UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 2 [illegible] 2000

REPLY TO THE ATTENTION OF:

R-19J

Honorable Frank O'Bannon
Governor of Indiana
Indianapolis, Indiana 46204-2797

Dear Governor O'Bannon:

Thank you for your recent letter sent by Commissioner Kaplan dated June 30, 2000, forwarding your State's recommendations informing your citizens about areas where air pollution poses a threat to public health. Making recommendations on geographic boundaries for the national air quality standard for smog is a critical step towards providing the citizens in your State with an important tool to make informed decisions about air pollution levels in their cities and hometowns. We intend to carefully review your recommendations and will work with you in determining final boundaries for your nonattainment areas.

We note that your recommendations have not identified as nonattainment all the counties in the Consolidated Metropolitan Statistical Areas (CMSAs) or Metropolitan Statistical Areas (MSAs). We will be reviewing the supporting data you have submitted and we would like to discuss these recommendations with your staff before we complete the designation process.

Even though the Environmental Protection Agency's (EPA's) new smog standard is pending before the courts, the U.S. Court of Appeals for the D.C. Circuit in its 1999 decision recognized that the designation process would continue. EPA is obligated under the Clean Air Act and the 1998 Transportation Equity Act to complete this process, which includes reviewing your recommendations and making ours later this year.

As a result, EPA is moving forward with the designation process. We are proceeding with this action to protect public health in parallel while appealing other parts of the May 14, 1999, D.C. Circuit decision to the Supreme Court. This will ensure that citizens living in nonattainment areas will have cleaner air as quickly as possible once the ongoing litigation is completed. Together we can move forward to bring cleaner, healthier air to

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the citizens in your State.

The EPA looks forward to working with Indiana in the coming months on designating areas for the ozone air quality standards. If you have any questions, please do not hesitate to call me or Bharat Mathur, Director, Air and Radiation Division, at (312) 353-2212.

Sincerely,

/s/ original signed by
Francis X. Lyons

Francis X. Lyons
Regional Administrator

cc: Lori Kaplan, Commissioner
Indiana Department of Environmental Management

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

A99-29
I-C-69

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

June 30, 2000

Mr. Francis Lyons
Regional Administrator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Dear Mr. Lyons:

This letter is in response to the United States Environmental Protection Agency's (USEPA) March 28, 2000, guidance memorandum concerning air quality designations for the 8-Hour National Ambient Air Quality Standard (NAAQS) for ozone. That guidance indicates USEPA's intention to propose designations in September 2000, finalize them by December 31, 2000, and make them effective at some unspecified time thereafter. Indiana appreciates the opportunity to provide input and recommendations to USEPA and intends to be fully engaged in this important issue.

Our initial evaluation has been complicated by the following factors:

1) The legal status of the eight hour ozone standard is uncertain,

2) The legal and policy implications under the Clean Air Act and other statutes for areas designated as "nonattainment," have not been clarified, and

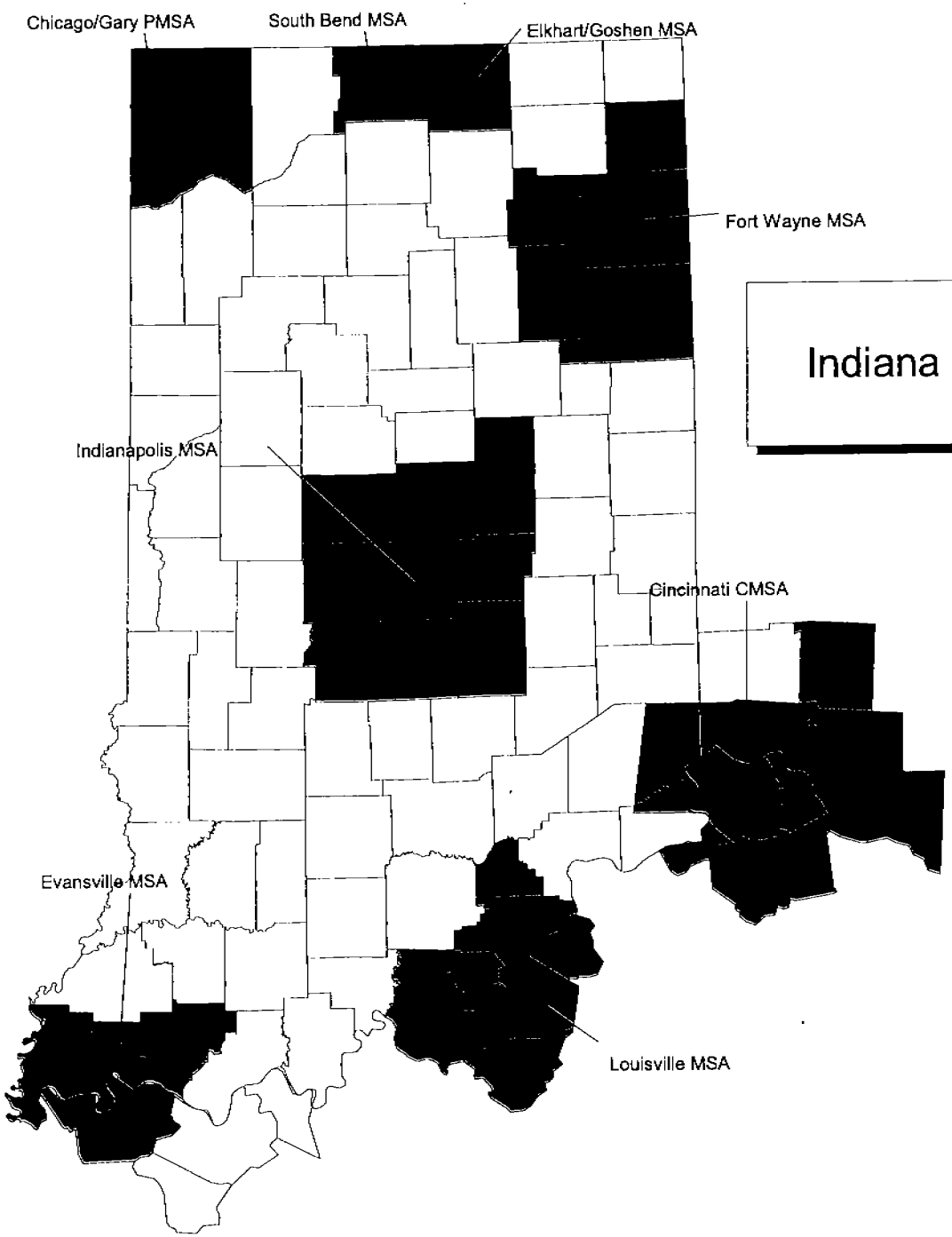
3) The fact that many areas within Indiana and other states will attain the eight-hour ozone standard upon implementation of substantial reductions of nitrogen oxides that will significantly reduce regional ozone levels. This fact was noted by USEPA at the time of establishment of the eight-hour ozone standard and at the time of promulgation of the NOx State Implementation Plan call in November 1998. Because Indiana and other states are moving forward with rules to substantially reduce nitrogen oxide emissions by May 2003, nonattainment area requirements such as new source review and transportation conformity may not be required in Indiana to attain and maintain the eight-hour ozone standard.

Recommendations continued.

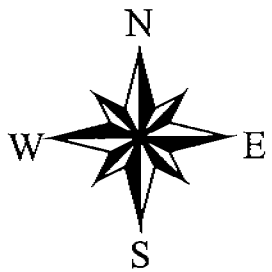
Fort Wayne MSA	Designation Relative to EPA Guidance
Adams County	Attainment
Allen County	Nonattainment
DeKalb County	Attainment
Huntington County	Attainment
Wells County	Attainment
Whitley County	Attainment
Indianapolis MSA	
Boone County	Nonattainment
Hamilton County	Nonattainment
Hancock County	Nonattainment
Hendricks County	Nonattainment
Johnson County	Nonattainment
Madison County	Nonattainment
Marion County	Nonattainment
Morgan County	Nonattainment
Shelby County	Nonattainment
Louisville CMSA	
Clark County	Nonattainment
Floyd County	Nonattainment
Harrison County	Attainment
Scott County	Attainment
Northwest Indiana (Chicago-Gary PSA)	
Lake County	Nonattainment
Porter County	Nonattainment
Non-Metroplitan County W/ Monitored Value Above Standard	
LaPorte County	Nonattainment
Other Affected Counties	
Gibson County	Attainment (only one year of monitoring data available)
Perry County	Attainment (only two years of monitoring data available)

These preliminary conclusions are supplemented with analysis, relevant technical information, and additional technical support documentation in Attachment I.

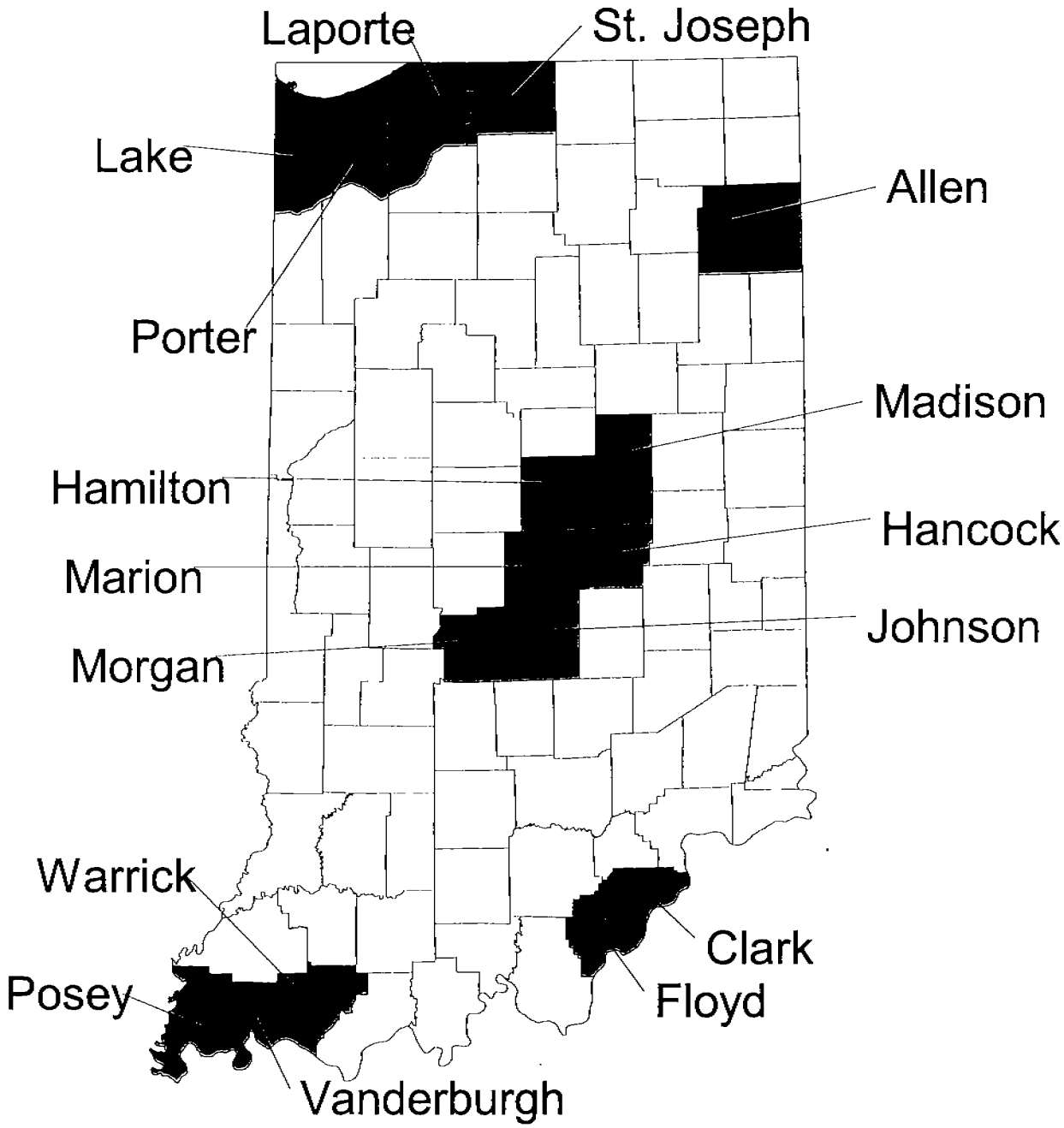
Attachment I

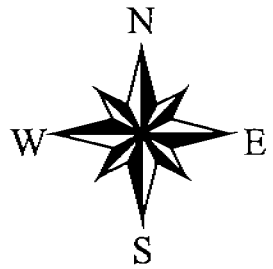


Indiana MSA/CMSA Boundaries



Indiana Counties With Monitor Values Above the 8-Hour Standard





Fourth Highest Ozone Value 1997-1999 (Average)
(In Parts per Million)*

COUNTY	MONITOR LOCATION	VALUE
Allen	Fort Wayne	[illegible]0.088
Allen	Leo High School	[illegible]0.088
Clark	Charlestown	[illegible]0.096
Elkhart	Bristol	0.082
Floyd	New Albany	[illegible]
Hamilton	Noblesville	[illegible]
Hancock	Fortville	[illegible]
Johnson	Trafalgar	[illegible]
Lake	Gary IITRI	[illegible]
Lake	Hammond	[illegible]
LaPorte	LaPorte	[illegible]
LaPorte	Michigan City	[illegible]
Madison	Madison El.	[illegible]
Marion	Fort Harrison	[illegible]
Marion	Harding Street	[illegible]
Marion	Mann Road	[illegible]
Marion	Naval AW Center	[illegible]
Morgan	Monrovia	[illegible]
Porter	Ogden Dunes	[illegible]
Posey	St. Phillips	[illegible]
St. Joseph	Granger	[illegible]
St. Joseph	Potato Creek	[illegible]
St. Joseph	South Bend	[illegible]
Vanderburgh	Evansville-Mill Rd	[illegible]
Vanderburgh	Scott School	[illegible]
Vigo	Terre Haute	0.083
Warrick	Alcoa	[illegible]
Warrick	Boonville High School	[illegible]
Warrick	Tecumseh High School	[illegible]

* includes monitors with 3 years of data

Cincinnati CMSA

Cincinnati CMSA (Dearborn and Ohio Counties):

Counties within the Analysis Area:

Dearborn and Ohio

Monitor Values:

There are no monitors located within Dearborn and Ohio Counties.

Designation Relative to US EPA Guidance:

County	Designation
Dearborn	Attainment
Ohio	Attainment

Analysis:

There are no monitored violations of the standard within Dearborn and Ohio Counties, and the emissions inventories for Dearborn and Ohio Counties are insignificant in comparison to the other counties within the CMSA. There are no point sources located within Ohio County and the only major point source located in Dearborn County will have significant emissions reductions once the NO_x SIP is implemented. Ohio and Dearborn Counties are predominately rural in nature with very low population densities. Ohio County's population density is one of the lowest in the state. Although Dearborn County's population growth rate appears significant in terms of percentage increase, the volume in terms of growth is insignificant. Dearborn and Ohio Counties have not been included in previous Greater Cincinnati nonattainment designations. Likewise, there are three Kentucky Counties within the CMSA that have been excluded in previous designations.

Dearborn County Annual Emissions 1996 (Tons)

	Point	Area	Nonroad	Onroad	Total
VOC	1,055.74	1,226.26	242.30	958.78	3,483.07
NOx	38,960.34	160.15	906.33	1,536.18	41,562.99

Ohio County Annual Emissions 1996 (Tons)

	Point	Area	Nonroad	Onroad	Total
VOC	0	187	23	114	324
NOx	0	10	73	160	143

1996 Point Source Inventory

Dearborn County

strFacilityName	NOx	VOC
JOSEPH SEAGRAM & SONS	547.65	553.93
AURORA CASKET CO INC	3.50	283.45
AMERICAN ELECTRIC POWER	36,527.26	86.09
TEXAS GAS TRANSMISSION - DILLSBORO	1,553.80	61.88
AURORA CASKET CO-VANGUARD PLT	1.25	58.81
ANCHOR GLASS CONTAINER CORP	307.25	11.53

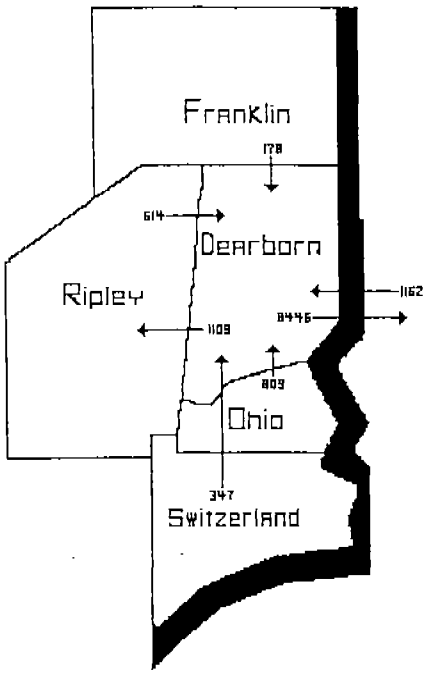
Cincinnati CMSA Population Growth

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Dearborn County	38,835	46,576	7,741	19.93%	50,583	4,007	8.60%	60,287	13,711	29.44%
Ohio County	5,315	5,458	143	2.69%	5,555	97	1.78%	5,791	333	6.10%

Dearborn County Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	17,308	100.0%
Worked in County of residence	7,336	42.4%
Worked out of County of residence	9,972	57.6%
Worked in Indiana-out of County of residence	1,526	8.8%
Worked out of Indiana	8,446	48.8%



Counts of under 100 are not shown. Counts into and out of Indiana are to or from all neighboring states.

Last Updated: January 10, 1997

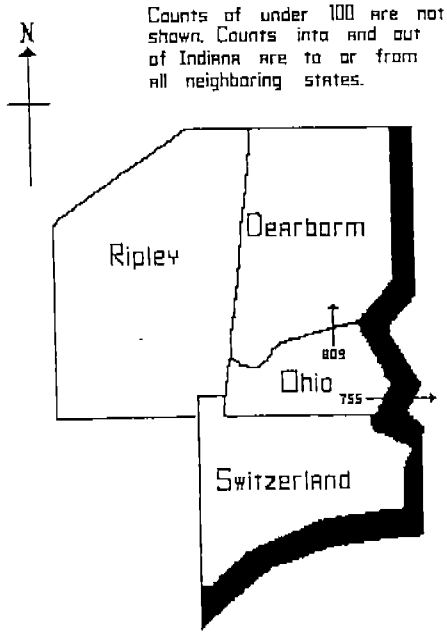
Analyst/Contact: Carol Williams (812) 948-6102

Source: Indiana Dept. of Workforce Development, Labor Market Information

Ohio County Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	2,332	100.0%
Worked in County of residence	588	25.2%
Worked out of County of residence	1,744	74.8%
Worked in Indiana-out of County of residence	989	42.4%
Worked out of Indiana	755	32.4%



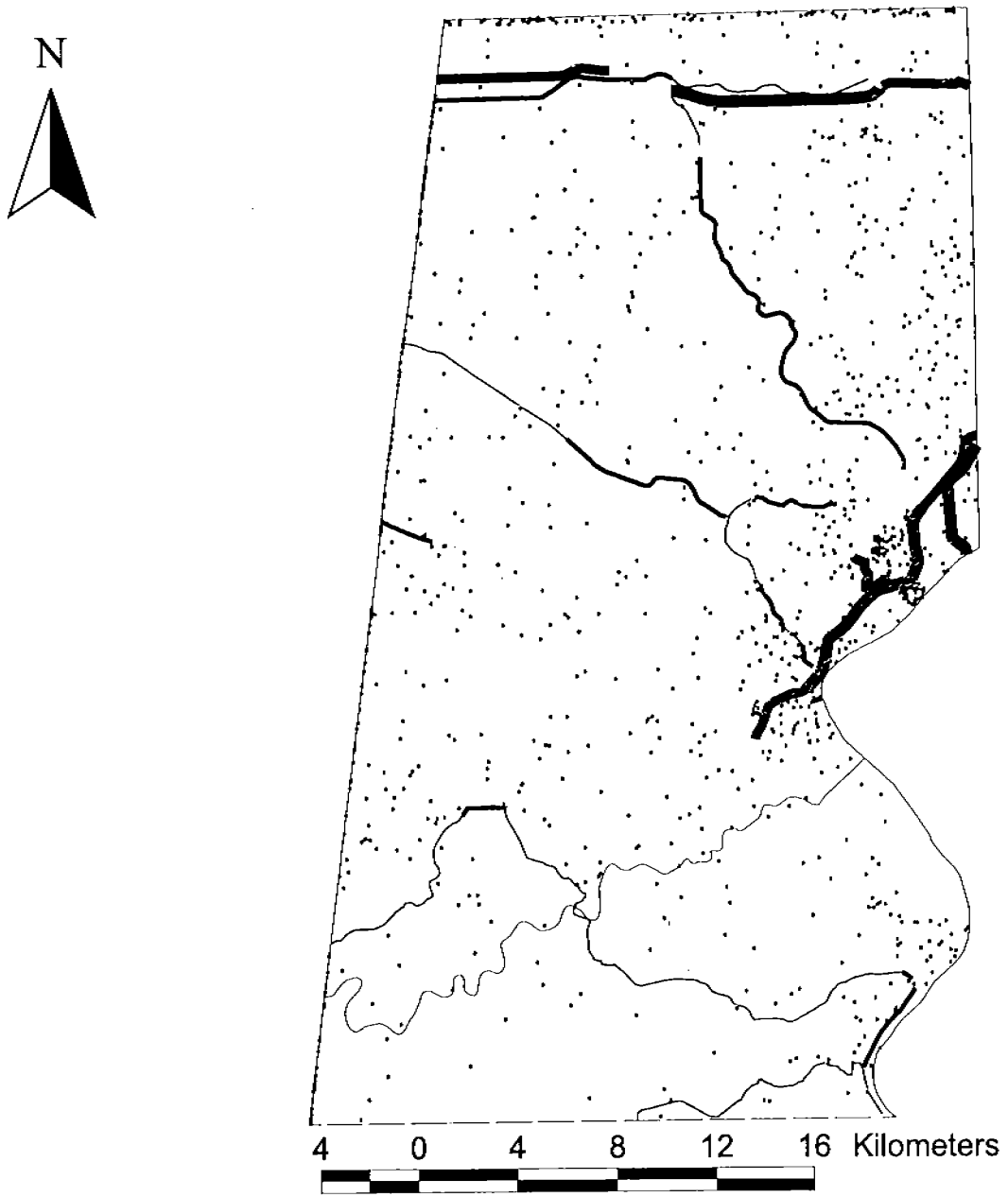
Last Updated: January 10, 1997

Analyst/Contact: Carol Williams (812) 948-6102

Source: Indiana Dept. of Workforce Development, Labor Market Information

Cincinnati MSA Population and Road Data

Population Distribution (1990)
1 Dot = 50
Daily Peak Vehicle Volume
0.002 - 0.011
0.011 - 0.024
0.024 - 0.05
0.05 - 0.099
0.099 - 0.184



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Evansville MSA

Evansville MSA

Counties within the MSA:

Posey, Vanderburgh, and Warrick.

Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
Posey	St. Phillips	0.091
Vanderburgh	Evansville-Mill Rd	0.094
Vanderburgh	Scott School	0.091
Warrick	Alcoa	0.094
Warrick	Boonville High School	0.091
Warrick	Tecumseh High School	0.093

Designation Relative to US EPA Guidance:

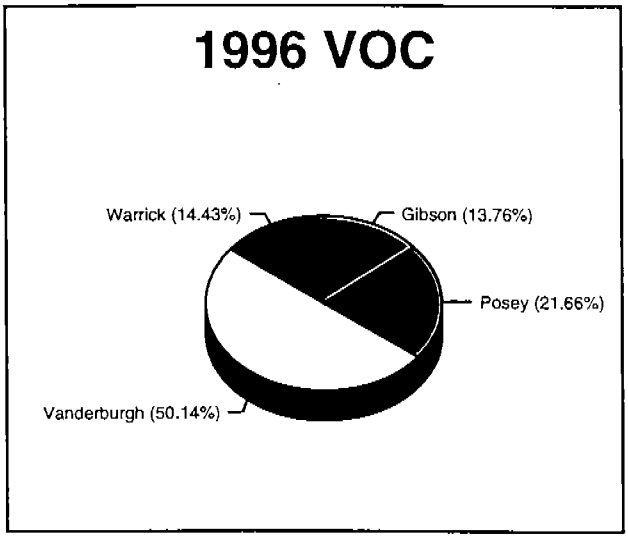
County	Designation
Posey	Nonattainment
Vanderburgh	Nonattainment
Warrick	Nonattainment

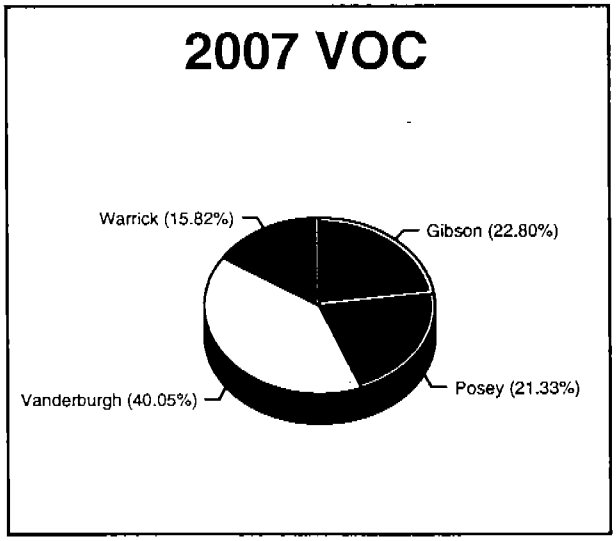
Analysis:

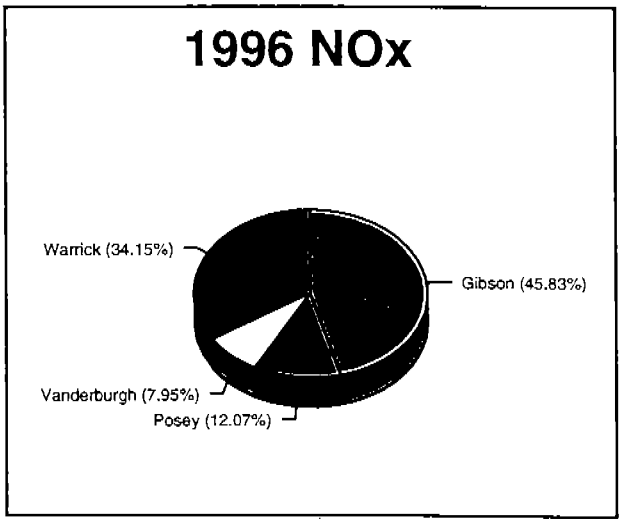
Each county within the MSA has an ozone monitor with an average fourth highest ozone value, over the 3-year period, above the standard. In accord with US EPA's guidance, Gibson County is not included because it does not have a monitored violation of the eight hour ozone standard and is not part of the Evansville MSA. Moreover, high ozone in the MSA and Gibson County is dominated by regional transport and Gibson County emissions have little contribution to elevated ozone in Evansville. In addition, state rules now under development will require substantial reductions of nitrogen oxides (NO_x) from the one large source in Gibson County.

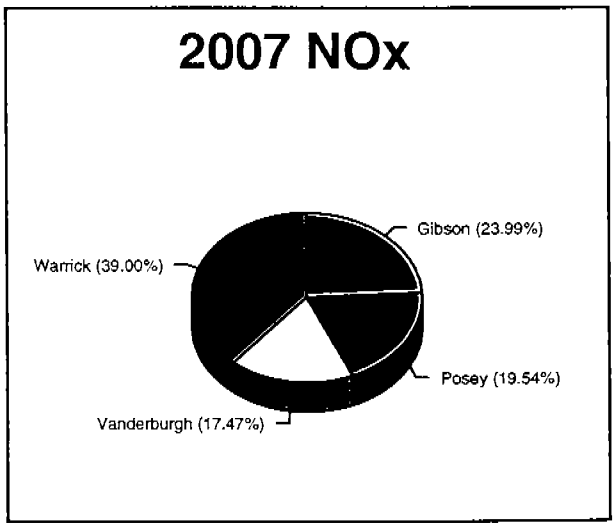
Total Annual Emissions By County

	1996 VOC	% Of MSA	2007 VOC	% of MSA	1996 NOx	% of MSA	2007 NOx	% of MSA
Gibson	3,731	14%	5,149	23%	47,496	46%	9,640	24%
Posey	5,871	22%	4,816	21%	12,507	12%	7,852	20%
Vanderburgh	13,592	50%	9,045	40%	8,239	8%	7,021	17%
Warrick	3,911	14%	3,574	16%	35,395	34%	15,671	39%
	27,105	100%	**22,584**	100%	**103,637**	100%	**40,184**	100%









POINT SOURCES WITHIN THE ANALYSIS AREA

Annual Emissions In Tons As of 1996

Minimum 10 Tons VOC or NOx Per Year

First Sorted by VOC

Gibson County

strFacilityName	NOx	VOC
TEPPCO PRINCETON TERMINAL	0.12	369.37
PSI ENERGY - GIBSON	44,666.95	268.31
MID STATES RUBBER	4.13	20.00
EMGE PACKING CO.INC,DIV OF EXCEL CORP.	32.30	0.99

* Note that Toyota Opened Following 1996

Posey County

strFacilityName	NOx	VOC
COUNTRYMARK COOPERATIVE, INC.	230.83	2,021.88
GENERAL ELECTRIC CO	3,000.97	532.50
SIGECO - A. B. BROWN	6,413.69	40.84
MARATHON OIL COMPANY - MT. VERNON TERM		28.34
WARTSILA NSD NORTH AMERICA, INC.	18.99	3.27
SIGECO - OLIVER GAS STORAGE FIELD	20.40	0.50

Vanderburgh County

strFacilityName	NOx	VOC
KOCH LABEL CO., L. L. C.	1.95	1,152.10
WHIRLPOOL CORP	26.45	681.38
ITAPCO- EVANSVILLE TERMINAL, INC.		250.22
GUARDIAN AUTOMOTIVE TRIM, INC.	5.84	127.24
RED SPOT PAINT & VARNISH CO		105.70
HARTFORD BAKERY INC.	3.49	77.45
AMERICAN NATIONAL CAN	21.56	58.38
MEAD JOHNSON AND COMPANY	81.77	51.73
INLAND CONTAINER CO	4.90	49.08
KELLER CRESCENT CO.		34.91
PPG INDUSTRIES, INC. WKS #28	5.65	32.91
INDIANA TUBE CORP.	0.55	30.02
CRADDOCK FINISHING CORPORATION	1.61	27.03
BERRY PLASTICS CORP.		23.00
GENCORP	2.45	22.05
INTRAMETCO PROCESSING INC.	11.84	17.26
BOOTZ MANU CO	0.87	16.65
BROWNING-FERRIS INDUSTRIES OF INDIANA	9.32	16.31
HOOSIER STAMPING & MFG. CORP	0.49	15.74
EVANSVILLE BREWING CO	25.21	13.32
O'BRYAN BARREL COMPANY, INC.	0.20	12.91
INDIAN INDUSTRIES		12.90
KARGES FURNITURE CO., INC.	0.15	10.94
MASTER MANUFACTURING CO., INC.	0.55	10.06
SIGECO - OHIO RIVER	18.49	0.59
DEACONESS HOSPITAL	16.46	0.36
EVANSVILLE STATE HOSPITAL	39.53	0.35
J.H.RUDOLPH & CO	18.85	0.11

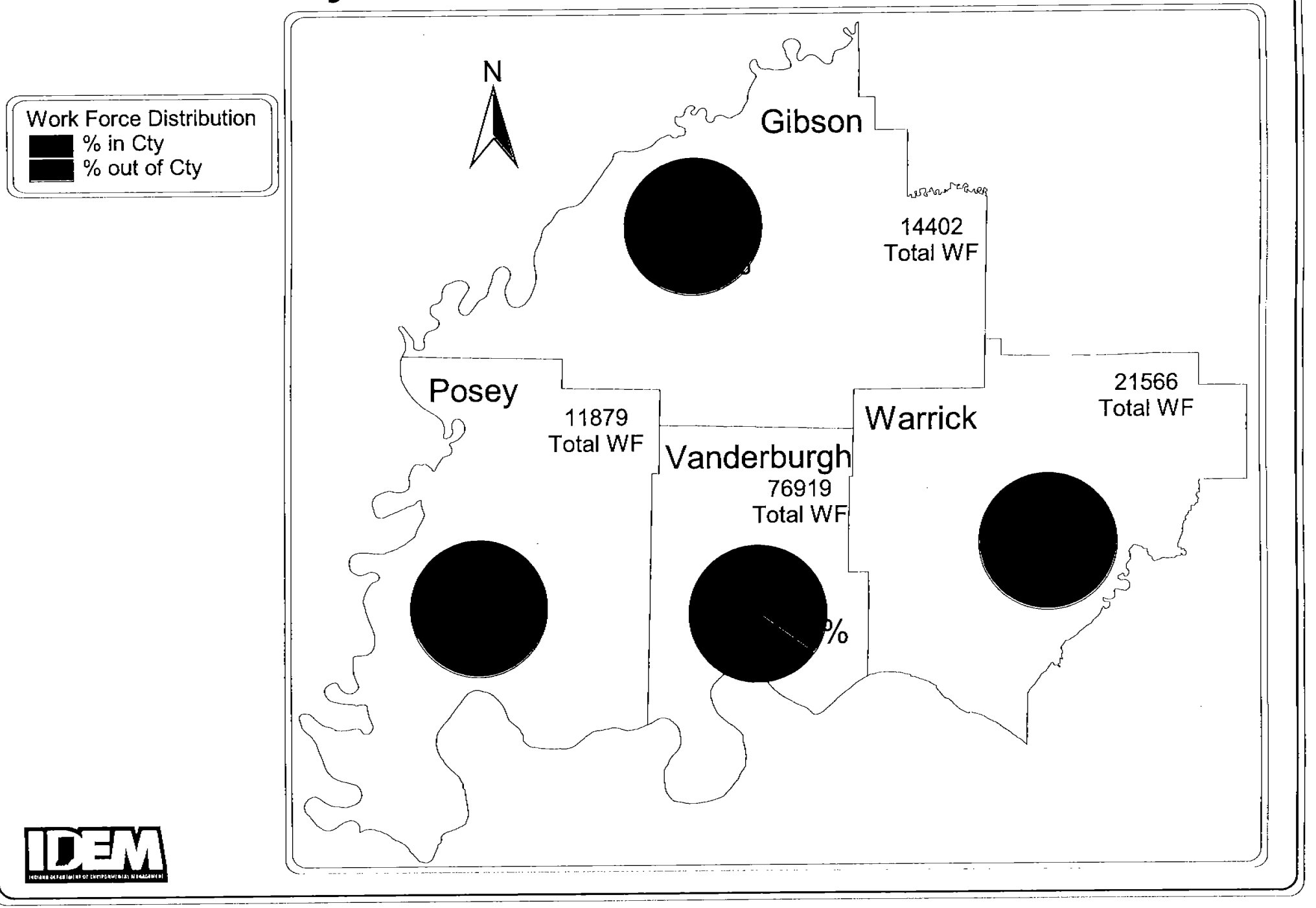
Warrick County

strFacilityName	NOx	VOC
ALCOA (ALUMINUM CO. OF AMERICA)	332.45	571.83
SIGECO-WARRICK PWR PLANT-ALCOA GENERATNG	18,769.13	87.62
SIGECO - F.B.CULLEY GENERATING STATION	6,573.19	37.86
INDIANA HARDWOODS TECH	13.51	6.75

Evansville Area Population Growth

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Gibson	31,913	31,948	35	0%	32,313	365	1%	33,197	1,249	4%
Posey	25,968	26,640	672	3%	27,438	798	3%	29,372	2,732	10%
Vanderburgh	165,058	166,837	1,779	1%	168,464	1,627	1%	172,403	5,566	3%
Warrick	44,920	50,831	5,911	13%	53,822	2,991	6%	61,067	10,236	20%

County Work Force Distribution

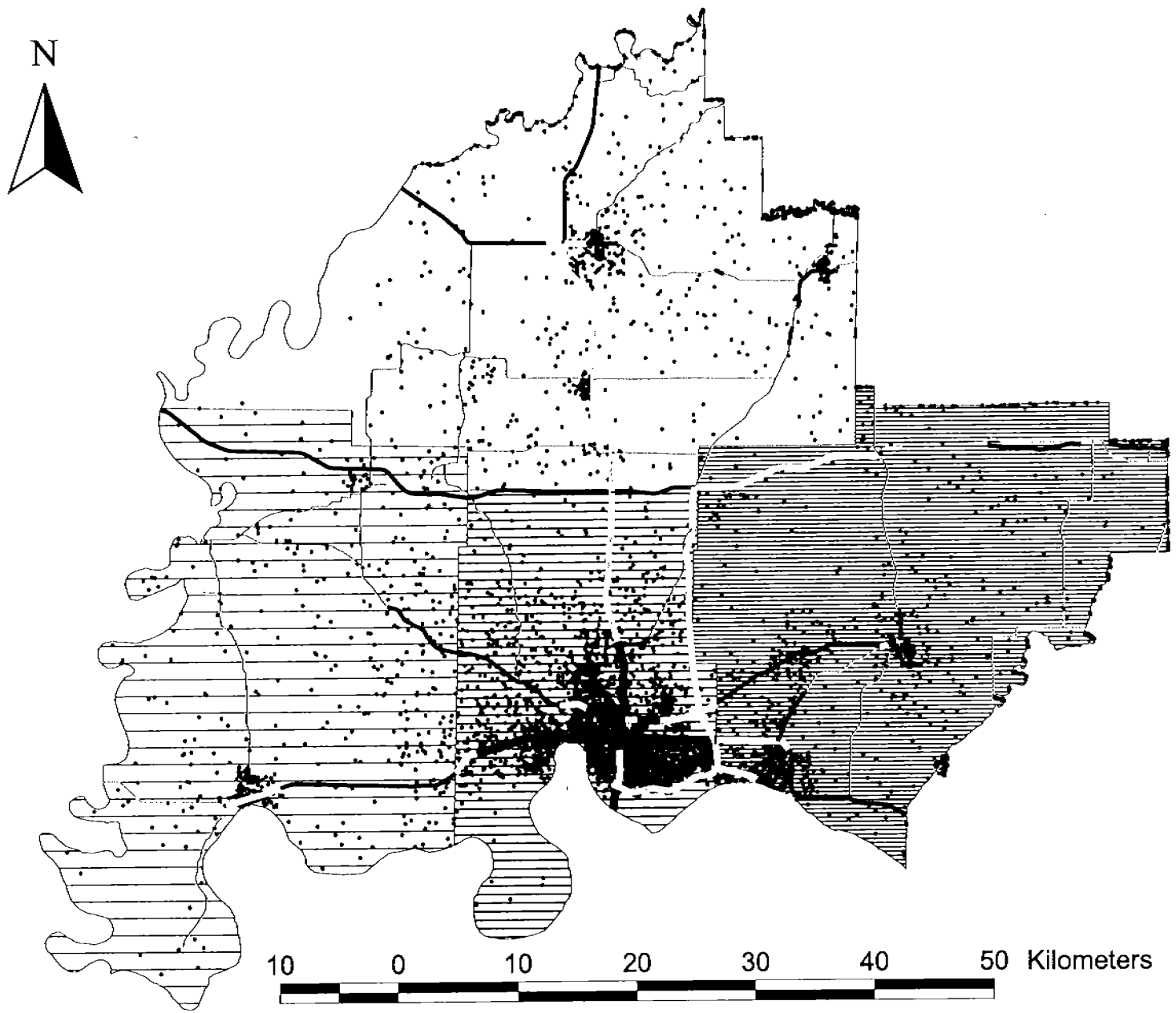


Evansville MSA Population and Road Data

Daily Vehicle Miles Peak
- 10 - 309
- 310 - 675
- 676 - 1177
- 1178 - 2046
- 2047 - 3217

Population Distribution (1990)
- 1 Dot = 50

1997 - 2020 Population Change
- 1249 - 2500
- 2500.1 - 5000
- 5000.1 - 8000
- 8000.1 - 10250



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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Fort Wayne MSA:

Counties within the MSA:

Adams, Allen, DeKalb, Huntington, Wells, and Whitley .

Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
Allen	Fort Wayne	0.088
Allen	Leo High School	0.088

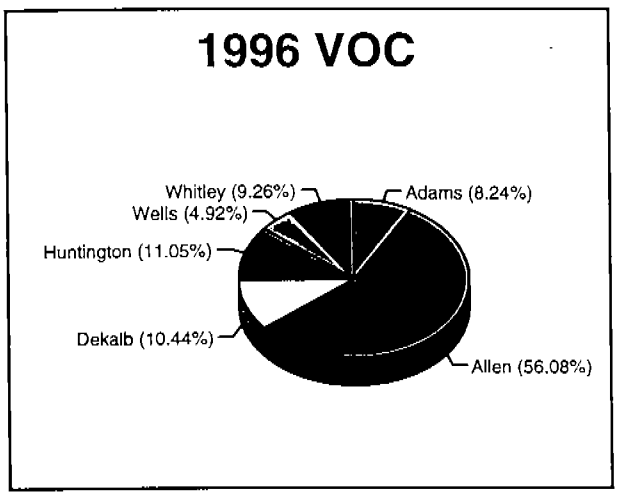
Designation Relative to US EPA Guidance:

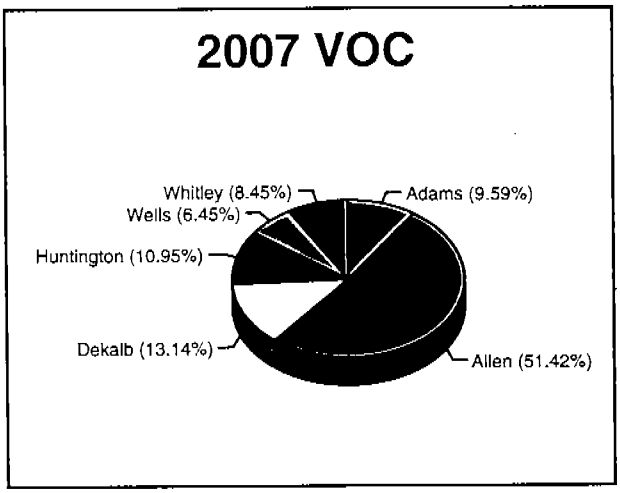
County	Designation
Adams	Attainment
Allen	Nonattainment
DeKalb	Attainment
Huntington	Attainment
Wells	Attainment
Whitley	Attainment

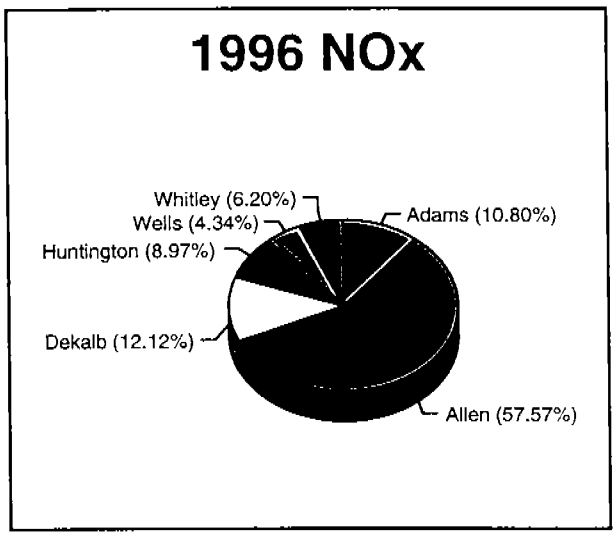
Analysis:

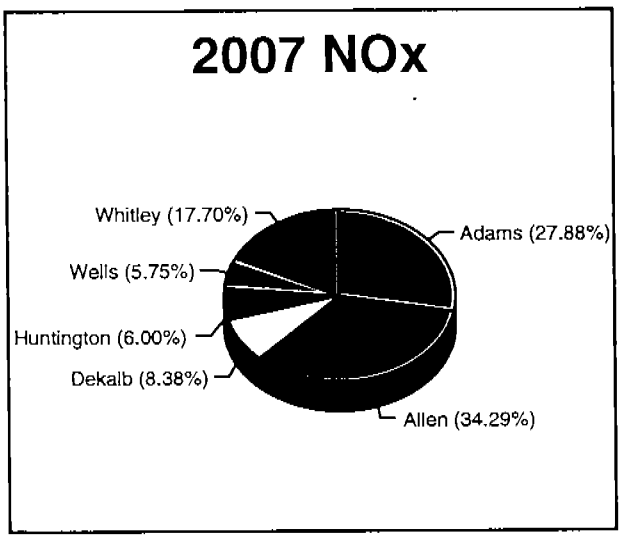
Both monitors in Allen County have an average fourth highest ozone value, over the 3-year period, above the standard. The majority (over 50%) of the region's emissions (NOx and VOC) are generated within Allen County. A substantial portion of Allen County is rural and due to existing land use controls, urban growth is limited to the central portion of the county (i.e., the city of Fort Wayne). The remaining portion of the MSA is rural and maintains fairly low population density. The majority of the region's traffic congestion is confined to the Fort Wayne Urban Area within Central Allen County. The in-county employment ratio exceeds 63% in all of the other counties.

Total Annual Emissions By County









	1996 VOC	% Of MSA	2007 VOC	% of MSA	1996 NOx	% of MSA	2007 NOx	% of MSA
Adams	3,550	8%	1,548	10%	4,015	11%	4,235	28%
Allen	24,150	56%	8,303	51%	21,391	58%	5,210	34%
Dekalb	4,497	10%	2,122	13%	4,504	12%	1,273	8%
Huntington	4,760	11%	1,768	11%	3,332	9%	911	6%
Wells	2,117	5%	1,042	6%	1,612	4%	874	6%
Whitley	3,988	9%	1,365	8%	2,305	6%	2,689	18%
	43,062	**100%**	**16,148**	**100%**	**37,159**	**100%**	**15,192**	**100%**

POINT SOURCES WITHIN THE ANALYSIS AREA

Annual Emissions In Tons As of 1996

Minimum 10 Tons VOC or NOx Per Year

First Sorted by VOC

Adams County

strFacilityName	NOx	VOC
CENTRAL SOYA COMPANY INC	385.02	666.75
GOLD SHIELD FIBERGLASS		164.15
THUNDERBIRD PRODUCTS, INC.		157.21
FLEETWOOD MOTOR HOMES OF INDIANA		79.00
UNITED TECHNOLOGIES AUTOMOTIVE	3.59	66.49
GOLD SHIELD FIBERGLASS		49.90
GILPIN IRONWORKS INC.		48.86
FLEETWOOD MOTOR HOMES OF INDIANA, INC.52		46.00
GOLD SHIELD FIBERGLASS		23.81
ELKHART PRODUCTS CORP	0.11	18.51
PRECISION WOOD CRAFTERS OF INDIANA, INC.		13.19
DECATUR CASTING	3.96	11.08
EP GRAPHICS		10.00

Allen County

strFacilityName	NOx	VOC
GENERAL MOTORS NATP FORT WAYNE ASSEMBLY	116.65	6,883.73
PHELPS DODGE MAGNET WIRE CO.	8.00	202.20
EAGLE PICHER PLASTICS DIV.		147.95
GE MOTORS AND INDUSTRIAL SYSTEMS (GEMIS)	27.19	118.39
ESSEX GROUP INC FORT WAYNE & CHEM. PROC	13.10	113.44
ESSEX GROUP, INC. FORT WAYNE PLANT	11.99	113.14
MICHELIN NORTH AMERICA,INC.	195.17	79.74
PANHANDLE EASTERN PIPELINE	1,545.30	65.48
ELITE ENTERPRISES		52.00
REA MAGNET WIRE CO, INC	15.73	50.12
PONTIAC FOUNDRY	11.34	48.52
AVERY DENISON - FASSON ROLL DIVISION	12.32	47.25
GE BROADWAY	13.12	45.60
VALSPAR CORP		44.80
TECO, INC.	1.19	43.05
GRABILL CABINET COMPANY	0.30	38.64
STONHARD MANUFACTURING, INC.		36.00
FORT WAYNE PLASTICS, INC.	2.85	33.82
FORT WAYNE FOUNDRY	4.72	25.06
TOKHEIM CORPORATION	5.74	23.33
NORTH AMERICAN VAN LINES	1.35	22.86
DANA CORP - SPICER AXLE	37.16	19.50
BROOKS CONSTRUCTION CO. INC.	9.52	17.49
TETRA PAK MATERIALS, INC	0.80	16.78
SLATERS STEELS	70.83	14.60
LINCOLN FOOD SERVICE PROD, INC.	3.29	14.07
WIELAND FURNITURE	0.05	12.85
BROOKS CONSTRUCTION	3.70	12.84
JEFFERSON SMURFIT CORPORATION	0.55	10.03

Dekalb County

strFacilityName	NOx	VOC
VULCRAFT, A DIVISION OF NUCOR CORP		329.55
COOPER TIRE & RUBBER CO., ENG.PROD.DIV	7.33	200.40
AUBURN FOUNDRY, INC.	11.26	132.21
THERMA-TRU CORPORATION		115.76
EAGLE PICHER PLASTIC		106.25
RIEKE CORPORATION		47.52
FOAMEX L.P.	231.25	29.56
DEKALB MOLDED PLASTICS CO.		21.49
AMERICAN FINISHING CORPORATION	0.10	17.01
ELECTRIC MOTOR SPECIALTIES, INC	0.20	16.01
FLEETWOOD HOMES OF INDIANA, INC.		14.00
STEEL DYNAMICS, INC.	60.25	5.36
BOHN ALUMINUM CORP.	23.46	3.05
SEALED POWER TECHNOLOGIES	11.91	0.69

Huntington County

strFacilityName	NOx	VOC
FRICTION MATERIALS	5.31	313.01
KEN-KOAT, INC	1.33	310.24
EAGLE-PICHER PLASTICS DIV-HUNTINGTON DIV		145.80
OHMITE MANUFACTURING CO.	0.30	90.50
SUN COMPANY		82.32
NOLL PRINTING COMPANY, INC	0.70	56.28
NORTH AMERICAN POWER SUPPLIES, INC.		52.00
ISOLATEK INTERNATIONAL	51.02	28.70
HAYES WHEELS INTERNATIONAL	22.79	17.85
MAJCO BUILDING SPECIALTIES, L.P.		17.33
CITGO PETROLEUM CORP.	1.67	13.45

Wells County

strFacilityName	NOx	VOC
FRANKLIN ELEC CO	35.75	46.30
JET COMPOSITES, INC.	773.40	44.86
WAYNE METAL PRODUCTS CO., INC.	2.05	27.11
STERLING CASTING CORPORATION	0.78	10.75

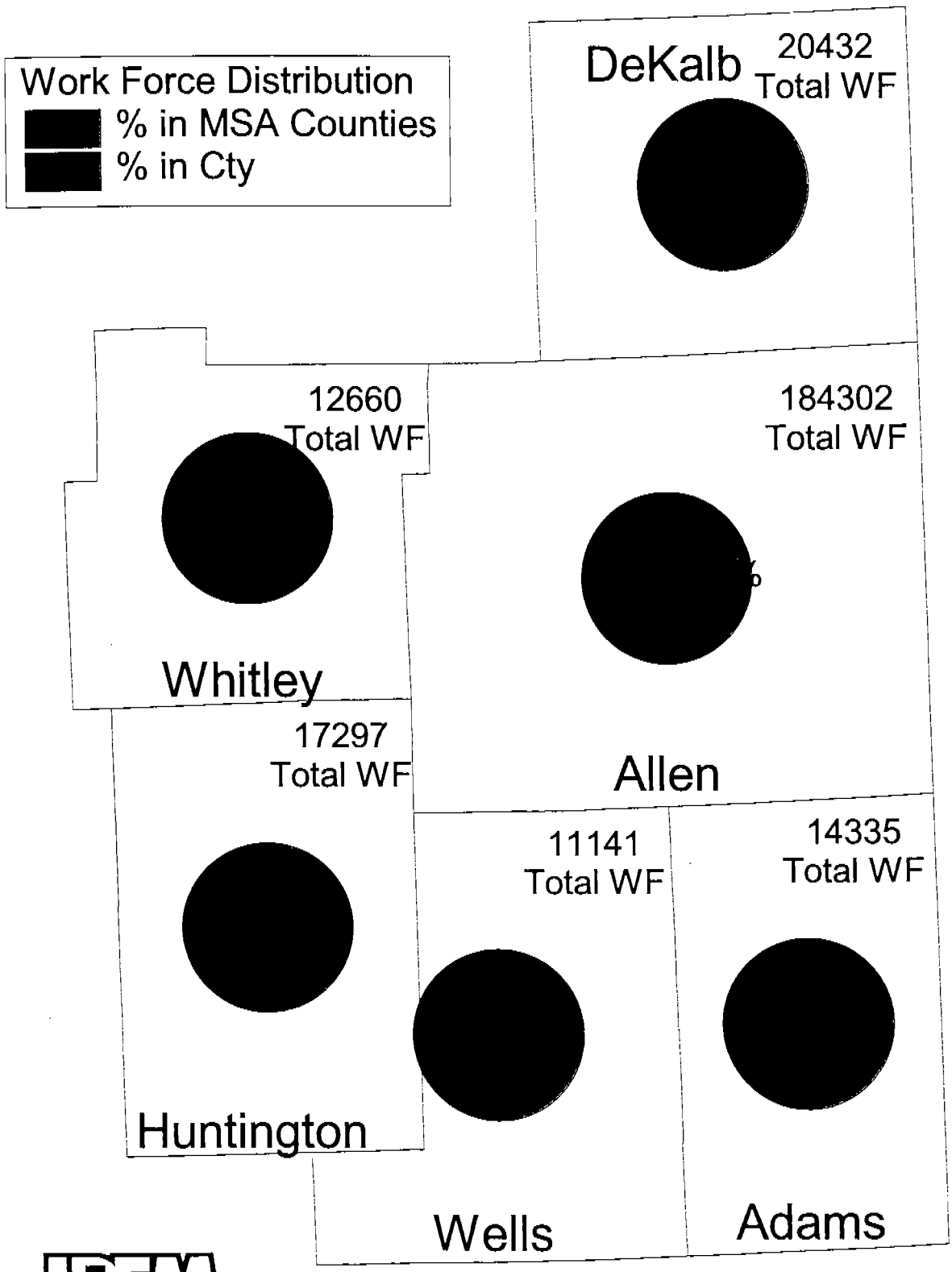
Whitley County

strFacilityName	NOx	VOC
ESSEX GROUP, INC. METALS PROCESSING #055	10.47	1,277.98
FORT WAYNE FOUNDRY	13.78	102.81
FIBRE FORM CORPORATION		70.00
WEATHERHEAD BRAKE PRODUCTS DIV DANA CORP	0.29	26.01

Fort Wayne MSA Population Growth Forecast

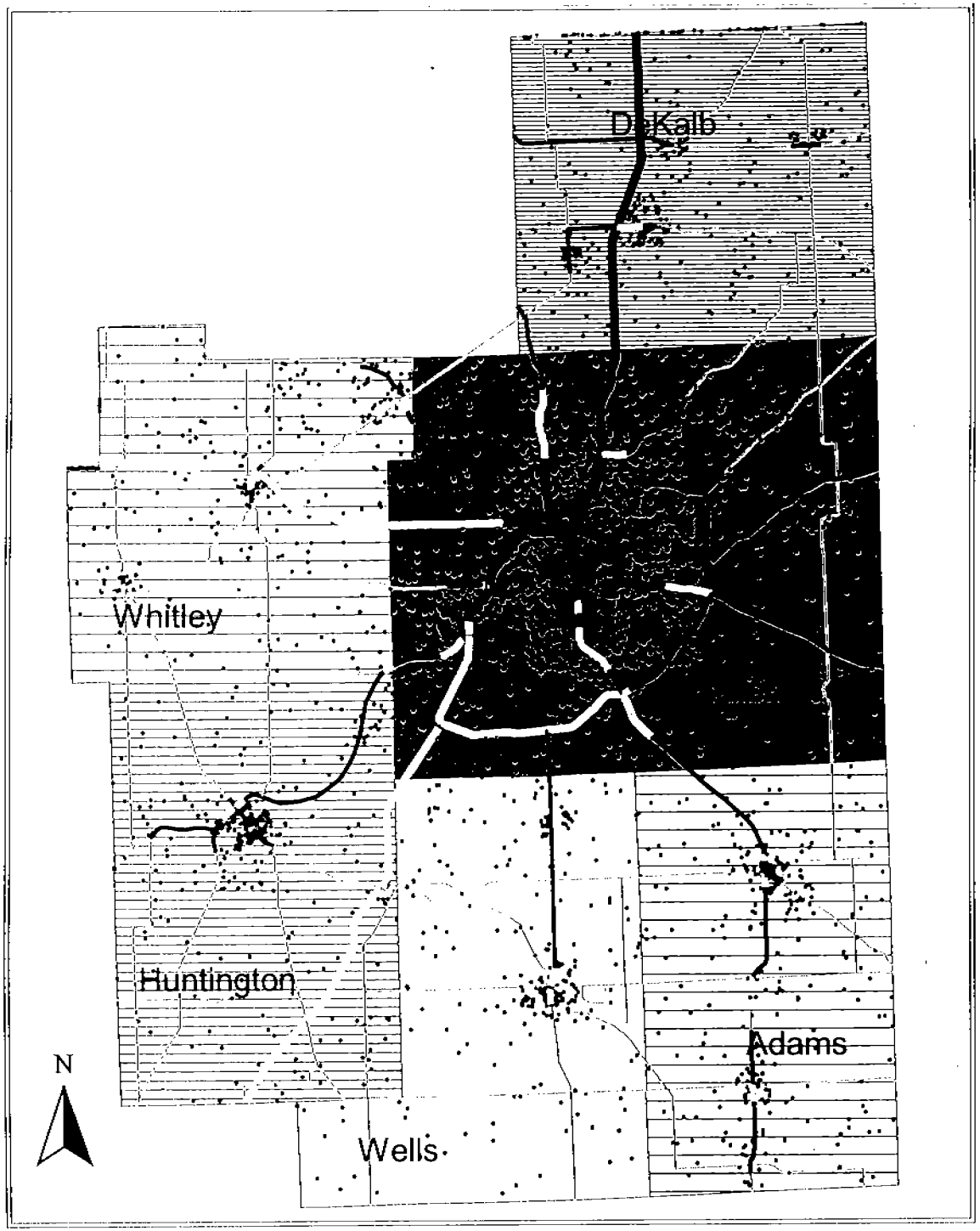
	1990	1997	2000	# Change	% Change	2020	# Change	% Change
Adams	31,095	32,837	33,806	969	3%	36,154	2,348	7%
Allen	300,836	312,091	321,245	9,154	3%	343,414	22,169	7%
Dekalb	35,324	38,722	40,766	2,044	5%	45,716	4,950	12%
Huntington	35,427	37,144	38,208	1,064	3%	40,783	2,575	7%
Noble	37,877	41,918	43,771	1,853	4%	48,260	4,489	10%
Wells	25,948	26,773	27,612	839	3%	29,645	2,033	7%
Whitley	27,651	29,969	30,946	977	3%	33,312	2,366	8%

Ft. Wayne MSA Employment Base



IDEM
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Ft. Wayne MSA Population and Road Use Data



Daily Peak Vehicle Volume
- 2 - 281
- 282 - 617
- 618 - 1054
- 1055 - 1643
- 1644 - 2660

Population Distribution
- 1 Dot = 100

Population Change (1997-2010)
- 2113
- 2114 - 2460
- 2461 - 2678
- 2679 - 5147
- 5148 - 23049

IDEM
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Indianapolis MSA

Indianapolis MSA:

Counties within the MSA:

Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby .

Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
Hamilton	Noblesville	0.097
Hancock	Fortville	0.092
Johnson	Trafalgar	0.089
Madison	Madison El.	0.090
Marion	Fort Harrison	0.093
Marion	Harding Street	0.088
Marion	Mann Road	0.088
Marion	Naval AW Center	0.091
Morgan	Monrovia	0.090

Designation Relative to US EPA Guidance:

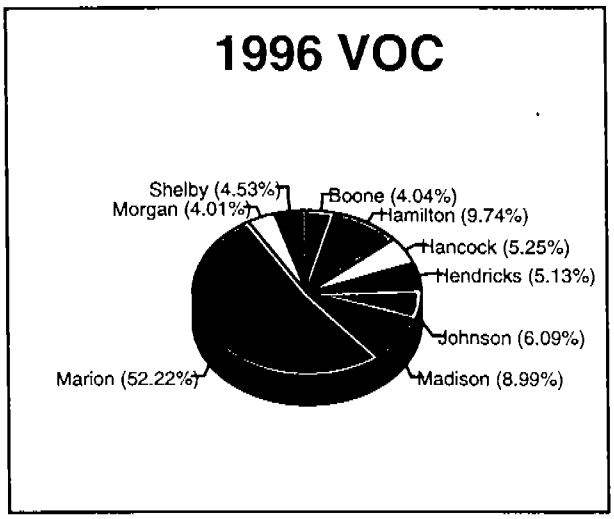
County	Designation
Boone	Nonattainment
Hamilton	Nonattainment
Hancock	Nonattainment
Hendricks	Nonattainment
Johnson	Nonattainment
Madison	Nonattainment
Marion	Nonattainment
Morgan	Nonattainment
Shelby	Nonattainment

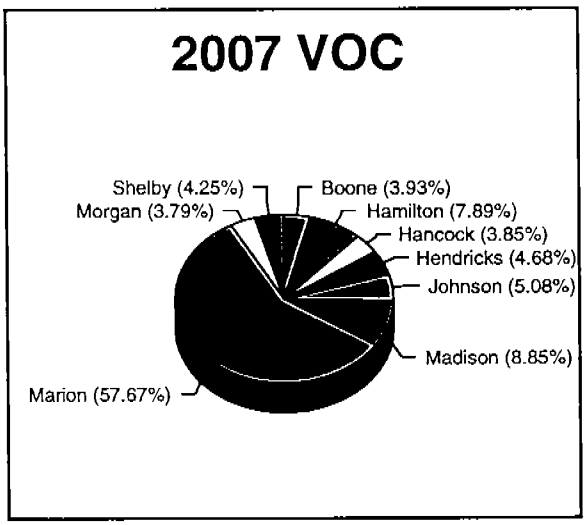
Analysis:

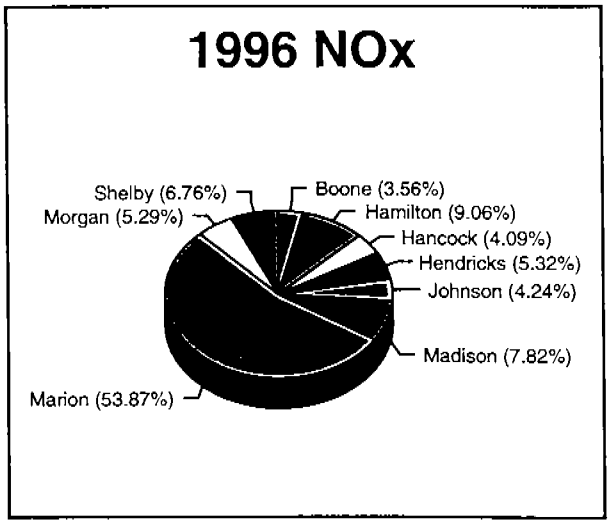
Each county within the MSA has an ozone monitor with an average fourth highest ozone value, over the 3-year period, above the standard, except Boone, Hendricks, and Shelby Counties. Although these counties do not have three years of monitoring data, their relationship to Marion County and the rest of the Indianapolis MSA is much the same as that of Hancock, Johnson, and Morgan Counties. The Indianapolis MSA functions as a region with Marion County (Indianapolis) serving as the sphere of influence in terms of employment/commuting, commerce, and recreation. The Indianapolis MSA's population density is expanding well beyond Marion County. In fact, the counties surrounding Marion County are among the fastest growing counties in the state. Mobile source emissions (NO_x and VOC) represent the largest portion of the emissions inventory for the entire region.

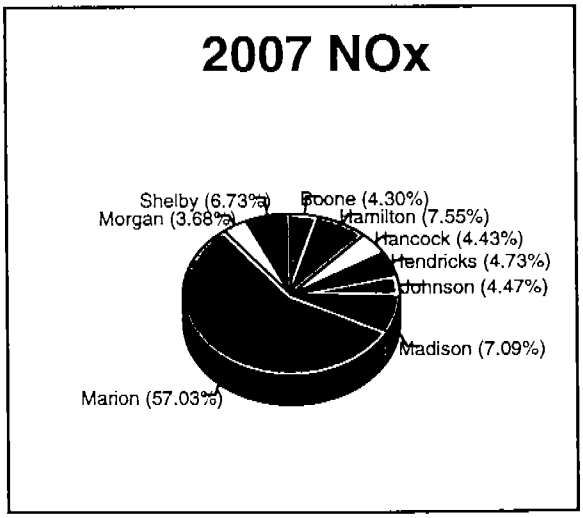
Total Annual Emissions By County

	1996 VOC	% Of MSA	2007 VOC	% of MSA	1996 NOx	% of MSA	2007 NOx	% of MSA
Boone	4,059	4%	2,740	4%	3,655	4%	3,540	4%
Hamilton	9,780	10%	5,503	8%	9,312	9%	6,217	8%
Hancock	5,277	5%	2,685	4%	4,203	4%	3,646	4%
Hendricks	5,154	5%	3,261	5%	5,469	5%	3,898	5%
Johnson	6,115	6%	3,543	5%	4,356	4%	3,681	4%
Madison	9,027	9%	6,171	9%	8,037	8%	5,838	7%
Marion	52,458	52%	40,195	58%	55,368	54%	46,980	57%
Morgan	4,024	4%	2,643	4%	5,432	5%	3,028	4%
Shelby	4,553	5%	2,961	4%	6,951	7%	5,547	7%
	100,448	100%	**69,701**	100%	**102,785**	100%	**82,374**	100%









POINT SOURCES WITHIN THE ANALYSIS AREA

Annual Emissions In Tons As of 1996

Minimum 10 Tons VOC or NOx Per Year

First Sorted by VOC

Boone County

strFacilityName	NOx	VOC
MARATHON PIPE LINE - LEBANON STATION		9.28

Hamilton County

strFacilityName	NOx	VOC
COUNTRYMARK COOPERATIVE, INC.		104.79
MAR-ZANE, INC.	2.73	36.79
FIRESTONE INDUSTRIAL PRODUCTS	10.85	34.09
INDUSTRIAL DIELECTRICS, INC	0.48	26.08
NOBLESVILLE CASTING, INC.	3.28	21.38
PSI ENERGY-NOBLESVILLE	1,085.91	2.34

Hancock County

strFacilityName	NOx	VOC
ROLL COATER INC.	35.30	912.11
FLAGSHIP CAPITAL CORP.	0.69	2.38
POWER SILICATES, INC.	49.22	1.59
ELI LILLY & CO	34.14	0.90

Hendricks County

strFacilityName	NOx	VOC
S T SERVICES, INC.		42.96
PHILLIPS PIPE LINE COMPANY	1.44	31.29
CLARK REFINING & MARKETING, INC.		9.10
INDIANA BOYS SCHOOL	43.65	0.44

Johnson County

strFacilityName	NOx	VOC
SONOCO FLEXIBLE PACKAGING	5.04	372.10
ALLIEDSIGNAL LAMINATE SYSTEMS	7.00	178.21
UNITED TECHNOLOGIES	0.75	49.32
ESSEX GROUP INC.		44.80
CAMP ATTERBURY	3.41	36.34
AT&T MORGANTOWN SITE	27.12	1.91
INDIANA MASONIC HOME	12.80	0.14

Madison County

strFacilityName	NOx	VOC
GMC-DELPHI INTERIOR AND LIGHTING SYSTEMS	130.07	661.13
ABC RAIL CORP.	31.89	478.48
ELSA CORPORATION	0.06	88.31
DELPHI ENERGY & ENGINE MGMT. SYSTEMS #3	29.96	86.88
DELCO REMY AMERICA, INC. {PLANT #17}	0.27	48.83
PAINT AND ASSEMBLY CORP.	2.38	29.53
FIBREX CORP/FORM. ROCKWOOL IND. INC.	58.42	27.89
ALAC GARMENT SERVICES	1.75	17.35
BROCKWAY GLASS INC.	515.23	17.02
PQ CORP	95.78	1.55
INDIANA STATE REFORMATORY	60.76	0.60

Marion County

strFacilityName	NOx	VOC
FORMPAC DIVISION OF W.R. GRACE & CO		471.83
CITIZENS GAS & COKE	766.73	321.92
INDIANAPOLIS CASTING CORPORATION	47.80	277.96
ELI LILLY AND COMPANY	0.80	259.81
CHRYSLER CORPORATION FOUNDRY	8.31	169.04
ALLISON TRANSMISSION DIVISION OF GMC	149.01	157.77
PANHANDLE EASTERN PIPELINE CO	2,568.70	133.22
INDUSTRIAL LAUNDRY AND DRY CLEANERS	1.54	112.03
INLAND PAPERBOARD AN PACKAGING, INC.	0.28	95.16
INDIANAPOLIS BELMONT WWTP	146.35	81.81
ALLISON TRANSMISSION DIVISION, #12/#14	7.74	75.13
LILLY INDUSTRIES, INC.	4.11	70.95
QUEENS GROUP INDIANA, INC.		58.14
WALKER CLEANERS		54.02
IPALCO - STOUT	6,023.85	50.66
ALLISON ENGINE CO. INC. PLANT 8	174.98	48.17
MARATHON OIL COMPANY - INDPLS TERMINAL		42.61
ELI LILLY AND COMPANY	0.54	41.84
SHEPARD & POORMAN COMMUNICATIONS, INC.		40.82
SHELL OIL COMPANY		36.81
MARATHON OIL COMPANY, SPEEDWAY TERMINAL		33.91
AMOCO OIL COMPANY		32.92
PRINT COMMUNICATIONS		32.87
THOMSON CONSUMER ELECTRONICS	7.54	30.51
GEIGER & PETERS INC		28.74
INDIANAPOLIS BAKERY	3.57	27.97
BEST LOCK CORP.		27.42
IVC INDUSTRIAL COATINGS, INC.		25.62
FORD MOTOR COMPANY	91.92	23.65
HORNER ELECTRIC	0.22	20.00
UNITED AIRLINES INDPLS MAINTENANCE CENTR	13.35	19.34
KERR-MCGEE CHEMICAL CORPORATION - FPD	30.97	18.51
INLAND CONTAINER	9.38	18.03
NATIONAL RAILROAD PASSENGER CORPORATION		16.99
POSTER DISPLAY		16.71
PRATT POSTER COMP.		16.38
REXNORD CORP., ROLLER CHAIN OPERATION	5.00	16.37
BENHAM PRESS, INC.		16.00
RICHARDSON CO - WITCO		15.61
WESTVACO ENVELOPE DIVISION		15.00
CREATIVE EXPRESSIONS		13.87
UNITED TECHNOLOGIES	0.31	13.05
UNITED COATINGS, INC.	1.05	13.00
ELI LILLY AND COMPANY		12.41
CORSI CABINET COMPANY, INC.		12.21
NATIONAL BY-PRODUCTS, INC.	8.35	12.04
VON DUPRIN DIVISION / INGERSOLL-RAND CO.	0.98	11.86

ALUMINUM FINISHING CORP.		11.01
MONSEY PRODUCTS		11.00
WHITE ARTS INC.	0.07	10.22
DESIGN PRINTING CO., INC.		10.12
IPALCO - PERRY K	2,664.88	9.53
OGDEN MARTIN SYSTEMS OF INDIANAPOLIS	1,693.00	8.40
ALLISON ENGINE COMPANY, INC. - PLANT 8	139.40	7.97
INDIANA VENEERS	134.12	7.66
CITIZENS GAS & COKE UTILITY - LNG SOUTH	206.40	6.14
BRIDGEPORT BRASS D/B/A OLIN BRASS	74.31	4.12
REILLY INDUSTRIES INC	116.93	3.39
NATIONAL STARCH & CHEMICAL CORPORATION	202.06	3.28
CITIZEN GAS-COKE UTILITY	25.00	0.57
REILLY INDUSTRIES INC	32.42	0.32
DOA FT. BENJ HARRISON	16.51	0.31
DOW ELANCO	13.44	0.27
MILESTONE CONTRACTORS,L.P.	52.60	0.27
QUAKER OATS COMPANY	13.23	0.26
CENTRAL STATE HOSPITAL	10.43	0.23
COMMUNITY HOSPITAL EAST	36.86	0.11
MILESTONE CONTRACTORS, L.P.	10.87	0.03
QUEMETCO, INC.	193.13	

Morgan County

strFacilityName	NOx	VOC
HARMON-MOTIVE, INC.		67.00
TUSCARORA INCORPORATED	2.83	65.48
IPALCO-PRITCHARD STATION	1,757.97	13.20
GENERAL SHALE PRODUCTS	142.17	5.88
HYDRAULIC PRESS BRICK CO.	102.16	4.59

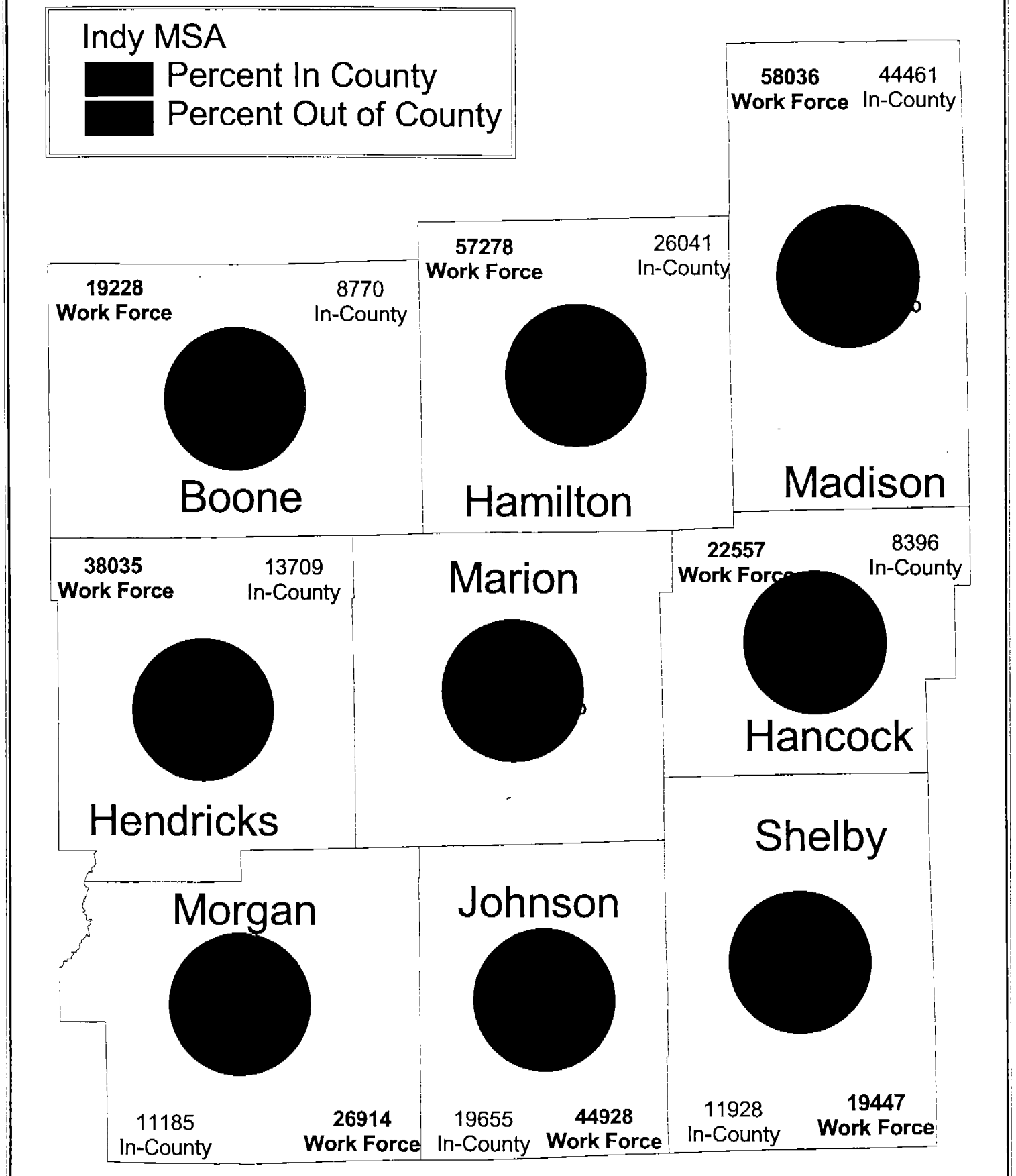
Shelby County

strFacilityName	NOx	VOC
GENCORP INC	3.07	154.83
CENTRAL SOYA COMPANY, INC.	4.76	142.28
ANR PIPELINE COMPANY	3,959.60	110.99
CALDWEELL GRAVEL SALES, INC.		99.00
KCL CORPORATION		66.37
RANDALL COMPANY - DIVISION OF TEXTRON	3.36	65.74
KNAUF FIBERGLASS	113.22	60.66
FREUDENBERG - NOK		44.61
PK USA, INC.	2.40	39.40
LIBBEY OWENS FORD CO.	6.81	37.22
VTI OF INDIANA, INC.		36.89

Indianapolis MSA Population Growth Forecast

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Boone	38,147	42,985	4,838	13%	45,300	2,315	5%	50,906	7,921	18%
Hamilton	108,936	154,785	45,849	42%	176,037	21,252	14%	227,506	72,721	47%
Hancock	45,527	53,071	7,544	17%	56,761	3,690	7%	65,698	12,627	24%
Hendricks	75,717	92,291	16,574	22%	101,429	9,138	10%	123,561	31,270	34%
Johnson	88,109	106,888	18,779	21%	115,515	8,627	8%	136,408	29,520	28%
Madison	130,669	131,840	1,171	1%	132,533	693	1%	134,210	2,370	2%
Marion	797,159	813,670	16,511	2%	823,173	9,503	1%	846,190	32,520	4%
Morgan	55,920	64,787	8,867	16%	69,734	4,947	8%	81,716	16,929	26%
Shelby	40,307	43,151	2,844	7%	44,674	1,523	4%	48,363	5,212	12%

County Work Force Distribution



Indy MSA Road and Population Data

Daily Peak Vehicle Volume

10 - 610

611 - 1409

1410 - 2834

2835 - 5188

5189 - 8539

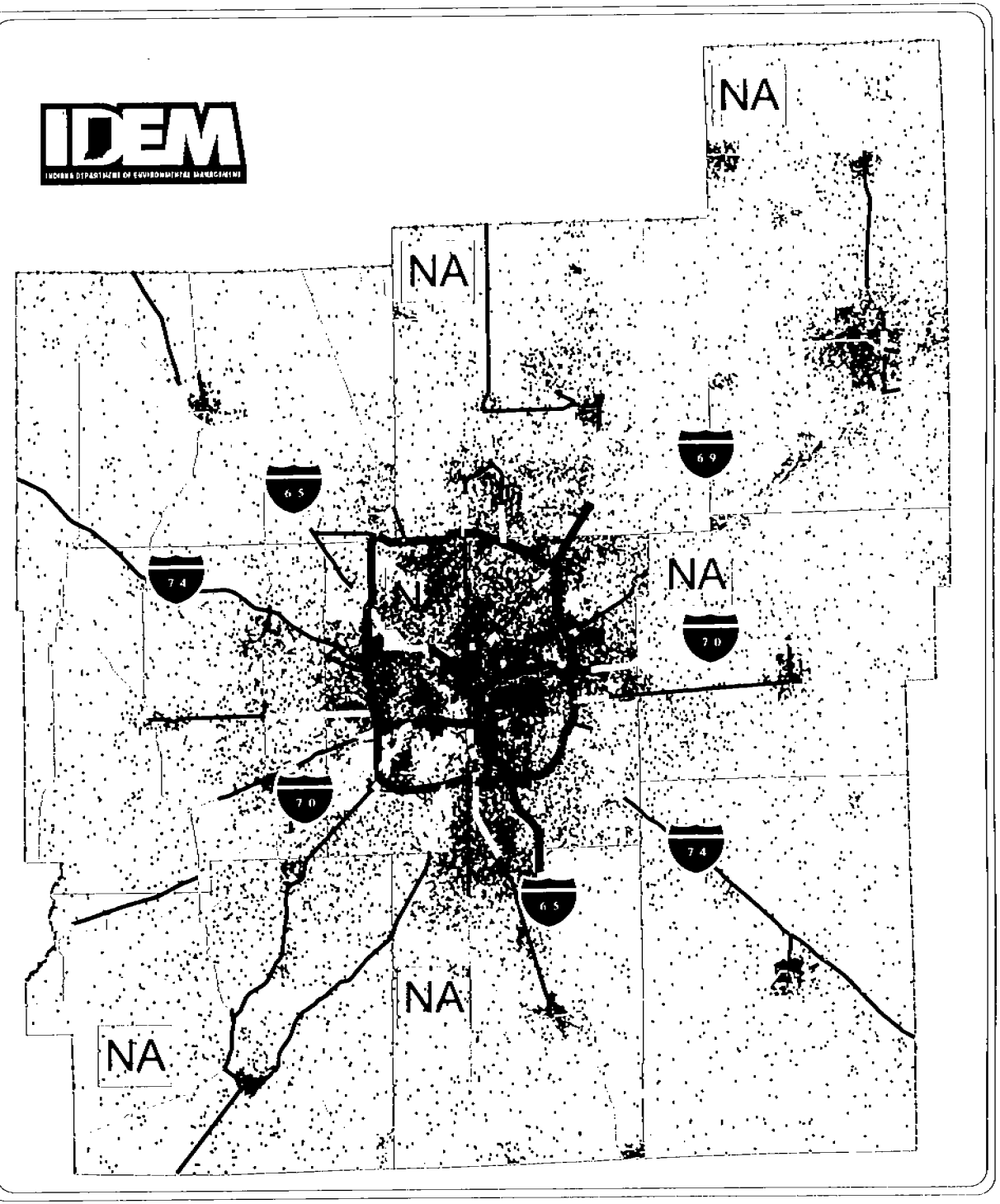
1990 Population Density

1 Dot = 50

N

W E

S



Louisville MSA

Louisville CMSA:

Counties within the CMSA:

Clark, Floyd, Harrison, and Scott.

Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
Clark	Charlestown	0.096
Floyd	New Albany	0.092

Designation Relative to US EPA Guidance:

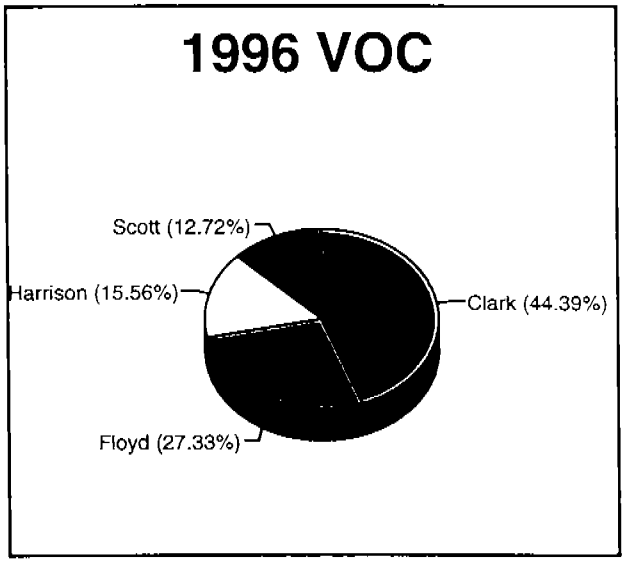
County	Designation
Clark	Nonattainment
Floyd	Nonattainment
Harrison	Attainment
Scott	Attainment

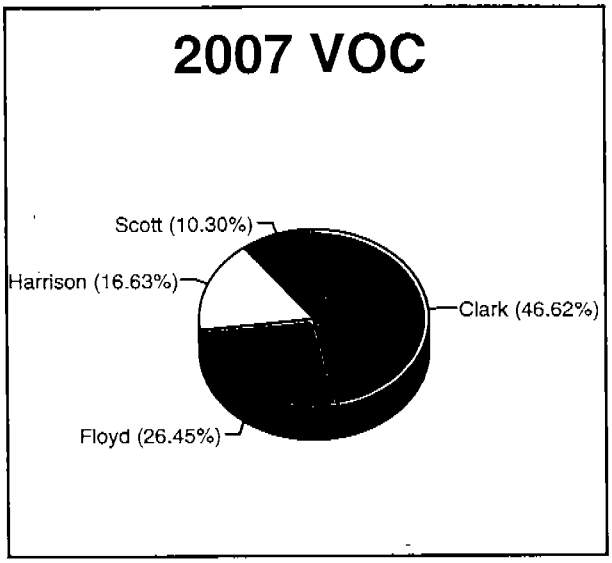
Analysis:

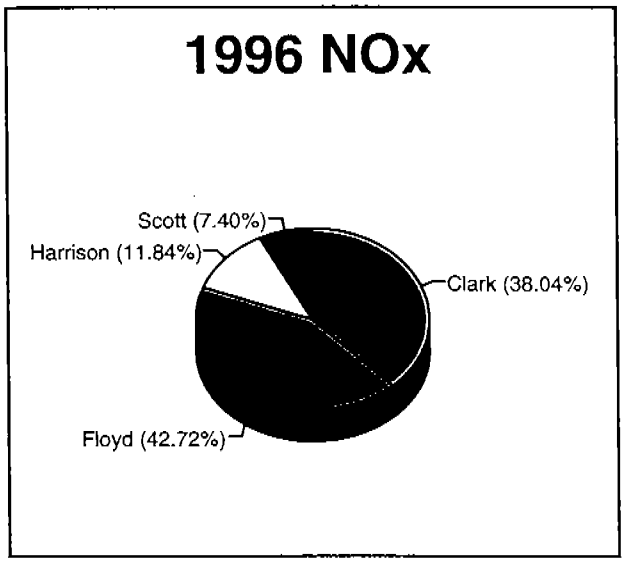
Clark and Floyd Counties each have a monitor with an average fourth highest ozone value, over the 3-year period, above the standard. While monitors are not currently located in Harrison and Scott Counties, both are predominately rural with low to moderate population density. Clark and Floyd Counties account for 71% of the area's overall VOC emissions and 81% of the area's NOx emissions. No major stationary sources are located in Harrison or Scott Counties. Scott County in particular maintains a high in-county workforce employment rate at 60% indicating that there is not much commuting occurring between Scott County and the remainder of the CMSA.

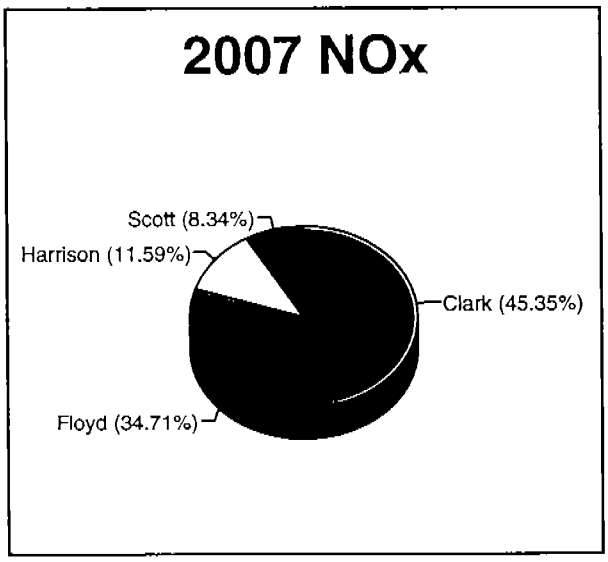
Clark and Floyd Counties were designated nonattainment under the one-hour ozone standard in 1991. Harrison and Scott Counties were excluded from previous nonattainment designations, and relative economic growth in Harrison and Scott Counties has not been significant.

Total Annual Emissions By County









	1996 VOC	% Of MSA	2007 VOC	% of MSA	1996 NOx	% of MSA	2007 NOx	% of MSA
Clark	7,814	44%	2,635	47%	8,966	38%	3,192	45%
Floyd	4,810	27%	1,495	26%	10,070	43%	2,443	35%
Harrison	2,739	16%	940	17%	2,791	12%	816	12%
Scott	2,239	13%	582	10%	1,745	7%	587	8%
	17,602	100%	**5,652**	100%	**23,572**	100%	**7,038**	100%

POINT SOURCES WITHIN THE ANALYSIS AREA

Annual Emissions In Tons As of 1996

Minimum 10 Tons VOC or NOx Per Year

First Sorted by VOC

Clark County

strFacilityName	NOx	VOC
KITCHEN KOMPACT INC		471.90
KIMBALL OFFICE FURNITURE- KIMBALL INTL	2.86	185.09
JEFFBOAT	2.15	167.98
HAAS CABINET CO		156.16
PROFILE EXTRUSION CO.		54.38
SELLERSBURG STONE COMP.	16.80	28.58
RHODES, INC.	6.30	17.90
ASHLAND PETROLEUM CO.		13.85
HILLERICH & BRADSBY	1.75	13.24
ESSROC MATERIALS	4,271.14	12.05
PHILADELPHIA QUARTZ	93.70	2.84
COLGATE-PALMOLIVE	16.17	0.68
APOLLO AMERICA CORP.	12.32	0.41

Floyd County

strFacilityName	NOx	VOC
FOAM FABRICATORS, LTD.	2.73	84.40
CRAIN INDUSTRIES, INC.		63.70
FLINT INK CORP.		55.72
PSI ENERGY - GALLAGHER	6,999.88	34.96
CAMEO MARBLE	0.25	19.41
CAMEO MARBLE	0.25	15.89
A. F. WOLKE PAINT COMPANY		12.85
RAUCH REHABILITATION & DEV. SERVICES		12.24
PRODUCT SPECIALTIES		11.98
FIRE KING INTERNATIONAL INC.		11.15
HITACHI CABLE INDIANA, INC.	12.67	0.28

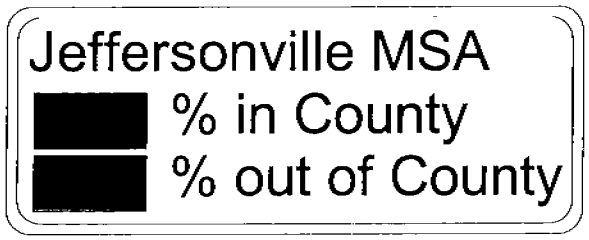
Scott County

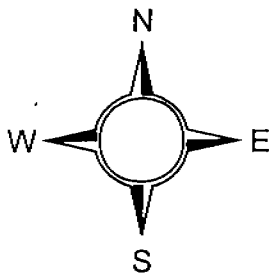
strFacilityName	NOx	VOC
MULTI-COLOR CORP.	2.60	64.35
MORGAN FOODS, INC.	21.28	0.46

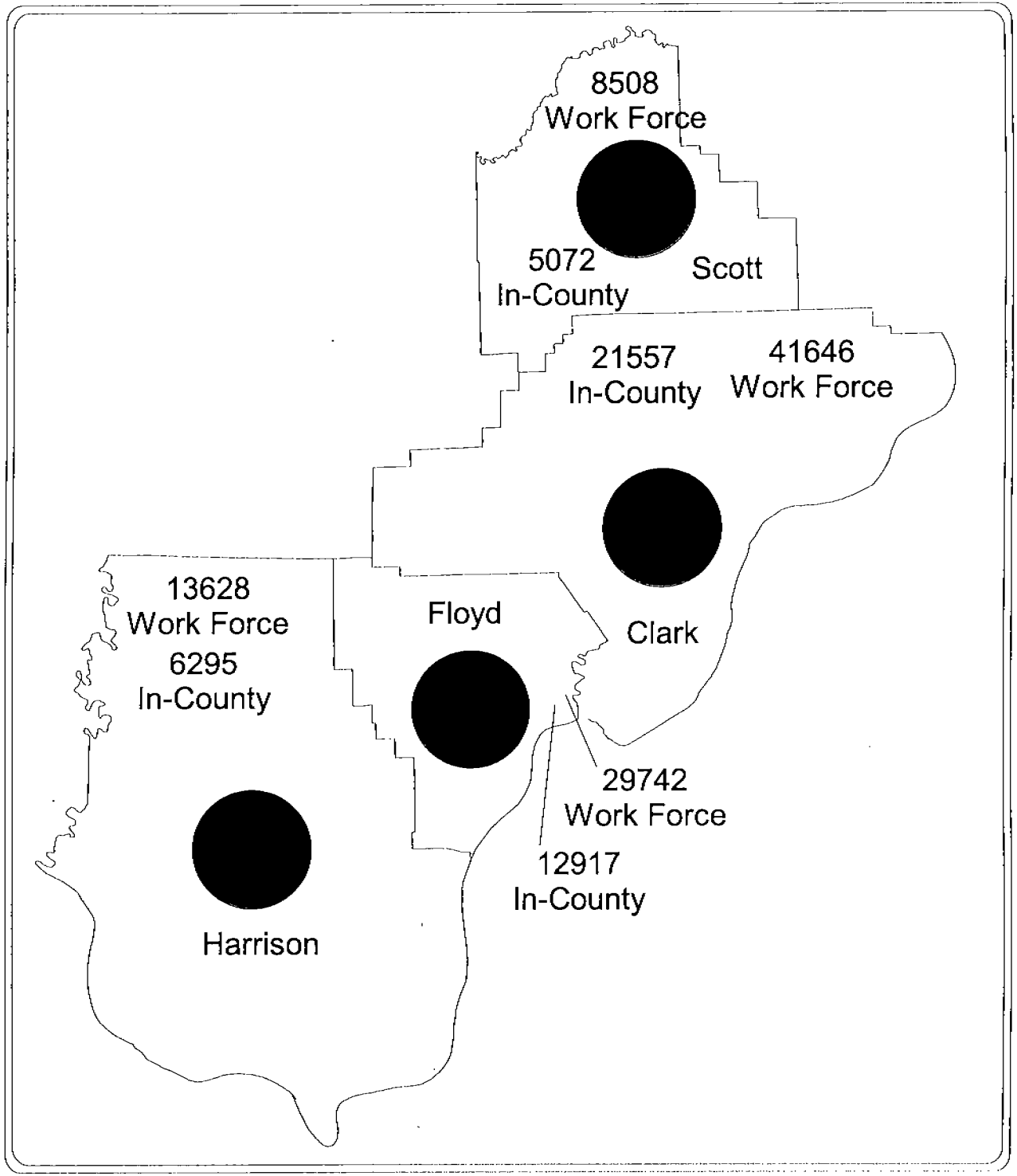
Clark & Floyd Area Population Growth

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Clark	87,774	93,212	5,438	6%	96,748	3,536	4%	105,311	12,099	13%
Floyd	64,404	71,465	7,061	11%	74,802	3,337	5%	82,883	11,418	16%
Harrison	29,890	33,999	4,109	14%	36,430	2,431	7%	42,317	8,318	24%
Scott	20,991	22,818	1,827	9%	23,672	854	4%	25,739	2,921	13%

County Work Force Distribution







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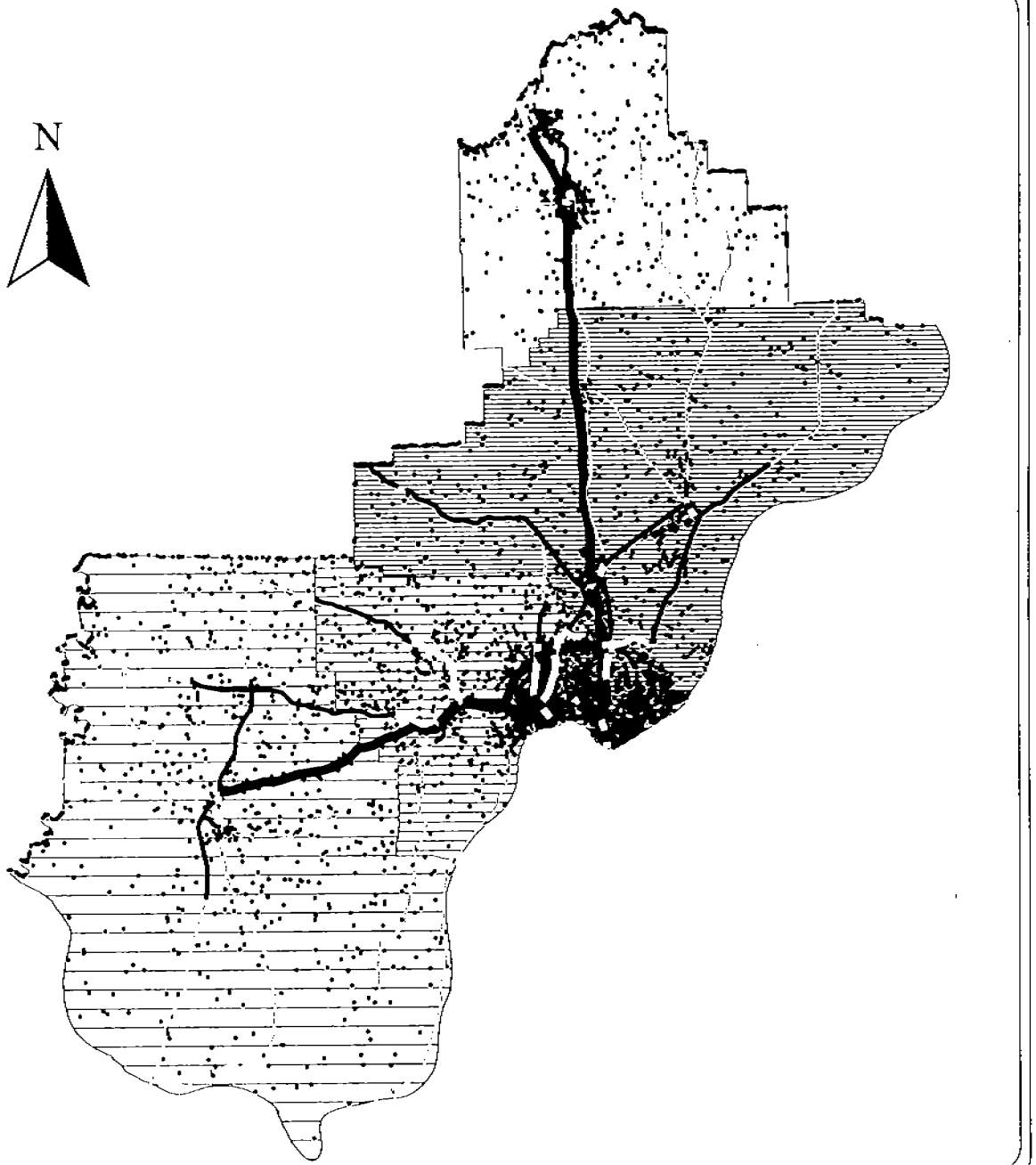
Jeffersonville MSA Road and Population Data



Daily Peak Vehicle Volume
- 1 - 269
- 270 - 621
- 622 - 1187
- 1188 - 1862
- 1863 - 4193

1990 Population Density
- 1 Dot = 50

Population Growth (1997-2020)
- 2921
- 2921 - 8318
- 8318 - 11418
- 11418 - 12099

IDEM

Northwest Indiana

Northwest Indiana:

Counties within the CMSA:
Lake and Porter.

Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
Lake	Gary IITRI	0.09
Lake	Hammond	0.091
Porter	Ogden Dunes	0.093

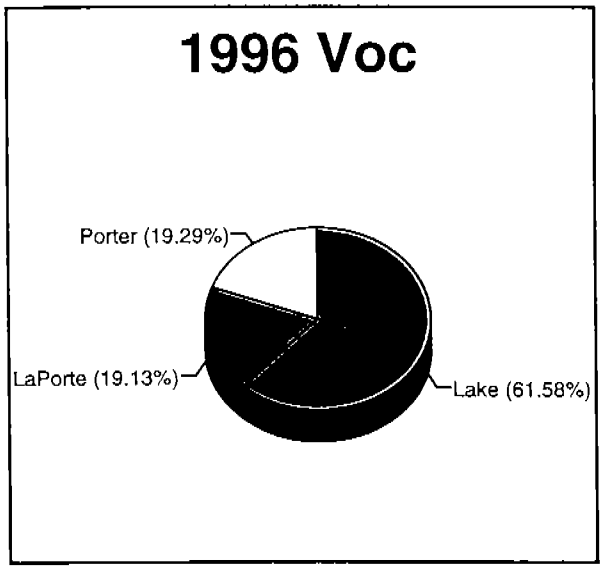
Designation Relative to US EPA Guidance:

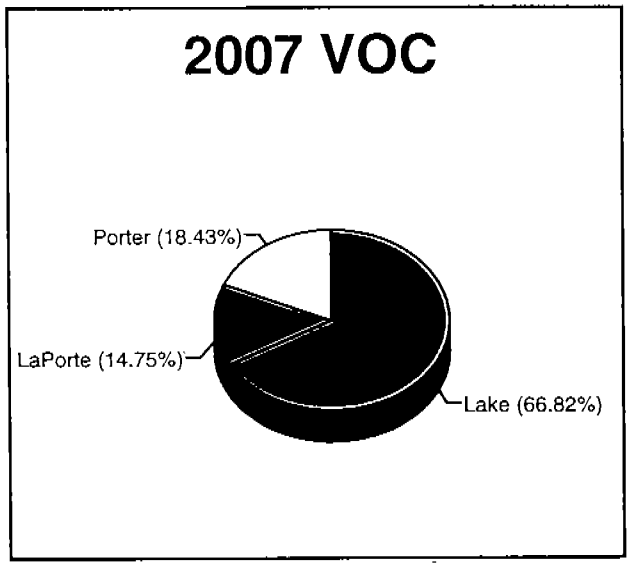
County	Designation
Lake	Nonattainment
Porter	Nonattainment

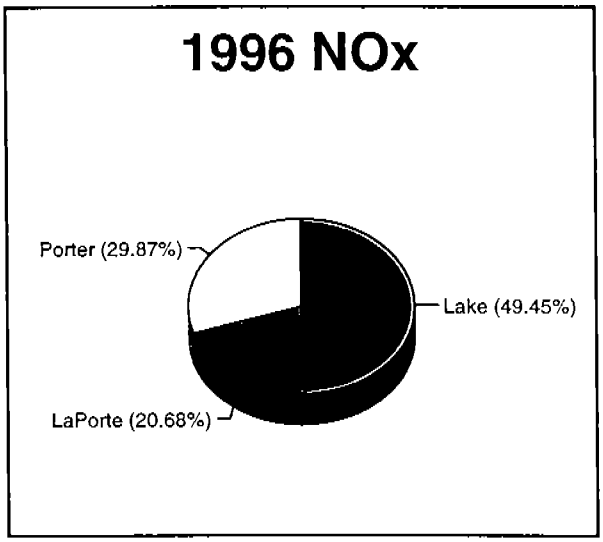
Analysis:

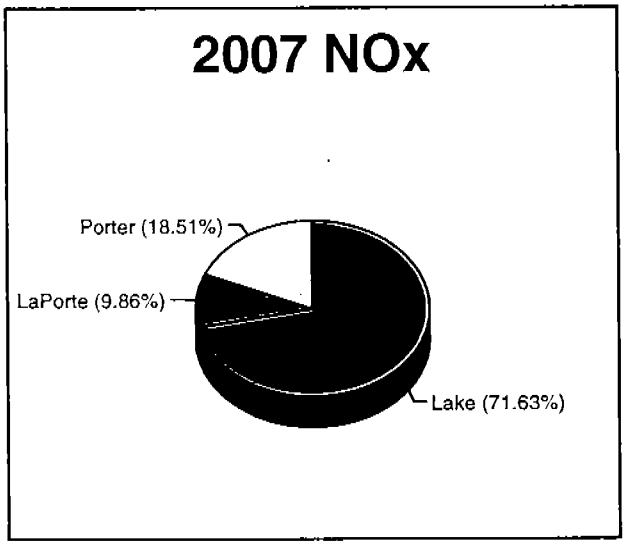
Lake and Porter Counties each have a monitor with an average fourth highest ozone value, over the 3-year period, above the standard. Lake and Porter Counties comprise the Indiana portion of the greater Chicago CMSA.

Total Annual Emissions By County









	1996 VOC	% Of MSA	2007 VOC	% of MSA	1996 NOx	% of MSA	2007 NOx	% of MSA
Lake	15,106	62%	15,990	67%	30,584	49%	33,071	72%
LaPorte	4,693	19%	3,530	15%	12,791	21%	4,554	10%
Porter	4,731	19%	4,410	18%	18,475	30%	8,545	19%
	24,530	100%	**23,931**	100%	**61,850**	100%	**46,170**	100%

POINT SOURCES WITHIN THE ANALYSIS AREA

Annual Emissions In Tons As of 1996

Minimum 10 Tons VOC or NOx Per Year

First Sorted by VOC

Lake County

strFacilityName	NOx	VOC
U S STEEL CO GARY WORKS	7,622.80	3,828.67
INLAND STEEL COMPANY	14,896.70	1,873.68
AMOCO OIL COMPANY, WHITING REFINERY	7,984.96	1,087.44
AMERICAN MAIZE PRODUCTS COMPANY	591.71	768.15
LTV STEEL COMPANY	4,469.55	303.03
AMERICAN STEEL FOUNDRIES	39.06	230.88
CITGO PETROLEUM CORP		227.46
SILGAN CONTAINERS CORP	16.97	173.20
ANR PIPELINE NAT GAS_CO-ST. JOHN STATION	945.93	93.50
UNION TANK CAR COMPANY - PLANT #1	18.37	92.46
KEIL CHEM -FERRO CO	17.03	92.46
MARATHON PIPELINE-GRIFFITH STATION		78.50
PHILLIPS PIPELINE		71.56
MARATHON OIL COMPANY, HAMMOND TERMINAL		55.90
GEN AMER TRANS CORP #2	7.90	51.00
MOBIL OIL CORP	0.05	48.53
MOBIL OIL-TANK FARM		37.82
SHELL OIL COMPANY		36.89
NIPSCO-DEAN H MITCHELL STATION - GARY	3,708.19	32.99
AMOCO OIL CO - HAMMOND TANK FARM		31.02
LAKEHEAD PIPE LINE CO. INC.		23.20
DAVIES IMPERIAL COATINGS, INC.		21.27
DANA TRANSPORT	0.30	21.17
EXPLORER PIPELINE COMP.		20.35
WHEELING CORRUGATING COMPANY GARY PLANT	2.65	19.57
CLARK REFINING & MARKETING, INC.		19.12
GLOBE INDUSTRIES INC	14.63	18.40
COMMONWEALTH EDISON	5,448.05	18.15
NORTHERN INDIANA DOCK CO.	1.50	16.50
AMERICAN STEEL FOUNDRIES	4.55	14.36
AVERY DENNISON MFD	12.32	14.23
STANRAIL CORP.		13.99
GLOBE BUILDING MATERIALS		12.41
AMOCO OIL CO. WHITING TERMINAL		10.12
RHONE-POULENC BASIC CHEMICALS CO	45.36	7.42
MARBLEHEAD LIME CO.	862.34	5.64
AVERY DENNISON-DECORATIVE FILM DIVISION	8.26	5.42
TERMINALS INC. - WOLF LAKE	1.45	5.09
JUPITER ALUMINUM CORPORATION	62.98	4.91
SAFETY-KLEEN OIL RECOVERY CO.,INC.	85.12	2.21
LEVER BROTHERS COMPANY	48.94	1.53
UNITED STATES GYPSUM COMPANY	49.20	0.86
GEORGIA PACIFIC	14.70	0.78
E I DUPONT	30.57	0.73
LEHIGH PORTLAND CEMENT CO	87.05	0.62
GARY COAL PROCESSING	16.20	0.53
PRAXAIR, INC.	24.61	0.48

Porter County

strFacilityName	NOx	VOC
BETHLEHEM STEEL CORP.	8,185.52	829.89
ENAMEL PRODUCTS AND PLATING CO.	3.79	222.59
UNITED STATES CAN COMPANY	14.90	209.45
AMERICAN NATIONAL CAN COMPANY		42.20
NIPSCO - BAILLY	22,546.95	26.55
NATIONAL STEEL CORP	694.04	17.15
ALPHA/OWENS-CORNING	17.81	12.99
WHEELER RECYCLING AND DISPOSAL FACILITY	13.07	12.60
BETA STEEL CORP.	28.16	3.31
MAGNETICS INTERNATIONAL, INC.	41.08	0.64
AIR PRODUCTS AND CHEMICALS, INC	13.05	0.27

LaPorte County

strFacilityName	NOx	VOC
SILIGAN CONTAINERS CORP.	43.12	264.59
ROLL COATER INC.	35.95	255.38
TELEDYNE CASTING SERVICE	7.48	193.93
WEISS PRESTAINING INC.	0.40	97.02
NIPSCO - MICHIGAN CITY	18,498.47	79.90
WEIL MCLAIN, A UNITED DOMINION COMPANY	9.96	63.81
HOLSUM FT. WAYNE, INC.	0.85	63.40
KINGSBURY CASTINGS DIVISION	5.68	57.23
MODINE MANUFACTURING COMPANY		45.00
PALTIER, DIV/LYON METAL PRODUCTS, INC.		37.51
AMPCOR II, INC.		32.75
DWYER PRODUCTS CORP		26.18
SULLAIR CORP BLDG. 1	8.91	17.45
THE NEW YORK BLOWER COMPANY		15.57
CRITERION CATALYST COMPANY L.P.	193.06	1.03
WESTVILLE CORRECTIONAL CENTER	68.35	0.50
INDIANA STATE PRISON	49.02	0.09

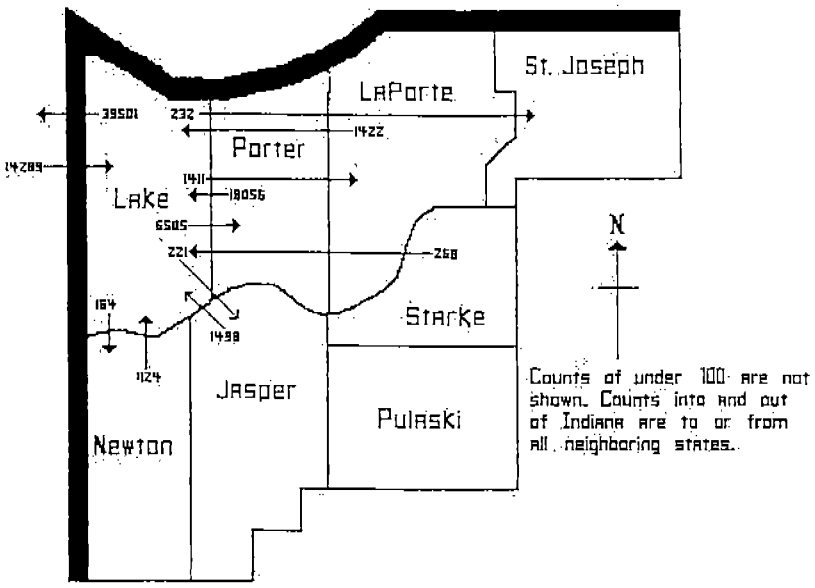
NW Indiana Area Population Growth

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Lake	475594	479339	3745	0.79%	486308	6969	1.45%	503185	23846	4.97%
LaPorte	107066	109080	2014	1.88%	110289	1209	1.11%	113217	4137	3.79%
Porter	128932	144084	15152	11.75%	151509	7425	5.15%	169493	25409	17.63%

Lake County Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	199,700	100.0%
Worked in County of residence	150,858	75.5%
Worked out of County of residence	48,842	24.5%
Worked in Indiana-out of County of residence	9,341	4.7%
Worked out of Indiana	39,501	19.8%



Last Updated: January 10, 1997

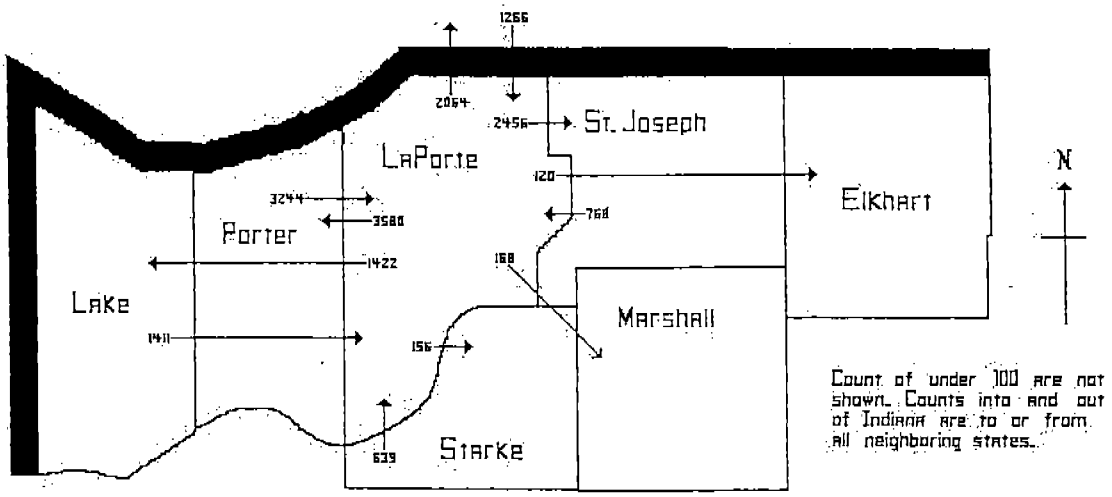
Analyst/Contact: Lillian Miles (219) 981-1520

Source: Indiana Dept. of Workforce Development, Labor Market Information

LaPorte County Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	47,358	100.0%
Worked in County of residence	36,971	78.1%
Worked out of County of residence	10,357	21.9%
Worked in Indiana-out of County of residence	8,293	17.5%
Worked out of Indiana	2,064	4.4%



Last Updated: January 10, 1997

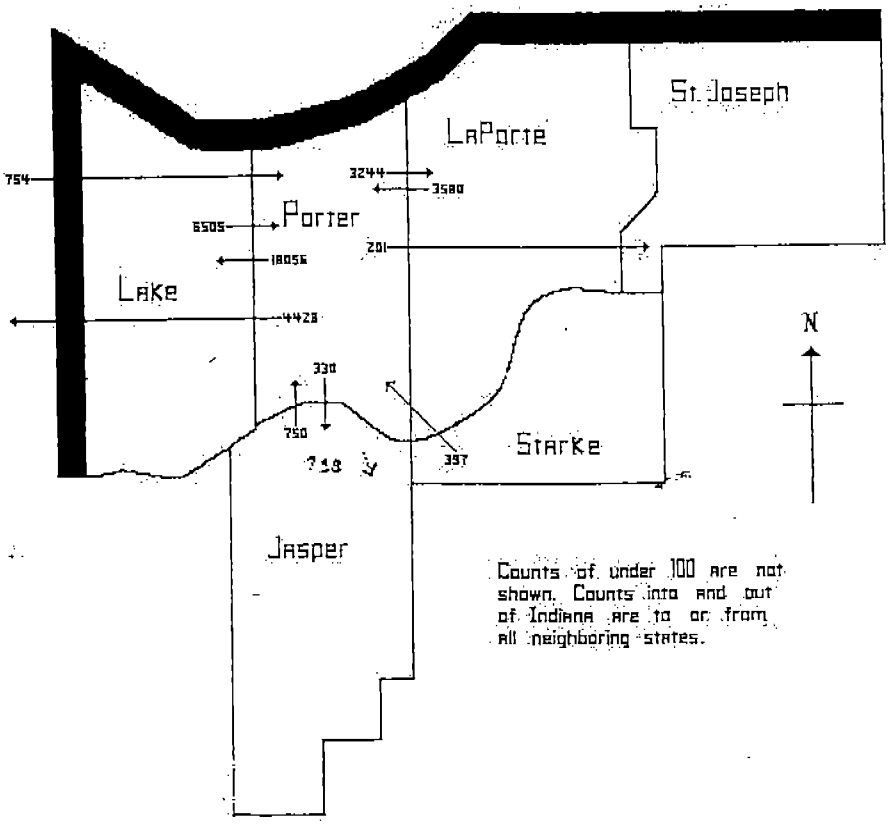
Analyst/Contact: Bruce Bendull (219) 762-2705

Source: Indiana Dept. of Workforce Development, Labor Market Information

Porter County Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	60,571	100.0%
Worked in County of residence	33,913	56.0%
Worked out of County of residence	26,658	44.0%
Worked in Indiana-out of County of residence	22,230	36.7%
Worked out of Indiana	4,428	7.3%



Last Updated: January 10, 1997

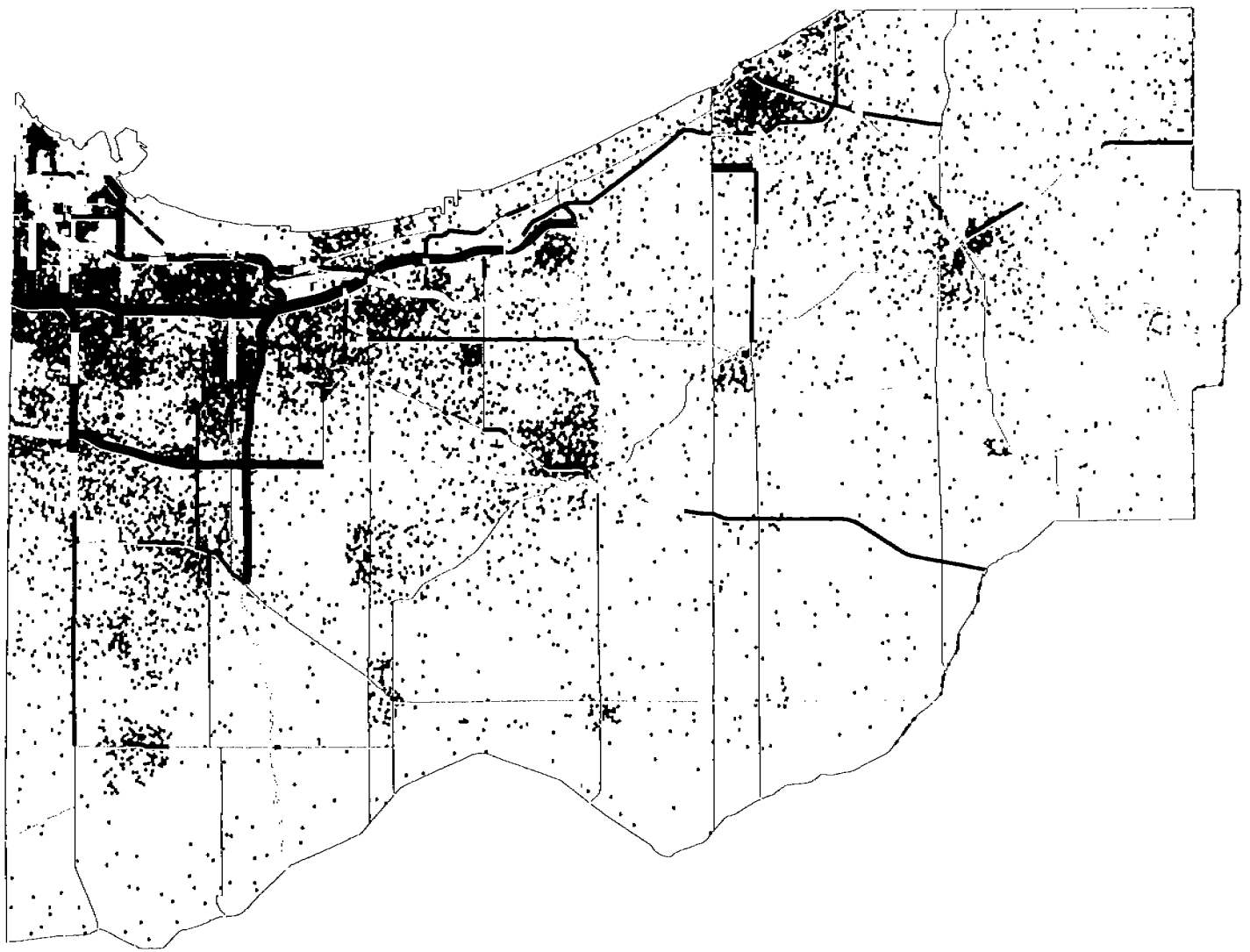
Analyst/Contact: Bruce Bendull (219) 762-2705

Source: Indiana Dept. of Workforce Development, Labor Market Information

Lake, Porter and LaPorte Counties Road Data

Daily Vehicle Miles Peak
16 - 472
473 - 895
896 - 1459
1460 - 2404
2405 - 7067
Population Distribution (1990)
1 Dot = 50

N



IDEM
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Elkhart and South Bend MSAs

South Bend/Elkhart/Goshen:

Counties within the MSAs:

Elkhart MSA:	Elkhart County
South Bend MSA:	St. Joseph County

Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
Elkhart	Bristol	0.082
St. Joseph	Granger	0.091
St. Joseph	Potato Creek	0.087
St. Joseph	South Bend	0.089

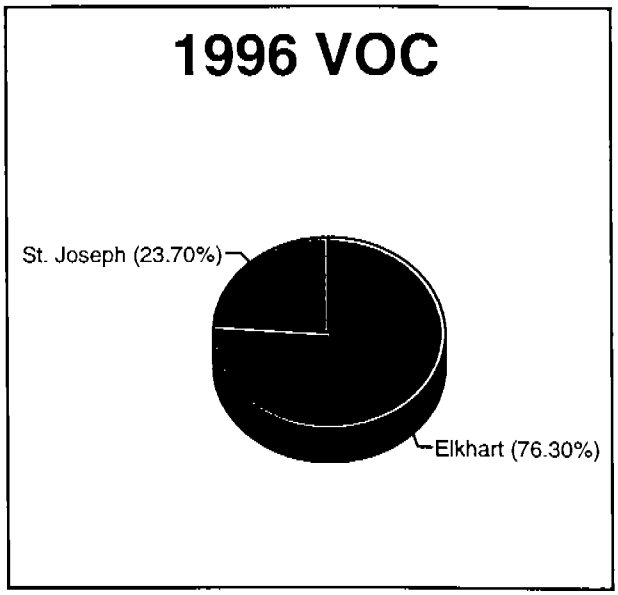
Designation Relative to US EPA Guidance:

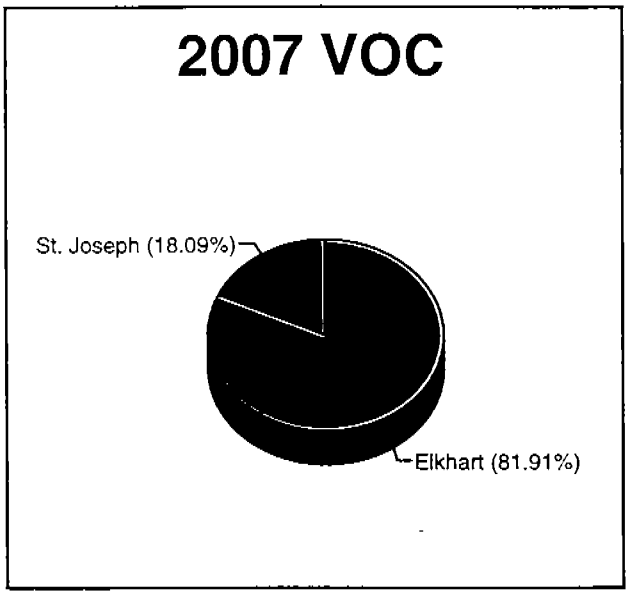
County	Designation
Elkhart	Nonattainment
St. Joseph	Nonattainment

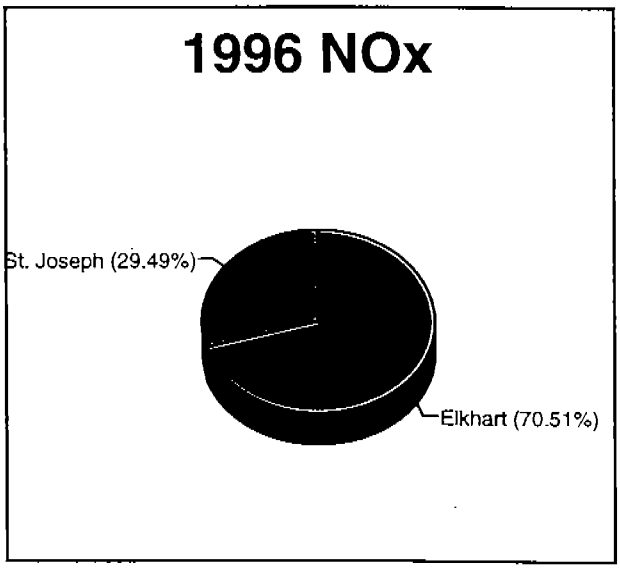
Analysis:

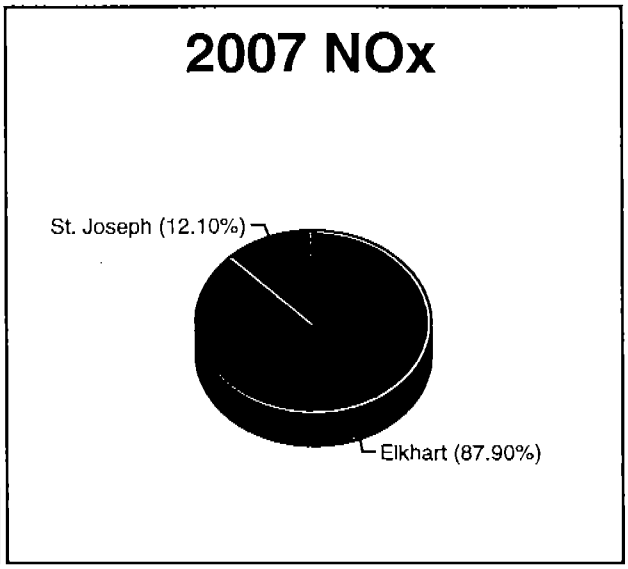
All three monitors in St. Joseph County have an average fourth highest ozone value, over the 3-year period, above the standard. Elkhart County accounts for the vast majority of the region's NO_x and VOC emissions inventories. An equal amount of traffic volume and congestion occurs in St. Joseph and Elkhart Counties. Elkhart County's growth rate is twice that of St. Joseph County. St. Joseph and Elkhart Counties are under the jurisdiction of a single Metropolitan Planning Organization and are within the same Transportation Management Area. St. Joseph and Elkhart Counties were designated as one nonattainment area in 1991, and maintenance area in 1994 under the 1-hour ozone standard. In addition, there is a monitor in Cassopolis, Michigan, just north of the South Bend and Elkhart MSAs that maintains an ozone value above the standard.

Total Annual Emissions By County









	1996 VOC	2007 VOC	# Change	% Change	1996 NOx	2007 NOx	# Change	% Change
Elkhart	15,106	15,990	884	6%	30,584	33,071	2,487	8%
St. Joseph	4,693	3,530	(1,162)	-25%	12,791	4,554	(8,237)	-64%
	24,530	**23,931**	(599)	-2%	**61,850**	**46,170**	(15,680)	-25%

POINT SOURCES WITHIN THE ANALYSIS AREA

Annual Emissions In Tons As of 1996

Minimum 10 Tons VOC or NOx Per Year

First Sorted by VOC

Elkhart County

strFacilityName	NOx	VOC
E.R. CARPENTER	2.79	323.09
FLEXIBLE FOAM PRODUCTS, INC.		300.42
HOME-CREST CORPORATION	2.92	198.86
ACCRA PAC, INC.	6.95	186.10
NEWMAR CORP.	1.55	180.22
MIDDLEBURY HARDWOOD PRODUCTS		158.50
FABWEL COMPOSITES	1.10	152.46
20TH CENTURY FIBERGLASS, INC.		148.85
ACCRA PAC, INC.	6.95	136.64
STARCRAFT AUTOMOTIVE	2.30	125.81
CANA INTERNATIONAL		123.00
SELMER COMPANY,INC., VINCENT BACH DIV.		118.70
BECK INDUSTRIES	0.50	114.03
SUPREME CORPORATION	1.35	110.93
SMOKER-CRAFT INC	1.40	107.91
JAYCO, INC.		105.00
HOLIDAY RAMBLER CORP		103.58
HOLIDAY RAMBLER CORP PLANT 1		96.55
MILLENNIUM PRODUCTS, INC		88.27
COMMODORE HOMES		87.09
VENTURE WELDING	0.65	86.74
VIKING FORMED PRODUCTS		81.43
D & W INC.		80.00
EFP CORP.	4.95	75.18
PATRICK INDUSTRIES		74.00
BAYER CORPORATION	265.05	72.32
NIBLOCK EXCAVATING	3.42	70.50
RICHARD C MYNSBERGE DBA COPPES CABINETS		69.27
COACHMEN RECREATIONAL VEHICLE COMPANY		69.15
GLOBAL GLASS, INC.	0.05	67.00
FAIRMONT HOMES, INC.		66.70
WARRICK INDUSTRIES, INC.	0.05	66.00
DOORS PLUS, IN.	0.20	65.47
ADORN INCORPORATED	0.20	60.56
GLAVAL CORPORATION, PLANT #1		59.84
MONACO COACH CORPORATION		52.39
MASTER FAB INC.	0.52	51.73
STOW DAVIS FURNITURE, INC.	0.80	48.79
KUSTOM WOODWORKING		48.38
TRUCK ACCESSORY GROUP, INC.		48.02
COVERMASTER, INC.		45.03
FINISHING UNLIMITED		44.64
GULF STREAM COACH, INC.		44.58
BETTER WAY PRODUCTS, INC.		42.00
RANCH FIBERGLAS, INC.		39.43
CRA-GEN INC D/B/A WOODTEK PLT #2	0.10	37.89
STILES, INC.	0.99	37.03

QUALITY FRAMES, INC	0.20	33.96
GLOBAL GLASS INC.	0.20	33.10
OMEGA INDUATRIES, INC.		33.00
JASON INDUSTRIES, INC.		31.74
ET & T FRAMES, INC.	0.25	31.09
COACHMEN VANS	1.10	31.06
WELLS CARGO, INC.		31.00
WEE SHAPE FRAMES & WELDING, INC.	0.15	30.01
HOLIDAY RAMBLER LLC		28.48
SCHULT HOMES CORP- FRAME DIV		27.01
WOODTEK PLT #1	0.05	25.12
JOHNSON CONTROLS, INC.	0.40	25.10
CARRERA DESIGNS - PLANT 1	126.10	24.98
PATRICK METALS ELKHART (ILC PROD CO.)	1.25	24.76
NICKELL MOULDING CO., INC.		24.00
HERR CUSTOM PAINTING	0.05	23.23
BEHLEM MFG CO.		23.00
ABTCO INC		22.00
WALTER PIANO COMPANY, INC.		22.00
FOUR WINDS INTERNATIONAL CORPORATION	0.05	21.79
MCCOY MILLER, INCORPORATED	0.05	21.00
DAMON COPORATION PLANTS 1,2, AND 3 SITE	0.30	20.11
MANCHESTER TANK	3.57	19.23
GASKA TAPE, INC.	1.05	19.06
LITHOTONE	0.20	18.35
MILLER DOOR & TRIM INC		18.29
PATRIOT HOMES INC.		18.00
HERR CUSTOM PAINTING	0.05	17.42
NATIVE HARDWOODS INC.		17.00
CARRERA DESIGNS - PLANT 2	0.15	16.90
FOUR SEASONS HOUSING	0.30	16.16
QUALTIY DESIGNS		16.00
DAMON COPORATION PLANTS 4,6, AND 7 SITE	0.30	15.63
DADON CORP DBA MERHOW INDUSTRIES		15.00
BETTERWAY PRODUCTS		15.00
BAYER CORP.	1.35	14.95
WE VAC PLASTICS CORPORATION	0.05	14.66
VENTURE WELDING-COLLINS RD.	0.10	14.62
DEXTER RIM AND WHEEL	1.86	14.06
C & K FIBERGLASS PLASTICS, INC.	0.05	13.92
SUNNYBROOK RV, INC.		13.67
DAMON CORPORATION PLANT 9		13.22
PHILIPS PRODUCTS/VENTLINE DIV	1.40	13.07
HERITAGE FURNITURE INC.		13.00
BROOKS CONSTRUCTION	3.72	12.84
LCM, INC. (PAINT FACILITY)	0.55	12.80
HEALTH CARE INDUSTRIES	1.15	12.75
CMI - PRECISION MOLD, INC.		12.70
GOSHEN COACH DIVISION OF WARRICK INDUST.		11.00

HAULMARK INDUSTRIES, INC.		11.00
HAULMARK INDUSTRIES, INC.		11.00
PRESTIGIOUS PRINTING	1.35	10.35
PACE AMERICAN, INC.	4.76	10.10
CARRERA DESIGNS - PLANT 3	0.15	10.09
NIBCO, INC.	0.43	10.07
UTILIMASTER CORPORATION		10.04
FOUR SEASONS HOUSING CORPORATION	0.10	10.01
TOMKINS INDUSTRIES INC.(DEXTER AXLE DIV)	1.60	10.00
SHASTA INDUSTRIES		10.00
LEER INC.	1.82	9.72
HOLIDAY RAMBLER DIVISION		9.53
HB FULLER, INC.	0.20	9.49
SUPERIOR LAMINATING, INC.	123.55	9.45

St. Joseph County

strFacilityName	NOx	VOC
ALLIED SIGNAL-AIRCRAFT LANDING SYSTEMS		1,179.01
NEW ENERGY COMPANY OF INDIANA	895.50	1,054.91
UNIROYAL TECHNOLOGY CORP., ENSOLITE DIV.	99.00	193.44
AM GENERAL CORP	1.82	154.53
DODGE-RELIANCE ELECTRIC	8.18	136.47
AM GENERAL CORPORATION		97.70
PREMDOR, INC.	0.17	37.89
PETERSEN GRAPHICS GROUP	0.20	33.70
PENZ PRODUCTS, INC.	0.35	30.10
ALLIED SIGNAL CONTROL & ACCESSORIES		28.00
CITY OF SOUTH BEND-WASTEWATER TREATMENT	101.47	21.85
I/N TEK (CCM PROJECT)	114.37	20.99
AMERICAN ROLLER CO.	1.29	20.06
MOHAWK FLUSH DOORS, INC.		19.17
E.W.I. INC.	919.74	18.46
TOTAL ENTERPRISES, LTD.		17.31
CHARLES O. HILER DIVISION	1.57	14.43
SER OIL SERVICES		13.47
QUALITY CUSTOM BOAT TRAILERS		12.32
UNIV OF NOTRE DAME	1,199.30	3.50
I/N KOTE	72.42	1.72
MEMORIAL HOSPITAL OF SOUTH BEND, IN	28.77	0.58
HOLY CROSS SHARED SERVICES	22.65	0.24

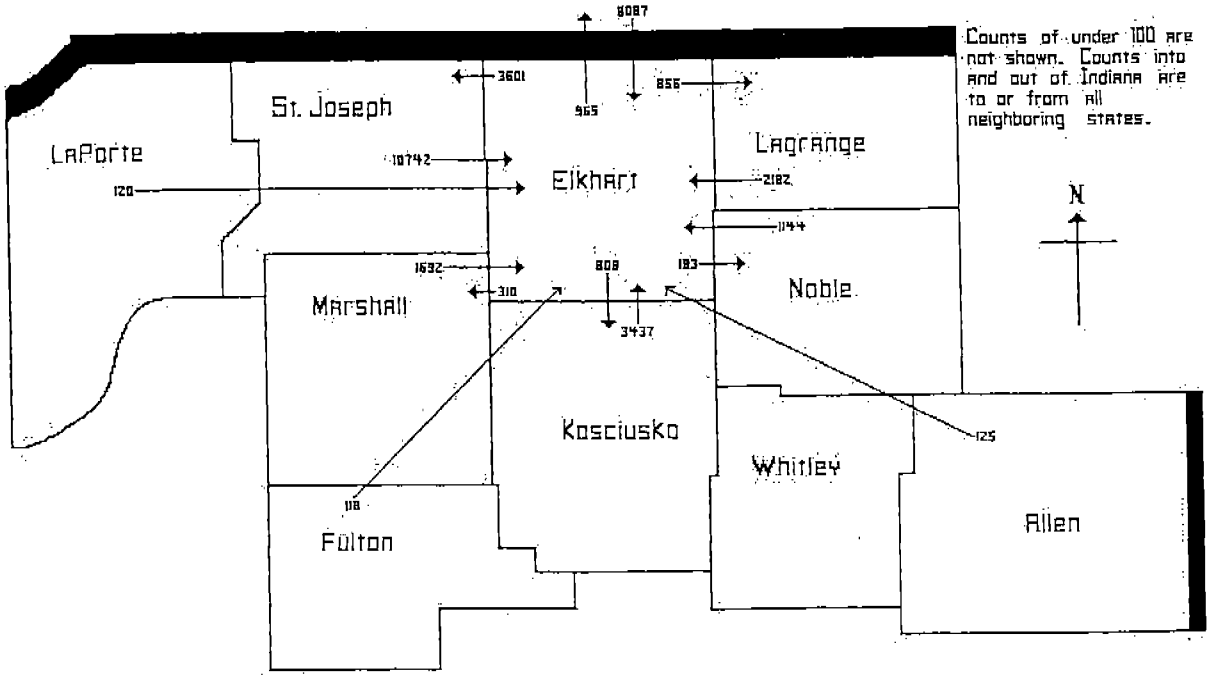
South Bend Area Population Growth

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Elkhart	156,198	170,725	14,527	9.30%	178,299	7,574	4.44%	196,644	25,919	15.18%
St. Joseph	247,052	258,056	11,004	4.45%	263,911	5,855	2.27%	278,093	20,037	7.76%

Elkhart County Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	79,496	100.0%
Worked in County of residence	72,405	91.1%
Worked out of County of residence	7,091	8.9%
Worked in Indiana-out of County of residence	6,126	7.7%
Worked out of Indiana	965	1.2%



Last Updated: January 10, 1997

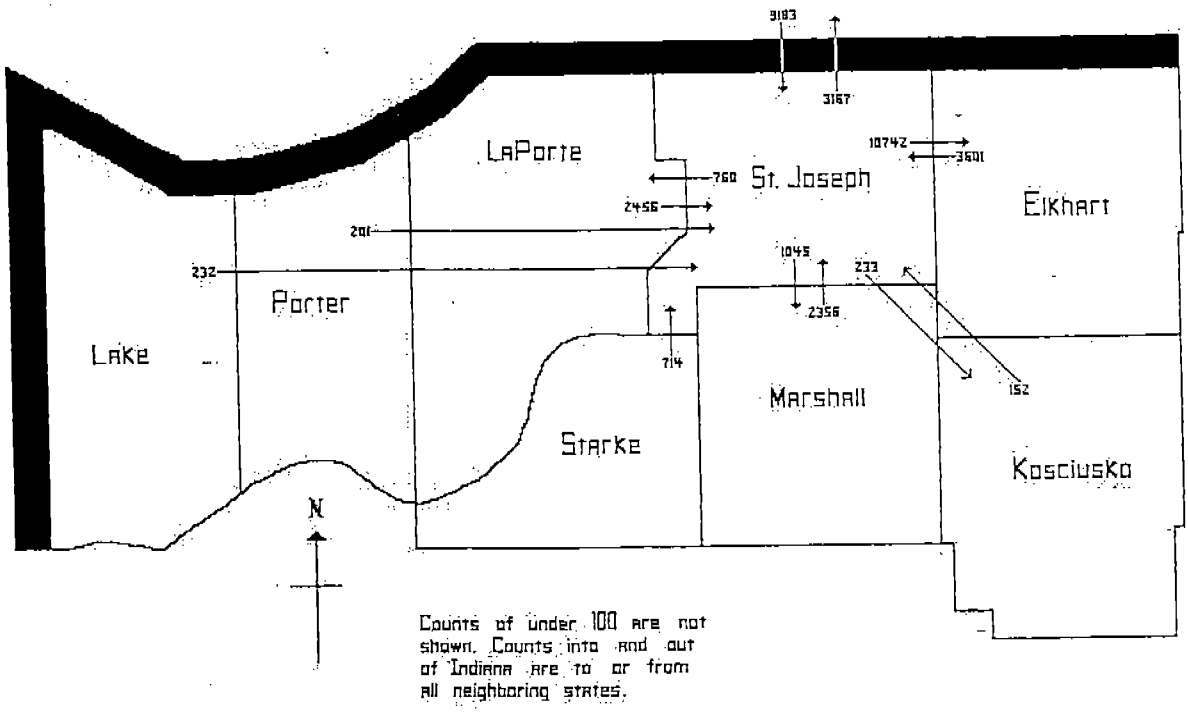
Analyst/Contact: Kathy Zeiger (219) 239-2380

Source: Indiana Dept. of Workforce Development, Labor Market Information

St. Joseph Commuting Patterns

(Based on 1990 U.S. Census)

Total workers 16+	115,613	100.0%
Worked in County of residence	98,792	85.5%
Worked out of County of residence	16,821	14.5%
Worked in Indiana-out of County of residence	13,654	11.8%
Worked out of Indiana	3,167	2.7%



Last Updated: January 10, 1997

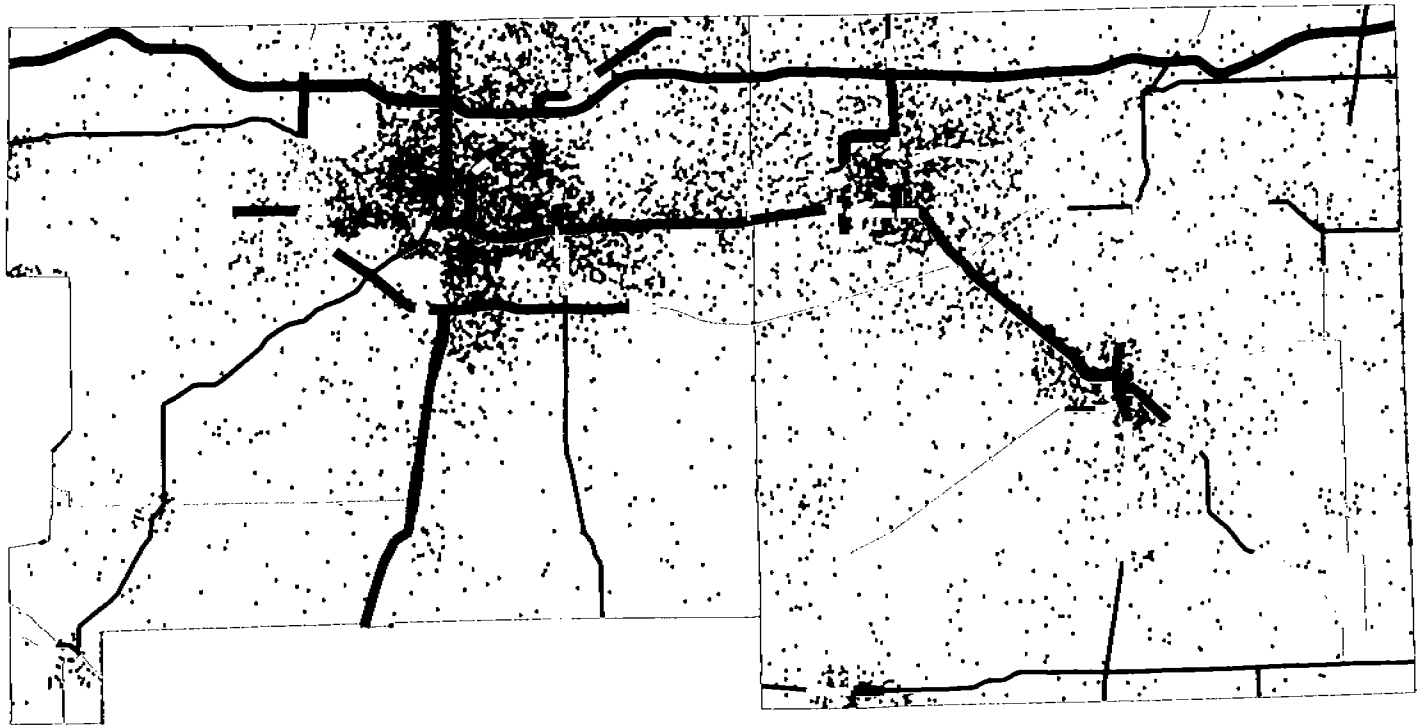
Analyst/Contact: Kathy Zeiger (219) 239-2380

Source: Indiana Dept. of Workforce Development, Labor Market Information

Elkhart and St. Joseph Counties Road Data

Daily Vehicle Miles Peak
- 0 - 215
- 216 - 449
- 450 - 712
- 713 - 1001
- 1002 - 1545

Population Distribution (1990)
- 1 Dot = 50



N

8 0 8 16 24 32 40 Kilometers

IDEM
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Non-Metropolitan Counties Affected

Non-MSA/CMSA Counties:

Counties Affected:

LaPorte
Perry

LaPorte County
Monitor Values (4th highest average value 1997-1999 in parts per million):

COUNTY	MONITOR LOCATION	VALUE
LaPorte	LaPorte	0.088
LaPorte	Michigan City	0.092

Analysis:

The monitoring values for the ozone monitors located within LaPorte County are above the standard.

Option 1

LaPorte County is adjacent to Lake and Porter Counties. Technical analysis demonstrates that LaPorte County is affected by regional transport, and the solution to the area's air quality problem lies in region-wide controls. LaPorte County is served by a Metropolitan Planning Organization that maintains a travel demand model for Lake, Porter, and LaPorte Counties. Therefore, one option is that LaPorte County be designated as part of the Northwest Indiana (Lake and Porter Counties) nonattainment area.

Option 2

LaPorte County is not part of an MSA/CMSA. LaPorte County was excluded from nonattainment designations under the 1-hour ozone standard. Over 78% of the workforce residing in LaPorte County is employed within the county. Lake and Porter Counties will still be affected by the 1-hour ozone standard following 8-hour designations, and could have a different compliance date established. Therefore, the other option is that LaPorte County be designated as an independent nonattainment area.

IDEM will discuss these options with interested persons in the affected region and US EPA and, if necessary, make a recommendation at a later date.

Perry County

The ozone monitor in Perry County has been operational for two ozone seasons. IDEM will defer additional analysis concerning Perry County until the third year of ozone data is available.