

TRAFFIC ENGINEERING

Mission Statement

The mission of the Traffic Engineering Department is responsibility for all aspects of roadway traffic engineering and operations/maintenance including implementation of programs related thereto. General areas of responsibility include: traffic signals, installation and maintenance of fiber optics, WiFi, electrical maintenance, traffic signs, pavement markings, street signs, bus route signs, truck route signs, impact attenuators, traffic design/review, transportation planning, accident analysis, traffic level-of-service analysis and liaison with other agencies.

Goals and Objectives

The Traffic Engineering Department endeavors to provide safe and efficient movement of vehicles, people and goods through the community as advocated by the established regulations and the elected administration. Goals and objectives can be categorized into the following areas:

- 1) The department strives to produce and make available the maximum level of service for traffic with the limited resources available for capital improvements and operation.
- 2) The department attempts to develop new engineering techniques for moving persons and goods safely and efficiently.
- 3) The department continues to create and maintain a communication channel between the administration and the public. This is to align department services in accordance with administrative policy making, as well as provide the timely interchange of incoming and outgoing information with the public.

Indicators:

	<u>2006 Actual</u>	<u>2007 Actual</u>	<u>2008 Estimated</u>	<u>2009 Projected</u>
Engineering/Administration Staff:				
Accident Records & Analysis	9,500	9,000	9,300	9,600
Fatal Accident Investigation	8	9	11	13
Development & Building Plans Processed	145	218	220	230
Board of Safety Reports	58	27	30	35
Traffic Counts Conducted	50	40	45	50
Traffic Studies Conducted	190	200	220	240
Traffic Investigations (complaints)	325	350	375	400

Signal Division:

New Signals Installed	6	11	6	6
Total Signals In Service	357	368	375	385
Total Flashing Beacons In Service	51	51	55	60
Total Pedestrian Signal Locations In Service	176	180	185	190
Signals Modernized	14	18	20	22
Signal Accident Repairs	36	31	50	50

	<u>2006</u> <u>Actual</u>	<u>2007</u> <u>Actual</u>	<u>2008</u> <u>Estimated</u>	<u>2009</u> <u>Projected</u>
Signal Division (cont'd)				
Signal Bulbs Replaced (Emergency)	0	9	12	0
Signal Bulbs Replaced (Routine)	0	0	0	0
Signal Trouble Calls	1,326	1,160	1,200	1,300
Controller Maintenance	955	401	485	500
Detector Loop Repairs	56	26	30	35
Signal Work Orders	277	213	250	275
Cable Locates	768			

Sign & Marking Division

Signs Installed	1,187	980	1,000	1,200
Signs Relocated	355	372	380	390
Signs Replaced	2,291	2,394	2,500	2,600
Signs Removed	1,064	1,185	1,200	1,300
Signs Manufactured	5,169	3,085	3,500	4,000
Street Lanes Marked-Painted Miles	719	759	775	800
Curb Parking Marked (Yellow Curb)	21,037 ft.	12,271 ft.	15,000 ft.	20,000 ft.
Crosswalks Marked	849	913	1,000	1,000
Lane Arrows Marked	822	950	1,000	1,000
Parking Stalls Marked	322	894	500	500

TRAFFIC ENGINEERING
 Dept # 0011
 2009 BUDGET COMPARISON

	2007 ACTUAL	2008 ACTUAL THRU 30-Jun-2008	2008 REVISED BUDGET	2009 SUBMITTED	\$ INCREASE (DECREASE) FROM 2008 APPR	% CHANGE FROM 2008 APPR TO 2009
5111 TOTAL WAGES	976,152		1,091,230	1,128,004	36,774	3.37%
5131 PERF - EMPLOYERS SHARE	92,529		110,249	117,552	7,303	
5132 FICA	115,055		124,719	128,262	3,543	
5134 LIFE MEDICAL & HEALTH INSURAN	272,000		279,000	279,000	-	
5136 UNEMPLOYMENT COMPENSATION	1,556		1,630	1,677	47	
5137 WORKERS COMP INSURANCE	19,800		21,221	23,664	2,443	
513A PERF - EMPLOYEES/PD BY CITY	44,413		47,249	48,642	1,393	
513R RETIREES HEALTH INSURANCE	25,500		45,000	54,000	9,000	
5161 WAGE SETTLEMENT/SEVERANCE PAY	66,478		-	-	-	
Total 5100	\$1,613,484	\$825,621	\$1,720,298	\$1,780,801	\$60,503	3.52%
5212 STATIONERY & PRINTED FORMS	597		550	550	-	
5214 SAFETY ITEMS/SUPPLIES	3,855		7,740	7,740	-	
5219 OTHER OFFICE SUPPLIES	3,892		6,050	6,050	-	
5231 GASOLINE	32,113		45,000	52,000	7,000	
5232 DIESEL FUEL / FUEL OIL	7,270		6,859	12,750	5,891	
5246 HOUSEHOLD & CLEANING SUPPLIES	1,426		2,700	2,700	-	
5261 BLDG REPAIR & MAINT MATERIALS	1,645		1,250	1,250	-	
5263 OTHER EQUIPMENT REPAIR PARTS	-		1,450	1,450	-	
5264 SIGN DIVISION/MATERIAL	68,556		83,668	72,000	(11,668)	
5265 SIGNAL DIVISION/MATERIAL	213,200		224,685	221,500	(3,185)	
5275 PAVEMENT MARKING MATERIALS	91,696		86,620	86,620	-	
5299 OTHER MATERIALS & SUPPLIES	105		300	300	-	
Total 5200	\$424,356	\$118,489	\$466,872	\$464,910	(\$1,962)	- 0.42%
5317 INSTRUCTIONAL SERVICES	6,125		600	600	-	
531E RANDOM DRUG TESTS	370		700	700	-	
531K SEMINAR FEES	-		-	1,000	1,000	
531M SECURITY SERVICES	304		280	280	-	
531Q RADIO SHOP SERVICES	1,936		1,150	1,150	-	
5322 POSTAGE	434		400	400	-	
5323 TELEPHONE & TELEGRAPH	18,637		21,300	21,300	-	
5324 TRAVEL EXPENSES	1,862		6,500	3,000	(3,500)	
5326 MILEAGE	455		400	400	-	
532C CELL PHONE	5,532		8,400	6,400	(2,000)	
532L LONG DISTANCE CHARGES	165		240	240	-	
5331 PRINTING OTHER THAN OFFC SUPPL	-		150	150	-	
5332 PUBLIC OF LEGAL NOTICES/ADVTER	140		400	400	-	
5333 PHOTOGRAPHY & BLUEPRINTING	78		1,800	-	(1,800)	
5342 LIABILITY INSURANCE	9,982		11,072	17,991	6,919	
5351 ELECTRICITY	68,872		108,000	100,000	(8,000)	
5352 NATURAL GAS	18,297		42,297	52,981	10,684	
5353 WATER	2,702		1,800	1,800	-	
5356 SOLID WASTE DISPOSAL	-		2,100	1,100	(1,000)	
5358 HAZARDOUS WASTE DISPOSAL	348		1,200	1,200	-	
5361 CONTRACTED BLDG & STRUCT REPAI	-		950	950	-	
5363 CONTRACTED OTHER EQUIPMT REPAI	5,750		13,600	10,000	(3,600)	

TRAFFIC ENGINEERING
 Dept # 0011
 2009 BUDGET COMPARISON

	2007 ACTUAL	2008 ACTUAL THRU 30-Jun-2008	2008 REVISED BUDGET	2009 SUBMITTED	\$ INCREASE (DECREASE) FROM 2008 APPR	% CHANGE FROM 2008 APPR TO 2009
5365 JANITORIAL & LAUNDRY SERVICE	8,203		6,804	6,290	(514)	
536N GARAGE CONTRACT - NONTARGET	3,364		3,000	3,000	-	
536T GARAGE CONTRACT - TARGET	77,798		85,980	88,339	2,359	
5374 OTHER EQUIPMENT RENTAL	1,509		3,025	3,025	-	
5377 CC BUILDING PARKING	1,230		840	840	-	
5391 SUBSCRIPTIONS AND DUES	1,778		1,550	1,550	-	
5392 LICENSES	30		200	1,000	800	
5399 OTHER SERVICES AND CHARGES	609		600	600	-	
539B MASTER LEASE	32,166		49,341	63,745	14,404	
Total 5300	\$268,677	\$155,638	\$374,679	\$390,431	\$15,752	4.20%
5425 PURCHASE OF FIXED EQUIPMENT	7,937		8,000	9,000	1,000	
5431 CONSTRUCTION FEES - GROUND & S	3,750		8,000	-	(8,000)	
5443 PURCHASE OF OFFICE EQUIPMENT	734		4,000	4,000	-	
5445 PURCHASE OF COMPUTER EQUIP	-		5,000	-	(5,000)	
Total 5400	\$12,421	\$7,642	\$25,000	\$13,000	(\$12,000)	- 48.00%
Total	\$2,318,938	\$1,107,391	\$2,586,849	\$2,649,142	\$62,293	2.41%

Traffic Engineering 2009-2013 Capital Improvement Program

FUNDING SOURCE CODE:	GRP-Grant Pending	PT-Property Tax
CC-Cumulative Capital Fund	LE-Lease	RB-Revenue Bond
CDBG-Community Development Block Grant	InfraBd-Infrastructure Bond	ST-State Source
CEDIT-Co. Economic Development Income Tax	LRS-Local Roads & Streets	SU-Sewer Utility
CO-County Source	MISC-Miscellaneous	SWU-Stormwater Utility
FED-Federal Source	MVH-Motor Vehicle Highway	TIF-Tax Increment Financing
GOB-General Obligation Bond	PCBF-Park Cumulative Bldg. Fund	UF-User Fee
GRA-Grant Approved	PS-Private Source	WU-Water Utility

Item #	Project Title & Description	Funding Source	Expenditure				
			2009	2010	2011	2012	2013
1	Vehicles	LE-Lease	70,000	65,000	75,000	85,000	100,000
	Hybrid Escape, to Replace #16011, 1996 Ford and F350 Dump Truck, to Replace #24302, 1994 Ford Loop Truck - Pickup Sign Truck - Signal Service Truck - Arrow Truck Signal Bucket Truck Challenger Lift		70,000	65,000	75,000	85,000	100,000
2	Equipment	LRS	9,000	14,000	18,000	28,000	35,000
	Linerar Line Grinder - Air Compressor for Building Locator - Concrete Saw - Portable Generator Paint Machine for Arrow Truck - Portable Welder Arrow Board Backhoe/Trencher		9,000	14,000	18,000	28,000	35,000
3	Actra Fiber Optic Cable Update	Cable	10,000	10,000	10,000	10,000	10,000
4*	Traffic Signal Modernization Program - 4 intersections/year	LRS	90,000	90,000	80,000	80,000	80,000
	a. Maplecrest & Trier b. Airport Expressway & Lower Huntington c. Fairfield & Lower Huntington d. Coliseum & McCormick e. Fourth & Harrison f. Covington & Smith g. Lindenwood & State h. Hoagland & Pontiac i. Spring & Sherman j. Airport Expressway & Fairfield k. Getz & Illinois l. Ardmore & Wheelock m. St Joe Center & Wheelock n. Harmer & Washington o. Covington & Freeman (flasher) p. Fairfield & Lwr Huntington (flasher) q. New Haven & Phelps Dodge r. Oxford & Wayne Trace s. Adams Ctr & Tillman t. Minnich & Tillman		90,000	90,000	80,000	80,000	80,000
5*	Traffic Signal Controller Replacement Program - 6 units complete 1. Ardmore & Covington 2. Ardmore & Engle 3. Auburn & N. Clinton 4. Bevel & Taylor 5. Covington & Hadley 6. Maysville & Meijer	LRS	45,000	45,000	45,000	45,000	45,000
6*	Northeast Annexation Ph. V - Installation/replacement of street name signs and stop signs.	LRS	-	-	-	-	-
7*	Southwest Extended Annexation - Installation of street name signs	LRS	-	-	-	-	-
8	Traffic Signal Head Replacement - 10 intersections/year 2009 Replacements 1. Anthony & Tillman 2. Calhoun & Main 3. Clinton & Community 4. Clinton & Medical Pk 5. Coliseum & New Haven 6. Dupont & Dupont Ridge 7. Dupont & La Cabreah 8. Harrison & Main 9. Pontiac & Smith 10. River Run & St Joe Ctr	LRS	15,000	15,000	15,000	15,000	15,000
9	Traffic Signal Activation Program - (see Transportation CIP)	LRS	-	-	-	-	-
10	Expand/Upgrade ATMS Computerized Signal System	LRS	50,000	50,000	50,000	50,000	50,000

Traffic Engineering 2009-2013 Capital Improvement Program

FUNDING SOURCE CODE:		GRP-Grant Pending	PT-Property Tax
CC-Cumulative Capital Fund		LE-Lease	RB-Revenue Bond
CDBG-Community Development Block Grant		InfraBd-Infrastructure Bond	ST-State Source
CEDIT-Co. Economic Development Income Tax		LRS-Local Roads & Streets	SU-Sewer Utility
CO-County Source		MISC-Miscellaneous	SWU-Stormwater Utility
FED-Federal Source		MVH-Motor Vehicle Highway	TIF-Tax Increment Financing
GOB-General Obligation Bond		PCBF-Park Cumulative Bldg. Fund	UF-User Fee
GRA-Grant Approved		PS-Private Source	WU-Water Utility

Item #	Project Title & Description	Funding Source	Expenditure				
			2009	2010	2011	2012	2013
11	Office Equipment Replacement	LRS	4,000	4,000	4,000	4,000	4,000
TOTAL			293,000	293,000	297,000	317,000	339,000

* Although capital improvements, actual expenditures will be made from the 4200 budget line series.

The Traffic Engineering / Traffic Operations Department is responsible for all aspects of roadway Traffic Engineering operations and maintenance. Areas of responsibility include: the design, installation, timing and maintenance of traffic signals, pavement markings, sign installation, maintenance, traffic design and review, transportation planning, traffic calming devices, accident record compiling and analysis. Signal service personnel are on duty 24 hours a day, seven days a week. Sign personnel respond to knockdowns of stop and yield signs and are on an call basis during non-working hours.

Revenue for departmental funding comes from Local Roads and Streets (LRS), contracts with INDOT, Allen County, New Haven, and claims reimbursements, as well as subsidy from the property tax. Improvements to high volume traffic routes such as signalization, intersection interconnects, signal modernization's, separate turn lanes, and additional "thru" lanes have depended upon CEDIT, federal and private sources for funding.

1. - 2. Vehicles and equipment are replaced on a rotating basis based on 1) maintenance costs 2) mileage 3) age.
3. Actra fiber optic conversion. This item will include replacing electronic equipment to utilize fiber optic cable for interconnection of traffic signals.
4. Traffic Signal Modernization - This program updates a signalized intersection to aluminum mast arm poles, 12" traffic signal indications and new wiring. Intersections with steel poles and 8" signal indications that were last modernized in the 60's are
5. Traffic Signal Controller Replacement - This program replaces obsolete and discontinued traffic signal control units that have been in service for at least ten years.
6. - 7. Annexation projects - Shall consist of installation of a green standard street name sign at an intersection that is unmarked or where the neighborhood desires replacement of wood street name signs.
8. Traffic Signal Head Replacement-This program replaces traffic signal indications which were installed in the 70's The program is designed as a preventative maintenance and safety
9. Traffic Signal Activation Program. This program will convert fixed time signalized intersections to fully activated to improve the flow of traffic. (2 locations/year.)
10. In 2000 and 2001 our Eagle Contract Traffic Signal Control System was replaced with an Eagle Actra Advanced Traffic Management System. The new system allows expansion of our computerized traffic signal network.
11. Furniture replacement will consist of replacing standard office chairs with ergonomic chairs, providing additional workstation space in conjunction with the new advanced Traffic Management Computer System and replacing worn furniture.

STAFFING LEVELS
BUDGETED
TRAFFIC ENGINEERING DEPARTMENT

CLASSIFICATION TITLE	EXEMPT GRID/ UNION														
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Director Traffic Eng/Street Light	J	0.5	0.5	0.5	0.5	0	0	0	0	0	0	0	0	0	
Assistant Traffic Engineer	J	1	1	0	0	0	0	0	0	1	1	1	1	1	
Administrative Assistant	A	0	0	0	0	0	0	1	1	1	1	1	1	1	
Project Coordinator	14/IAM	2	2	2	2	2	2	3	3	2	2	2	2	2	
Design Coordinator	13/IAM	0	0	0	0	0	1	0	0	0	0	0	0	0	
Signal Superintendent	J	1	1	1	1	1	0	0	0	0	0	0	0	0	
Signal Supervisor	F	0	0	0	0	0	0	0	0	0	0	0	0	0	
Engineer Coordinator	13/IAM	1	1	1	1	1	0	0	0	0	0	0	0	0	
Signal Foreman	F	2	2	2	2	2	2	1	1	1	1	1	1	1	
Sign & Marking Supt	H	1	1	1	1	1	0	0	0	0	0	0	0	0	
Sign & Marking Supervisor	F	0	0	0	0	0	1	1	1	1	1	1	1	1	
Engineer Technician	10/IAM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Signal Electrician	10/FF/IAM	11	11	11	11	11	11	10	10	10	10	10	10	10	
Sign & Marking - Foreman	F	1	1	1	1	1	1	1	1	1	1	1	1	1	
Sign & Marking Specialist	9/IAM	3	2	9	7	7	7	6	6	6	6	6	6	6	
Signal Technician	9/IAM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Data Processing Technician	10 /IAM	1	1	1	1	1	1	1	1	1	1	1	1	1	
Bookkeeper/Clerk	9/IAM	1	1	1	1	1	1	0	0	0	0	0	0	0	
Secretary VII	7/IAM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Signal Electrician/Tech. Apprentice	9/IAM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Marking Electrical Tech. Apprentice	9/IAM	6	7	0	0	0	0	0	0	0	0	0	0	0	
Sign Fabricator	10/IAM	1	1	1	3	3	4	4	4	4	4	4	4	4	
Supervisor	H	0	0	0	0	0	0	0	0	0	0	0	0	0	
Infrastructure Supervisor	F	1	1	0	0	0	0	0	0	0	0	0	0	0	
Assoc. Dir. Traffic Eng/Street Light	J	0	0	1	1	0	0	0	0	0	0	0	0	0	
Traffic Engineer	H	0	0	0	0	1	1	1	1	1	1	1	1	1	
Director Traffic Operations	H	0	0	0	0	0	1	1	1	1	1	1	1	1	
Supervisor Traffic Operations	F	0	0	0	0	0	0	1	1	1	1	1	1	1	
TOTAL		33.5	33.5	32.5	32.5	32	33	32	31	31	31	31	31	31	