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*The True Cost of Garbage Collection in
Pittsburgh: Can the City Compete with
Private Contractors?*

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Key Findings

- The City of Pittsburgh is providing residential trash collection for the Borough of Wilkinsburg through 2010. For this service the City is charging the Borough \$722,000, or \$120 per household on an annual basis.
- Taking into account all costs including fringe benefits, workers' compensation, fuel, vehicle capital cost, and vehicle maintenance the estimated cost for trash collection in the City is \$202 per household, 68 percent higher than the price Pittsburgh is charging Wilkinsburg.
- Priced at the City's per household cost, trash pickup in Wilkinsburg would cost closer to \$1.2 million, a difference of \$480,000. City taxpayers are in effect subsidizing Wilkinsburg garbage collection. And those subsidies will only become larger should the City extend its service reach to other municipalities.
- Many earlier studies have found the City's garbage operation to be very inefficient and expensive, casting further doubt on the claims of competitiveness.

Introduction

Notwithstanding the Mayor's support for the merger of the City and County governments, Pittsburgh continues to press ahead with attempts to sell its services to other municipalities in the County.

This effort is predicated largely on the purportedly successful contract with the Borough of Wilkinsburg to provide residential garbage collection through the end of 2010. The City estimates it will save the Borough up to half a million dollars per year compared to what the Borough would have paid the former private collector. The heavily touted success of that compact, coupled with the opinion of the Mayor that "the cost of delivering government continues to rise", has led the City to offer services like animal control, police, building inspection, and public works to other municipalities.¹

But is the City ready to offer its services beyond its geographic borders at an economical cost? More importantly, are the City's estimate of its costs of service provision—specifically garbage collection—accurate and complete?

To answer that question, this report has prepared an independent estimate of Pittsburgh's cost of garbage collection in the City in order to determine whether its contract with Wilkinsburg is priced high enough to cover costs.

Details of the Agreement

The Borough of Wilkinsburg had been using Waste Management to collect residential garbage. But an expected rate increase spurred the Borough to approach the City of Pittsburgh, who proposed to do the job for less than the private vendor. Pittsburgh's service to Wilkinsburg began January 1, 2007. The one year agreement was subsequently extended through the end of 2010.²

The Agreement was executed under the provisions of the state Municipal Waste Planning Act which permits municipalities to "contract with a private hauler or another municipality to carry out its duties with regard to transportation, collection, and storage of its municipal waste".³

It should be noted that the City is only one of the providers of refuse and recyclables collection in the Borough. The City collects all residential refuse from single family dwellings and small apartment buildings, defined as 5 units or less in the Intergovernmental Cooperation Agreement. Waste Management collects refuse from

¹ Rich Lord "Ravenstahl Wants to Extend Wilkinsburg Garbage Agreement" Pittsburgh Post-Gazette, January 15, 2008; "Mayor Pitches City Services to Suburban Officials" Pittsburgh Post-Gazette, June 10, 2008

² City of Pittsburgh Resolutions 2006-0976 and 2008-0007

³ Cooperation Agreement between the Borough of Wilkinsburg and the City of Pittsburgh

apartment buildings with 6 units or more and all commercial refuse and recycling. The Borough handles residential recycling.⁴

The City also picks up all furniture and non-Freon containing appliances and is responsible for all labor and equipment which is to be “furnished by...the sole expense of the City”. All customer complaints are funneled through the Borough to the City, with a penalty fee assessed for any unresolved complaints.⁵

Was the City a Responsible Bidder?

We tried on numerous occasions to contact officials of the City of Pittsburgh Department of Public Works for information related to its service in Wilkinsburg. Specifically, we were trying to obtain a document referenced in the City Council meeting minutes for Resolution 2008-0007, which executed the Intergovernmental Cooperation Agreement. Those minutes noted that “the DPW Director and...Mayor’s Finance Director, were at the table to provide information...In factoring the City’s costs, criteria such as employee hours, benefits, equipment repair and replacement, and legacy costs were projected”.⁶

Attempts to obtain that documentation were unsuccessful. Therefore this analysis draws upon available sources such as the Cooperation Agreement, the City’s 2008 budget, newspaper and professional journal articles, data from the Act 47 quarterly performance report, and the City’s 2004 Five-Year Financial Forecast and Performance Plan.

This much of the financial arrangement between the two municipalities is known: the City of Pittsburgh is being paid \$722,000, which is reflected in the 2008 budget as an “Intergovernmental Services Fee”.⁷

With a contract amount of \$722,000 and around 6,000 households in the Borough living structures with 5 or fewer dwelling units, that amounts to \$120 per household.⁸ But here is the key question: how much is it really costing the City to carry out the service?

Beyond what the Cooperation Agreement stipulates as the City’s responsibility for labor, equipment, and frequency of collections, the costs are not explicitly spelled out, and the data from the City was not shared.

⁴ Ibid

⁵ Ibid

⁶ Council of the City of Pittsburgh, Standing Committee Meeting Minutes, Public Works and Environmental Services Committee, January 16, 2008

⁷ City of Pittsburgh, 2008 Budget. The 2007 CAFR of the Controller’s office reflects this same amount.

⁸ Number of households estimated from a phone conversation with the Borough Manager of Wilkinsburg who stated that the per household cost of the service is \$120 annually (her exact quote was that the household cost was “around \$10 per month”). Based on the Cooperation Agreement—which states that the Borough is paying \$750,000 annually to the City—a \$120 annual household payment translates into 6,250 households. But the City’s budget and last year’s audit shows \$722,000—using the \$120 annual reimbursement equates to 6,016 households.

Clearly, a comprehensive bid from the City would include all the costs incurred in providing the service. That list would encompass personnel pay, all fringe benefits, fuel, tipping fees, vehicle maintenance and capital costs. It would also account for the general administrative costs (Mayor, Council, Human Resources, legal, etc.) dedicated to the operation. That's the way the private sector would have to do it to ensure costs were covered. Comparing the per household cost being charged to Wilksburg (\$120 annually) to the City's true per household cost will indicate whether this venture is worthwhile or a money loser for the City.

Estimating the City's Garbage Collection Costs

The 2008 budget for the Department of Public Works, Bureau of Environmental Services, will serve as a starting point. Planned expenditures for 2008 are placed at \$11.5 million. This spending total includes refuse collection, recycling pickups, and animal control. Using the aggregate labor hours for recycling and refuse as presented in the 2004 City financial forecast (251,000), refuse collection accounted for 210,000 hours, or 85 percent of the aggregate hours. Animal control expenses, placed at roughly \$500,000, are removed from the budget total, leaving \$11 million for recycling and refuse collection. Finally, since refuse collections accounts for about 85 percent of labor hours, that ratio is applied to the \$11 million to obtain an estimate of the City's refuse budget expense. This calculation puts the figure at \$9.4 million.⁹

However, the Bureau's budget does not take into account several major items including fringe benefits, fuel costs or vehicle expenses. These expenses are shown only for the entire City workforce. Excluding workers' compensation outlays, the budget projects \$54 million in fringe benefits. The Citywide total of salaries and premium pay was \$172 million. Thus fringe benefits excluding workers' compensation represent 31 percent of salaries paid.

In Environmental Services, total salaries and premium pay was \$8.1 million. Taking \$400,000 away for animal control leaves \$7.7 million. Applying the 31 percent Citywide fringes/salaries ratio to get the fringe total for Environmental services and the 85 percent refuse/total labor hours ratio results in an estimate of \$2.0 million in fringes for refuse.¹⁰

We know that workers' comp is very high—disproportionately so—in the refuse division. A report produced for the state oversight board noted that while environmental services comprised 5.8 percent of the workforce, they were responsible for 52 percent of claims. The report noted:

⁹ City of Pittsburgh 2008 budget, Department of Public Works. City of Pittsburgh, Five Year Financial Forecast and Performance Plan, May 2004. 2004 Forecast shows labor hours for refuse (210,000) and recycling (41,000) for a total of 251,000: refuse represents 85%, so this was used as the metric for measuring the refuse share of Environmental Services functions where necessary. Overall Environmental Services Budget of \$11.5 million, less \$500,000 for animal control related functions = \$11 million. Based on refuse representing 85%, \$11 million x .85 = \$9.4 million

¹⁰ City wide fringes \$54 million / Citywide salaries and premium pay =31%. Environmental services salaries and premium pay \$8.1 million - \$400,000 for animal control = \$7.7 million. The \$7.7 million x .31 = \$2.3 million and \$2.3 million x .85 = \$2.0 million

A significant incidence of injuries within the Environmental Services Department as 52.2% of that departmental workforce is alleged to be involved in a work related event that results in injury and over a third of those injuries result in an alteration of duty status...the noted incidence is alarmingly high and mandates ongoing scrutiny with respect to assessing the validity of a claim as well as aggressive claims investigation. In addition, safety programs should be developed that are specific to this department.¹¹

The 2008 budget puts workers' compensation (medical, indemnity, and miscellaneous) for all City employees at \$24.8 million. Assuming conservatively that refuse collection employees accounts for a third of the City's workers' comp payments puts refuse collection workers' comp payments at \$7 million.¹²

What about fuel and vehicle expenses? Again, these items are not distributed to the Environmental Services budget, rather they are Citywide totals. Fuel is counted in the non-departmental category as "supplies" and is budgeted at \$3.2 million for the entire City government in 2008. The 2004 Financial Forecast estimated 2008 Environmental Services vehicle capital costs at \$1.59 million.

For fuel expense we use a nationwide estimate of annual fuel use for garbage trucks that places consumption at 8,600 gallons per vehicle. Thus with 50 trucks and \$4 a gallon for fuel, garbage collection would require \$1.7 million for fuel.¹³

Vehicle capital cost is somewhat more difficult to derive. Garbage trucks suffer a lot of wear and tear creating the need for relatively frequent replacement. Assuming an average useful life of eight years and a cost of \$170,000 per new truck, we put the capital costs of garbage trucks at around \$1.6 million, very close to the estimate contained in the Mayor's 2004 forecast. This estimate does not include maintenance expenses which are estimated at \$1.5 million per year using a budget note reference that maintenance will average about \$30,000 per vehicle.¹⁴

¹¹ Industrial Medical Consultants, Inc. "An Analysis of the City of Pittsburgh Workers' Compensation Program" May 2004

¹² Workers' comp total of \$24.8 million; a third of this is \$8.26, and $\$8.26 \times .85 = \7 million

¹³ Gas usage of 8,600 gallons per year x 50 trucks x \$4 a gallon = \$1.7 million.

¹⁴ Here's how the estimate for the capital cost for garbage trucks was produced. "Equipment Trends: Spec'ing Refuse Vehicles" by Sean Kilcarr http://driversmag.com/ar/fleet_equipment_trends_specing/) turned up a figure of \$170,000 for a new garbage truck. The budget mentions 50 trucks in the fleet, so a start-up fleet would be \$8.5 million. Given the wear and tear on refuse vehicles, we estimated replacing an 1/8th of the fleet every year, at a cost of \$1.062 million. In addition, the opportunity cost of foregoing investing the original \$8.5 million on the fleet, at 7 percent interest, is \$595,000. Thus, \$1.062 million + \$0.595 million = \$1.657 million. The 2004 financial forecast estimated 2008 Environmental Services' vehicle capital cost at \$1.590 million

The 2008 budget notes that the reduction of refuse vehicles "saves the City approximately \$450,000 a year in maintenance cost", and $\$450,000 / 15$ trucks equals \$30,000 per truck in maintenance.

As mentioned earlier, there are a host of other costs that should be proportionally distributed to the garbage operation: general administration, including the Mayor’s office, City Council, Public Works’ senior management, the Finance Department given the role they play in administering the bureau’s trash operation and negotiating the agreement and giving approval; payroll; the Solicitor’s office for legal services, etc. We don’t quantify these implicit costs here, but it is a virtual certainty they have not been included in the City’s estimate used for the Wilkinsburg contract.

However, even without an assignment of these overhead costs to garbage collection, the total cost of collecting residential garbage in the City is placed at \$23,257,000 for 2008. That amounts to \$202 per household for the estimated 115,000 households being served. See the table below for details by category of expenditure.

The point here is that if the City is going to claim it is able to provide garbage collection cheaper than private contractors, it must calculate costs on an equivalent basis and must include all assignable costs to garbage to get a true and accurate estimate. And even our more thorough calculation does not include a reasonable margin for profit or a fair return on investment that a private contractor would require.

Clearly, if it costs the City \$202 per household to collect garbage in the City, it is highly unlikely it can pick up garbage in Wilkinsburg at a cost of only \$120 per household. Indeed, if the City priced the Wilkinsburg contract at the City’s true cost, the contract with the Borough would come to closer to \$1.2 million, about \$480,000 higher than the actual current contract amount. Thus, using a full cost shows the City to be subsidizing garbage collection in Wilkinsburg to the tune of nearly a half a million dollars each year.¹⁵ Were the City to offer to collect garbage in other municipalities at the same price, the taxpayers of Pittsburgh would be forced to subsidize even more trash collection outside the City.

A Full Cost Estimate of Pittsburgh Garbage Collection

Budget Estimates	\$
<i>Expenditures for Garbage Collection</i>	
Estimated Refuse Budget	\$9,400,000
Estimated Share of Fringes	\$2,000,000
Estimated Share of Workers’ Comp	\$7,000,000
Estimated Fuel Cost	\$1,700,000
Estimated Vehicle Capital Cost	\$1,657,500
Estimated Maintenance Cost	\$1,500,000
<i>Total Estimated Cost</i>	<i>\$23,257,000</i>
Cost per Household	\$202

Recall too that the Borough opted to use the City when the household cost of the private collector was expected to increase, according to a phone conversation with the Borough

¹⁵ At a \$200 household rate, the cost to Wilkinsburg would be \$1.2 million. Since the Borough is being charged \$722,000, the difference is \$481,200.

manager, from \$8 to \$13 per household. Assuming that increase went into effect, the per household cost would be \$156 annually. At the City's estimated true rate of \$202, that bid would still be saving money, about \$4 per month per household.

The City's Trash Operation Has Never Been Efficient

The Mayor has used the Wilksburg trash contract to begin constructing a menu of services that the City could offer to other municipalities. How is it that the City could argue that one contract victory—and a dubious one at that, as we have just shown—translates into the City being ready to be a major service provider? And how are we to believe that the City's trash operation, notorious for lagging behind private sector competitors, is now the model of efficiency?

Outside Studies of Trash Collection, 1996 to Present

Recent studies have been critical of the City's operation and its opportunities for moving the task to the private sector.

- *Competitive Pittsburgh (1996)* found that the City's annual cost per household was higher than the private operators in surrounding municipalities—\$113 to \$84—and recommended that the City reduce its costs to private sector levels or “competitively bid a portion or all of solid waste collection”.¹⁶
- *Pittsburgh21 (2002)* noted that the City was low on two measurements compared to other haulers in twelve other cities: the number of households per employees on trucks (Pittsburgh had a measurement of 617, 10th in the sample) and average households per route (Pittsburgh had 483, 11th in the sample). The study noted that it studied trash hauling “because of its high level of expenditures, the fact that municipalities often turn to the private sector for the service, and the fact that the administration has previously sought bids for these services”.¹⁷
- *The Five Year Financial Forecast and Performance Review (2004)* suggested the following key initiatives to meet objectives: exploring the feasibility of a transfer station since the landfill where City trash is dumped is 22 miles from the Bureau lot, to employ temporary and part-time workers to fill in for employees on disability or workers' compensation, and the feasibility of automated or semi-automated trucks.¹⁸
- That same year the *Act 47 Recovery Plan* made the same three recommendations along with two others, a managed competition for solid waste (discussed below) and seeking reimbursement from recycling programs.¹⁹

¹⁶ Competitive Pittsburgh Task Force “Establishing a Culture of Excellence” October 1996. If the \$113 per household amount is an accurate representation of what the City based its per household cost in Wilksburg, then it is clear that the City is taking a loss on the service to the neighboring bureau. If household collection costs grew at a 3 percent annual rate from 1996, the City's per household cost would currently be \$157, still higher than what the City is charging Wilksburg.

¹⁷ Pittsburgh in the 21st Century Report, 2002

¹⁸ City of Pittsburgh, Five Year Financial Forecast and Performance Plan, May 2004

¹⁹ Commonwealth of Pennsylvania, Department of Community and Economic Development, City of Pittsburgh Act 47 Recovery Plan, June 2004

- A quarterly report from the Act 47 Coordinator (2007) showed that the refuse division was high on the annual average for the entire Environmental Services Bureau (also including recycling and animal control) on premium pay, unscheduled leave, sick and accident days, and workers' compensation days.²⁰

Given that stream of evidence, we are expected to believe that either (1) the years of study prodded the operation into efficiency or (2) that the operation is some how more efficient than the data show.

City Trash Collection Not Getting More Efficient²¹

Variables	2004	2007
Refuse Routes	44	32
Trucks	63	50
Households	115,000	115,000
Tons Collected/Disposed	131,500	95,453
Labor Hours	210,080	229,117
<i>Efficiency Measures</i>		
Tons per Labor Hour	0.63	0.42
Households per Truck	1,825	2,300

There was a chance to see how well the bureau would perform against outside competition prior to its expansion into Wilkinsburg.

The Competition that Almost Was

Under Act 47, a directive PW-04 called “Managed Competition of Solid Waste Services”, envisioned a two-step evaluation. In stage one, only private haulers would be permitted to bid in order to allow for “an opportunity to evaluate contracted services”. This would be followed by stage two, encompassing a larger service area, and “the City workforce shall be included among the bidders in competition with private contractors”.²²

For whatever the reason, this plan did not come to pass. Instead, there was a combined bid that eliminated the separate private competition and private-public competition. With no opportunity to see how well contracted residential service would work in the City, and a lower overall bid, the in-house union won the competition. Emboldened by the win, the head of the garbage union immediately stated that he would be “looking for a wage increase” and soon after queried “if the private sector can compete against public employees, why shouldn’t we be able to compete with them?”²³

There may have been more at work than the City’s garbage collectors putting up their level of service and competing against and beating all-comers. They might not be the

²⁰ Commonwealth of Pennsylvania, Department of Community and Economic Development, City of Pittsburgh Act 47 Quarterly Report

²¹ 2004 data taken from Five Year Financial Forecast and 2007 data from 2008 Budget narrative on FY2007 performance measures in Environmental Services and Act 47 Quarterly Report

²² Act 47 Recovery Plan, June 2004

²³ Rich Lord “City’s Trash Collection Cheaper, Bids Reveal” Pittsburgh Post-Gazette, March 10, 2006 and “Pittsburgh Taking Over Wilkinsburg Trash Pickup” Pittsburgh Post-Gazette, November 16, 2006

efficient and competitive division the Mayor is portraying them to be. And that might mean City taxpayers are not getting the amount of benefits they could be from their taxes. As the City's public works director pointed out in a newspaper article when the City's bid won out over private haulers in the Act 47 competition, the City is cheaper because it does not pay taxes or have to make a profit.²⁴ When these factors come into play, there is more of an emphasis on the bottom line. Removing the incentive to study the bottom line and creates a different operation.

Future Directions

Bolstered by the Wilksburg contract and the aura of merging as a “win-win” situation as proposed by the backers of the City-County merger, the City is now prepared to offer its services to other municipalities. There was a meeting in early June 2008 where the City presented options to 100 suburban officials. Some noted they would be interested in the garbage option. Some communities felt that the City could not handle garbage pickup. Others like the possibility of animal control. Some wanted to partner with the City, others with neighboring municipalities outside of the City. Still others felt that the Councils of Government are providing sufficient shared services and cooperation.²⁵

No community has formally executed a contract for garbage collection as of yet. And it is troublesome for all parties—the City taxpayers especially—if more agreements are hammered out based on doing the service at a loss. Competition is good and the public sector ought to be competing against private vendors, but they have to be accurate and comprehensive in their cost accounting.

²⁴ Ibid

²⁵ Rich Lord “Mayor Pitches City Services to Suburban Officials” [Pittsburgh Post-Gazette](#), June 10, 2008 and Deborah Todd and Moriah Balingit “Officials: Shared Services with City Possible” [Pittsburgh Post-Gazette](#) June 19, 2008 and Erin Gibson Allen “Towns Study Sharing with the City” [Pittsburgh Post-Gazette](#) June 26, 2008. Among the quotes from suburban officials from the articles: The purchasing agent for Penn Hills noted “I don’t foresee us combining garbage...I don’t think [the City] could handle it”. The manager of Wilksburg stated “I think we will continue to explore options for consolidation with, not only the City, but with other municipalities”. And “In an informal...poll [of communities in southern Allegheny County], some officials said they were enthusiastic, but others reminded that their communities already have forms of inter-municipal cooperation, and saw no real benefit to the mayor's offer”. The City Administrator in McKeesport specifically cited the projected garbage collection savings in Wilksburg as attractive.