

2017 MEDINA COUNTY ENGINEER'S ANNUAL REPORT

By: Andrew J. Conrad, P.E., P.S., Medina County Engineer

To the Board of Medina County Commissioners

2017 was an exciting year. It was my first year as the elected County Engineer after serving Medina County for the previous 17 years as the Subdivision Engineer and the Assistant County Engineer. It is my privilege to present the Annual Report for the Office of the Medina County Engineer. In accordance with the Ohio Revised Code, an annual report must be made to the County Commissioners summarizing the activities and accomplishments of the County Engineer's office. It also provides a summary to the citizens of Medina County of an accounting of where dollars were spent in order to improve and maintain the County's system of roads and bridges.

The County Engineer is responsible for the maintenance, repair, and construction of the 326.2 miles of roadways on the County highway system and the 292 bridges on both the County and Township roads. Employees of the County Engineer also assist the County Commissioners with management of the stormwater and floodplain regulations, highway use permitting, and subdivision infrastructure planning. Employees of the Engineer also manage the tax map office and various computer operations for the County, including GIS functions.

In March, Josh Wolf was hired to be the new Assistant County Engineer. He joins the office after many years of service with the City of Wadsworth.

NEW REVENUE

In 2017, the Board of Medina County Commissioners enacted a \$5 permissive motor vehicle license tax under Ohio Revised Code 4504.02. The additional revenue is for planning, constructing, improving, maintaining, and repairing Medina County roads and bridges. This additional tax will effect the motor vehicle registrations in all seventeen townships and the villages of Gloria Glens Park, Westfield Center, Spencer, Chippewa Lake, and Creston. It is projected to generate an additional \$487,000 per year.

WINTER MAINTENANCE

Each winter season brings its own set of unique challenges. Winter operations for our highway department personnel consists primarily of snow and ice control and removal. The total cost of all snow and ice operations which includes plowing, spreading salt, stacking/loading, brine making and application, and dispatch and supervision was \$673,258.

TREE TRIMMING

As a result of the continued infestation of the emerald ash borer insect, there are a large number of dead and dying ash trees along most of the roads in Medina County. As time permits and where needed, work crews have been out in many locations performing tree trimming and removal. The work is made more difficult with the number of overhead utilities that occupy our road right-of-ways. Contractors are sometimes utilized when large trees are encountered. During 2017, the total cost of tree trimming and removal was \$407,355.

VEGETATIVE CONTROL

Three rounds of roadside mowing were completed over the 326.2 centerline miles of County Roads. The first two rounds involved mowing mainly roadsides as well as intersection locations where sight distance was impacted. The third round also included backslopes in addition to roadsides and intersections. A total of \$118,907 was spent on mowing operations with an additional \$5,219 spent for weed-eating at spot locations. The cost of applying herbicide spray by County forces was \$6,025.

MARKS ROAD IMPROVEMENT

Marks Road extending from Hamilton Road to State Route 303, approximately 2.85 miles in length, was resurfaced during 2017 with hot mix asphalt. Extensive work was performed by Medina County crews during 2016 and 2017 in order to prepare for the project by replacing and extending several cross culverts and adding fill material along sections of the roadway. The resurfacing project consisted of milling the existing asphalt surface, widening and repairing pavement edges, resurfacing with asphalt placed in two lifts, and pavement marking. The prime contractor for this project was Kokosing Construction Company. The total cost of the project was \$675,491, of which 80% was paid for with Federal Highway Gas Tax Funds administered through NOACA (Northeast Ohio Areawide Coordinating Agency). The remaining 20% local match was made up of Medina County auto and gas funds.

CHIPPEWA ROAD IMPROVEMENT

Chippewa Road extending from Lake Road to State Route 3, approximately 1.78 miles in length, was resurfaced during 2017 with hot mix asphalt. Minor work was performed by Medina County crews during 2016 and 2017 in order to prepare for the project. The resurfacing project consisted of milling the existing asphalt surface, widening and repairing pavement edges, resurfacing with asphalt placed in two lifts, and pavement marking. The prime contractor for this project was Kokosing Construction Company. The total cost of the project was \$441,747, of which 80% was paid for with Federal Highway Gas Tax Funds administered through NOACA. The remaining 20% local match was made up of Medina County auto and gas funds.

HOT MIX RESURFACING

Medina County received grants from the Ohio Public Works Commission (OPWC) to resurface two county highways. The local match was made up of Medina County auto and gas funds. The prime contractor for both of these projects was Barbicas Construction Co., Inc.

Smith Road – Medina City Limits to Columbia Road - 1.14 miles - \$191,960 – 74% OPWC Grant

Hamilton Road – Abbeyville Road to State Route 3 – 5.10 miles - \$838,996 – 84% OPWC Grant

PAVING AND CHIP SEAL PROGRAM

The remaining portion of the County paving program for 2017 consisted mainly of applying a 2" surface course of County Spec. 405 cold mix asphalt (motor-pave) with chip seal to 10.33 miles of roadway. The total cost of this work amounted to \$1,091,670. Spot full depth repairs were also performed on these roads as part of the resurfacing contract and included in the total cost.

The chip seal program consisted of applying a single seal of asphalt emulsion and #8 slag cover aggregate to 19.18 miles of various County Roads. The total cost of the chip seal work amounted to \$295,643. The work for both the 405 motor-pavement and the single chip seal application was performed by Melway Paving Company.

SPOT PAVEMENT REPAIRS

County crews performed hand and machine patching and repair on various roads in 2017 where needed. We expended \$337,350 to perform this work. Also, a contract was let for more extensive repairs to Reimer Road, Fenn Road, Granger Road, and Medina Line Road. Melway Paving Company furnished equipment, material and labor to mill and repair sections of these roads. The total cost of this contract work was \$118,283.

CRACK SEAL

Crack sealing of various County Roads was performed by County Forces in 2017. Material and labor cost for this work amounted to \$96,377.

PAVEMENT MARKING

Annual pavement marking was performed by contract to renew centerline, edgelines, and miscellaneous markings. Dura-Mark Inc. of Aurora, Ohio was the striping company to whom the contract was awarded for this work. A total of 105 miles of centerline and 182 miles of edgeline were painted at a cost of \$132,634.

BRIDGE REPLACEMENTS

During 2017, there were four bridge replacements completed utilizing grants from the State of Ohio. These projects had local match percentages of varying amounts. The projects were designed by County Engineer Staff and constructed by contract. The projects were as follows:

<u>Project Location</u>	<u>Contractor</u>	<u>Total Contract Amt.</u>
Repp Road, Bridge No. 5	Cuyahoga Bridge & Road, Inc.	\$411,065
Wandel Road, Bridges No. 9 & 15	HSH Construction Co., Inc.	\$124,698
River Styx Road, Bridge No. 30	V.O. Menezes & Son, Inc.	\$420,446

ODOT replaced six bridges on the County inventory through the Ohio Bridge Partnership Program. These included structures on State Road, Bagdad Road, Smith Road, Muntz Road, Grafton Road, and Old Weymouth Road.

The City of Medina replaced a bridge on our inventory as part of their Smith Road reconstruction project.

FORCE ACCOUNT CULVERT AND SHOULDER WORK

The Highway Department was able to replace several road culverts, build and repair shoulders and berms on various roads, and address a large number of work order requests related to drainage concerns and ditching. This force account work was performed utilizing both County Highway equipment and personnel as well as outside contractors. During 2017, Medina County Highway forces repaired, replaced, and extended fifteen road culverts of various sizes at a cost of \$223,625.

VEHICLE PURCHASES

- * 1 - Western Star Single-axle Truck With Dump Body and Hydraulics - \$142,260
- * 1 - Ford F450 with Service Body - \$47,934
- * 3 - ½ Ton Pickups - \$70,457
- * 1 - Jeep Cherokee Sport - \$23,402

FINANCIAL SUMMARY

The maintenance, repair, and construction of roads and bridges on the County Highway System is funded primarily from portions of license plate fees collected for vehicles registered in Medina County and a share of the Ohio twenty-eight cents/gallon fuel tax. No real estate or sales tax is used for highway purposes. Federal gas tax and State Issue 1 funds are utilized on specific projects when our office is successful in securing these funds.

Below are the general summaries of the major Expenses and Revenues for 2017.

2017 EXPENSES		2017 REVENUES	
Salaries	\$2,511,746	License Plate Fees	\$5,491,325
Fringe Benefits	\$923,744	Gasoline Tax	\$2,389,285
New Equipment	\$313,626	Fees	\$165,420
Travel/Training	\$4,945	Fines	\$41,896
Road/Bridge Contract Repairs	\$2,426,501	Sales/Reimbursements	\$251,123
Contract Services	\$538,404	Interest	\$75,810
Materials	\$830,196	Other	\$72,854
Miscellaneous	\$40,603		
Land	\$1,079		
Total	\$7,590,843	Total	\$8,487,713