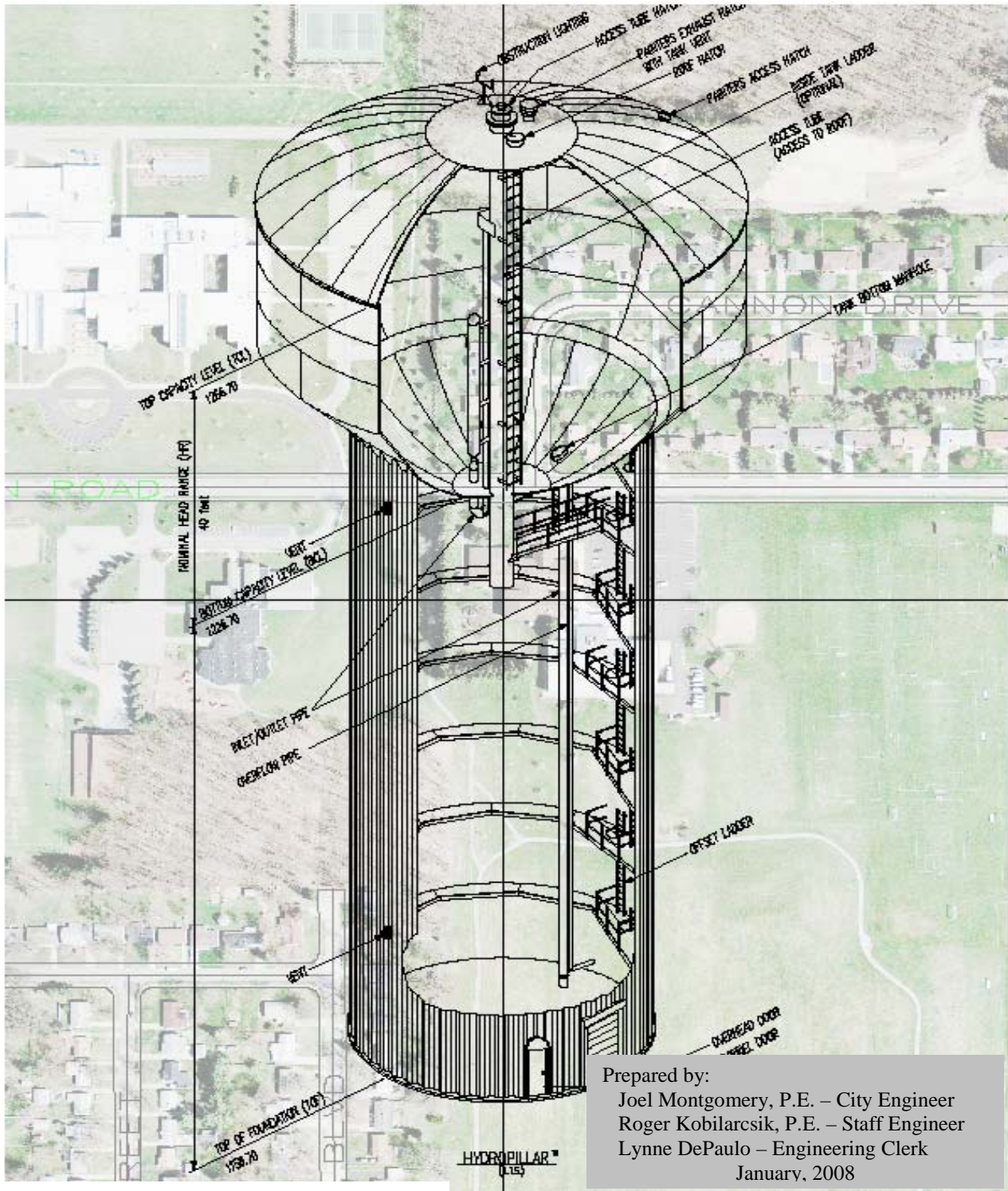


CITY OF WOOSTER

DIVISION OF ENGINEERING

2007 Annual Report



Prepared by:
Joel Montgomery, P.E. – City Engineer
Roger Kobilarcsik, P.E. – Staff Engineer
Lynne DePaulo – Engineering Clerk
January, 2008

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*Division of Engineering
City of Wooster
2007 Annual Report*

Summary & Narrative – Section 1

Division of Engineering 2007 Annual Report Executive Summary

The 2007 Annual Report for the Division of Engineering is contained in the following pages. The intent of this report is to summarize the major projects and activities accomplished by the Division of Engineering for the year ending December 31, 2007, as well as provide information that can be used for planning infrastructure improvements and development for the coming year.

The Division of Engineering has attempted to meet those needs in the most cost effective way possible. Most projects are designed, managed, and inspected in-house by Engineering Division staff, keeping fees for professional services below 5% of construction costs for 2006, and below 4% for 2007. The industry average for design and professional engineering costs is 8% to 11% of the estimated construction costs. This translates to a cost savings of over \$500,000 in 2006 and over \$400,000 for 2007.

The Engineering Division aggressively seeks outside funding sources in an effort to offset the high costs of infrastructure improvements. Over the last 5 years, more than \$5,000,000 has been obtained in grant money and over \$4,000,000 in zero or low interest loan money from various sources such as ODOT, EPA, OPWC and others. These funds have been applied to water system projects such as the water tanks, roadway projects such as Milltown Road and Larwill Street Bridge, and several waterline and sewer separation projects.

The Engineering Division managed 18 infrastructure projects in 2006 and 13 projects in 2007. The total dollar value of construction projects for 2006 was over \$10,000,000, and over \$7,000,000 in 2007. For projects completed or under construction in 2007, final construction costs are over \$1,000,000 under estimate.

Including construction and development in 2007, the City now has over 400 miles of piping in its utility system and over 130 miles of roadway in its transportation system. Over 75% of the utility infrastructure is greater than 20 years old. Over 77% of the sanitary sewer and 70% of the water systems are over 30 years old.

The Engineering Division also reviews and issues permits for all utility and site work construction activity in the City, as well as enforcing the City's Site development and Storm water Regulations. 126 permits were issued in 2007. The number of permits issued by this division indicates a steady rate of development over the last 3 to 4 years. Reasonable adjustments to the fees charged for permits and inspections have allowed the division to recover 87% of its general fund operating costs for 2006, and over 95% of its General Fund costs for 2007. Our division generated over \$300,000 in permit revenue over the past two years, and was hired by a local engineering firm in 2007 to perform surveying and technical services for a neighboring city in Wayne County, using our recently purchased survey equipment.

The Engineering Division is also the City's representative for the Ohio Utilities Protection Service, and is responsible for locating and marking all city owned utilities whenever requested by contractors. These requests have consistently numbered over 2000 each year since 1991. In 2007 we processed 2,270 OUPS requests with most utility locations being marked within 24 hours of the request.

The Engineering Division is also responsible for all mapping and utility information that is contained in the City's Geographic Information System, or GIS. This information is updated and used on a daily basis for project planning, design, and maintenance of the City's infrastructure.

Division of Engineering Mission Statement and Objectives

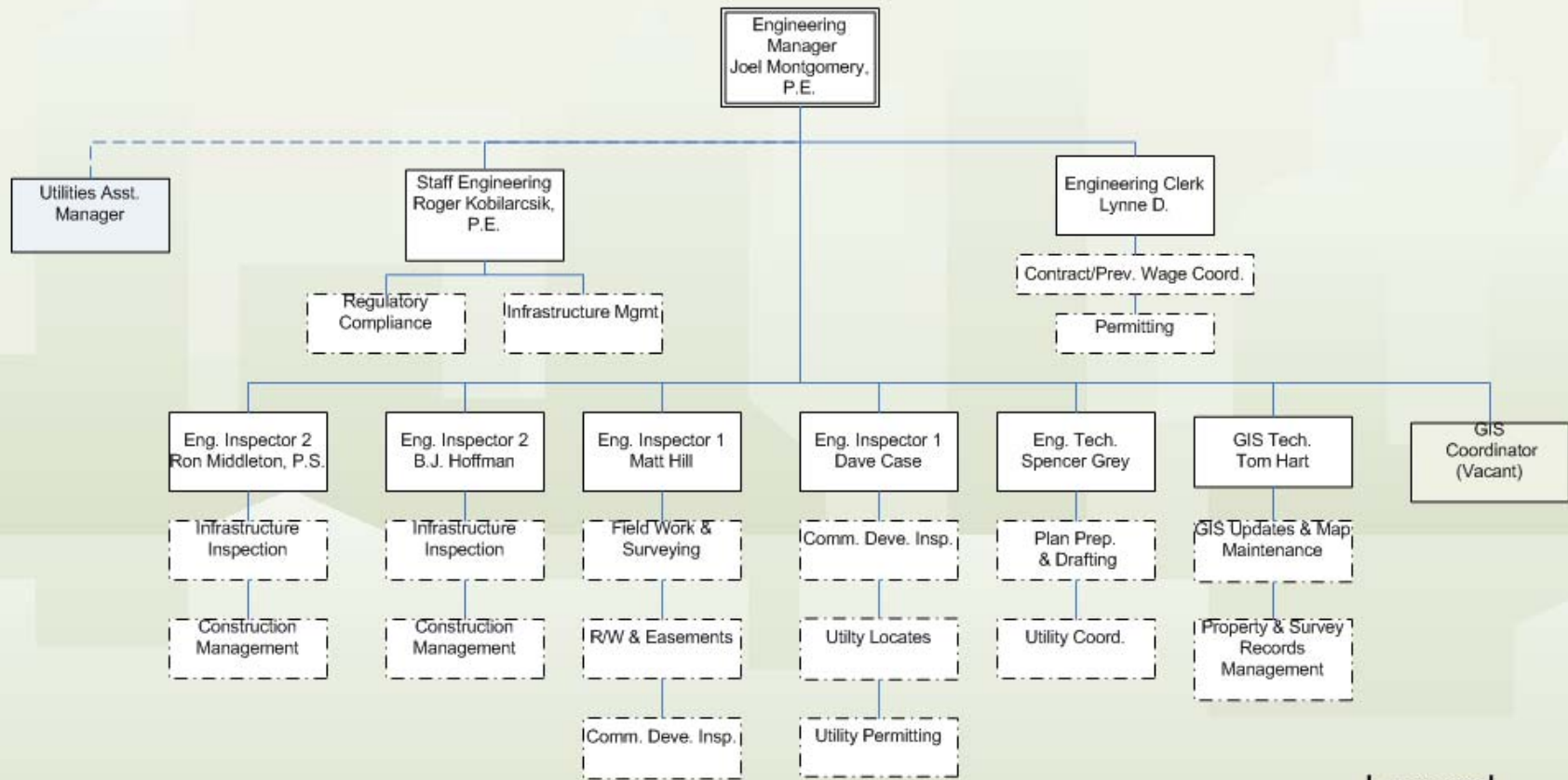
Mission: Our mission in the City of Wooster, Division of Engineering is to plan, advise, administer, oversee implementation of and document all public works improvements and subdivision development with the aim of providing these services cost effectively and timely while protecting the public health, safety and welfare.

2008 Objective: To continue to manage the City's infrastructure construction and documentation in a way that will provide adequate service to residents, sustain development, and allow for intelligent infrastructure planning. The Division of Engineering attempts to balance the infrastructure needs of the city with the financial resources available. At the same time, current and future development and its associated demands are considered when attempting to develop a strategic plan for infrastructure improvements.

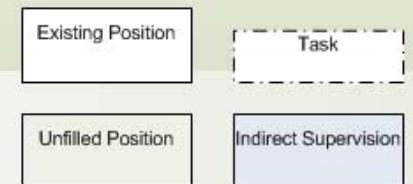
Personnel:

	Title	Years Experience
Joel Montgomery	City Engineer, Licensed Professional Engineer	15
Roger Kobilarcsik	Staff Engineer, Licensed Professional Engineer	18
Ronald Middleton	Inspector II, Licensed Professional Surveyor	36
BJ Hoffman	Inspector II, B.S. Degree Construction Technology	20
Dave Case	Inspector I, Assoc. Degree Civil Eng. Technology	14
Matt Hill	Inspector I, ODOT Right-of-Way Certification	23
Spencer Gray	Engineering Technician/Drafter	23
Tom Hart	Engineering Technician/GIS Technician	25
Lynne DePaulo	Engineering Clerk/Prevailing Wage Coordinator	29

City of Wooster
Division of Engineering
 Organizational Chart



Legend



**Division of Engineering
2007 Project Narrative
January, 2007**

INFRASTRUCTURE PROJECTS COMPLETED OR UNDER CONSTRUCTION IN 2007:

1. **Wayne Avenue Storm Sewer:** The work consisted of approximately 620 linear feet of reinforced concrete storm sewers from 21 inches to 36 inches in diameter, storm manholes, and reconditioning existing junction chambers. The engineer's estimate for this project was \$135,000. The project was bid in June 2006 and the contract was awarded to G.E. Baker Construction in the amount of \$75,813.30 for construction. Construction was completed in mid-fall at a final construction cost of \$74,102.60.

2. **Campbell Avenue & Minerva Street Waterline Replacement:** This work consisted of approximately 1350 linear feet of 6" and 8" ductile iron waterline, 14 gate vales, 4 fire hydrants and 30 water services. The engineer's estimate for this project was \$161,000. The project was bid in June 2007 and awarded to Jeff Cutlip Site Development in the amount \$132,146.50. As of early December the project is substantially completed.

3. **Intermediate Zone Water Tank:** This project was designed by the Engineering Division to meet current demands on the Intermediate and High Pressure Systems. The initial estimate for a 1,000,000-gallon water storage tank is \$2,366,000. The tank will be located just south of Oldman Road, between Kean Elementary and Ida Sue schools. The tank will be approximately 110' high, 52' in diameter at the base and 74' in diameter at the top of the tank. The project was bid in August 2007 with CB&I Constructors awarded the bid at a price of \$1,820,000.

4. **Oldman Road Waterline Improvements:** This project is being done in conjunction with the Intermediate Zone Water Tank. This work consists of approximately 1,440 linear feet of 12" ductile iron water pipe, 315 linear feet of 8" water pipe and associated appurtenances. The Engineer's estimated construction cost for this project was \$175,000. The contract was awarded to D.C. Berger Excavating in the amount of \$112,200. Construction began in October and will continue through spring.

5. **Beall Avenue Streetscape – Utility :** This project is the preliminary part of the Beall Avenue Streetscape project slated for construction in 2008. This is the actual relocation of the telephone, electric and cable lines along Beall Avenue by installation of underground conduit. The engineer's estimate was \$800,000. The bid opening was September 2007 with McClintock Electric being awarded the contract at a price of \$866,295.49. Construction began in November 2007.

6. **Mindy Lane and Mechanicsburg Road Water Main:** This project consists of looping the waterline between the Mechanicsburg Booster Station and the Intermediate Pressure Zone constructing approximately 3100 linear feet of 12 inch water main and appurtenances on Mindy Lane and Mechanicsburg Road. The project was bid in conjunction with the Buckeye and Mechanicsburg Water Pumping Stations. The engineer's estimated costs for construction was \$287,600. The project was bid In September 2007 and awarded to Wenger Excavating for a bid price of \$201,480.90. Construction began in November 2007.

7. **Buckeye and Mechanicsburg Water Pumping Stations:** This project consists of providing improvements to the existing Buckeye Street and Mechanicsburg Road Water Pumping Stations including piping modifications, pump replacements, structural and electrical modifications and yard piping modifications. The engineers estimate for construction was \$1,134,000. The project was bid in September and Bogner Construction was awarded the contract at a price of \$764,027.00.

8. **College Avenue Sewer Separation:** This project is part of the City's Master Plan for sewer separation and was designed by the Engineering Division. The project consists of approximately 2,300 linear feet of 12" through 30" storm sewer, manholes, catch basins, 850 linear feet of sanitary sewer, 2,500 linear feet of sanitary and storm sewer laterals, 1,000 linear feet of sanitary sewer cured-in-place pipe rehabilitation and 5 sanitary sewer manhole rehabilitations. The engineer's estimated costs for construction was \$737,000. Bid opening was November 2007 with the low bidder being Underground Utilities in the amount of \$696,633.00.

9. **Grant, Walnut, Clark and Saybolt Area Storm Sewers:** Designed by the Engineering Division this project consisted of the installation of approximately 2,700 linear feet of storm sewer ranging in size from 12" to 27", 1,500 linear feet of 6" storm laterals, 350 linear feet of 6" D.I. waterline including 9 water services, 440 linear feet of sanitary sewer main and 300 linear feet of sanitary sewer laterals. The engineer's estimated construction cost was \$680,000 which was partially funded by an OPWC grant and no interest loan. The project was bid in October, 2006 and was awarded to Stout Excavating in the amount of \$566,195.40. Final payment was made to Stout in August, 2007 in the amount of \$619,531.28.

10. **Cleveland Road Lift Station:** This project consisted of replacing the existing lift station on Cleveland Road to meet current sanitary sewer flows and OEPA regulations. The upgrade includes new force main, 4" non-clog explosion proof pumps, 8' diameter wet well, electric work, standby power system, and telemetry and control work. The engineer's estimated construction costs for this project was \$250,000. G.E. Baker Construction was awarded the project in November, 2006 with a bid price of \$235,892.40. Final payment was made in August, 2007 in the amount of \$233,954.90.

11. **Triway Lift Station Replacement:** This project was designed by the Engineering Division and consists of replacing the existing lift station on S.R. 226 to meet current sanitary sewer flows and Ohio EPA regulations. The work consists of furnishing all materials and labor for removal of the existing lift station and the construction of a new backup generator building, wet well and valve vault. The engineer's estimated construction costs for this project is \$260,000. The project was awarded to G.E. Baker Construction with a bid amount of \$239,840.00. Construction is slated to begin in spring, 2008.

12. 2007 Sanitary Sewer Rehabilitation: Designed by the Engineering Division this project consists of the repair and the cured-in-place pipe rehabilitation, 170' of 8" PVC sanitary sewer pipe and 3 new sanitary sewer manholes in various locations throughout the city. The project is being advertised in December, 2007 with a bid opening January 3, 2008. The engineer's estimate for the project is \$154,000.

13. Municipal Building Standby Power Generator: This project consists of furnishing and installing an emergency natural gas generator, transfer switch and associated electrical work at two separate locations, City Hall and the main Fire Station. The estimate for work is \$180,000 with the project due to be advertised in January, 2008.

INFRASTRUCTURE PROJECTS SCHEDULED/PLANNED FOR 2008:

1. **Beall Ave. Streetscape:** This project consists of upgrading Beall Avenue from Liberty Street to Bloomington Avenue. New roadway will be constructed complete with curb and gutters, turn lanes, storm sewer and a boulevard section through the College of Wooster. Engineering plans were completed in 2006. Right-of-way acquisition is continuing and funding is being secured. Advertisement should take place in April 2008. The engineer's estimate for construction of this project is \$8,000,000.
2. **Larwill Street Bridge Replacement:** This project will replace the existing deteriorating concrete slab bridge with a new concrete poured in place structure. The project also consists of the replacement of approximately 300 linear feet of water main and placing storm sewer catch basins and junction chamber in anticipation of a future sewer separation project on Larwill. The estimated cost for this project is \$680,000. Advertisement for bids should take place in March 2008.
3. **Mechanicsburg Road Sanitary Sewer:** This project will be designed by the Engineering Division and consists of upgrading the sanitary sewer which runs along Mechanicsburg Road then adjacent to Bell & Howell. This upgrade is necessary to meet the current and future demands from development along the western border of the City. Construction costs are estimated to be \$200,000.
4. **WTP CL2 Storage Expansion:** The Engineering Division is managing the design of an addition to the Water Treatment Plant for Chlorine Storage for disinfection of the City's water supply. The cost estimate for the proposed building is \$100,000.
5. **Point-of-View Lift Station Replacement:** This project will be designed by the Engineering Division and consists of replacing the existing lift station on Point-of-View Drive to meet current sanitary sewer flows and Ohio EPA regulations. The upgrade includes new non-clog submersible pumps, 8' diameter wet well, electric work, standby generator, and telemetry and control. The engineer's estimated construction costs for this project is \$350,000.
6. **SR 302/SR 3 Resurfacing:** This project includes pavement planning, pavement repair, resurfacing with asphalt and/or concrete and minor bridge rehabilitation. The project was designed by the Engineering Division and Ohio Department of Transportation with partial funding being provided by ODOT. The engineer's estimate is \$1,346,000.

- 7: **Secret Road Reconstruction/Biohio:** Street Improvements to Secret Raod are to include sidewalks and general improvements for the upcoming Research facility. Estimated engineer's cost is \$1,500,000 for the project.
8. **Cleveland/Portage Road Waterline:** The Division of Engineering is in the process of completing field work and designing this project to replace approximately 2300 feet of waterline along Cleveland Road and 2500 feet of waterline along Portage Road. The engineer's estimate for this project is \$1,000,000.
9. **Sherwood Drive Sanitary Sewer:** Replacement of the sanitary sewer line has been designed for this project. Easements are currently being obtained so the project can proceed and be advertised Spring 2008. The engineer's estimate is \$50,000.
10. **North High Water Tank:** This project is under design by the Division of Engineering with a current estimate of \$1,605,000. This project will provide water storage in a portion of the City's water system which currently provides less than ½ day of storage based on current average water usage. Tentative bid date is May 1, 2008 with construction slated to begin July.
11. **Northwestern Sidewalk:** This project has been designed and is ready to be bid. Proposed assessments have been calculated and contract bidding and award should be authorized by Council in March 2008.
12. **Secondary Transmission Line:** This project will provide a secondary transmission line to provide increased water flow and circulation, as well as provide a back-up route for water to reach the city's distribution system from the city water treatment plant. The engineer's estimate for construction is \$645,000 with an anticipated bid date of June 1, 2008.

Insert Project Map

Private Developments

1. **Private Subdivisions/Commercial Property under Construction:** Development within the city dropped significantly in 2007 both in number of permits issued and the cost estimate of the construction.

Much of the development continued in the north end with two private subdivision breaking ground in 2007; Crooked Creek and Milltown Point. A Stop-N-Go was completed at the south end of city and the OARDC began a utility extension project in anticipation of the upcoming BiOhio Research facility.

2. **Subdivision Plan Review Table:** In addition to the major private subdivisions and commercial developments under construction in 2007, several minor commercial developments were reviewed by the Engineering Department. The table below lists all subdivisions and developments submitted for review in 2007.

City of Wooster						
Engineering Development Permits						2007
DEVELOP. #	PERMIT NO.	PROJECT NO.	NAME / DESCRIPTION	SITE IMP.S COST ESTIMATE	PLAN REVIEW FEE	DATE RECEIVED
1	07001	063045	STOP-N-GO	\$ 400,000.00	\$ 3,061.50	01/12/07
2	07002	063015	AMERICAN RED CROSS	\$ 5,000.00	\$ 372.50	4/10/2007
3	07003	073012	GOODWILL PARKING	\$ 10,000.00	\$ 985.50	04/17/07
4	07004	063044	CTR FOR OCCUPIED MEDICINE	\$ 80,000.00	\$ 1,562.00	04/24/07
5	07005	073007	FAITH HARVEST FELLOWSHIP	\$ 3,000.00	\$ 362.50	04/25/07
6	07006	063046	GRACE BRETHERN CHURCH	\$261,000	\$ 8,703.00	05/21/07
7	07007	073017	4124 BURBANK ROAD	\$ 10,000.00	\$ 944.50	05/29/07
8	07008	063043	COLLEGE OF WOOSTER	\$10,000	\$ 1,410.50	06/05/07
9	07009	073006	CROOKED CREEK	\$ 650,000.00	\$ 28,961.45	06/20/07
10	07010	073016	NORTHTOWN CENTRE	\$ 35,000.00	\$ 977.50	06/07/07
11	07011	033052	OARDC UTILITY EXT	\$150,000	\$ 3,228.75	06/08/07
12	07012	073015	EDGEWOOD SCHOOL PARKING	\$132,000	\$ 1,684.00	06/14/07
13	07013	073023	CORNERSTONE PARKING	\$ 60,000.00	\$ 200.00	07/06/07
14	07014	073025	VERIZON WIRELESS	\$ 250,000.00	\$ 1,072.50	08/06/07
15	07015	073020	REXROTH	\$ 20,000.00	\$ 2,213.00	08/06/07
16	07016	073022	MILLTOWN POINT	\$ 10,000.00	\$ 7,180.50	08/06/07
17	07017	073027	OBERLE & WILES	\$ 50,000.00	\$ 1,134.00	08/15/07
18	07018	073021	WOOSTER CLINIC/COMMERCE PKWY	\$ 60,000.00	\$ 2,710.10	10/17/07
19						
20						
21						
22						
23						
TOTALS				\$ 2,196,000.00	\$ 66,763.80	

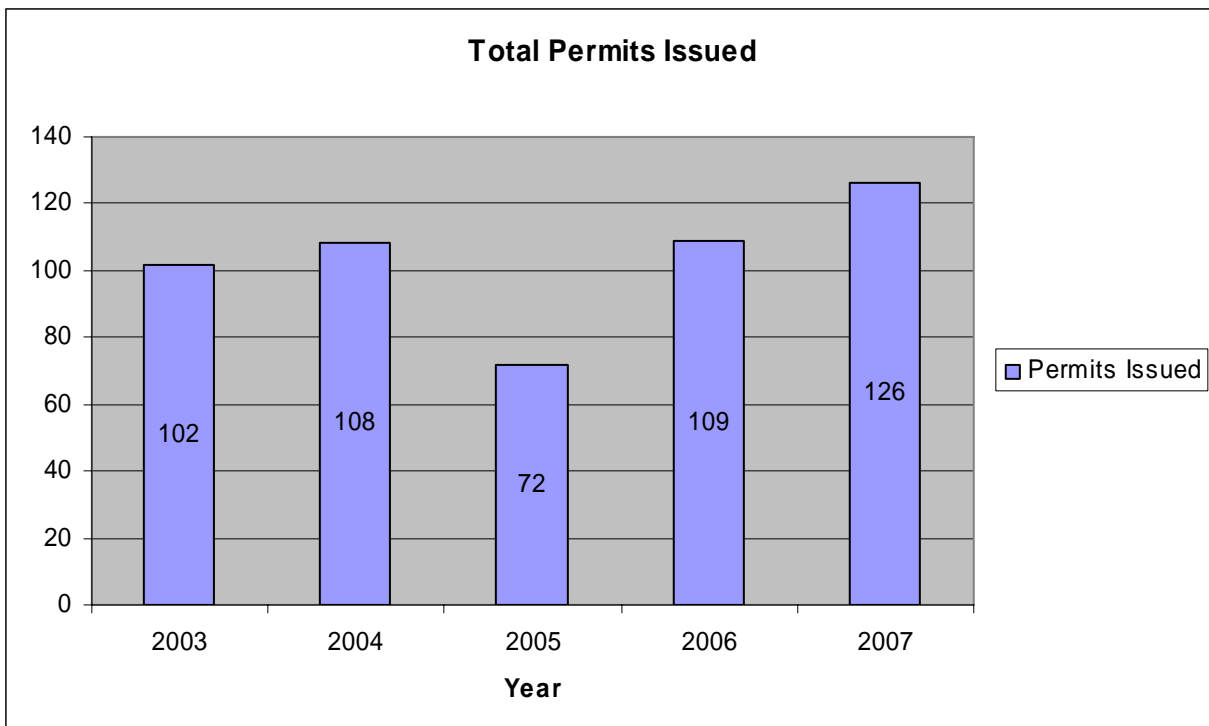


ENGINEERING FEES AND REVENUES FOR 2007:

The following breakdown details the revenues received in 2006 and 2007 by the Division of Engineering.

	<u>2006</u>	<u>2007</u>
Single Inspection	\$ 2,692.00	\$ 240.00
Street Cut Permit	\$ 13,290.00	\$
Construction Inspection	\$ 29,268.00	\$ 45,624.00
Plan Review Fee	\$ 42,258.00	\$ 66,628.00
Plan Copies	\$ 2,765.00	\$ 4,842.00
Yard Pipe Permit	\$ 476.00	\$ 400.00
Sanitary Sewer Permit	\$ 5,850.00	\$ 2,994.00
San. Sewer Availability Charge	\$ 72,225.00	\$ 19,635.00
Water Availability	\$ 39,819.00	\$ 8,144.00
Water Service Permit	\$ 960.00	\$ 5,604.00
Development Permit Waiver	(\$ 37,500.00)	(\$ 1,295.00)
Total Fees Collected:	\$172,103.00	\$162,816.00

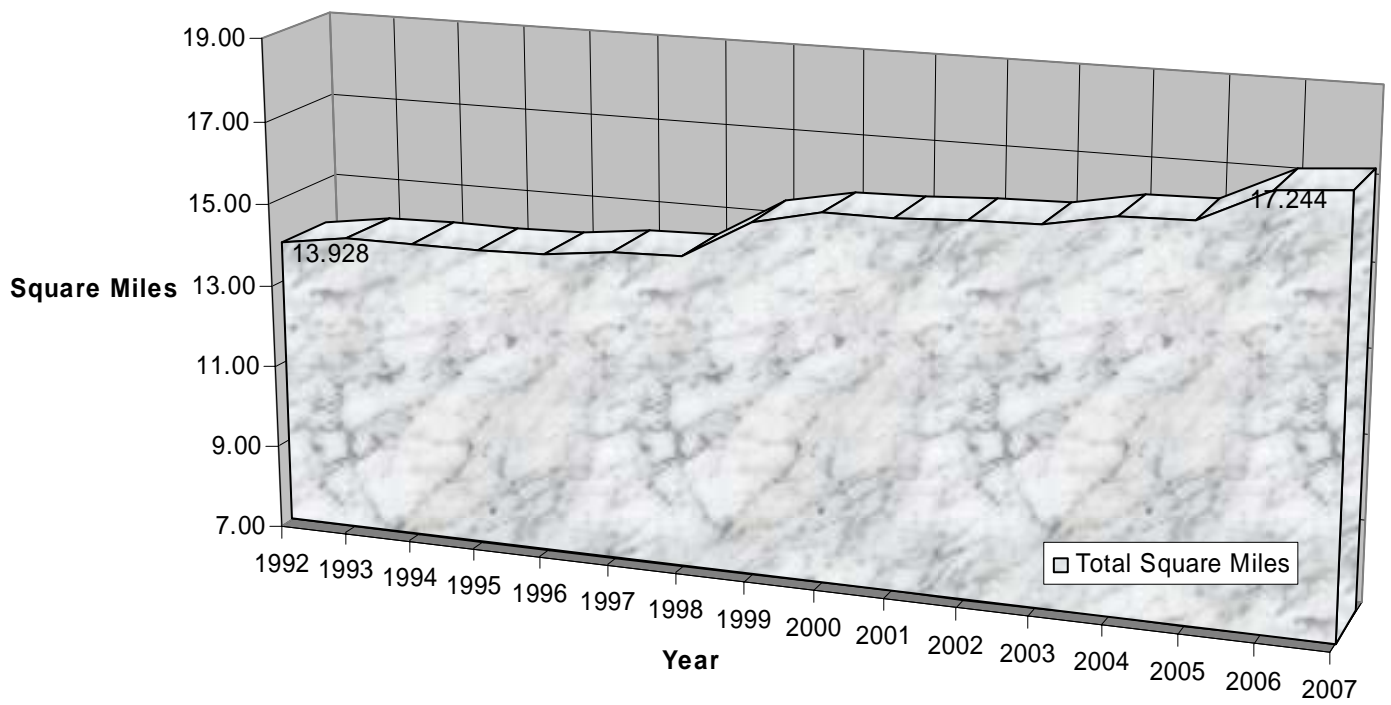
Total Permits for the 2007 year were up again for the third year in a row. Revenues remained fairly constant with the majority of the increase in permits coming from right of way permits issued to local utility companies for which no fee is charged.



*Division of Engineering
City of Wooster
2007 Annual Report*

City Growth Statistics – Section 2

City Growth Total City Area



City Area Statistics

City Area				
Year	Increases (Acres)	Total Acres	Total Square Miles	% Increase
1965	0.000	4,966.400	7.760	0.000
1966	648.890	5,615.290	8.774	13.066
1967	0.000	5,615.290	8.774	0.000
1968	0.000	5,615.290	8.774	0.000
1969	331.550	5,946.840	9.292	5.904
1970	62.470	6,009.310	9.390	1.050
1971	0.000	6,009.310	9.390	0.000
1972	181.810	6,191.120	9.674	3.025
1973	54.380	6,245.500	9.759	0.878
1974	173.858	6,419.358	10.030	2.784
1975	4.000	6,423.358	10.036	0.062
1976	19.532	6,442.890	10.067	0.304
1977	25.032	6,467.922	10.106	0.389
1978	79.990	6,547.912	10.231	1.237
1979	56.819	6,604.731	10.320	0.868
1980	3.000	6,607.731	10.325	0.045
1981	135.195	6,742.926	10.536	2.046
1982	2.730	6,745.656	10.540	0.040
1983	47.046	6,792.702	10.614	0.697
1984	148.203	6,940.905	10.845	2.182
1985	0.000	6,940.905	10.845	0.000
1986	45.319	6,986.224	10.916	0.653
1987	0.000	6,986.224	10.916	0.000
1988	187.711	7,173.935	11.209	2.687
1989	1,031.835	8,205.770	12.822	14.383
1990	0.000	8,205.770	12.822	0.000
1991	541.763	8,747.533	13.668	6.602
1992	166.072	8,913.605	13.928	1.899
1993	160.949	9,074.554	14.179	1.806
1994	1.080	9,075.634	14.181	0.012
1995	0.000	9,075.634	14.181	0.000
1996	23.626	9,099.260	14.218	0.260
1997	123.047	9,222.307	14.410	1.352
1998	40.564	9,262.871	14.473	0.440
1999	610.865	9,873.736	15.428	6.595
2000	217.389	10,091.125	15.767	2.202
2001	2.781	10,093.906	15.772	0.028
2002	64.491	10,158.397	15.872	0.639
2003	24.120	10,182.517	15.910	0.237
2004	226.640	10,409.157	16.264	2.226
2005	11.090	10,420.247	16.282	0.107
2006	537.062	10,957.309	17.121	5.154
2007	78.780	11,036.089	17.244	0.719

2007 Annexations

No.	Description	Date	Area
1	Dover Road	4/2/2007	19.411 Ac.
2	Bauman Drive	11/5/2007	16.869 Ac.
3	Friendsville Road	7/10/2007	42.5 Ac.

City Growth Information

Year	City Population	City Area	City Streets
1990	22,427 (a)	12.8222 Sq. Mi.	106.42 Miles
1999	26,100 (b)	15.428 Sq. Mi.	119.38 Miles
2000	24,811 (a)	15.767 Sq. Mi.	120.41 Miles
2001	25,047 (b)	15.772 Sq. Mi.	120.79 Miles
2002	25,342 (b)	15.872 Sq. Mi.	121.55 Miles
2003	25,420(b)	15.910 Sq. Mi.	122.87 Miles
2004	25,801 (b)	16.264 Sq. Mi.	125.39 Miles
2005	26,166 (b)	16.282 Sq. Mi.	127.20 Miles
2006	26,411(b)	17.126 Sq. Mi.	129.76 Miles
2007	26,527 (b)	17.244 Sq. Mi.	131.98 Miles

(a) Census

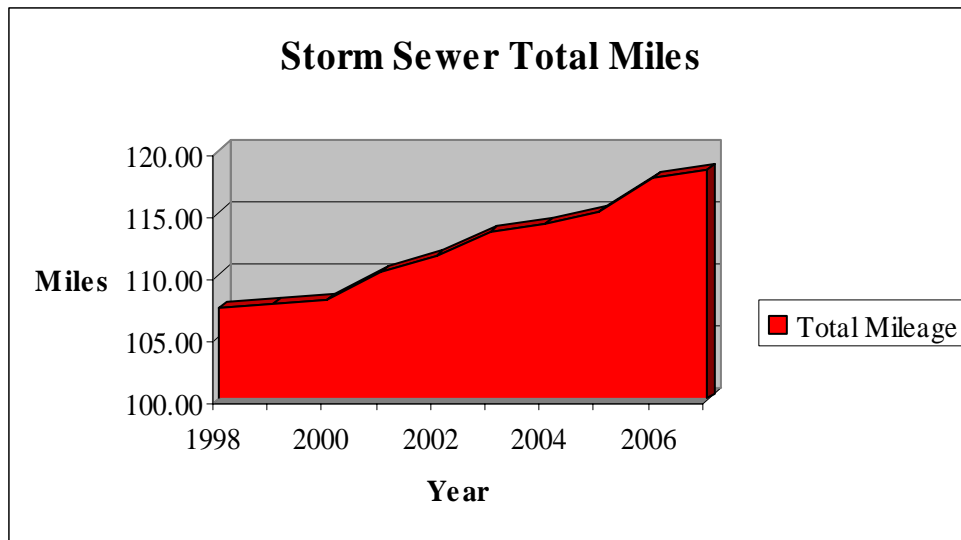
(b)
Estimated

*Division of Engineering
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Utility Statistics – Section 3

Storm Sewer Mileage

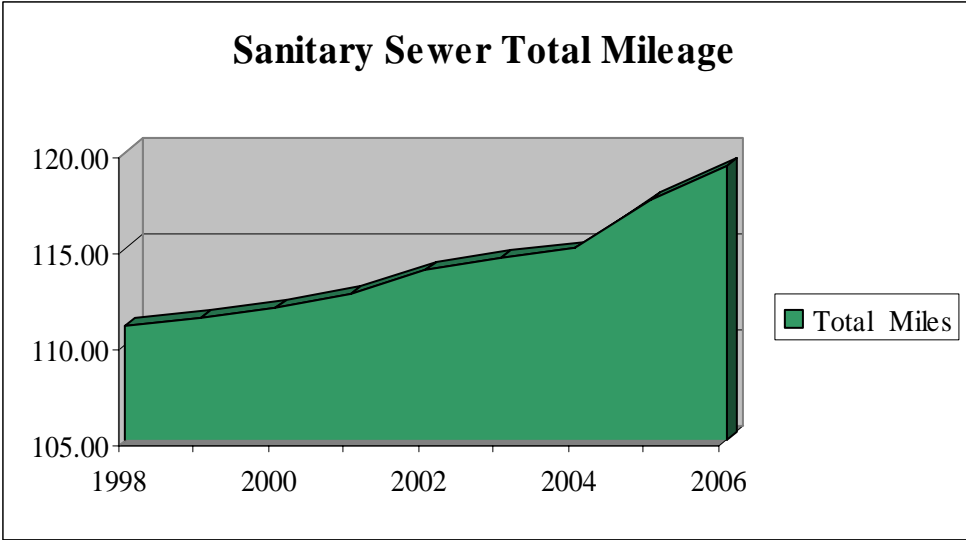
Year	Increase in Miles	Total Mileage	% Increase
1998	0	107.33	0.00%
1999	0.38	107.71	0.35%
2000	0.305	108.02	0.28%
2001	2.285	110.30	2.12%
2002	1.239	111.54	1.12%
2003	1.891	113.43	1.70%
2004	0.715	114.15	0.63%
2005	0.964	115.11	0.84%
2006	2.7	117.81	2.35%
2007	0.64	118.45	0.54%



The substantial increase in storm sewer mileage since 2003 and the rate of increase over the past 3 years is the result of the aggressive implementation of the City’s sanitary and storm sewer separation plan. It should be noted that an additional effect of the separation program has been the decrease of peak flows to the Water Pollution Control Plant during rain events.

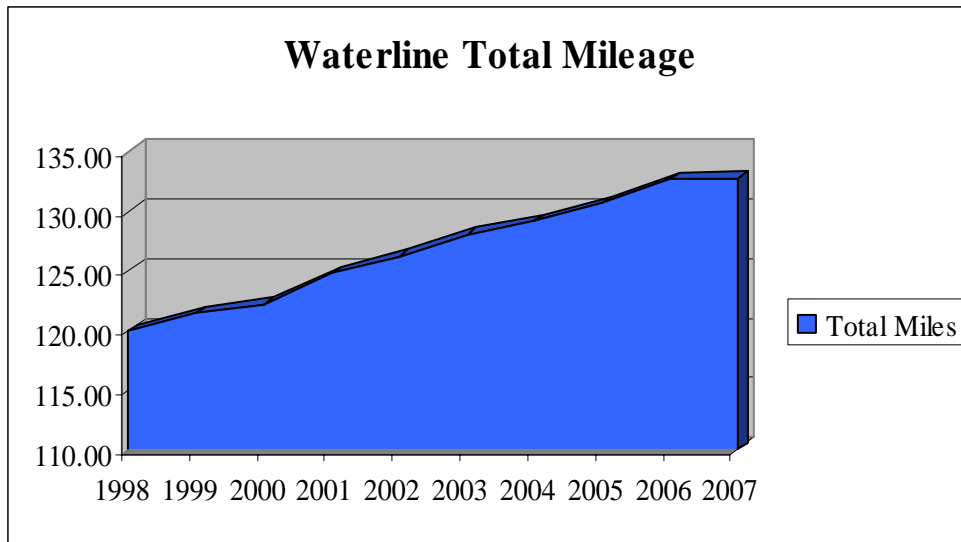
Sanitary Sewer Mileage

Year	Increase in Miles	Total Miles	% Increase
		109.87	
1998	1.03	110.90	0.94%
1999	0.48	111.38	0.44%
2000	0.53	111.91	0.48%
2001	0.68	112.60	0.61%
2002	1.23	113.83	1.09%
2003	0.62	114.44	0.54%
2004	0.50	114.94	0.44%
2005	2.56	117.50	2.23%
2006	1.71	119.21	1.46%
2007	0.00	119.21	0.00%



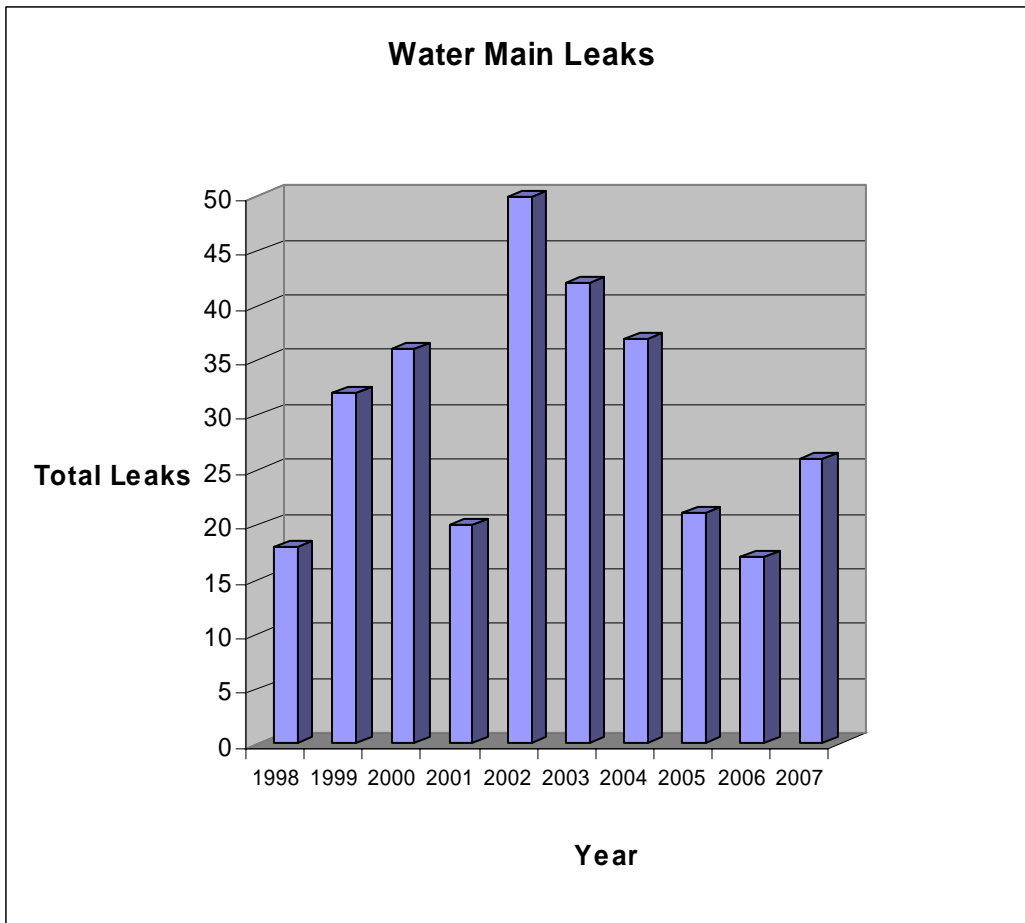
Waterline Mileage

Year	Increase in Miles	Total Miles	% Increase
		118.61	
1998	1.27	119.88	1.07%
1999	1.49	121.37	1.24%
2000	0.78	122.15	0.64%
2001	2.61	124.76	2.14%
2002	1.43	126.18	1.14%
2003	1.88	128.06	1.49%
2004	1.11	129.17	0.87%
2005	1.45	130.63	1.12%
2006	2.06	132.69	1.58%
2007	0.10	132.78	0.07%



Water Main Leaks

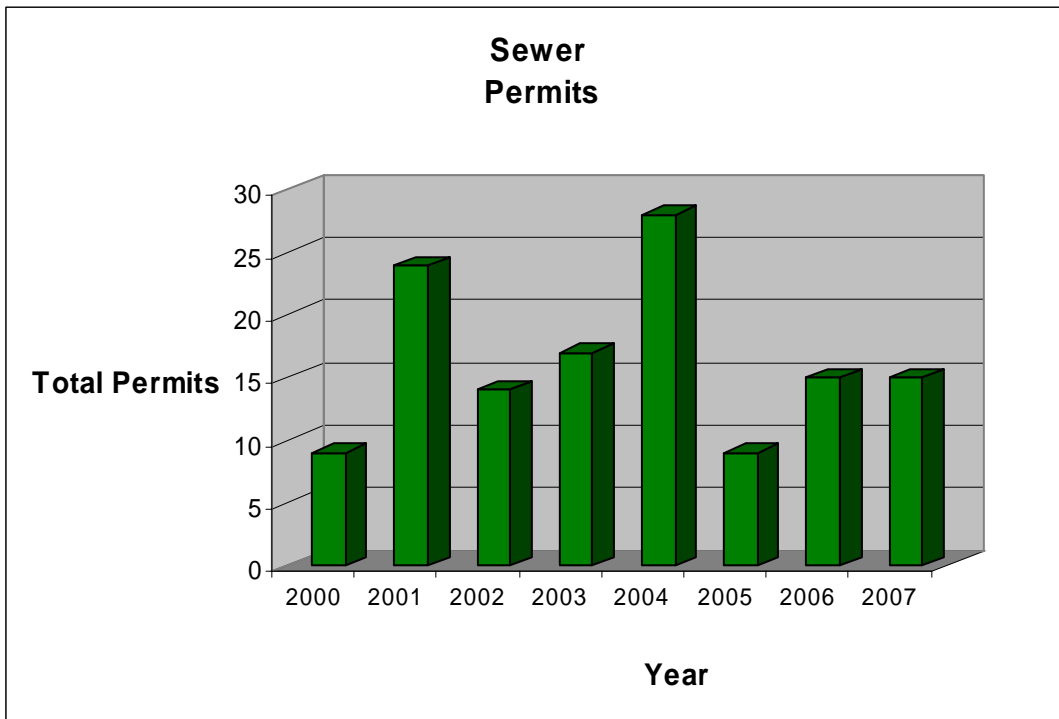
<u>Year</u>	<u>Number</u>
1998	18
1999	32
2000	36
2001	20
2002	50
2003	42
2004	37
2005	21
2006	17
2007	26



The above chart clearly indicates a significant and steady reduction in the number of water main breaks over the last 5 years. This reduction is due to several factors. The Utility Division has performed proactive leak detection in the distribution system resulting in the detection and repair of several leaks. A significant amount of leaks were eliminated due to waterline replacement projects administered by the Division of Engineering.

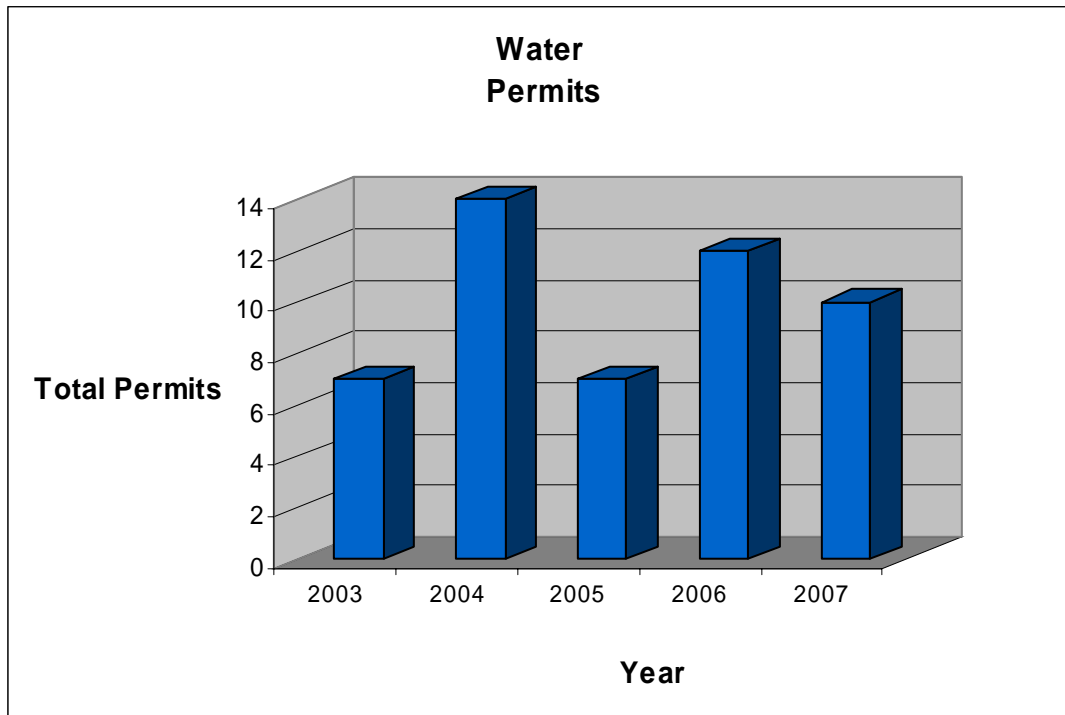
Sewer Permits

Year	Number
2000	9
2001	24
2002	14
2003	17
2004	28
2005	9
2006	15
2007	15



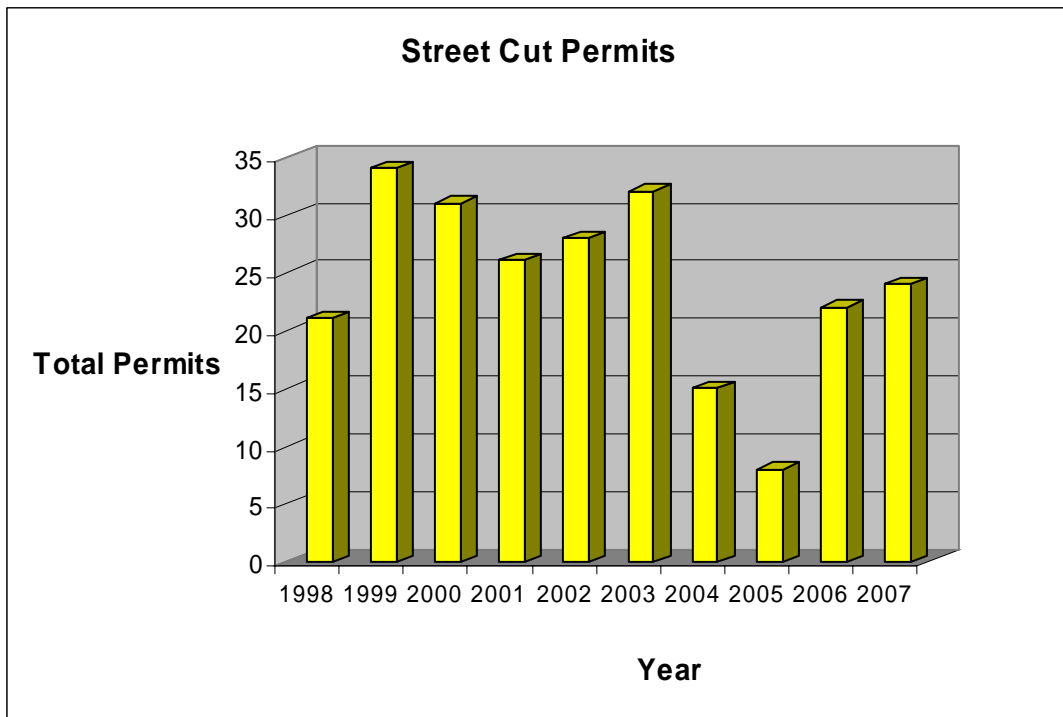
Water Permits

Year	Number
2003	7
2004	14
2005	7
2006	12
2007	10



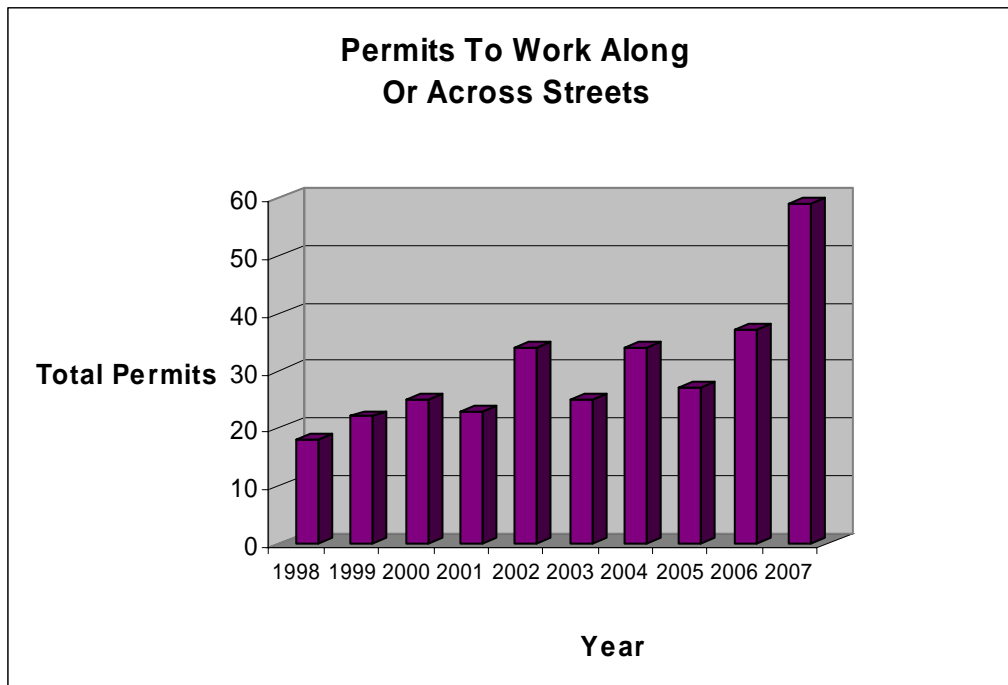
Street Cut Permits

<u>Year</u>	<u>Number</u>
1998	21
1999	34
2000	31
2001	26
2002	28
2003	32
2004	15
2005	8
2006	22
2007	24



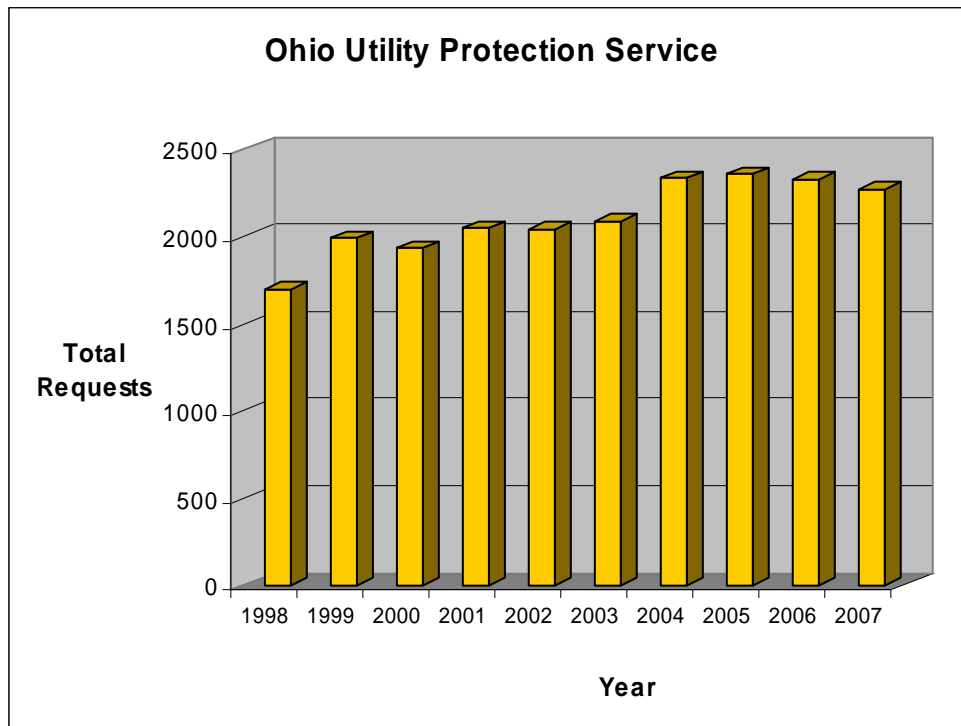
**Permits To Work Along
Or Across Streets**

Year	Number
1998	18
1999	22
2000	25
2001	23
2002	34
2003	25
2004	34
2005	27
2006	37
2007	59



Ohio Utility Protection Service
Location Requests

<u>Year</u>	<u>Number</u>
1998	1697
1999	1992
2000	1932
2001	2047
2002	2043
2003	2087
2004	2334
2005	2356
2006	2332
2007	2270

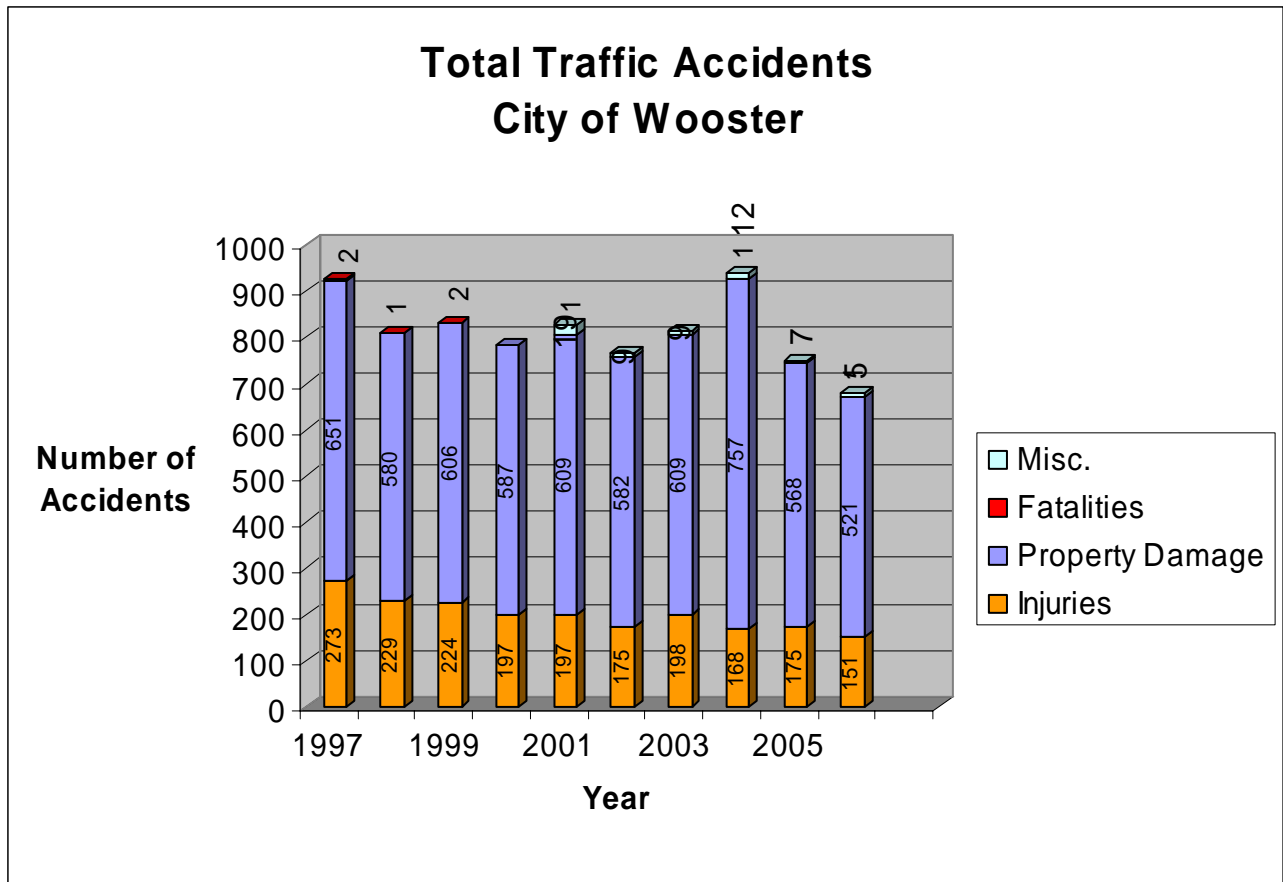


*Division of Engineering
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Traffic Statistics – Section 4

City of Wooster
Traffic Accidents

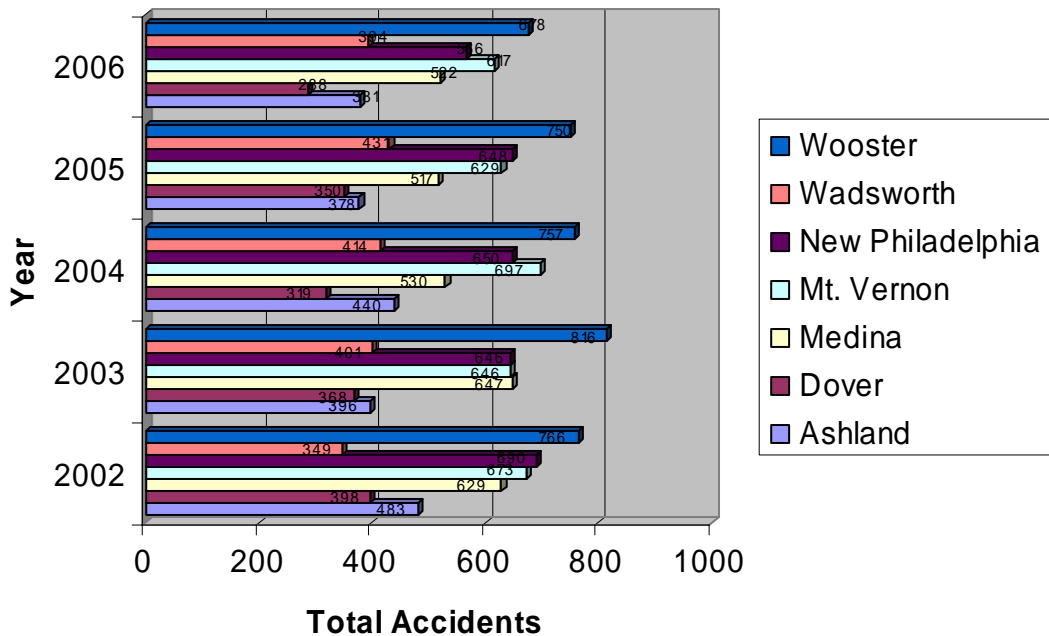
Year	Injuries	Property Damage	Fatalities	Misc.
1997	273	651	2	
1998	229	580	1	
1999	224	606	2	
2000	197	587		
2001	197	609	1	19
2002	175	582		9
2003	198	609		9
2004	168	757	1	12
2005	175	568		7
2006	151	521	1	5



Traffic Accident Comparison
Totals By Neighboring Cities

Year	Ashland	Dover	Medina	Mt. Vernon	New Philadelphia	Wadsworth	Wooster
1997	514	357	716	707	601	362	926
1998	548	389	605	735	726	374	810
1999	558	387	603	773	730	366	832
2000	523	361	593	745	673	364	786
2001	431	349	653	753	684	377	826
2002	483	398	629	673	690	349	766
2003	396	368	647	646	646	401	816
2004	440	319	530	697	650	414	757
2005	378	350	517	629	648	431	750
2006	381	288	522	617	566	394	678

**Traffic Accident Comparison:
Neighboring Cities**

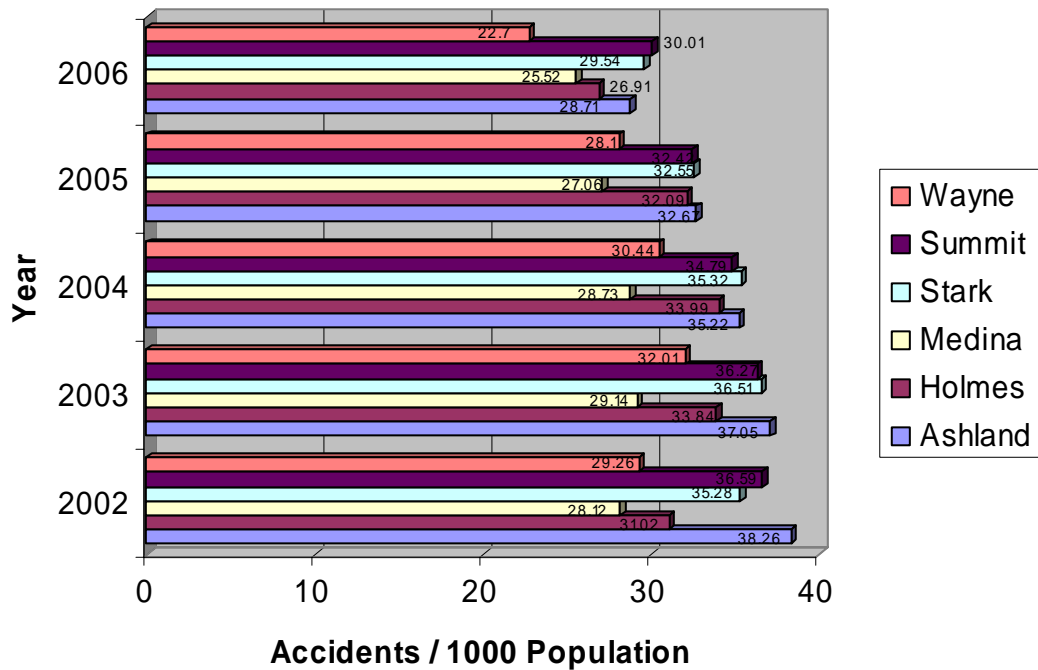


Traffic Accident Comparison
Rates by Neighboring Counties

Accidents Per 1000 People

Year	Ashland	Holmes	Medina	Stark	Summit	Wayne
1997	35.78	31.94	30.45	35.27	38.38	32.67
1998	35.78	28.73	26.61	34.64	36.1	28.99
1999	36.16	31.13	27.68	34.29	38.45	30.37
2000	38.67	31.51	26.81	34.75	27.97	30.36
2001	34.37	30.35	26.55	31.13	36.19	28.12
2002	38.26	31.02	28.12	35.28	36.59	29.26
2003	37.05	33.84	29.14	36.51	36.27	32.01
2004	35.22	33.99	28.73	35.32	34.79	30.44
2005	32.67	32.09	27.06	32.55	32.42	28.1
2006	28.71	26.91	25.52	29.54	30.01	22.7

**Traffic Accident Comparison:
Neighboring Counties Accident Rates**



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Engineering Design Statistics – Section 5

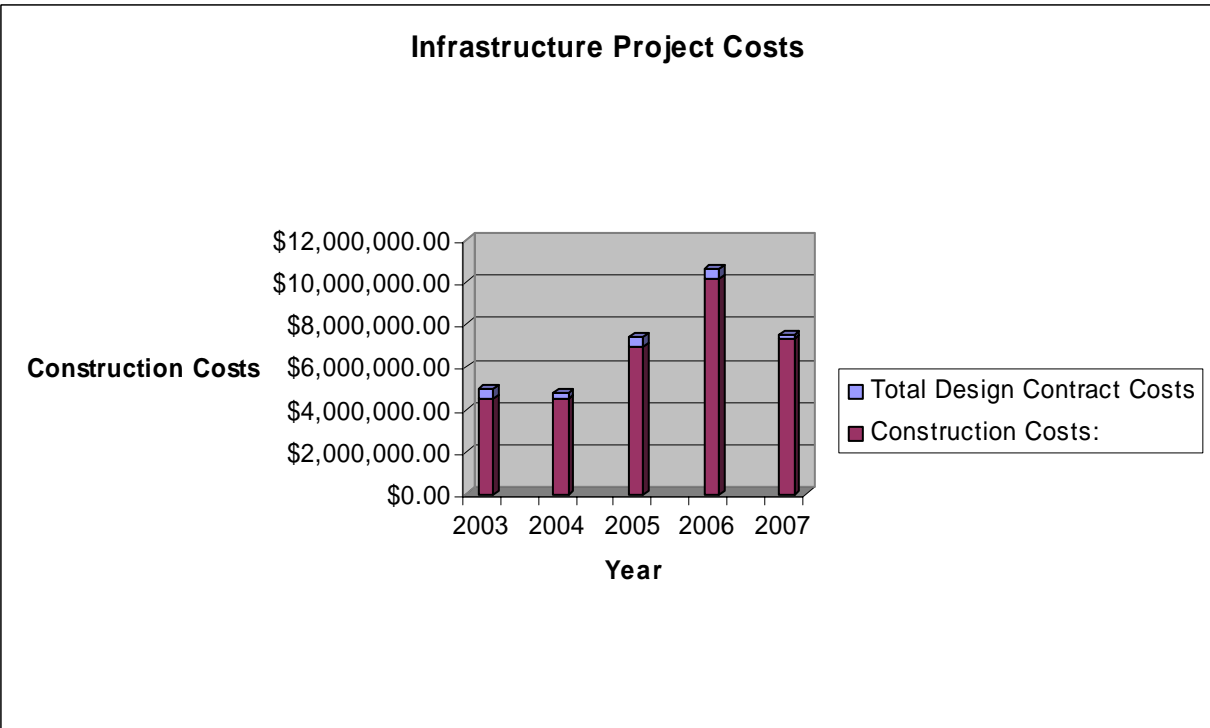
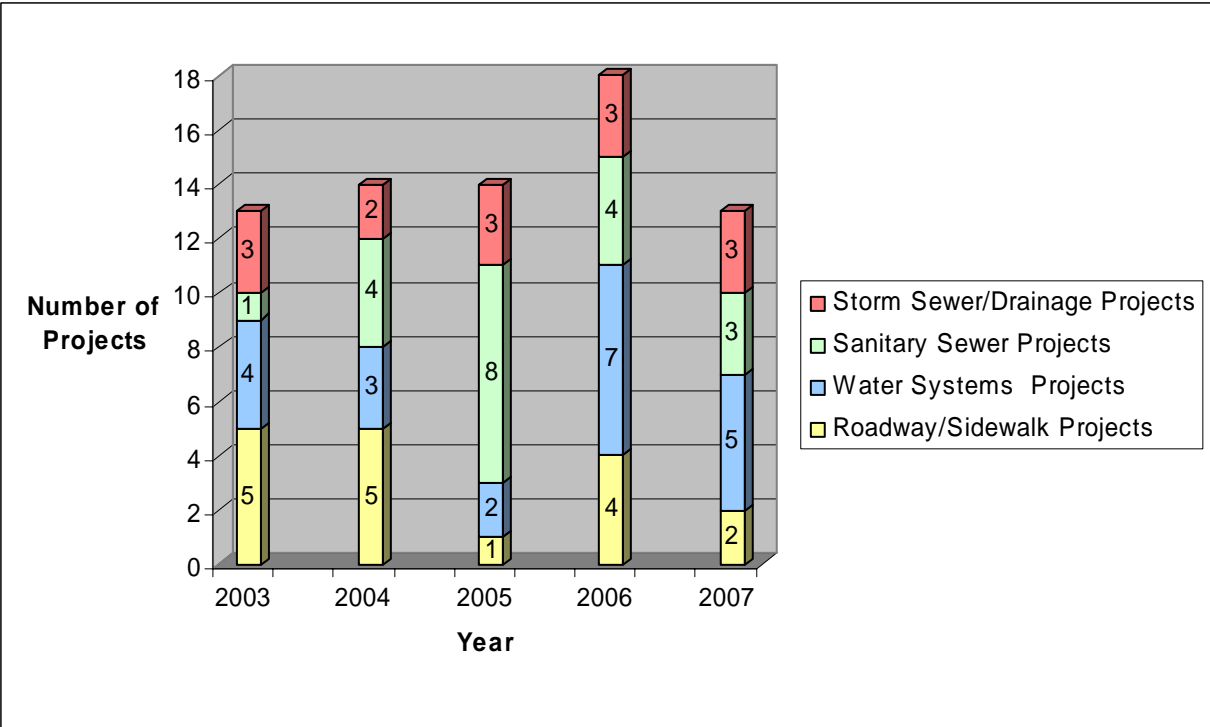
2007 Annual Report - Project Summary
(Projects Designed or Constructed in 2007)

PROJECT	DESIGNER/CONSULTANT	DESIGN COST	CONTRACTOR	ESTIMATED			Contract	%
				CONST. COST	BID PRICE	FINAL COST	Balance	Complete
GIS Mapguide	Imaginit Technologies		Imaginit Technologies		N/A			
Wayne Avenue Storm Sewer	Wooster Engineering Div.	\$0.00	G.E. Baker	\$135,000.00	\$75,813.30	\$74,102.60	\$0.00	100%
Campbell/Minerva W/L	Wooster Engineering Div.	\$0.00	Jeff Cutlip	\$161,000.00	\$132,146.50	UC		
Intermediate Zone WaterTank	Wooster Engineering Div.	\$0.00	CB&I	\$2,366,000.00	\$1,820,000.00	UC		
Oldman Road Waterline	Wooster Engineering Div.	\$0.00	DC Berger	\$175,000.00	\$112,200.00	UC		
Beall Avenue - Utility	Brandstetter & Carroll	\$52,000.00	McClintock	\$800,000.00	\$866,295.49	UC		
Mindy Lane/Mechanicsburg W/L	Arcadis	\$18,400.00	Wenger	\$287,600.00	\$201,480.90	UC		
Buckeye/Mechanicsburg PS	Arcadis	\$128,700.00	Bogner	\$1,134,000.00	\$764,027.00	UC		
College Avenue	Wooster Engineering Div.	\$0.00	Underground Utilities	\$737,000.00	\$696,633.00	UC		
Grant/Walnut/Clark W/L & Sewer	Wooster Engineering Div.	\$0.00	Stout Exc.	\$680,000.00	\$566,195.40	619,531	\$0.00	100%
Cleveland Road Lift Station	Engineering Associates	\$18,000.00	G.E. Baker	\$250,000.00	\$235,892.40	\$233,954.90		100%
Triway Lift Station	Wooster Engineering Div.	\$0.00	G.E. Baker	\$260,000.00	\$234,900.00	UC		
2007 Sanitary Sewer Rehab	Wooster Engineering Div.	\$0.00	N/A	\$154,000.00	\$133,206.00			
Municipal Bldg. Generator	State Electrical	\$15,000.00	N/A	\$180,000.00	N/A			
Subtotals		\$232,100.00	3.98%	\$7,319,600.00	\$5,838,789.99			
Larwill St. Bridge Replacement	Engineering Associates, Inc.	\$76,305	N/A	\$680,000.00	N/A	DC		
Beall Avenue Streetscape	Brandstetter, Carroll Inc.	\$645,000.00	N/A	\$10,046,750.00	N/A	DC		
St. Rt. 83 Resurfacing	ODOT/Wooster Engineering	\$0.00	N/A	\$512,000.00	N/A	DC		
Subtotals		\$721,305.00		\$11,238,750.00				
Akron Rd -	Engineering Associates	\$255,000.00	N/A		N/A	UD		
Point-of-View Lift Station	Wooster Engineering Div.	\$0.00	N/A	\$350,000.00	N/A	UD		
Mechanicsburg Rd. SS	Wooster Engineering Div.	\$0.00	N/A	\$200,000.00	N/A	UD		
WTP CL2 Storage	EMHT	\$15,000.00	N/A	\$30,000.00	N/A	UD		
302/SR3 Resurfacing	ODOT/Wooster Engineering	\$0.00	N/A	\$1,346,000.00	N/A	UD		
Secrest Road Reconstruction	Wooster Engineering Div.	\$4,000.00	N/A	\$1,500,000.00	N/A	UD		
Portage/Cleveland Rd. W/L	Wooster Engineering Div.	\$0.00	N/A	\$1,000,000	N/A	UD		
Sherwood Drive Sanitary	Wooster Engineering Div.	\$0.00	N/A	\$50,000	N/A	UD		
North High Water Tank	Wooster Engineering Div.	\$0.00	N/A	\$1,500,000.00	N/A	UD		
Northwestern Sidewalk	Wooster Engineering Div.	\$0.00	N/A	\$97,000.00	N/A	UD		
Subtotals		\$274,000.00		\$6,073,000.00				

UD = Under Design
DC = Design Complete
UC = Under Construction

**Major Public Works
Projects**

Project Information	2003	2004	2005	2006	2007
Roadway/Sidewalk Projects	5	5	1	4	2
Water Systems Projects	4	3	2	7	5
Sanitary Sewer Projects	1	4	8	4	3
Storm Sewer/Drainage Projects	3	2	3	3	3
Total Projects	13	14	14	18	13
Projects Designed In-House	4	3	7	8	9
Consultant Designed Projects	10	11	11	5	4
Total Design Contract Costs	\$528,700.00	\$291,700.00	\$424,100.00	\$481,515.00	\$232,100.00
Construction Costs:	\$4,471,061.89	\$4,480,225.77	\$6,950,852.87	\$10,155,522.00	\$7,319,600.00
Engineering Costs as % of Construction Cost	11.8%	6.5%	6.1%	4.7%	3.2%



The City had \$7,319,600 of infrastructure projects in 2007 and associated design contracts of \$232,100. The Division of Engineering designed 8 of the 2007 projects resulting in a decrease in design costs of 1.5% for the year 2007, and an overall design cost of 3.2% of construction costs. Industry averages for design fees are 7% to 11% of construction costs. The reduced design costs are the result of performing design service with the Engineering Division staff.