

JEFFERSON COUNTY, INDIANA
HAZARDOUS MATERIALS HIGHWAY TRAFFIC
FLOW STUDY SPRING-SUMMER 2010

	Representative Materials	ERG	SR 3	SR 7	SR 56	SR 62	SR 250	SR 256	SR 362	SR 421	SR 56/62	TOTALS	
Hours of Observation			42.5	69.5	78.5	108.5	41.5	30	16	83.5	32	502	
T/T Box Van			130	639	535	1,367	12	190	8	702	440	4,023	
Straight truck			401	933	1,020	1,547	58	382	27	1,002	450	5,820	
Flat bed			62	174	184	377	5	54	3	206	140	1,205	
Multi Trailers			1	16	0	13	0	1	0	0	2	33	
Pneumatic Bulk			1	5	30	50	0	10	0	40	32	168	
Atmospheric Tanker (306/406)			1	19	9	27	0	5	1	10	13	85	
Atmospheric Tanker (307/407)			1	4	5	40	0	3	1	17	13	84	
Corrosive Tanker			0	5	1	15	1	0	1	5	5	33	
High Pressure Gas			4	1	2	5	0	5	0	0	3	20	
Cryogenic Tanker			0	2	0	4	0	0	0	0	2	8	
Compressed Gas			0	0	1	2	0	0	0	0	1	4	
Molten Sulphur			0	0	0	2	0	0	0	0	1	3	
Total Qualifying Vehicles			601	1,798	1,787	3,449	76	650	41	1,982	1,102	11,486	
Vehicles per hour (day light)			14	26	23	32	2	22	3	24	34	23	
Vehicles per year			123,877	226,626	199,416	278,463	16,042	189,800	22,448	207,932	301,673		
Explosives: Class 1													
Placard Only		112	0	0	0	0	0	0	0	0	0	0	
1.1 D Mass detonation and fragmentation		112	0	0	0	2	0	0	0	1	0	3	
1.5 D Very insensitive explosion hazard		112	0	0	0	3	0	0	0	0	2	5	
Explosives Total			0	0	0	5	0	0	0	1	2	8	
Gases: Class 2													
Flammable Gas Acetylene		118	0	3	12	19	2	0	0	12	11	59	
1075 Propane		115	11	12	30	37	1	11	0	20	21	143	
Non Flammable Gas Argon		121	1	4	11	30	3	0	0	11	13	73	
1005 Anhydrous Ammonia		125	0	0	0	0	0	0	0	1	0	1	
1977 Nitrogen, refrigerated liquid		120	0	1	0	1	0	0	0	0	0	2	
2187 Carbon Dioxide, refrigerated		120	0	1	2	6	0	0	0	0	4	13	
Total Gases			12	21	55	93	6	11	0	44	49	291	
Total Flammable Gas			11	15	42	56	3	11	0	32	32	202	
Flammable Gas% of Gases			91.67%	71.43%	76.36%	60.22%	50.00%	100.00%	0.00%	72.73%	65.31%	69.42%	
Flammable Liquids: Class 3													
Flammable		127	1	2	0	7	1	0	0	3	3	17	
1203 Gasoline		128	4	21	19	34	0	14	0	13	16	121	
1268 Petroleum Products		128	0	1	0	1	0	0	0	0	0	2	
1863 Aviation Fuel		128	0	1	0	1	0	0	0	0	0	2	
1866 Resin Solution		127	0	1	0	0	0	0	0	0	0	1	
1993 Combustible Liquid, nos		128	1	5	0	6	0	2	0	0	0	14	
3256 Elevated temp liquid flammable		128	0	0	0	1	0	0	0	0	0	1	
3295 Hydrocarbons, liquid, nos		128	1	0	0	0	0	1	0	0	0	2	
Flammables Total			7	31	19	50	1	17	0	16	19	160	
Flammable Solids: Class 4													
Flam Solid		134	0	0	0	0	0	0	0	0	0	0	
Flammable Solids Total			0	0	0	0	0	0	0	0	0	0	
Oxidizer: Class 5													
Division 5.1		143	0	1	0	1	0	0	0	0	0	2	
Oxygen		122	1	10	11	18	0	1	0	20	0	61	
1073 Oxygen		122	0	2	0	2	0	0	0	0	0	4	
Division 5.2 Organic Peroxides		148	0	1	0	0	0	0	0	0	0	1	
3139 Oxidizing liquid nos		140	0	0	0	1	0	0	0	0	0	1	
Oxidizer Total			1	14	11	22	0	1	0	20	0	69	
Toxic/Infection Risk: Class 6													
Infectious Substance		158	0	0	0	0	0	0	0	0	0	0	
Inhalation hazard		123	0	0	0	1	0	0	0	0	0	1	
Toxic		153	0	0	0	1	0	0	0	0	0	1	
Toxic/Infectious Risk Total			0	0	0	2	0	0	0	0	0	2	
Radioactive: Class 7													
Radioactive		163	0	0	0	0	0	0	0	0	0	0	
Corrosive: Class 8													
Corrosive		153	2	12	5	20	0	1	0	4	6	50	
1760 Cleaning Compound		154	0	0	0	2	0	0	0	0	0	2	
1791 Hypochlorite solution		154	0	1	0	3	0	0	0	0	1	5	
1824 Sodium Hydroxide		154	0	1	0	1	0	0	0	2	0	4	
1830 Sulfuric acid		137	0	0	0	0	0	0	0	0	0	0	
1840 Zinc Chloride, solution		154	0	0	0	0	0	0	0	0	0	0	
1903 Disinfectant, corrosive, liquid, nos		153	0	2	0	2	0	0	0	0	0	4	
2031 Nitric acid, other than red fuming		157	0	1	0	1	0	0	0	0	1	3	
3266 Corrosive liquid basic inorganic		154	0	4	3	8	0	0	0	2	3	20	
Corrosive Total			2	21	8	37	0	1	0	8	11	88	
Misc Dangerous Substance: Class 9													
Placard only		171	0	0	0	0	0	0	0	0	0	0	
3077 Hazardous waste solid		171	0	0	3	0	0	0	0	4	0	7	
3257 Elevated temp liquid, nos		128	0	1	0	5	0	0	0	0	2	8	
Dangerous		111	0	2	0	4	0	0	0	0	0	6	
Misc Total			0	3	3	9	0	0	0	4	2	21	
Total Placards			22	90	96	218	7	30	0	93	83	639	
Per cent Hazmat			3.66%	5.01%	5.37%	6.32%	9.21%	4.62%	0.00%	4.69%	7.53%	5.56%	
Per cent Total Placards			3.44%	14.08%	15.02%	34.12%	1.10%	4.69%	0.00%	14.55%	12.99%		REVISED CLASS
PER CENTAGE BY HAZARD CLASS													BY
Explosives			0.00%	0.00%	0.00%	2.29%	0.00%	0.00%	0.00%	1.08%	2.41%	1.25%	1.25%
Gases			54.55%	23.33%	57.29%	42.66%	85.71%	36.67%	0.00%	47.31%	59.04%	45.54%	13.93%
Flammables			31.82%	34.44%	19.79%	22.94%	14.29%	56.67%	0.00%	17.20%	22.89%	25.04%	56.65%
Flammable Solid			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Oxidizer			4.55%	15.56%	11.46%	10.09%	0.00%	3.33%	0.00%	21.51%	0.00%	10.80%	10.80%
Toxic/Infection Risk			0.00%	0.00%	0.00%	0.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	0.31%
Radioactive			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Corrosive			9.09%	23.33%	8.33%	16.97%	0.00%	3.33%	0.00%	8.60%	13.25%	13.77%	13.77%
Misc Dangerous Substance			0.00%	3.33%	3.13%	4.13%	0.00%	0.00%	0.00%	4.30%	2.41%	3.29%	3.29%
TOTAL			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0	100.00%	100.00%	100.00%	
TOTALS													
Per cent by vehicle type													
T/T Box Van			21.63%	35.54%	29.94%	39.63%	15.79%	29.23%	19.51%	35.42%	39.93%	35.03%	
Straight truck			66.72%	51.89%	57.08%	44.85%	76.32%	58.77%	65.85%	50.55%	40.83%	50.67%	
Flat bed			10.32%	9.68%	10.30%	10.93%	6.58%	8.31%	7.32%	10.39%	12.70%	10.49%	
Multi Trailers			0.17%	0.89%	0.00%	0.38%	0.00%	0.15%	0.00%	0.00%	0.18%	0.29%	
Pneumatic Bulk			0.17%	0.28%	1.68%	1.45%	0.00%	1.54%	0.00%	2.02%	2.90%	1.46%	
Atmospheric Tanker (306/406)			0.17%	1.06%	0.50%	0.78%	0.00%	0.77%	2.44%	0.50%	1.18%	0.74%	
Atmospheric Tanker (307/407)			0.17%	0.22%	0.28%	1.16%	0.00%	0.46%	2.44%	0.86%	1.18%	0.73%	
Corrosive Tanker			0.00%	0.28%	0.06%	0.43%	1.32%	0.00%	2.44%	0.25%	0.45%	0.29%	
High Pressure Gas			0.67%	0.06%	0.11%	0.14%	0.00%	0.77%	0.00%	0.00%	0.27%	0.17%	
Cryogenic Tanker			0.00%	0.11%	0.00%	0.12%	0.00%	0.00%	0.00%	0.00%	0.18%	0.07%	
Compressed Gas			0.00%	0.00%	0.06%	0.06%	0.00%	0.00%	0.00%	0.00%	0.09%	0.03%	
Molten Sulphur			0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%	0.09%	0.03%	
TOTAL			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

