HURON COUNTY ENGINEER'S OFFICE

2023 ENGINEER'S ANNUAL REPORT

The Ohio Revised Code requires each Ohio County Engineer to publish an annual report to the County Commissioners outlining the general condition of the roads and bridges in their county. Our office is responsible for 224 miles of county roads, 409 bridges and 3,500 culverts covering an area of 497 square miles with a staff of 28 hardworking team members.

The next few pages are a review of our accomplishments from 2023 and a preview of our 2024 projects, totaling over \$6 million dollars in construction.

Last year our office had its largest construction season to date with over \$7 million in projects including nine bridge projects. A big part of this was made possible by securing \$5.5 million in state and federal funds including American Rescue Plan Act (ARPA) funding. This eases the local tax burden while allowing us to stretch our local dollars further. In turn, this enables us to complete more projects that otherwise might not have been possible. Our success with acquiring funding will continue into the future, with over \$20 million in funding secured over the next 5 years.

We would also like to give a big thank you to the Huron County Commissioners for approving nearly \$1 million in ARPA funds to make upgrades to our snow and ice control operations. These funds have been used to purchase a new wheel loader, purchase two fully outfitted snow plow trucks, and expand our salt storage building. This year we will use additional funds to resurface Jim Esker Road leading to the Huron County Airport.

Where is all the snow? Most of our office's large equipment and staffing levels are based on the needs for winter snow and ice control operations. With the mild winters over the past few years, and little to no snow, we have been able to shift more resources to roadway maintenance items. This has allowed us to perform asphalt pavement repairs and cracksealing until almost Thanksgiving and continue ditch and culvert work nearly year round. Hopefully the trend continues, but if not, we are ready for whatever mother nature throws at us!

Please feel free to contact me with any questions regarding our office. I appreciate the opportunity to serve the residents of Huron County.



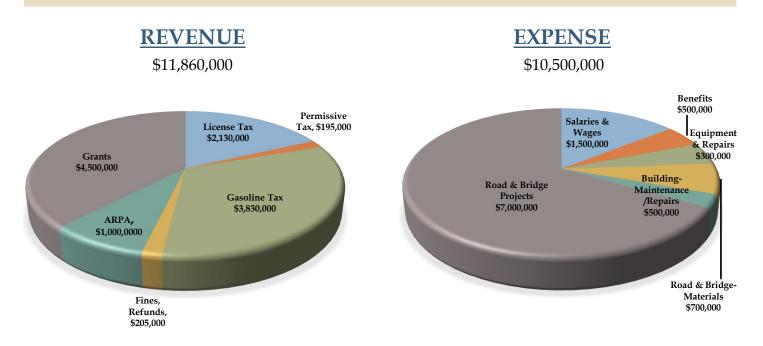
Lee E. Tansey, P.E., P.S. Huron County Engineer

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> Hours: 7:00 a.m. - 3:30 p.m. Monday thru Friday

Visit us on the web at: www.huroncountyengineer.org Find us, like us, share us on Facebook





WHERE OUR REVENUE COMES FROM

Gas Excise Tax

Federal Tax:\$0.184 gasoState Tax:\$0.385 gaso

\$0.184 gasoline and \$0.244 diesel per gallon (unchanged since 1993)
\$0.385 gasoline and \$0.47 diesel per gallon (new rates effective July 2019)
We receive approximately \$3,800,000 from the state gas and diesel tax

Motor Vehicle Registration Fees

The Ohio Revised Code 4501.04 requires collection and distribution of license plate registration fees for highway maintenance.

For a passenger car, the basic annual fee is \$34.50.

The Huron County Engineer's Office receives approximately \$2,100,000.

WHAT TYPICAL PROJECTS COST

Roadway Items

Partial-depth asphalt resurfacing \$225,000-\$275,000 per mile

• Remove 2 inches of existing pavement, place 3 inches of new asphalt

Asphalt overlay, 1 inch thick \$120,000 per mile

• Usually requires minor asphalt repairs prior to overlay +/- \$5,000 per mile

Chip and seal **\$17,000** per mile

• Crack sealing and pavement repairs prior \$5,000-\$8,000 per mile

Pavement markings: edge lines and center line \$1,500 per mile

Complete roadway reconstruction \$500,000-\$550,000 per mile

Structures

Bridges and culverts less than 20 feet in span: **\$75,000 - \$300,000** Bridges over 20 feet in span: **\$300,000 - \$1,500,000 +**

BRIDGE PROJECTS

Auster Road Bridge

Located in Wakeman Township and awarded to R & I Construction. The project included the replacement of a truss bridge that was built in 1955. Total construction cost was \$1,000,000 with a federal grant covering 100% costs.







Skinner Road and Moriah Road Bridges

Located in New Haven and Bronson Townships, US Bridge completed these two superstructure replacements. Total construction costs were \$500,000, with a federal grant covering 100% of materials cost.







Baseline Road and Rome Greenwich Road Bridges

Located in New Haven and Greenwich Townships, R & I Construction completed these two design build bridge replacements. Total construction cost was \$2,100,000, with a federal grant covering \$1,600,000.







Old State Road Bridge

Located in Bronson Township, R & I Construction completed this bridge deck replacement. Total construction cost was \$441,000, with a federal grant covering 100% of costs.







ROAD RESURFACING

Old State Road Resurfacing

The project included 2.2 miles of paving from Town Line 12 Road to Fairfield Angling Road. The work was performed by Sarver Paving Co. The total construction cost was \$200,000 utilizing local funds.





Peru Center / Town Line 12 Intersection Improvements

The project included 1.4 miles of improvements from SR 598 and SR 103 to just North of Town Line 12. The work was performed by Erie Blacktop, Inc. The total construction cost was \$500,000, with federal safety grant covering 80% of construction costs.



Townsend Avenue Resurfacing

The joint project with the City of Norwalk included .75 miles of paving from Old State Road to Perrin Road. The work was performed by Erie Blacktop, Inc. The total cost was \$180,000, with the Ohio Public Works Commission covering 74% of construction costs. With the City and County splitting the remaining \$46,000.







Bridge Repairs and Culvert Installations

Our office is responsible for maintaining over 400 bridges, including annual inspections and load analysis.





Whittlesey Road Culvert Replacement Buckeye Excavating & Construction







Cook Road Culvert County Forces



Peru Center Road Culvert Dalton Farms & Excavating

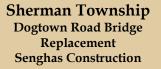
Township Projects

Our Office is responsible for providing engineering services for all 19 Townships.





Bronson Township Settlement Cove Mallard Pointe 7 L Construction





Ripley Township Old State Improvements Kokosing Construction





Richmond Township Willard West Improvements Gerken Paving

Salt Storage Facility Expansion

- Increased Salt Storage by 800 tons
- Completed October 2023 By Senghas Construction



- Huron County Commissioners / ARPA Funded
- \$464,000 Construction Cost



Drainage Improvements



Pavement Markings





Roadside Mowing



Asphalt Repairs



Box Culvert Construction



Ready For Snow!



Touch A Truck Event Strawberry Festival



Students visit as part of "Engineering Day"

Huron County Engineer Bridge Summary Report

The County Engineer's Office annually inspects and reports the condition of all bridges on county and township maintained roads. A bridge is defined as a structure with a clear span of ten (10) feet or more measured parallel to the centerline of the roadway. Our office is responsible for 409 bridges across the county ranging in span from 10 feet to 126 feet. When a structure is less than 10 feet and located on a Township Road, the structure is considered a culvert and is the responsibility of the Township. In the past our office has provided replacement assistance to the Townships with their large culverts; going forward, our ability to continue this service may be limited to engineering, due to rising costs and limited staffing.

Ohio has the 2nd largest bridge inventory of all states with 43,525 bridges maintained by the various entities; county engineers, cities, villages and ODOT. 26,300 of those bridges fall under the jurisdiction of the 88 County Engineers Offices across the state. Bridges are typically designed for a 50-year life cycle, which equates to the county engineers replacing 280 bridges per year to maintain a 50-year lifecycle of the 26,300 bridges. On average, county engineers are replacing 175 bridges per year with funding being the limiting factor.

The federal Bipartisan Infrastructure Law enacted in late 2022 has helped in the short term by funding several bridge projects state wide. This legislation has increased the federal allocation for local bridge projects in the state of Ohio by \$45 million for fiscal years 2022-2026 and directly funded four of our nine bridge projects last year. It is also allowing for a more aggressive bridge program over the next three years with five bridge projects scheduled for 2024 and thirteen more bridges for years 2025 and 2026, totaling over 10 million in construction cost.

Each bridge is given a General Appraisal rating during the annual inspection, which is a summary of the condition of the structural elements of the bridge. The table below provides an overview of our bridge inventory for the 2023 inspections:

General Appraisal	Description	2023 Inspections
9	Excellent Condition	64
8	Very Good Condition	77
7	Good Condition	85
6	Satisfactory Condition	108
5	Fair Condition	47
4	Poor Condition	12
3	Serious Condition	14
2	Critical Condition	1
1	"Imminent Failure" Condition	0
0	Closed to Traffic	1
	Total Bridges	409

Currently there are twenty-four (24) bridges that have load limit restrictions. We have successfully secured funding to replace fifteen (15) of these bridges over the next few years. Some of the weight restricted bridges are in fair to good condition, but were not built to handle today's modern heavy trucks and equipment. Many of these structures have several years of service life remaining and will not be a focus of our replacement program until all of the poorly rated structures have been replaced.