

**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**

**33. Ford Motor Co.  
Wixom, MI**

**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:  
Ford Motor Co.  
Wixom MI**

12/2/97

<b>LOCATION</b>	Address	28801 Wixom Rd., Wixom MI 48393		<b>DESCRIPTION</b>	Plant opened 1957; Produced Lincoln Continental, MarkVIII and TownCar in 1994.		
	Lat/Long:	latitude (degrees N)	42 30' 15"		<b>ID NUMBERS</b>	RCRA ID	MID005379714
		longitude (degrees W)	83 32' 20"	AIRS ID		AFS0010670010	
	County:	Oakland	MSA:	Detroit MI		NPDES ID	MI0028151
	Other counties within 3 miles of plant:	Wayne, Washtenaw		TRI	48096FRDMT50000		
<b>OPERATIONS</b>		<b>Production</b>	<b>Employment</b>				
	Calendar Year: 1991	188,009					
	1992	168,556					
	1993	184,403					
	1994	180,587	3,858				

**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 (ignit) D039, D018 (benzene)	N	B203 org. liquids	A19 other clean/degr.	Off	M029 solvents recov.	37.3	37.3	0.0
D001 (ignitable)	N	B203 org. liquids	A21 painting	Off	M021 solvents recov.	662.5	662.5	0.0
D001 (ignitable)	N	B203 org. liquids	A21 painting	Off	M029 solvents recov.	52.1	52.1	0.0
D001(ignit) F005 (solvents)	N	B204 org. liquids	A21 painting	Off	M029 solvents recov.	227.1	227.1	0.0
D008 (lead)	Y	B102 inorg. liquids	A21 painting	Off	M111 stabilization	225.2	225.2	0.0
D008 (lead)	N	B319 inorg. solids	A38 tank sludge remov.	Off	M111 stabilization	453.6	453.6	0.0
D008, D018, D001, F001, F006	Y	B102 inorg. liquids	A51 1x/intermittent	Off	M111 stabilization	318.2	318.2	0.0
F019 (WWT sludges)	N	B504 inorg. sludges	A75 wastewater trt	Off	M132 landfill	1,142.4	1,142.4	0.0
<b>TOTAL - 1991</b>						<b>3,118.4</b>	<b>3,118.4</b>	<b>0.0</b>
<i>1993</i>								
D001 (ignitable) F005 (solvents)	N	B203 org. liquid	A21 painting	Off	M022 solvents recov.	748.8	748.8	0.0
D001 (ignitable) F005 (solvents)	N	B203 org. liquid	A21 painting	Off	M029 solvents recov.	24.9	24.9	0.0
D001, D039, D018	N	B203 org. liquid	A19 other clean/degr.	Off	M029 solvents recov.	5.9	5.9	0.0
D008 (lead)	N	B319 inorg. solids	A38 tank sludge remov.	Off	M111 stabilization	356.2	356.2	0.0
D008, D018, D001, F001, F006	Y	B102 inorg liquid	A51 1x/intermittent	Off	M111 stabilization	292.5	292.5	0.0
F019	N	B504 inorg sludges	A75 wastewater trt	Off	M132 landfill	1,847.8	1,847.8	0.0
<b>TOTAL - 1993</b>						<b>3,276.1</b>	<b>3,276.1</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	54,059	696,165	755,305	55,157	138,430	1,615,653	25,714	18,158	1,853,112
1992	46,606	899,925	946,531	12,455	35,423	891,910	71,445	7,285	1,018,518
1993	21,303	1,170,362	1,191,665	100,419	25,021	740,470	43,505	12,975	922,390
1994	30,020	1,208,138	1,238,158	114,101	210	972,500	70,155	15,200	1,172,166
<b>Lbs. per vehicle produced:</b>									
1991	0.29	3.70	4.02	0.29	0.74	8.59	0.14	0.10	9.86
1992	0.28	5.34	5.62	0.07	0.21	5.29	0.42	0.04	6.04
1993	0.12	6.35	6.46	0.54	0.14	4.02	0.24	0.07	5.00
1994	0.17	6.69	6.86	0.63	0.00	5.39	0.39	0.08	6.49

**Plant-Community Profile:  
Ford Motor Co.  
Wixom MI**

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**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	1,200	15,000	16,200	0	70	2,300	5	5	2,380
N-BUTYL ALCOHOL	310	62,000	62,310	0	0	31,000	5	5	31,010
BENZENE	29	66	95	0	0	0	0	0	0
DICHLOROMETHANE	11,000	14,000	25,000	0	0	14,000	0	0	14,000
METHYL ETHYL KETONE	3,100	8,100	11,200	0	0	6,900	5	5	6,910
1,2,4-TRIMETHYLBENZENE	150	30,000	30,150	0	140	4,500	5	5	4,650
ETHYLBENZENE	560	110,000	110,560	0	0	93,000	5	5	93,010
ETHYLENE GLYCOL	0	0	0	2,400	0	0	0	0	2,400
METHYL ISOBUTYL KETONE	8,200	330,000	338,200	0	0	310,000	5	5	310,010
TOLUENE	1,700	4,700	6,400	0	0	8,300	5	5	8,310
CYCLOHEXANE	1	2	3	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	2,800	540,000	542,800	0	0	490,000	5	5	490,010
METHYL TERT-BUTYL ETHER	280	650	930	0	0	0	0	0	0
HYDROCHLORIC ACID	0	250	250	0	0	0	0	0	0
BARIUM COMPOUNDS	0	370	370	1,400	0	0	51,900	12,005	65,305
GLYCOL ETHERS	440	93,000	93,440	110,000	0	12,500	5	5	122,510
MANGANESE COMPOUNDS	0	0	0	61	0	0	3,200	550	3,811
ZINC COMPOUNDS	250	0	250	240	0	0	15,010	2,600	17,850
<b>TOTAL</b>	<b>30,020</b>	<b>1,208,138</b>	<b>1,238,158</b>	<b>114,101</b>	<b>210</b>	<b>972,500</b>	<b>70,155</b>	<b>15,200</b>	<b>1,172,166</b>

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

	<i>VOCs</i>	<i>NO2</i>
1990	1,729,722	371,392
1991	791,672	404,776
1992	653,228	160,578
1993	1,100,808	183,952
1994	1,482,374	160,372

**Plant-Community Profile:  
Ford Motor Co.  
Wixom MI**

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**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 WILLIAMS INTL.	0	0	0	0	0	0
2 TIODIZE/MICHIGAN INC.	0	10,380	10,380	5	250	255
3 MOLMEC INC. DECO TRIM INC. DIV.	0	20,313	20,313	0	151,295	151,295
<b>Total</b>	<b>0</b>	<b>30,693</b>	<b>30,693</b>	<b>5</b>	<b>151,545</b>	<b>151,550</b>

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

ozone - nonattainment (moderate)\*  
carbon monoxide - attainment or unclassifiable  
particulates - unclassifiable  
lead - unclassifiable  
NO2 - cannot be classified or better than national standards  
SO2 - attainment

\* redesignated as attainment effective 4/6/95 (60 FR 12459)

**Plant-Community Profile:  
Ford Motor Co.  
Wixom MI**

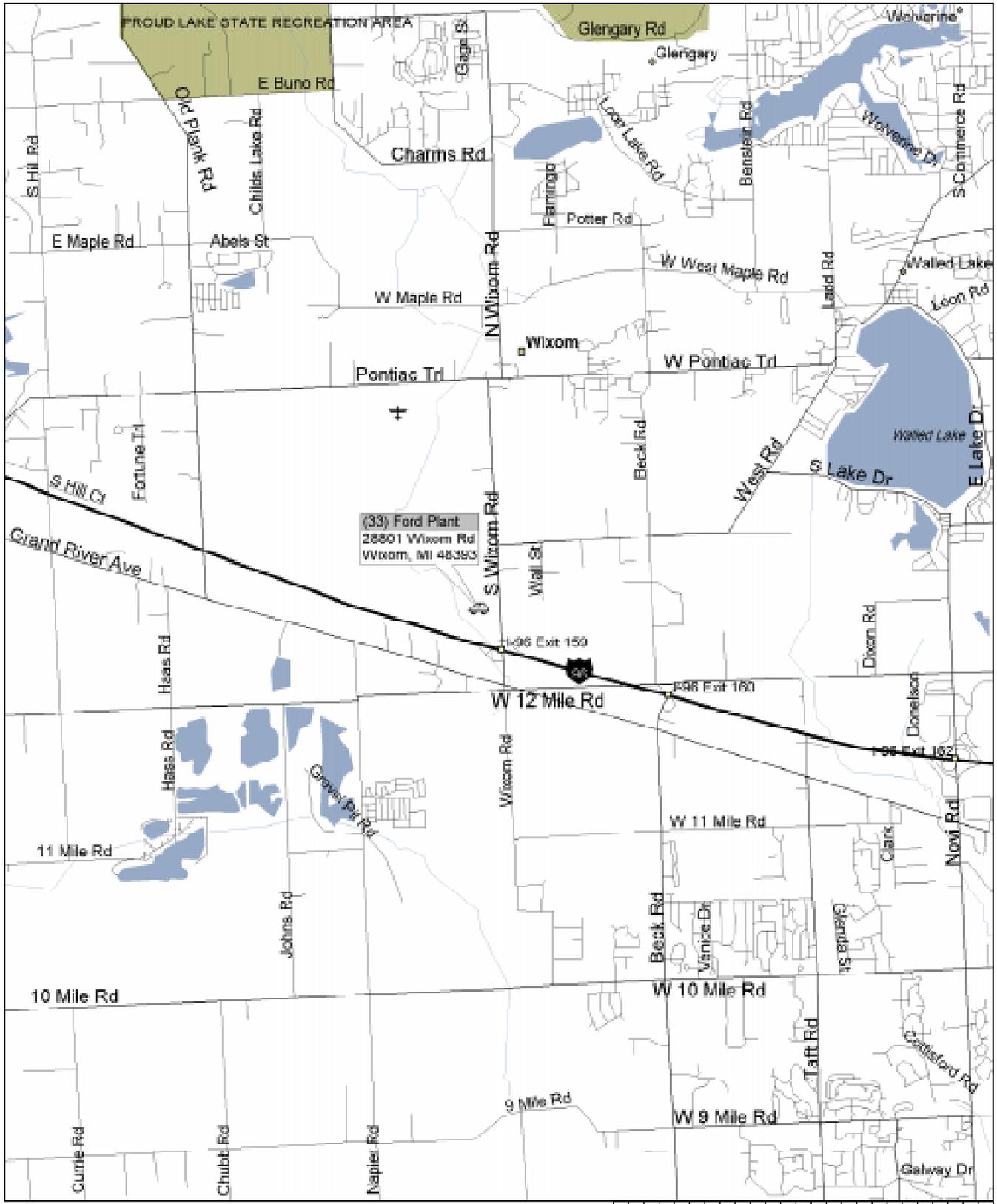
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**COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS**

	<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	1,142,013	9,496,539	260,340,990
Total Population (1990)	275	423	14,618	14,195	215,886	1,083,592	9,295,297	248,709,873
% Change 1990-1994	NA	NA	NA	NA	NA	5	2	5
Total Area (sq. mi.) (1990)	2.1	3.1	28.2	25.1	50.2	872.7	56,809.2	3,536,278.1
Population/sq. mi. (land area) (1990)	130	135	529	579	4,551	1,242	164	70
Median Household Income (1994)						NA	35,284	32,264
Median Household Income (1989)						43,407	31,020	30,056
% Change 1979-1989 (constant \$)						2	-4	7
% Change 1989-1994 (constant \$)						NA	14	7
Per Capita Personal Income (1993)						29,781	20,584	20,800
Per Capita Personal Income (1989)						26,193	17,546	17,690
% Change 1989-1993 (current \$)						14	17	18
Minority Percentage (1990)	0	0	1	1	2	10	16	20
Pct. of Households Below Poverty Level (1989)	15	13	7	7	4	12	23	20
Pct. Not Completing High School (1990)	36	29	12	11	11	15	23	25
Total Employment (1994) (civilian nonfarm)						624,067	4,753,000	131,056,000
Unemployment Rate (1994)						4	6	6
Manufacturing Employment (1993)						104,973	906,672	18,183,381
Mfgr. as % Total Employment (1993)						17	26	19
Manufacturing Employment (1992)						105,500	917,000	18,253,000
Production Workers (1992)						59,600	574,000	11,654,000
% Change in Mfgr. Employment 1987-1992						-5	-7	-4
Assembly Plant as % Total Mfgr. Workers						4		

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

# Wixom, MI, Ford Plant



Microsoft MapData  
**Streets98**

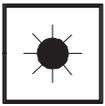
FORD MOTOR CO  
28801 WIXOM RD  
WIXOM MI  
Tri Number: 48096FRDMT50000

Map #	SIC	Name	Address	City	State
0	3711	FORD MOTOR CO. WIXOM ASSEMBLY PLANT	28801 WIXOM RD.	WIXOM	MI
1	3724	WILLIAMS INTL.	2280 W. MAPLE RD. P.O. BOX 200	WALLED LAKE	MI
2	3479	TIODIZE/MICHIGAN INC.	28966 WALL ST.	WIXOM	MI
3	3479	MOLMEC INC. DECO TRIM INC. DIV.	30150 S. HILL RD.	NEW HUDSON	MI

# AREA WIDE 1994 TRI EMISSION PROFILE

FORD MOTOR CO  
OAKLAND COUNTY, Michigan

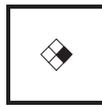
Latitude: 42 30 15  
Longitude: 83 32 20



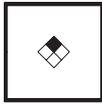
Map Key:  
Auto  
Plant  
Truck



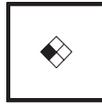
Air  
Release



Land  
Release

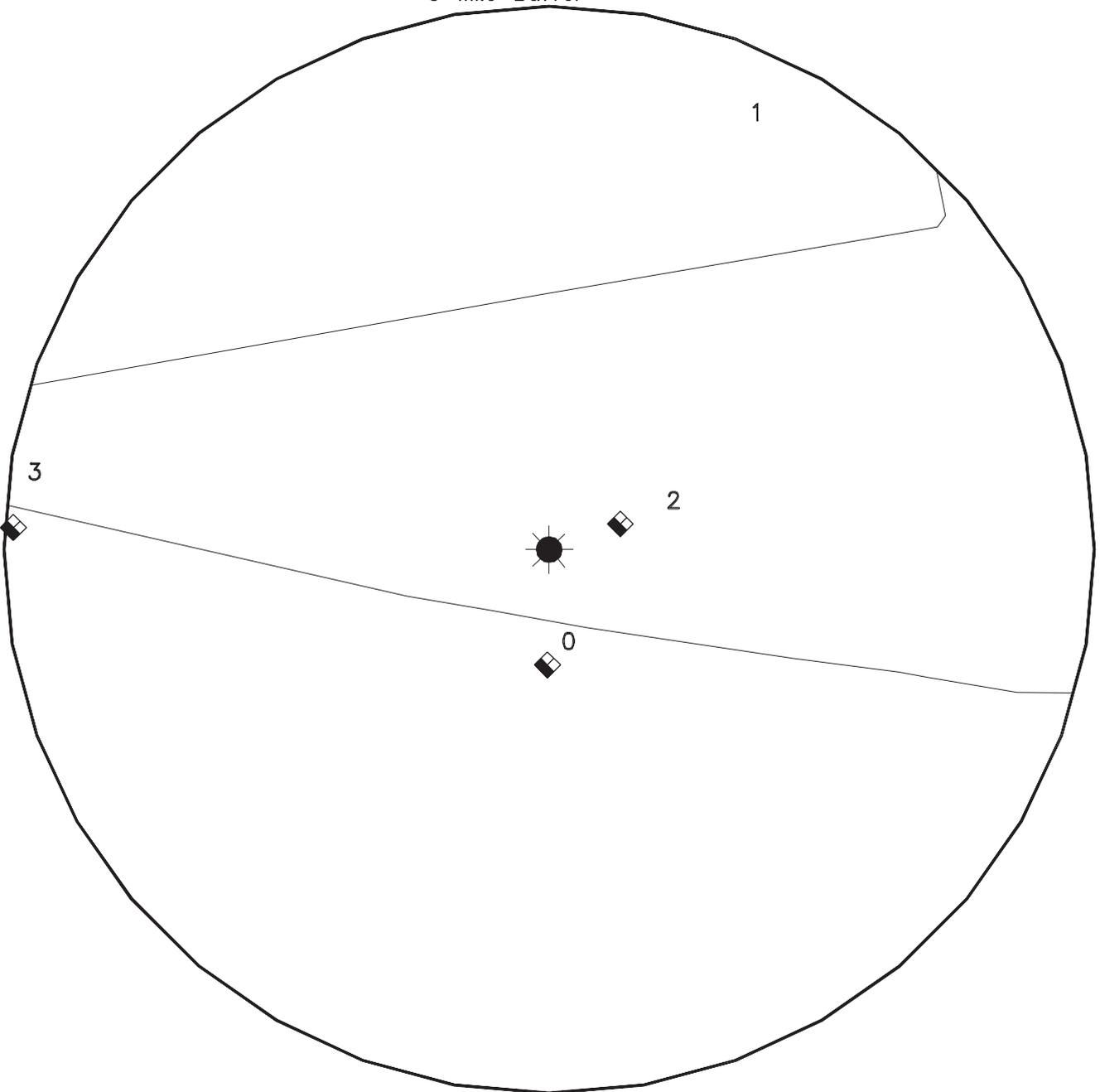


Water  
Release



Transfer  
location  
To offsite

3 Mile Buffer



1

2

3

0

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





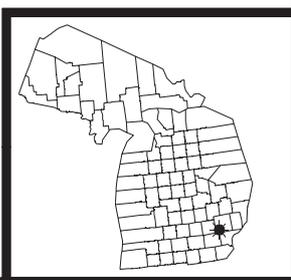
# Ford Motor Company Wixom Oakland County, Michigan

Latitude: 42 30 15 N  
Longitude: 83 32 20 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

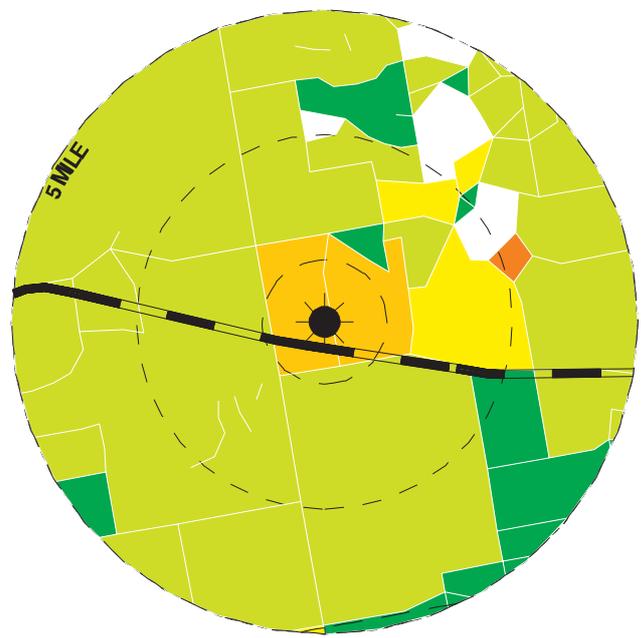
- Minority, poverty, and High School Incomplete percentages**
- Greater than 50
  - 40 - 50
  - 30 - 40
  - 20 - 30
  - 10 - 20
  - 0 - 10



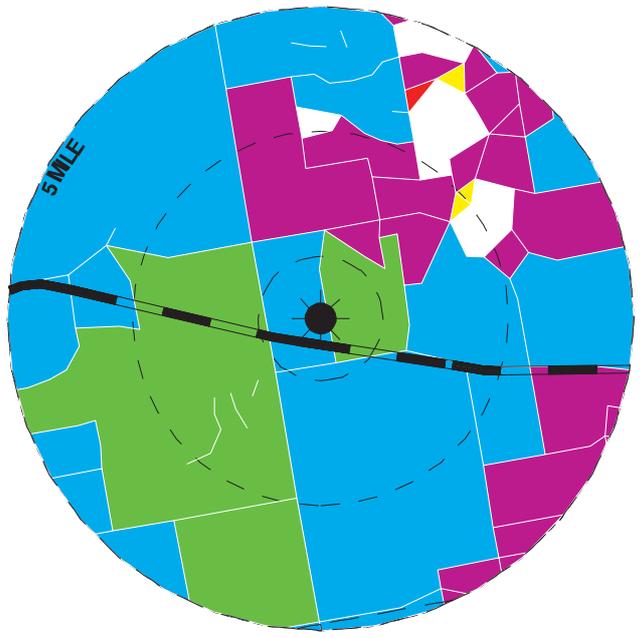
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density  
People Per Sq. Mile



Minority Population  
Percent of Total Population



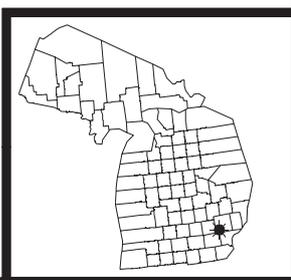
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Latitude: 42 30 15 N  
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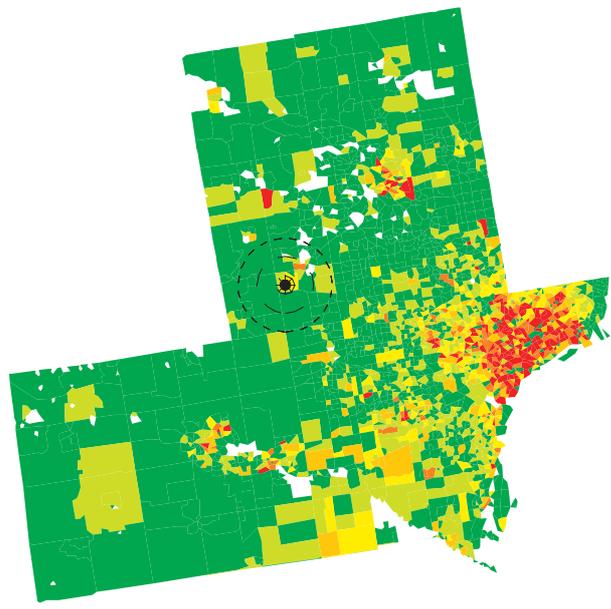
- MAP KEY:**
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  -  Inter State Highway
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- POPULATION DENSITY / SQ. MILE**
-  Greater than 10000
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  -  1-10

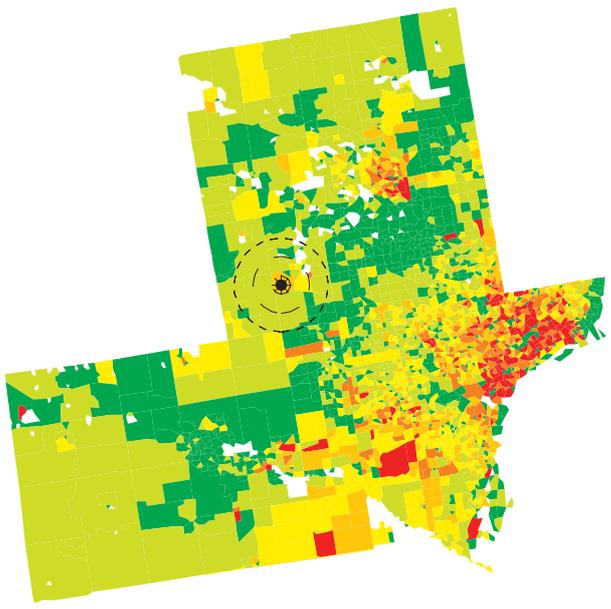
- Minority, poverty, and High School Incomplete percentages**
-  Greater than 50
  -  40 - 50
  -  30 - 40
  -  20 - 30
  -  10 - 20
  -  0 - 10



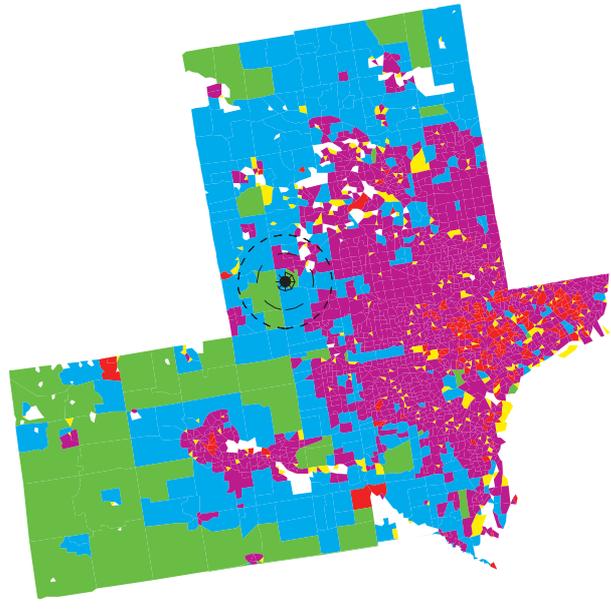
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density  
People Per Sq. Mile



Minority Population  
Percent of Total Population

