# 2011 ANNUAL REPORT OF THE CONDITION OF ROADS, BRIDGES, AND CULVERTS Coshocton County Engineer Frederick T. Wachtel, P.E., P.S.

This report is filed annually to highlight the Coshocton County Engineer's Office activities of 2011 and to lay out the tentative plans for the year 2012.

The challenges of providing a reasonable level of service for the citizens of Coshocton County continue to escalate. Declining revenue, increasing costs, and unfunded mandates are hampering our ability to do all the things that need to be done to maintain a county road and bridge system that serves the needs of our constituents. As time goes on we will have no choice but to close bridges that we can no longer afford to maintain or replace and many hard surfaced roads will continue to devolve into gravel roads. Until the legislators at the state and federal level recognize their responsibility to provide adequate funding for local road agencies, the decline will continue. Over 90% of the Coshocton County Engineer's annual revenue is generated by the gas tax and license plate fees. No County general fund moneys are provided to address these needs.

The shale drilling boom is inching ever closer to Coshocton County. We have been monitoring the activities in some of our eastern counties so that we can be as ready as possible to deal with all of the challenges that will accompany this activity. Permitting activity is underway for two such wells in Linton Township in the southeastern corner of our county. We expect to see construction activity for the well pads begin in the spring of 2012. This dynamic has the potential to be a positive for the overall economic well-being of our county, but will also create some real challenges for the County Engineers' Office and some or all of 22 townships. It is going to be an exciting time.

I hope you will find this report interesting and informative. As always, if you have questions with regard to the county road and bridge system, please feel free to contact us at 740-622-2135 or via email at <u>fredwachtel@coshoctoncounty.net</u>. And, for current information with regard to the County Engineer's Office please visit our website at www.coshoctoncounty.net.

Thank you for giving me the opportunity to serve as your elected Coshocton County Engineer for these 19 years. It has an honor and privilege working for you.

# PERSONNEL MATTERS

We still staff with a total of 25 employees in the County Engineer's Office, which includes one person in the Tax Map Office and myself.

Our Union Contract expired in August, 2011. Due to the financial uncertainties and the unknown outcome of the SB 5 ballot issue, the members of AFSCME Local 343 agreed to a one year extension of the present contract with no wage increase. This unselfish act on the part of the Union helped us finish the year in the black. We will begin negotiations soon so that we have a new agreement in place when this extension expires this August.

Eleven employees completed 2011 with perfect

attendance – Barbara Babcock, Bob Bordenkircher, Ronnie Fisher, Kelly Sims, and Jeff Staser one year; Pam Acord, Dave Alexander, and Cliff McPeak two years; Scott Frazee and Brent Everhart four years; and Rob Helmick eight years in a row.

#### **BUILDING IMPROVEMENTS**

We replaced an outside door in our Storage Building in 2011. In addition we installed electronic locks on two of the outside doors so that we can eventually better control access into our facilities.

We had a video surveillance system installed at our complex to improve safety and security.

We installed new carpet in the Administrative

Offices replacing the original 11 year old carpet that was showing considerable wear.

With the design help of the ladies at the Garden Patch Garden Center, we piggy-backed on the community's Red, White and Bloom landscaping theme as part of our tribute to the America in Bloom competition that the City of Coshocton participated in in 2011.

## MAJOR ROAD IMPROVEMENTS

Our 2011 resurfacing program consisted of a combination of MVG funding and OPWC grants.

We administered all aspects of the OPWC Round 25 resurfacing projects. The County Engineer's personnel administered the contracts and provided the bulk of the construction inspection. Entities that were participants in these projects included the City of Coshocton, the Townships of Franklin, Jackson, Lafayette, Tuscarawas, and Virginia. This is just another example of how we have been collaborating and sharing services with various other governmental entities for years.

County roads resurfaced in 2011 were:

- CR 3, 5.79 miles, motor-pave, from Muskingum County Line to CR 383, Pike Township, estimated at \$360,224;
- CR 25, 2.70 miles, motor-pave, from CR 24 to CR 405, Bethlehem Township, \$178,717;
- CR 80, 4.73 miles, motor-pave, Muskingum County Line to CR 3, Pike Township, \$291,088;
- CR 103, 2.01 miles, motor-pave, from SR 751 to Tuscarawas County Line, Adams Township, \$130,239;
- CR 115, 1.01 miles, motor-pave, from US 36 to Dead End, Tuscarawas and Lafayette Townships, \$64,222;
- CR 116, 0.42 miles, motor-pave, CR 170 to Dead End, Lafayette Township, \$20,840;
- CR 236, 3.07 miles, motor-pave, from CR 10 to SR 93, Crawford Township, \$202,309;
- CR 318, 0.70 miles, asphalt, from MM0.7 to SR 60, \$36,311; and,
- CR 621, 1.91 miles, US 36 to US 36, Tuscarawas and Keene Townships, \$245,534.

Current condition ratings of our 350 miles of road as reported on our most recent OPWC Capital Improvement Report is as follows with the 2010 and 2009 miles in parentheses: 55, (50) (86) miles are excellent; 171, (166) (120) miles are good; 88, (99), (135) miles are fair; 36, (35) (9) miles are poor; and none are critical.

We are re-evaluating our road maintenance strategy in light of the continuing financial shortcomings. Many roads that were once hard surfaced, be it hot mix asphalt, motor-paved, or chip sealed are now deteriorating to the point where portions of the roads are reverting back to gravel surfaces. This is certainly not the results we want to provide to our constituents, but it is the harsh reality of insufficient funding.

# PENDING ROAD PROJECTS

Our 2012 resurfacing program will be funded through a combination of County Engineer's Office funds and a pending OPWC grant. No general fund monies are allocated to the County Engineer's Office. The planned projects, providing funding is available, include:

- CR 5, 0.28 miles, asphalt, from SR 93 to CR 151, Lafayette Township, estimated at \$29,000;
- CR 14, 1.46 miles, motor-pave, from Muskingum County Line to CR 436, Washington Township, \$89,000;
- CR 23, 0.40 miles, asphalt, US 36 to Bridge 5, Bethlehem Township, \$45,000;
- CR 33, 1.01 miles, motor-pave, from CR 319 to CR 49, Clark Township, \$62,000;
- CR 38, 1.57 miles, motor-pave, from SR 83 to 29301 CR 38, Keene and Mill Creek Townships, \$99,000;
- CR 49, 0.79 miles, motor-pave, CR 33 to SR 60, Clark Township, \$50,000;
- CR 70, 1.06 miles, motor-pave, from CR 3 to CR 18, Pike and Washington Townships, \$69,000;
- CR 92, 0.59 miles, motor-pave, from CR 367 to Knox County Line, \$34,000;
- CR 151, 1.90 miles, asphalt, CR 5 to SR 751, Lafayette Township, \$183,000;
- CR 254, 1.40 miles, motor-pave, RR crossing to SR 751, Oxford Township, \$90,000;
- CR 410, 1.18 miles, motor-pave, TR 256 to CR 9, Oxford Township, \$82,000;
- CR 436, motor-pave, 3.65 miles, CR 14 to CR 3, Pike and Washington Townships, \$222,000;
- CR 489, 0.19 miles, motor-pave, Muskingum County Line to CR 14, Washington Township, \$12,000; and,
- CR 501, 0.57 miles, asphalt, Bridge 2 to SR 541, Jackson Township, \$43,000.

As always, this list is subject to change depending upon the severity of the winter, bid prices and other factors such as the price of oil. If we are able to complete all of this work we will have resurfaced 16.05 miles of road and expended an estimated \$1,109,000 of which \$958,000 would come from our MVG budget and the remainder from OPWC grants. This \$958,000 is 24% of our total budget. However, this is only 5% of our county highway system.

# **BRIDGE CONSTRUCTION**

Because of the load rating mandate that we are operating under we've had to re-assess our county bridge system. The result of the analyses of 34 steel beam timber deck bridges has caused a significant change to 2011 ANNUAL REPORT our replacement program. In addition, we have reduced our total bridge count by 4 bridges due to replacing bridges with culverts so that the structures no longer meet the definition of a bridge. We will be employing this strategy in 2012 as well to help us deal with the lack of funds to build bridges but still provide a level of service to our constituents so they won't have to detour miles out of their way just to get home. We are also applying for Federal Funds to load rate our remaining unrated bridges. The results of those analyses will only create more problems for our operation because there are no additional funds provided to increase our bridge replacement program.

We completed 4 bridge replacements in 2011. Two pre-stressed concrete beam bridges were built by County personnel – CR 297, B2 and TR 88, B2, both funded in part by an OPWC grant. TR 237, B1 was a four-sided concrete box funded through our MVG budget. McConnell Contracting of West Lafayette built our CR 501, B2, a pre-stressed concrete beam bridge funded through the LBR program. We also hired McConnell to replace two piers on a small three span bridge on TR 455. The old timber piers were failing, so we replaced them with steel headers resting on driven steel pilings.



The General Appraisal Summary of our bridges is as follows:

	GA9	GA8	GA7	GA6	GA5	GA4	GA3
<b>'</b> 11	0	14	95	70	60	34	11
'10	0	11	100	65	64	37	11
<b>'</b> 09	0	13	94	69	67	39	6
<b>'</b> 08	0	17	87	70	75	34	6
<b>'</b> 07	0	4	82	76	83	30	15
<b>'</b> 06	0	10	72	80	82	33	13
<b>'</b> 05	10	4	67	68	94	38	9
<b>'</b> 04	15	3	70	60	97	35	10
<b>'</b> 03	1	15	59	60	98	47	10
<b>'</b> 02	4	14	64	69	80	55	5
<b>'</b> 01	6	11	62	62	88	54	7

Based upon ODOT's sufficiency ratings, the breakdown at year's end is as follows:

Condition	11	10	09	08	07	06	05	04
Bridges	284	288	288	289	290	290	290	291
Excellent	103	98	95	91	85	75	73	69
Good	91	91	91	93	104	98	97	92
Fair	52	65	69	73	72	75	90	93
Poor	38	34	33	32	28	42	30	36
Critical	0	0	0	0	0	0	0	1
% Posted	20.1	22.2	21.1	22.4	26.6	29.3	30.0	30.6

#### PENDING BRIDGE PROJECTS

We have two bridges to be built in 2012 that are part of our OPWC Round 25 funding – White Eyes TR 191, Bridge 1 and Pike TR 4, Bridge 10.

Other bridges planned for construction in 2012, provided funds are available, include:

- CR 383, Bridge 3, Perry Twp. MVG
- CR 171, Bridge 1, White Eyes Twp. 2012 OPWC
- CR 171, Bridge 2, White Eyes Twp. 2012 OPWC
- TR 58, Bridge 4, Jackson Twp. 2012 OPWC
- TR 192, Bridge 1, Keene Twp. 2012 OPWC
- CR 17, Bridge 7, Bedford Twp. This will be a federally funded bridge replacement. We are developing the plans for this "Just Build" project. It is programmed for 2013 so we will be finalizing the bid package in 2012.

#### FLEET MANAGEMENT

We limited our major equipment purchases to one new cab and chassis and associated outfitting of said truck for snow plowing. This is the first time under my tenure that we bid the outfitting separate from the truck itself. The successful bidder on the cab and chassis was Young Truck Sales providing a 2012 Freightliner Model The cost for this single axle truck was M2-106V. \$73.626. The successful bidder for providing the stainless steel bed, central hydraulics, and snow plow was Monroe Truck Equipment at a price of \$41,559. This is our first Freightliner truck and the first time we had outfitting provided by someone other than Ace Equipment. It will be a good chance for us to evaluate other solutions to our truck needs. So far, both the truck and outfitting have met or exceeded our expectations.

As a part of our ongoing sharing and collaborating efforts we have staged our third backhoe at the Village of Warsaw maintenance garage. They have access to the unit when needed and so do we. They pay us an hourly rate for when they actually use the unit. We have also rented our Dura-Patcher to the City of Coshocton and the Village of West Lafayette for pothole repairs within their respective municipalities.

#### SAFETY ISSUES

PDK Construction was the successful bidder for our joint guardrail project construction with Guernsey County. Nearly 19,500 feet of guardrail was built along CR 3, CR 4, CR 14, and CR 80. This work was funded by a safety improvement grant through the County Surface Transportation Program (CSTP).

We also completed another year with no lost time accidents. Our last lost time accident was in November, 2008! What a great accomplishment by all of our co-workers.

OSHA hours worked by County Engineer personnel in 2011 were 42,463; 2010, 42,022; 2009, 42,007; 2008, 53,809; 55,875 in 2007; 55,408 in 2006; 58,566 in 2005; and 57,713 in 2004.

# DRAINAGE IMPROVEMENTS AND CULVERT <u>REPLACEMENTS</u>

County crews completed a total of 35 different installations on our County road system in 2011 at a cost of \$89,123. These installations ranged in size from 12" up to 60" diameter plastic pipe with a total length of 1528 feet installed. Culverts were replaced in 10 of our 22 townships. Pike Township, with 20 installations, had the most replacements. Most of the installations were in preparation for our paving programs so that we won't have to cut the new pavement for the foreseeable future.

In our ongoing effort to assist our townships we installed a total of 6 large culverts for four townships at a cost of \$66,201. This included replacing three bridges with culverts.

Four different townships purchased a total of \$6800 worth of culvert through our joint culvert purchase program in 2011.

#### WINTER SNOW PATROL

Cost of providing snow and ice control for the winter of 2010 – 2011 totaled \$339,458. The breakdown of the cost was: Labor- \$81,785; Equipment - \$81,155; driving 36,069 miles; Salt - 2694 tons, \$168,321; Sand, #9 gravel, and cinders - 1900 tons, \$8197.

#### TAX MAP / GIS

In 2011, we reviewed 1832 deeds, affidavits, land contracts and instruments of transfer, as well as 181 property surveys. We performed 118 CAUV calculations for the County Auditor, many of which included multiple parcels.

A total of 1224 deeds transferred which included 1524 parcels. Of these transfers 189 properties transferred twice, 19 transferred 3 times, and 1 parcel transferred 4 times.

We assigned 52 new addresses in 2011.

We are looking at our entire deed review process with the idea that we need to streamline the process in order to reduce the number of times that we have review the same information. We are also putting out on our website a database that tracks each submittal so that people can check for themselves where their instrument is in the process. Many times the Map Office gets blamed for holding up transactions when in fact the instrument is not even in our hands.

We are working with Ohio University to update our GIS to the current ESRI software. They are taking our existing functionality and marrying it with ARCMap Version 10.0. We hope to have the new version live for all to use later this spring.

#### ACCESS MANAGEMENT

A total of 61 access permit applications were received in 2011, which generated \$2750 in fees. Of that total, 25 were minimum volume drives which include new field drives, oil well drives, etc.; 28 were very low volume drives being mostly residential drives; and 8 were low volume commercial drives. In addition, 10 existing bad drives were identified and corrective action plans worked out with the owners.

Nineteen OUPS tickets were reviewed and field inspections made. These visits resulted in corrective work at some locations, permit applications in others, and the opportunity to counsel folks on our permitting requirements.

Forty-nine proposed splits were reviewed for the Coshocton County Regional Planning Commission. Three were not satisfactory as presented and all were reconfigured to accommodate a satisfactory access point.

We issued 23 utility permits for installations within the right-of-way of various county roads.

As a reminder, any construction in the public road right-of-way requires a permit. Contact the County Engineer's Office to details.

# FLOODPLAIN ADMINISTRATION

We processed 8 floodplain permits in the unincorporated part of Coshocton County. We did not issue any permits in either the City of Coshocton, nor in the Village of Warsaw.

