Coordinating Efforts Between Counties and Smaller Jurisdictions:  
Shared Purchasing and Capital Costs on Roadway Maintenance and Facilities  
May 2013

Synopsis
This paper highlights recent efforts by county engineers to steward equipment sharing, facility sharing and bid pooling among counties and local jurisdictions such as: townships, villages, and cities. The paper analyzes key components for successful resource sharing and outlines the cost savings local governments are achieving through intergovernmental coordination and collaboration.

Introduction
Ohio’s 88 county engineers are responsible for the inspection, maintenance, repair, and construction of almost 30,000 miles of county roadway. While cities and villages are responsible for the streets and roads within their boundaries, county engineers are responsible for the 26,000 bridges located in Ohio’s townships and municipalities. The 1,308 township in Ohio may handle the maintenance, repair or construction of any road within their jurisdictions (including local streets, county and state routes), but are not statutorily required to do so. In many counties, the County Engineer repairs, widens, plows, and builds roads and highways on behalf of local township trustees.

Because both townships and counties can be responsible for all of the roads and highways that do not pass through a city or village, there is duplication of equipment, fleets, and facilities. A 2012 study by the Auditor of State found that fleet equipment owned by the Lake County Engineer and 23 local jurisdictions in Lake County—nine cities, nine villages, five townships—was idle 50% or more of the time that the pieces could be possibly utilized.

Background on Current Funding Sources for County Engineer and Township Roadway Projects
County engineers and township trustees support public works projects and infrastructure improvements through several sources. Capital improvements, equipment and fleet purchases, salaries, and administrative costs are primarily funded through the state Motor Vehicle Fuel Tax ("gas tax") and motor vehicle license tax (vehicle registration fee). Local property taxes and the Local Government Fund also provide some funding. Sometimes specific projects receive funding from the Federal Highway Administration, Ohio Public Works Commission, and Ohio’s Local Transportation Improvement Program, but these sources are not guaranteed and are distributed piecemeal across the state.

The gas tax and vehicle registration fees are collected by the state and proportionately redistributed back to counties, municipalities, and townships. With more energy efficient
vehicles on the road, Ohio’s gas tax income has been declining. Moreover, other local revenue sources have also been dwindling. In FY2011-2012 Local Government Fund (LGF) allocations to local communities were reduced by 25% and in FY2012-2013, the LGF was reduced by another 25%. In 2011 the elimination of the tangible personal property tax was accelerated and effective January 1, 2013, the estate tax was eliminated. Townships felt the LGF reductions more keenly than counties; counties were affected by the reduction of the estate tax and the elimination of the tangible personal property tax.

Constrained state resources have increasingly prompted communities to supplement funding for road projects and the purchase of equipment and fleet through road and bridge levies. Typical of many counties, since 2008 every township within Geauga County and the County itself have passed five-year street and bridge levy renewals that range from 1 to 3 mills.

**New Directions for Counties and Townships**

Recognizing that renewal levies are not sustainable, local government officials are beginning to survey their colleagues to determine local appetite for collaboration. Agreements to share equipment, facilities, and even labor are becoming increasingly common among Ohio’s communities.

Shared equipment and facilities are a natural area for formal collaboration, as informal collaborations have occurred at the local level for years. With the passage of the 2012-2013 State Budget Bill in July 2011, local communities now can create simple agreements, allowing them to enter into collaborative relationships with greater ease and simplicity than before. Those communities that are creating collaborations do so with the goal of not only maintaining current service quality but also funding additional projects and increasing service quality and delivery to local residents.

In this research brief and in *Transportation Facility and Equipment Sharing: Integration Efforts between County and ODOT*, county engineers emerge as the focal point for these efforts that seek collaboration among local governments. County engineers have experience sharing purchasing and service provision with townships and municipalities for over 30 years and are uniquely positioned to bring a countywide perspective and leadership to local government collaborations. The conclusions the Greater Ohio Policy Center (GOPC) draws from county-led collaborations are supported by the effectiveness of existing collaborative relationships found between and among counties and their jurisdictions.

**Part I: The Story of Three Ohio Counties Collaborating with Other Smaller Jurisdictions**

**Geauga County**

In 2012, the County Engineer’s office, fourteen townships and two villages in Geauga County (“collaborators”) entered into an agreement to share in the purchase and long-term maintenance of three new pieces of needed roadway maintenance equipment. The Local
Government Innovation Council (LGIC) awarded the collaborators a $450,000 loan, which the county engineer matched with a $50,000 grant for the purchase of a roadway crack sealer, a boom-arm mower, and a hydraulic excavator (better known as a “Gradall” because Ohio-based Gradall Industries makes the excavator).

The crack sealer and boom-arm mower are used only during the spring and fall on days that will not experience rain. In the past, townships either rented these pieces of equipment from private companies or informally borrowed the county’s sealer and mower. The constricted usage periods exacerbated the already high demand for the equipment, and the county was not always able to make the equipment available to local jurisdictions in a timely fashion. The hydraulic excavator is a unique piece of equipment used most often for repairing long, continual stretches of road, as are often found on rural township and county routes. Private contractors use them less often and there are only three available for rental in Ohio. Analysis showed that local government ownership of an excavator would assist the county and townships in avoiding high rental fees while also reducing waiting time for the equipment.

The county will own the three pieces of equipment and rent the equipment to partnering townships and villages at 60% of private sector and market rate rental costs. The county also will provide staff that will operate the equipment and be accountable for repairs. The collaborators estimate that savings achieved through renting county-owned equipment (compared to private contracted equipment) will be a combined $495,000 over ten years. These savings and the rental fees to the County will be used to satisfy the LGIC loan.

Trumbull County

In Trumbull County, the county engineer’s office and fourteen townships are cooperatively building a facility to store road salt and ice control material (ICM) at the engineer’s main office. The engineer’s office will consolidate a small secondary office with the main office and at least three townships have dropped plans to build their own ICM storage facilities. Trumbull County collaborators received a $500,000 loan from the LGIC for construction of the shared salt storage facility.

The Trumbull County Engineer’s office is providing a loan match through financial and in-kind contributions for the remaining costs of construction ($171,628). The collaborators expect to save local taxpayers an estimated $1,418,364 over 10 years through facility consolidation and sharing. The township and county savings will be used to pay back the LGIC loan.

Summit County

Since 2011, the Summit County Engineer has administered a program that combines local jurisdictions’ road paving and repair bids with the Engineer’s bids, in order to increase bidding power and generate lower per-unit costs. The Engineer collects the individual paving and repair projects, puts the pooled projects out to bid, and selects the contractor. Local jurisdictions are responsible for paying the contractor directly for projects completed within their districts. Because the County manages the program, participating townships, villages and cities experience reduced overhead costs and related administrative duties.14
The joint bidding program has expanded each year. In 2013 the Engineer will offer three different road repair activities on which local governments can pool bids: traditional pavement maintenance, concrete road repair and culvert replacement. Three cities, a village, six townships and the Engineer’s office are expected to utilize a combination of these programs in 2013.15

Quantifying the exact cost savings for the joint bidding program is difficult because there is variation year to year in the scope and length of the individual repair projects, types of materials used, and cost of supplies. A 2012 survey conducted by the Summit County Engineer did find that its joint paving program had the second lowest cost per square foot in the county. See Appendix A for a comparison of costs per square foot for local jurisdictions.16

**Part II: How to Undertake Successful Resource Sharing**

*Know Existing Resources and Use Existing Resources Effectively*

Successful collaborations cannot occur without knowing what equipment, facilities or staff are available and the quality of these resources. Inventories, surveys and third party assessments are valuable starting points. Transportation experts at Iowa State University, after studying road equipment utilization rates across Iowa, advise that all road maintenance agencies produce equipment list inventories that are shared with other entities. A countywide inventory improves efforts to gauge future equipment need and reduce the likelihood of redundant purchases. The Ohio Auditor of State (AOS) conducts performance audits that analyze local government resources and the usage rates of these resources.

In Geauga County several townships requested that the county engineer survey all of the county’s townships to develop an inventory of equipment (including make, model, year, and quantity). This survey and a second one helped to systematically prioritize current and future equipment needs.17 The surveys revealed that a crack sealer, boom-armed mower, and hydraulic excavator were the top needs for current and future work. Other items that the townships needed were in lower demand and already owned by the county or select townships.

Assessments by third parties, like the performance audit by the AOS, provide a comprehensive view of existing resources and the utilization rates of these resources. In Trumbull County, the county engineer hired an independent engineering firm to find efficiencies which would improve the county’s use of salt and ice control material (ICM).18 The firm found that the county could reduce expenses by closing an outpost location and centralizing operations at its main office. (The outpost is located in a city with a growing population, making the outpost a critical asset that the Engineer could sell at market rate in the future.) Around the same time as the assessment, three townships in Trumbull County were preparing to build their own individual salt storage facilities. The collaborators quickly realized that the cost of one salt
storage building that could serve the whole county would be less than building individual facilities in the three townships.

Over ten years, Trumbull County’s decision to move operations from its secondary outpost to its main facility will save the county $295,050 in utility costs and eliminate $39,000 in duplicative labor and equipment repair costs. The three townships that were considering the construction of their own facilities will save a total of at least $191,000.\(^{19}\)

The county facility will store salt and ICM under cover, which prevent precipitation-induced run-off and material loss. The Engineer estimates the new facility will eliminated the typical open-air facility loss of 10% of all materials. Over a ten-year period, product preservation will produce approximately $300,000 in financial savings with additional important and immeasurable environmental benefits.

### Table 1: Facility Consolidation Savings in Trumbull County

<table>
<thead>
<tr>
<th>Ten year savings through consolidating county’s secondary outpost with main facility:</th>
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<tbody>
<tr>
<td>utility costs</td>
<td>$295,050</td>
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<tr>
<td>duplicative labor &amp; equipment repair</td>
<td>$39,000</td>
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<tr>
<td>preservation of salt through appropriate storage techniques</td>
<td>$300,000</td>
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<table>
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<tr>
<th>One time savings through avoiding the construction of three additional township facilities:</th>
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<tr>
<td>facility 1: $83,000 + facility 2: $54,000 + facility 3: $54,000</td>
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<tr>
<th>Ten years of avoided interest cost on loan/bond amount</th>
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<tr>
<td>bond rate of 3.5%</td>
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<tr>
<th>Ten year savings in shared product purchasing</th>
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<tr>
<td>bulk purchasing of salt</td>
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<tr>
<th><strong>Total Savings</strong></th>
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<tr>
<td><strong>$1,418,364</strong></td>
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</table>

**Highest Capacity Entity Should Manage Project**

Successful collaborations designate an entity to manage funds and the collaborative relationship. In Ohio, county engineers are well-positioned to lead the way. In addition to the county-wide perspective inherent to the office, most counties have the staff, expertise, and resources that townships, villages, and smaller cities are unable to support.

In Trumbull County, the county will house the shared salt storage facility because its main office has room for expansion and already houses a scale for weighing trucks and their loads. The collaborators expect to jointly purchase ICM in bulk, which will make the scale a critical tool for...
accurately measuring salt usage by individual townships. No other jurisdiction within the county has a truck scale.

Trumbull County and fourteen townships\(^{20}\) sought funding from the Local Government Innovation Council to provide initial funding for the shared centralized salt storage facility. The county expects it will cost $671,628 to construct the storage structure. The LGIC awarded a $500,000 loan with ten-year, 0% interest terms.\(^{21}\) The county engineer was the main applicant for the Local Government Innovation Fund (LGIF) loan, because it contributed funds to the construction and could manage the repayments. The county and township officials recognized that implementing the assessment recommendations and sharing in the responsibility of constructing a facility would generate cost savings.

Similarly, the Geauga County Engineer served as the lead applicant for the $450,000 loan from the LGIF that was used to purchase the three needed pieces of roadway maintenance equipment at the lowest price bid.\(^{22}\) Fourteen townships, two villages, and the county signed a Letter of Agreement to share in the use of the three new pieces of equipment.\(^{23}\) The county engineer will supervise equipment scheduling and manage labor availability as well as be responsible for equipment maintenance and repair, as there are already mechanics on the county’s staff who are familiar with the three pieces of equipment.\(^{24}\)

To use the equipment, a township or one of the two villages, places a request for the equipment with the county. The entity using the equipment pays “rental fees,” which will be 60% of private rental fees. See Appendix B to see how county rental fees were calculated.

The only additional cost to the county is the administrative cost associated with managing equipment use. The county expects to handle this cost without any significant administrative changes as one existing deputy has been appointed to serve as the primary contact for townships and villages reserving equipment. If this work proves to be too onerous, especially if the county takes on the coordination and management of additional equipment (either new purchases or equipment currently owned by a local jurisdiction), then the county will consider adding additional staff to manage these operations.

**Overcoming Challenges to Collaboration**

The passage of Ohio HB 153 in 2011 eliminated a number of obstacles to efficient intergovernmental collaboration. Even with the elimination of these obstacles, additional factors are key to successful road maintenance collaborations including:

- **Opt-In Option.** In surveyed county-led projects, the collaboration is voluntary. All collaborations, such as the ones underway in Summit, Geauga or Trumbull Counties have ensured that other entities will have opportunities to participate in the future. In Geauga County, co-signatories of the shared equipment are not required to rent the three pieces of equipment. However demand forecasts show that the equipment will be in heavy service demand and the low cost rentals are a significant savings over renting from the private sector. The Geauga County Engineer believes it will be able to
repay the LGIF loan through rental fees collected from townships that utilize the equipment. If additional communities join the collaboration, usage costs may decrease further. Usage fees for local jurisdictions may eventually be, as low as “at cost.”

- **Clear Responsibility for Fleet and Equipment Maintenance and Associated Costs.** Taxpayers and officials want to know what entity will maintain the equipment and who will pay for routine upkeep as well as any repairs. In Geauga County, each piece of equipment comes with a county operator who supervises its use. With this setup, if there is a problem associated with the equipment or a breakdown, the county will be responsible for equipment repairs. The supervision, maintenance, and replacement of equipment are built into the cost estimates provided by the county and billing to the townships accounts for these costs. Summit County makes clear to the selected contractor and local jurisdictions that it facilitates the Collaborative Pavement Maintenance Program—local jurisdictions must pay their own maintenance and paving costs.

- **Knowledge of Local Union Contracts.** The Local Government Institute of Wisconsin, which has conducted research on joint road maintenance equipment purchasing, has identified union contract prohibitions as one barrier to higher rates of shared equipment purchasing and use. One Ohio County Engineer estimates that 75% of all Ohio counties are unionized, which means that local labor contracts may prohibit non-union workers from operating equipment or prevent union workers from working in certain areas. Knowledge of contract language will inform the way different government staff collaborate with each other and ultimately increase efficiency.

- **Favorable Loan Rate.** In Trumbull County, the 0% interest of the Local Government Innovation Fund will allow the County to avoid traditional bonding rates. At a typical bonding rate of 3.5% on a 10-year $500,000 loan, Trumbull County will avoid $93,314 in interest costs.

**Part III: Demonstrating Advantages and Beneficial Outcomes from Consolidation Cases**

*Strategic Investments and Coordination Lead to Economies of Scale and Effective Deployment of Resources.*

Sharing fleet and equipment purchases, product purchasing, and facility usage and construction lead to more effective uses of existing resources and economies of scale in a number of ways.

- **Joint equipment purchasing.** The Auditor of State estimates that of all the road construction and maintenance equipment owned by local government entities in Lake County, no piece is utilized more than 50% of the time. These low utilization rates are
partially due to an oversupply of equipment and limited demand. In Geauga County, one scenario suggests that the total cost for each of the seventeen participating jurisdictions to purchase the three pieces of equipment purchased by the collaborators as discussed above would be, minimally, $8,500,000 ($500,000 * 17 jurisdictions). Elsewhere the cities of Kent, Stow and Ravenna recently shared in the purchase of a $130,000 asphalt recycler, which will be stored centrally in Kent. Incidentally, Kent and Ravenna are located in Portage County and Stow in Summit County. This joint purchase among the three municipalities represents significant savings over purchasing of three machines (aggregated cost: $390,000) or renting equipment from a private sector contractor when needed.

• **Shared facility construction.** The shared facility in Trumbull County eliminated the need for construction of three proposed individual township facilities, which would have cost $191,000 in the aggregate. While there will be some increased gasoline costs associated with driving salt trucks to and from outlying rural areas, these costs will be de minimus. These cross-county drives will only occur in the winter months, and the frequency of these trips will fluctuate depending on the intensity of the winter storms. The cost savings from the shared facility are conservative estimates and greatly outweigh any additional costs townships may face in driving salt trucks farther than before to retrieve salt and ICM. Additional statewide savings would result if this arrangement were replicated in other counties that have cities, villages or townships considering the new construction of jurisdiction-specific salt facilities.

• **Avoiding future market rate rental costs.** The Geauga County Engineer’s office looked at purchasing and use costs versus rental costs over a ten year period and calculated that the shared equipment agreement will save collaborating local governments and their taxpayers an estimated $495,000 over ten years. The $495,000 is based upon the expected demand for the equipment’s use at the county cost rate versus the expected equipment demand at the private sector rate. Consortium projections estimated that the cost for each individual township and village to rent privately owned equipment over ten years would be 40% more than if the county purchased the equipment and rented it to consortium members. These calculations take into account the fact that purchases are less expensive for governments than for the private sector. As an example, Burton Township in Geauga County has a budget of nearly $1 million for all activities, with a 1.1 mills, five-year renewal road and bridge levy as one of its primary sources for public works and infrastructure related expenses. Despite the levy, the township’s budget can only allocate $10,000 to $12,000 for equipment rental. Therefore 40% savings in equipment rental fees is a significant gain for the township. Hypothetically, if all of Burton Township’s equipment use was rented through a county-collaborative system, then an additional $4,000 to $4,800 per year in savings would be achieved to be used for additional road maintenance or other needed services in the township.
• **Shared Purchasing and Product Preservation.** Where there is one location for salt and ICM storage, it makes sense for the county and townships to share in product purchasing. In the Trumbull County case, bulk purchasing is expected to save the county and townships $5.00 per ton purchased. A normal purchase is 10,000 tons per year, so they will save $500,000 collectively over ten years.

• **A coordinated county effort ensures equipment is maximally utilized.** The Auditor of State (AOS) estimates that of all the equipment owned by local entities in Lake County, no pieces are utilized more than 50% of the time. A study conducted by Iowa State University found similar, very low road maintenance equipment utilization rates among small city governments. These low utilization rates are partially due to an oversupply of equipment and limited demand. In Geauga County, supervising equipment maintenance, scheduling and guaranteeing labor availability, and coordinating deployment across jurisdictional boundaries to meet heavy, cyclical demand will ensure the three new pieces of equipment are rarely idle.

• **Increasing efficiencies from matching the equipment to the needed maintenance or repair.** Before the shared purchase of the crack sealer, boom-armed mower, and hydraulic excavator, local governments in Geauga County often complete needed road maintenance and repair using the wrong piece of equipment. This is not only an inefficient use of staff time but greatly increases the likelihood of idled equipment while costly equipment repairs are undertaken. Having the correct equipment and designating the county to service the equipment will decrease the amount of time equipment will be idled for repairs. In addition, some jurisdictions in Geauga County were unable to do any maintenance leading to the need for costly infrastructure improvements. Access to these three pieces of high-demand equipment will enable local jurisdictions to do road maintenance correctly, avoid future repair costs on equipment and roadway, and improve service quality for residents.

• **Urgent projects are prioritized.** Centralizing administration for equipment use and requiring every entity to submit work requests in advance will allow the Geauga County Engineer’s Office to prioritize critical projects ahead of routine maintenance or repair.

• **Intelligent road repair and maintenance schedules can be established.** A centralized administrative office will be able to establish repair and maintenance projects that are not constrained by jurisdictional boundaries but follow the natural course of the road or highway.

**Collaborative Relationships Lead to Other More Comprehensive Relationships.**

The efficiencies gained from the efforts discussed in this paper not only produce cost savings outlined above, but are also expected to lead to additional forms of shared services and other creative ways of operating collaboratively.
• **Staff Pooling.** In Geauga County, the shared fleet purchase has led Geauga County collaborators to pool their staff to jointly undertake routine highway maintenance and repair. Creating work crews out of existing township, village and county staff—and deploying staff beyond their jurisdictional boundaries to operate these three pieces of equipment—will be more cost efficient than utilizing market rate rental companies.

• **Pooled Bids for Private Contractor Work.** As described above, the Summit County Collaborative Pavement Maintenance Program has expanded yearly to include a range of maintenance activities on which communities can pool bids. In Trumbull County, the Engineer is building on the successes of the shared salt storage facility and is now in the process of bidding out road-paving projects in conjunction with five townships and a village to reduce the total costs for all entities. Trumbull County is also using a similar pooled bid approach for a chip-and-seal program with ten local jurisdictions. 30

• **Regional Facilities.** The increased collaborations in Trumbull County have led the county engineer to begin investigating the feasibility of building a regional mechanics/fabrication shop and regional truck wash facility. 31

• **Additional formal sharing agreements on other equipment and services.** Success with sharing the three jointly purchased pieces of equipment in Geauga County increases the likelihood of future, more comprehensive, equipment sharing agreements. Experience with managing the sharing of these three pieces of equipment leaves the county well positioned to coordinate future equipment sharing arrangements. The Geauga County experience can serve as a model for collaborations in other counties. For example, if county engineers and local governments in all 88 counties were to share in the purchase and use of the same three pieces of equipment, statewide savings for state and local governments would be, minimally, $43.5 million over ten years (88*$495,000=$43,650,000).

**Conclusion**

In conclusion, while there may be some upfront coordination challenges, successful resource sharing can lead to a number of advantages in the short term, including economies of scale, costs savings and avoiding service duplication with even more comprehensive long-term benefits. Sharing among counties, townships and villages provides a unique opportunity to try innovative service sharing arrangements, while maintaining the local control that Ohioans value.
Appendix A: representative price differences between Summit County Engineer’s pavement maintenance collaboration and individual jurisdictions in Summit County.

<table>
<thead>
<tr>
<th>Local Government</th>
<th>Cost per square foot—Basic motor paving</th>
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</thead>
<tbody>
<tr>
<td>Summit County*</td>
<td>0.93</td>
</tr>
<tr>
<td>Akron</td>
<td>0.95</td>
</tr>
<tr>
<td>Barberton</td>
<td>2.00</td>
</tr>
<tr>
<td>Cuyahoga Falls</td>
<td>1.00</td>
</tr>
<tr>
<td>Fairlawn</td>
<td>1.05</td>
</tr>
<tr>
<td>Green</td>
<td>No response</td>
</tr>
<tr>
<td>Hudson</td>
<td>No response</td>
</tr>
<tr>
<td>Macedonia</td>
<td>0.81</td>
</tr>
<tr>
<td>Munroe Falls</td>
<td>1.53</td>
</tr>
<tr>
<td>Norton</td>
<td>2.30</td>
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<tr>
<td>Stow</td>
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</tr>
<tr>
<td>Tallmadge</td>
<td>0.95</td>
</tr>
<tr>
<td>Summit County’s Twinsburg</td>
<td>1.29</td>
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</tbody>
</table>

* Summit County bid includes jurisdictions participating in the Collaborative Pavement Maintenance Program: Summit County Engineer, city of Akron, city of new Franklin, Village of Richfield, Bath, Copley, Coventry, Sagamore Hills, Springfield, and Twinsburg Townships.

Chart courtesy of the Summit County Engineer’s office.¹
### Appendix B: Calculating savings created by owning and sharing three pieces of equipment in Geauga County

<table>
<thead>
<tr>
<th></th>
<th>Private Rental Costs – hourly</th>
<th>Private Rental Costs – annual</th>
<th>Public Ownership Costs – hourly</th>
<th>Public Ownership Costs – annual</th>
</tr>
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<tbody>
<tr>
<td><strong>Hydraulic Excavator</strong></td>
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<td></td>
</tr>
<tr>
<td>Salary</td>
<td>$50/hour</td>
<td>$60,000</td>
<td>$50/hour</td>
<td>$60,000</td>
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<tr>
<td>Capital &amp; Expenses</td>
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<td>$182,400</td>
<td>$55/hour</td>
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<tr>
<td>Gasoline</td>
<td>$12/hour</td>
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<td>$12/hour</td>
<td>$14,400</td>
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<tr>
<td></td>
<td></td>
<td>$256,800</td>
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<td>$140,400</td>
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<tr>
<td><strong>Boom Mower</strong></td>
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<td></td>
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<tr>
<td>Salary</td>
<td>$50/hour</td>
<td>$60,000</td>
<td>$50/hour</td>
<td>$60,000</td>
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<tr>
<td>Capital &amp; Expenses</td>
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<td>$23/hour</td>
<td>$27,600</td>
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<tr>
<td>Gasoline</td>
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<tr>
<td></td>
<td></td>
<td>$194,400</td>
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<td>$102,000</td>
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<tr>
<td><strong>Crack Sealer</strong></td>
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<tr>
<td>Salary</td>
<td>$50/hour</td>
<td>$60,000</td>
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<tr>
<td>Capital &amp; Expenses</td>
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<td></td>
<td></td>
<td>$164,400</td>
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<tr>
<td><strong>Total Costs:</strong></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>$615,600</td>
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<td>$320,400</td>
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Source: Geauga County Engineer’s Office

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1. [http://www.co.portage.oh.us/engineer.htm](http://www.co.portage.oh.us/engineer.htm); [http://www.ceao.org/aws/CEAO/pt/sp/home_page](http://www.ceao.org/aws/CEAO/pt/sp/home_page);
   [http://codes.ohio.gov/orc/315.08](http://codes.ohio.gov/orc/315.08); [http://codes.ohio.gov/orc/5543.01](http://codes.ohio.gov/orc/5543.01).
4. The motor vehicle fuel tax (ORC 315.12) and the motor vehicle license fee (ORC 4501.04) can support operation of the county engineer’s office, including salaries and be “used to plan, construct, reconstruct, repave, widen, maintain, repair, clear, and clean public highways, roads, and streets; to maintain and repair bridges and viaducts; to purchase, erect, and maintain street and traffic signs and markers; to purchase, erect, and maintain traffic lights and signals; to pay the principal, interest, and charges on bonds and other obligations issued pursuant to Chapter 133. of the Revised Code or incurred pursuant to section 5531.09 of the Revised Code for the purpose of acquiring or constructing roads, highways, bridges, or viaducts, or acquiring or making other highway improvements for...
which the municipal corporation may issue bonds; and to supplement revenue already available for such purposes” (4501.04).

9 http://www.co.geauga.oh.us/Departments/BOE/Elections/EResults.aspx;
12 Cite.
13 Interview with Fredrick Pausch, Executive Director of County Engineers Association of Ohio. April 3, 2013.
15 Email correspondence with Heidi Swindell May 9, 2013.
16 http://engineer.co.summit.oh.us/attachments/article/399/Newsletter%20Fall%202012%20Final.pdf
17 Interview with Jim Dvorak, Burton Township Trustee 4/10/13.
18 The assessment by FPS Architects and Engineers cost $23,000 and was counted toward the local match for the LGIC loan.
20 One township estimated its construction costs would total $83,000; the other two projected construction costs at $54,000 per facility.
21 Participating collaborators are: Bazetta Township, Braceville Township, Brookfield Township, Champion Township, Greene Township, Gustavus Township, Hartford Township, Howland Township, Johnston Township, Mecca Township, Southington Township, Vernon Township, Vienna Township, Weatherfield Township. Non-participating jurisdictions in Trumbull Co. are: City of Cortland, City of Girard, City of Hubbard, McDonald Village, West Farmington Village, City of Newton Falls, City of Niles, City of Orangeville, Yankee Lake Village, City of Hubbard, City of Warren, City of Youngstown, Bloomfield Township, Bristol Township, Farmington Township, Fowler Township, Hubbard Township, Kinsman Township, Liberty Township, Lordstown Township, M(esopotamia Township, Newton Township, Warren Township.
23 Government purchases over $50,000 usually require private suppliers to provide competitive bids on the cost of the purchase. http://codes.ohio.gov/orc/307.86.
24 The political entities involved in this collaboration are Auburn Township, Aquilla Village, Burton Township, Burton Village, Chardon Township, Chester Township, Claridon Township, Hamilton Township, Huntsburg Townships, Middlefield Township, Montville Township, Newbury Township, Parkman Township, Russell Township, Thompson Township and Troy Township.
25 Bainbridge and Munson Townships did not participate. Four villages and cities did not participate in this initial application either.
26 Interview with Joe Cattell, Geauga County Engineer, 3/6/13 and 4/10/13.
27 http://www.localgovinstitute.org/content/local-government-cooperation-maintain-roads-streets
28 Interview with Lake County Engineer James Gill 2/27/13.
30 GOPC qualifies this estimate because it does not have a full inventory of the township’s equipment use.
31 Jaselskis, Edward J. and Andrle, Stephen J. (2002). “Road Equipment Procurement and Utilization Study.” Center for Transportation Research and Education: Iowa State University.
33 Trumbull County Engineer’s Office. April 2009, “Intergovernmental Cooperative Initiatives.
List of Interviewees
Joe Cattell, Geauga County Engineer
Jim Dvorak, Burton Township Trustee
James R. Gills, Lake County Engineer
David Miller, Western Ohio Regional Liaison at Auditor of State
Gene Roberts, Director of Public Service City of Kent

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