MUSKINGUM COUNTY
MCEO
ENGINEER'S OFFICE

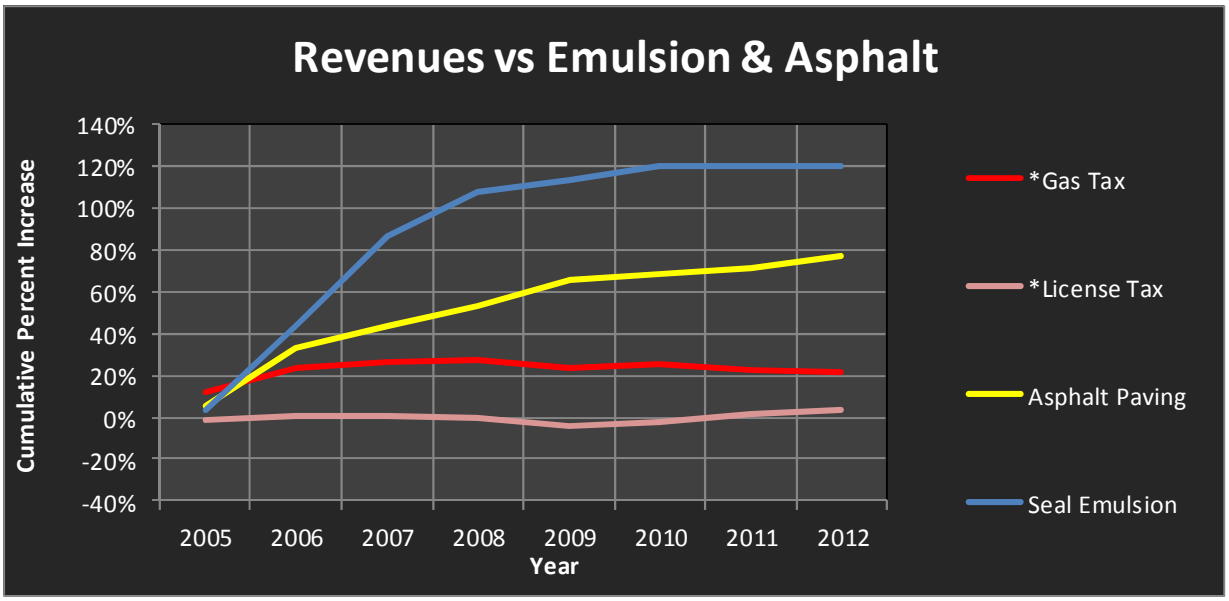
Volume 7, Issue 1

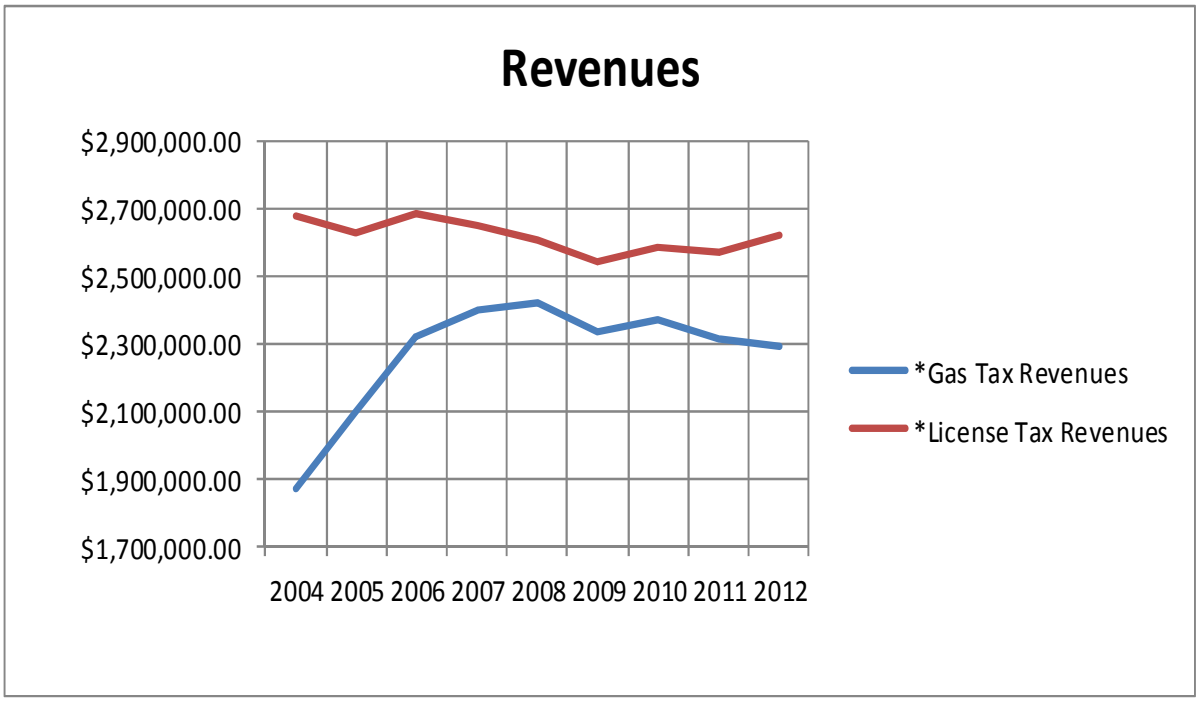
January 2013

MCEO Employee Newsletter

## 2012 Budget in Review

Revenues for the Engineer's Office remain stagnant as costs continue to rise. It has become very important to prioritize projects and be assured that the right treatment, on the right road, at the right time is strictly followed. As the charts show, material costs, such as asphalt and emulsion for chip-seal and patching, are costing the Engineer's Office more money every year. We must continue to do our best to work as efficiently as possible while maintain the level of service that has been provided thus far.



# News and Notes

⇒ Diaries are very important to the operation of the Engineer's Office. A lot of data is processed daily in the office to track completed work, hours spent on projects, and material usage. Please make sure that the daily diaries are as specific and detailed as possible.

⇒ The Engineer's Office used more material in December 2012 than the entire 2011-2012 winter season.

⇒ A sign replacement and upgrade grant was secured by the Engineer's Office to purchase $50,000 worth of speed limit and warning signs. Two years ago, a similar grant paid for the replacement of over 800 stop signs and installation of 200 stop ahead signs.

**Ground Tire Rubber asphalt could stabilize asphalt prices**

Each year the United States generates approximately 290 million scrap tires. Of these 290 million tires, approximately 80.4 percent are recycled or reused in fuel, agricultural or civil engineering markets leaving 27 million tires left to be placed in landfills or stockpiles. Currently, about 12 million scrap tires each year are being converted into ground tire rubber for modifying asphalt cements.

The utilization of scrap tire rubber in asphalt started in the mid-1960s when ground rubber was placed in asphalt surface treatments, such as chip seal applications. Later on, in the 1970's, crumb rubber modified (CRM) asphalt chip seals were used as a stress absorbing membranes interlayer (SAMI). Its use extended to hot mix asphalt (HMA) and has continued to evolve due to the rubber's enhancement of mixture performance including improved rutting resistance, thermal reflective crack resistance, and resistance to fatigue cracking. Some other benefits reported include reduction in maintenance, smooth ride, good skid resistance, and noise reduction.

By using ground tire rubber (GTR) instead of oil-based polymers in asphalt mixtures may stabilize asphalt prices, according to the NCAT study. According to the National Center for Asphalt Technology (NCAT), Assistant Research Professor Richard Willis, this means that "by increasing the use of ground tire rubber, asphalt producers will benefit from price stability as compared to more volatile oil prices which impact the cost of traditional, oil-based polymers."

The Engineer's Office used GTR in 2009 on Creamery Road as part of a government grant.

## Happy Birthday to...

| | |
|---|---|
| Doug Davis | 1-25 |

## Happy Anniversary to...

| | |
|---|---|
| Doug Culbertson | 8 years |
| Shawn Johnson | 8 years |
| Bob Wilson | 8 years |