

# 2009 ANNUAL REPORT

PREPARED BY:  
**ALAN BRUBAKER, P.E., P.S.**  
**SUMMIT COUNTY ENGINEER**

ISSUED APRIL 1, 2010



# Mission Statement



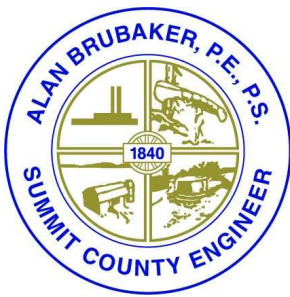
Alan Brubaker, P.E., P.S.,  
Summit County Engineer

Our mission is to serve the Summit County Community by maintaining and improving our region's infrastructure, encouraging economic development, and ensuring a safe and efficient transportation system while protecting the environment.



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## **ALAN BRUBAKER, P.E., P.S.**

**SUMMIT COUNTY ENGINEER**

April 1, 2010

Summit County Council  
Ohio Building – 7th Floor  
175 South Main Street  
Akron, Ohio 44308-1314

Dear Members of Summit County Council:

In accordance with Ohio Revised Code Section 5543.02, I respectfully submit the Summit County Engineer's (SCE) annual report for the year 2009. This report reviews the activities of this Office for 2009, highlighting major infrastructure improvement projects and the maintenance of our existing infrastructure. The Office continues to be an active partner with the townships and other communities in their efforts to update and improve local infrastructure systems.

I took office on January 5th, 2009. Our first year in office proved to be challenging, difficult decisions had to be made and budget cuts were necessary to bring our expenditures in line with our declining revenue. Our office proved we were ready to meet these challenges and numerous changes were made to ensure the health of our budget and to provide the best services possible to the citizens of Summit County.

This annual report highlights many of our projects and initiatives. If you have any questions regarding past accomplishments or the future plans set forth within this Annual Report, please contact me at (330) 643-2850.

Sincerely,

Alan Brubaker, P.E., P.S.  
Summit County Engineer

# Services

Summit County Engineer Alan Brubaker, P.E, P.S.  
is pleased to offer the following services to the public:

- Design, construction, inspection and maintenance of Summit County highways, bridges and assessed stormwater facilities.
- Installation, inspection, and maintenance of traffic safety equipment, signs, traffic control devices, and pavement markings on county highways and bridges.
- Snow and ice control on Summit County highways and highways within other jurisdictions by agreement.
- Engineering design and other services to Summit County's cities, villages and nine townships.
- Coordination of local efforts to procure state and federal funding for infrastructure.



Engineer Brubaker gathered with colleagues to receive the Akron Area Engineer's Week proclamation from the City of Akron.

**THE SUMMIT COUNTY ENGINEER  
HAS A WEALTH OF RESOURCES  
AND INFORMATION FOR PUBLIC  
USE. PLEASE LET US KNOW HOW  
WE CAN HELP YOUR COMMUNITY!**

**CALL US AT 330.643.2850**

**[www.summitengineer.net](http://www.summitengineer.net)**

Our office rolled out a new website in 2009. The website was designed in-house with collaboration from other county offices, saving a considerable amount of money in design and hosting fees. The website still includes all of the functions of the previous website with additional features that will increase both public and private industry efficiency when utilizing the records and forms available online. The new design makes the website more user friendly. Content was reorganized in a streamlined fashion so citizens will need to spend minimal time and effort finding the information they need. In addition, the website also offers news and traffic alerts that can be set up in a RSS feed, allowing the public to get real time updates about road closing and construction projects. The "projects" section now utilizes Google Maps in order to show the exact parameters of any construction project planned or in progress.

Your Summit County Engineer maintains:

- Over 360 lane miles of roads - in all seasons
- Over 300 bridges throughout the County - and inspects each one, **every** year
- Over 1200 culverts
- Over 45 currently assessed subdivision stormwater facilities
- Hundreds of miles of road right-of-way and roadside ditches
- Regional storm water facilities
- Over 30 signalized intersections



# Public Services Department

We changed the name of the Maintenance Department to the Department of Public Services, a name that better defined the operations of that office. The men and women in the Public Services Department are most often the public face of this office. They do so much more than just maintain the roadway. They are often rebuilding culverts, driveway pipes, dredging retention or detention ponds, providing snow and ice control or providing pavement markings. The new name encompasses all that they do for Summit County.

The Public Services Department is responsible for maintaining over 360 lane miles of county roadway, 315 bridges, 1,200 culverts, guardrail, berms, vegetation control, ditches, pavement markings, traffic signals, tree trimming and removal, deceased animal removal, driveway culvert pipes, fleet maintenance, retention and detention ponds, roadside mowing, snow and ice control on township roads and some State Highways.

The Administrative office and the South Street Station are located at 601 E. Crosier St. in Akron, with an outpost at Boston Mills Station located in Boston Township. Bath, Boston, Copley, Coventry, Northfield Center, Richfield, Sagamore Hills, Springfield and Twinsburg townships are provided general maintenance and snow and ice control by our department. In addition to our South Street and Boston locations, the County has salt storage facilities at: The Village of Lakemore, City of New Franklin, Copley Yard in Copley Township and Bath Township maintenance yard on Ira Road.

In 2009 a total of 645 requests for service were received and completed, 59 animals were picked up and disposed of, 49 ditches were cleaned, 15 traffic signal related calls were repaired, 32 tree problems were handled and there were 36 shoulder repairs. The department used 5,500 tons of stone, 5,100 ft of culvert pipe, 2,300 tons of asphalt and 14,160 tons of salt.

## South River Road

**During Construction**



**After Construction**



## Mount Pleasant Road

**Before**



**After**



# Public Services Department

The department constructed a 30' X 60' salt storage dome at the City of New Franklin Yard facility. This was constructed to supplement the salt supply for County snow plow trucks while performing snow and ice control for the City. The department also purchased three new 5 Ton plow/dump trucks – two for our Boston Station facility and the other for our South Street Station facility. These vehicle purchases were to replenish previous auctioned fleet. The Service garage refurbished a Case loader and installed a greasing system which will automatically grease the loader and aid in the prevention of premature “wear”. A brine making system was also designed and constructed “in-house” by County forces. The brine production rate is approximately 30 gallons per minute.



Pine Trails Retention Pond Restoration

Our Bath/Copley district repaired a storm sewer on Cleveland Massillon Road at Ira Road. Two crossover pipes were installed on Medina Line Road. 300' of 15" plastic pipe was installed for a new ditch enclosure on Yellow Creek Road. A ditch enclosure repair and crossover installation were performed on City of New Franklin Salt Storage Facility on Jacoby Road.

Our Boston district performed stream bank stabilization work on Highland Road at Brandywine Ski Resort. Road stabilization work and gabion baskets were installed on Highland Road at Chamberlain Road. Repair to an existing ditch enclosure and a basin installation were done on Highland Road at Olde Eight Road. Sections of Highland Road were also re-based and asphalted. Ditch stabilization, erosion control installation, stone and durapatch work was performed on Boston Mills Road. Our South district repaired a ditch enclosure on Cottage Grove Road. Prep work performed for road reconstruction on Waterloo Road by ditching, flushing basins and crossover pipes. Stream bank stabilization and berm repairs were done on Mount Pleasant Road just East of Christman Road (at bridge) for guardrail installation.

Assessed Subdivision Stormwater Facility Work	
Subdivision	Work done
Pine Trails	Retention pond restoration, replaced outlet, structure, restored outlet channel, removal of excess silt and vegetation
4 Seasons of Bath	Repaired heavy erosion in inlet and outlet channels, installed rock channel erosion protection, re-established positive drainage flow, repaired catch basin, repaired culvert pipe
Royal Meadows	Repaired severe erosion on dam, repaired outlet structure
North Bath Estates	Retention pond restoration; removed silt build-up, re-establish drainage channels
Creekside	Retention pond restoration; restored design volume by removing heavy siltation, repaired outflow channel
Heritage Woods	Repaired collapsed culvert head wall, cleaned outlet channel
South River Road	Head wall stabilization, stream and vegetation clean out
Summit County wide	Retention pond mowing and general maintenance were performed district wide.



# Engineering Department

The Engineering Department is active in the development of plans for highway, drainage, and bridge improvements and new construction on Summit County roads. The engineers and technicians prepare improvement plans for federal, state and locally funded projects on County highways. They also assist townships by preparing plans for township roads and drainage systems. Our project managers are responsible for overseeing large projects from initial scoping through the design phase and into construction.



Maintenance on the High Level Bridge, Akron

## **2009 Culvert Replacement Program**

Two culverts were replaced on Granger Road (Bath Township)

## **2009 Resurfacing Program**

Resurface Everett Road from Medina County Line to Hametown Road (Bath and Richfield Townships)  
Cleveland-Massillon Road from Springside Dr. to Ghent Rd. (Bath Township)  
Rothrock Road was resurfaced from Springside Drive. to Fairlawn Corp. Line.

## **2009 Crack Sealing Program for Summit County**

The following were Crack Sealed:

South Main Street from Green Corp. Line to Lakota Dr. (Coventry Township)  
Ridgewood Road from Medina Line Rd to Hametown Rd (Copley Township)  
Killian Road from SR 241 to Myersville Rd (Springfield Township)  
Highland Road Chamberlin Rd to Haddan Rd (Twinsburg Township)

## **2009 Asphalt Rejuvenating Program for Summit County**

The following roads were rejuvenated:

Killian Road from Myersville Rd. to Canton Rd. (Springfield Township)  
Ridgewood Road from Hametown Rd. to Cleveland-Massillon Rd. (Copley Township)  
Medina Line Road from Ridgewood Rd. to SR 18 (Copley Township)  
White Pond Drive from SR 162 to Akron Corp. Line (Copley Township)

## **2009 Spot Paving Program**

The following roads were part of the Spot Paving Program:

North Turkeyfoot Road from S. Main St. to Vaughn Trail (Coventry Township)  
Warner Road from S. Main St. to N. Turkeyfoot Rd. (Coventry Township)  
Yellow Creek Road Cleveland-Massillon Rd. to Sand Run Rd. (Bath Township)

The following bridge decks were resurfaced and waterproofed:

Christman Road Bridge over Lake Y-Noah Outlet (between Stoner Rd. and Paul Dr.)  
Pressler Road Bridge over South Fork of the Tuscarawas River (just west of Myersville Rd.)  
Pressler Road Bridge over the Tuscarawas River (between Killian Rd. and Moler Dr.)

## **2010 Project Plans and Specification Preparation**

2010 Pavement Maintenance Program

2010 Culvert Program

Everett Road Widening and Resurfacing

Waterloo Road Resurfacing

Hazel Street Bridge over Little Cuyahoga

Cleveland-Massillon Bridge over North Fork Scour Mitigation

Van Buren Bridge over Tuscarawas River



# Engineering Department Survey Section

During 2009, the Summit County Engineer's Survey Section utilized performed surveying for internal departments, townships and for the County Executive and County Fiscal Officer. A Trimble 5600 robotic total station, Topcon 300 series total station and a Ranger data collector with TDS software were utilized to collect survey data. Computers with Land Desk Design software were used to accept and analyze the field data and create the base mapping for design and field staking purposes. The Survey Section also utilized four GPS receivers and accessories to establish horizontal and vertical control on jobsites.

The Survey Section continues to perpetuate the integrity of the road surfaces by surveying for the installation of Monument Boxes. Since a portion of everyone's property borders a road, private surveyors need to dig holes in the pavement to find old survey pins that define the centerline of that road. The holes can be more than a foot deep and soon turn into "pot holes". Surveys are conducted to determine the centerline of road right of way in coordination with a pavement resurfacing project. Monument Boxes containing survey pins marking the centerline can then be installed at the surface of the pavement during the paving project. This allows private surveyors to simply lift the lid of the monument box to access the pins they need to perform surveys for the general public and other improvement projects. This helps to eliminate unnecessary pot holes and extend the life of the pavement.

In addition, this section assists with the review of major road and bridge projects as well as road dedications, road vacations, annexations and land subdivisions.

The department transitioned to a Ricoh Aficio XP W2470 RPCS large format copier/printer/color scanner to produce scanned images of Drainage Plans, Subdivision Improvement Plans, Road Record Plan Sheets, Dedication Plats, Vacations Plats, Private Surveys, Cemeteries Maps, Abandoned Mines Maps, Portage Lakes Maps, Nimisila Reservoir Maps, Miscellaneous Township Surveys on file with the Summit County Engineer. Indexes were created identifying the scanned images. These images are available for download to an external hard drive for a fee of \$10.00. There are over 70,000 images available with a total capacity of about 100 gigabytes. This allows private firms and others the ability to access these records from their own computer at anytime. Our goal is to work toward a "digital records room" that can be accessed from the internet. Scanned images of surveys, subdivisions and subdivision improvement plans from our records can be found through the "ONLINE TOOLS" section on the Summit County Engineer website: <http://www.summitengineer.net/resources/tools>

## 2009 Work Completed:



- Surveyed eight parcels of land for the County and townships, totaling 36.7 acres
- Set pins in 47 monument boxes
- Staked 1 monument box and set pin
- Set approximately 75 job site control points
- Reviewed 24 survey plats, 10 major subdivision plats, 3 bridge plans, 19 drainage/culvert improvement plans, 7 intersection improvement plans, and 1 annexation review totaling 67 reviews
- Verified pins set in monument boxes and property corners for 1 major subdivision
- Performed as-built surveys for 4 projects
- Assisted a local chapter of the Professional Land Surveyors of Ohio during the recovery of old stone monuments set in 1876 on the Summit/Portage County Line.

# Engineering Department

## Bridge Section

The Summit County Engineer Bridge Section is responsible for bridge inspections, bridge inventory, coordination of our bridge maintenance program and developing recommendations for rehabilitation or replacement of County bridges. The bridge section also reviews all bridge plans prepared by consultants.

### RECENTLY COMPLETED BRIDGE PROJECTS

**South Main Street Bridge** over Brewster Ditch in City of Akron, Phase 2 – 2009

**South Main Street Bridge** over Tuscarawas River in Coventry Township, Phase 2 – 2009

### BRIDGE MAINTENANCE COMPLETED

**State Mill Road Bridge** over Connecting Stream in Coventry Township – Repaired guardrail and concrete superstructure.

**Liberty Road Bridge** over Post Ditch in Twinsburg Township – Completed concrete repair work.

**Riverview Road Bridge** over Yellow Creek in Akron – Realigned downstream channel to reduce bridge scour.

**South River Road Bridge** in Munroe Falls – Realigned channel, stabilized slope.

**Riverview Road Bridge** over Furnace Run in Cuyahoga Falls – Repaired drainage system, repaired concrete superstructure and substructure.

**Pressler Road Bridge** over Tuscarawas River in Springfield Township – Waterproofed and resurfaced bridge deck.

**Christman Road Bridge** over Lake Y-Noah Outlet in Green – Waterproofed and resurfaced bridge deck.

### BRIDGE INSPECTION

**Summit County Bridges** - Completed required inspections of all 315 bridges.

**MetroParks Serving Summit County Bridges** – Completed initial inspection and inventory of 32 bridges for MetroParks Serving Summit County.

### COMMUNITY INVOLVEMENT

The Bridge Section participates in the Annual Miniature Bridge Building Competition. This year's competition featured 33 teams of Summit County High School students.

New Main Street Bridge over Tuscarawas River in Coventry Township opened to traffic in June, 2009.



### UPCOMING BRIDGE CONSTRUCTION

**Hazel Street Bridge** over the Little Cuyahoga River in Akron.

**Northampton Road Bridge** over Mud Brook in Cuyahoga Falls.

**Van Buren Road Bridge** over Tuscarawas River in Barberton and New Franklin.

**Cleveland Massillon Road Bridge** over Hudson Run in Barberton.

**South Main Street Bridge** over Feeder Canal in Coventry Township.

**Ravenna Road Bridge** over Tinkers Creek in Twinsburg.

### UPCOMING BRIDGE MAINTENANCE

**Cleveland Massillon Road Bridge** over North Fork in Bath Township – Install natural rock vane structures in the waterway to reduce bridge scour.

**Minor Road Bridge** over Spicer Ditch in Copley Twp – Chip and repair concrete superstructure.

**Granger Road Bridge** over Yellow Creek in Bath Twp – Repair concrete deck.



Channel Alignment at Riverview Road Bridge over Yellow Creek in Akron, November, 2009.

### **Summit County Engineer Bridge Facts**

315 total bridges

119 in Townships

196 in Cities and Villages

# Engineering Department

## Drainage Section

The Drainage Section coordinates requests, reviews, inspects, designs and schedules improvements to ditches, culverts, storm sewers and other drainage-related items for landowners, townships and/or County maintenance. In 2009, the Drainage Section generated 53 letters of response and/or transmittals providing information regarding drainage reviews. Preliminary studies and improvement plans were prepared for several township and county drainage projects. There were 18 proposed commercial improvement plans reviewed in the townships as well as several drainage studies and storm sewer replacement projects. There were 16 ditch restoration projects coordinated with the Summit County Engineer's Maintenance Department Ditch Crew and 9 drainage projects in various stages of design.

### **2009 Ditching Project Locations**

DATE	TWP	LOCATION	TYPE OF WORK
January	Copley	Viers Ditch	County Ditch Maintenance
	Twinsburg	Pine Trails	Retention Basin Maintenance
February	Copley	Pigeon Creek	County Ditch Maintenance
March	Springfield	Springfield Lake Outlet	County Ditch Maintenance
April	Twinsburg	Pine Trails	Assessed Ditch Maintenance
May	Copley	Montrose West	Detention Basin Maintenance
June	Twinsburg	Twinsburg Industrial Park	Retention Basin Maintenance
June-July	Bath	Four Seasons of Bath	Retention Basin Maintenance
August	Copley	Heritage Woods	Retention Basin Maintenance
September-October	Bath	Royal Meadows	Retention Basin Maintenance

### **2009 DRAINAGE PROJECTS**

		Status
Bath	Robinwoods Hills Storm Sewer Outlet Improvements	Construction Completed
Bath	Spring Valley Culvert Replacement	Design Underway
Copley	Hametown Road Culvert Replacement	Design Complete/Ready for Construction
Copley	Westview Estates Drainage Improvements	Received Request/2010 Design
Coventry	Killian/Buttercup/Cosmos	Preliminary Engineering Underway
Northfield Center	Butternut Storm Sewer	Construction Completed
Northfield Center	Schoepf Drive	Obtaining Easement/Revised Design
Richfield	Whitehorn Circle	Construction Completed
Springfield	Kellar Avenue Storm Sewer	Prelim Design Complete
Various	2009 Culvert Contract - Two Culverts on Granger, one liner on Everett	Construction To be Completed Early 2010



# Engineering Department Construction Section

The Construction Section ensures the quality, cost and timeliness of improvements to the County's highways and bridges. This includes all activities from obtaining legislative approval to project bidding to construction inspection to completion of final project documents.



South Main Street, Phase IV

The Construction Section provides assistance as requested by townships and various other municipalities, which may include review of construction documents and plans, preparation of cost estimates and bid documents, inspection of construction activities and contract administration.

This Section also performs annual inspection of bridges, culverts and roads.

In addition the Construction department administers permits for road openings and closings, special hauling, ditch enclosures, and driveway culverts.

## 2009 Road Projects

Cleveland Massillon Road Resurfacing	\$174,205.00
Rothrock Road Resurfacing	\$222,023.09

## Pavement Rehabilitation

Spot Paving - 2008	\$74,320
405/409 Paving - 2008	\$117,620
Crack Seal - 2008	\$18,100
Pavement Rejuvenating	\$49,282
Pavement Marking - 2008	\$68,920

**TOTAL \$724,470.09**

## Utility Coordination

The Utility Coordinator maintains communications with utility (gas/water/telephone/fiber optic/cable TV/electric power/sanitary sewer/railroad) companies that have facilities in Summit County. The Coordinator works with the utility owners to ensure safe and efficient planning, construction and operation of utilities in the County's right-of-way.

## Right-of-Way Coordination

The Right-of-Way Coordinator works with ODOT and local agencies to ensure proper procedures are followed in the evaluation, appraisal and procurement of property, right-of-way and easements required for construction of County bridge and highway projects.

Township Construction Projects Administered, Inspected, and Tested		
Township	# of Projects	Miles
Bath	4	10.5
Boston	0	0
Copley	2	2.9
Coventry	1	10.2
Northfield Center	2	9.1
Richfield	0	0
Sagamore Hills	3	0.33
Springfield	0	0
Twinsburg	4	1.12
	<b>16</b>	<b>34.15</b>

## Township Controlled Highway Miles:

Bath	61.82	Boston	12.19
Copley	57.24	Coventry	54.78
Northfield Ctr.	20.75	Richfield	15.58
Sagamore Hills	37.30	Springfield	69.42
Twinsburg	12.62		

**Total Township Miles: 341.70**

**2009 County Controlled Highway Mileage: 183.19**



# Engineering Department

## Highway Section

The Highway Section is responsible for highway design, installation and maintenance of traffic control devices such as signs, pavement markings and traffic signal systems/warning flashers. These functions are integral parts of all improvements made to the Summit County highway system. In addition to the section's primary function of preparing plans for roadway improvements, the Highway Section also conducts studies and/or evaluations of roadway traffic, geometrics, physical features and access. The Highway Section determines the need for signage, guardrail, lane assignments/construction, speed limit revisions and other safety capacity improvements. This Section also reviews and coordinates construction projects to ensure that alternate routes for traffic detours are free of major obstructions and available during the construction season.

<b>Design Complete</b>	<b>Current Design</b>
Springfield -- Waterloo Road Improvements	Boston -- Akron-Cleveland/Truxell Traffic Signal
	Boston -- Akron-Peninsula Road Improvements
<b>Studies Completed</b>	<b>Current Studies</b>
Bath -- Cleve-Mass/Lowe's Signal Optimization	Copley -- Montrose Speed Limits
Bath -- Cleve-Mass/Springside Signal Optimization	
Bath -- Crystal Lake Road Signal Coordination (SR18 to Embassy)	Northfield Center/Twinsburg -- - Twinsburg Road Speed Limit
Coventry -- S. Main/Warner Signal Optimization	Springfield -- Portage LineWaterloo Signal Optimization
Twinsburg -- - Liberty Road Speed Limit	Countywide -- High Hazard Crash Analysis

## Engineering Department

### Allotment Section

The Allotment Section works with developers, engineers, contractors, governmental agencies and the public to regulate the design, construction and acceptance of subdivisions. This section also coordinates inspections under the Engineer's annual storm-water maintenance program. This consists of inspecting detention/retention ponds, catch basins, headwalls and storm sewers in subdivisions throughout the County. When required, corrective measures are taken to update the storm-water facilities to assure that storm-water is appropriately managed in allotments.

#### **2008 SUBDIVISION PLAN REVIEWS**

Bradford Oaks Phases 1 & 2  
 Brandywine Preserve Phases 3 & 4  
 Charbonneau Allotment  
 Creekstone Phases 1 & 2  
 Glencairn Forest Phase 10  
 Glencairn Forest The Woods Phase 3  
 Greenwood Village Phases 9 & 10  
 Killarney Woods  
 Meadows of Wintergreen Phase 2  
 Reserve At Kensington  
 Reserve At Waterford  
 Rhoads Allotment  
 Richfield Industrial Park  
 Rolling Brooke Phases 1 & 2  
 Silverleaf Court  
 Silver Trail  
 Wedgewood Phase 5  
 West Ridge Estates Phase 1



# Engineering Department Planning Section

## Supported Committees & Organizations:

The Planning Section supports and regularly attends meetings of various committees and organizations that affect roads and bridges in the County. Attendance at these meetings enables this Office to communicate the impact of their projects on County facilities, advise them of County projects that may affect their programs, and assist in planning County projects to co-ordinate with other community programs. This office participated in the following committees and organizations:

- National Pollution Discharge Elimination System Phase II Countywide Program
- Heritage Corridors of Bath Scenic Byway
- Northeast Ohio Four County Planning and Development Organization (NEFCO) Board and Environmental Technical Advisory Committee (TAC)
- Akron Metropolitan Area Transportation Study (AMATS) Technical Advisory Committee
- Ohio Public Works Commission (OPWC) Issue 1 Coordination
- Yellow Creek Watershed Group
- Brandywine Watershed Group
- Copley Township Master Land Use Plan
- Muskingum Watershed Conservancy District
- Cuyahoga River Watershed Steering Committee



# Engineering Department G.I.S. Section

The G.I.S. section is a complement to each section in our Engineering Department, including the mapping of infrastructure features using handheld G.P.S. equipment. Creation of design drawings, miscellaneous mapping, and house numbering are just a few of the engineering support services provided by this section. They also provide updates for the Summit County maps that are distributed to the public.

## LBRS (Location Based Response System) Project

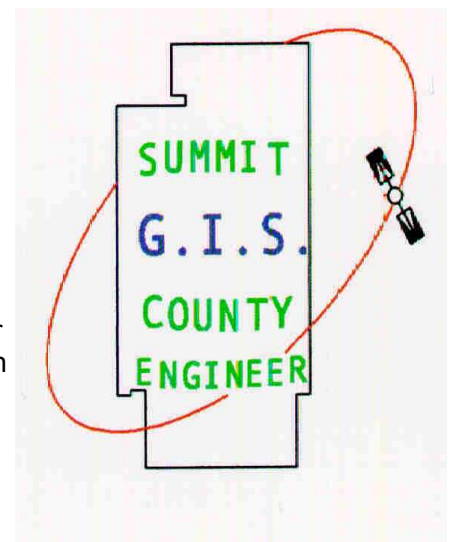
The Engineers office will begin the distribution phase of the LBRS project, this will allow emergency responders to access the real-time house numbering data for use in their dispatch systems. Work will also begin on the creation of a process for editing existing and new numbers and creating geocoded centerlines from the verified address points.

## AutoCad Civil 3D Implementation & Drafting Standards Update

This software upgrade will be completed later this year. All of our design styles for Civil 3D will be available for download from our website for consultants working on County projects.

## 2010 Aerial Photography

The Engineers office is participating in an Orthophoto project that includes Chippewa Township in Wayne County, Portage County and Akron Metropolitan Area Transportation Study. The Contract was awarded to Kucera International. Delivery of the final project is scheduled in late 2010.





# Administration Department Human Resource Section

The Human Resource (HR) Section coordinates the human resource functions of the Summit County Engineer's Office, acting as a source of information and support for employees and managers in all aspects of employment, including policy, procedure, compensation, benefits, training, and professional development. The HR Section is also responsible for labor relations and Equal Employment Opportunity Compliance for the Engineer's Office.

The HR Section trains employees on current Office, County, state and federal policies and procedures, and assures compliance with federal and state labor and workplace safety laws, County Human Resource Commission Rules, and the County's Classification/Compensation Plan. The section maintains an employee database for the Office's 125 regular staff and for the participants of the Summer Student Employment Program.



2009 Employee Luncheon

## Information Technology Section

The Information Technology (IT) Section plans, implements, and supports all hardware, software, and network infrastructure for the Engineer's Office. The IT Section also advances the Office's efforts to incorporate cost-effective technology into our operations to constantly improve our delivery of services and information to the citizens of Summit County.

In 2009, the IT Section implemented a new phone system which offers a wide variety of new features and usability improvements while reducing costs.

The IT Section also developed a new website capable of utilizing the latest in web technology. The new site has made it easier for citizens to find out about this office and what projects and initiatives are currently happening in their communities. The website was also developed by in-house, thus saving thousands of dollars in design expenses.

The IT Section also worked to improve the security of our building and personnel by securing our building with an access control system.

In addition, the IT Section have also developed a tool for tracking the location of our construction equipment, making us better prepared in the event of an emergency.



# Administration Department

## Finance Section

The Finance Section provides oversight, control and management of all budgetary functions for the Summit County Engineer's Office. In addition to the typical accounting functions, the Finance Section manages inventory control, asset accounting, cost accounting, budget management and finance planning.

### Revenue

Portions of the Ohio vehicle registration, gasoline and permissive taxes fund the Engineer's office. Approximately 12 cents out of the current 28 cent State gasoline tax goes to Ohio County Engineers. Permissive taxes are used to plan, construct, maintain and repair public roadways. They now account for our second largest share of revenue. Our county permissive tax is \$15 per vehicle.

### Capital Improvement Program

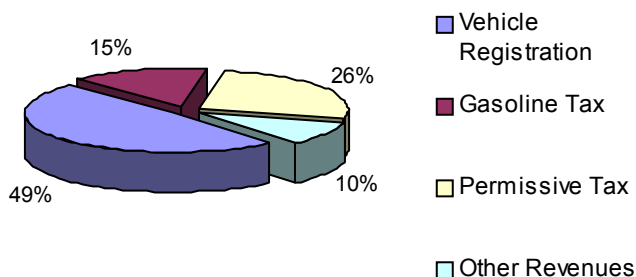
The Engineer's Office structures its 6-year Capital Improvement Plan (CIP) to integrate with the Engineer's yearly operating and capital budgets. In prior years, these documents were considered independently, making long term planning and forecasting difficult for the office.

### ODOT State Infrastructure Bank Loans (SIB)

In years prior to 2009, the Summit County Engineer secured SIB loan financing to pay the county local share of the federal roadway improvement projects. The total debt principal on January 1, 2009 was \$4,498,144.00. Repayment of this debt commenced in 2004 and will conclude in 2014. The loans carry an average interest rate of 3% and are payable over a 10 year term.

We will be restructuring this debt service in 2010. By consolidating our SIB loans into one note for \$3.5 million at 2.625% that will be held by the County. This restructuring will provide a break in our interest rate of 375 basis points and a more favorable pay-off schedule, thereby providing approximated \$300,000 per year that can be used for pavement maintenance. Our Fiscal Department will get an additional 225 basis points over the current rate they are receiving on their investment of general fund money. April 15, 2010 is our target date for the new note.

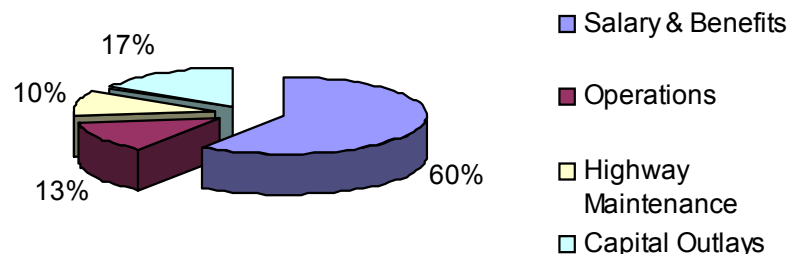
**2009**



REVENUES	2008	2009
Vehicle Registration	\$7,711,843	\$7,549,132
Gasoline Tax	\$2,415,819	\$2,331,703
Permissive Tax	\$3,955,055	\$3,935,228
Other Revenues	\$1,466,503	\$1,493,497
<b>TOTAL</b>	<b>\$15,549,220</b>	<b>\$15,309,560</b>

**2009**

EXPENSES	2008	2009
Salary & Benefits	\$8,714,706	\$9,316,589**
Operations	\$2,059,367	\$2,099,477
Highway Maintenance	\$1,669,522	\$1,571,324
Capital Outlays	\$3,089,963	\$2,604,074
<b>TOTAL</b>	<b>\$15,533,558</b>	<b>\$15,591,464</b>



\*\* Total includes costs of the Voluntary Separation Program for employees who took advantage of the buy out.



# Honoring Caine Collins



Caine Collins with his wife and two daughters at a luncheon in his honor on April 21, 2009.

Caine Collins and his family have made a tremendous sacrifice for our nation. Caine is one of the Summit County Engineer's office's Construction Projects Coordinators and is not only an exemplary employee but an outstanding citizen and soldier. Caine deployed to Iraq nearly twelve months ago and we are fervently hoping for his safe return to work by the beginning of August 2010. Caine stays in contact with our office and has told us that he has been able to use his experience from working in our office in Iraq. He works with contractors, utility companies, government representatives, and state department officials to help coordinate installation of irrigation systems and greenhouses to grow food for citizens in Eastern Iraq. In order to do this he draws on his experience specifically as one of our Project Engineers and as our Utility Coordinator and in a more general sense he uses his construction management, communication, and construction experience.

# Thank you Caine!

All of us are extraordinarily proud of Caine and his commitment to the United States, his family, and our office. Please send your thoughts, prayers, and thanks to the Collins' family.

## Changes in 2009

From a new mission statement to new financial policies, Engineer Brubaker implemented many positive changes in 2009. Here's just a few:

**Building Bridges to other County Offices:** Special thanks to Summit County Prosecutor Sherri Bevan Walsh for providing legal counsel to this office. The agreement among the offices was a true win-win situation. Not only does the Engineer's office get legal expertise at a much cheaper rate, the Prosecutor's office saves money on personnel. Attorney Susan Baker Ross from the Prosecutor's office has quickly become a valued member of our team at the Engineer's office.

**Emphasis on Timetracking:** Our engineering staff and technology staff have been working to find a better, more efficient way to track the time spent on different projects. We are now working to modify our new system to fit with the existing technology of the office. Being diligent and consistent with tracking our time spent on projects will yield more money for the Engineer's office, most often in the form of reimbursements and invoicing to other municipalities or political authorities.

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# Changes in 2009 (Continued)

**SR 91:** Early in 2009, we met with Munroe Falls' officials to discuss resurfacing SR 91. Through cooperation and collaboration, we were successful in helping them secure funding to complete the road's resurfacing.

**Updated agreements:** The Engineer's office holds many agreements with other political entities for road maintenance. One of our first projects was to go through all the old agreements and update them. Each road maintenance agreement was reviewed and updated to everyone's satisfaction and it looks promising that we continue to work closely with cities and villages to best serve the public.

**New Maps:** We have updated the Summit County maps. The new features include updated road names and township, city and village contact information. Maps are available for free at your local Summit County library or at our office on E. South Street.

**Contract with Norton:** We developed a contract with the City of Norton to provide engineering services. This is a win-win situation for both our office and Norton. Norton will have a dedicated City Engineer at a lower cost for them and our office will save money in personnel. Also importantly, it helps foster cooperation and regionalism around Summit County.

**Snow plowing in New Franklin:** Along the line of regionalism and cooperation, we have updated and formalized our contract with New Franklin to provide snow and ice control. Using proper ODOT standards, we now have an official and legislatively approved contract with the City of New Franklin. Similar to the contract with Norton, this contract works in favor for both our office and New Franklin.

**Complete Streets Committee:** ODOT has started a new "Complete Streets Committee". Mr. Brubaker was chosen by the Ohio County Engineer's Association to serve as a member of this committee as well as being tasked with providing the "Urban County Engineer" perspective. Complete Streets are streets that are designed with safety, comfort, and convenience in mind for all users – cyclists, pedestrians, motorists and public transit riders.

**WRDA Funding:** Stormwater has been a hot topic in Summit County this year. As the stormwater engineer for the County, Mr. Brubaker has been working tirelessly to fund a stormwater study and to implement improvements. Just recently we applied for Federal funding through the Water Resources Development Act for \$3.5 million dollars to fund this study and get a program together that will prevent erosion and protect our environment and waterways. All three of our Congressional representatives have submitted the project for funding and we are very hopeful that we will secure some funding for this effort.

**Twitter:** The Summit County Engineer's office became the first Engineer's office to utilize "tweets" regarding traffic advisories, road closings, and construction updates in real time. We hope to continue using the latest technologies to communicate with the residents of Summit County.



**Dedicated Engineer for each Township:** We assigned members of our staff to work directly with each township. Our assigned employees attend township meetings and are available to township trustees, staff, and residents for any questions they may have regarding transportation projects in their area. By assigning staff members to become experts in the needs and concerns of each township, we hope to improve cooperation and foster better working relationships with all of the townships we represent.

# Changes in 2009 (Continued)

**GPS units:** Our Public Services Department installed GPS units on snow plow trucks. This serves several purposes and has the potential to save this office money. We now can look at what routes are the most efficient, can tell the public when the last time their road was plowed or salted and when they can expect the plows to come through again. In the future with upgrades in the technology we will be able to tell when the plow blade is up or down and how much salt is being applied to the road, which could potentially cut back on salt usage.

**Upgraded Security:** Our Department of Public Services and our IT specialist spent a considerable amount of time in 2009 making the employees, the materials, and the public safer at the Engineer's office. Doors are now all equipped with locks that only open when an employee swipes their ID card. The gates around the office now close from 6pm-6am and the front gate is now motorized and can open automatically.

**Staff Reorganization:** We worked hard to save money on personnel costs at the top of our organization. Some positions were eliminated, one was added and others were merged. As a result of changes made on the Senior Staff level, the Summit County Engineer's office saved \$100,000 in 2009 when compared to 2008. In addition, the Engineer's office eliminated 13 positions through attrition due primarily to retirements.

**New Phone System:** Our tech guys worked around the clock to find the best phone rates available. As a result, we have a newer, better, updated phone system that costs less and let's us do more. We can even get our voicemail through our e-mail! It's predicted that this phone system will pay for itself in eighteen months.

**Fiscal Year 2010 Appropriations Requests:** In February we submitted projects to all three of our Congressional representatives, including a replacement of the Akron Cleveland Road Trail Bridge and money to construct the Springfield Lake Trail. Because of the Economic Stimulus dollars, Congress has yet to pass the Appropriations Bill for 2010, wanting this funding to stretch out recovery dollars as long as possible. However, we are confident that our Representatives will champion our projects as they work their way through the Congress.

**ARRA/Economic Stimulus:** In January requirements and application guidelines were put forth for eligibility to get economic stimulus funds from the Federal government for transportation projects. In total, we submitted 31 projects representing all of Summit County's townships. Unfortunately, we did not receive funding for as many projects as we wanted, but we did receive economic stimulus funds in the amount of \$660,000 for our Waterloo Road project, which will be complete in 2010.

## **New budgeting and fiscal policies**

Proper management of the Engineer's office requires keeping the office in good fiscal order. The policies listed here provide the basis for making future financial decisions. They also assist the office in determining whether immediate spending reductions are needed as well as the issues that need to be resolved in future budget cycles.

### **Budget Formulation Policy**

In prior administrations, the practice was to budget only the net cost to the County. Revenue from other major funding sources was not tracked as part of the budget process. These sources include money that is regularly received from the state and federal government for highway funding that may be paid directly to contractors. As a result, prior budgets did not adequately represent the value and/or cost of the improvements administered by the Engineer. In the future we will account for all costs and funding sources to provide a complete picture of available financial resources and actual project costs to the County Council and the public.

### **Minimum Fund Balance Policy**

The Motor Vehicle Gas Tax fund is managed by the County Engineer to assure that maintenance and road improvements are properly funded. The financial integrity of the fund is paramount to our continued ability to provide services. Maintaining a reasonable fund balance is required to ensure that we are not spending beyond our means, but we are also planning to fully utilize the tax dollars we collect on the improvements for which they are intended. Going forward, the Engineer will work to maintain an unencumbered fund balance of 10% to 15% of net fund expenditures with 12.5% being the target level.

# **Alan Brubaker, P.E., P.S. Summit County Engineer**

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County Engineer's Office please contact us or check  
our website:**

**[www.summitengineer.net](http://www.summitengineer.net)**

## **PUBLIC RECORDS ON FILE FOR CITIZENS AND PROFESSIONALS**

- Geodetic control in Summit County used to reference the GIS
- Records for County and Township Roads
- Road improvement plans
- Road Dedication and Vacation Plats
- Summit County survey field notes
- Survey Drawings of Minor Subdivisions
- Records of Summit County Surveys
- State Road Improvement Plans
- Major Subdivision Plats and Improvement Plans in unincorporated areas
- Ditch and Drainage Records
- Summit County Bridge Records
- Cemetery Maps
- Survey Maps of Ohio-Erie Canal



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