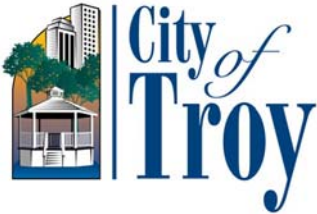


• *City Engineer*.....Steven J. Vandette



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ENGINEERING

## FUNCTIONAL ORGANIZATIONAL CHART

### • *Administration*

- ✓ Prepares and administers capital improvement budget for roads; sewers; water mains; drains; and sidewalks
- ✓ Develops master plans for capital improvements
- ✓ Serves as liaison with Federal, State and County agencies and other cities to implement projects, programs and permits
- ✓ Serves as liaison with developers to implement public improvements for new residential; commercial; and industrial developments
- ✓ Serves as liaison with utility companies for private utility construction in City right-of-way
- ✓ Prepares and maintains development standards for new development

### • *Engineering*

- ✓ Designs 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 City development standards; construction specifications; and standard construction details
- ✓ Investigates construction-related concerns from the public regarding construction and development projects
- ✓ Answers utility and flood plain questions
- ✓ Maintains the City's pavement management system
- ✓ Issues permits and performs inspections for soil erosion control; culverts; and right-of-way activities
- ✓ Prepares special assessment district projects for paving; sanitary sewers; and sidewalks

### • *Surveying and Inspection*

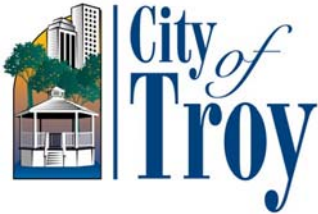
- ✓ Conducts surveys for design and construction of public improvements
- ✓ Maintains the City's global positioning and benchmark systems
- ✓ Participates in maintenance of the City's geographic information system
- ✓ Investigates drainage problems
- ✓ Inspects public improvements for compliance with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

### • *Traffic Engineering*

- ✓ 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
- ✓ Serves as liaison with the Road Commission for Oakland County on traffic signal complaints
- ✓ Investigates traffic vision obstructions
- ✓ Provides staff support for Traffic Committee activities
- ✓ Processes sidewalk waiver requests
- ✓ Conducts traffic impact studies

### • *Storm Water Drainage*

- ✓ Evaluates storm water drainage systems
- ✓ Develops and implements projects to improve watersheds and storm water drainage systems
- ✓ Serves as liaison with other storm water agencies to effectively manage watersheds in accordance with regulations and mandates



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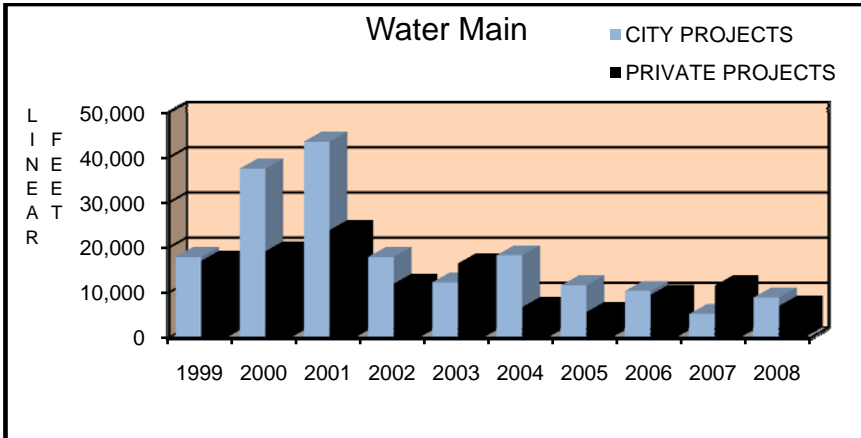
ENGINEERING

DEPARTMENT AT A GLANCE

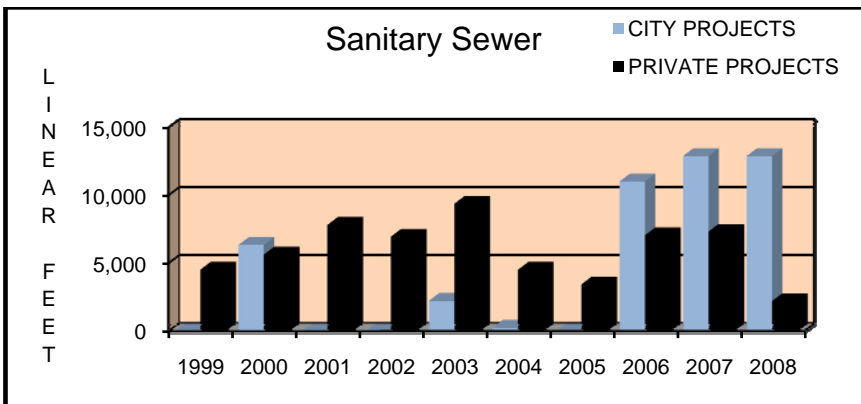
Funding Level Summary			Estimated		2009/10 Budget	% Of Change
	2006/07 Actual	2007/08 Actual	2008/09 Budget	2008/09 Budget		
Engineering	\$2,450,386	\$2,443,157	\$2,523,455	\$2,687,210	\$2,336,410	-13%
Traffic Engineering	226,332	233,689	95,380	195,080	78,010	-60%
<b>Total Department</b>	<b>\$2,676,718</b>	<b>\$2,676,846</b>	<b>\$2,618,835</b>	<b>\$2,882,290</b>	<b>\$2,414,420</b>	<b>-16%</b>
Personal Services	\$2,157,467	\$2,225,800	\$2,122,330	\$2,321,030	\$1,940,860	-16%
Supplies	30,448	27,321	29,000	30,100	27,000	-10%
Other Services/ Charges	488,803	423,725	467,505	531,160	446,560	-16%
<b>Total Department</b>	<b>\$2,676,718</b>	<b>\$2,676,846</b>	<b>\$2,618,835</b>	<b>\$2,882,290</b>	<b>\$2,414,420</b>	<b>-16%</b>

Personnel Summary	2006/07		2007/08		2008/09		2009/10	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
Engineering	22	4	21	4	20	4	16	3
Traffic Engineering	1	2	1	2	1	2	0	2
<b>Total Department</b>	<b>23</b>	<b>6</b>	<b>22</b>	<b>6</b>	<b>21</b>	<b>6</b>	<b>16</b>	<b>5</b>

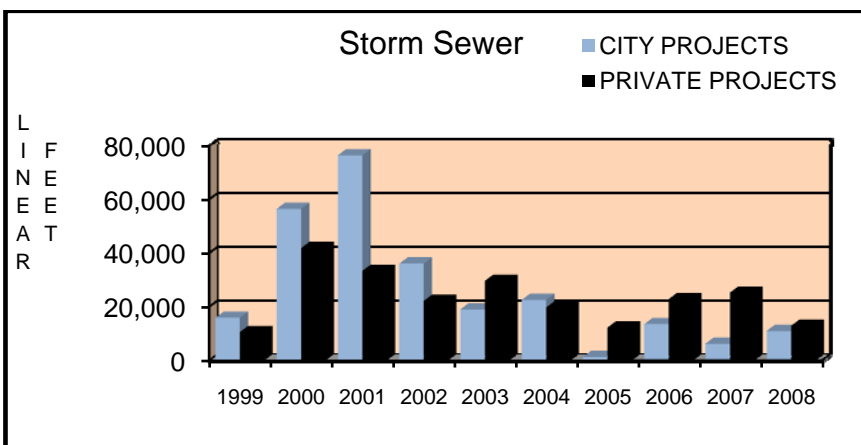
**KEY DEPARTMENTAL TRENDS**



Linear feet of water main installed on City projects versus private development.

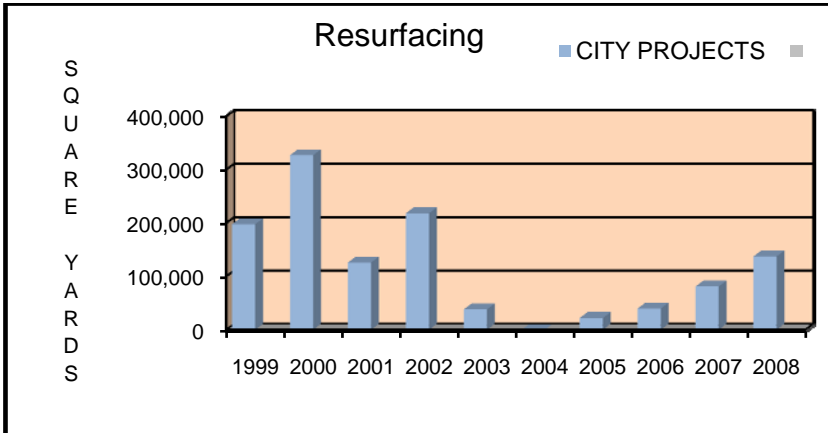


Linear feet of sanitary sewer installed on City projects versus private development.

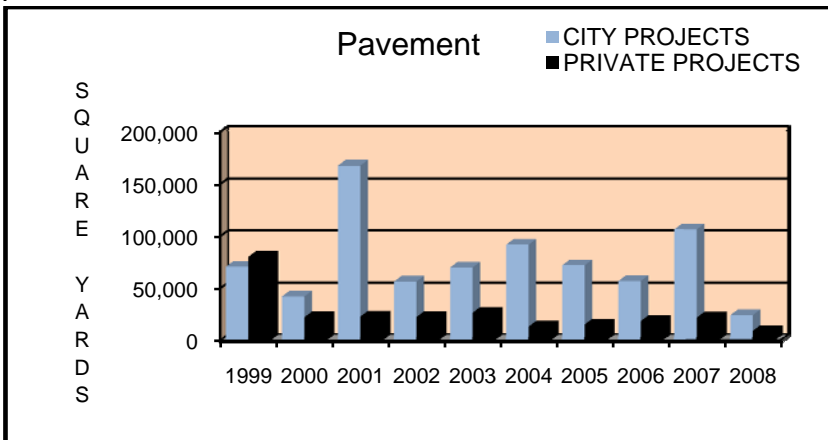


Linear feet of storm sewer installed on City projects versus private development.

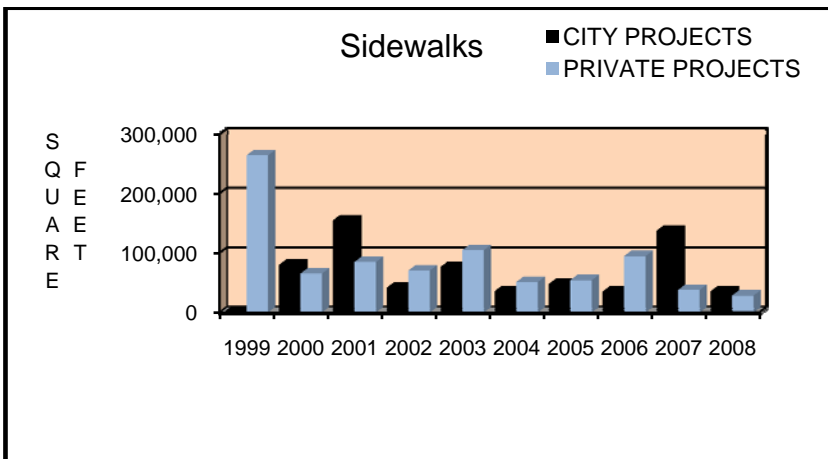
KEY DEPARTMENTAL TRENDS, CONTINUED



Square yards of resurfacing (asphalt pavement overlay) constructed on City projects.



Square yards of new pavement constructed on City projects versus private development.



Square feet of new sidewalks constructed on City projects versus private development.



## MISSION AND SERVICE STATEMENTS

- ***Mission Statement***

The mission of the Engineering Department is to design high quality, cost effective 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 to ensure 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.

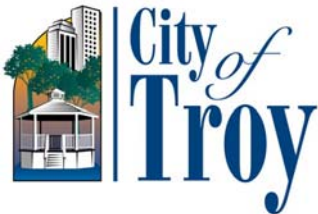
Residents, property owners, developers, builders, and consulting engineers obtain a variety of information from Engineering such as location and availability of utilities, wetland and floodplain locations; development standards; construction specifications; and permit and inspection requirements. Property owners can receive information on special assessment procedures for implementing road; water main; sewer; and 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 improve and protect water quality in drains and rivers, educates the public and implements programs and projects to promote sustainable storm water management and reduce soil erosion.

- ***Did You Know?***

- ✓ The City has secured approximately \$22,000,000 in State and Federal funding for major road improvements from 2009 to 2012.



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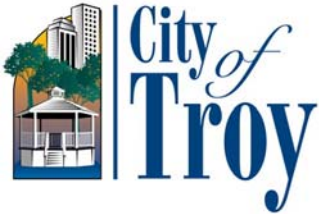
**PERFORMANCE OBJECTIVES**

**Output**

- ✓ Construct miscellaneous sanitary sewer locations to eliminate septic systems. **(Output B)**
- ✓ Prioritize City road maintenance needs on major, local and industrial roads using the Hansen pavement management system (PMS). Prepare and execute annual maintenance plan. **(Output J)**
- ✓ Implement water system improvements as recommended in the water master plan update. **(Output B)**
- ✓ Construct intermodal transit center southeast of Maple and Coolidge. **(Output X)**
- ✓ Develop and implement a 6-year capital improvement plan. **(Output C)**

\*See the list of outputs as ranked by City Council in the [CITY-WIDE ACTION PLAN](#) on pages 16 and 17.

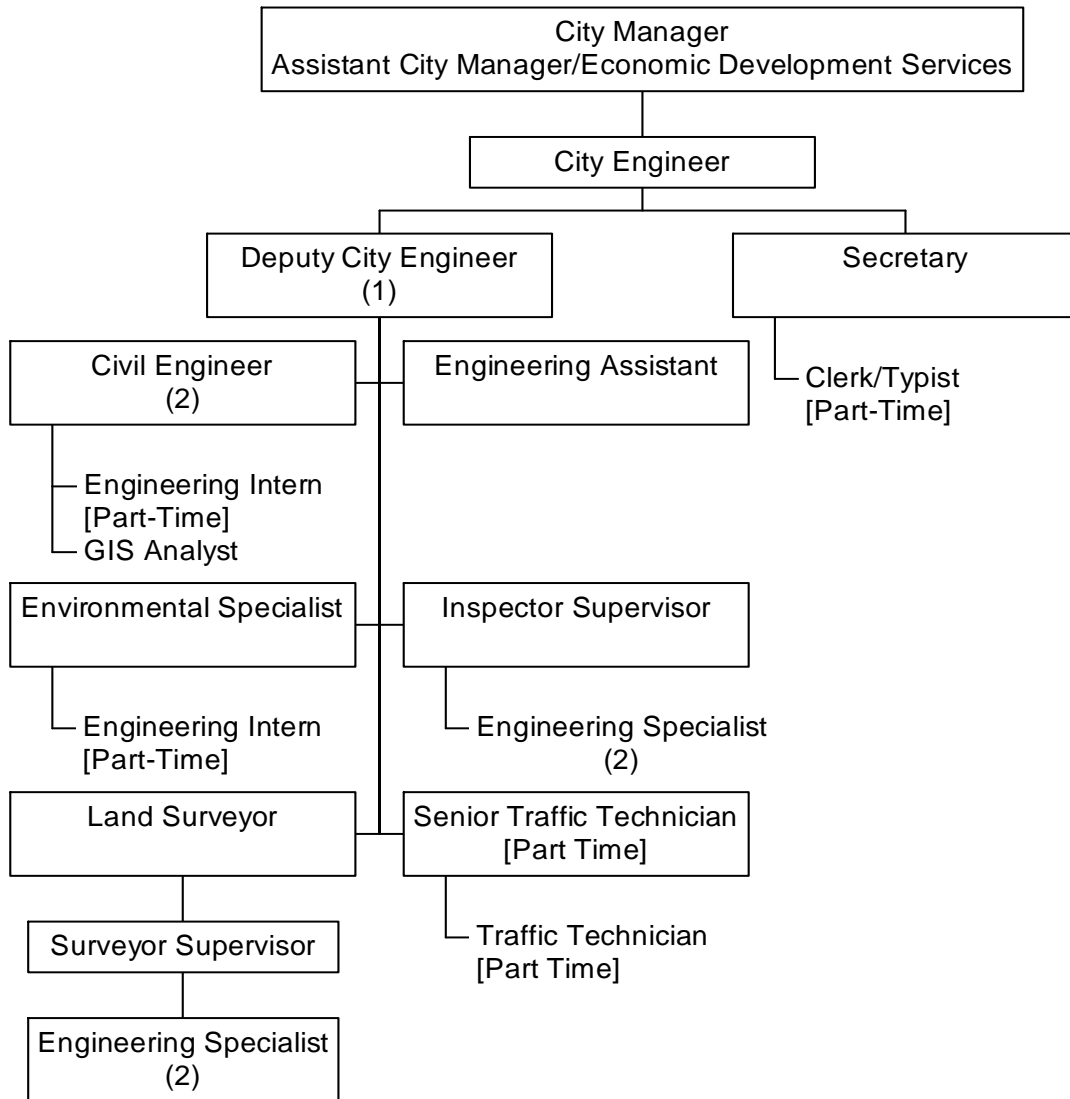
	Performance	2007/08	2008/09	2008/09	2009/10
	Indicators	Actual	Projected	Budget	Budget
Output	✓ Site Plans Approved	116	85	80	80
	✓ Right-of-way Permits Issued	304	202	100	200
	✓ Value of Construction Contracts Awarded and Supervised	\$8.8 million	\$9.7 million	\$7 million	\$22.5 million
	✓ Soil Erosion Control Permits	159	60	75	65
	✓ Soil Erosion Control Inspections	2,005	1,400	2,200	1,800
	✓ Machine Traffic Counts	96	125	115	110
	✓ Traffic Studies	174	215	220	220
	✓ Collision Diagrams and Analysis	74	82	70	78
Efficiency	✓ Engineering Plans Reviewed within 8 Weeks	79%	80%	78%	80%
	✓ Right-of-Way Permits Issued within 10 Days	81%	85%	85%	85%
	✓ Soil Erosion Control Permits Issued within 5 Days	81%	80%	90%	85%
	✓ Contracts Completed within 10% of Bid Award	89%	85%	85%	85%

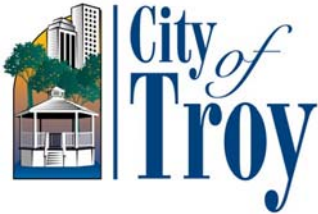


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ORGANIZATIONAL CHART



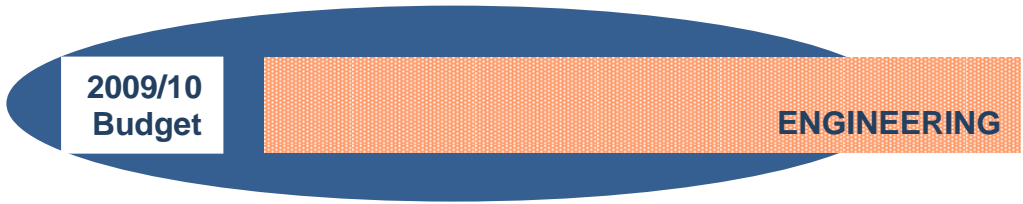
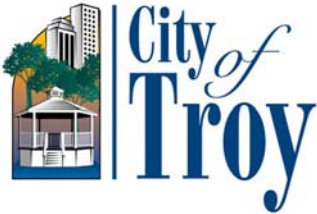


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ORGANIZATIONAL CHART, CONTINUED

<b>Staff Summary</b>	<b>Approved 2007/08</b>	<b>Approved 2008/09</b>	<b>Recommended 2009/10</b>
City Engineer	1	1	1
Deputy City Engineer	2	2	1
Civil Engineer	3	3	2
Clerk/Typist [Part-Time]	1	1	1
Engineering Assistant	1	1	1
Engineering Intern [Part-Time]	3	3	2
Engineering Specialist	6	6	5
Engineering Technician	1	1	0
Environmental Specialist	1	1	1
GIS Data Analyst	1	1	1
Inspector	1	1	0
Inspector Supervisor	1	1	1
Land Surveyor	1	1	1
Project Manager	1	0	0
Secretary	1	1	1
Senior Traffic Tech [Part-Time]	1	1	1
Survey Supervisor	1	1	1
Traffic Technician [Part-Time]	1	1	1
<b>Total Department</b>	<b>28</b>	<b>27</b>	<b>21</b>



**SUMMARY OF BUDGET CHANGES**

- **Significant Notes – 2009/10 Budget Compared to 2008/09 Budget**

Personal Services decreased by \$380,170 (16%) due to reduction in personnel, the duties of which will be outsourced on an as-needed basis.

The Supplies budget decreased \$3,100 (10.3%) from last year. The decrease in Operating Supplies accounts for the reduction in this account.

Other Services/Charges decreased by \$84,600 (16%) from last year. Accounts that were reduced include: Building Maintenance; Equipment Maintenance; Computer Service – Internal; Consulting Engineers; Consulting Engineers – Inspection; Books and Magazines; Education and Training; Communications – Mobile Phones; and Membership and Dues.

- **Operating Budget History**

