# Pittsburgh Enhanced Residential LERTA and Act 42 Enhanced

# Tax abatement programs as community development incentives

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# The City of Pittsburgh and its 90 neighborhoods

"The sometimes used argument that half a loaf is better than none in the face of loss of local taxes is only valid if jobs and tax dollars really would have been gone absent the abatements. To date research has either not been able to measure the counterfactual or has failed to show industrial exodus when abatements are not offered."<sup>1</sup>

# **Executive Summary**

Pittsburgh has been steadily losing population. To stem the tide, cities have come up with various schemes. In 2007, Pittsburgh added two new tax abatement programs and one enhancement to an existing program to its already existing tax abatement programs. These were focused on 28 neighborhoods selected on the basis of a "Neighborhood Vitality Index."

Prior to implementation, three City Departments (City Planning, Finance, and the Urban Redevelopment Authority) analyzed the costs and benefits of the program. The departments forecasted that the programs would result in substantial net positive benefits to the city, including \$90 million in new spending from new residents, an increase in benefits to developers of 25%, \$55 million in new property value, \$594,000 in new property taxes at the end of the program, and other, more qualitative benefits including a 'domino effect,' increases in 'neighborhood vitality,' the creation of 'greater economic diversity,' and 'greater neighborhood stability.'

Our ex-post analysis of the program was unable to confirm that these benefits did in fact occur. Though we were unable to confirm the benefits of the program, we were able to construct demand curves for new construction and renovation permits that showed an outward shift after the program became available. This is a possible indication that the programs did stimulate demand, though confounding effects could not be controlled for.

There are many possible reasons for this mixed result. First, program participation rates were not available, so we were not able to create a plausible counterfactual. Second, we had neither the time nor the resources to build a comprehensive econometric model to control for all possible confounding factors. Finally, the national credit and housing crisis by themselves may have caused the abatement programs to underperform expectations.

<sup>&</sup>lt;sup>1</sup> (Reese, Larnell and Sands 277)

# Background

According to the United States Census Bureau, the City of Pittsburgh had a population of 676,805 in 1950. As of the last decennial census, the city's population was 305,704. This represents nearly a 55 percent decrease over the 60-year period. Though astounding, this is a common trend for cities across Pennsylvania and the larger region now known as America's Rust Belt.<sup>2</sup>



Figure 1

With such a drastic decline in population come an obvious increase in the number of vacant, abandoned, and blighted properties and a corresponding decrease in the tax base for these local governments (Schilling and Logan 452). Despite the latter, tax abatements have emerged as a popular policy mechanism for local governments across the region to encourage new development in an attempt to combat the population decline. The abatement program specifically authorized by the Commonwealth of Pennsylvania for the local taxing bodies is the Local Revitalization Tax Assistance (LERTA). Through LERTA, local taxing bodies are able to grant up to a 10-year abatement on incremental assessment increase for any building improvements and new construction for a designated area. Since the abatement is only for the

Data Source: Pittsburgh SNAP

<sup>&</sup>lt;sup>2</sup> Buffalo, New York, Cleveland, Ohio, and Detroit, Michigan have all lost over half their population since World War II (Hollander, Pallagst and Schwarz).

incremental value, the taxing bodies still receive the property taxes for the pre-improvement value of the property (Mercer County 51).

The City of Pittsburgh adopted LERTA programs for commercial and residential properties and a residential-specific abatement program, Act 42, in 1980 (Pittsburgh, Pennsylvania Code of Ordinances, Chapter 267). Since that time, the City has altered and amended the programs to encourage certain types of development or to spur development in particular areas. In their most recent and targeted attempt at spurring development within the city limits, Pittsburgh's municipal government and the Pittsburgh School Board passed two new residential tax abatement programs and modified an existing one. Specifically, beginning on July 1, 2007, the city and school district enacted the following abatement programs:

- Act 42 Enhanced Residential is a 100 percent, 10-year assessment reduction up to \$250,000 in new construction or renovation costs. The program applies to for-sale or rental residential properties located within 28 defined, target neighborhoods (see Exhibits 3 & 4).
- Residential LERTA is a 10-year tax credit for the city (up to \$1,620), school district (up to \$3,480), and Allegheny County (up to \$569). The abatement amount is 100 percent for the first two years, declining by 10 percent every two years until the credit expires. On July 1, 2007, the city and school district eliminated this sliding scale to a full 100 percent abatement for 10 years. This program applies to rental residential and hotel properties that occupy former commercial or industrial sites located within four neighborhoods in and around downtown (see Exhibits 2 & 4).
- Residential Enhanced LERTA is a 100 percent, 10-year tax credit for the city (up to \$2,700) and school district (up to \$3,480). The program applies specifically to "residential separately assessed units"<sup>3</sup> located within the same four neighborhoods as the regular Residential LERTA (see Exhibits 2 & 4).

<sup>&</sup>lt;sup>3</sup> The program was targeted for condo developments and that is the reason for this specific language.

Without new legislation, the Act 42 Enhanced and Residential Enhanced LERTA programs will expire and the regular Residential LERTA will revert back to the sliding scale that was in place prior to July 1, 2007.

While all three programs warrant a review prior to any extension or termination, for the purposes of this report we have chosen to focus on reviewing the effectiveness of the Act 42 Enhanced Residential program (Act 42E). The geographic area for this program is considerably larger than the other two programs. Additionally, the state of the 28 target neighborhoods prior to July 1, 2007 provide a stronger point of contrast for us to assess any potential impacts of the program than with the four target neighborhoods of the Residential LERTA programs.

Prior to recommending the 28 neighborhoods for Act 42E, the Pittsburgh Department of City Planning developed a ranking system for the city's 90 neighborhoods. Known as the Neighborhood Vitality Index (NVI), City Planning gave each neighborhood a score for 11 separate indicators.<sup>4</sup> They then transferred these scores to an overall index score for the neighborhood and ranked all of the neighborhoods accordingly. The majority (i.e. 26) of the 28 Act 42E target neighborhoods fell in the bottom half of the NVI while also having less than 20 percent of the city average for building permit investment between 2005 and 2006 (Department of City Planning). The Central Business District and Bluff (or Uptown) were also included in the program, as they were previously designated as "deteriorated, underutilized, transition areas under the existing LERTA program" (Department of City Planning, Department of Finance, and Urban Redevelopment Authority 10)

<sup>&</sup>lt;sup>4</sup> The indicators by neighborhood included population change (1990-2000); percent of population with a college degree; percent of households headed by a single mother; percent of housing units that are owner-occupied; percentage of vacant land; percentage of vacant buildings; changes in housing sales value (2001-2004); percentage of tax delinquent properties; per capita building permit value; and violent crimes per 100 people (Department of City Planning).

# **Cost Benefit Analysis**

Our cost-benefit analysis is an ex-post analysis of Act 42E that follows from an ex-ante study done by several City of Pittsburgh departments in 2007. After data was cleaned and processed, it was analyzed to determine whether the benefits envisioned in 2007 actually occurred. We found that while demand curves for property shifted outward in the cases of both new construction and renovation, property values and demographic variables in the target neighborhoods were not appreciably affected.

## Pittsburgh Ex Ante Study

In March of 2007, the Urban Redevelopment Authority, Department of City Planning, and Department of Finance ("the Group") prepared an ex-ante study on the effects of Enhanced Residential LERTA and Act 42E, which was presented at a public hearing on May 1, 2007. Based on its cost-benefit analysis, summarized below, the Group recommended that the programs should be implemented in Downtown Pittsburgh and 21 targeted neighborhoods throughout the city. The Group made several assumptions in the study, including that 66% of all participants would be new Pittsburgh residents, that those new residents would have an average salary of \$60,000, and that the annual wage tax increase resulting from the program would be \$49,500. (Department of City Planning, Department of Finance, and Urban Redevelopment Authority 14)

In their analysis of the downtown area, the Group found that, after factoring in development that would have occurred without the enhanced program, the cost of the tax expenditures were essentially offset by increased property taxes above the capped amount (\$250,000) plus wage taxes associated with new city residents. (Department of City Planning, Department of Finance, and Urban Redevelopment Authority 11). Further, they found that the financial impact of new downtown residents (assuming less than 15% of income goes into the local economy) would be more than \$90M over the life of the program. (Department of City Planning, Department of Finance, and Urban Redevelopment Authority 12). Finally, the Group found that benefits to developers of rental property would increase by 25%, and that it would take only one new large scale rental project becoming viable downtown to offset the costs of the program with new wage taxes. (Department of City Planning, Department of Finance, and Urban Redevelopment Authority 14)

In targeted neighborhoods, the Group added one more assumption to those listed above. They estimated that over a five year period, 200 new or rehabbed owner-occupied units per year would appear as a result of the program. These new units would result in \$55M in new property value at the end of the program. This additional property value would generate \$594,000 in new taxes which would be collected at end of program. Further, the Group estimated a total property tax loss of less than \$10,000 per year during program because of minimal amount of pre-program investment. Finally, the Group posited that there would be other, less quantifiable benefits, including a 'positive domino effect,' additions to 'neighborhood vitality,' the creation of 'greater economic diversity,' and 'greater neighborhood stability." (Department of City Planning, Department of Finance, and Urban Redevelopment Authority 15).

Finally, it is important to note that in all cases where the Group predicts positive effects, all other variables must be held constant. Most importantly, the Group assumes no further population loss.

# **Data Sources and Methodology**

To test the ex-ante assumptions of the Group and perform an ex-post analysis of the programs, we began gathering available data. The data included:

- 2000 and 2010 U.S. Census data and 2010 American Community Survey data;
- 2011 demographic data by neighborhood from PghSNAP;
- Pittsburgh Bureau of Building Inspection ("BBI") building permit data from 2001-2011;
- Construction Cost Index data from Engineering News Record;
- City Planning parcel files from 2005 and 2012; and
- TIGER/Line census tract shape files from 2000 and 2010.

Upon inspection of the permit data received from BBI, it became obvious that thorough data cleaning would be necessary, as not all information was recorded in all years, and certain data was recorded in different formats in different years. Data was separated by year and by type of permit. Duplicate entries were removed, and addresses with multiple types of permits had the total cost allocated across the number of permits.

Once the data was cleaned and prepared in Excel, it was exported to ArcGIS. Using Esri's online address locator for the United States, we geocoded the more than 24,000 permits. The automated geocoding result left us with 800 entries that the database could not locate. We manually reviewed each of these entries and were able to provide approximate addresses for roughly half of them. We then spatially joined all of the permits to the neighborhood they were located. Maps were subsequently prepared for all program neighborhoods, representing all permits issued for renovation and new construction in all city neighborhoods during the pre-and post-program.

After being processed in ArcGIS, the data tables associated with the permit shapefiles were exported to SAS to analyze program data. First, SAS was used to identify permits that were eligible for each program. This was not possible to do for every permit, but was done for as many permit applications as possible. Next, the Construction Cost Index was used to bring all construction costs forward to 2012 dollars.

Once this was done, the data was again exported to Excel to code for Act 42E eligibility.<sup>5</sup> Renovation projects in eligible neighborhoods were plotted using number of projects against the cost to build demand curves for renovation projects for the pre-program period and for the program period. Pre-program eligibility was modeled for the years 2004-2007 and program period eligibility was modeled for the years 2008-2011.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Models do not include projects in the Bluff or Central Business District as those neighborhoods are eligible for other abatement programs.

<sup>&</sup>lt;sup>6</sup> The enhanced programs began on July 1, 2007, so the "before" data includes six months of time during which properties were eligible for abatement. If the programs in fact increased construction rates then our estimate of change due to the program will be conservative.

Once the data was modeled, SAS was used to create reports showing computed permit totals by neighborhood. These reports assumed 100% participation in the program for new construction and for renovation projects costing more than \$25. SAS was then used to plot the number of permits for new construction<sup>7</sup> against the cost of construction to build demand curves for the pre-program period and for the program period. Pre-program eligibility was again modeled for the years 2004-2007 and program period eligibility was again modeled for the years 2008-2011.<sup>8</sup>

Using ArcGIS again, we spatially joined city parcels files from City Planning to the appropriate neighborhoods. The shapefile data tables were then exported as CSV files. For parcel data, SAS was used to create a variable called "assessedvalue," which showed county property tax assessment in 2005 and in 2012. Another variable, "mktvalue," was created to convert all property values to 2012 dollars. Finally, SAS was used to create a report (for residential properties only and for all properties) showing changes by neighborhood in the number of properties, the average assessment value of properties, and the total neighborhood assessment value.

# Proposed Costs and Benefits of the Abatement Program

Once data was prepared, we tried to determine the major costs and benefits associated with the program based on the ex-ante Pittsburgh analysis, an in media res analysis performed on Philadelphia's tax abatement programs, and several academic analyses.

The major cost of the program was posited to be the property tax revenue foregone by the city, county (when applicable), and school district. In addition to property tax, other major costs included the loss of local services tax revenue and the cost of increased municipal services.

 <sup>&</sup>lt;sup>7</sup> Non-new-single-family homes were disaggregated from the model as much as was possible by removing properties with more than one dwelling per building and properties with extremely high property values.
 <sup>8</sup> As before, the Bluff and Central Business District neighborhoods were not included in the analysis. In addition, as with renovation projects, enhanced programs began on July 1, 2007, so estimates of program effects may be conservative.

Major benefits, on the other hand, were more diffuse. We determined that benefits of the program could include:

- Gain in Total (or "Social") Surplus;
- Increase (or Slower Decrease) in Population;
- Possible Increase in Incidental Tax Revenue (Income, Parking, etc.);
- Increase in Construction Jobs;
- Increase in Property Values;
- Ancillary Benefits (e.g., Reduced Crime Rate, Blight, Vacant Lots, etc.); and,
- Future Property Tax Collections.

Based on these cost and benefit assumptions, and armed with the city's ex-ante assumptions and cleaned data, we proceeded to analyze the effects of the programs.

# Ex Post Study of Impacts on Housing Market<sup>9</sup>

As illustrated by Figure 2, the Act 42E target neighborhoods have historically mimicked the city in terms of population decline. However, the target neighborhoods have consistently lost population at a greater rate than the city as a whole. We have included the Residential Enhanced LERTA neighborhoods to specifically show the changes in the downtown neighborhood while also providing another contrast point for the Act 42E target neighborhoods. These four downtown neighborhoods have clearly fared better than both the city and the Act 42E targets since 1990.

<sup>&</sup>lt;sup>9</sup> It should be noted that we lacked the proprietary data analysis tools that some municipalities were able to use to create vectors that accounted for, in some cases, more than 80 different confounding variables. As such, we were unable to determine with certainty any causal relationship between the abatement programs and any changes in the housing market. In addition, we were not provided with usage rates for the programs, which left us unable to create a plausible counterfactual.



Figure 2 - Population Indexed to 1970 and Population Change by Decade

Similarly, as seen in Figure 3, below, the total number of residential building permits in Act 42E areas has closely tracked the city as a whole, as has the growth rate. Again, LERTA neighborhoods are presented for contrast.



To provide a spatial reference for the aggregate figures presented above, we prepared a choropleth map to illustrate the population changes from 2000 to 2010 by neighborhood across Pittsburgh (see Figure 4 below). The map clearly shows concentrated population growth over the last ten years in the Central Business District and Strip District. Meanwhile, the city's East End appears to have had the most positive population growth in large population centers. The remaining neighborhoods largely experienced modest population losses. It is important to note that while Figures 2 and 4 show rather large population losses for the Act 42E target neighborhoods, we were unable to gather population data for 2005 or another year between the two decennial Census. This data would have allowed us to more closely approximate the population changes that specifically occurred after the abatement program was adopted.



Figure 4 - 2011 City of Pittsburgh Migration

Migration Inflows 2011	n Migration Outflows 2011	Net Migration
34,183	42,878	-8,695

### Tax Abatements and Housing Investment Decisions – Renovation

As Figure 5 clearly illustrates, after 2007 there was an outward shift in the demand curve for residential renovations across the 26 non-downtown, target neighborhoods. While we cannot attribute this entirely to the Act 42E program, there is clearly a correlation.



When you look at the graph in more detail you notice that none of the improvements were over \$250,000. This amount is also the limit of the abatement available through the Act 42E program. However, it is clear that there are a small number of improvements that happen in this range. The apparent lack of demand around this price range could provide justification for altering the program limits, at least for renovations. The demand elasticity for renovation permits stayed relatively stable and somewhat inelastic, with an elasticity of -0.764 before the program and an elasticity of -0.829 after the program.

Although we were unable to construct a corresponding supply curve, we did calculate the change in surplus that occurs as a result of the shift shown above. Assuming that the supply curve does not shift (which is likely given the small shift in demand), we then considered the

increase in surplus from the shifting demand curve as an increase in total surplus. Using the equation shown below:

$$Area = (\frac{1}{\beta_0})^{\frac{1}{\beta_1}} (\frac{q^{\rho_1} - q^{\rho_0}}{\rho})$$

we calculated the change in surplus to be \$536,687.74. Without the usage rates of the program we could not determine what the costs in forgone tax would be, nor how much of this increase may have been the result of spillover from Act 42E.

#### Tax Abatements and Housing Investment Decisions – New Construction

Figure 6 shows a similar outward shift in the demand curve for new construction as there was with renovations. However, it is worth noting that before and after 2007 the number of newly constructed residential units is considerably lower than the number of renovations and improvements to existing homes. Additionally, while the renovation permits included any type of Act 42E-eligible residential construction, we estimated the demand curve for new construction using only single-family homes.<sup>10</sup>





<sup>&</sup>lt;sup>10</sup> This adjustment was made after our presentation, at the suggestion of Dr. Denise DiPasquale.

Again, though we cannot attribute the shift entirely to the Act 42E program there is a clear shift in demand for new single-family housing in the 26 target neighborhoods we studied. Additionally, there appears to be a clustering of new construction between \$100,000 and \$250,000 that makes the Act 42E abatement limit seem more appropriate than we observed in the renovations data. Finally, as with renovation permits, the demand elasticity for new construction permits stays relatively stable, though more inelastic than for renovation permits, with an elasticity before the program of -0.332 and an elasticity after the program of -0.428.

Using the same equation shown above, we estimated the change in total surplus that resulted from the shift in the demand curve for new single-family homes to be \$238,911.90. Not surprisingly given the smaller number of permits, the change was less than with renovations.

### Impact on Housing Prices

Market prices for residential property were taken from city planning shape files, and the values from 2005 and 2012 were converted to 2012 dollars and compared to see if there was an increase in value in the targeted neighborhoods. Results of the analysis can be seen below in Table 1:

Neighborhood	Average Market Property Value (Before Program)	Average Market Property Value (After Program)	Average Market Property Value per Square Foot (Before Program)	Average Market Property Value per Square Foot (After Program)
Allentown	\$31,857	\$24,550	\$13	\$9
Arlington	\$38,205	\$24,094	\$11	\$8
Beltzhoover	\$27,132	\$14,052	\$10	\$5
California- Kirkbride	\$205,181	\$15,016	\$164	\$9
East Allegheny	\$210,014	\$113,957	\$140	\$76
Elliott	\$86,031	\$30,257	\$37	\$7
Esplen	\$428,505	\$131,154	\$95	\$68
Fineview	\$72,591	\$44,494	\$39	\$16
Hays	\$173,208	\$46,736	\$19	\$13
Hazelwood	\$122,783	\$30,000	\$41	\$11
Homewood North	\$150,673	\$12,371	\$63	\$4

Table 1 – Changes in Ma	ket Value in Program	Neighborhoods
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Homewood South	\$228,877	\$21,880	\$153	\$6
Homewood West	\$64,351	\$29,067	\$14	\$8
Knoxville	\$41,580	\$26,025	\$14	\$8
Larimer	\$90,233	\$147,436	\$59	\$15
Lincoln- Lemington- Belmar	\$57,365	\$19,581	\$30	\$5
Lower Lawrenceville	\$153,912	\$258,982	\$57	\$141
Manchester	\$91,238	\$86,283	\$43	\$54
Marshall- Shadeland	\$65,846	\$41,364	\$19	\$12
Mt. Oliver	\$37,421	\$21,969	\$9	\$6
Perry South	\$79,634	\$23,737	\$32	\$7
Sheraden	\$76,457	\$35,741	\$19	\$9
Spring Garden	\$47,618	\$27,957	\$26	\$8
Upper Hill	\$153,066	\$61,200	\$45	\$18
Upper Lawrenceville	\$69,094	\$63,977	\$36	\$46
West End	\$186,429	\$315,289	\$36	\$105
Average	\$99,938	\$59 <i>,</i> 880	\$44	\$25

Somewhat surprisingly, the average market value in the Act 42E target neighborhoods fell precipitously, both in total value and in per square foot value. In fact, only three neighborhoods (Larimer, Lower Lawrenceville, and West End) saw an increase in average market value. This data suggests that the increase in property value predicted by the ex-ante study in 2007 did not, in fact, occur.

# Impact on Neighborhood Demographics

Next, median income in the target neighborhoods in 2005 and in 2012 was examined to determine if the tax abatement programs had any effect on economic diversity in the form of increased incomes. Results can be seen below in Table 2.

Only eight of the 28 target neighborhoods (Allentown, Central Business District, East Allegheny, Fineview, Hays, Larimer, Manchester, and West End) experienced an increase in median income between 2005 and 2012. Further, the target neighborhoods underperformed with regards to median income when compared to the city as a whole as well as to the non-target neighborhoods. This result suggests that either the economic diversity in target neighborhoods predicted by the 2007 ex-ante analysis did not in fact occur or that, because the city in general and these neighborhoods in particular did not gain net new residents, any effects of attracting wealthier new residents to the city were negligible.

	1999 Median Income ('11	2009 Med. Income ('11	Change in Med. Income ('99
Neighborhood	Dollars)	Dollars)	to '11)
Allentown	\$29,941	\$30,198	\$257
Arlington	\$36,089	\$25,912	\$(10,177)
Beltzhoover	\$35,535	\$34,938	\$(597)
Bluff	\$15,297	\$13,199	\$(2,098)
California-Kirkbride	\$31,550	\$27,183	\$(4,367)
Central Business District	\$27,232	\$38,658	\$11,426
East Allegheny	\$22,938	\$29,061	\$6,124
Elliott	\$39,791	\$26,864	\$(12,927)
Esplen	\$37,195	\$14,048	\$(23,147)
Fineview	\$23,294	\$30,579	\$7,285
Hays	\$30,719	\$30,775	\$55
Hazelwood	\$32,695	\$32,048	\$(648)
Homewood North	\$25,543	\$21,826	\$(3,717)
Homewood South	\$22,216	\$20,827	\$(1,389)
Homewood West	\$27,442	\$14,878	\$(12,564)
Knoxville	\$35,187	\$28,773	\$(6,413)
Larimer	\$24,546	\$27,506	\$2,960
Lincoln-Lemington-Belmar	\$31,089	\$30,497	\$(592)
Lower Lawrenceville	\$27,295	\$23,015	\$(4,279)
Manchester	\$31,955	\$33,441	\$1,486
Marshall-Shadeland	\$38,552	\$33,637	\$(4,914)
Mt. Oliver	\$42,285	\$39,720	\$(2,565)
Perry South	\$34,419	\$30,737	\$(3,682)
Sheraden	\$45,832	\$32,044	\$(13,787)
Spring Garden	\$39,918	\$39,631	\$(288)
Upper Hill	\$37,559	\$33,010	\$(4,549)
Upper Lawrenceville	\$33,055	\$32,782	\$(273)
West End	\$28,404	\$42,552	\$14,148
Abated Neighborhood	\$31,699	\$29,226	\$(2,473)
Average	<i>401,000</i>	<i><i><i><i><i><i><i><i><i><i><i><i><i><i><i><i><i><i><i><i><i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i>	¥(=,+,•)
City Average	\$37,777	\$38,017	\$241
City w/o Target Hoods	\$40,521	\$41,987	\$1,466

#### Table 2 – Changes in Median Income in Program Neighborhoods v. City

# **City Benchmarks**

An important component of the project is to compare Pittsburgh's development efforts with other cities. Because Pittsburgh referenced Philadelphia and Columbus in their original proposal, we chose to include them in our analysis as a first cut. In addition, we wanted to compare Pittsburgh with cities that had similar characteristics. The characteristics we chose were location, population, population gain/loss, and population growth/loss relative to state population growth/loss. Finally, we also wanted to look at cities that were outperforming their states to see what, if anything, they were doing to drive population growth.

For location, we settled on a broad definition of Midwest. Next, we downloaded census population data and, filtering for 'Midwestern' cities, looked for two types of cities – those that had similar population characteristics to Pittsburgh, and those that were significantly outperforming their state in retaining or adding residents.

Based on the above criteria, we chose the following cities for comparison:

Annual Estimates	of the Resident Po	opulation for Ind	corporated Pla	ces Over 100,000	
Geographic Area	l		Populatio	on Estimates	
Place	State	July 1, 2009	July 1, 2000	Growth Rate 7/1/00 - 7/1/09	State Growth Rate
Philadelphia City	Pennsylvania	1,547,297	1,513,800	2.21%	2.60%
Columbus City	Ohio	769,332	715,971	7.45%	1.57%
Omaha City	Nebraska	454,731	409,868	10.95%	4.86%
Cleveland City	Ohio	431,369	476,574	-9.49%	1.57%
Cincinnati City	Ohio	333,012	331,258	0.53%	1.57%
Pittsburgh City	Pennsylvania	311,647	333,703	-6.61%	2.60%
Lexington-Fayette Urban County	Kentucky	296,545	261,189	13.54%	6.55%

#### Table 3

# **Abatement Programs in Benchmark Cities**

Once we determined which cities we would be comparing to Pittsburgh, we visited the community development websites for each city and studied each city's variation on tax abatement programs. Following is a summary of the programs available in each city.

# Philadelphia

The city of Philadelphia uses four separate abatement programs: Philadelphia 961 for residential rehab; Philadelphia 1130 for converting buildings to commercial/residential space; Philadelphia 1456-A for new residential construction; and Pennsylvania State Act 175 for new developments that will be sold or rented (Econsult Corporation 10).

Philadelphia 961 is a tax credit for all residential rehabilitation in the city of Philadelphia. It provides for an abatement of 100% of the increase in property value attributable to improvements for a ten-year period. While the city at one point capped the abatement at \$50,400, the program is currently uncapped (Econsult Corporation 10).

Philadelphia 1130 is a tax credit for renovations done anywhere in the city of Philadelphia to convert space to commercial or residential use. It, like Philadelphia 961, provides for an abatement of 100% of the increase in property value attributable to improvements for a tenyear period. The program has no yearly maximum (Econsult Corporation 10).

Philadelphia 1456-A is a tax credit for new residential construction in the city of Philadelphia. Like Philadelphia's other abatement programs, it provides for an abatement of 100% of the increase of property value attributable to improvements for a ten-year period. Also like the other programs, it has no yearly maximum (Econsult Corporation 10).

Finally, Pennsylvania State Act 175 is a tax credit given to developers who develop new property for residential sale or rent. While the program is similar to Philadelphia's other

programs in that it provides for an abatement of 100% of the increase in property value attributable to improvements, the abatement only lasts for 2.5 years or until the developer sells the property. The program is uncapped (Econsult Corporation 10).

#### Omaha and Lexington – loan and grant programs

The cities of Omaha and Lexington present special cases. Instead of offering abatement programs, they offer direct grant and loan programs to developers and private owners for new construction and renovation (Omaha Planning Department, Housing and Community Development), (Lexington Fayette Urban County Government Division of Community Development).

#### Cincinnati

The city of Cincinnati has two abatement programs; one for new construction and one for renovation. Both programs are for residential use, which Cincinnati defines as homes and condo and apartment buildings with up to three units. Condo and apartment buildings with more than three units are considered commercial property (Cincinnati Department of Housing).

Cincinnati's new construction abatement program is a tax credit that provides for a ten-year abatement of 100% of the increase in property value attributable to improvements, up to a yearly limit of \$309,515. The yearly limit increases by 3% every January 1 (Cincinnati Department of Housing).

Cincinnati's renovation abatement program is similar to the new construction program in several ways. It, too, is a tax credit that provides for a ten-year abatement of 100% of the increase in property value attributable to improvements to a yearly limit of \$309,515. Also like the new construction program, the renovation program maximum increases by 3% every January 1. To receive the abatements, improvements in one- and two-unit buildings must cost at least \$2,500, and improvements in three unit buildings must cost at least \$5,000 (Cincinnati Department of Housing).

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### Cleveland

The city of Cleveland has programs for new construction and renovation, dividing its programs into small (1-2 family) and large (3+ family) structures (Rush and Rodriguez), (Rodriguez).

For all new construction, Cleveland has a tax credit, covering the entire city, that provides for a 100% abatement in the increase in property value attributable to improvements. All new construction projects receive the abatement, which has no yearly maximum, for 15 years (Rush and Rodriguez), (Rodriguez).

For renovation projects, the situation is slightly more complicated. For all renovation projects, Cleveland provides a 100% abatement on the increase in property value attributable to improvements. In addition, there is no yearly abatement limit for all renovation projects. For renovation projects on one to two family structures, the project must cost at least \$2,500 and the abatement lasts for 10 years. For larger projects (three or more family structures), the minimum cost is \$15,000 and the abatement lasts for 12 years (Rush and Rodriguez), (Rodriguez).

## Columbus

Columbus, like Cleveland and Philadelphia, has several distinct tax abatement programs, which are all limited to designated areas referred to as 'Neighborhood Improvement Districts.' These programs cover new residential construction, improvements to owner-occupied properties, and improvements to rental property with three or more units (City of Columbus, Ohio Department of Development, Housing Division).

For new residential development, Columbus provides a 15–year abatement of 100% of home value, with the developer (and later owner) only responsible for taxes on the value of the vacant land. There is no yearly maximum on this program (City of Columbus, Ohio Department of Development, Housing Division).

Columbus also offers an uncapped abatement program on renovations to owner-occupied property. The renovation provides a 10-year abatement of 100% of the increase in property value attributable to improvements, as long as the renovations are worth at least 20% of the value of the property as certified by the county treasurer (City of Columbus, Ohio Department of Development, Housing Division).

If the owner of rental property with three or more units wishes to renovate his property, Columbus provides a 10-year abatement of 100% of the increase in property value attributable to improvements. Similar to the abatement on owner-occupied property, the renovations must meet a minimum percentage of the property value as certified by the county treasurer. In this case, however, the value of the improvements must be at least 50% of the value of the home to receive the abatement. There is no yearly maximum abatement amount (City of Columbus, Ohio Department of Development, Housing Division).

# Conclusions

Though we were unable to obtain a list of projects that took advantage of the Act 42 Enhanced Residential abatement program, our analysis reveals the changes that occurred in the target neighborhoods after the program was enacted. The data appears to show that in most cases the target areas did not improve and in some cases actually declined. Though it is entirely possible that Act 42E was able to slow the decline of these areas, we were not able to construct a reasonable counterfactual without the usage rate for the abatement program.

We were also not able to isolate the effects of Act 42E on new residential development and improvements. However, we did find clear outward shifts in the demand curves for both new residential construction and residential renovations after 2007.

Although their study was focused on commercial and industrial tax abatements, the 2009 report on tax abatement policy by Reese, Blackmond-Larnell and Sands provides a thorough

overview of the larger positives and negatives provided through municipal tax abatement programs. Some of their more significant findings include:

- Tax incentives can have positive outcomes under certain conditions (i.e. "targeted geographic, particularly blighted areas"). However, according to Peter and Fisher, "the best case is that incentives work about 10 percent of the time, and are simply a waste of money the other 90 percent" (Reese, Larnell and Sands 278).
- Overall use of abatement programs appears to "increase in times of prosperity and [go] down in times of economic stress (Reese, Larnell and Sands 276).
- For those municipalities that are "already economically healthy, tax abatement do appear cost effective." Conversely, for more distressed cities "taxes foregone per job generated are excessive." In fact, they found that "abatements appear to stimulate new jobs and investment in growing exurban areas to the detriment of inner ring suburbs and central cities" (Reese, Larnell and Sands 262).
- Over the long-term, abatements appear to have "consistent positive results," with "many studies [indicating] little effects on jobs or investments" (Reese, Larnell and Sands 262).

Though these findings were focused on commercial properties, the observations seem applicable to the current situation. In particular, it is possible that the Act 42E program underperformed expectations because of the national credit and real estate crises, which may have led to the depressed salary and market value figures in the target neighborhoods.

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# Appendix

# Exhibit 1

	Renovation - Before	<b>Renovation - After</b>	New - Before	New - After
β <sub>0</sub>	428021	822487	239572	362772
1/β₀	2.33633E-06	1.21582E-06	4.17411E-06	2.75655E-06
β1	0.764	0.829	0.332	0.428
1/β1	1.308900524	1.206272618	3.012048193	2.336448598
ρ	2.308900524	2.206272618	4.012048193	3.336448598
q1	300	300	21	21
q <sub>0</sub>	0	0	0	0
qı <sup>ρ</sup>	524114.9671	291880.3073	201747.2074	25793.88221
۹٥ <sup>ρ</sup>	0	0	0	0
$(1/\beta_0)^{1/\beta_1}$	4.25571E-08	7.32389E-08	6.2644E-17	1.02377E-13
(q1 <sup>ρ</sup> -q0 <sup>ρ</sup> )/ρ	226997.6388	132295.6669	50285.33998	7730.939487
				-
Area under curve from equation	0.00966037	0.009689189	3.15007E-12	7.91469E-10
Area under curve*sum of permits	436.1656965	437.4668823	7.27667E-10	1.82829E-07
p at q1	5,482.07	7,271.02	87,188.51	98,565.27
Area of rectangle up to curve	1644620.478	2181306.919	1830958.696	2069870.6
Total Area	1645056.643	2181744.386	1830958.696	2069870.6
Gain in Surplus		536,687.74		238,911.90

# Exhibit 2 – LERTA Eligible Neighborhoods



Data Source: Pittsburgh City Planning

### Exhibit 3 – Act 42E Eligible Neighborhoods



Data Source: Pittsburgh City Planning

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REAL ESTATE TAX ABATEMENT

SIBLE A WIDE	CURRENT USE OF PROPERTY RESIDENTIAL OR VACANT I AND	FUTURE USE AND OWNERSHIP TYPE RESIDENTIAL FOR SALE OR RENTAL	TYPE REDUCTION ASSESSMENT REDUCTION	PARTICIPATING TAXING BODY AND ABATEMENT/CREDIT LIMIT * AD \$ 86,750 YR FOR NEW CONSTRUCTION A) \$ 36,900 YR	PERIOD ABATED 3 YEARS	ASSESSMENT INCREMENT ABATED 100% INCREASE TAX DUE TO IMPR OVEMENTS
EFINED RESIDENTIAL RESID AS OR FOR SA VACANT LAND RENTA	RESID: FOR SA RENTA	ENTIAL ALE OR AL	ASSESSMENT REDUCTION	FÓR RENOÚATIONS C & S] \$250,000 YR FOR NEW CONSTRUCTION OR RENOVATIONS	10 YEARS	100% INCREA TAX DUE TO IMPROVEME
WIDE COMMERCIAL COMME INDUSTRIAL OR INDI OR VACANT FOR SAI LAND RENTAI	COMME OR INDI FOR SAI RENTAI	RCIAL USTRIAL LE OR	TAX CREDIT	<u>C)</u> \$ 50,000 IR	5 YEARS	100% INCREASE TAX DUE TO IMPROVEMENT
FINED COMMERCIAL RESIDEN AS OR RENTAL INDUSTRIAL (APARTN OR HOTI	RESIDEN RENTAL (APARTN OR HOTH	ITIAL AENTS) ELS	TAX CREDIT	C) \$150,000 TR S) \$250,000 TR CN) \$100,000 TR	10 YEARS	100% YRS 1 & 2 90% YRS 3 & 4 80% YRS 5 & 6, & SO ON **
FINED COMMERCIAL RESIDENT AS OR SEPARATI	RESIDENT SEPARATI	TAL	TAX CREDIT	C) \$ 2,700 YR S) \$ 3,480 YR	10 YEARS	100% INCREASE TAX DUE TO

* CCITY SSCHOOL CNCOUNTY	THE LERTA PROGRAMS ARE TAX CREDITS. THE MAXIMUM BENEFIT
A CITY SCHOOL AND COUNTY	CANNOT EXCEED THE TAX CREDIT LISTED ABOVE.
*** VISITABILITY TAX CREDIT CAN RUN CONCURRENTLY WITH OTHER	
RESIDENTIAL PROGRAMS.	
THE ACT 42 PROGRAMS ARE ASSESSMENT REDUCTIONS. THE TOTAL TAX	** BOTH THE CITY (ORD 10) AND THE SCHOOL DISTRICT CHANGED
BENEFIT CAN CHANGE DEPENDING ON THE MILLAGE RATE FOR THE TAX	THE EXEMPTION SCHEDULE FROM A REDUCED EXEMPTION OVER 10
YEAR. VISIT THE CITY OF PITTSBURGH'S WEB SITE FOR INFORMATION	YEARS TO A 100% EXEMPTION FOR 10 YEARS FOR APPLICATIONS
ON THE ELIGIBLE AREAS.	FILED ON OR AFTER JULY 1, 2007 THROUGH JUNE 30, 2012

100% INCREASE TAX DUE TO IMPROVEMENTS

5 YEARS

\*\*\* <u>C & CN)</u> \$ 2,500 MAX CREDIT FOR EACH TAXING BODY OVER 5 YEARS

TAX CREDIT

RESIDENTIAL SINGLE FAMILY DUPLEX TRIPLEX

RESIDENTIAL VACANT LAND COMMERCIAL

CITY WIDE

LERTA ORD 10 PGH CODE CHAPTER 267 VISITABILITY RESIDENTIAL PGH CODE CHAPTER 267

ADAPTED REUSE

INDUSTRIAL

ASSESSED UNITS

INDUSTRIAL

IMPROVEMENTS