Municipal Spending and Taxation in Allegheny County: An Update

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Key Findings

This paper looks at the 2009 per capita spending and revenue levels for Allegheny County municipalities that submitted annual financial reports to the Department of Community and Economic Development. This report is an update of last year’s study on 2008 data. This sample included 123 municipalities—the report on 2008 data covered only 119 municipalities that had submitted reports—and did not include the City of Pittsburgh. The study examined the per capita (using 2010 Census figures) general fund expenditures, revenues and general obligation debt as well as the population and median household incomes of the municipalities in our sample. The key findings from the data show:

- Weighted average per capita for total expenditures in 2009 is $638. Fifteen municipalities spent more than $1,000 per capita with two (Rosslyn Farms and Sewickley Heights) spending more than $2,000 per capita.
- The largest component of municipal spending was public safety. The weighted average per capita amount for public safety among this sample is $220—higher than the 2008 average of $216. In all ten municipalities spent more than $400 per capita on public safety while seven spent less than $100 per capita.
- Weighted average per capita long term general obligation debt in the sample is $514, down from the 2008 average of $522. Sixteen municipalities in the sample had per capita general obligation debt of $1,000 or more.
- Weighted average per capita total general fund revenue for this sample of 123 municipalities is $628—less than the weighted average per capita total general fund expenditures of $638, but greater than the 2008 average of $621.
- The largest component of revenue for municipalities comes through taxation, of which the property tax comprised the greatest share. The weighted average per capita level of property tax collected by the municipalities in this sample is $214 which is a little higher than the 2008 level of $207.
- The difference between the 2009 estimate and the 2010 decennial count for the 129 municipalities (not including the City of Pittsburgh) in Allegheny County is just over 6,000 people. Of these 129 municipalities, 74 had increased their population counts from the 2009 estimate to the 2010 count (57 percent).
- Median household income had a small correlation with total expenses and total revenues. This small coefficient for median household income points to a degree of fixity in spending and revenue on the major categories that is somewhat independent of incomes.
Introduction

Government budgets were under pressure as the nation wrestled with a deep recession from 2008 through 2010. As a new decade began and the recession deemed officially over, the economy nonetheless remained very sluggish. How have municipalities in Allegheny County coped with the soft economic conditions in terms of revenues and spending? Last year we reported on the 2008 municipal financial statements submitted to the Pennsylvania Department of Community and Economic Development (DCED). This year we are updating with the 2009 financial statements submitted to DCED. This report presents the municipal average for major spending and revenue categories. Further, we replace the 2009 population estimates with the 2010 Census figures for each municipality to calculate the per capita levels of spending and revenues and compare the highs and lows of each measure across 123 of Allegheny County’s 130 municipalities\(^1\)—the report on 2008 data covered only 119 municipalities that had submitted reports. Neither report includes the City of Pittsburgh.

Expenditures

Municipalities have many expenditure categories including public safety, recreation, highways and streets, debt service, and sanitation. As a preliminary step to the municipal comparison analysis, a correlation matrix was conducted to see how closely major expenditures correlate to total municipal expenditures\(^2\). This matrix also includes population and median household income for the municipalities. The table below shows the results.

<table>
<thead>
<tr>
<th>Category</th>
<th>Correlation</th>
<th>Category</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Safety</td>
<td>0.958</td>
<td>General Obligation Debt</td>
<td>0.759</td>
</tr>
<tr>
<td>General Government</td>
<td>0.936</td>
<td>Sanitation</td>
<td>0.716</td>
</tr>
<tr>
<td>Population</td>
<td>0.907</td>
<td>Debt Service</td>
<td>0.591</td>
</tr>
<tr>
<td>Recreation</td>
<td>0.867</td>
<td>Median Household Income</td>
<td>0.139</td>
</tr>
<tr>
<td>Highways</td>
<td>0.843</td>
<td></td>
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</tr>
</tbody>
</table>

First, as expected all variables are positively correlated with total spending, i.e., an increase in all measures is associated with an increase in total spending. The variable with the highest correlation with municipal total expenditures is public safety (0.958), followed closely by general government spending (0.936). Population also has a high correlation coefficient with

\(^1\) Six municipalities did not submit an annual financial report with the Department of Community and Economic Development (East Deer, Etna, McDonald, Trafford, Wall and Wilmerding). The City of Pittsburgh was also omitted from this study since it is frequently the subject of analysis elsewhere.

\(^2\) A correlation is done to statistically measure the strength of association between two variables. It can assume any value from -1.00 to +1.00 inclusive. A correlation coefficient close to +1.00 indicates that the variables are perfectly related in a positive linear sense, while a value of zero indicates no association.
total expenditures (0.907) implying that as population increases so will total general fund spending. Median household income (0.139) and debt service (0.591) are the least correlated with total general fund spending.

Because public safety and general government represent a large fraction of most municipal budgets, the high correlation coefficients are to be expected. Meanwhile, the small coefficient for median household income points to a degree of fixity in the spending on the major categories that is somewhat independent of incomes.

While raw data was used to calculate the correlation coefficients between variables, per capita values are used to analyze and compare municipalities.

**Total General Fund Expenditures**

In 2009 the weighted average per capita total general fund spending for the 123 municipalities for which updated information was available stood at $638. This figure is higher than the one reported for 2008’s per capita total general fund spending average ($629). For 2009 data, the median per capita income at $599 is lower than the average. At the high end of spending are Rosslyn Farms and Sewickley Heights, each above $2,000 per capita, and Findlay, Leetsdale, and Ohio, all over $1,500 per capita. Ten other municipalities spent between $1,000 and $1,500 per resident.

At the bottom end of the spectrum for per resident spending, the lowest occurred in Liberty Boro at $268. Three others—Brackenridge, South Versailles, and West Elizabeth—spent less than $300 per capita. Overall, 39 municipalities (30 percent of total) spent less than $500 per capita on total general fund spending.

**Public Safety**

The largest component of total general fund spending is public safety. The category of public safety includes payment for police, fire, code enforcement, planning and zoning. It is important to note that very few municipalities have a paid fire department, as most rely on volunteers for this service. The weighted average per capita spending on public safety of the 123 municipalities in the sample is $220, which is higher than the 2008 average of $216. Sewickley Heights spent the most per capita on public safety ($951) with only two others spending more than $500 per capita—Findlay ($631) and West Homestead ($505). These three were all in the top five last year. In all there are ten municipalities that spent more than $400 per capita on public safety.

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3 Averages are for municipalities other than the City of Pittsburgh and the six municipalities who do not have audits on file. The averages of the 123 reporting data to DCED are weighted by taking the total amount in each category and dividing by the total population in the sample.
On the other hand more than half the municipalities in the sample (65) spent less than $200 per capita on public safety with seven spending less than $100 per capita. The lowest spending on public safety occurred with Turtle Creek ($21) followed by Glenfield ($38) and South Versailles ($48).

Highways and Streets

Another large component of a municipality’s total general fund spending is in the category “Public Works—Highways and Streets”. This segment is comprised of winter maintenance, storm sewers and drains, maintenance and repair of bridges and roads, as well as highway construction and rebuilding projects. While much of the money for this category is paid for in the general fund, some of it does emanate from a special revenue fund paid for by the state’s liquid fuels tax. The focus in this paper is on the amount spent through the general fund, specifically the per capita amount.

The average per capita amount spent on highways and streets for the sample is $105. Rosslyn Farms, whose spending in this category came in at $971 per capita, spent by far the most on this category. The next highest spending municipality is Ben Avon Heights at $430—more than half that amount spent in Rosslyn Farms. The median for this category is $93 per capita. A year earlier, the average per capita level of highway spending was $116—$11 higher than in 2009. The highest spending municipality that year (Leetsdale) spent only $440 per capita while the next highest spender in 2008 (Thornburg) came in at $424.

The top five for 2009 are rounded out with Sewickley Heights ($361), Thornburg ($331), and Fox Chapel ($305). Along with Rosslyn Farms and Ben Avon Heights these are the only municipalities to spend more than $300 per capita in general fund dollars in the highways and streets category.

More than half (68) of the municipalities spent less than $100 per capita through the general fund on highways and streets. The lowest spending municipalities include Elizabeth and Lincoln Boros ($34), Liberty ($33), West Elizabeth ($32), Port Vue ($24), and Sewickley Hills ($1).

Recreation

The category “Culture and Recreation” consists of, among other things, all spending on parks, participant recreation, libraries, shade trees, and senior citizen centers. For 2009 the weighted average level of per capita spending on recreation is $40—just below the 2008 level of $42. The municipality with the highest per capita expenditure on recreation is Sewickley Heights at $191, followed by Leetsdale ($153) and Sewickley Hills ($144). In fact seven of the top ten spenders
on recreation spent more than $100 per capita. However this is a category that has a wide range with fifteen municipalities choosing not to use general fund expenditures to pay for these functions. More than half (71 of 123) of the municipalities in the sample spent less than $20 per capita in general fund expenditures on culture and recreation.

_General Obligation Debt_

To look at the long term general debt for each municipality, we were interested in the item “general obligation bonds and notes” from the financial reports. The total balance gives the amount still owed at the end of 2009. The weighted average per capita long term debt in the sample is $514, down from the 2008 average of $522. The highest debt per capita belongs to Upper St. Clair ($3,024) followed by Ohio Twp. ($2,017) and Leetsdale ($1,958). In fact sixteen of the municipalities in the sample had more than $1,000 per capita in long term debt.

This is another category with a wide range as twenty eight municipalities did not have any per capita general obligation debt and fifty three had less than $100 in per capita long term debt.

_Population_

Population is strongly correlated to both total general fund revenues and expenses (0.908, 0.907 respectively). As a community’s population increases, so will their level of revenues and expenses. The population count we use is from the 2010 Census. The average population for this sample of 123 municipalities is 7,394. Penn Hills represents the largest municipality in the County (other than the City of Pittsburgh which has been excluded from this sample) with 42,329 people. The top ten municipalities in Allegheny County all have more than 20,000 residents. There are thirteen communities with less than 1,000 residents, the smallest being Haysville (70).

The difference between the 2009 estimate and the 2010 decennial count for the 129 municipalities (not including the City of Pittsburgh) in Allegheny County is just over 6,000 people. Of these 129 municipalities, 74 had increased their population counts from the 2009 estimate to the 2010 count (57 percent). The municipality with the largest increase was Mt. Lebanon with an increase of more than 2,600. In all there were eight municipalities with population increases of more than 1,000.

On the other end of the spectrum, Trafford, which was not part of our sample, was the Allegheny County municipality that had largest decrease to their population count (3,000), followed by McKeesport (2,300). There were seven municipalities that had decreases of at least 1,000 from the 2009 estimate to the 2010 count.
This is very important when discussing the per capita values across time periods because the population count comprises the denominator. If the population count rises faster than the increase to the financial variable of interest, such as total revenue or total expenditures, then the per capita amount will show a decrease and vice versa.

**Revenues**

The other side of the coin for municipalities is revenue. Their ability to raise revenue will of course help, to some degree, determine the level of expenditures. But it also can go a long way in attracting residents and businesses or drive them away. Municipalities in Allegheny County rely heavily on taxation, specifically on property and earned income taxes, for the bulk of their revenue streams. Some also collect business taxes and the local services tax on workers employed within their boundaries. Some also enjoy a substantial level of non-tax revenues through things such as host fees. The following table shows the correlation coefficients to total general fund revenues for these variables and more.

**Correlation with Total General Fund Revenues**

<table>
<thead>
<tr>
<th>Category</th>
<th>Correlation</th>
<th>Category</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Tax Revenue</td>
<td>0.966</td>
<td>Non-Tax Revenue</td>
<td>0.831</td>
</tr>
<tr>
<td>Earned Income Tax</td>
<td>0.925</td>
<td>Local Services Tax</td>
<td>0.714</td>
</tr>
<tr>
<td>Population</td>
<td>0.908</td>
<td>Business Tax</td>
<td>0.420</td>
</tr>
<tr>
<td>Property Tax</td>
<td>0.878</td>
<td>Median Household Income</td>
<td>0.142</td>
</tr>
</tbody>
</table>

As noted above, even though the correlations were done with the raw data, the analysis that follows will be on a per capita basis.

**Total General Fund Revenue**

The weighted average per capita total general fund revenue for this sample of 123 municipalities is $628—less than the weighted average per capita total general fund expenditures of $638, but greater than the 2008 average of $621. The municipality with the greatest amount of per capita general fund revenues is Sewickley Heights ($2,016) followed by Rosslyn Farms ($1,784). In fact sixteen municipalities had per capita values greater than $1,000. The median value was $594.

On the other end of the spectrum, the municipality that collected the least total revenue on a per capita basis is South Versailles ($256). The bottom five all collected less than $300 per capita in total general fund revenues.
**All Tax Revenue**

Tax revenue provides the bulk of funding for any municipality, and thus it comes as no surprise that the category all tax revenue has such a high correlation with total general fund revenues (0.966). For this sample of 123 municipalities the weighted average per capita amount of all tax revenues is $628 for 2009. This is up slightly from the 2008 average of $621. The municipality with the highest per capita level is Sewickley Heights ($1,777) followed by Rosslyn Farms ($1,440) and Edgeworth ($1,341). The top five all had per capita levels greater than $1,000 (Leetsdale ($1,272) and Green Tree ($1,147)). The same five municipalities occupied the top spots in 2008 as well. At the lower end of the spectrum is West Elizabeth ($189) and South Versailles ($192). The bottom five were all below $205 per capita.

**Earned Income Tax**

The category with the next highest correlation coefficient is the earned income tax. The earned income tax is dependent upon the total amount of wages citizens of the municipality earn and the rate of the tax imposed. The rate is capped by state law at 0.5 percent. However there is an exception for municipalities under home rule\(^4\).

The weighted average per capita level of earned income tax collected by the municipalities in this sample is $143 which is a little lower than the 2008 level of $146. The 2009 community with the highest per capita level is Sewickley Heights ($672) followed by Fox Chapel ($467) and Upper St. Clair ($395)—they also represented three of the top four in 2008. The municipalities that collect the least earned income tax per capita are Braddock, Homestead, and North Braddock—all collecting $38. In fact the bottom ten communities all collect less than $50 per capita. More than half of the communities in this sample (64) collect less than $100 per capita.

**Property Tax**

The real estate tax may not have the highest correlation to total general fund revenues, but it provides most municipalities with their largest revenue stream\(^5\). The per capita weighted average property tax collection for this sample is $214. This 2009 value was a little higher than the 2008 amount of $207. The community with the highest per capita property tax collection is Rosslyn Farms ($1,087) followed by Sewickley Heights ($1,029). They are the only two municipalities with more than $1,000 per capita in property tax revenues. The Boroughs of

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\(^4\) There are seventeen home rule municipalities in Allegheny County: Bellevue, Bethel Park, Bradford Woods, Green Tree, Hampton, McCandless, McKeesport, Monroeville, Mt. Lebanon, O’Hara, Penn Hills, Pine, Pittsburgh, Richland, Upper St. Clair, West Deer, and Whitehall. Only Pittsburgh is not in this sample.

\(^5\) Fourteen of the 123 municipalities (11 percent) collect more earned income tax revenue than they do property tax revenue.
Edgeworth ($872), Leetsdale ($826), and Glen Osborne ($638) comprise the top five. In 2008 these same municipalities also comprised the top five. As can be seen from this list there is a wide range among the leaders. In fact only the top ten have more than $500 per capita in real estate tax revenue.

On the lower end of the scale, the communities with the five lowest property tax revenues per capita come in at $100 or less—West Deer ($82), Rankin ($84), Liberty ($87), South Versailles ($98) and McCandless ($100). With a median value of $219, half of the sample has per capita values less than $220.

**Non-Tax Revenue**

The category of non-tax revenue includes revenues derived from fines and forfeits, licenses and permits, interest, rents, and royalties, charges for service, intergovernmental transfers (to the general fund) and other miscellaneous items. In this sample the weighted average per capita amount of non-tax revenue is $189, considerably higher than the 2008 level of $128. The highest amount is $1,242 (Ohio Twp.) and in a distant second place is Millvale at $906. The third highest amount belongs to McKeesport ($575) which is well below the top two finishers. Homestead ($539) and Findlay ($524) complete the top five. Ohio Township’s rank atop this category is aided by a large amount added to the 2009 general fund from a category “Other Financing Sources—Proceeds from General Long-Term Debt” in the amount of $3.67 million. In 2008 their per capita amount of non-tax revenue was only $465. Likewise in 2009 Millvale had a large amount listed in “Other Financing Sources—Proceeds of General Fixed Asset Disposition” for $1.56 million. In 2008 their non-tax per capita amount was only $652. These two examples show just how volatile this non-tax revenue category can be.

The 2009 median for this category is $166 with twenty eight municipalities receiving less than $100 from non-tax revenues. Those in the bottom five all received $50 or less (Emsworth ($50), Ingram ($49), Glen Osborne ($46), Ben Avon Heights ($43) and Haysville ($36)).

**Local Services Tax**

The final revenue stream that we will examine is the local services tax, commonly known as the LST. This tax only applies to those working within a municipality’s boarders and is capped at $52 per year. In our sample of 123 municipalities for 2009, eleven municipalities did not report a collection of the LST on their annual report. The 2009 per capita weighted average LST revenue is $16 whereas in 2008 the average came in at $14. The top five municipalities in 2009 were Leetsdale ($109), Harmar ($97), Neville ($93), Frazer ($88), and Findlay ($87). At the lower end of the spectrum there were 15 municipalities that, on a per capita basis, came in at $0.
Appendix

<table>
<thead>
<tr>
<th>Per Capita Weighted Average</th>
<th>2009</th>
<th>2008</th>
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</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$628</td>
<td>$621</td>
</tr>
<tr>
<td>Total Taxes</td>
<td>$438</td>
<td>$439</td>
</tr>
<tr>
<td>Real Estate Taxes</td>
<td>$214</td>
<td>$207</td>
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<tr>
<td>Earned Income Taxes</td>
<td>$143</td>
<td>$146</td>
</tr>
<tr>
<td>Local Services Tax</td>
<td>$16</td>
<td>$14</td>
</tr>
<tr>
<td>Non-Tax Revenue</td>
<td>$189</td>
<td>$128</td>
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<tr>
<td><strong>Expenditures</strong></td>
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<tr>
<td>Total Expenses</td>
<td>$638</td>
<td>$629</td>
</tr>
<tr>
<td>General Government</td>
<td>$ 75</td>
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<td>Public Safety</td>
<td>$220</td>
<td>$216</td>
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<tr>
<td>Highways and Streets</td>
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<td>$116</td>
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<tr>
<td>Recreation</td>
<td>$ 40</td>
<td>$ 42</td>
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<tr>
<td>General Obligation Debt</td>
<td>$514</td>
<td>$522</td>
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<tr>
<td><strong>Sample Size</strong></td>
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<td>119</td>
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