

# OFFICE OF THE LOGAN COUNTY ENGINEER

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## ANNUAL REPORT 1998-1999 ROAD REVIEW

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April 1, 1999

Sincerely,  
James K. Cox, P.E., P.S.  
Logan County Engineer

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## FROM YOUR COUNTY ENGINEER

April 1, 1999

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

I respectfully submit the Annual Report for the Logan County Engineer's Office, which provides an overview of the operations and condition of the county highway system.

The Logan County Engineer's Office is not only responsible for all maintenance and improvements on the 371.51 mile county road system and 300 bridges, but also assists the 17 townships on their 345.27 mile road system. Beyond these obvious tasks, the Logan County Engineer's Office has a long history of joint cooperation on construction projects with the city, townships and villages.

Once again, County employees produced impressive statistics for the year with construction and safety improvements shown. Each project listed has had the involvement of this office in all or one of the functions of planning, funding, design and/or construction. As you review the accomplishments for 1998, please note how integrated and flexible the overall department has become to provide services and improvements in an efficient and cost-effective manner. We have continued to streamline the operation, while addressing the infrastructure needs with the limited funding.

In 1997, the voters recognized our need for additional funding for our infrastructure, and passed a 1/2% sales tax. As a result, we began collecting the 1/2% sales tax which was expected to generate approximately 1.5 million dollars a year for 5 years. We know that we cannot make a difference overnight, however, we hope the public is beginning to see that we have made a noticeable difference with this additional funding.

As of March 31, 1999, the bridges under our responsibility were inspected. We currently have 300 bridges on the county system, with 9 of those being permanently closed. There are 59 posted bridges on the County and Township systems with 31 bridges not capable of holding a school bus. Our 1993 report indicated 85 posted bridges with 35 bridges unable to support school buses. We are gaining on the problem.

During 1998, we were able to replace/rehabilitate 15 structures and resurface more than 27.5 miles of road. We also chip sealed an additional 35 miles of road surface. The following pages detail the work that was accomplished in 1998 and also outline the work we have planned for 1999.

Sincerely,

James K. Cox, P.E., P.S.  
Logan County Engineer

## THE CONDITION OF OUR HIGHWAY SYSTEM

In 1997, we inventoried our entire highway system and found that 124 mile of pavements were in poor condition. During the intervening two years, we have improved 31 miles, leaving 86 miles of very poor pavement. This means that 23% of our system is very poor.

We estimate that only 50 miles of pavement are in good condition and the remaining 235.5 miles of pavement in fair to poor condition. While we are making some improvement, much remains to be done.

Our bridges are still a nagging problem. With 23% of our 300 bridges posted or closed, we would have to say that the overall condition is marginal.

## OPERATIONAL FUNDING INCREASE?

When Gordon Proctor, the Director of the Ohio Department of Transportation, presented the new budget for ODOT to the Legislature, he testified that ODOT did not foresee a need for an increase to their budget for the next four years. They have lowered their operating costs and are benefiting from increased Federal Highway dollars. We applaud their efforts to control the bottom line. The only problem is that all the local governments may pay a price for their success.

"How could that be?", you ask. Well, for the last eight years, Governor Voinovich has declared "No new Taxes!" each time the highway industry has approached the issue of a gas tax increase. Therefore, the notion of an increase has never reached the floor of the House and Senate. Now ODOT has declared themselves solvent, leaving the impression that the entire highway industry is adequately funded.

For the past several years, the County Engineers Association of Ohio has been trying to keep the need for additional funding for local governments before the leadership of the legislature. What the Association would like to see is a three cents a gallon increase in the State gasoline tax earmarked for local governments only. The proposal would distribute the new 3 cents at the same rate as the current local portions are now distributed.

Of the eighteen cents taxed for each gallon of fuel, five and one half cents is sent to all the local governments. The municipalities receive forty three percent, the townships receive fourteen percent and the counties receive twenty five percent. This proposal would mean an increase of \$459,000 per year to be shared by the seventeen townships and a 57% increase to the thirteen municipalities, along with an increase of \$750,000 to each county.

In the past, before Federal mandates on fuel economy, as more miles were traveled each year, more gasoline was used and more funds were available to each of us. Now, the consumption rate is lower, while the number of vehicles using the system is increasing. What the local governments are faced with are greater demands for services, but no additional money to provide for that demand. At the same time, our material costs have been increasing. From 1996 through 1998, our cost for 304 stone has increased 11%, the cost of the liquid we use for our seal program has increased 16% and the cost of the concrete we use for our bridges has increased 14%.

The voting public of Logan County approved an increase in the sales tax to improve our county and township roads and bridges. Those revenues are earmarked for capital improvements and are not to be used for the townships' or the county's operating costs. We have seen a significant increase in the amount of hot mix paving and bridge replacements as a result of the sales tax.

What we will be faced with in the future is how to continue our snow removal program and how will we pay to mow the roads? We must provide these basic services from the gas tax revenue and the motor vehicle license revenue.

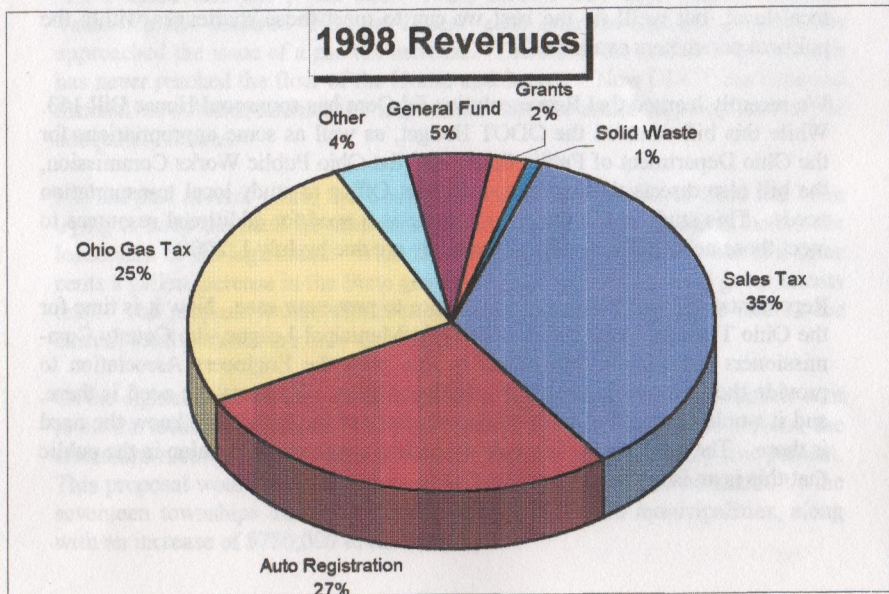
Ohio State Senator Scott Oelslager spoke to the Ohio Contractors at their closing luncheon of their annual Conference last December. Senator Oelslager is the chairman of the Senate Highways and Transportation Committee. According to the January/February issue of the Ohio Contractor Magazine, Oelslager predicts that the Legislature's time will be spent on funding education. He did concede that while the funding for ODOT from TEA-21 has increased, there is still concern for transportation funding available for local governments. He is quoted "We know we have many, many additional challenges out there, especially at the local level, but we'll do the best we can to meet those challenges within the political parameters available."

We recently learned that Representative Ed Core has sponsored House Bill 163. While this bill contains the ODOT Budget, as well as some appropriations for the Ohio Department of Public Safety and the Ohio Public Works Commission, the bill also directs the Legislative Budget Office to study local transportation needs. This study is to determine if there is a need for additional resources to meet those needs. The results of the study are due by July 1, 2000.

Representative Core has given us a chance to prove our case. Now it is time for the Ohio Trustees Organization, the Ohio Municipal League, the County Commissioners Association and others to join with the Engineers Association to provide the facts to the Legislative Budget Office. We know the need is there, and it would appear that some of the members of the legislature know the need is there. The question is, "How do we build a consensus of opinion in the public that this is an issue?"

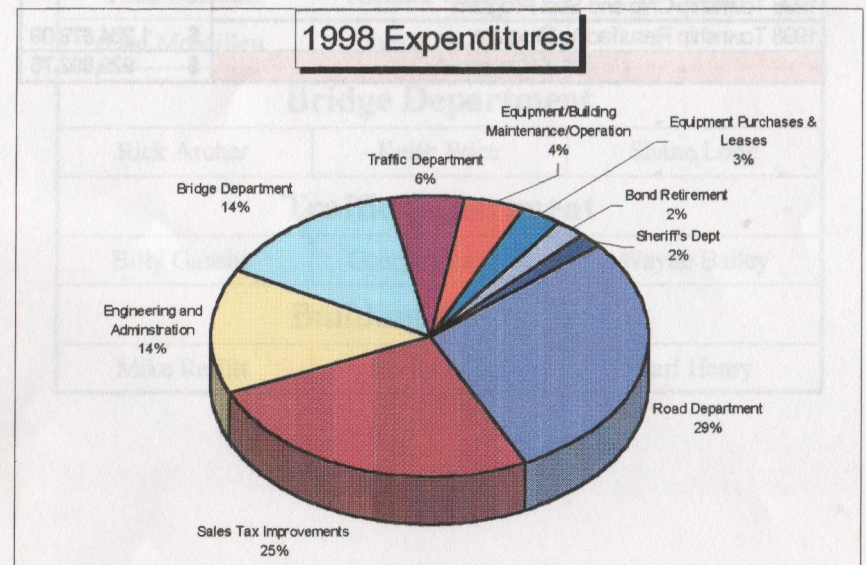
## 1998 REVENUES

1998 Revenues		
Sales Tax (Earmarked for Capital Improvement)	35%	\$ 1,851,934.56
Auto Registration	27%	\$ 1,439,561.44
Ohio Gas Tax	25%	\$ 1,348,220.78
Other (Fines, Sales, Inspections)	4%	\$ 238,187.36
General Fund	5%	\$ 278,035.97
Grants	2%	\$ 117,134.25
Solid Waste	1%	\$ 50,000.00
<b>Total</b>		<b>\$ 5,323,074.36</b>



## 1998 EXPENDITURES

1998 Expenditures		
Road Department (Operation, Materials, Purchased Services)	29%	\$ 1,462,583.62
Sales Tax Improvements (Roads and Bridges)	25%	\$ 1,284,879.09
Engineering and Administration	14%	\$ 728,962.47
Bridge Department (Operation, Materials, Purchased Services)	14%	\$ 716,744.60
Traffic Department (Operation, Materials, Purchased Services)	6%	\$ 283,279.07
Equipment Maintenance/Operation & Building Operations	4%	\$ 222,947.20
Equipment Purchases & Leases	3%	\$ 155,705.93
Bond Retirement (New Garage)	2%	\$ 117,500.00
Sheriff's Dept	2%	\$ 78,515.00
<b>Total</b>		<b>\$ 5,051,116.98</b>



## SALES TAX BALANCE SHEET

1997 Sales Tax	
Income	\$ 451,385.86
<b>Expenditures</b>	
CR 31 Resurfacing	
CR 63 Widening	
Replacement of Bridge 190-3.48	\$ 88,638.57
<b>Total Carryover</b>	<b>\$ 362,747.29</b>

1998 Sales Tax	
Carryover from 1997	\$ 362,747.29
Income	\$ 1,851,934.56
<b>Expenditures</b>	
CR 13 Resurfacing	
CR 24 Resurfacing	
CR 31 Resurfacing	
CR 34 Resurfacing	
CR 62 Resurfacing	
CR 63 Widening and Resurfacing	
CR 73 Resurfacing	
Widening Materials for CR 5, 10, 29, 41, 55	
TR 129-2.99, TR 129-3.08, TR 129-3.20 Bridge Replacements (funded partly by Perry Township)	
Sandusky Street Bridge Rehabilitation with City of Bellefontaine	
CR 52 Resurfacing (at Bridge 52-2.38 Replacement)	
Lighting at CR 154 and SR 347	
1998 Township Chip and Seal Program	
1998 Township Resurfacing Program	\$ 1,284,879.09
<b>Total Carryover</b>	<b>\$ 929,802.76</b>

## EMPLOYEES OF THE LOGAN COUNTY ENGINEER'S OFFICE

<b>County Engineer</b>		
James K. Cox, P.E., P.S.		
<b>Engineering Department</b>		
Scott C. Coleman	Stephanie Ann Goff	Harvey L. Grimes
Curtis D. Dill	Jennifer Ganson	Charles Nichols
Suzi Yoesting	Anna Furrow	Jon Hines
Becky Brandt	Shirley Brunke	Bob Simmons
<b>Road Department</b>		
Larry L. Park	Butch Banning	Ronald George
Larry Strayer	Bob Schrader	Robert Smith
Larry Artis	John Berry	Jim Armentrout
George Brugler	Doug Collins	Ron Hanson
Mike Miller	Mark Hilty	Clyde Ball
Todd Coleman	Richard Cooksey	Jim Logan
Dan McMillen	Jackie Norviel	
<b>Bridge Department</b>		
Rick Archer	Keith Price	Shane Long
<b>Traffic Department</b>		
Billy Ganson	George Coleman	Wayne Bailey
<b>Building Authority</b>		
Mike Reffitt	Becky Jolliff	Carl Henry

## 1998 ROAD PROGRAM

The road 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 Road Department was extremely busy in 1998. The 1998 Chip and Seal Program totaled 34.99 miles of road, for a total cost of \$154,466.34. The 1998 Asphalt Concrete Paving Program consisted of 6.23 miles funded from the Auto and Gas Fund and 21.85 miles funded for the newly passed sales tax, resulting in a total of 28.08 miles of road, for a total cost of \$1,249,444.40. The costs listed include labor (based on the hourly wages of the workers and all benefits), amortized equipment, and materials (asphalt and berming stone). The commissioners provided \$50,000 this year in Laidlaw tipping fees to help with the resurfacing work.

The program was a great success thanks to the cooperation between the public and our county crews.

1998 Regular Program						
ROAD#	Begins	TO	Labor	Equipment	Material	Total Cost
11	TR 45 EAST	TR 43 WEST	\$ 954.14	\$ 36.28	\$ 54,329.22	\$ 55,318.64
43	CH 11	CH 18	\$ 4,105.83	\$ 243.54	\$ 201,530.81	\$ 205,880.18
Grand Total for Regular Program			\$ 5,059.97	\$ 278.82	\$ 255,860.03	\$ 261,198.82

1998 Sales Tax Program						
ROAD#	Begins	TO	Labor	Equipment	Material	Total Cost
13	SR 235 LEAVE	CR 130	\$ 2,560.12	\$ 146.31	\$ 375,270.63	\$ 377,977.06
24	NORTH CORP LINE DEGRAFF	CH 21 WEST TR 21 EAST	\$ 408.34	\$ 28.65	\$ 123,608.89	\$ 124,044.18
63	EAST CORP LINE OF QUINCY	SR 508 (Inside Corp)	\$ 532.30	\$ 37.40	\$ 139,603.67	\$ 140,176.37
73	LOGAN-SHELBY CO LINE	CH 34	\$ 560.66	\$ 56.19	\$ 69,088.59	\$ 69,740.43
34	SR 235	CH 74 WEST	\$ 437.53	\$ 73.80	\$ 59,203.57	\$ 59,714.90
62	BEGIN ON CHAMPAIGN LOGAN CO LINE	SR 508	\$ 262.51	\$ 38.07	\$ 61,634.73	\$ 61,935.31
31	COUNTY LINE	CH 43	\$ 977.13	\$ 59.01	\$ 153,621.19	\$ 154,657.33
Total for Sales Tax Program			\$ 5,768.58	\$ 439.73	\$ 982,037.27	\$ 988,245.58

Total for 1998			\$ 10,828.55	\$ 718.55	\$ 1,237,897.30	\$ 1,249,444.40
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1998 Chip and Seal Program Completed							
Road	Begins	Ends	Distance Miles	Labor	Amortized Equipment	Materials	Total
15	CR 44	SR 287 & CR 41	0.85	\$ 236.25	\$ 228.20	\$ 2,410.62	\$ 2,875.07
27	CR 37 & CR 54	SR 274	0.75	\$ 456.72	\$ 413.00	\$ 2,017.53	\$ 2,887.25
28	CR 41E	CR 291	6.49	\$ 5,142.20	\$ 4,555.29	\$ 19,368.89	\$ 29,066.38
44	CR 15	SR 559	2.70	\$ 1,713.55	\$ 1,554.40	\$ 7,570.45	\$ 10,838.40
47	SR 245	CR 29	4.41	\$ 3,952.64	\$ 3,542.35	\$ 12,804.81	\$ 20,299.80
48	CR 142	Co Line	1.13	\$ 943.76	\$ 880.70	\$ 2,796.47	\$ 4,620.93
58	SR 235	SR 235	3.03	\$ 2,075.51	\$ 1,808.15	\$ 8,984.48	\$ 12,868.14
61	CR 37 & CR 54	SR 274	1.08	\$ 423.68	\$ 414.50	\$ 3,631.48	\$ 4,469.66
96	SR 117	CR 97	2.03	\$ 1,908.62	\$ 1,732.75	\$ 5,755.05	\$ 9,396.42
101	CR 49	SR 638	1.83	\$ 1,279.51	\$ 1,189.20	\$ 5,263.43	\$ 7,732.14
113	CR 101 & CR 111	W. Corp Rushsylvania	3.08	\$ 1,712.64	\$ 1,612.60	\$ 8,585.01	\$ 11,910.25
146	SR 29W TR 29E	CR 153	1.59	\$ 878.11	\$ 806.90	\$ 4,321.44	\$ 6,006.45
158	SR 559	SR 287	1.85	\$ 1,308.56	\$ 1,250.80	\$ 5,142.16	\$ 7,701.52
168	Co Line	CR 28	0.81	\$ 669.08	\$ 657.58	\$ 2,267.08	\$ 3,593.74
187	TR 7	SR 508	1.00	\$ 1,239.17	\$ 1,183.28	\$ 3,263.72	\$ 5,686.15
202	Co Line	SR 508	1.18	\$ 629.07	\$ 571.75	\$ 3,368.10	\$ 4,568.92
270	Corp Lakeview	US 33	1.18	\$ 456.72	\$ 414.50	\$ 3,604.42	\$ 4,475.64
<b>Total Chip and Seal Program</b>			<b>34.99</b>	<b>\$26,026.79</b>	<b>\$22,816.93</b>	<b>\$101,165.14</b>	<b>\$148,996.86</b>
24*	CR 21	SR 235		\$ 777.48	\$ 803.75	\$ 3,888.25	\$ 5,469.48
<b>Total Chip and Seal Program</b>				<b>\$26,803.27</b>	<b>\$23,619.68</b>	<b>\$106,043.39</b>	<b>\$164,466.34</b>

\*Only sealed 1 lane

## 1998 BRIDGE PROGRAM

Our Bridge crew also had another outstanding year. In addition to the Bridge Crew repairing and replacing bridges and culverts, they are involved in snow and ice control process and worked on snow and ice control. This means the Bridge Crew must be able to proficiently switch from a project to snow and ice control and back again.

As of March 1, 1999, all of the annual bridge inspections were completed.

The bridge crew has had an extremely busy season. We gave the bridge crew a very busy schedule for 1998 and they exceeded it!

In 1998, the bridge crew replaced nine structures, rehabilitated three structures, and replaced one large culvert. In addition, two large bridges were replaced with federal aid by contract.

### Structures Replaced:

Bridge 13-8.18 over Bokengehalas Creek  
 Bridge 153-2.42 over Branch of Mad River  
 Bridge 153-2.88 over Branch of Mad River  
 Bridge 153-3.02 over Branch of Mad River  
 Culvert 25-7.37 over Branch of Miami River  
 Culvert along CR 153 over Peters Ditch  
 Bridge 52-2.38 over Muchinippi Creek  
 Bridge 129-2.99 over Branch of Mill Creek  
 Bridge 129-3.08 over Branch of Mill Creek  
 Bridge 129-3.20 over Branch of Mill Creek  
 Bridge 58-3.69 (Federal Aid) over Rum Creek  
 Bridge 58-4.05 (Federal Aid) over Miami River

### Structures Rehabilitated:

SR 540 over Possum Run in the City of Bellefontaine  
 Bridge 13-8.68 over Bokengehalas Creek  
 Bridge 153-2.78 over Branch of Mad River

Way to Go Bridge Crew! Congrats on all your hard work!

## EQUIPMENT PURCHASES

Equipment Purchased in 1998	
1999 International Dump Truck (#319)	\$ 69,116.00
1998 Case Wheel Loader	\$ 23,000.00
1998 One-Ton Pickup (#336)	\$ 20,907.13
1991 Used Ford Road Tractor	\$ 19,500.00
Konica #3340 Copier	\$ 11,632.00
New Plotter and Upgrade of Existing Plotter	\$ 3,778.97
Computer Software and Software Upgrades	\$ 2,506.12
Cadd Workstation	\$ 1,730.00
Computer Workstation	\$ 1,279.95
Stone Concrete Vibrator	\$ 1,064.20
Communication Radio for #304	\$ 983.00
Other	\$ 208.56
<b>Total for 1998</b>	<b>\$ 155,705.93</b>

## SNOW & ICE CONTROL WINTER 1998-1999

Fall/Winter 1998			
Regular Hours	284.79	hours	\$ 5,296.67
Overtime Hours	198.22	hours	\$ 5,535.13
Grit (salt and #9 stone)	1,064.75	tons	\$ 17,674.85
Amortized Equipment Cost			\$ 15,416.95
<b>Total</b>			<b>\$ 43,923.60</b>

Winter 1999			
Regular Hours	1,628.38	hours	\$ 31,623.34
Overtime Hours	1,818.23	hours	\$ 54,189.69
Grit (salt and #9 stone)	3,910.25	tons	\$ 64,910.15
Amortized Equipment Cost			\$ 94,667.20
<b>Total</b>			<b>\$ 245,390.38</b>

## ADMINISTRATIVE/STAFF SUPPORT

This department manages the overall fiscal needs and budget of the Engineer's Office. Since the cost for construction, materials, and equipment is increasing faster than local revenues, the utilization of alternate funding sources is critical to the office.

Other responsibilities of the administrative and staff support are human resources, payroll, purchasing requisitions, billing, word processing and contract administration. The department also administers the Ohio Public Works Commission's State Capital Improvement Program (SCIP) and the Local Transportation Improvement Program (LTIP) for Logan County. The allocations and accounting for this annual funding is another significant function of the Engineer's office.

With our revised cost-tracking system, the costs include surveying, engineering, administration, and construction of the bridges. The equipment costs are amortized, while the labor include all fringes and benefits. Besides the accounting portion of the administrative and staff support, this department also deals with the day to day calls from the public and either deals with the questions/problems or forwards them to the appropriate person.

## DESIGN/ENGINEERING

The 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. In addition to the engineering, this department also does 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. The road signs now number 7,138. The maintenance of these signs includes installation, preservation and inspection. As part of the inspection process, we look for reflectability, wind damage, vandalism and overall visibility. Repairing mailboxes damaged during snow removal operation is another part of the Traffic Department's responsibilities along with signing for road closure detours. The route markers main duty is to keep traffic moving safely. Our responsibility is to keep the traveling public informed.

Since implementing our sign inventory program on August 1, 1998, the traffic department has replaced 66 signs due to vandalism, 9 due to accidents, and 34 as routine maintenance. They have also removed 44 signs that were no longer needed. Currently, we are awaiting the delivery of our signs to begin our routine replacement of signs due to their condition.

## COURTHOUSE DUTIES

By law, the County Engineer is required to be the official plat draftsman for the County Auditor. In addition to maintaining maps of all properties by lot, parcel, and acreage; the office assigns new house numbers, serves attorneys, surveyors, appraisers, realtors and private individuals in checking deed descriptions and new surveys for accuracy and compliance.

The changing and ever growing county community has kept the map room very busy. In 1998, they processed approximately 375 new property splits and checked over 3,000 deeds transferring property. We also have checked approximately 150 easements and right-of-way documents, and reviewed 9 new plats, and created approximately 300 new house numbers. We also checked over 300 new surveys and provided over 2,000 deed pre-approvals of legal descriptions.

These figures do not include the numerous copies of property maps made for the public, and the answering of the public's questions on a day to day basis. The rapid growth and development doesn't appear to be slowing down any, so next year will probably be just as busy, if not more so.

Besides our normal operations, you might recall we have a contract with Sandborn Co. to produce our tax maps as a digital overlay of aerial photography of the county. This will allow us to view the aerial photography and tax mapping on the Auditors computer system. Eventually, this information may be available to the public through the county's web site.

Presently, 322 of the 334 digitized tax maps have been approved. The final phase will be to have Sandborn combine all the tax maps into one seamless digital map that will have no overlaps or gaps. As a part of the contract, Sandborn will install the digital information on our computers along with user software to allow for quick and easy access to desired parcels. During the installation process, Sandborn will train our personnel on how to use and maintain the data. We are hoping to wrap this project up by June of this year.



## 1999 ROAD PROGRAM

Well, we have been hard at work already this year planning for next years' road program. We have reviewed each road on the program for needed culvert replacements, bridge replacements and/or repairs, drainage problems, where widening is needed, etc.

The following roads are scheduled for resurfacing next year:

### Regular Funding

County Road 5 from CR 1 to CR 29E (2.08 miles)  
 County Road 153 from Zanesfield to CR 28 S (1.02 miles)  
 County Road 153 from SR 287 to CR 277 (2.05 miles)

### Solid Waste Funding

County Road 25 from End of New Pavement (800 ft north of RR) to N of TR 37 W (1.00 miles)

### Sales Tax Funding

County Road 5 from US 68 to CR 1 (2.54 miles)  
 County Road 5 from CR 29E to Zanesfield (2.37 miles)  
 County Road 10 from Zanesfield to SR 292 (5.16 miles)  
 County Road 28 from CR 41 to CR 168 (.30 miles)  
 County Road 28 from CR 29 to CR 291 (1.73 miles)  
 County Road 29 from CR 5 to CR 146 (3.85 miles)  
 County Road 41 from CR 28 to SR 287 (1.14 miles)  
 County Road 44 from TR 160 to SR 559 (.72 miles)  
 County Road 47 from SR 245 to CR 29 (4.39 miles)  
 County Road 55 from CR 29 to CR 10 (1.91 miles)  
 County Road 146 from CR 29 W to CR 153 (1.59 miles)  
 County Road 153 from CR 28 to CR 146 (2.25 miles)  
 County Road 153 from SR 152 to SR 287 (0.06 miles)  
 County Road 168 from County Line to CR 28 (.81 miles)

This 1999 program estimates \$278,952 in regular funding (5.15 miles), \$50,000 in solid waste funds (1.00 miles), and \$1,677,122 in sales tax funding (28.81 miles) for a total of 2.0 million dollars.

### 1999 Chip and Seal Program

Due to budget constrictions, there will not be a chip and seal program for 1999.

## 1999 ESTIMATED ROADWAY COSTS

1999 Estimated Roadway Costs	
Pavement Markings	\$ 25,000
Roadside Mowing	\$ 60,000
Roadside Spraying	\$ 30,000
Replace and Construct Guardrail	\$ 15,000
Snow & Ice Control	\$ 300,000
Regrade Berms & Side Ditches	\$ 75,000
Grubbing and Tree Control	\$ 45,000
Routemarking	\$ 200,400
Durapatching	\$ 100,000
Bridge Program	\$ 562,392
Road Program	\$ 2,000,000
Repair Potholes	\$ 30,000
<b>Total</b>	<b>\$ 3,442,792</b>

## 1999 BRIDGE PROGRAM

The bridge crew once again has their work cut out for them as we have again planned an aggressive bridge program for 1999. The following structures are scheduled for replacement in 1999.

This 1999 program estimates \$175, 276 in regular funding (materials and purchased services), and \$387, 116 in sales tax funding (materials and purchased services).

1999 Bridge Program	
Regular Funding	
Structure	Material Cost
County Road 60-4.02 Temp Bridge Repair	\$ 15,000
Township Road 92-0.49 Bridge Replacement	\$ 20,592
Township Road 238-0.43 Bridge Replacement	\$ 21,164
County Road 13-1.58 Bridge Rehabilitation	\$ 118,520
<b>Total</b>	<b>\$ 175,276</b>

Sales Tax Funding	
Structure	Material Cost
County Road 60-0.03 Large Culvert Replacement	\$ 30,000
County Road 8-0.63 Large Culvert Replacement	\$ 30,000
County Road 8-2.87 Large Culvert Replacement	\$ 30,000
County Road 103-1.53 Large Culvert Replacement	\$ 30,000
County Road 2-3.48 Large Culvert Replacement	\$ 30,000
County Road 12-1.29 Bridge Replacement	\$ 26,400
County Road 12-2.61 Bridge Rehab.	\$ 17,952
County Road 87-0.76 Bridge Replacement	\$ 54,560
County Road 74-0.83 Bridge Replacement	\$ 19,008
County Road 65-0.02 Bridge Replacement	\$ 33,792
County Road 117-0.94 Bridge Replacement	\$ 52,668
County Road 124-0.43 Bridge Replacement	\$ 32,736
<b>Total</b>	<b>\$ 387,116</b>

## MOTOR VEHICLE REGISTRATIONS

1998 County of Logan Motor Vehicles Registrations	
Type of Registration	# of Units
Passenger Cars	\$ 33,319.00
Motor Homes	\$ 417.00
Motorcycles	\$ 1,522.00
House Vehicles	\$ 761.00
Mopeds	\$ 55.00
Non-Commercial Trailers	\$ 4,098.00
Non-Commercial Trucks	\$ 10,877.00
Farm Truck	\$ 299.00
Buses	\$ 35.00
Commercial Trailers	\$ 1,518.00
Non IRP Trucks	\$ 2,109.00
IRP Trucks	\$ 143.00
<b>Total Vehicle Registrations</b>	<b>\$ 55,153.00</b>

SOURCE: State of Ohio, Bureau of Motor Vehicles

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**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](http://www.co.logan.oh.us/engineer)

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**EXECUTIVE SUMMARY**

371.51 Miles of County Road

300 Bridges

7,138 Signs

1,547 Culverts

Excellent/Good Condition-1202

Fair/Poor/Unknown Condition-345

Project	Estimated Cost
County Road 80-0.63 Large Culvert Replacement	\$ 30,000
County Road 8-0.58 Large Culvert Replacement	\$ 30,000
County Road 18-3.87 Large Culvert Replacement	\$ 30,000
County Road 100-1.53 Large Culvert Replacement	\$ 30,000
County Road 2-3.48 Large Culvert Replacement	\$ 30,000
County Road 12-1.26 Bridge Replacement	\$ 26,400
County Road 12-2.51 Bridge Repair	\$ 17,952
County Road 57-0.76 Bridge Replacement	\$ 54,960
County Road 74-0.63 Bridge Replacement	\$ 19,008
County Road 55-0.02 Bridge Replacement	\$ 32,792
County Road 117-0.94 Bridge Replacement	\$ 52,688
County Road 124-0.43 Bridge Replacement	\$ 32,736
<b>Total</b>	<b>\$ 387,116</b>