

APPENDIX E

**2005 and 2008 Base Year Emission Inventories
and 2015 and 2025 Projected Emission Inventories
for Nitrogen Oxides (NO_x), Sulfur Dioxide (SO₂),
and Direct Fine Particles (PM_{2.5}), Louisville Area**

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2005-Clark, Floyd and Jefferson Counties, IN Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	4,106.81	1,971.32	358.62	0.00	2,220.61	8,657.36
	FLOYD COUNTY, IN	2,922.90	754.09	286.78	5,306.09	0.19	9,270.05
	JEFFERSON COUNTY, IN	521.05	521.01	152.26	22,620.90	7.74	23,822.96
		7,550.76	3,246.42	797.66	27,926.99	2,228.54	
GRAND TOTAL							41,750.37

SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	20.72	178.06	138.17	0.00	3,190.07	3,527.02
	FLOYD COUNTY, IN	14.03	78.04	113.26	56,666.70	0.00	56,872.03
	JEFFERSON COUNTY, IN	2.10	49.44	73.19	74,658.70	0.11	74,783.54
		36.85	305.54	324.62	131,325.40	3,190.18	
GRAND TOTAL							135,182.59

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	135.49	82.06	5.14	0.00	611.00	833.69
	FLOYD COUNTY, IN	99.63	47.26	4.63	36.76	12.02	200.30
	JEFFERSON COUNTY, IN	15.11	31.07	2.50	283.00	10.70	342.38
		250.23	160.39	12.27	319.76	633.72	
GRAND TOTAL							1,376.37

2008-Clark, Floyd, and Jefferson Counties, IN Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	3,444.07	1,519.07	364.36	0.00	2,419.41	7,746.91
	FLOYD COUNTY, IN	2,397.70	611.02	291.17	4,941.90	0.19	8,241.98
	JEFFERSON COUNTY, IN	403.83	423.14	155.62	20,546.70	7.88	21,537.17
		6,245.60	2,553.23	811.15	25,488.60	2,427.48	
GRAND TOTAL							37,526.06

SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	22.22	86.85	140.18	0.00	3,493.53	3,742.78
	FLOYD COUNTY, IN	14.58	33.26	114.69	40,433.40	0.00	40,595.93
	JEFFERSON COUNTY, IN	2.09	21.86	75.45	64,934.30	0.11	65,033.81
		38.89	141.97	330.32	105,367.70	3,493.64	
GRAND TOTAL							109,372.52

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	117.07	66.05	5.17	0.00	520.25	708.54
	FLOYD COUNTY, IN	82.61	39.48	4.68	31.00	3.79	161.56
	JEFFERSON COUNTY, IN	11.23	25.88	2.52	284.50	8.24	332.37
		210.91	131.41	12.37	315.50	532.28	
GRAND TOTAL							1,202.47

2015-Clark, Floyd, and Jefferson Counties, IN Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	1,843.80	1,039.80	358.58	0.00	1,360.31	4,602.49
	FLOYD COUNTY, IN	1,306.71	379.02	286.61	2,744.00	0.20	4,716.54
	JEFFERSON COUNTY, IN	199.31	287.45	153.02	12,822.00	7.93	13,469.71
		3,349.82	1,706.27	798.21	15,566.00	1,368.44	
GRAND TOTAL							22,788.74

SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	22.83	25.82	135.94	0.00	1,349.85	1,534.44
	FLOYD COUNTY, IN	15.38	10.68	111.09	5,660.62	0.00	5,797.77
	JEFFERSON COUNTY, IN	1.97	5.37	73.37	27,203.00	0.11	27,283.82
		40.18	41.87	320.40	32,863.62	1,349.96	
GRAND TOTAL							34,616.03

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	61.03	44.37	5.04	0.00	579.58	690.02
	FLOYD COUNTY, IN	43.67	26.01	4.59	28.00	1.02	103.29
	JEFFERSON COUNTY, IN	4.88	17.36	2.45	285.00	7.37	317.06
		109.58	87.74	12.08	313.00	587.97	
GRAND TOTAL							1,110.37

2025-Clark, Floyd, and Jefferson Counties, IN Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	975.12	558.76	354.47	0.00	561.03	2,449.38
	FLOYD COUNTY, IN	726.78	176.87	283.29	2,744.00	0.20	3,931.14
	JEFFERSON COUNTY, IN	109.90	155.39	151.57	12,822.00	8.06	13,246.92
		1,811.80	891.02	789.33	15,566.00	569.29	
GRAND TOTAL							19,627.44

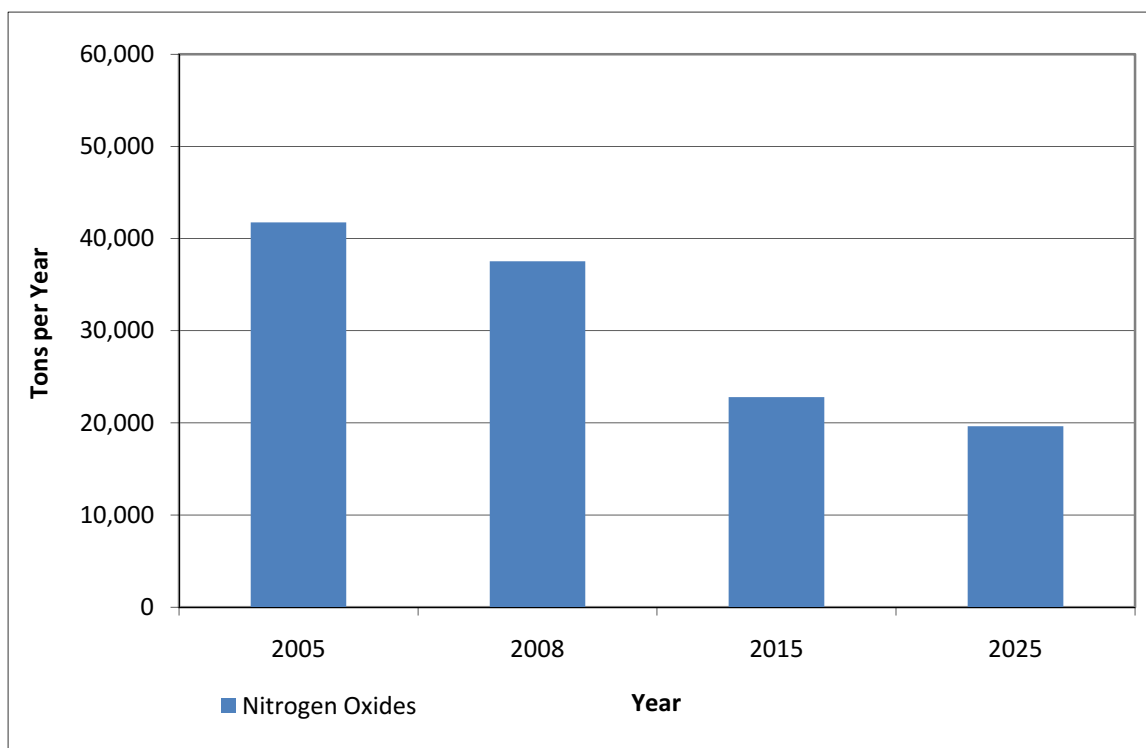
SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	21.70	2.63	131.87	0.00	122.30	278.50
	FLOYD COUNTY, IN	15.30	1.62	107.49	5,660.62	0.00	5,785.03
	JEFFERSON COUNTY, IN	2.01	0.35	71.99	27,203.00	0.11	27,277.46
		39.01	4.60	311.35	32,863.62	122.41	
GRAND TOTAL							33,340.99

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	34.92	23.57	4.90	0.00	613.01	676.40
	FLOYD COUNTY, IN	26.36	13.50	4.50	28.00	0.18	72.54
	JEFFERSON COUNTY, IN	2.65	9.27	2.37	285.00	5.77	305.06
		63.93	46.34	11.77	313.00	618.96	
GRAND TOTAL							1,054.00

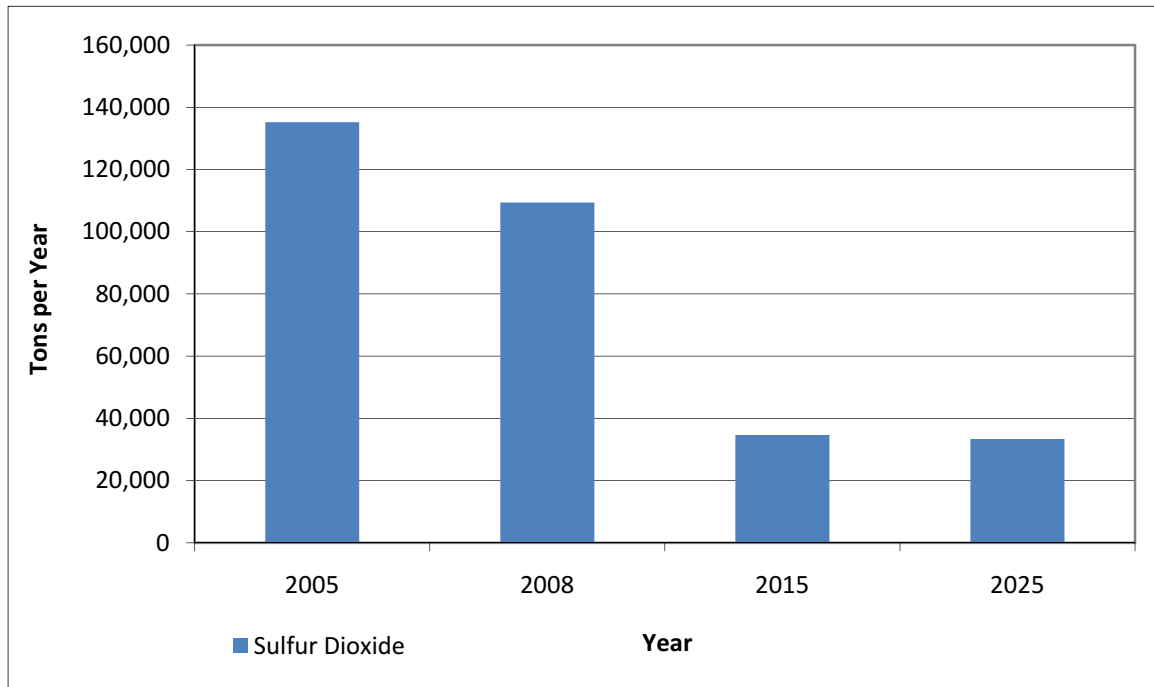
**Comparison of 2008 Estimated and 2025 Projected Emission Estimates, All Sources
in Clark, Floyd, and Jefferson Counties, Indiana (Tons per Year)**

	2008	2025	Change	% Change
NO _x	37,526.06	19,627.44	-17,898.62	47.70% decrease
SO ₂	109,372.52	33,340.99	-76,031.53	69.52% decrease
Direct PM _{2.5}	1,202.47	1,054.00	-148.47	12.35% decrease

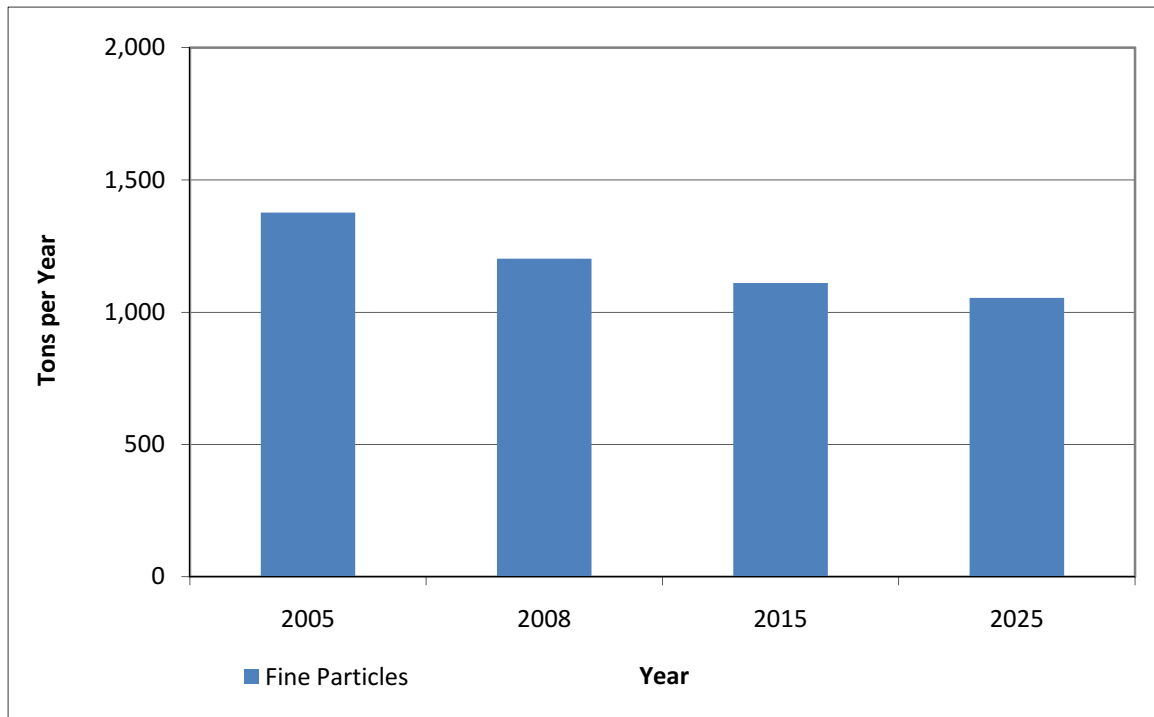
**Comparison of 2005, 2008, 2015, and 2025 Projected NO_x Emissions, Clark, Floyd,
and Jefferson Counties, Indiana**



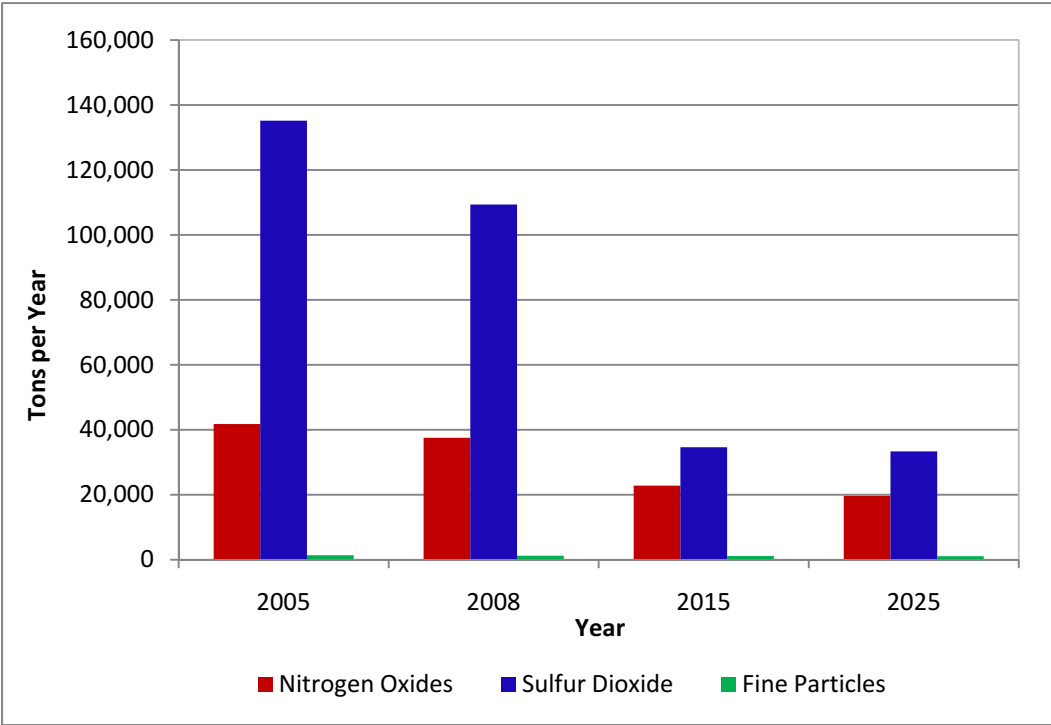
Comparison of 2005, 2008, 2015, and 2025 Projected SO₂ Emissions, Sources, Clark, Floyd, and Jefferson Counties, Indiana



Comparison of 2005, 2008, 2015, and 2025 Projected Direct PM_{2.5} Emissions, Clark, Floyd, and Jefferson Counties, Indiana



Comparison of 2005, 2008, 2015, and 2025 Projected NO_x, SO₂, and Direct PM_{2.5} Emissions, Clark, Floyd, and Jefferson Counties, Indiana



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2005-Louisville Area Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	4,106.81	1,971.32	358.62	0.00	2,220.61	8,657.36
	FLOYD COUNTY, IN	2,922.90	754.09	286.78	5,306.09	0.19	9,270.05
	JEFFERSON COUNTY, IN	521.05	521.01	152.26	22,620.90	7.74	23,822.96
	BULLITT COUNTY, KY	2,952.07	533.69	53.48	0.00	204.61	3,743.85
	JEFFERSON COUNTY, KY	22,241.72	10,590.84	1,272.69	20,176.48	1,489.68	55,771.41
		32,744.55	14,370.95	2,123.83	48,103.47	3,922.83	
GRAND TOTAL							101,265.63

SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	20.72	178.06	138.17	0.00	3,190.07	3,527.02
	FLOYD COUNTY, IN	14.03	78.04	113.26	56,666.70	0.00	56,872.03
	JEFFERSON COUNTY, IN	2.10	49.44	73.19	74,658.70	0.11	74,783.54
	BULLITT COUNTY, KY	12.11	30.94	94.36	0.00	356.47	493.88
	JEFFERSON COUNTY, KY	95.26	714.33	0.00	42,852.96	1,894.40	45,556.95
		144.23	1,050.81	418.98	174,178.36	5,441.05	
GRAND TOTAL							181,233.43

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	135.49	82.06	5.14	0.00	611.00	833.69
	FLOYD COUNTY, IN	99.63	47.26	4.63	36.76	12.02	200.30
	JEFFERSON COUNTY, IN	15.11	31.07	2.50	283.00	10.70	342.38
	BULLITT COUNTY, KY	84.08	40.62	247.16	0.00	53.35	425.21
	JEFFERSON COUNTY, KY	721.30	579.53	550.70	3,123.24	604.24	5,579.01
		1,055.61	780.54	810.13	3,443.00	1,291.31	
GRAND TOTAL							7,380.59

2008-Louisville Area Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	3,444.07	1,519.07	364.36	0.00	2,419.41	7,746.91
	FLOYD COUNTY, IN	2,397.70	611.02	291.17	4,941.90	0.19	8,241.98
	JEFFERSON COUNTY, IN	403.83	423.14	155.62	20,546.70	7.88	21,537.17
	BULLITT COUNTY, KY	2,820.80	448.45	55.99	0.00	215.12	3,540.37
	JEFFERSON COUNTY, KY	19,094.05	11,255.08	1,382.23	22,749.14	1,987.01	56,467.51
		28,160.45	14,256.76	2,249.37	48,237.74	4,629.61	
GRAND TOTAL							97,533.93

SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	22.22	86.85	140.18	0.00	3,493.53	3,742.78
	FLOYD COUNTY, IN	14.58	33.26	114.69	40,433.40	0.00	40,595.93
	JEFFERSON COUNTY, IN	2.09	21.86	75.45	64,934.30	0.11	65,033.81
	BULLITT COUNTY, KY	13.28	12.22	95.26	0.00	365.07	485.83
	JEFFERSON COUNTY, KY	101.00	778.68	0.00	38,684.02	2,080.95	41,644.65
		153.18	932.87	425.58	144,051.72	5,939.66	
GRAND TOTAL							151,503.01

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	117.07	66.05	5.17	0.00	520.25	708.54
	FLOYD COUNTY, IN	82.61	39.48	4.68	31.00	3.79	161.56
	JEFFERSON COUNTY, IN	11.23	25.88	2.52	284.50	8.24	332.37
	BULLITT COUNTY, KY	85.40	37.44	247.15	0.00	54.13	424.12
	JEFFERSON COUNTY, KY	627.06	571.03	496.28	2,763.06	640.00	5,097.43
		923.37	739.88	755.80	3,078.56	1,226.41	
GRAND TOTAL							6,724.02

2015-Louisville Area Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	1,843.80	1,039.80	358.58	0.00	1,360.31	4,602.49
	FLOYD COUNTY, IN	1,306.71	379.02	286.61	2,744.00	0.20	4,716.54
	JEFFERSON COUNTY, IN	199.31	287.45	153.02	12,822.00	7.93	13,469.71
	BULLITT COUNTY, KY	1,782.71	317.56	62.25	0.00	240.71	2,403.23
	JEFFERSON COUNTY, KY	10,259.60	9,912.27	1,217.32	21,595.85	1,759.66	44,744.70
		15,392.13	11,936.10	2,077.78	37,161.85	3,368.81	
GRAND TOTAL							69,936.67

SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	22.83	25.82	135.94	0.00	1,349.85	1,534.44
	FLOYD COUNTY, IN	15.38	10.68	111.09	5,660.62	0.00	5,797.77
	JEFFERSON COUNTY, IN	1.97	5.37	73.37	27,203.00	0.11	27,283.82
	BULLITT COUNTY, KY	15.01	1.69	97.38	0.00	400.42	514.50
	JEFFERSON COUNTY, KY	102.55	960.48	0.00	38,684.02	2,080.95	41,828.00
		157.75	1,004.04	417.78	71,547.64	3,831.33	
GRAND TOTAL							76,958.54

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	61.03	44.37	5.04	0.00	579.58	690.02
	FLOYD COUNTY, IN	43.67	26.01	4.59	28.00	1.02	103.29
	JEFFERSON COUNTY, IN	4.88	17.36	2.45	285.00	7.37	317.06
	BULLITT COUNTY, KY	55.96	26.11	247.11	0.00	57.84	387.02
	JEFFERSON COUNTY, KY	339.41	212.51	440.65	2,481.90	568.43	4,042.90
		504.95	326.36	699.84	2,794.90	1,214.24	
GRAND TOTAL							5,540.29

2025-Louisville Area Totals, All Sources (Tons Per Year)

NO _x		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	975.12	558.76	354.47	0.00	561.03	2,449.38
	FLOYD COUNTY, IN	726.78	176.87	283.29	2,744.00	0.20	3,931.14
	JEFFERSON COUNTY, IN	109.90	155.39	151.57	12,822.00	8.06	13,246.92
	BULLITT COUNTY, KY	948.69	202.15	72.30	0.00	281.93	1,505.07
	JEFFERSON COUNTY, KY	5,336.69	8,269.43	1,015.56	22,221.35	1,479.63	38,322.66
		8,097.18	9,362.60	1,877.19	37,787.35	2,330.85	
GRAND TOTAL							59,455.17

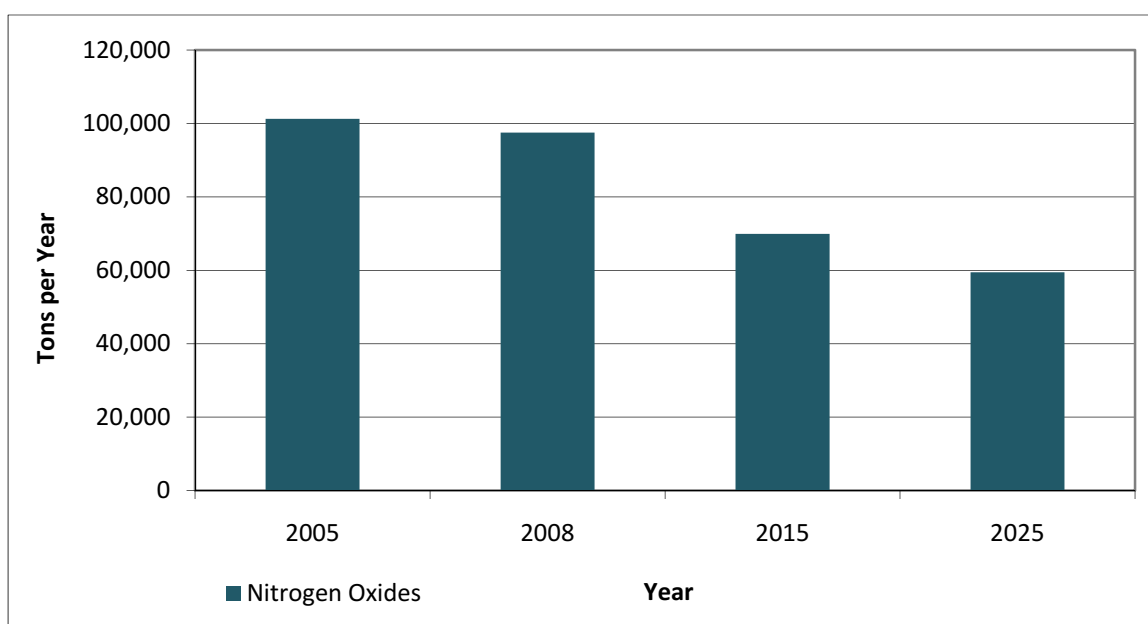
SO ₂		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	21.70	2.63	131.87	0.00	122.30	278.50
	FLOYD COUNTY, IN	15.30	1.62	107.49	5,660.62	0.00	5,785.03
	JEFFERSON COUNTY, IN	2.01	0.35	71.99	27,203.00	0.11	27,277.46
	BULLITT COUNTY, KY	16.33	0.09	100.48	0.00	460.24	577.14
	JEFFERSON COUNTY, KY	101.81	1,297.16	0.00	38,684.02	2,080.95	42,163.94
		157.15	1,301.85	411.83	71,547.64	2,663.60	
GRAND TOTAL							76,082.07

PM _{2.5}		ONROAD	NONROAD	AREA	EGU	POINT	TOTAL
	CLARK COUNTY, IN	34.92	23.57	4.90	0.00	613.01	676.40
	FLOYD COUNTY, IN	26.36	13.50	4.50	28.00	0.18	72.54
	JEFFERSON COUNTY, IN	2.65	9.27	2.37	285.00	5.77	305.06
	BULLITT COUNTY, KY	29.89	14.74	247.06	0.00	64.03	355.71
	JEFFERSON COUNTY, KY	187.95	124.16	371.92	2,481.90	479.96	3,645.89
		281.77	185.24	630.75	2,794.90	1,162.95	
GRAND TOTAL							5,055.61

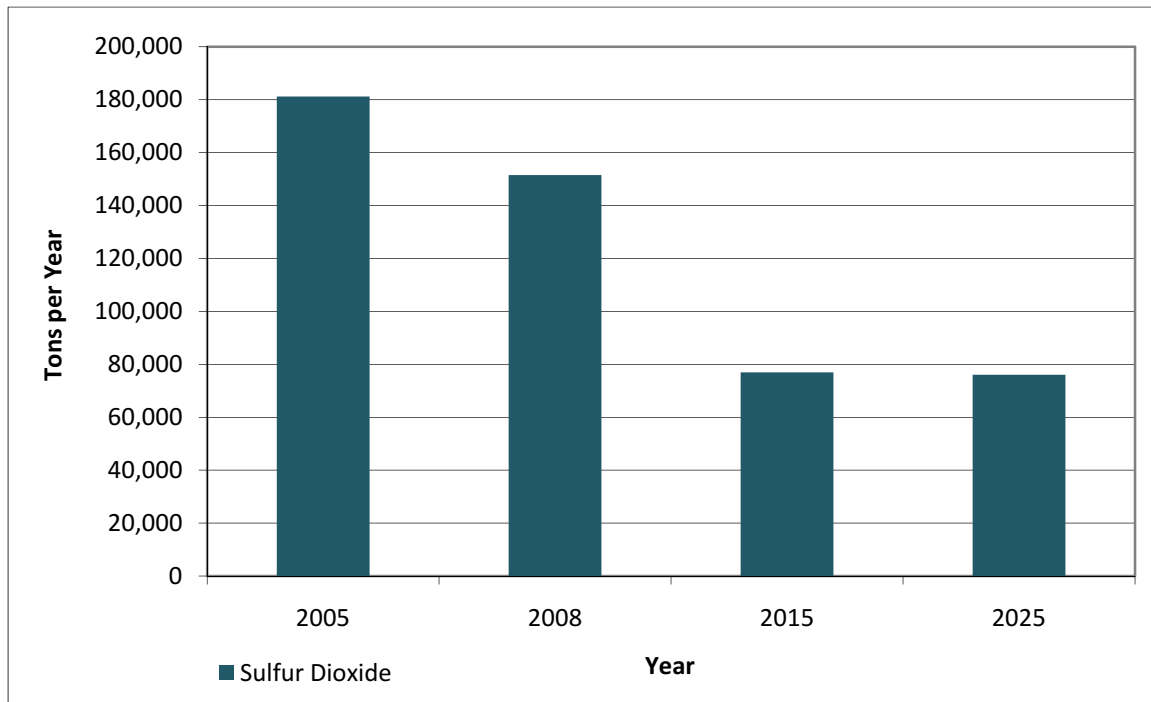
Comparison of 2008 Estimated and 2025 Projected NO_x, SO₂, and Direct PM_{2.5} Emissions, Louisville Area (Tons per Year)

	2008	2025	Change	% Change
NO _x	97,533.93	59,455.17	-38,078.76	39.04% decrease
SO ₂	151,503.01	76,082.07	-75,420.94	49.78% decrease
Direct PM _{2.5}	6,724.02	5,055.61	-1,668.41	24.81% decrease

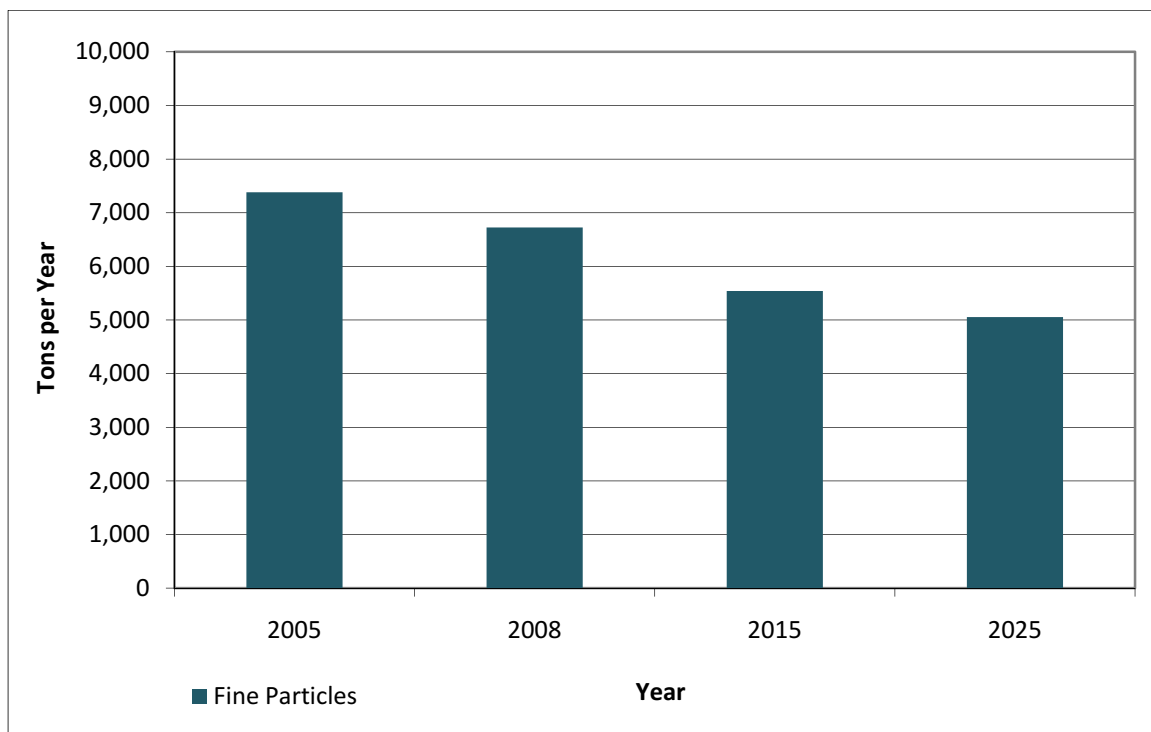
Comparison of 2005, 2008, 2015, and 2025 Projected NO_x Emissions, Louisville Area



Comparison of 2005, 2008, 2015, and 2025 Projected SO₂ Emissions, Louisville Area



Comparison of 2005, 2008, 2015, and 2025 Projected Direct PM_{2.5} Emissions, Louisville Area



Comparison of 2005, 2008, 2015, and 2025 Projected NO_x, SO₂, and Direct PM_{2.5} Emissions, Louisville Area

