

## Funding Sources

The primary source of funding for County roads and bridges is generated from gas tax and license plate fees. Muskingum County has 528 miles of roadway (most in the state) and 400 bridges, (about 14th highest in the state), which is one of the largest infrastructures to maintain by any county in Ohio, yet our annual budget is not reflective of that. The percentage of gas taxes collected that are distributed to counties is divided equally between all 88 counties. The difference in annual budget from county to county is the license plate fees. These fees are directly proportional to the population of the county. Muskingum County only has about 86,000 residents, thus the revenue from our license fees are much less than counties with larger populations.

### The effects of better fuel efficiency

While this system has worked for many years, most vehicles are becoming more fuel efficient, thus getting better gas mileage and reducing fuel consumption and the introduction of electric vehicles which don't require any gas at all. While the reduction in fuel consumption is great for reducing harmful emissions, it means fewer dollars for roadway improvements and an uneven distribution of funding roadway improvements by Ohio drivers. Fuel consumption is expected to drop 40 percent through 2040 while electric vehicle adoption by Ohioans is expected to increase to 30 percent. Currently a higher registration fee is imposed on electric and hybrid vehicles to help offset their lower use of gasoline but this does not address the declining gas consumption due to better fuel efficiency.

## Muskingum County Statics

- Population 86,000
- 670 Sq. Miles
- 528 Miles of County Maintained Roadway
  - More than all other counties in the state of Ohio
  - 200 Miles more than the average county mileage
- 400 County Maintained Bridges
  - 14th highest amount of bridges by county in the state
  - 100 more bridges to maintain than the average county

### The effects of inflation

Construction costs to maintain and improve our roads and bridges have dramatically increased over the past several years. The inflationary increases of up to 47 percent in material costs directly impact our maintenance and improvement costs. With this increased cost and a decrease in fuel consumption, it is becoming more difficult to maintain our current infrastructure and nearly impossible to make improvements within our budget.

### Additional License Fees

In order for counties, such as Muskingum, to keep pace with inflation and properly maintain their infrastructure, Ohio law provides the ability to increase annual local motor vehicle license fees. These fees are added to vehicle registrations within the county and all of the funds generated stay in Muskingum County.

## Examples of Cost Increases due to Inflation 2021-2023

### Asphalt Paving

	2021 Cost	Per Ton	2023 Cost	Per Ton	Per Ton Increase	Percent Increase	Annual Qty (Tons)	Budget Impact
		\$70.00		\$103.00	\$33.00	47%	20,000	\$660,000.00

### Chip/Seal - Coldmix Emulsion

	2021 Cost	Per Gal	2023 Cost	Per Gal	Per Gal Increase	Percent Increase	Annual Qty (Gals)	Budget Impact
Chip/Seal	\$1.94		\$2.45		\$0.51	26%	182,000	\$92,820.00
Coldmix	\$2.14		\$2.80		\$0.66	31%	105,000	\$69,300.00
							Emulsion Total	\$162,120.00

### Concrete - bridges/culverts

	2021 Avg	2023 Avg	Per CY Increase	Percent Increase	Annual CY Qty	Budget Impact
	Cost Per CY	Cost Per CY				
	\$127.00	\$185.00	\$58.00	46%	1,000	\$58,000.00

**Total Impact from Inflation for these products**  
**% of Budget Impacted by Inflation\***

**\$880,120.00**  
**12%**

**25 miles of roads were paved in 2021, while 18 miles are scheduled for 2023. 12 miles are projected to be paved in 2024 due to inflationary costs.**

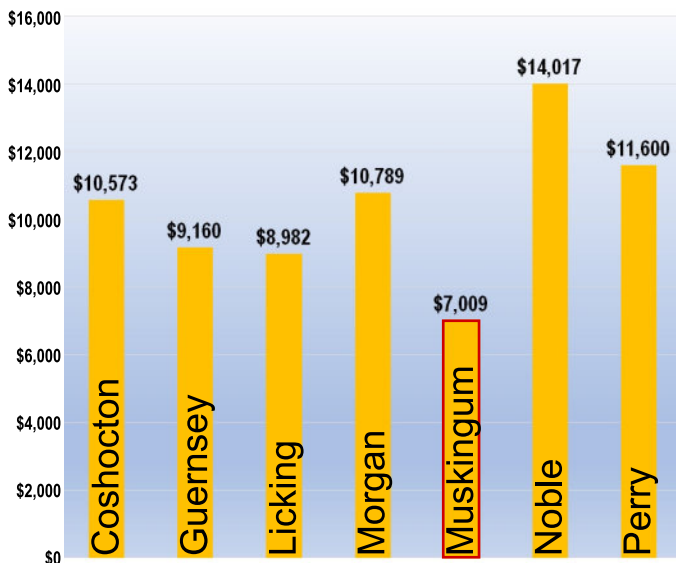
\*Note - This percentage does not include other price increases such as steel, vehicles, equipment, wages, stone, etc.

## Existing Gas Tax Revenue

Since the gas tax revenues are distributed equally among the 88 counties, Muskingum County gets less money to spend per mile of roadway because of our large number of road miles. The average county in Ohio has 200 less miles of roads to maintain than Muskingum County. That means our county has 200 more miles of paving, patching, ditching, mowing, signs, snow plowing, berming, culverts, tree trimming, etc. than the average county. The charts below show how surrounding counties with less road miles have more money from gas tax revenue to spend on maintaining their roadway per mile than our county.

County	County Road Miles	Gas Tax Revenue 2022	\$'s per mile
Coshocton	350	\$3,700,503	\$10,573
Guernsey	404	\$3,700,503	\$9,160
Licking	412	\$3,700,503	\$8,982
Morgan	343	\$3,700,503	\$10,789
Muskingum	528	\$3,700,503	\$7,009
Noble	264	\$3,700,503	\$14,017
Perry	319	\$3,700,503	\$11,600

Surrounding Counties - Gas Tax Revenue by Road Mile



## Supplemental County Motor Vehicle License Fee Options For Muskingum County

Muskingum County has three (3) additional supplemental Motor Vehicle license fee options available. These are \$5.00 fees placed on licenses for each vehicle registered within the county, which would total \$15.00 per vehicle if all of the fees were implemented. The county currently has one \$5.00 permissive license fee, which was enacted in 1968 when the opportunity was first made available to counties in Ohio.

ORC 4504.15 & ORC 4504.16 - \$5.00 each must be enacted in sequence. ORC 4504.15 has to be enacted prior to ORC 4504.16. These two fees provide 30% of the revenues generated to be provided to the township in which the vehicle is registered. The county then collects the remaining 70% of the revenue generated in each township. With ORC 4504.15, The county also receives 50% of the license fees collected in municipalities (City of Zanesville and villages), if the municipality has not already enacted their own permissive license fee. Currently, 5 villages have enacted the \$5.00 license fee and, therefore, the county would receive no fee funds from these villages. With 4504.16, the county receives 100% of the funds from municipalities who have not enacted their own second \$5.00 license fee. Currently, only 3 villages have the second \$5.00 fee in place.

ORC 4504.24 third \$5.00 fee. This supplemental \$5.00 fee is a county fee only and 100% of the revenue from the townships and municipalities is received by the county. There are no restrictions on this fee. It can be enacted by itself or with the other supplemental fees. The other \$5.00 fees do not have to be implemented before this can be placed on registered vehicles.

The ORC has the same process for enacting any of the supplemental license fees. The board of commissioners are required to hold two (2) public hearings, which are advertised in the local newspaper. Public hearings are being held at the John McIntire Library as follows:

- 1st public hearing 5:00pm, Monday, May 22, 2023
- 2nd public hearing 9:00am, Thursday, May 25, 2023

If the commissioners choose to enact the fee(s), a resolution passed by the board must be received by the Bureau of Motor Vehicle's tax distribution division by July 1st in order for the tax to be enacted the following year.

### Existing Permissive License Fee for Muskingum County

Currently, Muskingum County has a local \$5.00 permissive license fee, which was established in 1968, when Ohio law first allowed counties to raise fees for extra local funds. Consequently, the local license fees have not been increased in 55 years. Think about how much the cost of goods and services increased in over 5 decades. Imagine how difficult it is to maintain a highway system of nearly 530 miles on 1968 income.

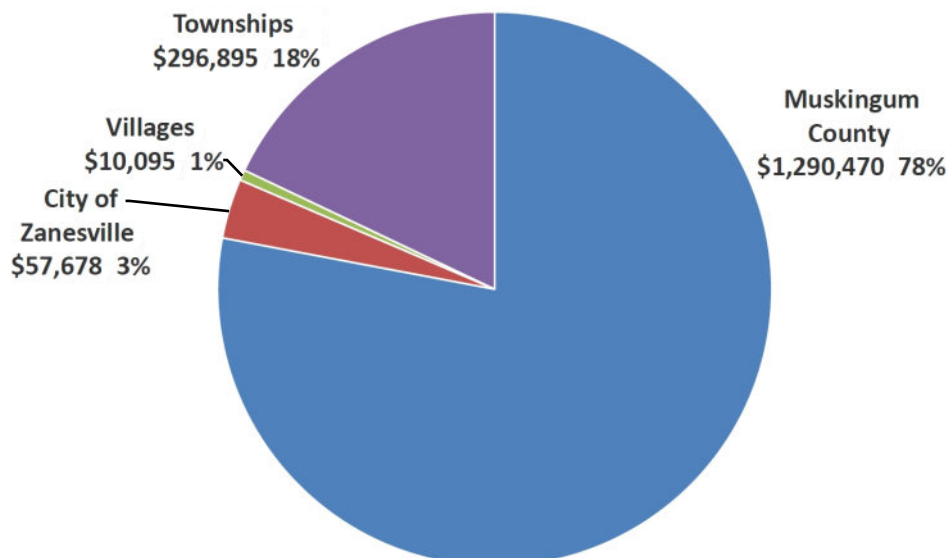
One hundred percent of the local license fees stay in Muskingum County and will be used for local road and bridge maintenance.

## Estimated Revenue for Townships, Municipalities, and Muskingum County - Supplemental Motor Vehicle License Fees

Village/City	Registrations	1st Supplemental \$5.00 fee 50% to County	1st Supplemental \$5.00 fee 50% To Village/City	2nd Supplemental \$5.00 fee 100% County	2nd Supplemental \$5.00 fee 0% To Village/City	3rd Supplemental \$5.00 fee 100% County	Village/City Total	County Total
Adamsville	153	\$382.50	\$382.50	\$765.00	\$0.00	\$765.00	\$382.50	\$1,912.50
Dresden*	1,617	\$0.00	\$0.00	\$8,085.00	\$0.00	\$8,085.00	\$0.00	\$16,170.00
Fazeysburg*	1,505	\$0.00	\$0.00	\$0.00	\$0.00	\$7,525.00	\$0.00	\$7,525.00
Fultonham	139	\$347.50	\$347.50	\$695.00	\$0.00	\$695.00	\$347.50	\$1,737.50
Gratiot*	89	\$0.00	\$0.00	\$0.00	\$0.00	\$445.00	\$0.00	\$445.00
New Concord	1,401	\$3,502.50	\$3,502.50	\$7,005.00	\$0.00	\$7,005.00	\$3,502.50	\$17,512.50
Norwich	109	\$272.50	\$272.50	\$545.00	\$0.00	\$545.00	\$272.50	\$1,362.50
Philo*	748	\$0.00	\$0.00	\$3,740.00	\$0.00	\$3,740.00	\$0.00	\$7,480.00
Roseville*	700	\$0.00	\$0.00	\$0.00	\$0.00	\$3,500.00	\$0.00	\$3,500.00
South Zanesville	2,236	\$5,590.00	\$5,590.00	\$11,180.00	\$0.00	\$11,180.00	\$5,590.00	\$27,950.00
Zanesville	23,071	\$57,677.50	\$57,677.50	\$115,355.00	\$0.00	\$115,355.00	\$57,677.50	\$288,387.50
<b>City/Village Total</b>	<b>31,768</b>	<b>\$67,772.50</b>	<b>\$67,772.50</b>	<b>\$147,370.00</b>		<b>\$158,840.00</b>	<b>\$67,772.50</b>	<b>\$373,982.50</b>

\*Village has local tax, which restricts collection of county fees

Township	Registrations	1st Supplemental \$5.00 fee 70% to County	1st Supplemental \$5.00 fee 30% to Twp	2nd Supplemental \$5.00 fee 70% to County	2nd Supplemental \$5.00 fee 30% to Twp	3rd Supplemental \$5.00 fee 100% County	Township Total	County Total
Adams	693	\$2,425.50	\$1,039.50	\$2,425.50	\$1,039.50	\$3,465.00	\$2,079.00	\$8,316.00
Blue Rock	1,080	\$3,780.00	\$1,620.00	\$3,780.00	\$1,620.00	\$5,400.00	\$3,240.00	\$12,960.00
Brush Creek	1,725	\$6,037.50	\$2,587.50	\$6,037.50	\$2,587.50	\$8,625.00	\$5,175.00	\$20,700.00
Cass	2,451	\$8,578.50	\$3,676.50	\$8,578.50	\$3,676.50	\$12,255.00	\$7,353.00	\$29,412.00
Clay	480	\$1,680.00	\$720.00	\$1,680.00	\$720.00	\$2,400.00	\$1,440.00	\$5,760.00
Falls	11,323	\$39,630.50	\$16,984.50	\$39,630.50	\$16,984.50	\$56,615.00	\$33,969.00	\$135,876.00
Harrison	1,411	\$4,938.50	\$2,116.50	\$4,938.50	\$2,116.50	\$7,055.00	\$4,233.00	\$16,932.00
Highland	1,303	\$4,560.50	\$1,954.50	\$4,560.50	\$1,954.50	\$6,515.00	\$3,909.00	\$15,636.00
Hopewell	4,827	\$16,894.50	\$7,240.50	\$16,894.50	\$7,240.50	\$24,135.00	\$14,481.00	\$57,924.00
Jackson	1,892	\$6,622.00	\$2,838.00	\$6,622.00	\$2,838.00	\$9,460.00	\$5,676.00	\$22,704.00
Jefferson	517	\$1,809.50	\$775.50	\$1,809.50	\$775.50	\$2,585.00	\$1,551.00	\$6,204.00
Licking	3,549	\$12,421.50	\$5,323.50	\$12,421.50	\$5,323.50	\$17,745.00	\$10,647.00	\$42,588.00
Madison	721	\$2,523.50	\$1,081.50	\$2,523.50	\$1,081.50	\$3,605.00	\$2,163.00	\$8,652.00
Meigs	346	\$1,211.00	\$519.00	\$1,211.00	\$519.00	\$1,730.00	\$1,038.00	\$4,152.00
Monroe	707	\$2,474.50	\$1,060.50	\$2,474.50	\$1,060.50	\$3,535.00	\$2,121.00	\$8,484.00
Muskingum	6,147	\$21,514.50	\$9,220.50	\$21,514.50	\$9,220.50	\$30,735.00	\$18,441.00	\$73,764.00
Newton	7,274	\$25,459.00	\$10,911.00	\$25,459.00	\$10,911.00	\$36,370.00	\$21,822.00	\$87,288.00
Perry	4,099	\$14,346.50	\$6,148.50	\$14,346.50	\$6,148.50	\$20,495.00	\$12,297.00	\$49,188.00
Rich Hill	790	\$2,765.00	\$1,185.00	\$2,765.00	\$1,185.00	\$3,950.00	\$2,370.00	\$9,480.00
Salem	1,222	\$4,277.00	\$1,833.00	\$4,277.00	\$1,833.00	\$6,110.00	\$3,666.00	\$14,664.00
Salt Creek	1,573	\$5,505.50	\$2,359.50	\$5,505.50	\$2,359.50	\$7,865.00	\$4,719.00	\$18,876.00
Springfield	5,546	\$19,411.00	\$8,319.00	\$19,411.00	\$8,319.00	\$27,730.00	\$16,638.00	\$66,552.00
Union	2,799	\$9,796.50	\$4,198.50	\$9,796.50	\$4,198.50	\$13,995.00	\$8,397.00	\$33,588.00
Washington	6,219	\$21,766.50	\$9,328.50	\$21,766.50	\$9,328.50	\$31,095.00	\$18,657.00	\$74,628.00
Wayne	7,680	\$26,880.00	\$11,520.00	\$26,880.00	\$11,520.00	\$38,400.00	\$23,040.00	\$92,160.00
<b>Township Total</b>	<b>76,374</b>	<b>\$267,309.00</b>	<b>\$114,561.00</b>	<b>\$267,309.00</b>	<b>\$114,561.00</b>	<b>\$381,870.00</b>	<b>\$229,122.00</b>	<b>\$916,488.00</b>
<b>Grand Total</b>		<b>\$335,081.50</b>	<b>\$182,333.50</b>	<b>\$414,679.00</b>	<b>\$114,561.00</b>	<b>\$540,710.00</b>	<b>\$296,894.50</b>	<b>\$1,290,470.50</b>





## Bridge Management in Muskingum County

The Engineer's Office maintains all bridges on county and township roads with a 10' or longer span. With 400 bridges to maintain in Muskingum County and a small budget our office learned how to stretch a dollar as follows:

- County staff designs most of the new bridges and major rehabilitations instead of contracting the work to consultants.
- County staff performs the required yearly inspections instead of contracting the work to consultants.
- County bridge crews build most new bridges and major rehabilitations instead of contracting the work.
- We obtain state or federal funding for larger bridges whenever possible.
- We recycle materials to build new bridges.
- County bridge crews build our own concrete bridge beams and abutments at our facility.

The staff has been working vigorously to improve the overall condition of the bridges in Muskingum County. Many of the bridges are deteriorating, and even some of the bridges in good shape were not designed to withstand the weight of today's vehicles or are not wide enough for higher volume of traffic. The overwhelming number of Muskingum County's bridges make it difficult to keep up on maintenance even with all of our efforts to save money.

Even with cost saving practices, the recent inflation is greatly impacting the amount of replacements and repairs of bridges we can afford to perform. Delaying maintenance or replacements due to lack of funds directly impacts the overall condition of our bridge inventory. It is becoming increasingly difficult to perform the amount of work required to keep pace with our aging infrastructure.



Concrete beams and abutments fabricated and installed by the county bridge crew - Shannon Valley Road



Recycled interstate beams and concrete abutments fabricated and installed by the county bridge crew - Chapel Hill Road



Used box culverts purchased at a reduced rate and installed by the county bridge crew - Dutch Hill Road

## Roadway Management in Muskingum County

Maintaining 528 miles of county roadway and bridges is a large operation. Below is a simplified list of what the engineer's office does to maintain its' assets, equipment and facilities required to perform duties and maintain a safe highway system.

### Improvements

Road paving and repairs  
Pavement marking  
Guardrail repair/installation  
Bridge repairs & replacements  
Crossover culverts (under roads)  
Driveway culverts  
Catch basins (for stormwater)

### Maintenance

Snow & ice removal  
Roadside mowing  
Tree trimming & removal  
Traffic signs  
Ditching  
Dead animal removal  
Chip-seal  
Pothole patching  
Grading roads & applying stone  
Shoulder/berm repairs  
Slip/slide repairs  
Erosion control for roads/bridges

### Planning/Design

In-house road/bridge design, engineering  
Surveying  
Bridge inspections  
Bridge load rating  
Road/bridge inventory management  
Right-of-way permitting, utilities, etc.  
Overweight/oversize permitting

### Facility Maintenance

Main garage and 4 outpost buildings  
Equipment storage  
Maintenance Garage  
Material storage buildings for salt, stone, sand, cinders, etc.  
Bridge fabrication shop  
Radio tower repeater  
Fueling stations at 4 locations

### Fleet Equipment/Maintenance

Service truck  
Pick-up trucks  
Weld trucks  
Dump trucks  
Snow plows  
Tractor-trailers  
Bucket truck  
Graders  
Tractors  
Mowers  
Small & large excavators  
Front end loaders  
Loader-backhoes  
Crane  
Dozer  
Roller  
Zipper  
Paver  
Hot box  
Pug mill  
Chip spreader