

KNOX COUNTY ENGINEER

2024 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.

I can report to the Knox County Board of Commissioners and the residents of Knox County, that as each year passes and we reflect on the work which was accomplished during the past year... we are making progress. We work to develop a five-year plan for the road and bridge infrastructure of Knox County and do our best to accomplish our goals for each year.

Maintaining 400 centerline miles of roadway which includes approximately 20 miles of gravel roadway is daunting in and of itself. Additionally, our crews maintain and inspect approximately 326 bridges on county and township roadways. I am fortunate to have a dedicated staff that works diligently and continually to make progress. I appreciate my employees and the sacrifices they make when weather-related events keep them at work (especially snow season). I thank them for keeping the roadways and bridges of Knox County in safe condition for the traveling public.

Each year we strive to balance work and finances between roads and bridges. Funding for the maintenance and repair of the county road and bridge network comes primarily from gas tax and license plate fees. Property taxes, sales tax and other Knox County general revenue funds are not used for the upkeep of roads and bridges or for the purchase of equipment and maintenance of buildings. The list of projects always outweighs the availability of funds to complete the work.

To connect the gap between normal revenue received and the needs of projects, we must utilize several competitive grants. Since the year 2016 the Knox County Engineers Office has been successful in securing over \$18 million in state and federal grants. We will continue to aggressively pursue the grants as they are available, but it is never guaranteed when you have to compete against other local agencies seeking the same pot of money.

This report covers the activities of the Knox County Engineers Office, the Knox County Highway Department, and the Knox County Tax Map Office. Thank you for your support in what we do and the people that make it happen.

Sincerely,



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



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Knox County Engineer & Highway Department

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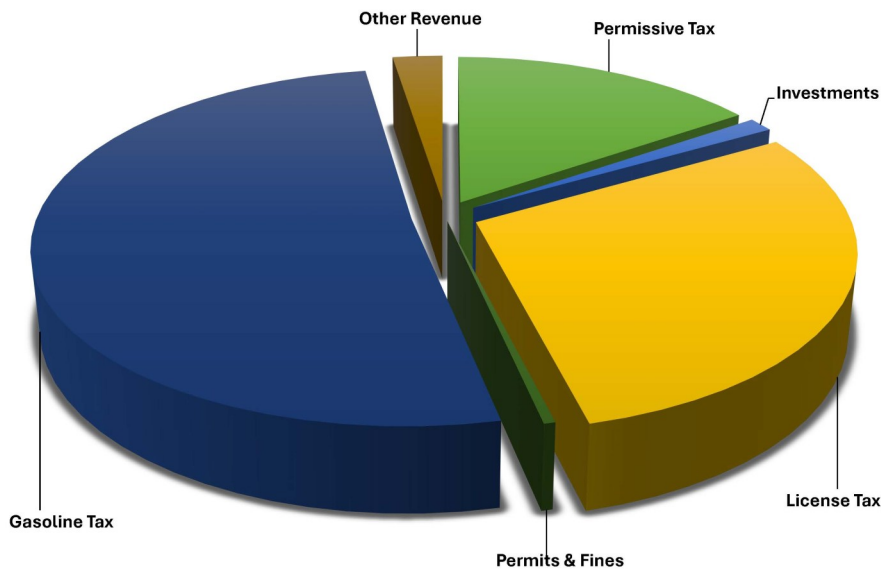
www.co.knox.oh.us/engineer/



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

2024 Budget by the Numbers

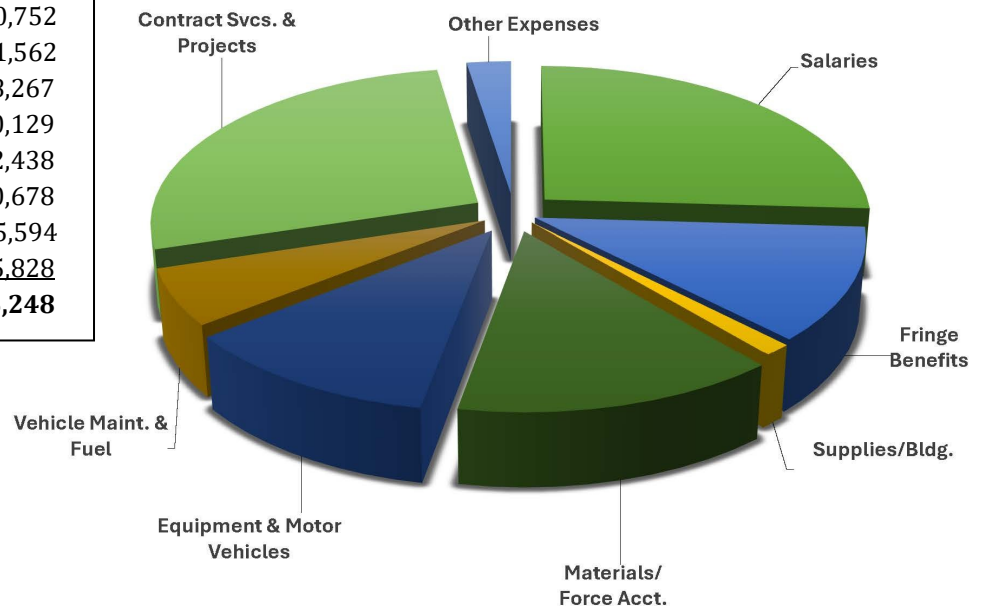
REVENUE



Gasoline Tax	\$ 3,871,745
License Tax	\$ 2,233,503
Permissive Tax	\$ 1,174,338
Investments	\$ 97,910
Permits & Fines	\$ 32,685
Other Revenue	\$ 190,646
TOTAL REVENUE	\$ 7,600,827

EXPENSES

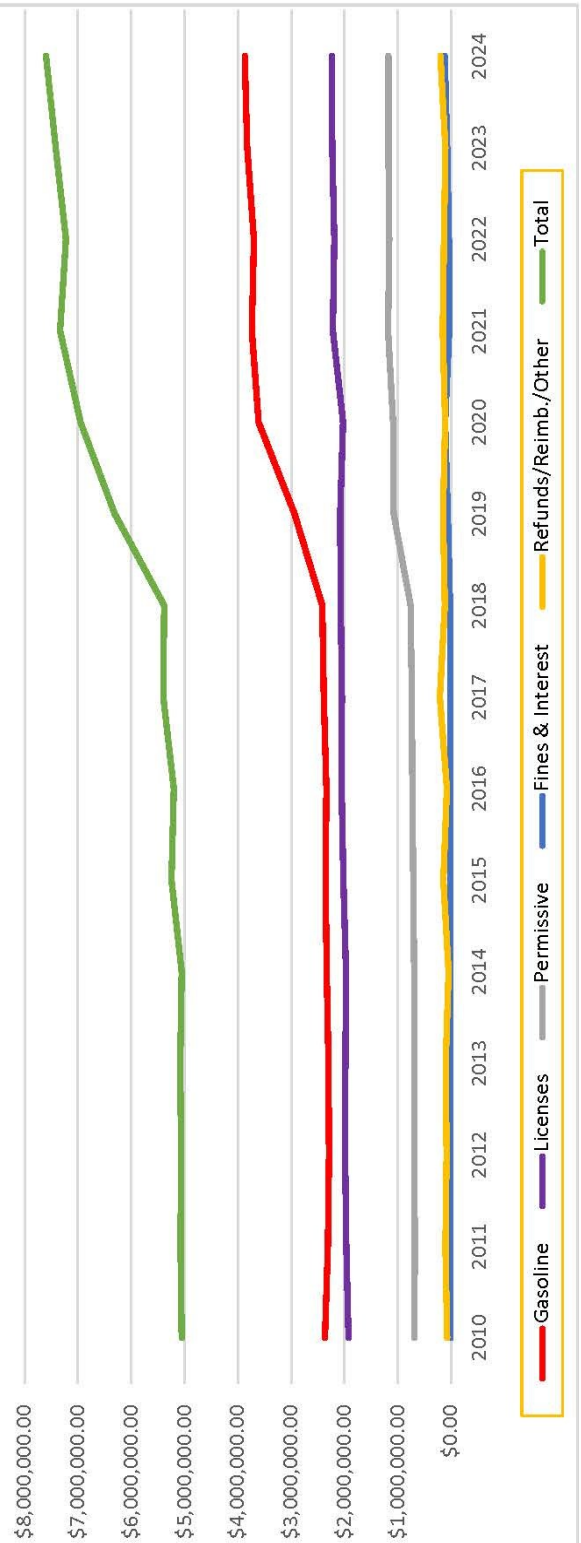
Contract Svcs./Projects	\$ 1,930,752
Salaries	\$ 1,891,562
Materials	\$ 988,267
Fringe Benefits	\$ 830,129
Vehicle Maint. & Fuel	\$ 412,438
Equipment	\$ 810,678
Supplies/Building	\$ 85,594
Other Expenses	\$ 175,828
TOTAL EXPENSES	\$7,065,248



2010 - 2024 Revenue Comparison

Year	Gasoline	Licenses	Permissive	Fines & Interest	Refunds/Reimb./Other	Total
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
2024	\$3,871,744.51	\$2,233,502.79	\$1,174,338.29	\$119,934.75	\$201,306.13	\$7,600,826.47

Knox County Engineer's Revenue Comparison



2024 Road Projects

Annual Resurfacing Program

The annual resurfacing program covered 14.50 miles of county highways at a cost of \$919,780, equating to \$63,433 per mile. The contract was awarded to Small's Asphalt Paving, Inc. and included an asphalt leveling course, chip & seal, and berming.



<u>Road Name</u>	<u>Miles</u>
Chapel Road (CR16)	6.91
New Delaware Road (CR2)	7.59

Annual Roadside Mowing Program

The Knox County Engineer subcontracted the 2024 roadside mowing duties to Quick Mow, Inc. from Millersburg, Ohio. Quick Mow, Inc. mowed 400 miles of roadway on three separate occasions (Ohio Revised Code 5579.04). The cost of mowing was \$112 per mile (\$134,944 annually). In between the contracted mows, county highway crews assisted in keeping road-side vegetation clear during the growing seasons.

Asphalt Patching and Repairs

Knox County Highway crews patch and repair county roadways year-round. In the winter months, cold mix asphalt is used prior to the seasonal readiness of the hot mix materials. Patching material costs were as follows:

Hot mix asphalt	\$ 298,304
Cold mix asphalt	<u>\$ 22,669</u>
Total	\$ 320,973

2024 Road Projects

(continued)

Danville-Amity (CR14) Phase I Safety Improvements

The contracted cost of this project was \$3,121,503; being fully funded at 62% through ODOT Safety Funds 38% Ohio Public Works Commission. The contract was awarded to Law General Contracting, Inc., St. Louisville, Ohio. It was an extensive project consisting of 2.62 miles of roadway widening, right of way work, road resurfacing and safety features (guardrail, striping, and rumble stripes). Construction began in the spring of 2024 and is anticipated to be completed early spring of 2025.



2024 Bridge Projects

Beckley Road (TR401) Bridge Replacement

Contractor: Rietschlin Construction, Inc.

Bridge Type: 165' Three-span steel beam bridge with an integral concrete deck

Cost: \$ 2,273,202

Funding: Local Bridge Replacement (LBR) funds 95%, Local funds 5%



Krause Road (TR112) Bridge Replacement

Contractor: V.O. Menuoz & Son, Inc.

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

Cost: \$ 846,735

Funding: Fully funded through Bridge Formula Program



2024 Bridge Projects

(continued)

Box Culvert Replacements:

Knox County Highway crews completed six (6) concrete box installations. Mack Industries was awarded the contract to provide the structures.

Chapel Road	\$ 158,700
College Hill Road	\$ 81,090
Grove Church Road	\$ 108,710
Johnstown Road	\$ 104,016
Mowery Road	\$ 104,530
Yankee Street	\$ 118,489



Historical Bridge Conditions

2024	Good	Fair	Poor	Critical	Total
	171	124	26	2	323
	53.0%	38.4%	8.0%	0.6%	
2023	Good	Fair	Poor	Critical	Total
	166	122	34	2	324
	51.2%	37.7%	10.5%	0.6%	
2022	Good	Fair	Poor	Critical	Total
	164	119	39	2	324
	50.6%	36.8%	12.0%	0.6%	
2021	Good	Fair	Poor	Critical	Total
	162	118	44	2	326
	49.7%	36.2%	13.5%	0.6%	
2020	Good	Fair	Poor	Critical	Total
	158	120	44	2	324
	48.8%	37.0%	13.6%	0.6%	

Equipment Purchases

2025 Western Star 47X

Tandem Dump Trucks

Purchased: August 2024

Price: \$267,524

Quantity: 2



2024 Chevrolet Silverado 3500

Superintendant Truck

Purchased: August 2024

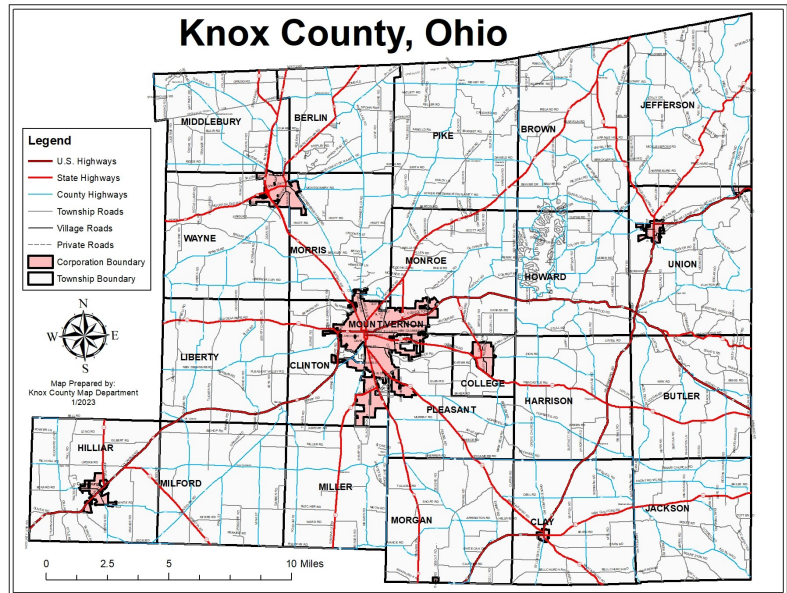
Price: \$65,486

Quantity: 1

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:	\$ 1,890
Deed Transfers:	3,588
Address Assignments:	255
Boundary Surveys:	261



Winter Recap

The Knox County Engineer participated in the ODOT Rock Salt Winter Competitive Bid for the 2023-2024 season, purchasing all salt material from Cargill, Inc. The salt price was \$59.27/ton (a \$3.06 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 above average for Knox County; the quantity of freezing precipitation events was higher than normal with average snow fall amounts. Our crews used a total of 4,393 tons of salt in different mixture combinations.

The 2024-2025 state bid for salt was awarded to Cargill, Inc., with a price decrease of \$0.30/ton (or 0.51% lower than the prior year) for a cost of \$58.97/ton.

2024 Notable Events

Greenville Treaty Line Historical Monuments



The 1795 Greenville Treaty line runs along the northern edge of Knox County, marking a boundary between the United States and Native American lands. To preserve and indicate the boundary, several county engineers worked to re-survey the historic Greenville Treaty Line. In November 2024, Knox, Ashland, Richland, and Holmes County Engineers joined forces with other state and private entities to physically place monuments along the frontier.

Emergency Backup Generator

The Knox County Commissioners generously funded an emergency back-up generator to power our entire facility during outages. Previously, we had a pre-owned generator that supplied electricity to a very limited area of the Knox County Highway building, so this upgrade was much needed and much appreciated. In the event of a power outage we are now fully functional, including both the Knox County Highway and Knox County Engineer buildings. Design Engineering services were contracted to Kramer Engineers, while the mechanical unit installation was contracted to by Beck Electric, for a total cost of \$130,841.



2025 Upcoming Projects

Pleasant Valley Road Bridge Replacement (TR362) - \$1,036,440. LBR Funds 95%, Local Funds 5%. Construction to begin in the spring of 2025. Bid opening scheduled for February 20, 2025.

Howard-Danville Road Bridge Replacement (CR9) - \$1,147,242. LBR Funds 95%, Local Funds 5%. Construction to begin in the spring of 2025.

Danville Amity Road (CR14) Phase II - \$3,596,850. 80% funded through CEAO Safety Funds 20% Local Funds. Construction to begin in the spring of 2025.

Mishey Road (CR55) Resurfacing - \$865,080. Ohio Public Works Commission funds 74%, Local Funds 26%. Construction to begin late summer 2025.

Annual Resurfacing - 100% Local funds.

Asphalt Level & Chip, Seal & Berm (total 25.29 miles)

Big Run Road (CR54) - \$142,366

Murray Road (CR64) - \$147,067

McLarnan Road (CR32) - \$273,317

Ridge Road (CR47) - \$251,827

Blue Road (CR50) - \$130,950

Fairview Road (CR50) - \$160,498

Ravin Road (CR75) - \$70,512

Mickley Road (CR88) - \$143,709

Flat Run Road (CR40) - \$378,077

Chip & Seal (total 20.95 miles)

Butler Road (CR65) - \$107,750

Pipesville Road (CR35) - \$107,750

Wally Road (CR78) - \$103,500

Sycamore Road (CR27) - \$204,750

Total Construction Cost of 2024 Projects - \$8,867,685