City Engineer .....***Steven J. Vandette***

Functional Organizational Chart

Administration

- Prepares and administers department budget
- Prepares and administers capital improvement budget for roads, sanitary sewers, water mains, drains and detention, erosion control and sidewalks
- Develops master plans for capital improvements
- Liaisons with Federal, State and County agencies and other cities to implement projects
- Liaisons with developers to implement public improvements for new residential, commercial, and industrial developments
- Liaisons with utility companies for private utility construction in City right-of-way
- Prepares and maintains development standards for new development

Engineering

- Designs and administers construction of public improvement projects such as roads, storm drains, sanitary sewers, stream bank stabilization and water mains
- Reviews development-related public improvement plans for compliance with City standards and specifications
- Reviews development-related site grading, drainage and soil erosion control plans for compliance with City, County and State requirements
- Maintains quarter section utility maps
- Maintains City development standards, construction specifications and standard construction details
- Coordinates construction-related inquiries and/or concerns from the public concerning City construction projects, commercial and residential development projects
- Answers utility and flood plain questions and maintains flood plain maps and requests
- Participates in development and maintenance of the City's pavement management system
- Issues permits and performs inspections for soil erosion control, culvert and right-of-way permits
- Prepares special assessment district projects for paving, sanitary sewers and sidewalks

Surveying and Inspection

- Conducts surveys for design and construction of public improvements
- Maintains the City's global positioning and bench mark systems
- Participates in maintenance of the City's geographic information system
- Conducts surveys for the investigation of development- related drainage problems
- Inspects public improvements for compliance with development standards, construction specifications and soil erosion control requirements
- Inspects City road, water and sewer projects

Traffic Engineering

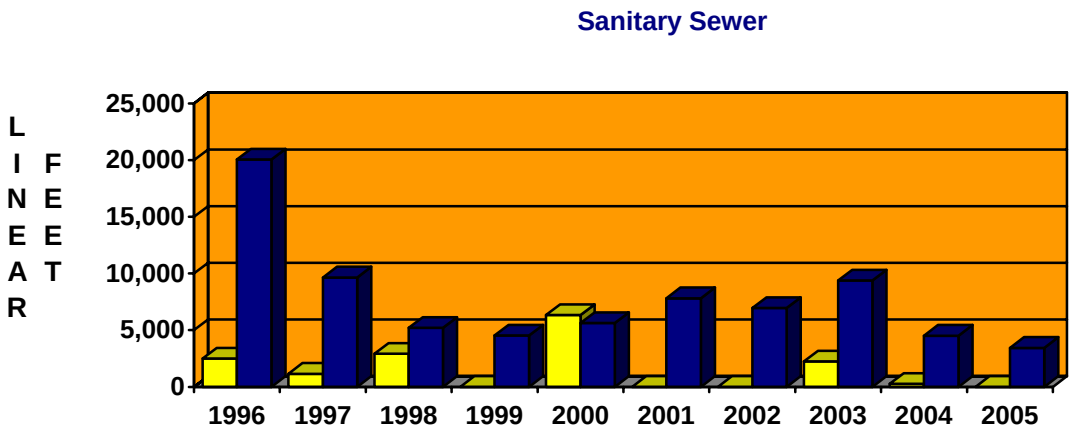
- Analyzes roads for defects and deficiencies
- Maintains records of traffic crashes, signals, and signs
- Conducts and maintains traffic volume counts
- Reviews plans of new developments for compliance with traffic standards
- Responds to requests for new traffic signals and signs
- Liaisons with the Road Commission for Oakland County on traffic signal complaints
- Investigates traffic vision obstructions
- Participates in Traffic Committee activities
- Processes sidewalk waiver requests
- Performs site plan and traffic control plan reviews
- Conducts traffic impact studies
- Identifies traffic safety concerns, develops projects, prepares applications for State and Federal funding

Department at a Glance

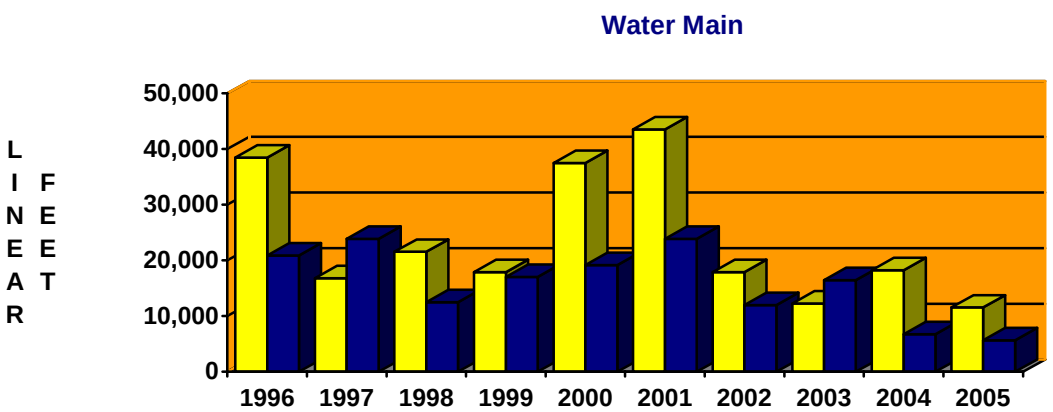
Funding Level Summary	2003/04 Actual	2004/05 Actual	Estimated 2005/06 Budget	2005/06 Budget	2006/07 Budget	% of Change
Engineering	$2,553,198	$2,518,862	$2,637,580	$2,759,390	$2,850,450	3.3%
Traffic Engineering	213,557	261,785	233,200	237,170	246,440	3.9
Total Department	**$2,766,755**	**$2,780,647**	**$2,870,780**	**$2,996,560**	**$3,096,890**	**3.3%**
Personal Services	$2,174,354	$2,207,794	$2,288,900	$2,422,970	$2,512,530	3.7%
Supplies	24,522	24,070	24,000	27,050	26,650	-1.5
Other Services/Charges	552,293	531,733	540,880	529,540	557,710	5.3
Capital Outlay	15,586	17,050	17,000	17,000	0	-100.0
Total Department	**$2,766,755**	**$2,780,647**	**$2,870,780**	**$2,996,560**	**$3,096,890**	**3.3%**

Personnel Summary	2003/04		2004/05		2005/06		2006/07	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
Engineering	22	4	22	4	22	4	22	4
Traffic Engineering	1	3	1	3	1	2	1	2
Total Department	**23**	**7**	**23**	**7**	**23**	**6**	**23**	**6**

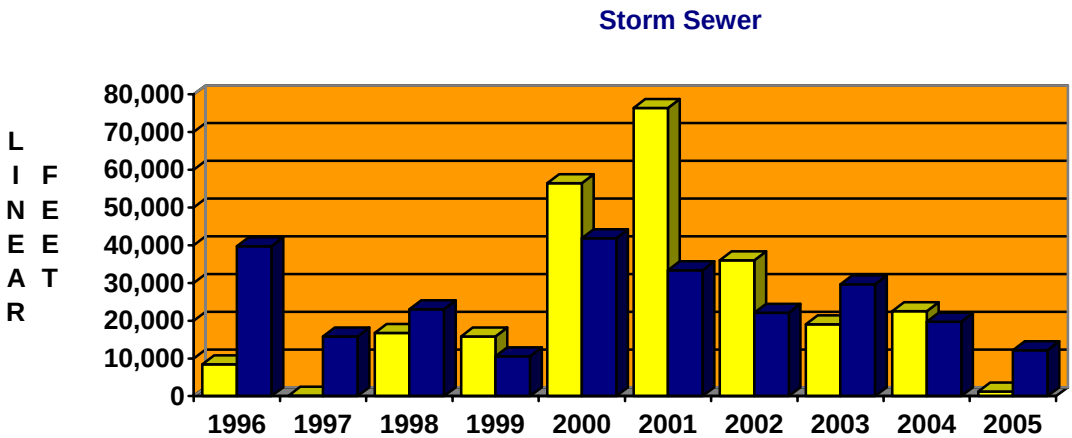
Key Departmental Trends



Comparison of linear feet of sanitary sewer installed by City projects and private development.

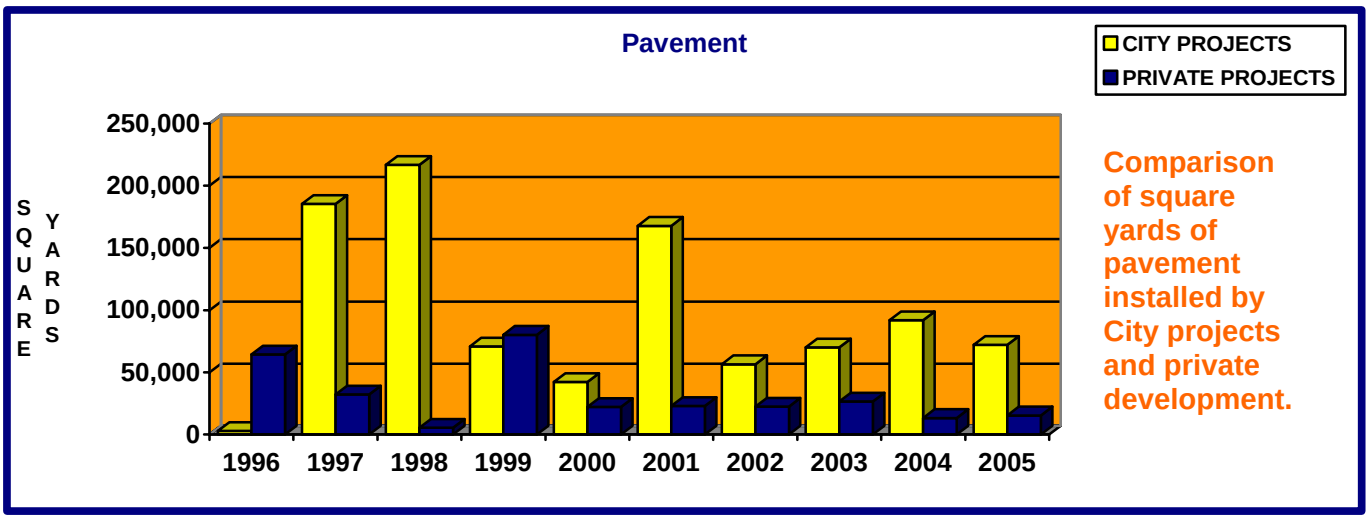


Comparison of linear feet of water main installed by City projects and private development.

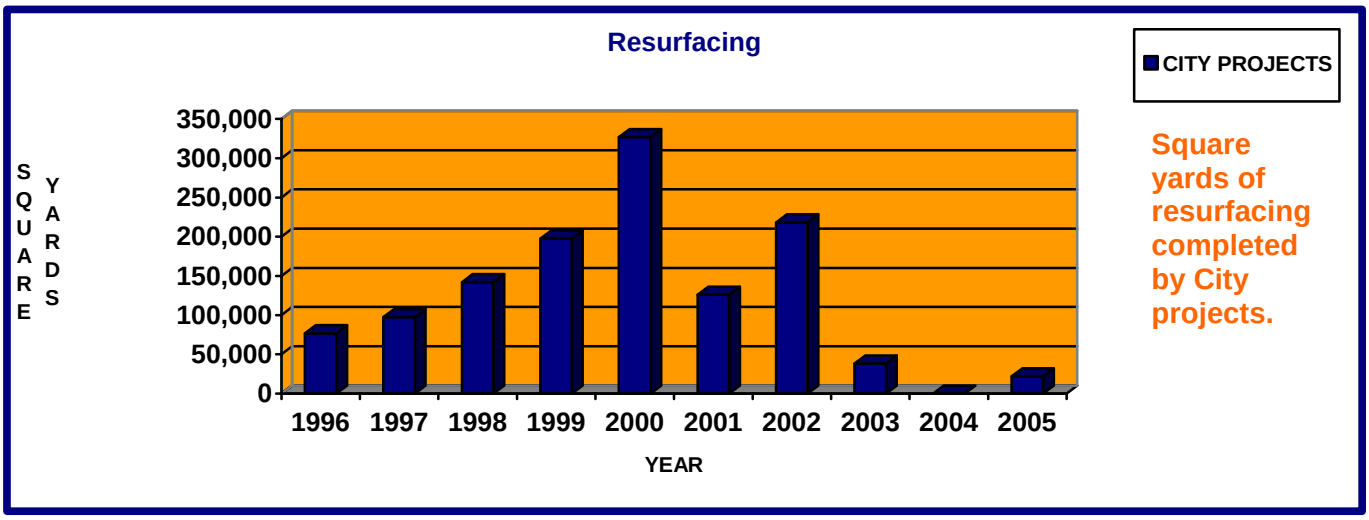


Comparison of linear feet of storm sewer installed by City projects and private development.

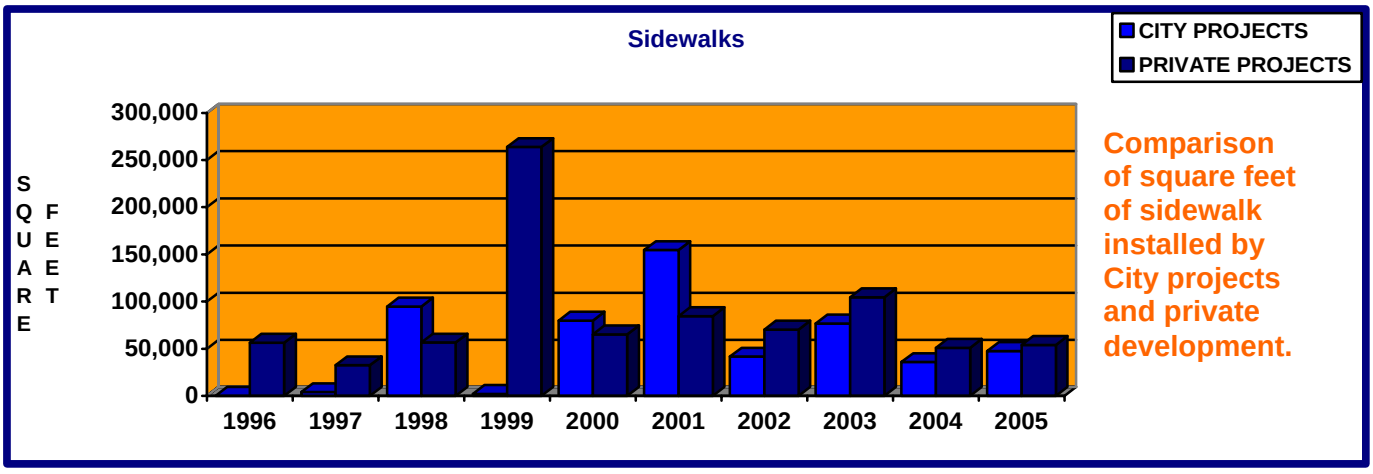
Key Departmental Trends, Continued



Comparison of square yards of pavement installed by City projects and private development.



Square yards of resurfacing completed by City projects.



Comparison of square feet of sidewalk installed by City projects and private development.

Mission and Service Statements

Mission Statement

The mission of the Engineering Department is to design high quality public improvements using sound engineering principles and cutting edge technology.

Service Statement

Engineering is responsible for planning, design and construction of City projects such as roads, sewers, water mains, drains and soil erosion control.

Major responsibilities include in-house design of public works projects and oversight of consulting engineers engaged in design, construction engineering, inspection, and materials testing on City projects.

Engineering develops master plans, cost estimates and funding strategies for public improvement projects. Engineering reviews plans for public and private improvements in City right-of-ways for compliance with City ordinances and development standards. Engineering is responsible for all records of City utilities, local and major streets, pavement management, traffic counts, crashes, signal maintenance and control orders. Engineering receives requests for installation of new traffic control devices and sidewalk waivers and processes these requests through the Traffic Committee and City Council.

Residents, property owners, developers, builders, and consulting engineers obtain a variety of information from Engineering such as utility, wetland and floodplain locations, development standards, construction specifications, permit and inspection requirements and location and availability of City utilities. Property owners can receive information on special assessment procedures for implementing road, water, sewer, or sidewalk improvements. Engineering is responsible for setting the right-of-way standards, issuing right-of-way construction permits, soil erosion control, soil removal and filling permits, and all permit inspection. Plans for private development are submitted to the Engineering Department to review for conformance with City development and traffic requirements.

Construction inspection is conducted to ensure conformance with City, State and County requirements.

Engineering develops and administers Phase II storm water permit programs to educate the public by implementing programs and projects to promote sustainable storm water management and reduce soil erosion to improve and protect water quality in drains and rivers.

Did You Know ...?

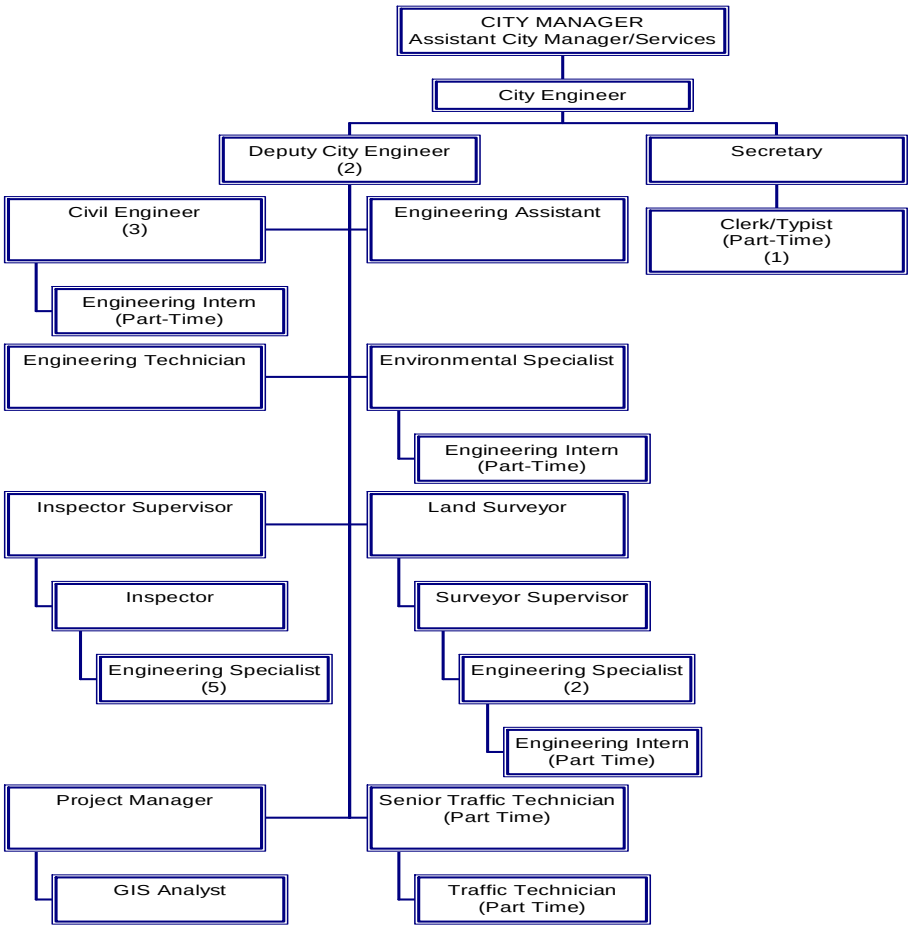
- There are over 319 miles of major and local roads maintained by the City of Troy, not including ones maintained by the Road Commission for Oakland County.

Performance Objectives

- Construct major road projects: Crooks, Square Lake to South Boulevard and Congestion Mitigation/Air Quality (CMAQ) projects (Objective 3,7)
- Implement the pavement management system for City road maintenance needs on major, local and industrial roads (Objective 3, 7)
- Implement improvements as recommended in the water master plan update (Objective 7)
- Inspect subdivision detention basins and develop procedures to reduce incidence of failing basins (Objective 3)
- Optimize the Neighborhood Traffic Harmonization Program web page (Objective 1, 3, 6)
- Implement optimized traffic signal timings (yellow and all-red phase) (Objective 3)

	Performance Indicators	2004/05 Actual	2005/06 Projected	2005/06 Budget	2006/07 Budget
Output	Site Condominium/Subdivision Plans Approved	14	25	40	20
	Right-of-way Permits Issued	55	70	70	75
	Utility Permits Issued	123	125	100	100
	Value of Construction Contracts Awarded and Supervised	$3.3M	$7.6M	N/A	$7M
	Soil Erosion Control Permits Issued	306	275	300	250
	Soil Erosion Control Inspections	2983	2,700	2,500	2,500
	Machine Traffic Counts	128	125	125	100
	Traffic Studies (Speed, Safety, Signal Warrant, Level of Service)	67	60	50	50
	Collision Diagrams	49	60	60	60
Efficiency	% of Engineering Plans Reviewed within 8 Weeks	60%	56%	N/A	75%
	% of Utility Permits Issued within 10 Days	94%	88%	N/A	90%
	% of Soil Erosion Control Permits Issued within 5 Days	77%	69%	N/A	85%
	% of Contracts Completed within 10% of Bid Award	75%	85%	N/A	85%

Organizational Chart



Staff Summary	Approved 2004/05	Approved 2005/06	Recommended 2006/07
City Engineer	1	1	1
Deputy City Engineer	2	2	2
Civil Engineer	3	3	3
Clerk/Typist (Part-Time)	2	1	1
Engineering Assistant	1	1	1
Engineering Intern (Part-Time)	3	3	3
Engineering Specialist	7	7	7
Engineering Technician	1	1	1
Environmental Specialist	1	1	1
GIS Data Analyst	1	1	1
Inspector	1	1	1
Inspector Supervisor	1	1	1
Land Surveyor	1	1	1
Project Manager	1	1	1
Secretary	1	1	1
Senior Traffic Tech (Part-Time)	1	1	1
Survey Supervisor	1	1	1
Traffic Technician (Part-Time)	1	1	1
Total Department	**30**	**29**	**29**

Summary of Budget Changes

Significant Notes – 2006/07 Budget Compared to 2005/06 Budget

The Personal Services account makes up 81.1% of the Engineering Department's operating budget. The total Personal Services budget increased $89,560 or 3.7% over last year due to projected salary and benefit adjustments for all budgeted positions.

The Other Services/Charges budget increased $28,170 or 5.3% from last year. Increases in several units, including Custodial Contracting, Office Equipment Maintenance, Computer Service – Internal, Electricity, Water, Insurance and Membership and Dues, account for the overall increase.

8-Year Operating Budget History