

CITY OF WOOSTER
DIVISION OF ENGINEERING
2014 Annual Report



S. Geyers Chapel Culvert

Prepared by:
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Lynne DePaulo – Administrative Assistant
February, 2015

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Summary & Narrative – Section 1

Division of Engineering 2014 Annual Report Executive Summary

The 2014 Annual Report for the Division of Engineering is contained in the following pages. The intent of this report is to summarize roles and responsibilities of the Division of Engineering, as well as describe the major projects and activities accomplished by the Division of Engineering for the year ending December 31, 2014. Hopefully, this report will provide information that can be used for City organizational, development and infrastructure planning for the coming years.

The Division of Engineering has attempted to meet the City's mission in the most cost effective way possible. Most infrastructure projects are designed, managed, and inspected in-house by Engineering Division staff, keeping average fees for professional services at 6.75% for 2014. The industry average for design and professional engineering costs is 8% to 11% of the estimated construction costs. The value of engineering services provided by the Engineering Division for projects was over \$1,400,000 in 2014.

The Engineering Division managed 30 infrastructure projects in 2014. The total dollar value of construction projects completed or under construction in 2014 was over \$16,600,000. Final construction costs were slightly higher than the contracts awarded price due to several issues arising during resurfacing and concrete repairs on city streets. The division diligently tracks and records quantities, materials stored and other aspects of construction management to ensure the city does not incur unjustified overages.

The Engineering Division is responsible for managing the replacement and improvement of the City's infrastructure. Including construction and development in 2014, the City now has over 400 miles of piping in its utility system and over 130 miles of roadway in its transportation system; 70% of the utility infrastructure is greater than 20 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 Regulations and Storm Water Management Regulations. 158 permits were issued in 2014 compared to 171 in 2013.

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 and proposed development. These requests have consistently numbered over 2000 each year since 1991. 2014 brought another increase in notifications processing 2823 requests. OUPS has been promoting their new "811 - Call Before You Dig" campaign and many of these new requests are from private citizens. Due to a new state law, not only are we responsible for physically marking the locations, we also are responsible for responding to requests electronically. The Engineering Division along with PPM traffic use WEBTMS software to note whether the locations have been marked, no conflict or a design ticket.

The Engineering Division is also responsible for all mapping, parcel data, addressing, utility information, and traffic control data 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.

2014 Objectives: 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:

<i>Name</i>	<i>Title</i>	<i>Years Experience</i>
Roger Kobilarcsik	City Engineer, Licensed Professional Engineer	25
BJ Hoffman	Inspector II, B.S. Degree Construction Technology	27
Dave Case	Inspector II, Assoc. Degree Civil Eng. Technology	21
Matt Hill	Inspector II, ODOT Right-of-Way Certification	30
Spencer Gray	Engineering Technician/Drafter	30
Tom Hart	Engineering Technician/GIS Technician	32
Lynne DePaulo	Administrative Assistant/Contract Specialist	38
John Rice	Staff Engineer, Licensed Professional Engineer	8
Lance Cole	Project Manager	22

Operations:

O&M costs have remained steady over the past several years. 2014 saw a replacement of a scanner and old HP plotter with a new Canon scanner/plotter eliminating the need for two machines. The new Canon has the ability to scan and print all sizes in either black and white or color.

Capital:

The current system of infrastructure project prioritization is primarily reactive. Capital improvement projects are currently implemented as portions of the system fail, in response to regulatory mandates, in an effort to avoid lawsuits, or complaint driven. Funds are limited and the result is that the most needed projects are not always addressed.

Wooster's Infrastructure Strategic Plan indicates the following funding needs:

- ▶ 100 projects planned for construction from 2015-2019
- ▶ \$20,000,000 in Roadway
- ▶ \$20,000,000 in Water
- ▶ \$10,000,000 in Sewer
- ▶ \$ 3,000,000 in Storm

The most pressing needs within the next five years are as follows:

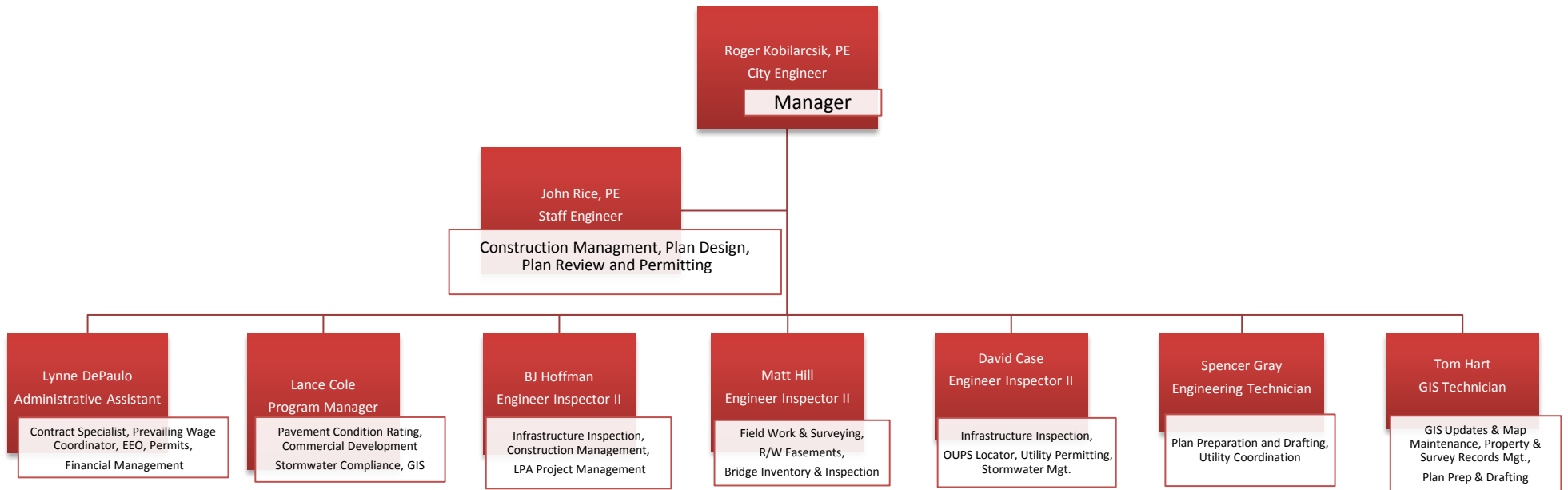
1. Water Distribution and Storage – Replacing existing mains and providing adequate storage
 - a. Funding Needs in 2015 = \$7,400,000
 - b. Funding Needs in 2016 = \$2,900,000
2. Sewer Collection – upgrade the existing WPCP & sewer separation to meet EPA requirements
 - a. Funding Needs in 2015 = \$6,000,000
 - b. Funding Needs in 2016 = \$1,000,000
3. Roadways – Numerous streets and signals need replaced and improved
 - a. Funding Needs in 2015 = \$5,300,000
 - b. Funding Needs in 2016 = \$2,700,000
4. Storm Sewer – Sewer separations & roadway culvert replacements
 - a. Funding Needs in 2015 = \$735,000
 - b. Funding Needs in 2016 = \$885,000

The City aggressively seeks outside funding sources in an effort to offset the high costs of infrastructure improvements. Over the last 3 years, more than \$11,000,000 has been obtained in grant money or low interest loan money from various sources such as ODOT, EPA, OPWC, CDBG and others. These funds have been applied to water system projects, sewer separation projects and roadway projects including resurfacing.

OPWC funded two projects; Spink Street Sewer Separation (\$500,000) and the Oak Hill/Milltown Road Resurfacing (\$60,514) totaling \$560,514 in financing. ODOT is currently providing funding of over \$5,000,000 for seven of our active projects which include sidewalk projects (SRTS), Friendsville Road Reconstruction, Akron Road Reconstruction, resurfacing projects and micro-surfacing projects.

Division of Engineering

Organizational Chart



Stormwater Management

The Division of Engineering is responsible for the City's Stormwater Management Plan and Municipal Separate Storm Sewer System (MS4) as mandated by the Ohio EPA. The program entails managing a minimum of six control measures.

- 1) **PUBLIC EDUCATION AND OUTREACH:** The City has formed and maintained a cooperative agreement with Wayne County Soil and Water Division (Wayne SWDC) to educate students and the general public in environmental conservation through programs such as Freddie the Fish, Groundwater Wonders and Enviroscape. Kelly Riley, Education Specialist with the Wayne SWDC, taught more than 50 sessions last year through public school programs reaching more than 1200 students. Riley also provided information and support through programs offered at the Wayne County Fair and the Ohio Agriculture Research and Development Center (OARDC) addressing such topics as conservation, pond maintenance, point source and non-point source pollution and BMPs.

The City has also continued several outreach programs to educate residents within the City. These programs included informational letters to residents that maintain septic systems within the City limits called HSTS, and educational flyers on an annual basis to residents whom receive public water, storm and/or sanitary services. The City also maintains a public website that provides information to users about the City's Stormwater system, how and where to dispose of materials that could impact public waterways and users can submit stormwater complaints via the web interface directly to the City Engineer and others involved.

- 2) **PUBLIC INVOLVEMENT AND PARTICIPATION:** The College of Wooster, OARDC and various service organizations partner with the City's Park Department in park clean-up activities, tree planting and trail projects. Links are provided on our website for local information on recycling and connecting users to the Tri-County Waste Management Division. The City is actively looking for methods to increase public involvement and participation.
- 3) **ILLICIT DISCHARGE DETECTION AND EDUCATION:** The Engineering Division is responsible to locate, map and update the City's storm system onto the GIS. The Engineering Division is in the process of completing a comprehensive review of the existing data and making significant modifications to how data is stored to meet new Ohio EPA permit requirements. Comprehensive inventories of all public and private outfalls (discharge points of the storm water system), culverts, HSTS and permanent Best Management Practices (BMP) are being completed to facilitate the management of these assets and compliance with Ohio EPA permits guidelines.

The City also implemented numerous programs to aid in the detection, prevention and monitoring of the stormwater system in terms of illicit discharge. These programs include; smoke testing of areas that have been identified as possible contributors of illicit discharge, regular inspection of more than 500 outfalls for signs of contamination, environmental stress, overall structural condition and proper function, video inspection of storm and sanitary systems to evaluate possible infiltration, along with damage and tree root infestation. The Engineering Division performs annual dry weather screenings to identify other areas possible requiring further investigation. Several other new programs are under consideration, pending final guidance from the Ohio EPA.

- 4) **CONSTRUCTION SITE RUN-OFF CONTROL:** This year 18 new National Pollution Discharge Elimination System NPDES permits were issued by the Ohio EPA for projects greater than one acre within the City of Wooster MS4. The Engineering Division is responsible for reviewing the plans for these permits, monitoring construction activities for new and previously issued permits and insuring compliance with Ohio EPA regulations. The City project manager inspects and monitors an average of 21 sites per month for compliance to their approved Storm Water Pollution Prevention Plan (SWP3), proper installation and maintenance of BMPs and issues notices of noncompliance and violation notices as need to meet EPA regulations.

The Engineering Division is in the process of incorporating NPDES permit data into the City GIS system to assist in tracking the progress of active NPDES permits and provide historical data for previously issued permits. This effort is being undertaken to meet new requirements of the most recent issuance of the City's MS4 permit and Ohio EPA requirements.

- 5) **POST CONSTRUCTION STORM WATER MANAGEMENT:** Numerous changes are underway to meet Ohio EPA requirements for post construction stormwater management and monitoring of more than 150 permanent BMPs. During the summer of 2014 a comprehensive inventory was completed of all new, existing and proposed permanent BMPs within the City's MS4. The inventory involved identifying the physical BMP, collecting original design information, performing a physical inspection and evaluating compliance to design specifications. Effective 9/11/2014 the Engineering Division is required to annually inspect each permanent BMP and issue a letter of findings to the property owner and insure proper maintenance and repair of each BMP.
- 6) **POLLUTION PREVENTION/GOOD HOUSEKEEPING:** In 2013 the City implemented a Stormwater Pollution Prevention Plan for the Wooster Service Center as part of the City's MS4 permit. The plan addresses service center activities, methods to minimize exposure, good housekeeping, spill prevention and response, management of surface water runoff, waste and garbage management and dust generation control. The plan is jointly managed by PPM and Engineering to implement training, inspections, documentation and meet compliance requirements. This year the City will be utilizing several training opportunities available from the Ohio EPA to continue meeting the SWP3 requirements.



**Division of Engineering
2014 Project Narrative
February, 2015**

INFRASTRUCTURE PROJECTS COMPLETED OR UNDER CONSTRUCTION IN 2014:

1. **Safe Routes to Schools:** The City of Wooster in conjunction with the Wooster City Schools has determined several areas within the city that will benefit from installation of sidewalks; enabling a greater number of students to safely walk to school which should help reduce traffic congestion at many of the elementary schools. With financing through ODOT, the first area to be improved was Melrose Drive from Portage Road to Melrose Elementary School. A new sidewalk, pedestrian signal and crossing were installed in 2013.

Kean Elementary: Sidewalks were installed along the north side of West Highland Avenue between Christmas Run and Oak Hill and a pedestrian signal installed at the intersection of Oak Hill and Highland. The bid date was February 13, 2014 and G.E. Baker was awarded the contract at a bid price of \$191,729.65. Work was completed in July at a final cost of \$202,090.32.

Parkview Elementary: This sidewalk project was bid in August and was awarded to Terra Valley Excavating with a bid price of \$320,142.15. Work began in October in the area of Northwestern, Beechwood and Westridge. Cold weather in November put a hold on the construction project. The contractor is expected to have the work completed by June 1, 2015.

2. Friendsville Road Reconstruction: This project was designed by GPD Associates and consisted of placing curb and gutter, bike path, sidewalks and widening the road to accommodate the additional traffic between Riffel and Milltown Roads. The construction cost estimate was \$2,065,000. ODOT is funding this project in the amount of \$1,317,744.39.

The project was bid in September 2013 with a total of 6 contractors submitting bids. Stout Excavating was the low bidder at a price of \$1,798,042.49. Stout began construction in May 2014 and the roadway was open to the public in November. Construction costs through the end of the year have totaled \$1,613,561.29.

3. Spink Street (North of Bowman) Sewer Separation: This project is another on the mandated OEPA sewer separation project list. It was designed by the City of Wooster Division of Engineering and had a cost estimate of \$900,000. The project includes 3900' of storm sewer, 500' of sanitary, 1700' of storm and sanitary laterals, catch basins and manholes. A \$500,000 OPWC loan was obtained to assist in funding this project.

The project was bid in September 2013 with 2 contractors submitting bids. Wenger Excavating was awarded the contract with a bid of \$989,524.10. Work began in December 2013 and was completed by July 2014. Final completion cost was \$1,073,477.00.

4. North High Water Tank: This project was designed by the Division of Engineering with an estimate of \$3,900,000. This project will provide water storage in the north end of the City's water system which currently provides less than ½ day of storage based on current average water usage.

The project was bid in April 2014 and awarded to CB&I Constructors at a bid price of \$3,066,000 using a composite style water tank. Work began in August and is slated to be completed by October 31, 2015.

5. SR585/Akron Road Reconstruction – Phase II: This project was designed with the intent to reduce congestion and improve safety by installing storm sewers, curb and gutters, sidewalks, bike path, adding a turn lane and providing a new surface course over the existing roadway between Gateway Drive and Long Road. The project estimate was \$3,100,000.00 and is partially funded by ODOT.

Wenger Excavating submitted the low bid of \$3,077,862.12. They began work in June 2014 and are on schedule to have the project completed before November 2015.

6. Edgewood Allotment: Smith Paving was awarded the contract to provide concrete removal and repair in the Taylor, Kinney and McClure area which was hard hit by the winter of 2014. The project was bid in July with a completion date for the work of October 31, 2014 at a cost of \$211,700.00.

Cold weather moved in too quickly for Smith Paving to complete the Edgewood Allotment. Work will be completed in the spring.

7. **Dix Expressway:** ODOT had contracted with Smith Paving to make repairs on the Dix Expressway in 2013. It became apparent that some areas that were thought to be fine in 2013 turned out to need significant repairs in 2014. Although ODOT had the original contract with Smith Paving, they considered their contract to be complete and the City was responsible for the additional work.

An emergency resolution allowed Smith Paving to be contracted for the Dix Expressway repairs. With time being of the essence, Smith Paving was pulled from another Wooster job and worked steadily on the Dix Expressway to complete the repairs in three weeks. The final cost for the project was \$303,820.12.

8. **Madison Hill Water Storage Tank Improvements:** The Water Storage Tanks located at the OARDC, Madison Avenue and Milltown Road were evaluated for possible recoating and improvements. Burgess and Niple provided the inspection services and reported the necessary steps to improve the tanks. Madison Hill tank improvements include surface preparation, interior and exterior painting, and concrete and steel repair work. The project was awarded to D & M Painting Corporation in July 2013 with a project cost of \$402,600. Work began in spring 2014 and was completed in August, 2014 for a final project cost of \$404,154.50.

9. **W. Henry Street Waterline Replacement:** The City of Wooster's Engineering Division designed a new waterline to replace an old cast iron line which had a history of failures. The project consisted of 327 LF of 6" DI waterline, 8 service replacement and miscellaneous appurtenances. The engineer's estimate was \$75,000. Dirt Dawg was awarded the contract in November, 2013 with a bid of \$53,315. Construction began the end of January 2014 with the project being completed in May at a final cost of \$48,919.10.

10. **Armstrong Drive Waterline Replacement:** This project consisted of replacing 1633 LF of 8" DI waterline and had an engineering estimate of \$240,000. It was bid in October 2013 and awarded to Dirt Dawg with a bid price of \$186,386.00. Work began in November 2013 and was completed by May 2014. Final project cost was \$185,627.67.

11. **Burbank Road Resurfacing:** This project was partially funded by ODOT and consisted of planing and resurfacing 9879 SY of pavement, curb ramps and pavement markings. The project was bid in June 2013 and awarded to Barbicas Construction with a contract price of \$183,876.15. Work began in August 2013 and was completed in September 2013. Final quantities and paperwork were not completed until January 2014. The project was completed at a cost of \$188,417.61.

12. **Portage Road Resurfacing:** This project was also partially ODOT funded and involved planing and resurfacing 15,066 SY asphalt concrete pavement, curb ramps and pavement markings. The project was bid in December 2013 with a work start date of May 2014. Karvo Paving submitted the low bid of \$238,691.90.

Work began in the end of June and was completed quite quickly. Final paperwork and quantities were processed in December with a final cost of \$238,610.39.

13. **Catherine Street Sanitary Sewer Replacement:** The estimate for this project was \$80,500 and consisted of replacing 470 LF of 8" sanitary sewer pipe, 3 manholes and 6 sanitary laterals. The project was bid in January 2014 and awarded to Dirt Dawg Construction with a bid price of \$78,890. The project was completed in June 2014 at a final cost of \$75,150.00.

14. WRRF – Liquid Stream Improvements: URS developed and designed upgrades to the Wooster Resource Recovery Facility with a projected estimate of \$4,840,000. The bid was opened on September 18, 2014 with six contractors submitting bids. The project was awarded to Kirk Brothers with a bid price of \$3,817,000. Work will begin spring 2015.

15. S. Gevers Chapel Culvert: The project was designed by the Division of Engineering with a cost estimate of \$100,000. The project was bid in March 2014 and was awarded to G.E. Baker with a bid price of \$90,550.15. It was completed in August 2014 with a final cost of \$91,903.05.

16. Branstetter Waterline Replacement: Designed by the Division of Engineering this project consisted of replacing approximately 1900 LF of 8” DI waterline and 22 service replacements. Dirt Dawg was awarded the contract with a bid price of \$230,626.00. The project was completed in September with a final cost of \$241,070.20.

17. Larwill, Massaro, Lucca Resurfacing: Barbicas Construction was awarded the contract for resurfacing with a winning bid of \$110,344.25 in April. Manhole replacement work was necessary before the resurfacing could be done. The project was completed in August with a final cost of \$118,025.51.

18. Emergency Repairs: PPM and Engineering Divisions worked together to determine which roadways were in need of emergency repairs due to the extreme winter weather. The following is a general list of repairs and costs.

Melrose Drive North: Kokosing - \$67,789.95; Melway \$29,852.71

Venture Boulevard: Karvo Paving - \$48,497.15

Silver Road Rehab: Melway Paving \$14,324.20

Bauer Road: Melway Paving - \$93,105.02

Various small areas throughout city: CJ Miller - \$48,000; Most Paving - \$40,725

Morgan & Highland Microsurfacing: Strawser - \$44,716.00

19. North Street Parking Lot: Stout Excavating constructed a gravel parking lot on North Street made possible by CDBG funding. The project was completed in approximately one week at a cost of \$19,555.00

20. Sidewalks: CDBG funding enabled the Engineering Division to replace various sections of sidewalk in the economically disadvantaged area of the city. D.L. Smith Concrete was awarded the contract for work at a cost of \$45,226.50. Work was completed in October.

21. Overlook Waterline: This was a small waterline replacement job designed by the Engineering Division to alleviate multiple leaks in the area. RBS was awarded the contract in July. The project was completed at a final cost of \$37,936.87.

22. QUASAR Electric Line: An electric line is being run from the Wooster Resource Recovery Facility to the Wooster Treatment Plant at a cost of \$260,000.00. The WRRF is creating enough electricity to sustain both plants.

23. E. Liberty/Pittsburgh Resurfacing: This project consists of planing and resurfacing over 26,000 square yards of asphalt concrete pavement and providing new pavement markings. The engineer's estimate was \$450,000. Bids were opened on 12/18/14 with five contractors submitting bids. Kokosing Construction Company was awarded the contract at a bid price of \$396,203.65. This project is partially funded by ODOT and is expected to be completed by July 1, 2015.

24. Oak Hill/Milltown Road Resurfacing: The City's Engineering Division and the Wayne County Engineer's Division worked jointly to resurface Oak Hill from Oldman to Milltown and a portion of W. Milltown. Financing was obtained from OPWC. Kokosing submitted the low bid of \$143,153.00 in July. The project was completed at a final cost of \$151,284.27.

25. Northwestern Storm Sewer Replacement: Wenger Excavating quoted a price of \$49,042 to replace storm sewer and catch basin on Northwestern prior to the SRTS – Parkview project work beginning. Final cost of the project was \$43,533.

INFRASTRUCTURE PROJECTS SCHEDULED/PLANNED FOR 2015:

1. **Melrose Booster Station:** This project consists of construction of a booster station to pump water from the intermediate zone to the north high zone. The station includes a pump building, pumps, electrical, telemetry, waterline piping and backup generator. Design of the project is being done by GGJ Engineering and the Division of Engineering. Construction cost estimate for this project is \$644,500.

2. **Melrose Drive Interceptor Rehabilitation:** The City of Wooster’s Engineering Division will prepare construction plans and specifications for rehabilitation of the interceptor lines as an upgrade to improving the area for the Daisy facility. The engineer’s estimate for this project is \$500,000.

3. **Geyers Chapel Road Reconstruction:** Engineering Division is completing plans for this project. The cost estimate is \$330,000 and the project is partially funded through Jobs Ohio.

4. **First Farm Water & Sewer:** The Engineering Division is completing plans for a sanitary sewer extension and waterline extension. This will be a combination bid and is funded with a CDBG grant. The engineer’s cost estimate is \$783,000. These utilities will serve the new Daisy Brand facility.

5. **OARDC – SR 302 Crosswalks and Signal Replacement:** This project is being coordinated with the OARDC/ATI to install crosswalks and sidewalks in the recently annexed area on SR 302 adjacent to the campus. Construction of these crosswalks is part of the annexation agreement between the OARDC with costs being shared. The traffic signal at the intersection of SR 302 and SR 83 will also be replaced at this time. The engineer’s estimate is \$180,000.

6. **Paving Projects:** In 2014, the Division of Engineering updated its Pavement Condition Rating database. All roadways within the city limits were rated based on certain criteria. Roadways will be selected for resurfacing or improvement from the database rating.

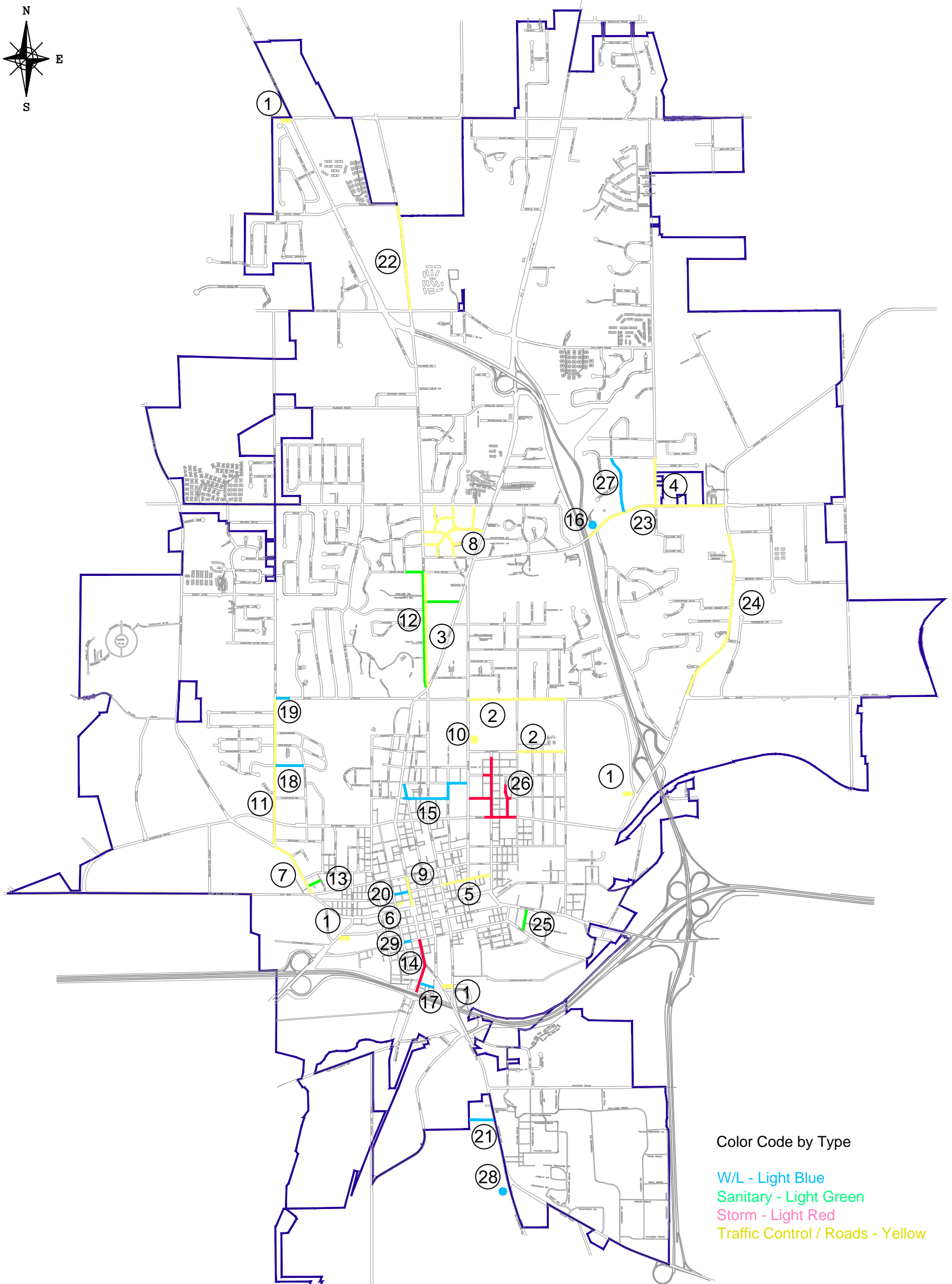
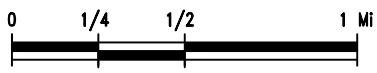
<u>Roadway</u>	<u>Estimate</u>
Milltown Road Microsurfacing	\$175,000
E. Pine Street Reconstruction	\$500,000
Point of View & Crabapple Court Resurfacing	\$100,000
Vinton Woods Concrete Repair	\$200,000
Long Road & E. Bowman Resurfacing	\$500,000

7. **Oldman Connector Path:** The Division of Engineering designed a multi-use 10’ wide path to connect Oak Hill Park trails to the pathways at the Kinney Soccer Complex. The route will follow the existing sidewalk on the south side of Oldman Road within the city’s existing right-of-way. ODOT is currently reviewing plans. The project is slated to be bid this spring.

8. **Norman Place Waterline:** Design work is complete on the replacement of approximately 420 feet of waterline. The engineer's estimate is \$106,000.
9. **Secondary Transmission Line:** Design work is progressing on the replacement of this line going through Christmas Run Park. The engineer's estimate is \$906,000.
10. **Various Waterline Projects:** The Engineering Division is in the process of designing waterline replacement projects in various areas of the city including Ihrig, Sherman, Impala and Skylark.
11. **Miscellaneous Projects:** Design work will be done to rehab the alley south of Liberty and east of Bever. Other designs in progress include culvert work on both Oakley and Geyers Chapel north, a pond cleanout at Oakley Road pond, CDBG sidewalk area, and additional bike path routes and lanes to connect Kinney Soccer fields to downtown.

CITY OF WOOSTER

Prepared By: DIVISION OF ENGINEERING



Color Code by Type

- W/L - Light Blue
- Sanitary - Light Green
- Storm - Light Red
- Traffic Control / Roads - Yellow

2013 - 2014 City Infrastructure Projects				
Completed, Proposed and In Process 1/1/13 to 12/31/13				
#	Project Name	Description	Construction Dates	Primary Funding Source
Completed Projects				
1	Wooster Gateway Projects	Signage, Landscaping	Completed Fall 2013	ODOT - Local
2	University/Wayne Resurfacing	Roadway Resurfacing	Completed Fall 2013	Local
3	Burbank Road Resurfacing	Roadway Resurfacing	Completed Fall 2013	ODOT - Local
4	State Route 10 School	Markings/Remediation	Fall 13 - Spring 13	ODOT - Local
5	2013 Microsurfacing Program	North Street Microsurfacing	Summer 2013	ODOT - Local
6	Merchants Block	Parking, Traffic, Landscaping	Completed Summer 2013	OPWIC - Local
7	Liberty Street Resurfacing	Roadway Resurfacing	Fall 2013	ODOT - Local
8	Donchelder Area Microsurfacing	Roadway Microsurfacing	Fall 2013	Local
9	U. Market Resurfacing	Roadway Resurfacing	Fall 2013	Local
10	Beall Avenue - Lovers Center	Pedestrian Lighting	Summer 2013	Local
11	Oak Hill Resurfacing	Roadway Resurfacing	Fall 2013	ODOT - Local
12	Burbank Road Sanitary	Storm and Sanitary Sewer	Completed Summer 2013	Local
13	Ohio Avenue W/L & Sanitary	Water & Sanitary Sewer	Fall 2013	Local
14	Market/Grace Sewer Separation	Storm and Sanitary Sewer	Winter 13 - Summer 13	OPWIC - Local
15	Spring Street W/L	Water Line Replacement	Spring 13 - Summer 13	OPWIC - State
16	Wesley Drive W/L Connection	Connection	Summer 2013	Local
17	Vine St W/L Replacement	Water Line Replacement	Spring 2013	Local
18	Hamilton Ave. W/L	Water Line Replacement	Fall 2013	Local
19	W. Water Waterline	Water Line Replacement	Fall 2013	Local
20	North Street Waterline	Water Line Replacement	Fall 2013	Local
21	Westview Drive Waterline	Water Line Replacement	Fall 2013	Local
Projects In Process				
22	Friendville Road Reconstruction	Miltovn to Rittel	Summer 14 - Fall 15	ODOT - Local
23	Portage Road Resurfacing	Roadway Resurfacing	Summer 2014	ODOT - Local
24	Alton Road - SR 895 - Phase 2	Lane Road to Gateway	Summer 14 - Fall 15	ODOT - Local
25	Catharine Sanitary Sewer Replacement	Sanitary Sewer	Winter 14 - Summer 14	Local - Sewer Funds
26	Spink Street Sewer Separation	Storm and Sanitary Sewer	Winter 13 - Summer 14	OPWIC - Local
27	Armstrong Drive Waterline Replacement	Water Line Replacement	Fall 13 - Spring 14	Local
28	Madison Hill Tank Storage Improvements	Improvements	Spring 14 - Summer 14	Local
29	W. Henry Street Waterline	Water Line Replacement	Winter 14 - Summer 14	Local

Private Developments

1. Private Subdivisions/Commercial Property under Construction:

2014 saw a slight increase in the number of development permits issued for development and expansion in the private sector. The City issued 16 development permits totaling nearly \$49,500 in plan review fees.

The Akron Road (SR585) corridor seems to be the next desirable location within the city. New development that was opened or built in 2014 includes The Hospice Center, Bauer Ladder and Fastenal. LUK continues to expand and Daisy Brand is in the process of building a new plant off Geyers Chapel Road.

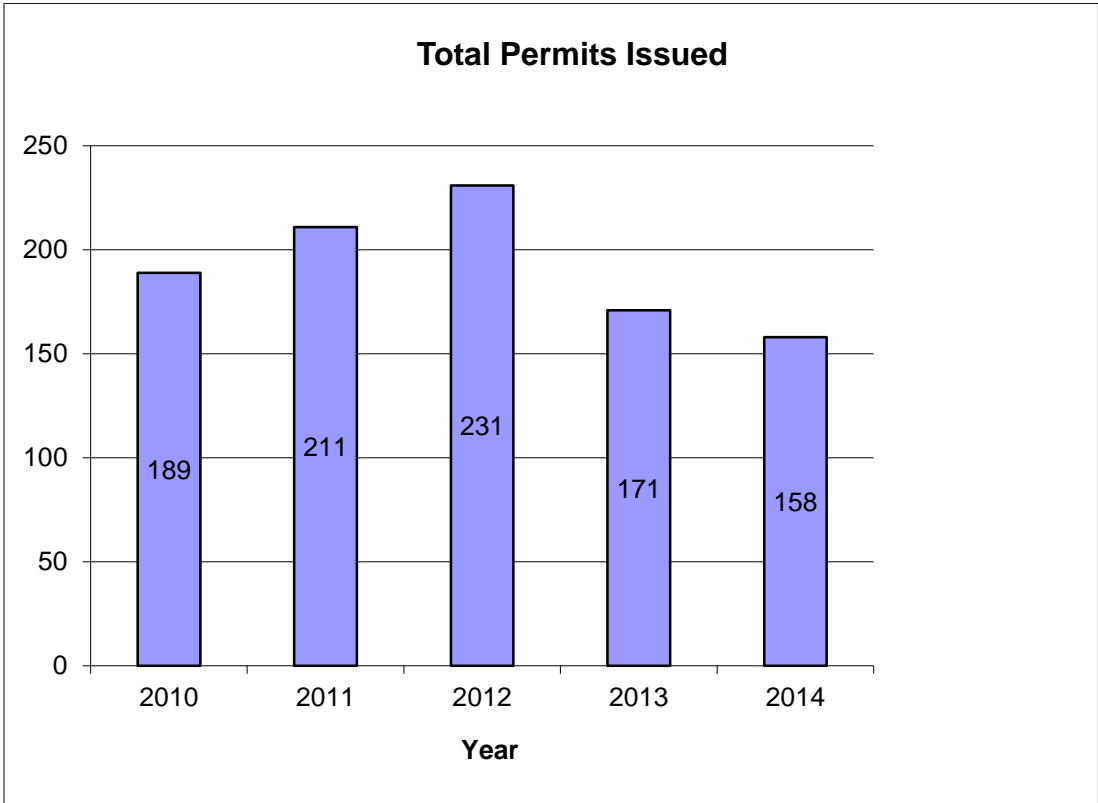
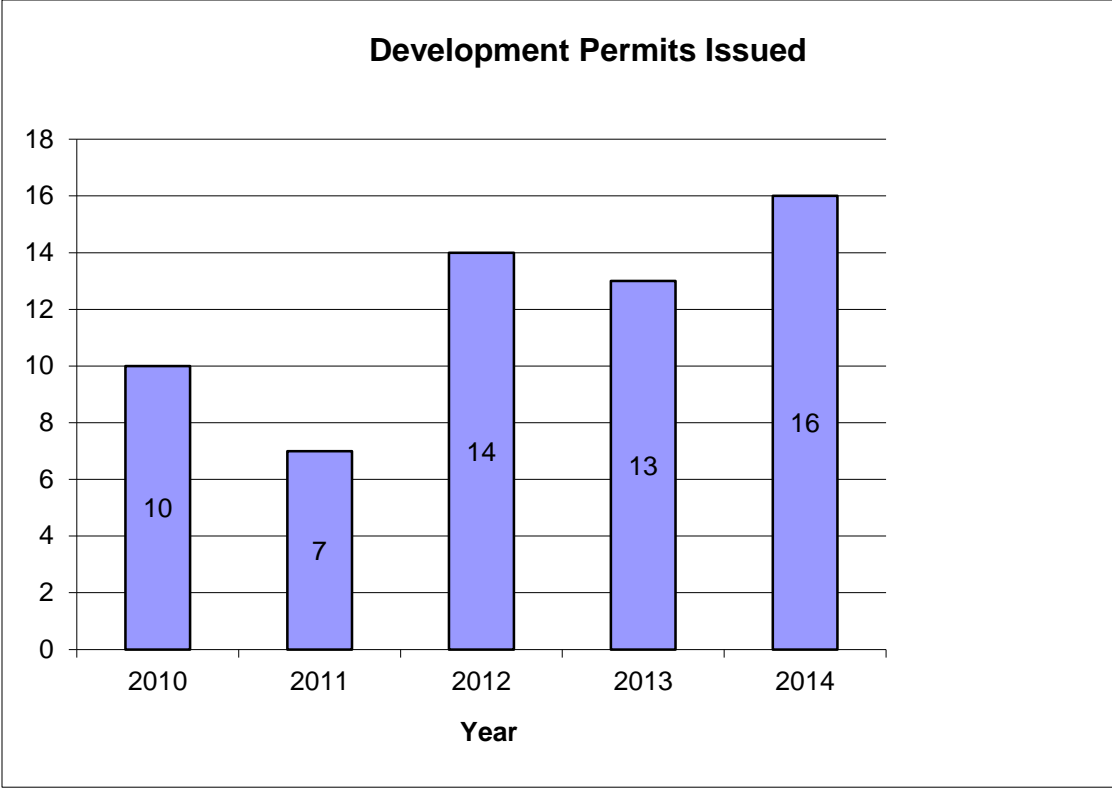
2015 will bring the opening of the Daisy sour cream plant, several new independent living facilities and an expansion at the College of Wooster.

All private developments required oversight and permit approval from the City Engineering Division for compliance with the Wooster Site Development and Improvement Regulations. The Engineering Division reviews all plans and provided inspection of all these developments.

2. Subdivision Plan Review Table: The table below lists all subdivisions and developments submitted for review in 2014.

City of Wooster Engineering Development Permits						2014
DEVELOP. #	PERMIT NO.	PROJECT NO.	NAME / DESCRIPTION	SITE IMP.S COST ESTIMATE	PLAN REVIEW FEE	DATE RECEIVED
1	#2014001	#133050	Edgewood Parking Lot	\$15,000	\$ 592	01/08/14
2	#2014002	#133053	Bauer Corporation	\$50,000	\$ 6,188	1/28/2014
3	#2014003	#132063	OARDC Greenhouse	\$209,200	\$ 1,506	03/03/14
4	#2014004	#133057	Progress Drive	\$20,000	\$ 6,437	03/17/14
5	#2014005	#132016	North High Zone Water Tank	\$3,800,000	n/a	04/14/14
6	#2014006	#143014	Seaman Corp	\$25,000	\$ 900	04/21/14
7	#2014007	#143021	OARDC Mill Road Improvements	\$389,417	\$ 1,100	04/28/14
8	#2014008	#143023	Daisy Brand Site Development	\$8,000,000	\$ 30,438	05/07/14
9	#2014009	#143026	Wooster High School Track	\$1,200,000	\$ 3,863	05/22/14
10	#2014010	#143029	Wellert Property - 149 N. Walnut	\$75,000	\$ 613	06/09/14
11	#2014011	#143025	Wooster Dental	\$55,000	\$ 1,931	06/17/14
12	#2014012	#143030	1747 Akron Road - Fastenal	\$20,000	\$ 2,478	06/17/14
13	#2014013		College of Wooster	\$15,000	\$ 590	07/01/14
14	#2014014	#142042	Claire Bridge	\$5,992,100	\$ 5,166	08/12/14
15	#2014015	#143032	CAWM Head Start	\$78,000	\$ 724	09/09/14
16	#2014016	#143047	LUK Parking Expansion	\$25,000	\$ 1,642	10/03/14

\$ 19,968,717.00 \$ 49,443.60



ENGINEERING FEES AND REVENUES :

The following chart details the revenues received the past few years by the Division of Engineering. Revenue for 2014 remained fairly constant with 2013.

Division of Engineering
Engineering Fees and Revenues

The following breakdown details the revenues received for the years 2011 through 2014 by the Division of Engineering

	2011	2012	2013	2014
Single Inspection	\$8,890.00	\$11,470.00	\$21,338.26	\$10,478.20
Construction Inspection	\$3,840.65	\$37,491.43	\$50,476.60	\$114,642.28
Plan Review Fee	\$18,638.00	\$17,320.00	\$14,160.00	\$10,480.00
Plan Copies	\$3,805.40	\$4,204.50	\$4,634.54	\$4,213.25
Yard Pipe Permit	\$480.00	\$0.00	\$160.00	\$0.00
Sanitary Sewer Permit	\$2,080.00	\$6,960.00	\$480.00	\$480.00
San. Sewer Availability Charge	\$3,146.00	\$44,586.00	\$25,740.00	\$7,584.00
Water Availability	\$7,760.00	\$36,768.80	\$25,461.00	\$704.00
Water Service Permit	\$560.00	\$960.00	\$1,400.00	\$640.00
Development Permit Waiver	(\$635.00)	\$0.00	\$0.00	\$0.00
TOTAL FEES COLLECTED	\$48,565.05	\$159,760.73	\$143,850.40	\$149,221.73

Permissive Tax Revenue: \$105,953.79 \$94,029.20 \$101,243.42 \$102,382.20

Permissive tax revenue represents the portion of the state vehicle license tax received by the city. These funds are released to the city based on roadway construction expenditures for projects managed by the Division of Engineering. The Division requests disbursement of these funds on a bi-monthly basis. The total funds requested and released from 1969 to October 2014 is \$4,102,484.46.

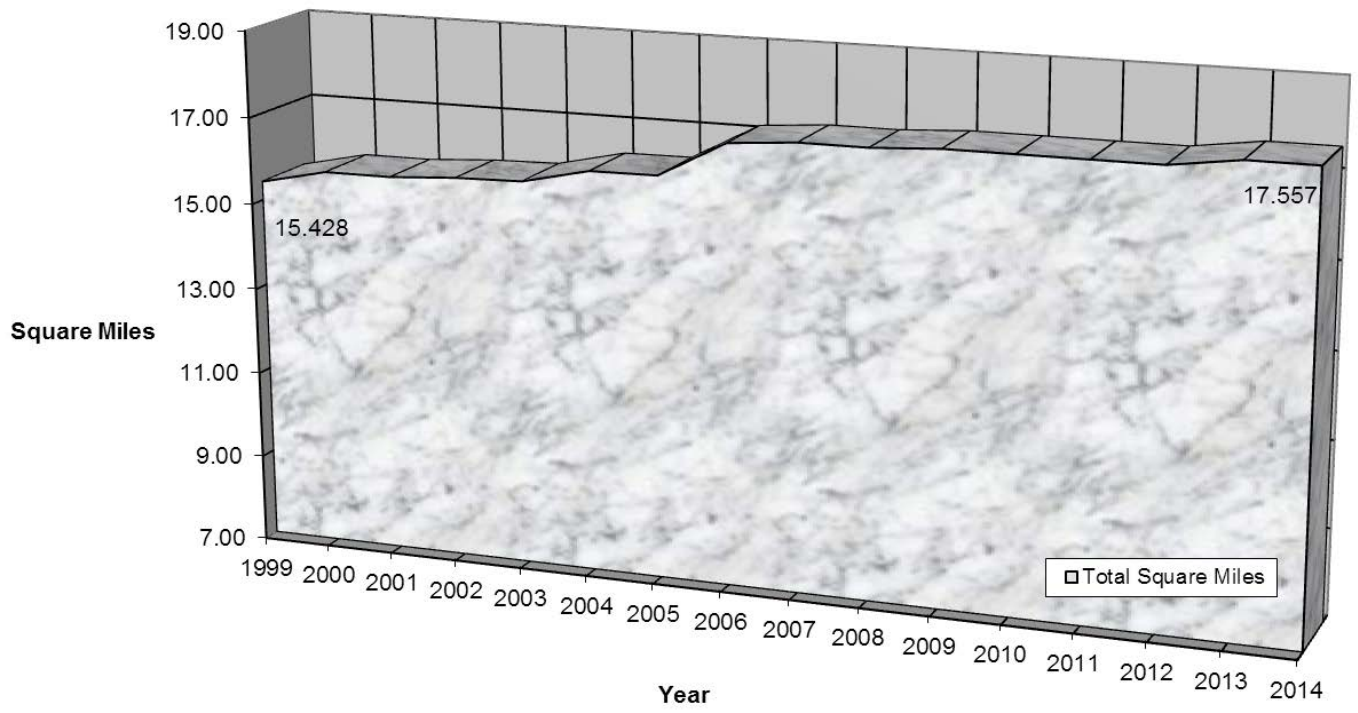
ODOT Reimbursement: \$ 2,826,188.14

The Engineering Division requests reimbursement from ODOT for construction costs and construction engineering costs on ODOT funded projects. The City had six roadway projects that had reimbursable costs in 2014. ODOT funding amounting to over \$4,000,000 is still available for projects that have not been finalized and are still in the construction phase.

*Division of Engineering
City of Wooster
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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
2008	0.000	11,036.089	17.244	0.000
2009	57.450	11,093.539	17.334	0.521
2010	0.000	11,093.539	17.334	0.000
2011	0.000	11,093.539	17.334	0.000
2012	1.61	11,095.149	17.336	0.015
2013	141.202	11,236.351	17.557	1.273
2014	0	11,236.351	17.557	0.000

2014 Annexations

No.	Description	Date	Area
	NONE		

City Growth Information

Year	City Population	City Area	City Streets
1990	22,427 (a)	12.8222 Sq. Mi.	106.42 Miles
2000	24,811 (a)	15.767 Sq. Mi.	120.41 Miles
2010	26,119 (a)	17.334 Sq. Mi	133.10 Miles
2011	26,397 (b)	17.334 Sq. Mi	133.10 Miles
2012	26,677 (b)	17.336 Sq. Mi	133.10 Miles
2013	26,961 (b)	17.557 Sq. MI	133.78 Miles
2014	27,247 (b)	17.557 Sq. MI	133.78 Miles

(a) Census

(b) Estimated from Housing Starts

NOTES

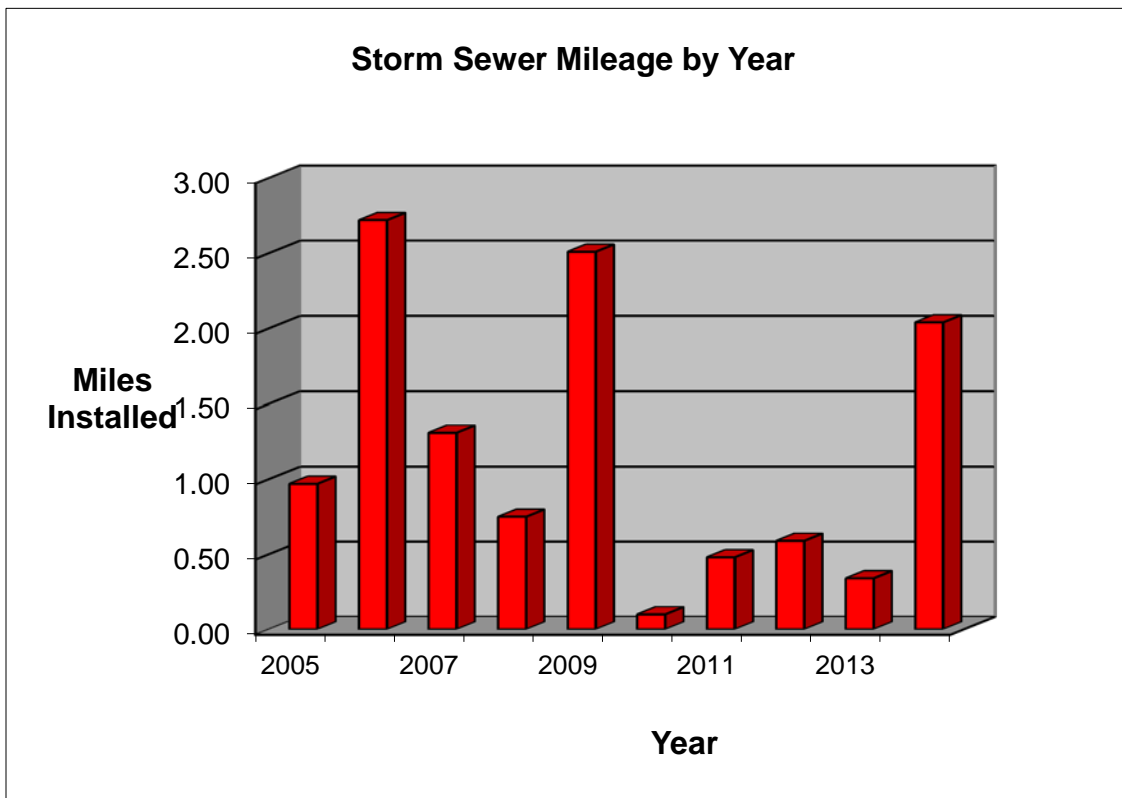
- 1) Population growth saw a 5.27% increase from 2000 to 2010 based on actual census figures.

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Utility Statistics – Section 3

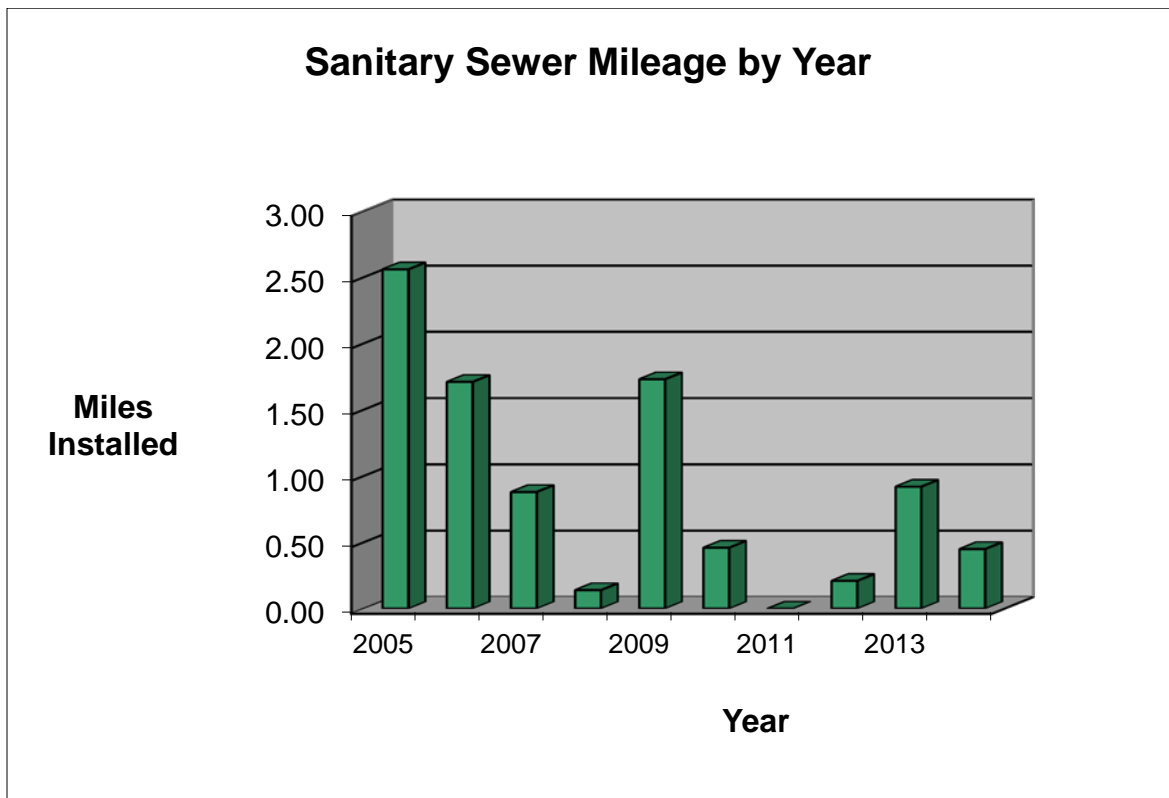
Storm Sewer Mileage

Year	Increase in Miles	Total Mileage	% Increase
		110.63	
2005	0.97	111.60	0.88%
2006	2.72	114.32	2.44%
2007	1.31	115.63	1.15%
2008	0.75	116.38	0.65%
2009	2.51	118.89	2.16%
2010	0.10	118.99	0.08%
2011	0.48	119.47	0.40%
2012	0.59	120.06	0.49%
2013	0.34	120.40	0.28%
2014	2.04	122.44	1.69%



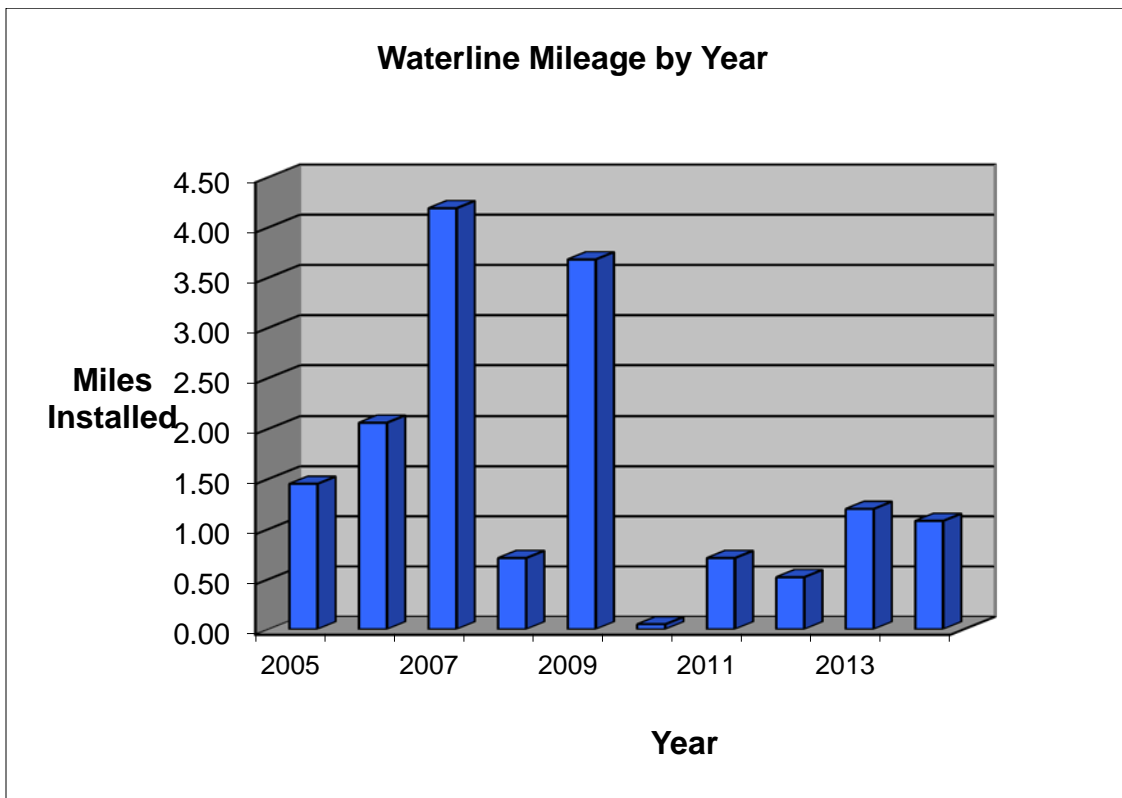
Sanitary Sewer Mileage

Year	Increase in Miles	Total Miles	% Increase
		112.29	
2005	2.56	114.85	2.28%
2006	1.71	116.56	1.49%
2007	0.88	117.44	0.75%
2008	0.14	117.58	0.12%
2009	1.73	119.31	1.47%
2010	0.46	119.77	0.39%
2011	0.00	119.77	0.00%
2012	0.21	119.98	0.18%
2013	0.92	120.90	0.77%
2014	0.45	121.35	0.37%



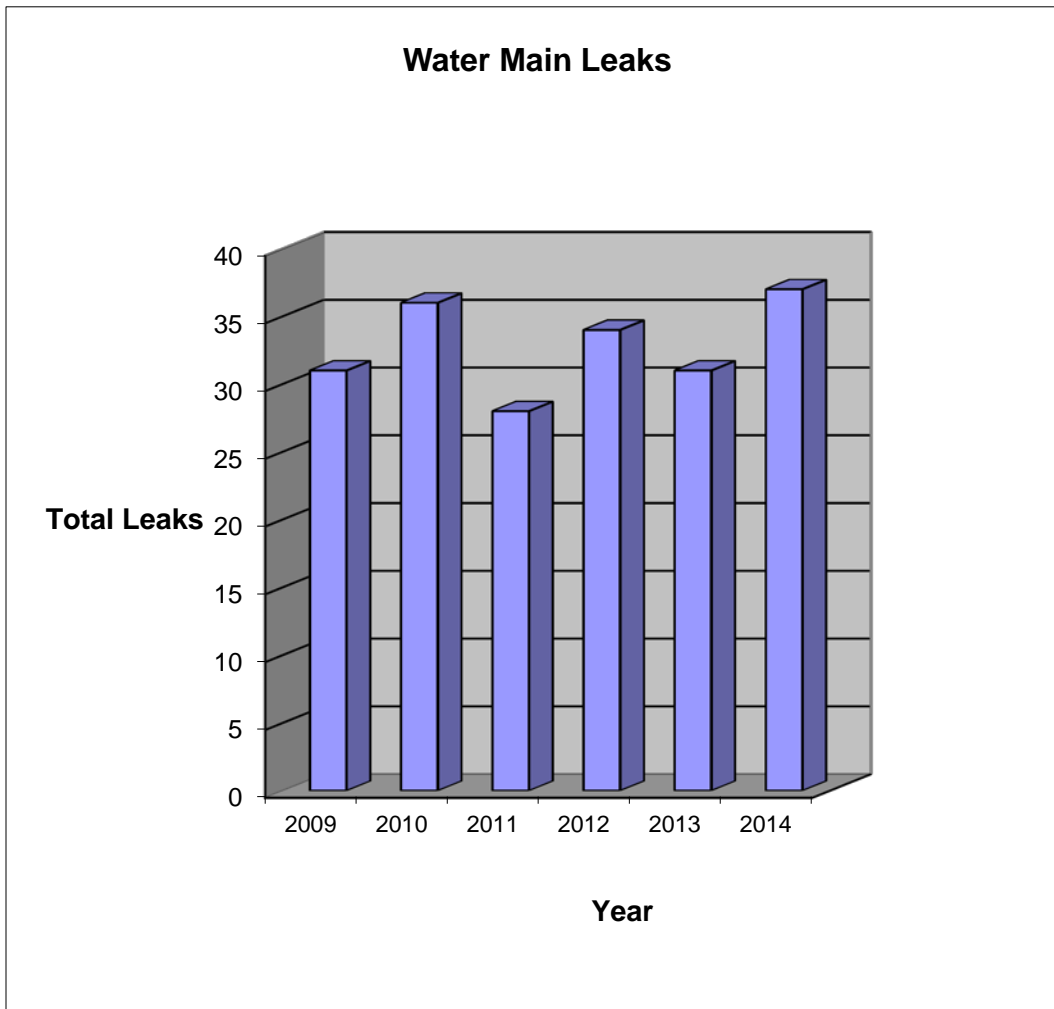
Waterline Mileage

Year	Increase in Miles	Total Miles	% Increase
		120.94	
2005	1.45	122.39	1.20%
2006	2.06	124.45	1.68%
2007	4.19	128.64	3.37%
2008	0.71	129.35	0.55%
2009	3.68	133.03	2.84%
2010	0.05	133.08	0.04%
2011	0.71	133.79	0.53%
2012	0.52	134.31	0.39%
2013	1.20	135.51	0.89%
2014	1.08	136.59	0.80%



Water Main Leaks

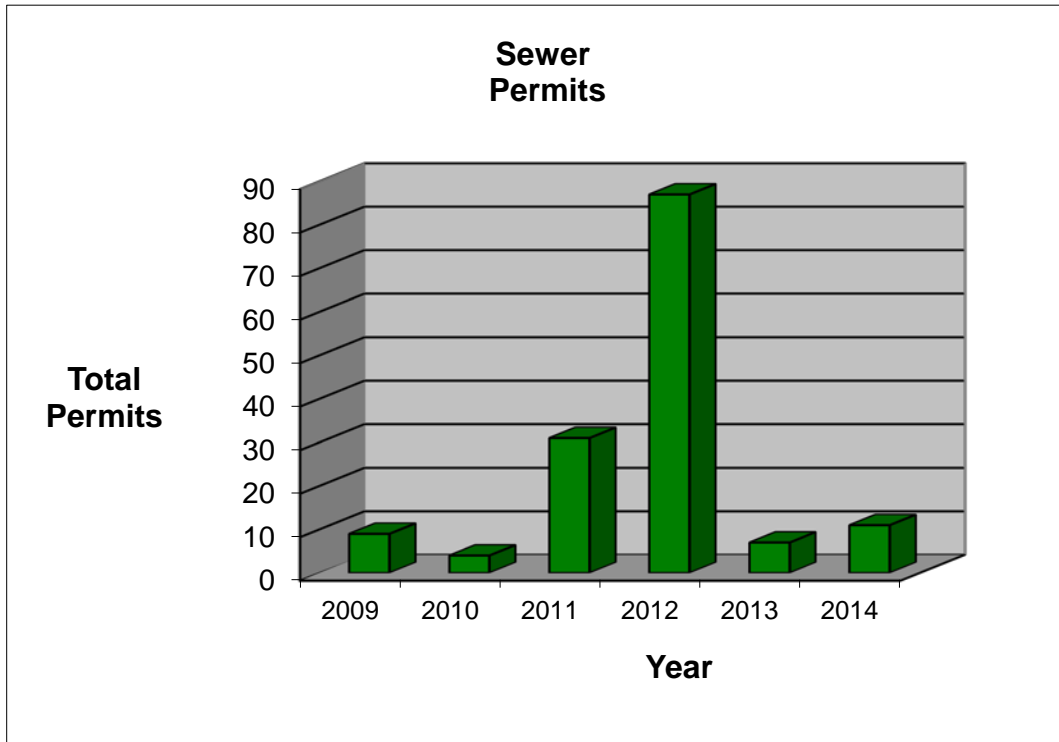
<u>Year</u>	<u>Number</u>
2003	42
2004	37
2005	21
2006	17
2007	26
2008	33
2009	31
2010	36
2011	28
2012	34
2013	31
2014	37



Water leaks continue to be consistent due to the age and deterioration of the current infrastructure.

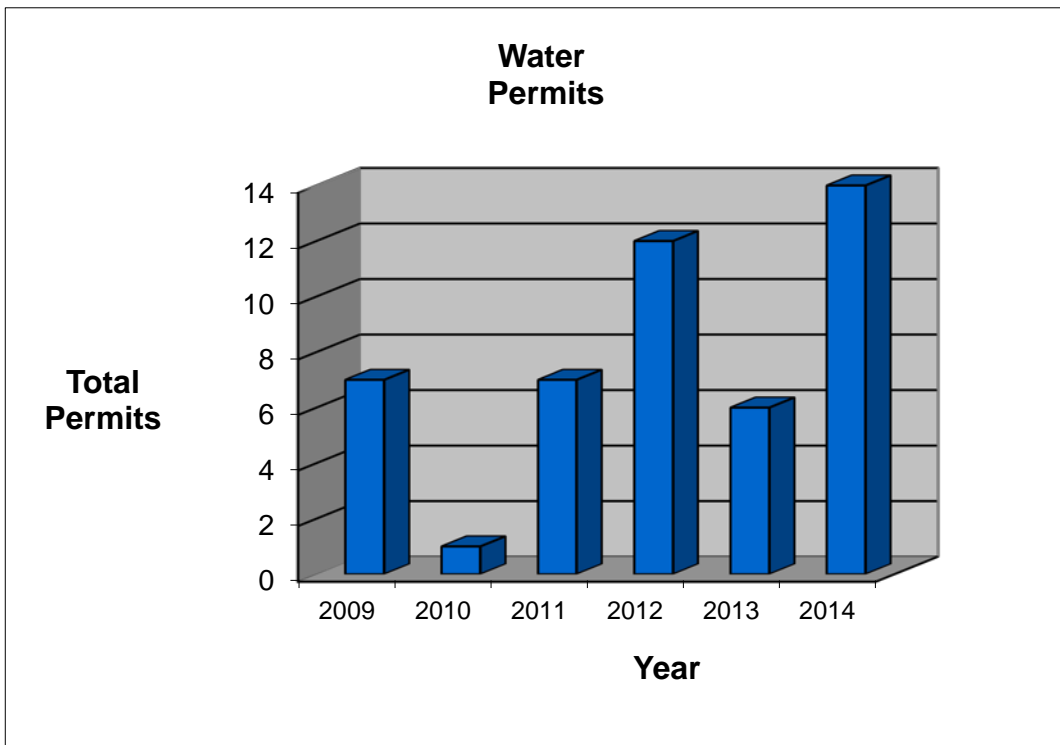
Sewer Permits

Year	Number
2009	9
2010	4
2011	31
2012	87
2013	7
2014	11



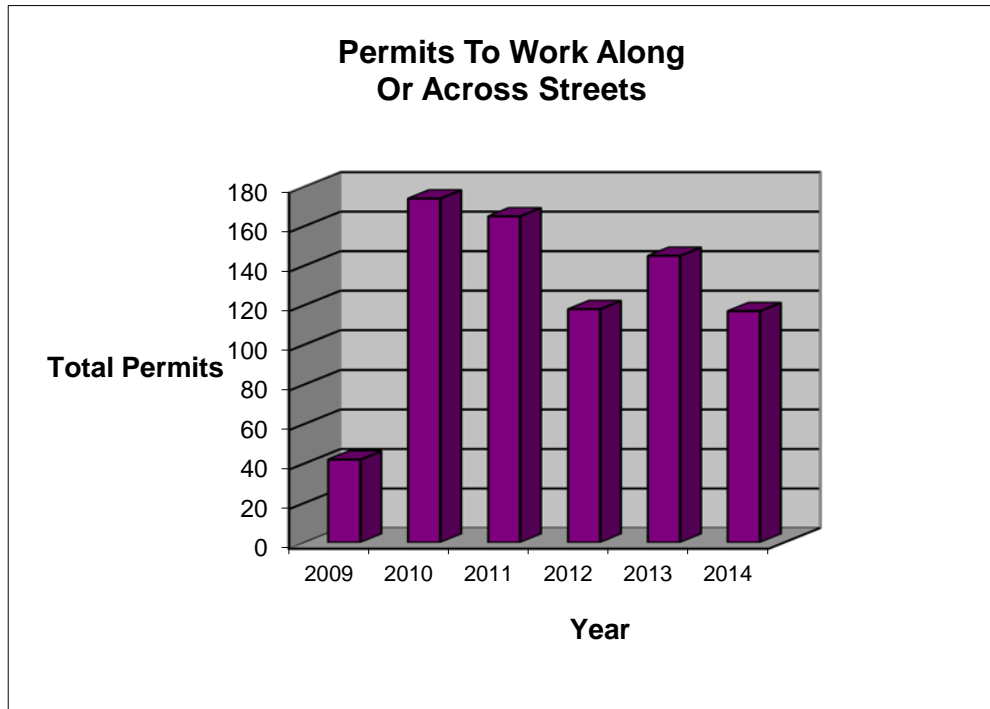
Water Permits

Year	Number
2009	7
2010	1
2011	7
2012	12
2013	6
2014	14



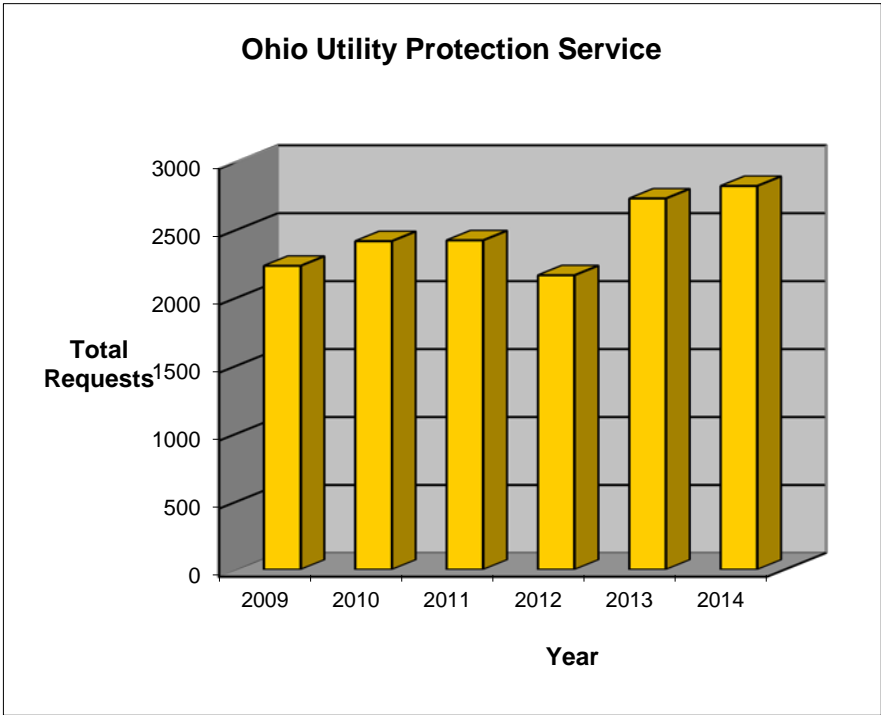
**Permits To Work Along
Or Across Streets**

<u>Year</u>	<u>Number</u>
2009	42
2010	174
2011	165
2012	118
2013	145
2014	117



Ohio Utility Protection Service
Location Requests

<u>Year</u>	<u>Number</u>
2005	2356
2006	2332
2007	2270
2008	2241
2009	2235
2010	2417
2011	2423
2012	2166
2013	2731
2014	2823

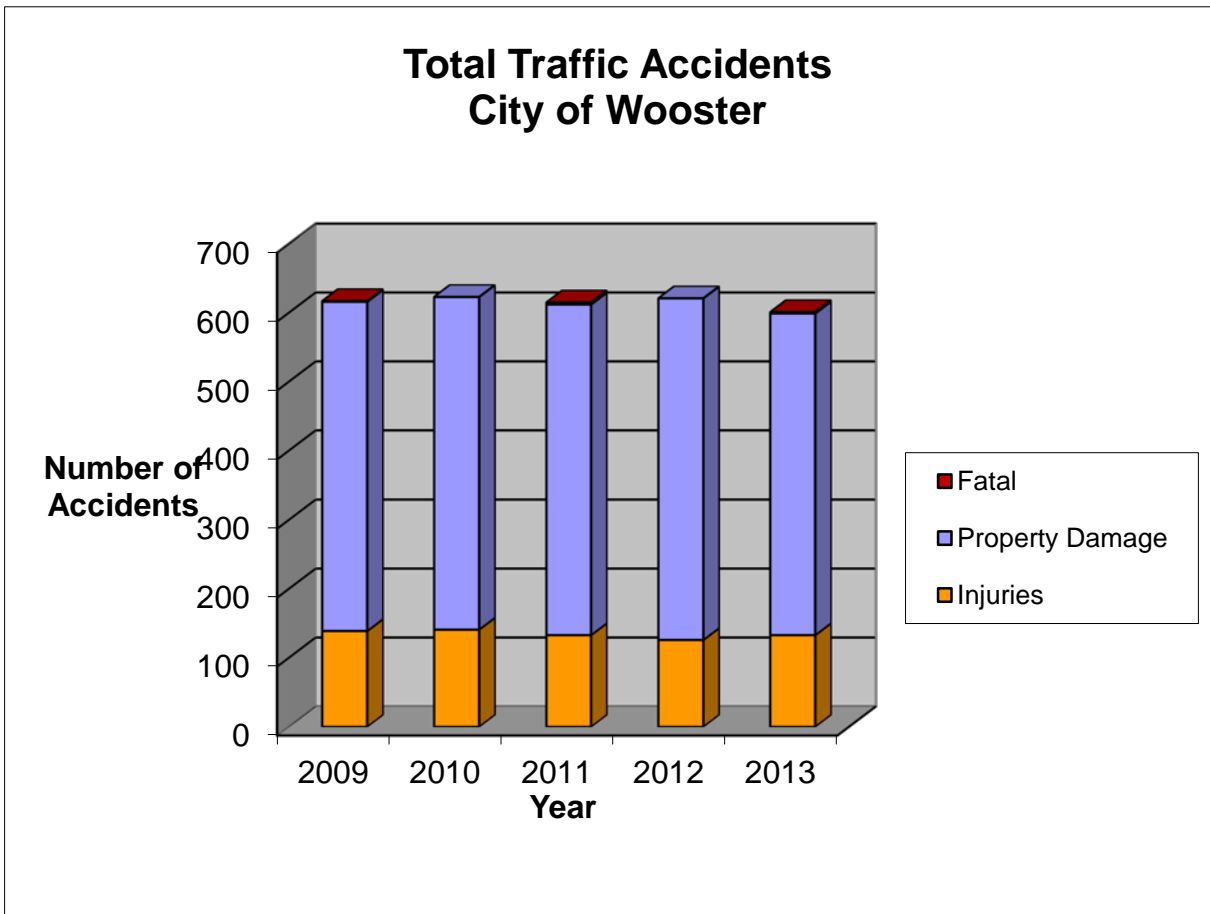


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Traffic Statistics – Section 4

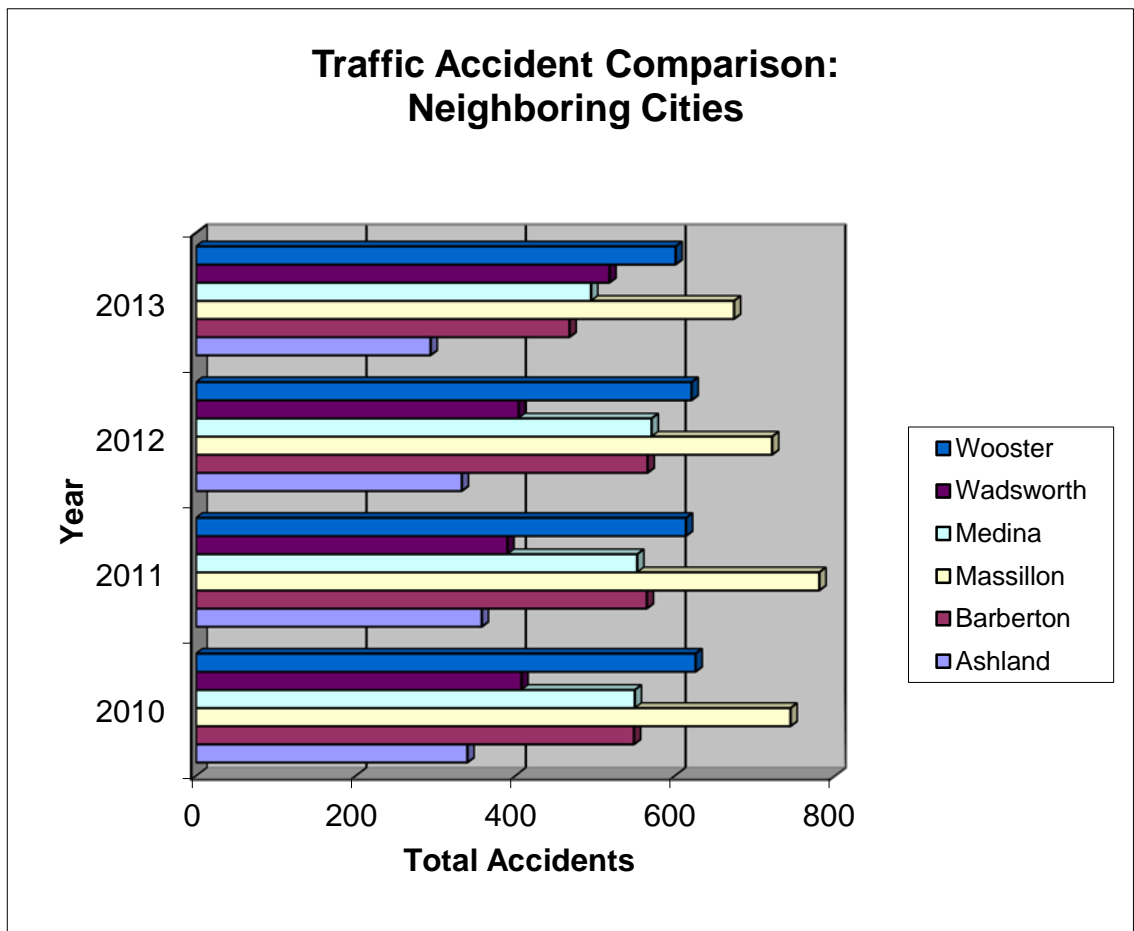
Traffic Accidents

Year	Injuries	Property Damage	Fatal
2009	139	477	1
2010	141	482	
2011	133	479	3
2012	126	495	
2013	133	466	2



Traffic Accident Comparison
Totals By Neighboring Cities

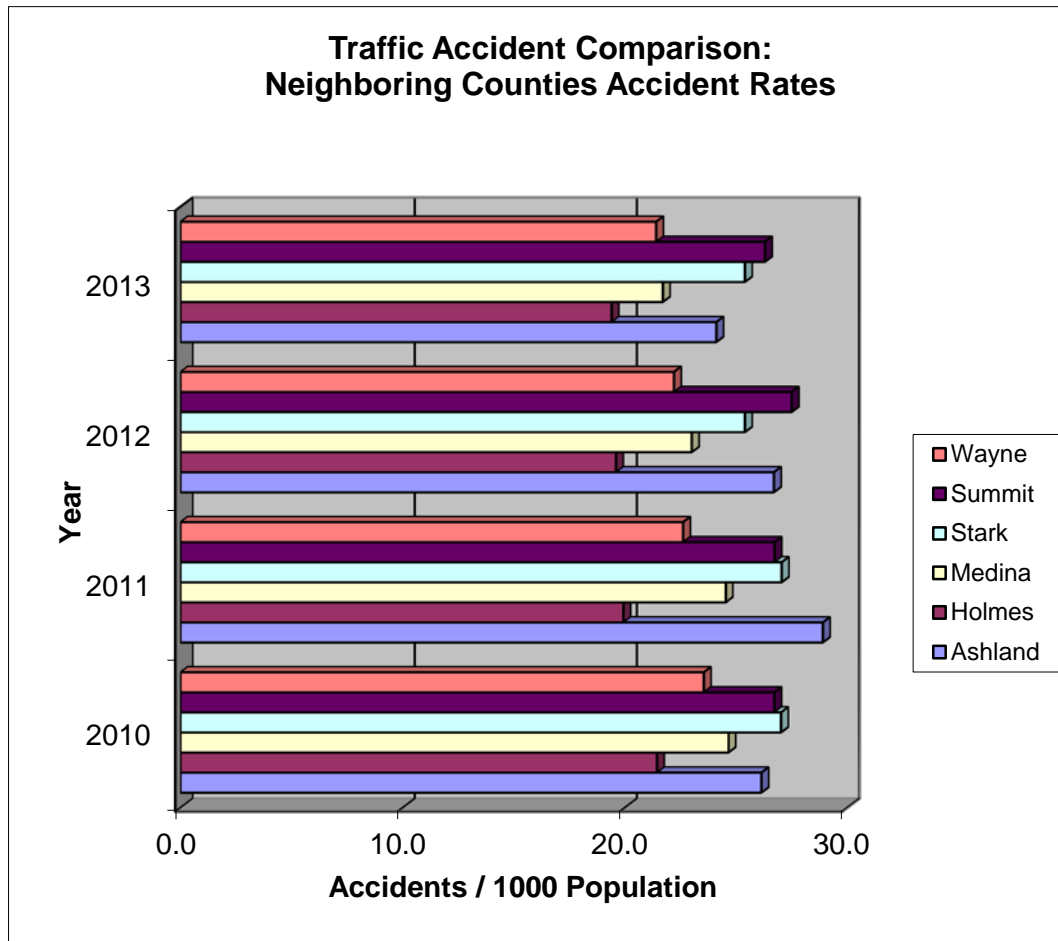
Year	Ashland	Barberton	Massillon	Medina	Wadsworth	Wooster
2009	317	557	745	465	381	625
2010	340	549	745	550	408	626
2011	358	565	781	553	390	614
2012	333	566	722	571	404	621
2013	294	468	674	495	518	601



Traffic Accident Comparison
Rates by Neighboring Counties

Accidents Per 1000 People

Year	Ashland	Holmes	Medina	Stark	Summit	Wayne
2009	27.0	20.6	23.1	26.6	26.3	22.3
2010	26.1	21.4	24.7	27.0	26.7	23.5
2011	28.9	19.9	24.5	27.1	26.7	22.6
2012	26.7	19.6	23	25.4	27.5	22.2
2013	24.1	19.4	21.7	25.4	26.3	21.4



*Division of Engineering
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Engineering Design Statistics – Section 5

DIVISION OF ENGINEERING
2014 Project Summary
(Projects Designed or Constructed in 2014)

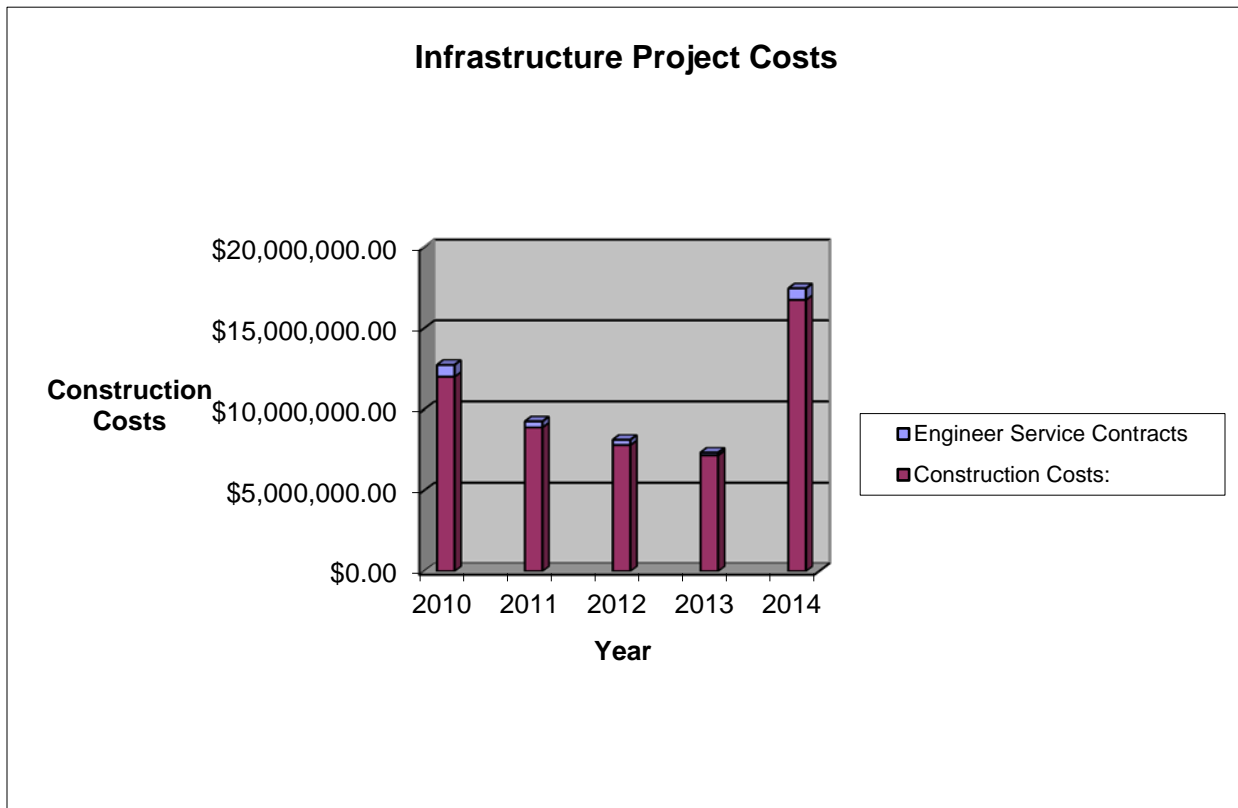
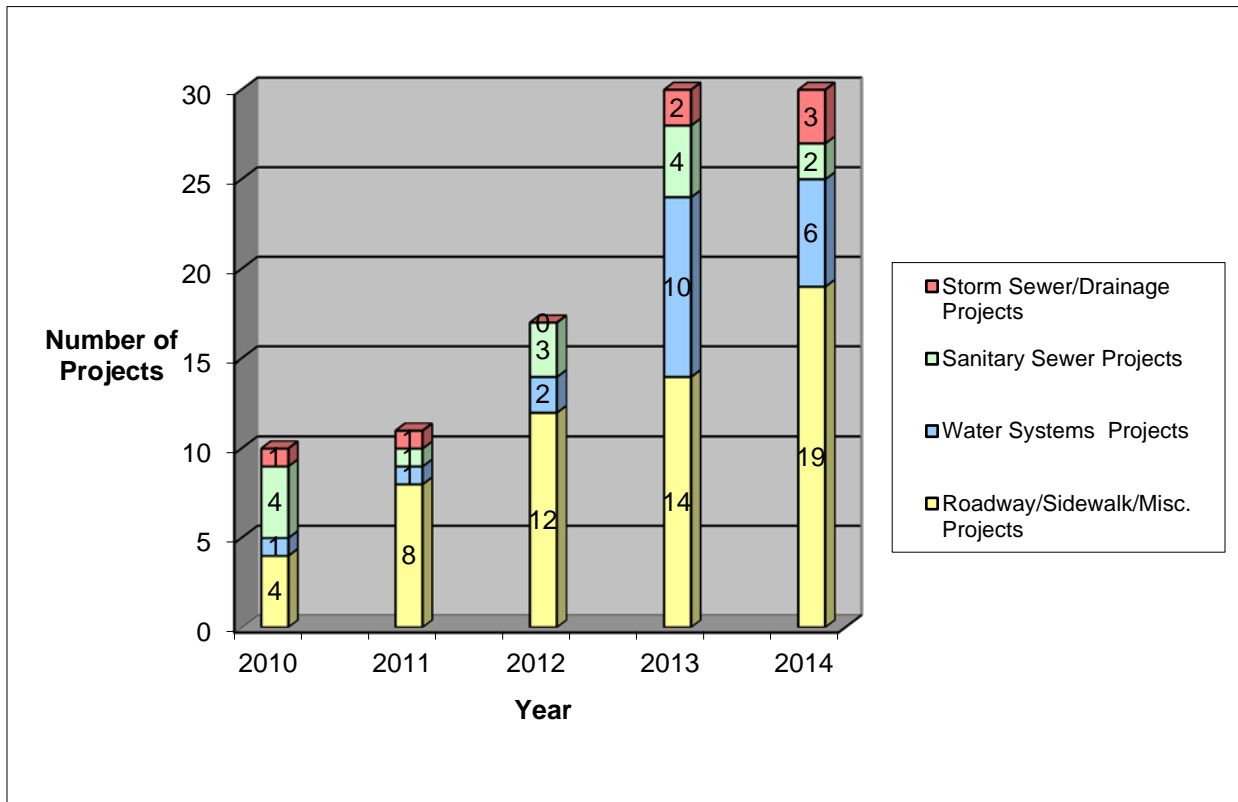
PROJECT	DESIGNER/CONSULTANT	DESIGN COST	CONTRACTOR	ESTIMATED CONST. COST	BID PRICE	FINAL COST	Contract Balance	% Complete	Retainage
SRTS - Kean Elementary - Sidewalk	Wooster Engineering	\$0	G.E. Baker	\$220,000	\$191,730	\$202,090	\$0	100%	\$0
Akron Rd - Phase 2	Engineering Associates	\$385,000	Wenger	\$3,100,000	\$3,077,862	UC	\$1,913,171	62%	\$101,277
North High Water Tank	Wooster Engineering	\$0	CB&I	\$3,900,000	\$3,066,000	UC	\$2,200,947	28%	\$75,221
Branstetter Road Waterline	Wooster Engineering	\$0	Dirt Dawg	\$250,000	\$230,626	\$241,070	\$0	100%	\$0
Geyers Chapel Culvert	Wooster Engineering		G.E. Baker	\$100,000	\$90,550	\$91,903	\$0	100%	\$0
SRTS - ODOT - Parkview	Wooster Engineering	\$0	Terra Valley	\$281,000	\$320,142	UC	\$0	0%	\$0
WRRF - Liquid Stream	URS	\$225,000	Kirk Brothers	\$4,840,000	\$3,817,000	UC	\$0	0%	\$0
Dix Expressway	Wooster Engineering		Smith Paving	\$400,000	\$350,000	\$303,820	\$0	100%	\$0
Edgewood Allotment	Wooster Engineering		Smith Paving	\$190,000	\$211,700	UC	\$48,146	80%	\$10,025
Armstrong Drive W/L	Wooster Engineering		Dirt Dawg	\$240,000	\$186,386	\$185,627	\$0	100%	\$0
Burbank Road Resurfacing	Wooster Engineering		Barbicas	\$192,500	\$183,876	\$188,418	\$0	100%	\$0
Friendsville Rd. Reconstruction	GPD	\$101,760	Stout	\$2,065,000	\$1,798,042	UC	\$184,481	99%	\$71,921
Madison Hill Water Storage Tank Improvements	Wooster Engineering		D & M Painting	\$470,000	\$402,600	\$404,155	\$0	100%	\$0
Larwill Massaro Lucca	Wooster Engineering		Barbicas	\$125,000	\$110,344	\$118,025	\$0	100%	\$0
Portage Rd. Resurfacing	Wooster Engineering		Karvo Paving	\$300,000	\$238,692	\$238,610	\$0	100%	\$0
Spink St. Sewer Separation	Wooster Engineering		Wenger	\$900,000	\$989,524	\$1,073,477	\$0	100%	\$0
W. Henry St. W/L Replacment	Wooster Engineering		Dirt Dawg	\$75,000	\$53,315	\$48,920	\$0	100%	\$0
Catherine St. Sanitary Sewer Replacem	Wooster Engineering		Dirt Dawg	\$80,500	\$78,890	\$75,150	\$0	100%	\$0
North Street Parking Lot	Wooster Engineering		Stout	\$25,000	\$19,555	\$19,555	\$0	100%	\$0
CDBG Sidewalks	Wooster Engineering		D.L. Smith Concrete	\$57,000	\$45,227	\$45,227	\$0	100%	\$0
Overlook Waterline	Wooster Engineering		RBS	\$52,000	\$48,789	\$37,936	\$0	100%	\$0
Quasar Electric Line	Wooster Engineering		Quasar	\$260,000	\$260,000	UC	\$260,000	0%	\$0
E. Liberty Resurfacing	Wooster Engineering		Kokosing	\$450,000	\$396,203	UC		0%	
Melrose Drive North	Wooster Engineering		Kokosing	\$110,000	\$67,789	\$67,789	\$0	100%	\$0
Oak Hill/Milltown Roads Resurfacing	Wooster Engineering		Kokosing	\$160,000	\$143,153	\$151,300	\$0	100%	\$0
Venture Blvd. Repair	Wooster Engineering		Karvo Paving	\$50,000	\$46,638	\$48,497	\$0	100%	\$0
Bauer Road Rehab	Wooster Engineering		Melway Paving	\$97,900	\$102,060	\$93,105	\$0	100%	\$0
Northwestern Storm	Wooster Engineering		Wenger	\$49,000	\$49,042	\$43,533	\$0	100%	
Silver Road	Wooster Engineering		Melway Paving	\$14,324	\$14,324	\$14,324	\$0	100%	
Morgan & Highland Microsurfacing	Wooster Engineering		Strawser	\$47,000	\$44,716	\$44,716	\$0	100%	\$0
Subtotals		\$711,760		\$19,101,224	\$16,634,775	\$3,737,247			

DIVISION OF ENGINEERING
2014 Project Summary
(Projects Designed or Constructed in 2014)

PROJECT	DESIGNER/CONSULTANT	DESIGN COST	CONTRACTOR	ESTIMATED CONST. COST	BID PRICE	FINAL COST	Contract Balance	% Complete	Retainage
Melrose SS Interceptor	Wooster Engineering			\$500,000.00	N/A	DC			
Norman Place Waterline	Wooster Engineering			\$106,000	N/A	DC			
First Farm Water & Sewer	Wooster Engineering			\$783,000	N/A	DC			
Oldman Connector Path	Wooster Engineering			\$180,000	N/A	DC			
Geyers Chapel Road Reconstruction	Wooster Engineering			\$330,000	N/A	DC			
Subtotals		\$0		\$1,399,000					
Mechanicsburg Rd. SS	Wooster Engineering	\$0	N/A	\$200,000	N/A	UD			
First Farm Water & Sewer	Wooster Engineering			\$783,000	N/A	UD			
Melrose Booster Station	GGJ	\$48,900	N/A	\$644,500	N/A	UD			
CDBG Sidewalks	Wooster Engineering			\$60,000	N/A	UD			
Westridge Waterline	Wooster Engineering			\$95,000	N/A	UD			
Point of View/Crabapple Resurfacing	Wooster Engineering			\$100,000	N/A	UD			
E. Pine Street	Wooster Engineering			\$500,000	N/A	UD			
Vinton Woods Concrete Repair	Wooster Engineering			\$200,000	N/A	UD			
Milltown Microsurfacing	Wooster Engineering			\$175,000	N/A	UD			
Secondary Transmission Line	Wooster Engineering	\$0	N/A	\$906,000	N/A	UD			
Impala & Skylark Waterline	Wooster Engineering		N/A	\$500,000	N/A	UD			
Oakley Culvert North	Wooster Engineering	\$0	N/A	\$200,000	N/A	UD			
Geyers Chapel Culvert	Wooster Engineering	\$0	N/A	\$175,000	N/A	UD			
Long Road & E. Bowman Resurfacing	Wooster Engineering	\$0	N/A	\$500,000	N/A	UD			
OARDC-SR 302 Crosswalk/Signal	Wooster Engineering	\$0	N/A	\$180,000	N/A	UD			
Subtotals		\$48,900		\$5,218,500					

Note: Engineering consultant services and construction costs shown in this table represent totals to date. Actual expenditures occurred over several years.

UC = Under Construction



The City oversaw \$16,634,775 of infrastructure construction projects in 2014 and associated engineering service contracts of \$711,760. The Division of Engineering staff designed 27 of the 30 projects keeping our design costs below the 8% to 11% industry average.

Engineering Value Calculations

Project	Design Cost	2014 Design Costs Paid	2013 Design Costs Paid	2012 Design Costs Paid	2011 Design Costs Paid	2010 Design Costs Paid	2009 Design Costs Paid	Engineer's Estimate	Contractor	Bid Price	Final Cost	2014 Const. Payments
Friendsville Rd. Improvements	\$101,760			\$15,837	\$59,072	\$24,341	\$0	\$2,065,000	Stout	\$1,798,042	UC	\$1,613,561
Akron Road Phase 2	\$385,000		\$904	\$51,198	\$13,128	\$230,668	\$140,704	\$3,100,000	Wenger	\$3,077,862	UC	\$865,053
SRTS - Kean								\$220,000	G.E. Baker	\$191,730	\$202,090	\$202,090
North High Water Tank	\$6,000	\$1,760	\$3,850					\$3,900,000	CB&I	\$3,066,000	UC	\$865,052
Madison Hill Water Storage Tank								\$470,000	D&M Painting	\$402,600	\$404,155	\$404,155
Branstetter Waterline								\$250,000	Dirt Dawg	\$230,626	\$241,070	\$241,070
Geyers Chapel Culvert								\$100,000	G.E. Baker	\$90,550	\$91,903	\$91,903
SRTS - Parkview								\$281,000	Terra Valley	\$320,142	UC	
WRRF - Liquid Stream	\$225,000	\$72,850	\$152,150					\$4,840,000	Kirk Bros	\$3,817,000	UC	
Dix Expressway								\$400,000	Smith Paving	\$350,000	\$303,820	\$303,820
Edgewood Alottment								\$190,000	Smith Paving	\$211,700	UC	\$217,083
Armstrong Drive Waterline								\$240,000	Dirt Dawg	\$186,386	\$185,627	\$185,627
Burbank Road Resurfacing								\$192,500	Barbicas	\$183,876	\$188,418	\$188,418
Portage Road Resurfacing								\$300,000	Kokosing	\$238,692	\$238,610	\$238,610
Spink St. Sewer Separation								\$900,000	Wenger	\$989,524	\$1,073,477	\$1,073,477
W. Henry W/L Replacement								\$75,000	Dirt Dawg	\$53,315	\$48,920	\$48,920
Catherine St. Sanitary Sewer								\$80,500	Dirt Dawg	\$78,890	\$75,150	\$75,150
Overlook Waterline								\$52,000	RBS	\$48,789	\$37,936	\$37,936
Melrose Drive North								\$110,000	Kokosing	\$67,789	\$67,789	\$67,789
Oak Hill/Milltown Road Resurfacing								\$160,000	Kokosing	\$143,153	\$151,300	\$151,300
Venture Blvd. Repair								\$50,000	Karvo	\$46,638	\$48,497	\$48,497
Bauer Road Rehab								\$97,900	Melway	\$102,060	\$93,105	\$93,105
Morgan & Highland Microsurfacing								\$47,000	Strawser	\$44,716	\$44,716	\$44,716
Larwill, Massaro, Lucca Resurfacing								\$125,000	Barbicas	\$110,344	\$118,025	\$118,025
North Street Parking Lot								\$25,000	Stout	\$19,555	\$19,555	\$19,555
CDBG Sidewalks								\$57,000	D.L. Smith	\$45,227	\$45,227	\$45,227
Quasar Electric Line								\$260,000	Quasar	\$260,000	UC	
Northwestern Storm								\$49,000	Wenger	\$49,042	\$43,533	\$43,533
Silver Road Rehab								\$14,324	Melway	\$14,324	\$14,324	\$14,324
E. Liberty Resurfacing								\$450,000	Kokosing	\$396,203	UC	
	\$717,760	\$74,610	\$156,904	\$67,035	\$72,200	\$255,009	\$140,704	\$19,101,224		\$16,634,775		\$7,297,996
Value of Design Engineering* =	8.5%									\$1,413,956		

								Under Construction (2014)		
								Value of Construction Engineering	10.00%	\$655,189.60
								Design Value Provided in 2014	12.0%	\$77,699.30
Design Completed										
Melrose SS Interceptor							\$500,000	Design Completed (2014)		
Norman Place Waterline							\$106,000			
Oldman Connector							\$180,000			
Geyers Chapel Road Reconstruction							\$330,000	Value of Design Engineering	8.50%	\$94,860.00
	\$0	\$0	\$0	\$0	\$0	\$0	\$1,116,000			

								Under Design (2014)		
								Value of Design Engineering	8.50%	\$381,420.50
Under Design										
Mechanicsburg Rd. SS							\$200,000			
First Farm Water & Sewer							\$783,000			
Melrose Booster Station	\$63,150	\$13,252				\$48,900	\$644,500			
CDBG Sidewalk							\$60,000			
Westridge Waterline							\$95,000			
Point of View/Crabapple							\$100,000			
E. Pine Street							\$500,000			
Secondary Transmission Line							\$906,000			
Impala & Skylark Waterline							\$500,000			
Oakley Culvert							\$200,000			
Geyers Chapel Culvert North							\$175,000			
Long Road & E. Bowman Resurfacing							\$500,000			
OARDC - SR 302 Crosswalk							\$180,000			
Vinton Woods Concrete							\$200,000			
Milltown Resurfacing							\$175,000			
	\$63,150	\$13,252	\$0	\$0	\$0	\$48,900	\$5,218,500			

								Planning (2014)		
								Value of Preliminary Engineering	3.00%	\$178,200
Preliminary Engineering, Planning & Funding										
Water Projects (1)	\$0						\$2,600,000			
Sewer projects (1)	\$0						\$50,000			
Storm (1)	\$0						\$835,000			
Roadway Projects (1)	\$0						\$2,455,000			
	\$0	\$0	\$0	\$0	\$0	\$0	\$5,940,000	Total Engineering Services Provided in 2014		\$1,387,369

Notes:
Fees for Engineering services are based on standard industry rates as established by various regulatory and funding agencies, including ODOT, USDA, EPA and OPWC, as well as recent engineering services proposals.
(1) Sum of construction estimates from the 10 year infrastructure plan.

Consultant Services Paid	% of Construction
\$766,461.74	4.01%
\$0.00	0.00%
\$62,152.00	1.19%
\$0.00	0.00%
\$828,613.74	6.75%