



The Orange Brigade



Winter 2011

Logan County Engineer's Office

Volume 38



Coleman's Comments

Greetings from your County Engineer:

The Logan County Engineer's Office has been aggressively seeking grant funds to supplement our regular funding and sales tax funding. The guardrail inventory study and federal aid sign facing upgrade grants totaled \$83,520.50 of grant funding to the Logan County Engineer's Office. We also acquired \$970,542 of OPWC grant funding for the 2010 Township and Village paving programs and \$40,544 of OPWC funding for the Harrison TR 200 widening and resurfacing project.

For 2011, we have received approval of up to \$ 85,000.00 for the update of the Location Based Response System (which was postponed from 2010), \$50,000 for sign upgrades, about \$68,000 for bridge load ratings, and \$180,116 for County Road resurfacing. We have also received approval of up to \$ 88,211.00 of grant funding for the Pleasant Township Road 33 widening and \$523,058 for Village street resurfacing. Furthermore, we were able to assist West Liberty in being approved for the Columbus Street reconstruction, phase 1 project. We will continue to apply for additional grants throughout the year.

Sales tax revenue declined by 1 percent in 2010 and was down 10 percent in 2009. Motor vehicle fuel tax revenue increased 1.48 percent and automobile registration fees increased by 2.5 percent in 2010; these were down 4 percent and 2 percent, respectively, in 2009. Despite an unclear outlook for our future revenue, we have completed the 2011 bridge replacement schedule and resurfacing plan. We have also completed a tentative resurfacing plan for 2011 through 2015. These plans are posted on our website

<http://www.co.logan.oh.us/engineer/index.html> .

Beginning in 2005, the Logan County Engineer's Office has relinquished a portion of our general revenue funding, which is provided by the County Commissioners, in order help the general fund departments continue to operate during these tight financial times. The general revenue

funds that the County Commissioners provide to this office have been dedicated to bridge replacements and to pay the debt for the Highway Garage that was built in 1994. Since 2005, the Logan County Engineer's Office has surrendered \$ 907,636.39 for the benefit of the general fund departments of the County.

The snow and ice season has hit us hard this season. We have experienced several days of extremely low temperatures and significant snow fall in late 2010. We continue to work hard to treat the roads appropriately for each storm. So far this season, we have worked 1,578 hours of regular time and 707 hours of overtime to treat the county highways. We have used 3,430 tons of mixed salt and grit. Our total cost of labor, equipment, and materials for snow and ice control is \$251,571.52 and counting. We have built a salt brine pretreatment spray truck and purchased a used tailgate mounted pre-wetting system to add to our snow and ice treatment options and feel that this will improve our efficiency. Please remember the Ohio Department of Transportation winter slogan "ice and snow...take it slow". See their website for winter driving tips and links to traffic conditions.

<http://www.dot.state.oh.us/Services/Pages/IceandSnowInformation.aspx>

There has been a lot of talk in the media lately expressing concern over government employees, and government efficiency. I can tell you that at the County Engineer's Office we are always looking for ways to save money, be more efficient, and deliver the highest quality of service to our customers, the public. Our staff works very hard to serve the citizens of Logan County and we will continue to do so. We are continually tracking our project costs to make sure that we are completing projects in the most cost effective manner. We complete most of our construction and maintenance with our own staff, because we can save taxpayer dollars that way. However, when appropriate, we hire private sector contractors or service providers to complete the work items where we are not the most efficient. I believe that our fiscal numbers and condition of the highway infrastructure prove that the Logan County Engineer's Office has been a good steward of the taxpayers' money. If you meet any of our staff members, I encourage you to thank them for their hard work and dedication to public service. Scott C. Coleman, P.E., P.S.

Bridge Load Rating Funding

By: Bryan Dhume, P.E., Assistant Engineer

The Logan County Engineer's Office has applied for, and will receive federal funding for three bridge load rating projects this year. This 100% funding has been provided as part of an agreement between the County Engineer's Association of Ohio (CEAO), the Ohio Department of Transportation (ODOT), and the Federal Highway Administration (FHWA) to complete the load rating of all bridges greater than 20 feet in span by 2013. The first project will include the load rating of our seven truss bridges at a cost of \$31,372. The second project consists of load rating our five continuous multiple span bridges at a cost of \$13,709. Both projects are being completed by Kohli & Kaliher Associates, Inc. of Lima, OH. We are currently waiting on consultant proposals for the third project, which will include load rating our nine culvert type bridges over 20 feet in span. We expect this project to cost around \$23,000.

BUILDING BRIDGES

By: Shane Long, Bridge Superintendent

2010 was a very productive year for the bridge crew. Some of the projects contributing to our successes were: the wood floors and steel repairs on CR 88 and CR 97; repairs to the covered bridges on CR 13 and CR 38; the fascia beam, wall repair and channel alignment on CR 64. The factors of our success in 2010 included the teamwork of our Bridge Crew, summer interns, engineering staff and all support functions within our office. 2010 also brought change in the Bridge Crew Superintendent role as Rick Archer retired after 26 years of service. I had the opportunity to work for Rick and learn many facets of the bridge building/maintenance operations from him. Near the end of last year I was able to transition into the Bridge Superintendent role. I embrace the challenge of this new position and look forward to serving the public in this new role and working with my crew to ensure that we accomplish our goals in a safe, timely and quality manner. I am very excited about this year and all of the projects we have lined up for the Bridge Crew, including our current project of the multiplate installation on CR 4. We have a busy year planned for the Bridge Crew. We have a great team of workers on the Bridge Crew and I am confident that we will have another successful year in 2011.

I have been with the Logan County Engineer's Office for 14 years, joining the Bridge Crew in February of 1997. I am a lifelong resident of Logan County, currently residing in West Liberty with my wife, Kim, and two daughters, Madilynne and Abbigayle.



BR 64-0.00 over Lee Creek



BR 97-0.76 over South Fork Miami River

Lighting Upgrade

By Harvey Grimes, Administrative Coordinator

At the Logan County Engineer's Office we are constantly looking for ways to stretch our budget dollars. Recently we became aware of a rebate program being offered by the Dayton Power & Light Company to help offset the costs of upgrading the lighting in our facilities. The benefits are reduced energy consumption (cost savings), better lighting, instant-on, and a 5-year warranty on the bulbs and ballasts. Phase 1 of this project is complete and Phase 2 will be completed in February of this year. Project summaries are as follows:

Phase 1:

Replace (48) HID fixtures with (48) 4-Lamp T-5 fixtures (New Garage). Installation done with County forces.
\$7,965.00 (Initial investment) - \$2,400.00 (DP&L Rebate) = \$5,565.00 + \$192.00 (Freight).
Return on Investment = 24 Months.

Phase 2:

Retrofit (92) fixtures and (5) new exit signs in the office facility.
Retrofit (7) fixtures and install (13) new fixtures and (5) new exit signs in the old garage.
Retrofit (91) fixtures and (6) new exit signs in the new garage and mezzanine.
Installation provided by contractor.
\$14,250.00 (Initial investment) - \$4,458.00 (DP&L Rebate) = \$9,792.00 + \$450.00 (Freight).
Return on Investment = 16.3 Months.



Gearing Up for the Winter

By Joel Miracle, Highway Maintenance Superintendent

Coming into the 2011 snow and ice removal season, the County Engineer's Office has engineered a pre-treat brine system. This quick and efficient method of pre-treating the county roads has obvious advantages for the motorists and for our snow and ice control crews. The application of salt brine before snow begins to fall helps to prevent the bonding of snow and ice to the road surface. This will reduce the immediate accumulation of snow and allow our crews more time to respond to inclement weather.

It takes one ton of salt to make 1,000 gallons of 23% salt brine, which at this time is being purchased from the city of Bellefontaine. The modular tank which holds 1,635 gallons of brine has been fitted with 12 adjustable nozzles 9" apart to disperse the material onto the road surface at the speed of 30 miles per hour and applying material at 50 gallons per lane mile. This system is pressurized by a hydraulic driven pump that we had in stock as a spare for the spray truck used in the spring for roadside maintenance. All supplies used to fabricate this truck were purchased through Tri-State Ag Service (Anna), FDS (Botkins), and A&H Hose (Huntsville), NAPA and TSC in Bellefontaine. It was a significant cost savings by fabricating the unit in-house. We had labor and materials of \$5,000 compared to \$10,000 to \$15,000 to buy a pre-built unit.

We also added a pre-wetting system to our fleet. This unit hangs on the rear tailgate of the truck, spraying liquid brine onto the material coming off the spinner. This is a more efficient way to start the melting process without relying on traffic volume. We purchased this unit used from Newell Equipment in Galion, Ohio for the cost of \$1,000. We feel it's making a difference as we battle the inclement weather that Mother Nature brings to Logan County.



Persistence does pay off....

County Road 117 Railroad Crossing to Receive Safety Upgrade

*By: Scott C. Coleman, P.E., P.S.
Logan County Engineer*

I began working on getting gates and lights installed at the railroad crossing of CR 117 south of Ridge-way in the mid to late 1990's. Jim Cox was County Engineer when I began this effort. The County had already tried installing rumble strips to warn travelers of the approaching railroad crossing. We were receiving complaints that vehicles were driving left of center to avoid the rumble strip and nearly causing several head on collisions. Therefore, we eventually covered the rumble strips. Over about 13 to 15 years, I contacted the Public Utilities Commission of Ohio (PUCO), the Ohio Rail Development Commission (ORDC), CSX Transportation Inc., and Angels on Track to request installation of lights and gates at this location. Finally, after all these years of work, Logan County will be receiving lights and gates at the crossing that I consider to have the poorest sight distance in the county. The project is estimated to cost \$206,000 and will be paid by CSX Transportation Inc. (10%), PUCO (59%), and ORDC (31%). I am extremely happy to bring this safety measure to the citizens of Logan County.

"Traffic on the Move"

*By: Don A. Phipps
Traffic Control Superintendent*

In 2010 the Traffic Department replaced 1,455 signs that were a part of our routine maintenance schedule. We also replaced 55 signs due to vandalism.

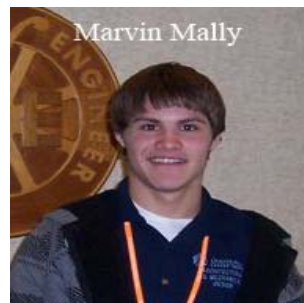
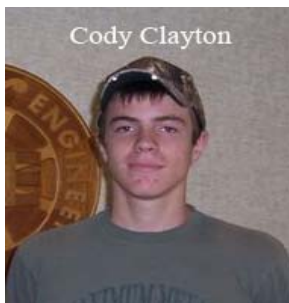
For the summer paving and chip seal programs, we used 255 temporary "Road Construction" and "Unmarked No Passing Zone" signs.

We also replaced or repaired 92 mailboxes during the year.



Job Shadowing

Two students from the Architectural & Mechanical Design Program at Ohio Hi-Point Career Center in Bellefontaine requested to spend the day with the Logan County Engineer. The students learned about the operations of the Engineer's Office and Highway Departments.



"Mapping Matters"

Notes from the Map Room Staff

*By: Suzie Yoesting
Tax Map Draftsperson 2-Supervisor*

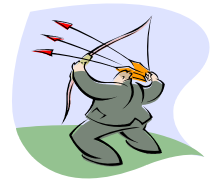
In 2010, the Map Room Staff checked legal descriptions on 2,215 real estate documents. Two hundred-fifty of these recorded documents were Affidavits. There were 71 Certificates of Transfer, 1,776 deeds, 52 easements and 66 land contracts. Additionally 6 condominium plats and declarations were approved and recorded along with one highway plat. New property splits totaled 137 for the year with 108 documents being new surveys.

Surveyors submitted 293 new legal descriptions that were reviewed, approved, scanned, and filed by the Map Room personnel. In addition, 37 new house numbers were established in 2010.

The Logan County Map Room is located in the Court-house Annex Building-Suite B across from the historic Holland Theatre. We are here to assist with your real estate property information and mapping needs. For more information, please call 937-599-7230 or via email at syoesting@co.logan.oh.us.



TARGET SAFETY...



By: Todd Bumgardner, Engineering Technician 2

2010 was the 1st injury-free calendar year since records have been kept at the Logan County Engineer's Office and Highway Department. In 2009 the Engineer's Office began a program that focused on safety through daily safety briefings, monthly safety meetings and quarterly safety committee discussions. The efforts by all continue to yield results by breaking milestones and going home injury-free everyday to enjoy our families.

"Jahn Scaffold Jacks" were purchased based on an employee recommendation. The scaffold jacks are utilized when our bridge crew performs concrete forming and pouring operations. The scaffold jacks are basic steel triangle brackets that are nailed into our wooden abutment formwork. Once a series of scaffold jacks are secured at 5 foot intervals, wooden planks spanning between each create a walkway 35 feet long and 5 feet above the existing ground. The finished walkway along with a handrail makes for a safe concrete placement operation.

Our meeting/conference room received an update this fall as well, with the addition of a projector and speakers. The shared use of a laptop computer purchased for our Traffic Department along with this addition will expand the types of media we can present at our monthly safety meetings. This was a welcomed addition that has been utilized in some format each month since installed.

Thanks to Don Phipps (Traffic Superintendent), Jeremy Burrey (Highway Worker 3) and Kip Jenkins (Ditch Maintenance Technician) for volunteering to fulfill safety committee positions during calendar year 2011. The committee meets on a quarterly basis, we exchange ideas on how to improve safety of our operations, safety purchases, schedule safety meeting topics based on upcoming work and review "near miss" as well as property damage occurrences. I also want to thank Joel Miracle (Road Superintendent), Shane Long (Bridge Superintendent) and John Berry (Head Mechanic), for presenting during monthly safety meetings held since the summer edition of the Orange Brigade.

402 consecutive days worked injury-free as of January 31, 2011.

ODOT OFFICIALS CAUTION MOTORISTS THAT VEHICLE CRASHES INVOLVING DEER LIKELY TO INCREASE

By: Dianne Gauder, Personnel Specialist

The Ohio Department of Transportation (ODOT) updated a safety analysis in October 2010 which showed that Ohio motorists may see a spike in collisions with deer. Statistics show that deer-vehicle crashes were not limited to just rural areas. Urban Ohio highways had the highest numbers of accidents involving deer in 2010.

Ohio has eight million drivers, 121,000 roadway miles, and approximately 600,000 deer. ODOT recommends that all motorists exercise caution and learn how deer behave to help avoid collisions. Please remember these driving tips.

- **See the Signs:** Deer Crossing signs are posted in high-risk areas. Drive with extreme caution, especially in the posted areas.
- **Deer Do Not Roam Alone:** If you see one deer near or crossing the road, expect that others will follow.
- **Danger from Dusk to Dawn:** Watch for deer especially at dawn and after sunset. About 20% of crashes occur in early morning, while more than half happen between 5 P.M. and midnight.
- **Safety Begins Behind the Wheel:** Always wear safety belts and drive at safe and sensible speeds for road conditions.

For more information check out ODOT's link at
<http://www.dot.state.oh.us/news/Pages/ODOTSafetyAnalysisshowsCrasheswithDeerLikelytoSpike.aspx>

RECENTLY RETIRED

Rick Archer
Bridge Superintendent
26+ Years of Service



Rick was hired as a Highway Worker 2 on September 17, 1984. He was promoted to Bridge Superintendent in 1991. Over the years Rick worked on the complete replacement or rehabilitation of hundreds of bridges or culverts in Logan County, including both historic covered bridges. Always known for his direct communication style, he is respected for his contribution to the Logan County Engineer's Office and Highway Departments. Rick recently completed construction of his dream home and enjoys spending time with his wife, Melanie, sons, Sam and Matt, and three grandchildren.

Congratulations, Rick!

RECENTLY RETIRED

Larry Artis
Mechanic 2
22+ Years of Service



Larry joined the Highway Department on June 24, 1987. Larry advanced to a Mechanic 2 over the years and worked on just about every piece of equipment owned by the department. He worked to fabricate the first "Ramm-Air". This is a modification to snow plows that keeps snow from collecting on plow trucks and impeding operation. Larry also served on the Safety Committee and was a friendly face for visitors to the Logan County Highway Garage. He and his wife, Daisy, have a son, Darrell, and eight grandchildren. ***Congratulations, Larry!***

NEW EMPLOYEES

Two new employees have joined the Logan County Highway Department.

Bradley Jackson, Mechanic 1, lives in the Zanesfield area.
Gregory Miller, Ditch Maintenance Technician, resides in the Indian Lake area.

Welcome to our team!

PROMOTED & RECLASSIFIED EMPLOYEES

Greg Kennaw was promoted to a Highway Worker 2 in October of 2010.
Shane Long was promoted to Bridge Superintendent in September 2010.
Steve Tracey was reclassified from a Highway Worker 3 to a
Ditch Maintenance Technician in November 2010.

Congratulations to these employees on successfully transitioning to new positions!