

JAMES (JIM) A. WIECHART, P.E., P.S. ~Mercer County Engineer~ REPORT FOR 2024

The primary mission of the Mercer County Engineer is to serve the citizens of Mercer County with safe, superior rural local transportation and drainage systems. The Mercer County Engineer will complete this mission through the building, maintaining and managing of these rural infrastructure assets in an efficient & cost-effective manner in coordination with other local, state and federal partners.

For the second year in a row; the number of projects, the impact to our county, and with the help of outside revenue sources, our office magnified its base resources to a factor of nearly two. We aggressively brought infrastructure improvements to reality. The base funding of this office merely serves to maintain what we have. Thus, it is our challenge and responsibility to leverage that to continue to replace bridges, widen roads and continue with capital improvements to serve current and future constituents.

With many thanks to our employees, as well as contractors (many of which are local), we are appreciative of all their efforts and recognize that no serious accidents or injuries resulted from the huge amount of improvements that were completed. The vast majority of road widening and bridge replacement projects had some component of outside funding beyond our base road & bridge funds associated with them such as federal aid funds, OPWC funds, TIF's, Jobs & Commerce, etc. We continue to try to access as many outside funding sources as possible to stretch our efforts across our 480+ square mile footprint of roads and bridges. Most of these outside funding sources are competitive and have elements of red tape associated with them but the benefits to our county outweigh the complications to bring these capital improvements to fruition. Effectively, we are looking under any "rock" we can find on the funding (revenue) side to improve our infrastructure.

Along these lines, a note of appreciation and thanks to our Board of County Commissioners in regards to the passage of the last county permissive license fee (ORC 4504.02) on June 25th of this past year. The passage will mildly assist this office's efforts to make significant capital improvements (most notably road widenings). There was virtually no opposition to this measure being taken and in general, I believe people are supportive of increased costs when they will see tangible improvements being made throughout our county.

One final note to add related to revenue, not just for this office, but on behalf of all Ohio townships, counties and municipalities. In December 2024, the Ohio Senate adopted House Joint Resolution 8. This initiated the first step in the process of renewal of the State Capitol Improvement Program (SCIP). Largely under the radar (without a whole lot of fanfare) this program is heading towards 40 years of existence. The way it is structured via Article VIII, Section 2t of the Ohio Constitution, every 10 years the Ohio voters need to approve the program via ballot. In 32 years of public service, I have seen and worked within a multitude of local, state and federal infrastructure funding programs. Compared to many other programs, the SCIP programs via Ohio Public Works Commission (OPWC) are a relatively streamlined and effective way of supporting long-term capital infrastructure improvements via the bonding capacity of Ohio. Were it not for these programs, a huge amount of Ohio local government infrastructure would be in very poor shape. Consider the importance of this program as we head towards the spring primary election in 2025.



	EQUIPMENT PURCHASES		
-	The following is a list of the purchases over \$5000 during 2024		
	SS Dump Body, Hydr. System, Plow Hitch, Plow, SS Spreader for #19	\$	89,300.00
	Caterpillar Model 310 07 Mini Hydraulic Excavator (14C)	\$	119,247.00
	trade in (1C) (\$43,000)		
	New Holland TS6.130 Tractor (6M)	\$	-
	trade in (16M, 24M, 25M & 2M) (\$90,000) even trade	•	
	2023 Intl CV515 Cab & Chassis, Sign Bed, Hydr Crane, Air Compressor (#8P)	\$	65,991.00
	partial payment-to be completed in 2025		
	2024 Ford F-250 w/service bed (9P)	\$	63,337.00
	WS18 Wheel Saw w/3" Wheel & Harness Kit	\$	22,044.22
	Utility Bed for 3P	\$	7,874.73
		\$	367,793.95

FUI	LL ASPHALTIC CC	NCRETE RESURFACING	
ROAD NAME	<u>WIDTH</u>	LENGTH (MILES)	TOTAL COST
Carthagena	24'	3.023	\$269,137.40
St. Anthony	24'	3.170	\$348,731.50
Ft. Recovery-Minster	. 24'	. 3.300 .	\$290,403.60
Wabash (widening)	6'	4.530	\$495,744.40
	Total	14.023	

PAVEMENT MARKINGS

64.059 miles of center line and 6.109 miles of edge line striping and auxiliary markings was completed by Oglesby Construction, Inc. at a cost of \$52,049.97. 74.910 miles of centerline and 65.970 miles of edge line striping was completed by Aero-Mark Company at a cost of \$103,116.29.

LITTER PICK-UP

Our office works with the Mercer County Solid Waste District to facilitate litter pick-up. 8 Mercer County townships picked up litter along county roads in 2024. The Engineer's office paid each group \$25.00 per mile of county roads for their efforts in this community service project. Litter was picked up along 238.47 miles of county roads. The Solid Waste Office furnished litterbags, safety vests, signs & dumpsters. The Mercer County Solid Waste Office paid the litter disposal fees.

ROAD MAINTENANCE

Roadside maintenance of existing roadway components is a very important part of our operations. During 2024 there were 435 signs replaced out of 5,299 signs in our total inventory on both county and township roads.

One county mower ran consistently, from May through October mowing county roads making 4 rounds in some sections. Contract mowing was completed in our entire county on all our county roads, with Quick Mow, Inc. doing this work at a cost of \$97,332.86. Once mowing was caught up on roadway side ditches and conditions allowed during the regular mowing season, a small portion of 20 county ditch maintenance open ditches were mowed.

County crews installed 70 catch basins. 20 locations had trees cut and brush removed, along with other miscellaneous locations with more minor cuttings. In fighting snow and ice, 1,001 tons of salt were used at a cost of \$78,015.73 and 1,001 tons of grit were used at a cost of \$10,496.33. 829 hours of overtime were worked in snow removal. In all, the costs of snow and ice control and removal to our operations in 2024 were \$228,418.87.

Roadside herbicide spraying of 386 miles of county roads was completed by The Dalton's at a cost of \$28,091.12.

15 ROADS RECEIVED CHIP & SEAL RESURFACING &/OR FOG SEAL VIA OUR CREWS				
ROAD NAME	WIDTH	LENGTH (MILES)	TOTAL COST	
Depweg	24'	1.836	\$48,183.48	
Philothea	25'	3.070	\$76,587.68	
Chickasaw	18'6"	1.766	\$37,741.04	
Goettemoeller	18'9"	2.016	\$65,561.14	
Mercer-Darke County Line	19'6"	2.262	\$45,268.45	
Sharpsburg	19'6"	2.831	\$55,479.72	
Sebastian	24'	2.466	\$62,525.72	
Township Line	18'9"	1.515	\$25,478.22	
Schroeder	18'6"	1.768	\$32,613.77	
Carmel Church	19'	1.530	\$28,442.60	
Oregon	18'6"	4.927	\$89,688.71	
Wabash	18'9"	3.004	\$51,518.59	
Wilson	18'3"	2.200	\$40,027.95	
Neptune-Mendon	19'9"	5.625	\$114,886.53	
Rice	19'3"	2.273	\$44,735.33	
TOTAL FULL CHIP & SEA	······································			
FOG SEAL RESURFACING (TOTAL COST INCLUDES CONTRACT HAULING & LOADER COST)		39.089	\$971,858.24	

***Note: Our crews also chip sealed and/or fog sealed 60.821 miles of township roads beyond the 39.089 miles of county roads completed summing to 99.910 miles of local road chip sealing &/or fog sealing our crews completed on county and township roads. This work on township roads amounted to \$784,102.13.

DITCH MAINTENANCE INFRASTRUCTURE

County ditch maintenance activities continued to improve our county drainage maintenance infrastructure. We appreciate your input and feedback on drainage related topics. There were 40 ditches sprayed in order to keep noxious weeds and brush to a minimum. Twenty of the open ditches were fully mowed and 29 had work done on them in some way: dip out, rip rap placement or tile repairs. A few of the larger open ditches had rip-rap material placed in long stretches to protect the banks from erosion. 399 loads of recycled concrete were hauled to various ditches and used as rip-rap.

Four new ditch projects were implemented via the SWCD S.B. 160 process and were accepted for permanent maintenance with our office. This consists of two 2-stage ditches totaling 2.317 miles in Center, Dublin & Union townships for \$863,582; and 2 tile ditches totaling 5.531 miles in Center, Dublin & Union townships for \$1,256,945 in drainage improvements to our program.

There was a total expenditure of \$304,268.53 and over 697.50 man hours involved for ditch maintenance infrastructure related tasks. One of the largest maintenance ditches is the Beaver Creek, which serves as an outlet for Grand Lake St. Marys. On Beaver Creek, we continued with an ongoing erosion control project (placing rip rap) on the banks. This year approximately 5,044 tons of rip-rap (at a value of \$166,430.00) was installed along the banks near the lower end of this maintenance ditch. It is projected that all of the Beaver Creek rip rap work will be done by or before the end of 2025. The accumulated cost of spraying various ditches by Right-of-Way Management was \$68,313.79

BRIDGE RECONSTRUCTION PROJECTS

The bridge crew completed 6 bridge replacements. Two large culverts were replaced and one large culvert was extended. It is important to be mindful that the bridge crew not only completes the actual structure work of the construction, but also does all the excavation and embankment activities adjoining the structure work; often-times improving not only the bridge structure, but also improving the adjoining roadway approach attributes via their efforts. On occasion, our bridge crew supports our roadway crews and also on occasion, our roadway personnel will support our bridge crew, as is needed with good flexibility in directing labor & equipment to any needed operations. Waterproofing procedures were completed on four bridges. Two bridge projects were federally funded and completed by contractors.

TWP	BRIDGE/ CULVERT	ROAD NAME	<u>TYPE</u>	COST
LIB	C31A-8.21B	WABASH	65 LF 14'W X 8'H PRECAST CONCRETE BOX	\$140,748
MAR	T50B-0.16B	OLDING	92 LF 16'W X 10'H PRECAST CONCRETE BOX	\$211,444
GRA	C115-1.49B	CRANBERRY	78 LF 87"H X 136"W ELLIPTICAL CONCRETE PIPE	\$110,664
BUT	C117-0.66B	JOHNSTON	STEEL BEAM W/CONC DECK 63' C/C BEARINGS WIDTH VARIES 32'-44'6 7/8" (FEDERAL AID-CONTRACTOR: BRUMBAUGH CONSTR)	\$975,619
UNI	C125B-2.47B	PALMER	PRESTRESS BOX BEAMS 140.82' C/C BEARINGS 32' WIDE (FEDERAL AID-CONTRACTOR: JUTTE EXCAVATING)	\$913,475
JEF	C126-1.68B	MONROE	72 LF 14'W X 7'H PRECAST CONCRETE BOX	\$155,067
WAS	C130-1.84B	SCHROEDER	72 LF 14'W X 7'H PRECAST CONCRETE BOX	\$147,417
НОР	C170A-2.42B	MORROW	72 LF 9'W X 6'H PRECAST CONCRETE BOX	\$85,529
REC	C31-3.86C	ST PETER	56 LF 66" DIA RCP	\$19,652
MAR	C72-2.49C	SEBASTIAN	64 LF 60" DIA RCP	\$42,505
WAS	C80-2.98C	SIEGRIST JUTTE	CULVERT EXTENSION-8 LF 8'W X 4'H PRECAST CONCRETE BOX	17,285

2024 BRIDGE & LARGE CULVERT REPLACEMENT PROGRAM

	BRIDGE SUPERSTRUCTURE WATERPROOFING				
LIB	C41-14.24B	BURRVILLE	208 SQ YD SUPERSTRUCTURE	\$14,570	
FRA	C72-0.90B	SEBASTIAN	260 SQ YD SUPERSTRUCTURE	\$20,211	
BUT	C80-10.77B	SIEGRIST JUTTE	114 SQ YD SUPERSTRUCTURE	\$10,254	
LIB	C196-1.94B	TAMA	117 SQ YD SUPERSTRUCTURE	\$10,551	

NOTE: Some of the bridge and culvert materials for these projects were purchased in 2023. Also, some of the projects may have been started in 2023. Cost shown is 2024 and may not be total project cost.

PERSONNEL

A total of 27 employees make up our annual personnel. In the year 2024 there were 4 seasonal employees that worked for the Engineer. In 2000 we had 31 full-time employees. In 1984 there were 39 full-time employees.

Our employees and their years of service to Mercer County:

NAME	CLASSIFICATION	<u>YRS</u>
Borns, Kirk	Sign Manager	29
Freeman, Todd	Equipment Operator 2/Crew Leader	24
Gray, Richard	Bridge Worker 2	25*
Hague, David	Equipment Operator 2	5
Harter, Derrick	Highway Maintenance Supervisor	19
Heinrichs, Karen	Administrative Assistant	19
Kahlig, Renee	Office Assistant	10*
Knapke, Anthony	Bridge Worker 2	12
Louth, Garth	Auto Mechanic 1/Equipment Operator 2	2
Laffin, Brad	Operations Manager	35*
Meier, Austin	Equipment Operator 2	5
Mescher, Samuel	Equipment Maintenance Supervisor	25*
Messner, Dusty	Highway Maintenance Superintendent	24
Muhlenkamp, RJ	Equipment Operator 2	1
Moeller, Aaron	Design Engineer/Assistant County Engineer	8
Norris, Gary	Equipment Operator 2	.92
Porter, Darren	Highway Maintenance Supervisor/Safety Director	28
Post, Nick	Mechanic 2	5
Rolfes, Casey	Equipment Operator 2	5
Schamp, Aaron	Survey Design Technician/Drainage Deputy	3
Schoenleben, Bryan	Equipment Operator 2	10*
Smalley, TJ	Bridge Supervisor	25*
Steinlage, Michael	Equipment Operator 2/Ditch Maintenance	20*
Walls, Trace	Equipment Operator 2	.92
Watercutter, Anthony	Equipment Operator 2	9
Waterman, Kiel	Equipment Operator 2	12
Wiechart, James	Mercer County Engineer	25*

*

Denotes employees that were awarded Certificates of Appreciation for their years of service with the Mercer County Engineer.

Employee Recognition



<u>10 years of service</u> Renee Kahlig (Office Assistant) Bryan Schoenleben (Equipment Operator 2)



<u>20 years of service</u> Mike Steinlage (Equipment Operator 2|Ditch Maintenance)



<u>25 years of service</u> Jim Wiechart (Mercer County Engineer) Sam Mescher (Equipment Maintenance Supervisor) Richard Gray (Bridge Worker 2) TJ Smalley (Bridge Supervisor)



<u>35 years of service</u> Brad Laffin (Operations Manager)

SNOW PLOW RODEO

As part of our efforts to improve our snow & ice control operations, as well as, the operational safety of those crucial maintenance activities, Auglaize County hosted a 2-county Snow Plow Rodeo. The employees of the Auglaize & Mercer County Engineer's Offices were part of this event. A portion of the event is a skills competition with equipment operators competing against the other counties. Listed below are the winners of the various competitions.

This year the Auglaize County "A" Team came in first place, with Auglaize County "B" Team in 2nd place & Mercer County "B" Team in 3rd place. In the individual snow plow competition, Clint Moon (Auglaize), Kevin Steinke (Auglaize) & Ross Cook (Auglaize) placed 1st, 2nd and 3rd, respectively.

Equipment rodeo results are as follows: 1st Place Murphy Backhoe: Kevin Steinke (Auglaize), 1st Place Backhoe Bowling: Tony Knapke (Mercer), 1st Place Backhoe Basketball: Tony Knapke (Mercer), and 1st Place Skid Loader: Kevin Steinke (Auglaize).

INTERESTING FACTS

- There are 368 bridges on Mercer County township and county roads. Every year all 368 bridges are inspected by our office.
- There are 444 miles of township roads and 386 miles of county roads in Mercer County.
- There is an average of 16 miles of county roads and 14 bridges per employee.
- Since 1999 the Mercer County Engineer has received approximately \$10,439,684.33 in competitive state grant programs for local road improvements.
- Since 1999 the Mercer County Engineer has received \$38,737,762.53 in competitive federal grant programs for local road improvements.
- No real estate, sales or property taxes fund county road and local road bridge improvements in Mercer County. Road user fees in the form of motor vehicle gas taxes and license fees fund our efforts.
- Asphaltic Concrete prices as bid by the Mercer County Engineer increased 80% from 2009 to 2024, an average annual increase of 5.3% per year.
- By the end of 2024, we have 37% or 141.539 miles of our county road pavements at or wider than 22'.
- 84 miles of sub-surface tile and 112 miles of open ditch are under maintenance by this office.
- The number of Mercer County Engineer full and part-time employees has decreased over the last 20 years with less resources going towards salaries and fringe benefits as a percentage of the total budget.
- Average years of service of county engineer full-time employees is 14.3 years.

SUMMARY

Much was accomplished in 2024 and we welcome your comments, suggestions and questions to our office: Mercer County Engineer, 4884 Mud Pike, Celina OH 45822, Phone# 419-586-7759, e-mail: engineer@engineer.mercercountyohio.gov. Listed below are some of the short and long-term goals for the office for the years to come as well as our mission statement.

- 1. Maintain an acceptable standard of condition of our roadway pavements & bridges.
- 2. Obtain outside funding sources to supplement our budget for capital improvements.
- 3. Be aggressive where possible in putting significant resources into capital improvement projects like roadway widening, bridge replacements, etc.
- 4. Assist townships in getting outside funding sources for their capital improvement projects and assist them in the administration of those funds.
- 5. 24' by "44"—long-term goal to have all county road pavements widened to a minimum width of 24' by the year 2044.
- 6. Improve the condition of our county ditch maintenance program ditches and tile.

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