# PROJECT H.O.M.E.'S ECONOMIC AND FISCAL IMPACT ON PHILADELPHIA NEIGHBORHOODS

#### Submitted to:

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# EXECUTIVE SUMMARY

Econsult Corporation was retained by Project H.O.M.E. to examine and measure the impact of Project H.O.M.E. facilities on the values of neighborhood properties.

From 1990 to the present, Project H.O.M.E. (Housing, Opportunities for Employment, Medical Care, and Education, hereinafter referred to as "PH") has opened 15 sites which include entry-level residential facilities, transitional housing, permanent housing, affordable housing, outreach programs, and education centers. While Project H.O.M.E. has received great acclaim for its positive impact on the lives of people who are homeless and formerly homeless, Project H.O.M.E. and other housing and service providers have met with some opposition from neighbors who are wary of potentially negative effects of a PH facility in their neighborhood. This study finds substantial statistical evidence that such resistance is unfounded.

Though Project H.O.M.E. locates some of its facilities in disadvantaged neighborhoods, its presence in a neighborhood does not decrease local property values. Rather, the opening of a new Project H.O.M.E. site is actually beneficial to the value of nearby homes.

Employing a sophisticated "event study" methodology, we examine house prices near Project H.O.M.E. sites both <u>before</u> and <u>after</u> the opening of a residence or service center for people who are or were homeless. Among our main findings are:

- Before the arrival of a Project H.O.M.E. facility, house values in these neighborhoods were already below the city's average.
- Immediately following the opening of a Project H.O.M.E. facility, house values in these neighborhoods are not adversely affected.
- In the years following the opening a Project H.O.M.E. facility, house values in these neighborhoods appreciated over time at a significantly higher rate than the citywide average; or about 1.8 percent per year in addition to the baseline citywide house price appreciation rate of 5 percent per year.
- Over nearly fifteen years, this rate of appreciation increases both housing wealth to individual residents (+\$31,000 each) and fiscal revenues to fund public services for all city residents (+\$8.5m).

In summary, the data and analysis strongly indicate that following the opening of a Project H.O.M.E. facility, house values in these neighborhoods actually experienced above-market appreciation rates over time. Thus, the positive benefits of Project H.O.M.E. extend beyond just its homeless clientele to directly benefit local property owners and indirectly benefit all city residents.

# I. INTRODUCTION AND PROJECT MOTIVATION

From 1990 to the present, Project H.O.M.E. (hereafter, PH) has opened 15 facilities, which vary in nature from entry-level residence facilities, to transitional housing, permanent housing, affordable housing, and outreach and education centers. While PH has been recognized for its positive impact on the lives of homeless and formerly homeless persons, its impact on neighborhood property values was unknown before this study. According to traditional urban economic theory, a positive spillover from an event such as the opening of a PH facility can boost investment in the local housing stock, and increase homeowner confidence, community participation, and neighborhood physical appearance. These can also lead to increases in property values, economic activity, employment, and overall neighborhood quality-of-life. To strengthen its base for future growth, PH is therefore interested in determining the economic impact of its sites on neighborhood property values. At the request of Project H.O.M.E., Econsult has examined and measured the impact of PH facilities on the values of neighborhood properties.

This report is structured as follows: Part One discusses the motivation for this project and the scope of its work. Part Two discusses the data employed in the analysis. Part Three discusses the empirical strategy. Part Four delivers and discusses the empirical results. Part Five summarizes the report and offers some concluding thoughts.

### II. DATA

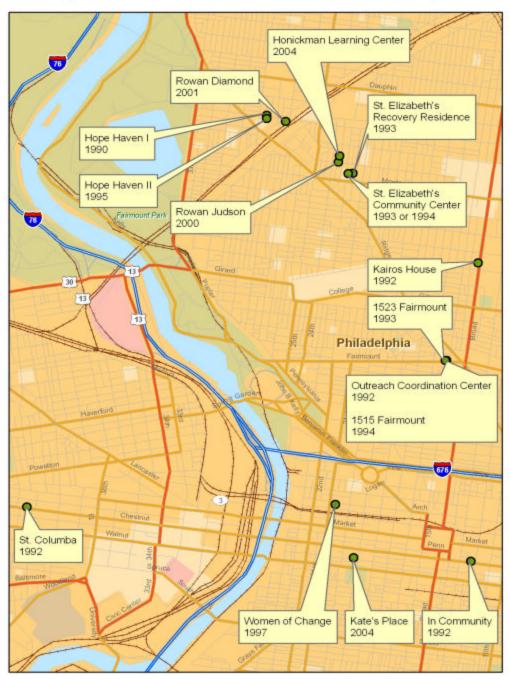
The figures in this study came from two separate datasets: one of PH sites and one of citywide home sales from 1980 through 2006. According to PH's data, the names, locations, and opening years of their 15 Philadelphia sites are as follows:

- 1. 1515 Fairmount, *1515 Fairmount Avenue*, *1994*
- 2. 1523 Fairmount, 1523 Fairmount Avenue, 1993
- 3. Hope Haven I, 2827 Diamond Street, 1990
- 4. Hope Haven II, 2828 Diamond Street, 1995
- 5. Honickman Learning Center and Comcast Technology Labs, 1936 Judson Street, 2004
- 6. In Community, *1229 Chestnut Street, 1992*
- 7. Kairos House, 1440 N. Broad Street, 1992
- 8. Kate's Place, 1929 Sansom Street, 2004
- 9. Outreach Coordination Center, *1515 Fairmount Avenue*, *1992*
- 10. Rowan Diamond, 2700 Diamond Street, 2001
- 11. Rowan Judson, 1900 Judson Street, 2000
- 12. St. Columba, 4133-9 Chestnut Street, 1992
- 13. St. Elizabeth's Community Center, 1845 N. 23<sup>rd</sup> Street, 1993 or 1994
- 14. St. Elizabeth's Recovery Residence, 1850 N. Croskey Street, 1993
- 15. Women of Change, *2042 Arch Street, 1997*

The dates of opening span the years 1990 through 2004. Based upon their individual addresses, each site was geo-coded with a latitude and longitude using GIS<sup>1</sup> software. Figure 1 displays their locations, with labeled with the site name and year of opening (see next page):

<sup>&</sup>lt;sup>1</sup> Geographic Information Systems. We use ArcView<sup>™</sup> software, an ESRI product.

### Figure 1.



Project H.O.M.E.: 15 Sites in Philadelphia

Source: Project H.O.M.E.

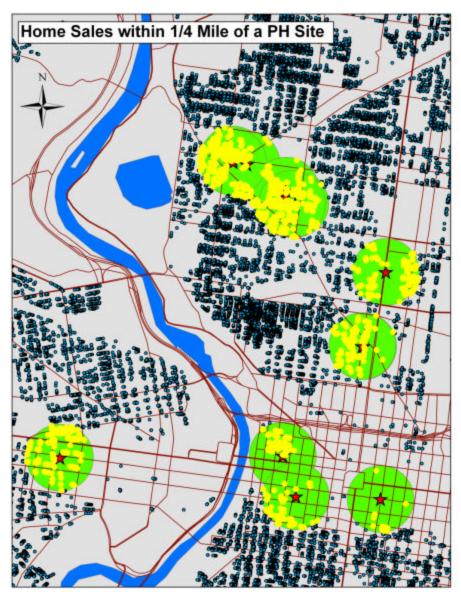
The dataset of home sales includes the population of all arms-length<sup>2</sup> home sales in Philadelphia from 1980 through 2006. Like the PH sites, each of the 372,555 observations in the dataset was geo-coded with respect to its address and assigned a location. Figure 2 shows these home sales: Figure 2



#### Source: Econsult Corporation

<sup>&</sup>lt;sup>2</sup> Arms-length sales are sales where the buyer and seller are both private-sector individuals or households that do not know each other (i.e. are "arms-length" from each other). Because they exclude nominal sales, sheriff sales, blanket sales, HUD sales and the like, the recorded prices should reflect true market fundamentals and conditions.

From this larger dataset of all home sales, we identify those home sales that occurred within a quarter mile<sup>3</sup> of a PH site by using GIS software to overlay a ¼ mile buffer zone around each PH site. The buffer zones are displayed as green circles in Figure 3 below, with the relevant home sales represented as yellow dots:



### Figure 3

Source: Project H.O.M.E. and Econsult Corporation

<sup>&</sup>lt;sup>3</sup> A quarter-mile is the standard convention for the impact of a local amenity or dis-amenity.

Of the 372,555 total sales citywide, there are 21,448 sales in the seven ZIP codes<sup>4</sup> in which PH is located. Within these seven ZIP codes, there were 2,120 home sales within a ¼ mile of the PH sites. While this may seem to be a small percentage of total citywide sales, it is a sufficiently large sample to identify the effects proximity to a PH site has on house values.

The following table compares the general characteristics of homes near PH sites (within a ¼ mile) to homes further away from PH sites (beyond a ¼ mile but within the seven ZIP codes):

Table 1. Summary Statistics of Homes Near PH Sites v. Further Away from PH Sites				
	Within ¼ Mile of PH Site		Beyond ¼ Mile of PH Site	
	Mean	Std. Dev.	Mean	Std. Dev.
Building SqFt	1,332	847	1,554	779
Lot SqFt	1,028	594	1,131	621
Floor Area Ratio <sup>5</sup>	1.35	0.54	1.43	0.41
Row home/Attached	87%		94%	
Rental	45%		41%	
<avg. condition<="" td=""><td colspan="2">19%</td><td colspan="2">13%</td></avg.>	19%		13%	
Price	\$34,200	\$161,017	\$95,515	\$156,500
Price/SqFt	\$22.64	\$52.62	\$56.58	\$76.57

Source: Econsult Corporation

The statistics in Table 1 indicate that homes which are near to PH sites are:

• Smaller:

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The average size of a home near a PH site is 1,332 square feet, versus 1,554 square feet in the rest of the seven ZIP codes. But, the variation in house size is actually slightly larger: a standard deviation of 847 square feet v. 779 square feet. The greater variation in house sizes near PH sites is attributable to the fact that three PH sites are in Center City (where homes are larger), while the remaining sites are in relatively low-income areas of the city (where homes are smaller)<sup>6</sup>. If these three Center City sites are dropped from the sample, the average size of a home near a PH site is very close to the citywide average.

• On slightly smaller lots:

Homes near PH sites are not only smaller, they are also on smaller plots of land. Their average lot size is 1,028 square feet vs. 1,131 square feet in the rest of the seven ZIP codes.

<sup>&</sup>lt;sup>4</sup> The seven ZIP codes are 19103, 19107, 19102, 19104, 19130, 19121 and 19132.

<sup>&</sup>lt;sup>5</sup> Ratio of the home's square footage to the lot's square footage (higher number indicating greater density).

<sup>&</sup>lt;sup>6</sup> This is also supported by the fact that the prices of homes near PH sites have a higher standard deviation than in the rest of the city.

• Dense and Attached Rowhomes:

The Floor Area Ratio<sup>7</sup> for homes in PH neighborhoods (1.35) and the percent of homes which are attached row homes is similar to what is in the rest of the ZIP codes.

• Slightly more likely to be renter-occupied:

45 percent of homes in PH neighborhoods are renter-occupied, compared to 41 percent further away from PH sites<sup>8</sup>.

• More likely to be in below-average condition:

19 percent of housing units near PH sites are classified by the BRT as "below average" or "inferior", compared to 13 percent in the rest of ZIP codes analyzed<sup>9</sup>.

• Significantly lower-priced:

From 1980-2006, the average transaction price of homes near PH sites was \$34,200, while the average price beyond a ¼ mile (but within the same ZIP code) from a PH site was \$95,515; a \$61,315, or 180 percent disparity. Similarly, homes near to PH sites also have a significantly lower price-per-square foot than homes further away: \$22.64 v. \$56.58.

In summary, the data support the notion that PH sites are located in neighborhoods which are generally more distressed and depreciated than in the rest of the city. While the homes in these areas are somewhat smaller and on smaller lots, and have lower rates of homeownership, they are significantly lower-priced than homes in the rest of the seven ZIP codes which are analyzed. While these numbers support the idea that homes which are immediately near to PH sites should have a price discount, the discount is very large. Since it seems fairly obvious that being only 10 percent smaller is not a justification for being 65 percent cheaper, there are likely other reasons for such a large disparity in house values. One reason could be that PH facilities are indeed perceived as an undesirable disamenity by their neighbors. Another reason could be that the housing stock in these neighborhoods is significantly more distressed and depreciated, and/or that the quality-of-life (e.g. crime, noise) is perceived as significantly lower, for reasons that are independent of PH's presence. So, it still remains to be seen whether these lower property values are caused by the presence of PH facilities, or whether

<sup>&</sup>lt;sup>7</sup> Floor Area Ratio is the ratio of a dwelling's size to its lot size (both typically measured in square feet).

<sup>&</sup>lt;sup>8</sup> Note: rates of renter-occupancy are computed only for single-family homes, and do not include rental units in apartment buildings.

<sup>&</sup>lt;sup>9</sup> The Board of Revision of Taxes (BRT) classifies the exterior condition of all housing units on a categorical scale. These classifications have not been updated in several years, and are likely biased downwards. That is, a greater number of Philadelphia houses are depreciated and distressed than what is reported by the BRT. However, there is still good reason to believe that BRT's numbers still accurately reflect the geographic variation in housing quality across city neighborhoods.

they are due to other characteristics that are separate from the presence of PH facilities. It is to this subject we now turn.

### III. EMPIRICAL STRATEGY

The summary statistics of the previous section describe the condition of homes near PH sites but do not determine the true impact of Project H.O.M.E. facilities on their immediate neighborhoods. House values in PH neighborhoods may be depressed because they are older, more depreciated, more transient and more densely configured, and not because of the presence of PH. Indeed, this argument is supported by the fact that PH is more likely to locate a new service center in a low-income neighborhood since the incidence of homelessness is likely to be higher in these neighborhoods. Thus, there are really two questions that this study is attempting to answer:

- 1. Are house values near PH sites truly depressed, in a "significant" sense?
- 2. If so, is it the presence of PH that causes this depression, or is it that PH is just more likely to locate its service centers into low-income and low-priced neighborhoods?

To answer these questions, we employ regression analysis, which scientifically tests the relationship between variables while controlling for the influence of other variables. If the relationship is statistically significant, then it is highly unlikely to have occurred by chance and thus implies causality. In this example, we want to control for things like age, density, size, and condition of houses so that the true effect of PH sites on property values can be tested.

In particular, our analysis uses a "hedonic<sup>10</sup> regression" that computes how overall variation in a product's total price (e.g. house price<sup>11</sup>) is explained by variation in the individual attributes of the product (e.g. structural attributes like square footage, lot size, floor area ratio, type of exterior, locational features (e.g. distance to CBD, census tract) and time since last sale, presence of a tax abatement, owner- versus renter-occupied, etc.). The regression also controls for general fluctuations in house values over time using dummy variables of the year a home sold. All in, there are a total of 68 independent control variables in the regression.

Having controlled for the most salient factors affecting house values, we define the effect of a PH site on house values with the variables in Table 2:

<sup>&</sup>lt;sup>10</sup> A hedonic regression is one in which the total value of a product (e.g. house, car) is decomposed into the sum of the values of its individual attributes.

<sup>&</sup>lt;sup>11</sup> The natural log transformation is taken to convert the regression coefficients from prices to percents. This was done because the data spans 27 years, and marginal prices are subject to inflation over time. The log transformation generally produces parameter estimates that are more stable, with respect to inflation.

Table 2. Definition of Regression Variables			
Variable Name	Definition		
Pre_PH	Dummy variable =1 if home is within ¼ mile of either a current or future PH site; 0 otherwise		
Pre_PHt	A time trend variable for homes within a ¼ mile of a current or future PH site. It equals 1 if it's the first year of the study period (1980), 2 if it's the second year (1981),, 27 if it's the last year (2006). Equals 0 for all homes beyond a ¼ mile.		
post_PH	Dummy variable =1 if home is within 1/4 mile of a currently operating PH site; 0 otherwise		
post_PHt	A time trend variable for homes within a ¼ mile of a currently operating PH site. It equals 1 if it's the first year after the PH site became active, 2 if it's the second year after the PH site became active, etc. Equals 0 otherwise.		
Source: Econsult Corporation			

We estimate two regressions. The first regression measures if proximity to a PH site is associated with any meaningful difference in home values. In other words, are house values in PH neighborhoods truly less than house values in the rest of Philadelphia, after controlling for size, age, density, neighborhood quality, etc.? The second and more sophisticated regression is an "event study" that measures whether the level and trend in house prices near PH sites <u>before</u> they open is any different from the level and trend in house prices near PH sites <u>after</u> they open. Because this regression compares house prices both pre - and post-PH presence in the neighborhood, it effectively controls for whether PH causes low house prices or whether low-priced neighborhoods are more likely to attract a PH facility, which we believe to be the more accurate of the two regressions.

### IV. EMPIRICAL RESULTS

The regression results are presented in Table 3. Each column contains the results of a specific regression, with the estimated coefficients and t-scores (in parentheses)<sup>12</sup>. Coefficients are the average percent change in house values given a unit increase in the independent variables. The t-scores report the statistical significance, or "strength" of this relationship. By the standards of traditional statistical conventions, a t-score greater than two or less than negative two is considered statistically significant:

<sup>&</sup>lt;sup>12</sup> Since there are so many variables in the regression, we focus only on those variables related to the presence of PH facilities and omit the full results from this report. The full results are available form the author upon request at gillen@econsult.com

Table 3. Regression Results: Coefficients and (t-scores)				
Variable	Regression 1: Simple Model	Regression 2: Event Study		
pre_PH	-0.33374	-0.4057		
pre_i m	(-16.48)	(-7.04)		
pre_PHt		0.00323		
pre_r nt		(0.59)		
post_PH		-0.03120		
post_FT		(-0.40)		
post_PHt		0.01819		
μυδι_ΕΤΙΙ		(3.26)		
Includes control variables?	Yes	Yes		
Adj. R-squared	0.6663	0.7348		

Source: Econsult Corporation

For the first regression, the reported coefficient is -0.33374, with a t-score of -16.48. This means that homes within a ¼ mile of a current or future PH site have prices that are, on average, 28.4%<sup>13</sup> less than the citywide average during the 1980-2006 period after controlling for characteristics like size, condition, and neighborhood quality. Since the t-score of -16.48 substantially exceeds the usual critical threshold of -2, this relationship is strongly significant, and not likely to be due to random chance. This answers the first of our two questions in this study: controlling for other characteristics, houses near PH sites do indeed have a meaningful price discount compared to other homes further away from PH sites, in a "statistically significant" sense.

However, as previously pointed out, this approach ignores how the PH organization chooses to locate its facilities. There are a variety of factors that determine site selection – each one has a unique story combining location, availability, space configuration, community resources, and other factors. But it does raise a particular question: are house values near PH sites low because the sites attract homeless people and depress house prices, or does PH self-select into neighborhoods where house prices are already depressed?

Addressing this question of a causal relationship is the purpose of the event study regression. The naïve regression compares house prices near PH sites to house prices outside of PH neighborhoods. By contrast, the event study regression compares house prices in PH neighborhoods <u>before</u> PH opened a facility to house prices in PH neighborhoods <u>after</u> PH opened a facility.

The second regression in Table 3 has four variables.

• The first variable, pre\_PH, is negative and statistically significant. It indicates that PH does indeed disproportionately locate its facilities in low-price neighborhoods. Prior to PH arriving, house prices in these neighborhoods were 33 percent below the average house value in the

<sup>&</sup>lt;sup>13</sup> This 28.4 percent is less than the 33.4 percent number reported in Table 3 because the coefficient must be exponentialized and then have 1 subtracted. This transformation is necessary because this variable takes a value of 0 or 1. Since the dependent variable is the natural log of price, and you can't take the log of 0, you must perform the exponential transformation: exp(-0.33374)-1=-0.28376, or -28.4 percent when rounded.

seven ZIP codes. So, house prices in PH neighborhoods were <u>already</u> low before PH opened a facility.

- The second variable, pre\_PHt, is not statistically significant. This indicates that the trend in house prices in PH neighborhoods was not meaningfully different from the citywide trend in house prices. So, house values in PH neighborhoods were moving with overall citywide trends in house price, neither rising nor falling in a relative sense, prior to PH's arrival.
- The third variable, post\_PH, is also not statistically significant. This indicates that the immediate effect of a PH site opening in a neighborhood does not adversely affect house values.
- The fourth variable, post\_PHt, is positive and statistically significant. It indicates that the trend in house prices in PH neighborhoods is positive and above-average (relative to the overall market trend) following the opening of a PH site. Specifically, house values near PH sites grow 1.8 percent faster, per year, than other homes in these ZIP codes, in each year following the opening of a PH site in a neighborhood is associated with a positive effect on housing values <u>over time</u>.

These results stand in stark contrast to the simpler regression. First, they indicate that the correlation between low house values and the presence of PH facilities is due to the fact that PH chooses to locate in low-priced neighborhoods. Second, the opening of a PH facility has no immediate adverse effect on house values. Thirdly, homes near PH sites appreciate in value at a rate of two percent per year higher than the city average. While this additional two percent per year may seem small, it is actually quite meaningful when you consider that the historic annual appreciation rate of housing is only 4-5 percent per year. Adding an additional 1.8 percent to this historic yield can translate into significant amounts of additional housing wealth over time, due to the effect of compounding<sup>14</sup>.

Such an unusual pattern of house price movements deserves some explanation. While it remains very difficult to prove that PH's presence definitively <u>causes</u> increased property values, the empirical results strongly support the result that the location of PH facilities is definitively <u>correlated</u> with increased property values. While it is possible that this correlation is spurious—i.e. due to either random chance or other unobserved events in these neighborhoods—this is fairly improbable since the regression used to derive these results is fairly extensive. A more likely explanation has to do with the specific dynamics and characteristics of the neighborhoods PH is investing in.

It may seem counter-intuitive that the presence of a residential or service facility for people experiencing homelessness is associated with above-market appreciation in house values. But both the particular nature of the neighborhoods that PH chooses to locate into and the particular nature of their investment in these neighborhoods should be taken into account. The empirical results in this study are largely driven by the Fairmount and North Philadelphia locations of PH, and not Center City.

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<sup>&</sup>lt;sup>14</sup> Note: as an integrity check, this analysis was also done on a citywide basis, in which house prices and trends were examined on a citywide level and compared to PH neighborhoods. The results were almost identical to what is presented here. These results are available from Econsult upon request.

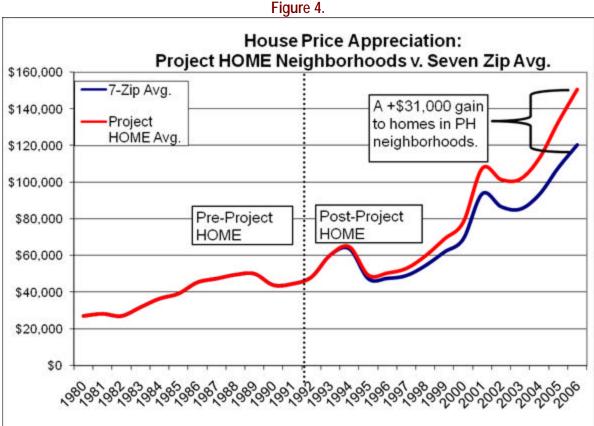
This is because there are relatively few single -family transactions near PH's Center City locations<sup>15</sup>. Large parts of these neighborhoods have a very distressed and depreciated housing stock that is occupied by low-income residents. In addition, a significant percent of the properties acquired by PH were either abandoned, distressed and depreciated, and/or otherwise under-maintained. Project H.O.M.E. made significant investments in and upgrades to these properties following their acquisition. Moreover, they maintain these properties to an extent that their previous owners often didn't. The improvements to and maintenance of these (previously under-maintained) properties are a direct benefit to these neighborhoods. In addition, PH provides a number of services to these neighborhood residents that also represent an investment in these neighborhoods. These include, but are not limited to, the provision housing, homeownership counseling, job counseling and the employment of local residents. These also improve the quality-of-life in these neighborhoods by reducing homelessness and unemployment, and increasing homeownership and housing investment. Hence, PH also provides indirect benefits to the neighborhood's residents through their ongoing activities.

Viewed in this context, the fact that the presence of a homeless service facility has a net positive impact on property values *in these particular neighborhoods* shouldn't seem that counter-intuitive. The investment in low-valued (and previously distressed) properties combined with the services provided to disproportionately low-income residents represents real improvements to the neighborhoods themselves. And, this becomes positively capitalized into increased house values. While this may not be the case in other high-priced and high-income neighborhoods, the data seem clear that most residents perceive PH's presence as a net positive to their neighborhood and its quality of life, to the average tune of an additional 1.8 percent house price appreciation rate per year.

To gain a better visual intuition of how meaningful this additional growth is, we use the regression results to generate two house price indices<sup>16</sup> that track house price movements over time. This compares the rate of house price appreciation of homes near PH sites v. the house price appreciation of homes further away. The results are shown in Figure 4:

<sup>&</sup>lt;sup>15</sup> This study did not examine the impact on the values of multifamily (i.e. apartment building) properties because such transactions often do not occur at clean or arms-length prices. Since a disproportionate amount of the Center City housing stock contains apartment buildings and condos, this limited the extent to which we could measure PH's presence in Center City on residential property values.

<sup>&</sup>lt;sup>16</sup> The indices are generated from the estimated coefficients on the vector of dummy variables denoting the year that each house in the samp le sold. For example, the coefficient for the year 1981 reports the average house price appreciation rate from 1980 to 1981, after controlling for size, quality, neighborhood, etc.



### Source: Econsult Corporation

The blue line represents the overall trend in house prices in the seven ZIP codes analyzed. The red line represents house prices in PH neighborhoods; i.e. within a ¼ mile of PH facilities. Consider the typical Philadelphia home, which had an average price of \$27,000 in 1980. Although homes in PH neighborhoods had a lower average value than those citywide, the event study regression establishes that this is not caused by the presence of Project H.O.M.E., since house prices were already low prior to PH's arrival. Hence, we eliminate this effect, and set house prices in PH neighborhoods to be equal to the city's average in order to do an apples-to-apples comparison. As the event study egression indicated, house values in PH neighborhoods appreciated at essentially the same rate as house prices in the in the seven ZIP codes. So, throughout the 1980s, house price appreciation patterns in both markets tracked each other quite closely, and were not meaningfully different from each other. By 1992, the average house was now worth approximately \$51,000.

Then, in 1993, assume that a PH site opens<sup>17</sup>. The immediate impact on house values is zero, as reported by the insignificant t-score in the regression. However, house prices in the PH neighborhood grow at an additional 1.819 percent year. While this may not seem like a large number, house prices in Philadelphia have appreciated at a historic average rate of only 5%. In PH neighborhoods, they will now grow at nearly 7 percent per year instead of this 5 percent historical average. As such, the red line steadily diverges from the blue line as homes near PH sites appreciate at a faster rate than the rest of

<sup>&</sup>lt;sup>17</sup> We chose the year 1993 because it was the median opening year of all PH sites.

the homes in the city. By 2006, the typical home in a PH neighborhood would now be worth over \$151,000, compared to the seven ZIP code average of \$120,000.<sup>18</sup> Over this period following the opening of a PH facility, that would represent a \$31,000 gain in housing wealth to the owner of a home in a PH neighborhood.

This increase in property values also has additional benefits to city residents in the form of an increased tax base and additional property tax revenues. Applying the city's taxation formula to this additional \$31,000 in housing value results in the projection of an additional \$574 in tax revenue per dwelling. Multiplying this by the housing stock of all fifteen PH neighborhoods<sup>19</sup> of 14,767 single-family residences predicts an additional \$8.5m in annual property tax revenue as a result of above-market house price appreciation in PH neighborhoods. This is tax revenue that can be used to improve and extend the provision of critical city services, such as roads, sanitation, police and schools. Notably, these services are not limited to just residents of PH neighborhoods, but all city neighborhoods. Hence, while the direct positive effect of PH facilities is to local residents is in the form of increased property value over time, PH sites also have an indirect positive impact on residents of all Philadelphia neighborhoods in the form of a larger tax base and additional fiscal revenues.

# V. CONCLUSION

This study examines how the presence of Project H.O.M.E. facilities affects local property values. Descriptive statistics and a simple regression report that homes within a ¼ mile of PH sites are, on average, worth 33 percent less than the other homes in the seven ZIP codes where PH has a presence. However, a more sophisticated regression tells us that it is the relatively low value of such neighborhoods which increases the likelihood that PH will locate a facility there in order to better serve its disadvantaged residents. In short, house prices in those neighborhoods were already low before PH arrived. In addition, there is compelling statistical evidence that there is no negative effect on local property values immediately following the opening of a PH facility. Moreover, the opening of a PH facility in the neighborhood is associated with a higher rate of house price appreciation in those neighborhoods. This additional appreciation is an average of nearly 2 percent per year on top of the city's average appreciation of 5 percent per year. For the typical homeowner near a PH facility, this would translate into nearly an additional \$31,000 in housing wealth to the homeowner over nearly fifteen years. Finally, this increase in housing wealth further translates into an improved tax base and an additional \$8.5m in fiscal revenues to fund critical public services.

In summary, the presence of Project H.O.M.E. does not adversely affect the values of homes in a neighborhood. Rather, in addition to improving the quality of life for its own clientele, the opening of a Project H.O.M.E. site yields significant benefits to the homeowners and residents of its chosen neighborhoods, as well as fiscal benefits for all city residents.

<sup>&</sup>lt;sup>18</sup> Current prices in PH neighborhoods are still below the citywide average. However, this number reflects the relative gain over the current citywide average if the two lines had started at the same place as the Figure depicts.
<sup>19</sup> The housing stock was identified with the help of GIS software, by creating a ¼ mile radius around each site and extracting all single-family residences from the property file.