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2024 Auglaize County Engineer's Annual Report

Introduction



Ohio County Engineer Offices operate mainly on funds generated from motor vehicle tax and license plate registrations within the county. In Auglaize County, these two sources of revenue typically account for approximately 80-85% of our budget annually but have only increased less than 1% over the last 4 years. This means we have the same amount of money to maintain roads and bridges regardless of the inflating costs of labor, equipment, and construction materials.

Due to these stagnate revenue sources, we must work to find alternative funding to offset the rising construction costs to maintain our roads and bridges. One great avenue to obtaining additional funding is through the Ohio Public Works Commission.

Since 2016, Auglaize County, Townships, Villages, and Cities have received funding for 36 infrastructure projects totaling over \$6,750,000 in grant funds. In 2024, we received an \$810,000 grant that was used for road resurfacing throughout the County.

The Ohio Public Works Commission was established over 40 years ago to provide grants and loans for infrastructure projects throughout Ohio. The State Capital Improvement Program does not raise taxes but relies on bonds, which are paid off with existing state funds. The funding for this program relies on an amendment to Ohio's Constitution every 10 years. It has been approved 3 times since 1987.

The renewal for this program will be voted on the state-wide ballot on May 6, 2025. I would encourage you to review the Ohio Public Works Commission's website for additional information or call our office to discuss projects that we have accomplished locally with these funds. To help protect and improve the infrastructure of Auglaize County, **Please Vote Yes for State Issue 2 on May 6th!**

It is my privilege to offer this report on the improvements and accomplishments made by the Auglaize County Highway Department and Engineer's Office in 2024. I encourage you to contact our office if you have questions about this report or the undertakings of this office.

Respectfully Submitted,

A handwritten signature in blue ink that reads "Andrew J. Baumer".

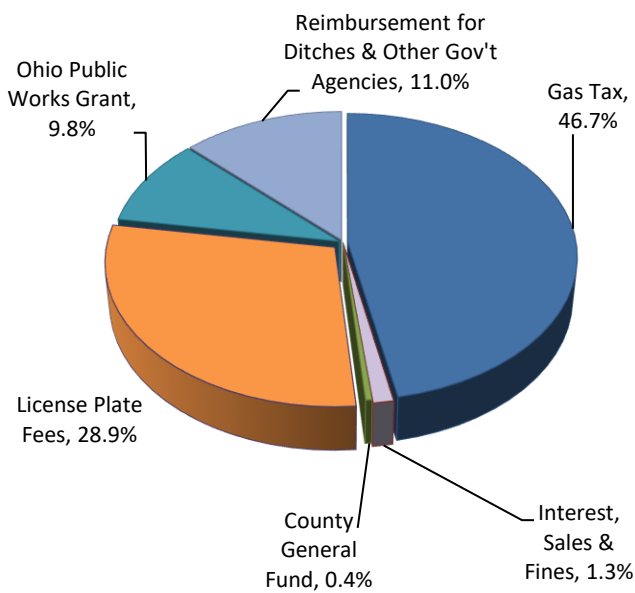
Andrew J. Baumer, P.E., P.S.
Auglaize County Engineer

Financial Summary

The financial summary for 2024 is illustrated below with graphs showing the revenues and expenditures of this department. Revenue in 2024 trended slightly higher than in previous years. The main revenue influx was a grant through Ohio Public Works for \$810,000 for County Road paving. We also completed work for some Townships and Villages in the County, along with County Ditch maintenance to bring our reimbursement revenues to over one million dollars.

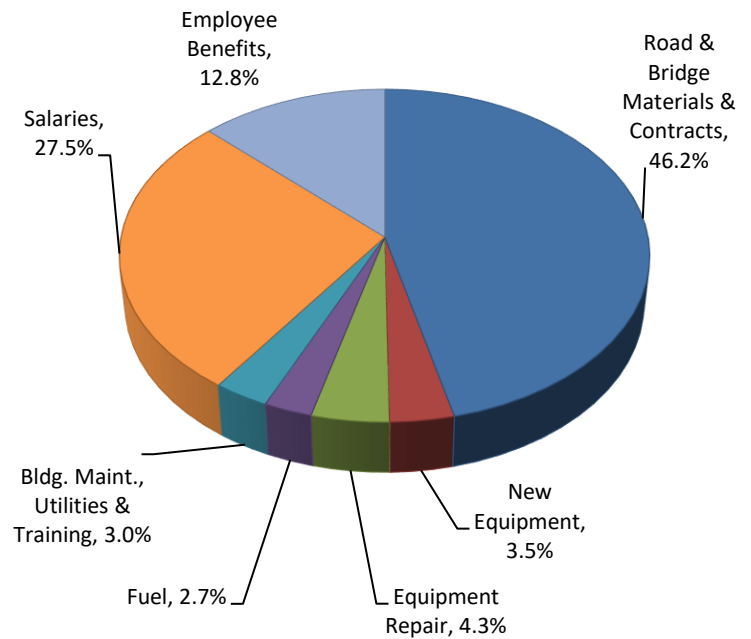
The main expenditures in 2024 were the road and bridge materials and contracts, which accounted for 46% of the total expenditures. New equipment costs were over 3.5% and maintenance repairs increased to 4.3%. Maintaining a reliable fleet of equipment is crucial as we continue to complete as much maintenance work as we can with our employees.

2024 RECEIPTS



Total Revenue = \$8,287,617

2024 EXPENDITURES



Total Expenditures = \$7,368,512

4-Year Financial Comparison

| | 2021 | 2022 | 2023 | 2024 |
|--------------|-------------|-------------|-------------|-------------|
| Revenue | \$7,198,966 | \$7,821,030 | \$7,253,104 | \$8,287,617 |
| Expenditures | \$7,121,960 | \$7,452,735 | \$6,965,777 | \$7,368,512 |

Roadway Improvements & Maintenance

Chip Seal Program

Our road crews applied almost 132,600 gallons of liquid asphalt emulsion and 3,765 tons of #8 stone that full sealed 26.4 miles of county roads in 2024. The material costs equated to \$13,200 per mile for a full-width chip seal. This cost increased \$1,500 per mile from 2023, but chip seal still remains a necessary and cost effective solution to maintaining our roadway network. Based on 2024 costs, we are able to chip seal 8.5 miles of roadways with our crews and equipment for the same cost to have a contractor place hot mix asphalt on 1 mile of road.

Paving Program

In 2024, our paving bid was awarded to *Shelly Company* for the placement of 13,758 tons of hot mix asphalt on 10.67 miles of county roads at a total price of \$1,594,998. All roads, except subdivision roads listed below, were paved with ½” lift of intermediate asphalt mix. The intermediate mix allows us to re-establish the road profile to remove rutting and other inconsistencies in the roadways. A 1.25” lift of surface mix is placed as the final wearing surface. Berm stone was placed by Auglaize County crews. *Olgesby Construction* placed the center and edge line striping to complete the road improvements.

2024 Paving Program – Funded by County Funds and \$810,000 OPWC Grant

| <u>Road Name</u> | <u>From</u> | <u>To</u> | <u>Length (miles)</u> | <u>Asphalt (tons)</u> | <u>Cost</u> |
|--------------------------|--------------------|--------------------|-----------------------|-----------------------|--------------------|
| Wapak Cridersville Road | Infirmary Road | National Road | 4.5 | 5,647 | \$640,770 |
| Kettlersville Road | Washington Pike | CR 33A | 1.5 | 1,954 | \$220,269 |
| Canal Road | SR 119 | Seventh St. | 0.5 | 628 | \$71,214 |
| Bensman Road | SR 66 | East Shelby Road | 1.9 | 2,468 | \$279,767 |
| Infirmary Road | SR 198 | Wapak Cridersville | 1.5 | 2,017 | \$230,471 |
| Barber Warner Road | Center Road | Claus Road | 0.12 | 302 | \$35,597 |
| Pleasantview Subdivision | St. Marys Township | | 0.65 | 738 | \$116,907 |
| Total: | | | 10.67 | 13,758 | \$1,594,998 |

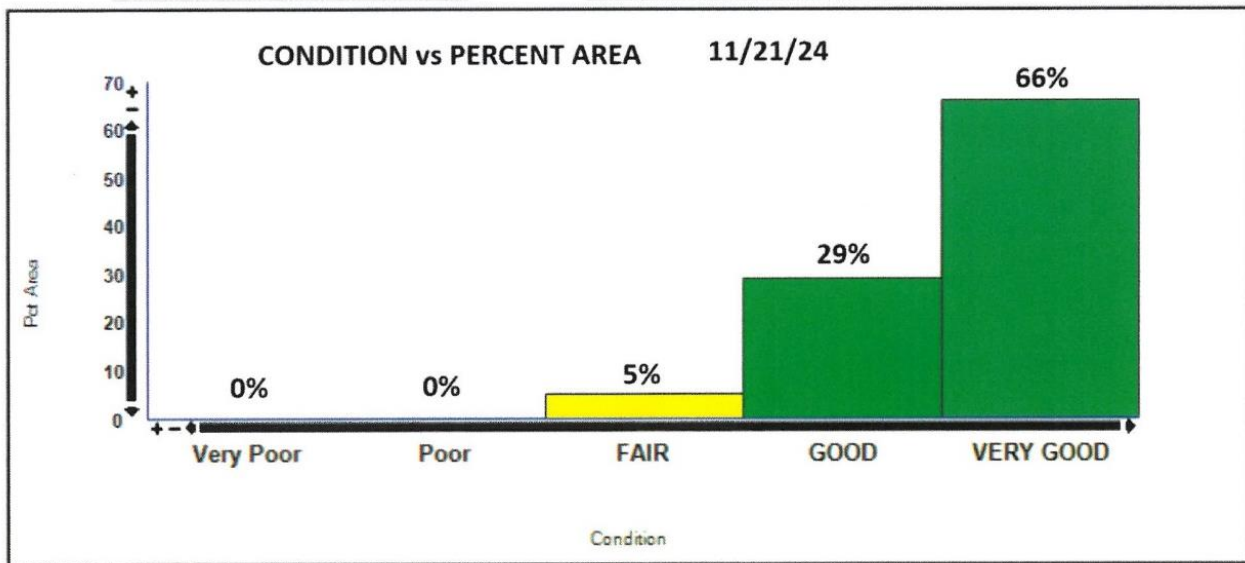


A separate contract was awarded for road improvements in the Meadowbrook Subdivision in Duchouquet Township. We milled the asphalt to expose the original concrete streets and then placed the *GlassGrid* fabric over the full width of the streets to stabilize the concrete slabs from shifting during freeze/thaw cycles. Hot mix asphalt was laid on top of the fabric to provide the new wearing surface. These improvements will keep the roads smooth for the residents within the subdivision. *H&S Asphalt* from Bellefontaine, OH performed the work on this project for a **total cost of \$461,035.**

Roadway Improvements & Maintenance

Road Condition Report

All 347 miles of our county roads are evaluated annually to determine the best maintenance treatment. Our typical maintenance treatments include crack sealing, chip seal, and paving. The combinations of these treatments are important to stretch our budget to maintain and improve our roadways. I am happy to share the chart below showing the pavement condition ratings based on evaluations completed by *Kindler Engineering Systems, LLC* in 2024. We will continue to utilize different treatment methods to ensure we have a strong roadway network in Auglaize County into the future.



Winter Weather

2024 presented us with very mild winter weather. Our crews responded to snow and ice events only 12 times between January 6 and February 24, 2024. This set the record for “fewest times out” and “latest 1st time out”. The previous record was 13 times out during the 2022-2023 winter. We used 718 tons of salt at a price of \$77.58 per ton and had 1,085 labor hours to preform snow and ice removal on our roadways.

The more mild winters over the last several years have offered some relief to the budget. The 10-year average for annual salt costs is over \$94,000. In the last two mild winters, the average cost was just \$54,000. The lower costs due to the mild winter allowed for additional funds to be available for more road and bridge projects. Also, harsh winter weather, freeze/thaw cycles, and the necessary treatments to control the snow and ice are huge problems for our road surfaces. Those impacts have been lessened significantly with this mild winter weather.

Bridge Program & Construction

Inspection Ratings

There are currently 356 bridges under the responsibility of the Auglaize County Engineer. Each bridge is given a condition rating between 0-9 with 9 being a bridge in new/excellent condition and 0 being a failed bridge. Below is the breakdown of ratings for the bridges in Auglaize County by condition:

| Condition Rating | Total | % of bridges |
|------------------|------------|--------------|
| 9 – Excellent | 12 | 3.4% |
| 8 – Very Good | 178 | 50.0% |
| 7 – Good | 127 | 35.6% |
| 6 – Satisfactory | 36 | 10.1% |
| 5 – Fair | 2 | 0.6% |
| 4 - Poor | 1 | 0.3% |
| Total: | 356 | 100% |

As you can see in the chart, 89% of Auglaize County’s bridges are in Excellent (9), Very Good (8), or Good condition (7). Only 11% of Auglaize County’s bridges are in Satisfactory (6), Fair (5), or Poor condition (4). One bridge that is in Fair condition (5) is on a section of road that is on non-maintained status and does not carry traffic. The other bridge in Fair condition (5) is scheduled for a superstructure replacement in 2026. The bridge rated in Poor condition (4) will receive federal funding for construction in 2028. Of the 356 bridges, only 3 bridges are posted for minor weight reductions.

Bridge Construction

We had a busy and productive bridge construction season in 2024. We once again utilized our precast box beams and 3 sided boxes to complete projects in a very efficient and cost-effective manner. The projects listed below represent those constructed by Auglaize County forces and the cost represents the labor, materials, and equipment used on each project.

2024 Bridge Construction Projects

| Road Name | Structure Type/Work Completed | Cost |
|---|---|---------------------|
| Fairmount Road | 26’ Precast beams with composite deck | \$66,683.22 |
| Buckland-Holden Road | 26’ Precast beam and deck repair due to accident damage | \$24,116.87 |
| Arnold Road | 14’ Precast 3-sided concrete box | \$59,289.29 |
| Blank Pike | 14’ Precast 3-sided concrete box | \$69,029.82 |
| Fairmount Road | 36” Concrete Pipe | \$15,214.84 |
| Glynwood Road | 10’ Precast 3-sided concrete box | \$35,068.99 |
| Tri-Township Road | 10’ Precast 3-sided concrete box | \$61,616.66 |
| Erie Road | 10’ Precast 3-sided concrete box | \$55,083.61 |
| Total Cost for Bridge Construction = | | \$386,103.30 |

Bridge Program & Construction

Bridge and Large Culvert Construction



In addition to our yearly in-house bridge replacements, Auglaize County bridge crews are also responsible for maintaining approximately 310 large culverts ranging in size from 36" up to 10' span. Although these do not meet the true definition of a bridge, they are still significantly sized structures that need a regular inspection, maintenance, and replacement to keep the traveling public safe. We are currently into our third year of a five year focus plan to replace culverts from the 1940's to 1960's that were either

corrugated metal structures that have rusted out or are concrete structures that need improved due to narrow safety shoulder widths or overall deterioration due to age. We have recently been incorporating between 6 - 10 large culvert replacements into our bridge program each year and will have almost 35 structures replaced in five years. The attached photos show just a few of the six structures that were replaced in 2024.



Bridge Program & Construction

Bridge superstructure replacements were still actively performed by county crews on two structures in 2024. The photo to the right is bridge UNI-180-22.12 on Fairmount Road just East of Wrestle Creek in Union Township. This bridge was rehabilitated by recapping the existing concrete abutments which saved on replacement costs. New 26' long precast county beams were installed, and the bridge was widened from 24' to 27'. These quick rehabilitation projects by our experienced crews easily bring our bridge General Appraisal ratings from 6's to 8's, keeping our inventory in excellent condition and minimizing load posted bridges.



Being prepared for the unexpected is a must when overseeing the safety of the traveling public. Our crews and staff worked together seamlessly to respond to, assess, and repair a bridge in Duchouquet Township on Buckland-Holden Road due to a vehicular accident. This bridge received an exterior beam replacement, new waterproofing, asphalt, and new guardrail due to damage caused by the crash. Bridge repair work was performed by county crews, paving was performed by *Buehler Asphalt Paving Co.*, and the cost of all repair work was fully covered by private insurance.

Before



After



Bridge Program & Construction

Joint County Cooperation

We strive to be as efficient as we can be with employees, equipment, and project implementation. Our cooperation with other county agencies to complete maintenance and construction projects allows us to resourcefully improve all of Auglaize County's infrastructure, not just the items directly under our jurisdiction.

In 2024, we split the cost of a bridge replacement on Southland Road just West of State Route 29 with Shelby County. This work was performed by Shelby County and included rehabilitating existing abutments and replacing the 54' long deteriorated beams with new prestressed concrete beams. Pictured below is the completed bridge on Southland Road. Auglaize County's cost share totaled \$120,722.15.



Ditch Construction & Maintenance

Ditch Construction

In 2024, three new ditch projects were completed through the Petition Ditch Process under Ohio Revised Code 6131.

Ewald Ditch - Duchouquet Township

The Ewald Ditch project covered 322 acres and involved replacing the original clay drainage tile, installed in 1910, with 10,444 linear feet of new plastic tile in sizes of 24", 15", 12", 10", and 8". The project also included new catch basins and plastic submains to enhance drainage efficiency. *Sand Ridge Excavating* completed the project at a total cost of **\$298,671.50**.



Sand Ridge Excavating scalping dirt for tile installation approximately 9' deep for the Ewald Ditch.

Dowty Ditch-St. Marys Township

The Dowty Ditch project covered 354 acres, replacing aging clay tile from 1912 with 7,600 linear feet of new plastic tile in sizes of 24", 18", 15", and 12". Similar to the Ewald Ditch, the project also incorporated new catch basins and plastic submains. *Cy Schwieterman Inc.* completed the construction at a total cost of **\$228,892.87**.



Hollman Ditch-Noble Township

Completed in the summer of 2024, the Hollman Ditch project was a necessary drainage upgrade due to increased development within the 229-acre watershed. The original drainage system, installed in the early 1900s and partially upgraded in 1964, was no longer sufficient to handle runoff from the 23 additional house lots developed since then. The new system starts with an 18" main tile at the open ditch, splitting into two laterals running parallel to Koenig Road up to U.S. 33. Additionally, 6" lateral tiles were installed for each house, along with catch basins and breathers at property lines. *Albers Excavating* completed the project at a total cost of **\$238,378.27**.

Ditch Construction & Maintenance

Ditch Maintenance

As required by Ohio Revised Code 6137, Auglaize County is responsible for maintaining all petition ditches constructed since 1957. This includes oversight of **137 miles of tile ditches, 175 miles of open ditches, 8.6 miles of waterways, and 71 miles of log jam removal.**

In 2024, maintenance was performed on **221 of the 329 ditches under county jurisdiction**, with a total expenditure of **\$357,815**. Routine maintenance activities included:

- Ditch dip-outs and leveling
- Tile suck hole and catch basin repairs
- Herbicide spraying
- Mowing

These efforts ensure the long-term functionality of the county's drainage infrastructure and support effective water management across the region.

The picture below shows a log jam that was removed on the Auglaize River as part of the ditch maintenance in 2024. Removing these obstructions allows the river to flow freely and reduces the length of impacts during flooding events.



GIS & Map Office

In Ohio, the County Engineer is elected and must be a registered Professional Engineer and Professional Surveyor. One duty as Auglaize County's Professional Surveyor is overseeing the County Map Office. The primary function of the Map Office is to produce and update a set of maps to display current property boundaries, ownership, acreage, parcel numbers and subdivision names. These maps assist the County Auditor in keeping an accurate tax base.

The Map Office reviews boundary, subdivision, condominium, and annexation survey plats as well as legal descriptions of real estate transfers to ensure they comply with the Auglaize County's Conveyance Standards and Minimum Standards for Boundary Surveys.

The review of these documents under the supervision of a Professional surveyor not only ensures accuracy, but helps to avoid potentially costly disputes and lawsuits over boundary lines and ownership rights.

In 2024, our Map Office was busy reviewing and filing 121 new boundary surveys along with reviewing 2,060 legal descriptions of conveyance documents for deeds, plats, land contracts, certificates and affidavits transfer of real estate. The tax map and landowner information is updated daily and is displayed online using an interactive GIS map. This map is the one stop website to find all sorts of information, including:

- 2024 Aerial Imagery + historical imagery dating back to 1957
- Landowner information
- Maintenance Drainage Ditches
- Surveys & Plat Records
- Floodplain Boundary & Certificates
- Links to County Auditor & Recorder websites

<https://gis.auglaizecounty.org/main/>



GIS & Map Office Employees:

Kurt Rodeheffer, Angelita Anderson, James Marok



NEW 2024 Maps!

Our own Map Office employees created and formatted the updated County Highway Map in 2024. The maps were printed by *Post Printing* in Minster.

Although paper maps have been mostly replaced in this digital age, this is a great resource that shows all 1000+ miles of roads maintained by Cities, Villages, Townships, County and ODOT within Auglaize County.

Employee Spotlight

There was so much work accomplished throughout the County annually. These improvements would not have been possible without the efforts and talents of our employees. Their dedication to completing projects properly and efficiently whether its 75° and sunny or 15° with blowing snow conditions does not go unnoticed. I am grateful and thankful for all of their time and efforts throughout the year.



0-10 Years of Service:

- Ross Wuebker
- TJ Place
- Matt Broughman
- Sam Philpot
- Chad Coates
- Marshall Miller
- Angelita Anderson
- Tyler Varno
- Doug Piper
- Julie Schneider
- David Sawmiller
- Ross Cook
- Austin Albers

10-15 Years of Service:

- Andrew Baumer
- Jesse Hein
- Nick Piehl
- Jamey Turner
- Kyle Perry
- Clint Moon
- Kevin Steinke
- Jeremy Rostorfer
- Tim Rostorfer



15-25 Years of Service:

- Thad Hemleben, Kevin Snider
- Toby Lee, Jeff Steinke

25-30 Years of Service:

- Mike Schmerge, Tony Drexler,
- Dustin Kohlrieser



- 30-35 Years of Service:**
Howard Bair, Chad Kohlrieser



- 40+ Years of Service:**
Mary Lou Hume
Steve Rimmer