

Champaign County Engineer

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Champaign County Engineer 2021 Annual Report



It is with great pleasure we present the work of the Champaign County Engineer's office. Whether we are keeping the roads safe during the winter season, resurfacing or repairing deteriorated roads, replacing bridges or culverts, or working on the right of way, **the employees are very dedicated and hard-working.** We dedicated most of our hours in 2021 to the maintenance of 239 miles of roadway and the upkeep of the right of way in the form of resurfacing, mowing, snow and ice control, ditch cleaning, trash pickup, tree cutting, and road repair. 2021 we continued to deal with COVID and construction and maintenance. Supply on nearly everything has been disrupted. We are currently looking at our practice of stocking items and our equipment and vehicle purchase practices to make sure we can serve the citizens of Champaign County.

Funding for our office to accomplish our work comes from three primary sources. The first funding source comes from a portion of the state gas tax. The gas tax is a fixed amount that does not change with the fluctuating fuel price. In 2021, Champaign County received **\$3,739,694.30** from gasoline tax. The **second funding source** comes from a portion of the license plate fee. The Engineer's office received **\$1,384,049.67** last year. The **third primary source** of revenue is also based on the number of licenses issued in Champaign County, referred to as the Permissive License Fee. Municipalities, townships, and the County split the additional \$15 fee. The County's permissive share was **\$581,008.33** last year.

Additional funding sources for the County occasionally come in state and federal grants. The Engineer's office received Ohio Public Works Commission funding to pave 4.2 miles of roads in 2021, bringing nearly \$650,000 to Champaign County. Champaign County uses no **property tax or sales tax** in maintaining roads or replacing bridges in 2021. We will continue to pursue outside funding to help improve the county bridges and roads. Some of our accomplishments completed this year can be found in the following report.

Following the Ohio Revised Code, an annual report must be presented to the County Commissioners summarizing the work performed and the county infrastructure condition. Please submit any questions or comments concerning this report to our office. **We are happy to serve you.**

Sincerely,



Stephen McCall P.E., P.S.
Champaign County Engineer

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2021 Road Work

<p>2021 Road Projects</p> <p>Brush Lake road was widened and overlaid in 2021 by the Shelly Company for a bid price of \$997,297.65. The Ohio Public Works Commission paid \$648,243.47, and Champaign county paid \$349,054.18 for the project.</p> <p>The county engineer’s office bid on the 2021 Runkle road paving project paid 100% by the county. Runkle roads were paved from St. Paris Jackson to Kite road. The total project cost was \$546,084.85 and was completed by A & B Asphalt.</p> <p>A & B also widened Runkle and North Heck Hill by 2’ on each side of the road with a contract of \$180,989.18.</p> <p>Champaign County also had two inches of cold in-place asphalt constructed on North Heck Hill. Bergman Construction won the bid to install this material at the cost of \$131,428.40</p> <p>Asphalt materials provided the asphalt liquid and made the material. The total cost of the material, including the stone, was \$198,545.00.</p>	<p>2021 Resurfacing Program</p> <p>Various roads on the eastern side of the county were chip and sealed.</p> <p>Over 51 miles of County, Township, and Municipal roads were chip and sealed with HF-RS2P emulsion. We are currently on a six-year resurfacing rotation with our program and inspect the roads every two years to see if they need immediate attention.</p> <p style="text-align: center;">County Roads – 15.73 miles Township and Municipal Roads – 35.5 miles</p> <p>218,324 Gallons of HF-RS2P at \$1.85/gal 6,612 Tons of #8 Stone at \$17.14/ton avg \$ 520,078.94 Total Material Cost</p>
<p>Pavement Marking</p> <p>141 miles of road was marked with centerline and edge line with a cost of \$147,364. 10 railroad crossings, 2 crosswalks, 4 bike crossings, 5 stop bars, and 6 school zones were also painted with a cost of \$ 6,720. The total cost of pavement marking for the year was \$ 154,084.</p>	<p>Crack Sealing</p> <p>The County crack sealed Upper Valley Pike, Ward, Hanna, Kite, and portions of Dallas, Mutual Catawba, and Old Troy Pike. Clark road for Salem Township and Loveless road for Goshen Township was also crack sealed.</p>
<p>Mowing</p> <p>Two single passes and three full-width mowing passes were performed this year. The total cost for mowing was \$85,090.59</p>	<p>Road Mileage</p> <p>Current road centerline mileage for the County totals 239.146 miles. This mileage is certified and provided to the Ohio Department of Transportation.</p>

Snow and Ice Control

<p>2189 tons of salt were used to treat county and township roads through the 2020-2021 winter season. 1256 tons were used for county roads and townships, and smaller incorporated villages purchased 933 tons. Over the last fifteen years, our average has been just over 1,834 tons per year.</p>	<p>The 2021 winter salt price was \$62.99 per ton. The price was lower than the 2020s, \$67.03 per ton. We also use Beet Heet to help the salt melt snow and ice at lower temperatures and not refreeze. Using this product has helped reduce the amount of material required to melt the same amount of snow and ice at temperatures below 25° F.</p>
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2021 Bridge and Culvert Work

Our annual inspection of 214 bridges has been completed and shows that our bridges are in good shape overall. We share maintenance responsibilities with Clark County for three bridges on County Line Road and two bridges with Logan County. Currently, Champaign county has five county bridges that are posted narrow (18' to 20'). And one posted for load restrictions is posted as one lane (18' or less).

2021 Bridge Replacement and Repair	
Location	Cost
Lippincott Rehabilitation	
Church Road 34-0329 Rehabilitation	\$ 13,775.77
N. Hampton Donnelsville 22-0101 Rehabilitation	\$23,090.96
Dogleg 128-0074 Rehabilitation	\$12,376.26
Allison 171-0102 Rehabilitaion	\$22,376.26
Total	\$72,003.90

2021 Bridge Inspection		
General Appraisal	Condition	Number
9A	As-Built	79
8A	Very Good	82
7A	Good	41
6A	Satisfactory	9
5A	Fair	2
4A	Poor	1
3A	Serious	0
2A	Critical	0
Total		214

Staff and Highway Workers

Currently, the Engineer's office has eight office staff, a superintendent and four supervisors, a fleet maintenance manager and a mechanic, and 16 highway workers. The 31 employees and the County Engineer are dedicated to maintaining Champaign county's infrastructure.

2021 Culverts Replaced

Per Ohio law, any structure with a span of less than 10' is considered a culvert.

The Engineer's office replaced 19 culverts ranging from 12" to 24" in diameter. The cost of these projects totaled \$88,119.07

Mapping and Planning

The Office of Mapping and Planning continues to do a great job serving the public. The office answers several questions daily from the public in addition to their regular duties. The number of conveyances and new surveys was similar to last year. The total conveyances reviewed were 1942.

<p style="text-align: center;">2021 Permits</p> <ul style="list-style-type: none"> ➤ 41 Total Requests for Driveway Permits ➤ 18 Driveway pipes were installed ➤ 72 House numbers were issued ➤ 23 Total Utility Permits Were Issued <ul style="list-style-type: none"> 14 Issued on county roads 9 Issued on township roads 	<p style="text-align: center;">2020 Deed, Description, and Survey Reviews</p> <ul style="list-style-type: none"> ➤ 208 Surveys were approved <ul style="list-style-type: none"> 73 New splits were approved 5 New attachments were approved 4 New easements were approved 126 Retracement surveys ➤ 1942 Conveyances were reviewed <ul style="list-style-type: none"> 26 Sheriff Deeds
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Existing Fleet

The total miles driven by the 35 licensed vehicles were 267,298 miles last year. The 30 pieces of off-road construction equipment totaled 6,529 hours of usage. We have 11 tandem trucks. The average age of our tandem trucks is nine years old, with an average of 107,012 miles. Through 2021 we spent \$ 156,694 on fuel. The total maintenance cost for the entire fleet and construction equipment was \$151,039 for this year.

2020 New/Used Equipment Purchases

<p>2021 Midland Road Widener \$ 184,720</p> 	<p>2021 Paladin FFC Preparator \$8,900</p> 
<p>2021 Trail King Trailer \$26,545</p> 	

Financials

2021 Receipts			2021 Expenditures		
Gasoline Tax	\$3,739,694.30	60%	Road Projects & Maint.	\$ 2,453,727.50	41.0%
Auto License	\$1,384,049.67	22%	Payroll	\$ 1,665,803.86	27.8%
Permissive Taxes	\$ 581,008.33	9%	Employee Benefits	\$ 638,517.75	10.7%
Miscellaneous	\$ 522,206.48	8%	Equipment & Fleet	\$ 595,287.19	9.9%
Interest	\$ 32,486.97	1%	Bridge & Culvert Projects	\$ 491,839.28	8.2%
			Office & Operations	\$ 140,653.76	2.4%
Total Receipts	\$ 6,259,444.75		Total Expenditures	\$ 5,985,829.30	