

# WAYNE COUNTY ENGINEER'S OFFICE

## 2018 ANNUAL REPORT



Each year, the constituents of Wayne County entrust the Wayne County Engineer in coordination with the Wayne County Commissioners to maintain 499.194 miles of county infrastructure including 492 bridges. This annual report summarizes the efforts of the Engineer, Highway Maintenance and Tax Map departments for 2018.

Wayne County Engineer  
Scott A. Miller, P.E., P.S.  
3151 West Old Lincoln Way  
Wooster, Ohio 44691  
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### 2018 IMPROVEMENTS ARE AS FOLLOWS:

- County forces replaced seven (7) large culverts and four (4) bridges.
- Two (2) bridges were rehabilitated by county forces.
- County forces resurfaced 37 road miles by chip and seal or scratch paving.
- County forces drag patched 62 road miles.
- One (1) bridge was replaced by contract (R&I Construction).
- Sixty-seven (67) miles of centerline and 84 miles of edge line road striping were completed by contract.
- Seventy-four (74) lane miles of berm cut by county forces.

I want to express my sincere appreciation to my staff for compiling this report and to the Board of Wayne County Commissioners for their cooperation in achieving our goals.

A handwritten signature in blue ink, appearing to read "S. Miller", is written over the typed name.

Scott A. Miller, P.E., P.S.  
Wayne County Engineer  
330.641.8405

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## **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.

## WAYNE COUNTY ROAD DATA BY JURISDICTION

<u>System</u>	<u>Mileage</u>	<u>Maintained By</u>
State Highway	252.47	Ohio Department of Transportation
County Road	499.19	Wayne County Engineer
Township Road	561.85	Township Trustees
Municipal Street	277.39	Incorporated Cities & Villages
<b>TOTAL</b>	<b>1590.90</b>	

## TOWNSHIP ROAD MILEAGE

Baughman	36.86	Clinton	26.05	Green	34.61	Salt Creek	23.81
Canaan	26.57	Congress	36.06	Milton	33.15	Sugar Creek	46.95
Chester	44.79	East Union	41.92	Paint	23.22	Wayne	35.04
Chippewa	50.84	Franklin	30.53	Plain	37.58	Wooster	33.87

## **PERSONNEL**

SCOTT A. MILLER, P.E., P.S.  
WAYNE COUNTY ENGINEER

### **ADMINISTRATIVE SERVICES DEPARTMENT**

Pam Brown, Administrative Assistant  
Cindy Nolt, Account Clerk II

### **ENGINEERING DEPARTMENT**

Mark Spademan, P.E., Asst. County Engineer (Retired 1.25.19)  
Eric Liew, P.E., P.S., Bridge Engineer  
Ryan Marthey, P.E., Drainage/Roadway Engineer  
John Zaranac, P.S., Deputy Surveyor  
Brock Yoder, Permit & Traffic Safety Supervisor (12.31.18)  
Mike Barnhouse, Engineering Technician  
Craig Wuthrich, Engineering Technician (4. 2.18)

### **TAX MAP OFFICE**

Mike Martin, Tax Map Supervisor (Resigned 2.19.19)  
Jennifer Wisard, Tax Map Supervisor (2.20.19)  
Stacy Peppard, Tax Map Specialist (3.25.19)

### **HIGHWAY MAINTENANCE DEPARTMENT**

Pat Miller, Bridge Superintendent  
Mike Pritchett, Fleet Manager  
TJ Shamp, Operations Manager  
Bill Sprinkle, Highway Superintendent  
Dean Whitman, Assistant Highway Superintendent

John Baldner ~ Larry Bresson ~ Bob Ewing ~ Lukus Hawk ~ Jon Hudson ~ Mike Hyatt ~ Corey Keplar ~  
Jeremy Leckrone ~ Chris Leisure ~ Scott Loving ~ Aaron Mackey ~ Kevin Miller ~ Dave Mowrer ~ Jr. Mowrer  
~ Brian Spotts ~ Steve Stewart ~ Trent Swinehart ~ Dustin Taylor ~ Kevin Troyer ~ Josh Vizzo ~ Bryan Weiser  
~ Jeff Zerrer

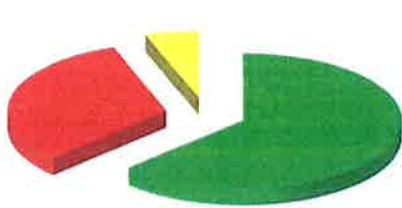
**Sign Shop** ~ Jeff Metcalf, Dave Richard

**Mechanic (Shop)** ~ Joe Burns, Dave Corbett

**Retired/Resigned:** K. Badertscher, L. Conn, R. Deak, J. Grassman, B. Saurer, B. Tenney and G. Wilcox

# 2018 Financial Statement

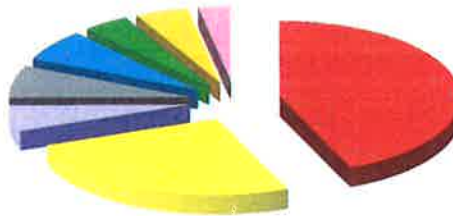
## INCOME



License Fees & Permissive	\$4,721,470	62.56%
Gasoline Tax	\$2,417,404	32.03%
Sales, Fees, & Misc.	\$408,251	5.41%
<b>TOTAL</b>	<b>\$7,547,125</b>	<b>100.0%</b>

**REAL ESTATE TAXES ARE NOT USED FOR COUNTY HIGHWAY PURPOSES.**

## EXPENDITURES



Labor and Fringes	\$3,093,874	43.68%
Road Materials & Contracts	\$1,815,109	25.62%
Repair, Fuel, Etc.	\$391,295	5.52%
Equipment	\$488,721	6.90%
Bridge Materials & Contracts	\$463,307	6.54%
Note Repayment	\$291,882	4.12%
Contracts (Repairs & Services), Compensation & Damage, Advertising & Printing	\$335,906	4.74%
Issue II Projects	\$203,400	2.87%
<b>TOTAL</b>	<b>\$7,083,494</b>	<b>100.0%</b>

# HIGHWAY MAINTENANCE

## ROAD MAINTENANCE:

37 Miles Resurfaced by Scratch Paving/Chip and Seal -- 62 Miles Maintained by Drag Patch

ROAD	MILES	OPERATION	MATERIAL \$
2	7.83	Drag	\$71,135
2	4.23	Scratch	\$31,513
10	0.58	Drag	\$4,543
12	2.00	Drag	\$3,664
27	10.18	Drag	\$37,191
27	8.52	Seal	\$100,920
29	3.14	Seal	\$36,909
30A	4.59	Drag	\$4,597
30A	6.29	Seal	\$66,310
36	0.69	Drag	\$1,888
36	0.69	Seal	\$5,828
44	4.62	Drag	\$45,235
48	6.41	Drag	\$23,045
48	7.43	Seal	\$84,609
52	2.97	Drag/Seal	\$74,697
54	1.07	Drag	\$2,735

ROAD	MILES	OPERATION	MATERIAL \$
54	0.04	Scratch	\$1,771
77	2.58	Drag	\$38,621
78	1.65	FA Overlay	\$83,385
86	0.89	Drag	\$1,904
88	1.06	Drag	\$3,686
94A	2.29	Drag	\$10,933
109	1.00	Drag	\$1,088
116	0.93	Drag	\$1,874
128	0.79	FA Overlay	\$39,986
184	0.83	Drag	\$1,472
186	4.34	Drag	\$15,020
186	4.34	Seal	\$45,292
213	2.98	Drag	\$5,741
233	2.06	Drag	\$4,752
363	2.04	Drag	\$15,861
TOTAL			\$866,209

Materials Costs:      Asphalt \$59 per ton  
                              #8 Limestone \$26.25 per ton  
                              HFRS-2 Sealing Oil \$1.785 per gallon

CR 52 was resurfaced by contract for a total cost of \$370,011



## **ROAD SIDE MAINTENANCE:**

The Wayne County Engineer is responsible for maintaining the roadside along all county roads. Roadside maintenance includes mowing, ditching, cutting berms and cutting brush and trees.

**MOWING:** The county mows all berms, ditches and back of ditches twice a year. The mowing operation comprises of two boom mowers and two pull behind mowers. All work in tandem to complete the mowing in a timely manner. Seven hundred and ten (710) total man hours was needed to complete the first cut and nine hundred and eighty-two (982) man hours was needed for the second. The first cut cost for labor and equipment was \$34,773 and the second was \$44,399 for a total cost of \$79,172.

**CUTTING BERMS:** Another important road operation that most citizens are unaware of is cutting berm. The berm is the section of roadway between the treated edge of pavement and top of the ditch. This section of roadway builds up over time and becomes several inches higher than the edge of the pavement. This high berm prevents water from draining off the road and into the ditch thus causing flooding on the roadway and weakens subbase on edges of pavement causing cracking. Cutting berm removes the berm height to level with edge of pavement and slopes the berm to drain to the ditch and away from the road. The county cut 74 edge line miles of berm in 2018 on the following roads:

Apple Creek (CR 44)  
Back Massillon (CR 29)  
Centerville (CR 1)  
Elton (CR 424)  
Emerson (CR 79)  
Fulton (CR 27)  
Harrison (CR 2)  
Honeytown (CR 54)

Hutton (CR 78)  
Jericho (CR 80)  
Pleasant Home (CR48)  
West Lebanon (CR 105)







**EQUIPMENT PURCHASES:**

<b>2018</b>	<b>Planned for 2019</b>
2 - Single-Axle Dump Truck (Western Star) with Snow/Ice Package	3-Tandem-Axle Dump Truck w/Snow & Ice Package
2 – Crew Cab Pick Up Trucks	Palletized Paint Striper
22 - Pre-Wet Tanks (Snow/Ice)	Boom Mower w/Ditcher
Truck for Paint Striper	Schulte Pull Behind Mower
Power Washer (Trailer) for Bridges	20-Ton Trailer

**PERMITS:**

The Wayne County Engineer’s Office oversees work within the county right-of-way by public utilities and property owners as well as overweight and oversize vehicles using the roads. This ensures that all utility work, including relocation of overhead and buried electric, phone, cable, water and gas lines along and under the road, does not interfere with the safety and operation of the county road. Also, any work done by a resident to the front of their property (inside the road right-of-way), including construction of new driveways, installation of drainage pipes, re-grading ditches or installing obstructions that would otherwise affect the operation or safety of the road must be reviewed by the permit department. Special haul permits are for vehicles that are oversize or overweight according to the limits set by Ohio Revised Code 5577.

Permits were issued for the following:

89	Drive Pipes
95	Utility Permits
35	Ditch Enclosures
99	Special Haul Permits

## LARGE CULVERTS

The Wayne County Engineer is responsible for inspection, maintenance, and construction of 306 large culverts on county roads. Large culverts are defined as culverts having a span or rise greater than or equal to 48” and less than 120” (10’). Structures with a span greater than/equal to 120” (10’) 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 239 large culverts on township roads.

### CONSTRUCTION:

Seven (7) Large Culverts were replaced or extended by county forces in 2018:

PLA-CR18	Angling Road	GRE-CR502	Smucker Road
CLI-CR149	Elyria Road	CHE-CR186	Overton Road
WAY-CR78	Hutton Road	BAU-CR27	Fulton Road
EAS-CR2	Harrison Road		

Fifty-one (51) small culverts (less than 48”) were replaced/repared by county forces. The county maintains 2,341 small culverts.



Culvert Replacement  
CR149 – Elyria Road

## **BRIDGES**

The Wayne County Engineer is responsible for inspection, maintenance, and construction of 492 bridges on county and township roads, and extensions of those roads through municipalities.

### **INSPECTION:**

Annual inspections for 492 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". In addition to the current Ohio rating practice of using Ohio legal trucks, the Ohio Department of Transportation (ODOT) has implemented a plan of action in response to the Federal Highway Administration (FHWA) requirement to incorporate the Specialized Hauling Vehicles (SHV) and Emergency Vehicles (EV) as per AASHTO's "Manual for Bridge Evaluation, Second Edition" into all new load rating analyses.

Load ratings, performed on Wayne County bridges in 2018, resulted in nine (9) bridges being submitted to ODOT with new or updated load limits. In addition, the posted load limits were removed on two (2) bridges in 2018.



Elyria Road

*BRIDGES CONTINUED*

**CONSTRUCTION:**

***Contract Work:***

**CON-CR59-0.21 Sterling Road ~ R&I Construction**  
Replacement, \$500,145 (Federal & Local Funds)  
Local Share \$28,417



Sterling Road

***County Forces:***

**CHE-TR245-1.78 Camp Road ~ Replacement, \$70,990**  
**CON-CR36-3.20 Stratton Road ~ Replacement, \$73,911**  
**PLA-CR149-3.09 Elyria Road ~ Replacement, \$82,855**  
**CLI-CR16-0.92 Funk Road ~ Replacement, \$99,548**

**REHAB: CHI-CR95-2.30 ~ Coal Bank Road, \$22,841**  
**CLI-CR1-0.91 ~ Centerville Road, \$31,449**



Centerville Road

## TRAFFIC CONTROL

The primary responsibility of our traffic control staff is the inspection and maintenance of 9,314 road signs, including over 1,200 road name signs, along county roads and at narrow and load-limited bridges on township roads. The sign shop updated or installed 676 signs in 2018.

DuraMark, Inc. completed our striping program in 2018 for a total cost of \$88,791.20. DuraMark painted 67 miles of center line and 84 miles of edge line. Roads that received striping and/or auxiliary markings (railroad, school, turn arrows etc.) include:

<b>Road Number</b>	<b>Road Name</b>	<b>Road Number</b>	<b>Road Name</b>
2	Harrison	94A	Carr
3A	Old Columbus	95A	Blachleyville
6	Friendsville	97	Wenger
7	Church	98	Zuercher
19	Canal	105	West Lebanon
22	Mechanicsburg	139	Heyl
23	Back Orrville	142	Millborne
27	Fulton	145	Chippewa
29	Back Massillon	149	Elyria
30A	East Lincoln Way	169	Hametown
30A	East Lincoln Way	174	Columbus Ave. Exit
44	Apple Creek	177	Batdorf
47A	South Crown Hill	186	Overton
48	Pleasant Home	188	Hackett
51	Canaan Center	225	Criswell
52	Kidron	228	Willow
59	Sterling	242	Burton City
73	Eby	363	Mt. Hope
77	Moreland	424	Elton
78	Hutton	501	Fredericksburg
79	Emerson	504	Sterling
86	Smithville Western		

## 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 [http://wayne-county-engineer.com/Tax\\_Maps\\_&\\_Surveys/default.html](http://wayne-county-engineer.com/Tax_Maps_&_Surveys/default.html). Tax maps of past years dated from 1929 forward are retained in a reference library and are available for viewing.

In 2018, there were approximately 59,274 tax parcels in Wayne County. There were 4,534 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.

For many years, surveyors have been required to submit their survey plats for review and entry into the land records. There are approximately 34,382 surveys dating back to 1815. These surveys include numerous plats of allotments, subdivisions, and annexations. In 2018, this department reviewed and processed 285 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.

## 2019 Outlook

**INCOME PROJECTION:** Our income projection for 2019 is approximately \$7.7 Million which includes the increase in the gas tax. Carry-over from 2018 and an advance from the general fund is an additional \$700,000 for expenses.

**APPROPRIATIONS:** Funds will be distributed according to our budget and construction plan.

- Labor & Fringe, \$3,139,800 (37.65%)
- Road Material & Contracts, \$1,625,785 (19.5%)
- Bridge Materials & Contracts, \$693,000 (8.31%)
- Repairs and Fuel, \$500,000 (6.0%)
- Issue II, \$582,600 (6.99%)
- Building – Comp & Damages – Misc, \$456,600 (5.48%)
- Equipment, \$754,510 (9.05%)
- Transfers, \$585,000 (7.02%)\*

\*Includes repayment of advance from general fund (truck purchase)

### PROJECTS:

County forces will replace six (6) bridges and eight (8) large culverts. We will also rehabilitate four (4) bridges and repair/replace 30-40 small culverts. Our highway department will resurface 50+ miles of road by scratch paving and/or chip and seal.

A three-mile section of Elyria Road (between SR 95 & SR 3) will be reconstructed with Local and OPWC funds. The county cost of that project is estimated at \$583,000.

The roundabout project (federal and state funds) at the intersection of Smithville Western Road (CR 86) and Friendsville Road (CR 6) will begin construction this summer.

Our project goals for 2019 are posted on our website:

[www.wayne-county-engineer.com](http://www.wayne-county-engineer.com)