

2007 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 2007 and to lay out the tentative plans for the year 2008.

The tragic collapse of the I-35W bridge in Minneapolis this past summer brought to the public's attention the plight that all agencies charged with the operation and maintenance of the nation's infrastructure have known for a long time – the amount of financial resources required to adequately care for our aging highway and bridge system is woefully inadequate. With the significant increase in construction costs and a minimal - increase in revenue for the County Engineer's Office, we are going to find it harder and harder to provide the level of service which our constituents want and deserve. The County Engineer's Office receives no property taxes or general fund monies to help fund our operation.

We are fortunate we have been able to replace all of our major bridges in the last several years so that our oldest major structure was built in 1972. We are also fortunate that we only have three fracture critical bridges in our inventory, two through trusses built in the mid-1990's and the Helmick Covered Bridge which was restored in 1995. Every year engineers from the consulting engineering firm of Hammontree and Associates inspect all of our bridges and provide a detailed report of the condition of each bridge to this office. This information is then used to plan our maintenance and replacement program so we can address the shortcomings of our bridges before they become catastrophes.

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 fredwachtel@coshoctoncounty.net.

PERSONNEL MATTERS

Our employees are what allow us to be a successful operation. We have a diverse group of people who help us get the work done.

We had one retirement in 2007. Bill Reed, our Safety and Training guru, decided to join the ranks of the retired after spending just over two years helping us to build a safety program. We wish him well as a man of leisure.

We brought three new Highway Maintenance Workers on board in 2007. Chris Guthrie joined us coming from County Commissioners' Maintenance Department. Kelly Sims came to us from the Tuscarawas Township Trustees' road crew. And, Brent Everhart left private industry to come to our operation. All three bring with them different skills and abilities to help make us a more effective operation.

We added these three gentlemen anticipating that within the next few years a number of our employees will be able to retire. In fact, these fellows

have worked out so well that we have initiated a 2 year retirement incentive program to provide some of our senior employees the opportunity to start their retirement earlier than they may have originally planned.

Three employees completed 2007 with perfect attendance. Rob Helmick four years, and Rick Conkle and Jeff Staser have made it seven years in a row.

MAJOR ROAD IMPROVEMENTS

Our 2007 paving program was somewhat limited due to the ever increasing cost of doing business. We did, however, have three different contracts for three different surface treatments in attempt to get the most bang for our buck. In addition to traditional hot mix asphalt paving, we also contracted for motor-paved, and for chip sealing

We administered all aspects of the OPWC Round 21 County Resurfacing Program - 2007. This project involved a total of six different entities that went together to realize the economy of scale. In addition to

the Coshocton County Engineers' Office, the City of Coshocton, the Village of West Lafayette, and the Townships of Lafayette, Tuscarawas, and Virginia were part of this contract. The Shelly Company was the successful bidder for this work which totaled \$978,041. County roads paved as a part of this project were:

- CR 12 from SR 83 to TR 212, Keene and Mill Creek Townships, 3.05 miles, actual cost \$238,832;
- CR 54 from SR 60 to SR 541, Washington and Bedford Townships, 3.92 miles, actual cost \$352,039.

The Shelly Company was also the successful bidder for our Motor Paving – 2007 contract. The roads receiving this treatment were:

- CR 58 from CR 17 to MM 1.812, Jackson Township, 1.81 miles, actual cost \$96,518;
- CR 298 from CR 6 to CR 297, Virginia Township, 0.92 miles, actual cost \$46,471.

Small's Asphalt Paving Company won our sealing contract for 2007. The roads they sealed included:

- CR 14 from Muskingum County Line to CR 436, Washington Township, 1.45 miles, cost \$21,607;
- CR 92 from Knox County Line to SR 206, New Castle and Perry Townships, 1.80 miles, cost \$19,887;
- CR 99 from SR 206 to SR 79, New Castle and Jefferson Townships, dust mats, cost \$9,127;
- CR 436 from TR 71 to CR 3, Washington and Pike Townships, cost \$96,865.

Current condition ratings of our 352 miles of road as reported on our most recent OPWC Capital Improvement Report are: 98 miles are excellent; 93 miles are good; 148 miles are fair; 13 miles are poor; and none are critical. Of these 352 miles almost 70 miles are still gravel roads.

PENDING ROAD PROJECTS

Projects that are planned for 2008 include:

- CR 10, 4.99 miles, from CR 425 to CR 236, White Eyes and Crawford Townships, asphalt resurfacing, funded through OPWC;
- CR 19, 1.56 miles, from CR 33 to TR 22, Monroe Township, asphalt resurfacing, funded through OPWC;
- CR 22, 6.09 miles, Warsaw Corporation Limit to CR 33, Jefferson and Monroe Townships, asphalt resurfacing, funded through OPWC;
- CR 33, 0.33 miles, CR 22 to CR 19, Monroe Township, asphalt resurfacing, funded through OPWC;
- CR 51, 1.40 miles, SR 541 to SR 79, Bedford Township, motor paving, funded entirely by MVG;
- CR 297, 4.73 miles, CR 6 to SR 541, Virginia and Jackson Townships, motor paving, funded by MVG;
- CR 18, 2.68 miles, SR 541 to CR 367, Perry Township, double seal, funded by MVG;

- CR 20, 4.63 miles, SR 715 to CR 401, New Castle and Tiverton Townships, double seal, funded by MVG;
- CR 82, 4.05 miles, SR 79 to SR 60, Jefferson Township, double seal, funded by MVG.

As always, this list is subject to change. Depending upon the severity of the winter, bid prices and other factors it may need be necessary to revise the program as the year unfolds. We continue to see our costs for this work increase much more than our income.

BRIDGE CONSTRUCTION

We were able to complete the construction of 10 replacement bridges in 2007. Nine were completed by County personnel, in conjunction with concrete beam and concrete box contractors, and one was replaced by contract funded through ODOT's Local Bridge Replacement program. Pre-stressed concrete box beam bridges built in 2007 included: CR 10, B14 in Crawford Twp.; CR 207, B3 in Keene Twp.; TR 65, B3 in Washington Twp.; TR 90, B5 in White Eyes Twp; TR 219, B2 in Mill Creek Twp.; TR 351, B2 in Tiverton Twp.; and, TR 483, B1 in Franklin Twp.. Four-sided concrete boxes were installed at: TR 58, B5 in Bedford Twp. and TR 111, B2 in New Castle Twp..

Maiden and Jenkins Construction from Nelsonville, Ohio was the successful bidder for the bridge replacement of CR 436, B1 in Washington Twp. This ODOT funded, traditionally administered project is now open for traffic. The contractor will have to come back in the spring of 2008 to put down the finish course of asphalt and tidy up the site. Thankfully, with the completion of this replacement we have built all the bridges we can afford to steer through the very cumbersome and frustrating process of funding through the Local Bridge Replacement program. The bureaucratic red tape that is required to use this funding is making it too expensive for smaller counties, like ours, to utilize these funds for anything but major structures.

The General Appraisal of our bridges is as follows:

	GA9	GA8	GA7	GA6	GA5	GA4	GA3
'07	0	4	82	76	83	30	15
'06	0	10	72	80	82	33	13
'05	10	4	67	68	94	38	9
'04	15	3	70	60	97	35	10
'03	1	15	59	60	98	47	10
'02	4	14	64	69	80	55	5
'01	6	11	62	62	88	54	7

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

Condition	07	06	05	04	03	02	01	00
# of Bridges	290	290	290	291	290	291	289	293
Excellent	85	75	73	69	60	60	58	49
Good	104	98	97	92	86	82	78	82
Fair	72	75	90	93	92	89	99	99
Poor	28	42	30	36	52	51	54	62
Critical	0	0	0	1	0	0	0	1
% Posted	26.6	29.3	30.0	30.6	34.0	35.7	40.1	43.0

PENDING BRIDGE PROJECTS

Bridges planned for construction in 2008 include:

- CR 18, Bridge 1, Washington Twp.
- CR 97, Bridge 3, Adams Twp.
- TR 67, Bridge 1, Washington Twp.
- TR 101, Bridge 1, Adams Twp.
- TR 111, Bridge 1, Newcastle Twp.
- TR 159, Bridge 16, Lafayette Twp.
- TR 164, Bridge 3, Tuscarawas Twp.
- TR 224, Bridge 1, Crawford Twp.
- TR 360, Bridge 1, Tiverton Twp.
- TR 483, Bridge 2, Franklin Twp.

FLEET MANAGEMENT

Fleet updates in 2007 included: one new GMC dump truck for \$68,500 with trade in of one truck; one GMC 4WD Sierra 1500 for \$24,228.57; and a 2007 Caterpillar AA 12H Motor Grader for \$185,000.00 with trade in.

GARAGE MAINTENANCE FACILITY

We had to replace the waste oil furnace we use to help heat our vehicle storage building. The last one was in service almost 10 years and saved us thousands of dollars in heating costs.

VEGETATION CONTROL

We have been very diligent this past year with our “brushing” operation. Using our boom truck, chipper and several motivated employees, we have been able to start down a road and remove limbs and trees to open up the roads to improve safety, visibility, and the life of the pavement.

We had the opportunity to try a truck mounted boom mower for a few days to see if it would be good replacement for our tractor mounted boom mowers. We were satisfied enough with its capabilities that we plan to purchase such a unit in 2008.

SAFETY ISSUES

Lake Erie Construction was the successful bidder for our joint guardrail project construction with Guernsey County. Nearly 17,000 feet of guardrail was built along CR 12, CR 93, and CR 124. This work was funded by a safety improvement grant through the County Surface Transportation Program (CSTP).

The safety and training of our employees remain one of the priority goals of the department. Some of the

various ongoing training for our employees include respirator fitting and training for select individuals; Red Cross CPR training; hearing conservation testing and training; snow removal techniques; severe weather safety; electrical safety; motor grader safety; hazardous energy training; hazard communications; ergonomics and lifting; skid steer safety; bucket truck safety; and fork lift operations.

Bill Reed, our Administrative Assistant for Safety and Training also attended sessions on: Workers’ Compensation and the Ohio Safety Congress and Expo.

OSHA hours worked by County Engineer personnel in 2007 were 55,875, 55,408 in 2006, 58,566 in 2005 and 57,713 in 2004. We had 1 OSHA recordable injury compared to 2 in 2006, which resulted in five days of lost time. The County Engineer’s OSHA incident rate for 2007 was 3.58, which was significantly lower than the 2006 rate of 7.27. This number has dropped for the last three consecutive years

DRAINAGE IMPROVEMENTS AND CULVERT REPLACEMENTS

County crews completed a total of 60 different installations on our County road system in 2007 at a cost of \$75,989.44. These installations ranged in size from 12” up to 48” diameter plastic pipe with a total length of 2532 feet installed. Culverts were replaced in 16 of our 22 townships. Virginia Township, with 11 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 in the foreseeable future.

In our ongoing effort to assist our townships we installed a total of 5 culverts for five different townships for a cost of \$8,935.44.

Eight different townships and one village purchased a total of \$15,936.76 worth of culvert and sign posts from our office in 2007.

CENTERLINE STRIPING

We were part of a Five County Re-striping project that was funded through the CSTP safety program. Almost 90 miles of roads were striped with polyester based paint at no out of pocket expense to Coshocton County.

WINTER SNOW PATROL

The winter of 2006-2007 was almost over before winter began. The majority of storm events took place between January 10, 2007 and March 7, 2007. County crews responded 22 times, drove 23,528 miles, spread 1,350 tons of salt and 1,700 tons of cinders and sand. The total cost for this work was just under \$141,000. By comparison, the cost in 05-06 was \$77,000, 04-05 was \$141,000, 03-04 was \$156,000, 02-03 was \$246,000 and 01-02 was \$81,000.

TAX MAP / GIS

The Coshocton County Geographic Information System went on line in 2007. With some assistance from Woolpert, Inc. we were able to roll out our GIS for the whole world. Accessible at coshoctoncounty.net, the system makes available various data sets including current ownership, roads, 1996 black and white aerial photography, and 2006 color aerial photography, floodplains, subdivisions, and addresses to all who have access to the world wide web. Barb Mainwaring, GIS technician, almost single-handedly built this program over 7 plus years of triumphs, trials and tribulations. A special thanks to the Coshocton County Board of County Commissioners for providing the funds in 2007 to allow us purchase the necessary software and consultant services to make this a reality. In addition to the information listed above, all the boundary surveys for properties in our county have been scanned and are linked to their respective parcel so you can see the actual plat. There is also a link to the County Auditors' website so you can also see all of their information associated with the parcel.

The parcel layer in the GIS is now complete; however, we will be continually editing and updating it as better information comes to light and as parcels transfer. The GIS is a dynamic program and we welcome any suggestions or corrections.

In 2007, we reviewed 2,764 deeds, affidavits, land contracts and instruments of transfer, as well as 206 property surveys. We completed mapping the addresses within the City of Coshocton. We now have captured, within our GIS, all of the addresses that we could identify within Coshocton County. We performed 159 CAUV calculations for the County Auditor and issued 22 floodplain permits.

We handled 1,919 parcel transfers in 2007. Of these transfers 254 properties transferred twice and 27 transferred 3 times. A total of 119 lot splits were mapped in 2007.

With the hiring of a full time director for the Coshocton County Regional Planning Commission we have been able to separate ourselves from the day-to-day operation of that organization. We are still trying to educate the public on the unique responsibilities of each operation.

ACCESS MANAGEMENT

A total of 77 access permit applications were received in 2007, which generated \$3,352 in fees. Mike Campbell, who handles this program, has developed a good working relationship with several of our townships as he has worked very hard to make sure that any new drives are constructed in the correct location and properly to eliminate future safety and maintenance problems for the entity responsible for the road. For the more challenging installations Mike will meet with the

owner, the excavator, and the trustees to make sure everyone is on the same page and the finished product is satisfactory.

The other component of this program involves evaluating all proposed new splits to insure that safe, viable access can be sited on the proposed parcel. In 2007, 69 splits were reviewed of which 2 were not approved and 2 were re-configured to provide an approval access point.

Mike has also been tasked with working on correcting existing drives that have been an ongoing hazard to the motorists using the public road. Many times we will get calls from Township Trustees who have been dealing with poor installations for years. Ten such drives were addressed by the landowners after they were contacted with suggestions on how to improve the situation. This is just the "tip of the iceberg" but you have to start somewhere.

***Frederick T. Wachtel, P.E., P.S.
Coshocton County Engineer
23194 CR 621
Coshocton, Ohio 43812***