

Jackson County Engineer's 2019 Annual Report

In accordance with Section 5543.02 of the Ohio Revised Code, the County Engineer must provide an annual report to the Board of County Commissioners detailing the conditions of the county roads, bridges and culverts, along with an estimate of the funds necessary to maintain, repair, and construct such infrastructure. This annual report is a summary of everything we do here at the Jackson County Engineer's Office and the Jackson County Highway Department.

2019 Revenue:

Motor Vehicle Registration Fees	26.7%	\$ 1,226,412.27
Gasoline Tax	63.9%	\$ 2,939,200.28
Fines	1.0%	\$ 47,923.92
Sales (Fuel, etc.)	0.1%	\$ 41.44
Miscellaneous (Scrap Metal, Interest on Road and Bridge Funds, ODNR, Buckeye Rural Electric, and Health Insurance Incentive, etc.)	1.0%	\$ 48,728.35
Reimbursements from grants (OPWC, CDBG, FEMA, FHWA Emergency Relief, Sign Grant, Worker's Comp, Auction, etc.)	7.3%	\$ 338,401.19
TOTAL*	100%	\$ 4,600,707.45

* An additional \$695,562.46 (T-216-0.81 Bridge), \$415,588.60 (T-384-1.33), & \$1,293,514.83 (C-76 Paving) in grant funding was paid directly to contractors.

2019 Expenditures:

Payroll	32.2%	\$ 1,459,767.45
Fringe Benefits	12.9%	\$ 584,733.81
Overhead	6.2%	\$ 279,366.69
Debt on Loans	5.3%	\$ 240,447.11
Equipment, Parts & Repairs	12.9%	\$ 585,360.65
Fuel & Oil	3.0%	\$ 135,885.93
Road Materials	15.4%	\$ 699,684.82
Road Contracts	4.6%	\$ 206,244.34
Bridge Materials	5.0%	\$ 229,092.54
Bridge Contracts & Design	2.5%	\$ 113,578.25
TOTAL*	100%	\$ 4,534,161.59

Roads:

Like 2018, 2019 also became a year in Jackson County's history that was due impart to the weather. In like years past we've strived to do our part in making Jackson County safe and great again! Our crews worked a total of 1817 combined normal and overtime hours during ice and snow removal operations. We used 4255 tons of our 50/50 mix of salt and grit mix. Due to the substantial weather conditions, we used a total of 805 tons of various patching materials to repair pot holes in our roads.

One of our goals this year was to ditch / berm and patch using our road grader, so we could shed as much water as possible from lying on our roadways and to cover lane miles. We were able to ditch / berm 144 lane miles and patch 95 lane miles using 3359 tons of hot mix asphalt. We also used our skid steer to patch 39 lane miles and used 561 tons of hot mix asphalt. Using these attachments, which were manufactured in house by our maintenance department, on our grader and skid steer allows us to control the flow and material usage more effectively. Our county crews were able to do 9 lane miles of Force Account paving, which limits us to \$30,000 per road mile for paving, using 422 tons of cold mix asphalt and 1300 tons of hot mix asphalt while using our paver. Being rewarded with a grant to allow for paving on C76 Beaver Pike was a much needed and welcoming accomplishment. In all there were 27 lane miles paved in 2019.

In 2019 we also revisited our chip and seal program as another avenue to prolong the longevity of our roads while using our county crews and equipment. This program allowed us to cover 35 lane miles. During this process we used 242 tons of #8 stone, 1462 tons of #9 stone and 46,614 gallons of an oil emulsion. These processes of patching, paving and sealing programs have allowed us to repair and or renew 196 out of 588 lane miles in Jackson County during the 2019 year.

The wet weather of 2019 also continued into the summer months as well. The wet and humid conditions really gave our vegetation the ingredients it needed to flourish. We were finally able to get an edge once the wet weather subsided. Our long reach boom mowers were able to mow back brush on 221 lane miles in the county. We also contracted out our road side mowing this year and were able to complete 4 rounds of mowing with them this year. We also utilized an herbicide spraying contractor and were able to spray 97,000 linear feet of guard rail along county roads. Our crews also installed 1626 feet of plastic and corrugated metal pipes of various diameters in 2019. Many of these locations were cross pipes under our roadways. Our sign man was able to install 499 signs. These signs were either new installs or repair / renewals due to various reasons. We also utilized our excavator and piling driver attachment on a 50' slip project.

We've had quite a busy year in our department this year. I'm extremely proud of our crews and staff, their efforts and accomplishments that have been made during 2019 for all of Jackson County. Thank You!

Andy Dickens, Road Superintendent

The county experienced another FEMA flooding event on February 6th, while still in the midst of trying to navigate FEMA's process for the 2018 event. It has been a very frustrating process.

The Jackson County Engineer's Office is responsible as an agent of the Jackson County Commissioners for monitoring the use of and coordinating the various utilities within the rights-of-way of the Jackson County Road System. The use of a permit system allows the County Engineer's Office to control the location, depth, and proximity of various utilities to the roadway pavement and roadway structures. These utilities include water, electric, phone, cable, and gas. In 2019, the Engineer's Office issued 55 permits, almost double the amount from 2018.

Ohio Revised Code 5543.16 explains a property owner's requirements for driveways. We developed a driveway permit in 2019 so we could bring more awareness to people that driveways are the property

owner’s responsibility. The permit has detailed guidance as to our requirements for installing and maintaining a proper driveway. 67 driveways permits were processed in 2019.

G.I.S./Tax Map Department:

The Engineer’s Office is responsible for maintaining up to date information on all parcels of land within the County. Our office staff works very closely with the Auditor’s Office and the Recorder’s Office. In 2019 the office reviewed and approved the content and mathematical accuracy of 220 land surveys of individual properties in accordance with Chapter 4733 of the Ohio Administrative Code. The office staff also assists the public and other governmental agencies in utilizing the records that we keep on file.

Addressing for the county is also done through the Engineer’s Office. 71 addresses were assigned in 2019.

Bridges:

The Engineer’s Office is also responsible for the maintenance and repair of 263 bridges on Jackson County Roads and Township Roads with a span length equal to ten feet and greater. All the bridges must be inspected annually and an inspection report must be submitted to the Ohio Department of Transportation (ODOT). Needed repairs and replacement projects are prioritized during these annual inspections. The condition of our bridges in 2019 was as follows with 9 being the best condition down to a 0.

9	Excellent	29
8	Very Good	45
7	Good	48
6	Satisfactory	44
5	Fair	53
4	Poor	40
3	Serious	3
2	Critical	0
1	Imminent Failure	0
0	Failed	2

Ohio law requires the county engineer to first perform a force account estimate on any bridge work to be performed. If the cost of the work on a bridge will exceed \$100,000, then the project must be bid out to a contractor. If the cost is estimated to be less than \$100,000, then the county crews can do the work themselves.

We had to close four bridges before they failed during the year, which resulted in unplanned expenses from the budget. The first was on Cherry Fork Road (C-6-1.81). We were able to add a support and stringers to re-open the bridge and I know have OPWC funding to replace the entire structure in 2020. The second was on Limerick Road (C-25-3.00). We replaced the bridge temporarily with 2~60” pipes and I now have CDBG funding to replace the bridge with a box culvert in 2021. The third was on C,H&D Road (C-2-3.89). We replaced this structure with our own steel beams and a concrete deck from Scioto Valley PreCast. The fourth was on Pyro Road (C-47-1.23). We replaced this bridge with 2~48” pipes. In all four cases the steel beam stringers failed.

We were able to replace two bridges with Ohio Public Works grant and loan funding. The first was on Spencer Road (T-216-0.81). We replaced the old truss with new abutments and a new truss bridge. The total project cost was \$695,562.46. The second was on Wellston Park Road (T-384-1.33). We rehabilitated the old truss and were able to re-use the existing abutments. The total project cost was \$415,588.60. U.S. Bridge built both of these structures for us.

C-2-3.89



T-216-0.81



T-384-1.33



Only being able to replace six to eight bridges on average a year is not enough to keep up with our failing infrastructure. We are using every possible means to stretch our valuable dollars but inevitably we will simply have roads closed for extended periods of time due to lack of funding. In 2020, the Ohio Public Works Commission (OPWC) grant and loan money will pay for the replacement or removal of four bridges: Cherry Fork Road (C-6-1.81), Antioch Road (C-12-4.20), Camba Road (C-15-1.91), and Glade Run Road (C-57-0.26). The CDBG grant will pay for a bridge replacement on No. 12 Hollow Road (T-180-0.05) and I have federal LBR funding and credit bridge funding for the replacement and road realignment at our Raysville Road truss bridge (C-29-8.73). The Ohio Bridge Partnership Program is paying for the replacement of the Roberts Road truss bridge (T-221.2.33).

The OPWC grant will also pay for paving the remaining portions of Franklin Valley Road in 2020.

Equipment:

In 2019 we were able to purchase a flail attachment for our tractor and a John Deere brush cutter tractor to assist in brush removal in right of way areas. We also added a metal cutting saw and a barrier lift attachment to our bridge department to assist in bridge construction. We purchased a new Dodge Ram pickup to replace a 2008 pickup from our fleet, and added a KM8000 asphalt reclaimer trailer to assist our road crews in patching road surfaces. We purchased a 2014 International Pro-Star Semi tractor to replace our 1985 Mack Semi tractor to assist in moving our equipment, and added a 2019 BOMAG BW141 tandem vibratory roller to assist our road crews in paving and repair of our roadways.

We started upgrading our radio system with Justin Drummond's help and will continue with this project in 2020!

I truly believe each and every one of my employees is a good steward of the public tax dollars we receive, and we strive to manage our funding as efficiently as possible while constantly exploring new and better ways of doing more with less. A huge THANK YOU goes to all of my employees for all of their long hours and hard work. We are all doing the best we can to maintain our roads and bridges with very limited funding.

Respectfully,

Melissa Miller, P.E., P.S.
Jackson County Engineer