

**JAMES (JIM) A. WIECHART, P.E., P.S.**  
**Mercer County Engineer**  
**REPORT FOR 2011**

---

---

2011 provided another opportunity for all the employees of the Mercer County Engineer to make significant improvements to the roadway and bridge infrastructure in our county. Much good was accomplished throughout the year with these public works and this is a credit to the team effort of our employees. Our team accomplishments are far more extensive than our individual efforts and we look forward to the challenges and opportunities that will present themselves in 2012.

A challenging snow and ice melt event coupled with significant rainfall in late January/early February created a great deal of flooding which damaged some roads, bridges and drainage structures. Our crews reacted quickly and over the course of several weeks after that event, most repairs had been completed.

Much of our outside work is very weather dependent, but despite the aforementioned weather problems in the early part of the year and a wet harvest season; the construction season stayed relatively dry which allowed much to get done.

The slow economy led to a very modest (about 1%) growth in our base revenue. We are thankful to be able to serve the public with our work and it is our responsibility and mission to do the utmost with the means available to better our county. We take this responsibility seriously.

This report is contrary to bling, as it lacks any abundance of ostentatious flamboyance. This report was done at minimal cost, fanfare, extravagance or exaggeration. It is a compilation of where your money went and what improvements we were able to make with it. We embrace the simplicity, practicality of it and the strong foundation of facts and figures. In an age when it seems some may lack these foundations, we hope you see value in it. We are always happy to answer any questions you may have and we welcome your comments.

## REVENUE/EXPENDITURES

<u>HIGHWAY RECEIPTS</u>			<u>HIGHWAY EXPENDITURES</u>		
MOTOR LICENSE FEES	\$2,420,970	29%	RESURFACING/IMPROVEMENTS	\$4,932,971	60%
GAS TAX	\$2,310,207	27%	BRIDGE CONSTR. & MAINT.	\$361,642	4%
SALES & REIMBURSEMENTS	\$389,143	5%	SALARIES	\$1,214,540	15%
GAS REIMBURSEMENT	\$459,314	5%	FRINGE BENEFITS	\$468,026	6%
STATE & FEDERAL GRANTS	\$2,885,961	34%	EQUIPMENT PURCHASES	\$278,733	3%
INTEREST INCOME	<u>\$23,674</u>	<1%	ROAD MAINT. & UTILITIES	\$712,163	9%
			REPAIRS & SUPPLIES	<u>\$217,904</u>	3%
<b>TOTAL RECEIPTS</b>	<b>\$8,489,269</b>		<b>TOTAL EXPENDITURES</b>	<b>\$8,185,979</b>	

## 2011 ROAD RESURFACING

The Shelly Company was awarded a contract for the county road resurfacing, and a portion of the resurfacing monies, \$420,000 came from an Ohio Public Works Commission grant.

<u>ROAD NAME</u>	<u>LENGTH (MILES)</u>	<u>WIDTH</u>	<u>(448II) TONS</u>	<u>(448I) TONS</u>	<u>TOTAL COST</u>
<b>Mercer County 3/4" x 3/4"</b>					
Philothea	2.151	20'	896	1,085	\$109,887
Clover Four	6.140	22'	3,448	4,175	\$422,868
Watkins	3.280	20'	1,346	1,670	\$167,351
Carmel Church	2.177	19'	946	1,071	\$111,772
Oregon	4.019	19'	1,748	1,970	\$210,148
*Ft. Recovery Minster	4.039	24'	4,295	2,522	\$369,146
*Mud Pike	<u>0.672</u>	22'	-	<u>696</u>	<u>\$40,917</u>
<b>TOTALS</b>	<b><u>22.478</u></b>		<b><u>12,679</u></b>	<b><u>13,189</u></b>	<b><u>\$1,432,089</u></b>

\*Denotes Widening Trench

Note: Other resurfacing was done through roadway reconstruction projects listed elsewhere within this report.

## 11 ROADS RECEIVED CHIP AND SEAL SURFACES

<u>ROAD NAME</u>	<u>WIDTH</u>	<u>LENGTH (MILES)</u>	<u>TOTAL COST</u>
<b><u>FULL SEAL</u></b>			
Harris	18 ½'	2.500	\$27,727
Denny	18 ½'	0.259	\$3,437
Winkler	18 ½'	0.245	\$4,225
Wabash	18'	5.038	\$55,581
Erastus Durbin	18 ½'	5.053	\$53,113
Township Line	18'	2.512	\$27,250
St. Anthony	18 ½'	3.177	\$32,862
Lange	18'	4.167	\$46,414
Cranberry	18'	1.007	\$12,596
Cassella Montezuma	18'	1.695	\$20,599
Mercer Darke County Line	18 ½'	<u>4.021</u>	<u>\$45,960</u>
<b>TOTAL FULL SEAL</b>		<b>29.674</b>	<b>\$329,764</b>
<b>TOTAL STRIP SEAL</b>	Varies	<b><u>10.250</u></b>	<b><u>\$31,046</u></b>
<b>TOTAL SEAL PROJECTS</b>		<b><u>39.924</u></b>	<b><u>\$360,810</u></b>

## PAVEMENT MARKINGS

The following pavement markings were placed: 395 miles of centerline and 133 miles of edge line at a cost of \$157,675. A grant that was applied for and was awarded from the Federal Highway Administration provided \$150,000 towards this work.

## BRIDGE RECONSTRUCTION PROJECTS

As schedules, time and Mother Nature allowed, bridge maintenance activities were completed on many structures throughout Mercer County. Those maintenance details are generally all lower cost activities and are not listed herein. Replacements and rehabilitations (higher cost projects) are detailed in this report below. 4 bridges on CR219A were rehabbed or replaced utilizing 80% federal funds while 1 large culvert was also completed as part of that federally-funded roadway widening project.

Most of the projects are complete replacements with those listed with an “R” next to the type are a “rehabilitation”.

### 2011 BRIDGE & LARGE CULVERT REPLACEMENT PROGRAM

<u>TWP</u>	<u>CULVERT</u>	<u>ROAD NAME</u>	<u>TYPE</u>	<u>COST</u>
GRA	C10-11.01C	WATKINS	48 LF 24” DIA. PIPE	\$3,068
MAR	C30B-15.34C	FT REC-MINSTER	48 LF 8’W X 3’H CONCRETE BOX	\$22,764
MAR	C30B-16.26C	FT REC-MINSTER	48 LF 29”H X 45”W ELLIPTICAL PIPE	\$12,091
WAS	C31A-0.56C	WABASH	56 LF 43”H X 68”W ELLIPTICAL PIPE	\$12,401
FRA	C80A-4.33C	CLOVER FOUR	56 LF 38”H X 60”W ELLIPTICAL PIPE	\$13,578
FRA	C96B-1.31C	CR219A	56 LF 8’ X 3’ CONCRETE BOX	\$25,635 VTF EXCAVATION
JEF	C146-01.68C	FAIRGROUND	48 LF 29”H X 45”W PRECAST ELLIPTICAL PIPE	\$6,728
UNI	T236A-01.90C	HAMILTON	40 LF 48” DIA. CONCRETE PIPE	\$4,085
UNI	T240A-2.36C	SHELLEY	40 LF 29”H X 45”W ELLIPTICAL PIPE	\$8,556
UNI	T240A-2.75C	SHELLEY	48 LF 34”H X 53”W ELLIPTICAL PIPE	\$8,400
DUB	T254-0.11C	ROSS	48 LF 8’W X 3’H CONCRETE BOX	\$20,624

<u>TWP</u>	<u>BRIDGE</u>	<u>ROAD NAME</u>	<u>TYPE</u>	<u>COST</u>
FRA	C96B-1.04B	CR219A	56 LF 20' X 10' CONCRETE BOX	\$84,369 VTF EXCAVATION
FRA	C96B-2.71B	CR219A	56 LF 10' X 6' CONCRETE BOX	\$48,278 VTF EXCAVATION
FRA	C96B-3.56B	CR219A	56 LF 12' X 3' CONCRETE BOX	\$40,396 VTF EXCAVATION
FRA	C96B-4.60B	CR219A	CAST IN PLACE REINFORCED CONCRETE DECK (R)	\$235,386 VTF EXC- EAGLE BRIDGE (SUB)
CEN	C151B-2.75B	RICE	56 LF 77" DIA. CONC. PIPE/(2) ½ HT PRECAST CONC. HEADWALLS	\$29,245
LIB	C170-2.67B	FRAHM PIKE	64 LF 96" DIA. REINFORCED CONCRETE PIPE	\$26,432
LIB	C170-2.97B	FRAHM PIKE	72 LF 77"H X 121"W ELLIPTICAL CONCRETE PIPE	\$40,258
LIB	C170-3.27B	FRAHM PIKE	64 LF 66" DIA. REINFORCED CONCRETE PIPE	\$16,039
HOP	C196-9.04B	TAMA	56 LF 78" DIA. CONCRETE PIPE	\$16,509
HOP	C196-9.94B	TAMA	88 LF 68"H X 106"W ELLIPTICAL PIPE	\$35,395

NOTES: Some of the bridge and culvert materials for these projects were purchased in 2010. Also, some of the projects may have been started in 2010. Cost shown is 2011 and may not be total project cost.

## ROAD RECONSTRUCTION PROJECTS

The following roadways were improved with the pavement and shoulders being widened:

### **Deep Cut Road** from SR 707 to Mercer-Auglaize County Line

*2011 Cost: \$11,065.24      2011 Grant: \$313,540.42(federal funds)*

*Note: Started in 2010, finished in 2011*

### **St. Anthony Road** from Burkettsville-St. Henry Road to Coldwater Creek Road and **Coldwater Creek Road** from St. Anthony Road to US 127

*2011 Cost: \$391,080.61      2011 Grant: \$318,873.58(federal funds)*

*Note: Started in 2010, finished in 2011*

### **CR219A** from SR 219 to SR 219      5.01 miles in length

*2011 Cost: \$1,706,841.23      2011 Grant: \$1,240,488.64(federal funds)*

*Note: To be finalized in 2012*

The following roadway had only its' shoulders widened:

**Sharpsburg Road** from the Village of Ft. Recovery to Mercer-Darke County Line

*2011 Cost: \$211,568.57*

*2011 Grant: \$138,623.12(OPWC state funds)*

*Note: To be finalized in 2012*

## **MAINTENANCE**

Roadside maintenance of existing roadway components is a very important part of our operations. During 2011 there were 1136 signs replaced. 5 miles of roads were spot-paved.

Even though the spring started out quite soggy, 8 county mowers ran fairly consistent May through September mowing 390 miles of county roads making anywhere from 4 to 6 rounds in some sections. A small portion of county open ditches were mowed during the regular mowing season once mowers were caught up with side ditches and conditions allowed. Mowers attempted to mow around the weather to complete the remaining open ditches. Due to the return of wet weather toward the end of October into November and a large number of crops still in the field; maintenance ditches were put on hold until next year.

County crews installed 61 catch basins. 8 different locations had trees cut and brush removed. Approximately 500' of old fence was removed.

In fighting snow and ice, 1,398 tons of salt were used at a cost of \$91,345.34 and 1,398 tons of grit were used at a cost of \$10,139.39. 1,106.5 hours of overtime were worked in snow removal. In all, the costs of snow and ice control and removal to our operations in 2011 were \$308,878.12.

The Daltons, Inc. received the contract for roadside herbicide spraying. The bid price per mile of roadside was \$48.50. The total amount for treating both sides of all county roads was \$18,575.

## **LITTER PICK-UP**

The County Engineer's Office, in partnership with the Mercer County Solid Waste Office and various Boards of Township Trustees, sponsored various civic and community groups in 11 Mercer County townships to pick up litter along county roads in 2011. The Engineer's office paid each group \$20.00 per mile for their efforts in this community service project. A total of 331 miles was picked up. The County Engineer's Office along with the Solid Waste Office furnished litterbags, safety vests, and signs and paid the tipping fees in disposal of the litter.

## PERSONNEL

A total of 24 full time employees made up our personnel; with 2 retirements (Rex Emans with 12 years of service, and Don Kittle with 30 years of service) occurring before the end of 2011, we had 22 full time employees. In the year 2011 there were 14 part-time and seasonal employees that worked for the Engineer. In 2000 we had 31 full-time employees. In 1984 there were 39 full-time employees.

## EQUIPMENT PURCHASES/FACILITY UPGRADES

The following is a list of the purchases over \$5000 during 2011.

(3) Gledhill Snow Plows	<i>Total for all 3</i>	\$	22,680.00
Fuel System	<i>*replaced due to lightning damage</i>	\$	10,184.00
ESI-50 Phone System	<i>*replaced due to lightning damage</i>	\$	5,794.00
Loader Backhoe (19C) with ditching bucket		\$	72,405.00
2011 Golden Flat Trailer (28T)		\$	6,000.00
2011 Ford F250 4 x 2 Styleside Pickup (30P)		\$	19,600.00
2012 Intl. Cab & Chassis, Dump Bed, & Hydr. System(52)		\$	125,144.00

## INTERESTING FACTS

There are 406 bridges on Mercer County township and county roads. Every year all 406 bridges are inspected by our office.

There are 447.906 miles of township roads and 387.945 miles of county roads in Mercer County.

Since 1999 the Mercer County Engineer has obtained approximately \$3,934,347 in competitive state grant programs for local road improvements.

Since 1999 the Mercer County Engineer has obtained \$21,329,434 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.

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.

From 2007-2011 total accounts for salaries and fringe benefits have decreased over that 5 year period 5.73%; being an average annual decrease in that period of time of 1.146%.

## SUMMARY

Much was accomplished in 2011 and we welcome your comments, suggestions and questions to our office: Mercer County Engineer, 321 Riley Street, Celina OH 45822, Phone# 419-586-7759, e-mail: engineer@mercercountyohio.org. Listed below are some of the short and long-term goals for the office for the years to come.

1. Maintain an acceptable standard of condition of our roadway pavements.
2. Obtain outside funding sources to supplement our budget for capital improvements.
3. Be aggressive in putting significant resources into capital improvement projects like roadway widening, bridge replacements, etc.
4. Complete the development of the Mercer County Engineer facility west of Celina.
5. Assist townships in getting outside funding sources for their capital improvement projects.
6. 24' by "24"—long-term goal to have all county road pavements widened to a minimum width of 24' by the year 2024.

*James A. Wiechart*

---

**James (Jim) A. Wiechart, P.E., P.S.**  
**Mercer County Engineer**