

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**

**27. General Motors
Lansing (M), 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.

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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
Lansing MI

12/2/97

LOCATION	Address Lat/Long: County: Other counties within 3 miles of plant:	401 N. Verlinden Ave., Lansing MI 48901 latitude (degrees N) 42 43' 27" longitude (degrees W) 84 33' 21" Ingham MSA: Lansing-East Lansing MI Clinton, Eaton	DESCRIPTION	Produced Pontiac Grand Am and Olds Achieva in 1994. Vehicles produced at this plant also undergo some assembly operations at the Lansing Townsend plant.
			ID NUMBERS	RCRA ID MID005356928 AIRS ID AFS2606500035 NPDES ID - TRI 48921BCLNS401NO
OPERATIONS	Production		Employment	
Calendar Year: 1991	240,511			
1992	398,894			
1993	348,496			
1994	420,474	NA		

PLANT ENVIRONMENTAL PROFILE

RCRA BIENNIAL REPORT

Waste Code(s) <i>1991</i>	Wastewater?	Physical Form	Source	Mgd. On/Off-Site	Management Method	Quantity Generated (tons)	Quantity Shipped (tons)	Quantity Mgd. On-Site (tons)
D001 (ignitable)	N	B001 lab packs	A59 1x/intermittent	Off	M041 incineration	0.2	0.2	0.0
D001 (ignitable)	N	B201 org. liquids	A21 painting	Off	M061 fuel blending	6.4	6.4	0.0
D001 (ignitable)	N	B203 org. liquids	A21 painting	Off	M061 fuel blending	3.5	3.5	0.0
D001 (ignitable)	N	B203 org. liquids	A21 painting	Off	M061 fuel blending	85.0	84.2	0.0
D001 (ignitable)	N	B210 org. liquids	A58 1x/intermittent	Off	M061 fuel blending	0.0	0.2	0.0
D001 (ignitable)	N	B210 org. liquids	A58 1x/intermittent	Off	M061 fuel blending	0.0	0.7	0.0
D001 (ignitable)	N	B210 org. liquids	A58 1x/intermittent	Off	M061 fuel blending	0.0	0.5	0.0
D001 (ignitable)	N	B211 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.4	0.0
D001 (ignitable)	N	B219 org. liquids	A99 other processes	Off	M041 incineration	0.2	0.2	0.0
D001 (ignitable)	N	B319 inorg. solids	A53 1x/intermittent	Off	M043 incineration	0.0	0.1	0.0
D001 (ignitable)	N	B409 org. solids	A21 painting	Off	M061 fuel blending	4.2	3.3	0.0
D001 (ignitable)	N	B409 org. solids	A09 clean out equip	Off	M061 fuel blending	6.8	6.8	0.0
D001 (ignitable) D002 (corrosive)	N	B319 inorg. solids	A99 other processes	Off	M041 incineration	0.0	0.0	0.0
D001 (ignitable) D018 (benzene)	Y	B101 inorg. liquids	A56 1x/intermittent	Off	M125 other treat.	2.9	2.9	0.0
D001 (ignitable) D018 (benzene)	Y	B102 inorg. liquids	A09 clean out equip	Off	M125 other treat.	8.7	8.7	0.0
D001 (ignitable) D018 (benzene)	Y	B102 inorg. liquids	A53 1x/intermittent	Off	M125 other treat.	6.3	6.3	0.0
D001 (ignitable) D018 (benzene)	?	B119 inorg. liquids	A56 1x/intermittent	Off	M125 other treat.	85.9	85.9	0.0
D001 (ignitable) D039 (tetrachlrethylene)	N	B211 org. liquids	A04 flush rinsing	Off	M141 transfer facil.	13.2	13.2	0.0
D001(ignit) F003, F005 (solvents)	N	B203 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.7	0.7	0.0
D001(ignit) D035 (MEK)	N	B209 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	7.4	7.4	0.0
D001(ignit) D035 (MEK)	N	B209 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.4	0.4	0.0
D001(ignit) D035 (MEK)	N	B409 org. solids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.2	0.0
D001, D004, D006, D007, D008	N	B209 org. liquids	A21 painting	Off	M041 incineration	0.8	0.8	0.0
D001, D005, D006, D007, D018, D035	N	B203 org. liquids	A21 painting	Off	M061 fuel blending	5.2	5.2	0.0
D001, D005, D007, D035	N	B203 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.9	0.9	0.0
D001, D005, D018, D035	N	B201 org. liquids	A09 clean out equip	Off	M029 solvents recov.	107.9	107.9	0.0
D001, D005, D018, D035	N	B201 org. liquids	A09 clean out equip	Off	M125 other treat.	20.9	20.9	0.0
D001, D005, D018, D035	N	B211 org. liquids	A21 painting	Off	M029 solvents recov.	227.1	226.7	0.0
D001, D006, D008	N	B203 org. liquids	A21 painting	Off	M061 fuel blending	9.7	8.6	0.0

(continued)

Plant-Community Profile:
General Motors
Lansing MI

12/19/97

PLANT ENVIRONMENTAL PROFILE (continued)

RCRA BIENNIAL REPORT (continued)

Waste Code(s) 1991 (continued)	Wastewater?	Physical Form	Source	Mgd. On/Off-Site	Management Method	Quantity Generated (tons)	Quantity Shipped (tons)	Quantity Mgd. On-Site (tons)
D001, D007, D018, D040	N	B203 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.4	0.0
D001, D018, D035	N	B210 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	1.1	1.1	0.0
D001, D035, D007	N	B209 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.5	0.0
D002 (corrosive)	Y	B110 inorg. liquids	A59 1x/intermittent	Off	M111 stabilization	0.0	0.2	0.0
D002 (corrosive)	Y	B110 inorg. liquids	A59 1x/intermittent	Off	M111 stabilization	0.3	0.3	0.0
D002 (corrosive)	N	B319 inorg. solids	A99 other processes	Off	M041 incineration	0.0	0.3	0.0
D006 (cadmium)	N	B207 org. liquids	A59 1x/intermittent	Off	M111 stabilization	3.4	3.4	0.0
D006 (cadmium)	N	B319 inorg. solids	A53 1x/intermittent	Off	M111 stabilization	0.0	0.2	0.0
D007 (chromium)	N	B203 org. liquids	A59 1x/intermittent	Off	M111 stabilization	0.0	0.2	0.0
D008 (lead)	N	B207 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
D008 (lead)	N	B310 inorg. solids	A32 product filtering	Off	M111 stabilization	69.7	69.7	0.0
D008 (lead)	N	B319 inorg. solids	A69 remediation	Off	M111 stabilization	255.4	255.4	0.0
D022 (chloroform)	N	B204 org. liquids	A59 1x/intermittent	Off	M111 stabilization	0.0	1.0	0.0
D022 (chloroform)	N	B206 org. liquids	A99 other processes	Off	M041 incineration	0.2	0.2	0.0
D031, P059	N	B409 org. solids	A99 other processes	Off	M043 incineration	0.9	0.9	0.0
F001, F003, F005, D001	N	B206 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
F002 (halog. solvents)	N	B202 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.0	0.2	0.0
F002 (halog. solvents) D001 (ignitable)	N	B204 org. liquids	A21 painting	Off	M061 fuel blending	0.2	0.2	0.0
F002, D001, D029, D035	N	B209 org. liquids	A21 painting	Off	M041 incineration	0.6	0.6	0.0
F002, D039	N	B206 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.2	0.0
F002, F003, F005, D001	N	B204 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F003 (nonhalog. solvents) D001 (ignit.)	N	B203 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F003 (nonhalog. solvents) D001(ignit.)	N	B219 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F003, D001, D007, D018, D040	N	B203 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.0	0.0
F003, F002 (solvents)	N	B319 inorg. solids	A53 1x/intermittent	Off	M043 incineration	0.0	0.1	0.0
F003, F002, D001, D035	N	B209 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.7	0.7	0.0
F003, F005 (nonhalog. solvents)	N	B119 inorg. liquids	A63 remediation	Off	M125 other treat.	28.4	28.4	0.0
F003, F005 (nonhalog. solvents)	N	B319 inorg. solids	A99 other processes	Off	M043 incineration	0.0	0.1	0.0
F003, F005 (nonhalog. solvents)	N	B319 inorg. solids	A63 remediation	Off	M111 stabilization	2,691.2	2,691.2	0.0
F003, F005 (solvents) D001(ignitable)	N	B203 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F003, F005 (solvents) D001(ignitable)	N	B203 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F003, F005 (solvents) D001(ignitable)	N	B409 org. solids	A21 painting	Off	M061 fuel blending	72.6	72.6	0.0
F003, F005 (solvents) D035 (MEK)	Y	B101 inorg. liquids	A59 1x/intermittent	Off	M125 other treat.	0.2	0.2	0.0
F003, F005, D001, D018	N	B119 inorg. liquids	A63 remediation	Off	M125 other treat.	1.0	1.0	0.0
F003, F005, D001, D035	N	B204 org. liquids	A99 other processes	Off	M041 incineration	0.4	0.4	0.0
F003, F005, D001, D035	N	B219 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.3	0.3	0.0
F003, F005, F001, D006, D008	N	B206 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
F005 (nonhalog. solvents)	N	B319 inorg. solids	A99 other processes	Off	M043 incineration	0.0	0.0	0.0
F005 (nonhalog. solvents)	N	B319 inorg. solids	A09 clean out equip	Off	M061 fuel blending	0.0	0.2	0.0
F005 (nonhalog. solvents)	N	B409 org. solids	A53 1x/intermittent	Off	M043 incineration	0.0	0.3	0.0
F005 (solvents) D001 (ignitable)	N	B119 inorg. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.0	0.2	0.0
F005, D001, D007, D008	N	B211 org. liquids	A21 painting	Off	M061 fuel blending	4.6	4.4	0.0
F005, D001, D008, D010, D035	N	B203 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F005, D001, D018	N	B211 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F005, F002 (solvents) D001(ignit.)	N	B204 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.0	0.2	0.0
F005, F002 (solvents) D001(ignit.)	N	B204 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.4	0.4	0.0
F005, F002 (solvents) D008 (lead)	N	B207 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
F005, F002, D001, D035	N	B119 inorg. liquids	A56 1x/intermittent	Off	M125 other treat.	100.2	100.2	0.0
F005, F002, D001, D039	N	B207 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.3	0.3	0.0
F005, F003, D001, D035	N	B219 org. liquids	A09 clean out equip	Off	M061 fuel blending	0.6	0.6	0.0
F005, F003, D001, D035	N	B204 org. liquids	A99 other processes	Off	M041 incineration	0.0	0.2	0.0
F005, F003, F002 (solvents)	N	B219 org. liquids	A53 1x/intermittent	Off	M125 other treat.	0.8	0.8	0.0
F005, F003, F002, D001(ignit.)	N	B204 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
TOTAL - 1991						3,840.0	3,843.0	0.0

(continued)

Plant-Community Profile:
General Motors
Lansing MI

12/19/97

PLANT ENVIRONMENTAL PROFILE (continued)

RCRA BIENNIAL REPORT (continued)

Waste Code(s) 1993	Wastewater?	Physical Form	Source	Mgd. On/Off-Site	Management Method	Quantity Generated (tons)	Quantity Shipped (tons)	Quantity Mgd. On-Site (tons)
D001 (ignitable)	N	B209 org. liquid	A58 1x/intermittent	?	?	0.2	?	?
D001 (ignitable)	N	B209 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	0.0	4.3	0.0
D001 (ignitable)	N	B604 org. sludges	A21 painting	?	?	0.2	?	?
D001 (ignitable)	N	B201 org. liquid	A09 clean out equip	Off	M061 fuel blending	0.0	0.2	0.0
D001 (ignitable)	Y	B102 inorg liquid	A09 clean out equip	Off	M125 other treat.	3.6	2.1	0.0
D001 (ignitable)	N	B203 org. liquid	A19 other clean/degr.	Off	M061 fuel blending	12.3	12.3	0.0
D001 (ignitable)	N	B203 org. liquid	A19 other clean/degr.	Off	M061 fuel blending	0.2	0.2	0.0
D001 (ignitable)	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	51.6	51.6	0.0
D001 (ignitable)	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	0.0	0.2	0.0
D001 (ignitable)	N	B210 org. liquid	A21 painting	Off	M061 fuel blending	0.0	0.4	0.0
D001 (ignitable)	N	B210 org. liquid	A58 1x/intermittent	Off	M125 other treat.	0.2	0.2	0.0
D001 (ignitable)	N	B212 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	0.3	0.3	0.0
D001 (ignitable)	N	B319 inorg. solids	A21 painting	Off	M061 fuel blending	72.0	70.3	0.0
D001 (ignitable)	N	B409 org. solids	A09 clean out equip	Off	M061 fuel blending	0.3	0.3	0.0
D001(ignitable) D018 (benzene)	Y	B102 inorg liquid	A57 1x/intermittent	Off	M125 other treat.	16.7	16.7	0.0
D001(ignitable) D035 (MEK)	N	B210 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
D001(ignitable) D039 (tetrochlethylene)	N	B204 org. liquid	A04 flush rinsing	Off	M141 transfer facil.	10.2	10.2	0.0
D001, D005, D007, D008, D035	N	B219 org. liquid	A53 1x/intermittent	Off	M125 other treat.	2.7	2.7	0.0
D001, D005, D007, D008, D035	N	B219 org. liquid	A53 1x/intermittent	Off	M061 fuel blending	7.8	7.8	0.0
D001, D005, D007, D018, D035	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	183.0	183.0	0.0
D001, D005, D007, D035	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	330.5	330.1	0.0
D001, D007	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	8.4	8.4	0.0
D001, D018, D035	N	B209 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
D001, D018, D035	N	B209 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	2.1	2.1	0.0
D001, D022	N	B210 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	0.5	0.5	0.0
D001, D035	N	B203 org. liquid	A58 1x/intermittent	?	?	0.9	?	?
D001, F002, D018, D039, D035	N	B204 org. liquid	Not rep't	Off	M061 fuel blending	6.3	6.3	0.0
D002 (corrosive)	N	B001 lab packs	A58 1x/intermittent	Off	M041 incineration	0.3	0.3	0.0
D002 (corrosive)	Y	B110 inorg liquid	A58 1x/intermittent	Off	M129 other treat.	0.3	0.3	0.0
D002 (corrosive), D006 (cadmium)	N	B009 lab packs	A58 1x/intermittent	Off	M129 other treat.	0.2	0.2	0.0
D002, D006, D007, D008	Y	B105 inorg liquid	A09 clean out equip	Off	M129 other treat.	0.3	0.3	0.0
D002, D006, D007, D008, D010, D011	Y	B105 inorg liquid	A09 clean out equip	Off	M129 other treat.	0.3	0.3	0.0
D002, D006, D008	Y	B105 inorg liquid	A09 clean out equip	Off	M129 other treat.	0.3	0.3	0.0
D002 (corrosive), D008 (lead)	Y	B105 inorg liquid	A09 clean out equip	Off	M129 other treat.	0.0	1.8	0.0
D008 (lead)	Y	B114 inorg liquid	A09 clean out equip	Off	M129 other treat.	16.3	16.3	0.0
D008 (lead)	N	B209 org. liquid	A58 1x/intermittent	Off	M049 incineration	1.1	1.1	0.0
D008 (lead)	N	B310 inorg. solids	A71 poll cntl/waste trt	Off	M132 landfill	20.1	19.3	0.0
D018 (benzene)	N	B219 org. liquid	A57 1x/intermittent	Off	M125 other treat.	0.2	0.2	0.0

(continued)

Plant-Community Profile:
General Motors
Lansing MI

12/19/97

PLANT ENVIRONMENTAL PROFILE (continued)

RCRA BIENNIAL REPORT (continued)

Waste Code(s)	Wastewater?	Physical Form	Source	Mgd. On/Off-Site	Management Method	Quantity Generated (tons)	Quantity Shipped (tons)	Quantity Mgd. On-Site (tons)
<i>1993 (continued)</i>								
D035 (MEK)	N	B210 org. liquid	A58 1x/intermittent	Off	M049 incineration	0.1	0.1	0.0
D036 (nitrobenzene)	N	B210 org. liquid	A58 1x/intermittent	Off	M061 fuel blending	0.0	0.3	0.0
F002, D001	N	B209 org. liquid	A21 painting	Off	M061 fuel blending	0.2	0.2	0.0
F002, D001, D018, D039, D035	N	B204 org. liquid	A19 other clean/degr.	Off	M061 fuel blending	2.7	2.7	0.0
F002, D001, D018, D039, D035	N	B219 org. liquid	A21 painting	Off	M061 fuel blending	1.2	1.2	0.0
F002, D007	N	B319 inorg. solids	A09 clean out equip	Off	M061 fuel blending	0.1	0.1	0.0
F002, D008	N	B319 inorg. solids	A19 other clean/degr.	Off	M049 incineration	0.2	0.2	0.0
F002, F003, F005 (solvents)	Y	B101 inorg liquid	A64 remediation	Off	M125 other treat.	14.6	14.6	0.0
F002, F005, D029, D035	N	B204 org. liquid	A09 clean out equip	Off	M125 other treat.	0.0	0.3	0.0
F005, D001	N	B203 org. liquid	A21 painting	?	?	0.2	?	?
F005, D001	N	B211 org. liquid	A21 painting	Off	M061 fuel blending	0.0	0.4	0.0
F005, D001	N	B606 org. sludges	A09 clean out equip	Off	M061 fuel blending	0.3	0.3	0.0
F005, D001, D035	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	5.7	5.7	0.0
F005, D001, D035	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	0.7	0.7	0.0
F005, D001, D035	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	0.9	0.9	0.0
F005, D001, D035	N	B210 org. liquid	A09 clean out equip	Off	M061 fuel blending	0.2	0.2	0.0
F005, D001, D035	N	B211 org. liquid	A21 painting	?	?	0.2	?	?
F005, D001, D035	N	B219 org. liquid	A21 painting	Off	M061 fuel blending	2.6	2.6	0.0
F005, F002, D001, D027, D029, D039, D040	N	B201 org. liquid	A21 painting	?	?	0.2	?	?
F005, F002, D001, D035	N	B219 org. liquid	A21 painting	Off	M061 fuel blending	0.4	0.4	0.0
F005, F003, D001	N	B211 org. liquid	A09 clean out equip	Off	M061 fuel blending	0.0	0.2	0.0
F005, F003, D001, D007, D035	N	B203 org. liquid	A21 painting	Off	M061 fuel blending	0.0	0.2	0.0
F005, F003, D001, D029, D035	N	B204 org. liquid	A09 clean out equip	Off	M061 fuel blending	0.4	0.4	0.0
F005, F003, D001, D001	N	B606 org. sludges	A09 clean out equip	Off	M061 fuel blending	1.5	1.5	0.0
TOTAL - 1993						782.2	784.2	0.0

TOXICS RELEASE INVENTORY

Total lbs of TRI chemicals:	Air-Fugitive Emissions	Air-Stack Emissions	Total Releases	Discharge to POTW	Off-Site Energy Recovery	Off-Site Recycling	Off-Site Treatment	Off-Site Disposal	Total Transfers
1991	224,550	559,460	784,010	1,225	355,000	87	22,858	18,500	397,670
1992	225,800	1,030,200	1,256,000	2,365	171,800	48	91,749	183,996	449,958
1993	205,460	1,103,000	1,308,463	1,482	281,283	164	2,641	12,622	298,192
1994	188,360	956,049	1,144,409	155	132,600	0	1,300	2,261	136,316
Lbs. per vehicle produced:									
1991	0.93	2.33	3.26	0.01	1.48	0.00	0.10	0.08	1.65
1992	0.57	2.58	3.15	0.01	0.43	0.00	0.23	0.46	1.13
1993	0.59	3.17	3.75	0.00	0.81	0.00	0.01	0.04	0.86
1994	0.45	2.27	2.72	0.00	0.32	0.00	0.00	0.01	0.32

Plant-Community Profile:
General Motors
Lansing MI

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	8,900	53,000	61,900	0	12,000	0	0	0	12,000
N-BUTYL ALCOHOL	30,000	150,000	180,000	0	9,600	0	0	0	9,600
METHYL ETHYL KETONE	34,000	33,000	67,000	0	18,000	0	0	0	18,000
1,2,4-TRIMETHYLBENZENE	0	19,000	19,000	0	1,800	0	0	0	1,800
ETHYLBENZENE	20	37,000	37,020	3	17,000	0	0	140	17,143
ETHYLENE GLYCOL	240	49	289	0	0	0	0	0	0
METHYL ISOBUTYL KETONE	7,600	120,000	127,600	0	26,000	0	0	3	26,003
TOLUENE	7,600	21,000	28,600	2	4,100	0	0	0	4,102
XYLENE (MIXED ISOMERS)	69,000	490,000	559,000	0	43,000	0	0	700	43,700
GLYCOL ETHERS	31,000	33,000	64,000	0	1,100	0	0	0	1,100
LEAD COMPOUNDS	0	0	0	150	0	0	1,300	1,418	2,868
TOTAL	188,360	956,049	1,144,409	155	132,600	0	1,300	2,261	136,316

VOC/NOx Emissions:
(lbs/year)

	<i>VOCs</i>	<i>NO2</i>
1990	4,277,028	5,118
1991	2,137,200	6,010
1992	2,862,800	66,078
1993	2,450,048	32,380
1994	2,862,728	86,458

Plant-Community Profile:
General Motors
Lansing MI

12/2/97

COMMUNITY ENVIRONMENTAL PROFILE

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

Facility (w. map #)	Air-Fugitive Emissions	Air-Stack Emissions	Total Releases	Discharge to POTW	Off-Site Transfers	Total Transfers
1 W. R. GRACE & CO.	0	0	0	0	0	0
2 MELLING FORGING CO.	0	0	0	0	34,304	34,304
3 MOTOR WHEEL CORP.	1,750	43,750	45,500	750	10,255	11,005
4 ATMOSPHERE ANNEALING INC.	5	250	255	250	91,031	91,281
5 LANSING PLATING	0	0	0	0	0	0
6 AMERICAN SUNROOF CO.	0	0	0	0	0	0
7 ASC LANSING TRIM #27	624	0	624	0	39,039	39,039
8 LANSING DAIRY INC.	0	0	0	18,400	0	18,400
9 LINDBERG HEAT TREATING CO.	2,264	3,127	5,391	0	0	0
11 TRUMARK INC.	0	0	0	0	715,300	715,300
12 CHRYSLER CORP. WARREN TRUCK /	178,783	894,082	1,072,865	33,860	1,304,000	1,337,860
13 GMC LANSING AUTOMOTIVE PLANT '	67,100	419,540	486,722	3,237	50,204	53,441
14 GMC POWERTRAIN DELTA ENGINE P	19	0	19	259	8,810	9,069
15 GMC LANSING AUTOMOTIVE DIV.	61	1,600	1,661	0	150	150
16 GMC LANSING AUTOMOTIVE PLANT :	39,830	2,650	42,480	1,700	3,046	4,746
17 FEDERAL FORGE INC.	0	0	0	0	0	0
Total	290,436	1,364,999	1,655,517	58,456	2,256,139	2,314,595

**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
Lansing MI

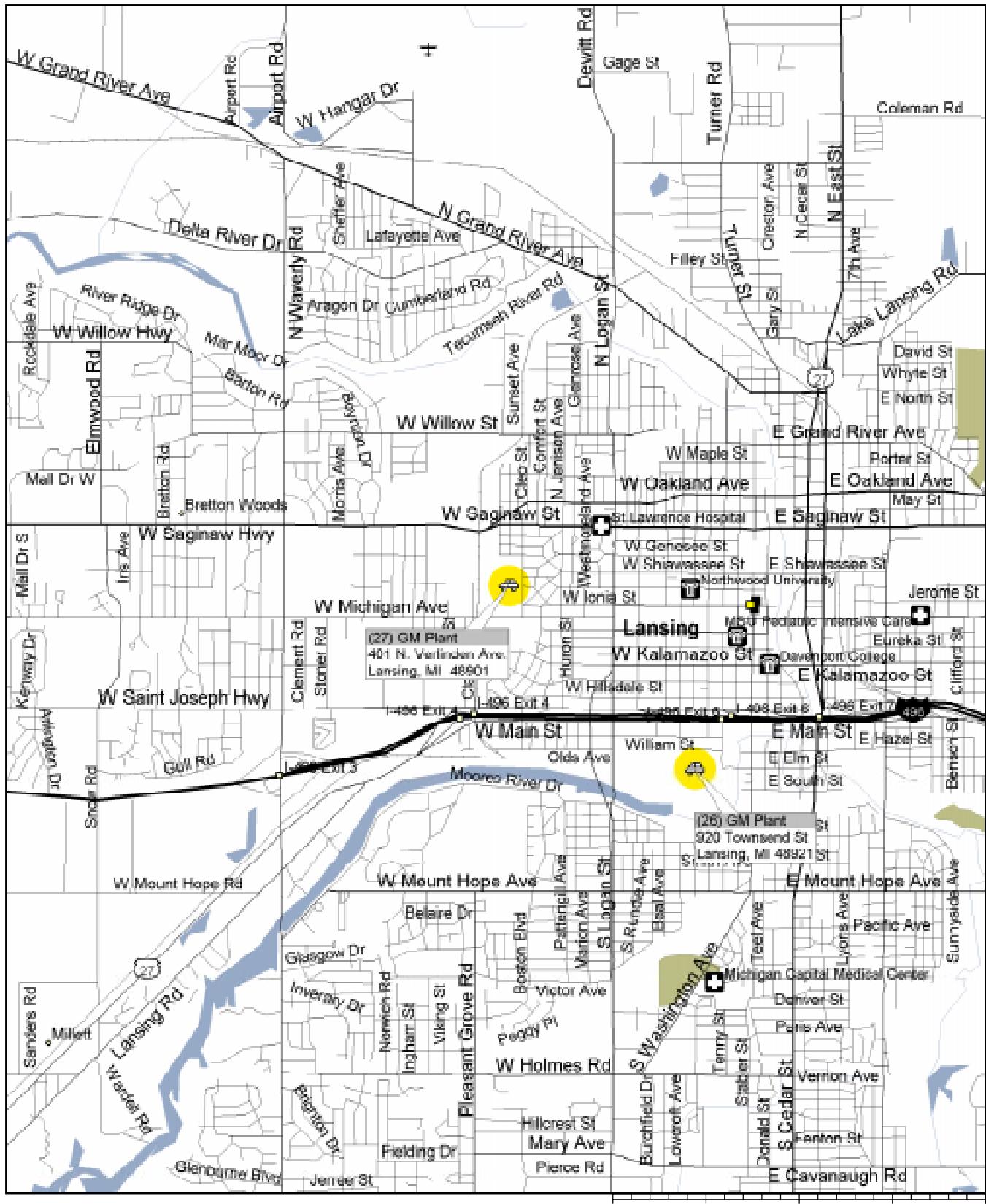
12/2/97

COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

<i>Census</i>	<i>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	278,426	9,496,539	260,340,990
Total Population (1990)	76	13,265	109,480	96,215	1,156,756	281,912	9,295,297	248,709,873
% Change 1990-1994	NA	NA	NA	NA	NA	-1	2	5
Total Area (sq. mi.) (1990)	<1	3.1	28.2	25.1	50.2	559.2	56,809.2	3,536,278.1
Population/sq. mi. (land area) (1990)	2,929	4,361	4,009	3,965	24,157	504	164	70
Median Household Income (1994)						NA	35,284	32,264
Median Household Income (1989)						30,162	31,020	30,056
% Change 1979-1989 (constant \$)						-1	-4	7
% Change 1989-1994 (constant \$)						NA	14	7
Per Capita Personal Income (1993)						19,464	20,584	20,800
Per Capita Personal Income (1989)						16,281	17,546	17,690
% Change 1989-1993 (current \$)						20	17	18
Minority Percentage (1990)	55	35	23	21	3	15	16	20
Pct. of Households Below Poverty Level (1989)	53	35	22	21	2	29	23	20
Pct. Not Completing High School (1990)	20	29	19	19	9	14	23	25
Total Employment (1994) (civilian nonfarm)						149,806	4,753,000	131,056,000
Unemployment Rate (1994)						5	6	6
Manufacturing Employment (1993)						24,790	906,672	18,183,381
Mfgr. as % Total Employment (1993)						20	26	19
Manufacturing Employment (1992)						26,200	917,000	18,253,000
Production Workers (1992)						19,700	574,000	11,654,000
% Change in Mfgr. Employment 1987-1992						-12	-7	-4
Assembly Plant as % Total Mfgr. Workers						NA		

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

Lansing, MI, GM Plant - N. Verlinden Ave.



Streets⁹⁸

GENERAL MOTORS CORP
 401 N VERLINDEN
 LANSING MI
 Tri Number: 48921BCLNS401NO

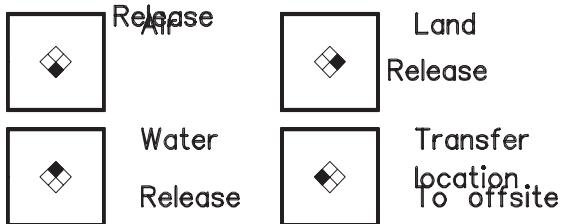
Map #	SIC	Name	Address	City	State
0	3711	LANSING AUTOMOTIVE DIV. BODY PLANT	401 N. VERLINDEN	LANSING	MI
1	2874	W. R. GRACE & CO.	2401 N. HIGH ST.	LANSING	MI
2	3462	MELLING FORGING CO.	1709 THOMPSON ST.	LANSING	MI
3	3465	MOTOR WHEEL CORP.	1600 N. LARCH ST.	LANSING	MI
4	3398	ATMOSPHERE ANNEALING INC.	1801 BASSETT ST.	LANSING	MI
5	3471	LANSING PLATING	1303 CASE ST.	LANSING	MI
6	3714	AMERICAN SUNROOF CO.	2101 W. WILLOW ST.	LANSING	MI
7	3714	ASC LANSING TRIM #27	2101 W. WILLOW ST.	LANSING	MI
8	2026	LANSING DAIRY INC.	2224 W. WILLOW	LANSING	MI
9	3398	LINDBERG HEAT TREATING CO.	2127 W. WILLOW ST.	LANSING	MI
11	9520	TRUMARK INC.	1820 SUNSET ST.	LANSING	MI
12	3711	CHRYSLER CORP. WARREN TRUCK ASSEMBLY PLANT	21500 MOUND RD.	WARREN	MI
13	3710	GMC LANSING AUTOMOTIVE PLANT 1	920 TOWNSEND	LANSING	MI
14	3519	GMC POWERTRAIN DELTA ENGINE PLANT	2901 S. CANAL RD.	LANSING	MI
15	3710	GMC LANSING AUTOMOTIVE DIV.	2801 W. SAGINAW ST.	LANSING	MI
16	3714	GMC LANSING AUTOMOTIVE PLANT 3	2800 W. SAGINAW ST.	LANSING	MI
17	3460	FEDERAL FORGE INC.	2807 S. LOGAN ST.	LANSING	MI

AREA WIDE 1994 TRI EMISSION PROFILE

GENERAL MOTORS CORP
INGHAM COUNTY, Michigan

Latitude: 42 43 27
Longitude: 84 33 21

Map Key:
Auto
Plant
Truck



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: 48921BCLNS401NO

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
LANSING AUTOMOTIVE DIV. BODY PLANT 401 N. VERLINDEN LANSING MI 48901					SIC DESCRIPTION: MOTOR VEHICLES & CAR BODIES SIC CODE: 3711			MAP LOCATION NO: 0
METHANOL	8,900	53,000	0	0	61,900	0	12,000	12,000
N-BUTYL ALCOHOL	30,000	150,000	0	0	180,000	0	9,600	9,600
METHYL ETHYL KETONE	34,000	33,000	0	0	67,000	0	18,000	18,000
1,2,4-TRIMETHYLBENZENE	0	19,000	0	0	19,000	0	1,800	1,800
ETHYLBENZENE	20	37,000	0	0	37,020	3	17,140	17,143
ETHYLENE GLYCOL	240	49	0	0	289	0	0	0
METHYL ISOBUTYL KETONE	7,600	120,000	0	0	127,600	0	26,003	26,003
TOLUENE	7,600	21,000	0	0	28,600	2	4,100	4,102
XYLENE (MIXED ISOMERS)	69,000	490,000	0	0	559,000	0	43,700	43,700
GLYCOL ETHERS	31,000	33,000	0	0	64,000	0	1,100	1,100
LEAD COMPOUNDS	0	0	0	0	0	150	2,718	2,868
SUBTOTALS	188,360	956,049	0	0	1,144,409	155	136,161	136,316
W. R. GRACE & CO. 2401 N. HIGH ST. LANSING MI 48906					SIC DESCRIPTION: PHOSPHATIC FERTILIZERS SIC CODE: 2874			MAP LOCATION NO: 1
SUBTOTALS	0	0	0	0	0	0	0	0
MELLING FORGING CO. 1709 THOMPSON ST. LANSING MI 48906					SIC DESCRIPTION: IRON AND STEEL FORGINGS SIC CODE: 3462			MAP LOCATION NO: 2
MANGANESE	0	0	0	0	0	0	34,304	34,304
SUBTOTALS	0	0	0	0	0	0	34,304	34,304

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
GENERAL MOTORS CORP TRI NO: 48921BCLNS401NO

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
 GENERAL MOTORS CORP TRI NO: 48921BCLNS401NO

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
ASC LANSING TRIM #27 2101 W. WILLOW ST. LANSING					SIC DESCRIPTION: MOTOR VEHICLE PARTS & ACCESSORIES SIC CODE: 3714			MAP LOCATION NO: 7
		MI 48917						
DICHLOROMETHANE METHYLENEBIS(PHENYLISOCYANATE)	619 5	0 0	0 0	0 0	619 5	0 0	13,879 25,160	13,879 25,160
SUBTOTALS	624	0	0	0	624	0	39,039	39,039
 LANSING DAIRY INC. 2224 W. WILLOW LANSING					SIC DESCRIPTION: FLUID MILK SIC CODE: 2026			MAP LOCATION NO: 8
	MI 48917							
PHOSPHORIC ACID	0	0	0	0	0	18,400	0	18,400
SUBTOTALS	0	0	0	0	0	18,400	0	18,400
 LINDBERG HEAT TREATING CO. 2127 W. WILLOW ST. LANSING					SIC DESCRIPTION: METAL HEAT TREATING SIC CODE: 3398			MAP LOCATION NO: 9
	MI 48917							
AMMONIA	2,264	3,127	0	0	5,391	0	0	0
SUBTOTALS	2,264	3,127	0	0	5,391	0	0	0

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
 GENERAL MOTORS CORP TRI NO: 48921BCLNS401NO

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
TRUMARK INC.								
1820 SUNSET ST.			SIC DESCRIPTION: SIC CODE: 9520				MAP LOCATION NO:	11
LANSING		MI 48901						
MANGANESE	0	0	0	0	0	0	614,200	614,200
NICKEL	0	0	0	0	0	0	37,700	37,700
CHROMIUM	0	0	0	0	0	0	63,400	63,400
SUBTOTALS	0	0	0	0	0	0	715,300	715,300
CHRYSLER CORP. WARREN TRUCK ASSEMBLY PLANT			SIC DESCRIPTION: MOTOR VEHICLES & CAR BODIES				MAP LOCATION NO:	12
21500 MOUND RD.			SIC CODE: 3711					
WARREN		MI 48901						
FORMALDEHYDE	1,300	12,000	0	0	13,300	0	552	552
METHANOL	15,000	67,000	0	0	82,000	0	3,728	3,728
N-BUTYL ALCOHOL	2,600	24,000	0	0	26,600	0	1,091	1,091
BENZENE	53	220	0	0	273	0	5	5
METHYL ETHYL KETONE	27,000	0	0	0	27,000	0	1,600	1,600
1,2,4-TRIMETHYLBENZENE	7,600	68,000	0	0	75,600	0	8,800	8,800
ETHYLBENZENE	6,900	62,000	0	0	68,900	0	130,120	130,120
ETHYLENE GLYCOL	140	2	0	0	142	970	0	970
METHYL ISOBUTYL KETONE	25,000	210,000	0	0	235,000	0	370,871	370,871
TOLUENE	12,000	25,000	0	0	37,000	0	2,033	2,033
XYLENE (MIXED ISOMERS)	47,000	400,000	0	0	447,000	0	737,960	737,960
COPPER	190	580	0	0	770	0	0	0
HYDROCHLORIC ACID	0	280	0	0	280	0	0	0
PHOSPHORIC ACID	0	1,000	0	0	1,000	0	0	0
GLYCOL ETHERS	34,000	24,000	0	0	58,000	32,000	5,657	37,657
MANGANESE COMPOUNDS	0	0	0	0	0	360	9,200	9,560
NICKEL COMPOUNDS	0	0	0	0	0	360	5,700	6,060
ZINC COMPOUNDS	0	0	0	0	0	170	26,683	26,853
SUBTOTALS	178,783	894,082	0	0	1,072,865	33,860	1,304,000	1,337,860

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
 GENERAL MOTORS CORP TRI NO: 48921BCLNS401NO

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 LANSING AUTOMOTIVE PLANT 1								
920 TOWNSEND					SIC DESCRIPTION: SIC CODE: 3710			
LANSING		MI 48921 6206						
METHANOL	6,700	26,000	0	0	32,700	0	1,700	1,700
N-BUTYL ALCOHOL	4,200	29,000	0	0	33,200	0	680	680
BENZENE	700	0	0	0	700	0	680	680
TERT-BUTYL ALCOHOL	400	0	0	0	400	0	0	0
METHYL ETHYL KETONE	11,000	45,000	0	0	56,000	0	11,500	11,500
1,2,4-TRIMETHYLBENZENE	380	14,000	0	0	14,380	0	500	500
ETHYLBENZENE	350	13,000	0	0	13,350	1	4,232	4,233
ETHYLENE GLYCOL	3,900	0	0	0	3,900	0	5,400	5,400
METHYL ISOBUTYL KETONE	110	27,000	0	0	27,110	0	69	69
TOLUENE	8,000	25,000	0	0	33,000	2	3,946	3,948
CYCLOHEXANE	860	0	0	0	860	0	0	0
XYLENE (MIXED ISOMERS)	27,000	240,000	0	0	267,000	0	15,309	15,309
METHYL TERT-BUTYL ETHER	1,500	0	0	0	1,500	0	1,200	1,200
CHROMIUM	0	0	1	0	1	17	483	500
COPPER	0	0	7	0	7	97	1,334	1,431
GLYCOL ETHERS	2,000	540	0	0	2,540	2,200	2,230	4,430
ZINC COMPOUNDS	0	0	74	0	74	920	941	1,861
SUBTOTALS	67,100	419,540	82	0	486,722	3,237	50,204	53,441

GMC POWERTRAIN DELTA ENGINE PLANT	SIC DESCRIPTION: SIC CODE: 3519	INTERNAL COMBUSTION ENGINES,	MAP LOCATION NO:	14
2901 S. CANAL RD.				
LANSING	MI 48921 6206			
ETHYLENE GLYCOL	19	0	0	0
MANGANESE	0	0	0	60
NICKEL	0	0	0	5
CHROMIUM	0	0	0	1
COPPER	0	0	0	33
ZINC COMPOUNDS	0	0	0	160
SUBTOTALS	19	0	0	259
			8,810	9,069

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
 GENERAL MOTORS CORP TRI NO: 48921BCLNS401NO

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 LANSING AUTOMOTIVE DIV.								
2801 W. SAGINAW ST. LANSING	MI 48921 6206	SIC DESCRIPTION: SIC CODE: 3710					MAP LOCATION NO:	15
TOLUENE	61	1,600	0	0	1,661	0	150	150
	SUBTOTALS	61	1,600	0	0	1,661	0	150
GMC LANSING AUTOMOTIVE PLANT 3								
2800 W. SAGINAW ST. LANSING	MI 48921 6206	SIC DESCRIPTION: SIC CODE: 3714	MOTOR VEHICLE PARTS & ACCESSOR				MAP LOCATION NO:	16
ETHYLBENZENE	130	0	0	0	130	0	0	0
TOLUENE	33,000	1,700	0	0	34,700	0	922	922
XYLENE (MIXED ISOMERS)	2,800	950	0	0	3,750	0	524	524
GLYCOL ETHERS	3,900	0	0	0	3,900	1,700	1,600	3,300
	SUBTOTALS	39,830	2,650	0	0	42,480	1,700	3,046
FEDERAL FORGE INC.								
2807 S. LOGAN ST. LANSING	MI 48910	SIC DESCRIPTION: SIC CODE: 3460					MAP LOCATION NO:	17
	SUBTOTALS	0	0	0	0	0	0	0

General Motors (M) Lansing (M) Ingham County, Michigan

Latitude: 42 43 27 N
Longitude: 84 33 21 W

MAP KEY:

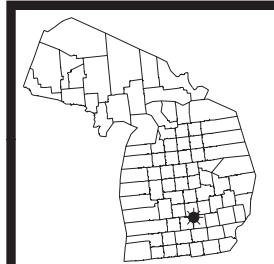
- County Boundaries
- Inter State Highway
- US Highway
- Rail Road
- One Mile
- Three Miles
- Five Miles

POPULATION DENSITY / SQ. MILE

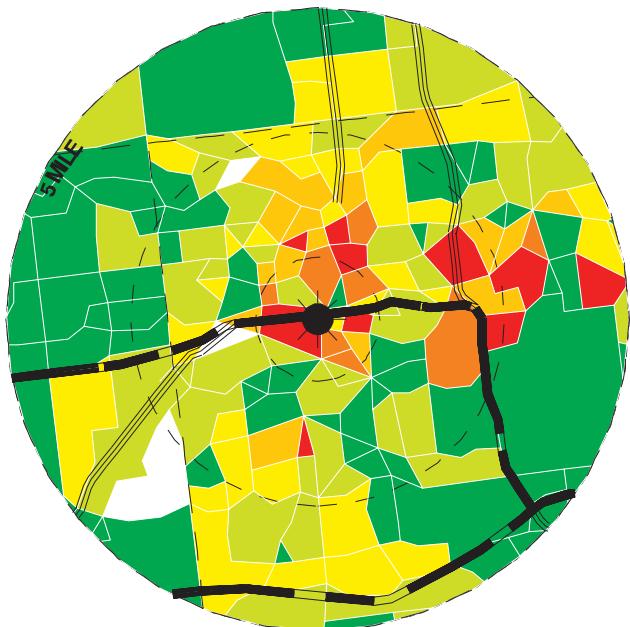
- Greater than 10000
- 1000 - 10000
- 100 - 1000
- 10-100
- 1-10

Minority, poverty, and High School Incomplete percentages

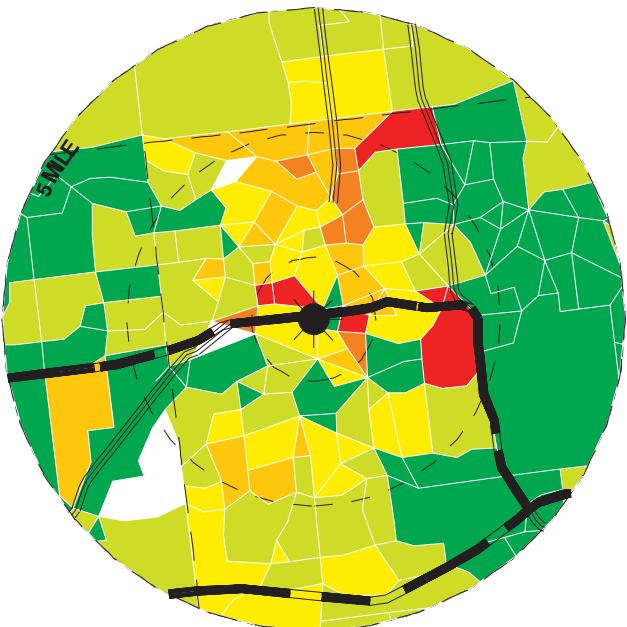
- Greater than 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10



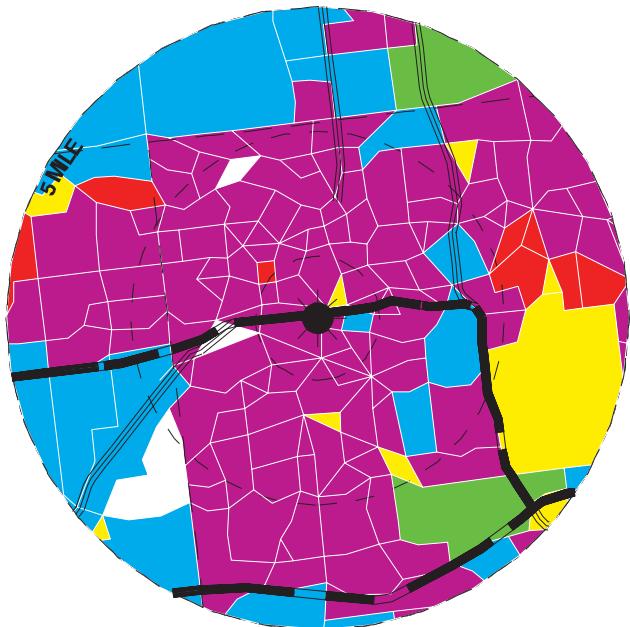
Percentage of Total Population Below Poverty Level



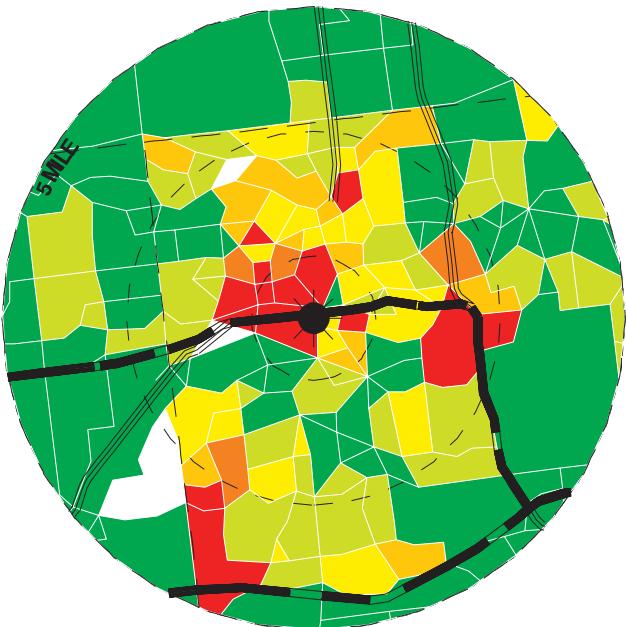
Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population



General Motors (M) Lansing (M) Ingham County, Michigan

MAP KEY:

- County Boundaries
- Inter State Highway
- US Highway
- Rail Road
- One Mile
- Three Miles
- Five Miles

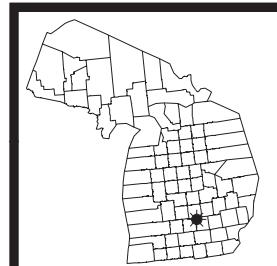
POPULATION DENSITY / SQ. MILE

- Greater than 10000
- 1000 - 10000
- 100 - 1000
- 10-100
- 1-10

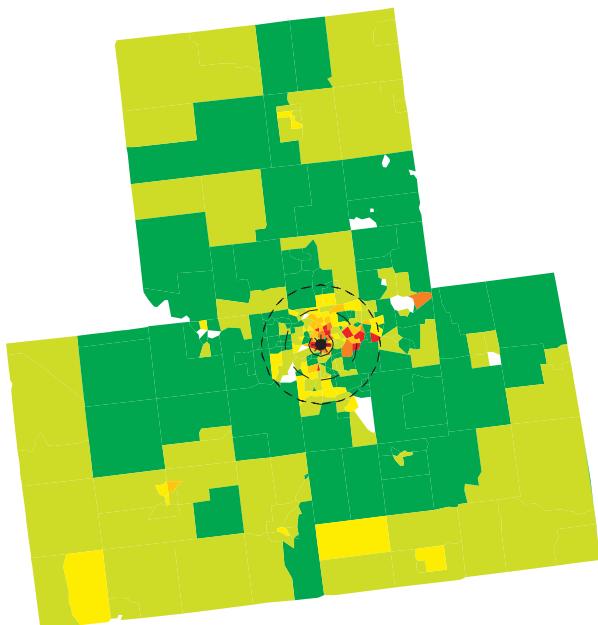
Latitude: 42 43 27 N
Longitude: 84 33 21 W

Minority, poverty, and High School Incomplete percentages

- Greater than 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10



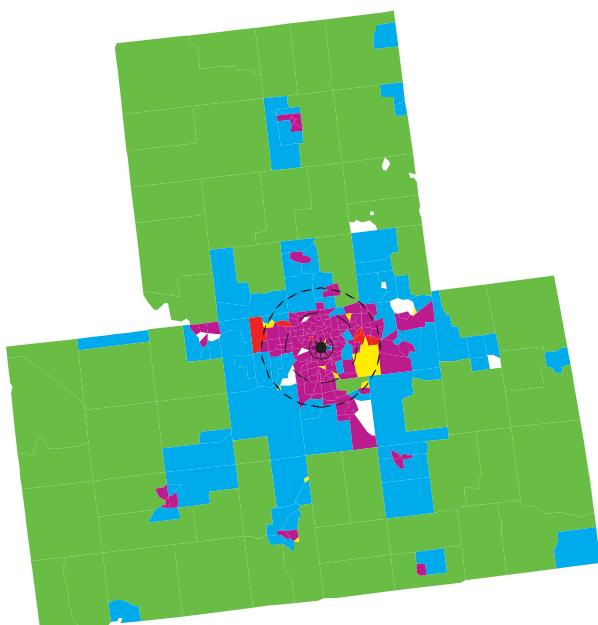
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population

