	ND	---	---	33	C	12.1	B	Y
St. Joseph	266,344	0.068	C	N	33	C	12.1	B	Y
Tippecanoe	177,513	ND	---	---	25	A	10.4	A	N
Vanderburgh	180,858	0.074	C	N	26	B	12.2	B	N
Vigo	108,428	0.068	C	Y	30	B	11.9	A	N
Warrick	60,463	0.073	C	Y	ND	---	ND	---	---
Subtotal	**4,981,875**								
Not Monitored	1,555,459								
Total	**6,537,334**								

DV – Design Value ND - No Data MM – Multiple Monitors

INDIANA

Table IN-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	106,509	0	0	522,926	2,177,027	1,446,330	151,003
C	217,227	32,934	0	383,842	2,167,573	153,232	3,199,245	3,107,909	1,802,499	2,555,242	3,823,160
D	331,605	467,485	1,173,456	3,434,804	1,852,257	3,160,078	739,837	602,007	0	0	331,400
F	3,178,631	3,400,398	2,887,396	235,039	0	598,772	0	0	0	0	0
Subtotal	3,727,463	3,900,817	4,060,852	4,053,685	4,126,339	3,912,082	3,939,082	4,232,842	3,979,526	4,001,572	4,305,583
NM	2,428,504	2,295,821	2,172,155	2,224,931	2,206,330	2,467,517	2,485,724	2,226,483	2,504,276	2,515,350	2,231,751
Total	6,155,967	6,196,638	6,233,007	6,278,616	6,332,669	6,379,599	6,424,806	6,459,325	6,483,802	6,516,922	6,537,334

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	187,405	927,711	1,099,388	1,489,592	976,977
B	0	68,674	645,473	0	1,150,667	494,120	2,408,892	2,335,260	2,186,001	1,587,159	2,427,494
C	1,263,323	1,069,562	1,730,401	2,498,814	1,482,155	1,989,034	996,910	306,581	197,559	198,941	266,344
D	1,535,273	1,717,896	703,468	1,025,659	916,914	1,088,142	0	0	0	266,700	0
F	271,002	273,588	0	0	0	0	0	0	0	0	0
Subtotal	3,069,598	3,129,720	3,079,342	3,524,473	3,549,736	3,571,296	3,593,207	3,569,552	3,482,948	3,542,392	3,670,815
NM	3,086,369	3,066,918	3,153,665	2,754,143	2,782,933	2,808,303	2,831,599	2,889,773	3,000,854	2,974,530	2,866,519
Total	6,155,967	6,196,638	6,233,007	6,278,616	6,332,669	6,379,599	6,424,806	6,459,325	6,483,802	6,516,922	6,537,334

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	160,687	1,316,990	1,392,678	1,597,332	1,419,972
B	0	0	575,303	265,565	1,197,940	585,756	2,141,827	1,245,101	1,186,877	1,945,060	2,250,843
C	987,404	1,314,811	1,592,711	1,753,022	1,369,133	1,996,277	1,183,287	1,007,461	903,393	0	0
D	1,118,049	1,814,909	911,328	1,505,886	982,663	989,263	107,406	0	0	0	0
F	964,145	0	0	0	0	0	0	0	0	0	0
Subtotal	3,069,598	3,129,720	3,079,342	3,524,473	3,549,736	3,571,296	3,593,207	3,569,552	3,482,948	3,542,392	3,670,815
NM	3,086,389	3,066,918	3,153,665	2,754,143	2,782,933	2,808,303	2,831,599	2,889,773	3,000,854	2,974,530	2,866,519
Total	6,155,967	6,196,638	6,233,007	6,278,616	6,332,669	6,379,599	6,424,806	6,459,325	6,486,802	6,516,922	6,537,34

NM – Not Monitored

Figure IN-1

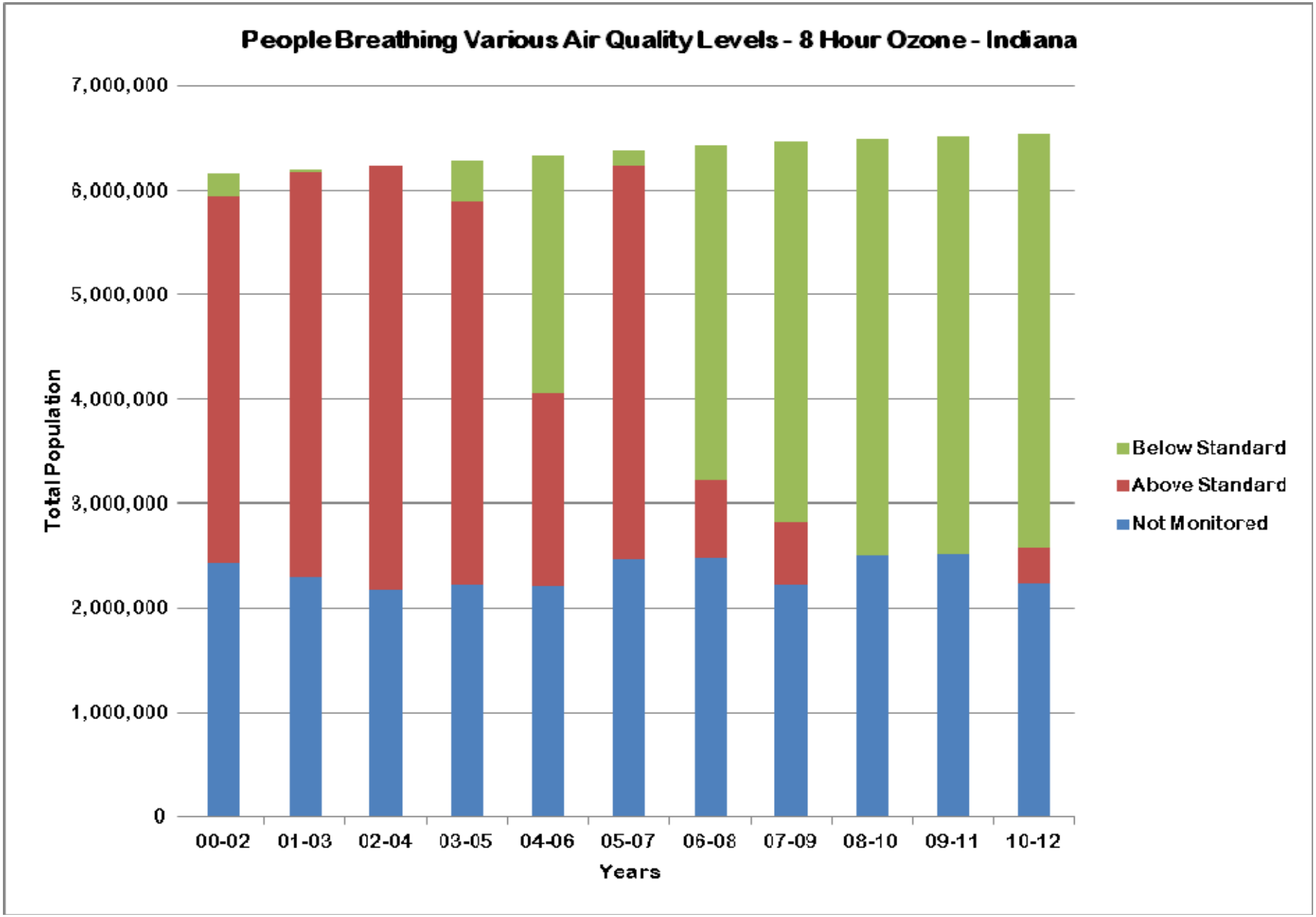

People Breathing Various Air Quality Levels - 8 Hour Ozone - Indiana
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure IN-2

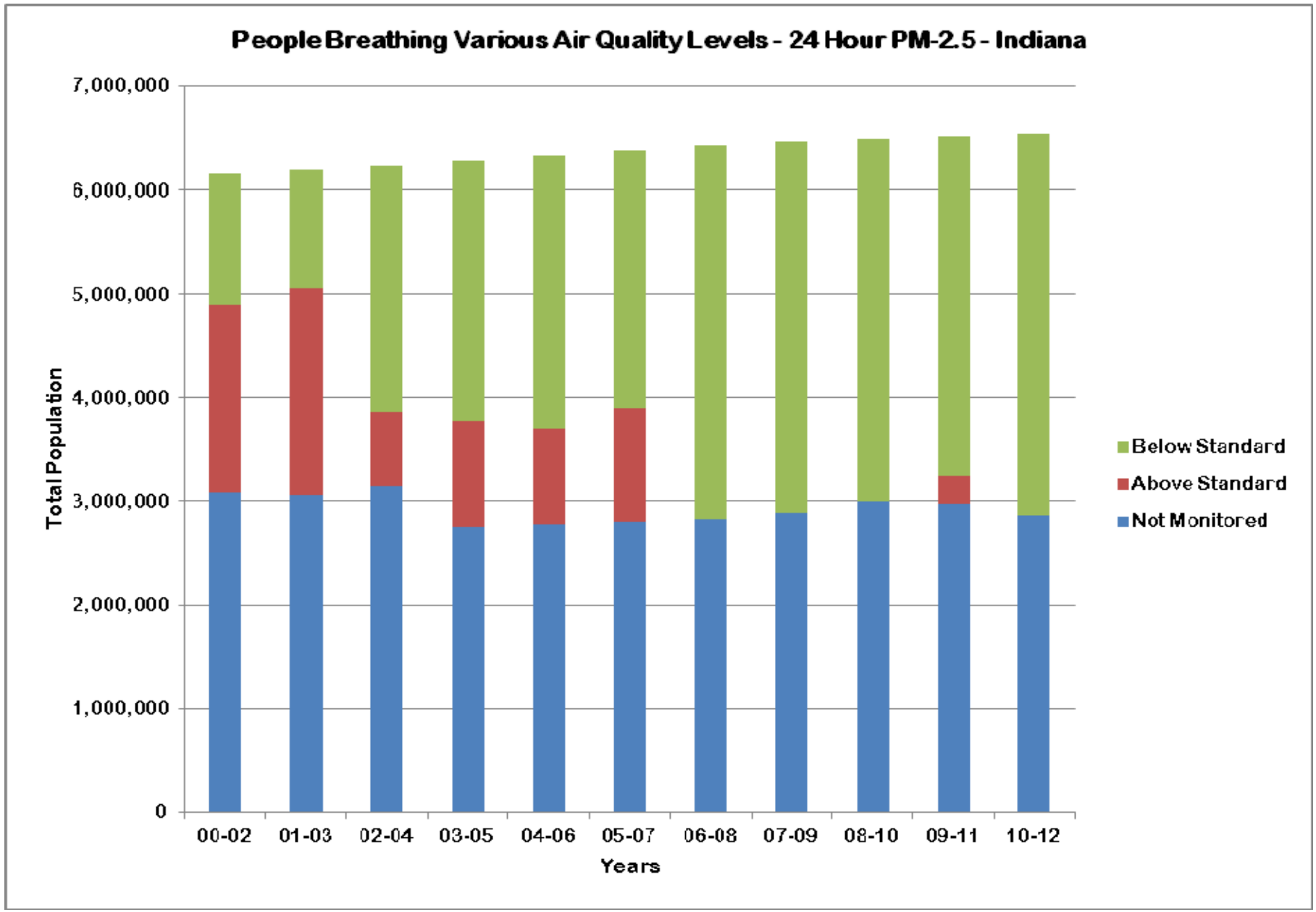
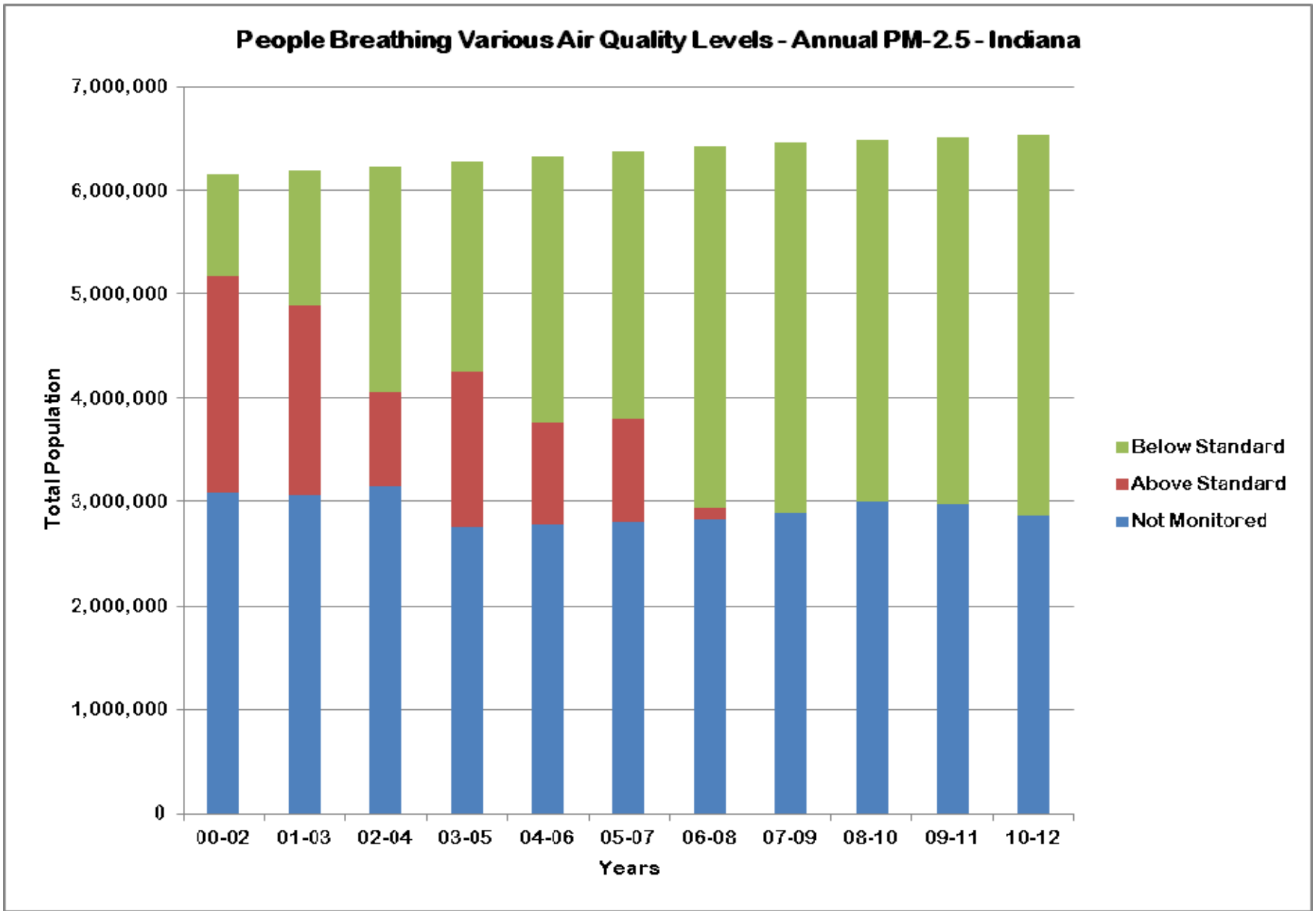

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Indiana
Total Population
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure IN-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Indiana
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

IOWA

Ozone

Progress has been made in ozone levels in Iowa. In the 2000 – 2002 time period, approximately 0.7 million people (25.4%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.1 million people (35.0%). The remainder of the population lived in counties where ozone was not measured. Figure IA-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour levels of PM-2.5 have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.4 million people (46.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.3 million people (43.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure IA-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Iowa have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.4 million people (46.6%) lived in counties where annual PM-2.5 levels met the standard. By 2009 – 2011 this had decreased to approximately 1.3 million people (43.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure IA-3 shows the distribution of people by year.

Table IO-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Black Hawk	131,820	ND	---	---	28	B	10.4	A	N
Bremer	24,479	0.066	B	N	ND	---	ND	---	---
Clinton	48,717	0.069	C	N	28	B	11.1	A	Y
Harrison	14,548	0.069	C	Y	ND	---	ND	---	---
Johnson	16,867	ND	---	___	27	A	10.5	A	N
Lee	35,617	ND	---	---	26	A	11.4	A	N
Linn	215,295	0.065	B	Y	28	B	10.3	A	Y
Montgomery	10,566	0.068	C	N	23	A	9.2	A	N
Muscatine	42,879	ND	---	---	30	B	11.7	A	Y
Palo Alto	9,275	0.068	C	N	22	A	8.9	A	N
Polk	443,710	0.061	B	N	25	A	9.6	A	Y
Pottawattamia	92,913	ND	---	---	27	A	11.1	A	N
Scott	168,799	0.067	B	Y	28	B	11.3	A	Y
Story	91,140	0.062	B	N	ND	---	ND	---	---
Van Buren	7,449	0.068	C	N	25	A	9.6	A	N
Warren	46,891	0.066	B	N	ND	---	ND	---	---
Woodbury	102,323	ND	---	---	27	A	9.9	A	N
Subtotal	**1,503,288**								
Not Monitored	1,570,898								
Total	**3,074,186**								

DV – Design Value ND - No Data MM – Multiple Monitors

IOWA

Table IA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	388,277	517,502	82,884	0	0	9,486	9,510	520,182	437,399	0
B	517,558	134,003	242,986	463,285	790,095	165,222	387,092	1,041,480	538,726	633,058	990,314
C	227,095	228,141	230,720	455,246	224,430	449,107	223,504	0	0	0	90,555
D	223,166	223,077	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	967,819	973,498	991,208	1,001,415	1,014,525	614,329	620,082	1,050,990	1,058,908	1,070,457	1,080,869
NM	1,966,415	1,968,501	1,962,427	1,963,039	1,968,119	2,384,883	2,396,652	1,981,880	1,987,447	1,991,852	1,993,317
Total	2,934,234	2,941,999	2,953,635	2,964,454	2,982,644	2,999,212	3,016,734	3,032,870	3,046,355	3,062,309	3,074,186

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	668,168	209,584	408,110	111,803	506,683	422,601	747,842	683,510	587,391	696,616	718,720
B	698,708	834,901	795,882	502,945	605,426	557,490	532,425	696,667	789,710	694,572	617,510
C	0	288,159	91,256	606,259	213,858	333,960	91,818	0	0	42,815	0
D	0	0	0	91,369	0	42,325	0	42,783	42,745	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,364,876	1,332,316	1,295,248	1,312,376	1,325,967	1,356,376	1,372,085	1,422,960	1,419,846	1,434,003	1,336,230
NM	1,567,358	1,609,683	1,658,387	1,652,078	1,656,677	1,642,836	1,644,649	1,609,910	1,626,509	1,628,306	1,737,956
Total	2,934,234	2,941,999	2,953,635	2,964,454	2,982,644	2,999,212	3,016,734	3,032,870	3,046,355	3,062,309	3,074,186

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,159,131	1,083,029	1,253,490	1,100,707	1,234,335	980,091	1,118,443	1,167,448	1,377,101	1,391,188	1,336,230
B	207,745	249,287	41,758	211,669	91,632	376,285	253,642	255,512	42,745	42,815	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,366,876	1,332,316	1,295,248	1,312,376	1,325,967	1,356,376	1,372,085	1,422,960	1,419,846	1,434,003	1,336,230
NM	1,567,358	1,609,683	1,658,387	1,652,078	1,656,677	1,642,836	1,644,649	1,609,910	1,626,509	1,628,306	1,737,956
Total	2,934,234	2,941,999	2,953,635	2,964,454	2,982,644	2,999,212	3,016,734	3,032,870	3,046,355	3,062,309	3,074,186

NM – Not Monitored

Figure IA-1

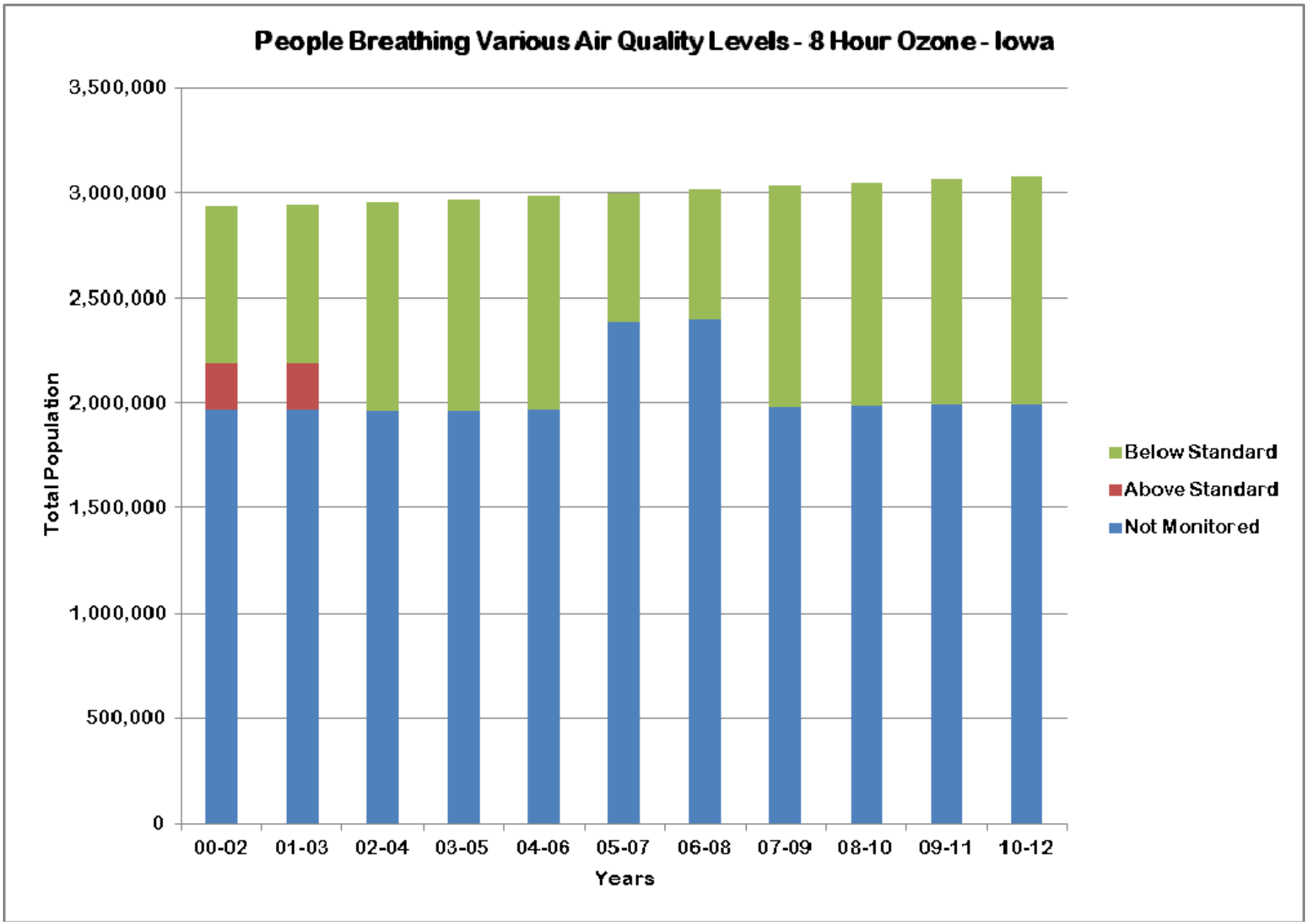

People Breathing Various Air Quality Levels - 8 Hour Ozone - Iowa
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure IA-2

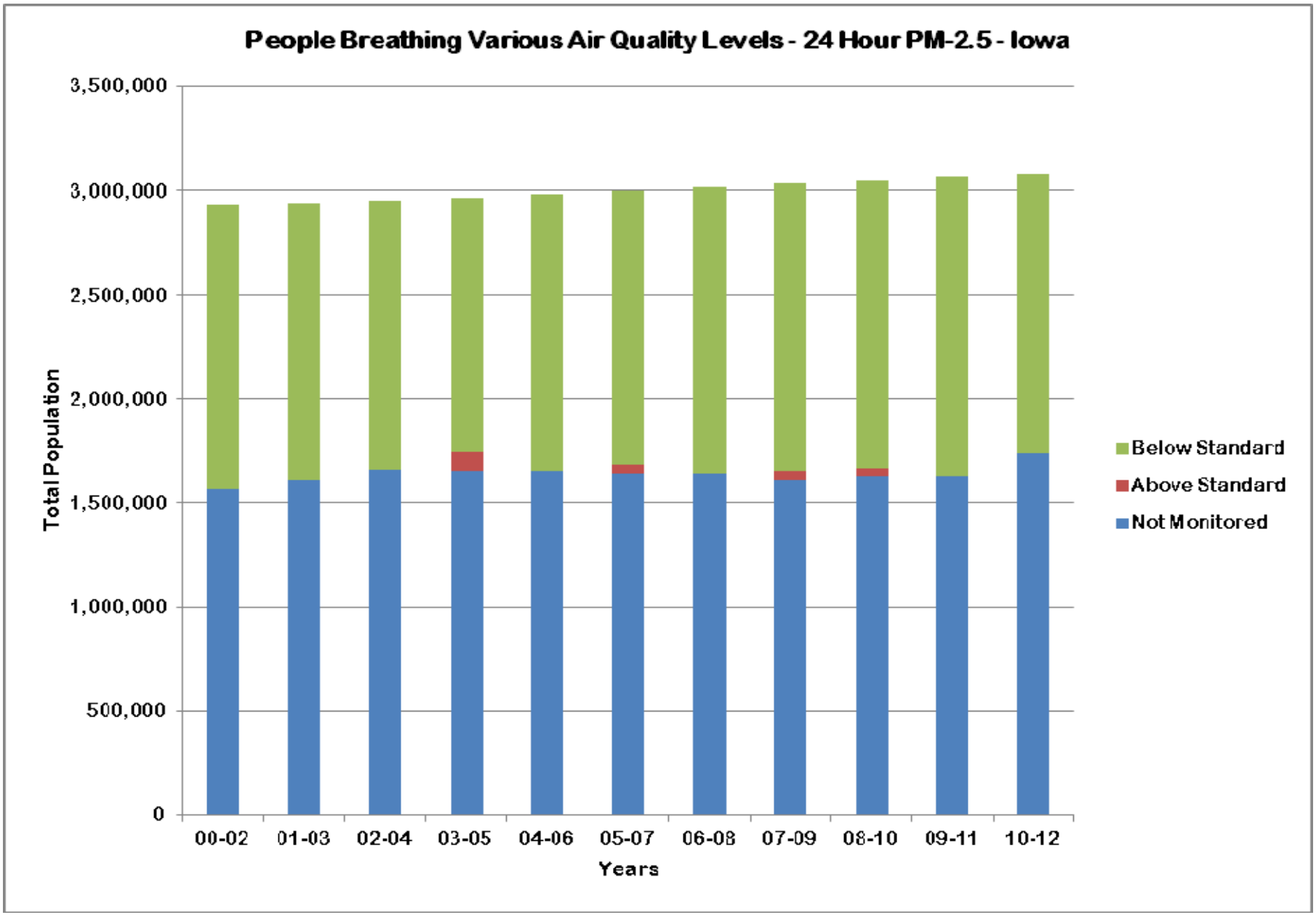
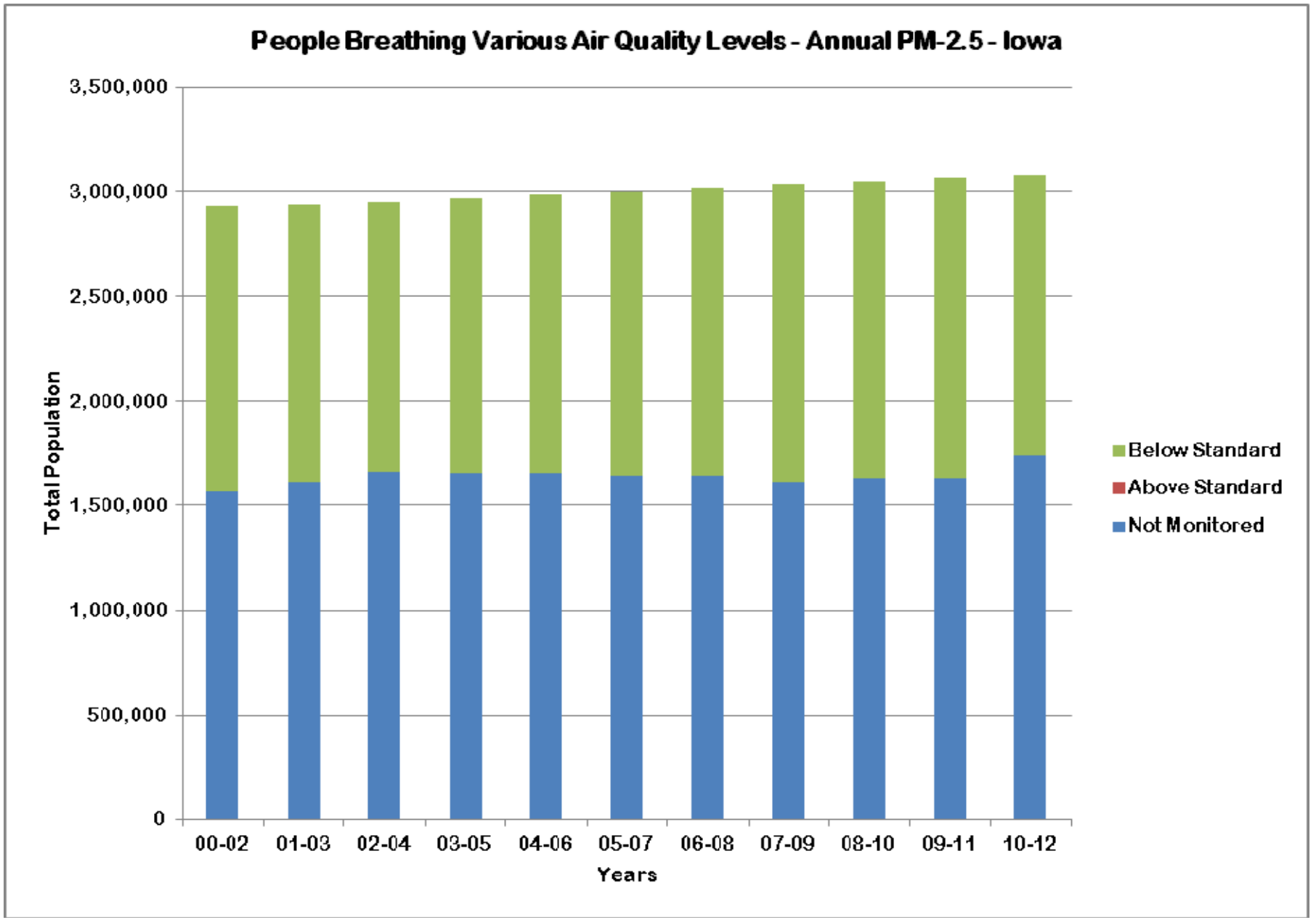

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Iowa
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure IA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Iowa
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

KANSAS

Ozone

Significant progress has been made in ozone levels in Kansas. In the 2000 – 2002 time period, approximately 3 thousand people (0.1%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.4 million people (14.8%). Figure KS-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Kansas have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.3 million people (47.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.4 million people (48.7%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure KS-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Kansas have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.3 million people (47.9%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.4 million people (48.7%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure KS-3 shows the distribution of people by year.

Table KS-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Johnson	**559,913**	**0.076**	**D**	**N**	17	A	7.7	A	N
Leavenworth	77,739	0.075	C	N	ND	---	ND	---	---
Linn	9,441	0.072	C	N	20	A	9.1	A	N
Sedgwick	**503,889**	**0.077**	**D**	**Y**	21	A	8.8	A	Y
Shawnee	178,991	0.074	C	N	20	A	9.1	A	N
Sumner	**23,674**	**0.078**	**D**	**N**	20	A	8.4	A	N
Trego	2,986	0.074	C	N	ND	---	ND	---	---
Wyandotte	159,129	0.067	B	N	21	A	9.5	A	Y
Subtotal	**1,515,762**								
Not Monitored	1,370,143								
Total	**2,885,905**								

DV – Design Value ND - No Data

KANSAS

Table KS-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	3,137	3,097	3,120	0	0	478,479	486,077	1,380,258	968,902	167,836	159,129
C	0	0	498,997	765,002	1,357,586	12,829	798,739	99,621	522,497	1,336,901	269,157
D	653,742	653,741	154,874	504,441	0	776,227	0	0	0	0	1,087,476
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	656,879	656,838	656,991	1,269,443	1,357,586	1,267,535	1,284,816	1,479,879	1,490,999	1,504,737	1,515,763
NM	2,056,656	2,066,166	2,077,382	1,475,856	1,405,345	1,516,250	1,523,260	1,352,825	1,362,119	1,366,501	1,370,143
Total	2,713,535	2,723,004	2,734,373	2,745,299	2,762,931	2,783,785	2,808,076	2,832,704	2,853,118	2,871,238	2,835,905

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,141,832	497,465	498,997	501,940	1,193,964	1,190,773	1,207,313	1,401,433	1,411,771	1,424,631	1,435,037
B	157,498	812,819	821,648	830,690	153,689	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,299,330	1,310,284	1,320,645	1,332,630	1,347,653	1,190,773	1,207,313	1,401,433	1,411,771	1,424,631	1,435,037
NM	1,414,205	1,412,720	1,413,728	1,412,669	1,415,278	1,593,012	1,600,763	1,431,271	1,441,347	1,446,607	1,450,868
Total	2,713,535	2,723,004	2,734,373	2,745,299	2,762,931	2,783,785	2,808,076	2,832,704	2,853,118	2,871,238	2,835,905

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,141,832	1,154,008	1,165,771	1,178,274	1,347,653	1,190,773	1,207,313	1,401,433	1,411,771	1,424,631	1,415,037
B	157,498	156,276	154,874	154,356	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,299,330	1,310,284	1,320,645	1,332,630	1,347,653	1,190,773	1,207,313	1,401,433	1,411,771	1,424,631	1,435,037
NM	1,414,205	1,412,720	1,413,728	1,412,669	1,415,278	1,593,012	1,600,763	1,431,271	1,441,347	1,446,607	1,450,868
Total	2,713,535	2,723,004	2,734,373	2,745,299	2,762,931	2,783,785	2,808,076	2,832,704	2,853,118	2,871,238	2,835,905

NM – Not Monitored

Figure KS-1

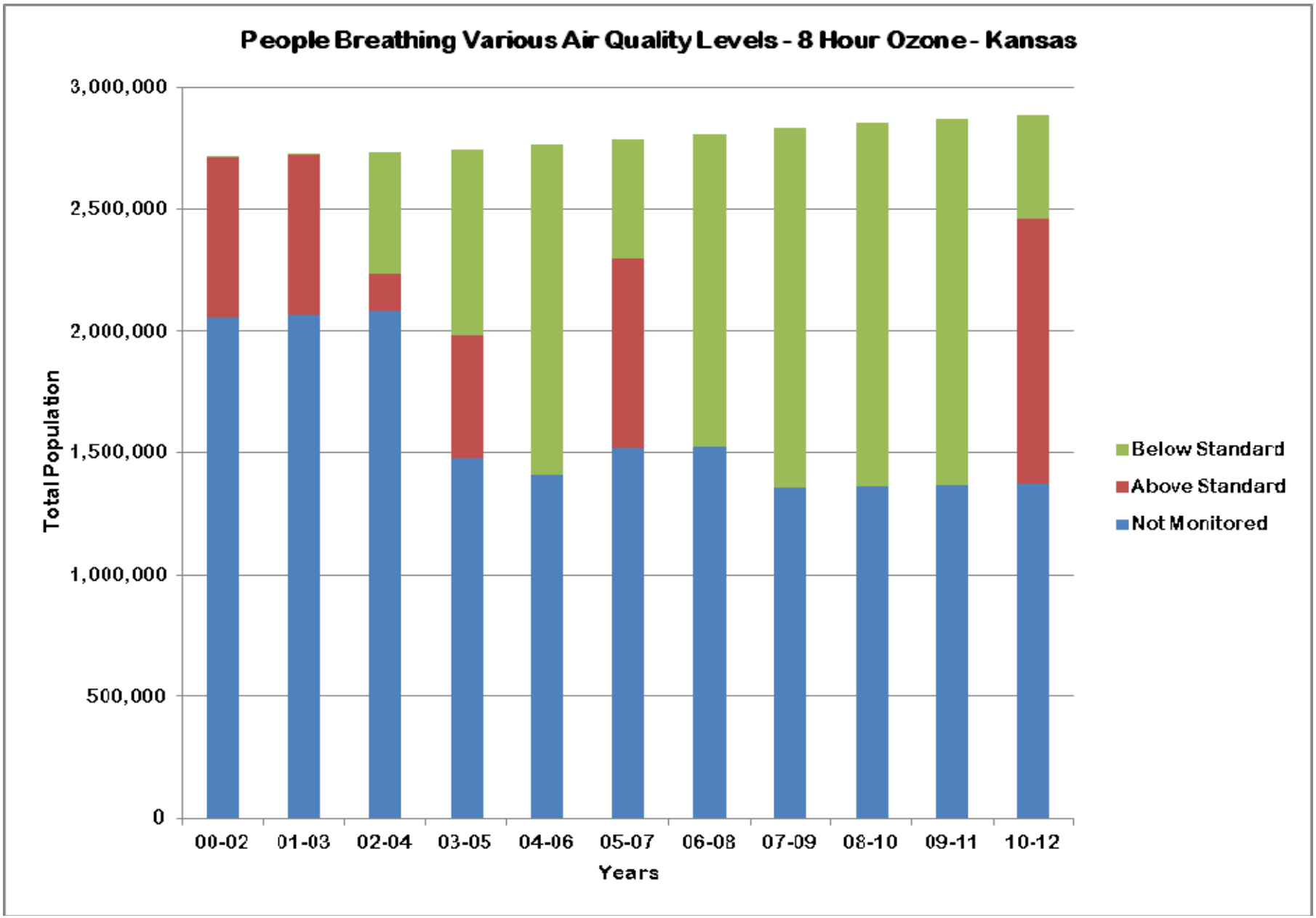

People Breathing Various Air Quality Levels - 8 Hour Ozone - Kansas
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure KS-2

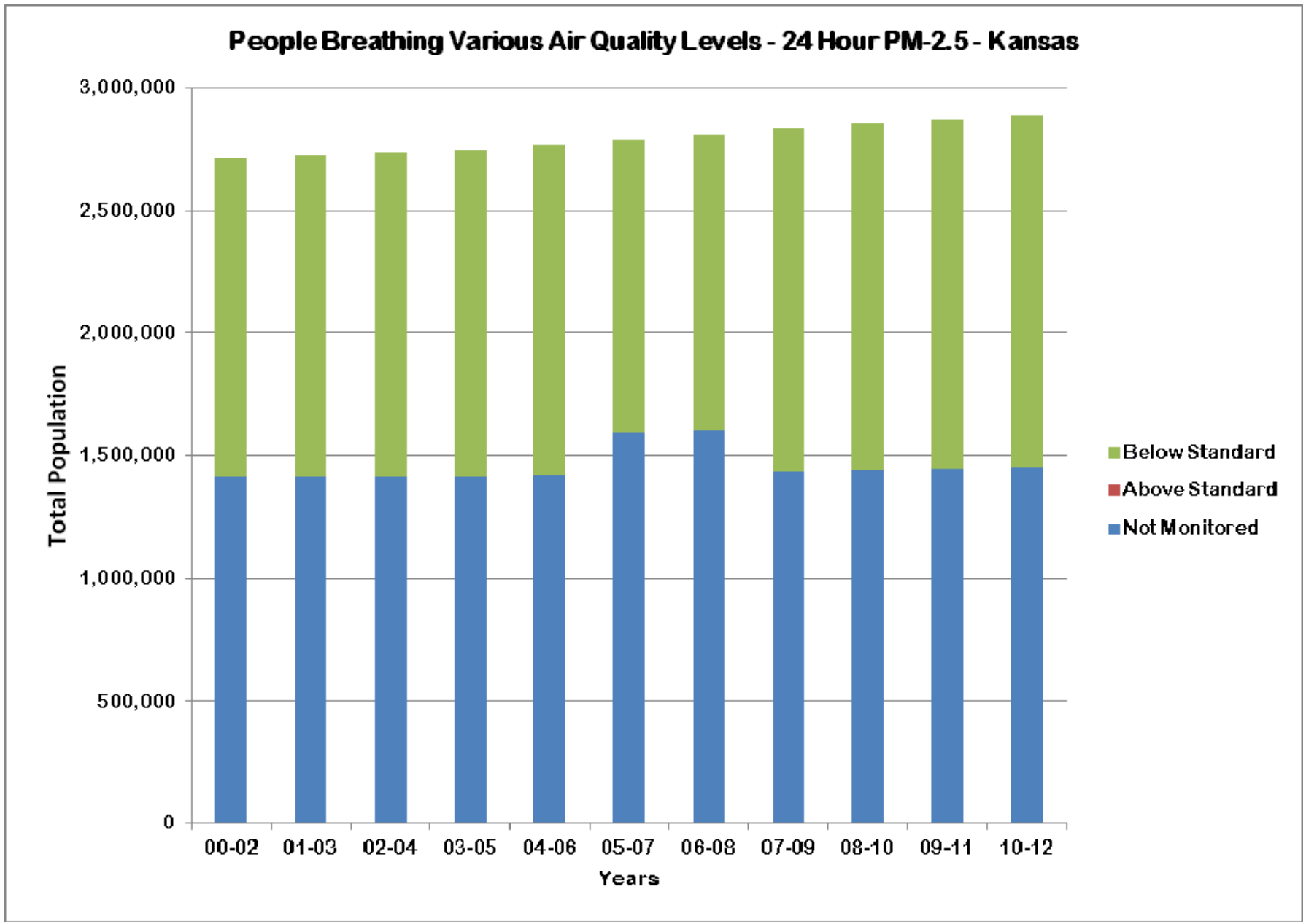
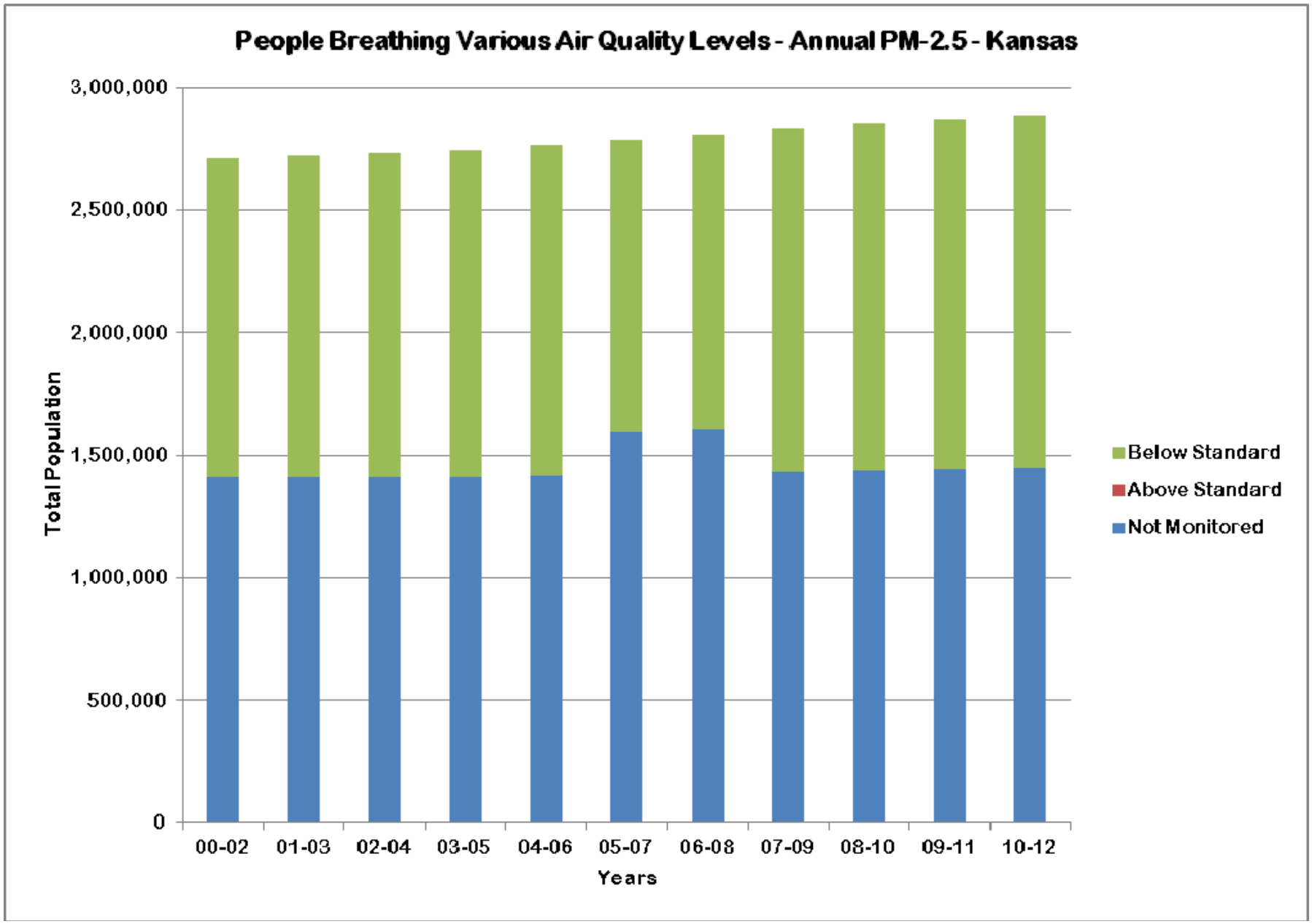

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Kansas
Total Population
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure KS-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Kansas
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

KENTUCKY

Ozone

Significant progress has been made in ozone levels in Kentucky. In the 2000 – 2002 time period, approximately 0.3 million people (7.7%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.1 million people (24.2%). Figure KY-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in Kentucky. In the 2000 – 2002 time period, approximately 0.7 million people (16.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.0 million people (23.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure KY-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in Kentucky. In the 2000 – 2002 time period, approximately 0.6 million people (14.3%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.0 million people (23.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure KY-3 shows the distribution of people by year.

KENTUCKY

Table KY-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Bell	**28,183**	**0.065**	**B**	**N**	**25**	**A**	**11.3**	**A**	**N**
Boone	**123,316**	**0.070**	**B**	**N**	**ND**	**---**	**ND**	**---**	**---**
Boyd	**49,164**	**0.072**	**C**	**N**	**24**	**A**	**10.6**	**A**	**N**
Bullitt	**75,896**	**0.075**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Campbell	**90,908**	**0.079**	**D**	**N**	**24**	**A**	**10.6**	**A**	**N**
Carter	**27,348**	**0.069**	**B**	**N**	**19**	**A**	**9.9**	**A**	**N**
Christian	**75,427**	**0.073**	**C**	**N**	**22**	**A**	**10.8**	**A**	**N**
Daviess	**97,847**	**0.080**	**D**	**N**	**26**	**A**	**11.9**	**A**	**N**
Edmonson	**12,071**	**0.076**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Fayette	**105,489**	**0.075**	**C**	**N**	**22**	**A**	**10.7**	**A**	**N**
Greenup	**36,707**	**0.073**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Hancock	**8,677**	**0.076**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Hardin	**107,025**	**0.073**	**C**	**N**	**22**	**A**	**11.5**	**A**	**N**
Henderson	**46,513**	**0.079**	**D**	**N**	**23**	**A**	**11.3**	**A**	**N**
Jefferson	**750,828**	***	***	***	***	***	***	***	***
Jessamine	**49,635**	**0.073**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Livingston	**9,423**	**0.075**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Madison	**84,786**	**ND**	**---**	**---**	**20**	**A**	**9.6**	**A**	**N**
McCracken	**65,549**	**0.077**	**D**	**N**	**22**	**A**	**10.6**	**A**	**N**
Oldham	**61,412**	**0.087**	**F**	**N**	**ND**	**---**	**ND**	**---**	**---**
Perry	**28,241**	**0.068**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Pike	**64,178**	**0.068**	**C**	**N**	**22**	**A**	**9.7**	**A**	**N**
Pulaski	**63,593**	**0.069**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Simpson	**17,538**	**0.072**	**C**	**N**	**ND**	**---**	**ND**	**---**	**---**
Subtotal	**2,079,754**								
Not Monitored	**2,300,661**								
Total	**4,380,415**								

DV – Design Value ND - No Data MM – Multiple Monitors

*** - Data for this county has been removed. Problems with sampling have resulted in data that is questionable.

KENTUCKY

Table KY-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	38,051	65,719	345,603	0	0	28,691	333,876	499,923	178,847
C	314,323	386,490	697,763	1,715,826	1,553,888	612,533	981,850	2,022,641	1,958,725	1,813,924	882,316
D	525,411	1,432,406	1,367,322	472,316	312,288	1,625,283	1,338,252	219,016	0	807,548	1,072,393
F	1,437,999	506,710	290,662	88,047	56,329	57,991	0	0	0	0	61,412
Subtotal	2,277,733	2,325,606	2,393,798	2,341,908	2,267,108	2,295,807	2,320,102	2,270,348	2,292,601	3,121,395	2,194,968
NM	1,812,142	1,791,564	1,752,303	1,840,834	1,951,131	1,960,865	1,969,776	2,046,726	2,046,766	1,247,961	2,185,447
Total	4,089,875	4,117,170	4,146,101	4,182,742	4,219,239	4,256,672	4,289,878	4,317,074	4,339,367	4,369,356	4,380,415

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	29,173	112,382	56,465	0	28,794	260,679	1,193,423	1,360,093	2,024,854	1,042,417
B	94,700	432,528	643,805	905,609	908,760	613,169	897,383	802,359	741,096	0	0
C	582,342	657,869	629,976	344,684	310,039	600,609	730,194	0	0	0	0
D	467,177	202,345	706,828	710,018	715,149	723,040	0	0	0	0	0
F	699,810	703,970	0	0	0	0	0	0	0	0	0
Subtotal	1,844,029	2,025,885	2,092,991	2,016,776	1,933,948	1,965,612	1,888,256	1,995,782	2,101,189	2,024,854	1,042,417
NM	2,245,846	2,091,285	2,053,110	2,165,966	2,285,291	2,291,060	2,401,622	2,321,292	2,238,178	2,344,502	3,337,998
Total	4,089,875	4,117,170	4,146,101	4,182,742	4,219,239	4,256,672	4,289,878	4,317,074	4,339,367	4,369,356	4,380,415

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	27,528	0	0	0	109,273	232,794	1,142,868	1,105,605	1,042,417
B	27,262	102,502	606,615	461,396	403,890	178,636	947,215	1,026,283	958,321	919,249	0
C	556,314	949,509	752,020	845,362	1,530,058	1,063,936	831,768	736,705	0	0	0
D	560,643	973,874	706,828	710,018	0	723,040	0	0	0	0	0
F	699,810	0	0	0	0	0	0	0	0	0	0
Subtotal	1,844,029	2,025,885	2,092,991	2,016,776	1,933,948	1,965,612	1,889,256	1,995,782	2,101,189	2,024,854	1,042,417
NM	2,245,846	2,091,285	2,053,110	2,165,966	2,285,291	2,291,060	2,401,622	2,321,292	2,238,178	2,344,502	3,337,998
Total	4,089,875	4,117,170	4,146,101	4,182,742	4,219,239	4,256,672	4,289,878	4,317,074	4,339,367	4,369,356	4,380,415

NM – Not Monitored

Figure KY-1

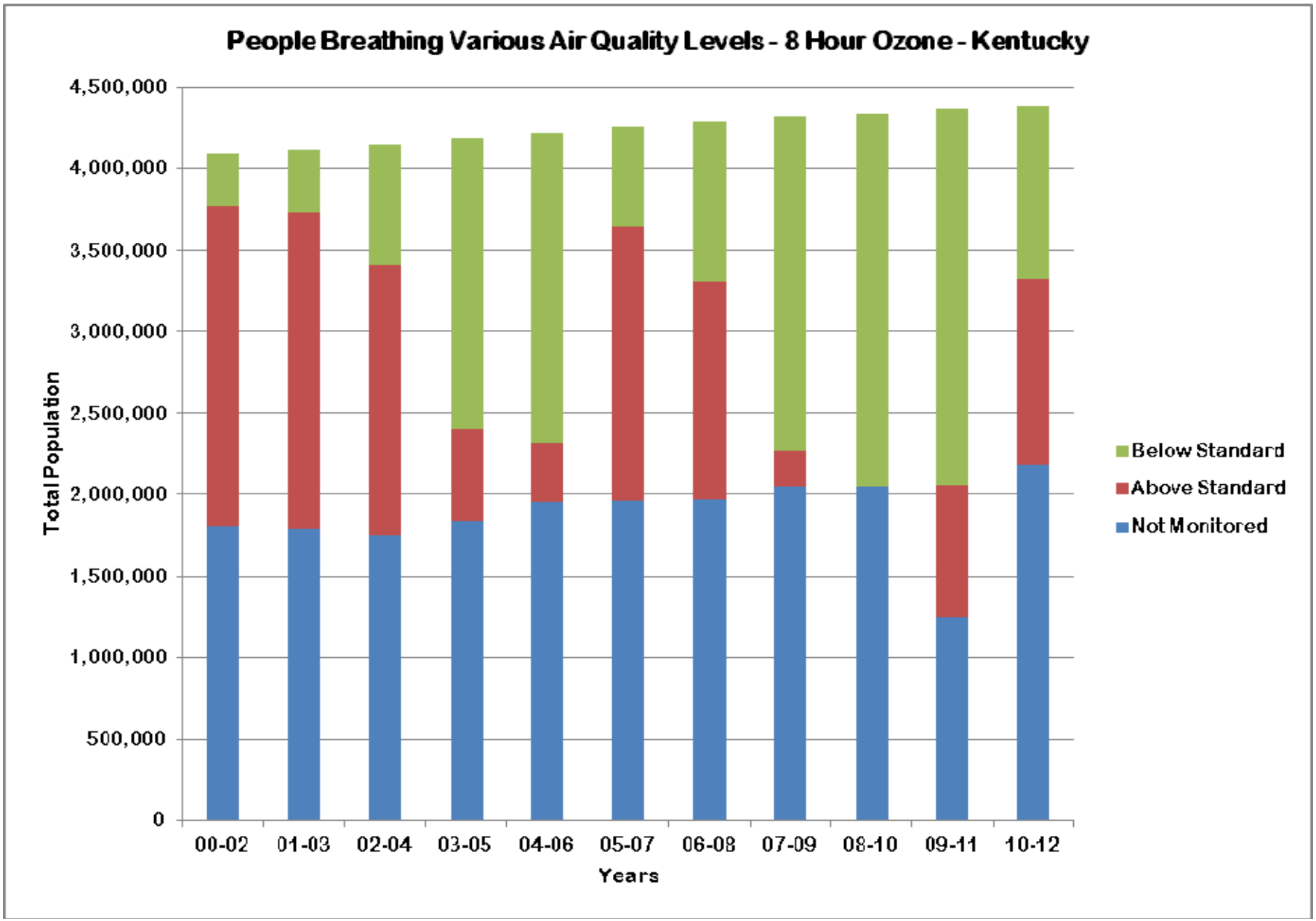

People Breathing Various Air Quality Levels - 8 Hour Ozone - Kentucky
Total Population
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure KY-2

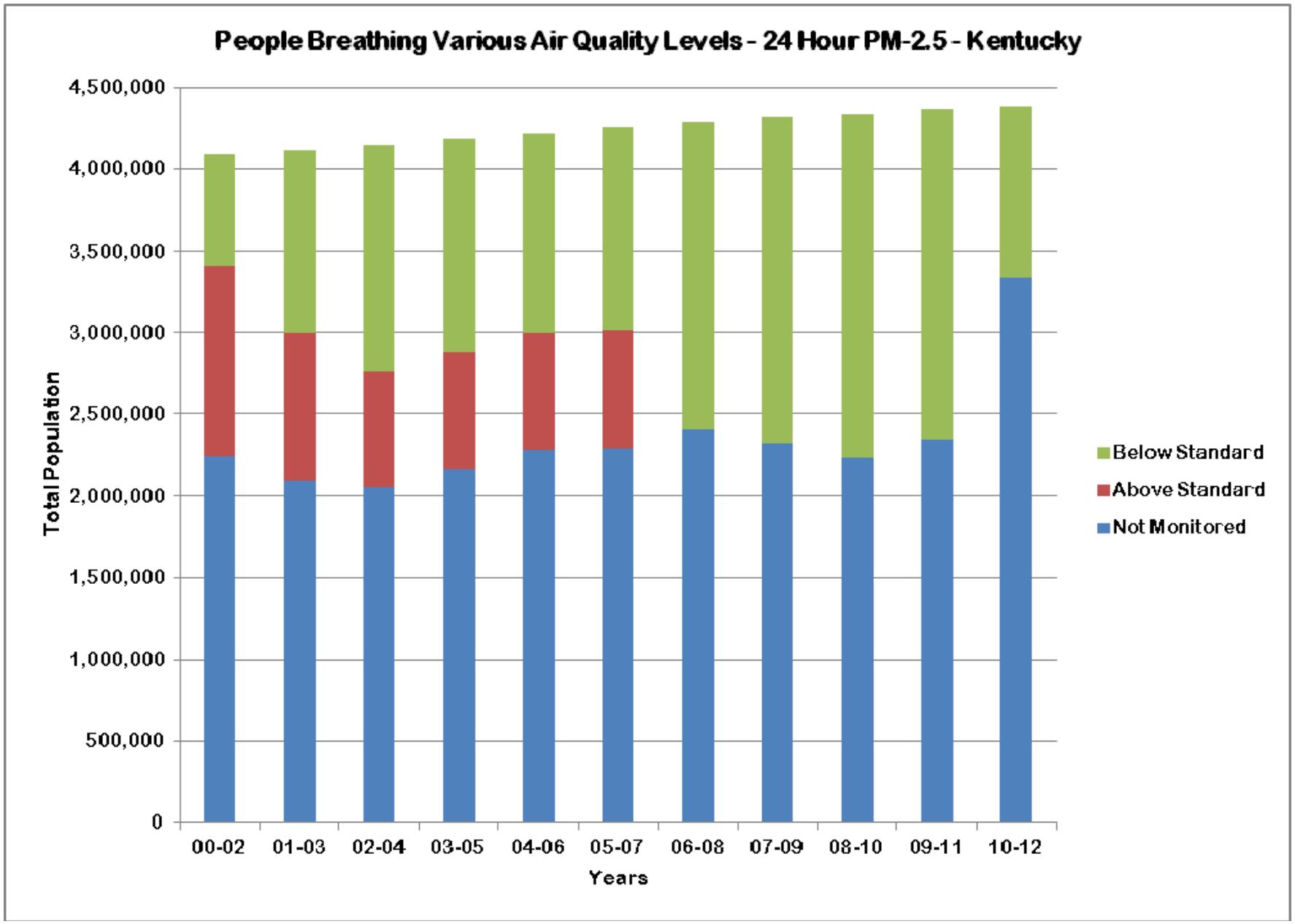
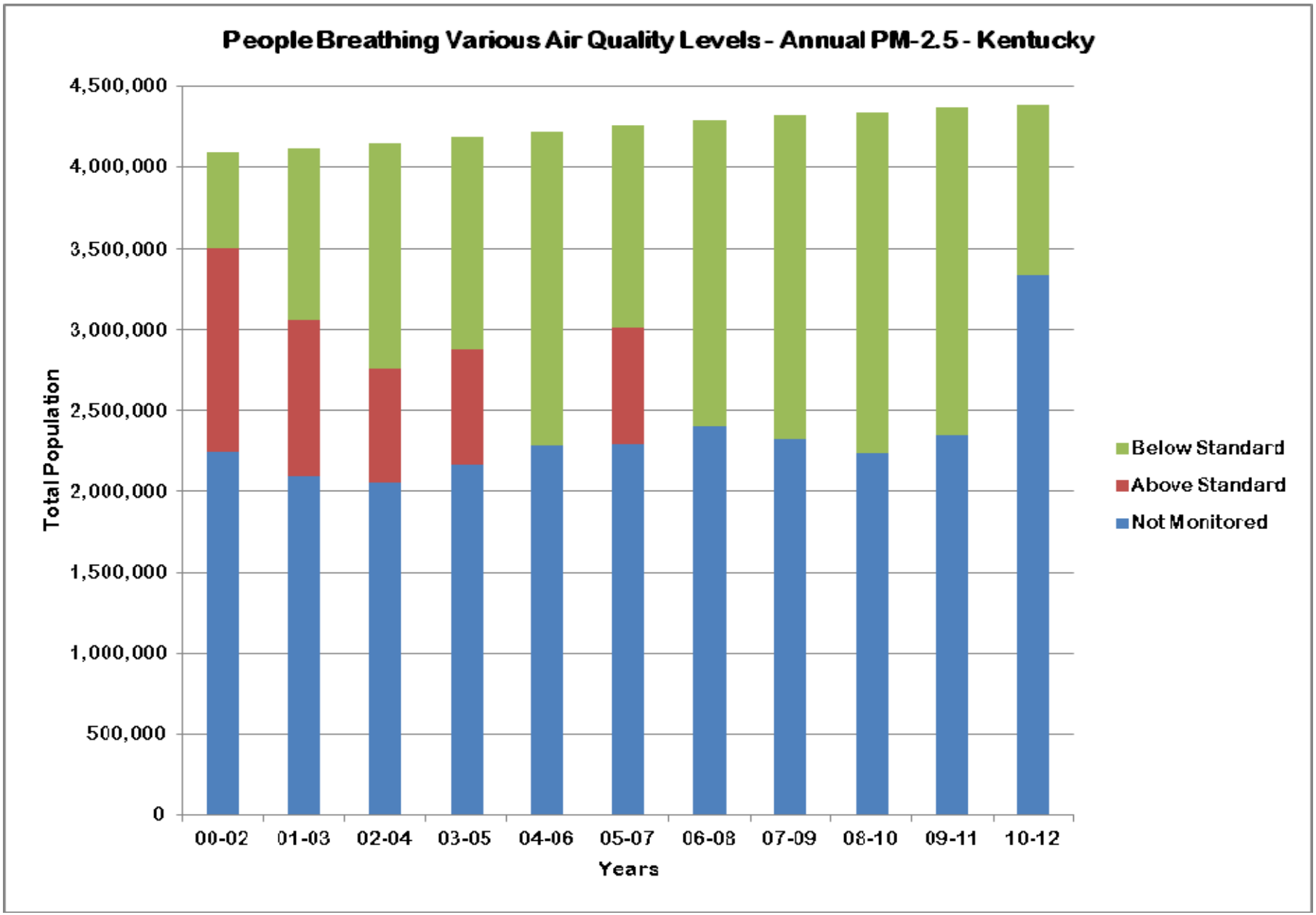

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Kentucky
Total Population
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure KY-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Kentucky
Total Population
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

LOUISIANA

Ozone

Significant progress has been made in ozone levels in Louisiana. In the 2000 – 2002 time period, approximately 0.5 million people (12.1%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.0 million people (43.3%). Figure LA-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour levels of PM-2.5 in Louisiana have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.6 million people (57.5%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.2 million people (47.3%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure LA-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Louisiana have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.6 million people (57.5%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 2.1 million people (47.3%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure LA-3 shows the distribution of people by year.

LOUISIANA

Table LA-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg.24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Ascension	**112,286**	**0.076**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Bossier	**122,197**	**0.079**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Caddo	**257,093**	**0.076**	**D**	**N**	**22**	**A**	**11.7**	**A**	**N**
Calcasieu	194,493	0.072	C	Y	20	A	8.8	A	Y
E. Baton Rouge	**444,526**	**0.076**	**D**	**Y**	**22**	**A**	**10.2**	**A**	**N**
Iberville	**33,228**	**0.076**	**D**	**Y**	**20**	**A**	**9.4**	**A**	**Y**
Jefferson	433,676	0.075	C	N	19	A	9.1	A	Y
Lafayette	227,055	0.072	C	N	24	A	11.8	A	N
Lafourche	97,029	0.074	C	N	ND	---	ND	---	---
Livingston	131,942	0.075	C	N	ND	---	ND	---	---
Orleans	369,250	0.071	C	N	ND	---	ND	---	---
Ouachita	155,363	0.064	B	N	20	A	9.4	A	N
Pointe Coupee	**22,726**	**0.077**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Rapides	132,373	ND	---	---	21	A	8.8	A	N
St. Bernard	41,635	ND	---	---	27	A	13.5	C	N
St. Charles	52,681	0.071	C	N	ND	---	ND	---	---
St. James	21,722	0.069	C	N	ND	---	ND	---	---
St. John the Baptist	44,758	0.075	C	N	ND	---	ND	---	---
St. Tammany	239,453	0.074	C	N	ND	---	ND	---	---
Tangipahoa	123,441	ND	---	---	18	A	9	A	N
Terrebonne	111,893	ND	---	---	18	A	8.4	A	N
W. Baton Rouge	24,106	0.072	C	N	23	A	10.7	A	N
Subtotal	**3,392,926**								
Not Monitored	1,208,967								
Total	**4,601,893**								

DV – Design Value ND - No Data MM – Multiple Monitors

LOUISIANA

Table LA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	151,727	153,058	153,720	154,919	155,363
C	545,173	641,716	912,802	34,130	94,385	151,157	377,363	1,443,861	2,371,085	1,536,058	1,836,165
D	1,121,093	1,355,723	1,559,727	1,177,023	1,460,020	887,477	1,655,887	765,899	0	1,267,276	992,056
F	1,201,469	888,906	436,211	924,992	512,413	1,045,794	125,857	0	0	0	0
Subtotal	2,867,735	2,886,345	2,908,740	2,136,145	2,066,818	2,084,428	2,310,834	2,362,818	2,524,805	2,958,253	2,983,584
NM	1,629,532	1,634,697	1,643,498	2,440,483	2,235,847	2,291,153	2,124,752	2,128,830	2,008,567	1,616,583	1,619,309
Total	4,497,267	4,521,042	4,552,238	4,576,628	4,302,665	4,375,581	4,435,586	4,491,648	4,533,372	4,574,836	4,601,893

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	730,602	1,477,952	2,256,156	1,112,151	525,083	1,539,431	1,839,072	2,115,457	2,129,612	2,144,180	2,178,882
B	1,673,118	994,149	249,157	378,509	1,311,332	291,133	251,953	0	0	0	0
C	183,487	0	0	456,554	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,587,207	2,472,101	2,505,313	1,947,214	1,836,415	1,830,564	2,091,025	2,115,457	2,129,612	2,144,180	2,178,582
NM	1,910,060	2,048,941	2,046,925	2,619,414	2,466,250	2,545,017	2,344,561	2,376,191	2,403,760	2,430,656	2,423,011
Total	4,497,267	4,521,042	4,552,238	4,576,628	4,302,665	4,375,581	4,435,586	4,491,648	4,533,372	4,574,836	4,601,893

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	585,956	1,297,185	1,819,945	1,261,880	806,369	1,072,484	1,815,820	2,115,457	2,129,612	2,144,180	2,137,247
B	2,001,251	1,174,906	685,368	685,334	1,007,380	734,896	275,205	0	0	0	0
C	0	0	0	0	22,666	23,184	0	0	0	0	41,635
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,587,207	2,472,101	2,505,313	1,947,214	1,836,415	1,830,564	2,091,025	2,115,457	2,129,612	2,144,180	2,178,582
NM	1,910,060	2,048,941	2,046,925	2,619,414	2,466,250	2,545,017	2,344,561	2,376,191	2,403,760	2,430,656	2,423,011
Total	4,497,267	4,521,042	4,552,238	4,576,628	4,302,665	4,375,581	4,435,586	4,491,648	4,533,372	4,574,836	4,601,893

NM – Not Monitored

Figure LA-1

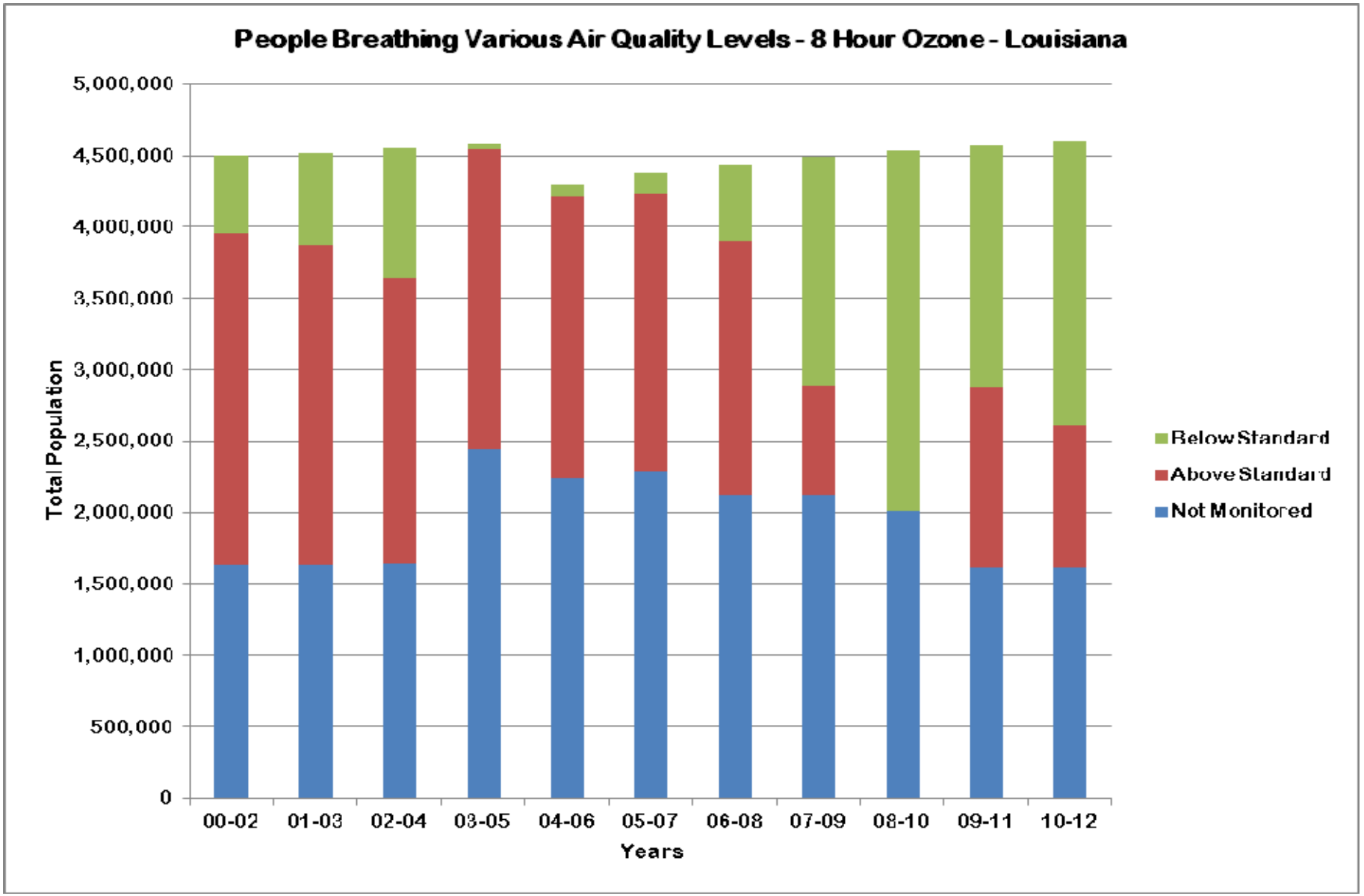

People Breathing Various Air Quality Levels - 8 Hour Ozone - Louisiana
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure LA-2

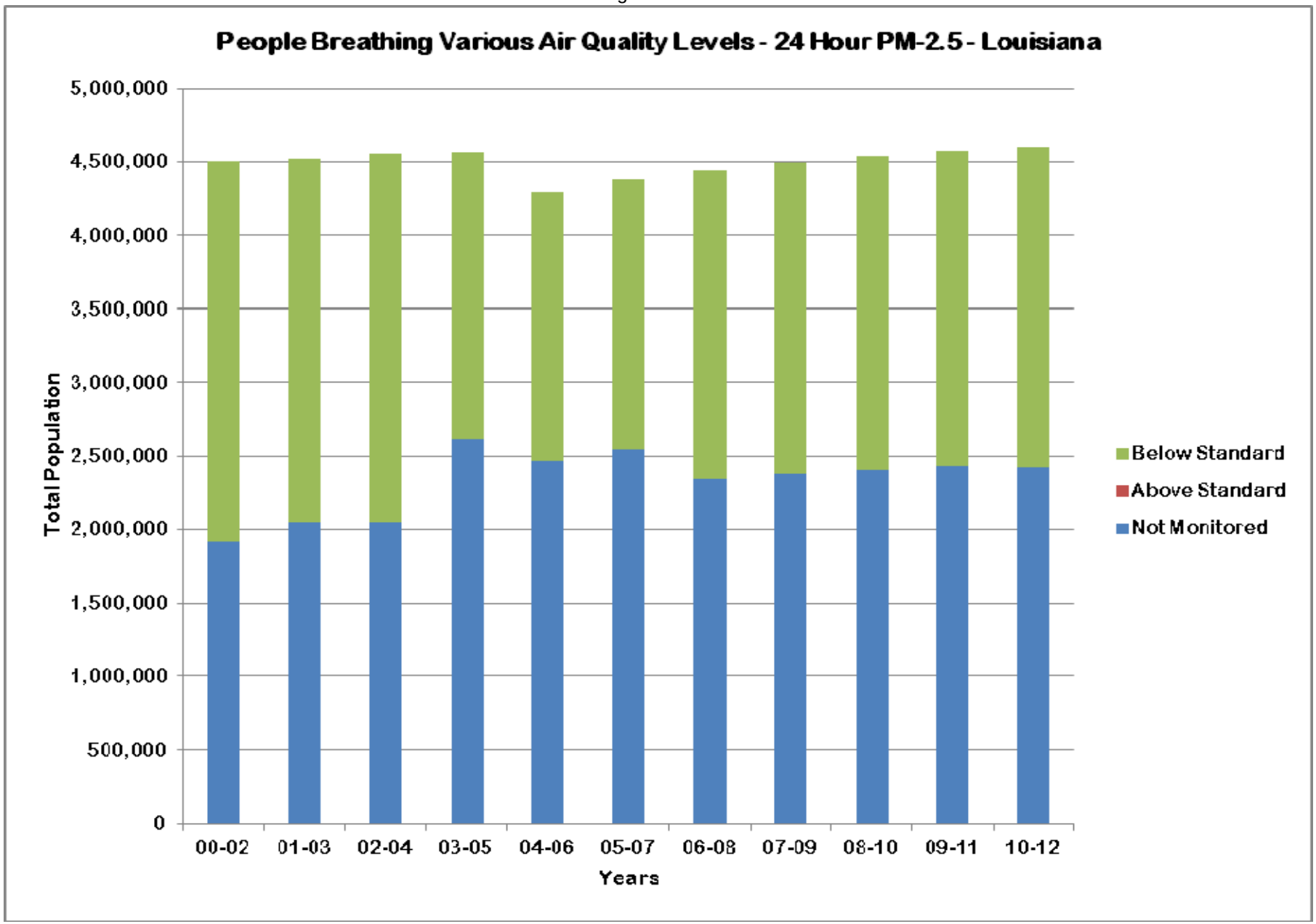

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Louisiana
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure LA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Louisiana
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MAINE

Ozone

Significant progress has been made in ozone levels in Maine. In the 2000 – 2002 time period, approximately 56 thousand people (4.3%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.2 million people (87.0%). The remainder of the population lived in counties where ozone was not measured. Figure ME-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Maine have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.0 million people (74.4%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.9 million people (64.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure ME-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Maine have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.0 million people (74.4%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 0.9 million people (64.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure ME-3 shows the distribution of people by year.

Table ME-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Androscoggin	107,609	0.061	B	N	20	A	7.5	A	N
Aroostook	70,868	0.051	A	N	17	A	5.9	A	N
Cumberland	283,921	0.066	B	Y	20	A	8.3	A	Y
Hancock	54,558	0.069	C	Y	13	A	4.7	A	N
Kennebec	121,853	0.062	B	N	16	A	5.8	A	Y
Knox	39,668	0.067	B	N	ND	---	ND	---	---
Oxford	57,481	0.055	A	N	27	A	8.2	A	N
Penobscot	153,746	0.057	A	N	20	A	7.3	A	N
Sagadahoc	135,191	0.061	B	N	ND	---	ND	---	---
Washington	32,462	0.058	A	N	ND	---	ND	---	---
York	199,005	0.067	B	Y	ND	---	ND	---	---
Subtotal	**1,256,362**								
Not Monitored	72,830								
Total	**1,329,192**								

DV – Design Value ND - No Data MM – Multiple Monitors

MAINE

Table ME-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	72,542	72,258	316,482	315,600	314,557
B	55,843	56,206	56,763	57,235	521,981	57,966	244,799	244,618	783,687	745,140	787,247
C	0	0	0	834,715	413,569	750,348	640,703	748,999	54,418	94,286	54,558
D	118,024	155,504	871,672	40,571	0	94,597	54,371	54,499	0	0	0
F	557,218	711,074	0	0	0	0	0	0	0	0	0
Subtotal	731,085	922,784	928,453	732,521	935,550	902,911	1,012,415	1,120,374	1,154,587	1,155,026	1,156,362
NM	564,875	383,729	385,253	386,266	388,069	424,129	318,094	209,216	173,774	173,162	172,830
Total	1,295,960	1,306,513	1,313,688	1,318,787	1,323,619	1,327,040	1,330,509	1,329,590	1,328,361	1,328,188	1,329,192

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	470,183	268,795	148,814	222,607	453,813	791,170	795,164	795,834	795,153	849,275	850,036
B	494,207	478,006	631,812	561,819	334,640	0	0	0	0	0	0
C	0	225,678	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	964,390	972,479	780,626	784,426	788,453	791,170	795,164	795,834	795,153	849,275	850,036
NM	331,570	334,014	532,062	534,361	535,166	535,870	535,345	533,756	533,208	478,913	479,156
Total	1,295,960	1,306,513	1,313,688	1,318,787	1,323,619	1,327,040	1,330,509	1,329,590	1,328,361	1,328,188	1,329,192

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	964,390	972,479	780,626	784,426	788,453	791,170	795,164	795,834	795,153	849,275	850,036
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	964,390	972,479	780,626	784,426	788,453	791,170	795,164	795,834	795,153	849,275	850,036
NM	331,570	334,014	532,062	534,361	535,166	535,870	535,345	533,756	533,208	478,913	479,156
Total	1,295,960	1,306,513	1,313,688	1,318,787	1,323,619	1,327,040	1,330,509	1,329,590	1,328,361	1,328,188	1,329,192

NM – Monitored

Figure ME-1

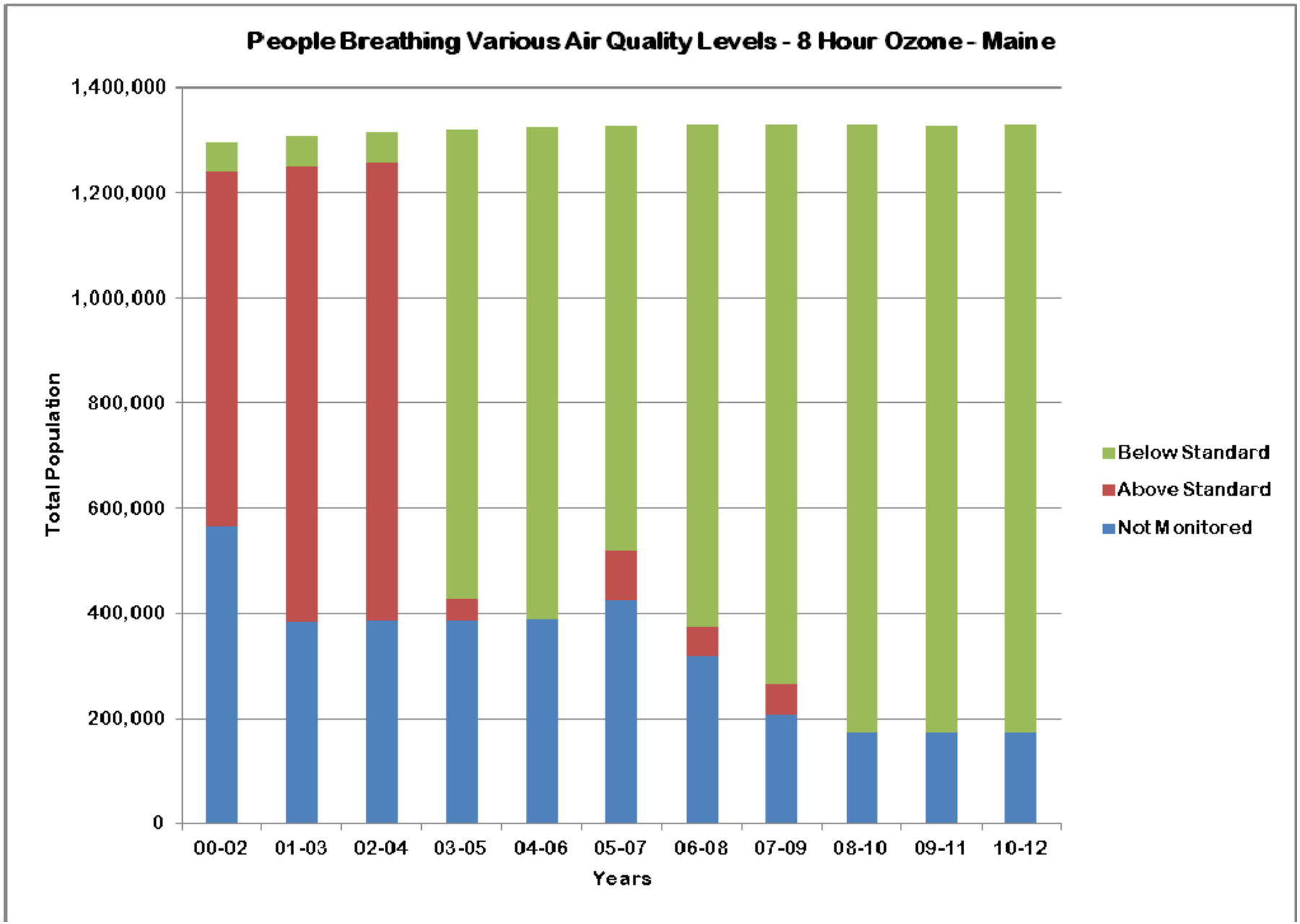

People Breathing Various Air Quality Levels - 8 Hour Ozone - Maine
Total Population
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure ME-2

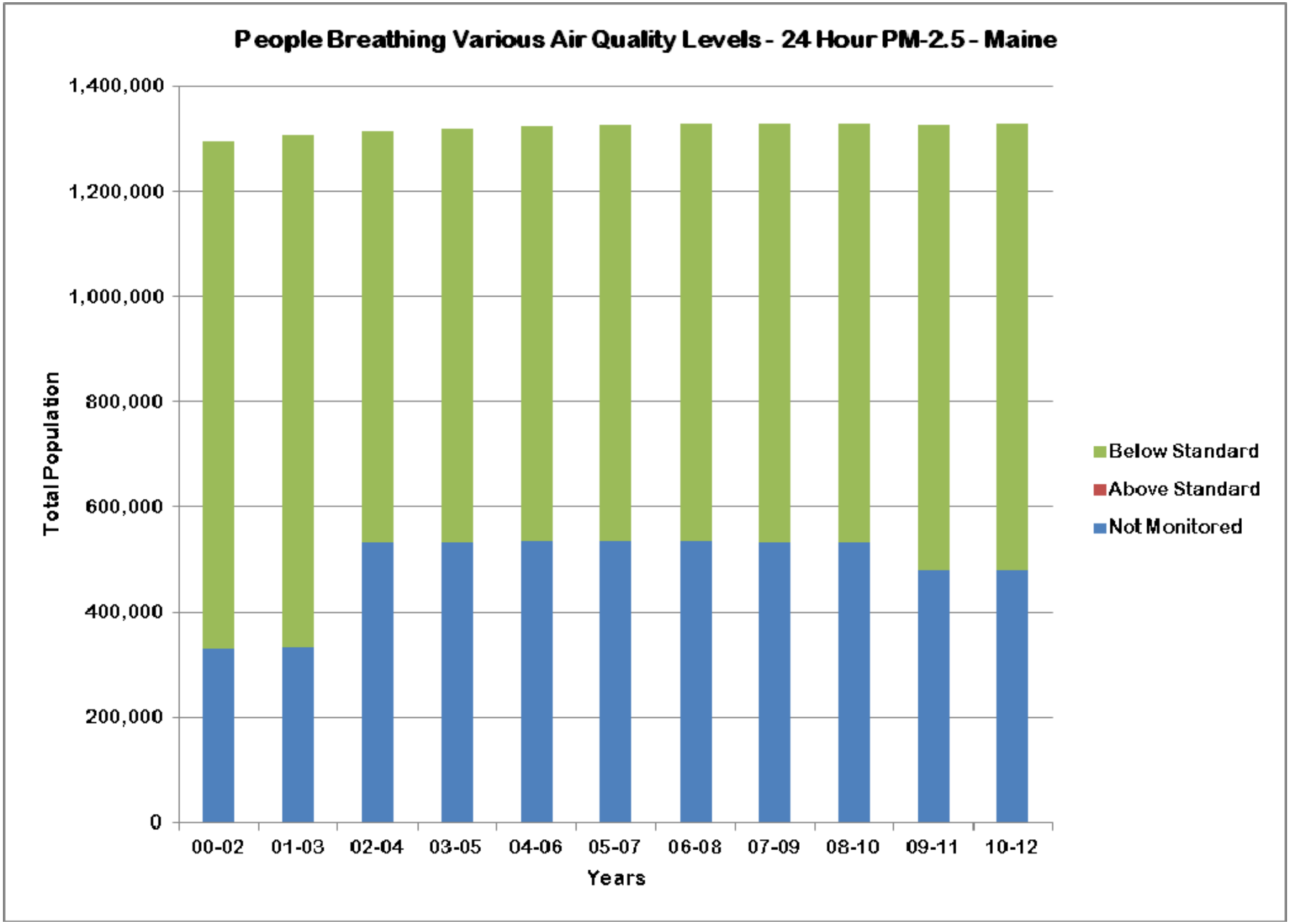
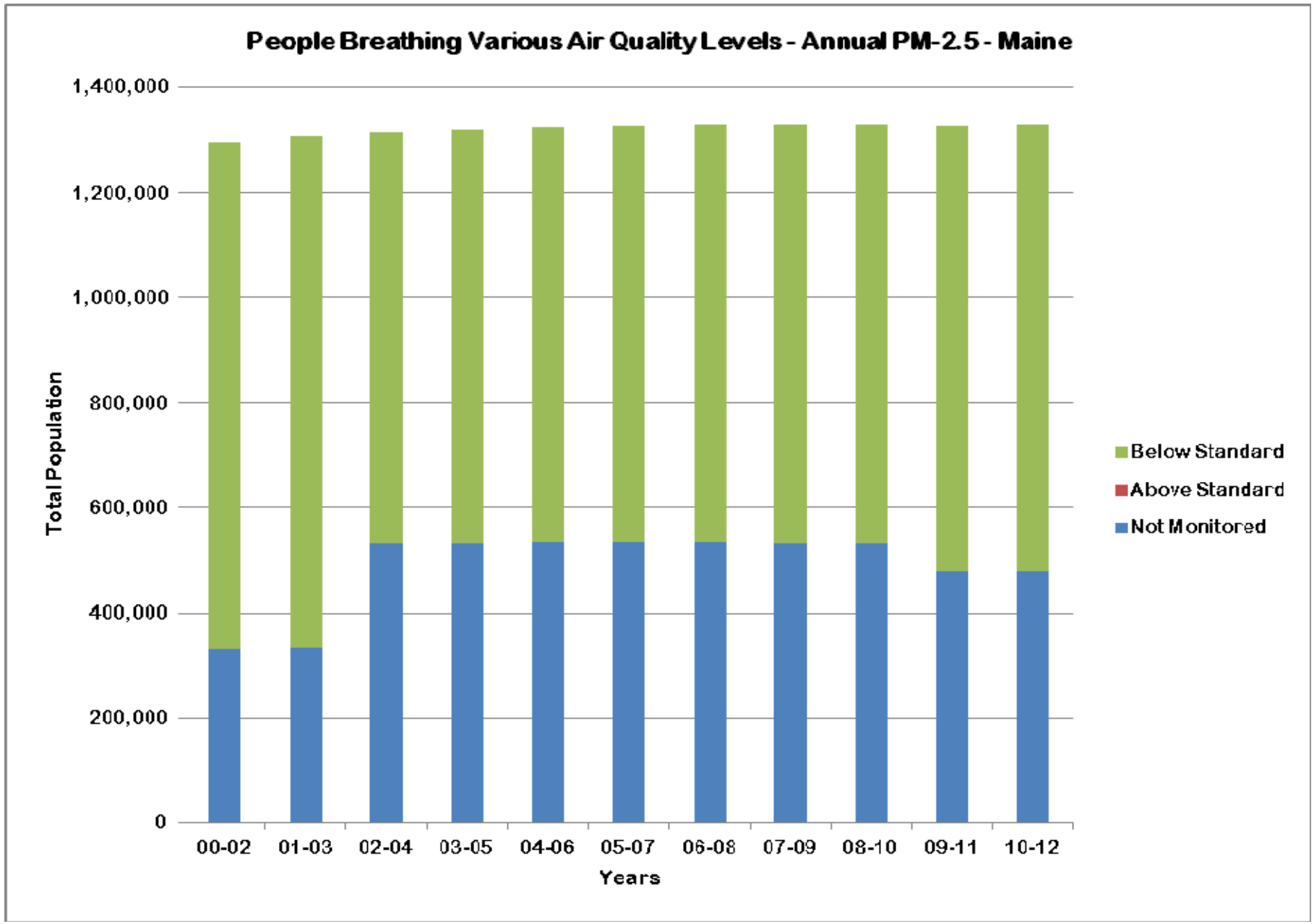

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Maine
Total Population
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure ME-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Maine
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MARYLAND

Ozone

Progress has been made in ozone levels in Maryland. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.2 million people (3.0%). Figure MD-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Maryland. In the 2000 – 2002 time period, approximately 1.1 million people (20.0%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 3.9 million people (65.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MD-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in Maryland. In the 2000 – 2002 time period, approximately 2.1 million people (39.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 3.9 million people (65.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MD-3 shows the distribution of people by year.

Table MD-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Anne Arundel	**550,488**	**0.087**	**F**	**N**	25	A	10.6	A	**N**
Baltimore	**817,455**	**0.083**	**F**	**Y**	24	A	10.3	A	**Y**
Baltimore City	**621,342**	**0.076**	**D**	**N**	26	A	11.0	A	**Y**
Calvert	**89,628**	**0.084**	**F**	**N**	ND	---	ND	---	---
Carroll	**167,217**	**0.079**	**D**	**N**	ND	---	ND	---	---
Cecil	**101,696**	**0.086**	**F**	**N**	ND	---	ND	---	---
Charles	**150,592**	**0.084**	**F**	**N**	ND	---	ND	---	---
Frederick	**239,582**	**0.079**	**D**	**N**	ND	---	ND	---	---
Garrett	29,854	0.075	C	N	ND	---	ND	---	---
Harford	**248,622**	**0.088**	**F**	**Y**	ND	---	ND	---	---
Kent	**20,191**	**0.082**	**D**	**N**	ND	---	ND	---	---
Montgomery	**1,004,709**	**0.077**	**D**	**N**	25	A	10.8	A	**N**
Prince Georges	**881,138**	**0.085**	**F**	**Y**	22	A	8.8	A	**Y**
Washington	149,180	0.075	C	N	ND	---	ND	---	---
Subtotal	**5,071,694**								
Not Monitored	812,869								
Total	**5,884,563**								

DV – Design Value ND - No Data MM – Multiple Monitors

MARYLAND

Table MD-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	620,509	620,961	0	0
C	0	0	0	0	30,147	0	30,222	264,342	1,316,052	817,951	179,034
D	0	0	0	2,239,445	388,283	1,059,839	607,531	2,753,270	3,041,295	3,959,484	2,053,041
F	3,973,971	4,025,554	4,064,457	1,862,935	3,738,118	2,269,056	2,704,716	344,501	0	246,489	2,839,619
Subtotal	3,973,971	4,025,554	4,064,457	4,102,380	4,156,548	3,328,895	3,342,469	3,982,622	4,978,308	5,023,924	5,071,694
NM	1,466,418	1,470,715	1,482,478	1,489,999	1,470,819	2,324,513	2,342,496	1,747,766	795,244	804,365	812,869
Total	5,440,389	5,496,269	5,546,935	5,592,379	5,627,367	5,653,408	5,684,965	5,730,388	5,773,552	5,828,289	5,884,563

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	2,306,628	2,328,561	3,834,864	3,875,132
B	0	0	0	0	1,266,476	2,269,045	2,282,600	1,954,712	1,963,646	0	0
C	1,087,577	1,141,909	1,149,840	2,013,204	2,307,814	1,316,576	1,944,338	0	0	0	0
D	2,236,917	1,285,525	1,921,852	2,068,925	621,109	620,306	0	0	0	0	0
F	768,946	765,905	139,423	0	0	0	0	0	0	0	0
Subtotal	4,093,440	3,193,339	3,211,115	4,282,129	4,195,399	4,205,927	4,226,938	4,261,340	4,292,207	3,834,864	3,875,132
NM	1,346,949	2,302,930	2,335,820	1,510,250	1,431,968	1,447,481	1,458,027	1,469,048	1,481,345	1,993,425	2,009,431
Total	5,440,389	5,496,269	5,546,935	5,592,379	5,627,367	5,653,408	5,684,965	5,730,388	5,773,552	5,828,289	5,884,563

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	1,285,759	2,306,628	4,292,207	3,834,864	3,872,172
B	993,201	1,141,909	1,149,840	2,013,204	2,118,573	2,269,045	2,941,179	1,954,712	0	0	0
C	1,132,347	1,422,397	1,437,053	1,447,365	1,455,717	1,936,882	0	0	0	0	0
D	1,138,999	629,033	624,222	621,560	621,109	0	0	0	0	0	0
F	828,893	0	0	0	0	0	0	0	0	0	0
Subtotal	4,093,440	3,193,339	3,211,115	4,282,129	4,195,399	4,205,927	4,226,938	4,261,340	4,292,207	3,834,864	3,875,132
NM	1,346,949	2,302,930	2,335,820	1,510,250	1,431,968	1,447,481	1,458,027	1,469,048	1,481,345	1,993,425	2,009,431
Total	5,440,389	5,496,269	5,546,935	5,592,379	5,627,367	5,653,408	5,684,965	5,730,388	5,773,552	5,828,289	5,884,563

NM – Not Monitored

Figure MD-1

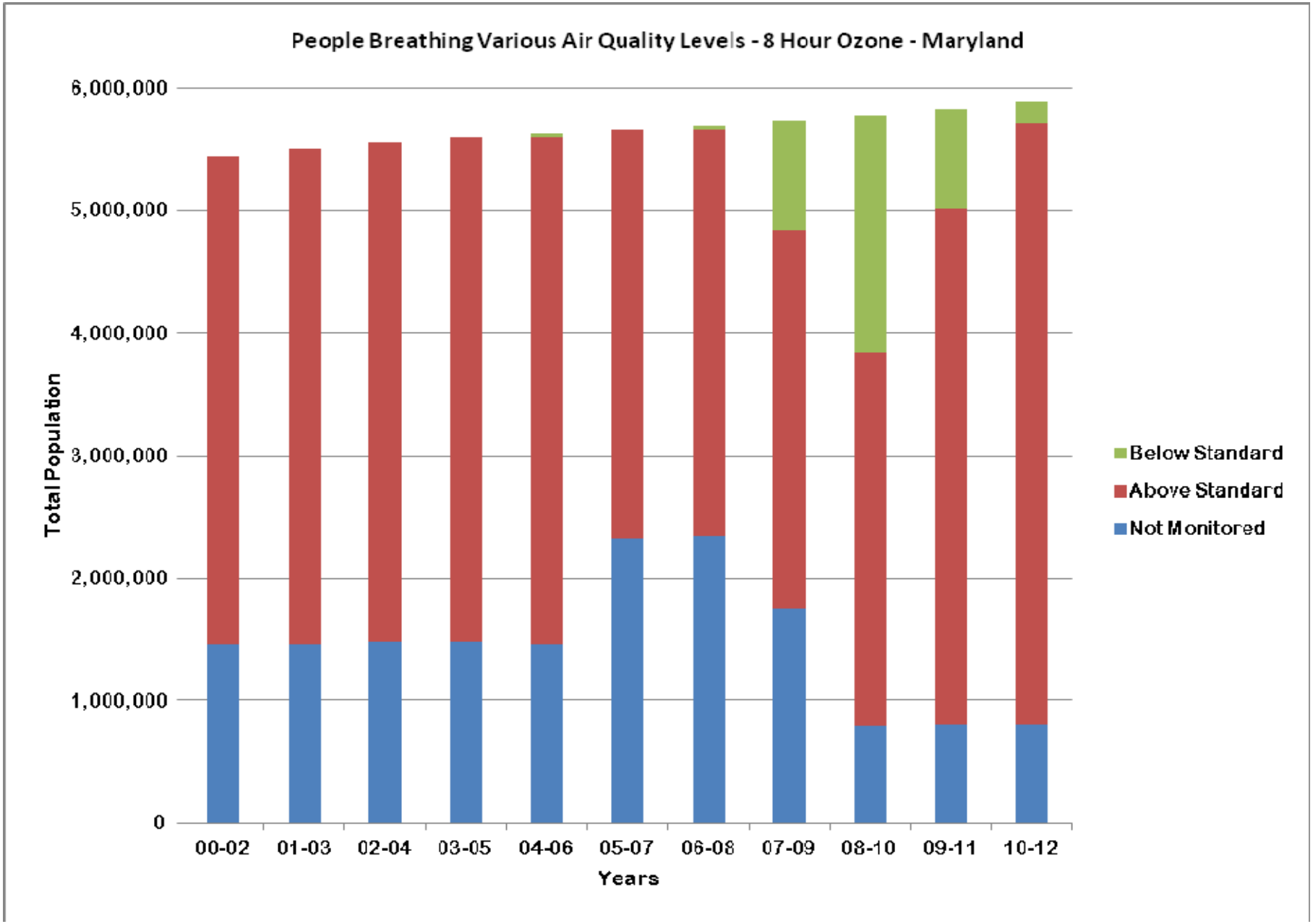

People Breathing Various Air Quality Levels - 8 Hour Ozone - Maryland
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MD-2

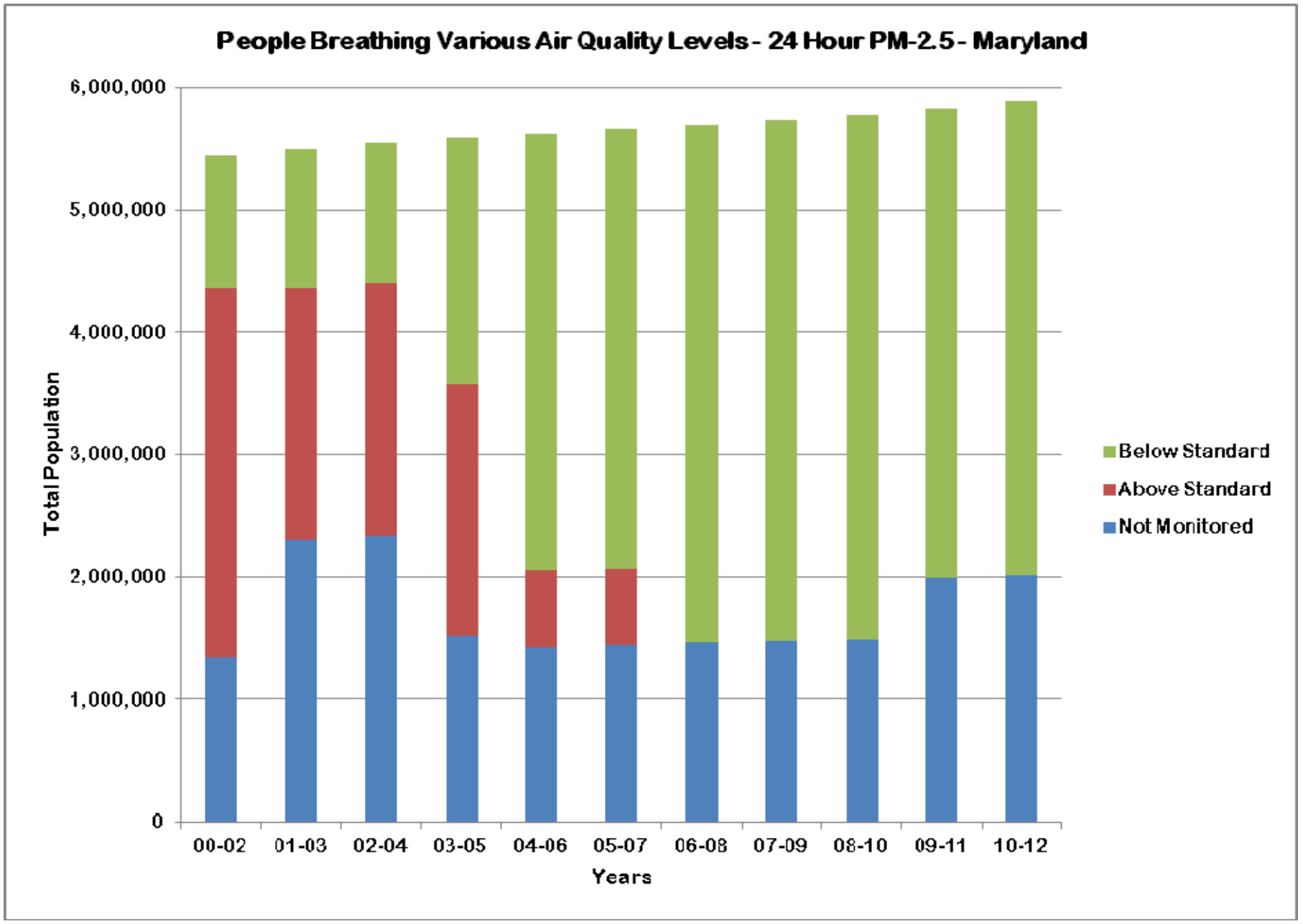
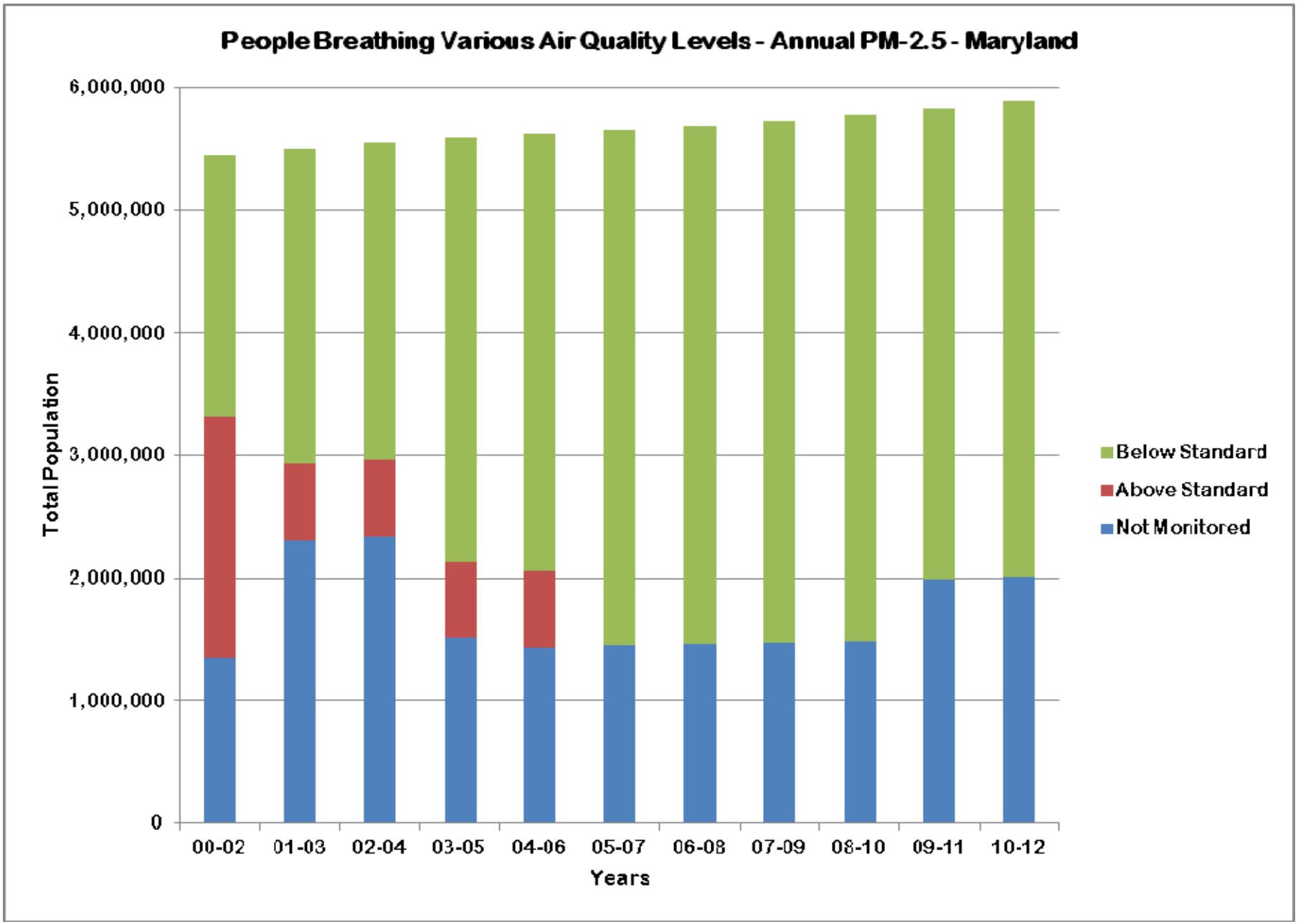

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Maryland
Total Population
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MD-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Maryland
Total Population
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MASSACHUSETTS

Ozone

Significant progress has been made in ozone levels in Massachusetts. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 5.4 million people (80.7%). Figure MA-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in Massachusetts. In the 2000 – 2002 time period, approximately 1.9 million people (30.3%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 4.0 million people (59.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MA-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in Massachusetts. In the 2000 – 2002 time period, approximately 2.4 million people (37.5%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 4.0 million people (59.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MA-3 shows the distribution of people by year.

Table MA-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Barnstable	215,423	0.075	C	N	ND	---	ND	---	---
Berkshire	130,016	ND	---	---	25	A	8.8	A	N
Bristol	551,082	ND	---	---	20	A	7.6	A	N
Dukes	**17,041**	**0.080**	**D**	N	ND	---	ND	---	---
Essex	755,618	0.071	C	Y	19	A	7.5	A	Y
Hampden	465,923	0.074	C	N	23	A	8.6	A	Y
Hampshire	159,795	0.069	C	Y	ND	---	ND	---	---
Middlesex	537,215	0.068	C	N	ND	---	ND	---	---
Norfolk	681,845	0.073	C	N	ND	---	ND	---	---
Plymouth	499,759	ND	---	---	20	A	7.9	A	N
Suffolk	741,426	0.065	B	Y	22	A	9.1	A	Y
Worcester	806,163	0.069	C	Y	21	A	8.6	A	Y
Subtotal	**5,561,306**								
Not Monitored	1,084,838								
Total	**6,646,144**								

DV – Design Value ND - No Data MM- Multiple Monitors

MASSACHUSETTS

Table MA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	702,201	715,214	722,023	2,249,103	744,426
C	0	0	0	2,296,851	687,192	693,368	0	678,588	3,970,566	3,611,889	4,621,982
D	1,433,565	154,621	2,984,587	1,642,705	3,803,960	2,870,941	4,716,469	4,085,679	1,262,042	16,766	17,041
F	2,848,871	4,259,095	2,067,518	1,880,117	1,350,634	2,297,437	478,185	462,777	0	0	0
Subtotal	4,282,436	4,413,716	5,052,105	5,819,673	5,841,786	5,861,746	5,896,855	5,942,258	5,954,631	5,877,758	5,383.449
NM	2,134,770	2,008,849	1,360,176	583,617	568,298	569,813	572,112	575,355	592,998	709,778	1,262,695
Total	6,417,206	6,422,565	6,412,281	6,403,290	6,410,084	6,431,559	6,468,967	6,517,613	6,547,629	6,587,536	6,646,144

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	153,461	0	0	545,437	1,273,942	1,275,952	2,757,866	4,915,926	5,404,732	5,440,002	3,952,987
B	1,793,303	0	691,272	1,901,769	2,091,293	2,563,216	2,576,844	462,777	0	0	0
C	0	484,245	1,078,927	593,710	461,408	0	0	0	0	0	0
D	458,780	0	0	0	0	0	0	0	0	0	0
F	0	460,673	0	0	0	0	0	0	0	0	0
Subtotal	2,405,544	944,918	1,770,199	3,040,916	3,826,643	3,839,168	5,334,710	5,378,703	5,404,732	5,440,002	3,952,987
NM	4,011,662	5,477,647	4,642,082	3,362,374	2,583,441	2,592,391	1,134,257	1,138,910	1,142,897	1,147,534	2,693,157
Total	6,417,206	6,422,565	6,412,281	6,403,290	6,410,084	6,431,559	6,468,967	6,517,613	6,547,629	6,587,536	6,646,144

People Breathing Year round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	635,553	484,245	1,078,927	1,893,169	3,139,451	3,839,168	5,334,710	5,378,703	5,404,732	5,440,002	3,952,987
B	1,311,211	460,673	691,272	1,147,747	687,192	0	0	0	0	0	0
C	458,780	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,405,544	944,916	1,770,199	3,040,916	3,826,643	3,839,168	5,334,710	5,378,703	5,404,732	5,440,002	3,952,987
NM	4,011,662	5,477,647	4,642,082	3,362,374	2,583,441	2,592,391	1,134,257	1,138,910	1,142,897	1,147,534	2,693,157
Total	6,417,206	6,422,565	6,412,281	6,403,290	6,410,084	6,431,559	6,468,967	6,517,613	6,547,629	6,587,536	6,646,144

NM – Not Monitored

Figure MA-1

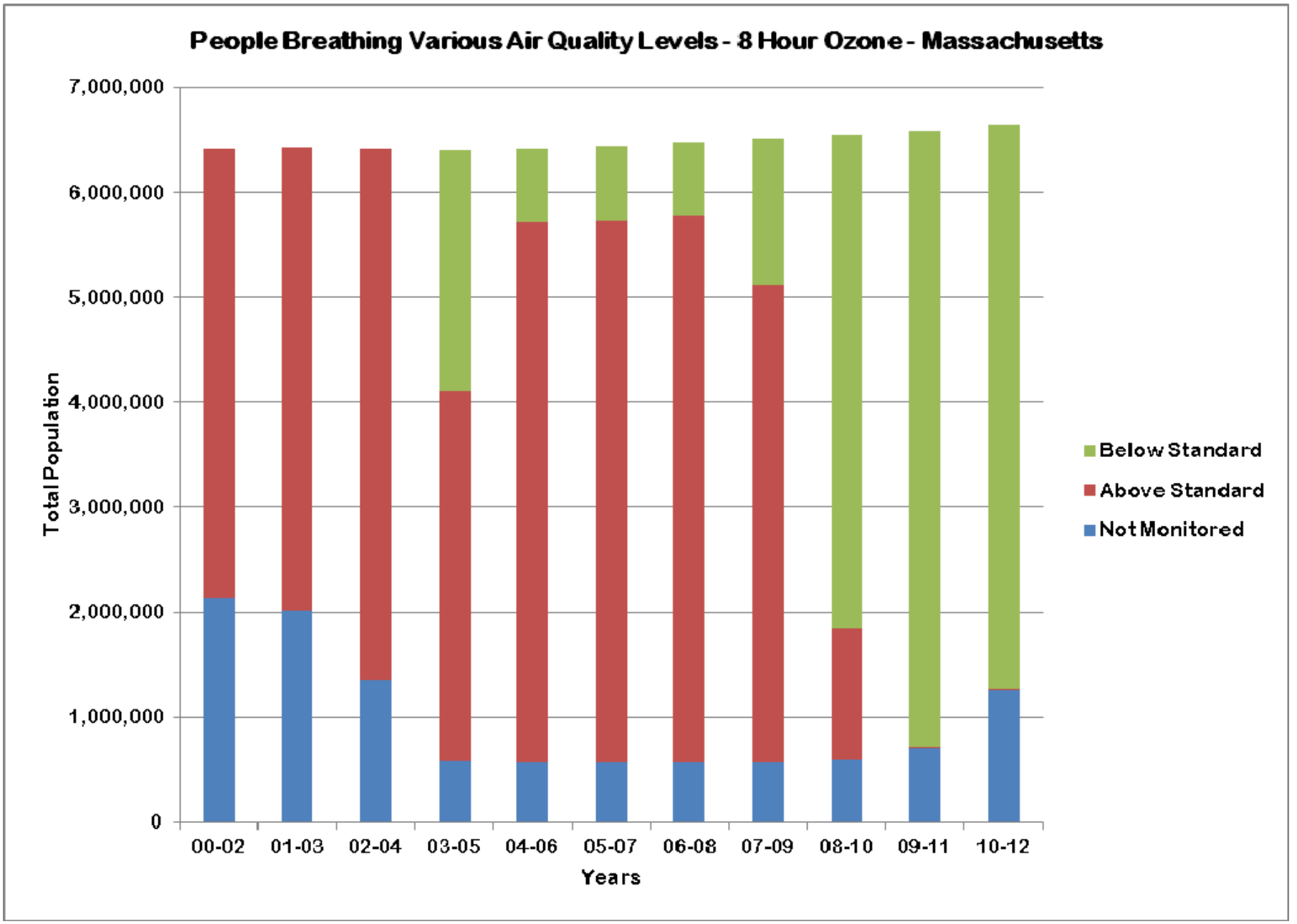

People Breathing Various Air Quality Levels - 8 Hour Ozone - Massachusetts
Total Population
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MA-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Massachusetts
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Massachusetts
Total Population
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MICHIGAN

Ozone

Significant progress has been made in ozone levels in Michigan. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.8 million people (18.0%). Figure MI-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Michigan. In the 2000 – 2002 time period, approximately 1.7 million people (16.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 6.8 million people (68.6%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MI-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Michigan. In the 2000 – 2002 time period, approximately 3.5 million people (35.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 6.8 million people (68.6%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MI-3 shows the distribution of people by year.

MICHIGAN

Table MI-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Allegan	**112,039**	**0.084**	**F**	**N**	25	A	8.5	A	N
Bay	106,935	ND	---	---	25	A	7.9	A	N
Benzie	17,465	0.075	C	N	ND	---	ND	---	---
Berrien	**156,067**	**0.082**	**D**	**N**	22	A	8.7	A	N
Cass	**52,242**	**0.078**	**D**	**N**	ND	---	ND	---	---
Chippewa	38,917	0.064	B	N	ND	---	ND	---	---
Clinton	76,001	0.071	C	Y	ND	---	ND	---	---
Genesee	418,408	0.075	C	Y	22	A	8.5	A	N
Huron	32,463	0.074	C	N	ND	---	ND	---	---
Ingham	281,723	0.072	C	N	23	A	8.8	A	N
Kalamazoo	254,580	0.075	C	N	23	A	9.3	A	N
Kent	614,462	0.074	C	Y	25	A	9.5	A	Y
Lenawee	**98,987**	**0.076**	**D**	**N**	24	A	9.2	A	N
Macomb	**847,383**	**0.079**	**D**	**N**	24	A	8.7	A	N
Manistee	24,672	0.074	C	N	19	A	6.7	A	N
Mason	28,680	0.076	D	N	ND	---	ND	---	---
Missaukee	15,031	0.070	C	N	17	A	6.0	A	N
Monroe	151,048	ND	---	---	25	A	9.6	A	N
Muskegon	**170,182**	**0.082**	**D**	**N**	23	A	8.5	A	N
Oakland	**1,220,657**	**0.078**	**D**	**N**	25	A	9.1	A	N
Ottawa	**269,099**	**0.078**	**D**	**N**	ND	---	ND	---	---
Schoolcraft	8,343	0.075	C	N	ND	---	ND	---	---
St. Clair	**160,644**	**0.077**	**D**	**N**	24	A	9.1	A	N
Washtenaw	**350,946**	**0.076**	**D**	**N**	23	A	9.4	A	N
Wayne	**1,792,365**	**0.078**	**D**	**Y**	26	A	10.2	A	Y
Subtotal	**7,299,339**								
Not Monitored	2,576,878								
Total	**9,876,187**								

DV – Design Value ND - No Data MM – Multiple Monitors

MICHIGAN

Table MI-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	501,358	90,380	38,917
C	0	0	0	0	3,805,133	15,009	1,455,890	4,358,405	6,489,227	5,772,729	1,743,148
D	944,823	15,031	3,258,025	5,604,281	3,007,209	4,732,781	5,485,999	2,645,402	0	1,124,681	5,147,252
F	6,137,725	7,025,788	3,792,065	1,457,654	284,866	2,321,749	111,589	0	0	0	112,039
Subtotal	7,082,548	7,040,819	7,050,090	7,061,935	7,097,208	7,065,539	7,053,478	7,003,808	6,990,585	6,987,790	7,041,356
NM	2,933,162	3,000,333	3,005,225	2,989,202	2,938,873	2,931,745	2,893,411	2,897,784	2,893,055	2,888,397	2,842,004
Total	10,015,710	10,041,152	10,055,315	10,051,137	10,036,081	10,001,284	9,946,889	9,901,591	9,883,640	9,876,187	9,883,360

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	38,789	247,292	54,089	15,043	15,009	729,425	1,124,676	3,319,002	6,765,417	6,776,129
B	369,927	318,314	995,315	207,368	685,342	683,540	852,852	4,023,247	3,185,986	0	0
C	1,299,228	1,306,283	2,699,400	1,602,538	393,260	393,133	1,865,058	1,364,901	0	0	0
D	2,083,450	2,260,265	2,134,947	1,936,817	939,209	153,424	0	0	0	0	0
F	2,173,694	2,155,901	0	3,484,099	2,085,950	2,246,302	0	0	0	0	0
Subtotal	5,926,299	6,079,552	6,076,954	7,284,911	4,118,804	3,491,408	3,447,335	6,512,824	6,504,981	6,765,417	6,776,129
NM	4,089,411	3,961,600	3,978,361	2,766,226	5,917,277	6,509,876	6,499,554	3,388,767	3,378,652	3,110,770	3,107,231
Total	10,015,710	10,041,162	10,055,315	10,051,137	10,036,081	10,001,284	9,946,889	9,901,591	9,883,640	9,876,187	9,883,380

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	209,323	357,103	959,021	1,145,248	567,363	564,545	841,014	4,675,288	6,504,988	6,765,417	6,776,129
B	880,432	1,949,274	2,982,986	2,655,564	1,121,473	527,137	2,606,321	1,837,536	0	0	0
C	2,420,913	1,617,274	151,117	1,523,836	497,478	2,399,726	0	0	0	0	0
D	390,498	2,155,901	1,983,830	1,960,263	1,932,490	0	0	0	0	0	0
F	2,025,133	0	0	0	0	0	0	0	0	0	0
Subtotal	5,926,299	6,079,552	6,076,954	7,284,911	4,118,804	3,491,408	3,447,335	6,512,824	6,504,981	6,765,417	6,776,129
NM	4,089,411	3,961,600	3,978,361	2,766,226	5,917,277	6,509,876	6,499,554	3,388,767	3,378,652	3,110,770	3,107,231
Total	10,015,710	10,041,162	10,055,315	10,051,137	10,036,081	10,001,284	9,946,889	9,904,591	9,883,640	9,876,187	9,883,380

NM – Not Monitored

Figure MI-1

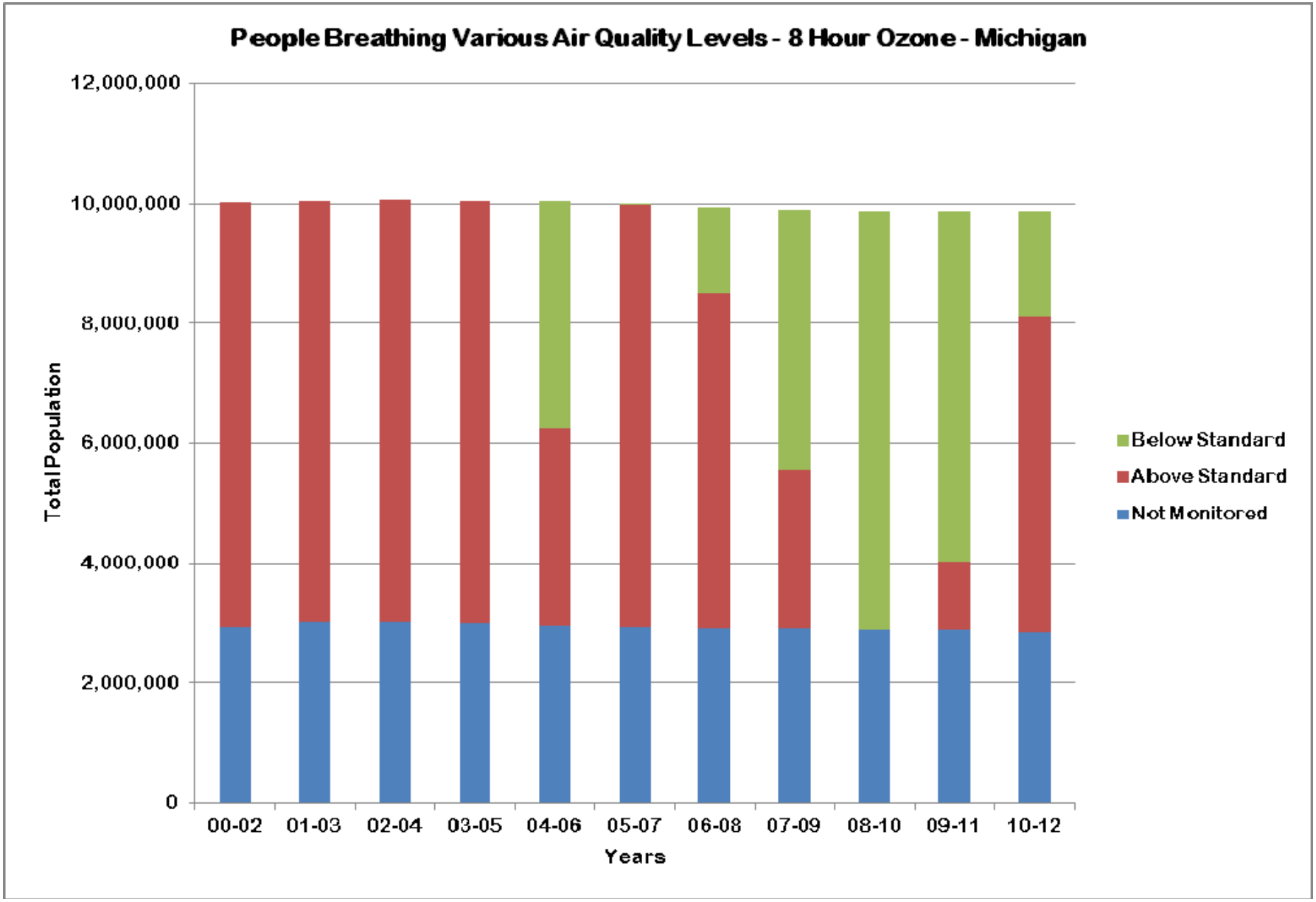

People Breathing Various Air Quality Levels - 8 Hour Ozone - Michigan
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MI-2

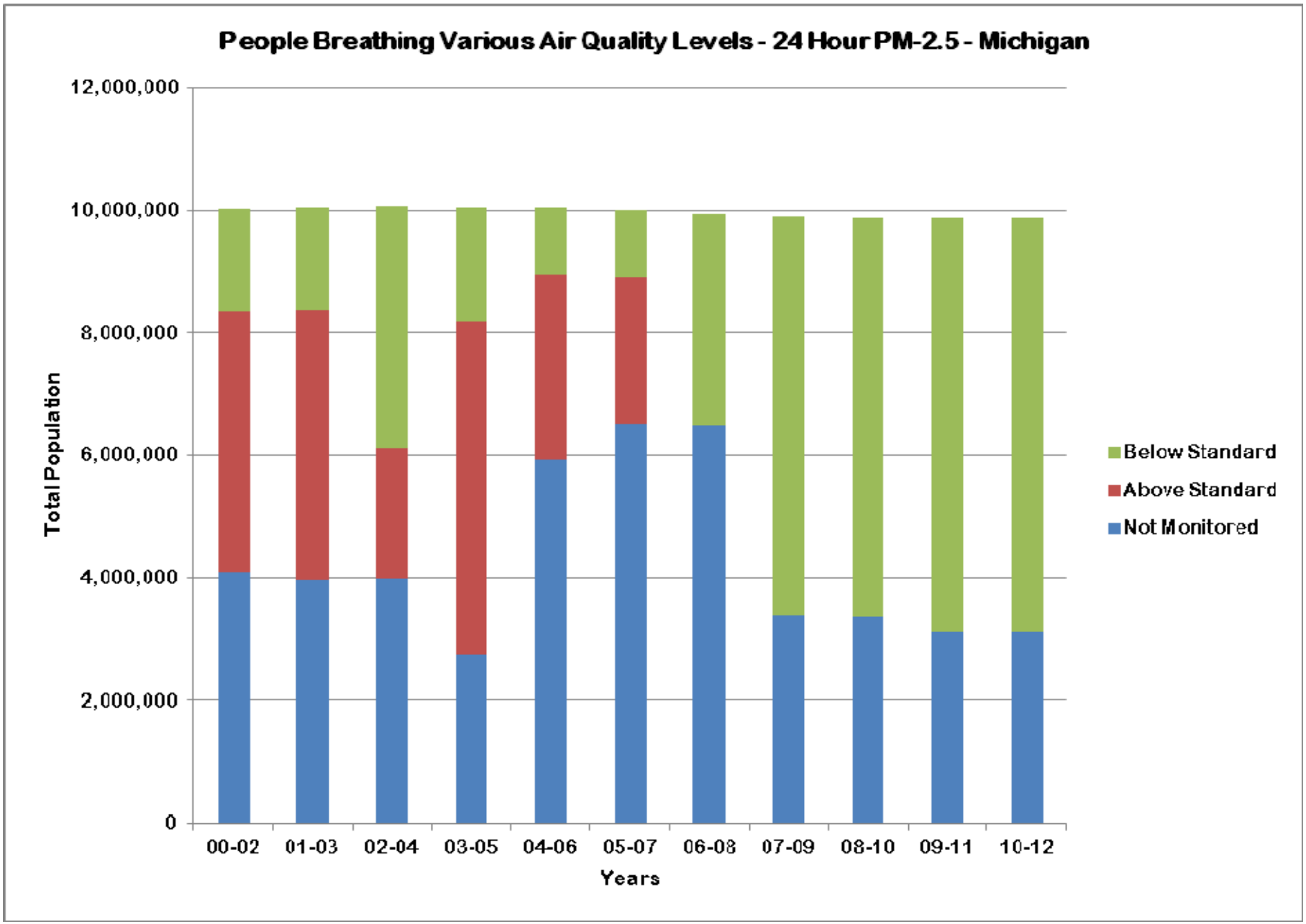
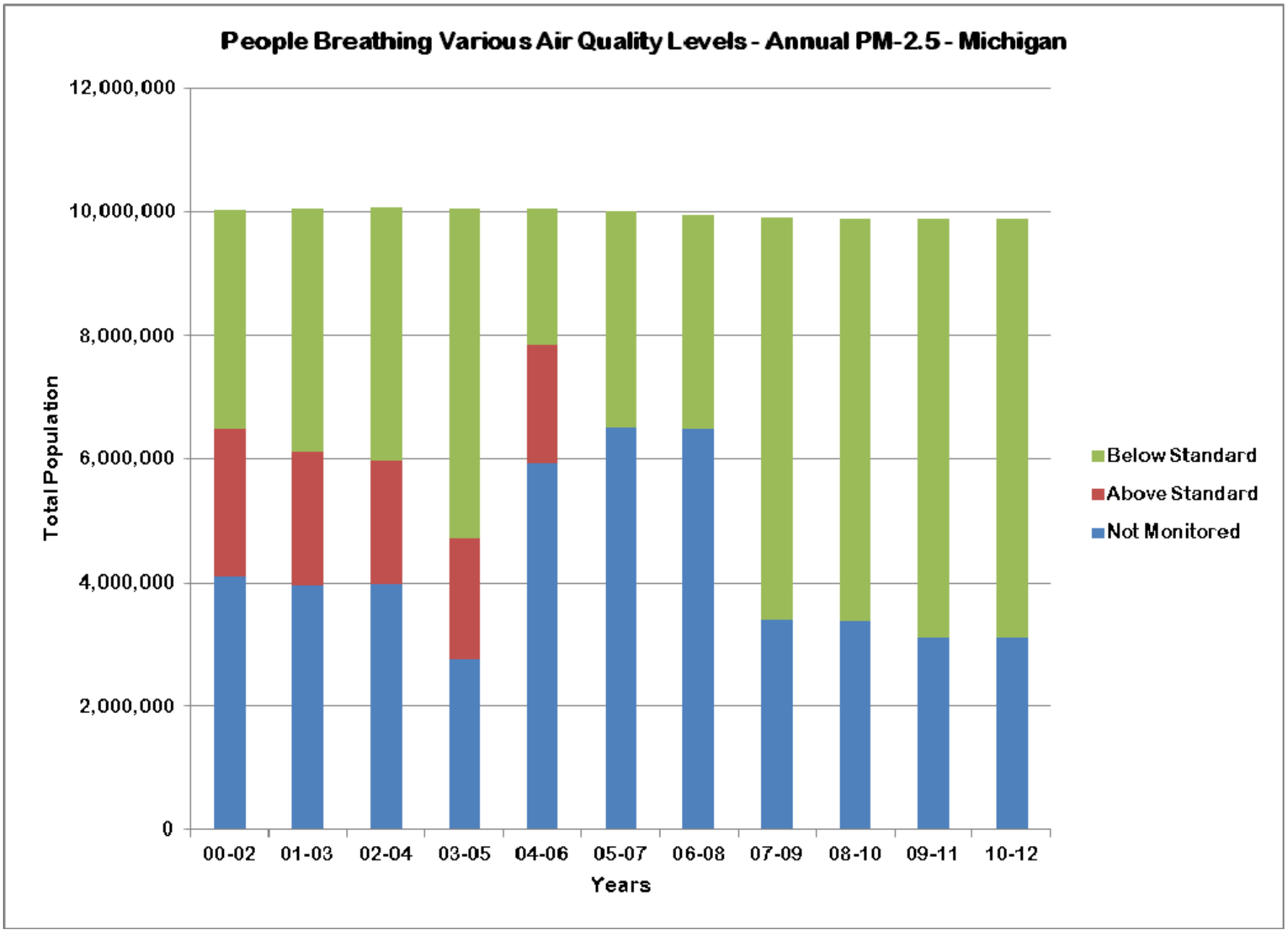

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Michigan
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MI-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Michigan
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MINNESOTA

Ozone

Ozone levels in Minnesota have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.1 million people (21.9%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.3 million people (24.9%). The remainder of the population lived in counties where ozone was not measured. Figure MN-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Minnesota have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.4 million people (46.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 3.1 million people (57.3%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MN-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Minnesota have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.4 million people (46.9%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 3.1 million people (57.3%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MN-3 shows the distribution of people by year.

Table MN-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg.24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Anoka	336,414	0.066	B	Y	23	A	8.1	A	N
Becker	33,000	0.061	B	N	ND	---	ND	---	---
Carlton	35,348	0.055	A	N	ND	---	ND	---	---
Crow Wing	62,882	0.062	B	N	ND	---	ND	---	---
Dakota	405,088	ND	---	---	25	A	9.0	A	N
Goodhue	46,336	0.063	B	N	ND	---	ND	---	---
Hennepin	1,184,576	ND	---	---	25	A	8.8	A	N
Lake	10,818	0.060	B	N	ND	---	ND	---	---
Lyon	25,543	0.065	B	N	ND	---	ND	---	---
Mille Lacs	25,740	0.060	B	N	ND	---	ND	---	---
Olmsted	147,056	0.064	B	N	25	B	9.0	A	N
Ramsey	520,152	ND	---	---	28	B	9.5	A	Y
St. Louis	200,319	0.057	A	Y	17	A	5.5	A	N
Scott	135,152	0.063	B	N	25	A	8.6	A	N
Stearns	51,606	0.061	B	N	24	A	8.5	A	N
Wright	127,336	0.064	B	N	ND	---	ND	---	---
Subtotal	**3,347,366**								
Not Monitored	1,997,495								
Total	**5,344,861**								

DV – Design Value ND - No Data MM – Multiple Monitors

MINNESOTA

Table MN-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	144,256	0	199,745	232,605	420,335	456,634	235,667
B	211,647	211,238	612,263	637,701	772,852	380,090	770,045	1,009,171	1,076,539	1,088,162	1,101,883
C	887,135	898,037	532,580	675,890	464,664	963,685	354,859	235,684	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,098,782	1,109,275	1,144,843	1,313,591	1,881,772	1,343,725	1,324,649	1,477,460	1,496,874	1,544,796	1,337,550
NM	3,920,153	3,944,297	3,942,870	3,806,007	3,781,783	3,863,428	3,922,369	3,803,843	3,807,051	3,800,065	4,041,589
Total	5,018,935	5,053,572	5,087,713	5,119,598	5,163,555	5,207,203	5,247,018	5,281,203	5,303,925	5,344,861	5,379,139

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	224,099	2,092,834	2,606,611	2,010,308	2,521,155	2,541,290	2,561,532	504,551	350,868	1,006,278	2,413,155
B	2,128,695	505,958	0	632,513	0	0	0	1,687,148	1,825,153	351,598	667,218
C	0	0	0	0	0	0	0	506,590	0	1,848,762	0
D	0	0	0	0	0	0	0	0	508,640	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,352,794	2,598,792	2,606,611	2,642,821	2,521,155	2,541,293	2,561,532	2,698,289	2,684,661	3,206,638	3,080,373
NM	2,666,141	2,454,780	2,481,102	2,476,777	2,642,400	2,665,913	2,685,486	2,582,914	2,619,264	2,138,223	2,298,766
Total	5,018,935	5,053,572	5,087,713	5,119,598	5,163,555	5,207,203	5,247,018	5,281,203	5,303,925	5,344,861	5,379,139

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,352,794	2,598,792	2,606,611	2,642,821	2,521,155	2,541,290	2,561,532	2,698,289	2,684,661	3,206,638	3,080,373
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,352,794	2,598,792	2,606,611	2,642,821	2,521,155	2,541,293	2,561,532	2,698,289	2,684,661	3,206,638	3,080,373
NM	2,666,141	2,454,780	2,481,102	2,476,777	2,642,400	2,665,913	2,685,486	2,582,914	2,619,264	2,138,223	2,298,766
Total	5,018,935	5,053,572	5,087,713	5,119,598	5,163,555	5,207,203	5,247,018	5,281,203	5,303,925	5,344,861	5,379,139

NM – Not Monitored

Figure MN-1

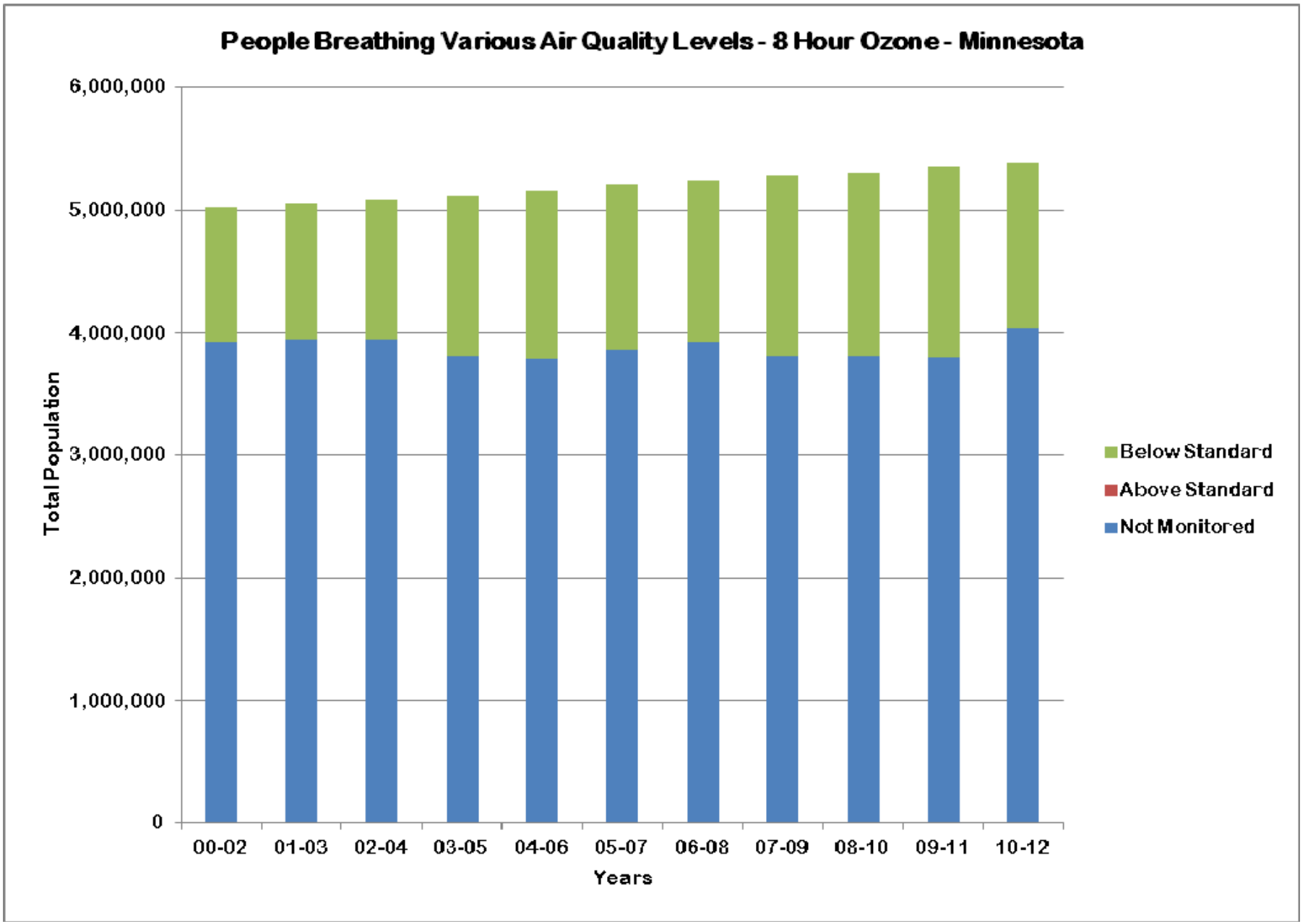

People Breathing Various Air Quality Levels - 8 Hour Ozone - Minnesota
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MN-2

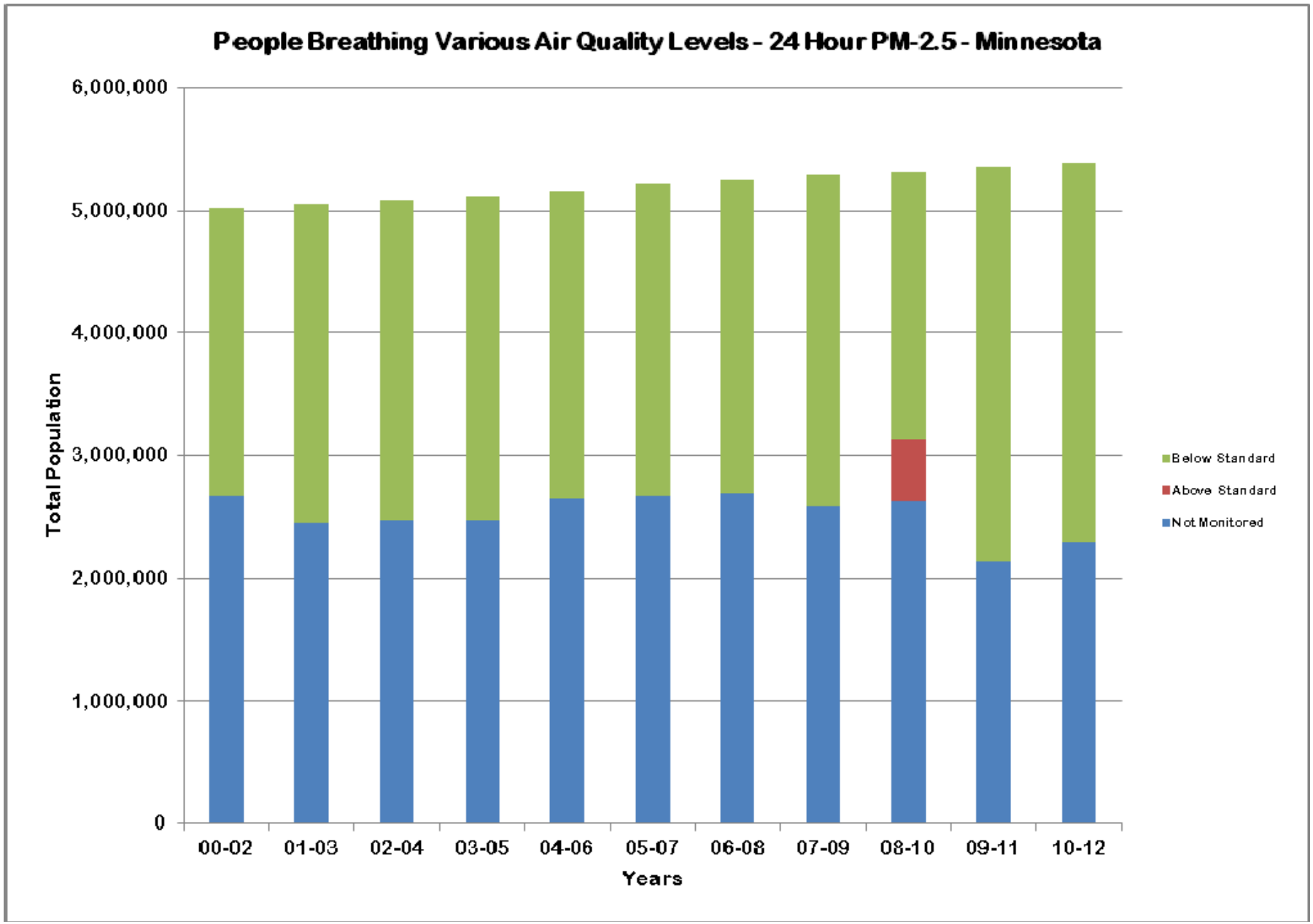

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Minnesota
Total Population
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MN-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Minnesota
Total Population
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MISSISSIPPI

Ozone

Significant progress has been made in ozone levels in Mississippi. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.0 million people (33.3%). The remainder of the population lived in counties where ozone was not measured. Figure MS-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Mississippi have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.4 million people (47.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.1 million people (37.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MS-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Mississippi have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.4 million people (47.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 1.1 million people (37.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MS-3 shows the distribution of people by year.

Table MS-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg.24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Bolivar	33,904	0.074	C	N	ND	---	ND	---	---
DeSoto	166,234	0.074	C	N	19	A	9.8	A	N
Forrest	76,894	ND	---	---	22	A	11.5	A	N
Grenada	21,682	ND	---	---	19	A	9.5	A	N
Hancock	45,255	0.068	C	N	19	A	9.6	A	N
Harrison	194,029	0.073	C	N	18	A	9.9	A	N
Hinds	248,643	0.069	C	N	21	A	11.0	A	N
Jackson	140,298	0.073	C	N	20	A	9.4	A	N
Jones	68,641	ND	---	---	22	A	11.6	A	N
Lauderdale	80,220	0.064	B	N	21	A	10.8	A	N
Lee	85,042	0.066	B	N	21	A	10.6	A	N
Subtotal	**1,160,842**								
Not Monitored	1,824,084								
Total	**2,984,926**								

DV - Design Value ND - No Data MM – Multiple Monitors

MISSISSIPPI

Table MS-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	324,749	440,753	489,531	828,363
C	0	575,045	523,633	440,286	473,058	359,996	473,522	149,191	335,065	528,765	165,262
D	973,081	490,579	412,038	505,286	132,717	250,450	476,740	483,812	187,105	0	0
F	118,603	0	130,767	0	319,669	329,742	0	0	0	0	0
Subtotal	1,091,684	1,065,624	1,066,438	945,572	925,444	940,188	950,262	957,752	962,923	1,018,296	993,625
NM	1,766,997	1,802,688	1,822,572	1,960,371	1,979,534	1,988,162	1,997,544	2,001,022	2,004,374	1,960,216	1,991,301
Total	2,858,681	2,868,312	2,889,010	2,905,943	2,904,978	2,928,350	2,947,806	2,958,774	2,967,297	2,978,512	2,984,926

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	370,891	498,030	589,691	32,674	0	315,082	927,921	1,181,757	1,127,524	1,118,081	1,126,938
B	498,700	820,888	846,236	1,178,760	988,309	618,602	223,015	0	0	0	0
C	489,894	97,946	0	59,237	139,080	206,676	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,359,485	1,416,864	1,435,927	1,270,671	1,127,389	1,140,360	1,150,936	1,181,757	1,127,524	1,118,081	1,126,938
NM	1,499,196	1,451,448	1,453,083	1,635,272	1,777,589	1,787,990	1,796,870	1,777,017	1,839,773	1,860,431	1,857,988
Total	2,858,681	2,868,312	2,889,010	2,905,943	2,904,978	2,928,350	2,947,806	2,958,774	2,967,297	2,978,512	2,984,926

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10-12
A	270,933	482,158	539,851	32,674	33,200	347,971	544,401	959,176	984,829	1,118,081	1,126,938
B	444,771	869,793	830,780	1,172,126	780,171	651,572	465,021	222,581	142,695	0	0
C	643,781	64,913	65,296	65,871	313,998	140,817	141,514	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,359,485	1,416,864	1,435,927	1,270,671	1,127,389	1,140,360	1,150,936	1,181,757	1,127,524	1,118,081	1,126,938
NM	1,499,196	1,451,448	1,453,083	1,635,272	1,777,589	1,787,990	1,796,870	1,777,017	1,839,773	1,860,431	1,857,988
Total	2,858,681	2,868,312	2,889,010	2,905,943	2,904,978	2,928,350	2,947,806	2,958,774	2,967,297	2,978,512	2,984,926

NM – Not Monitored

Figure MS-1

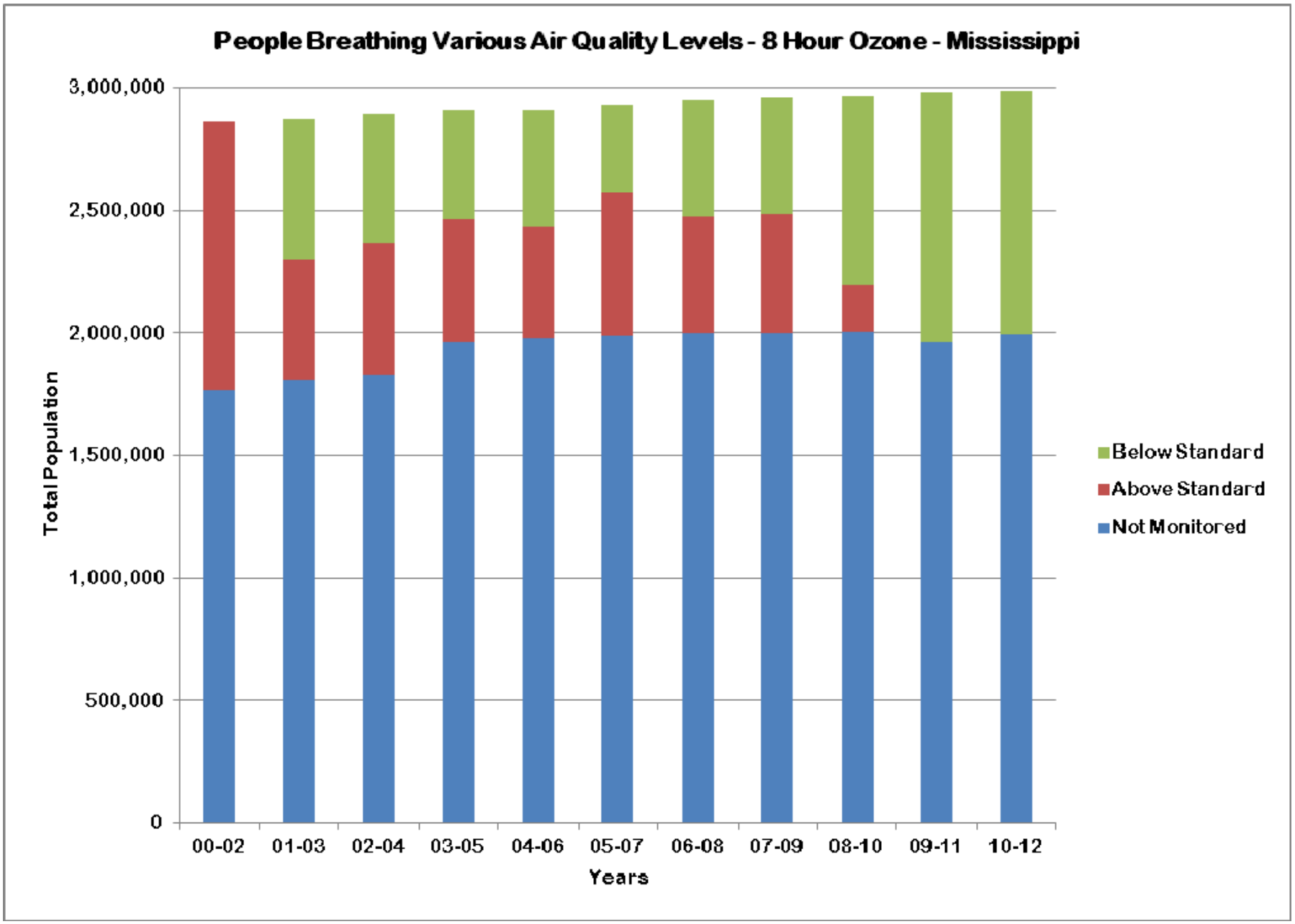

People Breathing Various Air Quality Levels - 8 Hour Ozone - Mississippi
Total Population
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MS-2

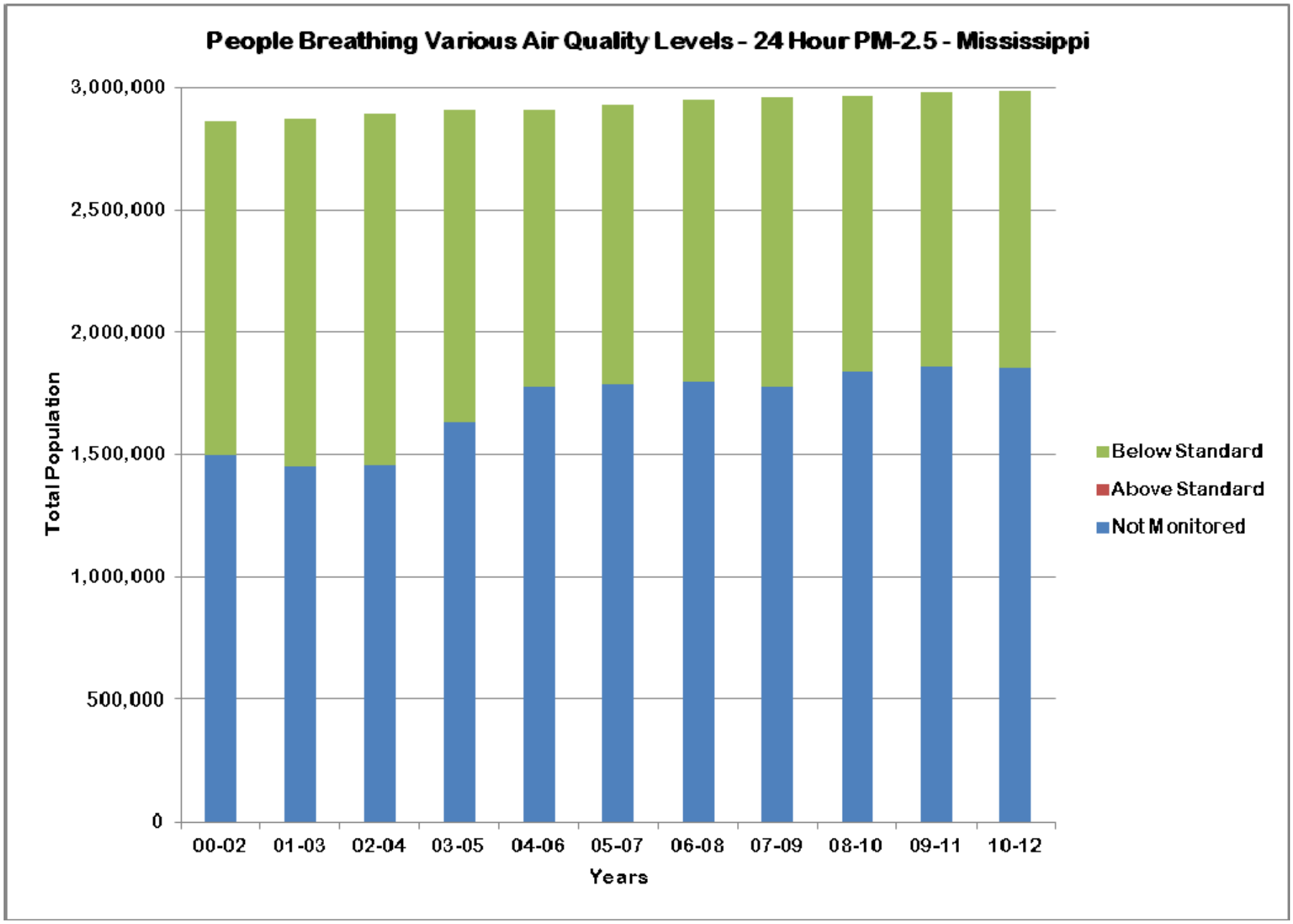
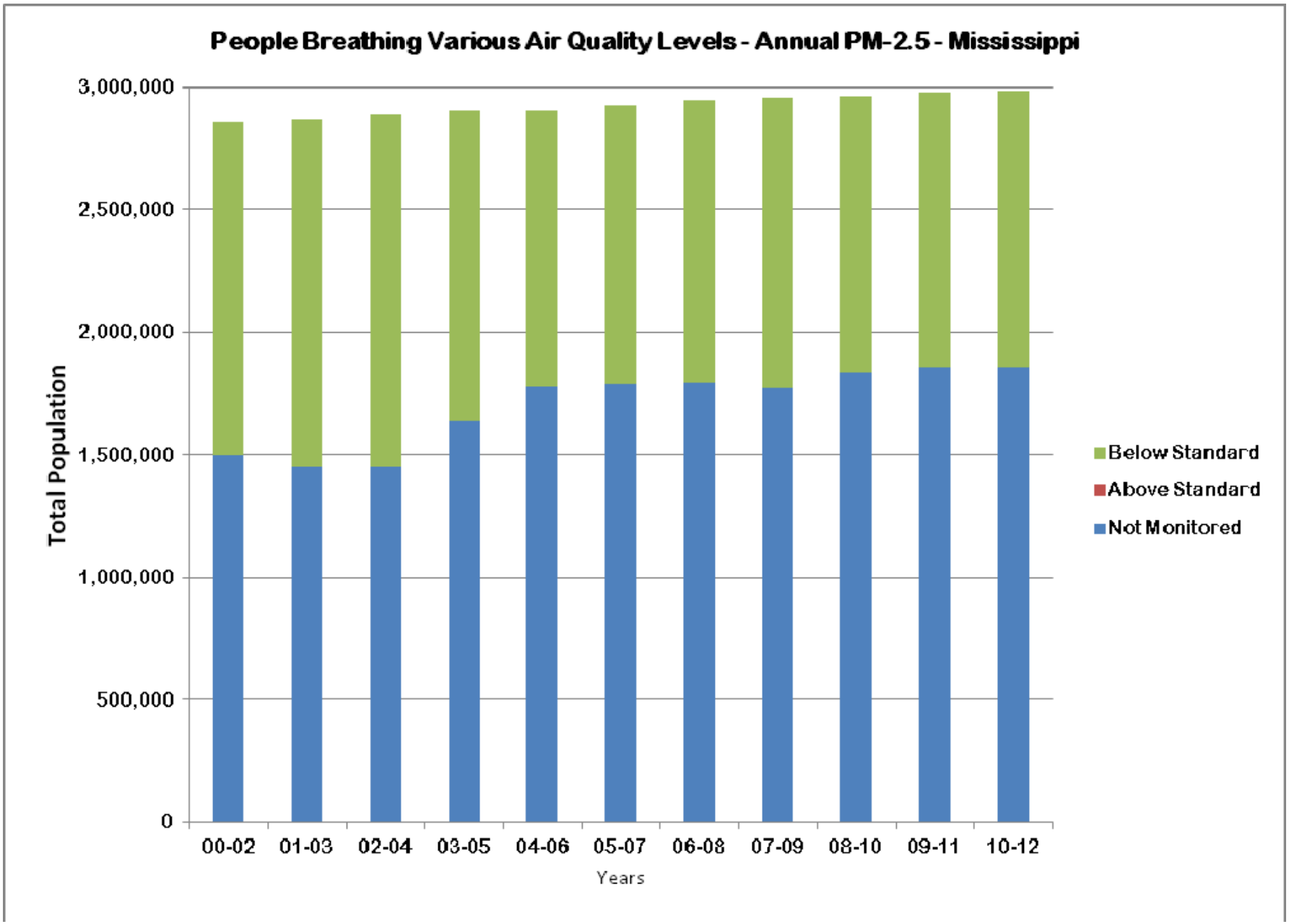

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Mississippi
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MS-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Mississippi
Total Population
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MISSOURI

Ozone

Significant progress has been made in ozone levels in Missouri. In the 2000 – 2002 time period, approximately 0.2 million people (4.3%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.7 million people (11.4%). Figure MO-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Missouri have historically been better than the standard except for 2000 - 2003. In the 2000 – 2002 time period, approximately 2.8 million people (48.8%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.2 million people (36.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MO-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Missouri have historically been better than the standard except for 2000 - 2002. In the 2000 – 2002 time period, approximately 2.7 million people (48.2%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 2.2 million people (36.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MO-3 shows the distribution of people by year.

Table MO-1
2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Andrew	**17,417**	**0.076**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Boone	168,535	0.072	C	N	ND	---	ND	---	---
Callaway	44,305	0.070	C	N	ND	---	ND	---	---
Cass	100,376	0.072	C	N	ND	---	ND	---	---
Cedar	13,799	0.074	C	N	ND	---	ND	---	---
Clay	**227,577**	**0.079**	**D**	**Y**	**ND**	**---**	**ND**	**---**	**---**
Clinton	**20,508**	**0.080**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Greene	280,676	0.073	C	Y	ND	---	ND	---	----
Jackson	627,377	ND	---	---	25	A	10.5	A	N
Jasper	**115,258**	**0.078**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Jefferson	**220,209**	**0.079**	**D**	**N**	23	A	10.1	A	N
Lincoln	**53,354**	**0.080**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Monroe	8,703	0.071	C	N	ND	---	ND	---	---
Perry	**19,018**	**0.078**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
St. Charles	**368,666**	**0.083**	**F**	**Y**	ND	---	ND	---	---
St. Genevieve	17,740	0.075	C	N	ND	---	ND	---	---
St. Louis	**1,000,438**	**0.078**	**D**	**Y**	26	A	10.9	A	N
St. Louis City	**318,172**	**0.079**	**D**	**N**	ND	---	ND	---	---
Taney	52,956	0.070	C	N	ND	---	ND	---	---
Subtotal	**3,675,084**								
Not Monitored	2,335,604								
Total	**6,010,688**								

DV – Design Value ND - No Data MM – Multiple Monitors

MISSOURI

Table MO-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	107,849	397,474	218,781	0
C	245,822	249,312	353,143	359,011	380,988	0	392,273	1,844,156	1,986,749	2,378,488	687,040
D	434,361	525,739	848,932	1,530,055	1,864,178	407,667	1,641,218	448,066	360,485	385,940	1,991,951
F	1,820,953	1,739,592	1,327,542	653,837	337,952	2,188,695	351,179	0	0	0	368,666
Subtotal	2,501,136	2,514,643	2,529,617	2,542,903	2,583,118	2,586,362	2,384,670	2,400,071	2,744,708	2,983,209	2,047,657
NM	3,173,689	3,194,760	3,218,124	3,247,397	3,259,586	3,301,250	3,539,246	3,561,017	3,244,219	3,027,479	2,974,331
Total	5,674,825	5,709,403	5,747,741	5,790,300	5,842,704	5,887,612	5,923,916	5,961,088	5,988,927	6,010,688	6,021,988

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	100,554	13,975	367,216	0	533,772	96,845	1,689,061	681,750	594,468	1,008,377	2,216,192
B	1,297,516	1,392,533	1,308,788	1,180,686	1,887,221	1,229,490	1,550,881	318,842	0	0	0
C	1,370,855	1,364,732	650,717	2,086,980	871,188	1,895,984	0	0	0	0	0
D	303,224	311,405	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,072,149	3,082,645	2,326,721	3,267,666	3,292,181	3,222,319	3,239,942	1,000,592	594,468	1,008,377	2,216,196
NM	2,602,676	2,626,758	3,421,020	2,522,634	2,550,523	2,665,293	2,683,974	4,960,496	5,394,459	5,002,311	3,794,492
Total	5,674,825	5,709,403	5,747,741	5,790,300	5,842,704	5,887,612	5,923,916	5,961,088	5,988,927	6,010,688	6,021,988

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	109,813	111,269	367,216	722,753	740,141	575,600	1,249,565	681,750	275,174	690,308	2,219,192
B	1,181,573	2,199,227	1,628,517	1,662,701	2,018,804	2,113,812	1,672,422	318,842	319,294	318,069	0
C	1,442,306	772,149	330,988	882,212	533,236	532,907	317,955	0	0	0	0
D	338,457	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,072,149	3,082,645	2,326,721	3,267,666	3,292,181	3,222,319	3,239,942	1,000,592	594,468	1,008,377	2,216,196
NM	2,602,676	2,626,758	3,421,020	2,522,634	2,550,523	2,665,293	2,683,974	4,960,496	5,394,459	5,002,311	3,791,492
Total	5,674,825	5,709,403	5,747,741	5,790,300	5,842,704	5,887,612	5,923,916	5,961,088	5,988,927	6,010,688	6,021,988

NM – Not Monitored

Figure MO-1

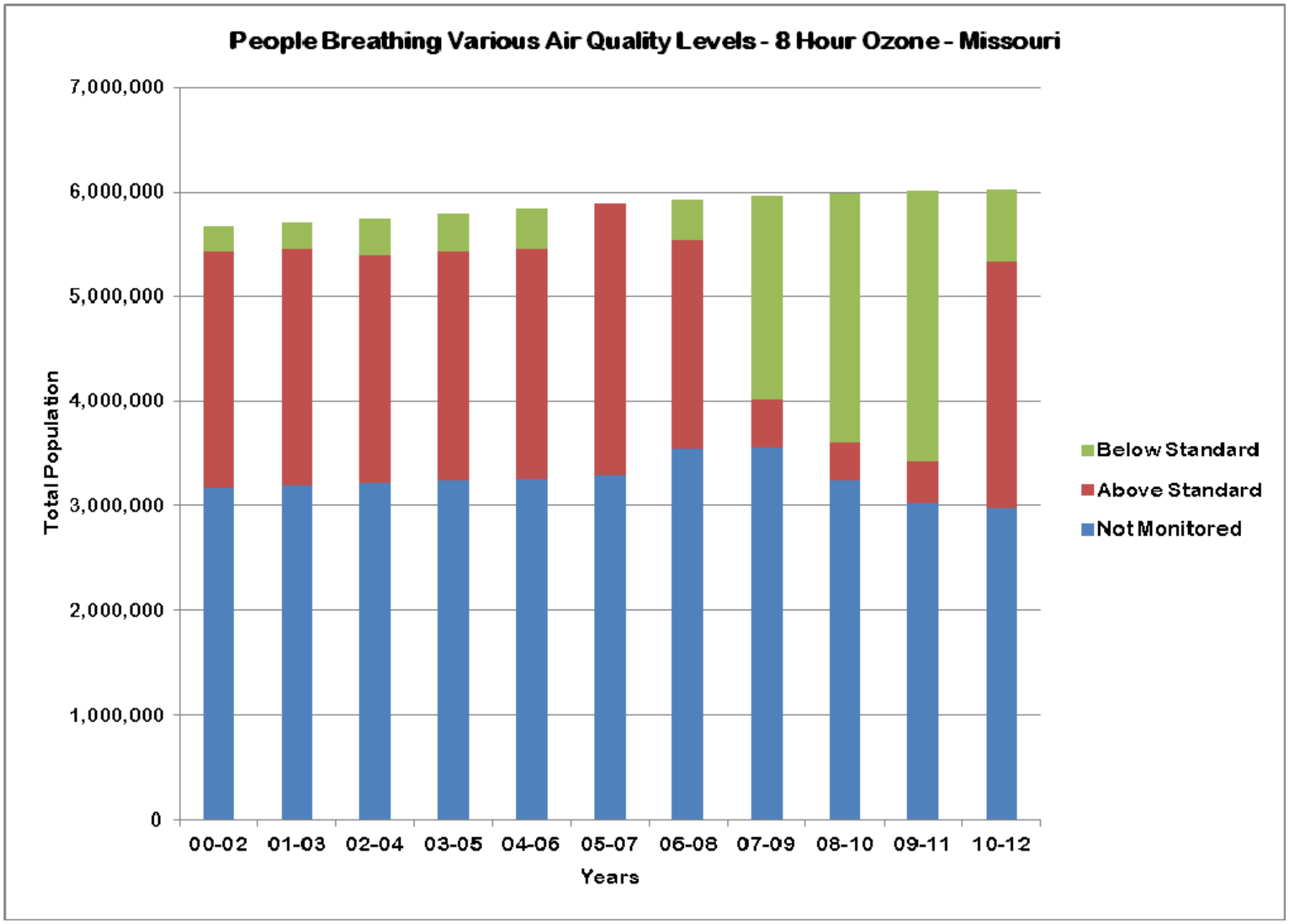

People Breathing Various Air Quality Levels - 8 Hour Ozone - Missouri
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MO-2

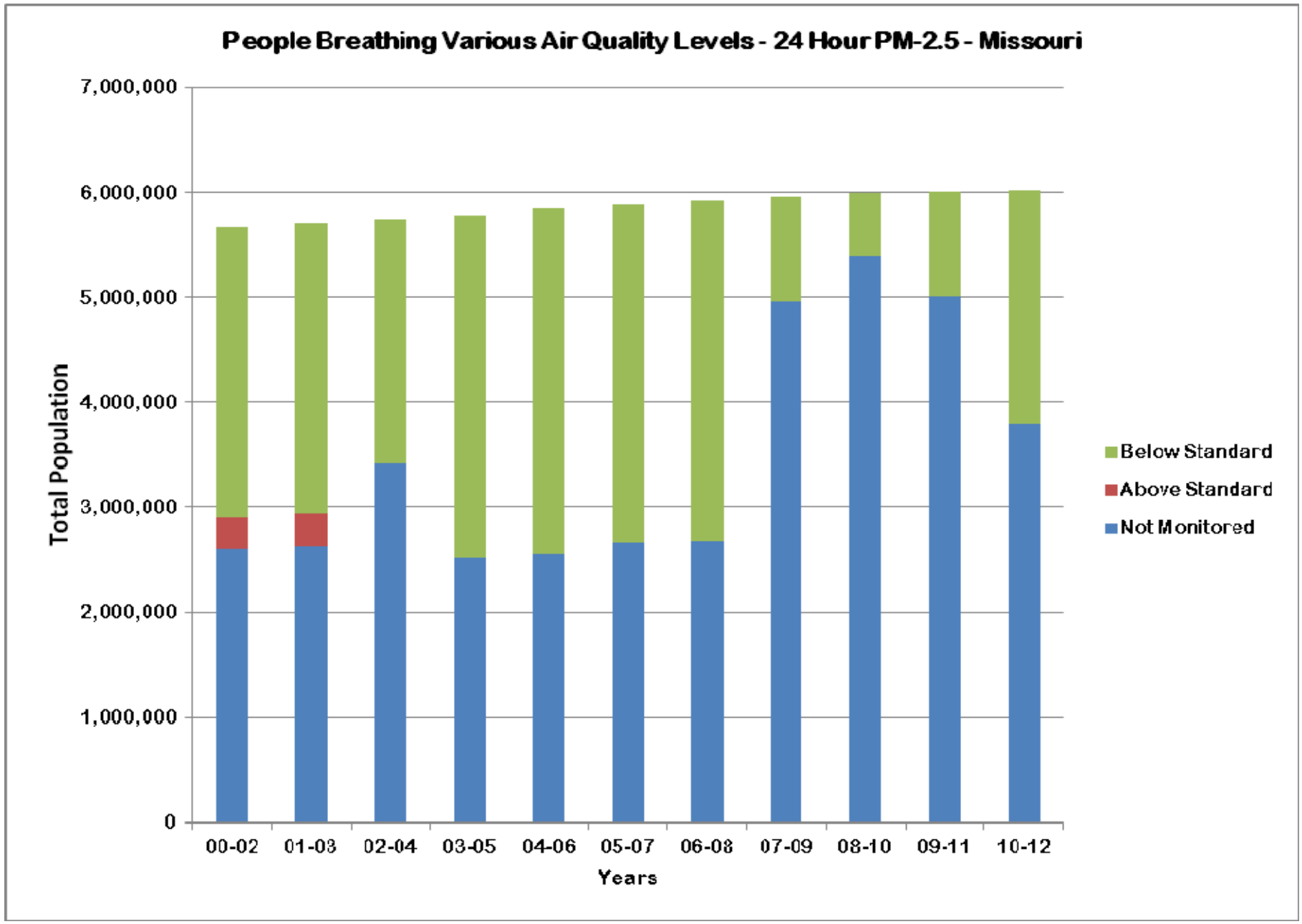
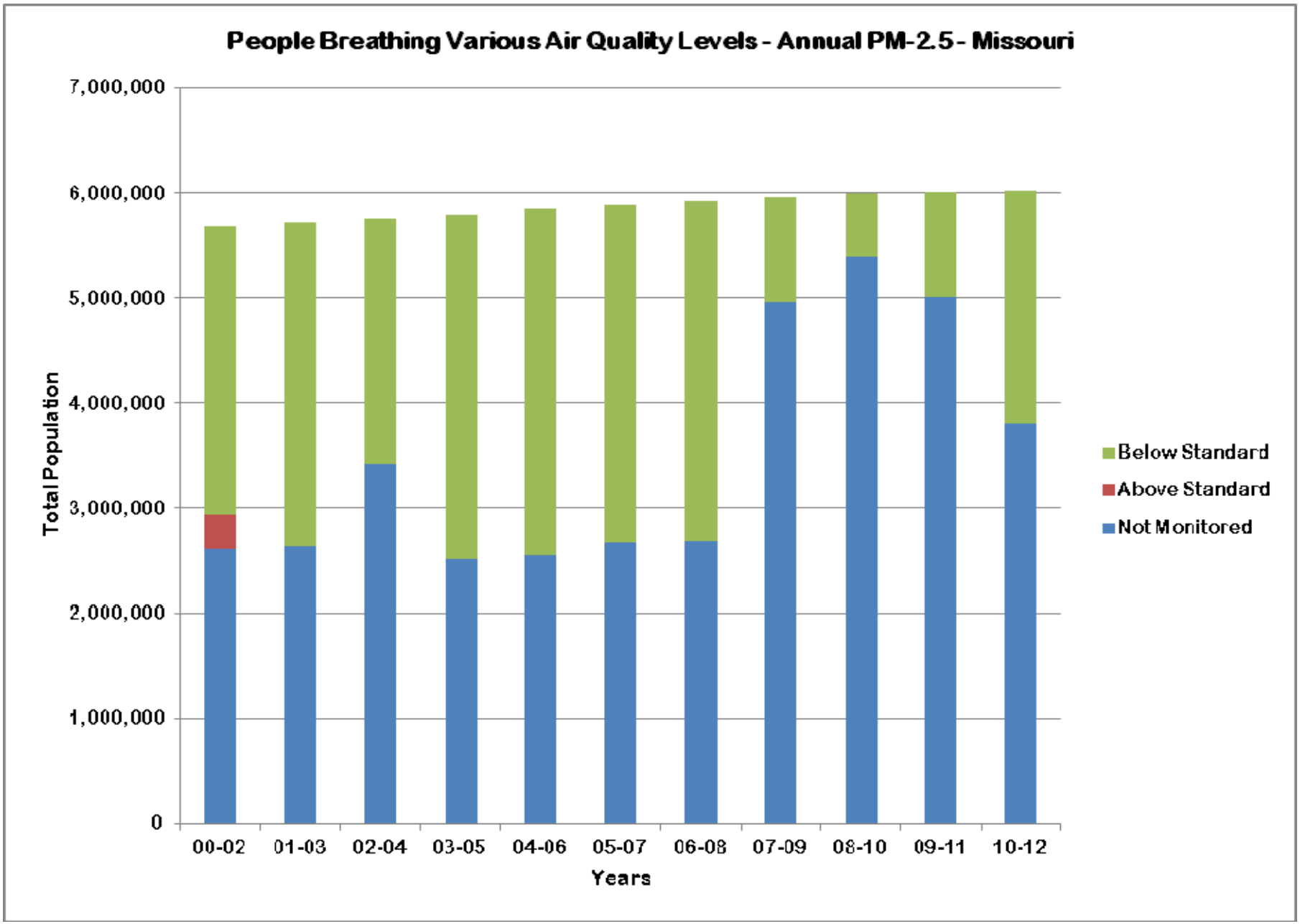

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Missouri
Total Population
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MO-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Missouri
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

MONTANA

Ozone

Ozone levels in Montana have historically been better than the standard. In the 2000 – 2002 time period, approximately 78 thousand people (8.5%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 103 thousand people (10.3%). The remainder of the population lived in counties where ozone was not measured. Figure MT-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Montana have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.6 million people (69.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.3 million people (27.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MT-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Montana have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.6 million people (69.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 0.3 million people (27.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure MT-3 shows the distribution of people by year.

Table MT-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Flathead	91,633	0.055	A	N	ND	---	ND	---	---
Lewis & Clark	64,776	ND	---	---	33	C	8.1	A	N
Missoula	110,977	ND	---	---	23	A	8.5	A	Y
Powder River	1,763	0.055	A	N	ND	---	ND	---	---
Ravalli	40,617	ND	---	---	28	B	7.4	A	N
Richmond	10,810	ND	---	---	15	A	6.6	A	N
Rosebud	9,396	0.057	A	N	12	A	4.9	A	N
Silver Bow	34,403	ND	---	---	34	C	8.3	A	N
Subtotal	**364,375**								
Not Monitored	640,766								
Total	**1,005,141**								

DV – Design Value ND - No Data MM – Multiple Monitors

MONTANA

Table MT-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	77,583	79,643	81,247	83,320	85,759	229,763	90,260	90,910	90,928	91,301	102,792
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	77,583	79,643	81,247	83,320	85,759	229,763	90,260	90,910	90,928	91,301	102,792
NM	834,084	839,987	848,762	856,782	866,933	734,943	886,155	893,072	898,487	906,898	902,349
Total	911,667	919,630	930,009	940,102	952,692	964,706	976,415	983,982	989,415	998,199	1,005,141

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	309,258	258,128	263,028	128,197	400,487	468,492	584,903	527,430	120,712	172,156	131,183
B	192,217	0	0	138,839	59,529	0	0	19,657	109,200	0	40,617
C	98,968	0	0	0	33,441	139,599	53,353	34,008	0	0	99,279
D	0	0	0	0	0	0	0	0	0	0	0
F	18,669	0	0	0	123,600	19,440	0	0	0	0	0
Subtotal	619,112	258,128	263,028	267,036	617,057	627,531	638,256	581,095	229,912	172,156	271,079
NM	292,555	661,502	666,981	673,066	335,635	337,175	338,159	402,887	759,503	826,043	734,062
Total	911,667	919,630	930,009	940,102	952,692	964,706	976,415	983,982	989,415	998,199	1,005,141

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	600,443	258,128	263,028	267,036	597,829	608,091	618,715	581,095	229,912	172,156	271,079
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	19,228	19,440	19,541	0	0	0	0
D	18,669	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	619,112	258,128	263,028	267,036	617,057	627,531	638,256	581,095	229,912	172,156	271,079
NM	292,555	661,502	666,981	673,066	335,635	337,175	338,159	402,887	759,503	826,043	734,062
Total	911,667	919,630	930,009	940,102	952,692	964,706	976,415	983,982	989,415	998,199	1,005,141

NM – Not Monitored

Figure MT-1

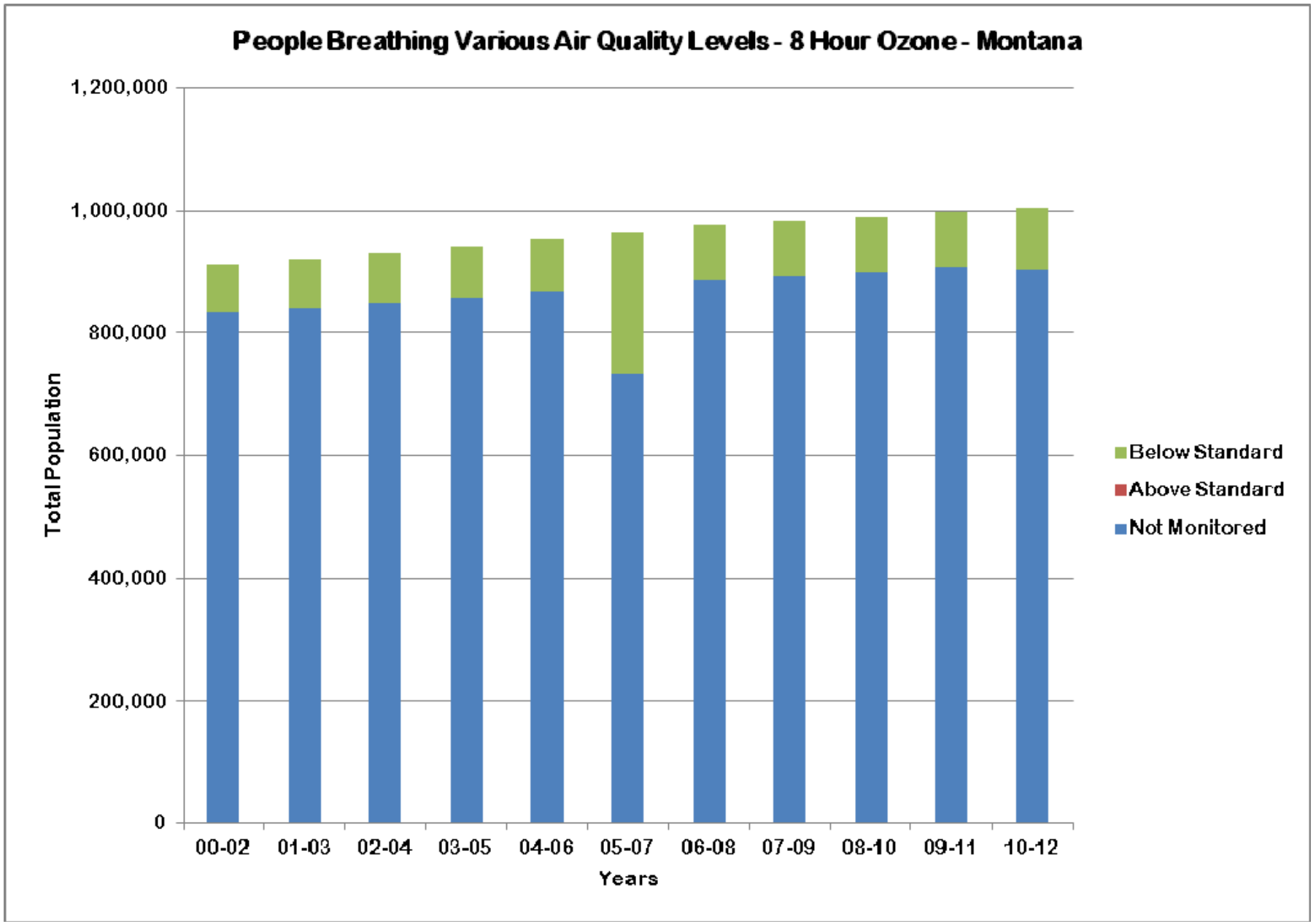
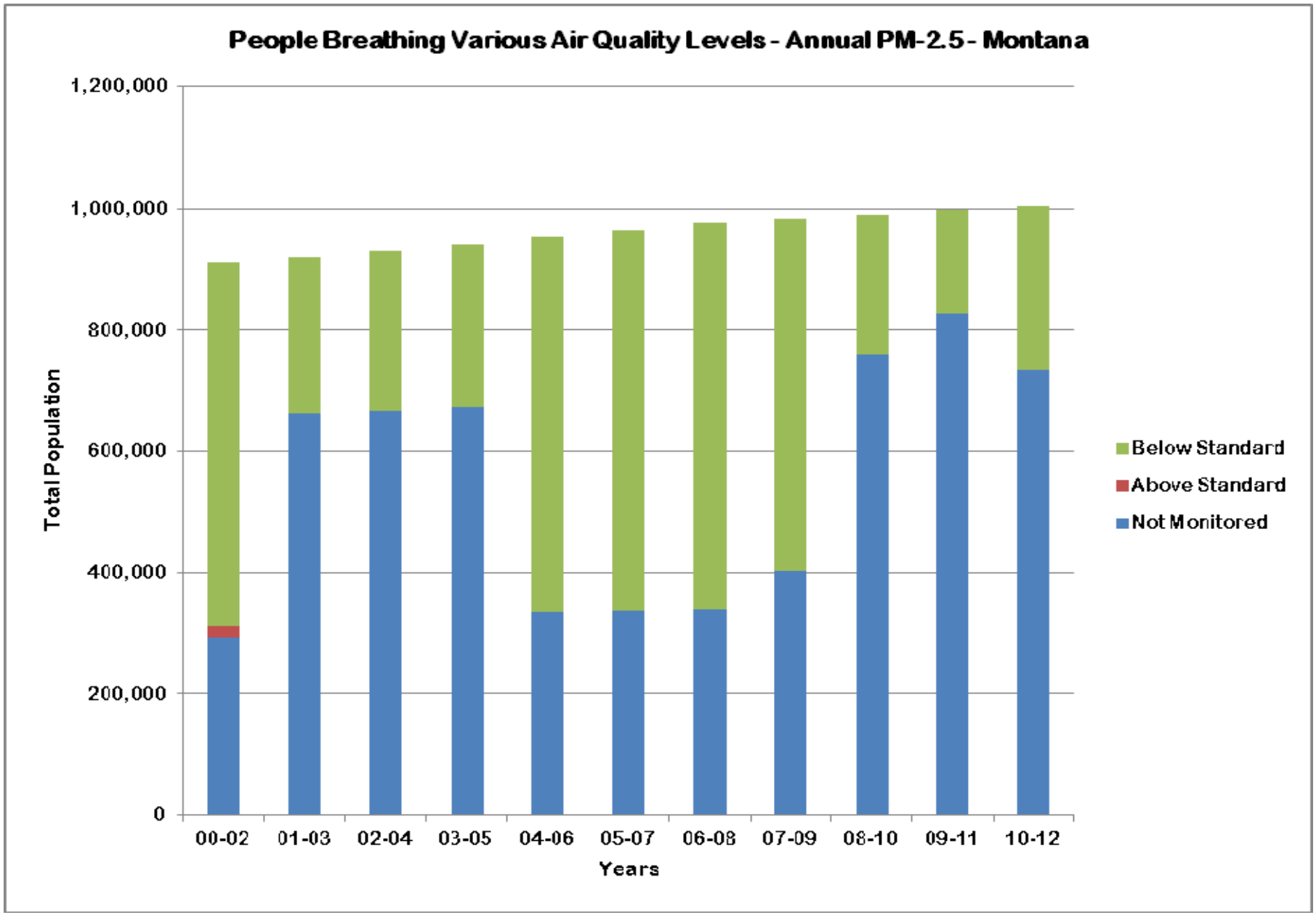

People Breathing Various Air Quality Levels - 8 Hour Ozone - Montana
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MT-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Montana
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure MT-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Montana
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NEBRASKA

Ozone

Ozone levels in Nebraska have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.7 million people (42.3%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.8 million people (44.6%). The remainder of the population lived in counties where ozone was not measured. Figure NE-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Nebraska have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.9 million people (49.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.9 million people (48.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NE-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Nebraska have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.9 million people (49.7%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 0.9 million people (48.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NE-3 shows the distribution of people by year.

Table NE-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Douglas	531,265	0.059	A	Y	24	A	10.1	A	Y
Hall	60,345	ND	---	---	19	A	7.3	A	N
Lancaster	293,407	0.052	A	N	22	A	8.7	A	N
Washington	20,252	ND	---	---	24	A	9.3	A	N
Subtotal	**905,269**								
Not Monitored	950,256								
Total	**1,855,525**								

DV – Design Value ND - No Data MM – Multiple Monitors

NEBRASKA

Table NE-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	258,398	262,667	265,087	268,868	272,286	276,012	279,605	794,999	802,517	814,661	824,672
B	471,866	476,701	482,075	488,114	0	498,743	504,547	0	0	0	0
C	0	0	0	0	493,757	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	730,264	739,368	747,162	756,982	766,043	774,755	784,152	794,999	802,517	814,661	824,672
NM	998,028	999,275	1,002,208	1,004,515	1,006,650	1,008,685	1,012,226	1,017,684	1,023,824	1,027,980	1,030,853
Total	1,728,292	1,738,643	1,749,370	1,761,497	1,772,693	1,783,440	1,796,378	1,812,683	1,826,341	1,842,641	1,855,525

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	858,558	823,308	756,408	268,868	930,169	1,035,252	1,050,346	1,029,225	881,358	894,433	905,269
B	0	0	25,074	513,284	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	858,558	823,308	756,408	782,152	930,169	1,035,252	1,050,346	1,029,225	881,358	894,433	905,269
NM	869,734	915,335	967,888	979,345	842,524	748,188	746,032	783,458	944,983	948,208	950,256
Total	1,728,292	1,738,643	1,749,370	1,761,497	1,772,693	1,783,440	1,796,378	1,812,683	1,826,341	1,842,641	1,856,525

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	858,558	823,308	781,482	782,152	930,169	1,035,252	1,050,346	1,029,225	881,358	894,433	905,269
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	858,558	823,308	781,482	782,152	930,169	1,035,252	1,050,346	1,029,225	881,358	894,433	905,269
NM	869,734	915,335	967,888	979,345	842,524	748,188	746,032	783,458	944,983	948,208	950,256
Total	1,728,292	1,738,643	1,749,370	1,761,497	1,772,693	1,783,440	1,796,378	1,812,683	1,826,341	1,842,641	1,856,525

NM – Not Monitored

Figure NE-1

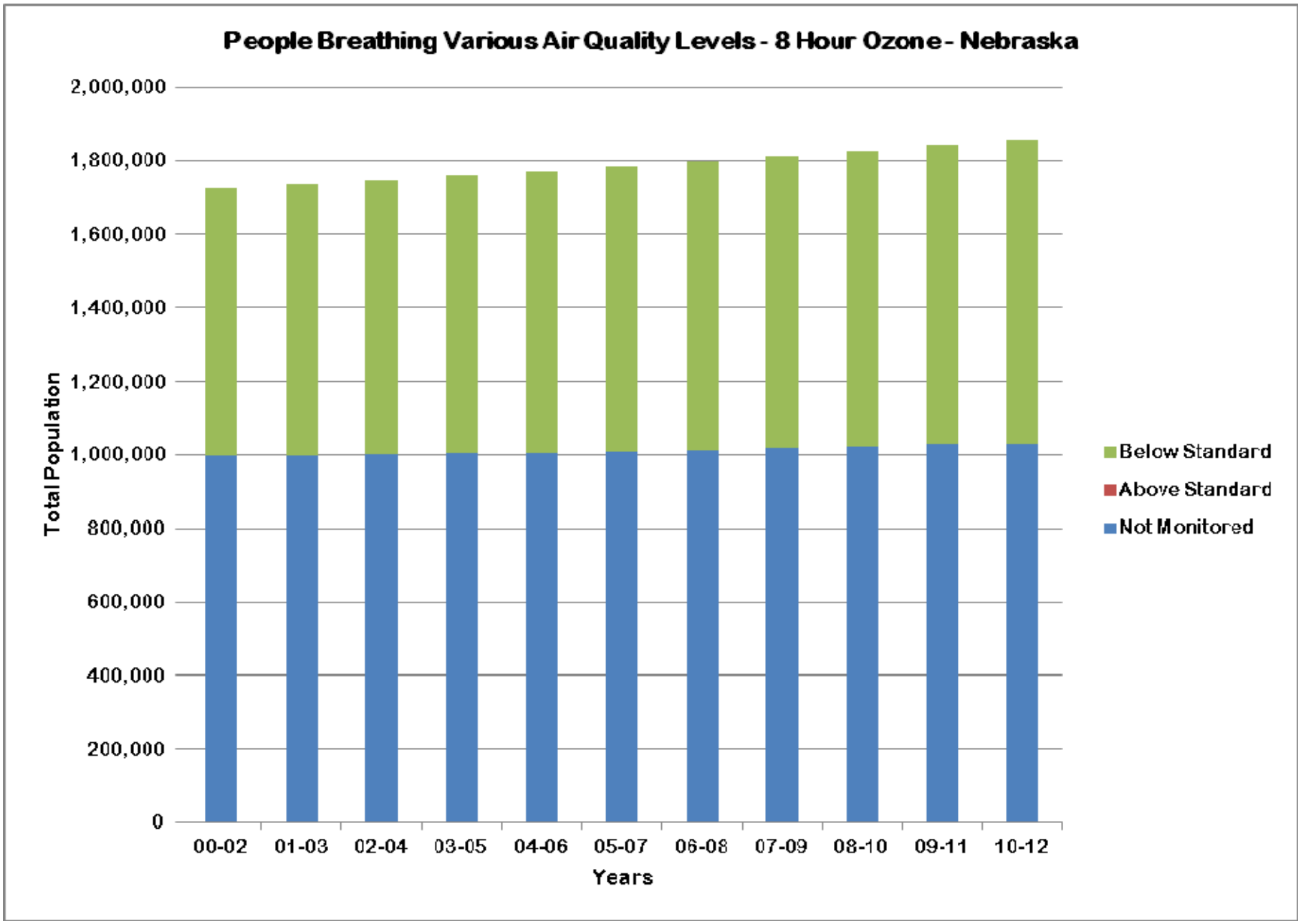

People Breathing Various Air Quality Levels - 8 Hour Ozone - Nebraska
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NE-2

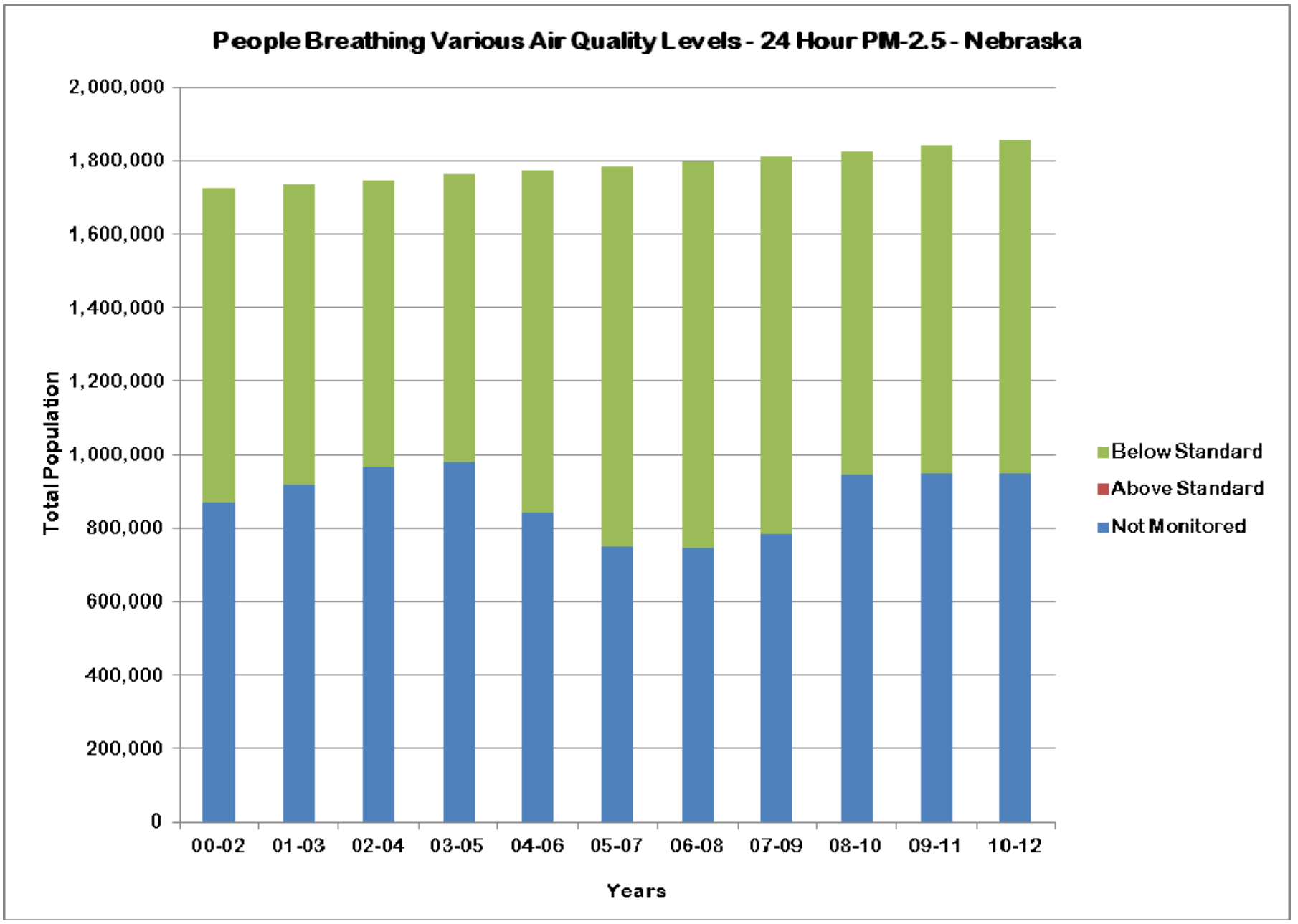
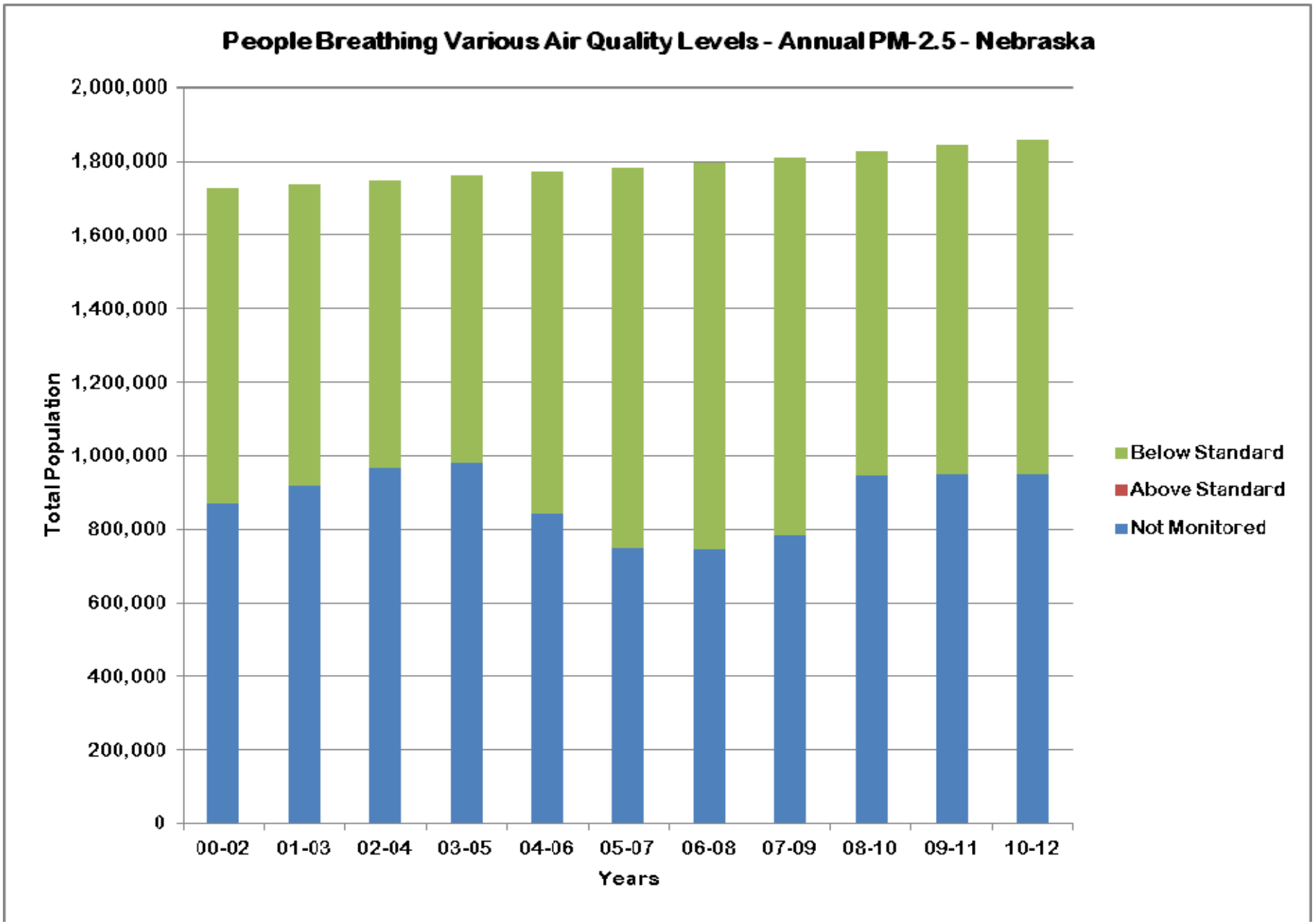

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Nebraska
Total Population
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NE-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Nebraska
Total Population
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NEVADA

Ozone

Significant progress has been made in ozone levels in Nevada. In the 2000 – 2002 time period, approximately 0.5 million people (21.6%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.5 million people (89.3%). The remainder of the population lived in counties where ozone was not measured. Figure NV-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Nevada have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.9 million people (86.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.4 million people (88.1%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NV-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Nevada have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.9 million people (86.7%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 2.4 million people (88.1%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NV-3 shows the distribution of people by year.

Table NV-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Churchill	24,375	0.056	A	N	ND	---	ND	---	---
Clark	2,000,759	0.073	C	Y	15	A	5.8	A	Y
Washoe	429,908	0.067	B	Y	17	A	6.1	A	N
White Pines	10,042	0.072	C	N	ND	---	ND	---	---
Subtotal	**2,465,084**								
Not Monitored	293,847								
Total	**2,758,931**								

DV – Design Value ND - No Data MM – Multiple Monitors

NEVADA

Table NV-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	24,637	24,375
B	0	0	55,995	55,982	55,410	80,249	0	25,067	24,877	425,710	429,908
C	469,006	480,711	391,485	401,882	409,964	418,350	449,574	2,367,029	2382,706	1,980,073	2,010,801
D	1,522,962	1,584,166	1,662,773	1,729,522	1,803,774	1,867,817	1,912,349	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,991,968	2,064,877	2,110,253	2,187,386	2,269,148	2,366,416	2,361,923	2,392,096	2,407,583	2,430,420	2,465,084
NM	181,823	183,973	235,969	244,757	253,510	234,656	291,707	292,569	293,968	292,902	293,847
Total	2,173,791	2,248,850	2,346,222	2,432,143	2,522,658	2,601,072	2,653,630	2,684,665	2,700,551	2,723,322	2,858,931

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,522,962	1,956,468	2,045,550	1,729,522	1,803,774	1,867,817	2,327,142	1,939,407	1,951,269	2,395,685	2,430,667
B	362,374	0	0	392,716	0	408,724	0	0	421,407	0	0
C	0	0	0	0	400,453	0	0	417,722	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,885,336	1,956,468	2,045,550	2,122,238	2,204,227	2,276,541	2,327,142	2,357,129	2,372,676	2,395,685	2,430,667
NM	288,455	292,382	300,672	309,905	318,431	324,531	326,488	327,536	327,875	327,637	328,264
Total	2,173,791	2,248,850	2,346,222	2,432,143	2,522,658	2,601,072	2,653,630	2,684,665	2,700,551	2,723,322	2,858,931

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,885,336	1,956,468	2,045,550	2,122,238	2,204,227	2,276,541	2,327,142	2,357,129	2,372,676	2,395,685	2,430,667
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,885,336	1,956,468	2,045,550	2,122,238	2,204,227	2,276,541	2,327,142	2,357,129	2,372,676	2,395,685	2,430,667
NM	288,455	292,382	300,672	309,905	318,431	324,531	326,488	327,536	327,875	327,637	328,264
Total	2,173,791	2,248,850	2,346,222	2,432,143	2,522,658	2,601,072	2,653,630	2,684,665	2,700,551	2,723,322	2,858,931

NM – Not Monitored

Figure NV-1

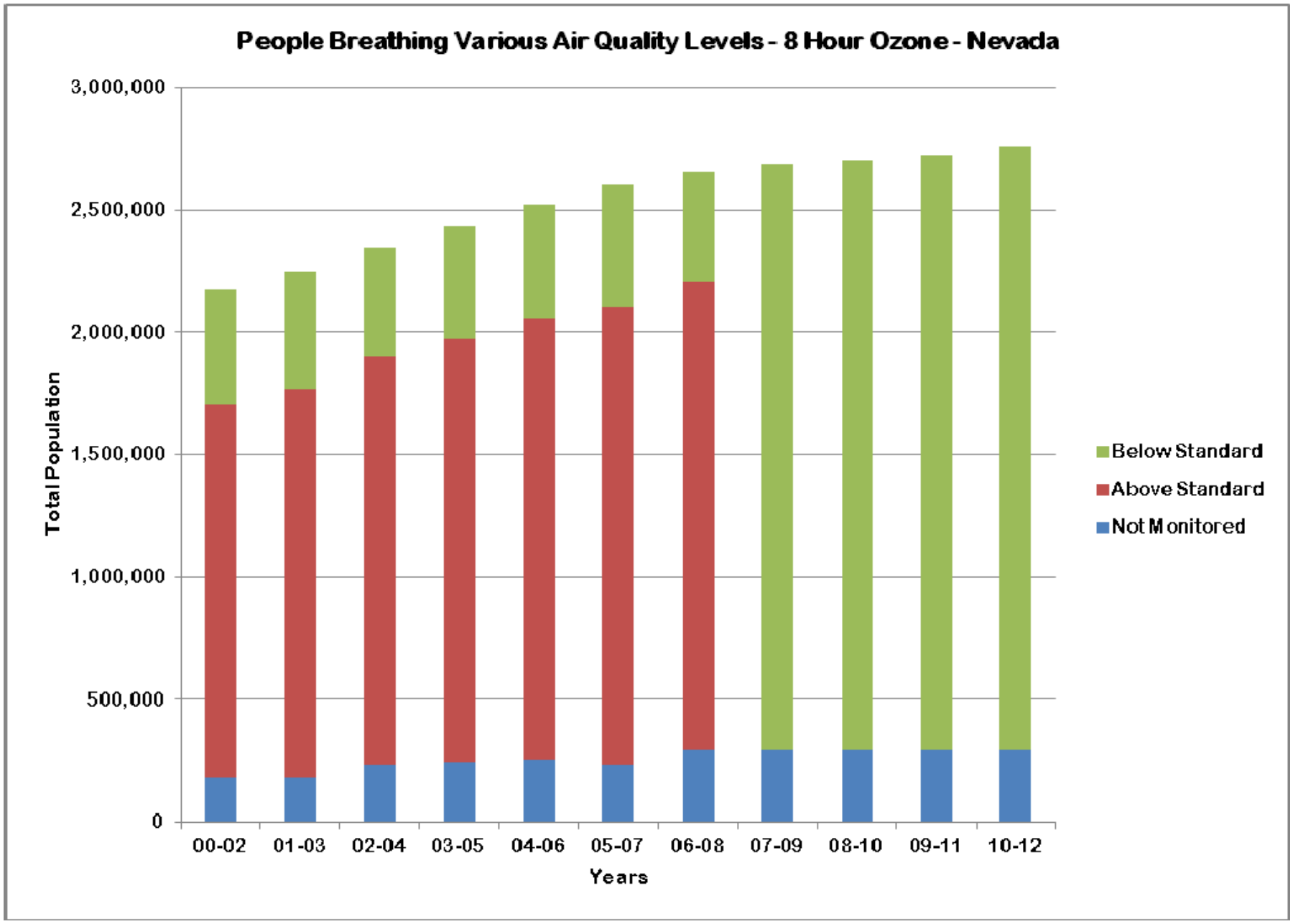
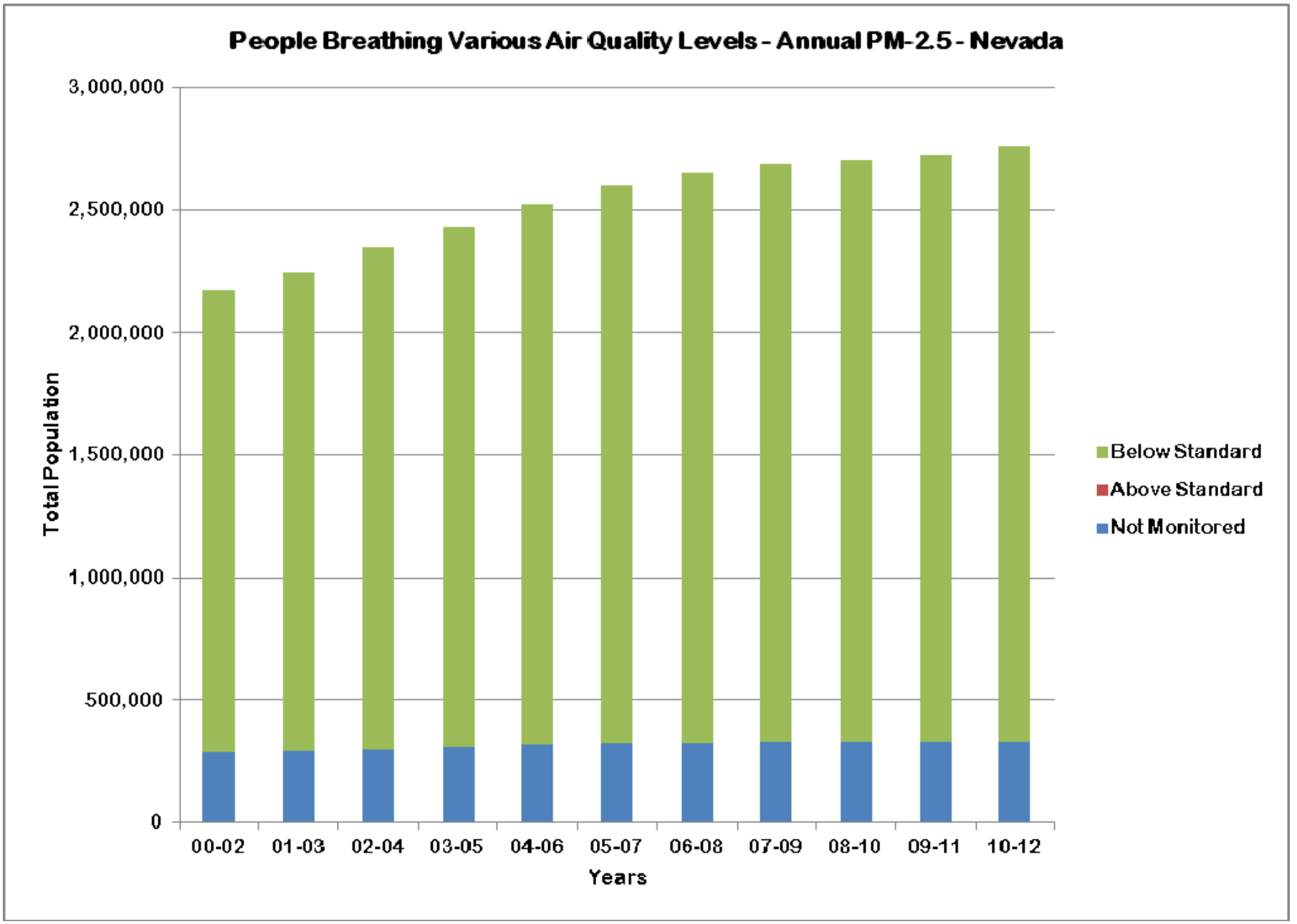

People Breathing Various Air Quality Levels - 8 Hour Ozone - Nevada
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NV-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Nevada
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NV-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Nevada
Total Population
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NEW HAMPSHIRE

Ozone

Significant progress has been made in ozone levels in New Hampshire. In the 2000 – 2002 time period, approximately 0.4 million people (30.6%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.1 million people (83.7%). The remainder of the population lived in counties where ozone was not measured. Figure NH-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in New Hampshire have historically been better than the standard. In the 2000 – 2002 time period, approximately 33 thousand people (2.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.8 million people (58.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NH-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in New Hampshire have historically been better than the standard. In the 2000 – 2002 time period, approximately 33 thousand people (2.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.1 million people (58.8%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NH-3 shows the distribution of people by year.

Table NH-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Belknap	60,327	0.063	B	N	16	A	5.9	A	N
Cheshire	76,851	0.063	B	N	27	A	9.1	A	N
Coos	32,096	0.066	B	Y	ND	---	ND	---	---
Grafton	89,181	0.061	B	N	19	A	6.8	A	N
Hillsborough	402,922	0.069	C	Y	22	A	7.8	A	N
Merrimack	146,761	0.065	B	N	22	A	8.7	A	N
Rockingham	297,820	0.067	B	Y	ND	---	ND	---	---
Subtotal	**1,105,958**								
Not Monitored	214,760								
Total	**1,320,718**								

DV – Design Value ND - No Data MM – Multiple Monitors

NEW HAMPSHIRE

Table NH-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	45,074	0	33,589	33,845	33,814	33,751	33,488	88,926	405,823	701,538	703,036
C	340,478	260,221	760,460	1,099,314	708,622	416,250	816,949	1,012,821	695,944	401,696	402,922
D	402,029	294,568	42,547	0	398,169	692,975	294,996	0	0	0	0
F	389,665	679,354	0	0	0	0	0	0	0	0	0
Subtotal	1,177,246	1,234,143	836,596	1,133,159	1,140,605	1,142,976	1,145,433	1,101,747	1,101,767	1,103,234	1,105,958
NM	91,843	45,697	453,525	165,333	167,784	169,564	170,473	214,355	214,703	214,960	214,760
Total	1,269,089	1,279,840	1,290,121	1,298,492	1,308,389	1,312,540	1,315,906	1,316,102	1,316,470	1,318,194	1,320,718

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10 - 12
A	33,234	0	60,170	325,614	1,019,551	1,031,480	1,034,473	902,125	979,594	697,421	776,042
B	0	505,993	509,080	807,545	121,054	77,745	77,472	77,302	0	76,918	0
C	0	76,135	471,137	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	33,234	582,128	1,040,387	1,133,159	1,140,605	1,109,225	1,111,945	979,427	979,594	774,339	776,042
NM	1,235,855	697,712	249,734	165,333	167,784	203,315	203,961	336,675	336,876	543,855	544,676
Total	1,269,089	1,279,840	1,290,121	1,298,492	1,308,389	1,312,540	1,315,906	1,316,102	1,316,470	1,318,194	1,320,718

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10-12
A	33,234	582,128	1,044,387	1,133,159	1,140,605	1,109,225	1,111,945	979,427	974,594	774,339	776,042
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	33,234	582,128	1,040,387	1,133,159	1,140,605	1,109,225	1,111,945	979,427	979,594	774,339	776,042
NM	1,235,855	697,712	249,734	165,333	167,784	203,315	203,961	336,675	336,876	543,855	544,676
Total	1,269,089	1,279,840	1,290,121	1,298,492	1,308,389	1,312,540	1,315,906	1,316,102	1,316,470	1,318,194	1,320,718

NM – Not Monitored

Figure NH-1

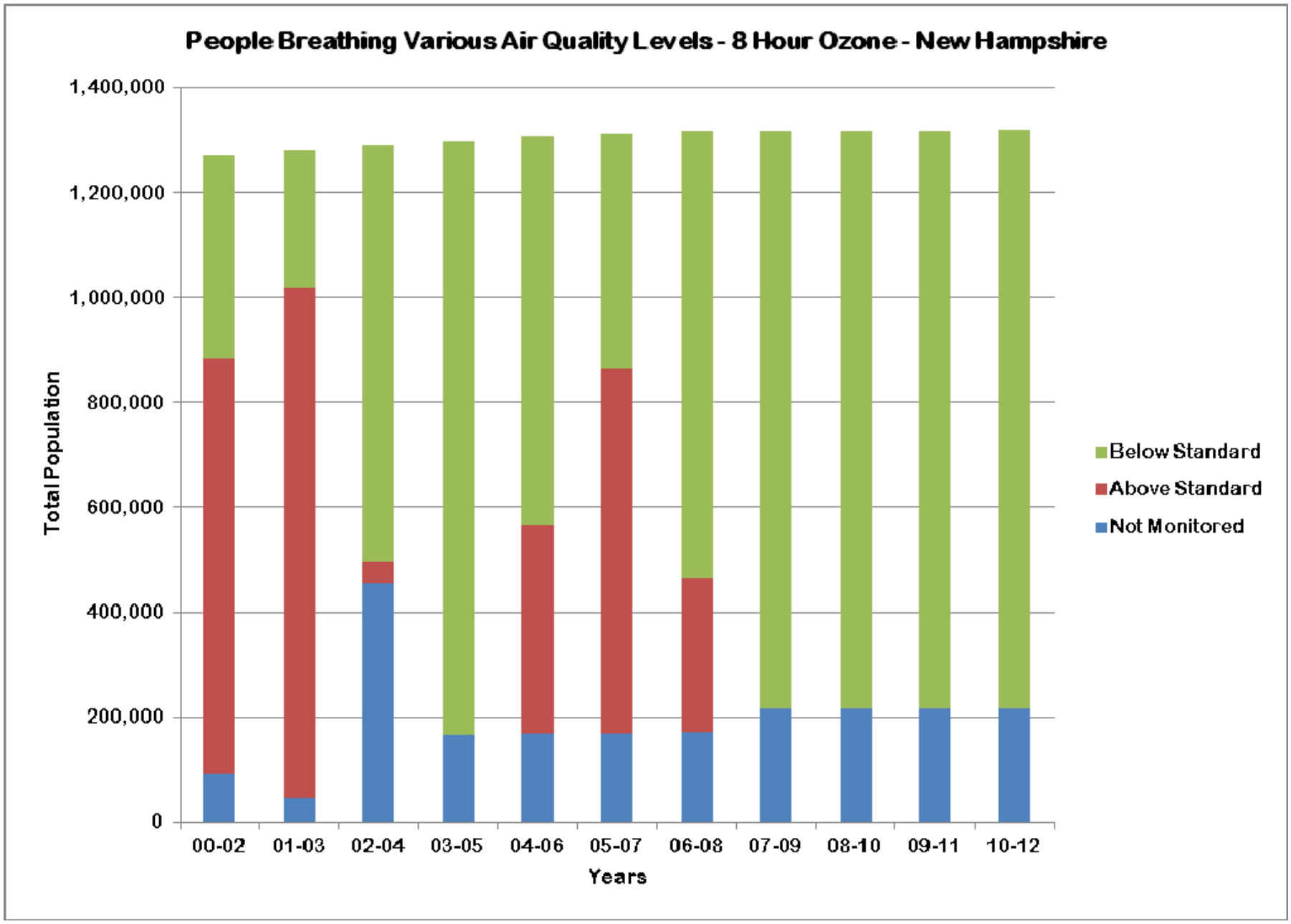

People Breathing Various Air Quality Levels - 8 Hour Ozone - New Hampshire
Total Population
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NH-2

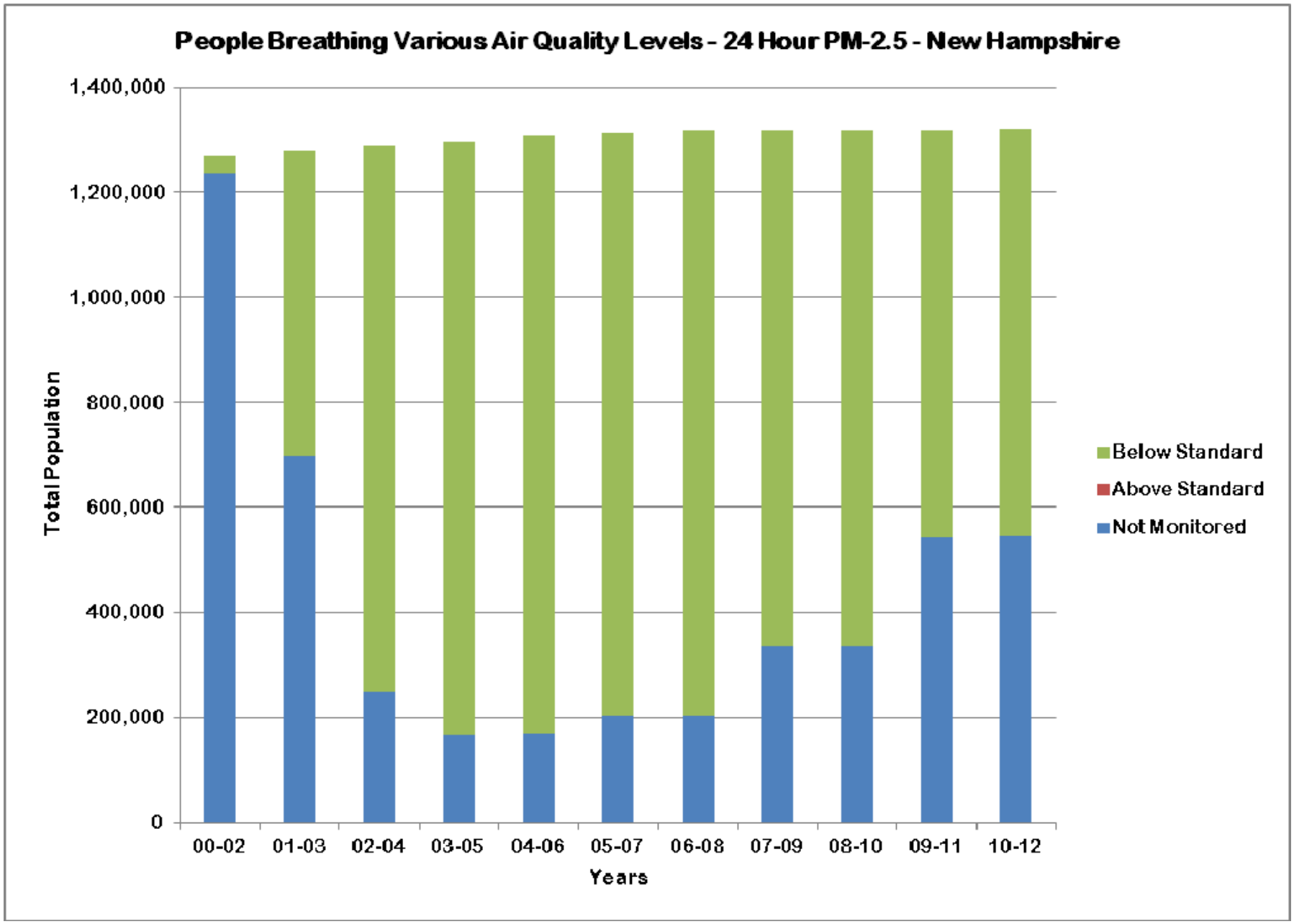
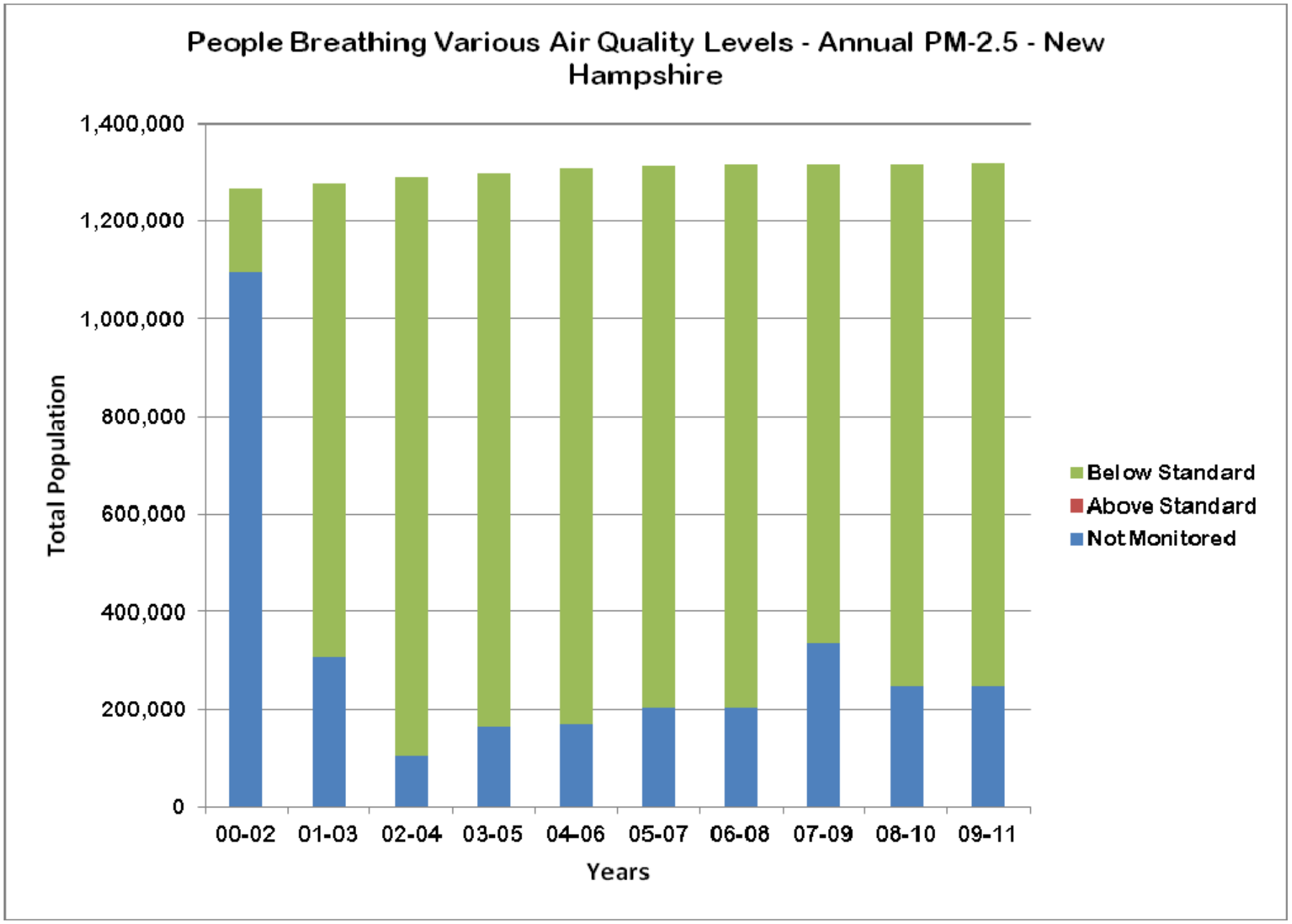

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - New Hampshire
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NH-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - New Hampshire
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
Years
Below Standard
Above Standard
Not Monitored

NEW JERSEY

Ozone

Progress has been made in ozone levels in New Jersey. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.5 million people (5.7%). Figure NJ-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in New Jersey. In the 2000 – 2002 time period, approximately 2.7 million people (31.8%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 6.9 million people (77.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NJ-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in New Jersey. In the 2000 – 2002 time period, approximately 3.7 million people (43.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 6.9 million people (77.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NJ-3 shows the distribution of people by year.

Table NJ-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Atlantic	**275,422**	**0.076**	**D**	**N**	22	A	8.6	A	N
Bergen	919,888	ND	---	---	23	A	9.2	A	N
Camden	**513,539**	**0.088**	**F**	**N**	22	A	9.5	A	N
Cumberland	**157,785**	**0.076**	**D**	**N**	ND	---	ND	---	---
Essex	**787,744**	**0.082**	**D**	**N**	23	A	9.6	A	N
Gloucester	**289,586**	**0.087**	**F**	**N**	22	A	9.3	A	N
Hudson	**652,302**	**0.078**	**D**	**N**	26	A	10.6	A	Y
Hunterdon	**127,050**	**0.080**	**D**	**N**	ND	---	ND	---	---
Mercer	368,303	ND	---	---	22	A	8.8	A	Y
Middlesex	**823,041**	**0.085**	**F**	**N**	19	A	8.0	A	N
Monmouth	**629,384**	**0.083**	**F**	**N**	ND	---	ND	---	---
Morris	**497,999**	**0.078**	**D**	**N**	21	A	8.0	A	Y
Ocean	**580,470**	**0.086**	**F**	**N**	23	A	8.5	A	N
Passaic	502,885	0.075	C	N	23	A	9.4	A	N
Union	543,976	ND	---	---	24	A	10.2	A	Y
Warren	107,653	ND	---	---	25	A	9.4	A	N
Subtotal	**7,777,027**								
Not Monitored	1,087,563								
Total	**8,864,590**								

DV – Design Value ND - No Data MM – Multiple Monitors

NEW JERSEY

Table NJ-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	274,049	775,775	933,440	502,885
D	0	0	0	1,249,404	1,251,975	272,303	650,642	4,788,939	5,502,168	5,002,193	2,498,302
F	5,176,432	6,104,810	6,135,654	4,906,502	4,916,065	5,022,792	4,397,793	287,362	0	0	2,836,020
Subtotal	5,176,432	6,104,810	6,135,654	6,155,906	6,168,040	5,295,095	5,048,435	5,350,350	6,277,943	5,935,633	5,837,207
NM	3,376,211	2,496,592	2,498,907	2,496,068	2,493,639	3,382,790	3,662,655	3,405,252	2,513,951	2,885,522	3,027,383
Total	8,552,643	8,601,402	8,634,561	8,651,974	8,661,679	8,677,885	8,711,090	8,755,602	8,791,894	8,821,155	8,864,550

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	2,430,517	3,931,626	6,178,289	6,862,078
B	0	0	271,714	0	1,048,788	565,356	2,604,816	2,919,143	2,075,881	641,224	0
C	2,718,461	2,710,799	2,783,866	1,787,476	1,751,519	1,752,759	2,431,613	628,572	0	0	0
D	1,586,162	1,609,311	2,718,431	3,484,877	2,183,628	3,201,205	619,533	0	0	0	0
F	527,625	771,848	614,607	1,126,646	1,138,730	613,637	0	0	0	0	0
Subtotal	4,832,248	5,111,958	6,388,618	6,398,999	6,122,665	6,132,957	5,655,962	5,978,232	6,007,507	6,819,513	6,862,078
NM	3,720,395	3,489,444	2,245,943	2,252,975	2,539,014	2,544,928	3,055,128	2,777,370	2,784,387	2,001,642	2,002,512
Total	8,552,643	8,601,402	8,634,561	8,651,974	8,661,679	8,677,885	8,711,090	8,755,602	8,791,894	8,821,155	8,864,550

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	263,285	1,816,841	1,041,484	2,198,518	1,416,799	2,604,816	5,349,660	6,007,507	6,819,513	6,862,078
B	769,280	884,136	2,128,812	2,643,245	2,785,417	3,064,015	2,431,613	628,572	0	0	0
C	2,919,789	3,349,724	2,442,965	2,714,270	1,138,730	1,652,143	619,533	0	0	0	0
D	1,143,179	614,813	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4,832,248	5,111,958	6,388,618	6,398,999	6,122,665	6,132,957	5,655,962	5,978,232	6,007,507	6,819,513	6,862,078
NM	3,720,395	3,489,444	2,245,943	2,252,975	2,539,014	2,544,928	3,055,128	2,777,370	2,784,387	2,001,642	2,002,512
Total	8,552,643	8,601,402	8,634,561	8,651,974	8,661,679	8,677,885	8,711,090	8,755,602	8,791,894	8,821,155	8,864,550

NM – Not Monitored

Figure NJ-1

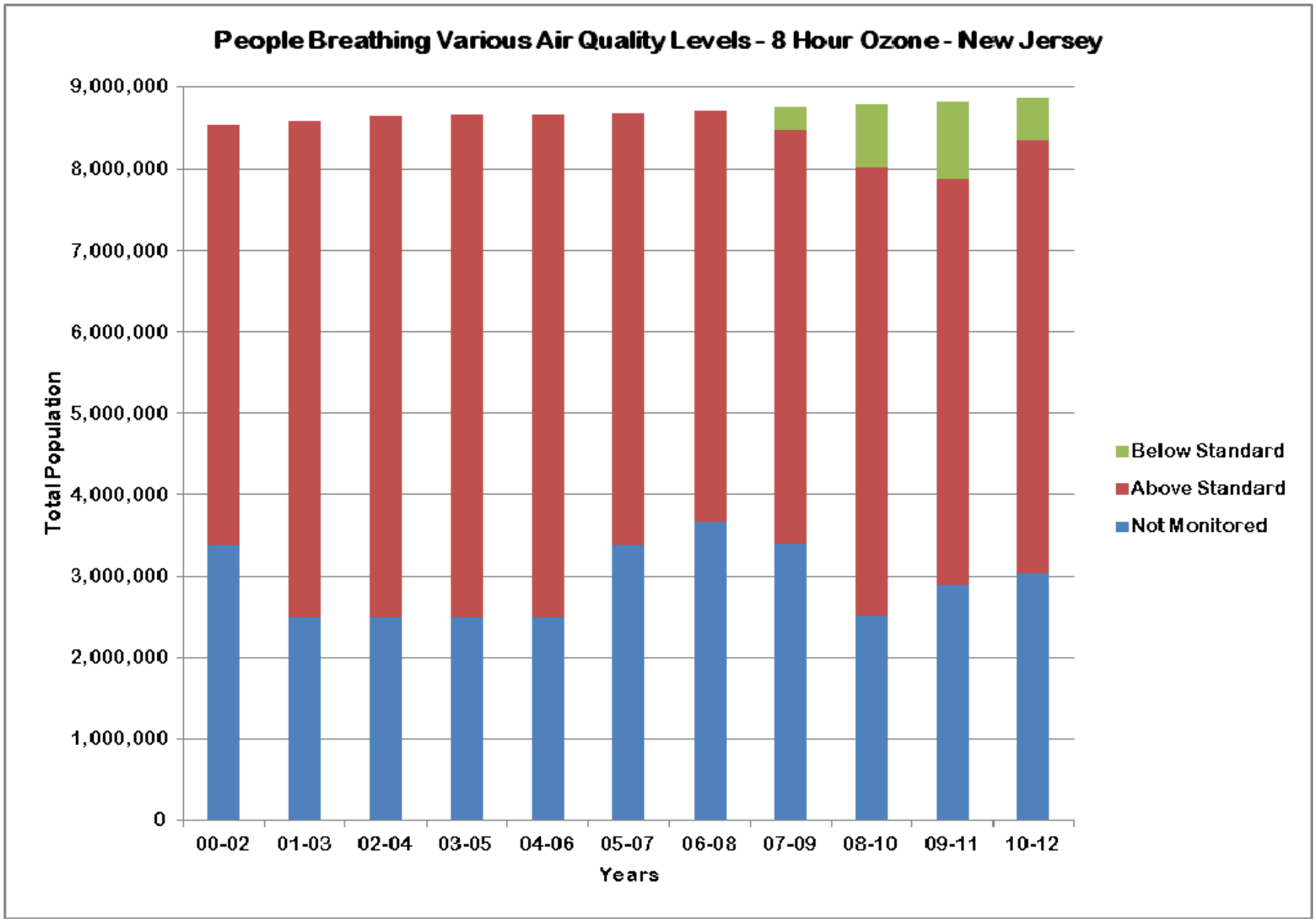

People Breathing Various Air Quality Levels - 8 Hour Ozone - New Jersey
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NJ-2

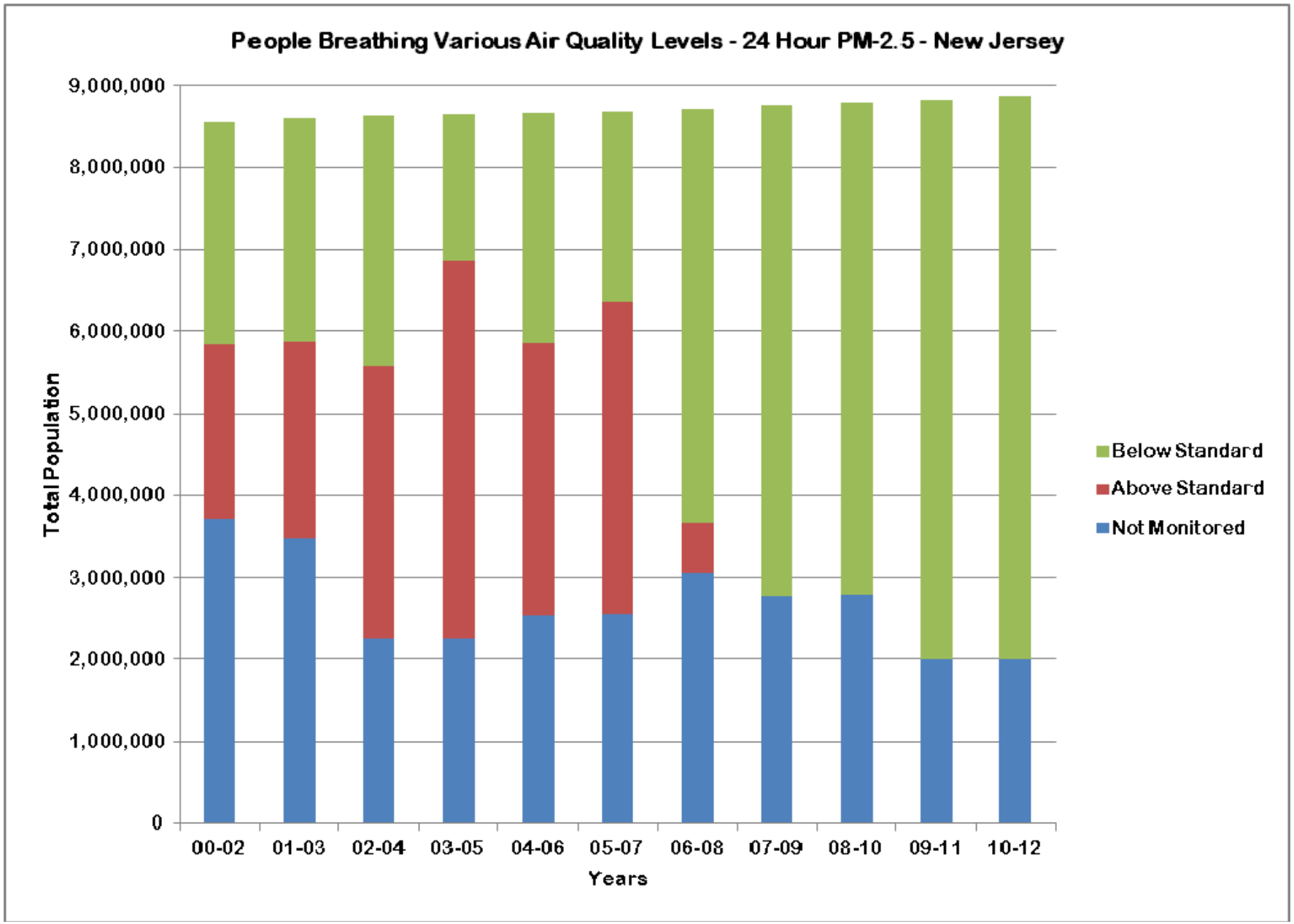
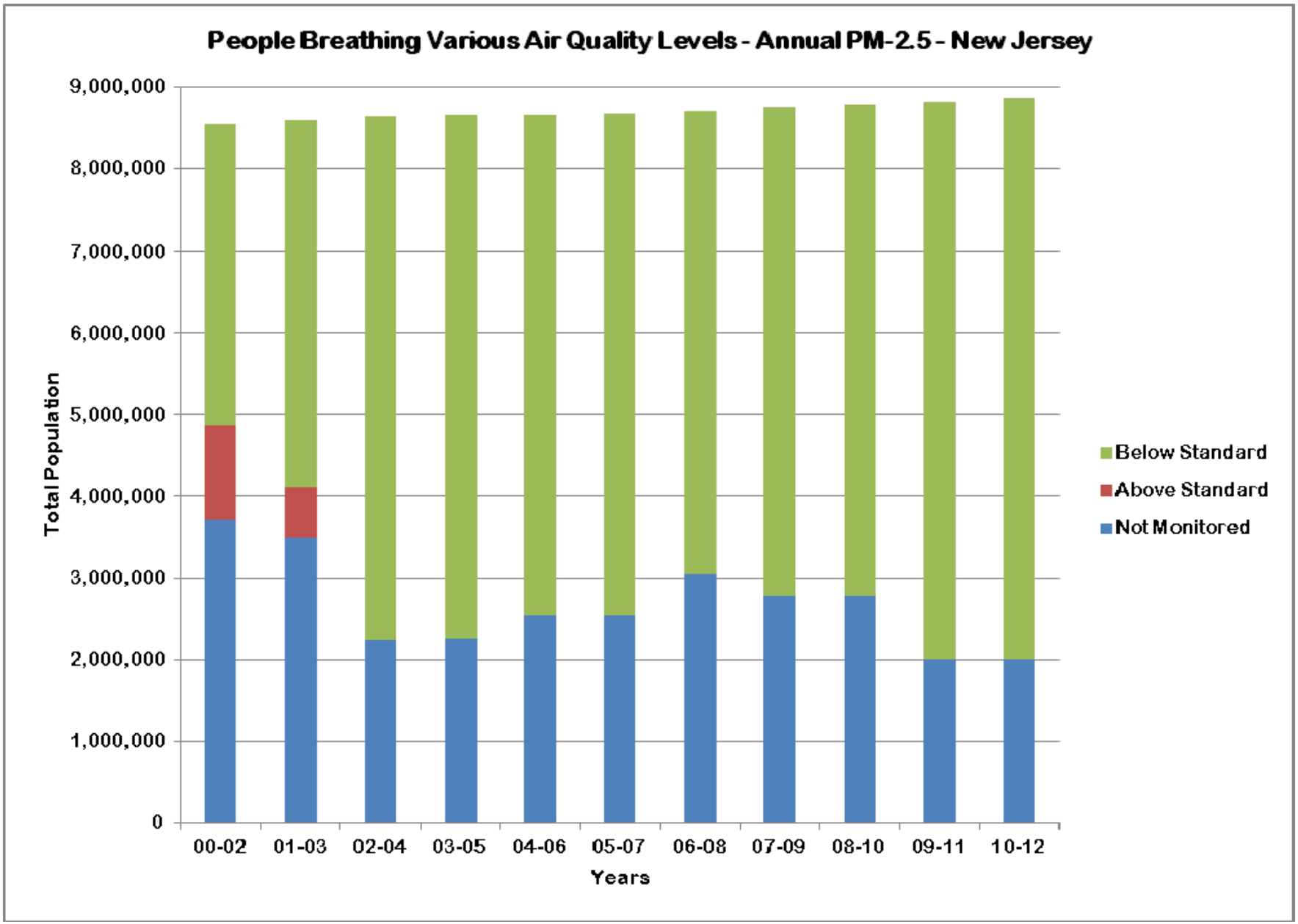

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - New Jersey
Total Population
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NJ-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - New Jersey
Total Population
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NEW MEXICO

Ozone

Ozone levels in New Mexico have historically been better than the standard. In the 2000 – 2002 time period, 1.1 million people (58.8%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.5 million people (70.7%). The remainder of the population lived in counties where ozone was not measured. Figure NM-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in New Mexico have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.1 million people (58.0%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.2 million people (58.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NM-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in New Mexico have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.1 million people (58.0%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 1.2 million people (58.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NM-3 shows the distribution of people by year.

Table NM-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg.24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Bernalillo	673,450	0.070	C	Y	17	A	6.3	A	Y
Dona Ana	214,443	0.068	C	Y	21	A	8.6	A	Y
Eddy	54,419	0.071	C	N	ND	---	ND	---	---
Grant	29,388	0.067	B	N	ND	---	ND	---	---
Lee	66,338	0.061	B	N	17	A	7.6	A	N
Luna	25,041	0.064	B	N	ND	---	ND	---	---
San Juan	128,529	0.069	C	Y	14	A	4.7	A	N
Sandoval	135,588	0.062	B	N	ND	---	ND	---	---
Santa Fe	146,375	0.065	B	N	9	A	4.5	A	N
Subtotal	**1,473,571**								
Not Monitored	608,653								
Total	**2,082,224**								

DV – Design Value ND - No Data MM – Multiple Monitors

NEW MEXICO

Table NM-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	25,119	89,822	25,281	0
B	0	0	0	0	0	0	29,921	406,270	1,307,086	716,508	402,730
C	1,090,092	989,997	1,011,150	1,036,764	1,050,795	1,196,016	1,215,310	860,680	53,829	725,120	1,070,843
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,090,092	989,997	1,011,150	1,036,764	1,050,795	1,196,016	1,245,231	1,292,069	1,450,737	1,466,909	1,473,573
NM	765,217	887,577	892,658	895,510	911,342	794,054	765,431	744,733	608,442	615,315	611,965
Total	1,855,309	1,877,574	1,903,808	1,932,274	1,962,137	1,990,070	2,010,662	2,036,802	2,059,179	2,082,224	2,085,538

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	939,498	1,272,586	1,295,528	1,324,158	1,262,864	1,348,236	1,177,543	1,098,233	1,110,208	1,319,107	1,229,147
B	0	0	0	0	0	0	0	0	0	0	0
C	178,464	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,117,962	1,272,586	1,295,528	1,324,158	1,262,864	1,348,236	1,177,543	1,098,233	1,110,208	1,319,107	1,229,147
NM	737,347	604,988	608,280	608,116	699,273	641,834	833,119	938,569	948,971	763,117	856,391
Total	1,855,309	1,877,574	1,903,808	1,932,274	1,962,137	1,990,070	2,010,662	2,036,802	2,059,179	2,082,224	2,082,224

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,117,962	1,272,586	1,295,528	1,324,158	1,262,864	1,348,236	1,177,543	1,098,233	1,110,208	1,319,107	1,229,147
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,117,962	1,272,586	1,295,528	1,324,158	1,262,864	1,348,236	1,177,543	1,098,233	1,110,208	1,319,107	1,229,147
NM	737,347	604,988	608,280	608,116	699,273	641,834	833,119	938,569	948,971	763,117	856,391
Total	1,855,309	1,877,574	1,903,808	1,932,274	1,962,137	1,990,070	2,010,662	2,036,802	2,059,179	2,082,224	2,082,224

NM – Not Monitored

Figure NM-1

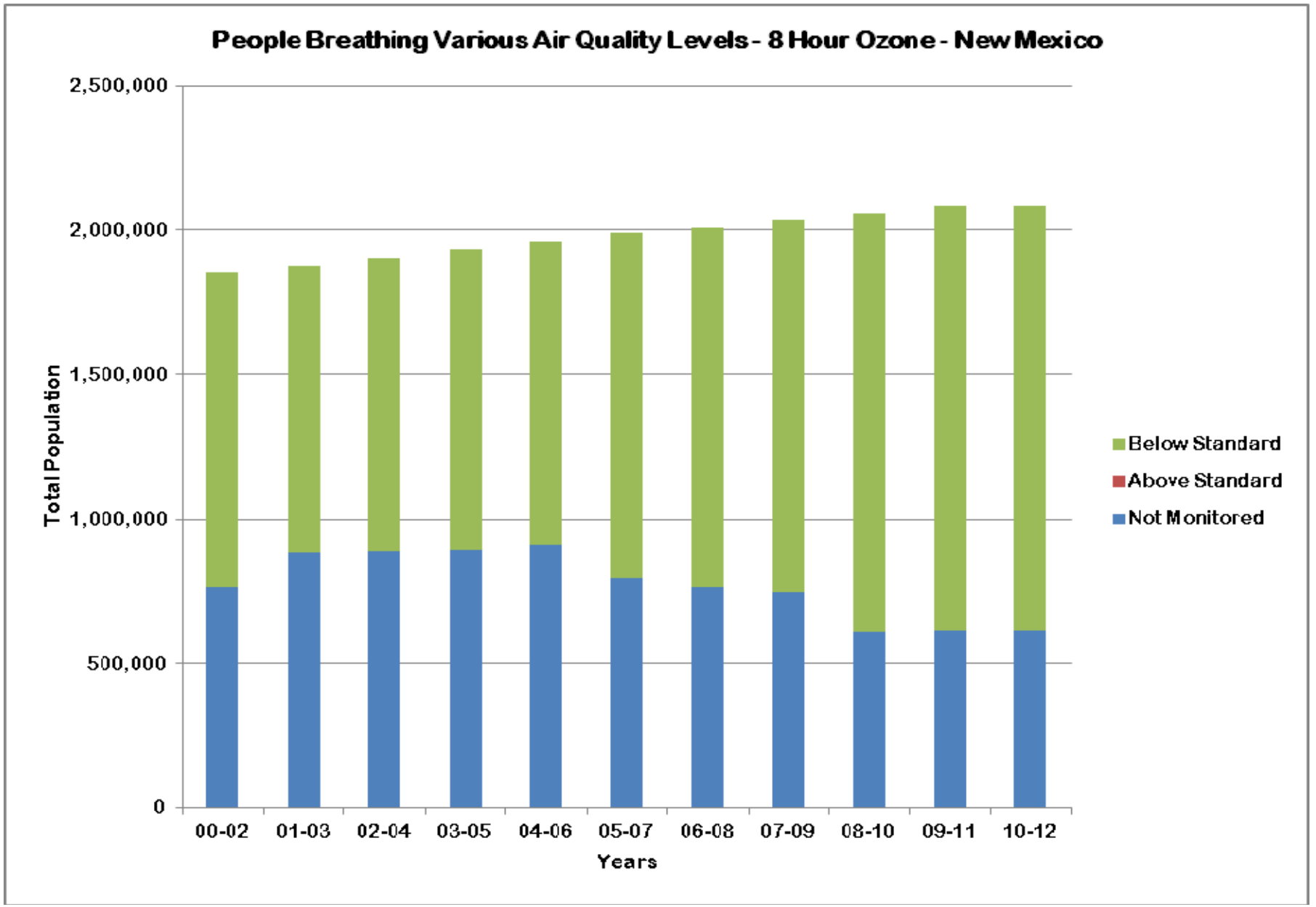

People Breathing Various Air Quality Levels - 8 Hour Ozone - New Mexico
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NM-2

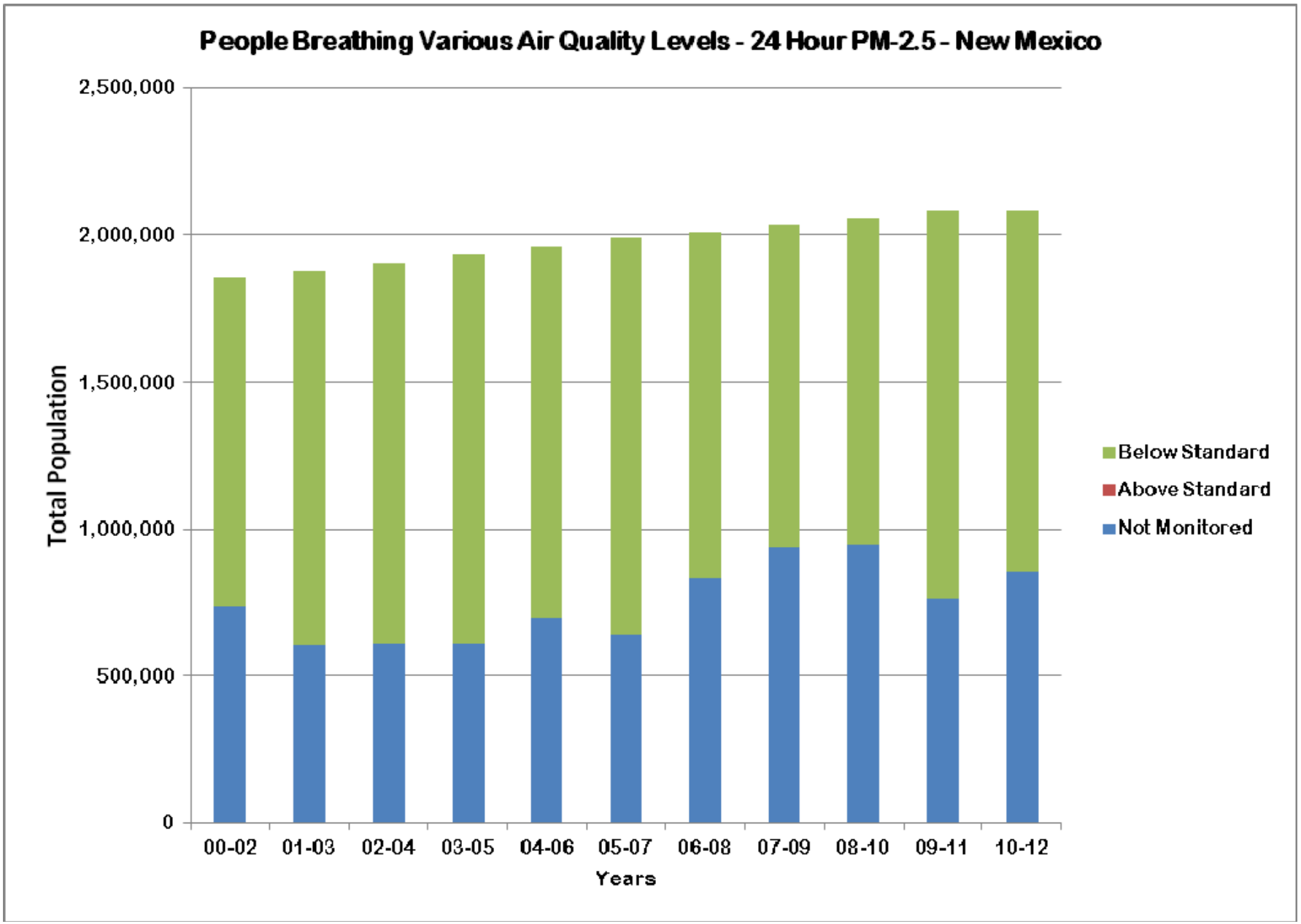
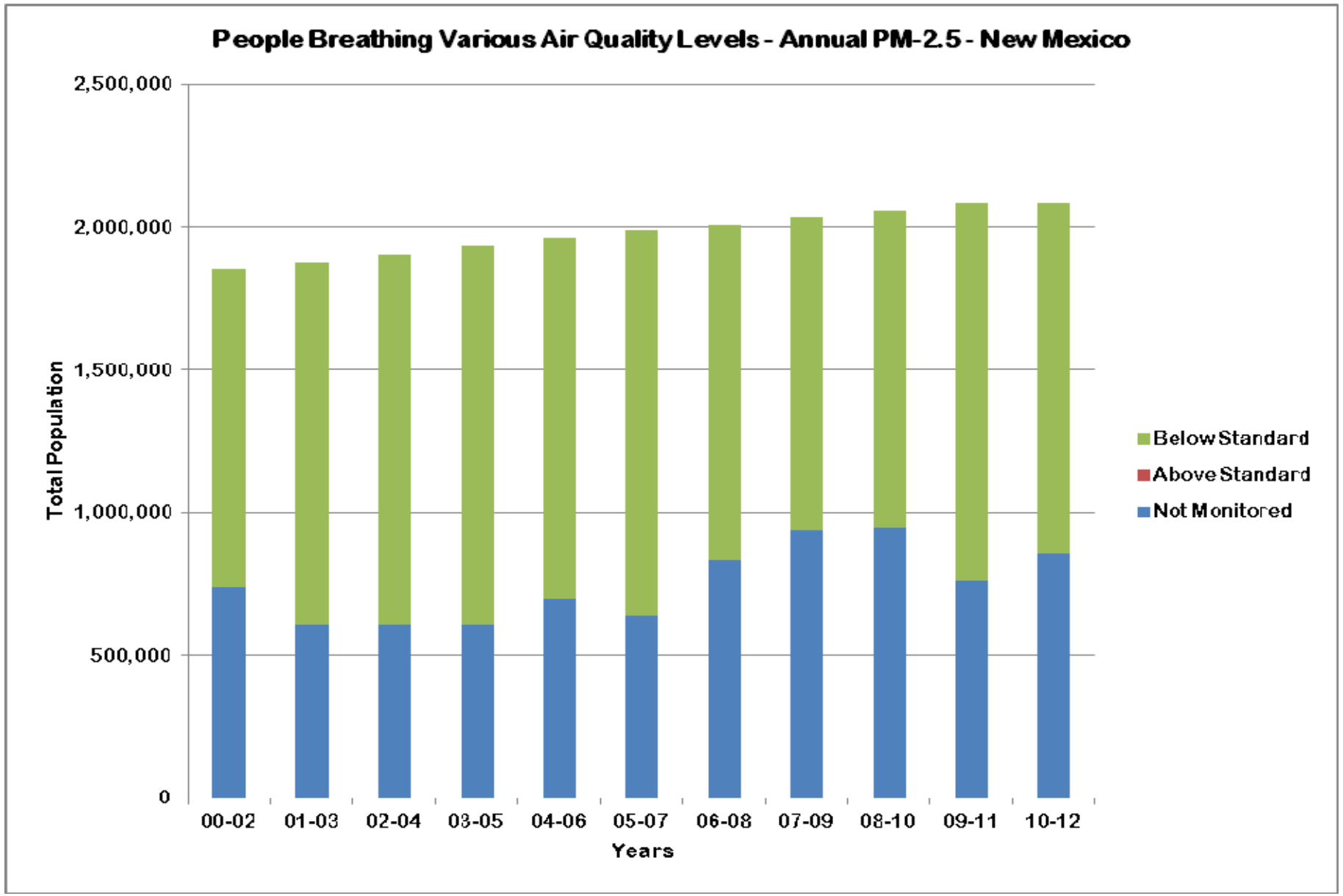

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - New Mexico
Total Population
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NM-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - New Mexico
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NEW YORK

Ozone

Significant progress has been made in ozone levels in New York. In the 2000 – 2002 time period, 2.3 million people (12.0%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 4.2 million people (21.2%). Figure NY-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in New York. In the 2000 – 2002 time period, approximately 7.2 million people (37.5%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 12.9 million people (66.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NY-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in New York. In the 2000 – 2002 time period, approximately 12.0 million people (62.4%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 12.9 million people (66.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NY-3 shows the distribution of people by year.

NEW YORK

Table NY-1
2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Albany	305,455	0.070	C	N	22	A	7.7	A	Y
Bronx	**1,408,473**	**0.076**	**D**	N	24	A	9.9	A	N
Chatauqua	**133,539**	**0.077**	**D**	Y	21	A	7.4	A	N
Chemung	88,911	0.068	C	N	ND	---	ND	---	---
Dutchess	297,322	0.074	C	N	ND	---	ND	---	---
Erie	919,086	0.073	C	N	25	A	9.6	A	N
Essex	38,961	0.071	C	Y	15	A	4.3	A	N
Franklin	51,795	0.038	A	N	ND	---	ND	---	---
Hamilton	4,778	0.067	B	N	ND	---	ND	---	---
Herkimer	64,508	0.063	B	N	ND	---	ND	---	---
Jefferson	120,262	0.074	C	N	ND	---	ND	---	---
Kings	2,565,635	ND	---	---	24	A	10.0	A	N
Monroe	747,813	ND	---	---	23	A	8.7	A	N
New York	**1,619,090**	**0.076**	**D**	N	25	A	11.0	A	Y
Niagara	215,124	0.075	C	N	ND	---	ND	---	---
Oneida	233,556	0.064	B	N	ND	---	ND	---	---
Onondaga	466,852	0.072	C	N	20	A	7.6	A	N
Orange	374,512	0.069	C	N	23	A	8.2	A	N
Oswego	121,700	0.070	C	N	ND	---	ND	---	---
Putnam	99,607	0.071	C	N	ND	---	ND	---	---
Queens	**2,272,771**	**0.081**	**D**	N	24	A	9.1	A	N
Rensselaer	159,835	0.068	C	N	ND	---	ND	---	---
Richmond	**470,728**	**0.083**	**F**	N	24	A	9.7	A	Y
Rockland	**317,757**	**0.076**	**D**	N	ND	---	ND	---	---
Saratoga	222,133	0.068	C	N	ND	---	ND	---	---
Steuben	99,063	0.067	B	N	20	A	7.0	A	N
Suffolk	**1,499,273**	**0.082**	**D**	N	22	A	8.4	A	N
Ulster	181,791	0.069	C	Y	ND	---	ND	---	---
Wayne	92,962	0.067	B	N	ND	---	ND	---	---
Westchester	**961,670**	**0.077**	**D**	N	ND	---	ND	---	---
Subtotal	**16,154,962**								
Not Monitored	3,415,299								
Total	**19,570,261**								

DV – Design Value ND - No Data MM – Multiple Monitors

NEW YORK

Table NY-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	136,139	0	0	0	0	51,599	285,838	51,795
B	0	0	0	0	480,585	0	439,749	440,375	398,387	886,587	494,867
C	2,288,478	2,214,608	64,332	1,168,835	3,528,064	2,755,345	3,469,325	6,832,380	10,012,546	7,140,669	3,611,551
D	1,906,122	398,094	5,075,260	4,838,435	3,569,696	4,891,754	5,356,955	3,529,021	2,911,193	3,746,664	8,212,573
F	7,013,513	8,623,300	5,506,640	4,603,416	3,889,550	3,889,652	2,417,667	944,201	0	470,467	470,728
Subtotal	11,208,113	11,236,002	10,646,232	10,746,825	11,467,895	11,536,751	11,683,696	11,745,977	13,373,725	12,530,225	12,841,514
NM	7,929,687	7,939,937	8,525,335	8,385,785	7,636,736	7,595,584	7,528,740	7,561,089	6,004,377	6,934,972	6,728,747
Total	19,137,800	19,175,939	19,171,567	19,132,610	19,104,631	19,132,335	19,212,436	19,307,066	19,378,102	19,465,197	19,570,261

People Breathing Short-Term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	39,195	0	0	111,606	611,971	137,914	1,341,885	4,728,630	11,334,195	15,128,693	12,921,251
B	1,239,979	913,857	2,611,638	599,529	1,339,350	2,718,449	4,399,858	6,735,417	3,920,094	0	0
C	5,888,896	4,843,739	2,413,672	6,905,265	6,333,479	6,333,991	6,055,134	2,959,692	0	0	0
D	4,979,492	2,472,999	5,595,943	3,377,554	3,784,296	5,376,782	2,950,510	0	0	0	0
F	1,358,739	3,866,373	2,928,910	2,925,309	1,578,171	0	0	0	0	0	0
Subtotal	13,506,301	12,096,968	13,550,163	13,919,263	13,647,267	14,567,136	14,747,383	14,423,739	15,254,289	15,128,693	12,921,251
NM	5,631,499	7,078,971	5,621,404	5,213,347	5,457,364	4,565,199	4,465,049	4,883,327	4,123,813	4,336,504	6,649,010
Total	19,137,800	19,175,939	19,171,567	19,132,610	19,104,631	19,132,335	19,212,436	19,307,066	19,378,102	19,465,197	19,570,261

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,765,594	1,337,176	4,568,454	3,882,042	4,727,797	7,808,825	9,336,516	8,976,296	15,254,289	15,128,693	12,921,251
B	4,402,476	4,420,420	3,593,695	4,666,103	3,557,003	1,381,529	3,823,849	5,447,443	0	0	0
C	4,782,849	6,339,372	5,388,004	3,797,545	5,362,467	5,376,782	1,587,022	0	0	0	0
D	1,555,382	0	0	1,573,573	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	13,506,301	12,096,968	13,550,163	13,919,263	13,647,267	14,567,136	14,747,383	14,423,739	15,254,289	15,128,693	12,921,251
NM	5,631,499	7,078,971	5,621,404	5,213,347	5,457,364	4,565,199	4,465,049	4,883,327	4,123,813	4,336,504	6,649,010
Total	19,137,800	19,175,939	19,171,567	19,132,610	19,104,631	19,132,335	19,212,436	19,307,066	19,378,102	19,465,197	19,570,261

NM – Not Monitored

Figure NY-1

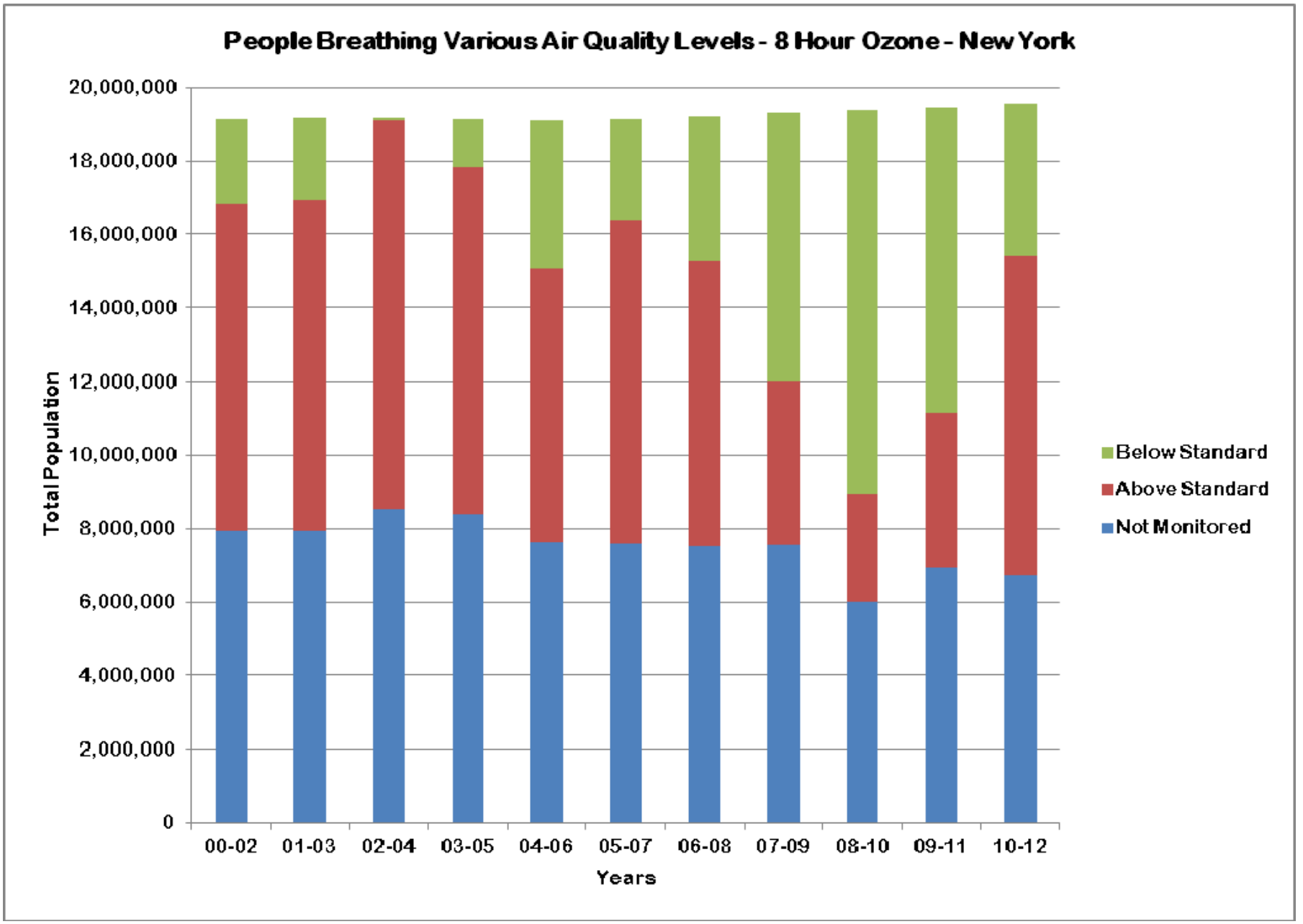

People Breathing Various Air Quality Levels - 8 Hour Ozone - New York
Total Population
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NY-2

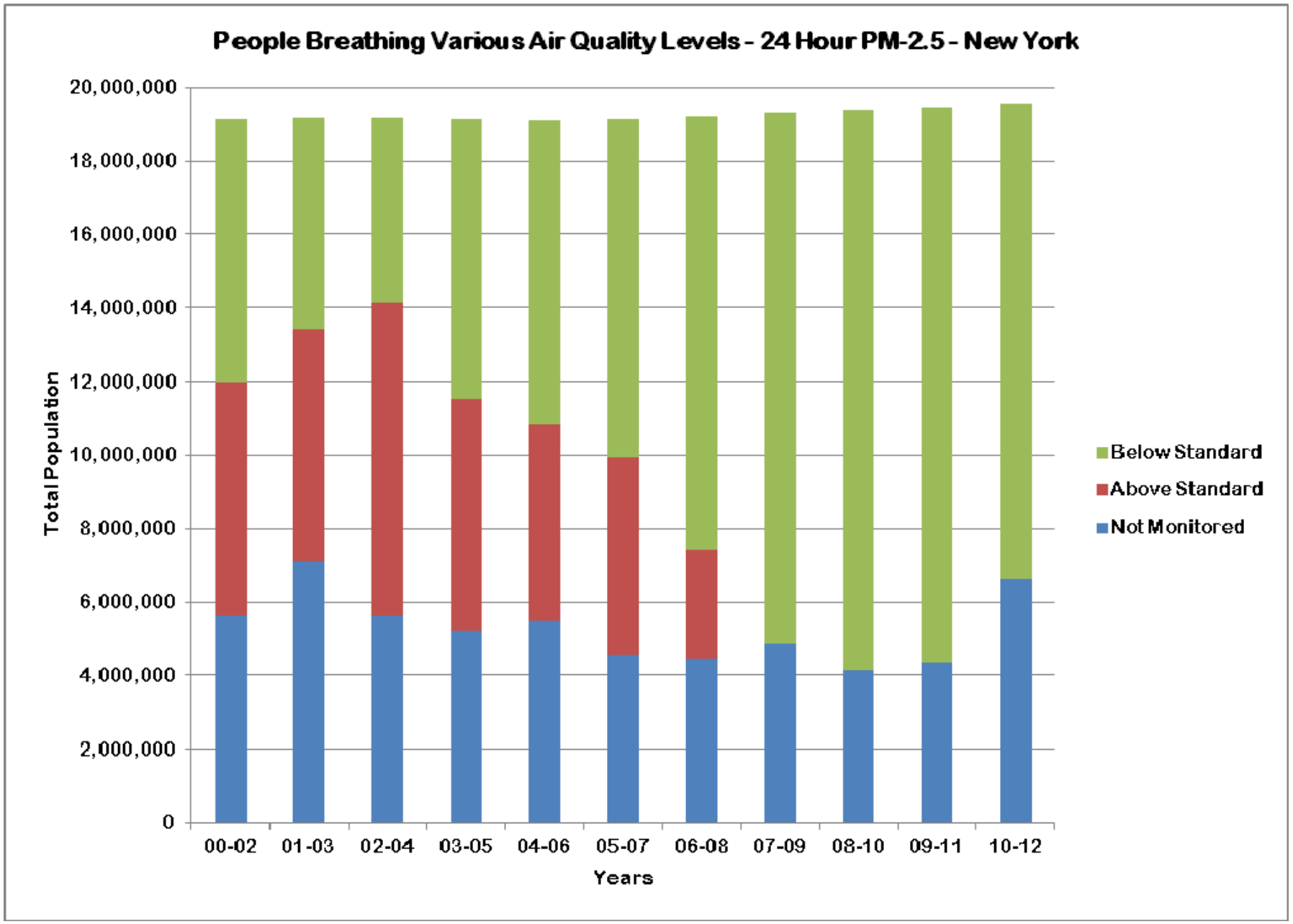
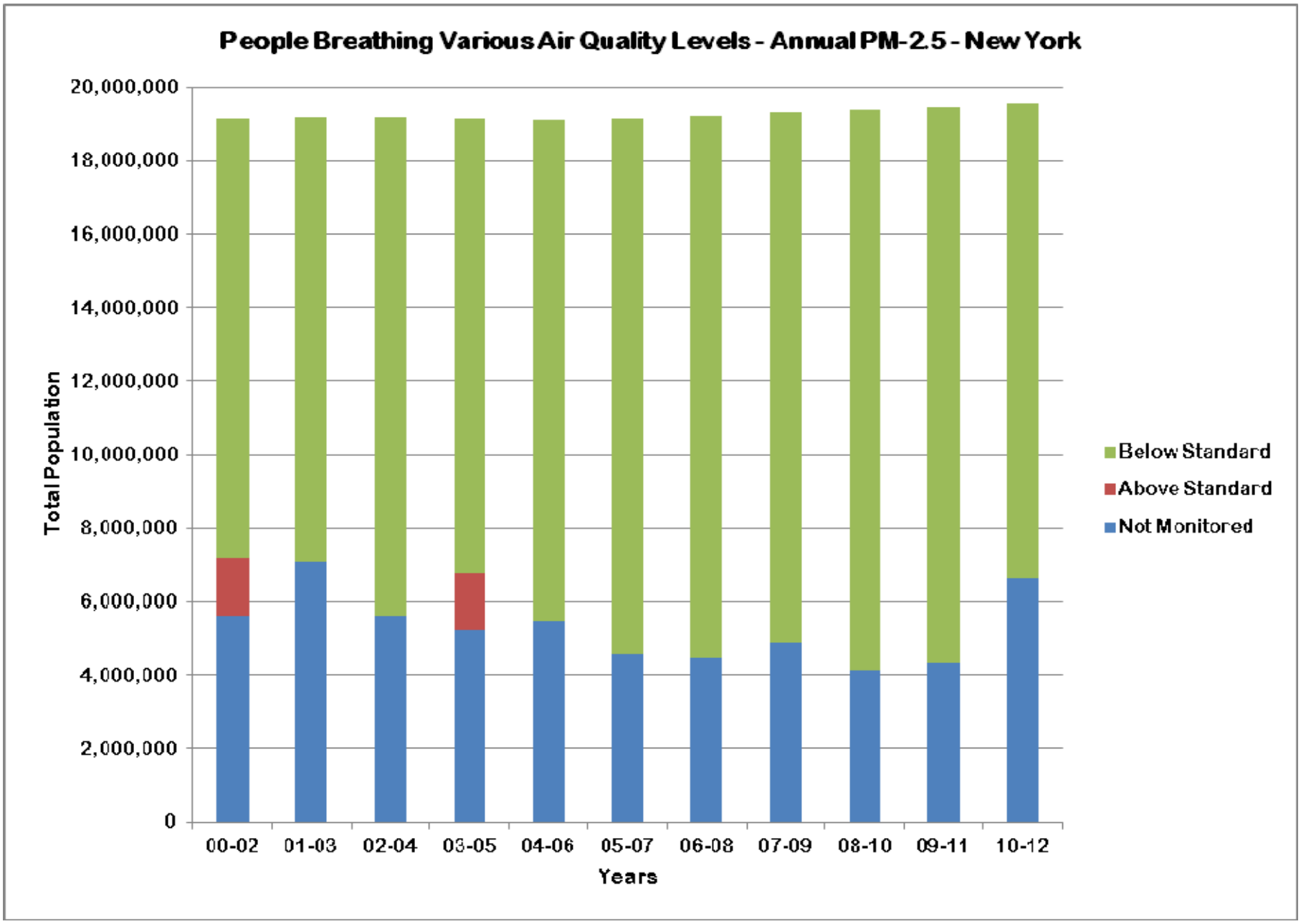

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - New York
Total Population
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NY-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - New York
Total Population
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NORTH CAROLINA

Ozone

Significant progress has been made in ozone levels in North Carolina. In the 2000 – 2002 time period, 13 thousand people (0.2%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 3.4 million people (35.3%). Figure NC-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in North Carolina. In the 2000 – 2002 time period, approximately 3.6 million people (43.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 5.1 million people (51.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NC-2 shows the distribution of people by year.

Annual PM-2.5

Progress has been made in annual PM-2.5 levels in North Carolina. In the 2000 – 2002 time period, approximately 2.9 million people (35.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 5.1 million people (51.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure NC-3 shows the distribution of people by year.

NORTH CAROLINA

Table NC-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Alexander	36,853	0.068	C	N	ND	---	ND	---	---
Avery	17,635	0.065	B	N	ND	---	ND	---	---
Buncombe	244,490	0.068	C	N	18	A	9.3	A	N
Caldwell	81,930	0.067	B	N	ND	---	ND	---	---
Caswell	23,217	0.073	C	N	18	A	8.9	A	N
Catawba	154,339	ND	---	---	23	A	10.6	A	N
Chatham	65,976	0.066	B	N	19	A	8.2	A	N
Cumberland	324,049	0.072	C	Y	22	A	10.0	A	N
Davidson	163,260	ND	---	---	21	A	11.1	A	N
Davie	41,433	0.073	C	N	ND	---	ND	---	---
Duplin	60,033	ND	---	---	20	A	8.7	A	N
Durham	279,641	0.073	C	N	19	A	9.2	A	N
Edgecombe	55,954	0.072	C	N	20	A	8.9	A	N
Forsyth	**358,137**	**0.076**	**D**	Y	20	A	9.7	A	Y
Franklin	61,475	0.072	C	N	ND	---	ND	---	---
Graham	8,700	0.072	C	N	ND	---	ND	---	---
Granville	60,436	0.073	C	N	ND	---	ND	---	---
Guilford	**500,879**	**0.077**	**D**	N	18	A	9.4	A	N
Haywood	58,908	0.069	C	Y	22	A	9.8	A	N
Jackson	40,448	0.071	C	N	18	A	9.3	A	N
Johnston	174,937	0.074	C	N	ND	---	ND	---	---
Lenoir	59,227	0.069	C	N	22	A	9.0	A	N
Lincoln	79,313	0.075	C	N	ND	---	ND	---	---
Martin	23,961	0.067	B	N	24	A	8.5	A	N
McDowell	44,998	ND	---	---	18	A	9.7	A	N
Mecklenburg	**969,031**	**0.081**	**D**	Y	23	A	10.9	A	N
Mitchell	15,368	ND	---	---	18	A	9.1	A	N
Montgomery	27,668	ND	---	---	20	A	9.0	A	N
New Hanover	209,234	0.063	B	N	ND	---	ND	---	---
Person	39,268	0.074	C	N	ND	---	ND	---	---
Pitt	172,554	0.071	C	N	22	A	8.4	A	N
Robeson	135,496	ND	---	---	22	A	9.8	A	N
Rockingham	92,720	0.074	C	N	ND	---	ND	---	---
Rowan	**138,180**	**0.078**	**D**	Y	19	A	10.1	A	N
Swain	14,141	0.062	B	N	20	A	9.7	A	N
Union	208,520	0.073	C	N	ND	---	ND	---	---
Wake	952,151	0.074	C	Y	20	A	9.3	A	Y
Watauga	51,871	ND	---	---	17	A	8.1	A	N
Wayne	124,246	ND	---	---	20	A	9.6	A	N
Yancey	17,630	0.071	C	N	ND	---	ND	----	---
Subtotal	**6,188,307**								
Not Monitored	3,562,766								
Total	**9.751.073**								

DV – Design Value ND - No Data MM – Multiple Monitors

NORTH CAROLINA

Table NC-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	13,693	13,819	13,872	31,858	31,778	746,419	412,877
C	13,120	13,199	191,602	575,725	946,706	527,499	682,402	1,832,774	3,422,182	3,507,133	3,031,925
D	321,483	595,857	844,777	1,918,088	2,354,802	3,249,577	2,945,187	2,770,332	1,546,462	1,082,392	1,966,227
F	4,129,693	4,094,433	3,641,465	1,677,276	965,552	1,112,202	1,025,712	138,562	0	0	0
Subtotal	4,464,296	4,703,489	4,677,844	4,171,089	4,280,753	4,903,097	4,667,173	4,773,526	5,000,422	5,335,944	5,411,029
NM	3,861,905	3,719,012	3,875,308	4,534,318	4,636,517	4,214,940	4,642,276	4,676,040	4,535,061	4,320,457	4,341,044
Total	8,326,201	8,422,501	8,553,152	8,705,407	8,917,270	9,118,037	9,309,449	9,449,566	9,535,483	9,656,401	9,752,073

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	458,949	414,394	771,324	728,099	730,843	520,163	1,988,537	4,595,271	4,891,793	4,974,714	5,058,223
B	1,842,818	1,986,120	2,277,003	3,274,863	2,563,688	2,872,215	1,358,441	0	0	0	0
C	1,333,043	1,921,209	2,016,501	861,586	667,990	650,212	0	0	0	0	0
D	677,352	35,711	0	148,629	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4,312,162	4,357,434	5,064,828	5,013,177	3,962,521	4,042,590	3,346,978	4,595,271	4,891,793	4,974,714	5,058,223
NM	4,014,039	4,065,067	3,488,324	3,692,230	4,954,749	5,075,447	5,962,471	4,854,295	4,643,690	4,681,687	4,693,850
Total	8,326,201	8,422,501	8,553,152	8,705,407	8,917,270	9,118,037	9,309,449	9,449,566	9,535,483	9,656,401	9,752,073

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	356,825	297,176	587,288	660,231	666,565	508,573	748,425	3,025,105	4,728,915	4,974,714	5,057,223
B	343,510	827,868	1,577,713	1,554,961	888,672	1,058,456	2,145,464	1,570,166	162,878	0	0
C	2,221,640	2,933,980	2,598,632	2,493,931	2,250,075	2,323,113	453,089	0	0	0	0
D	1,390,187	298,410	301,195	304,054	157,209	152,448	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4,312,162	4,357,434	5,064,828	5,013,177	3,962,521	4,042,590	3,346,978	4,595,271	4,891,793	4,974,714	5,058,223
NM	4,014,039	4,065,067	3,488,324	3,692,230	4,954,749	5,075,447	5,962,471	4,854,295	4,643,690	4,681,687	4,693,850
Total	8,326,201	8,422,501	8,553,152	8,705,407	8,917,270	9,118,037	9,309,449	9,449,566	9,535,483	9,656,401	9,752,073

NM – Not Monitored

Figure NC-1

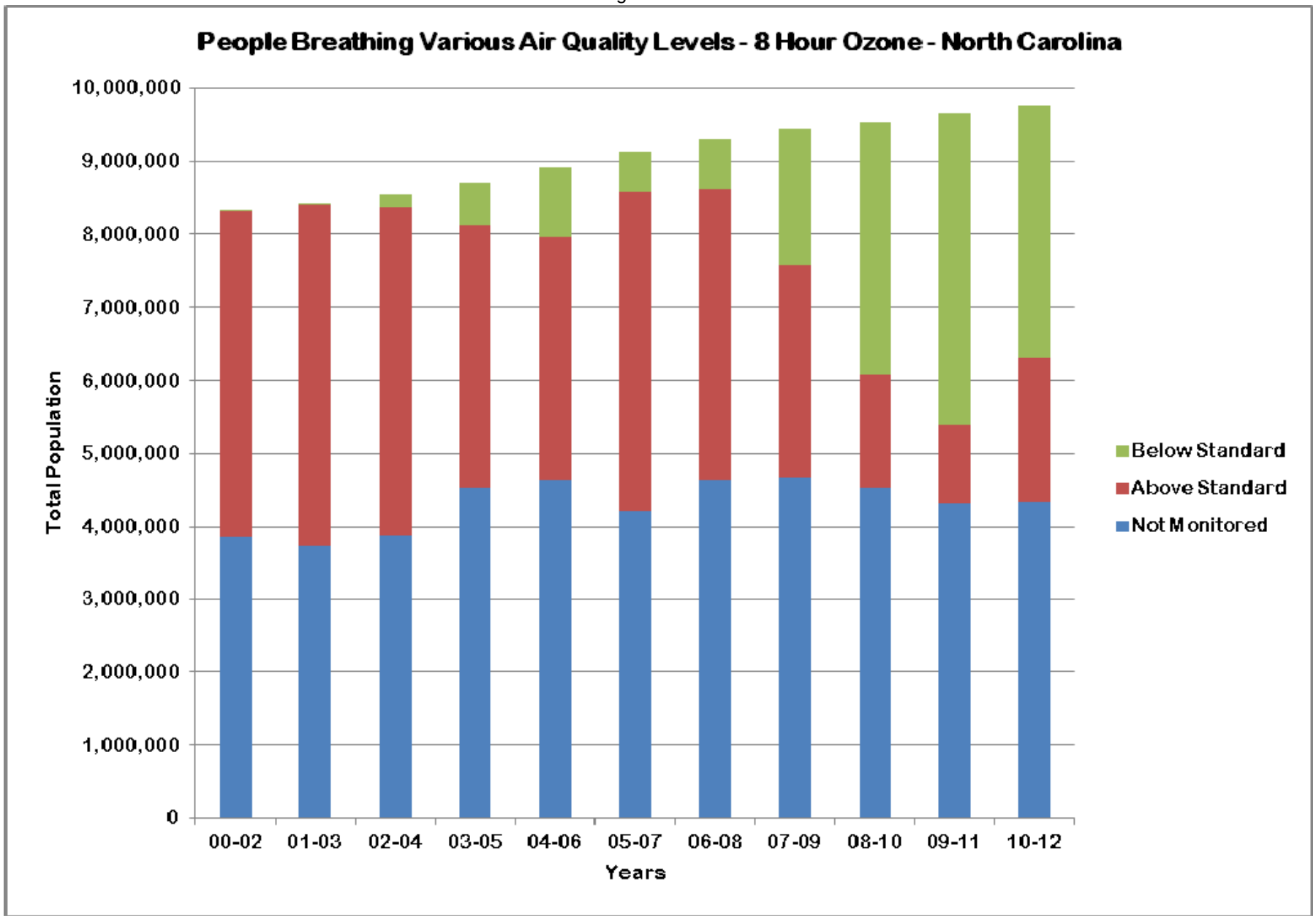

People Breathing Various Air Quality Levels - 8 Hour Ozone - North Carolina
Total Population
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NC-2

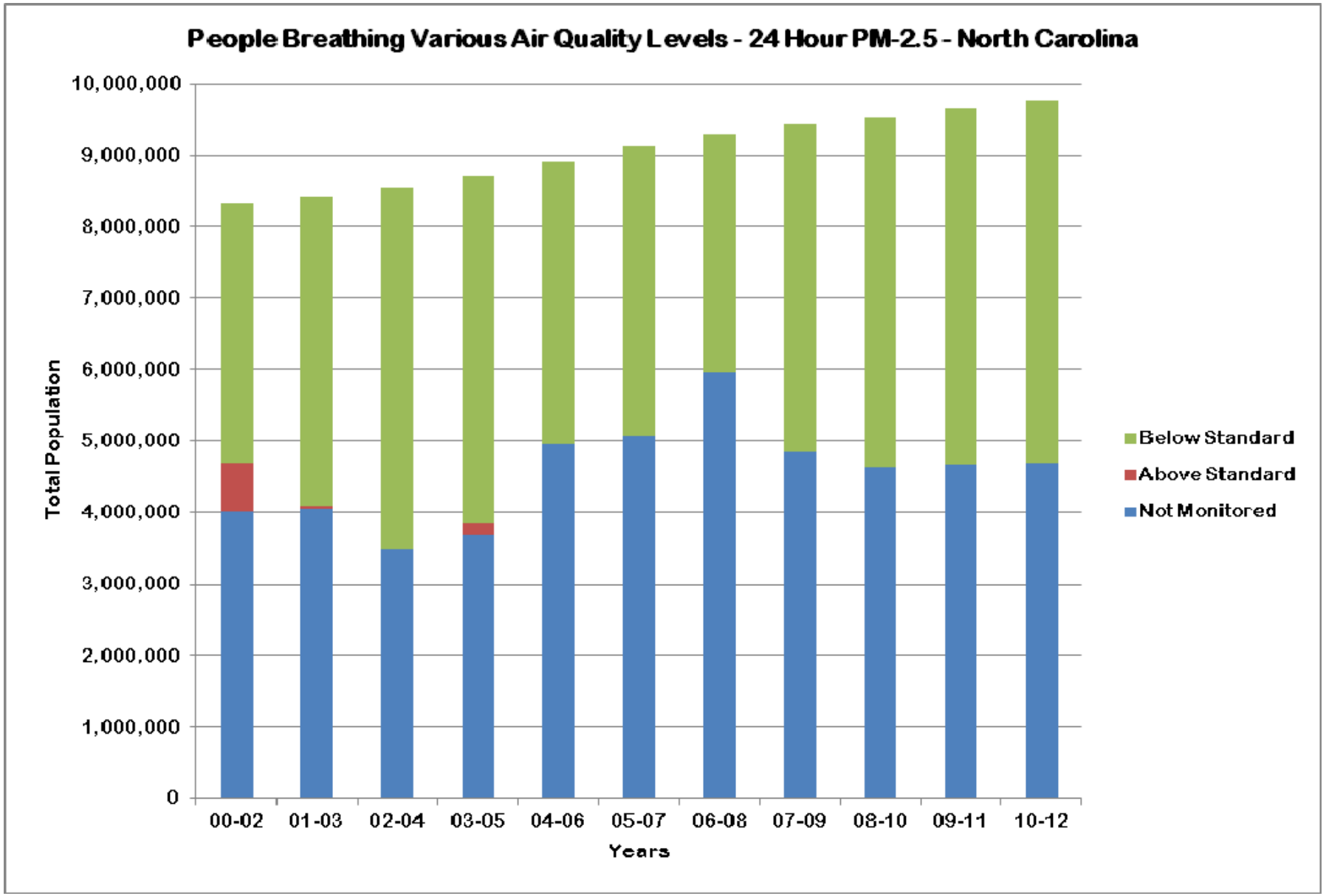
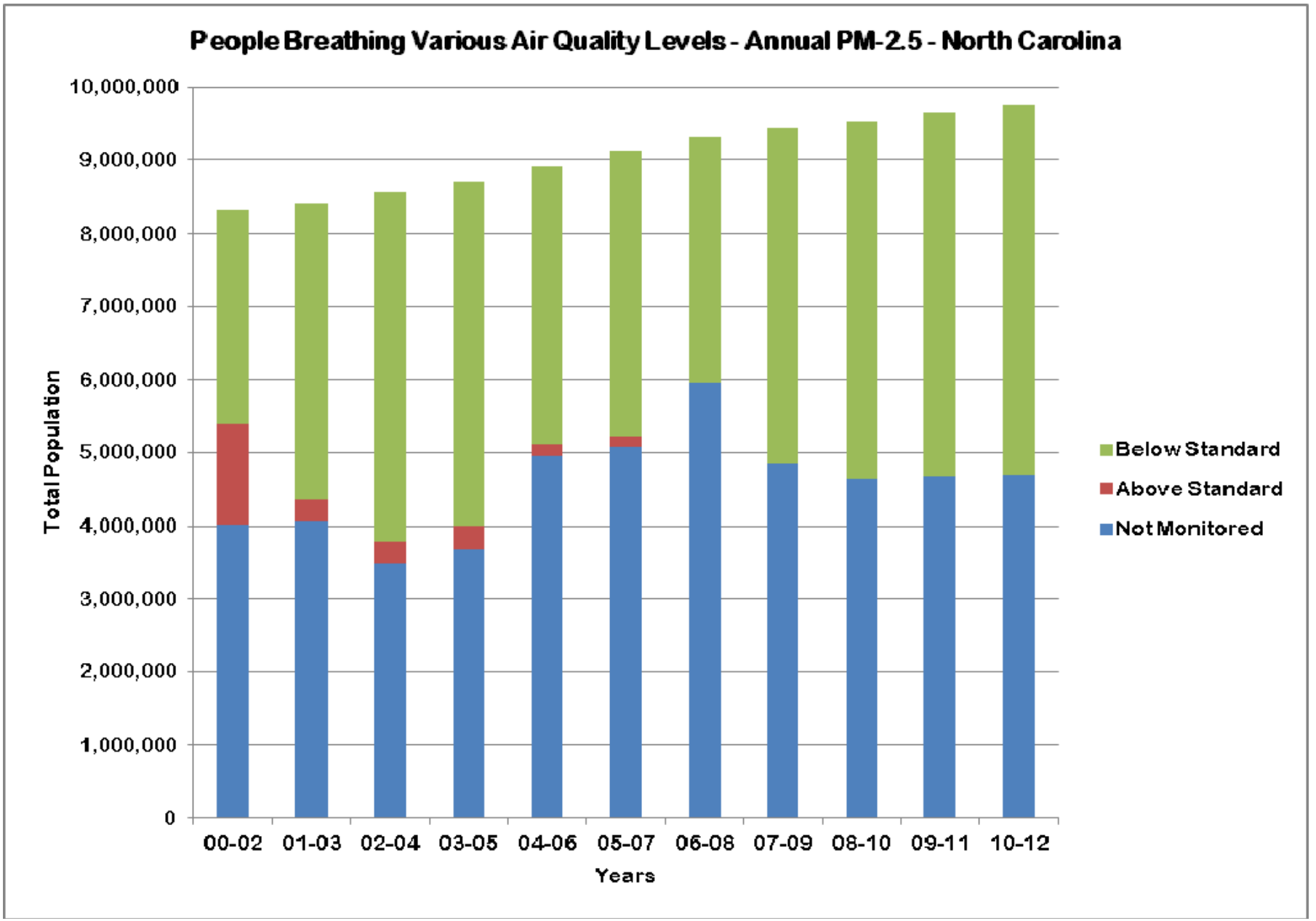

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - North Carolina
Total Population
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure NC-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - North Carolina
Total Population
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

NORTH DAKOTA

Ozone

Ozone levels in North Dakota have historically been better than the standard. In the 2000 – 2002 time period, 0.14 million people (21.4%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.26 million people (37.6%). The remainder of the population lived in counties where ozone was not measured. Figure ND-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in North Dakota have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.21 million people (32.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.25 million people (35.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure ND-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in North Dakota have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.21 million people (32.7%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 0.25 million people (35.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure ND-3 shows the distribution of people by year.

Table ND-1

2009 – 2011

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Billings	905	0.058	A	N	11	A	4.4	A	N
Burleigh	85,774	0.058	A	N	15	A	6.6	A	N
Burke	2,171	0.060	B	N	ND	---	ND	---	---
Cass	156,157	0.061	B	N	24	A	7.9	A	N
McKenzie	7,987	0.059	A	N	ND	---	ND	---	---
Mercer	8,486	0.060	B	N	14	A	5.8	A	N
Oliver	1,838	0.059	A	N	ND	---	ND	---	---
Subtotal	**263,318**								
Not Monitored	436,310								
Total	**699,628**								

DV – Design Value ND - No Data MM – Multiple Monitors

NORTH DAKOTA

Table ND-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	8,536	0	5,368	13,695	15,579	5,362	146,192	243,703	242,139	253,627	96,574
B	127,973	141,383	147,245	140,902	144,808	158,106	98,955	6,955	8,328	2,033	166,814
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	136,509	141,383	152,613	154,597	160,387	163,468	245,147	250,658	250,467	255,660	263,318
NM	501,659	497,434	492,092	491,492	489,035	489,354	412,422	414,310	422,124	428,272	436,310
Total	638,168	638,817	644,705	646,089	649,422	652,822	657,569	664,968	672,591	683,932	699,628

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	208,882	212,772	222,955	226,458	229,057	227,902	232,031	237,180	240,293	244,778	251,322
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	208,882	212,772	222,955	226,458	229,057	227,902	232,031	237,180	240,293	244,778	251,322
NM	429,286	426,045	421,750	419,631	420,365	424,920	425,538	427,788	432,298	439,154	448,306
Total	638,168	638,817	644,705	646,089	649,422	652,822	657,569	664,968	672,591	683,932	699,628

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	208,882	212,772	222,955	226,458	229,057	227,902	232,031	237,180	240,293	244,778	251,322
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	208,882	212,772	222,955	226,458	229,057	227,902	232,031	237,180	240,293	244,778	251,322
NM	429,286	426,045	421,750	419,631	420,365	424,920	425,538	427,788	432,298	439,154	448,306
Total	638,168	638,817	644,705	646,089	649,422	652,822	657,569	664,968	672,591	683,932	699,628

NM – Not Monitored

Figure ND-1

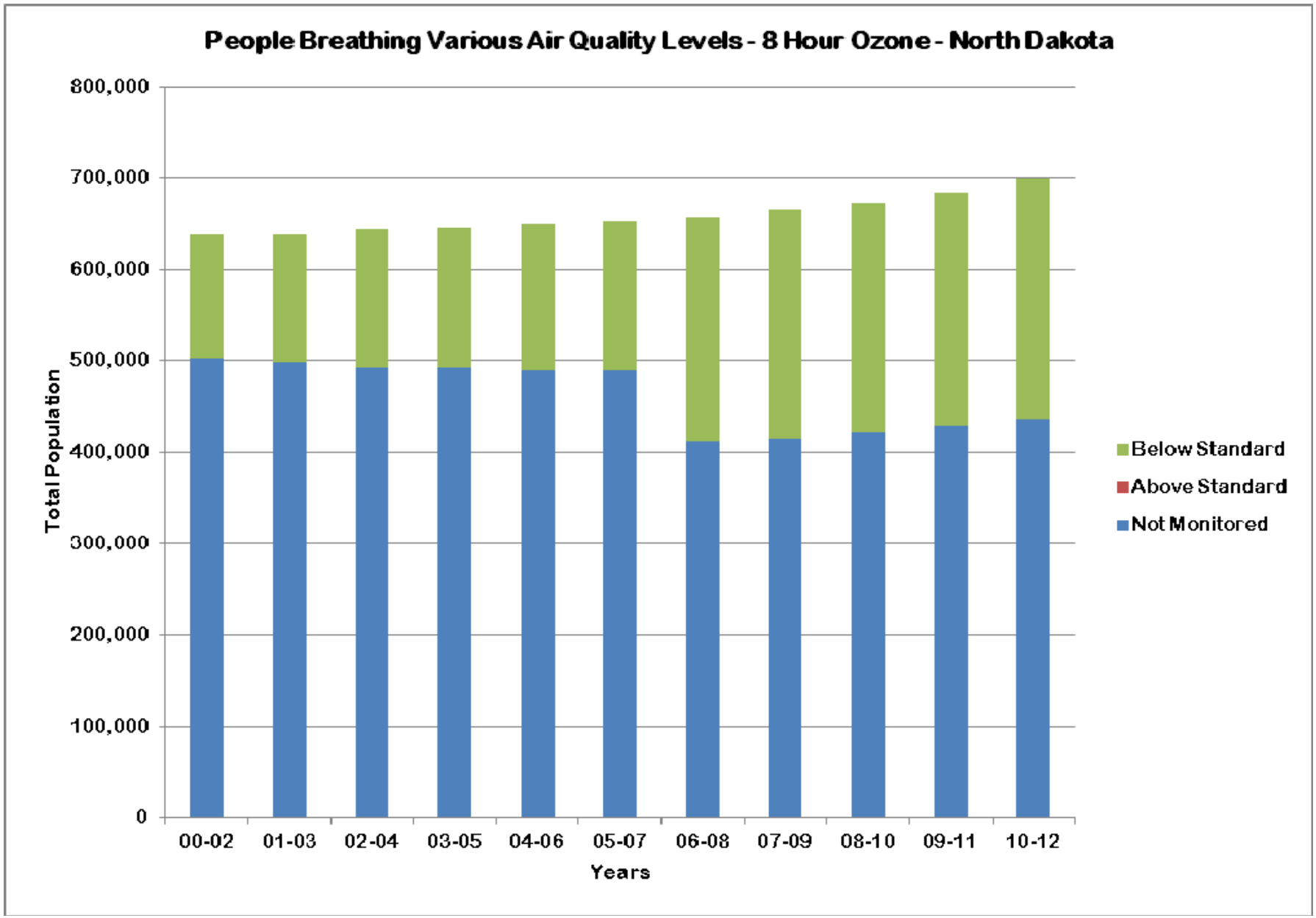

People Breathing Various Air Quality Levels - 8 Hour Ozone - North Dakota
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure ND-2

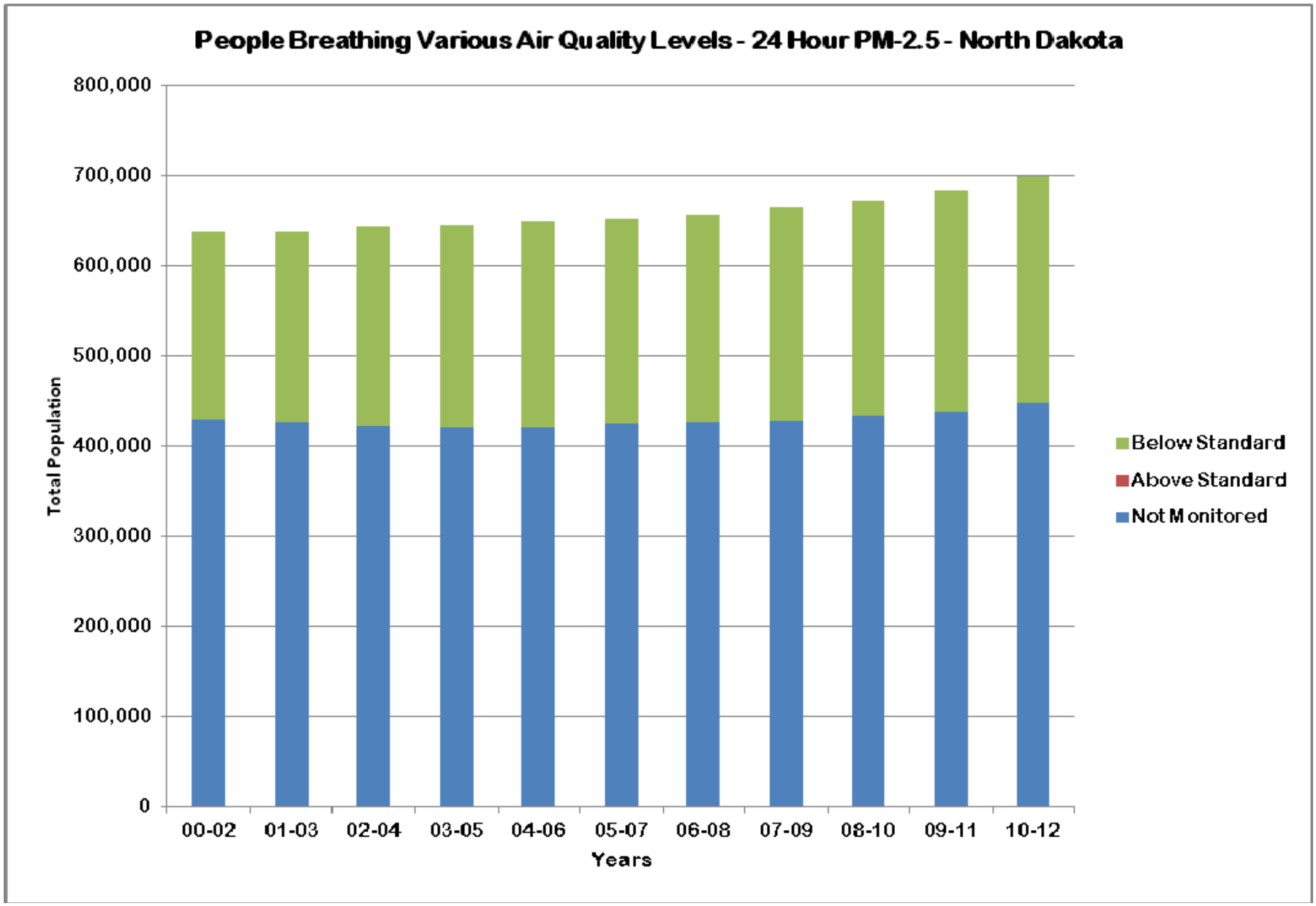
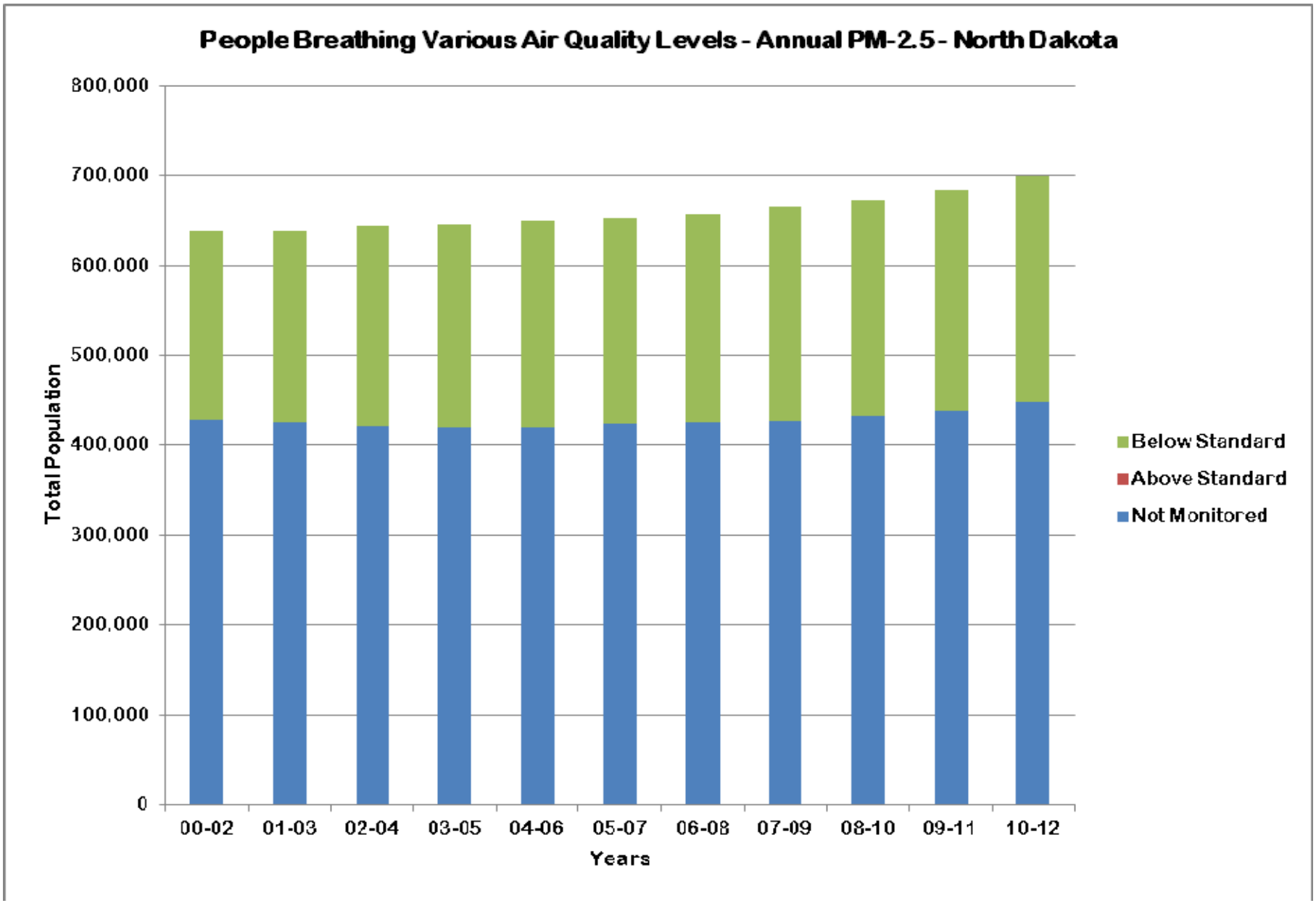

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - North Dakota
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure ND-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - North Dakota
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

OHIO

Ozone

Significant progress has been made in ozone levels in Ohio. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.6 million people (22.9%). Figure OH-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Ohio. In the 2000 – 2002 time period, no people lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 7.4 million people (64.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure OH-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Ohio. The remainder of the population lived in counties where PM-2.5 was not measured. In the 2000 – 2002 time period, approximately 0.5 million people (4.5%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 7.4 million people (64.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure OH-3 shows the distribution of people by year.

OHIO

Table OH-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Allen	105,141	0.075	C	N	ND	---	ND	---	---
Ashtabula	**100,389**	**0.080**	**D**	N	ND	---	ND	---	---
Athens	64,304	ND	**---**	---	17	A	8.9	A	N
Butler	**370,589**	**0.081**	**D**	Y	27	A	12.4	B	Y
Clark	**137,208**	**0.076**	**D**	Y	27	A	11.9	A	N
Clermont	**199,085**	**0.083**	**F**	N	ND	---	ND	---	---
Clinton	**41,886**	**0.082**	**D**	N	ND	---	ND	---	---
Cuyahoga	**1,265,111**	**0.076**	**D**	N	27	A	11.9	A	Y
Delaware	81,061	0.075	C	Y	ND	---	ND	---	---
Franklin	**1,195,537**	**0.077**	**D**	Y	25	A	11.5	A	Y
Geauga	**93,680**	**0.078**	**D**	N	ND	---	ND	---	---
Greene	163,587	0.074	C	N	25	A	11.4	A	N
Hamilton	**802,038**	**0.082**	**D**	N	27	A	12.5	B	Y
Jefferson	68,389	0.073	C	N	26	A	11.8	A	Y
Knox	60,705	0.075	C	N	ND	---	ND	---	---
Lake	**229,582**	**0.078**	**D**	N	23	A	9.6	A	N
Lawrence	62,109	0.070	C	Y	23	A	11.3	A	N
Licking	**167,537**	**0.077**	**D**	N	ND	---	ND	---	---
Lorain	307,478	0.075	C	N	23	A	9.8	A	N
Lucas	427,998	0.071	C	N	25	A	10.7	A	Y
Madison	**43,053**	**0.077**	**D**	N	ND	---	ND	---	---
Mahoning	235,145	0.073	C	N	26	A	11.3	A	Y
Medina	173,684	ND	---	---	24	A	10.3	A	N
Miami	103,060	0.074	C	N	ND	---	ND	---	---
Montgomery	**534,325**	**0.079**	**D**	N	27	A	12.3	B	N
Portage	161,451	0.071	C	N	24	A	10.3	A	N
Preble	41,886	0.074	C	N	25	A	10.7	A	N
Scioto	78,477	ND	---	---	21	A	10.6	A	N
Stark	**374,868**	**0.076**	**D**	N	27	A	12.4	B	Y
Summit	540,817	0.074	C	N	26	A	11.6	A	Y
Trumbull	**207,406**	**0.076**	**D**	Y	25	A	10.6	A	N
Warren	217,241	0.079	D	N	ND	---	ND	---	---
Washington	61,475	0.074	C	N	ND	---	ND	---	---
Wood	128,200	0.073	C	N	ND	---	ND	---	---
Subtotal	**8,844,502**								
Not Monitored	2,699,723								
Total	**11,544,225**								

DV – Design Value ND - No Data MM – Multiple Monitors

OHIO

Table OH-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	62,476	62,798	0	0	0	0	62,489	0
C	0	0	62,169	1,373,196	2,196,346	301,181	2,488,138	4,575,240	6,226,638	6,453,490	2,642,496
D	1,414,080	104,837	1,461,101	2,356,230	5,943,870	6,140,349	5,162,091	3,624,490	2,516,928	2,066,145	5,780,450
F	6,918,052	8,423,491	7,007,302	4,932,762	531,173	2,305,879	310,466	0	0	0	199,085
Subtotal	8,332,132	8,528,328	8,530,572	8,724,664	8,734,187	8,747,409	7,960,695	8,199,730	8,743,566	8,582,124	8,622,031
NM	3,075,757	2,906,460	2,921,679	2,738,656	2,747,026	2,753,059	3,554,696	3,329,166	2,792,938	2,962,827	2,922,194
Total	11,407,889	11,434,788	11,452,251	11,463,320	11,481,213	11,500,468	11,515,391	11,528,896	11,536,504	11,544,951	11,544,225

People Breathing Short-Term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	450,167	2,072,682	4,974,746	7,445,981
B	0	63,827	42,613	0	0	0	1,781,968	4,626,497	3,673,057	2,458,011	0
C	0	184,398	1,841,201	840,770	2,368,090	1,640,347	5,335,174	1,354,915	541,781	0	0
D	597,469	1,214,269	3,290,654	3,785,130	4,597,301	5,138,720	69,989	0	375,586	0	0
F	5,833,471	5,695,487	1,891,751	2,422,620	70,656	70,114	0	0	0	0	0
Subtotal	6,430,940	7,157,981	7,066,219	7,048,520	7,036,047	6,849,181	7,187,131	6,431,579	6,663,106	7,432,757	7,445,981
NM	4,976,949	4,276,807	4,386,032	4,414,800	4,445,166	4,651,287	4,328,260	5,097,317	4,873,398	4,112,194	4,098,244
Total	11,407,889	11,434,788	11,452,251	11,463,320	11,481,213	11,500,468	11,515,391	11,528,896	11,536,504	11,544,951	11,544,225

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	364,360	537,199	2,624,225	3,170,216	5,364,161
B	0	291,059	782,571	449,191	64,237	362,711	1,615,212	4,655,765	2,860,921	4,262,541	2,081,820
C	515,236	1,305,663	2,098,325	1,286,376	4,426,734	3,348,394	5,207,559	1,238,615	1,177,960	0	0
D	1,227,618	4,488,975	4,185,323	4,502,601	2,545,076	3,138,076	0	0	0	0	0
F	4,688,086	1,072,284	0	810,352	0	0	0	0	0	0	0
Subtotal	6,430,940	7,157,981	7,066,219	7,048,520	7,036,047	6,849,181	7,187,131	6,431,579	6,663,106	7,432,757	7,445,981
NM	4,976,949	4,276,807	4,386,032	4,414,800	4,445,166	4,651,287	4,328,260	5,097,317	4,873,398	4,112,194	4,098,244
Total	11,407,889	11,434,788	11,452,251	11,463,320	11,481,213	11,500,468	11,515,391	11,528,896	11,536,504	11,544,951	11,544,225

NM – Not Monitored

Figure OH-1

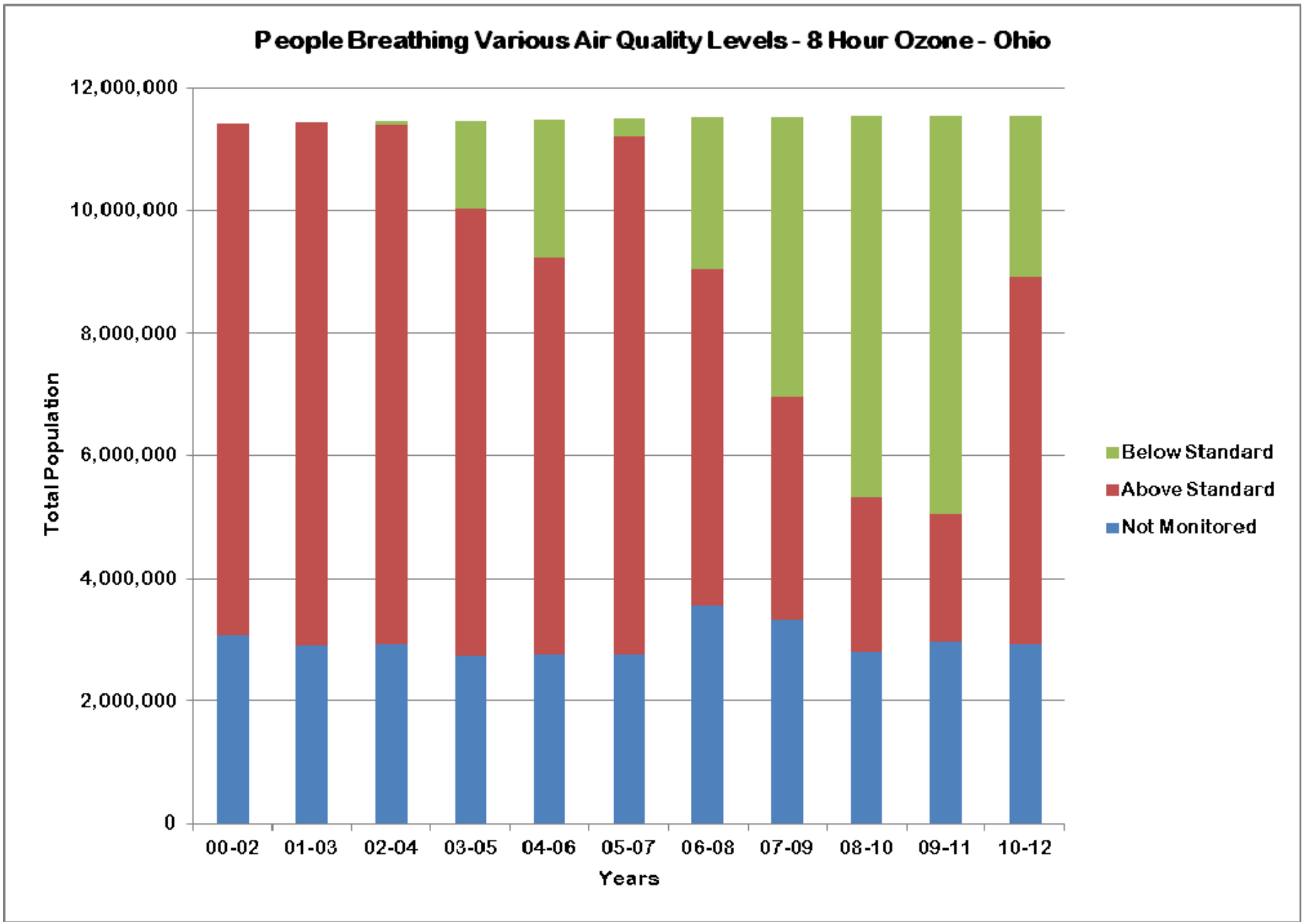

People Breathing Various Air Quality Levels - 8 Hour Ozone - Ohio
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure OH-2

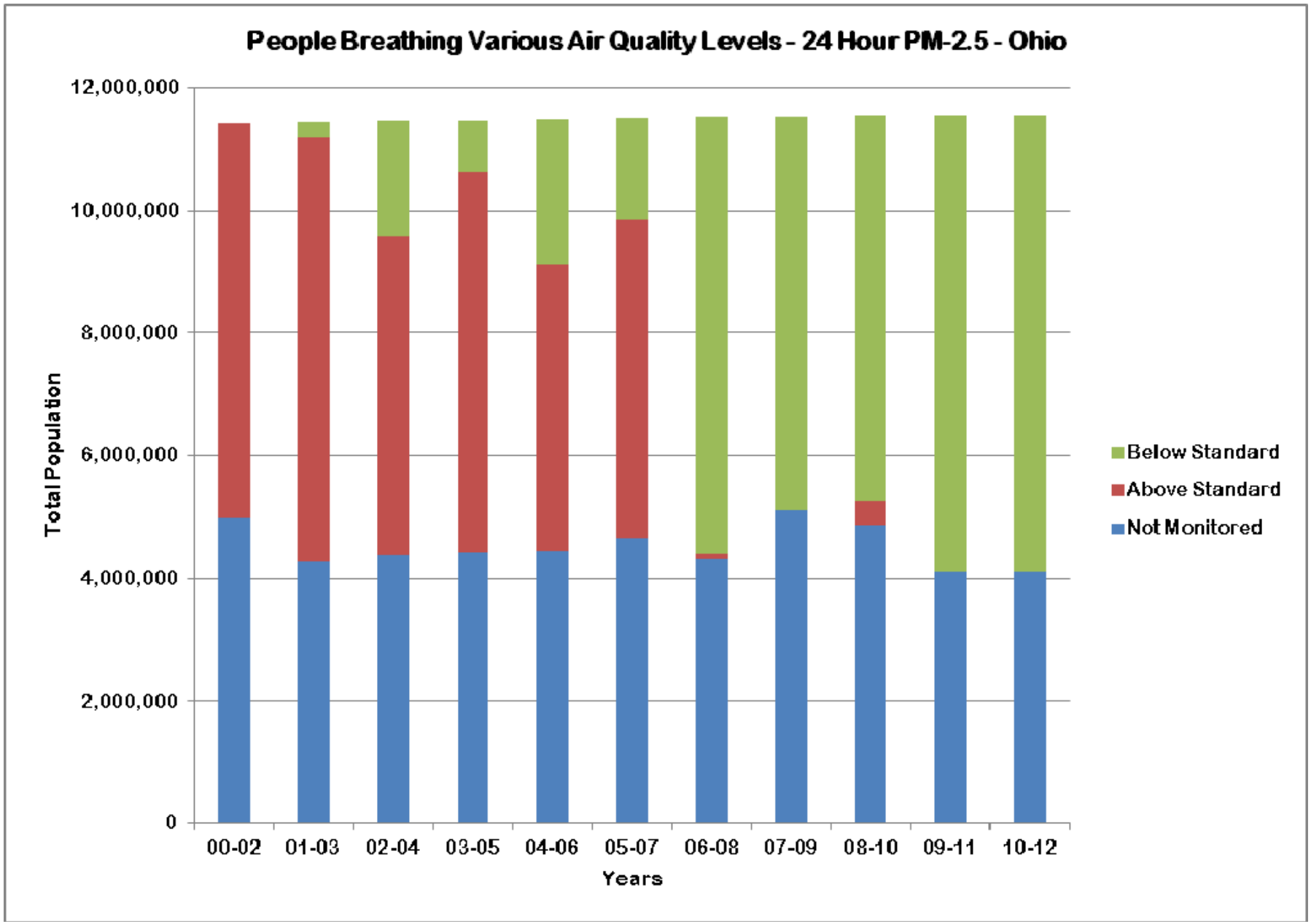
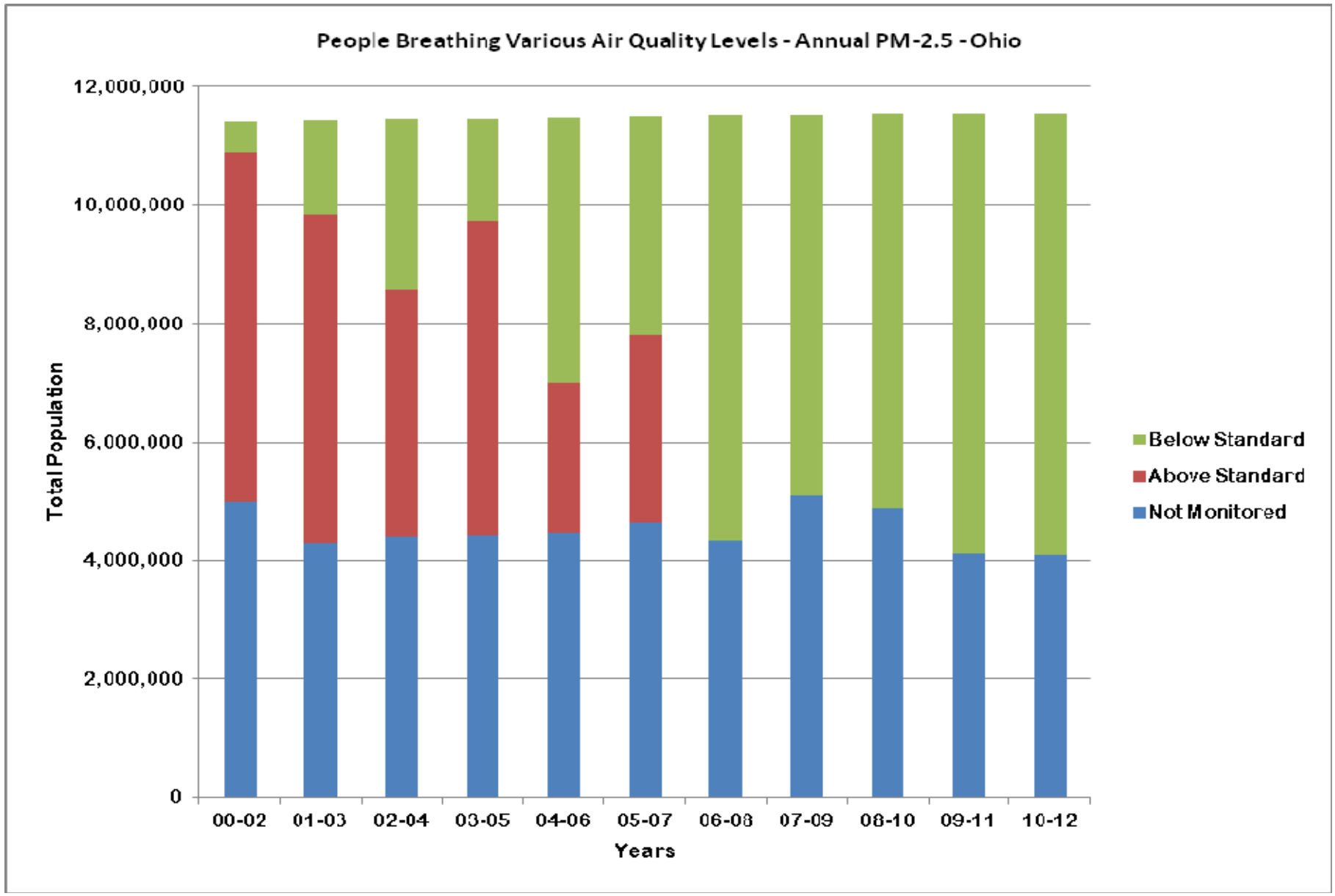

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Ohio
Total Population
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure OH-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Ohio
Total Population
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

OKLAHOMA

Ozone

Significant progress has been made in ozone levels in Oklahoma. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.3 million people (7.6%). Figure OK-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Oklahoma have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.9 million people (55.4%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 1.6 million people (42.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure OK-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Oklahoma have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.9 million people (55.4%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 1.6 million people (42.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure OK-3 shows the distribution of people by year.

OKLAHOMA

Table OK-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Adair	**22,286**	**0.077**	**D**	N	ND	---	ND	---	---
Caddo	**29,678**	**0.077**	**D**	N	ND	---	ND	---	---
Canadian	**122,560**	**0.077**	**D**	N	ND	---	ND	---	---
Cherokee	**48,150**	**0.076**	**D**	N	ND	---	ND	---	---
Cleveland	**265,638**	**0.077**	**D**	N	ND	---	ND	---	---
Comanche	126,390	0.075	C	N	ND	---	ND	---	---
Creek	**70,651**	**0.078**	**D**	N	ND	---	ND	---	---
Dewey	4,783	0.074	C	N	ND	---	ND	---	---
Kay	45,831	0.073	C	N	ND	---	ND	---	---
Mayes	**41,168**	**0.079**	**D**	N	ND	---	ND	---	---
McClain	35,613	0.075	C	N	ND	---	ND	---	---
McCurtain	33,203	0.069	C	N	ND	---	ND	---	---
Oklahoma	**741,781**	**0.078**	**D**	Y	20	A	9.5	A	Y
Ottawa	**32,236**	**0.077**	**D**	N	ND	---	ND	---	---
Pittsburg	45,048	0.074	C	N	19	A	9.9	A	N
Tulsa	**613,816**	**0.079**	**D**	Y	22	A	10.5	A	N
Subtotal	**2,278,832**								
Not Monitored	1,535,988								
Total	**3,814,820**								

DV – Design Value ND - No Data MM – Multiple Monitors

OKLAHOMA

Table OK-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	78,861	151,740	0	0
C	0	47,363	265,256	309,088	318,128	82,192	1,403,176	2,100,404	2,010,149	1,487,257	290,868
D	1,121,386	1,681,164	1,579,168	1,679,290	1,739,517	2,001,201	701,484	0	0	732,371	1,987,964
F	569,170	0	0	0	0	0	0	0	0	0	0
Subtotal	1,690,556	1,728,527	1,844,424	1,988,378	2,057,645	2,083,393	2,104,660	2,179,265	2,161,889	2,219,628	2,278,332
NM	1,798,524	1,776,365	1,680,809	1,560,219	1,536,445	1,550,956	1,564,316	1,538,307	1,589,462	1,571,880	1,535,988
Total	3,489,080	3,504,892	3,525,233	3,548,597	3,594,090	3,634,349	3,668,976	3,717,572	3,751,351	3,791,508	3,814,820

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,223,816	1,112,897	1,666,175	860,440	855,808	873,344	150,908	1,495,204	1,495,733	1,288,595	1,600,645
B	684,157	801,120	141,453	755,135	718,050	754,146	28,612	29,459	0	0	0
C	0	0	0	46,469	0	0	0	0	0	0	0
D	0	0	0	33,011	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,907,973	1,914,017	1,807,628	1,695,055	1,573,858	1,627,490	179,520	1,524,663	1,495,733	1,289,595	1,600,645
NM	1,581,107	1,590,875	1,717,605	1,853,542	2,020,232	2,006,859	3,489,456	2,192,909	2,255,618	2,502,913	2,214,175
Total	3,489,080	3,504,892	3,525,233	3,548,597	3,594,090	3,634,349	3,668,976	3,717,572	3,751,351	3,791,508	3,814,820

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,338,703	1,805,321	1,807,628	1,625,249	1,573,858	1,470,265	179,520	1,524,663	1,495,733	1,288,595	1,600,645
B	569,170	108,696	0	69,806	0	157,225	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,907,973	1,914,017	1,807,628	1,695,055	1,573,858	1,627,490	179,520	1,524,663	1,495,733	1,289,595	1,600,645
NM	1,581,107	1,590,875	1,717,605	1,853,542	2,020,232	2,006,859	3,489,456	2,192,909	2,255,618	2,502,913	2,214,175
Total	3,489,080	3,504,892	3,525,233	3,548,597	3,594,090	3,634,349	3,668,976	3,717,572	3,751,351	3,791,508	3,814,820

NM – Not Monitored

Figure OK-1

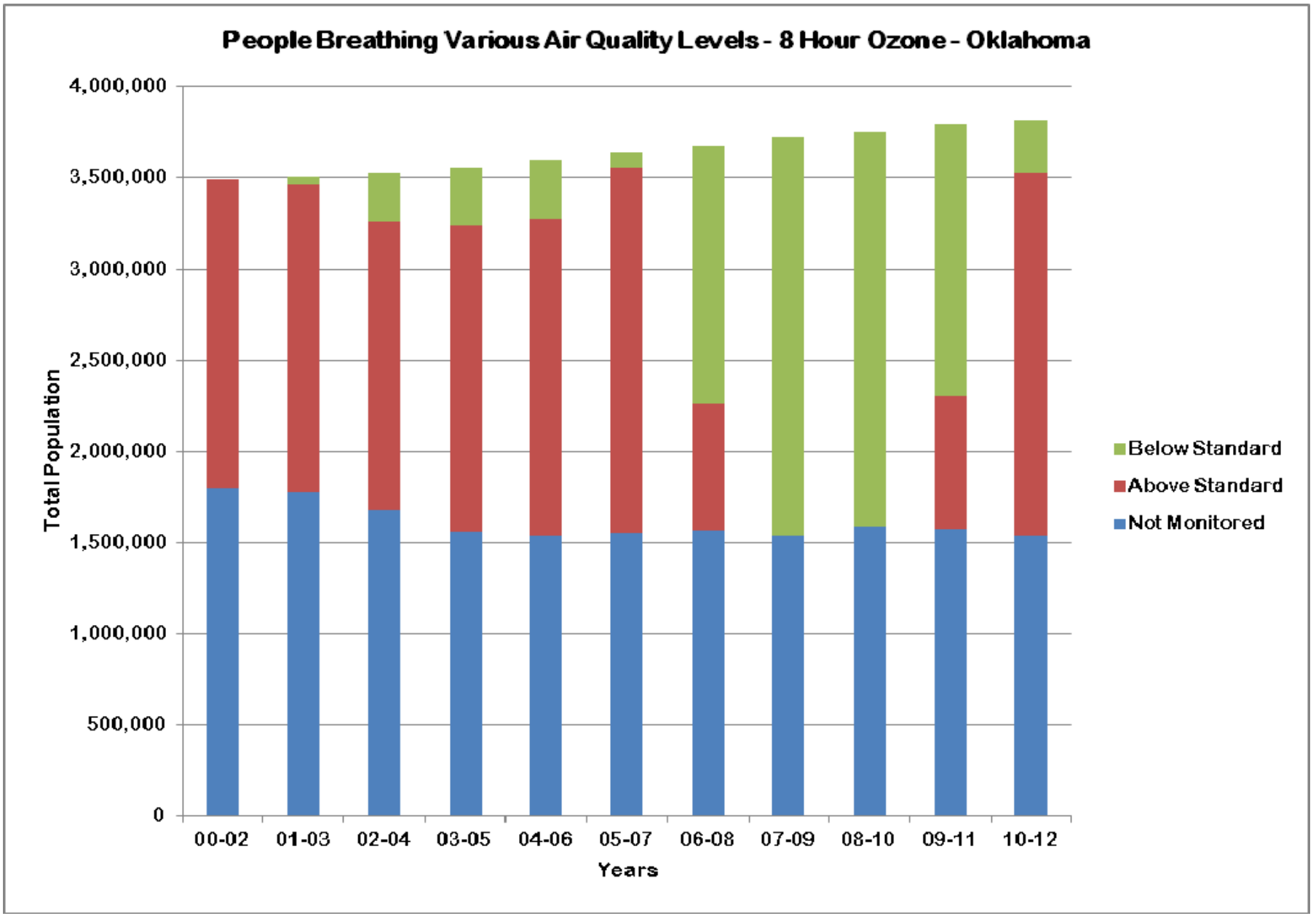

People Breathing Various Air Quality Levels - 8 Hour Ozone - Oklahoma
Total Population
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure OK-2

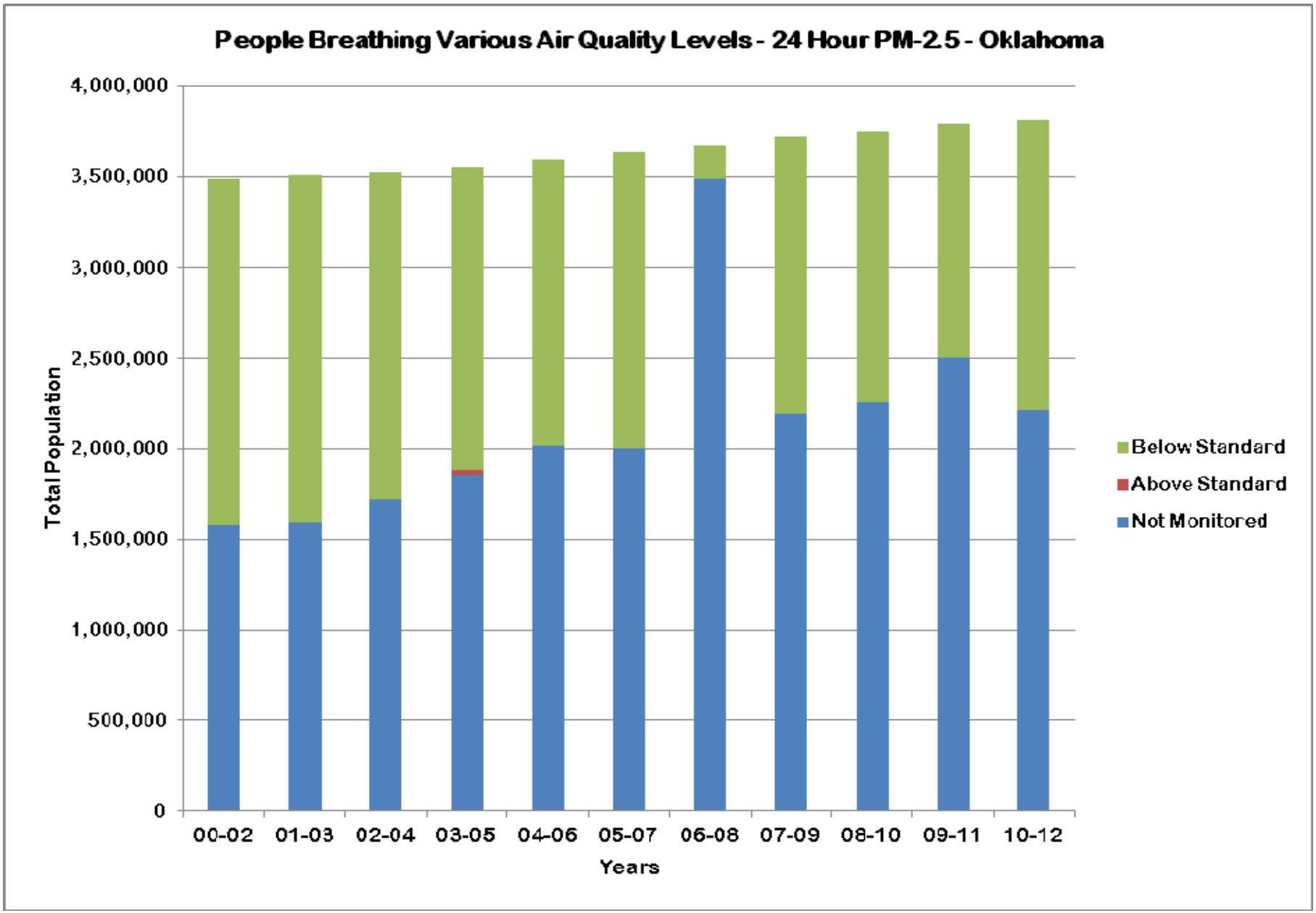
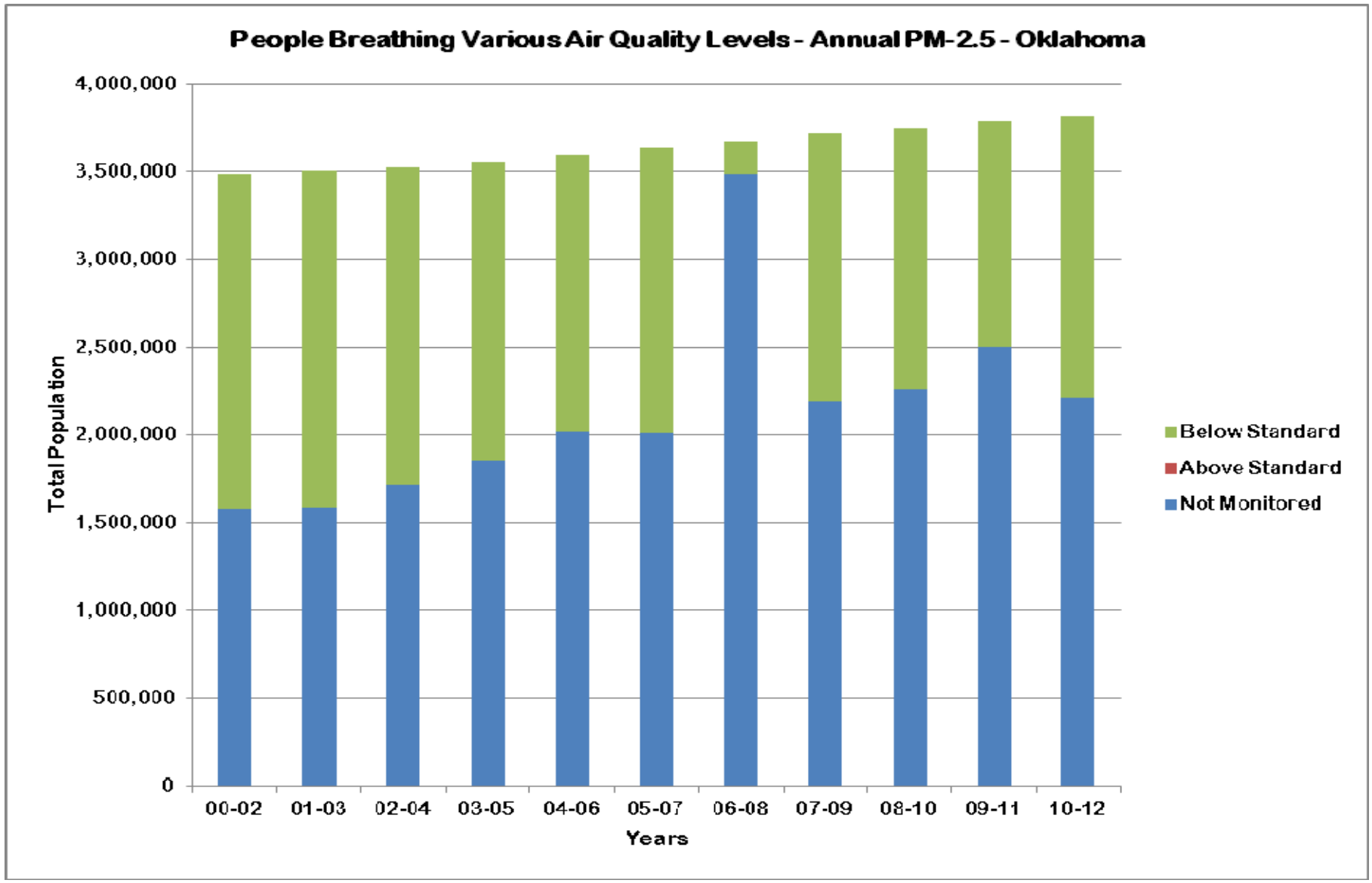

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Oklahoma
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure OK-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Oklahoma
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

OREGON

Ozone

Ozone levels in Oregon have historically been better than the standard. In the 2000 – 2002 time period, approximately 1.2 million (34.2%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.9 million people (73.9%). The remainder of the population lived in counties where ozone was not measured. Figure OR-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in Oregon. In the 2000 – 2002 time period, approximately 2.3 million people (65.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.1 million people (54.1%). Figure OR-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Oregon have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.4 million people (67.8%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 2.1 million people (54.1%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure OR-3 shows the distribution of people by year.

Table OR-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Clackamas	383,857	0.065	B	N	ND	---	ND	---	---
Columbia	49,286	0.051	A	N	ND	---	ND	---	---
Deschutes	182,277	0.059	A	N	ND	---	ND	---	---
Harney	7,212	ND	---	---	29	B	8.7	A	N
Jackson	206,412	0.061	B	N	26	A	8.5	A	N
Josephine	82,930	ND	---	---	23	A	7.0	A	N
Klamath	65,912	ND	---	---	32	C	10.3	A	N
Lake	7,771	ND	---	---	33	C	8.4	A	N
Lane	354,542	0.059	A	Y	26	A	7.3	A	Y
Marion	319,985	0.059	A	N	ND	---	ND	---	---
Multnomah	759,256	0.057	A	N	25	A	7.3	A	N
Umatilla	78,820	0.063	B	N	22	A	7.2	A	N
Washington	547,872	0.058	A	N	25	A	7.4	A	N
Subtotal	**3,046,132**								
Not Monitored	853,221								
Total	**3,899,353**								

DV – Design Value ND - No Data MM – Multiple Monitors

OREGON

Table OR-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	45,104	0	0	0	731,951	746,697	49,209	777,115	784,685	1,498,181	2,213,018
B	968,990	692,985	699,089	705,724	666,798	1,217,768	1,741,997	1,315,824	1,322,137	1,334,042	669,089
C	186,704	520,683	524,512	530,532	536,784	0	201,162	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,200,798	1,213,668	1,223,601	1,236,256	1,935,533	1,964,465	1,992,368	2,092,939	2,106,822	2,832,223	2,882,107
NM	2,312,626	2,333,708	2,345,862	2,376,946	1,735,350	1,757,952	1,776,380	1,715,661	1,724,252	1,039,636	1,017,246
Total	3,513,424	3,547,376	3,569,463	3,613,202	3,670,883	3,722,417	3,768,748	3,808,600	3,831,074	3,871,859	3,899,353

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,069,983	1,247,812	1,222,742	1,205,394	221,612	224,415	574,811	1,306,452	1,556,449	1,306,269	2,029,632
B	840,017	310,811	631,311	108,132	1,023,693	1,042,643	712,989	607,014	0	90,360	7,212
C	407,073	698,982	0	0	0	0	0	7,432	0	0	73,683
D	0	64,582	0	0	0	0	0	0	7,895	74,207	0
F	64,150	0	64,841	65,553	66,294	66,767	66,732	66,460	66,380	0	0
Subtotal	2,381,223	2,322,187	1,918,894	1,379,079	1,311,599	1,333,825	1,354,532	1,987,358	1,630,724	1,470,836	2,110,527
NM	1,132,201	1,225,189	1,650,569	2,234,123	2,359,284	2,388,592	2,414,216	1,821,242	2,200,350	2,401,023	1,788,826
Total	3,513,424	3,547,376	3,569,463	3,613,202	3,670,883	3,722,417	3,768,748	3,808,600	3,831,074	3,871,859	3,899,353

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,381,223	2,322,187	1,918,894	1,379,079	1,245,305	1,333,825	1,354,532	1,987,358	1,630,724	1,470,836	2,110,527
B	0	0	0	0	66,294	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,381,223	2,322,187	1,918,894	1,379,079	1,311,599	1,333,825	1,354,532	1,987,358	1,630,724	1,470,836	2,110,527
NM	1,132,201	1,225,189	1,650,569	2,234,123	2,359,284	2,388,592	2,414,216	1,821,242	2,200,350	2,401,023	1,788,826
Total	3,513,424	3,547,376	3,569,463	3,613,202	3,670,883	3,722,417	3,768,748	3,808,600	3,831,074	3,871,859	3,899,353

NM – Not Monitored

Figure OR-1


People Breathing Various Air Quality Levels - 8 Hour Ozone - Oregon
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure OR-2

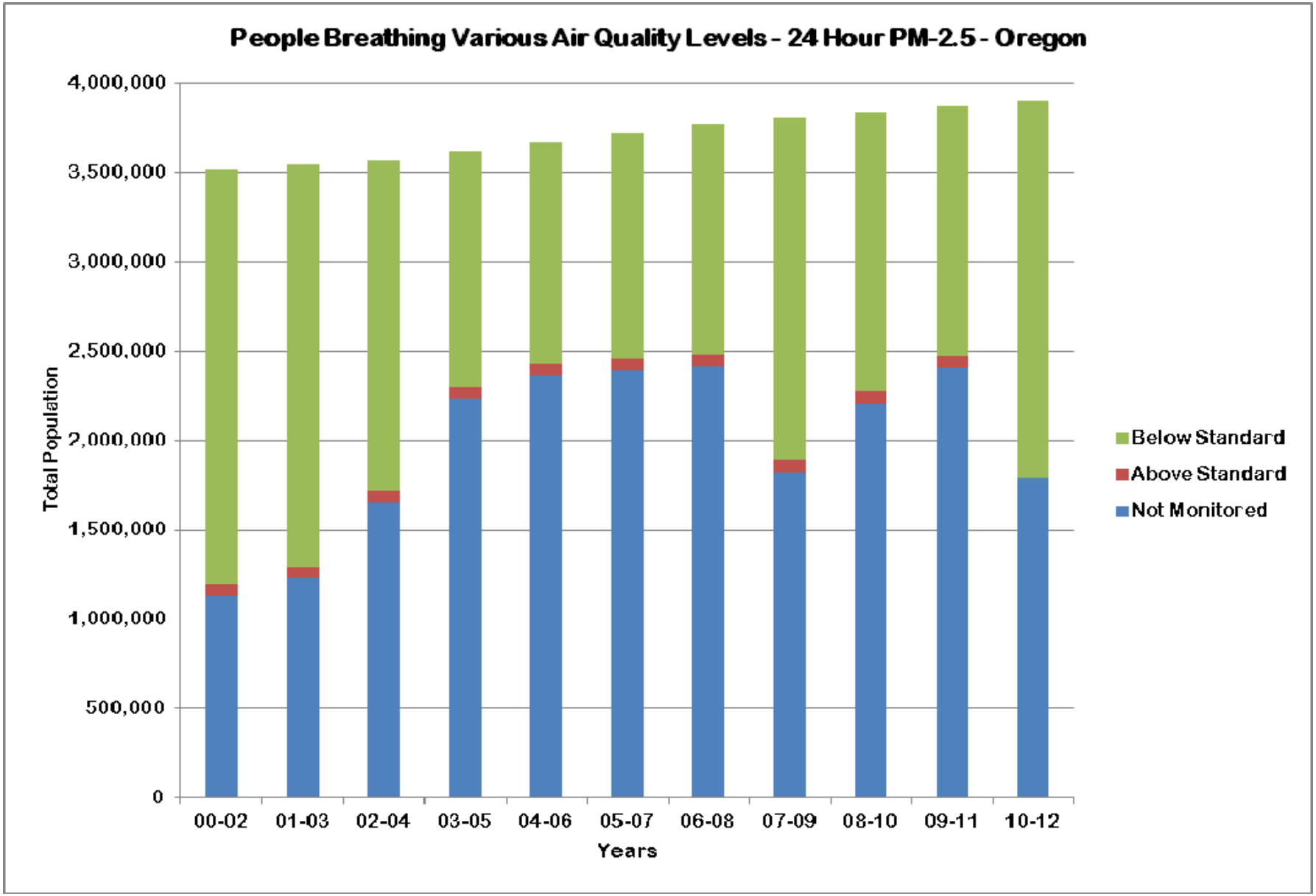
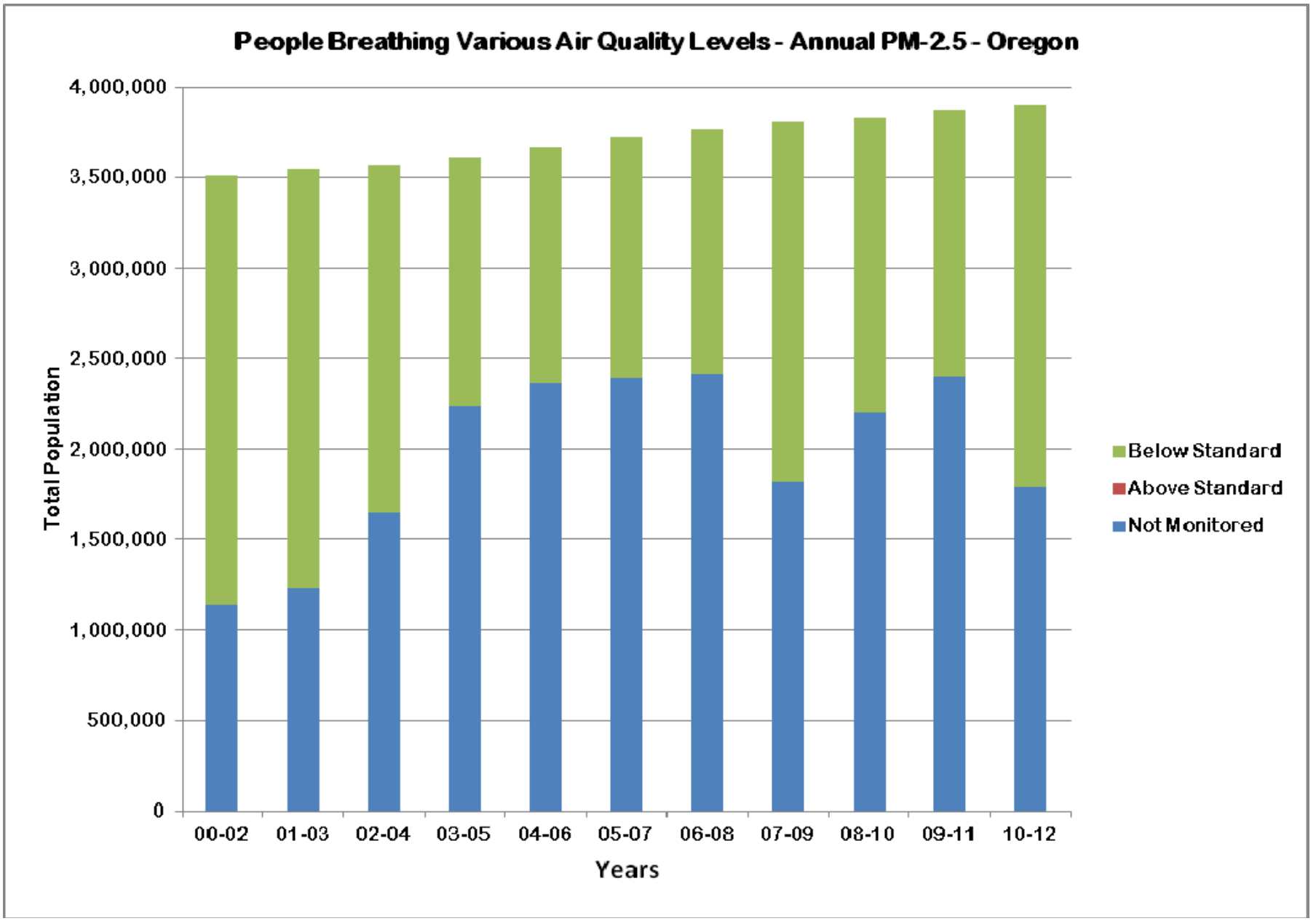

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Oregon
Total Population
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure OR-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Oregon
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

PENNSYLVANIA

Ozone

Significant progress has been made in ozone levels in Pennsylvania. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.8 million people (22.0%). Figure PA-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Pennsylvania. In the 2000 – 2002 time period, approximately 0.4 million people (2.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 8.4 million people (65.7%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure PA-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Pennsylvania. In the 2000 – 2002 time period, approximately 2.0 million people (16.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 8.4 million people (65.7%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure PA-3 shows the distribution of people by year.

PENNSYLVANIA

Table PA-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Adams	101,482	ND	---	---	30	B	11.6	A	N
Allegheny	**1,229,338**	**0.079**	**D**	Y	29	B	11.6	A	Y
Armstrong	68,409	0.075	C	N	27	A	11.7	A	N
Beaver	170,245	0.075	C	Y	27	A	12.3	B	N
Berks	**413,491**	**0.077**	**D**	Y	27	A	10.9	A	N
Blair	127,121	0.075	C	N	ND	---	ND	---	---
Bucks	**627,053**	**0.083**	**F**	N	29	B	11.0	A	N
Cambria	141,584	0.072	C	N	31	B	12.9	B	N
Centre	155,171	0.074	C	N	29	B	10.1	A	N
Chester	**506,575**	**0.076**	**D**	N	ND	---	ND	---	---
Clearfield	81,184	0.074	C	N	ND	---	ND	---	---
Cumberland	238,614	ND	---	---	30	B	10.8	A	N
Dauphin	**269,665**	**0.077**	**D**	N	ND	---	ND	---	---
Delaware	**561,098**	**0.079**	**D**	N	31	B	13.2	B	N
Erie	**280,646**	**0.076**	**D**	N	27	A	11.3	A	N
Franklin	151,275	0.068	C	N	ND	---	ND	---	---
Greene	38,085	0.07	C	N	ND	---	ND	---	---
Indiana	**88,218**	**0.079**	**D**	N	ND	---	ND	---	---
Lackawanna	214,477	0.072	C	Y	24	A	9.1	A	N
Lancaster	**526,823**	**0.081**	**D**	Y	31	B	12.1	B	N
Lawrence	89,871	0.074	C	N	ND	---	ND	---	---
Lehigh	**355,245**	**0.078**	**D**	N	ND	---	ND	---	---
Luzerne	321,027	0.067	B	Y	ND	---	ND	---	---
Lycoming	117,168	0.069	C	N	ND	---	ND	---	---
Mercer	**115,655**	**0.079**	**D**	N	25	A	10.8	A	N
Monroe	168,798	0.070	C	N	ND	---	ND	---	---
Montgomery	**808,460**	**0.079**	**D**	N	26	A	9.9	A	N
Northampton	299,267	0.074	C	Y	31	B	12.1	B	Y
Perry	45,701	0.070	C	N	ND	---	ND	---	---
Philadelphia	**1,547,607**	**0.079**	**D**	Y	28	B	10.9	A	Y
Tioga	42,577	0.072	C	N	ND	---	ND	---	---
Washington	208,716	0.072	C	Y	23	A	10.0	A	Y
Westmoreland	363,395	0.074	C	Y	ND	---	ND	---	---
York	**437,846**	**0.076**	**D**	Y	29	B	11.3	A	N
Subtotal	**10,911,887**								
Not Monitored	1,851,649								
Total	**12,763,536**								

DV – Design Value ND - No Data MM – Multiple Monitors

PENNSYLVANIA

Table PA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	320,527	2,087,650	894,668	321,027
C	0	0	0	547,855	1,137,095	1,040,923	2,277,985	4,384,428	4,024,231	7,344,354	2,483,044
D	212,282	211,804	3,108,470	5,591,076	5,299,028	4,077,299	4,866,005	4,834,033	4,496,682	2,307,605	7,140,667
F	9,727,226	9,770,916	6,997,202	3,996,016	3,341,752	4,789,257	2,972,223	624,648	0	0	627,053
Subtotal	9,939,508	9,982,720	10,105,672	10,134,947	9,777,875	9,907,479	10,116,213	10,163,636	10,608,563	10,546,627	10,571,791
NM	2,391,523	2,391,938	2,305,050	2,315,043	2,732,934	2,656,458	2,496,072	2,503,222	2,093,816	2,196,259	2,191,745
Total	12,331,031	12,374,658	12,410,722	12,449,990	12,510,809	12,563,937	12,612,285	12,666,858	12,702,379	12,742,886	12,763,536

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	795,494	1,278,322	1,226,658	2,300,100
B	0	0	491,834	0	212,595	213,513	1,281,980	1,511,991	2,900,445	5,099,232	6,085,913
C	359,607	359,856	3,328,248	2,417,553	3,637,608	1,267,703	3,099,469	4,334,388	2,246,299	1,959,415	0
D	3,286,073	2,353,185	2,220,920	1,346,214	1,916,103	2,823,594	4,284,723	1,222,171	0	0	0
F	4,056,886	5,778,711	3,155,064	3,337,337	2,046,299	2,046,565	0	0	0	0	0
Subtotal	7,702,566	8,491,752	9,196,066	7,101,104	7,812,605	6,351,375	8,666,172	7,864,044	6,425,066	8,285,305	8,386,013
NM	4,628,465	3,882,906	3,214,656	5,348,886	4,698,204	6,212,562	3,946,113	4,802,814	6,277,313	4,457,581	4,377,523
Total	12,331,031	12,374,658	12,410,722	12,449,990	12,510,809	12,563,937	12,612,285	12,666,858	12,702,379	12,742,886	12,763,536

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	212,595	213,513	745,431	1,065,362	3,664,983	5,383,436	6,666,975
B	665,521	667,128	1,445,556	718,776	2,753,399	1,560,915	4,254,633	3,898,294	2,760,083	1,735,025	1,719,038
C	1,316,667	3,594,396	4,449,390	1,655,386	1,461,904	1,739,145	3,666,108	2,900,388	0	1,166,844	0
D	4,469,230	3,350,016	2,409,740	3,823,154	3,384,707	2,837,802	0	0	0	0	0
F	1,251,148	880,212	891,380	903,788	0	0	0	0	0	0	0
Subtotal	7,702,566	8,491,752	9,196,066	7,101,104	7,812,605	6,351,375	8,666,172	7,864,044	6,425,066	8,285,305	8,386,013
NM	4,628,465	3,882,906	3,214,656	5,348,886	4,698,204	6,212,562	3,946,113	4,802,814	6,277,313	4,457,581	4,377,523
Total	12,331,031	12,374,658	12,410,722	12,449,990	12,510,809	12,563,937	12,612,285	12,666,858	12,702,379	12,742,886	12,763,536

NM – Not Monitored

Figure PA-1

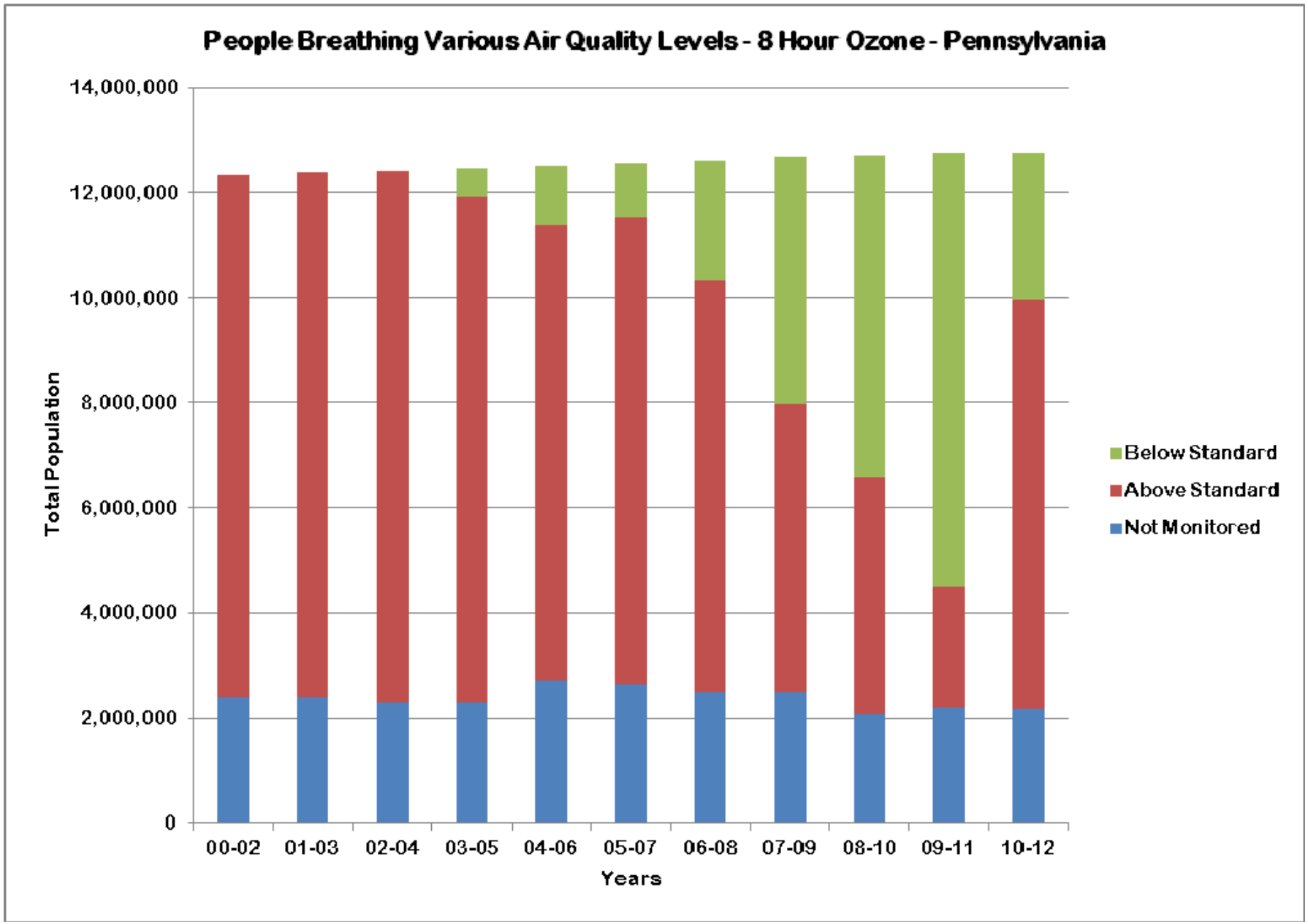

People Breathing Various Air Quality Levels - 8 Hour Ozone - Pennsylvania
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure PA-2

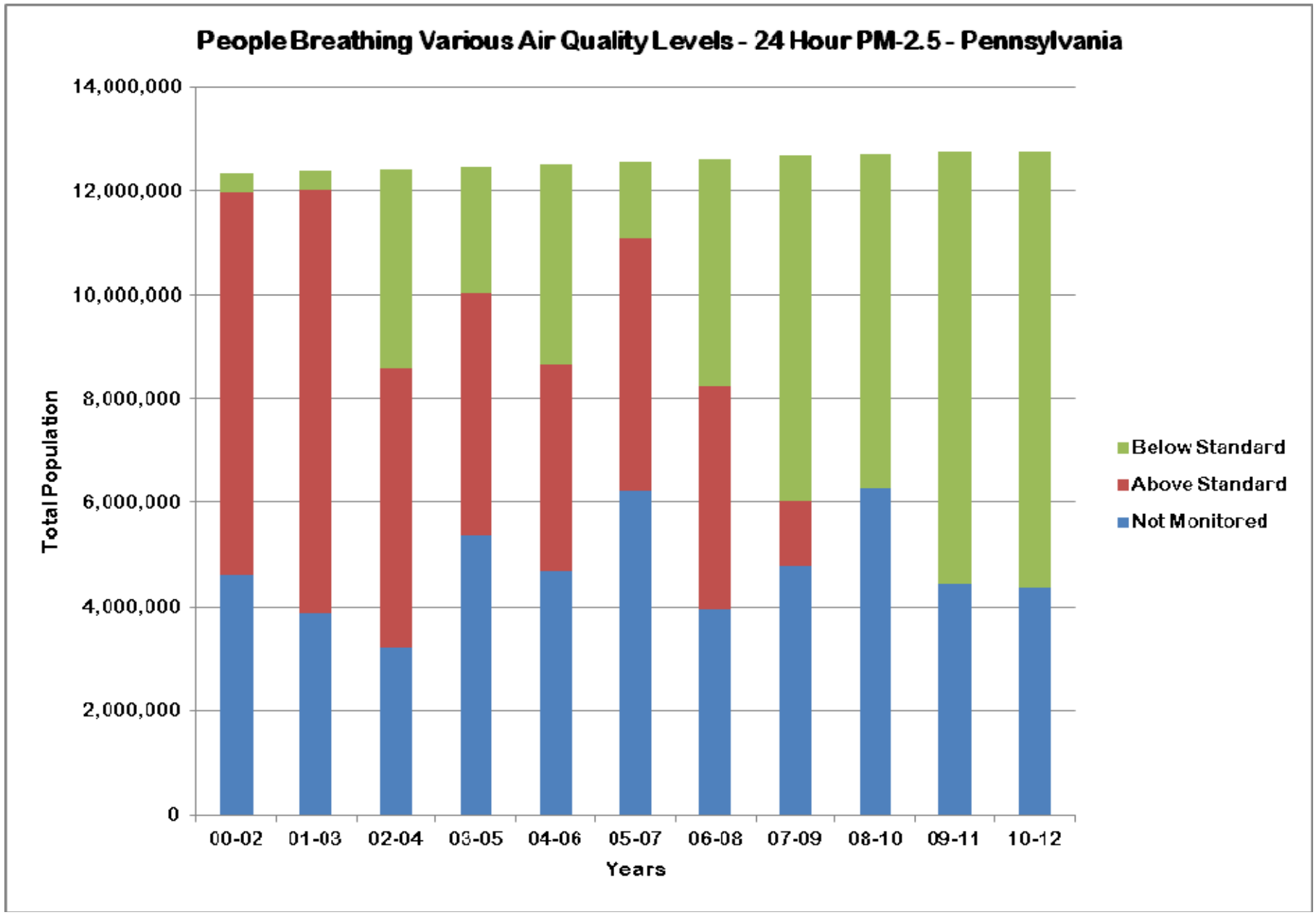
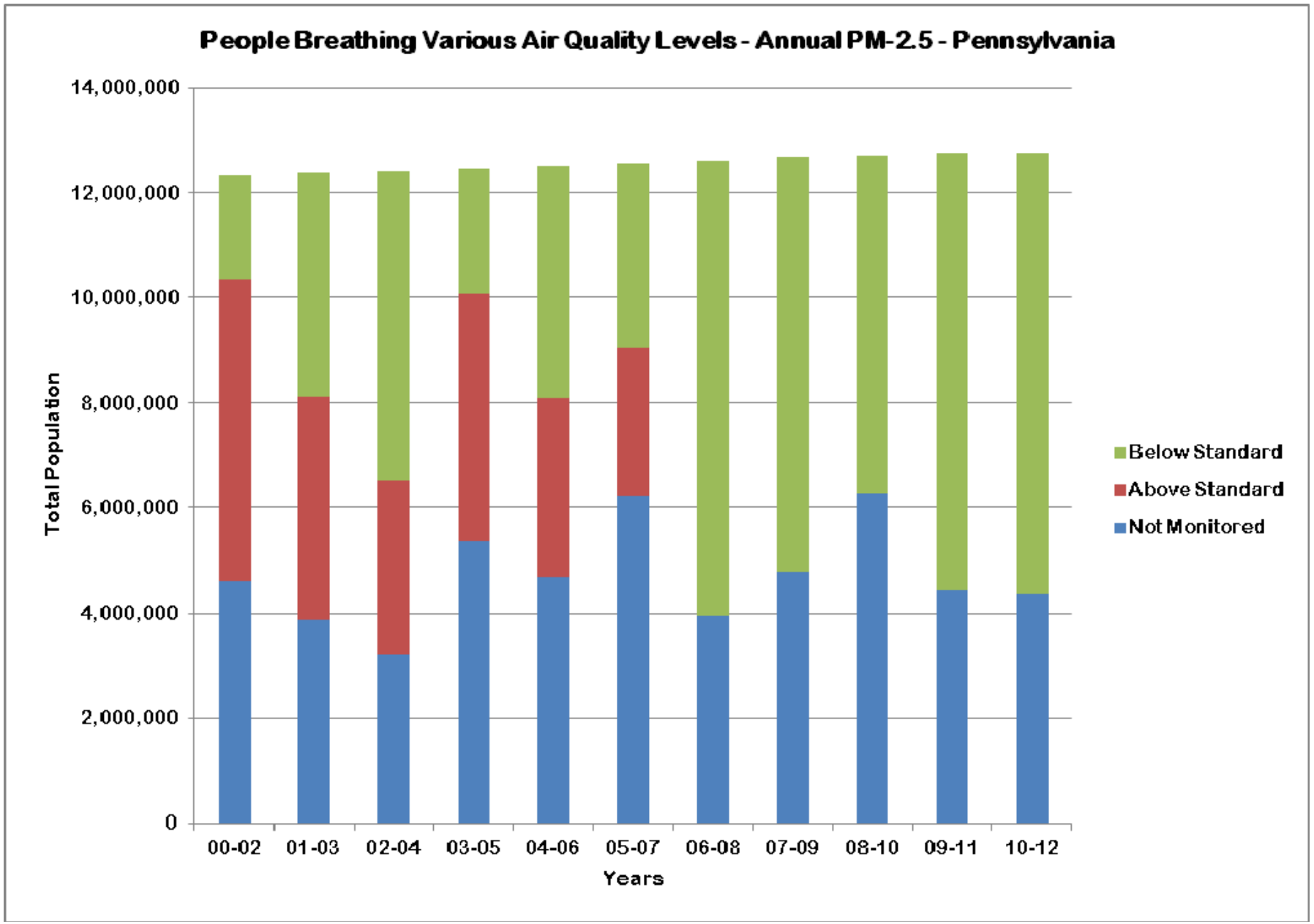

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Pennsylvania
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure PA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Pennsylvania
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

RHODE ISLAND

Ozone

Significant progress has been made in ozone levels in Rhode Island. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.2 million people (15.7%). Figure RI-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Rhode Island have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.9 million people (87.1%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.8 million people (75.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure RI-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Rhode Island have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.9 million people (87.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 0.8 million people (75.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure RI-3 shows the distribution of people by year.

Table RI-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg.24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Kent	**164,843**	**0.074**	**C**	**N**	**17**	**A**	**6.2**	**A**	**N**
Providence	**628,323**	**0.076**	**D**	**N**	**22**	**A**	**8.5**	**A**	**Y**
Washington	**125,946**	**0.078**	**D**	**N**	**ND**	**---**	**ND**	**---**	**---**
Subtotal	**919,112**								
Not Monitored	**131,180**								
Total	**1,050,292**								

DV – Design Value ND - No Data MM- Multiple Monitors

RHODE ISLAND

Table RI-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	792,825	918,807	164,843
D	0	0	0	635,060	0	0	754,561	920,675	126,979	0	754,269
F	928,192	934,038	936,857	297,227	926,970	923,520	167,269	0	0	0	0
Subtotal	928,192	934,038	936,857	932,287	926,970	923,520	921,830	920,675	919,804	918,807	919,112
NM	137,803	137,304	137,722	135,629	136,126	133,795	133,173	132,971	132,763	132,495	131,180
Total	1,065,995	1,071,342	1,074,579	1,067,916	1,063,096	1,057,315	1,055,003	1,053,646	1,052,567	1,051,302	1,050,292

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	126,462	0	808,897	0	0	0	795,158	626,304	626,667	792,244	793,166
B	801,730	806,790	0	635,060	631,691	629,110	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	928,192	806,790	808,897	635,060	631,691	629,110	795,158	626,304	626,667	792,244	793,166
NM	137,803	264,552	265,682	432,856	431,405	428,205	259,845	427,342	425,900	259,058	257,126
Total	1,065,995	1,071,342	1,074,579	1,067,916	1,063,096	1,057,315	1,055,003	1,053,646	1,052,567	1,051,302	1,050,292

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	928,192	806,790	808,897	635,060	631,691	629,110	795,158	626,304	626,667	792,244	793,166
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	928,192	806,790	808,897	635,060	631,691	629,110	795,158	626-304	626,667	792,244	793,166
NM	137,803	264,552	265,682	432,856	431,405	429,205	259,845	427,342	425,900	259,058	257,126
Total	1,065,995	1,071,342	1,074,579	1,067,916	1,063,096	1,057,315	1,055,003	1,053,646	1,052,567	1,051,302	1,050,292

NM – Not Monitored

Figure RI-1

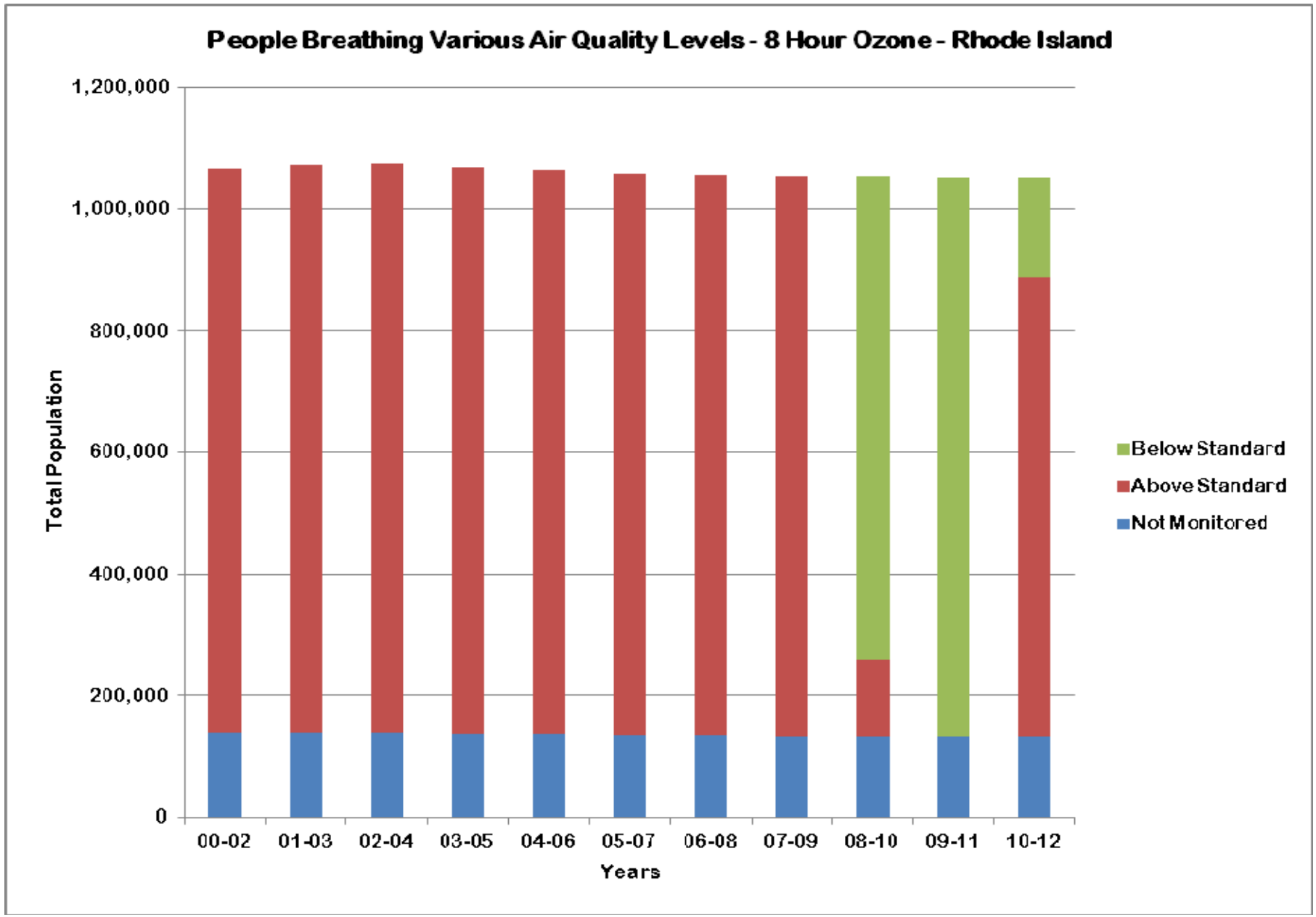
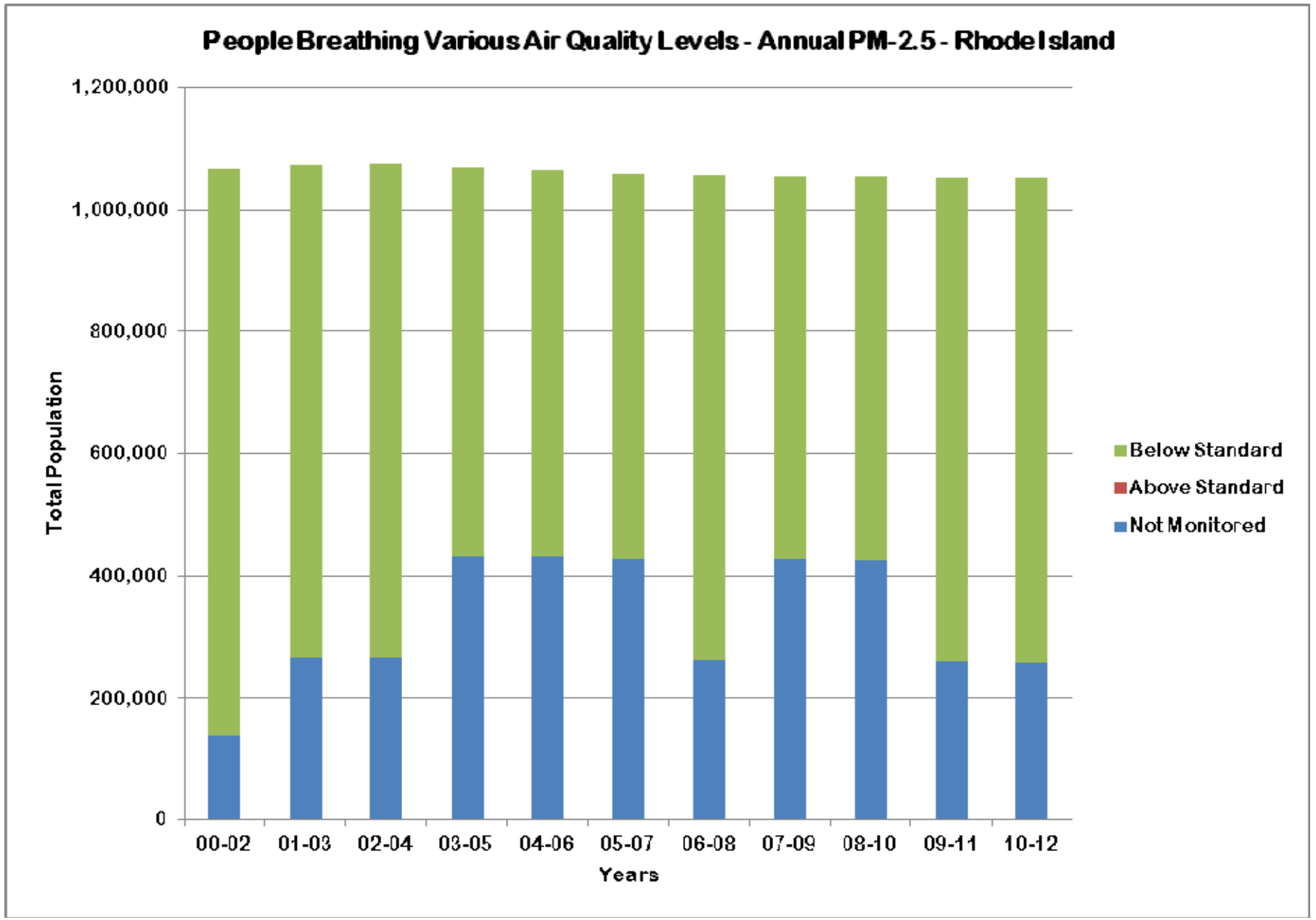

People Breathing Various Air Quality Levels - 8 Hour Ozone - Rhode Island
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure RI-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Rhode Island
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure RI-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Rhode Island
Total Population
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

SOUTH CAROLINA

Ozone

Significant progress has been made in ozone levels in South Carolina. In the 2000 – 2002 time period, 0.5 million people (12.2%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.5 million people (52.4%). Figure SC-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in South Carolina have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.0 million people (49.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.0 million people (42.3%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure SC-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in South Carolina air quality have usually been better than the standard. In the 2000 – 2002 time period, approximately 2.0 million people (49.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 2.0 million people (42.3%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure SC-3 shows the distribution of people by year.

Table SC-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Abbeville	25,101	0.064	B	N	ND	---	ND	---	---
Aiken	162,812	0.064	B	N	ND	---	ND	---	---
Anderson	189,355	0.073	C	N	ND	---	ND	---	---
Berkeley	189,781	0.064	B	N	ND	---	ND	---	---
Charleston	385,162	0.066	B	N	22	A	9.1	A	Y
Cherokee	55,682	0.071	C	N	ND	---	ND	---	---
Chesterfield	46,103	0.066	B	N	20	A	9.3	A	N
Colleton	38,153	0.063	B	N	ND	---	ND	---	--
Darlington	68,139	0.070	C	N	ND	---	ND	---	--
Edgefield	26,347	0.063	B	N	20	A	9.9	A	N
Florence	137,948	ND	---	---	22	A	10.4	A	N
Greenville	467,605	0.068	C	Y	22	A	10.7	A	Y
Lexington	270,406	ND	---	---	23	A	11.1	A	N
Oconee	74,627	0.065	B	N	ND	---	ND	---	---
Pickens	119,670	0.072	C	N	ND	---	ND	---	---
Richland	393,830	0.068	C	Y	21	A	10.4	A	Y
Spartanburg	**288,745**	**0.076**	**D**	N	22	A	10.7	A	N
York	234,635	0.065	B	N	ND	---	-ND	---	---
Subtotal	**3,174,101**								
Not Monitored	1,579,622								
Total	**4,723,723**								

DV – Design Value ND - No Data MM – Multiple Monitors

SOUTH CAROLINA

Table SC-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	164,913	171,099	213,956	619,346	1,038,714	1,182,721
C	464,112	504,849	554,127	1,022,049	821,395	633,282	650,871	1,406,122	1,134,930	1,674,326	1,294,281
D	399,447	694,431	1,267,519	1,193,451	1,125,207	1,277,136	892,177	402,518	284,307	0	288,745
F	1,125,327	878,184	331,443	0	268,898	0	279,673	0	0	0	0
Subtotal	1,988,886	2,077,464	2,153,089	2,215,500	2,215,500	2,075,331	1,993,820	2,022,596	2,038,583	2,713,040	2,765,747
NM	2,118,909	2,072,833	2,057,832	2,054,650	2,142,347	2,368,779	2,535,176	2,567,276	2,586,781	1,966,190	1,957,976
Total	4,107,795	4,150,297	4,210,921	4,270,150	4,357,847	4,444,110	4,528,996	4,589,872	4,625,364	4,679,230	4,723,723

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	490,503	1,231,383	1,093,965	561,488	0	337,147	1,249,671	1,863,512	1,596,321	2,047,623	1,996,146
B	899,229	493,591	975,832	541,174	1,127,362	1,790,980	718,415	0	0	0	0
C	648,664	394,242	399,319	1,254,268	1,283,170	274,215	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,038,396	2,119,216	2,469,116	2,356,930	2,410,532	2,402,342	1,968,086	1,863,512	1,596,321	2,047,623	1,996,146
NM	2,069,399	2,031,081	1,741,805	1,913,220	1,947,315	2,041,768	2,560,910	2,726,360	3,029,043	2,631,607	2,727,577
Total	4,107,795	4,150,297	4,210,921	4,270,150	4,357,847	4,444,110	4,528,996	4,589,872	4,625,364	4,679,230	4,723,723

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	197,484	776,952	904,934	773,567	218,703	813,429	415,010	1,157,874	1,596,321	2,047,623	1,996,146
B	513,518	616,023	326,453	329,095	840,568	205,958	861,587	705,638	0	0	0
C	1,327,394	331,999	1,237,729	1,254,268	1,351,261	1,382,955	691,489	0	0	0	0
D	0	394,242	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,038,396	2,119,216	2,469,116	2,356,930	2,410,532	2,402,342	1,968,086	1,863,512	1,596,321	2,047,623	1,996,146
NM	2,069,399	2,031,081	1,741,805	1,913,220	1,947,315	2,041,768	2,560,910	2,726,360	3,029,043	2,631,607	2,727,577
Total	4,107,795	4,150,297	4,210,921	4,270,150	4,357,847	4,444,110	4,528,996	4,589,872	4,625,364	4,679,230	4,723,723

NM – Not Monitored

Figure SC-1

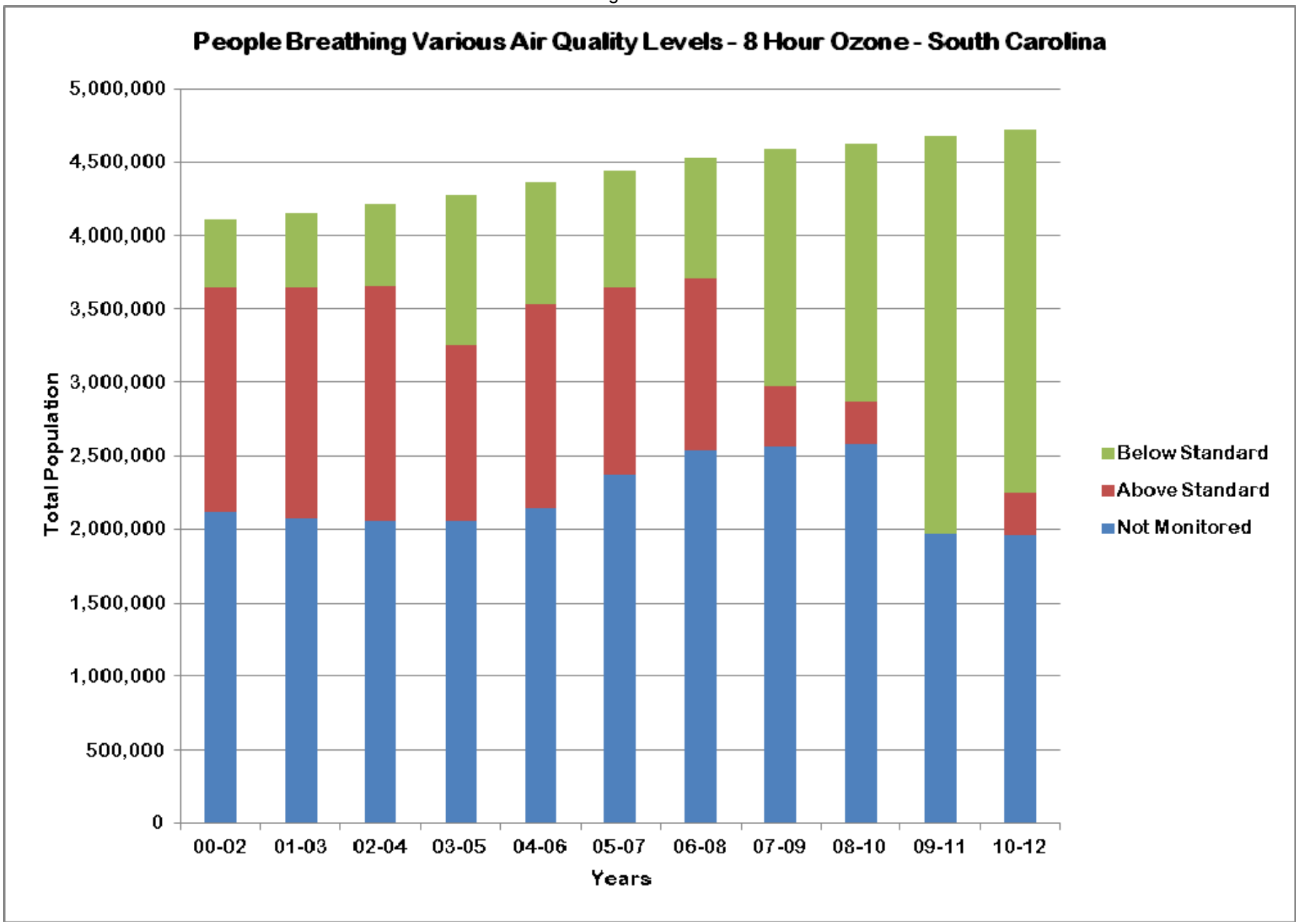

People Breathing Various Air Quality Levels - 8 Hour Ozone - South Carolina
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure SC-2

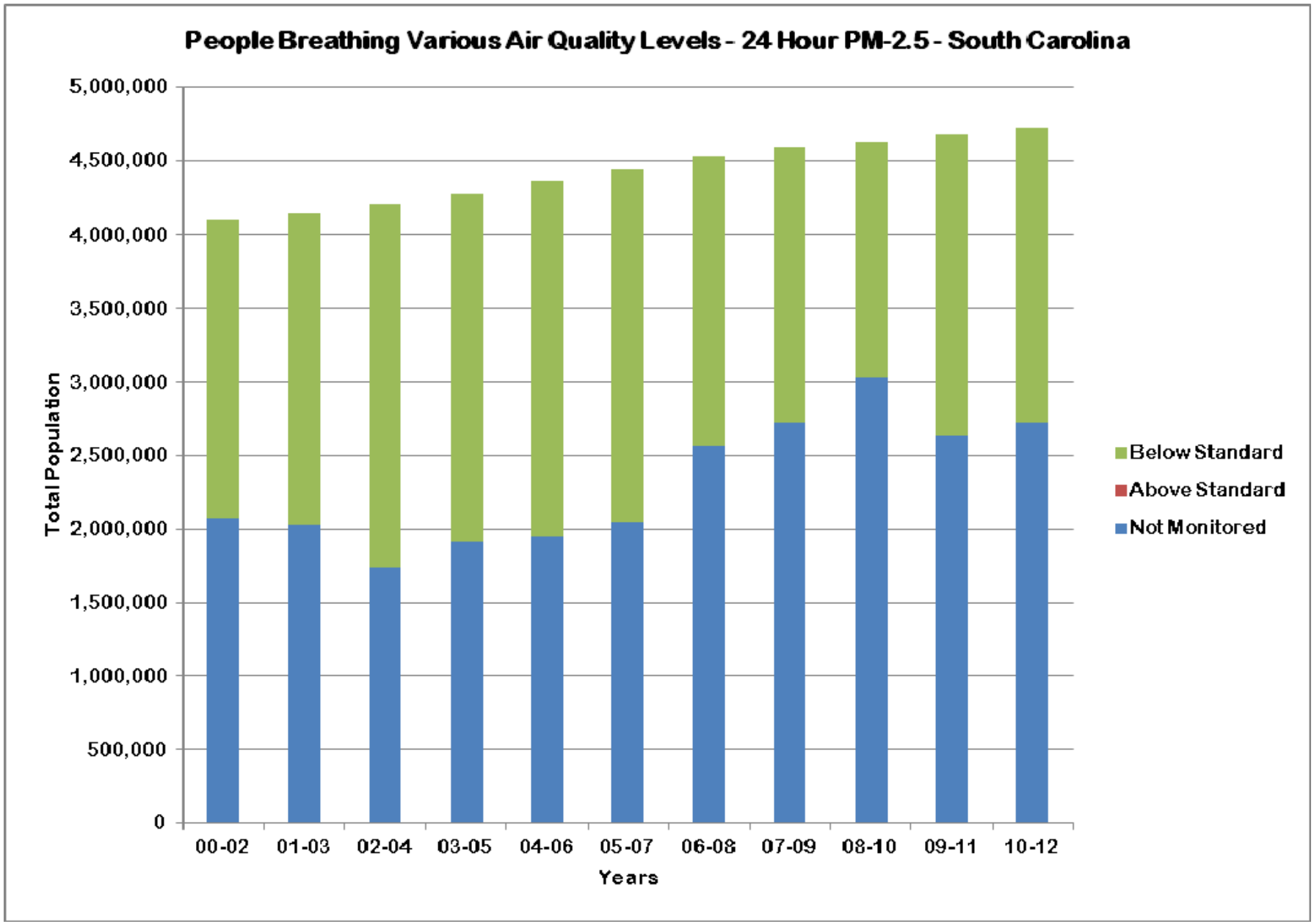
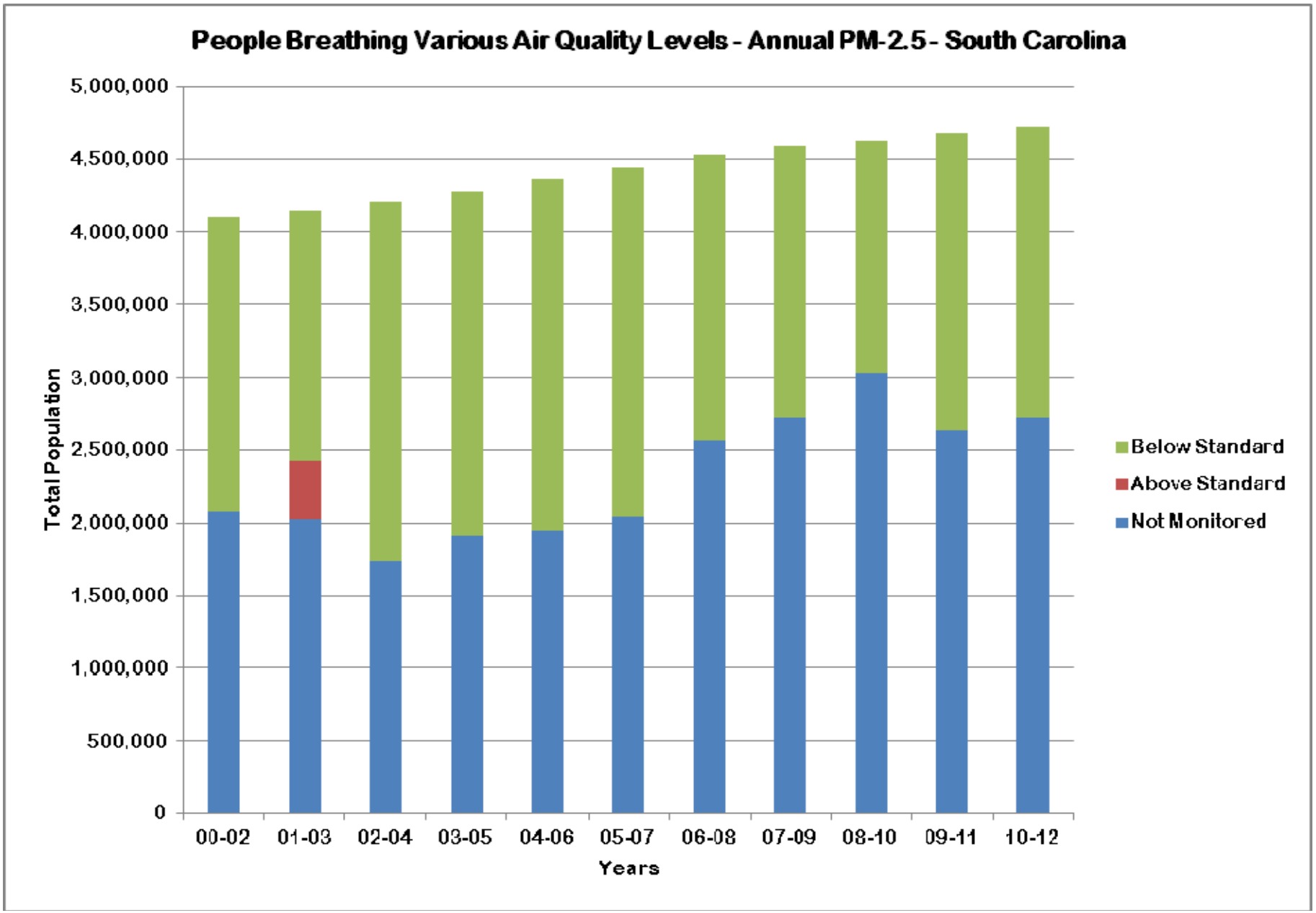

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - South Carolina
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure SC-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - South Carolina
Total Population
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

SOUTH DAKOTA

Ozone

Ozone levels in South Dakota have historically been better than the standard. In the 2000 – 2002 time period, no people lived in counties where measured air quality met the ozone standard. By 2010 – 2012 this had increased to approximately 0.26 million people (31.4%). The remainder of the population lived in counties where ozone was not measured. Figure SD-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in South Dakota have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.3 million people (40.8%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.4 million people (48.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure SD-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in South Dakota have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.3 million people (40.8%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 0.4 million people (48.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure SD-3 shows the distribution of people by year.

Table SD-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Brookings	32,629	0.065	B	N	22	A	8.4	A	N
Brown	37,331	ND	---	---	22	A	7.8	A	N
Codington	27,606	ND	---	---	23	A	9.3	A	N
Custer	8,339	0.063	B	N	13	A	4.3	A	N
Jackson	3,191	0.058	A	N	12	A	3.8	A	N
Meade	28,052	0.061	B	N	ND	---	ND	---	---
Minnehaha	175,037	0.067	B	N	23	A	8.6	A	Y
Pennington	104,347	ND	---	---	15	A	5.6	A	Y
Union	14,855	0.064	B	N	24	A	9.0	A	Y
Subtotal	**431,387**								
Not Monitored	401,967								
Total	**833,354**								

DV – Design Value ND - No Data MM – Multiple Monitors

SOUTH DAKOTA

Table SD-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	25,314	28,465	28,715	3,191
B	0	0	0	93,099	255,024	163,577	174,380	176,577	209,649	226,967	258,912
C	0	0	92,560	0	2,976	11,036	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	92,560	93,099	258,000	174,613	174,380	201,891	238,114	255,682	262,103
NM	760,020	763,729	677,836	682,394	525,033	617,010	624,744	605,176	576,066	568,400	571,251
Total	760,020	763,729	770,396	775,493	783,033	791,623	799,124	807,067	814,180	824,082	833,354

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	309,715	312,178	340,933	345,149	350,638	364,196	369,729	374,451	377,386	397,215	403,335
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	309,715	312,178	340,933	345,149	350,638	364,196	369,729	374,451	377,386	397,215	403,335
NM	450,305	451,551	429,463	430,344	432,395	427,427	429,395	432,616	436,794	426,867	430,019
Total	760,020	763,729	770,396	775,493	783,033	791,623	799,124	807,067	814,180	824,082	833,354

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	309,715	312,178	340,933	345,149	350,638	364,196	369,729	374,451	377,386	397,215	403,335
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	309,715	312,178	340,933	345,149	350,638	364,196	369,729	374,451	377,386	397,215	403,335
NM	450,305	451,551	429,463	430,344	432,395	427,427	429,395	432,616	436,794	426,867	430,019
Total	760,020	763,729	770,396	775,493	783,033	791,623	799,124	807,067	814,180	824,082	833,354

NM –Not Monitored

Figure SD-1

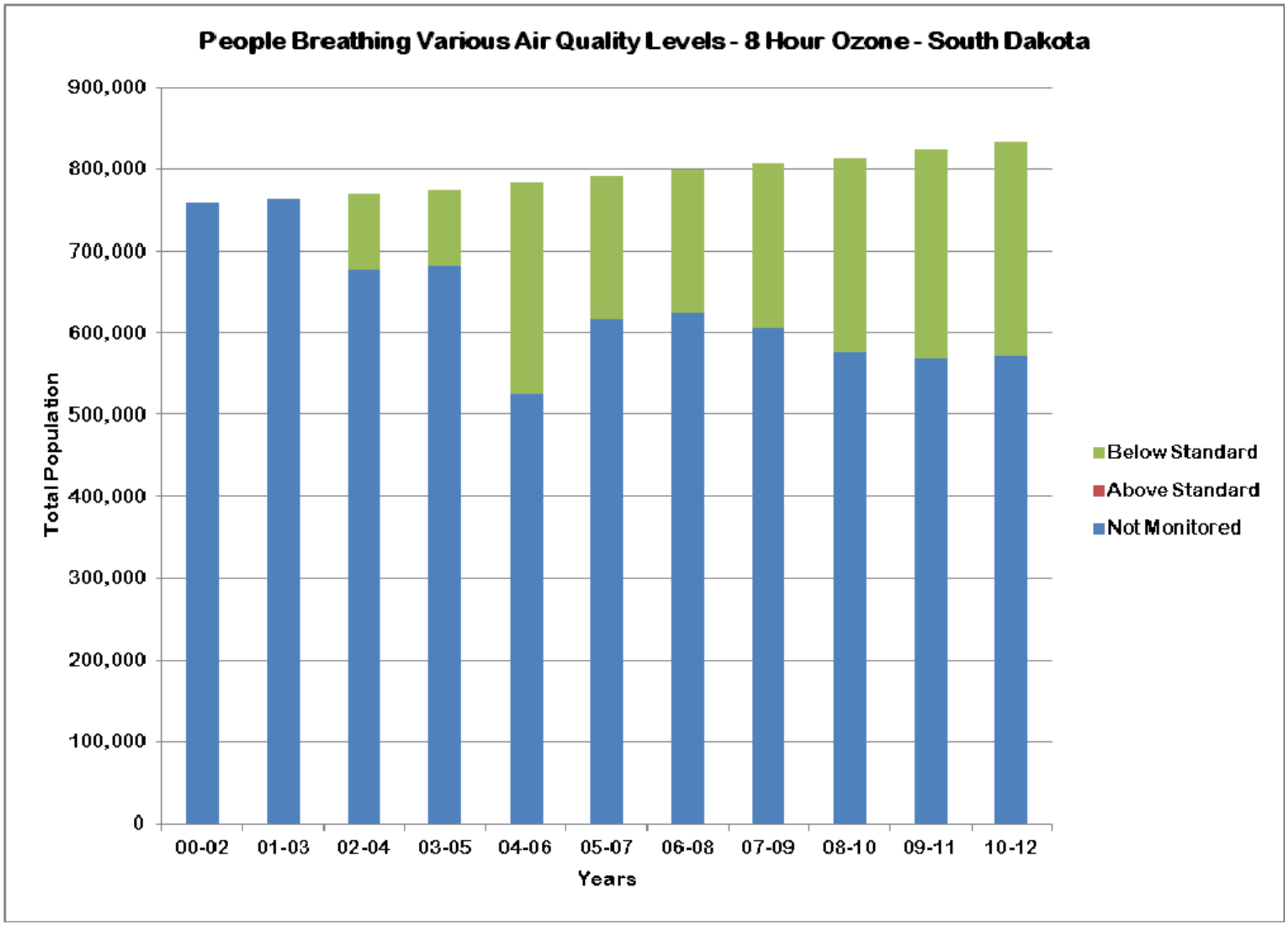

People Breathing Various Air Quality Levels - 8 Hour Ozone - South Dakota
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure SD-2

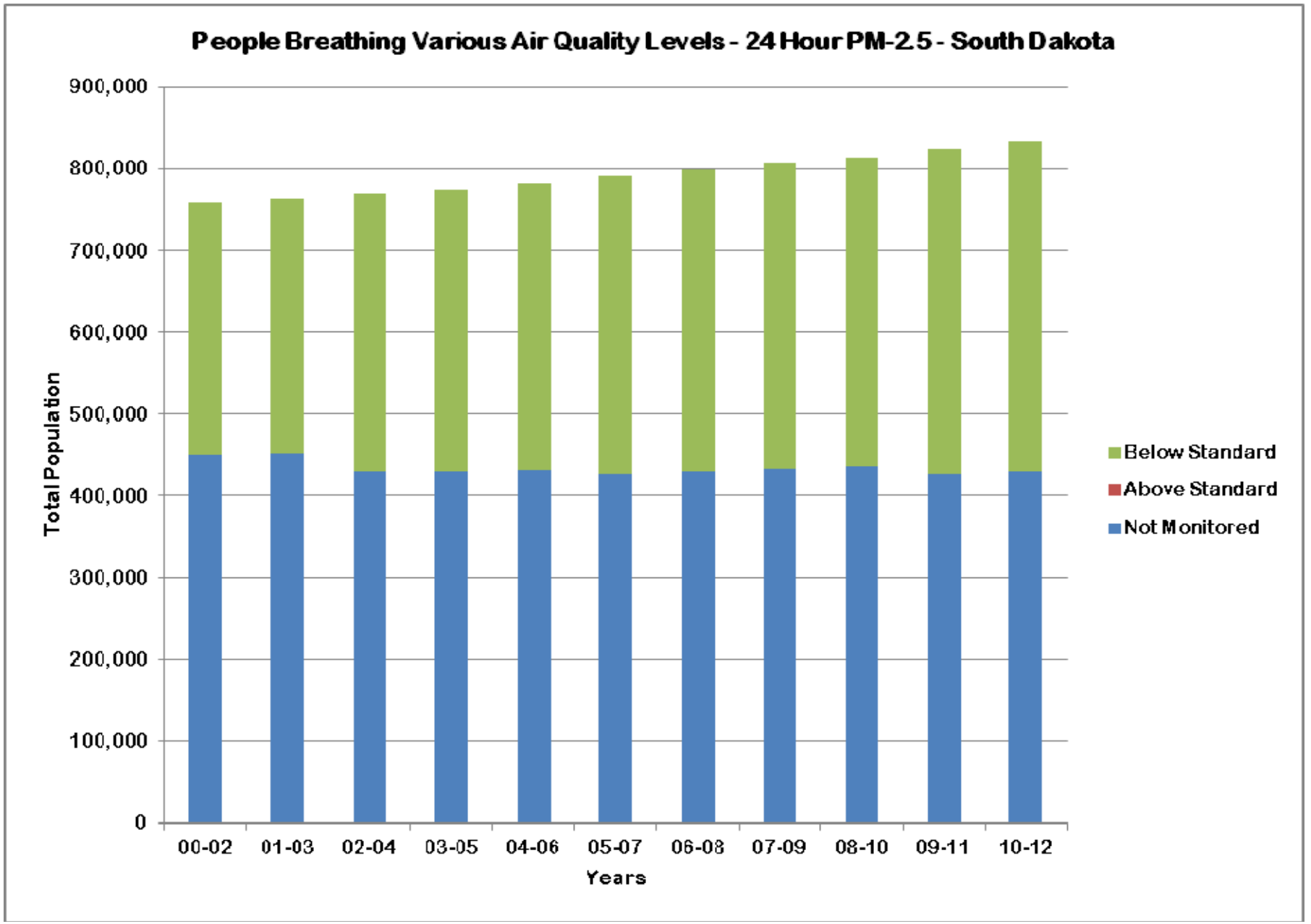
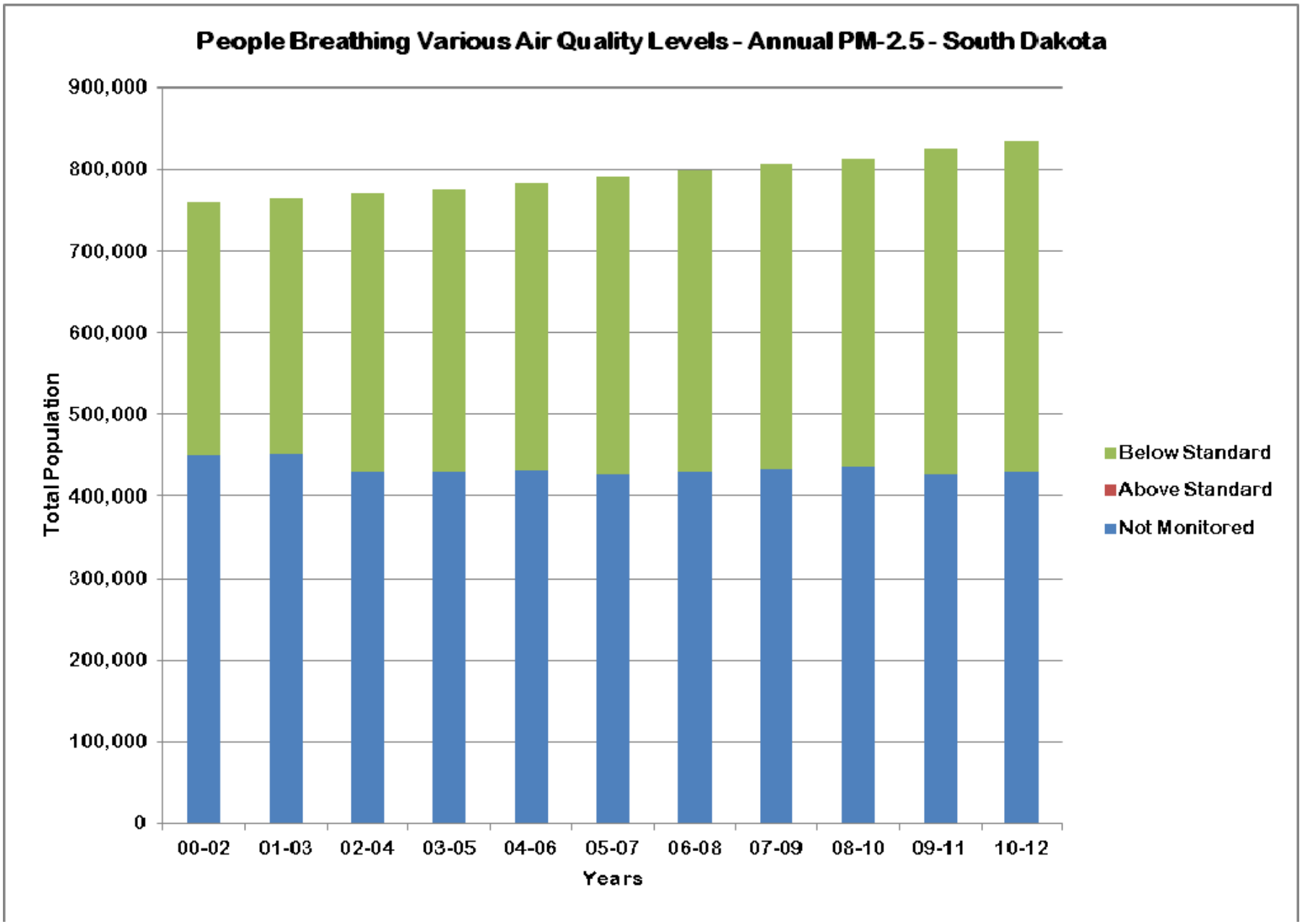

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - South Dakota
Total Population
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure SD-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - South Dakota
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

TENNESSEE

Ozone

Progress has been made in ozone levels in Tennessee. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.0 million people (30.9%). Figure TN-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Tennessee. In the 2000 – 2002 time period, approximately 2.1 million people (35.5%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 3.5 million people (53.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure TN-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in Tennessee. In the 2000 – 2002 time period, approximately 2.1 million people (35.5%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 3.5 million people (53.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure TN-3 shows the distribution of people by year.

TENNESSEE

Table TN-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Anderson	75,416	0.073	C	N	ND	---	ND	---	---
Blount	124,177	0.074	C	Y	21	A	10.5	A	N
Davidson	648,295	0.072	C	Y	22	A	10.5	A	Y
Dyer	38,255	ND	---	---	20	A	9.4	A	N
Hamilton	345,545	0.073	C	Y	22	A	11.0	A	Y
Jefferson	**52,191**	**0.078**	**D**	N	ND	---	ND	---	---
Knox	441,311	ND	---	---	23	A	11.6	A	Y
Lawrence	42,086	ND	---	---	18	A	8.6	A	N
Loudon	49,793	0.075	C	N	23	A	11.3	A	N
Madison	98,656	ND	---	---	18	A	9.4	A	N
Maury	61,990	ND	---	---	18	A	9.2	A	N
McMinn	52,416	ND	---	---	22	A	10.5	A	N
Meigs	11,698	0.074	C	N	ND	---	ND	---	---
Montgomery	184,468	ND	---	---	22	A	10.3	A	N
Putnam	73,229	ND	---	---	19	A	9.5	A	N
Roane	53,469	ND	---	---	22	A	11.6	A	N
Rutherford	274,454	0.070	C	N	ND	---	ND	---	---
Sevier	**92,512**	**0.076**	**D**	N	ND	---	ND	---	---
Shelby	**940,764**	**0.079**	**D**	Y	21	A	10.3	A	Y
Sullivan	156,786	0.073	C	Y	19	A	9.9	A	N
Sumner	**166,123**	**0.078**	**D**	Y	20	A	10.2	A	N
Williamson	192,911	0.073	C	N	ND	---	ND	---	---
Wilson	118,961	0.074	C	N	ND	---	ND	---	---
Subtotal	**4,295,506**								
Not Monitored	2,160,737								
Total	**6,456,243**								

DV – Design Value ND - No Data MM – Multiple Monitors

TENNESSEE

Table TN-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	626,681	635,475	0
C	0	577,231	583,013	1,125,006	1,110,974	0	1,040,712	1,901,336	2,883,435	2,482,920	1,998,036
D	614,739	423,220	2,047,768	2,196,758	2,228,667	2,662,428	2,018,613	1,669,384	89,889	91,466	1,251,590
F	2,716,119	2,364,557	688,143	0	49,079	727,412	425,276	0	0	0	0
Subtotal	3,330,858	3,365,008	3,318,924	3,325,764	3,388,720	3,379,840	3,484,601	3,570,720	3,600,005	3,209,861	3,249,626
NM	2,465,060	2,482,804	2,591,885	2,665,293	2,700,046	2,785,887	2,762,810	2,735,299	2,746,100	3,193,492	3,206,617
Total	5,795,918	5,847,812	5,910,809	5,991,057	6,088,766	6,175,727	6,247,411	6,306,019	6,346,105	6,403,353	6,456,243

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	40,596	317,901	362,123	324,784	941,360	3,174,128	3,422,601	3,458,584	3,477,363
B	475,438	405,390	1,798,762	359,276	1,367,384	682,888	1,874,439	222,961	0	0	0
C	1,581,386	2,068,090	655,219	2,845,887	1,401,030	1,741,511	52,284	0	0	0	0
D	956,752	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,013,576	2,473,480	2,494,577	2,523,064	3,130,537	2,749,183	2,868,083	3,397,089	3,422,601	3,458,584	3,477,363
NM	2,782,342	3,374,332	3,416,232	3,467,993	2,958,229	3,426,544	3,379,328	2,908,930	2,923,504	2,944,769	2,978,880
Total	5,795,918	5,847,812	5,910,809	5,991,057	6,088,766	6,175,727	6,247,411	6,306,019	6,346,105	6,403,353	6,456,243

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	78,116	0	40,773	0	176,485	2,690,286	2,941,819	3,458,584	3,477,363
B	215,788	1,260,512	1,333,243	1,450,611	113,838	2,168,582	2,415,882	229,388	480,782	0	0
C	1,841,036	505,626	684,911	668,219	2,518,934	460,651	275,716	477,415	0	0	0
D	567,309	707,342	398,307	404,234	456,992	119,950	0	0	0	0	0
F	389,443	0	0	0	0	0	0	0	0	0	0
Subtotal	3,013,576	2,473,480	2,494,577	2,523,064	3,130,537	2,749,183	2,868,083	3,397,089	3,422,601	3,458,584	3,477,363
NM	2,782,342	3,374,332	3,416,232	3,467,993	2,958,229	3,426,544	3,379,328	2,908,930	2,923,504	2,944,769	2,978,880
Total	5,795,918	5,847,812	5,910,809	5,991,057	6,088,766	6,175,727	6,247,411	6,306,019	6,346,105	6,403,353	6,456,243

NM – Not Monitored

Figure TN-1


People Breathing Various Air Quality Levels - 8 Hour Ozone - Tennessee
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure TN-2

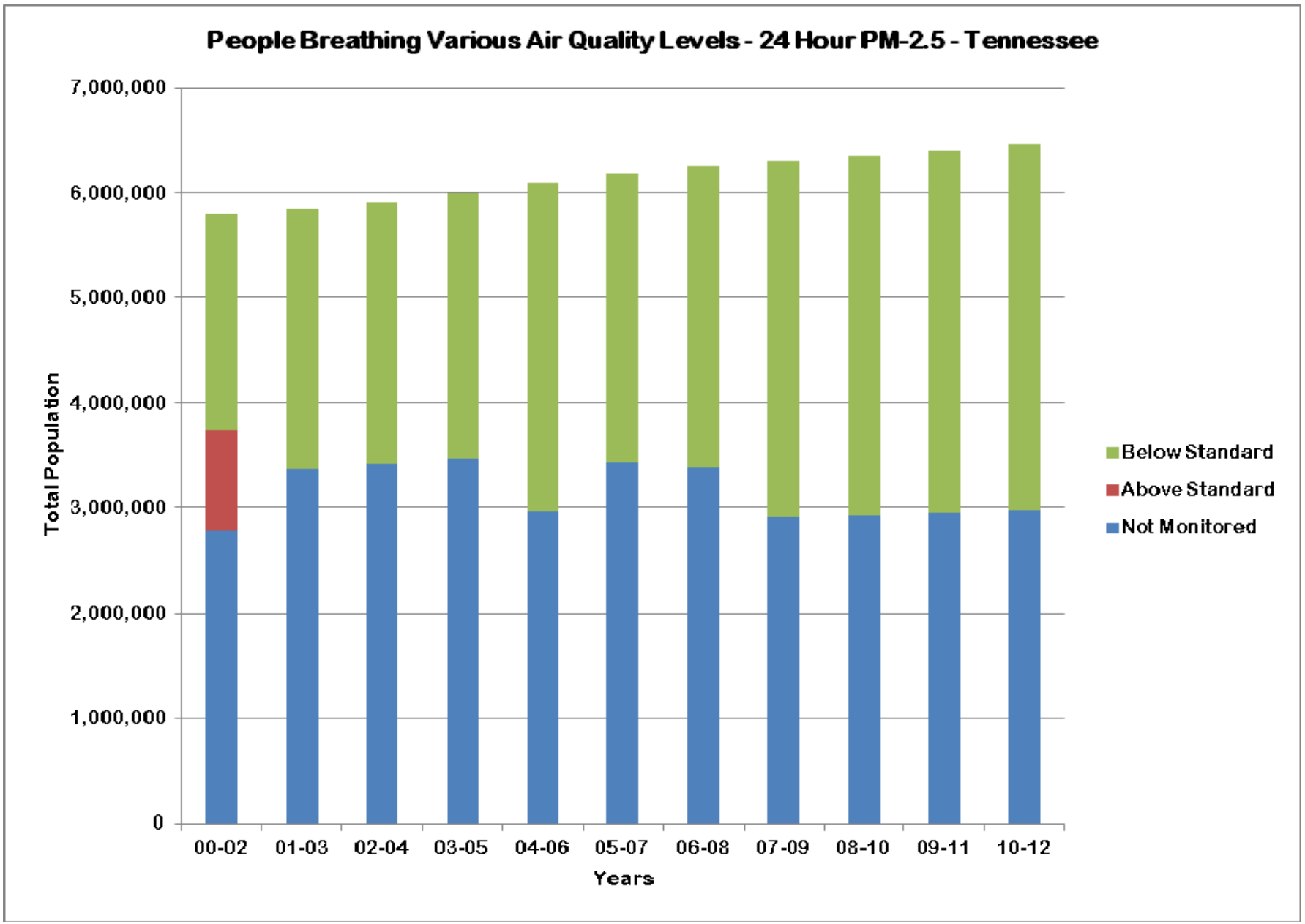

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Tennessee
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure TN-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Tennessee
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

TEXAS

Ozone

Significant progress has been made in ozone levels in Texas. In the 2000 – 2002 time period, 1.2 million people (5.4%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 7.0 million people (26.7%). Figure TX-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Texas have historically been better than the standard. In the 2000 – 2002 time period, approximately 11.4 million people (52.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 14.2 million people (54.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure TX-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Texas have historically been better than the standard. In the 2000 – 2002 time period, approximately 11.4 million people (52.6%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 14.2 million people (54.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure TX-3 shows the distribution of people by year.

TEXAS

Table TX-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Bell	323,037	0.075	C	N	ND	---	ND	---	---
Bexar	1,785,704	0.075	C	Y	22	A	9.0	A	Y
Bowie	93,148	ND	---	---	21	A	11.1	A	N
Brazoria	**324,769**	**0.078**	**D**	Y	ND	---	ND	---	---
Brewster	9,316	0.070	C	N	ND	---	ND	---	---
Cameron	415,557	0.064	B	N	21	A	10.0	A	N
Collin	**834,642**	**0.083**	**F**	N	ND	---	ND	---	---
Dallas	**2,453,843**	**0.082**	**D**	Y	21	A	10.4	A	Y
Denton	**707,304**	**0.083**	**F**	Y	ND	---	ND	---	---
El Paso	827,398	0.068	C	Y	21	A	9.4	A	Y
Ellis	153,969	0.073	C	Y	22	A	10.0	A	N
Galveston	**100,484**	**0.080**	**D**	N	ND	---	ND	---	---
Gregg	**122,658**	**0.079**	**D**	N	ND	---	ND	---	---
Harris	**4,253,700**	**0.080**	**D**	Y	23	A	11.6	A	Y
Harrison	67,450	0.074	C	N	27	A	10.9	A	N
Hidalgo	806,552	0.062	B	Y	24	A	10.3	A	N
Hood	**52,044**	**0.078**	**D**	N	ND	---	ND	---	---
Hunt	87,078	0.072	C	N	ND	---	ND	---	---
Jefferson	251,813	0.074	C	Y	ND	---	ND	---	---
Johnson	**153,441**	**0.080**	**D**	N	ND	---	ND	---	---
Kaufman	106,753	0.070	C	N	ND	---	ND	---	---
McLennan	238,707	0.072	C	N	ND	---	ND	---	---
Montgomery	485,047	0.080	D	N	ND	---	ND	---	---
Navarro	47,979	0.071	C	N	ND	---	ND	---	---
Nueces	347,691	0.071	C	Y	27	A	9.8	A	Y
Orange	82,977	0.072	C	Y	ND	---	ND	---	---
Parker	**119,712**	**0.078**	**D**	N	ND	---	ND	---	---
Rockwall	**83,021**	**0.078**	**D**	N	ND	---	ND	---	---
Smith	214,821	0.075	C	N	ND	---	ND	---	---
Tarrant	**1,880,153**	**0.084**	**F**	Y	22	A	10.5	A	Y
Travis	1,095,584	0.073	C	Y	20	A	9.2	A	Y
Victoria	89,269	0.069	C	N	ND	---	ND	---	---
Subtotal	**18,615,621**								
Not Monitored	7,443,582								
Total	**26,059,203**								

DV – Design Value ND - No Data MM – Multiple Monitors

TEXAS

Table TX-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	240,287	1,003,376	250,304	0	0
B	565,140	570,278	226,860	907,515	1,313,618	1,345,007	1,245,098	734,872	1,466,493	1,211,933	1,222,109
C	610,520	713,797	1,104,318	1,639,729	627,439	638,508	1,655,510	5,546,832	8,189,141	5,750,191	5,729,547
D	1,181,088	1,678,893	1,810,238	1,503,033	2,417,013	4,088,326	10,382,516	8,272,616	7,978,657	8,428,924	9,183,361
F	11,654,276	11,545,984	12,079,935	11,935,305	12,091,466	10,312,096	3,378,516	1,934,661	0	2,536,221	2,587,457
Subtotal	14,011,024	14,508,952	15,221,351	15,985,582	16,449,536	16,383,937	16,901,927	17,492,357	17,884,595	17,927,269	18,722,474
NM	7,679,301	7,521,979	7,172,672	6,792,541	6,910,044	7,448,046	7,407,112	7,309,404	7,260,966	7,747,412	7,336,729
Total	21,690,325	22,030,931	22,394,023	22,778,123	23,359,580	23,831,983	24,309,039	24,801,761	25,145,561	25,674,681	26,059,203

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	3,342,953	798,863	4,985,794	1,209,375	8,201,463	9,298,152	10,994,773	11,164,487	11,381,119	13,953,852	14,180,749
B	7,874,722	6,519,830	5,194,452	7,633,946	171,922	846,034	769,930	786,759	800,647	0	0
C	201,580	2,951,632	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	717,652	728,095	744,795	0	0	0	0	0	0
Subtotal	11,419,355	10,270,325	10,897,698	9,571,416	9,118,180	10,144,186	11,764,703	11,951,246	12,181,766	13,953,852	14,180,749
NM	10,270,970	11,760,606	11,496,325	13,206,707	14,241,400	13,687,797	12,544,336	12,850,515	12,963,795	11,720,829	11,878,454
Total	21,690,325	22,030,931	22,394,023	22,778,123	23,359,580	23,831,983	24,309,039	24,801,761	25,145,561	25,674,681	26,059,203

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	3,906,518	1,976,860	2,521,650	1,209,375	4,475,715	5,434,808	6,964,844	7,916,380	12,181,766	13,953,852	14,180,749
B	7,424,024	8,204,626	7,658,396	3,952,117	3,897,670	3,953,800	4,799,859	4,034,866	0	0	0
C	88,813	88,839	717,652	3,681,829	0	0	0	0	0	0	0
D	0	0	0	0	744,795	0	0	0	0	0	0
F	0	0	0	728,095	0	755,578	0	0	0	0	0
Subtotal	11,419,355	10,270,325	10,897,698	9,571,416	9,118,180	10,144,186	11,764,703	11,951,246	12,181,766	13,953,852	14,180,749
NM	10,270,970	11,760,606	11,496,325	13,206,707	14,241,400	13,687,797	12,544,336	12,850,515	12,963,795	11,720,829	11,878,454
Total	21,690,325	22,030,931	22,394,023	22,778,123	23,359,580	23,831,983	24,309,039	24,801,761	25,145,561	25,674,681	26,059,203

NM – Not Monitored

Figure TX-1

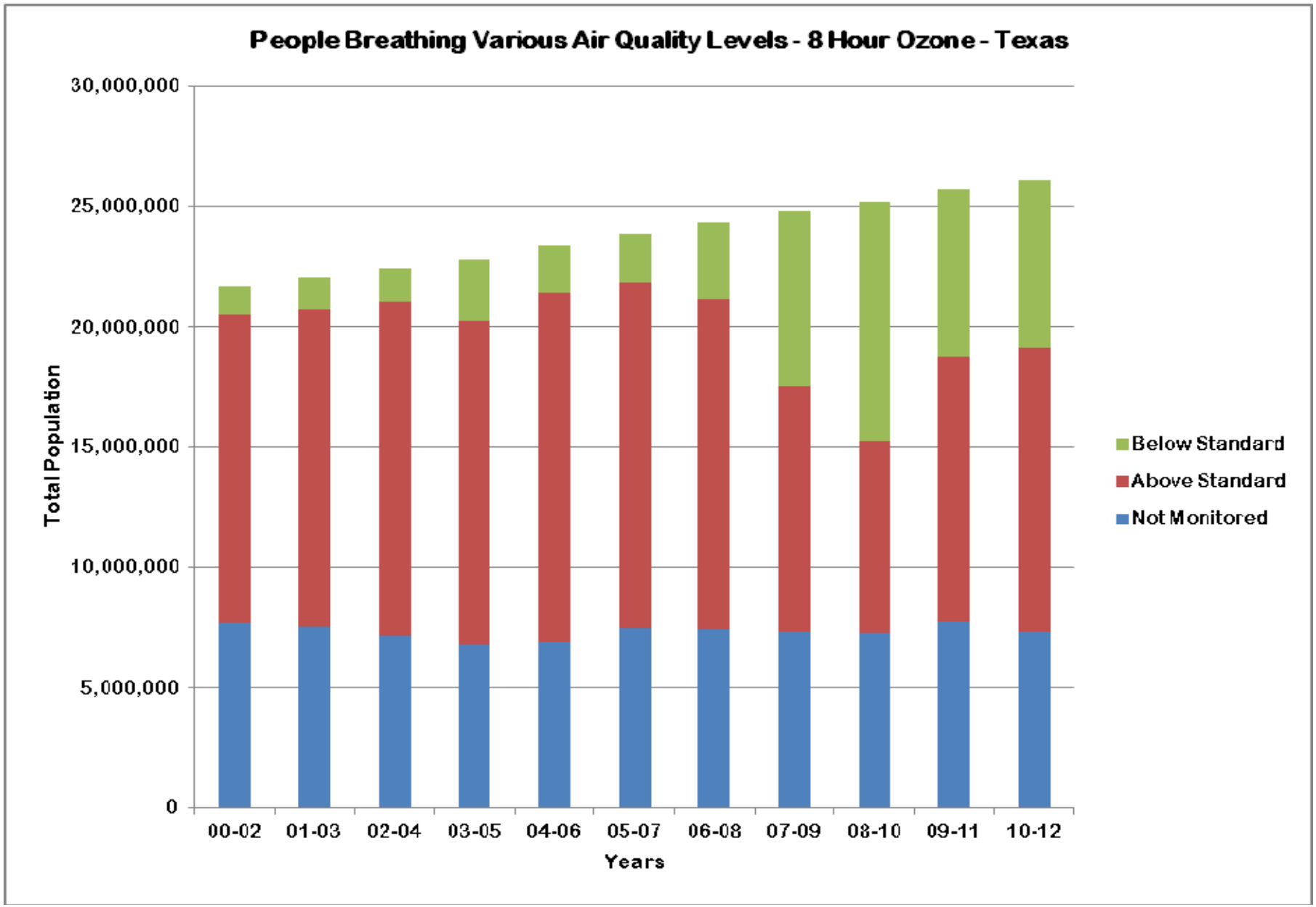

People Breathing Various Air Quality Levels - 8 Hour Ozone - Texas
Total Population
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure TX-2

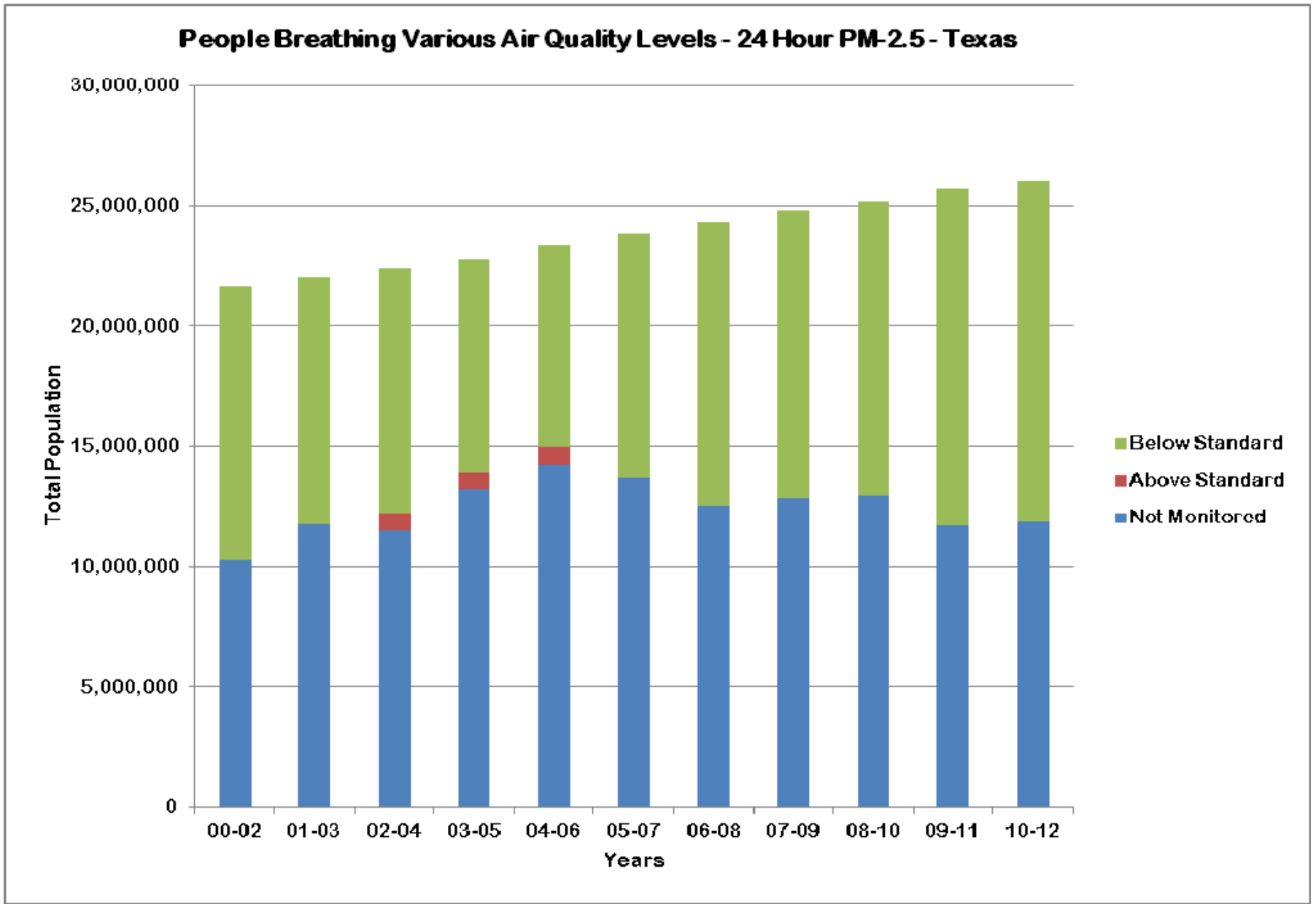
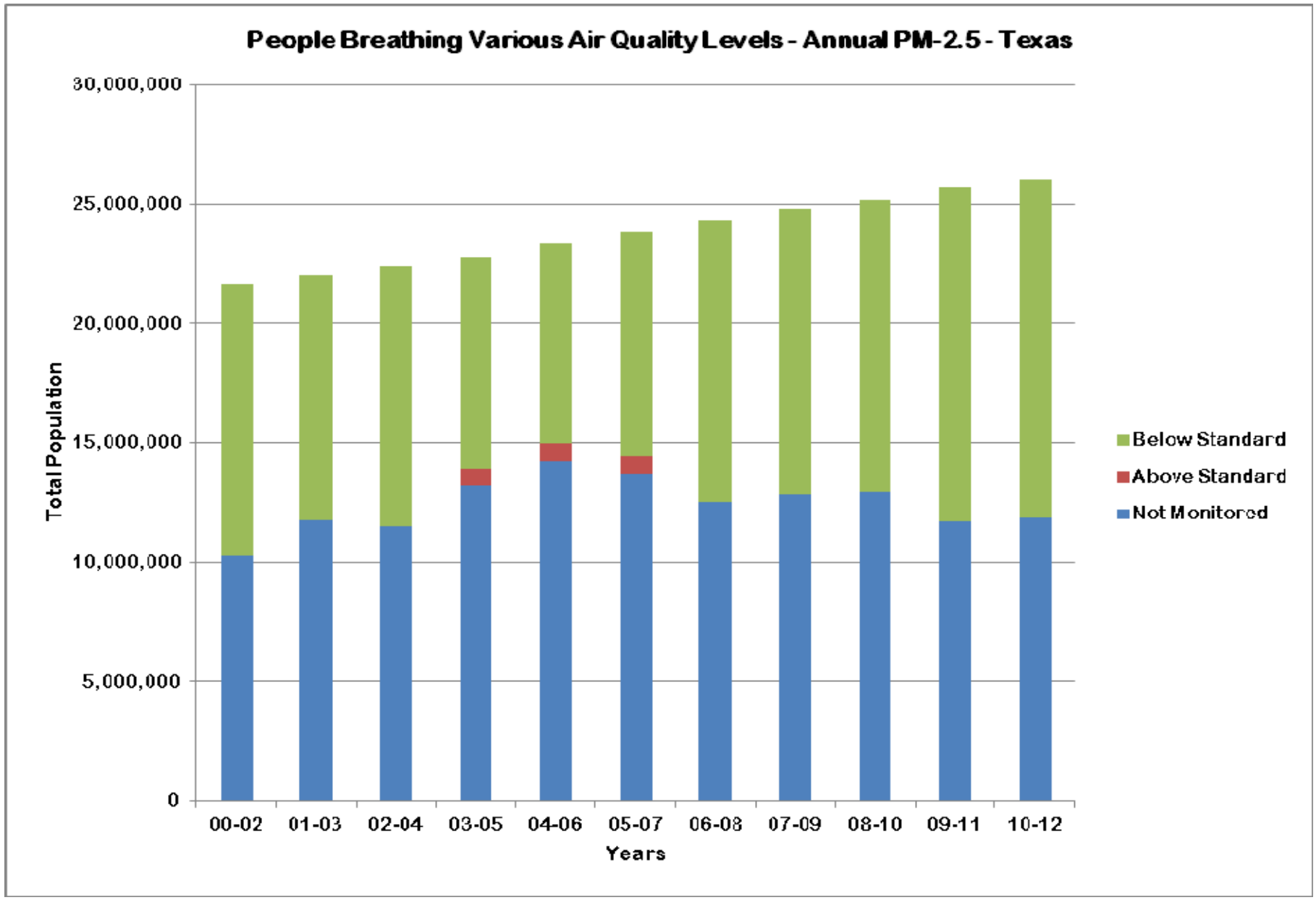

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Texas
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure TX-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Texas
Total Population
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

UTAH

Ozone

Significant progress has been made in ozone levels in Utah. In the 2000 – 2002 time period, 0.5 million people (21.8%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 2.6 million people (89.7%). Figure UT-1 shows the distribution of people by year.

24-Hour PM-2.5

Progress has been made in 24-hour PM-2.5 levels in Utah. In the 2000 – 2002 time period, approximately 0.04 million people (1.9%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.4 million people (83.4%). Figure UT-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Utah have historically been better than the standard. In the 2000 – 2002 time period, approximately 2.0 million people (84.0%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 2.4 million people (83.4%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure UT-3 shows the distribution of people by year.

Table UT-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Box Elder	**50,171**	0.069	C	N	**37**	**D**	7.7	A	N
Cache	**115,520**	0.065	B	N	**36**	**D**	8.7	A	N
Davis	315,809	0.070	C	N	35	C	8.2	A	N
Duchesne	19,244	0.067	B	N	ND	---	ND	---	---
Salt Lake	1,063,842	0.072	C	N	34	C	8.5	A	Y
Sam Juan	14,965	0.070	C	N	ND	---	ND	---	---
Tooele	59,870	0.073	C	N	23	A	6.1	A	N
Uintah	**34,524**	**0.079**	**D**	Y	ND	---	ND	---	---
Utah	540,504	0.071	C	Y	29	B	8.0	A	Y
Washington	144,809	0.073	C	N	ND	---	ND	---	---
Weber	236,640	0.072	C	Y	35	C	8.2	A	Y
Subtotal	**2,595,898**								
Not Monitored	259,389								
Total	**2,855,287**								

DV – Design Value ND - No Data MM – Multiple Monitors

UTAH

Table UT-2

People Breathing Ozone

Grade	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10 – 12
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	100,501	0	0	0	143,222	145,244	164,989	134,764
C	506,345	110,672	573,463	489,440	735,955	249,929	848,773	2,007,906	2,344,988	2,374,695	2,426,610
D	1,370,873	1,580,827	1,141,934	1,158,113	1,458,254	1,718,053	1,519,030	301,965	0	0	34,524
F	0	0	0	0	0	288,236	0	0	0	0	0
Subtotal	1,877,218	1,691,499	1,715,397	1,748,054	2,194,209	2,256,218	2,367,803	2,453,093	2,490,232	2,539,684	2,595,898
NM	447,597	668,638	686,183	709,665	331,298	341,528	295,226	270,328	273,653	277,538	259,389
Total	2,324,815	2,360,137	2,401,580	2,457,719	2,525,507	2,597,746	2,663,029	2,723,421	2,763,885	2,817,222	2,855,287

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10 - 12
A	0	0	0	0	0	0	55,909	57,218	58,218	59,326	59,870
B	0	0	0	0	0	101,014	48,437	49,372	0	0	540,504
C	44,998	46,652	0	45,090	0	217,567	519,477	0	0	0	1,616,291
D	0	406,158	0	640,847	985,700	288,236	594,439	301,965	1,104,254	0	165,691
F	1,767,063	1,430,251	1,602,820	1,317,672	1,068,034	1,556,917	999,553	1,860,005	1,142,311	2,290,704	0
Subtotal	1,813,061	1,883,061	1,602,820	2,003,609	2,053,734	2,163,734	2,217,815	2,268,560	2,304,783	2,350,030	2,382,356
NM	511,754	477,076	798,760	454,110	471,773	434,012	445,214	454,861	459,102	467,192	472,931
Total	2,324,815	2,360,137	2,401,580	2,457,719	2,525,507	2,597,746	2,663,029	2,723,421	2,763,885	2,817,222	2,855,287

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10 - 12
A	894,909	958,259	668,680	1,903,108	1,952,498	2,163,734	2,217,815	2,268,560	2,304,783	2,350,030	2,382,356
B	918,152	924,802	934,140	100,501	101,236	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,813,061	1,883,061	1,602,820	2,003,609	2,053,734	2,163,734	2,217,815	2,268,560	2,304,783	2,350,030	2,382,356
NM	511,754	477,076	798,760	454,110	471,773	434,012	445,214	454,861	459,102	467,192	472,931
Total	2,324,815	2,360,137	2,401,580	2,457,719	2,525,507	2,597,746	2,663,029	2,723,421	2,763,885	2,817,222	2,855,287

NM – Not Monitored

Figure UT-1

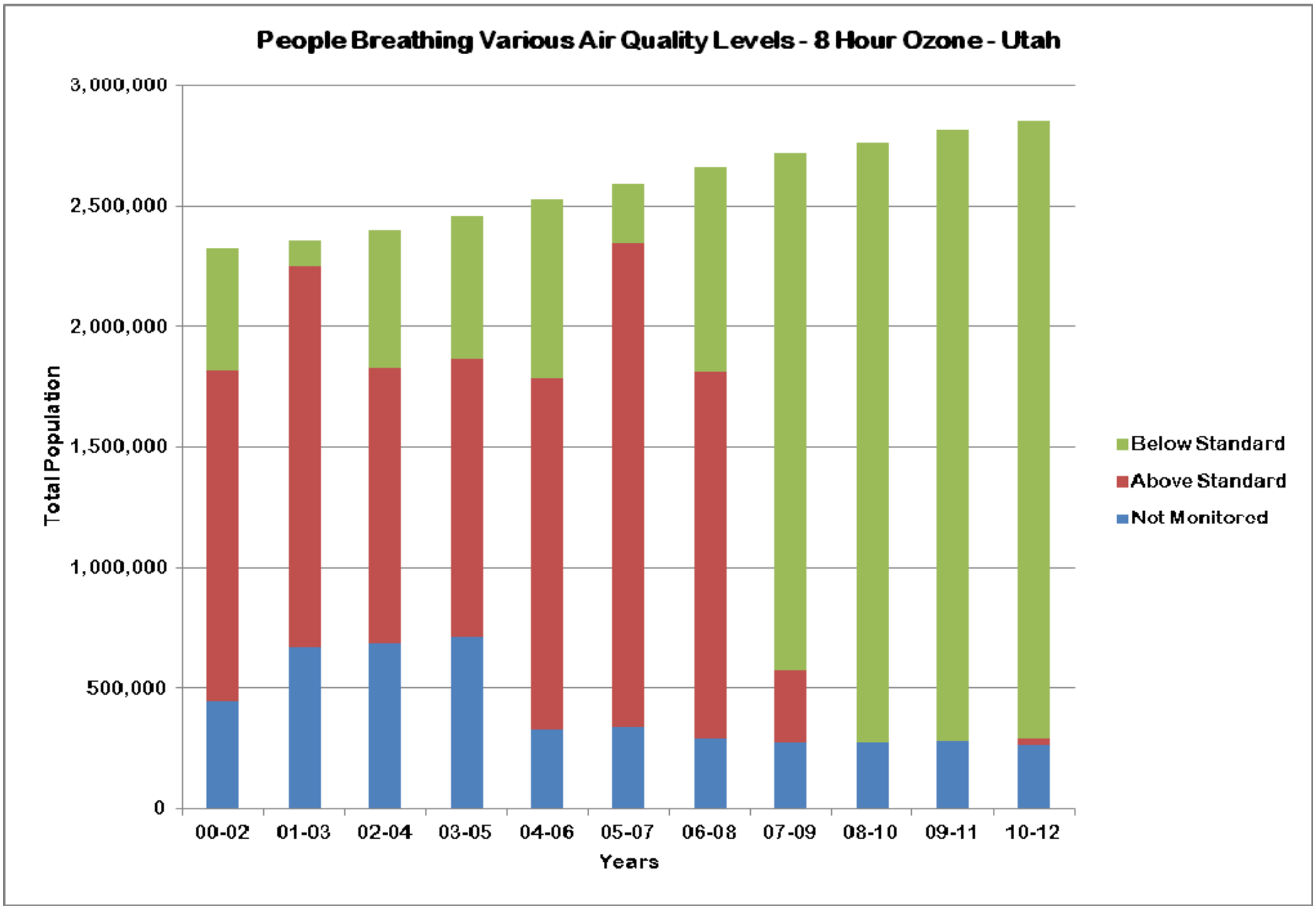

People Breathing Various Air Quality Levels - 8 Hour Ozone - Utah
Total Population
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure UT-2

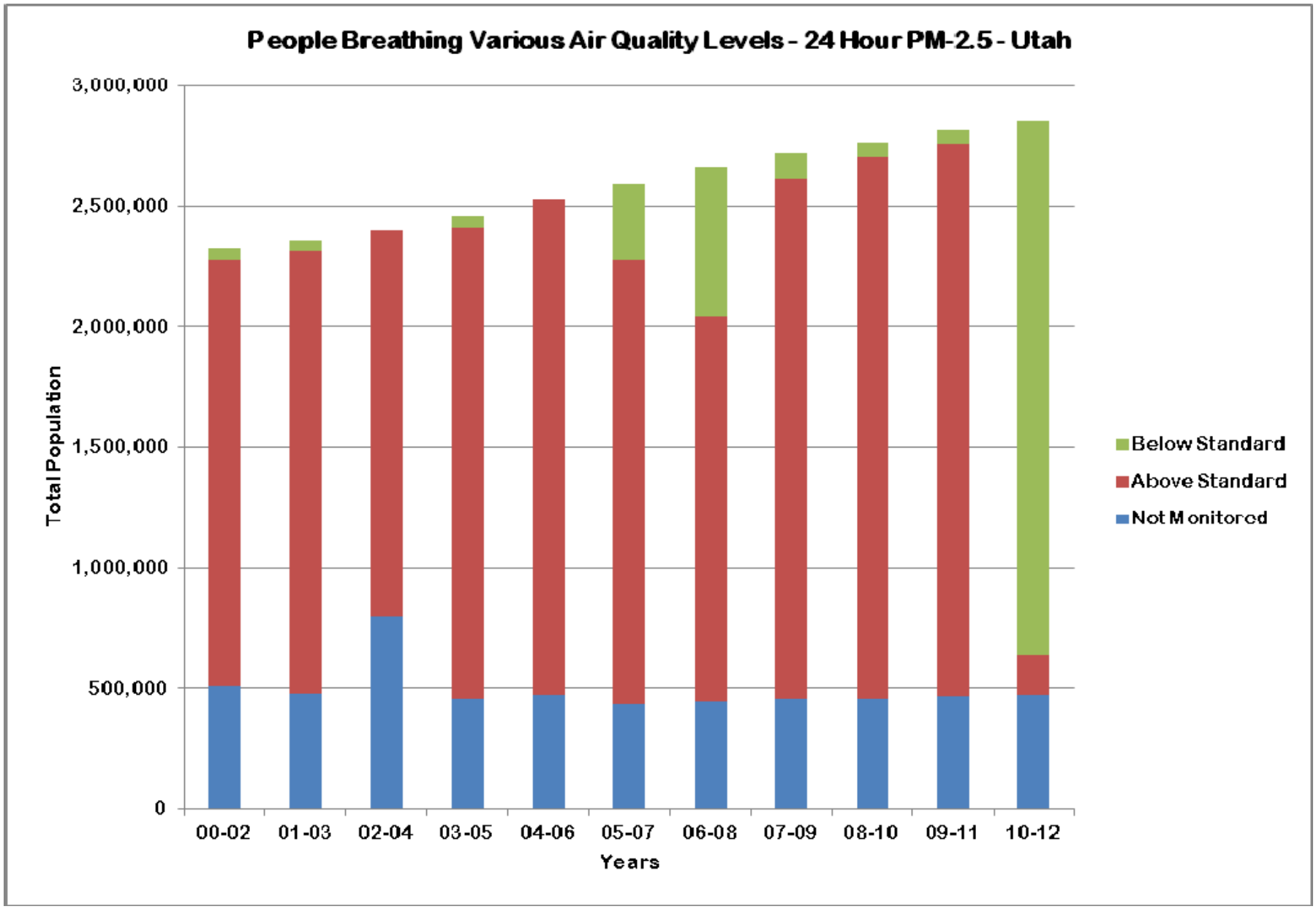
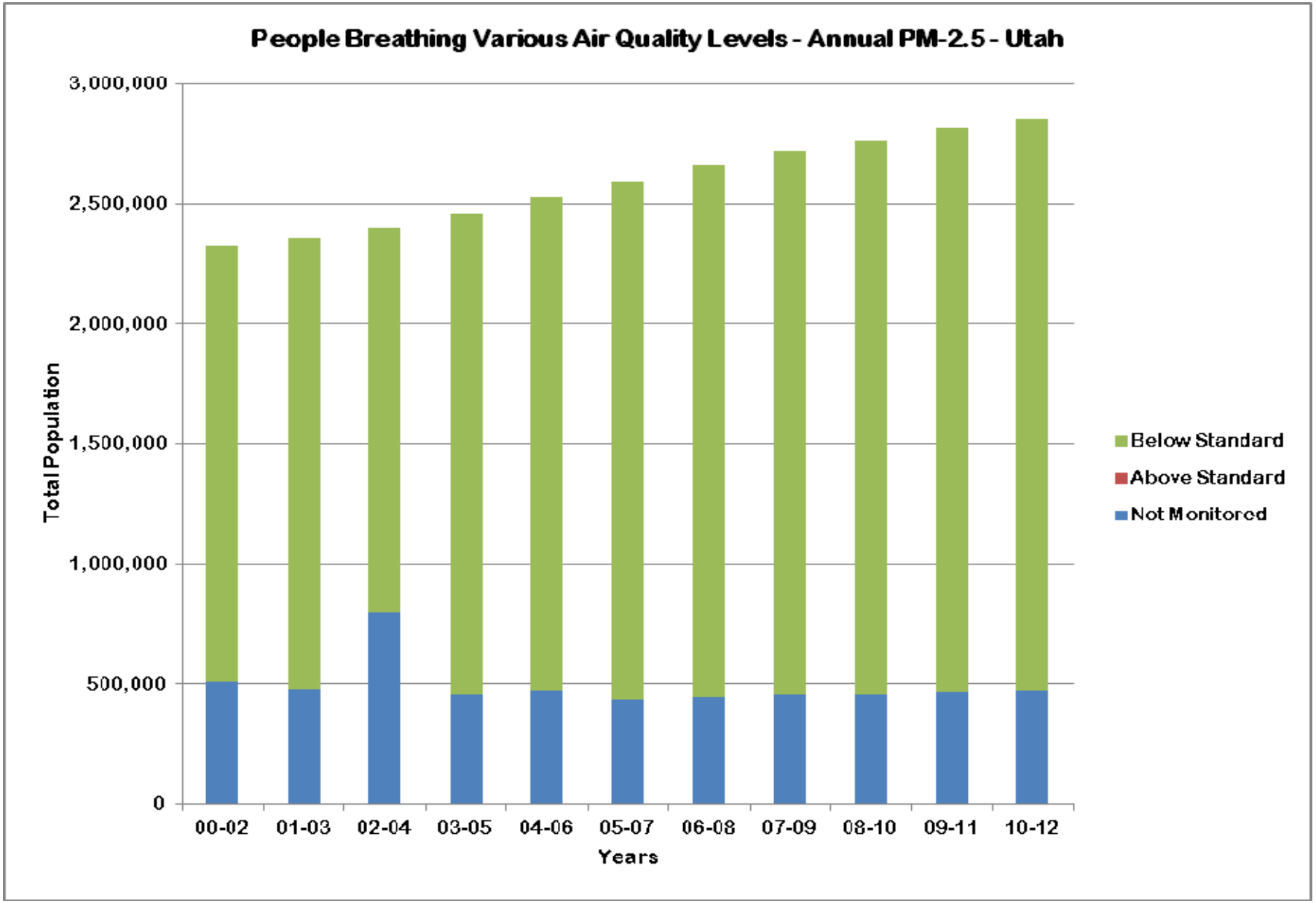

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Utah
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure UT-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Utah
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

VERMONT

Ozone

Significant progress has been made in ozone levels in Vermont. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.2 million people (31.2%). The remainder of the population lived in counties where ozone was not measured. Figure VT-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Vermont have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.3 million people (50.1%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.3 million people (40.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure VT-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Vermont have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.3 million people (50.1%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 0.3 million people (40.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure VT-3 shows the distribution of people by year.

Table VT-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Bennington	36,697	0.065	B	N	19	A	7.0	A	N
Chittenden	158,504	0.062	B	N	19	A	6.1	A	Y
Rutland	60,869	ND	---	---	29	B	9.6	A	N
Subtotal	**256,070**								
Not Monitored	369,941								
Total	**626,011**								

DV – Design Value ND - No Data MM – Multiple Monitors

VERMONT

Table VT-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	156,545	194,461	195,201
C	0	0	0	189,163	189,988	190,702	191,827	192,944	37,125	0	0
D	186,744	187,493	194,507	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	186,744	187,493	194,507	189,163	189,988	190,702	191,827	192,944	193,670	194,461	195,201
NM	428,698	430,365	425,413	432,052	432,904	432,779	432,324	431,873	432,071	431,970	430,810
Total	615,442	617,858	619,920	621,215	622,892	623,481	624,151	624,817	625,741	626,431	626,011

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	37,127	37,077	191,827	192,944	193,670	194,461	195,201
B	245,633	150,410	151,445	152,163	252,513	216,243	62,368	61,946	61,642	61,289	60,869
C	62,982	63,113	62,997	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	308,615	213,523	214,442	152,163	289,640	253,320	254,195	254,890	255,312	255,750	256,070
NM	306,827	404,335	405,478	469,052	333,252	370,161	369,956	369,927	370,429	370,681	369,941
Total	615,442	617,858	619,920	621,215	622,892	623,481	624,151	624,817	625,741	626,431	626,011

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	308,615	213,523	214,442	152,163	289,640	253,320	254,195	254,890	255,312	255,750	256,070
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	308,615	213,523	214,442	152,163	289,640	253,320	254,195	254,890	255,312	255,750	256,070
NM	306,827	404,335	405,478	469,052	333,252	370,161	369,956	369,927	370,429	370,681	369,941
Total	615,442	617,858	619,920	621,215	622,892	623,481	624,151	624,817	625,741	626,431	626,011

NM – Not Monitored

Figure VT-1

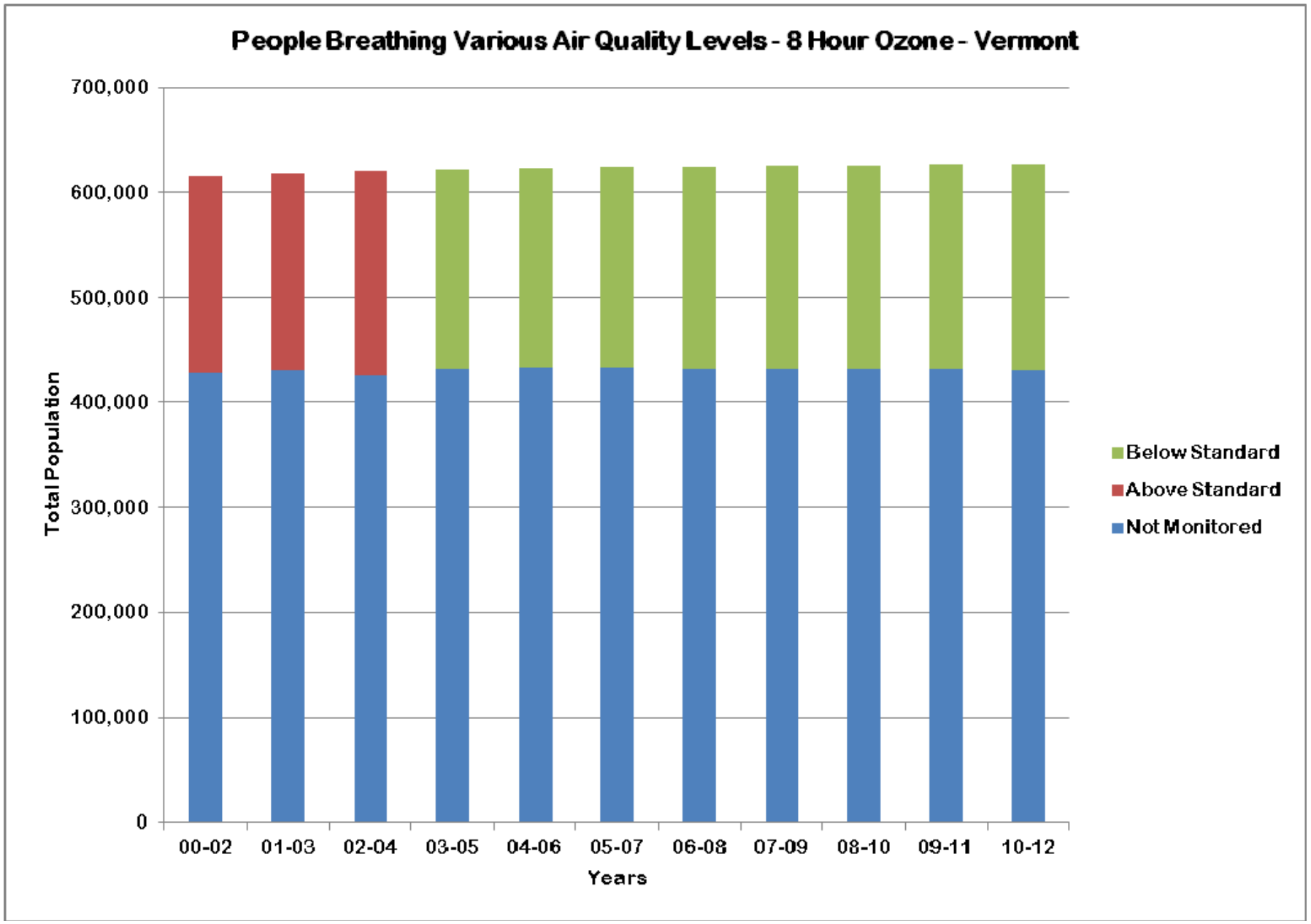
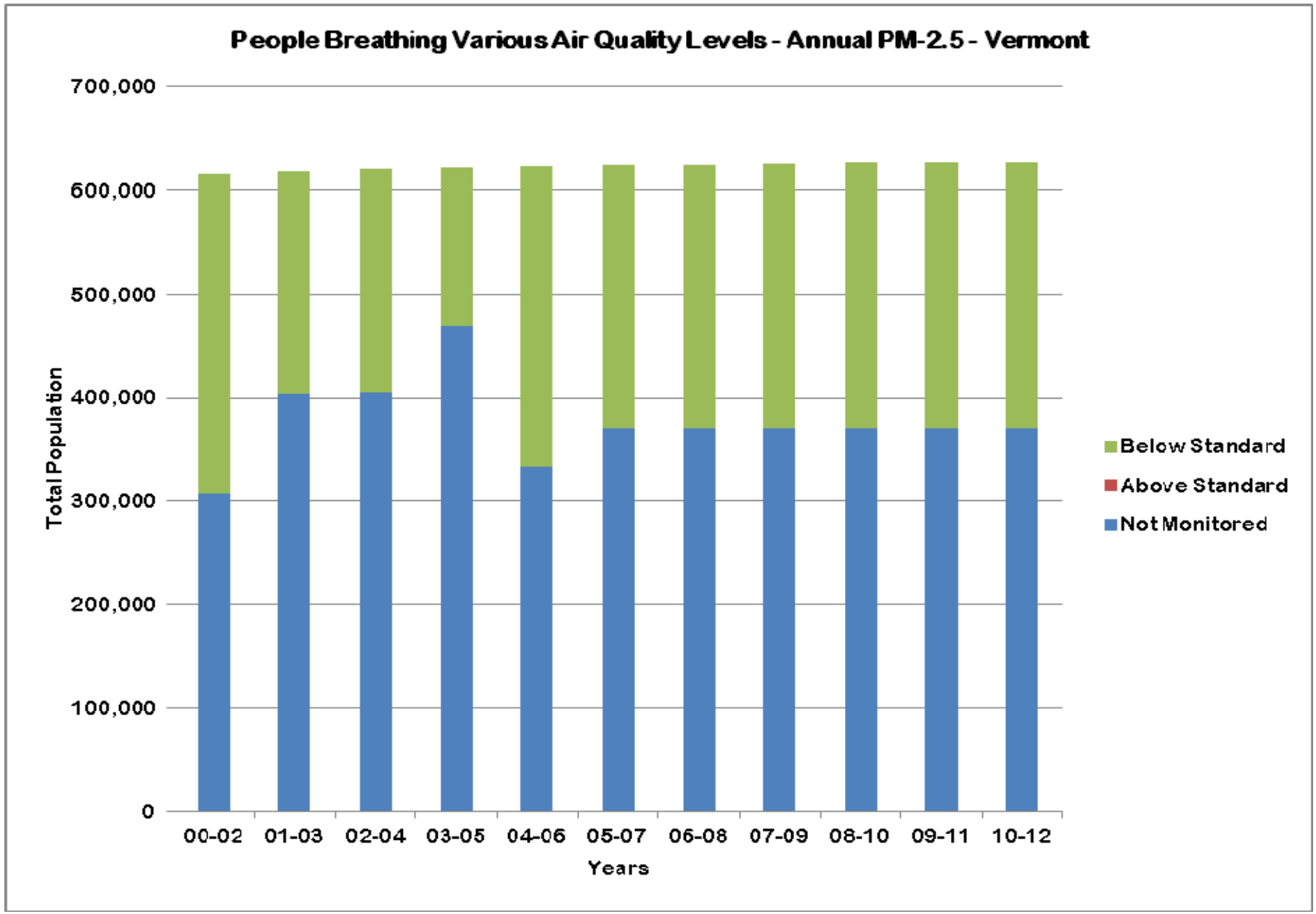

People Breathing Various Air Quality Levels - 8 Hour Ozone - Vermont
Total Population
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure VT-2


People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Vermont
Total Population
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure VT-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Vermont
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

VIRGINIA

Ozone

Progress has been made in ozone levels in Virginia. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 1.7 million people (20.9%). Figure VA-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Virginia. In the 2000 – 2002 time period, approximately 2.3 million people (31.7%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this had increased to approximately 3.7 million people (44.6%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure VA-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Virginia have historically been better than the standard. In the 2000 – 2002 time period, approximately 3.5 million people (48.3%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 3.7 million people (44.6%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure VA-3 shows the distribution of people by year.

VIRGINIA

Table VA-1
2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Albemarle	102,251	0.069	C	N	19	A	8.6	A	N
Arlington	**221,045**	**0.086**	**F**	N	22	A	9.9	A	N
Bristol City	17,662	ND	---	---	20	A	9.8	A	N
Caroline	28,972	0.074	C	N	ND	---	ND	---	---
Charles City	**7,157**	**0.079**	**D**	N	21	A	8.8	A	N
Chesterfield	323,856	0.075	C	N	21	A	9.5	A	N
Fairfax	**1,118,602**	**0.087**	**F**	N	23	A	9.3	A	N
Fauquier	66,542	0.064	B	N	ND	---	ND	---	---
Frederick	80,317	0.067	B	N	24	A	10.2	A	N
Hampton City	**136,836**	**0.076**	**D**	N	24	A	9.3	A	N
Hanover	**100,668**	**0.077**	**D**	N	ND	---	ND	---	---
Henrico	**314,932**	**0.078**	**D**	N	21	A	9.2	A	Y
Loudoun	336,898	0.075	C	N	21	A	9.5	A	N
Lynchburg City	77,113	ND	---	---	18	A	8.6	A	N
Madison	13.200	0.073	C	N	ND	---	ND	---	---
Norfolk City	245,782	ND	---	---	23	A	9.3	A	N
Page	23,895	0.068	C	N	21	A	9.1	A	N
Prince William	430,289	0.072	C	N	ND	---	ND	---	---
Roanoke	92,901	0.070	C	N	ND	---	ND	---	---
Roanoke City	97,469	ND	---	---	21	A	9.8	A	N
Rockbridge	22,394	0.064	B	N	ND	---	ND	---	---
Rockingham	77,391	0.068	C	N	22	A	9.9	A	N
Salem City	24,970	ND	---	---	20	A	9.7	A	N
Stafford	**134,352**	**0.076**	**D**	N	ND	---	ND	---	---
Suffolk City	85,181	0.072	C	Y	ND	---	ND	---	---
Virginia Beach	447,021	ND	---	---	24	A	9.2	A	N
Wythe	29,251	0.066	B	N	ND	---	ND	---	---
Subtotal	**4,643,760**								
Not Monitored	3,542,107								
Total	**8,185,867**								

DV – Design Value ND - No Data MM – Multiple Monitors

VIRGINIA

Table VA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	22,363	187,102	217,101	321,206	198,504
C	0	0	21,432	271,939	381,601	214,069	285,653	1,389,897	2,109,619	1,934,915	1,514,834
D	130,486	108,911	588,264	1,557,914	1,482,731	1,125,118	1,311,424	1,883,419	1,289,353	1,460,997	693,945
F	3,055,812	3,051,128	2,615,700	1,207,250	1,207,157	1,773,743	1,833,251	0	0	0	1,339,647
Subtotal	3,186,298	3,160,039	3,225,396	3,037,103	3,071,489	3,112,930	3,452,691	3,641,418	3,616,073	3,717,118	3,746,930
NM	4,100,575	4,206,938	4,250,179	4,540,002	4,602,236	4,638,070	4,380,805	4,465,519	4,384,951	4,379,486	4,438,937
Total	7,286,873	7,366,977	7,475,575	7,577,105	7,673,725	7,751,000	7,833,496	7,925,937	8,001,024	8,096,604	8,185,867

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	212,975	3,163,172	3,380,954	3,462,094	3,653,197
B	959,058	530,726	1,126,406	1,144,816	1,625,991	1,531,877	2,962,504	0	0	0	0
C	1,350,001	2,857,007	1,673,504	1,434,790	1,474,351	1,600,254	0	0	0	0	0
D	1,188,750	188,735	187,901	442,669	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,497,809	3,576,468	2,987,811	3,022,275	3,100,342	3,132,131	3,175,479	3,163,172	3,380,954	3,462,094	3,653,197
NM	3,789,064	3,790,509	4,487,764	4,554,830	4,573,383	4,618,869	4,658,017	4,762,765	4,620,070	4,634,510	4,532,670
Total	7,286,873	7,366,977	7,475,575	7,577,105	7,673,725	7,751,000	7,833,496	7,925,937	8,001,024	8,096,604	8,185,867

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	183,404	0	0	0	140,222	918,947	2,960,535	3,380,954	3,462,094	3,653,197
B	1,231,057	1,323,385	1,415,427	1,134,383	1,514,060	2,688,694	2,256,532	202,637	0	0	0
C	2,225,111	2,069,679	1,512,384	1,887,892	1,586,282	303,215	0	0	0	0	0
D	41,641	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,497,809	3,576,468	2,987,811	3,022,275	3,100,342	3,132,131	3,175,479	3,163,172	3,380,954	3,462,094	3,653,197
NM	3,789,064	3,790,509	4,487,764	4,554,830	4,573,383	4,618,869	4,658,017	4,762,765	4,620,070	4,634,510	4,532,670
Total	7,286,873	7,366,977	7,475,575	7,577,105	7,673,725	7,751,000	7,833,496	7,925,937	8,001,024	8,096,604	8,185,867

NM – Not Monitored

Figure VA-1

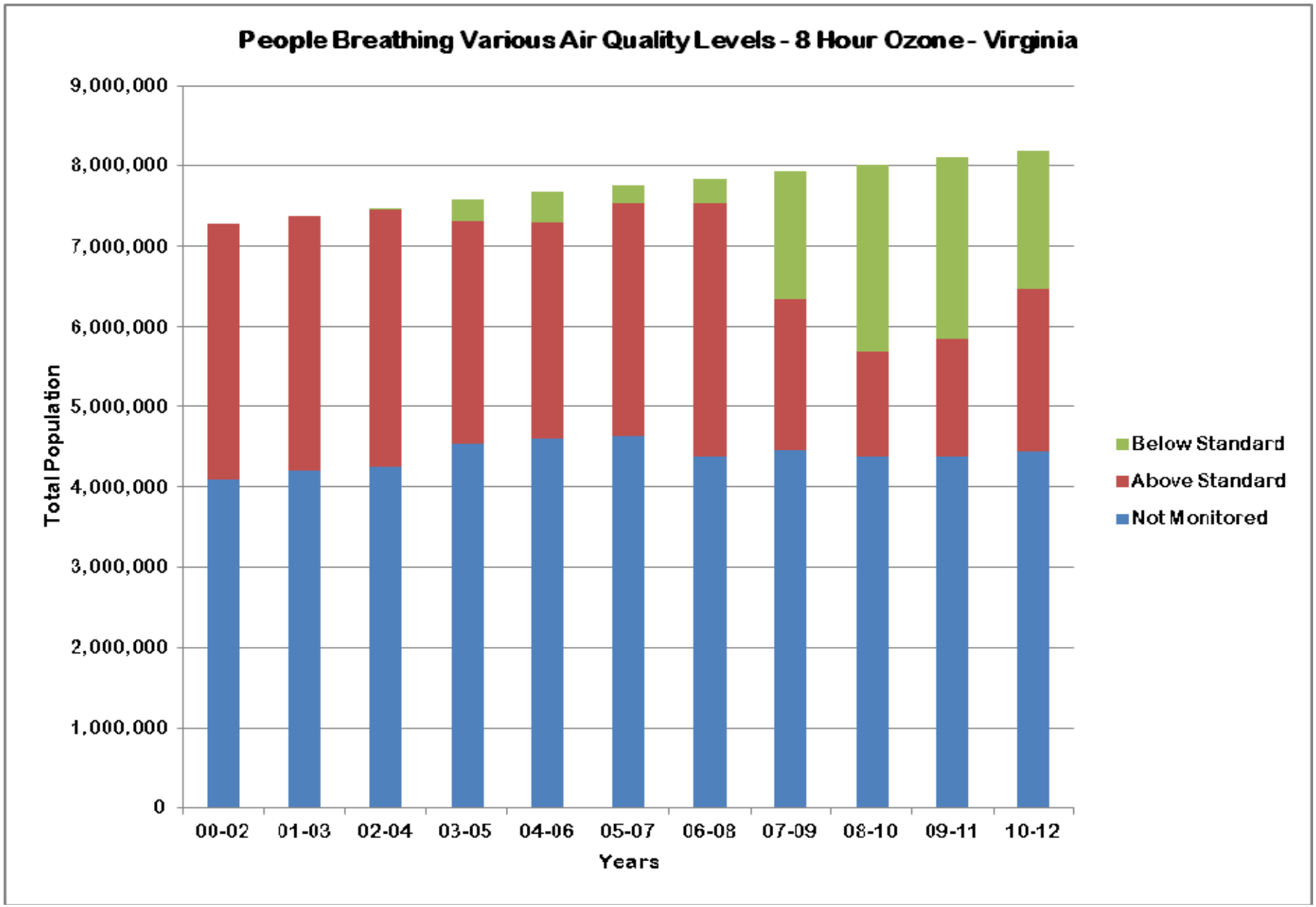

People Breathing Various Air Quality Levels - 8 Hour Ozone - Virginia
Total Population
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure VA-2

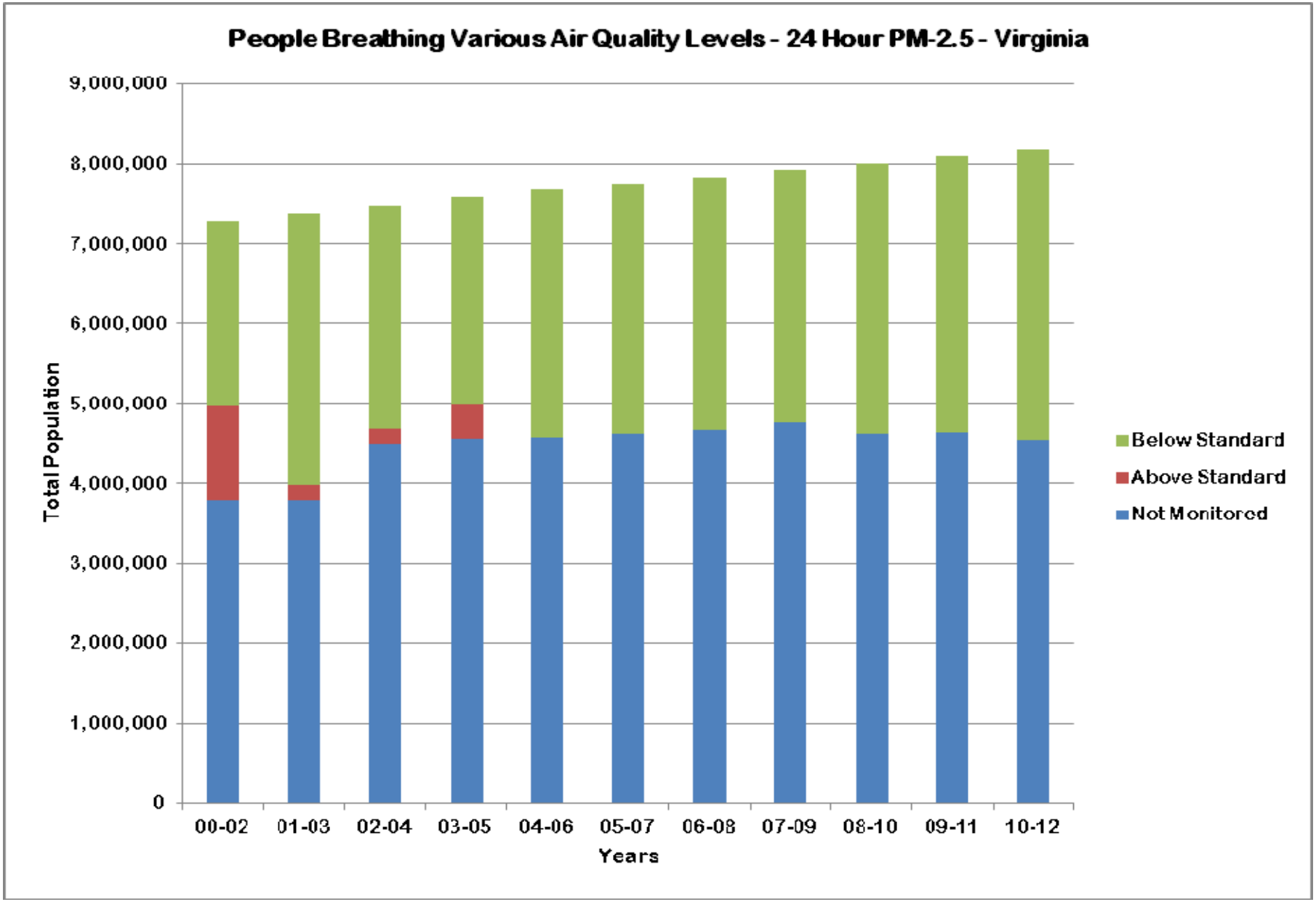
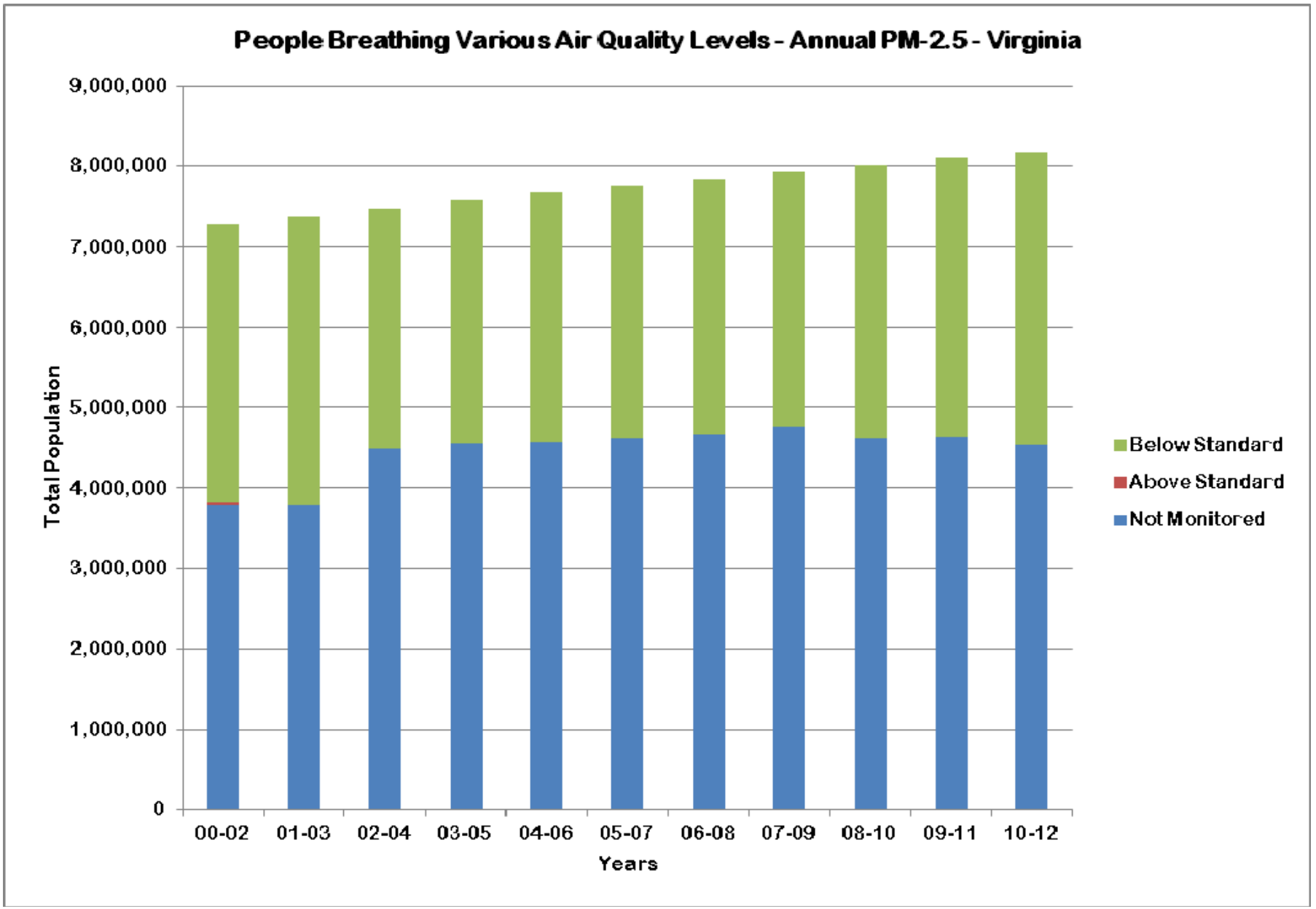

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Virginia
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure VA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Virginia
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

WASHINGTON

Ozone

Ozone levels in Washington have historically been better than the standard. In the 2000 – 2002 time period, approximately 3.9 million people (63.8%) lived in counties that met the ozone standard. By 2010 – 2012 this had decreased to approximately 4.3 million people (62.6%). The remainder of the population lived in counties where ozone was not measured. Figure WA-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in Washington. In the 2000 – 2002 time period, approximately 2.7 million people (45.4%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 3.1 million people (44.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WA-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Washington have historically been better than the standard. In the 2000 – 2002 time period, approximately 4.7 million people (77.5%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this was approximately 3.1 million people (44.5%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WA-3 shows the distribution of people by year.

Table WA-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Clark	438,287	0.056	A	N	ND	---	ND	---	---
King	2,007,440	0.056	A	Y	14	A	5.8	A	N
Pierce	811,681	0.055	A	Y	28	B	7.5	A	N
Skagit	118,222	0.057	A	N	ND	---	ND	---	---
Spokane	475,735	0.059	A	Y	ND	---	ND	---	---
Thurston	258,332	0.056	A	N	ND	---	ND	---	---
Whatcom	205,262	0.046	A	N	ND	---	ND	---	---
Yakima	246,977	ND	---	---	31	B	8.6	A	N
Subtotal	**4,561,936**								
Not Monitored	2,335,076								
Total	**6,897,012**								

DV – Design Value ND - No Data MM – Multiple Monitors

WASHINGTON

Table WA-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,321,242	351,521	412,016	296,133	301,547	1,962,052	186,577	321,013	3,946,726	4,216,897	4,314,959
B	812,572	2,376,279	2,402,445	2,876,286	1,865,012	1,875,226	3,782,297	3,597,966	0	0	0
C	728,091	1,164,679	1,175,405	748,148	1,822,967	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,861,905	3,892,479	3,989,866	3,920,567	3,989,526	3,837,278	3,968,874	3,918,979	3,946,726	4,216,897	4,314,959
NM	2,190,444	2,211,636	2,188,779	2,336,738	2,381,227	2,624,309	2,593,357	2,748,447	2,777,814	2,613,141	2,582,053
Total	6,052,349	6,104,115	6,178,645	6,257,305	6,370,753	6,461,587	6,562,231	6,667,426	6,724,540	6,830,038	6,897,012

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	2,083,912	2,094,887	1,930,986	1,795,268	1,822,967	0	0	1,912,012	0	0	2,007,440
B	665,236	430,710	435,268	598,165	447,517	2,304,136	462,263	0	1,138,698	1,155,818	1,058,658
C	0	593,597	0	1,049,126	670,706	683,997	694,622	706,302	243,231	3,024,767	0
D	1,575,930	860,773	870,813	0	0	0	0	239,604	795,225	0	0
F	366,405	733,969	1,125,068	748,148	763,408	772,484	785,400	796,483	0	0	0
Subtotal	4,691,483	4,713,936	4,362,135	4,190,707	3,704,598	3,760,617	1,942,285	3,654,401	2,177,154	4,180,585	3,066,098
NM	1,360,866	1,390,179	1,716,510	2,066,598	2,666,155	2,700,970	4,619,946	3,013,025	4,547,386	2,649,453	3,830,914
Total	6,052,349	6,104,115	6,178,645	6,257,305	6,370,753	6,461,587	6,562,231	6,667,426	6,724,540	6,830,038	6,897,012

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	4,691,483	4,713,936	4,362,135	4,190,707	3,704,598	3,760,617	1,942,285	3,654,401	2,177,154	4,180,585	3,066,098
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4,691,483	4,713,936	4,362,135	4,190,707	3,704,598	3,760,617	1,942,285	3,654,401	2,177,154	4,180,585	3,066,098
NM	1,360,866	1,390,179	1,716,510	2,066,598	2,666,155	2,700,970	4,619,946	3,013,025	4,547,386	2,649,453	3,830,914
Total	6,052,349	6,104,115	6,178,645	6,257,305	6,370,753	6,461,587	6,562,231	6,667,426	6,724,540	6,830,038	6,897,012

NM – Not Monitored

Figure WA-1

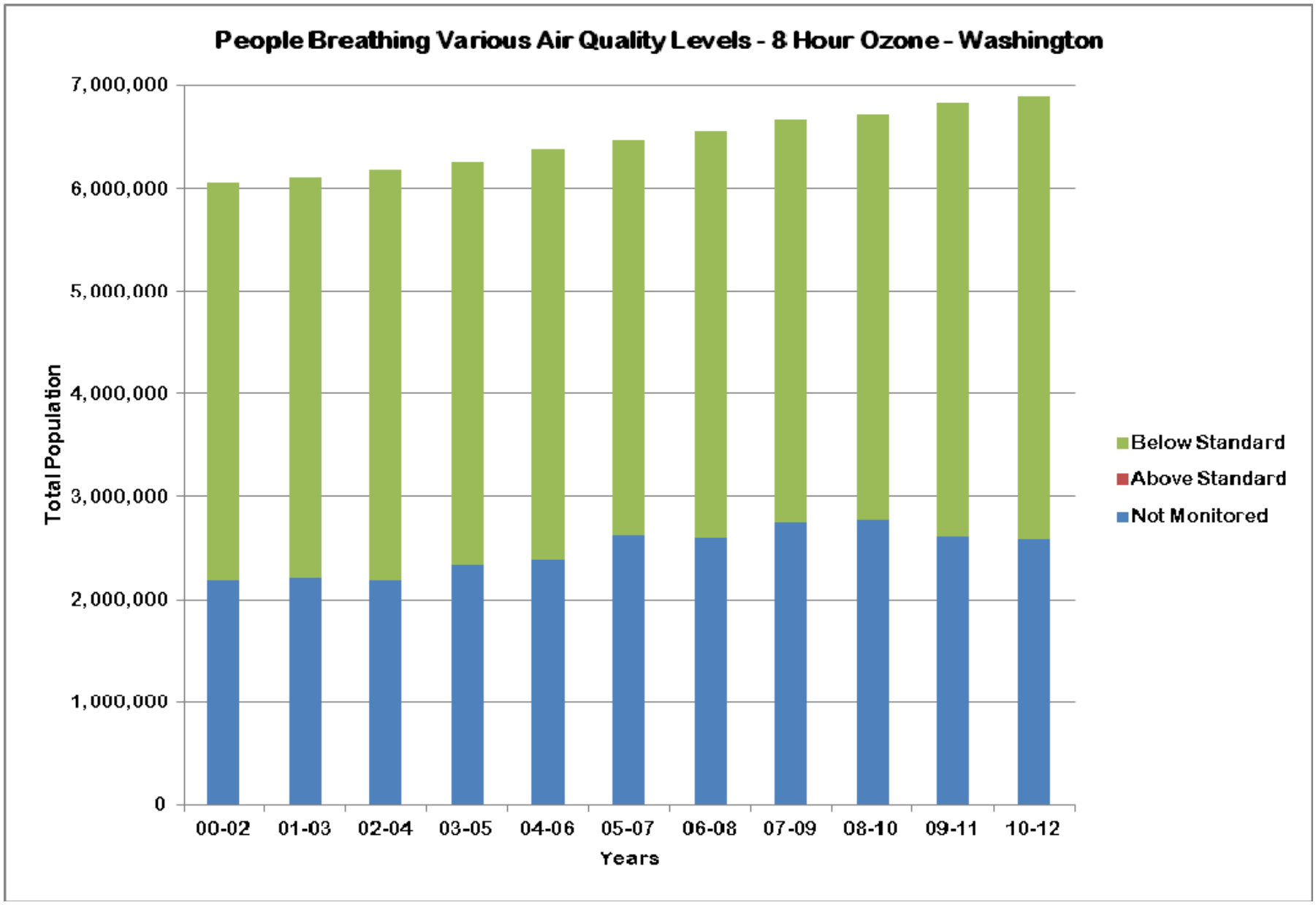

People Breathing Various Air Quality Levels - 8 Hour Ozone - Washington
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WA-2

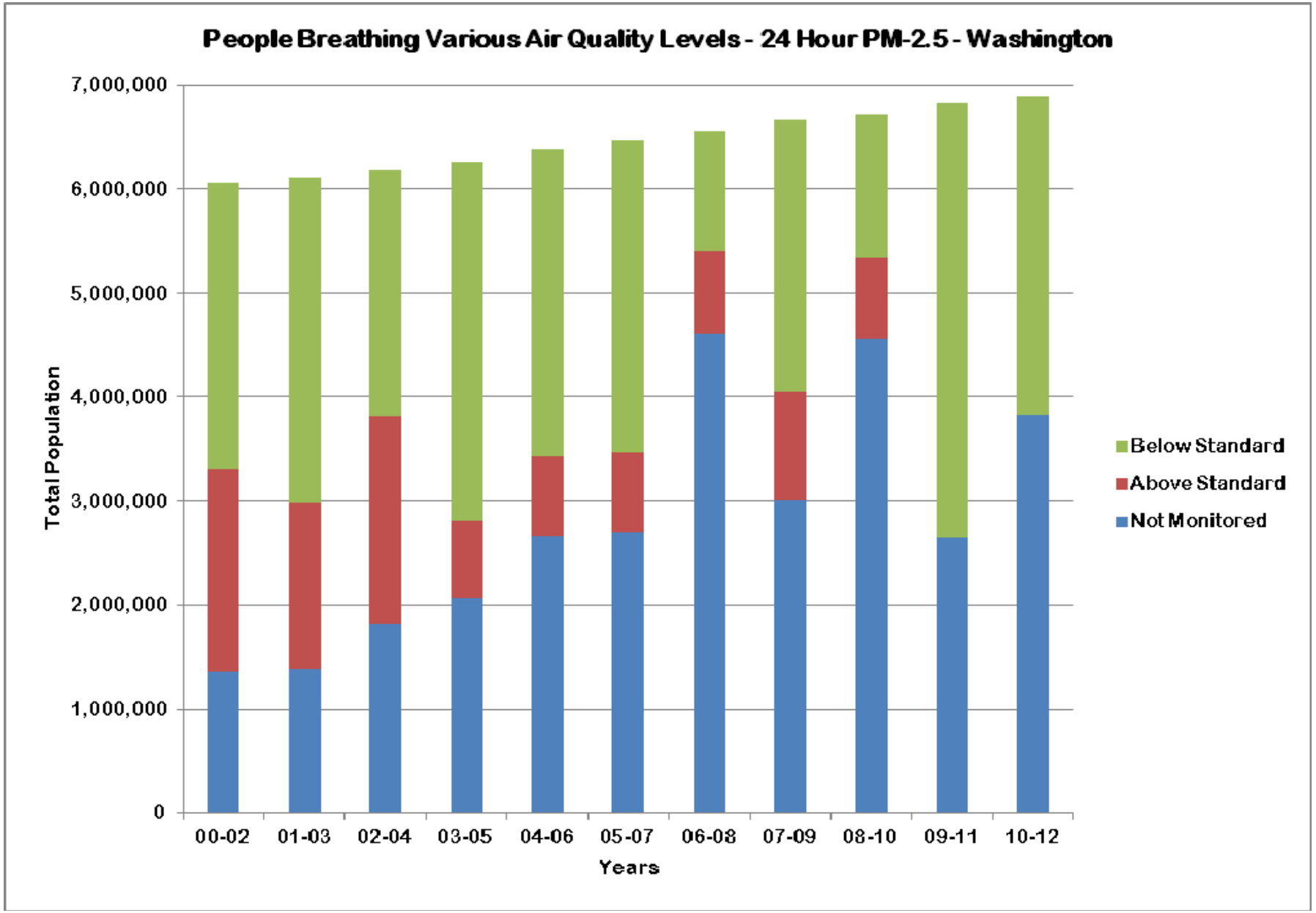
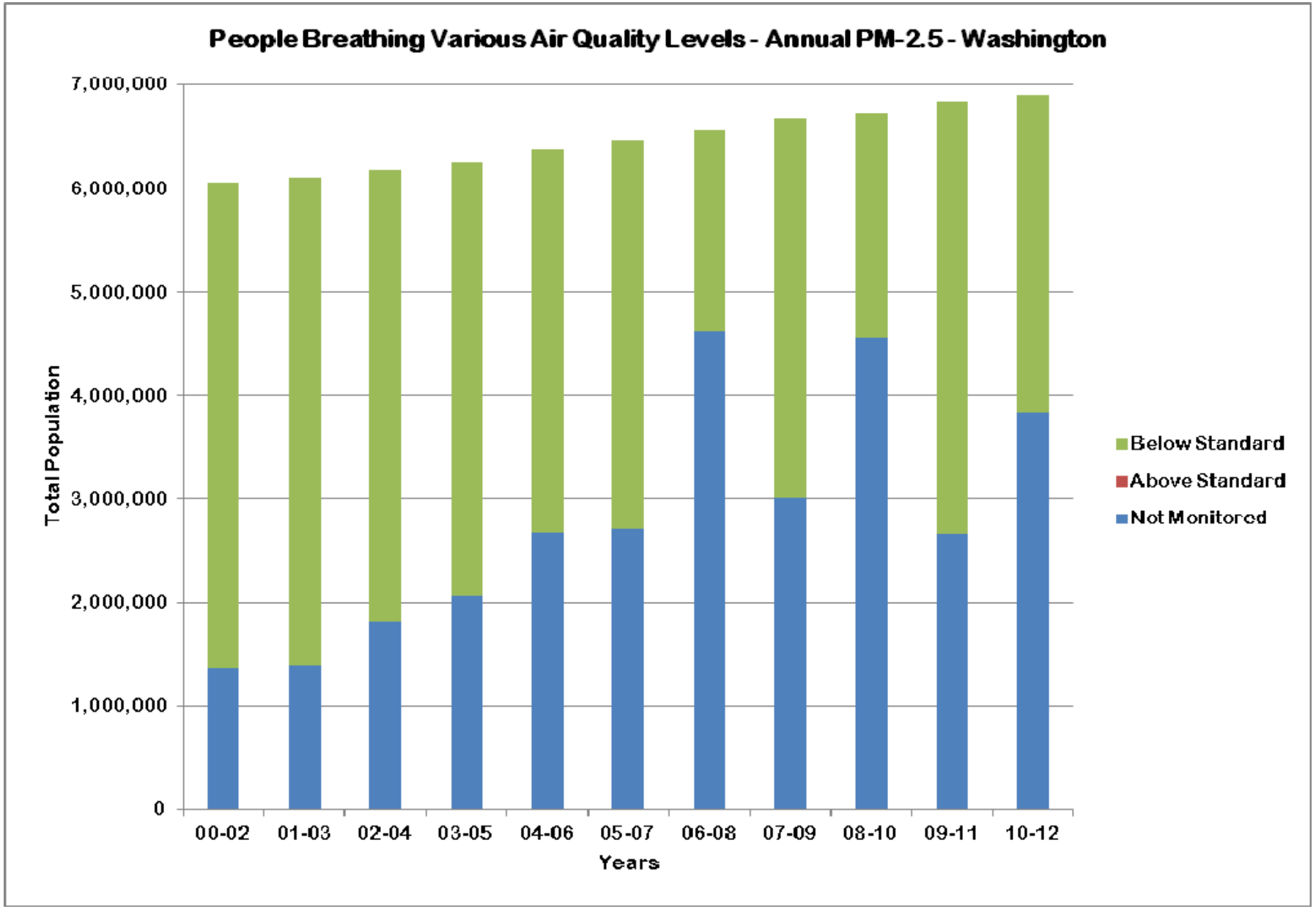

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Washington
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WA-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Washington
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

WEST VIRGINIA

Ozone

Significant progress has been made in ozone levels in West Virginia. In the 2000 – 2002 time period, no people lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.7 million people (37.4%). The remainder of the population lived in counties where ozone was not measured. Figure WV-1 shows the distribution of people by year.

24-Hour PM-2.5

Significant progress has been made in 24-hour PM-2.5 levels in West Virginia. In the 2000 – 2002 time period, approximately 0.2 million people (8.6%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.8 million people (45.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WV-2 shows the distribution of people by year.

Annual PM-2.5

Significant progress has been made in annual PM-2.5 levels in West Virginia. In the 2000 – 2002 time period, approximately 0.3 million people (17.0%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 0.8 million people (45.9%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WV-3 shows the distribution of people by year.

Table WV-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Berkeley	107,098	0.070	C	N	31	B	13.6	C	N
Brooke	23,353	ND	---	---	26	A	12.6	B	N
Cabell	96,974	0.072	C	N	24	A	11.6	A	N
Greenbrier	35,820	0.066	B	N	ND	---	ND	---	---
Hancock	30,305	0.075	C	N	27	A	11.3	A	N
Kanawha	192,179	0.074	C	N	25	A	11.3	B	N
Marion	56,678	ND	---	---	25	A	11.6	A	N
Marshall	32,674	ND	---	---	29	B	12.8	B	N
Monongalia	100,332	0.073	C	N	24	A	10.3	A	N
Ohio	44,075	0.075	C	N	25	A	11.5	A	N
Raleigh	79,021	ND	---	---	20	A	9.3	A	N
Wood	86,701	0.072	C	N	24	A	11.8	A	N
Subtotal	**885,210**								
Not Monitored	970,203								
Total									

DV – Design Value ND - No Data MM – Multiple Monitors

WEST VIRGINIA

Table WV-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	131,799	122,920	35,820
C	0	0	34,938	154,954	445,390	134,486	229,286	683,480	555,496	568,063	457,664
D	84,223	120,814	503,039	512,745	226,420	314,005	449,677	0	0	0	0
F	492,829	540,874	126,839	0	0	226,262	0	0	0	0	0
Subtotal	577,052	661,688	664,816	667,699	671,810	674,753	678,963	683,480	687,295	690,983	693,484
NM	1,228,362	1,150,607	1,151,622	1,152,793	1,156,102	1,159,299	1,161,347	1,164,295	1,165,699	1,164,381	1,161,929
Total	1,805,414	1,812,295	1,816,438	1,820,492	1,827,912	1,834,052	1,840,310	1,847,775	1,852,994	1,855,364	1,855,413

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	78,379	147,478	634,390	678,419	710,118
B	14,123	14,106	13,997	0	123,103	78,323	214,539	706,923	278,977	169,121	139,772
C	140,753	140,375	535,702	657,151	632,110	301,814	555,995	30,748	0	0	0
D	233,150	235,354	273,975	180,538	86,552	464,656	30,802	24,153	0	0	0
F	573,977	575,121	143,538	56,123	55,665	55,122	24,168	0	0	0	0
Subtotal	962,003	964,956	967,212	893,902	897,430	899,915	903,883	909,302	913,367	847,540	849,890
NM	843,411	847,339	849,226	926,590	930,482	934,137	936,427	938,473	939,627	1,007,824	1,005,523
Total	1,805,414	1,812,295	1,816,438	1,820,492	1,827,912	1,834,052	1,840,310	1,847,775	1,852,994	1,855,364	1,855,413

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	14,123	14,106	13,997	0	0	0	78,379	78,782	244,147	550,537	686,265
B	62,016	140,375	140,122	78,341	78,178	78,323	68,441	271,080	669,220	297,003	56,527
C	230,738	153,690	256,382	257,594	485,774	203,408	637,686	559,440	0	0	107,098
D	243,177	529,306	525,111	501,754	309,079	523,125	119,377	0	0	0	0
F	411,949	127,479	31,600	56,213	24,399	95,059	0	0	0	0	0
Subtotal	962,003	964,956	967,212	893,902	897,430	899,915	903,883	909,302	913,367	847,540	849,890
NM	843,411	847,339	849,226	926,590	930,482	934,137	936,427	938,473	939,627	1,007,824	1,005,523
Total	1,805,414	1,812,295	1,816,438	1,820,492	1,827,912	1,834,052	1,840,310	1,847,775	1,852,994	1,855,364	1,855,413

NM – Not Monitored

Figure WV-1

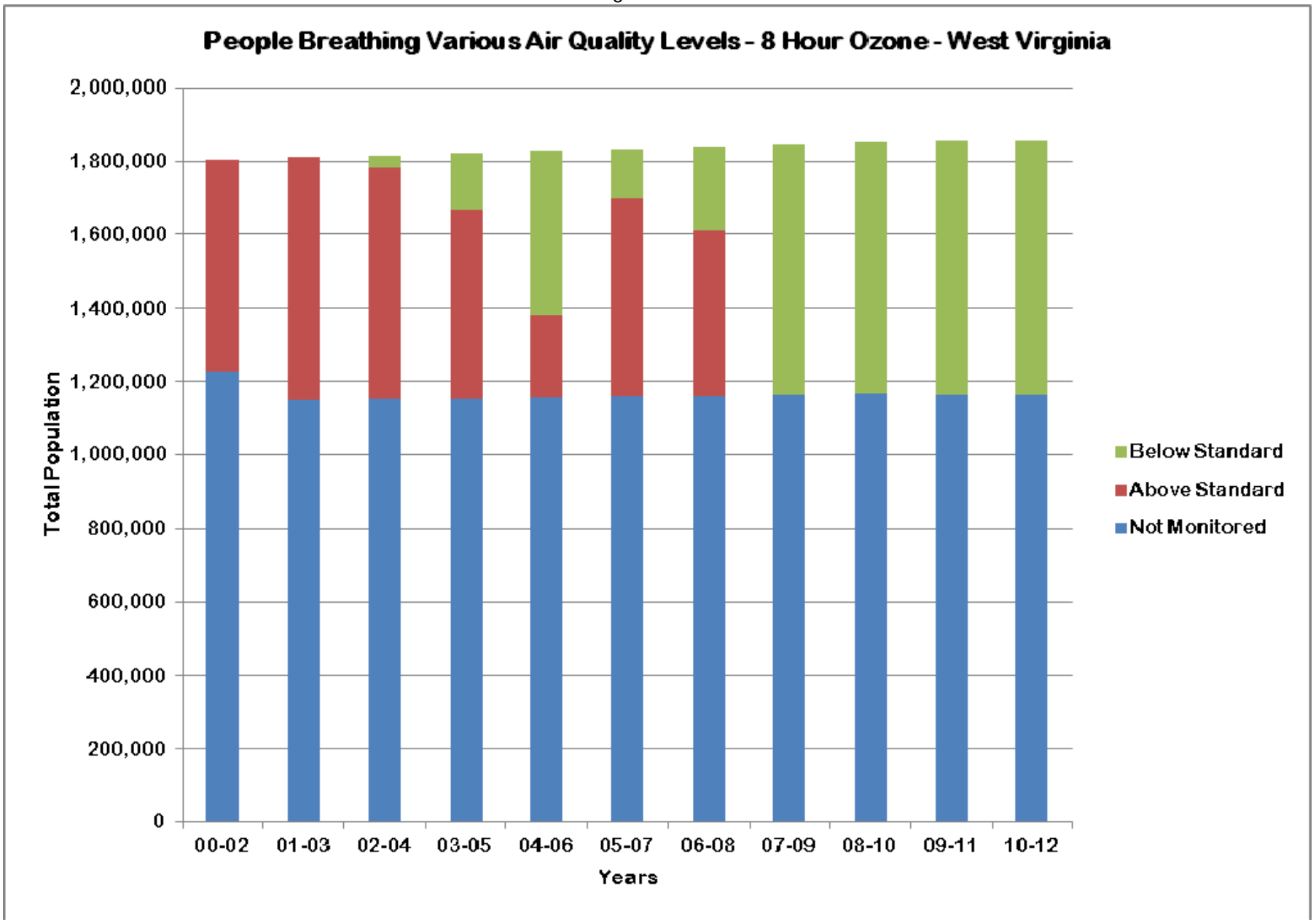

People Breathing Various Air Quality Levels - 8 Hour Ozone - West Virginia
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WV-2

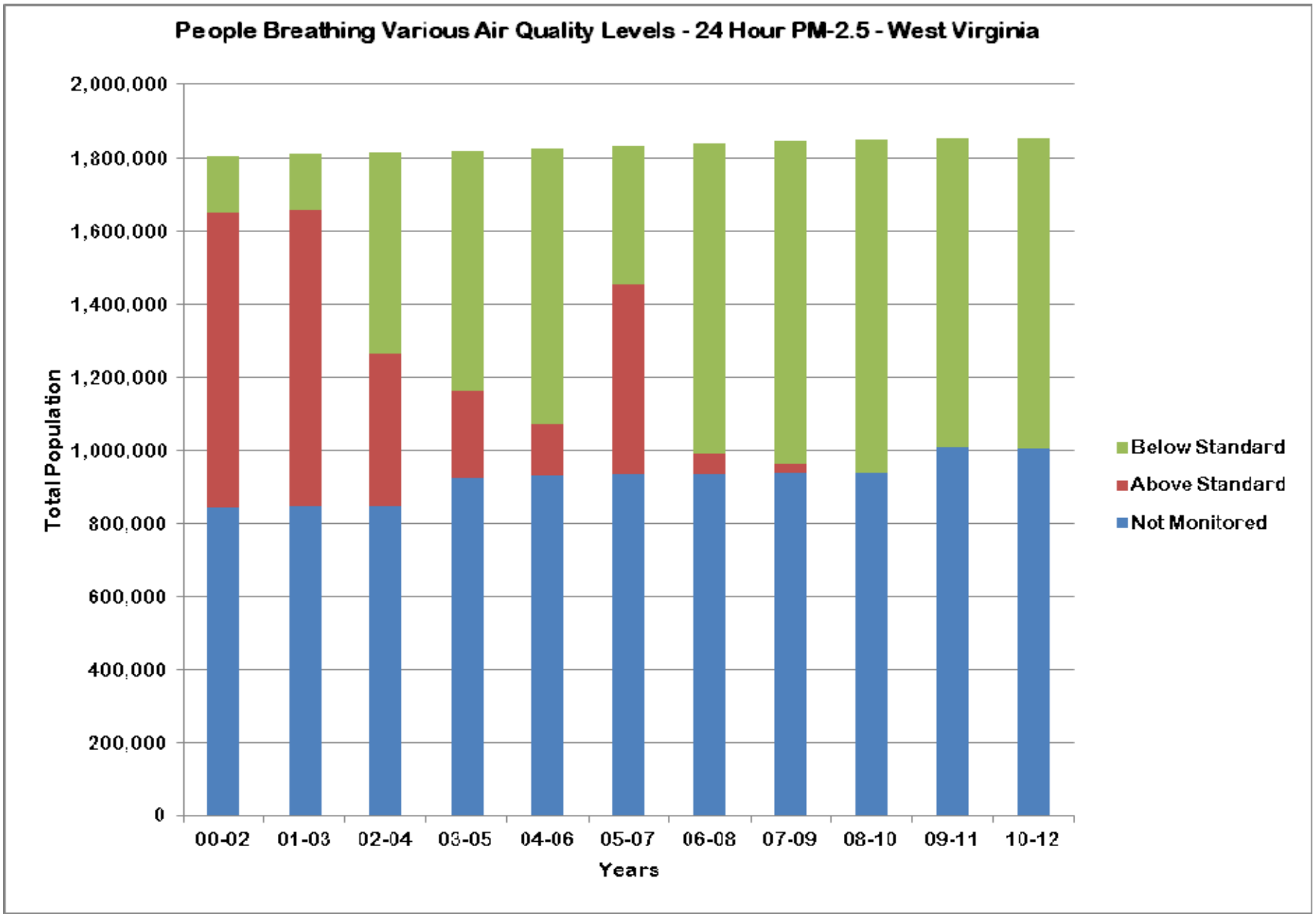
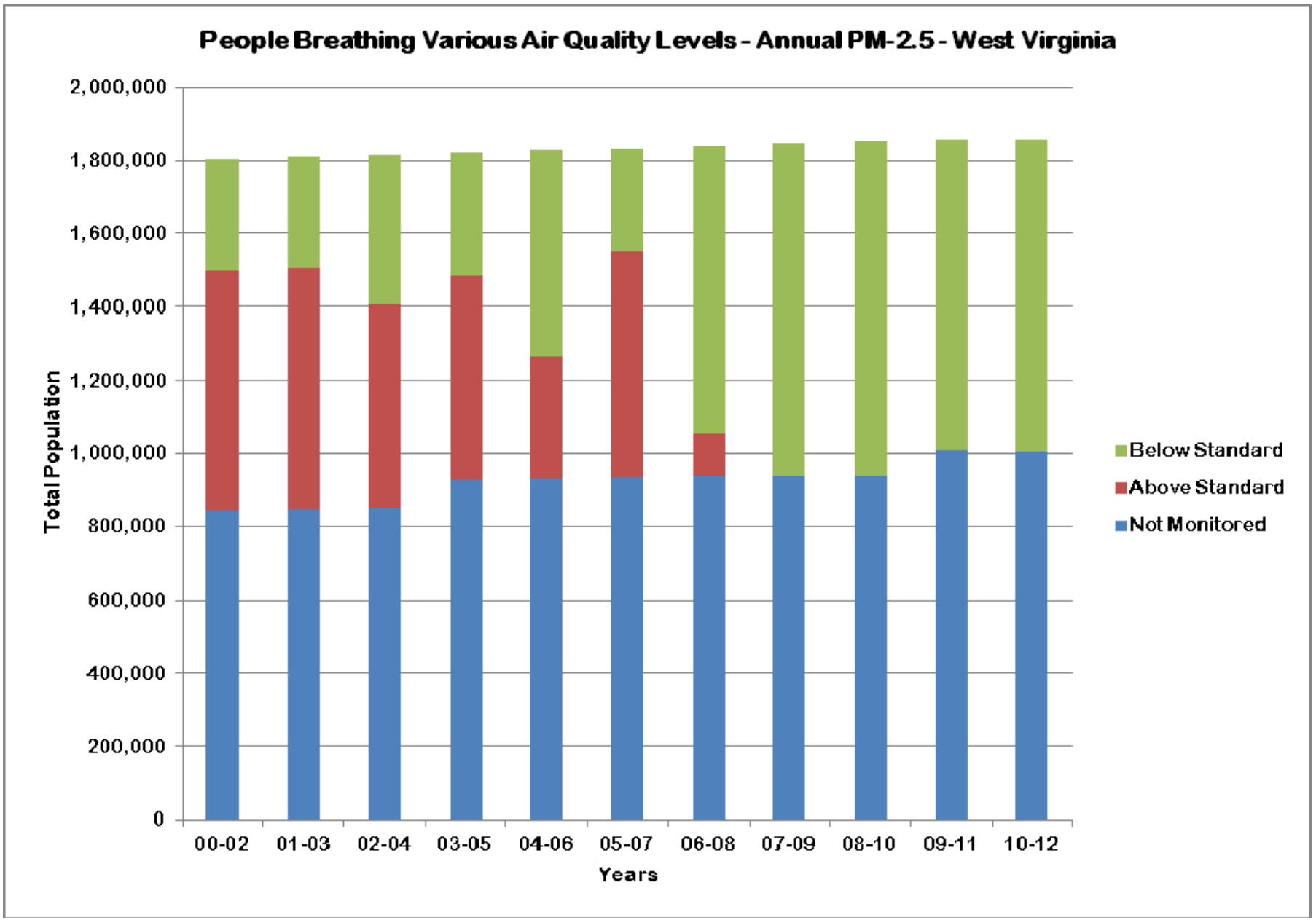

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - West Virginia
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WV-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - West Virginia
Total Population
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

WISCONSIN

Ozone

Progress has been made in ozone levels in Wisconsin. In the 2000 – 2002 time period, approximately 0.5 million people (10.0%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 3.1 million people (54.6%). Figure WI-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Wisconsin have historically been better than the standard. In the 2000 – 2002 time period, approximately 3.1 million people (56.5%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 2.6 million people (45.6%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WI-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Wisconsin have historically been better than the standard. In the 2000 – 2002 time period, approximately 3.1 million people (56.5%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had decreased to approximately 2.6 million people (45.6%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WI-3 shows the distribution of people by year.

WISCONSIN

Table WI-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Ashland	15,992	ND	---	---	17	A	5.3	A	N
Brown	253,032	0.070	C	N	29	B	9.6	A	N
Columbia	56,539	0.069	C	N	ND	---	ND	---	---
Dane	503,523	0.067	B	N	28	B	9.9	A	N
Dodge	88,415	ND	---	---	26	A	9.1	A	N
Door	**27,817**	**0.079**	**D**	N	ND	---	ND	---	---
Fond du Lac	101,843	0.072	C	N	ND	---	ND	---	---
Grant	51,087	ND	---	---	25	A	9.9	A	N
Jefferson	84,498	0.071	C	N	ND	---	ND	---	---
Kenosha	**187,536**	**0.085**	**F**	N	ND	---	ND	---	---
Kewaunee	**20,624**	**0.078**	**D**	N	ND	---	ND	---	---
La Crosse	6,461	0.065	B	N	ND	---	ND	---	---
Manitowoc	**80,671**	**0.080**	**D**	N	ND	---	ND	---	---
Marathon	134,735	0.065	B	N	ND	---	ND	---	---
Milwaukee	955,205	0.072	C	N	28	B	10.5	A	Y
Outagamie	178,816	0.070	C	N	28	B	9.2	A	N
Ozaukee	**86,823**	**0.079**	**D**	Y	23	A	9.1	A	N
Racine	**194,797**	**0.081**	**D**	N	ND	---	ND	---	---
Rock	160,418	0.072	C	N	ND	---	ND	---	---
Sauk	62,597	0.066	B	N	24	A	8.5	A	N
Sheboygan	**115,009**	**0.087**	**F**	N	ND	---	ND	---	---
Vilas	21,338	0.063	B	N	17	A	5.8	A	N
Walworth	102,851	0.070	C	N	ND	---	ND	---	---
Waukesha	392,292	0.070	C	N	27	A	11.3	A	N
Subtotal	**3,882,919**								
Not Monitored	1,843,479								
Total	**5,726,398**								

DV – Design Value ND - No Data MM – Multiple Monitors

WISCONSIN

Table WI-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	0	0
B	0	0	41,925	4,825	106,642	0	905,137	1,169,343	2,523,973	3,041,074	838,654
C	542,974	390,415	1,120,825	1,780,393	2,626,694	1,930,317	2,686,167	2,467,331	1,525,765	432,296	2,287,494
D	2,579,093	1,421,786	2,095,178	1,650,257	1,312,164	1,637,861	410,645	390,583	115,507	363,418	410,732
F	920,613	2,257,932	679,298	490,343	304,549	409,194	0	0	0	0	282,945
Subtotal	4,042,680	4,070,133	3,937,226	3,925,818	4,350,049	3,977,372	4,001,949	4,027,257	4,165,245	3,837,788	3,819,825
NM	1,402,482	1,409,070	1,576,800	1,620,348	1,227,606	1,633,403	1,639,047	1,642,007	1,521,741	1,873,979	1,906,573
Total	5,445,162	5,479,203	5,514,026	5,546,166	5,577,655	5,610,775	5,640,996	5,669,264	5,686,986	5,711,767	5,726,398

People Breathing Short-term Particle Pollution 24-Hour PM-2.5

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	93,608	104,007	188,984	58,853	58,866	150,016	259,427	25,524	25,461	410,003	718,544
B	560,407	372,561	376,247	555,689	226,811	149,396	661,363	444,524	1,125,414	2,346,085	1,890,576
C	2,424,702	1,142,595	2,091,208	597,460	937,311	938,655	1,994,542	2,569,694	1,813,536	251,412	0
D	0	939,513	0	1,550,012	1,551,253	714,335	0	0	0	0	0
F	0	0	0	0	0	931,453	0	0	0	0	0
Subtotal	3,078,717	2,558,676	2,656,439	2,762,014	2,774,241	2,883,855	2,915,332	3,039,742	2,964,411	3,007,500	2,609,120
NM	2,366,445	2,920,527	2,857,587	2,784,152	2,803,414	2,726,920	2,725,664	2,629,522	2,722,575	2,704,267	3,117,278
Total	5,445,162	5,479,203	5,514,026	5,546,166	5,577,655	5,610,775	5,640,996	5,669,264	5,686,986	5,711,767	5,726,398

People Breathing Year Round Particle Pollution Annual PM-2.5

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	1,327,189	797,861	889,955	991,541	998,161	797,155	887,867	1,006,720	2,574,520	2,918,839	2,609,120
B	1,751,528	1,760,815	1,766,484	1,391,588	1,395,281	771,008	806,022	2,033,022	389,891	88,661	0
C	0	0	0	378,885	380,799	1,315,692	1,221,443	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	3,078,717	2,558,676	2,656,439	2,762,014	2,774,241	2,883,855	2,915,332	3,039,742	2,964,411	3,007,500	2,609,120
NM	2,366,445	2,920,527	2,857,587	2,784,152	2,803,414	2,726,920	2,725,664	2,629,522	2,722,575	2,704,267	3,117,278
Total	5,445,162	5,479,203	5,514,026	5,546,166	5,577,655	5,610,775	5,640,996	5,669,264	5,686,986	5,711,767	5,726,398

NM – Not Monitored

Figure WI-1


People Breathing Various Air Quality Levels - 8 Hour Ozone - Wisconsin
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WI-2

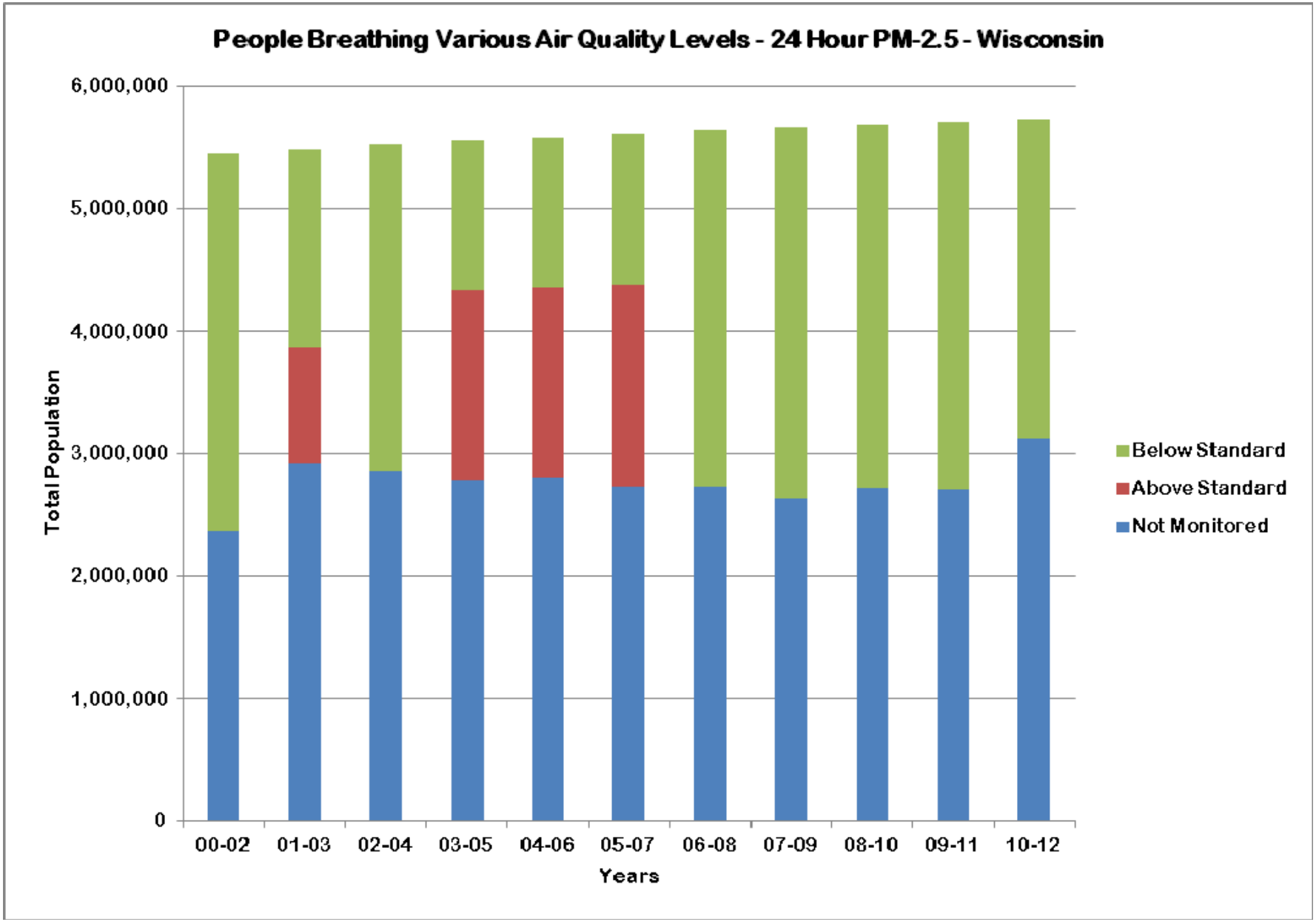
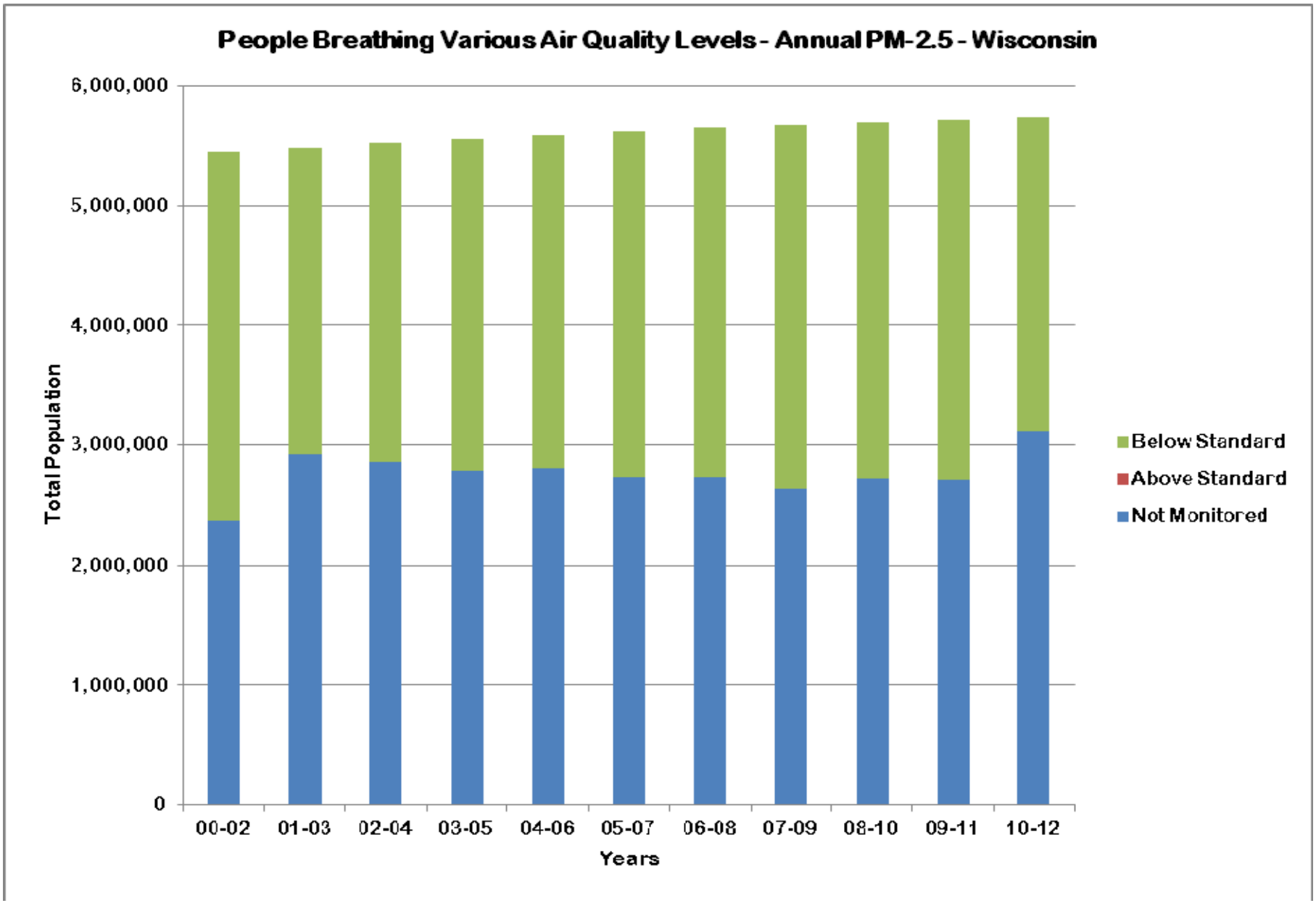

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Wisconsin
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WI-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Wisconsin
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

WYOMING

Ozone

Significant progress has been made in ozone levels in Wyoming. In the 2000 – 2002 time period, approximately 18 thousand people (3.8%) lived in counties that met the ozone standard. By 2010 – 2012 this had increased to approximately 0.30 million people (53.7%). The remainder of the population lived in counties where ozone was not measured. Figure WY-1 shows the distribution of people by year.

24-Hour PM-2.5

24-hour PM-2.5 levels in Wyoming have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.15 million people (29.3%) lived in counties where 24-hour PM-2.5 levels met the standard. By 2010 -2012 this was approximately 0.4 million people (69.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WY-2 shows the distribution of people by year.

Annual PM-2.5

Annual PM-2.5 levels in Wyoming have historically been better than the standard. In the 2000 – 2002 time period, approximately 0.15 million people (29.3%) lived in counties where annual PM-2.5 levels met the standard. By 2010 – 2012 this had increased to approximately 0.4 million people (69.0%). The remainder of the population lived in counties where PM-2.5 was not measured. Figure WY-3 shows the distribution of people by year.

Table WY-1

2010 – 2012

		OZONE			PARTICLE POLLUTION (PM-2.5)				
County	Population	Avg. DV	Grade	MM	Avg. 24-Hr DV	Grade	Avg. Ann DV	Grade	MM
Big Horn	11,794	0.056	A	N	ND	---	ND	---	---
Campbell	47,874	0.065	B	Y	14	A	5.0	A	N
Carbon	15,666	0.065	B	N	ND	---	ND	---	---
Fremont	41,110	0.066	B	Y	28	B	8.2	A	N
Laramie	94,483	0.065	B	N	12	A	4.8	A	N
Natrona	78,621	ND	---	---	14	A	4.8	A	N
Park	28,702	ND	---	---	13	A	4.7	A	N
Sheridan	29,596	ND	---	---	18	A	6.7	A	Y
Sublette	10,368	0.071	C	Y	16	A	5.0	A	N
Sweetwater	45,267	0.065	B	N	14	A	5.9	A	N
Teton	21,675	0.066	B	N	13	A	5.0	A	N
Uinta	21,025	0.066	B	N	ND	---	ND	---	---
Subtotal	**446,181**								
Not Monitored	130,231								
Total	**576,412**								

DV – Design Value ND - No Data MM – Multiple Monitors

WYOMING

Table WY-2

People Breathing Ozone

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	0	0	0	0	0	0	0	0	0	7,111	11,794
B	18,837	19,066	19,467	57,520	59,511	20,472	63,346	132,069	172,554	173,905	287,100
C	0	36,586	36,907	0	0	50,451	42,846	10,134	10,237	10,146	10,368
D	0	0	0	0	0	0	9,474	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	18,837	55,652	56,374	57,520	59,511	70,923	115,666	142,203	182,791	191,162	309,262
NM	481,180	447,801	452,732	456,637	463,156	463,953	430,377	417,648	381,763	376,996	267,150
Total	500,017	503,453	509,106	514,157	522,667	534,876	546,043	559,851	564,554	568,158	576,412

People Breathing Short-term Particle Pollution (24-Hour PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	119,419	120,670	134,684	155,847	159,131	237,625	243,243	210,302	270,947	349,364	356,586
B	0	26,938	26,942	27,075	37,408	0	0	39,685	40,273	0	41,110
C	26,839	0	36,383	36,838	27,422	0	0	0	0	40,579	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	146,258	147,608	198,009	219,760	223,961	237,625	243,243	249,987	311,220	389,943	397,696
NM	353,759	355,845	311,097	294,397	298,706	297,251	302,800	309,864	253,334	178,215	178,716
Total	500,017	503,453	509,106	514,157	522,667	534,876	546,043	559,851	564,554	568,158	576,412

People Breathing Year Round Particle Pollution (Annual PM-2.5)

Grade	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012
A	146,258	147,608	198,009	219,760	223,961	237,625	243,243	249,987	311,220	389,943	397,696
B	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0
Subtotal	146,258	147,608	158,009	219,760	223,961	237,625	243,243	249,987	311,220	389,943	397,696
NM	353,759	355,845	311,097	294,397	298,706	297,251	302,800	309,864	253,334	178,215	178,716
Total	500,017	503,453	509,106	514,157	522,667	534,876	546,043	559,851	564,554	568,158	576,412

NM – Not Monitored

Figure WY-1

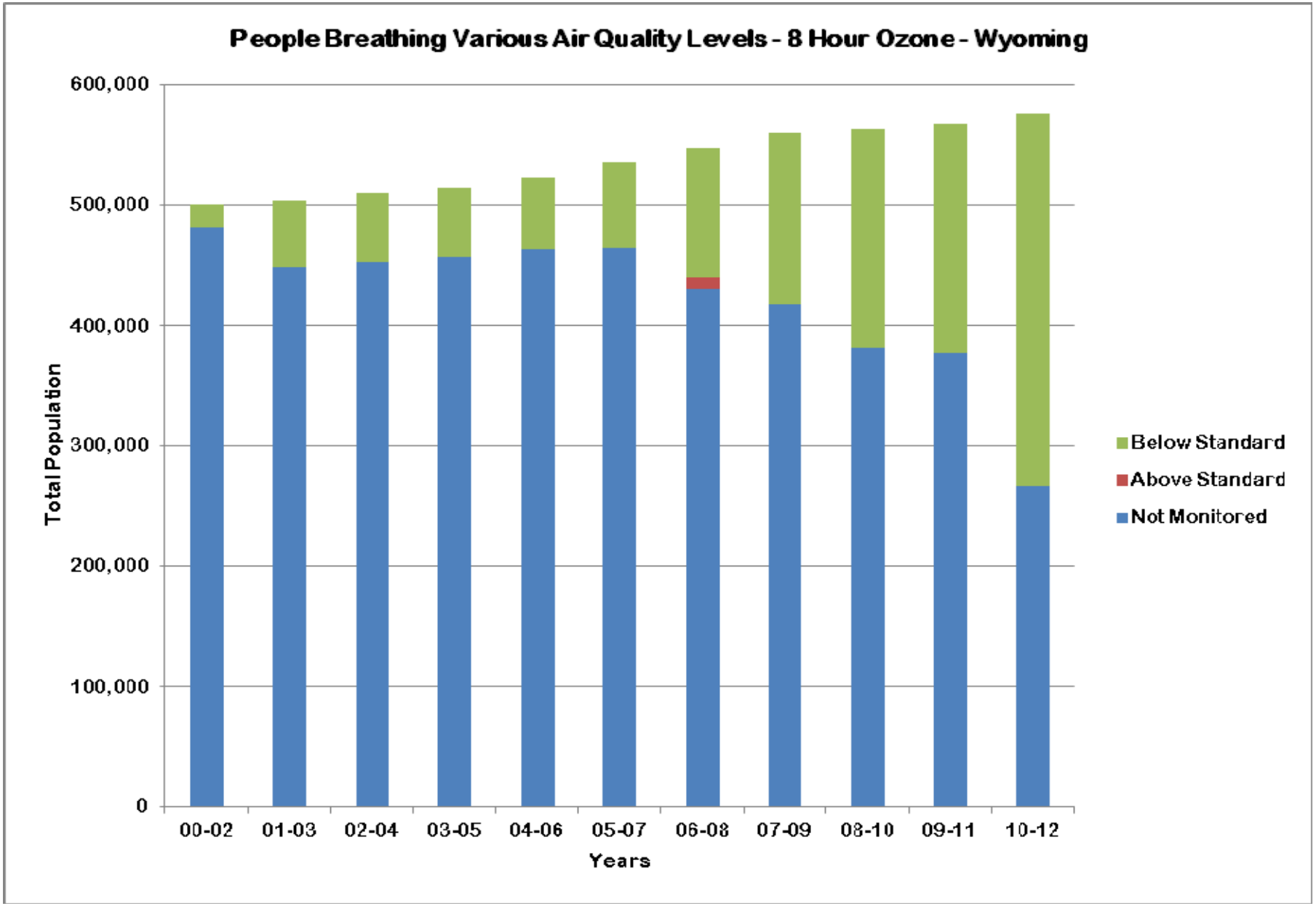

People Breathing Various Air Quality Levels - 8 Hour Ozone - Wyoming
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WY-2

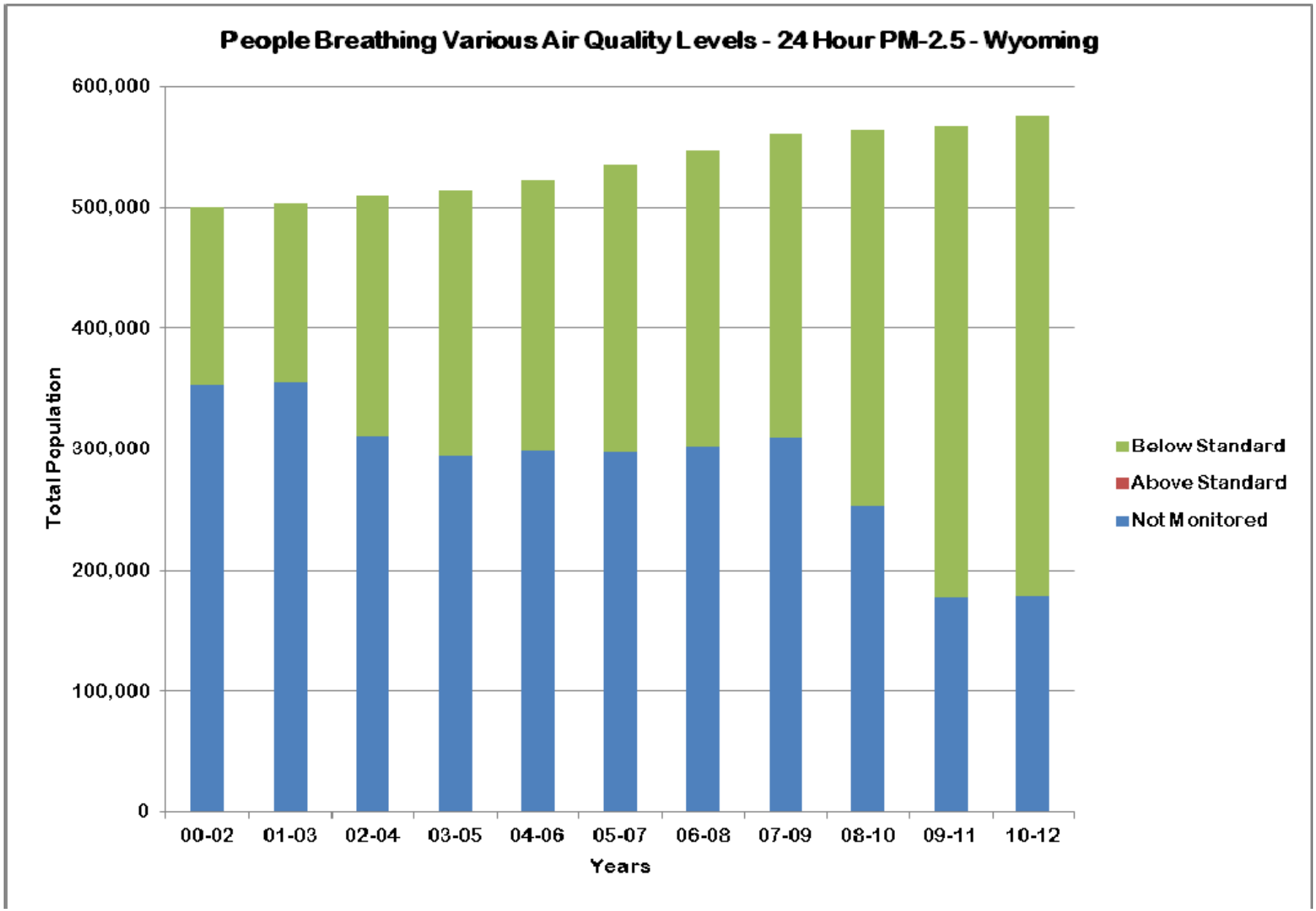
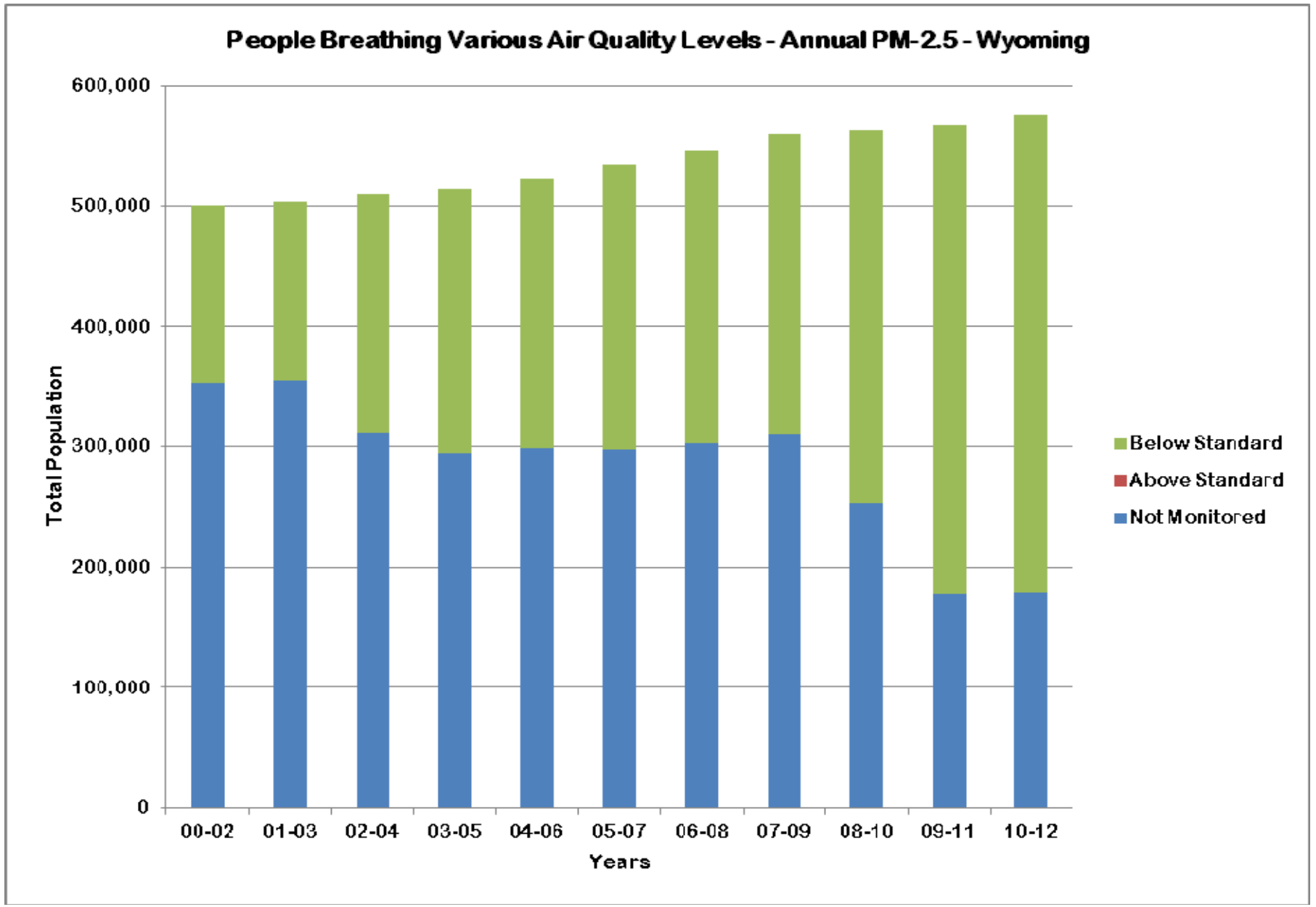

People Breathing Various Air Quality Levels - 24 Hour PM-2.5 - Wyoming
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored

Figure WY-3


People Breathing Various Air Quality Levels - Annual PM-2.5 - Wyoming
600,000
500,000
400,000
300,000
200,000
100,000
0
Total Population
00-02
01-03
02-04
03-05
04-06
05-07
06-08
07-09
08-10
09-11
10-12
Years
Below Standard
Above Standard
Not Monitored