

**OFFICE OF THE  
LOGAN COUNTY ENGINEER**

**2017 ANNUAL REPORT  
2017-2018 ROAD REVIEW**

*April 1, 2018*



*Scott C. Coleman, P.E., P.S.  
Logan County Engineer*



Bridge 174-0.56  
over the Onion Ditch



McColly Covered Bridge 13-1.56  
over the Great Miami River

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<b>EMPLOYEES OF THE LOGAN COUNTY ENGINEER'S OFFICE</b>		
<b>County Engineer</b>		
Scott C. Coleman, P.E., P.S.		
<b>Engineering Department</b>		
Michaela Brunke Donna Dahlke Cale Jacobs, P.E.	Shirley Brunke Greg Dappert Michael Kerns	Todd Bumgardner Curtis D. Dill, P.S.
<b>Map Room</b>		
Jayma Burkhammer		Suzie Cochran
<b>Highway Department</b>		
Adam Bergman Cole Craig Greg Kennaw John Spencer Todd Wisse	Richard Campbell Mark Hilty Bryan LeVan Lisa Stover TJ Yoder	Brad Carnes Kip Jenkins Joel Miracle Derek Thurman
<b>Ditch Department</b>		
Todd Coleman Greg Swonguer	Chris Hackley	Greg Miller Steve Tracey
<b>Bridge Department</b>		
Matt Archer Luke Jolliff	Andrew Farris	Elliott Fullerton Dan McMillen
<b>Traffic Department</b>		
Mark Dearwester		Steve Tracey

## Logan County Engineer's Office

April 1, 2018

To the Honorable Board of Logan County Commissioners and the Citizens of Logan County:

The following pages contain our Annual Report for 2017. On the back page, the reader will find a breakdown of the road miles, the number of bridges on our system, and the number of signs and culverts that we maintain. Also included in this report is what we accomplished in the year 2017 and what we plan to accomplish in 2018.

This year we resurfaced 23.75 miles of county highways, chip-sealed 67.25 miles of county highways, replaced/rehabilitated 2 bridges and 3 large culverts, milled and waterproofed 1 bridge, repaired 6 bridges damaged by auto accidents, and replaced 12 culverts. We assisted the Township Trustees with the resurfacing of 7.70 miles of roads, chip-sealing another 18.01 miles, and replacing 6 culverts.

After a few years of a road salt shortage, we have finally seen prices stabilize for the 2017-2018 winter season. Last winter we paid \$51.46 per ton for road salt and entered winter with a full stockpile. The road salt bid for this winter fill is \$47.12 per ton, which is nearly equal to \$47.09 per ton in 2013-2014. Due to dramatic increases in cost in the previous years, we have become more efficient and effective in how we utilize our labor and materials in clearing roadways of snow and ice. We have prewetting systems installed on all of our front line trucks to increase our available options for treating roadways. We have implemented the use of Beet Heet® sugar beet molasses for prewetting our salt at the spinner. This product increases our ability to melt ice at lower temperatures. Our overall snow and ice control costs for calendar year 2017 were \$322,507.31 and were below our average winter costs of \$369,000.

We thank the citizens of Logan County for their continued support and renewal of the 1/2% sales tax which allowed us to continue upgrading our transportation infrastructure. Sales tax revenue increased by almost 9% in 2017. Motor vehicle fuel tax revenue decreased by 2.2% and automobile registration fees increased by 0.8% in 2017. The Logan County Engineer's Office has been aggressively seeking grant funds to supplement our regular funding and sales tax funding. In 2017, we received a total of \$234,879.39 in grant funds. The grants funded sign upgrades, pavement marking, a curve study and a guardrail software module upgrade.

The 1/2% sales tax for roads and bridges generated \$3,776,849.66 in 2017. The County portion totaled \$2,137,940.51 and the Township portion totaled \$655,563.67. The total municipal sales tax collections were \$655,563.66 and is shared among Bellefontaine and the villages based on population. Total sales tax expenditures were \$1,749,039.80 for County projects and \$428,037.14 for Township projects. The County Engineer's Office expended \$7,224.03 in 2017 to develop, administer and perform inspections for the township paving and chip-sealing.

The State of Ohio began talking about shared services in the last few years to reduce costs and improve efficiencies throughout the state. At the Logan County Engineer's Office, we have been implementing shared services for many years and continue to expand them. We have performed roadside mowing, roadside spraying, sign inspections, township sign replacement, painting railroad crossing warnings, setting back mailboxes, roadside ditching, boom mowing of roadside vegetation, small paving projects, small chip seal projects, roadway shoulder stabilization, and culvert replacements for a few townships and villages. This is a mutually beneficial process where we can save the townships and villages money and offset some of our labor and equipment costs. We work with the City of Bellefontaine, villages, townships, County Commissioners, adjacent counties, and ODOT for shared services.

We have been working with our state legislators for the past several years to develop a long term funding source for Ohio's local roads and bridges. In Logan County, we have been very fortunate that the people of our community have agreed to invest in our local infrastructure in the form of a sales tax for roads and bridges. As shown above, this sales tax generates about three million dollars annually for the county, township, and municipal road and bridge system. This is a shortfall in state funding that many counties in Ohio cannot make up. Please encourage our Ohio Representatives and Senators that it is the responsibility of the State Legislature to provide adequate highway infrastructure funding for local jurisdictions. This can be accomplished with appropriate user fees, such as; commercial activity tax from motor vehicle fuel sales, motor vehicle fuel user fees, vehicle miles traveled fees, vehicle registration fees or sharing existing state highway funding.

Sincerely,

Scott C. Coleman, P.E., P.S.  
Logan County Engineer

## **The Condition of Our Highway System**

We have experienced a near normal winter as far as snow and ice control costs. Temperatures have been extremely cold early in December and through March. The extreme cold temperatures delayed our construction projects through the winter. This past year, we have seen several roads that were damaged by heavy vehicles traveling on routes that they should not be using and we continue to try to correct this behavior. We encourage our residents and neighbors to try to reduce loads or delay hauling operations during the wettest weeks of the year (generally March through May). Additionally, we ask that local industry and trucking companies utilize proper haul routes when travelling through the county. Overall, our county roads are showing above normal signs of damage through this winter.

We plan to resurface over 16.8 miles of roads this year and seal approximately 65.6 miles. In order to preserve our new pavements as long as possible, we must seal them as soon as we can after resurfacing. This year we will again be able to seal the new resurfacing within weeks after the roads are paved. Results over the past few years indicate that this process has been very cost effective and improves pavement performance. We have completed the surface course of paving on all county roads and will continue building thickness and strength with this years' resurfacing program. From 2003 through 2005, we placed only the intermediate course of pavement on many of the roads that were resurfaced. This process allowed us to repair more miles of very poor pavements each year than we could have if we had applied both courses at the same time. Since 2001 (inclusive), we have repaved over 499 centerline miles on the county highway system. We will also continue our crack sealing program to extend the service life of the roads in the county.

We continue to make strides with our bridge program. We are continuing to upgrade our overall bridge conditions with the replacement/rehabilitation of 2 bridges and milling and waterproofing of 1 bridge in 2017. We have one bridge that has a weight restriction affecting school buses and this structure will be replaced in 2020 with a federal grant. We are excited to report that 2017 is the tenth year in a row that we have entered the year with no bridges that are closed to traffic. This has been a goal of the Logan County Engineer's Office for many years and we are very proud to have achieved this goal for the benefit of the traveling public.

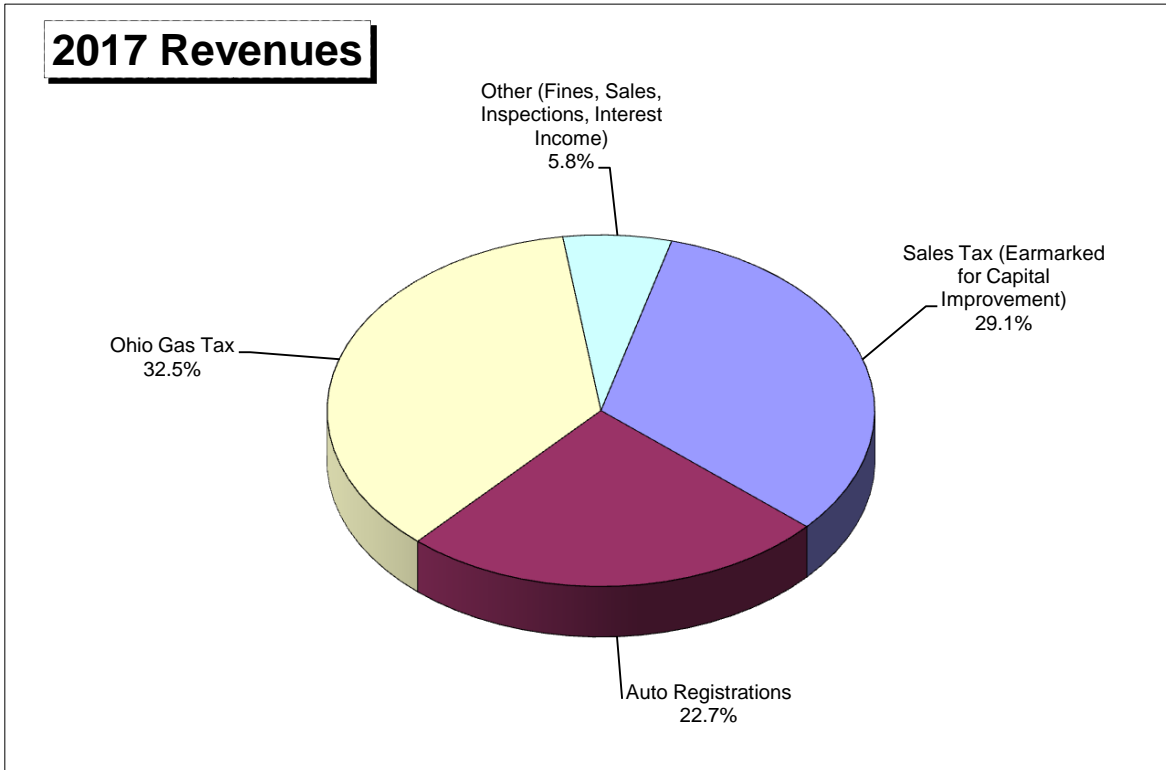
There are 11 bridges with posted load restrictions. Thirteen bridges are rated a 5 or less and many of the older structures continue to deteriorate as we replace others. Since 2001 (inclusive), we have replaced or performed rehabilitation on 126 structures. Bridge material costs have increased significantly over the last several years. In 2001, we were estimating replacement costs at \$48.00 per square foot of deck area, now we must use at least \$189 per square foot for estimating our bridge program.

Since the force account limits for projects that we can construct with our own staff were increased in 2003, construction material costs have increased between 44 and 220 percent. We must encourage the state legislature to increase the force account limits for roads and bridges so that we can continue to save the taxpayers' money by constructing road and bridge projects with our own crews. The current force account limits are \$100,000 per bridge and \$30,000 per mile for road construction. Considering the increased construction costs and the fact that there is some debate over the interpretation of the force account legislation, these limits need to be increased to \$309,000 and \$92,700, respectively, with an annual inflation factor.

## **Petition Ditch Maintenance**

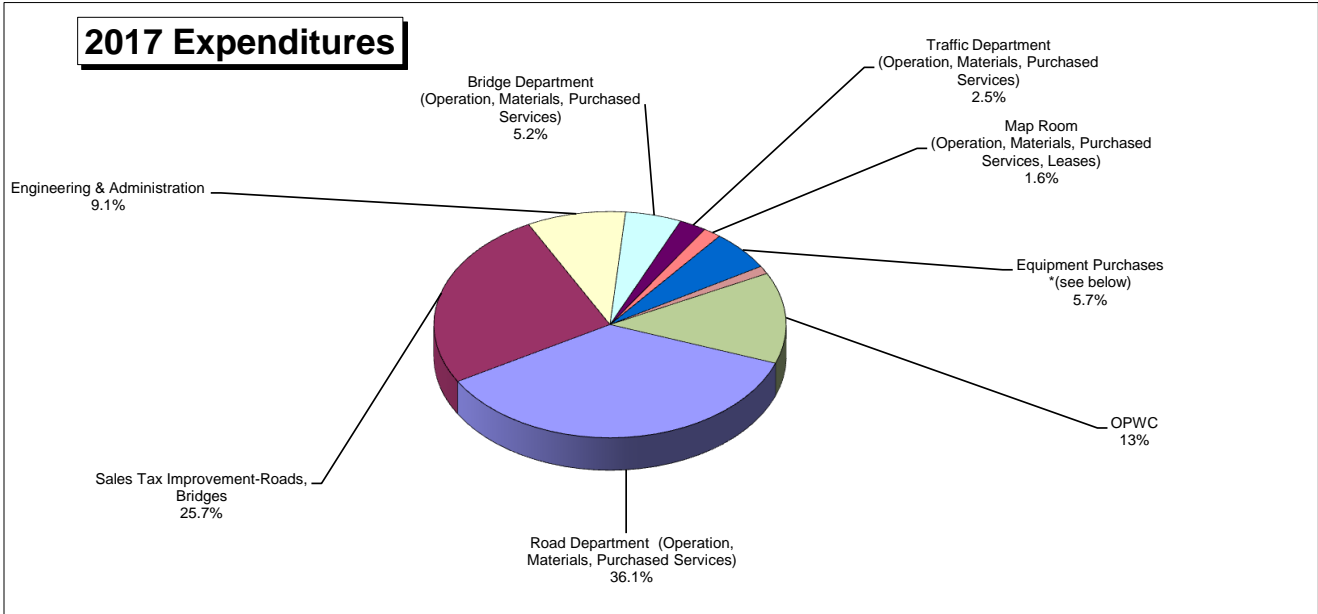
There are 45 petitioned ditches that we maintain. Of those, 37.89 miles are open waterway ditches, 11.96 miles of tile and 5.99 miles of grassed waterways, for a total of 58.22 miles. In 2017, we completed some level of maintenance on every ditch. General maintenance items include mowing, spraying, center dipping for improved flow, water crossing repairs, bank slip repairs, erosion control, seeding, and tile repairs. We spent \$52,097.12 on maintenance for the year and used 14 tons of stone, 185 pounds of grass seed, 194 feet of tile, and 106 tons of dump rock/concrete for repairs.

2017 Revenues		
Sales Tax (Earmarked for Capital Improvement)	29.1%	\$ 2,137,940.51
Auto Registrations	22.7%	\$ 1,667,626.50
Ohio Gas Tax	32.5%	\$ 2,389,284.77
Other (Fines, Sales, Inspections, Interest Income)	5.8%	\$ 423,818.38
OPWC Funds	9.8%	\$ 718,936.55
Belle Center Amish Church Community - Voluntary Contribution	0.1%	\$ 4,375.00
<b>Total</b>		<b>\$ 7,341,981.71</b>



2017 Sales Tax	
County Carryover from 2016	\$ 1,113,801.96
Township Carryover from 2016	\$ 525,143.34
<b>Income - County 2017</b>	<b>\$ 2,137,940.51</b>
<b>Income - Township 2017</b>	<b>\$ 655,563.67</b>
<b>Expenditures</b>	
Township Sales Tax Resurfacing Program and Chip/Seal	\$ 428,037.14
County Sales Tax Resurfacing Program (including culverts)	
Rejuvenating Sealer	
Bridge 86-2.87 Rehabilitation	
Bridge 37-3.60 Replacement	
	\$ 1,749,039.80
<b>2017 County Carryover</b>	<b>\$ 1,502,702.67</b>
<b>2017 Township Carryover</b>	<b>\$ 752,669.87</b>
<b>Total Carryover</b>	<b>\$ 2,255,372.54</b>

2017 Expenditures		
Road Department (Operation, Materials, Purchased Services)	36.1%	\$2,450,851.46
Sales Tax Improvement-Roads, Bridges	25.7%	\$1,749,039.80
Engineering & Administration	9.1%	\$616,632.37
Bridge Department (Operation, Materials, Purchased Services)	5.2%	\$350,590.79
Traffic Department (Operation, Materials, Purchased Services)	2.5%	\$167,635.22
Map Room (Operation, Materials, Purchased Services, Leases)	1.6%	\$112,110.59
Equipment Purchases* (see below)	5.7%	\$388,065.34
Capital Improvements	1.1%	\$77,393.69
OPWC (including local matching funds)	13.0%	\$884,799.92
<b>Total</b>		<b>\$6,797,119.18</b>



*Major Equipment Purchased in 2017		
Replacement Plows (2)	\$	19,776.00
Office Phone system and install	\$	9,856.00
Used Chipsreader - highway	\$	148,300.00
Replacement PU light bars (2)	\$	2,400.00
Complete Radio Upgrade	\$	1,625.00
2500 Chevy PU truck - highway	\$	30,520.78
2500 Chevy PU truck - ditch	\$	30,520.78
Case CX 80 Excavator 18,500 lb	\$	109,000.00
740 Paint Sprayer - traffic and bridge	\$	2,195.59
Mini Skid Steer "Dingo"	\$	18,000.00
Fuel System Replacement Equipment	\$	13,249.05
Plasma Cutter	\$	1,456.53
Portable Generator - bridge	\$	888.00
Computer - office	\$	277.61
<b>Total</b>	<b>\$</b>	<b>388,065.34</b>

**2017 ROAD PROGRAM**

The Highway Department is responsible for all Force Account projects (non-contract work performed by County Engineer employees), snow and ice control, berm repair, pavement patching, washout repairs, guardrail repair, mowing, and other general/seasonal maintenance of county roads and bridges. This department also works closely with the townships on various maintenance needs on their road systems. The Highway Department was extremely busy in 2017, working ahead for the 2018 road program in addition to their normal maintenance duties. The costs listed include labor (based on hourly wages of workers and all benefits), amortized equipment, and materials (asphalt and berming stone).

<b>Review of Miscellaneous 2017 Expenses</b>				
	Labor	Amortized Equipment	Materials and Contractor Work	Total
Mowing	\$ 78,701.16	\$ 95,786.44	\$ -	\$ 174,487.60
Roadside Spraying	\$ 9,944.42	\$ 2,870.13	\$ 5,362.49	\$ 18,177.04
Durapatching	\$ 12,261.98	\$ 11,873.57	\$ 6,812.77	\$ 30,948.32
Crack Sealing	\$ 21,951.95	\$ 2,832.98	\$ 21,252.00	\$ 46,036.93
Tree & Brush Removal	\$ 76,161.67	\$ 53,413.45	\$ 78.00	\$ 129,653.12
Culvert Repair & Replacement (not related to resurfacing)	\$ 18,758.48	\$ 14,918.41	\$ 20,584.91	\$ 54,261.80
Sign Repair	\$ 9,997.02	\$ 2,037.56	\$ 19,253.85	\$ 31,288.43
Sign Repair (Vandalism)	\$ 5,331.90	\$ 1,311.74	\$ 3,940.55	\$ 10,584.19
Snow and Ice Control	\$ 67,450.57	\$ 66,131.79	\$ 188,924.95	\$ 322,507.31

<b>2017 County Paving Program Completed Sales Tax</b>			
ROAD #	Begins	Ends	Total Cost
CR 87	CR 17 Logan/Auglaize Co. Line	CR 275	\$243,718.95
CR 37	CR 61 Lewistown T&OC RR	CR 39	\$603,896.70
CR 54	CR 60 Southwest	CR 61 & CR 37 Lewistown	\$199,831.49
CR 27	SR 235	SR 235	\$59,511.75
CR 39	CR 130	TR 56 West	\$44,439.74
CR 61	CR 37 & CR 54 Lewistown	SR 274	\$95,503.33
CR 77	CR 34	CR 21	\$161,222.29
CR 113	US 68	West Corp. Rushsylvania	\$145,014.51
Temp. Pavement Marking			\$4,900.46
Reclamite Sealer			\$139,416.76
<b>Grand Total</b>			<b>\$1,697,455.98</b>

<b>2017 County Paving Program Completed OPWC</b>			
ROAD #	Begins	Ends	Total Cost
CR 88	CR 17	US 33	\$241,828.52
CR 17	CR 23	Auglaize Co. Idle Road	\$178,238.40
CR 23	SR 274 resume	CR 17 Logan/Auglaize Co. Line	\$397,715.84
Temp. Pavement Marking			\$2,579.85
Reclamite Sealer			\$64,437.31
<b>Grand Total</b>			<b>\$884,799.92</b>

2017 County Chip and Seal Program Completed						
Road	Begins	Ends	Labor	Equipment	Materials	Total
3	CR 4 Shelby Co. Line	End of Logan Co. Maint.	\$ 1,016.82	\$ 864.75	\$ 4,737.05	\$ 6,618.62
4	RR	CR 70				
4	CR 70	Shelby CR 18 W	\$ 1,877.03	\$ 1,466.10	\$ 15,314.19	\$ 18,657.32
4	Shelby CR 18 W	Miami River - Shelby Co				
5	N. Corp. Line Zanesfield	CR 25				
5	N. Corp. Line Rushsylvania	TR 111 W				
5	TR 111 W	TR 51	\$ 3,609.89	\$ 3,378.18	\$ 33,660.17	\$ 40,648.24
5	TR 51	SR 273				
5	SR 273	Logan-Hardin Co. Line				
10	Belief. Corp.	TR 179				
10	TR 179	TR 55				
10	TR 55	US 33	\$ 4,206.23	\$ 3,452.50	\$ 18,995.49	\$ 26,654.22
10	US 33	TR 180 N				
10	TR 180 N	W. Corp. Line Zanesfield				
11	TR 43 W	TR 208 W				
11	TR 208 W	TR 209 W				
11	TR 209 W	TR 33 S Ples & Harr Twp. Line	\$ 3,842.18	\$ 3,244.67	\$ 29,010.98	\$ 36,097.83
11	TR 33 S Ples & Harr Twp. Line	TR 33 N				
11	TR 33 N	CR 31 S & TR 31 N				
12	W Bridge 3.28	E Bridge 3.28	\$ 174.43	\$ 133.85	\$ 1,102.50	\$ 1,410.78
13	CR 21 Bloomfield Twp	TR 79 E				
13	TR 79 E	TR 59 S				
13	TR 59 S	TR 247 SW				
13	TR 247 SW	SR 235 enter				
13	SR 235 leave	TR 214 N				
13	TR 214 N	TR 33	\$ 15,416.04	\$ 8,492.99	\$ 91,490.67	\$ 115,399.70
13	TR 33	TR 31 & Penn RR				
13	TR 31 & Penn RR	TR 46 S				
13	TR 46 S	TR 46 N				
13	TR 46 N	CR 32				
13	CR 32	CR 130				
20	W Bridge 6.53	E Bridge 6.53	\$ 243.78	\$ 157.30	\$ 1,333.50	\$ 1,734.58
26	CR 142	CR 124				
26	CR 124	Logan-Union Co. Line				
26	SR 292	CR 120 N	\$ 3,442.97	\$ 3,216.78	\$ 39,812.84	\$ 46,472.59
26	CR 120 N	Penn RR				
26	Penn RR	CR 142				
28	Bottom Corkscrew Hill	Top Corkscrew Hill	\$ 1,182.26	\$ 826.26	\$ 7,340.25	\$ 9,348.77
35	SR 235	TR 74 W Miami & Ples Twp				
35	TR 74 W Miami & Ples Twp	TR 75 E				
35	TR 75 E	SR 47	\$ 7,460.12	\$ 6,177.89	\$ 47,833.53	\$ 61,471.54
35	CR 59	CR 60				
35	CR 60	SR 274				
40	SR 274	TR 114 N				
40	TR 114 N	TR 115	\$ 2,875.11	\$ 2,806.28	\$ 31,902.26	\$ 37,583.65
40	TR 115	SR 292				
48	SR 292	CR 120 S				
48	CR 120 S	CR 142				
48	CR 12	Culvert	\$ 4,340.80	\$ 4,057.13	\$ 48,040.50	\$ 56,438.43
48	Culvert	SR 292				
48	CR 142	TR 138 N				
48	TR 138 N	Logan-Union Co. Line				
51	CR 101 SW	US 68	\$ 306.03	\$ 241.65	\$ 3,000.08	\$ 3,547.76
101	SR 638 Northwood	CR 111 & CR 113 E				
101	CR 111 & CR 113 E	TR 107 N				
101	TR 107 N	CR 51 E & TR 51 W	\$ 3,905.46	\$ 3,377.98	\$ 36,906.60	\$ 44,190.04
101	CR 49	TR 109 E				
101	TR 109 E	SR 638 Northwood				
102	CR 103 E	Logan-Hardin Co. Line	\$ 784.81	\$ 665.80	\$ 6,667.50	\$ 8,118.11
103	CR 102	US 68	\$ 2,826.53	\$ 2,245.93	\$ 24,433.88	\$ 29,506.34
104	SR 273	Logan-Hardin Co. Line	\$ 766.64	\$ 618.90	\$ 9,386.48	\$ 10,772.02
139	Logan-Hardin Co. Line	Logan-Hardin Co. Line	\$ 490.61	\$ 329.60	\$ 3,769.20	\$ 4,589.41
142	CR 26	CR 20				
142	CR 20	CR 48				
142	CR 48	CR 117				
142	CR 10	TR 141 W				
142	TR 141 W	CR 2	\$ 9,879.65	\$ 8,822.36	\$ 95,358.41	\$ 114,060.42
142	CR 2	TR 133 E				
142	TR 133 E	N Corp. Line W Mansfield				
142	N Copr. Line W Mansfield	TR 123 E				
142	TR 123 E	CR 124 NE				
142	CR 124 Ne	CR 26				
144	CR 153	TR 148 E	\$ 2,788.98	\$ 2,524.32	\$ 16,140.00	\$ 21,453.30
144	TR 148 E	SR 347				
152	SR 292	Cul De Sac				
152	CR 153 Middleburg	TR 227 E	\$ 2,564.48	\$ 2,196.93	\$ 20,388.00	\$ 25,149.41
152	TR 227 E	CR 144				
187	TR 7	TR 197	\$ 1,206.70	\$ 983.97	\$ 8,650.00	\$ 10,840.67
187	TR 197	SR 508				
222	E Corp. Line Huntsville	CR 39	\$ 706.76	\$ 581.90	\$ 3,546.00	\$ 4,834.66
265	SR 274 Big Springs	CR 12	\$ 222.50	\$ 239.00	\$ 571.50	\$ 1,033.00
270	Lakeview NCL	TR 87	\$ 1,364.30	\$ 1,263.70	\$ 11,076.68	\$ 13,704.68
270	TR 87	US 33				
271	Dead End	SR 292	\$ 682.41	\$ 471.00	\$ 3,046.20	\$ 4,199.61
296	SR 292	CR 271	\$ 1,348.22	\$ 1,023.80	\$ 12,286.80	\$ 14,658.82
<b>Total Chip &amp; Seal Program</b>						<b>\$ 769,194.52</b>



### 2018 TENTATIVE ROAD PROGRAM

We have reviewed each road on the program for needed culvert replacements, bridge replacements and/or repairs, drainage problems, etc. As of March 1, 2018, the proposed resurfacing and chip-seal programs for the County are as follows:

2018 Proposed County ST Resurfacing Program					
Road #	Begins	Ends	Road #	Begins	Ends
18	TR 45 W	TR 198 N	96	SR 117	Penn Central RR
18	TR 198 N	TR 187 S	96	Penn Central RR	CR 97 New Richland
18	TR 187 S	CR 43 W	111	CR 101	US 68
21	CR 77 W	TR 78 W	111	US 68	CR 112 S & TR 112 N
21	TR 78 W	CR 58	153	SR 287	TR 157
21	CR 58	CR 59 W & TR 59 E	153	TR 157	CR 277
21	CR 59 W & TR 59 E	CR 13 E	153	CR 277	Union Co. Line
21	CR 13 E	CR 60 Bloom Center	124	CR 142	CR 26
21	CR 60 Bloom Center	TR 80	124	CR 26	Logan-Union Co. Line
21	TR 80	SR 274	277	Logan-Union Co. Line	CR 44 Southwest
31	CR 43	CR 11	277	CR 44 Southwest	CR 153

Note: Some sections of roads may be non-performed in order to stay within budget.

2018 PROPOSED COUNTY CHIP SEAL PROGRAM					
Road #	Begins	Ends	Road #	Begins	Ends
5	SR 47 E & TR 273 W resume	CR 26 E	57	CR 130	US 33
5	CR 26 E	CR 136 W	62	Begin on Champaign-Logan Co Line	Leave Twp Line
5	CR 136 W	CR 118 W	62	Leave Twp Line	TR 295 W
5	CR 118 W	CR 20	62	TR 295 W	SR 508
5	CR 20	CR 50 E	64	Logan-Champaign Co Line	TR 295
10	SR 292 resume	CR 154	64	TR 295	TR 71 W
10	CR 154	CR 142 S	64	TR 71 W	CR 63
10	CR 142 S	TR 143	68	Logan-Champaign Co Line	SR 706
10	TR 143	Logan-Union Co. Line	70	CR 4 Logan-Shelby Co Line	W Corp Line of Quincy
12	SR 292 & CR 8	TR 127	73	Logan-Shelby Co Line	TR 23 N
12	TR 127	SR 47	73	TR 23 N	CR 34
24	N Corp Line DeGraff	TR 43 E	74	CR 23	CR 34 N End
24	TR 43 E	SR 47 Logansville	82	CR 83 S	W Corp Line of Lakeview
24	SR 47 Logansville	CR 21 W / TR 21 E	83	SR 720	CR 82 E
24	CR 21 W / TR 21 E	TR 207 E	106	SR 638	CR 105 W
24	TR 207 E	TR 207 W	106	CR 105 W	SR 638
24	TR 207 W	SR 235	106	Belle Center Corp Line	Logan-Hardin Co Line
25	CR 5	SR 540 suspend	119	SR 292	CR 120
25	CR 9	Penn Central RR	120	CR 26	CR 119 W
25	Penn Central RR	TR 37 W	120	CR 119 W	CR 20
25	TR 37 W	SR 274	120	CR 20	CR 48 End
28	SR 287 resume	TR 163 E	125	SR 47	Logan-Union Co Line
28	CR 29 Pickrelltown	CR 291	130	Bellefontaine Corp. Change City	Bellefontaine Corp Line N
32	CR 11	N. Penn Central RR Corp. Change	130	Bellefontaine Corp Line N	CR 13 Left
32	N. Penn Central RR Corp. Change/City	SR 47 City	130	CR 13 Left	CR 32 Left
32	SR 47 City	Bellef. Corp. Change City	130	CR 32 Left	TR 218 Right
32	Bellef. Corp. Line City	Bridge 32-5.60	130	TR 218 Right	CR 91 Left
32	Bridge 32.5.60	CR 13	130	CR 91 Left	Super Food Drive
32	CR 13	CR 130	130	Super Foods Drive	CR 57 Right
39	TR 100 W McArthur/Richland	CR 105 E	130	CR 57 Right	CR 39 Right
39	CR 105 E	CR 97 New Richland	130	CR 39 Right	TR 56
39	CR 97 New Richland	CR 259 New Richland	130	TR 56	CR 37
39	CR 259 New Richland	CR 49 S / TR 49 N	130	CR 37	US 33 Ramp End
39	CR 49 S / TR 49 N	TR 51 S	153	Zanesfield Corp Line	CR 28 S & SR 292
39	TR 51 S	S Corp Line Belle Center	153	CR 28 S & SR 292	US 33
44	TR 160 SE	SR 559	153	US 33	TR 147 S
44	SR 559	CR 277	153	TR 147 S	TR 145 N
47	SR 245	TR 174 W	153	TR 145 N	CR 146 S
47	TR 174 W	CR 173 W	153	CR 146 S	CR 144 N
47	CR 173 W	CR 1	153	CR 144 N	TR 243 S
47	CR 1	TR 166	153	TR 243 S	TR 29 S
47	TR 166	TR 165 N	153	TR 29 S	CR 152/Urbana Street
47	TR 165 N	TR 178 S	153	CR 152/Urbana Street	SR 287
47	TR 178 S	CR 29 End	158	SR 559	TR 157 NE
55	CR 29	Carriage Hill Road W	158	TR 157 NE	SR 287 Middleburg
55	Carriage Hill Road W	Mt Crest Dr E	200	CR 18	RR
55	Mt Crest Dr E	TR 182 E	291	Valley Hi Corp Line	CR 28
55	TR 182 E	CR 105 E			

Note: Some sections of roads may be non-performed in order to stay within budget.

### **2017 BRIDGE PROGRAM**

Our bridge crew had another productive year as they completed many projects that included one bridge replacement, one major bridge rehabilitation and three large culvert replacements. In addition to this, they performed tree removal on five structures, crack-sealed twenty-two structures and repaired six bridges (including both of the covered bridges) that were heavily damaged by vehicles.

County Road 37-3.60 (McArthur Twp.): Bridge Replacement (completed in 2018)  
Township Road 86-2.87 (Stokes Twp.): Deck Replacement and Steel Beam Repairs  
County Road 73-0.81 (Miami Twp.): Culvert Replacement  
County Road 31-1.61 (Union Twp.): Culvert - Repair parapet and wingwalls  
County Road 5-19.18 (Rushcreek Twp.): Culvert Replacement  
County Road 158-1.26 (Zane Twp.): Paint beams and Repair backwall  
County Road 17-0.13 (Stokes Twp.): Repair Deck and Waterproof

The replacement of BR 37-3.60, a deteriorating 1974 steel beam bridge, with a prestressed box beam superstructure and a cast-in-place concrete deck took longer than expected due to more pile driving needing to be done than estimated and due to the new structure being built during a bitterly cold Ohio winter. The string of unusually low temperatures forced the rescheduling of the pouring of the concrete abutments and the delivery of the box beams. We apologize for any inconveniences this caused.

### **2018 TENTATIVE BRIDGE PROGRAM**

The 2018 Bridge Program continues the commitment of prioritizing bridge and culvert replacements and rehabilitation based on a variety of factors. The County infrastructure will continue to be re-evaluated periodically and changes to this program are likely to occur in order to achieve our dedication to repair or replace the structures and highways in the worst condition first.

As of March 17, 2018, the proposed Bridge Program is as follows:

County Road 5-20.35 (Rushcreek Twp.): Paint beams and Repair backwall  
County Road 12-7.42 (Rushcreek Twp.): Repair wingwalls and abutments and Waterproof  
County Road 39-4.93 (Richland Twp.): Paint Piers  
County Road 142-3.72 (Perry Twp.): Culvert Replacement  
Township Road 136-0.88 (Rushcreek Twp.): Bridge Repair  
Township Road 258-0.60 (Zane Twp.): Paint beams

### **ADMINISTRATIVE STAFF SUPPORT**

This department manages the overall office functions and budget of the Engineer's Office. Since the cost for construction, materials, and equipment are increasing faster than local revenues, the utilization of alternate funding sources is critical to the office. As such, the department administers the Ohio Public Works Commission's State Capital Improvement Program (SCIP) and the Local Transportation Improvement Program (LTIP) for Logan County. The allocation and accounting of these annual funding sources are a significant function of the Engineer's office.

Other responsibilities of the administrative and support staff are human resources, payroll, purchasing requisitions, billing, word processing, contract administration and cost-tracking. Utilizing our cost-tracking system, all of the costs for the Engineer's Office are logged including the costs for surveying, engineering, administration, road work and construction of bridges. Equipment costs are amortized, while the labor costs include all fringes and benefits. In addition to all of the aforementioned accounting functions, this department also handles daily calls from the public and addresses the questions/problems directly or forwards them to the appropriate person.

### **DESIGN/ENGINEERING**

This department performs the engineering design for approximately 95% of the construction projects and directs specialized consultants for the engineering design of the remaining projects. Most of the staff design is done with a Computer Aided Design and Drafting (CADD) system. This department also oversees much of the administrative responsibilities.

### **TRAFFIC/DITCH DEPARTMENTS**

The Traffic Department is responsible for the maintenance of all road signs on county roads and bridge signs on township roads. Road signs now number 7,050. The maintenance of these signs includes installation, preservation and inspection. As part of the inspection process, we look for reflectivity, wind damage, vandalism and overall visibility. Repairing mailboxes damaged during snow removal operations is another part of the Traffic Department's responsibilities along with signing for road closure detours. The Routemarkers' main duty is to keep traffic moving safely and to keep the traveling public informed. The Ditch Department maintains 37.89 miles of open ditch, 11.96 miles of tile and 5.99 miles of waterway.

### **COURTHOUSE DUTIES**

It is the responsibility of the Map Room to maintain all of the county tax maps providing the County Auditor with an accurate tax base for each parcel. This includes creating new property splits, assigning new parcel numbers and adjusting property lines and acreages as reflected from new surveys. Both digital and shape file updates are performed regularly to keep the maps as current as possible. Along with these duties, the Map Room assists the various needs of surveyors, attorneys, realtors, other governmental agencies and the public, maintains the house numbering system for the unincorporated areas of the county for the 911 system, reviews new surveys & approves descriptions on legal documents.

In 2017, the Map Room Staff checked legal descriptions on 2,723 real estate documents. There were 2,064 deeds, 465 Affidavits, 74 Certificates of Transfer, 59 easements and 61 land contracts. Additionally, 1 annexation plat were approved and recorded. New property splits totaled 123 for the year with 53 additional documents being recorded with new survey descriptions.

Surveyors submitted 314 new legal descriptions that were reviewed, approved, scanned and filed by the Map Room personnel. In addition, 72 new house numbers were entered into the 911 system.

The records of the Map Room can be found on the Logan County Engineer's Office website at: [www.lceo.us](http://www.lceo.us)

**The Office of the Logan County Engineer**

1991 CR 13, P.O. Box 427  
 Bellefontaine, OH 43311  
 Phone (937) 592-2791  
 Fax (937) 599-2658  
 Web Site: www.lceo.us

**EXECUTIVE SUMMARY**

**368.576 Miles of County Road**  
 As of 12/31/17

**296 Bridges**  
 11 Have Load Reductions Posted  
 4 Have a Sufficiency Rating Less Than 50%

**7,050 Traffic Signs**

**1,677 Culverts**  
 Excellent/Good Condition - 1,483  
 Fair/Poor/Unknown Condition - 194

**MOTOR VEHICLE REGISTRATIONS**

Vehicle registration fees are a significant source of revenue for the Engineer's Office.

2017 Logan County, Ohio Motor Vehicles Registrations		2016	2015
Type of Registration	# of Units	# of Units	# of Units
Passenger Cars	35,216	36,779	35,574
Motor Homes	337	326	327
Motorcycles	2,699	2,743	2,677
House Vehicles	1,042	967	930
Mopeds	14	13	20
Unconventional Vehicles	988	0	0
Non-Commercial Trailers	6,198	5,951	5,841
Non-Commercial Trucks	11,007	10,963	10,852
Farm Truck	377	341	346
Buses	41	39	43
Commercial Trailers	2,175	2,214	2,072
Non IRP Trucks (Intl. Reg. Plan)	1,957	1,957	1,993
IRP Trucks (Intl. Reg. Plan)	365	203	197
<b>Total Vehicle Registrations</b>	<b>62,416</b>	<b>62,496</b>	<b>60,872</b>

SOURCE: State of Ohio, Bureau of Motor Vehicles