

**Common Sense Initiative, Automobile Manufacturing Sector**

*U.S. Automobile Assembly Plants and Their Communities:  
Environmental Economic, and Demographic Profile*

**Part III: Automobile/Light Duty Truck Assembly  
Plant-Community Profiles**

**12. General Motors  
Bowling Green, KY**

**December 1997**

## **Contents and Guidelines for Use**

**Users of this profile should carefully review the description of methods, data limitations, and guidelines for use and interpretation of the data presented in Part I of the report.**

### **Contents:**

Plant Locations (National and Michigan maps)  
Plant Location, Database Identification Numbers, 1994 Production and Employment  
1991 and 1993 RCRA Biennial Report Summary  
1991-1994 TRI Releases and Transfers Summary  
1994 TRI Releases and Transfers by Chemical  
1991-1994 Volatile Organic Compound and Nitrogen Oxide Emissions  
1994 Summary of TRI Chemical Releases and Transfers from Sources within 3 Miles of Assembly Plant  
Air Quality Attainment Status for Criteria Pollutants (as of 1994)  
Community Demographic and Economic Characteristics  
Facility Location (map)  
Area Wide 1994 TRI Emission Profile (map)  
1994 TRI Releases and Transfers from Sources within 3 Miles of Assembly Plant, by Chemical  
Demographic Characteristics (maps)

### **General Guidelines for Use**

Efforts have been made to ensure that the data presented here are accurate. The Project Team could not independently verify data accuracy in all cases, however, and some errors may remain. The following is a partial list of factors that should be considered in using these profiles:

1. Current releases presented in this report represent only some of the contamination sources in a given area. Data on historical releases (prior to 1991) were not included, and releases from non-assembly plant emission sources were identified only through the Toxics Release Inventory (TRI). TRI data do not cover all sources of releases. Considering only TRI data for a given community may mis-state the relative contribution of plants and their neighboring TRI facilities to an area's total releases.
2. Care must be taken to distinguish true changes over time in environmental releases from apparent changes, due, for example, to changes in the scope of reporting requirements.
3. TRI data are often based on engineering estimates and are reported on an annual basis. Data on releases over shorter time frames are not available.
4. TRI, the Biennial Report and other databases do not include all substances and environmental releases of concern.

### **Notes on Comparisons Across Facilities**

1. The following factors can affect an assembly plant's environmental profile, among other things: the number of vehicles produced, plant age, process equipment age, and vehicle size and configuration.
2. Some plants are highly-integrated, performing some parts and all assembly steps in-house. Others obtain parts from other manufacturing facilities, or share assembly operations with another plant.
3. States differ in how they define hazardous waste and how they treat recycled wastes and small quantity generators. Therefore, data on quantities of BRS wastes generated may not be comparable for plants located in different states.
4. Area-wide averages for economic and demographic characteristics may be better or worse measures of the plant's immediate community, depending on the specific location of a plant within the reporting area.

**Plant-Community Profile:  
General Motors  
Bowling Green KY**

12/2/97

<b>LOCATION</b>	Address	600 Corvette Drive, Bowling Green KY 42102	<b>DESCRIPTION</b>	Produced Chevrolet Corvette in 1994.		
	Lat/Long:	latitude (degrees N) 37 0' 33" longitude (degrees W) 86 22' 25"		<b>ID NUMBERS</b>	RCRA ID	KYD 000622993
	County:	Warren MSA: na	AIRS ID		AFS2122700005	
	Other counties within 3 miles of plant:	Warren	NPDES ID	KY0007954		
<b>OPERATIONS</b>		<b>Production</b>	<b>Employment</b>	TRI	42101GNRLMI65US	
	Calendar Year: 1991	21,082				
	1992	20,839				
	1993	22,578				
	1994	25,390	1,051			

**PLANT ENVIRONMENTAL PROFILE**

**RCRA BIENNIAL REPORT**

<i>Waste Code(s)</i>	<i>Wastewater?</i>	<i>Physical Form</i>	<i>Source</i>	<i>Mgd. On/Off-Site</i>	<i>Management Method</i>	<i>Quantity Generated (tons)</i>	<i>Quantity Shipped (tons)</i>	<i>Quantity Mgd. On-Site (tons)</i>
<i>1991</i>								
D001 (ignitable)	N	B201 org. liquids	A99 other processes	Off	M041 incineration	0.0	0.0	0.0
D001 (ignitable)	N	B206 org. liquids	A54 1x/intermittent	Off	M041 incineration	0.5	0.5	0.0
D001 (ignitable)	N	B206 org. liquids	A57 1x/intermittent	Off	M041 incineration	0.3	0.3	0.0
D001 (ignitable)	N	B206 org. liquids	A57 1x/intermittent	Off	M041 incineration	0.2	0.2	0.0
D001 (ignitable)	N	B210 org. liquids	A09 clean out equip	Off	M041 incineration	34.6	34.6	0.0
D001 (ignitable)	N	B210 org. liquids	A29 other surface prep	Off	M041 incineration	3.5	3.5	0.0
D001 (ignitable)	N	B211 org. liquids	A19 other clean/degr.	Off	M041 incineration	0.6	0.6	0.0
D001 (ignitable)	N	B211 org. liquids	A19 other clean/degr.	Off	M041 incineration	0.0	0.0	0.0
D001 (ignitable)	N	B211 org. liquids	A19 other clean/degr.	Off	M041 incineration	0.5	0.5	0.0
D001 (ignitable)	N	B211 org. liquids	A19 other clean/degr.	Off	M041 incineration	0.6	0.6	0.0
D001 (ignitable)	N	B211 org. liquids	A58 1x/intermittent	Off	M041 incineration	0.7	0.7	0.0
D001 (ignitable)	N	B219 org. liquids	A57 1x/intermittent	Off	M041 incineration	0.2	0.2	0.0
D001(ignit) F002 (solvents)	N	B202 org. liquids	A19 other clean/degr.	Off	M041 incineration	0.2	0.2	0.0
D001(ignit) F003 (solvents)	N	B203 org. liquids	A21 painting	Off	M041 incineration	51.3	51.3	0.0
D001(ignit) F003 (solvents)	N	B203 org. liquids	A21 painting	Off	M041 incineration	188.2	188.2	0.0
D002 (corrosive)	Y	B110 inorg. liquids	A03 caustic cleaning	Off	M041 incineration	0.2	0.2	0.0
D002 (corrosive)	N	B306 inorg. solids	A58 1x/intermittent	Off	M043 incineration	0.8	0.8	0.0
D002, D006	N	B309 inorg. solids	A55 1x/intermittent	Off	M013 metals recov.	0.7	0.7	0.0
F002 (halog. solvents)	N	B202 org. liquids	A19 other clean/degr.	Off	M041 incineration	1.2	1.2	0.0
<b>TOTAL - 1991</b>						<b>284.4</b>	<b>284.4</b>	<b>0.0</b>

**Plant-Community Profile:  
General Motors  
Bowling Green KY**

12/2/97

**PLANT ENVIRONMENTAL PROFILE (continued)**

**RCRA BIENNIAL REPORT (continued)**

<i>Waste Code(s)</i> 1993	<i>Wastewater?</i>	<i>Physical Form</i>	<i>Source</i>	<i>Mgd. On/Off-Site</i>	<i>Management Method</i>	<i>Quantity Generated (tons)</i>	<i>Quantity Shipped (tons)</i>	<i>Quantity Mgd. On-Site (tons)</i>
D001 (ignitable)	N	B206 org. liquid	A54 1x/intermittent	Off	M041 incineration	0.2	0.2	0.0
D001 (ignitable)	N	B206 org. liquid	A54 1x/intermittent	Off	M041 incineration	0.9	0.9	0.0
D001 (ignitable)	N	B206 org. liquid	A57 1x/intermittent	Off	M041 incineration	0.3	0.3	0.0
D001 (ignitable)	N	B207 org. liquid	A57 1x/intermittent	Off	M041 incineration	0.2	0.2	0.0
D001 (ignitable)	N	B210 org. liquid	A29 other surface prep	Off	M041 incineration	2.2	2.2	0.0
D001 (ignitable)	N	B210 org. liquid	A29 other surface prep	Off	M041 incineration	0.0	0.0	0.0
D001 (ignitable)	N	B210 org. liquid	A19 other clean/degr.	Off	M041 incineration	1.8	1.8	0.0
D001 (ignitable)	N	B211 org. liquid	A19 other clean/degr.	Off	M041 incineration	0.1	0.1	0.0
D001 (ignitable)	N	B211 org. liquid	A19 other clean/degr.	Off	M041 incineration	0.0	0.0	0.0
D001 (ignitable)	N	B211 org. liquid	A19 other clean/degr.	Off	M041 incineration	0.0	0.0	0.0
D001(ignitable) F002 (solvents)	N	B202 org. liquid	A19 other clean/degr.	Off	M041 incineration	0.5	0.5	0.0
D001(ignitable) F003 (solvents)	N	B203 org. liquid	A21 painting	Off	M041 incineration	206.7	206.7	0.0
D001(ignitable) F003 (solvents)	N	B203 org. liquid	A21 painting	Off	M041 incineration	45.8	45.8	0.0
D002 (corrosive)	Y	B110 inorg liquid	A03 caustic cleaning	Off	M041 incineration	0.0	0.0	0.0
D005, D007, D008	Y	B102 inorg liquid	A21 painting	Off	M041 incineration	5.8	5.8	0.0
F002 (halog. solvents)	Y	B102 inorg liquid	A19 other clean/degr.	Off	M041 incineration	0.0	0.0	0.0
F002 (halog. solvents)	N	B202 org. liquid	A19 other clean/degr.	Off	M041 incineration	1.0	1.0	0.0
F005 (nonhalog solvents)	N	B203 org. liquid	A19 other clean/degr.	Off	M041 incineration	0.0	0.0	0.0
<b>TOTAL - 1993</b>						<b>265.6</b>	<b>265.6</b>	<b>0.0</b>

**TOXICS RELEASE INVENTORY**

<i>Total lbs of TRI chemicals:</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Energy Recovery</i>	<i>Off-Site Recycling</i>	<i>Off-Site Treatment</i>	<i>Off-Site Disposal</i>	<i>Total Transfers</i>
1991	6,497	294,763	301,260	0	0	0	390,231	0	390,231
1992	3,221	198,821	202,042	337	0	0	188,976	5,068	194,381
1993	6,434	259,551	265,985	121	0	0	192,639	0	192,760
1994	5,863	142,366	148,229	353	0	0	129,197	4,844	134,394
<b>Lbs. per vehicle produced:</b>									
1991	0.31	13.98	14.29	0.00	0.00	0.00	18.51	0.00	18.51
1992	0.15	9.54	9.70	0.02	0.00	0.00	9.07	0.24	9.33
1993	0.28	11.50	11.78	0.01	0.00	0.00	8.53	0.00	8.54
1994	0.23	5.61	5.84	0.01	0.00	0.00	5.09	0.19	5.29

**Plant-Community Profile:  
General Motors  
Bowling Green KY**

12/2/97

---

**PLANT ENVIRONMENTAL PROFILE (continued)**

**1994 TRI Emissions/Releases by Chemical (lbs.)**

<i>Chemical Name</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Energy Recovery</i>	<i>Off-Site Recycling</i>	<i>Off-Site Treatment</i>	<i>Off-Site Disposal</i>	<i>Total Transfers</i>
METHANOL	370	18,246	18,616	0	0	0	15,371	0	15,371
N-BUTYL ALCOHOL	213	18,535	18,748	0	0	0	18,162	0	18,162
BENZENE	1,017	0	1,017	0	0	0	7	0	7
METHYL ETHYL KETONE	114	6,150	6,264	0	0	0	3,909	0	3,909
1,2,4-TRIMETHYLBENZENE	22	1,703	1,725	0	0	0	228	0	228
ETHYLBENZENE	136	190	326	0	0	0	250	0	250
METHYLENEBIS(PHENYLISOCYANATE)	0	99	99	0	0	0	5,357	0	5,357
ETHYLENE GLYCOL	0	0	0	0	0	0	2,505	0	2,505
TOLUENE	271	6,789	7,060	0	0	0	2,912	0	2,912
XYLENE (MIXED ISOMERS)	459	69,946	70,405	0	0	0	63,437	0	63,437
METHYL TERT-BUTYL ETHER	2,796	0	2,796	0	0	0	37	0	37
GLYCOL ETHERS	465	20,708	21,173	0	0	0	17,022	0	17,022
ZINC COMPOUNDS	0	0	0	353	0	0	0	4,844	5,197
<b>TOTAL</b>	<b>5,863</b>	<b>142,366</b>	<b>148,229</b>	<b>353</b>	<b>0</b>	<b>0</b>	<b>129,197</b>	<b>4,844</b>	<b>134,394</b>

**VOC/NOx Emissions:  
(lbs/year)**

	<i>VOCs</i>	<i>NOx</i>
1990	715,348	13,812
1991	606,284	17,852
1992	803,070	15,622
1993	874,704	19,140
1994	1,065,810	13,840

---

**Plant-Community Profile:  
General Motors  
Bowling Green KY**

12/2/97

**COMMUNITY ENVIRONMENTAL PROFILE**

**TRI Chemical Releases & Transfers from Sources Within 3 Miles of Auto/LDT Plant (lbs.)**

<i>Facility (w. map #)</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Transfers</i>	<i>Total Transfers</i>
1 WOODWORK OF MID-AMERICA	1,170	28,534	29,704	0	9,300	9,300
3 BADA CO.	0	0	0	0	250	250
4 AMERICAN SUNROOF CO.	0	0	0	0	0	0
5 EAGLE WIRE CO. INC.	500	255	755	255	8,505	8,760
<b>Total</b>	<b>1,670</b>	<b>28,789</b>	<b>30,459</b>	<b>255</b>	<b>18,055</b>	<b>18,310</b>

**Air Quality Attainment Status  
(as of 1994)\***

ozone - attainment or unclassifiable  
carbon monoxide - attainment or unclassifiable  
particulates - unclassifiable  
lead - unclassifiable  
NO2 - cannot be classified or better than national standards  
SO2 - attainment

\* no changes in designations occurred between 1994 and 1996

**Plant-Community Profile:  
General Motors  
Bowling Green KY**

12/2/97

---

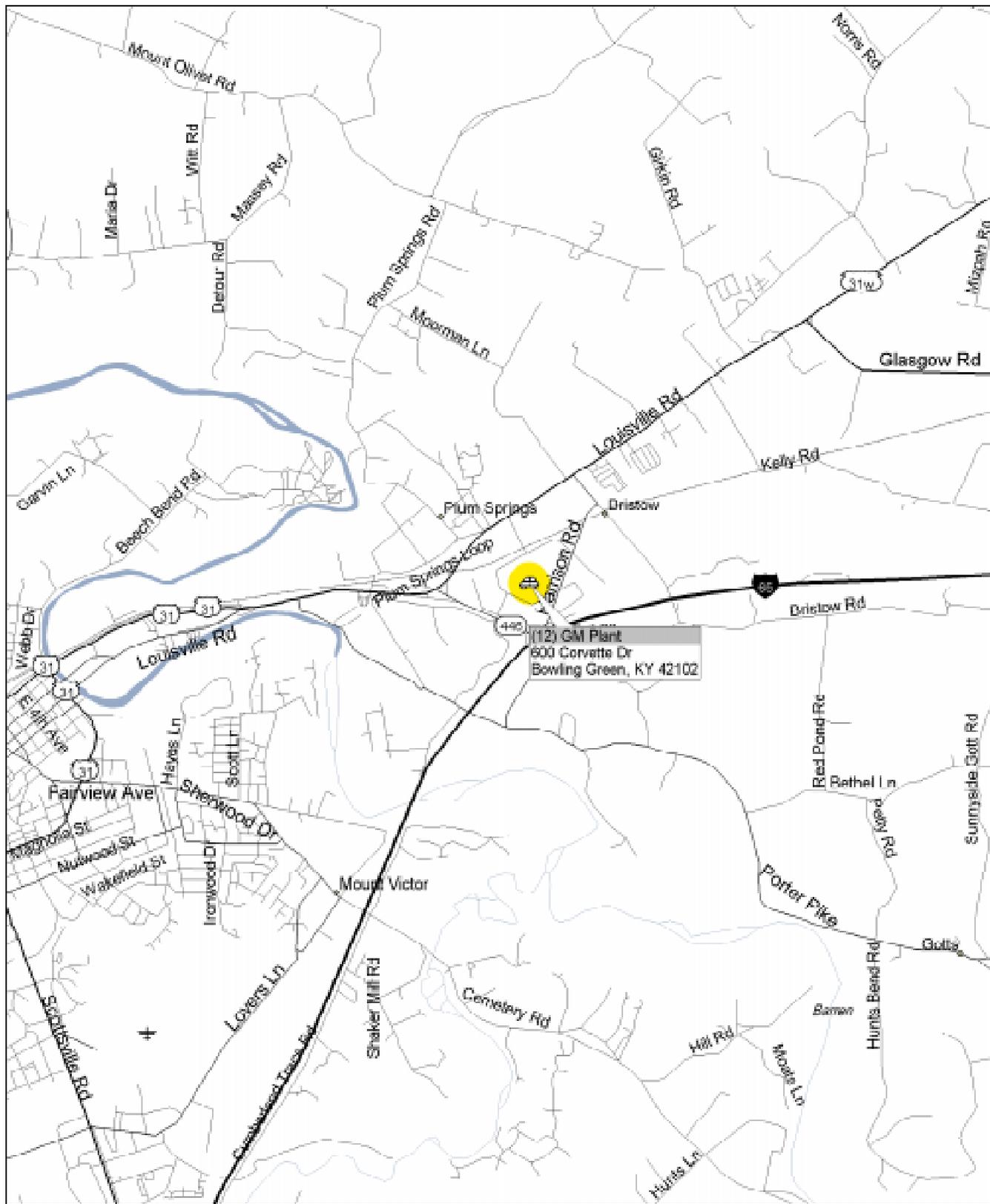
**COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS**

	<i>Census Block</i>	<i>0-1 Mile</i>	<i>0-3 Miles</i>	<i>1-3 Miles</i>	<i>3-5 Miles</i>	<i>County</i>	<i>State</i>	<i>U.S.</i>
Total Population (1994)	NA	NA	NA	NA	NA	83,049	3,826,839	260,340,990
Total Population (1990)	890	877	54,745	53,868	233,520	76,673	3,685,296	248,709,873
% Change 1990-1994	NA	NA	NA	NA	NA	8	4	5
Total Area (sq. mi.) (1990)	2.7	3.1	28.2	25.1	50.2	545.2	39,732.3	3,536,278.1
Population/sq. mi. (land area) (1990)	325	284	2,283	2,578	4,857	141	93	70
Median Household Income (1994)						NA	26,595	32,264
Median Household Income (1989)						24,175	21,949	30,056
% Change 1979-1989 (constant \$)						3	-14	7
% Change 1989-1994 (constant \$)						NA	<0.5	7
Per Capita Personal Income (1993)						17,476	16,889	20,800
Per Capita Personal Income (1989)						14,162	13,756	17,690
% Change 1989-1993 (current \$)						23	23	18
Minority Percentage (1990)	16	13	1	1	2	9	7	20
Pct. of Households Below Poverty Level (1989)	30	26	17	17	19	27	21	20
Pct. Not Completing High School (1990)	37	33	25	24	25	25	33	25
Total Employment (1994) (civilian nonfarm)						44,761	1,825,000	131,056,000
Unemployment Rate (1994)						4	5	6
Manufacturing Employment (1993)						8,085	284,185	18,183,381
Mfgr. as % Total Employment (1993)						23	23	19
Manufacturing Employment (1992)						NA	277,000	18,253,000
Production Workers (1992)						NA	203,000	11,654,000
% Change in Mfgr. Employment 1987-1992						NA	10	-4
Assembly Plant as % Total Mfgr. Workers						13		

---

Data sources used were not always complete or current.  
Attempts have been made to verify data, but errors may still exist.

# Bowling Green, KY, GM Plant



Microsoft Bopella

## Streets98

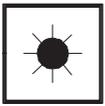
GENERAL MOTORS CORP  
600 CORVETTE DR  
BOWLING GREEN KY  
Tri Number: 42101GNRLMI65US

Map #	SIC	Name	Address	City	State
0	3711	GMC NAO BOWLING GREEN PLANT	600 CORVETTE DR.	BOWLING GREEN	KY
1	2541	WOODWORK OF MID-AMERICA	445 PLUM SPRINGS LOOP	BOWLING GREEN	KY
3	3399	BADA CO.	759 HENNESSY WAY	BOWLING GREEN	KY
4	3714	AMERICAN SUNROOF CO.	200 TOBACCO RD.	BOWLING GREEN	KY
5	3315	EAGLE WIRE CO. INC.	205 CLAY ST.	BOWLING GREEN	KY

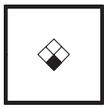
# AREA WIDE 1994 TRI EMISSION PROFILE

GENERAL MOTORS CORP  
WARREN COUNTY, Kentucky

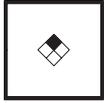
Latitude: 37 0 33  
Longitude: 86 22 25



Map Key:  
Auto  
Plant  
Truck



Air  
Release



Water  
Release



Land  
Release



Transfer  
location  
To offsite

3 Mile Buffer



Number without a Symbol denotes no reported emissions over 0.5 pounds per year

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF  
 GENERAL MOTORS CORP TRI NO: 42101GNRLMI65US

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
GMC NAO BOWLING GREEN PLANT SIC DESCRIPTION: MOTOR VEHICLES & CAR BODIES MAP LOCATION NO: 0 600 CORVETTE DR. SIC CODE: 3711 BOWLING GREEN KY 42102 9006								
METHANOL	370	18,246	0	0	18,616	0	15,371	15,371
N-BUTYL ALCOHOL	213	18,535	0	0	18,748	0	18,162	18,162
BENZENE	1,017	0	0	0	1,017	0	7	7
METHYL ETHYL KETONE	114	6,150	0	0	6,264	0	3,909	3,909
1,2,4-TRIMETHYLBENZENE	22	1,703	0	0	1,725	0	228	228
ETHYLBENZENE	136	190	0	0	326	0	250	250
METHYLENEBIS(PHENYLISOCYANATE)	0	99	0	0	99	0	5,357	5,357
ETHYLENE GLYCOL	0	0	0	0	0	0	2,505	2,505
TOLUENE	271	6,789	0	0	7,060	0	2,912	2,912
XYLENE (MIXED ISOMERS)	459	69,946	0	0	70,405	0	63,437	63,437
METHYL TERT-BUTYL ETHER	2,796	0	0	0	2,796	0	37	37
GLYCOL ETHERS	465	20,708	0	0	21,173	0	17,022	17,022
ZINC COMPOUNDS	0	0	0	0	0	353	4,844	5,197
SUBTOTALS	5,863	142,366	0	0	148,229	353	134,041	134,394
WOODWORK OF MID-AMERICA SIC DESCRIPTION: WOOD PARTI,SHELF,LOCK,ETC MAP LOCATION NO: 1 445 PLUM SPRINGS LOOP SIC CODE: 2541 BOWLING GREEN KY 42101								
TOLUENE	1,170	28,534	0	0	29,704	0	9,300	9,300
SUBTOTALS	1,170	28,534	0	0	29,704	0	9,300	9,300
BADA CO. SIC DESCRIPTION: PRIMARY METAL PRODUCTS, NEC MAP LOCATION NO: 3 759 HENNESSY WAY SIC CODE: 3399 BOWLING GREEN KY 42101								
LEAD	0	0	0	0	0	0	250	250
SUBTOTALS	0	0	0	0	0	0	250	250

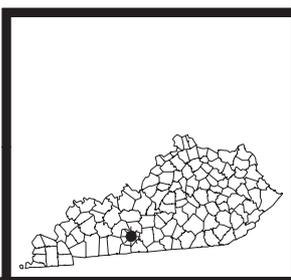


# General Motors Bowling Green Warren County, Kentucky

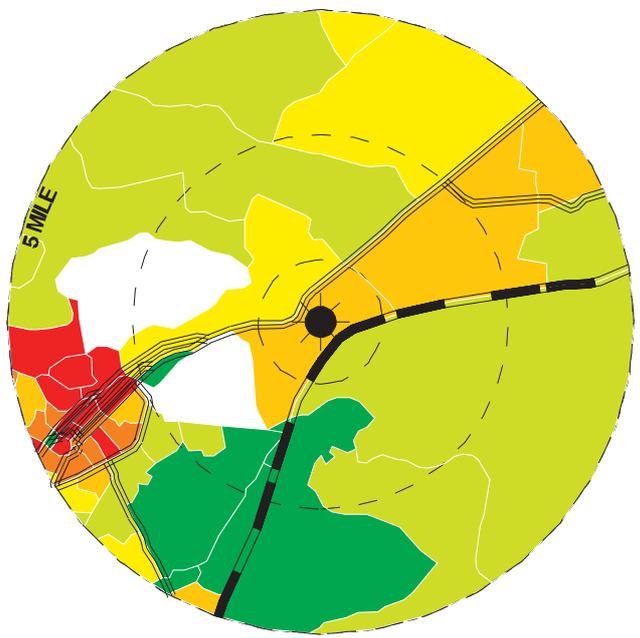
Latitude: 37 0 33 N  
Longitude: 86 22 25 W

- MAP KEY:**
- County Boundaries
  - Inter State Highway
  - US Highway
  - Rail Road
  - One Mile
  - Three Miles
  - Five Miles
- POPULATION DENSITY / SQ. MILE**
- Greater than 10000
  - 1000 - 10000
  - 100 - 1000
  - 10-100
  - 1-10

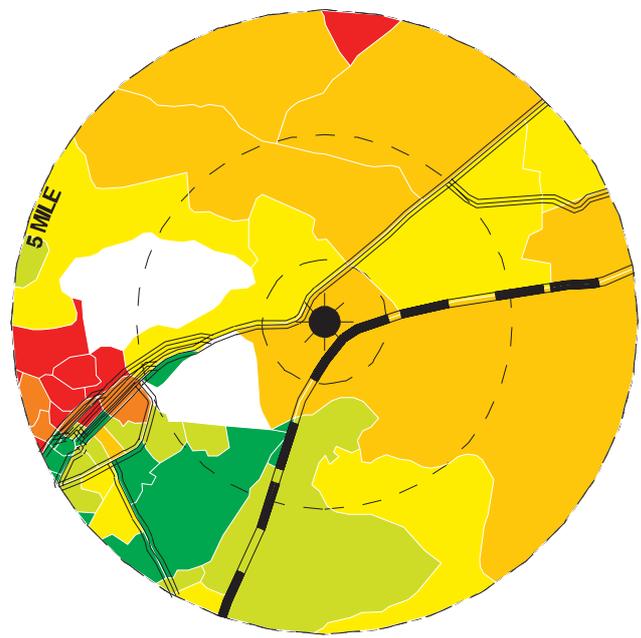
- Minority, poverty, and High School Incomplete percentages**
- Greater than 50
  - 40 - 50
  - 30 - 40
  - 20 - 30
  - 10 - 20
  - 0 - 10



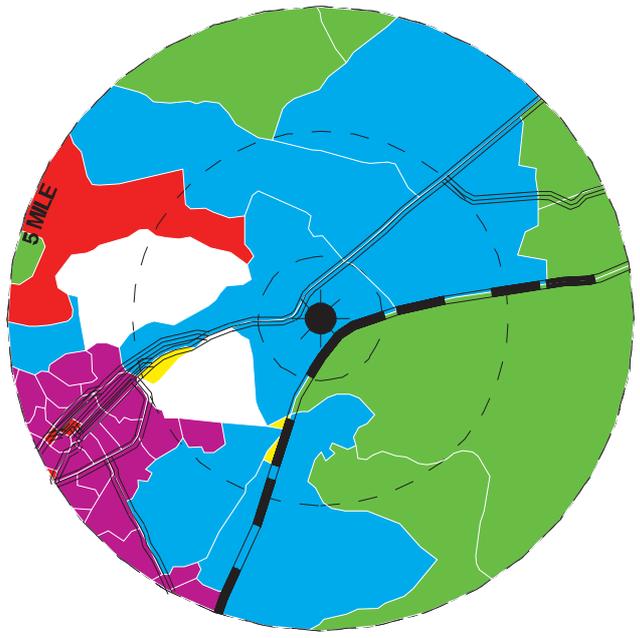
Percentage of Total Population Below Poverty Level



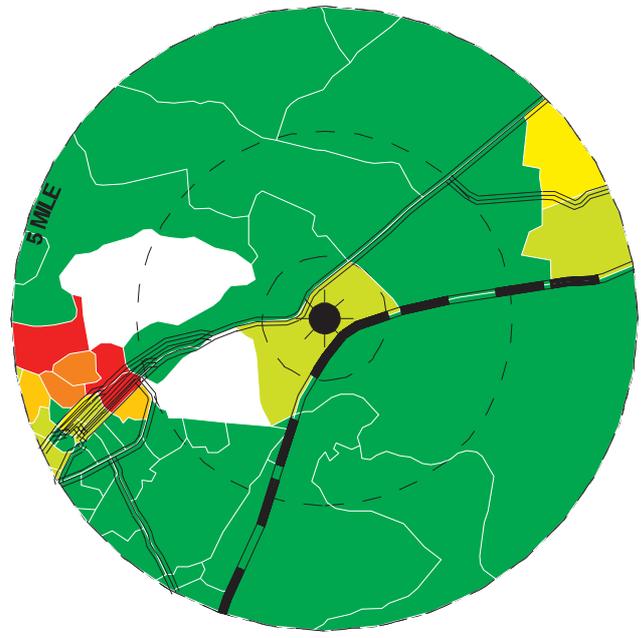
Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population

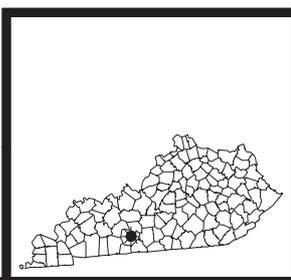


# General Motors Bowling Green Warren County, Kentucky

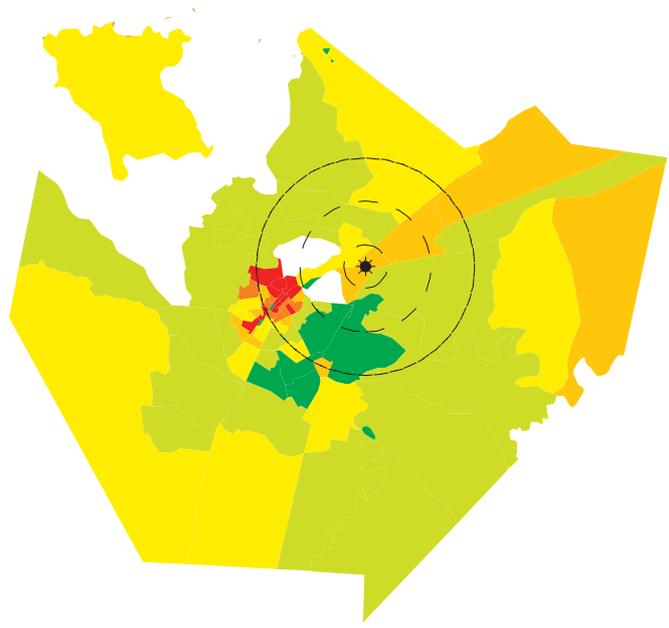
Latitude: 37 0 33 N  
Longitude: 86 22 25 W

- MAP KEY:**
- County Boundaries
  - Inter State Highway
  - US Highway
  - Rail Road
  - One Mile
  - Three Miles
  - Five Miles
- POPULATION DENSITY / SQ. MILE**
- Greater than 10000
  - 1000 - 10000
  - 100 - 1000
  - 10-100
  - 1-10

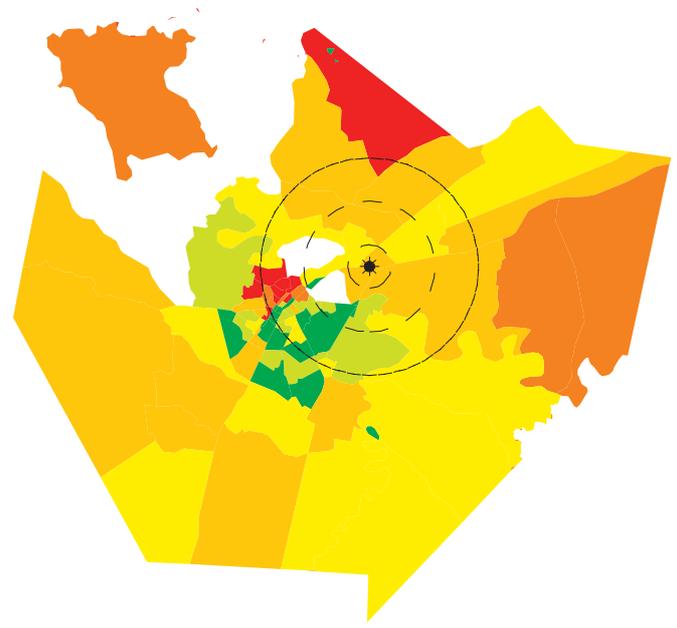
- Minority, poverty, and High School Incomplete percentages**
- Greater than 50
  - 40 - 50
  - 30 - 40
  - 20 - 30
  - 10 - 20
  - 0 - 10



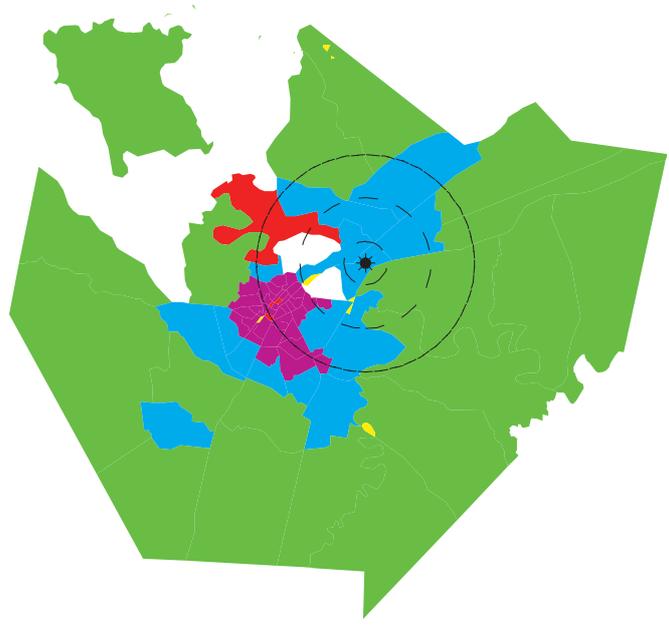
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density  
People Per Sq. Mile



Minority Population  
Percent of Total Population

