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, traffic signs, pavement markings, street signs, impact attenuators, traffic design/review, transportation planning, accident record compiling/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>indicators.</u>	2004	2005	2006	2007
	<u>Actual</u>	<u>Actual</u>	<u>Estimated</u>	<u>Projected</u>
Engineering/Administration Staff: Accident Records & Analysis Fatal Accident Investigation Plot Plans Processed Board of Safety Reports Traffic Counts Conducted Traffic Studies Conducted	8,813	9,300	9,800	9,800
	10	12	15	15
	42	52	55	55
	60	57	65	65
	45	30	55	45
	180	180	190	180
Traffic Investigations (complaints) Signal Division:	260	250	300	275
New Signals Installed Total Signals In Service Total Flashing Beacons In Service Total Pedestrian Signal Locations In Service Signals Modernized Signal Accident Repairs	3	4	6	6
	350	354	360	366
	53	53	52	50
	172	174	176	178
	5	4	4	4
	23	50	55	60

	2004 <u>Actual</u>	2005 <u>Actual</u>	2006 Estimated	2007 <u>Projected</u>
Signal Division (cont'd)				
Signal Bulbs Replaced (Emergency) Signal Bulbs Replaced (Routine) Signal Trouble Calls Controller Maintenance Detector Loop Repairs Signal Work Orders Cable Locates	357 9,463 419 798 43 318 1,339	264 740 1,234 515 61 400 7,500	20 400 1,260 521 65 400 800 *(moved to Si	20 360 1,300 527 70 400 0* treet Light Dept.)
Sign & Marking Division				
Signs Installed Signs Relocated Signs Replaced Signs Removed Signs Manufactured Street Lanes Marked-Painted Miles Curb Parking Marked (Yellow Curb) Crosswalks Marked Lane Arrows Marked Parking Stalls Marked	742 322 2,600 1,050 4,746 633 29,566 ft. 636 795 531	853 353 2,683 1,291 4,724 657 23,663 ft. 760 883 777	800 360 2,500 1,150 4,850 675 20,000 ft. 650 825 550	845 375 2,700 1,225 4,875 680 22,000 ft. 725 850 550

TRAFFIC ENGINEERING (LOCAL ROAD & STREETS) Dept # 138-011-OFFC 2007 BUDGET COMPARISON

Dept # 138-011-OFFC 2007 BUDGET COMPARISON								\$ INCREASE	
				2006				(DECREASE)	% CHANGE
Traffic Eng. page one of two		2005		APPROVED		2007	F	ROM 2006 APPR	FROM 2006 APPR
		<u>ACTUAL</u>	1	HRU 06/30/06		SUBMITTED		TO 2007	TO 2007
4111 WAGES-REG	\$	1,358,558	\$	1,416,839	\$	1,473,520	\$	56,681	
4115 PARTTIME	Ψ	30,881	Ψ	46,152	Ψ	46,400	Ψ	248	
411M TRAFFIC ENG		(469,368)		-		(524,808)		(524,808)	
4121 VACATION PAY		2,300		2,369		10,710		8,341	
4125 OVERTIME		16,758		16,768		18,534		1,766	
412L LONGEVITY		5,859		6,326		6,686		360	
TOTAL WAGES	\$	944,988	\$	1,488,454	\$	1,031,043	\$	(457,411)	-30.73%
4131 PERF		65,674		79,667		94,341		14,673	
4132 FICA		102,734		114,341		119,023		4,682	
4134 GROUP HEALTH INSUR		224,004		259,050		272,000		12,950	
4136 UNEMPLOYMENT		708		747		1,556		809	
4137 WORKERS COMP		19,044		21,804		19,800		(2,004)	
4138 CLOTHING ALLOWANCE		1,500		-		-		-	
413A PERF/FRINGE		39,405		43,455		45,284		1,829	
413R RETIREE HEALTH INSUR		6,996		23,550		25,500		1,950	
4161 STLMT/SEVRNC TOTAL 4100	\$	34,613 1,439,666	\$	2,031,068	\$	1,608,546	\$	(422,523)	-20.80%
TOTAL TIOU	Ψ	1,400,000	Ψ	2,031,000	Ψ	1,000,040	Ψ	(422,020)	-20.00 /0
4212 STATIONARY/FORMS	\$	599	\$	635	\$	550	\$	(85)	
4214 SAFETY ITEMS		3,237		6,050		7,740		1,690	
4219 OTHR OFFC SUPPL		5,480		5,300		6,050		750	
4231 GASOLINE		29,145		25,095		50,575		25,480	
4232 DIESEL FUEL		4,649		2,770		6,465		3,695	
4246 HOUSEHOLD SUPPL		2,026		2,175		2,700		525	
4261 BLDG REP MTLS		2,122		1,400		1,250		(150)	
4263 OTHR REP PARTS		150		1,400		1,450		50	
4264 SIGN DIVS		68,917		84,000		84,000		(0.500)	
4265 SIGNAL DIVS		212,591		279,000		275,500		(3,500)	
4275 PAVE/MARK 4299 OTHER MTLS		76,119 699		84,620 300		84,620 300		-	
TOTAL 4200	\$	405,734	\$	492,745	\$	521,200	\$	28,455	5.77%
		Í		·		·		·	
4317 INSTRCT SRVCS	\$	30	\$	430	\$	600	\$	170	
431E DRUG TEST		362		345		700		355	
431K SEMINAR FEES		390		-		-		-	
431M SECRTL SRVCS		272		280		280		-	
431Q RADIO SHOP		1,173		1,150		1,150		(1.060)	
4321 FREIGHT 4322 POSTAGE		982 440		1,060 435		400		(1,060) (35)	
4323 TELEPHONE		19,501		20,145		18,612		(1,533)	
4324 TRAVEL		4,014		3,000		6,500		3,500	
4326 MILEAGE		357		300		400		100	
432C CELL PHONE		4,396		4,800		6,000		1,200	
432L LONG DISTANCE		252		420		240		(180)	
4331 PRINTING		-		150		150		-	
4332 PUB LEGAL		139		400		400		-	
4333 PHOTO/BLPRNT		1,283		1,950		1,800		(150)	
4341 PROPERTY INSUR		952		2,281		945		(1,336)	
4342 LIABILITY INSUR		1,164		1,200		1,517		317	
4343 OFCL/CRIME BOND		150		317		197		(120)	
4344 OTHER CASUALTY INSR		1,710		402		109		(293)	
4345 AUTO INSUR		4,429		7,062		7,214		152	
4351 ELECTRICITY									
40=0 NIATION		210,621		151,800		132,000		(19,800)	
4352 NATURAL GAS 4353 WATER		210,621 16,238 2,387		151,800 18,500 1,680		132,000 32,535 1,800		(19,800) 14,035 120	

TRAFFIC ENGINEERING (LOCAL ROAD & STREETS) Dept # 138-011-OFFC 2007 BUDGET COMPARISON

2007 BUDGET COMPARISON								\$ INCREASE	
Traffic Eng. page two of two		2005 <u>ACTUAL</u>	1	2006 APPROVED HRU 06/30/06		2007 SUBMITTED		(DECREASE) OM 2006 APPR TO 2007	% CHANGE FROM 2006 APPR <u>TO 2007</u>
4356 SOLID WASTE DISPOSAL		1,069		1,075		1,100		25	
4358 HAZARD DISPOSAL		1,638		1,400		1,200		(200)	
4361 CONT BLD REP		1,133		950		950		-	
4363 CONT OTH REP		11,042		13,000		13,000		-	
4365 JANITORIAL SRVCS		8,000		6,930		6,940		10	
436N GARAGE NON-TARGET		4,124		3,000		3,000		-	
436T GARAGE TARGET		80,346		77,592		77,798		206	
4374 OTHR EQ RENT		579		1,500		3,025		1,525	
4377 CC BLD PKG		931		840		1,200		360	
4391 SUBS & DUES		1,311		1,505		1,550		45	
4392 LICENSES		256		100		200		100	
4399 OTHR SRVCS		392		600		600		-	
439B MASTER LEASE		-		10,988		32,193		21,205	
TOTAL 4300	\$	382,063	\$	337,587	\$	356,305	\$	18,718	5.54%
4425 PUR FIXED EQPT	\$	_	\$	16,000	•	11,000	\$	(5,000)	
4431 CONST GROUND	Ψ	1,399	Ψ	4,000	Ψ	4,000	Ψ	(5,000)	
4441 PUR VEHICLE		40,073		4,000		4,000		_	
4443 PUR OFFC EQP		169		2,500		4,500		2,000	
4445 PUR COMPUTER		400		2,500		-,500		-	
TOTAL 4400	\$	42,041	\$	22,500	\$	19,500	\$	(3,000)	-13.33%
TOTAL EXPENSES	\$	2,269,504	\$	2,883,900	\$	2,505,551	\$	(378,349)	-13.12%

	Traffic Engineering 2007-2	011 Capita	al Improve	ment Pro	ogram						
	FUNDING SOURCE CODE:	GRP-Grant P		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PT-Property Ta	av .					
	CC-Cumulative Capital Fund	LE-Lease	ending		RB-Revenue Bond ST-State Source						
	CDBG-Community Development Block Grant		tructure Bond								
	CEDIT-Co. Economic Development Income Tax		ads & Streets		SU-Sewer Utili						
	CO-County Source	MISC-Miscell			SWU-Stormwa						
	FED-Federal Source		aneous 'ehicle Highway		TIF-Tax Increm						
	GOB-General Obligation Bond		umulative Bldg.		UF-User Fee	ient i mancing					
	GRA-Grant Approved	PS-Private Sc		. Fullu	WU-Water Utili	tv					
	I		dice			•					
Item #	Project Title & Description	Funding	0007		Expenditure 2009		2011				
	No. 19 and 19 an	Source	2007	2008		2010	2011				
1	Vehicles	LE	90,000	137,000	85,000	100,000	110,000				
2	Equipment	LRS	11,000	13,000	11,000	10,000	10,000				
3	Computer Equipment Replacement	CC	-	-	-	-	-				
		LRS		5,000	7,000	5,500	5,500				
4*	<u>Traffic Signal Modernization Program</u> - 4 intersections/year	LRS	120,000	120,000	90,000	90,000	90,000				
	a. Oxford & Wayne Trace										
	b. Buchanan & Hanna										
	c. New Haven & Phelps Dodge										
	d. Calhoun & Paulding										
5*	<u>Traffic Signal Controller Replacement Program</u> - 6 units complete	LRS	35,000	35,000	35,000	35,000	35,000				
	2007 Replacements - Reed & Trier,										
	Edith & State, Maplecrest & Trier,										
	Dupont & La Cabreah, N. Clinton & Auburn,										
	Lower Huntington & Winchester										
6*	Southwest Extended Annexation - Installation of streetname signs.	LRS	11,500	-	-	-	-				
7*	Conflict Monitor/Malfunction Management unit Modernize-	LRS	16,000	16,000	-	-	-				
	Update of outdated, unrepairable electronics										
8*	Traffic Signal Head Replacement - 11 intersections/year	LRS	15,000	15,000	15,000	15,000	15,000				
	2007 Upgrades - Carew & State, Beacon & State,										
	Hobson & Vance, Hobson & Trier, Randallia & State										
	Calhoun & Rudisill, Broadway & Rudisill,										
	Hessen Cassel & Tillman, Hanna & Jefferson										
	Fairfield & Pettit, Rudisill & South Wayne										
9*	Expand/Upgrade ATMS Computerized Signal System	LRS	70,000	84,000	60,000	60,000	60,000				
10	Office Equipment Replacement	LRS	4.500	4,000	4.000	4.000	4,000				

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

TOTAL

The Traffic Engineering Department is responsible for all aspects of roadway Traffic Engineering operations and maintenance. Areas of responsibility include: the Revenue for departmental funding comes from Local Roads and Streets (LRS), contracts with INDOT, Allen County, New Haven, and claims reimbursements, as well

373.000

429.000

307.000

319,500

329.500

- 1. 2. Vehicles and equipment are replaced on a rotating basis based on 1) maintenance costs 2) mileage 3) age.
- 3. Computer equipment replacement There are 20 pc's in the department. This item will include replacing those computers that are five years old and also money is included to replace two (2) printers and two (2) monitors, in addition to the pc's. A fa
- 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. Conflict Monitor/Malfunction Management Modernize-This program updates old non repairable conflict monitors updating to new technology.
- 9. 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 program.
- 10. In 2000 and 2001 our Eagle Comtract 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. The expansion/upgrade of the ATMS will
- 11. Furniture replacement will consist of replacing standard office chairs with ergonomic chairs, providing additional workstation space in conjuction with the new advanced Traffic Management Computer System and replacing worn furniture.

STAFFING LEVELS BUDGETED TRAFFIC ENGINEERING DEPARTMENT

	EXEMPT GRID/													
CLASSIFICATION TITLE	UNION	99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
D: T # # 5			0 =								0	-		
Dir. Traffic Eng/Street Light	J	0.5	0.5	0.5	0.5		0.5	0		,	Ů	0	0	0
Asst. Traffic Engineer	J	1	1	1	1	0	0	0		•	0	0	0	0
Administrative Asst. +	Α	0	0	0	0		0	0			1	1	1	1
Project Coordinator	14/IAM	2	2	2	2		2	2	2	_		3	3	3
Design Coordinator +	13/IAM	0	0	0	0	_	0	0		O		0	0	0
Signal Superintendent	J	1	1	1	1	1	1	1	0	,	Ţ	0	0	0
Signal Supervisor	F	0	0	0	0	·	0	0	-	•	0	0	0	0
Engineer Coordinator	13/IAM	1	1	1	1	1	1	1	0	Ū	0	0	0	0
Signal Foreman	F	2	2	2	2	2	2	2			1	1	1	1
Sign & Marking Supt	Н	1	1	1	1	1	1	1	0	0	0	0	0	0
Sign & Marking Supervisor	F	0	0	0	0	0	0	0	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	11	11	10	10	10	10	10
Sign & Marking - Foreman	F	0	1	1	1	1	1	1	1	1	1	1	1	1
Sign & Marking Specialist	9/IAM	3	3	3	2	9	7	7	7	7	7	7	7	7
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	1	1	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	6	6	7	0	0	0	0	0	0	0	0	0
Sign Fabricator	10/IAM	1	1	1	1	1	3	3	4	4	4	4	4	4
Supervisor	Н	0.5	0	0	0	0	0	0		0	0	0	0	0
Infrastructure Supervisor	F	1	1	1	1	0	0	0	0	0	0	0	0	0
Assoc. Dir. Traffic Eng/Street Light	J	0	0	0	0	1	1	0	0	0	0	0	0	0
Traffic Engineer	Н	0	0	0	0	0	0	1	1	1	1	1	1	1
Director Traffic Operations	Н	0	0	0	0	0	0	0	1	1	1	1	1	1
Supervisor Traffic Operations	F	0	0	0	0	0	0	0	0	1	1	1	1	1
TOTAL		33	33.5	33.5	33.5	32.5	32.5	32	33	32	32	32	32	32

⁺ Reflects Additional Position in 2007