# OFFICE OF THE LOGAN COUNTY ENGINEER

# ANNUAL REPORT 2008-2009 ROAD REVIEW

April 1, 2009



Scott C. Coleman, P.E., P.S. Logan County Engineer





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EMPLOYEES (	OF THE LOGAN COUNTY EN	NGINEER'S OFFICE
	County Engineer	
	Scott C. Coleman, P.E., P.S.	
	Engineering Department	
Michaela Brunke	Shirley Brunke	Todd Bumgardner
Greg Dappert	Bryan Dhume, P.E.	Curtis D. Dill, P.S.
Dianne Gauder	Harvey Grimes	Sam Ragland
Bob Simmons	Denny Stryker	-
	Map Room	
Jayma Burkhammer	Jon Hines	Suzie Yoesting
	Road Department	
Matt Archer	Larry Artis	Butch Banning
John Berry	Jeremy Burrey	Todd Coleman
M. Elliott Fullerton	Mark Hilty	Curtis Hites
Greg Kennaw	Jason McKee	Dan McMillen
Joel Miracle	John Spencer	Lisa Stover
Greg Swonguer	Steve Tracey	
	Bridge Department	
Rick Archer	Jim Logan	Shane Long
Keith Price	Ç	· ·
	Traffic Department	
Richard Cooksey	Mark Dearwester	Don Phipps
	Building Authority	
John Cummins	Becky Jolliff	Mike Reffitt

April 1, 2009

To the Honorable Board of Logan County Commissioners and the Citizens of Logan County:

The following pages contain our Annual Report for 2008. On the back page, the reader will find a breakdown of the road miles, the number of bridges on our system, and the number of signs and culverts that we maintain. Also included in this report is what we accomplished in the year 2008, and what we plan to accomplish in 2009.

This year we resurfaced 18.7 miles of county highways, sealed 43.6 miles of county highways, replaced/rehabilitated 7 bridges, one large box culvert, and 18 culverts. We have also assisted the Township Trustees with the resurfacing of 12 miles and chipsealing of 23.5 miles of roads with a combination of sales tax and the Townships' own funds.

Salt bids increased from \$45.87/ton in 2007 to \$58.49/ton in 2008. Due to this 28% increase in cost, we notified the public that overtime snow and ice control as well as total salt usage would be significantly lower than in previous years. Even though we have had a lot of snow and ice events in late 2008, and extremely cold temperatures in November and December, we have been able to reduce our grit usage by 17% compared with the same time period in 2007. With our reduced salt mixture ratio, this represents approximately 33% less salt usage.

Logan County Highway Department crews constructed approximately five feet of fill on CR 13 between TR 214 and TR 33. This is an area that flooded regularly and has continued to sink over time. We were able to fill the area with free asphalt millings, concrete millings, and dirt fill. Our costs have been limited to labor, equipment, a new culvert, surface stone, and seeding. We will continue to maintain the gravel through this winter and place finish grade and asphalt this summer.

The bridge 63-2.63 design-build project, located between CR 64 and TR 256, was bid for \$883,000.00 last summer. The project construction began in February of 2009 and is scheduled for completion by July of 2009, weather permitting. The construction will be paid with an 80% federal aid grant up to a maximum of \$751,520.00 in federal funds.

This past summer we completed our entire pavement marking program using an \$83,314.66 federal aid grant.

This year, I will complete my three-year term as the District 13 Ohio Public Works Commission Integrating Committee Chairman. This year we were able to fund over \$11.9 million of construction projects throughout District 13. These projects will start in early 2009. The Logan County Engineer's Office applied for and received grant funding of \$730,688.00 for County Paving, \$89,090.00 for Village Paving, and \$89,090.00 for Township Paving. The City of Bellefontaine received a grant of \$89,090.00 and a loan of \$290,400.00 for their Wastewater Treatment Plant Upgrade.

Last year was a busy year for me serving as the co-chair of the bridge committee for the County Engineers Association of Ohio (CEAO) due to two major projects. The first project that I worked on was developing an agreement between CEAO, the Federal Highway Administration, and the Ohio Department of Transportation (ODOT) that established guidelines, timetables, and quality assurance for bridge inspections, gusset plate analyses, load ratings, and scour analyses for County Engineer's Offices. This project resulted from the Minnesota I-35 bridge collapse. I have also been working with County, State, Federal, and private sector bridge inspectors and engineers to update the ODOT Manual of Bridge Inspection and rating system. Currently, we plan to implement the revisions in 2010.

The 1/2% sales tax for roads and bridges generated \$2,564,842.14 in 2008. The County Road portion totaled \$1,692,795.82 and the Township portion totaled \$359,077.90. Total sales tax expenditures were \$1,146,066.02 for County projects and \$265,910.28 for Township projects. The County Engineer's Office expended \$6,471.86 in 2008 to develop, administer and perform inspections for the Township paving and chip-seal programs. We expended an additional \$1,009.52 to develop the 2009 Ohio Public Works multi-village paving program for the villages.

This fall, Logan County as well as most of Ohio experienced significant wind damage due to hurricane Ike. We had several roads closed due to downed power lines and trees. The impact to the County highway system was limited because most trees have been removed from the right-of-way since the 2005 ice storm.

The Traffic Department will begin sign upgrades from engineering grade high intensity to high intensity prismatic sign facing beginning in 2009. This change will increase the life expectancy of our highway signs from about 5 years up to about 12 years. This will also put us in compliance with Federal Highway Administration regulations that go into effect in 2012.

The engineering and administrative staff has overseen construction and inspection, designed all of the bridges and large culverts replaced by our highway/bridge crews in 2008, prepared all bid documents and specifications for all construction projects, prepared costs estimates, and performed hydraulic analyses for bridges and culverts. We plan bridge replacements and maintenance, road reconstruction, ditch maintenance, equipment needs, and building and grounds maintenance. We maintain and track our inventory, manage billing and payments, track project costs, inspect and issue driveway permits, prepare press releases, plan safety training, perform annual bridge inspections, maintain and update county mapping, inspect subdivisions and stormwater and erosion control measures, comply with state and federal regulations, and answer questions from the public. We perform design and analysis, construction inspection, and surveys for the townships. In 2008, we utilized \$1,948,385.18 of federal and state grant assistance for various projects.

### The Condition of Our Highway System

We have been busy this winter trying to keep the highways clear of snow and ice in extremely cold temperatures, repairing berms, hauling dirt for shoulder repair work, and cleaning road ditches. Our crews will continue to remove trees and limbs within the right-of-way as a regular maintenance item in order to limit damage caused by future ice storms or high winds.

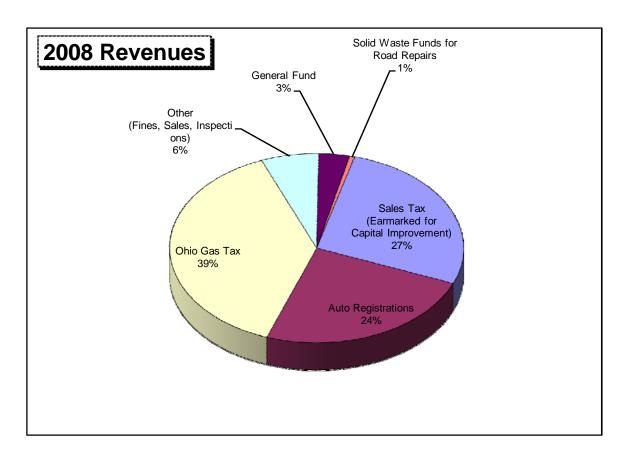
Generally speaking, our roads have weathered the winter pretty well due to limited freeze-thaw cycles. However, in order to preserve our new pavements, we must seal them as soon as possible after resurfacing. Several transportation agencies have started sealing new asphalt immediately after the hot-mix paver has left the jobsite. We will complete 26.9 miles of resurfacing with asphalt concrete and plan to seal about 39.5 miles. We still have several miles that require a surface course of paving. From 2003 through 2005, we placed only the intermediate course of pavement on many of the roads that were resurfaced. This process allowed us to repair more miles of very poor pavements each year than we could have if we had applied both courses at the same time. Since 2001 (inclusive), we have resurfaced over 266.2 miles of county highways. We will also continue a crack sealing program to extend the service life of the roads in the county.

We are continuing to make strides with our bridge program. With the replacement/rehabilitation of 7 bridges in 2008, we are continuing to upgrade our overall bridge conditions. This year's bridge replacement/repair schedule will upgrade 7 bridges that school buses are currently unable to cross due to weight restrictions. We are excited to report that 2009 is the first year that we have entered the year with no bridges that are closed to traffic other than bridges under construction. This has been a goal of the Logan County Engineer's Office for many years and we are very proud to have achieved this goal for the benefit of the traveling public.

There are 28 bridges with posted load restrictions. Thirty-one bridges are rated a 5 or less and many of the older structures continue to deteriorate as we replace others. Since 2001 (inclusive), we have replaced or performed extensive rehabilitation on 65 structures. Bridge material costs have increased significantly over the last several years. In 2001, we were estimating replacement costs at \$48.00 per square foot of deck area, now we must use at least \$112 per square foot for estimating our bridge program.

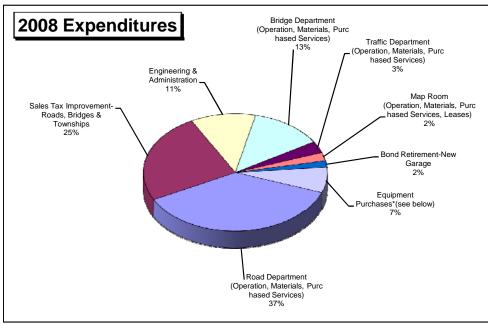
Since the force account limits for projects that we can construct with our own staff were increased in 2003, construction materials have increased by more than 71 percent. We must encourage the state legislature to increase the force account limits for roads and bridges so that we can continue to save the taxpayers' money by constructing road and bridge projects with our own crews. The current force account limits are \$100,000 per bridge and \$30,000 per mile for road construction. Considering the increased construction costs and the fact that there is some debate over the interpretation of the force account legislation, these limits need to be increased to \$292,000 and \$88,000, respectively, with an annual inflation factor.

2008 Revenues							
Sales Tax (Earmarked for Capital Improvement)	27%	\$	1,692,795.82				
Auto Registrations	24%	\$	1,535,205.23				
Ohio Gas Tax	38%	\$	2,415,819.46				
Other (Fines, Sales, Inspections)	6%	\$	399,090.12				
General Fund	3%	\$	212,175.06				
Solid Waste Funds for Road Repairs	1%	\$	35,000.00				
Weaver Bros., Inc Voluntary Contribution	0%	\$	5,000.00				
Belle Center Amish Church Community - Voluntary Contribution	0%	\$	4,175.00				
Total		\$	6,299,260.69				



2008 Sales Tax						
County Carryover from 2007	\$	1,247,614.17				
Township Carryover from 2007	\$	217,508.94				
Income (County & Township)	\$	2,051,873.72				
Expenditures						
Township Sales Tax Resurfacing & Chip Seal Program	\$	265,910.28				
County Sales Tax Resurfacing Program (including culverts)						
Bridge 221-0.20 Replacement						
Bridge 114-0.88 Replacement						
Bridge 164-2.10 Replacement	\$	1,146,066.02				
2008 County Carryover	\$	1,794,343.97				
2008 Township Carryover	\$	310,676.56				
Total Carryover	\$	2,105,020.53				

2008 Expenditures		
Road Department		
(Operation, Materials, Purchased Services)	37%	\$2,319,245.86
Sales Tax Improvement-Roads, Bridges & Townships	25%	\$ 1,561,976.30
Engineering & Administration	11%	\$720,551.15
Bridge Department (Operation,		
Materials, Purchased Services)	13%	\$801,410.59
Traffic Department		
(Operation, Materials, Purchased Services)	3%	\$ 204,021.08
Map Room (Operation,		
Materials, Purchased Services, Leases)	2%	\$143,382.45
Bond Retirement-New Garage	2%	\$ 112,892.06
Equipment Purchases*(see below)	7%	\$ 440,671.80
Total		\$ 6,304,151.29



*Major Equipment Purchased in 2008						
American Steel - Bridge Analysis Software	\$	245.00				
Vacuums Office & Garage	\$	747.96				
Digital Camera Office	\$	50.00				
Computer and Monitor	\$	2,270.00				
Fiber Optic - Connection Installation	\$	2,167.00				
Monitor - Map Room	\$	194.98				
Truck Radio's	\$	6,213.25				
Dump Body's & Plows (2)	\$	87,076.00				
Wheel Loader	\$	92,300.35				
Pressure Meter - Conctrete Testing	\$	930.64				
Link Belt - Excavator - Used	\$	65,000.00				
Tar Distributor - Used	\$	27,215.00				
Bed Mat & Chest	\$	379.47				
Digital Field Scale - Concrete Testing	\$	218.29				
Truck Chassis (2)	\$	147,472.00				
Diagnostic Machine - Computer Upgrade for Vehicles	\$	2,899.00				
Millwauke Magnetic Drill	\$	650.00				
Link Belt - Hydraulic Valve for Hammer, Relocation of Pedal						
and Extention Parts	\$	3,645.89				
6 Ton 5' Lever Hoists (2)	\$	996.97				
Total	\$	440,671.80				

### **2008 ROAD PROGRAM**

The Highway Department is responsible for all Force Account projects (non-contract work performed by County Engineer employees), snow and ice control, berm repair, pavement patching, washouts, guardrail repair, mowing, and other general/seasonal maintenance of county roads and bridges. This department also works closely with the townships on various maintenance needs on their own road systems. The Highway Department was extremely busy in 2008, working ahead for the 2009 road program, in addition to their normal maintenance duties. The costs listed include labor (based on hourly wages of workers and all benefits), amortized equipment, and materials (asphalt and berming stone).

Review of Miscellaneous 2008 Expenses								
					M	laterials and		
			Amortized			Contractor		
		Labor		Equipment		Work		Total
Mowing	\$	55,944.90	\$	55,245.20	\$	-	\$	111,190.10
Hand Patching	\$	12,004.54	\$	9,290.45	\$	10,565.34	\$	31,860.33
Durapatching	\$	9,234.32	\$	7,105.20	\$	6,876.49	\$	23,216.01
Crack Sealing	\$	9,511.19	\$	104.80	\$	6,212.84	\$	15,828.83
Tree & Brush Removal	\$	44,261.10	\$	29,801.40			\$	74,062.50
Culvert Repair & Replacement (not related								
to resurfacing)	\$	3,951.11	\$	2,534.90	\$	1,652.52	\$	8,138.53
Sign Repair	\$	27,313.02	\$	3,387.00	\$	12,583.41	\$	43,283.43
Sign Repair (Vandalism)	\$	3,825.18	\$	530.25	\$	2,680.52	\$	7,035.95
Sign Replacement	\$	9,964.88	\$	1,072.50	\$ 13,259.84		\$	24,297.22
Snow and Ice Control	\$	131,883.14	\$	137,413.34	\$	138,980.16	\$	408,276.64

2008 County Sales Tax & Regular Paving Program Completed								
ROAD #	Begins	Ends		Total Cost				
48	SR 292	CR 142	\$	86,961.62				
51	CR 101 Southwest	US 68	\$	16,239.69				
104	SR 273	Hardin Co. Line	\$	96,975.54				
112	CR 113	CR 111 W TR 111 E.	\$	37,604.42				
152	CR 153 Middleburg	Cul De Sac	\$	128,124.14				
271	CR 296 LT	SR 292	\$	11,686.72				
291	Valley Hi Corp.	CR 28	\$	38,344.03				
10	CR 154	Logan-Union Co. Line	\$	139,816.94				
106	SR 638	SR 638	\$	29,341.84				
142	CR 10	CR 117	\$	611,048.81				
144	CR 153	CR 144A	\$	90,137.32				
	Grand Total		\$	1,286,281.07				

2008 County Sales Tax & Regular Paving Program Completed								
Ground Tire Rubber Asphalt Binder Alternate Surface								
ROAD #	Begins	Ends		Total Cost				
48	SR 292	CR 142	\$	21,291.05				
10	CR 154	Logan-Union Co. Line	\$	33,885.09				
142	CR 10	CR 117	\$	95,500.49				
	Grand Total		\$	150,676.63				

Road         Begins         Ends         Labor         Equipment         Materials           2         CR 5         TR 129         TR 129	Total
2 TR 129 SR 292	
2 SR 292 TR 131	
2 TR 131 TR 132 \$ 8,276.89 \$ 6,372.90 \$ 60,952.89	\$ 75,602.68
2 TR 132 CR 142	
2 CR 142 Logan/Union Co. Line	
13 CR 21 TR 79 E.	
13 TR 79 F TR 59 S	
13 TR 59 S. TR 247 W. \$ 2,834.91 \$ 2,389.81 \$ 18,039.79	\$ 23,264.51
13 TR 247 SW. SR 235	
97 CR 96 Spur SR 273	
97 Spur SR 273 SR 273	
97 SR 273 TR 97 \$ 1,841.50 \$ 1,243.80 \$ 16,037.41	\$ 19,122.71
97A CR 97 SR 273	
187 TR 7 TR 197	
187 TR 197 SR 508 \$ 927.60 \$ 642.75 \$ 8,390.58	\$ 9,960.93
<b>202</b> TR 263 SR 508 \$ 1,120.87 \$ 916.15 \$ 9,573.02	\$ 11,610.04
12 CR 50 CR 265	Ψ 11,010.01
12 CR 265 TR 116 S	
12 TR 116 S. TR 115 N. \$ 5,327.33 \$ 4,065.00 \$ 40,744.80	\$ 50,137.13
12 TR 115N. SR 292 End	
<b>265</b> SR 274 CR 12 \$ 68.29 \$ 49.10 \$ 539.70	\$ 657.09
14 CR 189 SR 540 & TR 188 End \$ 774.94 \$ 651.25 \$ 5,048.00	
68 CR 3 / Co. Line SR 706 \$ 849.39 \$ 726.65 \$ 6,230.81	
118 CR 20 Spur to CR 20	
118 Spur to CR 20 CR 5 \$ 1,568.21 \$ 1,146.00 \$ 8,634.00	\$ 11,348.21
18 SR 508 & TR 18 TR 30 \$ 786.57 \$ 544.25 \$ 7,789.50	\$ 9,120.32
173 CR 5 CR 47 \$ 1,238.72 \$ 988.40 \$ 10,032.50	\$ 12,259.62
158 SR 559 TR 157	
158 TR 157 SR 287 \$ 2,228.77 \$ 1,655.40 \$ 14,951.94	\$ 18,836.11
189 W. Liberty N. Corp. CR 14	
189 CR 14 US 68 \$ 510.92 \$ 397.00 \$ 1,586.45	\$ 2,494.37
<b>20</b> CR 12 SR 292	
<b>20</b> SR 292 CR 120	
<b>20</b> CR 120 Penn Central RR \$ 4,952.43 \$ 4,009.10 \$ 43,879.08	\$ 52,840.61
20 Penn Central RR CR 142	
20 CR 142 Logan/Union Co. Line	
48 CR 12 Culvert	¢ 00,000,40
48 Culvert SR 292 \$ 2,782.31 \$ 2,179.70 \$ 21,420.09	\$ 26,382.10
50 CR 12 Rt. CR 12 Lt.	
<b>50</b> CR 12 Lt. TR 116	
<b>50</b> TR 116 Twp. Line \$ 2,986.50 \$ 2,307.20 \$ 25,199.62	\$ 30,493.32
<b>50</b> Twp. Line TR 267	
<b>50</b> TR 267 SR 292	
<b>15</b> CR 44 SR 287 & CR 41 \$ 2,682.90 \$ 2,013.00 \$ 6,291.34	\$ 10,987.24
44 CR 15 TR 160 \$ 1,761.74 \$ 1,417.50 \$ 14,414.15	\$ 17,593.39
102 TR 106 S. Corp. Belle. CR 103 E. \$ 2,041.41 \$ 1,244.20 \$ 7,867.23	\$ 11,152.84
102 CR 103 E. Logan/Hardin Co. Line	Ψ 11,132.04
5 CR 5 / CR 25 SR 540 \$ 566.95 \$ 426.30 \$ 2,360.50	\$ 3,353.75
Total Chip & Seal Program	\$ 411,498.01

#### 2009 ROAD PROGRAM

We have reviewed each road on the program for needed culvert replacements, bridge replacements and/or repairs, drainage problems, etc. As of March 24, 2009, the proposed resurfacing and chip-seal programs for the County are as follows:

	2009 Proposed County Resurfacing Program							
ROAD#	Begins	Ends	ROAD#	Begins	Ends			
5	CR 50	Rushsylvania East Corp.	50	CR 5 / TR 110	CR 12 (right)			
12	CR 26 (left)	CR 50 (suspend)	63	Quincy East Corp.	DeGraff South Corp.			
23	CR 74 East	CR 58 (suspend)	70	CR 4	Qunicy West Corp.			
24	DeGraff North Corp.	SR 235	91	SR 235	CR 130			
28	CR 168	CR 29	106	Belle Center North Corp.	Hardin Co. Line			
34	SR 235	CR 59	144	CR 153	New Pavement			
39	SR 274	Belle Center Corp.	153	Zanesfield East Corp.	SR 287			

Note: Some sections of roads may be non-performed in order to stay within budget.

2009 PROPOSED COUNTY CHIP SEAL PROGRAM								
Road #	Begins	Ends	Road #	Begins	Ends			
48	CH 142	TR 138 NORTH	49	TR 108 WEST	CH 105			
48	TR 138 NORTH	LOGAN-UNION CO. LINE	35	SR 235	TR 74			
125	SR 47	LOGAN-UNION CO. LINE	35	TR 74	TR 75			
119	SR 292	CH 120	35	TR 75	SR 47			
120	CH 26	CH 119 WEST	13	SR 235 LEAVE	TR 214 LEAVE			
120	CR 119 WEST	CH 20	13	TR 214 NORTH	TR 33			
120	CH 20	CH 48 END	13	TR 33	TR 31 & PENN CENTRAL RR (MCMORRAN)			
277	CH 44 SOUTHWEST	CH 153	13	TR 31 & PENN CENTRAL RR (MCMORRAN)	TR 46 SOUTH			
277	LOGAN-UNION CO.LINE	CH 44 SOUTHWEST	13	TR 46 SOUTH	TR 46 NORTH			
49	CH 105	CH 39	13	TR 46 NORTH	CH 32			
222	HUNTSVILLE ECL	CH 39	13	CH 32	CH 130			
153	CH 277	UNION CO. LINE	26	CH 142	CH 124			
124	CH 142	CH 26	26	CH 124	LOGAN-UNION CO. LINE			
124	CH 26	LOGAN-UNION CO. LINE	82	CH 83 SOUTH	WEST CORP. LINE LAKEVIEW			
158	SR 559	TR 157	83	SR 720	CH 82 EAST			
158	TR 157	SR 287	31	COUNTY LINE	SR 508			
5	SR 47 E. & TR 273 W. resume	CH 26 EAST	73	LOGAN-SHELBY CO. LINE	TR 23 NORTH			
5	CH 26 EAST	CH 136 WEST	73	TR 23 NORTH	CH 34			
5	CH 136 WEST	CH 118 WEST	74	CH 23	CH 34 NORTH END			
5	CH 118 WEST	CH 20	20	CH 142	LOGAN-UNION CO. LINE			
5	CH 20	CH 50 EAST	29	CH 5 LEAVE	TR 166 SOUTH			
5	N. CORP. LINE OF RUSHSYLVANIA	TR 111 WEST	29	TR 166 SOUTH	CH 47 SOUTH			
5	TR 111 WEST	TR 51	168	LOGAN-CHAMPAIGN CO. LINE	CH 28			
5	TR 51	SR 273	28	CH 41 EAST	CH 168 WEST			
5	SR 273	LOGAN-HARDIN CO. LINE	10	SR 292 (RESUME)	CH 154			
49	SR 274	CH 101 NORTHEAST	154	CH 10	SR 347			
49	CH 101 NORTHEAST	TR 108 WEST						

Note: Some sections of roads may be non-performed in order to stay within budget.

#### 2008 BRIDGE PROGRAM

Our Bridge Crew had another good year. In addition to repairing and replacing bridges and culverts, they worked on snow and ice control. This means the Bridge Crew must be able to proficiently switch from a bridge project to snow and ice control and back again.

As of March 2, 2009, all of the annual bridge inspections were complete. The Bridge Crew replaced 7 structures and performed significant repairs to 2 other structures. Structures Replaced:

Township Road 192-0.43 Bridge Replacement

Township Road 221-0.36 Deck Replacement

Township Road 221-0.20 Bridge Replacement

Township Road 34-7.20 Bridge Replacement

Township Road 110-0.58 Bridge Replacement

County Road 18-2.68 Beam Rehabilitation

Township Road 30-0.80 Abutment Rehabilitation

Township Road 114-0.88 Bridge Replacement

Township Road 163-0.53 Bridge Replacement

County Road 63-1.38 By Miller Brothers Construction - Federal Aid Contract

#### 2009 BRIDGE PROGRAM

In the 2001 renewal of the sales tax for roads and bridges, the priority was based on condition. Therefore, the 2009 Bridge Program continues the commitment of prioritizing bridge replacements based on condition. The County infrastructure will be re-evaluated periodically and changes to this program are likely to occur in order to achieve our commitment to repair or replace the structures and highways in the worst condition first.

As of March 2, 2009, the proposed Bridge Program is as follows:

Township Road 164-2.10 Bridge Replacement

Township Road 164-1.75 Bridge Replacement

Township Road 56-5.09 Bridge Replacement

Township Road 181-0.80 Bridge Replacement

County Road 270-0.65 Box Culvert

County Road 270-1.46 Box Culvert

County Road 142-0.88 Box Culvert

County Road 142-5.75 Bridge Replacement

County Road 91-1.45 Bridge Replacement

County Road 39-6.80 Beam Repair

County Road 13-1.56 Floor Beam Hanger Repair

County Road 26-2.68 Bridge Replacement

County Road 38-0.29 Floor Beam Hanger Repair

County Road 88-0.19 Deck Replacement

County Road 4-2.15 Box Culvert

Township Road 216-1.16 Co-Op with City of Bellefontaine - County to Install

County Road 63-2.63 By Miller Brothers Construction - Federal Aid Contract

#### ADMINISTRATIVE/STAFF SUPPORT

This department manages the overall office functions and budget of the Engineer's Office. Since the cost for construction, materials, and equipment are increasing faster than local revenues, the utilization of alternate funding sources is critical to the office. As such, the department administers the Ohio Public Works Commission's State Capital Improvement Program (SCIP) and the Local Transportation Improvement Program (LTIP) for Logan County. The allocation and accounting of these annual funding sources are a significant function of the Engineer's office.

Other responsibilities of the administrative and support staff are human resources, payroll, purchasing requisitions, billing, word processing, contract administration and cost-tracking. Utilizing our cost-tracking system, all of the costs for the Engineer's Office are logged including the costs for surveying, engineering, administration, road work and construction of bridges. Equipment costs are amortized, while the labor costs include all fringes and benefits. In addition to all of the aforementioned accounting functions, this department also handles daily calls from the public and addresses the questions/problems directly or forwards them to the appropriate person.

#### **DESIGN/ENGINEERING**

This department performs the engineering design for approximately 95% of the construction projects and directs specialized consultants for the engineering design of the remaining projects. Most of the staff design is done with a Computer Aided Design and Drafting (CADD) system. This department also oversees much of the administrative responsibilities.

#### TRAFFIC DEPARTMENT

The Traffic Department is responsible for the maintenance of all road signs on county roads and bridge signs on township roads. Road signs now number 6,676. The maintenance of these signs includes installation, preservation and inspection. As part of the inspection process, we look for reflectivity, wind damage, vandalism and overall visibility. Repairing mailboxes damaged during snow removal operations is another part of the Traffic Department's responsibilities along with signing for road closure detours. The Routemarkers main duty is to keep traffic moving safely and to keep the traveling public informed.

#### **COURTHOUSE DUTIES**

By law, the County Engineer is the official plat draftsman for the County Auditor. In addition to maintaining maps of all properties by lot, parcel and acreage, the Map Room assigns new house numbers, serves attorneys, surveyors, appraisers, realtors, and private individuals in checking deed descriptions and reviews new surveys for accuracy and compliance. Also, the office periodically updates the digitized tax maps to reflect all new property splits.

In 2008, the Map Room processed approximately 210 new property splits and checked over 2,100 deeds transferring property. They also checked approximately 40 new easement and right-of-way documents, reviewed 9 new subdivision plats, and created approximately 50 new house numbers. They also checked over 145 new surveys and provided over 1,200 deed pre-approvals of legal descriptions.

The County Engineer's Office has created a place on it's web site (www.co.logan.oh.us/engineer/index.htm) in which maps and surveys can be viewed. To aid in this effort, the Map Room has scanned well over 25,000 documents for use on this site, and more scanning is required to complete this task. We hope to have everything scanned by the end of 2009.

#### **BUILDING AUTHORITY**

In 2008, permit activity followed with the rest of the nation. New builds were down and the forecast seems to indicate it will stay this way until about the middle of 2010. The prediction is that we will see a noticable upswing in construction at that time. Although the permits were down, the average valuation per new home went up by 12.4 percent. Even with the residential construction starts down, the homes being constructed are averaging about 25 percent larger in square footage as compared to past years. Our revenue was down in 2008, as were permits. However, revenue remained higher than expenses. Expenditures were also down by 2.4 percent.

Revenue						
	2008			2007	% of Change	
Permit Revenue	\$	105,425.00	\$	130,625.00	-19.3%	
Contractor Registrations	\$	20,450.00	\$	20,800.00	-1.7%	
Plumbing Inspection Fees	\$	-	\$	4,760.00	-100.0%	
Reinspect Fees	\$	1,050.00	\$	1,075.00	-2.3%	
Misc	\$	-	\$	202.00	-100.0%	
Application Fees	\$	9,575.00	\$	11,725.00	-18.3%	
Additional Permit Fees	\$	3,025.00	\$	1,850.00	63.5%	
OMHC Seals (new)	\$	1,800.00	\$	975.00	-	
State Administrative Fee 1%	\$	1,194.50	\$	1,030.75	-	
Total Revenue	\$	142,519.50	\$	173,042.75	-17.6%	

Expenditures						
	2008			2007	% of Change	
Total Salaries	\$	93,156.74	\$	91,767.05	1.5%	
PERS, W/C & Medicare	\$	16,049.25	\$	16,957.18	-5.4%	
Supplies	\$	2,006.36	\$	2,219.66	-9.6%	
Contract Services	\$	14,752.73	\$	16,638.07	-11.3%	
Contract Repair	\$	1,065.94	\$	925.18	15.2%	
Equipment Lease	\$	1,990.67	\$	2,756.16	-	
Continuing Education	\$	895.52	\$	1,892.72	-	
Other Expenses	\$	2,571.04	\$	1,942.67	32.3%	
Code Books	\$	134.50	\$	876.81	-84.7%	
OMHC	\$	750.00	\$	900.00	-	
State Administrative Fee 1%	\$	1,195.00	\$	1,031.00	-	
Total Expenditures	\$	134,567.75	\$	137,906.50	-2.4%	

Permits Issued					
	2008	2007	% of Change		
Total of New Homes	64	86	-25.6%		
Total of New Mfg. Homes	6	12	-50.0%		
Total of "Other" Permits	304	362	-16.0%		
Plumbing Permits New Homes *	0	6	-100.0%		
Total All New Dwellings	70	98	-28.6%		
Total of All Permits	374	466	-19.7%		

<sup>\*</sup> Logan County Health Department issues plumbing permits

Inspections					
	2008	2007	% of Change		
Building/Structural	1,089	1,203	-9.5%		
Electrical Inspections	574	675	-15.0%		
HVAC Inspections	192	273	-29.7%		
Plumbing Inspections	0	249	-100.0%		
Special Inspections	1	1	100.0%		
Total Inspections*	1,856	2,401	-22.7%		

<sup>\*</sup> Includes Reinspections

Home Valuation					
	2008	2007	% of Change		
New Home Valuation	\$ 10,367,090	\$ 12,915,780	-19.7%		
Avg. Valuation Per Home	\$ 148,101	\$ 131,794	12.4%		

Averages					
		2008		2007	% of Change
Total Inspection Stops	1,159		1,418		-18.3%
Avg Inspections Per Stop	1.6		1.7		-5.9%
Avg Revenue Per Stop	\$	122.96	\$	122.03	0.8%
Avg Expenditure Per Stop	\$	116.11	\$	96.52	20.3%
Avg Revenue Per Permit	\$	381.07	\$	371.34	2.6%
Avg Expenditure Per Permit	\$	359.81	\$	293.71	22.5%
Avg Revenue Per Inspection	\$	76.79	\$	72.04	6.6%
Avg Expenditure Per Inspection	\$	72.50	\$	56.98	27.2%

## **MOTOR VEHICLE REGISTRATIONS**

Vehicle registration fees are a significant source of revenue for the Engineer's Office.

2008 Logan County, Ol Motor Vehicles Registrat	2007	2006	
Type of Registration	# of Units	# of Units	# of Units
Passenger Cars	33,988	33,987	34,716
Motor Homes	369	407	395
Motorcycles	2,738	2,551	2,283
House Vehicles	773	782	800
Mopeds	35	39	29
Non-Commercial Trailers	5,002	5,040	5,005
Non-Commercial Trucks	11,008	11,272	11,587
Farm Truck	314	308	305
Buses	61	50	54
Commercial Trailers	1,631	1,607	1,572
Non IRP Trucks	1,954	1,972	2,107
IRP Trucks	132	154	138
Total Vehicle Registrations in 2008	58,005	58,169	58,991

SOURCE: State of Ohio, Bureau of Motor Vehicles

## The Office of the Logan County Engineer

1991 CR 13, P.O. Box 427 Bellefontaine, OH 43311 Phone (937) 592-2791 Fax (937) 599-2658

Web Site: www.co.logan.oh.us/engineer/index.htm

### **EXECUTIVE SUMMARY**

371.22 Miles of County Road

## 300 Bridges

28 Have Load Reductions Posted 12 Have a Sufficiency Rating Less Than 50%

6,676 Signs

### 1,573 Culverts

Excellent/Good Condition - 1,399
Fair/Poor/Unknown Condition - 174