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WAYNE COUNTY ENGINEER'S OFFICE
ROGER K. TERRILL, P.E., P.S.
WAYNE COUNTY ENGINEER

March 30, 2015

Wayne County Commissioners
428 West Liberty Street
Wooster, Ohio 44691

Honorable Commissioners:

I am proud to present the Wayne County Engineer's 2014 Annual Report, summarizing the activities of the Engineering, Highway Maintenance and Tax Map Departments.

As can be seen on the included chart, receipts increased moderately from 2002 to 2012, while slightly increasing in 2013. Due to layoffs and attrition, actual total salaries increased (2.4% from 2002 through 2013) less than the increase in receipts from 2002 through 2013, whereas employee benefits increased more than salaries during the same period. Employee benefits also make up approximately one-third of total of salary and employee benefits. Salary and employee benefits make up approximately forty (40) percent of the Engineer's Office total budget. The remaining sixty (60) percent of the budget is made up of materials (gravel, concrete, asphalt, etc.), construction costs (labor, equipment & material for construction of roads & bridges), equipment, fuel, etc. and increased extensively from 2002 through 2014. Materials, construction costs, equipment, fuel, etc. also increased at a rate far greater than receipts for the same period.

Construction in 2014 included the replacement of four (4) bridges (three (3) bridges via contract and one (1) via force account). Two (2) of the contracted bridges were replaced with federal funds and one (1) with OPWC funds. One (1) bridge was rehabilitated by replacing its deck. We also replaced four (4) large culverts. Our goal is to replace ten (10) bridges and twelve (12) large culverts annually.

We continue to utilize all available grants in the most efficient manner possible. However, state and federal funding have become much more difficult to obtain. We were not successful in obtaining funding through CDBG in 2014.

I want to express my sincere appreciation to my staff for compiling this report and to the Board for their cooperation in helping us achieve our goals. Your comments and suggestions are welcome.

Respectfully submitted,

Roger K. Terrill, P.E., P.S.
Wayne County Engineer

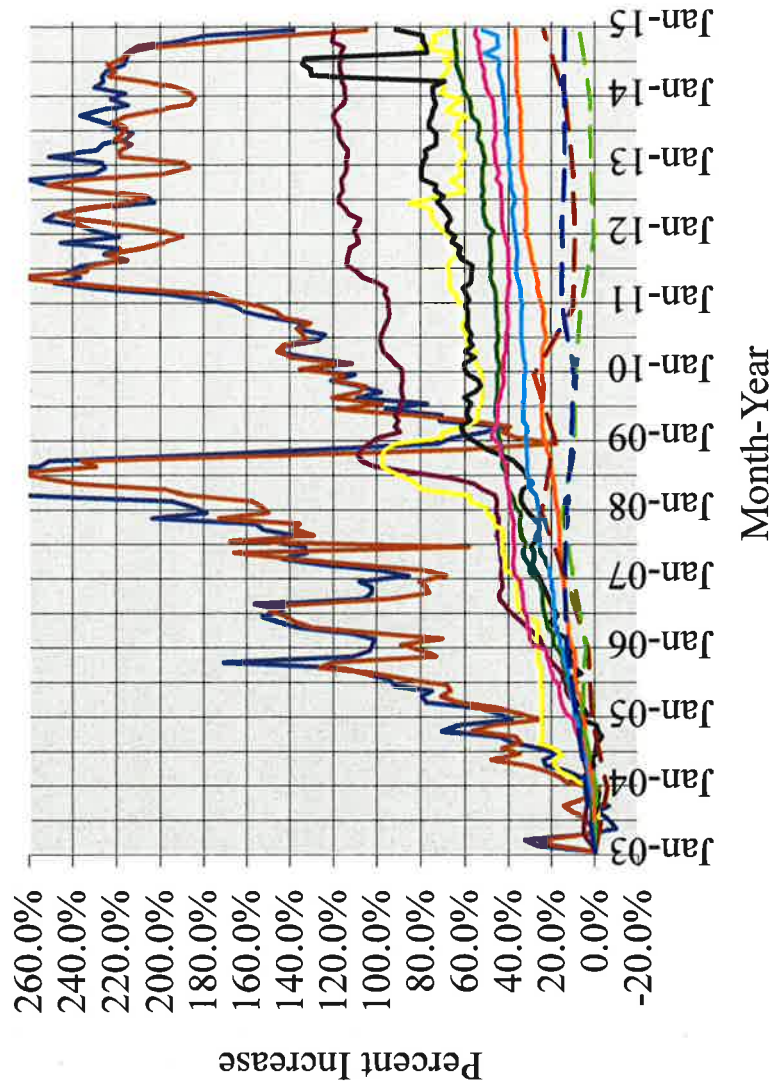
Wayne County Engineer's Office

Major Expenses and Receipts

Percent Increase since 2003

(* <http://data.bls.gov:8080/PDQ/outside.jsp?survey=pc>)

(** www.wayne-county-engineer.com)



PIPELINE CONSTRUCTION THROUGH WAYNE COUNTY

During 2014, **SUNOCO PIPELINE L.P.**, operating for INLAND CORP., constructed a 12" pipeline (approximately 22 miles in length) through Congress, Canaan, Milton, and Chippewa Township. The pipeline traverses several counties in the state of Ohio and is utilized for the transportation of petroleum products. The new pipeline runs parallel to an existing 8" petroleum pipeline. Construction of the pipeline disturbed approximately 185 acres of ground through Wayne County. The contractor was responsible for temporary and permanent erosion control.

The Wayne County Engineer's Office (WCEO) issued 7 Road Bore Permits to SUNOCO for crossing the following County Roads: Stratton, Franchester, Friendsville, intersection of Canaan Center & Sterling, Seville, Benner and Portage. In addition, several State and Township Roads were also crossed by the new pipeline. The WCEO also issued 17 Drive Pipe Permits for construction entrances to the pipeline project and 5 Special Hauling Permits for oversize/overweight vehicles.



PIPELINE CONSTRUCTION THROUGH WAYNE COUNTY

The Wayne County Engineer's Office had various meetings in 2014 with two (2) pipeline companies that are planning for the construction of major, interstate pipelines through Wayne County. **ET ROVER PIPELINE, LLC** is planning to construct twin, 42" pipelines (20' apart) to transport natural gas. The ROVER pipelines will traverse 28 miles through rural Paint, Salt Creek, Franklin, Wooster and Plain Township. Each pipeline will have an operating pressure of 1,440 pounds per square inch (psi). The proposed pipelines will require a 150' construction easement with a 60' wide permanent easement. A site for a mainline compressor station is proposed northwest of Elyria Road and U.S. 30 in Plain Township. Construction is expected to start in 2016. **NEXUS GAS TRANSMISSION, LLC** is another pipeline company that is planning to construct a 42" pipeline traversing six (6) miles through Chippewa Township. The pipeline will transport natural gas and will have a maximum operating pressure of 1,440 psi. The proposed pipeline will require a 100' construction easement with a 50' wide permanent easement. Construction is expected to start in 2017.

The Wayne County Engineer's Office (WCEO) is involved with Road Bore Permits for each County Road the pipeline companies will be crossing. The WCEO also requires Special Hauling Permits on County Roads used by the pipeline companies for the transportation of oversize/overweight vehicles. Drive Pipe Permits will need to be acquired by the pipeline companies so they can install various construction entrances for ingress/egress to County Roads. A Pipeline Road Use Maintenance Agreement (RUMA) is being proposed to protect County Roads from damage that may be caused from excessive truck traffic used during construction of the pipelines. The RUMA has specific terms and bonding requirements that the pipeline companies are to adhere to for preventing and repairing any damages to County Roads.

INDEX

DUTIES OF THE COUNTY ENGINEER	1
OHIO HIGHWAYS AND ROADS	2
WAYNE COUNTY HIGHWAYS AND ROADS.....	2
TOWNSHIP ROAD MILEAGE	2
2014 INCOME.....	3
2014 EXPENDITURES	4
2015 PROJECTED APPROPRIATIONS.....	5
PERSONNEL	
ADMINISTRATIVE SERVICES DEPARTMENT	6
ENGINEERING DEPARTMENT	6
TAX MAP DEPARTMENT	6
HIGHWAY MAINTENANCE DEPARTMENT.....	7
HIGHWAY MAINTENANCE REPORT	
MAINTENANCE AND CONSTRUCTION	8
SNOW AND ICE CONTROL	11
WEED AND BRUSH CONTROL	12
EQUIPMENT PURCHASES	12
PLANNING AND PROGRAMMING.....	13
WAYNE COUNTY ROAD AND BRIDGE FACTS	14
LARGE CULVERT REPORT.....	15
BRIDGE STATUS.....	17
BRIDGE REPORT	
INSPECTION.....	18
LOAD RATINGS	18
MAINTENANCE.....	18
CONSTRUCTION	18
TRAFFIC CONTROL.....	22
SUBDIVISIONS	24
TAX MAP DEPARTMENT	24
RIGHT-OF-WAY	25
SURVEYING	26

DUTIES OF THE COUNTY ENGINEER

The Engineer has the responsibility of performing for the County all duties authorized or declared by law to be done by a civil engineer or surveyor, and accordingly must hold registration certificates of the State of Ohio as both Professional Engineer and Professional Surveyor.

The Engineer, in cooperation with the County Commissioners, is responsible for all maintenance, repair, widening, resurfacing, reconstruction, and construction of roads and bridges on the county highway system.

The Engineer serves as an advisor to the Township Trustees for the maintenance, repair, widening, resurfacing, and reconstruction of their highways. The bridges on the township highway system are the full responsibility of the County.

The Engineer is also responsible for many bridges within municipalities. These bridges are located on streets which are extensions of county or township roads.

Also, the Engineer must maintain a perpetual inventory of all bridges on the county and township highway system, including an annual inspection and evaluation of the condition and load carrying capacity of each bridge.

The Engineer is the Tax Map Draftsman for the County and at the discretion of the County Commissioners, he may also serve as the Acting Sanitary Engineer and as a member of the County Planning Commission.

OHIO HIGHWAYS AND ROADS

<u>System</u>	<u>Mileage</u>	<u>Maintained By</u>
State Highway	19,226	Ohio Department of Transportation
County Road	28,972	County Engineers
Township Road	41,530	Township Trustees
Municipal Street	<u>31,664</u>	Incorporated Cities & Villages
TOTAL	121,392	

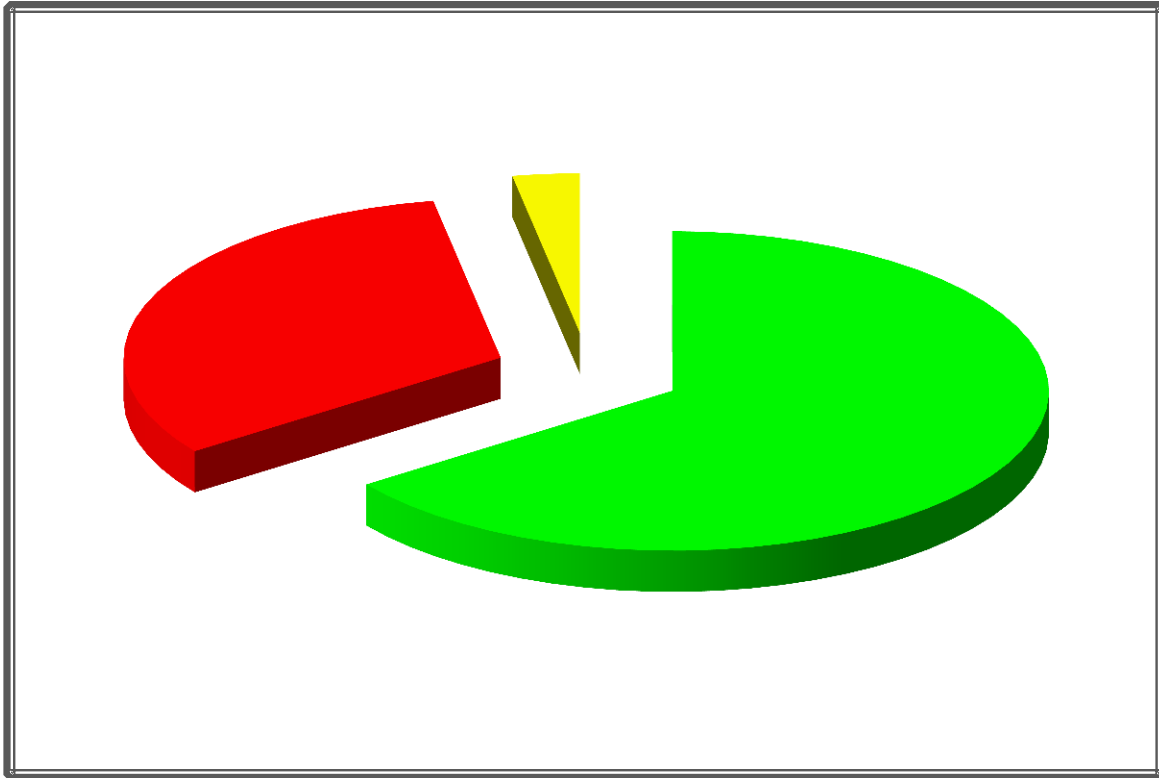
WAYNE COUNTY HIGHWAYS AND ROADS

<u>System</u>	<u>Mileage</u>	<u>Maintained By</u>
State Highway	253	Ohio Department of Transportation
County Road	500	Wayne County Engineer
Township Road	561	Township Trustees
Municipal Street	<u>277</u>	Incorporated Cities & Villages
TOTAL	1,591	

TOWNSHIP ROAD MILEAGE

Baughman	36.87	Clinton	26.05	Green	34.62	Salt Creek	23.81
Canaan	26.57	Congress	36.06	Milton	33.16	Sugar Creek	46.98
Chester	44.79	East Union	41.92	Paint	23.22	Wayne	34.81
Chippewa	50.84	Franklin	30.53	Plain	37.58	Wooster	33.74

2014 INCOME

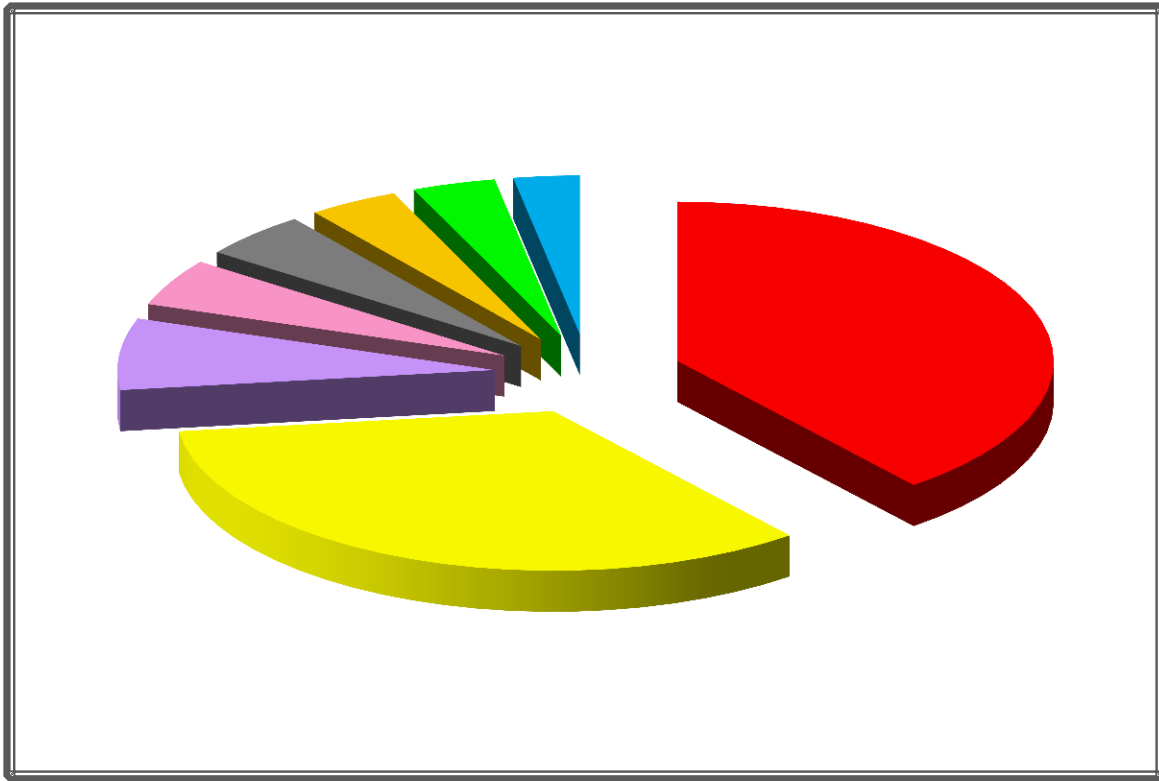


WHERE THE MONEY COMES FROM

	License Fees & Permissive Tax	\$4,733,244	65.0%
	Gasoline Tax	2,334,894	32.1%
	Traffic Fines, Fees, & Misc.	<u>209,138</u>	<u>2.9%</u>
	TOTAL	\$7,277,276	100.0%

REAL ESTATE TAXES ARE NOT USED FOR COUNTY HIGHWAY PURPOSES.

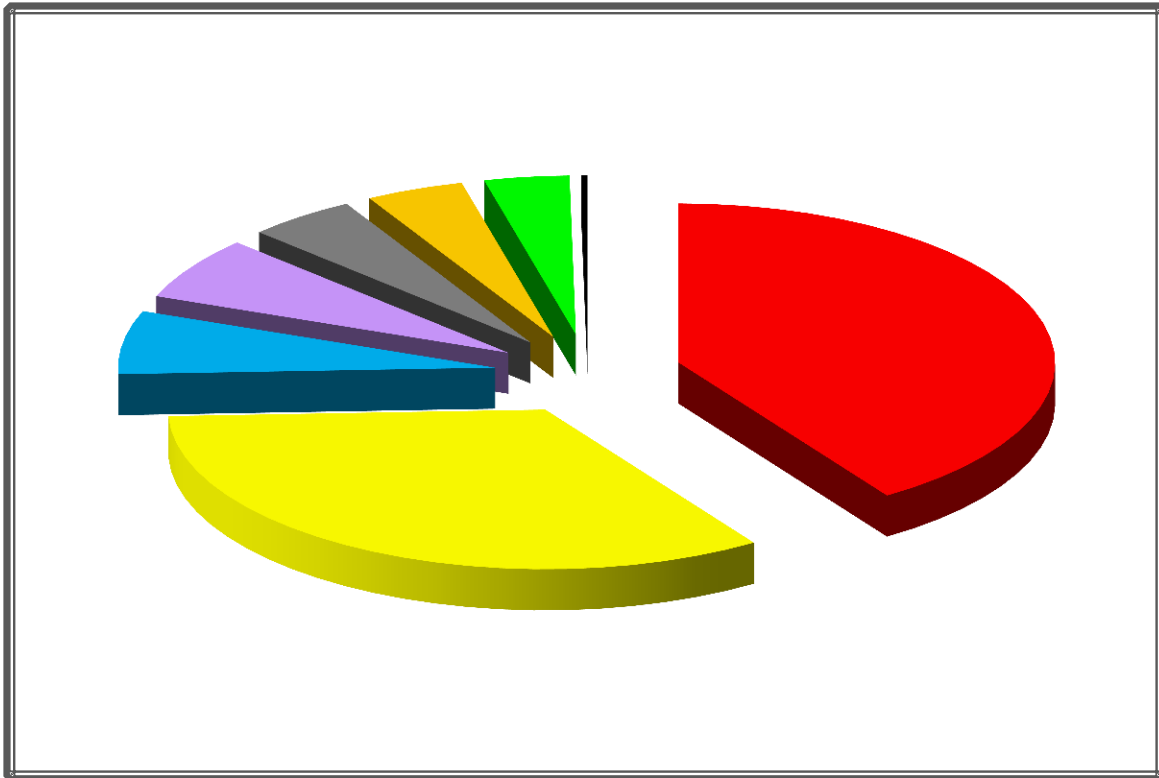
2014 EXPENDITURES



WHERE THE MONEY GOES

	Labor and Fringes	\$2,976,835	39.2%
	Road Materials & Contracts	2,564,120	33.7%
	Repair, Fuel, Etc.	551,991	7.3%
	OPWC Projects	363,605	4.8%
	Equipment	355,836	4.7%
	Contracts (Repairs & Services), Compensation & Damage, Advertising & Printing	293,505	3.9%
	Note Repayment	270,988	3.6%
	Bridge Materials & Contracts	<u>215,297</u>	<u>2.8%</u>
	TOTAL	\$7,592,177	100.0%

2015 PROJECTED APPROPRIATIONS



	Labor and Fringes	\$3,175,193	40.7%
	Road Materials & Contracts	2,628,265	33.7%
	Bridge Materials & Contracts	502,000	6.4%
	Repair, Fuel, Etc.	500,000	6.4%
	Equipment	365,600	4.7%
	Contracts (Repairs & Services), Compensation & Damage, Advertising & Printing	328,400	4.2%
	Note Repayment	285,000	3.6%
	Grants to Townships	<u>21,000</u>	<u>0.3%</u>
	TOTAL	\$7,805,458	100.0%

PERSONNEL

ROGER K. TERRILL, P.E., P.S. ***COUNTY ENGINEER***

ADMINISTRATIVE SERVICES DEPARTMENT

Pamela Brown
Administrative Assistant

Cindy Nolt
Account Clerk II

ENGINEERING DEPARTMENT

Larry Conn
Engineering Services Manager

Eric Liew
Deputy Engineer (Bridges)

Terry Vorhies
Deputy Surveyor

Mark Spademan
Deputy Engineer (Subdivisions)

Larry Warner
Engineering Inspector

Jeffrey Sparr
Deputy Engineer (Highways)

Michael Barnhouse
Engineering Technician

TAX MAP DEPARTMENT

Douglas Green
Tax Map Supervisor

Mike Martin
Tax Map Specialist

PERSONNEL

Continued

HIGHWAY MAINTENANCE DEPARTMENT

Highway Superintendent

Ben Saurer

Assistant Highway Superintendent

Gale Wilcox

Supervisors

David Mowrer (Eff. 11-17-14)

Bud Weiker (Ret'd. 5-30-14)

Mike Pritchett

Dean Whitman

Bill Sprinkle

H i g h w a y W o r k e r s

Keith Badertscher

Patrick Miller

John Baldner

Tom Nolletti

Larry Bresson

Trevor Ogi (Res'd. 4-18-14)

Scott Cantrell (Eff. 8-4-14)

Tom Shamp

Dale Cutter

Jaime Sigler (Eff. 8-11-14)

Les Durstine

Matt Sigler

Bob Ewing

Brian Spotts

Jeff Grassman

Stephen Stewart

Jon Hudson

Kevin Troyer

Mike Hyatt (Eff. 8-25-14)

Patrick Wilson (Ret'd. 6-12-14)

Scott Loving

Craig Wuthrich

Kevin Miller

Jeffrey Zerrer

Mechanic

Joe Burns

Parts Department

Bob Tenney

Sign Shop

Jeffrey Metcalf

Brock Yoder

HIGHWAY MAINTENANCE REPORT

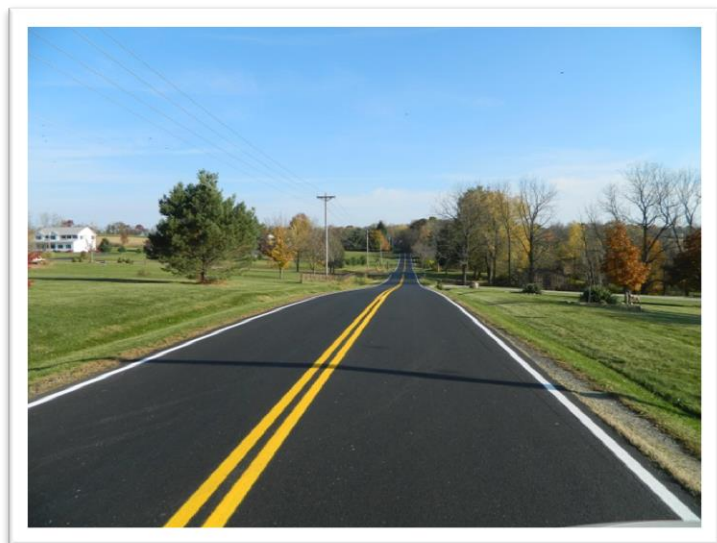
MAINTENANCE AND CONSTRUCTION

County forces improved the pavement surface on several roads by placing a leveling (or scratch) course of asphalt concrete. The roads in the following table were scratched full-width in 2014.

<u>Road No.</u>	<u>Name</u>	<u>Section</u>	<u>Miles</u>
21	Franchester	A*-B*	1.03
27	Fulton	B*,C*,D*	1.62
30A	Old Lincoln Way	A*-B*	0.78
48	Pleasant Home	F-G*,H*	2.16
59	Sterling	A*,B*,C*	1.04
72	Elyria	A*	0.48
88	Winter	A	0.88
104	Newkirk	B*-C*	0.59
128	Wolhgamuth	A*	1.43
139	Heyl	C*	0.28
149	Elyria	B*,C*,D*,K*,L*	1.99
159	Graber	A*	0.26
161	Martin	B*-C*	0.88
184	Milltown	A*	0.18
Total			13.60

* - Partial Section

C.R. 149 ELYRIA ROAD



HIGHWAY MAINTENANCE REPORT

Continued

Several roads also received a chip/seal surface treatment by county forces.

<u>Road No.</u>	<u>Name</u>	<u>Section</u>	<u>Miles</u>
1	Centerville	A-B	1.91
7	Church	B-E	3.42
8	Shreve Eastern	A-B	2.67
29	Rohrer	A-C	3.20
32	Dalton – Fox Lake	C*,E*-G	2.55
34	Kister	A-B	1.65
51	Canaan Center	A*	0.99
75	Cemetery	A	0.17
83	Millbrook	A-E	4.86
109	Salt Creek	E*-F	1.44
145	Chippewa	A	1.02
149	Elyria	C*	0.33
157	Jefferson	A-H	7.20
204	Clark	A*-B*	0.89
213	Bates	C*,D*,E*	2.70
228	Willow	A	0.50
289	Force	A	1.20
416	McQuaid	A*-D	4.22
Total			40.92

C.R. 29 ROHRER ROAD



HIGHWAY MAINTENANCE REPORT

Continued

✚ C.R. 60 (Seville Road) was resurfaced with a 2" overlay of asphalt concrete in 2014. The project also included the resurfacing of Porter Drive in Plain Township. The total cost of the project was \$370,297. The project was financed by the Ohio Public Works Commission (\$185,148), Wayne County (\$169,645), and Plain Township (\$15,504). Superior Paving & Materials, Inc. from North Canton, Ohio was the prime contractor.



✚ A contract was also awarded to Strawser Construction, Inc. from Columbus, Ohio to microsurface a portion of C.R. 30A (East Lincoln Way) in 2014. The project limits were Connector Street on the west end and C.R. 44 (Apple Creek Road) on the east end. The total cost of the project was \$189,458. The project was contracted through ODOT's Cooperative Purchasing Program. Local funds financed the project.



HIGHWAY MAINTENANCE REPORT

Continued

✚ Also in 2014, Wayne County participated in a joint project with the City of Wooster for improvements to Oak Hill Road (Oldman Road to Milltown Road) and Milltown Road (Oak Hill Road to corporation limits). Along Oak Hill Road, Wayne County forces performed cold in-place recycling of the existing pavement; restoring the crown and cross slope prior to a 2.5" overlay of asphalt concrete. The existing pavement along Milltown Road was milled and resurfaced with a 2.5" overlay of asphalt concrete. The total cost of the contract portion of the project was \$151,284. The project was financed by the Ohio Public Works Commission (\$60,514), Wayne County (\$49,745), and the City of Wooster (\$41,025). The Kokosing Construction Company, Inc. from Mansfield, Ohio was the prime contractor.



SNOW AND ICE CONTROL

Heavy equipment available for snow and ice control includes; 29 plow trucks with spreaders and 2 V-plow graders.

	<u>WINTER 2011-</u> <u>2012</u>	<u>WINTER 2012-</u> <u>2013</u>	<u>WINTER 2013-</u> <u>2014</u>
Salt & Cinders (Tons)	5,181	6,474	8,997
Labor	78,683	141,626	235,266
Equipment	106,050	181,363	304,096
Material	103,736	130,382	260,151
Total	\$288,469	\$453,371	\$799,513

HIGHWAY MAINTENANCE REPORT

Continued

WEED AND BRUSH CONTROL

In 2014, guardrail spraying was performed by DeAngelo Brothers, Inc. from Hazleton, Pennsylvania at a total cost of \$15,605. County maintenance crews conducted mowing operations in the summer and performed brush cutting during the winter months.

EQUIPMENT PURCHASES

<u>2014</u>	<u>2015 - Tentative</u>
2 Single-Axle Dump Trucks	1 Tandem-Axle Dump Truck
1 Tandem-Axle Dump Truck	1 Used Road Widener
2 Pickups	1 Pickup
1 Used Tandem Roller	1 Hydraulic Hammer
1 Used Power Broom	



PLANNING AND PROGRAMMING

The roads comprising the maintenance program are selected after an evaluation of the condition of each road. Information for all county roads is available in various electronic files. This information aids in the preparation of the annual highway maintenance program.

The highway inventory consists of approximately 470 road sections. During 2014, all sections were reevaluated.

Permits were issued for the following:

71	Drive Pipes
104	Utility Permits
26	Ditch Enclosures

The utility permits were primarily for public utilities and the oil and gas industry. Drive pipe permits were for private, commercial, and industrial drives. Permits were also issued for 22 oversize or overweight loads.

In addition, the engineering inspectors are often asked to inspect a variety of problems, to determine whether or not the problems are the responsibility of the County, and if so, what measures should be taken to correct the problems.

WAYNE COUNTY ROAD AND BRIDGE FACTS

- 📍 Ranked 4th in the state for county road mileage.
- 📍 Ranked 4th in the state for bridges inspected & maintained.
- 📍 Ranked 14th in the state for land area.
- 📍 Ranked 24th in the state for population – 114,520 (2010 Census)

COMPARISON WITH ADJOINING COUNTIES

	<u>Ashland</u>	<u>Holmes</u>	<u>Medina</u>	<u>Stark</u>	<u>Summit</u>	<u>Wayne</u>
Co. Road Mileage	282	249	327	408	183	500
Twp. Road Mileage	405	567	491	1,314	345	561
Bridges, 10' Span or Greater	219	283	292	325	309	487
Land Area (Sq. Mi.)	424	423	422	576	413	555

LARGE CULVERT REPORT

The Wayne County Engineer is responsible for inspection, maintenance, and construction of 306 large culverts on county roads and extensions of those roads through municipalities. Large culverts are defined as culverts having a span or rise greater than or equal to 48". Structures with a span greater than/equal to 120" are considered bridges.

INSPECTION


Inspections of large culverts are performed on a five (5) year rotation in accordance with the latest Ohio Department of Transportation "Culvert Management Manual." Some culverts are inspected and monitored more frequently because of known deficiencies.

At the request of the Township Trustees; the Wayne County Engineer's Office will inspect the large culverts on township roads. There are approximately 250 large culverts on township roads.

CONSTRUCTION

Three (3) large culverts were replaced in 2014 and one (1) culvert was repaired.

THE FOLLOWING LARGE CULVERTS WERE REPLACED IN 2014:

 **BAU 7-1.155** on Church Road in Baughman Township. An existing combination of 3' x 3' concrete box and 36" metal pipe was replaced with 46' of 48" metal pipe. Replacement work was completed by county forces. Local monies financed the project at a total cost of \$11,634.



LARGE CULVERT REPORT

Continued

✚ **CHI 5A-1.819** on Portage Street in Chippewa Township. An existing 71" span x 47" rise metal pipe arch was replaced with 48' of 68" span x 43" rise elliptical concrete pipe. Replacement work was completed by county forces. Local monies financed the project at a total cost of \$30,412.



✚ **FRA 159-0.384** on Graber Road in Franklin Township. An existing 3' span x 4' rise stone and concrete box was replaced with 91' of 48" plastic pipe. Replacement work was completed by county forces. Local monies financed the project at a total cost of \$65,854.



THE FOLLOWING LARGE CULVERTS WERE REPAIRED IN 2014:

✚ **SUG 105-0.612** on West Lebanon Road in Sugar Creek Township. An existing combination of 7' span x 4' rise concrete box and 7' span x 7.5' rise concrete and wood structure was repaired. The superstructure of the concrete and wood portion of the culvert was replaced with new concrete box beams. Replacement work was completed by county forces. Local monies financed the project at a total cost of \$22,310.



BRIDGE STATUS

1) INSPECTION, MAINTENANCE, AND CONSTRUCTION RESPONSIBILITY

- 28 On streets within municipalities (extensions to county or township roads).
- 237 On county roads.
- 222 On township roads.
- 487 Total bridges for inspection.

2) GENERAL DATA FOR COUNTY INSPECTED BRIDGES

- 116 Too narrow (less than 20').
- 45 Posted load limits.
- 43 Structurally deficient.
- 109 Functionally obsolete.

3) OTHER 2014 BRIDGE FACTS

Average age for 450 bridges with a recorded year built is 43.5 years - useful life is considered to be 50 years. For the other 37 bridges, the year built is unknown.

Average overall bridge length is 39.8 feet.

Maintain 3.25 miles of bridge deck.

Note: The information shown above is for bridges having a span of 10' or greater.

BRIDGE REPORT

The Wayne County Engineer is responsible for inspection, maintenance, and construction of 487 bridges on county and township roads, and extensions of those roads through municipalities.

INSPECTION

Annual inspections for 487 bridges are performed in accordance with the latest Ohio Department of Transportation "Bridge Inspection Manual." Some bridges are inspected and monitored more frequently because of known deficiencies.

LOAD RATINGS

To be in compliance with the National Bridge Inspection Standards; the Federal Highway Administration (FHWA) requires ratings on all structures with a span greater than 20'. The load rating is performed for the safety of the traveling public. The carrying-capacity of all bridges in the State of Ohio are rated using a standard set of vehicles, called "Ohio Legal Loads". Ratings for 11 bridges were submitted to ODOT in 2014. The ratings performed resulted in the posting of load limits on 4 bridges (formerly not posted).

MAINTENANCE

County forces performed maintenance work ranging from minor structural repairs to replacing damaged guardrail on 14 bridges in 2014.

CONSTRUCTION


Four (4) bridges were replaced and one (1) bridge was rehabilitated in 2014.

Considering the average life expectancy is 50 years for the typical bridge, we should be replacing more than 10 bridges per year. An average of 6.2 bridges per year have been replaced over the past 10 years.


BRIDGE REPORT

Continued

THE FOLLOWING BRIDGES WERE REPLACED IN 2014:

-  **CAN 108-5.16** on Steiner Road in Canaan Township. Age 76 years, 24' span, 23.7' wide, single span concrete slab bridge was replaced with a 16' span x 6' rise x 68' length precast reinforced concrete box culvert. V. O. Menuez & Son, Inc. from Millersburg, Ohio was the prime contractor. Ohio Public Works Commission and local monies financed the project at a cost of \$259,853.



-  **CHE 124-1.11** on Rice Hill Road in Chester Township. Age 93 years, 30' span, 14.5' wide, single span steel girder bridge was replaced with a 32' span, 24.0' wide, single span concrete slab bridge. V. O. Menuez & Son, Inc. from Millersburg, Ohio was the prime contractor. Federal and local monies financed the project at a cost of \$259,437.



BRIDGE REPORT

Continued

THE FOLLOWING BRIDGES WERE REPLACED IN 2014 (CON'T.):

✚ **CHI 70-1.87** on Doylestown Road in Chippewa Township. Age 77 years, 50' span, 21.6' wide, single span steel girder bridge was replaced with a 36' span x 8' rise x 35' length precast reinforced concrete flat-topped three-sided culvert. Black Horse Bridge Construction, Inc. from Norton, Ohio was the prime contractor. Federal and local monies financed the project at a cost of \$407,643.



✚ **GRE 23-4.39** on Back Orrville Road in Green Township. Age 89 years, 13' span, 22.5' wide, single span concrete slab bridge was replaced with a 9' span x 5' rise x 56' length precast reinforced concrete box culvert. Replacement work was completed by county forces. Local monies financed the project at a cost of \$71,107.



BRIDGE REPORT

Continued

THE FOLLOWING BRIDGES WERE REHABILITATED IN 2014:

CHI 206-0.12 on Edwards Road in Chippewa Township. Removal of existing concrete slab superstructure. Replaced with new concrete box beam superstructure. The work was done by county forces. Local monies financed the project at a cost of \$44,612.



TRAFFIC CONTROL

The primary responsibility of our traffic control staff is the inspection and maintenance of over 8,500 road signs along nearly 500 miles of county roads and at narrow and load-limited bridges on township roads. The focus of the sign crew's efforts in 2014 (after the top priority of repairing or replacing damaged, vandalized or stolen stop and yield signs) was an upgrade of all school zone and school bus signs along county roads. In November 2014, our office received a \$20,662 reimbursement from the County Engineers Association of Ohio (CEAO) to assist with materials costs.

Wayne County has responsibility for traffic signals and flashers on Back Orrville Road, Canal Road, East Lincoln Way, and Smithville-Western Road. In May 2014, the County Engineer's Office selected Lampion Companies, LLC of Wadsworth, Ohio to provide maintenance, repair, and upgrade services on these installations, as our previous contractor, McClintock Electric, elected to focus on other business sectors. In April, 2014, McClintock submitted a final invoice of \$1,375, while Lampion submitted invoices totaling \$6,049 by the year's end.

Due to budgetary limitations, Wayne County again had a reduced longitudinal pavement marking program in 2014. Markings included; 216 miles of center lines, 222 miles of edge lines and one mile of lane lines. Oglesby Construction of Norwalk, Ohio, performed this work at a total cost of \$186,943. In addition, Timco Pavement Striping of Wooster, Ohio repainted a portion of auxiliary markings on various county roads at railroad crossings, left turn lanes, entrance ramps and intersections in 2014 for a cost of \$4,845. The County Engineer's Office is currently considering combining the long-line and auxiliary marking programs under one contract for 2015.

The traffic engineering staff pursued a number of projects in 2014, including seeking reduced speed limit zones on Schellin Road (Wayne Township Road 226), Tolbert Road (Franklin Township Road 167), Friendsville Road (County Road 6), West Salem Road (County Road 70), and Smithville-Western Road (County Road 86). The cost of the last three speed zone studies (\$25,827) was partially reimbursed by a \$5,400 grant from CEAO. All but the County Road 86 study resulted in posting lower speed limits.

TRAFFIC CONTROL

Continued

The County Engineer's Office continues to move forward on the proposed conversion of the two-way stop at the Friendsville Road / Smithville Western Road intersection to a modern rural roundabout. Using ODOT's Programmatic Selection Process, Engineering Associates of Wooster, Ohio was placed under a \$224,055 contract for design, environmental clearance, right-of-way plan preparation and utility coordination services. 100% of these expenses are to be covered by FHWA safety funds. Construction of the \$1.6 million project may occur as early as summer 2017.

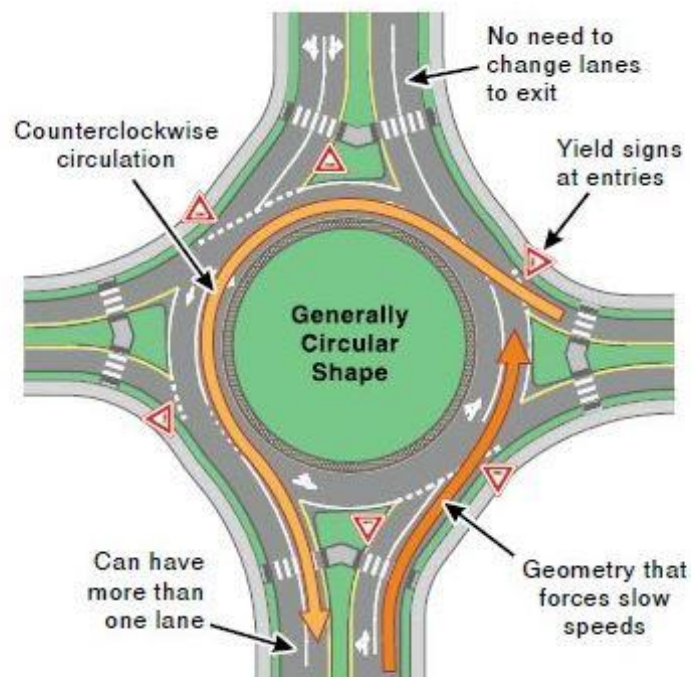


Figure 1: Key Roundabout Characteristics.

Federal Highway Administration – Office of Safety

SUBDIVISIONS

Due to the shift in rural residential housing construction toward single lot, infill, access easement, and common access drive projects; no new public subdivision roads were constructed or approved by the Wayne County Engineer, or accepted for dedication by the Board of Wayne County Commissioners in 2014.

TAX MAP DEPARTMENT

The Primary function of the Tax Map Department is to process all deeds and record the parcel transfers on the appropriate map(s). Some of the instruments that the Department is required to review and approve are as follows: warranty deeds, quit claim deeds, executor's deeds, certificate of transfers, deeds of trustees, transfer on death affidavits, land contracts, sheriff's deeds, etc.

The Tax Map Department also retains and maintains historical tax maps, property surveys, railroad and highway right-of-way maps for public viewing and research. The Department provides a current set of tax maps to the County Auditor for taxation purposes. Every parcel of land in Wayne County is mapped and kept current with each landowner. These maps are available for viewing in the front office or on the department's website at map.wayneohio.org. Tax maps of past years dated from 1929 forward are retained in a reference library and are available for viewing.

In 2014, there were approximately 55,675 tax parcels in Wayne County. There were 4,324 conveyances processed through this department during the year.

The Tax Map Department also administers the continuation of the county house numbering system. Numbers are assigned to new and existing building sites, cell tower sites, etc. that require an address. The new numbers are registered on a separate set of maps and index cards. New addresses are submitted to area post offices.

TAX MAP DEPARTMENT

Continued

For many years, surveyors have been required to submit their survey plats for review and entry into the land records. There are approximately 33,653 surveys dating back to 1815. These surveys include approximately 4,051 plats of allotments, subdivisions, and annexations. In 2014, this department reviewed and processed 238 survey plats.

This office prepares and maintains numerous volumes of other related maps, plats and drawings that form a part of the county mapping system. The office personnel deserve credit for performing the diversified duties that are required in serving the public and maintaining an efficient and well managed Tax Map Department.

RIGHT-OF-WAY

The Right-of-Way Section of the Engineering Department is responsible for maintaining the right-of-way records for county and township roads and drainage systems within the county.

The main duty of this office is the acquisition of additional right-of-way required for road and bridge improvements. The work involves preparation of documents which include easements, work agreements and rights-of-entry for specific purposes on privately owned lands. Negotiations with property owners are of vital importance in the acquisition process.

Road right-of-way information is available at this office, which is used extensively by local governments, private and public utility companies, engineering and surveying practitioners, the highway maintenance department, and the general public.

The office also establishes existing and proposed right-of-way limits on various roads for public improvements and reviews annexations for accuracy for the Board of Wayne County Commissioners.

Work will be required in 2015 on several projects that are now in the design stage along with other 2015 projects that will develop within the year.

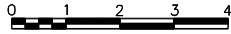
SURVEYING

The primary function of the Surveying Section is to perform field surveys for engineering of public improvements consisting of: roads, bridges, culverts, and drainage. Surveying data collected in the field is downloaded in the office and a base map is created to facilitate the design of various projects by department engineers. After the projects are designed, the surveying section sets horizontal and vertical control monuments in the field for construction. The Surveying Section also reviews and/or performs surveying (as required by Ohio Statute) for annexations and road dedications/vacations in preparation for public viewings and public hearings.

The office also maintains an inventory of monuments that mark the original land divisions of the county and also has a record of Global Positioning Monuments (GPS) that were established throughout the county in 2000. The GPS monuments (approximately 200) have very precise horizontal and vertical positions relative to the earth. These monuments were utilized in the creation of Wayne County's current Geographical Information System (GIS).



Scale in Miles



CULVERT REPLACEMENT



CULVERT REPAIR



BRIDGE REPLACEMENT



BRIDGE REHABILITATION



** ROAD RESURFACING



** ROAD MICROSURFACING

** BY CONTRACT

WAYNE COUNTY, OHIO

STATE ROUTES

COUNTY ROADS

TOWNSHIP ROADS

