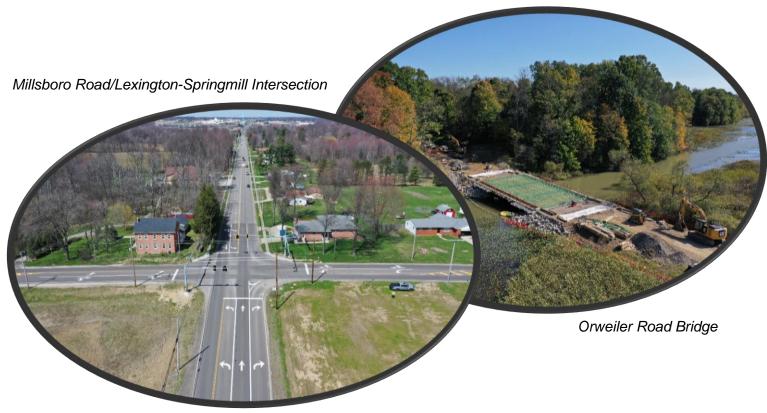
## 2019 ANNUAL REPORT OF THE CONDITION OF ROADS AND BRIDGES RICHLAND COUNTY, OH



Photos courtesy of K.E. McCartney and Associates, Mansfield, OH



Adam Gove, P.E., P.S. Richland County Engineer

### **Richland County Engineer's Office**

77 N. Mulberry St. Mansfield, OH 44902 419-774-5591

#### **Richland County Highway Department**

395 N. Main St. Mansfield, OH 44902 419-774-5594

#### **Richland County Tax Map Department**

50 Park Avenue E. Mansfield, OH 44902 419-774-5620

## **Bellville Outpost**

138 East St. Bellville, OH 44813 419-886-3721

### **Shiloh Outpost**

35 N. Walnut St. Shiloh, OH 44878 419-896-2221

#### COUNTY HIGHWAY SYSTEM

The Richland County Highway System consists of 347 miles of County roads plus 359 bridges on both County and Township highways. Our County highway system is approximately equivalent to a road stretching from Mansfield, Ohio to Chicago, Illinois. The County Engineer oversees the Highway Department and is responsible for the construction, maintenance, and repair of the 347 miles of roadway and the 359 bridges. This includes culverts, guardrails, signage, roadside drainage, pavement markings, mowing, and snow and ice control. We try to keep on top of the repairs, maintenance, snow removal, etc., but if a motorist sees something unusual on a highway or bridge we would appreciate a call to check it out. You may call 419-774-5594 or 419-774-5591 between 7 AM and 3:30 PM weekdays (summer hours 6:30 AM and 5 PM, Monday thru Thursday) or visit our website, <a href="https://www.rcengineer.com">www.rcengineer.com</a> to report an item of concern.

#### **ROADS**

In 2018, the County completed a Pavement Condition Rating (PCR) for all 347 miles of County Highway. This was a two year process in which every mile of roadway was rated based on several different factors. These factors included: surface type, cracking, rutting, base failure, potholes, pavement marking condition, etc. The PCR's were updated for maintenance and resurfacing work that occurred in 2019, as well as a reduction factor for deterioration that occurs over a year's time. The PCR rating will be used to monitor pavement conditions, determine future maintenance, and determine the type of maintenance/resurfacing work that will be needed. Every couple years, roadways will need to be re-evaluated to determine current PCR values.

# 2019 PCR SUMMARY HIGHWAY MILEAGE IN RICHLAND COUNTY

Poor Condition 77.40 miles
Fair Condition 120.90 miles
Good 56.70 miles
Excellent 95.10 miles

**Total** 350.10 miles\*

State Highways262.3 milesCounty Highways347.7 milesTownship Highways (18)577.5 milesCities & Villages388.8 milesTotal Mileage1576.3 Miles

\*The difference in mileage (347.7 inventory to 350.1 PCR) is due to those sections of roadway that have shared jurisdiction (½ of road is in County, other ½ is in municipality).



#### **BRIDGES**

Richland County bridges are inspected at least once yearly, as required by Ohio Revised Code. We are responsible for 359 bridges on County and Township Roads, as well as several Village and City Streets. Some repair work and bridge replacements are completed by the Highway Department, while others are done by contractors.

Each bridge is rated as to its ability to carry trucks and automobiles safely across the structure. Signs are posted in advance of the bridge indicating the maximum vehicle weights for structures with reduced weight limits. Truck drivers and operators of heavy farm machinery should pay particular attention to the advance weight limit signs. It could prevent serious damage to the bridge or the vehicle, or both. Also, the Richland County Engineer issues oversize or overweight vehicle permits for those vehicles



that are in excess of the legal size or weight requirements. When a permit is issued, operators will be advised of the route around these posted bridges.

BRIDGE STATUS BASED ON 2019 DATA				
<u>CONDITION</u>	NO. OF BRIDGES	PERCENT(%)		
New, Good	227	63.2%		
Fair	85	23.7%		
Poor	47	13.1%		
TOTAL	359	100.0%		
Large Bridges (>20' Span)	183	51.0%		
Small Bridges (10' to 20' Span)	176	49.0%		
Load Restricted Bridges	82	22.8%		
Functionally/Structurally Deficient (Narrow, weight restricted, and/or Poor Condi	tion) 104	29.0%		

Due to new guidelines from the Ohio Department of Transportation and the Federal Highway Administration, Richland County saw an increase of 17 new load restrictions placed on County bridges. Bridge load restrictions now include a sign for Emergency Vehicles (EV's) because these vehicles tend to have a higher axle load than the typical 2 or 3 axle trucks. You will notice the signs below going up across the county as we update old load restriction signs and add the new signs.

EMERGENCY
VEHICLE
WEIGHT LIMIT
2 AXLE 25T
3 AXLE 40T

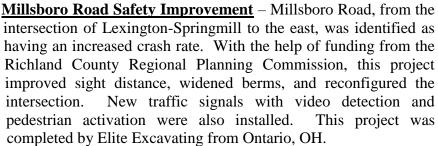
WEIGHT LIMIT
SINGLE UNIT
2 AXLE 10T
3 AXLE 14T
4 AXLE 18T
5 AXLE 22T
6+AXLE 24T

#### 2019 BRIDGE PROJECTS

<b>ROAD</b>	<b>TOWNSHIP</b>	<b>PROJECT</b>	COST
Stentz	Sharon	77" x 121" Elliptical Concrete Culvert	\$118,350.25
Home	Troy	20' x 6' Concrete Box Culvert	\$185,704.16
Kochheiser	Washington	96" Round Aluminum Culvert	\$103,860.50
Richland Run	Jackson	16' x 5' Concrete Box Culvert	\$119,738.69
Reynolds	Bloominggrove	18' x 6' Concrete Box Culvert	\$226,822.61
Orweiler	Springfield/Troy	78', 3-span, Concrete Slab Bridge	\$795,278.24

#### ADDITIONAL 2019 PROJECTS

- Millsboro Road Safety Improvement (vertical realignment and new signals at Lexington-Springmill) (\$1,375,685.01)
- Asphalt Resurfacing 7 miles (Bowman-6.3 miles, Hanley-0.4 miles, W. 4<sup>th</sup> St-0.3 miles) (\$957,016.65)
- Chip and Seal 13.9 miles (Smiley W., Richland Shale, Hook, Lincoln Hwy, Plymouth-Springmill) (\$351,822.69)
- Pavement Markings Centerline: 156 miles; Edge Line: 150 miles (\$289,360.18)
- Guardrail Replacement 4,100+/- Linear Feet (\$103,220.95)





### 2019 PROJECTS



Stentz Road – Elliptical Concrete Culvert



Home Road – Concrete Box Culvert



Kochheiser Road – Aluminum Culvert



Richland Run Road – Concrete Box Culvert



Reynolds Road – Concrete Box Culvert

#### 2019 PROJECTS



Orweiler Road Bridge – The Orweiler Road bridge, located on the headwaters of the Clear Fork Reservoir on the border of Springfield and Troy Townships, was a narrow, undersized bridge nearing the end of its useful life. This is a popular fishing spot, and the proximity of pedestrians and vehicles caused a serious safety hazard. A grant was obtained by the Engineer's



office to cover 95% of the construction costs. The new bridge is longer, wider, and provides pedestrian walkways on both sides of the bridge. Rietschlin Construction, out of Crestline, OH, did a wonderful job on the replacement project.



<u>Lincoln Highway Resurfacing</u> – Approximately 3.5 miles of Lincoln Highway were resurfaced using chip and seal and a fog seal. Placing a fog seal (asphalt emulsion applied after the chip and seal treatment) adds additional cost but cuts down on the amount of dust and loose stone, which is a benefit to a heavily traveled road, like this one with approximately 5,700 vehicles per day.

#### PROPOSED 2020 PROJECTS

Below is a list of projects that we plan to complete this coming construction season

<u>ROAD</u>	<b>TOWNSHIP</b>	<b>SECTION</b>	WORK TO BE DONE
Wells	Bloominggrove	N of Rome-Greenwich Rd	Bridge replacement
Pittenger	Weller	E of St Rt 545	Bridge replacement
Shelby-Ganges	Jackson	E of Plymouth-Springmill	Bridge replacement
Snodgrass	Springfield	E of St Rt 314	Bridge replacement
Mock	Jefferson	W of St Rt 97	Bridge Replacement
Millsboro	Springfield	W of Home Rd	Culvert Replacement

Guardrail Replacement – 8,000 +/- Linear Feet

Pavement Markings – 90 +/- miles

Asphalt Resurfacing (Millsboro, Lexington-Ontario, Windsor, Possum Run) - 7.5 +/- miles

Chip and Seal -20 +/- miles

#### STORM DAMAGE

The first half of 2019 saw several severe storms move into the area. A storm in January dumped nearly 18" of snow on most of the County. An April storm produced a tornado which touched down for 17 miles as it made its way along the north end of the County on a Sunday afternoon. A total of 7 County roads, along with several other Township and State Routes, were closed due to downed trees, power lines, and debris. County Highway crews worked through the night and all County roads were cleared enough to be opened by the next afternoon. The Highway department was able to borrow a large, portable chipper, which allowed crews to load trees and branches using a skid loader instead of by hand. Thanks to this equipment (and Baseline Mulch, Mr. Ervin Zimmerman), clean-up work which could have easily taken 3 weeks to complete, was completed in just 1 week. Heavy isolated storms continued into June, causing localized flooding and damage.



## 2019 REVENUES & EXPENDITURES

REVENUES	
Motor Vehicle License and Registrations	\$ 2,625,408.34
Gasoline Tax	\$ 2,939,200.28
Permissive License Fee (\$10 Additional)	\$ 971,659.53
Federal/State Grants (Funds administered by Ohio Dept. of Transportation)	\$ 2,687,128.50
State Grants (Funds administered by Ohio Public Works Commission)	\$ 737,822.95
Reimbursements (Grant funds paid to the Engineer's Office)	\$ 208,419.38
Misc. Revenue (Interest, Traffic Fines, scrap, old equip., etc.)	\$ 93,967.55
Animal-Drawn Vehicle Maintenance Fund	\$ 13,535.41
Carryover from 2018	<u>\$ 1,585,752.73</u>
TOTAL AVAILABLE REVENUE	\$11,862,894.67
EXPENDITURES	
Salaries	\$ 2,065,989.34
Benefits (Insurance, Worker's Comp, PERS, Etc.)	\$ 785,283.40
Construction/Highway Equipment (Purchase & Rentals)	\$ 222,389.13
Fuel and Oil	\$ 189,545.30
Road Salt	\$ 353,717.38
Engineering Services, Studies	\$ 131,845.61
Operating Expenses (vehicle maintenance/repair, utilities, tools, safety supplies, IT services, etc.)	\$ 558,408.15
Capital Expenses (Construction contracts, road and bridge materials, asphalt, concrete, stone, etc.)	\$ 2,034,757.20
Loan / Bond Payments	\$ 144,252.26
Federal/State Grants for Construction of roads and bridges (Administered by ODOT)	\$ 2,687,128.50
State Grants for Construction of roads and bridges (Administered by OPWC)	<u>\$ 737,822.95</u>
TOTAL EXPENDITURES	\$ 9,911,139.22
PROJECTED CARRYOVER TO 2020	\$ 1,951,755.45

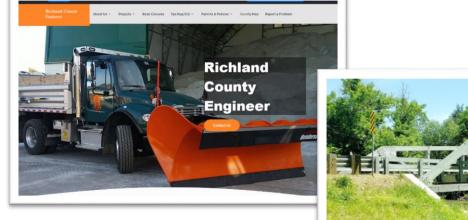
#### ANIMAL-DRAWN VEHICLE MAINTENANCE FUND

According to Ohio Revised Code Section 5501.53, Counties are able to receive donations from groups or individuals for maintenance of roadways in which animal-drawn vehicles travel. The Richland County Engineer received donations for the following amounts in 2019:

2018 Carryover	\$ 7,532.94
Fredericktown Buggy Fund	\$ 1,275.00
Amish Steering Committee (Weaver)	\$ 1,978.41
Amish Steering Committee (Raber)	\$ 3,502.00
Mennonite Steering Committee	\$ 6,780.00
2019 TOTAL DONATIONS	\$ 13,535.41
2019 Expenditures	\$ 0.00
2020 BEGINNING BALANCE	\$ 21,068.35

No funds were expended from this fund during 2019, as allowed by ORC 5501.53.A.2. These donations will be carried over to construction year 2020.

# Be sure to check out the NEW County Highway Map and the REDESIGNED County Engineer website @ www.rcengineer.com





# Did you Know?



There are many areas in the County with great views, but the highest point in Richland County is located in a field just off of Lexington-Ontario Road in Springfield Township. It has an elevation of 1,511 feet above sea level. It is the second highest elevation in the Ohio, falling just short of Campbell Hill in Logan County with an elevation of 1,549 feet.



# ADAM GOVE, P.E., P.S. RICHLAND COUNTY ENGINEER

#### Employees of the Richland County Engineer

I want to personally thank all the employees listed below. 2019 had snow, wind, flooding, a tornado, and many other obstacles to overcome. The work and effort that you put in is not often noticed by the public. Thank you for continually working hard to improve Richland County! And thank you to the public for recognizing our workforce and giving them room to work on the roadways!

#### **ENGINEERING OFFICE**

Kevin Payne, P.E., P.S.

C. Delafon Luna, P.E., P.S.

Chad Coward, P.E., S.I. Matthew Christian Wilma Marquis

**TAX MAP OFFICE** 

Elaine Riedel, Supervisor Jennifer Thompson Tricia Conroy

#### **HIGHWAY DEPARTMENT**

Jon Dickinson, Highway Superintendent

Kim Gosser, Assistant Superintendent/Bridge Foreman

Chad Swank, Mansfield Foreman

Lori Hartsel

Andy Orewiler, Maintenance Foreman

Lyle Hieber

Mike Schuster, Bellville Foreman

Heath Humphrey

Jacob Eyerly, Shiloh Foreman

Richard Hursh

Robert Swank, Jr., Mansfield Foreman Jason Kemp\*\* (Jan. 2020)

Evan Benedict\*\* (Jan. 2019)

Garry Bisel

Charles Miller

Jason Bright Levi Miller\*\* (Mar. 2019)

Andrew Burrer Danny Montgomery

Brian Cook Darren Mull
Matthew Cook Trent Neeley
Edward Cotter David Seaman

Adam Dessecker\*\* (Dec. 2018) Alan Sheets\*\* (Dec. 2018)

Gail Fulk Donald Traxler
Hank Fultz Mark Wright

\*\* New Hire

#### RECENT RETIREMENTS

The Richland County Engineer's Office would like to thank **Sheri Myers** for her 20 plus years of service to the County. Sheri was responsible for many functions of the office, including contract preparation, plan drafting, grant coordination, and road and record inventories. Her dedication and sense of humor will be greatly missed! Best wishes for a happy, healthy retirement!

This report is prepared by the Richland County Engineer as directed by Section 5543.02 of the Ohio Revised Code.
77 N. Mulberry St., Mansfield, OH 44902