

KNOX COUNTY ENGINEER

2023 ANNUAL REPORT

The Knox County Engineer compiles this report for the Knox County Board of Commissioners, as required by section 5543.02 of the Ohio Revised Code.

We continue to make progress on replacing bridge and culvert structures as well as resurfacing the roadway system in Knox County. The Tax Map Office continues to improve the land record system they maintain and to ensure that the residents of Knox County are protected by quality documents transferring their property. This report highlights the work that took place in Knox County by the Engineer's Office, Highway Department, and Tax Map Department.

In 2023, two House Bills (HB) were passed which positively impact the financial limits governing county engineers. House Bill 23, effective June 30, 2023, made changes to Ohio Revised Code (ORC) Section 5543.19, construction or reconstruction by force account. This change allows counties to do more work with their own employees in lieu of hiring outside contractors through the competitive bid process. The limits were increased to \$70,000 per mile for roadway work and \$233,000 per project for bridge and culvert work.

House Bill 33, effective October 3, 2023, made changes to ORC Section 153.12, awarding and executing contract, and ORC Section 307.86, competitive bidding required – exceptions. HB 33 also created a new section of the code, ORC Section 9.17, competitive bidding threshold amount. The changes to ORC Section 152.12 allow counties to make awards on projects up to 20% over the engineers estimated project cost. Changes to ORC Section 307.86 and addition of ORC Section 9.17 sets the threshold for bidding at \$75,000 and makes the provision for 3% annual increases.

I want to thank the local representatives that supported these House Bills to allow counties to have more flexibility and control over local projects. As we look to the future, we continue to plan and construct projects, but we must balance that with inflation, supply chain concerns and the need for additional revenue. The Knox County Engineer's Office works every day to seek additional funding sources, namely grants and loans. I appreciate the continued support of the Knox County Commissioners in the work that we do for the residents of Knox County.

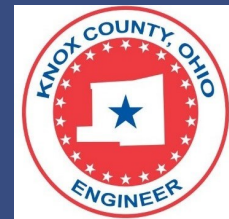
Sincerely,



Cameron Keaton, P.E., P.S.



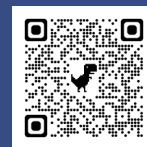
Cameron Keaton, P.E., P.S.



**Knox County Engineer &
Highway Garage**

422 Columbus Road
Mount Vernon, Ohio 43050
(740) 397-1590

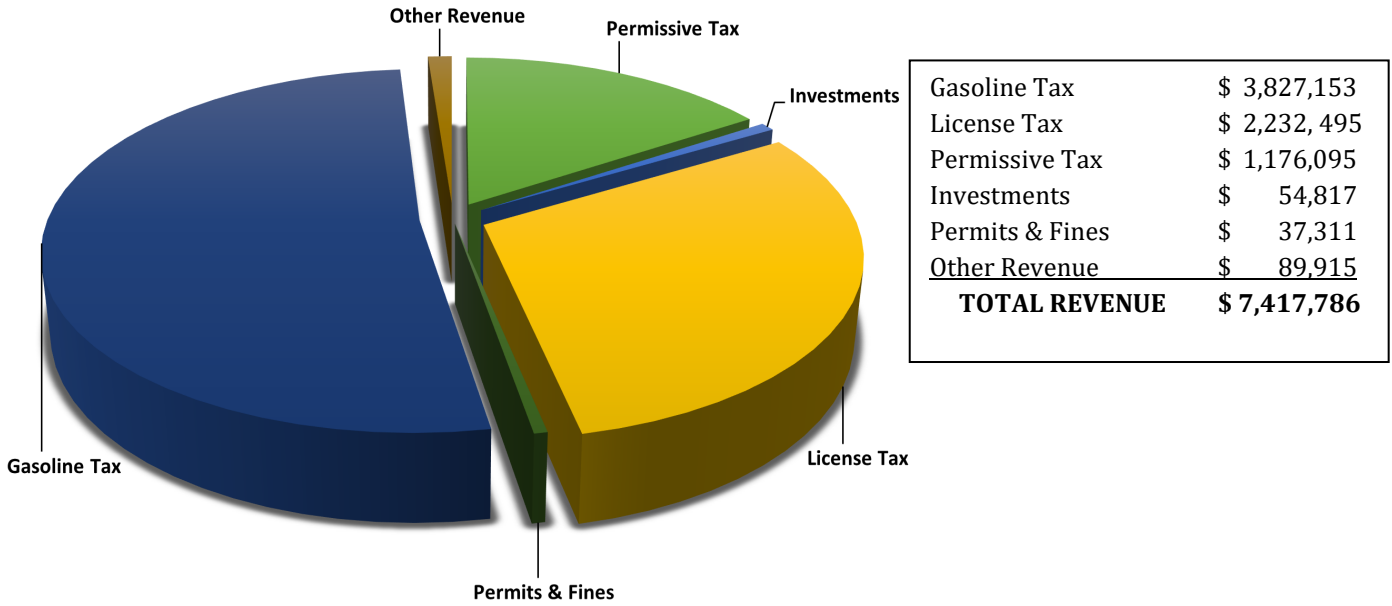
www.co.knox.oh.us/engineer/



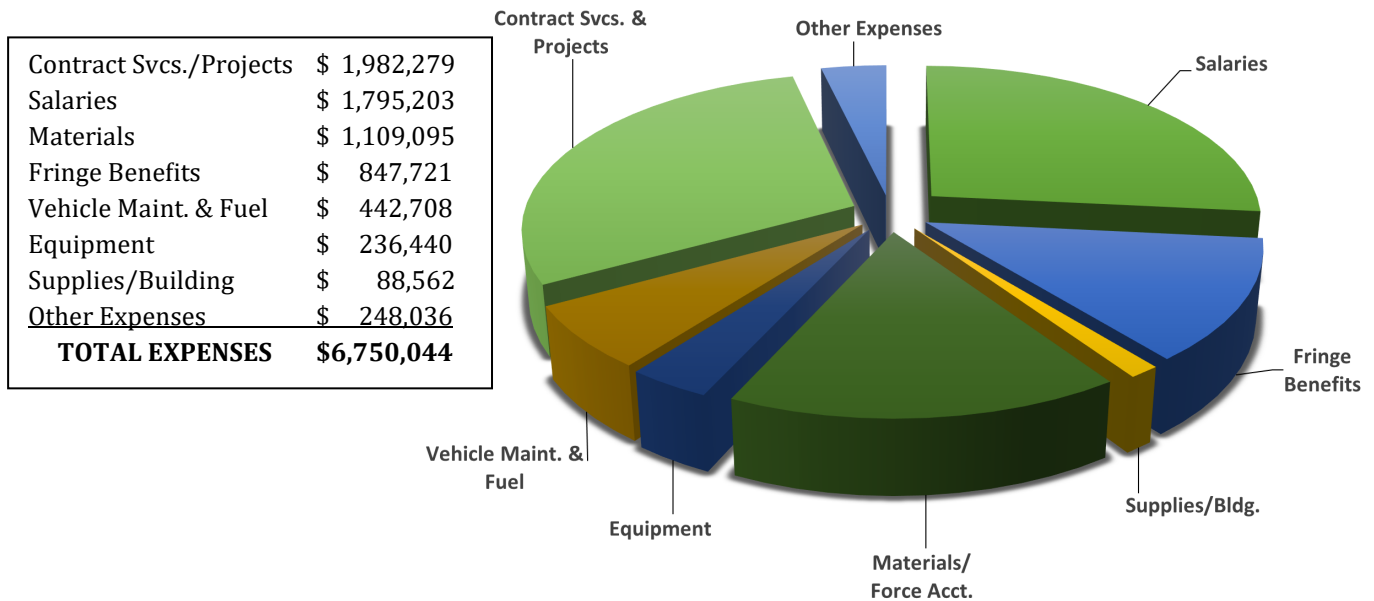
| | |
|----------------------|-------------|
| Total Area: | 530 sq. mi. |
| Population: | 62,721 |
| Length County Roads: | 399.8 mi. |
| Culverts: | 2,462 |
| Bridges: | 324 |

2023 Budget by the Numbers

REVENUE

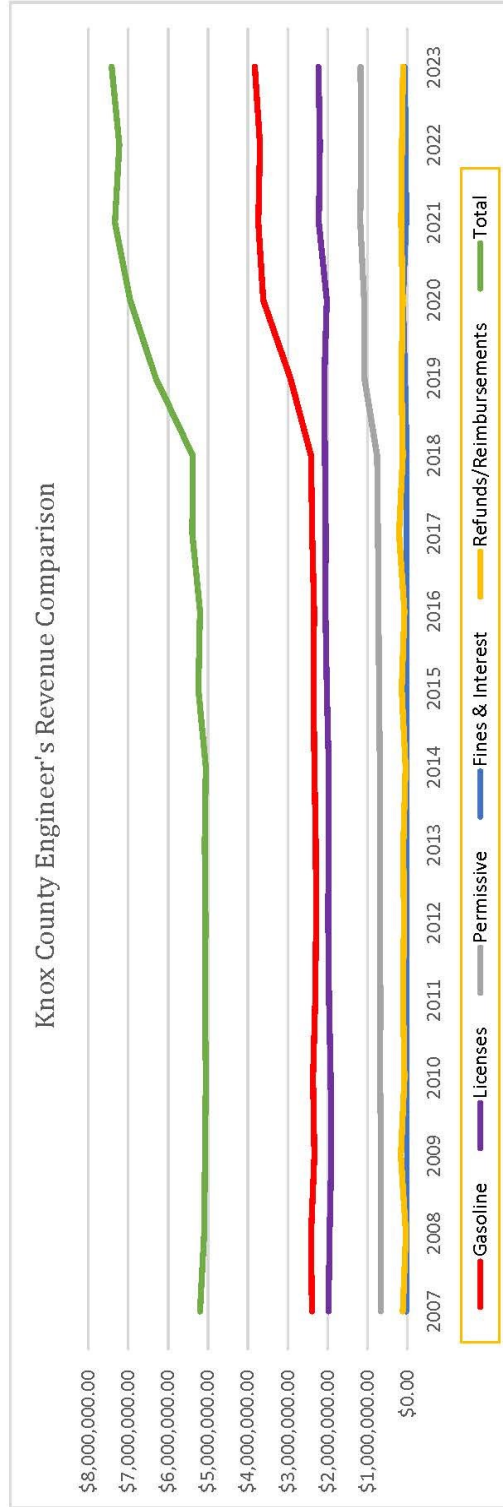


EXPENSES



2007 - 2023 Revenue Comparison

| Year | Gasoline | Licenses | Permissive | Fines & Interest | Refunds/Reimbursements | Total |
|------|----------------|----------------|----------------|------------------|------------------------|----------------|
| 2007 | \$2,396,839.15 | \$1,983,312.22 | \$667,823.37 | \$35,888.34 | \$114,508.87 | \$5,198,371.95 |
| 2008 | \$2,415,819.46 | \$1,952,686.18 | \$666,727.98 | \$25,185.94 | \$38,930.59 | \$5,099,350.15 |
| 2009 | \$2,331,702.91 | \$1,907,461.42 | \$667,334.03 | \$9,040.72 | \$164,416.66 | \$5,079,955.74 |
| 2010 | \$2,366,744.74 | \$1,925,033.35 | \$685,736.61 | \$4,490.85 | \$73,483.92 | \$5,055,489.47 |
| 2011 | \$2,310,206.90 | \$1,966,498.64 | \$680,841.33 | \$8,953.34 | \$108,490.49 | \$5,074,990.70 |
| 2012 | \$2,290,681.36 | \$1,989,453.76 | \$689,888.82 | \$7,636.86 | \$86,971.92 | \$5,064,632.72 |
| 2013 | \$2,299,886.19 | \$1,980,739.95 | \$693,164.91 | \$9,077.66 | \$100,378.10 | \$5,083,246.81 |
| 2014 | \$2,334,893.50 | \$1,970,488.72 | \$693,948.92 | \$11,233.38 | \$47,098.72 | \$5,057,663.24 |
| 2015 | \$2,356,712.91 | \$2,021,281.29 | \$712,861.93 | \$9,525.01 | \$146,285.54 | \$5,246,666.68 |
| 2016 | \$2,338,615.75 | \$2,053,057.61 | \$724,804.13 | \$10,300.28 | \$77,536.97 | \$5,204,314.74 |
| 2017 | \$2,389,284.77 | \$2,046,671.69 | \$737,877.74 | \$14,030.27 | \$210,696.88 | \$5,398,561.35 |
| 2018 | \$2,417,403.95 | \$2,069,367.51 | \$761,552.57 | \$18,446.34 | \$116,933.45 | \$5,383,703.82 |
| 2019 | \$2,939,200.28 | \$2,082,079.72 | \$1,077,412.27 | \$60,696.19 | \$151,520.91 | \$6,310,909.37 |
| 2020 | \$3,614,207.26 | \$2,024,382.21 | \$1,087,437.43 | \$112,899.55 | \$113,251.65 | \$6,952,178.10 |
| 2021 | \$3,739,694.30 | \$2,220,423.99 | \$1,182,304.68 | \$33,520.29 | \$158,788.71 | \$7,334,731.97 |
| 2022 | \$3,700,502.54 | \$2,192,121.82 | \$1,161,675.18 | \$38,734.78 | \$134,186.12 | \$7,227,220.44 |
| 2023 | \$3,827,153.05 | \$2,232,495.33 | \$1,176,094.63 | \$73,693.68 | \$108,350.02 | \$7,417,786.71 |



2023 Road Projects

Annual Resurfacing Program

The annual resurfacing program covered 14.93 miles of county highways at a cost of \$1,056,308; equating to \$70,751 per mile. The contract was awarded to Small's Asphalt Paving, Inc. and included level asphalt paving as well as chip & seal coverage.



| <u>Road Name</u> | <u>Miles</u> |
|------------------|--------------|
| Sapps Run Road | 4.68 |
| Range Line Road | 5.49 |
| Arrington Road | 4.26 |
| Hoss Road | 0.50 |

Lock Road Resurfacing (CR53)

With the assistance of funding through the County Surface Transportation Program (CSTP), the entire length of Lock Road was resurfaced (2.79 miles). At a cost of \$620,208, the mill and fill work was awarded to Kokosing Construction Co, Inc.



Annual Roadside Mowing Program

The Knox County Engineer currently subcontracts the roadside mowing operation. Quick Mow, Inc. from Millersburg, Ohio, was awarded the contract and mowed 400 miles of roadway on three separate occasions (Ohio Revised Code 5579.04). The cost of mowing was \$112 per mile, or \$134,944 annually. County highway crews mowed back intersections and used boom mowers to assist in roadside clearing.

Asphalt Patching and Repairs

Internally, our highway crews patch and repair county roadways year-round. In the winter months, cold mix asphalt is used until the hot mix plants open seasonally. Patching material costs were as follows:

| | |
|------------------|-------------------|
| Hot mix asphalt | \$ 377,578 |
| Cold mix asphalt | \$ 27,632 |
| Total | \$ 405,210 |

2023 Road Projects

(continued)

Beckley Road ROW/Bridge Clearing (TR401)

Extensive tree removal and land clearing was completed within the right-of-way in the area of Beckley Road Bridge to prepare for bridge replacement scheduled in the spring of 2024.



Fredericktown-Amity Road Resurfacing (CR14)

Funded through the Ohio Public Works Commission (OPWC) at a cost of \$884,880. A total length of 10.10 miles of mill and fill work was awarded to Small's Asphalt Paving, Inc. Completed in August 2023, the entire length of Fredericktown-Amity Road was resurfaced between the Village of Fredericktown and Wooster Road.



2023 Bridge Projects

Coffing Road (TR402) Bridge Replacement

Contractor: Crawford Construction Co., Inc

Bridge Type: Single span composite prestressed concrete box beam bridge with concrete deck

Cost: \$ 607,916

Funding: Local Bridge Replacement (LBR)



Historical Bridge Conditions

| 2023 | Good | Fair | Poor | Critical | Total |
|-------------|--------------|--------------|-------------|-----------|-------|
| | 166 51.2% | 122 37.7% | 34 10.5% | 2 0.6% | 324 |
| 2022 | Good | Fair | Poor | Critical | Total |
| | 164 50.6% | 119 36.8% | 39 12.0% | 2 0.6% | 324 |
| 2021 | Good | Fair | Poor | Critical | Total |
| | 162 49.7% | 118 36.2% | 44 13.5% | 2 0.6% | 326 |
| 2020 | Good | Fair | Poor | Critical | Total |
| | 158 48.8% | 120 37.0% | 44 13.6% | 2 0.6% | 324 |
| 2019 | Good | Fair | Poor | Critical | Total |
| | 145 44.6% | 124 38.2% | 52 16.0% | 4 1.2% | 325 |

2023 Bridge Projects

(continued)

Box Culvert Replacements:

3 concrete box structure installations, totaling \$319,452:

Glen Road

Crooked Street

Vincent Road

Vincent Road (CR46) - Bridge Rebuild



Glen Road (TR257) - Box Culvert



Equipment Purchases

2023 Chevrolet Silverado 3500
Bridge Crew Utility
Purchased: October 2023
Price: \$67,000



2023 Eager Beaver 20XPT
20T Tag Trailer
Purchased: May 2023
Price: \$34,200

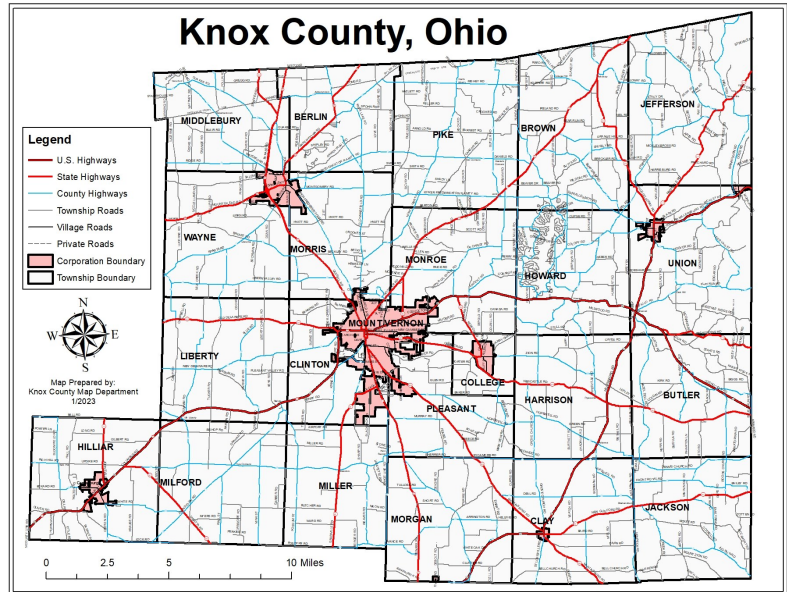
2023 Superior Broom DT74F
Broom Tractor
Purchased: February 2023
Price: \$80,700



Tax Map Report

The Knox County Tax Map Office is under the direction of the Knox County Engineer. The Tax Map Office is responsible for legal descriptions of properties, the county GIS database, boundary survey verification, parcel ownership information, custom mapping, and the assignment of property addresses.

Map Sales: \$ 1,781
Deed Transfers: 2,895
Address assignments: 189
Boundary surveys: 291



Winter Recap

The Knox County Engineer participated in the ODOT Rock Salt Winter Competitive Bid for the 2022-2023 season, purchasing all salt material from Cargill, Inc. The salt price was \$56.21/ton (a \$0.34 increase from the previous season).

County Highway crews were constantly assessing road conditions and determining the best materials to use on our roadways. The material used depends on the precipitation, road conditions, and temperature; our options are salted grits (9's), straight salt, or a 70/30 (9's/salt) mixture.

Last years' winter season was well below average for Knox County. Our crews used 1,215 tons of salt and 959 tons of salted grits.

We ended the winter with the salt storage buildings stocked full. The 2023-2024 state bid for salt was awarded to Cargill, Inc., with a price increase of \$3.06/ton (a 5.45% increase from the prior year) for a cost of \$59.27/ton.

2023 Notable Events

David Chopson Retirement

The most famed employee of the Knox County Highway Department retired in October. David Chopson served our department faithfully for 31 years. In 1992, we collaborated with the Knox County Board of Developmental Disabilities to find an employee to assist with daily cleaning and maintenance, thankfully this meeting introduced us to each other. Dave maintained order and cleanliness of the the Knox County Highway Garage. He was notorious for his comradery and humor with all his co-workers, and of course his famous “one liners”. Dave was an integral part of our organization and we honor his service.



Flexible Pavements of Ohio Award

The Knox County Engineer was presented the *Quality Award for Asphalt Paving 2023*. In coordination with Kokosing Construction Company, Inc. (paving contractor), the award was received for achieving the highest Quality in Asphalt Paving as exhibited by superior workmanship and riding quality for the resurfacing of Lock Road (CR53).

Centerburg Elementary Schools - Career Day



Knox County Engineer, Cameron Keaton (right) and Deputy Engineer, Clint Cochran (left) had the pleasure of presenting the engineering and surveying profession during Career Day to second graders of Centerburg Elementary School.

Knox County Engineer
2024 Upcoming Projects

Krause Road Bridge Replacement (TR112) - \$825,476. Design Build. 100% funded through Bridge Formula Program. Construction to begin in March 2024. Contracts awarded to V.O. Menuez & Son, Inc., and Engineering Associates Inc.

Beckley Road Bridge Replacement (TR401) - \$2,116,378. LBR Funds 95%, Local Funds 5%. Construction to begin in the spring of 2024. Contract awarded to Rietschlin Construction, Inc.

Danville Amity Road (CR14) Phase I - \$2,918,405. 100% funded through ODOT Safety Funds & Ohio Public Works Commission (OPWC). Construction to begin in March 2024. Contracts awarded to Law General Contracting, Inc., and MS Consultants.

Annual Resurfacing - 100% Local funds.

Chapel Road (CR16) - \$481,477

New Delaware Road (CR2) - \$528,826

Box Culvert Projects - 100% Local funds

Grove Church Road (CR31) Box Culvert - \$48,000

Johnstown Road (CR19) Box Culvert - \$49,000

Chapel Road (CR16) Box Culvert - \$62,000

Mowery Road (TR214) Box Culvert - \$48,000

Yankee Street (TR371) Box Culvert - \$55,000

College Hill Road (TR307) Box Culvert - \$50,000

Total Construction Cost of 2024 Projects: \$7,182,532