# City of Philadelphia

## Economic Impact Analysis of

## Proposed 10 Year Tax Abatement Adjustments

**Prepared by:**

Jones Lang LaSalle

**Contact:**
Reginald Ross, Econometrics Director
Jones Lang LaSalle Americas, Inc.
330 Madison Avenue, 4th Floor
New York, New York 10022
Phone: 212.418.2682
Email: reginald.ross@am.jll.com

# Table of Contents

# Section 1 – Introduction and Overview

## 1.1 Purpose of the Assignment and Executive Summary

The City of Philadelphia retained the services of Jones Lang LaSalle to identify and quantify the economic impact of altering the terms of its ten-year property tax abatement program. A recent legislative proposal seeks to reduce the abatement by the school district's 55% portion. The City is interested in estimating the impact of this legislation on the future of likely new development, City and school district tax income, and jobs through the use of historical data and analysis.

The City would like to view this impact under the 3 scenarios: 1.) abating only the non-school district portion 2.) allowing individual abatements to phase out after 5 years, and 3.) eliminating the full abatement immediately.

*Executive Summary*

The city's data and a historical rent analysis suggests that had the abatement not been in place, as is, during the past economic cycle, at least 65% of Philadelphia's recent development volume would likely not have been attractive enough to initiate. Had only the City portion had been abated, there would have been 45% fewer development projects.

- The abatement helps Philadelphia be competitive, with its peer group of major US cities, in its ongoing efforts to attract new investment capital to the City.
- Eliminating the school district portion immediately would increase short term revenue to the school district. However, that short term benefit is outweighed by the longer term benefits of a larger tax base that the abatement helps to foster, for both the school district and the City.[1]
    - The estimated the average annual increase in revenue to the school district, for the next ten years, is roughly $700k to $800k per year, were the proposed policy to be implemented.
    - The resulting estimated loss of revenue for the school district is $22 million over 30 years and $46 million in revenue loss to the City, relative to leaving the status quo in place.
- Furthermore, we estimate that under the current proposal, approximately 3,000 new units of residential new construction would not be financially attractive enough to build over the next ten years.

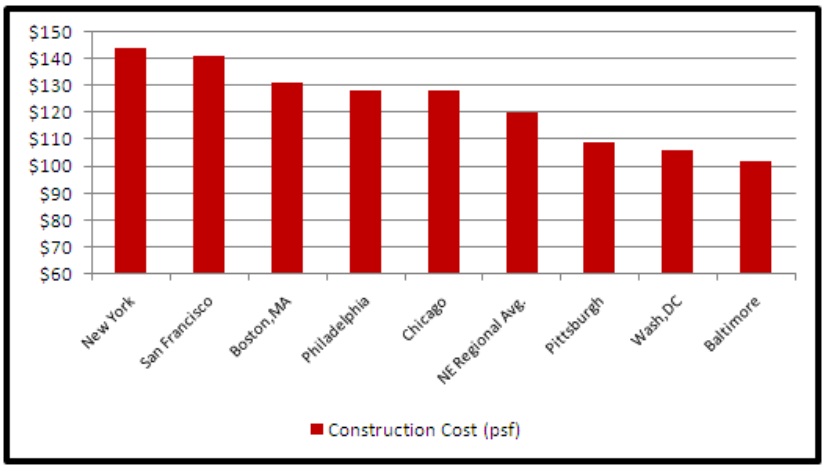
[1] This includes annual Real Estate Tax estimate only. This does not include tax revenue from unabated land, wage tax, transfer tax, business tax, use and occupancy tax, sales tax, and other non RE tax sources. Including these sources in our estimate would heavily favor the current structure, by increasing status quo revenue estimates by as much as 50% depending on the assumptions used.

## 1.2 Overview

- Philadelphia, like all major urban centers, must compete with other markets for development capital.

- For a number of reasons, costs associated with building or improving real estate in Philadelphia rank among the highest in the nation and above a Northeastern regional average.[2]

**Average Construction Cost Comparison by City**



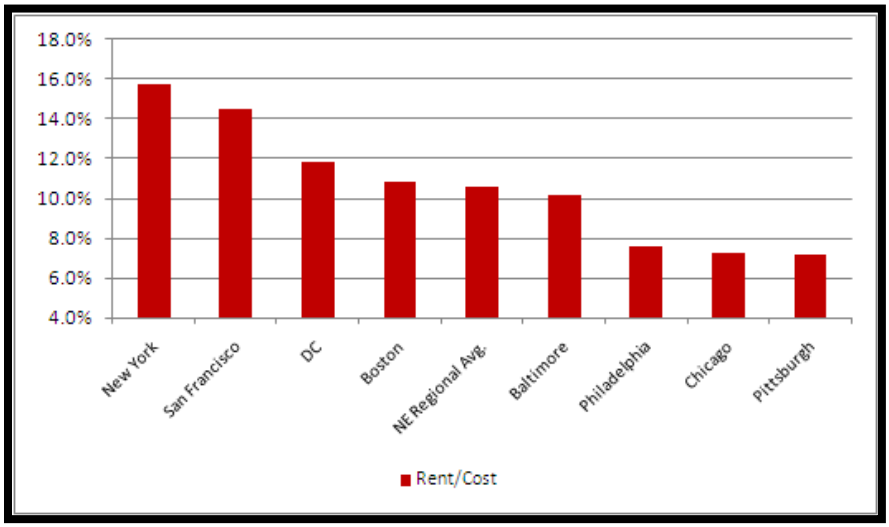

- Philadelphia's higher construction costs[3]limit this market's ability to provide returns for investors, as rents and sales prices lag behind other high cost cities, like New York, Boston and San Francisco.

- In the Northeastern region, there are multiple choices for investors to access major city real estate cash flows and returns. In other regions, like the Midwest, those choices may be more limited. [4]

- However, the profit that an investor can expect on construction costs in Philadelphia lags behind that of its peer group(s).

[2] NE regional average includes NYC, Boston, Wash DC, Pittsburgh, and Baltimore
[3] Source: RS Means, other third party data
[4] For example, Chicago offers virtually the only opportunity for major city urban real estate investment in the Midwest.

**Annual Return on Costs Comparison**[5]




- As the above charts point out, it can cost as little as 10% less to build in the Philadelphia market than in other major markets. However, the profit an investor can expect in the City can more than 40% *less* than those of its peer markets.

- The City's tax abatement policy is an attempt to alleviate some portion of this disparity between rents and construction costs as compared to other cities, in order to spur sustained levels of developer and redeveloper interest in the City.

- On a present value basis, the abatement offers about a 9%-12% reduction in costs, on average. This doesn't eliminate the gap between costs and rents compared to other markets completely, but it does help.

- The historical data suggests there likely were some transactions that would have been financially viable without the abatement, even if less profitably so.

- However, there are a significant number of transactions that had return on investment metrics that were near the bottom of what investors would historically accept from Philadelphia.

- For those properties, the abatement, and its certain availability, likely made the difference between moving forward or not.

- Our analysis suggests that if 55% of the abatement were not in place during the previous economic cycle, between 40% and 50% of development in Philadelphia, during that period,

[5] RS Means cost and PPR rent data

would likely not have been financially attractive enough to initiate. Simply put, about half of all construction and rehab projects would never have happened.

- Lastly, the aforementioned reduced development would also result in a loss of construction employment of about 20% to 30% over the same period.

### 1.3 Approach to the Assignment

Developers invest in markets where there is a reasonable expectation of profit, or yield. Obviously, developer profit models vary widely and can be a challenge to model using only historical data. Part of every developer decision process, however, is measuring if there is enough cash yield in a property to cover carrying costs until exit, should that exit take longer than expected.

We can model this financial portion of the developer's decision process to initiate development by examining historical rents and construction cost data.

Modeling this decision process using historical data forms the basis of our analysis.

There is typically an average level of yield or profit that will entice investors into a market. There will also be a "floor" level of yield beneath which, most investors will likely choose not to transact.

Our approach is to:

1. Calculate the historical floor level[6] for this market,
2. Translate changes in Real Estate Tax policy regarding the abatement into an implied loss in yield for the average development in Philadelphia.
3. Estimate the new floor that compensates for an implied loss of yield from adjusting Real Estate tax policy.

Calculating the change in the historical number of developed or improved properties that have yields above these floors, and projecting it forward is how we estimate likely changes in Philadelphia's future development market.

We recognize that critics of this method might point out that "all boats rise/fall together", implying that since the abatement impacts all properties equally, investors would simply reset expectations for the Philadelphia market and continue with new development, as usual.

[6] We define a floor as being the yield level above which properties in the Philadelphia market were more than 25% likely to transact.

We argue, however, that because Philadelphia is located in a region with many other options for investors to obtain consistent urban commercial Real Estate yield, it is likely that large portions of investment capital would simply be deployed somewhere else in the Northeast if expectation for yield decreases. With so many alternatives where an investor can look for yield in the Northeast region, Philadelphia would likely not attract its fair share of development capital without being at least competitive in terms of yield.

### 1.4 Acknowledgement of Other Published Work on this Topic[7]

There are several publicly available articles and papers on the value of the abatement to the City of Philadelphia. The materials contain very detailed analyses of the actual experience of a typical Philadelphia developer and abatement recipient. We are not in disagreement with this work or its conclusions. The purpose of our analysis is to find a way to model the experience of developers of other properties, property types, and locations that have also received abatements. We also acknowledge that there may be methods of estimating impact other than the ones used in this report.

One point of difference in our analysis is that we have been willfully conservative in our analysis by limiting the majority of our comparative analysis only to ongoing RE tax collections estimates.

[7]Philadelphia's Ten year Tax Abatement, Updated statistics on the size and distribution of tax-abated properties in Philadelphia, *by Kevin Gillen Ph.D. (2013)*
Fiscal Analysis of Philadelphia's Ten year tax abatement: Examining the Net Fiscal Impact of a Newly Constructed Tax-Abated Development Project in Philadelphia, by *Kevin Gillen Ph.D. and John Westrum (2014).*

# Section 2 – Existing Data Analysis

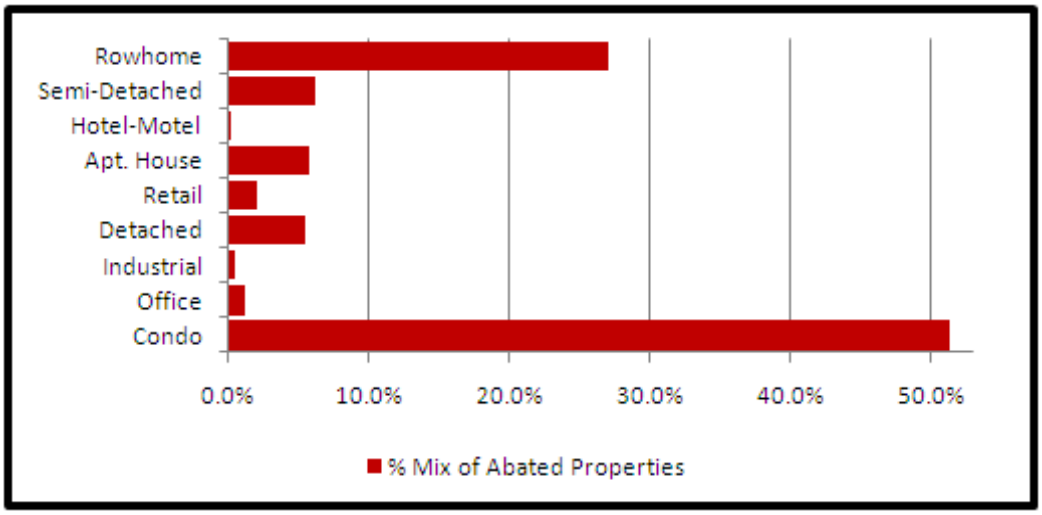
## 2.1 Current Mix of Abated Properties

Of the total of more than 15,000 properties that have been tax abated under this program, approximately 40% have been for improvements, while just over 60% have been for new construction.

These properties are made up largely of residential condominiums with row homes and semi-detached units making up the majority of the rest.[8]

| Abated Properties by Const Type | | |
|---|---|---|
| Improvement | 6,246 | 39% |
| New Const. | 9,637 | 61% |
| Total | 15,883 | |

**Properties with Abatements through 2013[9]**



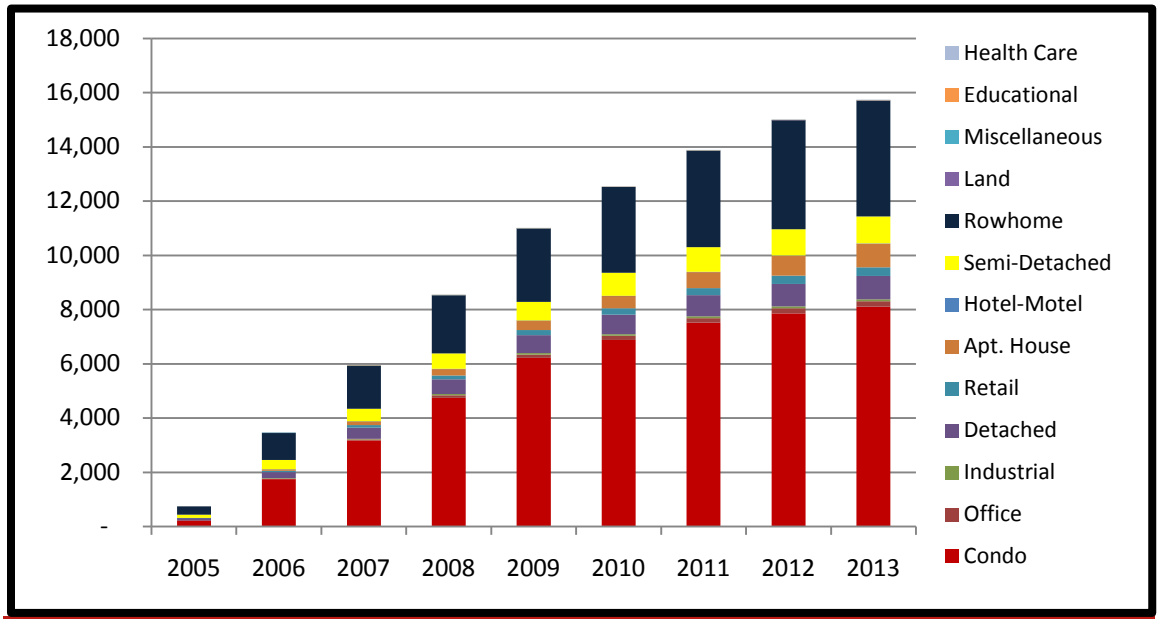

[8] The Hotels category on the chart is actually not zero. Relative to the number condo and residential units, the actual number of abated hotel properties is very small. However, the % mix of total square footage from this category is likely to be more in line with the other commercial property categories.

[9] All abated property charts are per Philadelphia's historical property tax and abatement data.

## 2.2 Historic Mix of Abated Properties

The mix of abated properties has remained largely consistent during the years of the abatements. However, the condominium share of the total mix has decreased in recent years in favor of row homes and, to a lesser extent, semi-detached units.

**Annual Abated Properties by Type**[10]




## 2.3 Average Abatement (psf) for New Construction

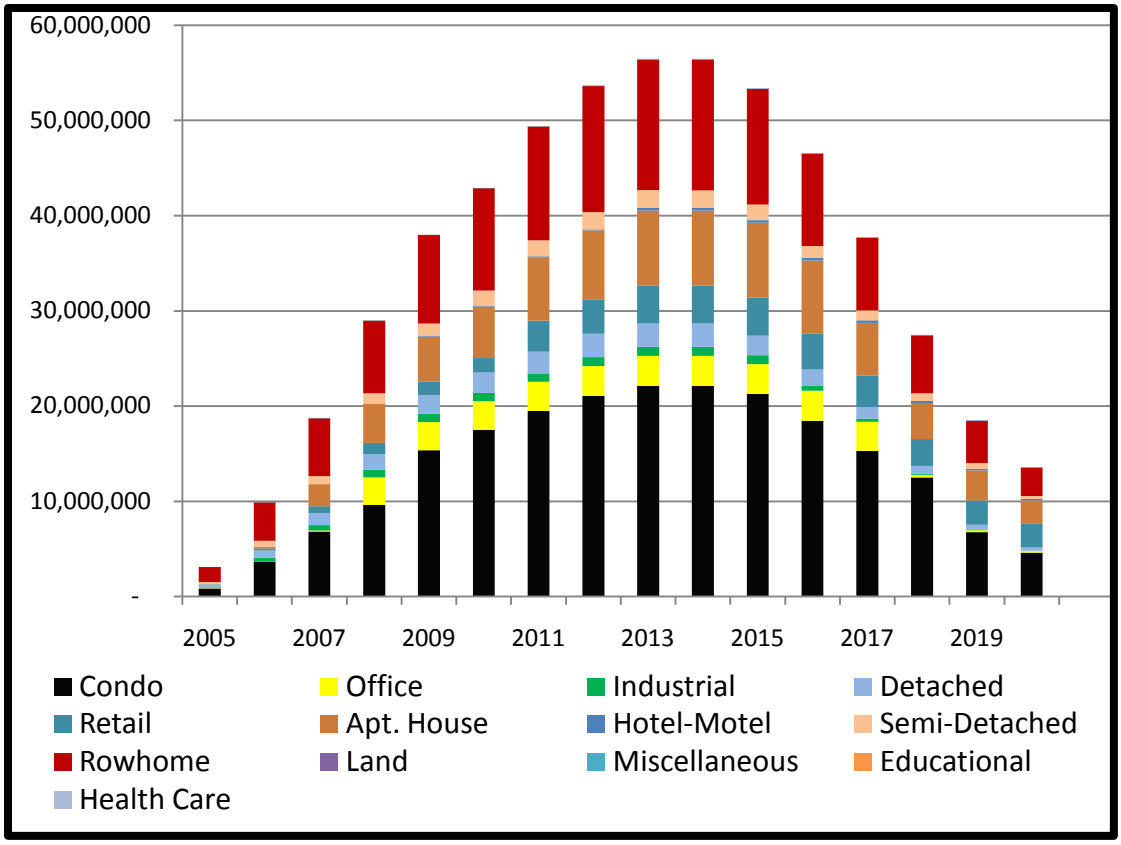
The number of new construction abatements during our analysis period is just over 9,600, with an average abatement value per square foot of approximately $170.

| Total New Construction Abatement Value | |
|---|---|
| Total Value Abatement for New Const | $4,333,651,119 |
| Total New Const Properties | 9,637 |
| Average Abatement Per New Const Property | $449,689 |
| Sq.ft | 25,264,141 |
| Avg. Abated Value (psf) | $172 |

[10] All abated property charts are per Philadelphia's historical property tax and abatement data.

The following chart represents the projected total annual abatement value, by property type, of abatements given through year end 2013. Condo and row homes remain a significant part of annual expirations as a good deal office abatements expire by 2018.

**Historical and Projected Value of New Construction Abatements in place through 2013**[11]




## 2.5 Average Abatement (psf) for Improvements

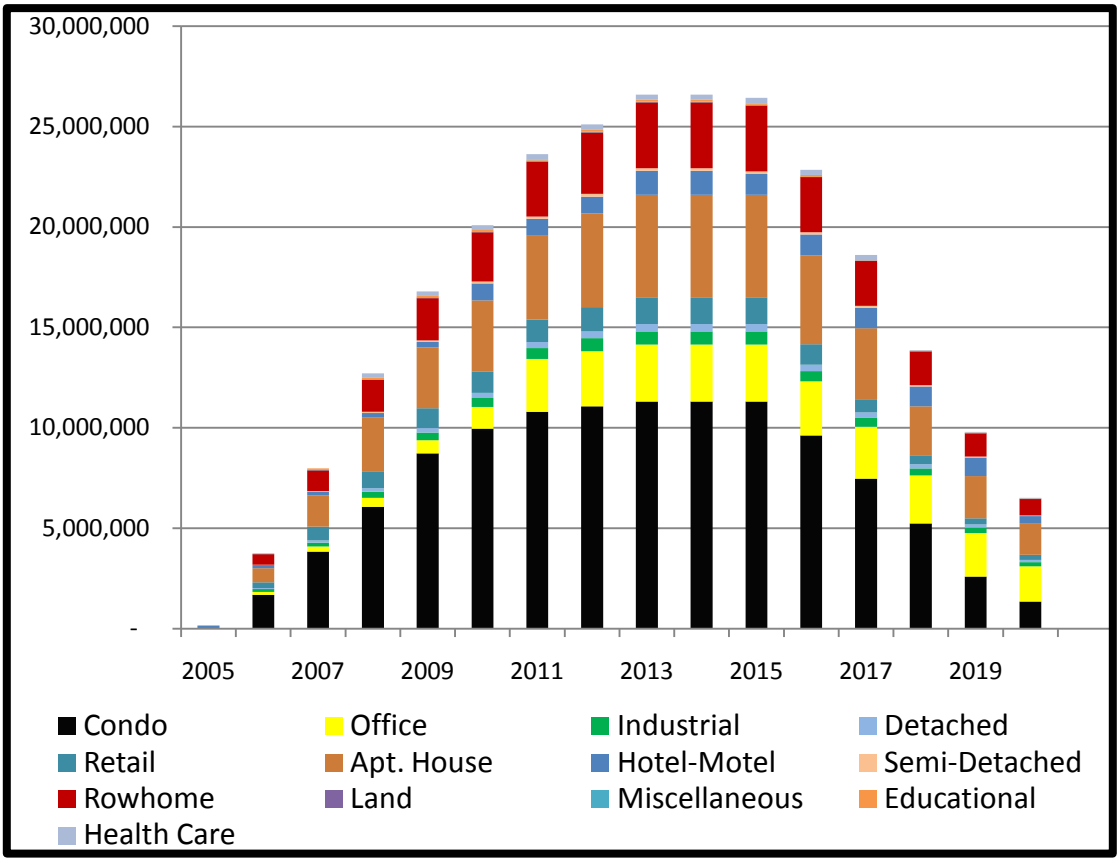
There were over 6,000 properties that took advantage of the abatement program to make improvements. The average improvement value per square foot of each property is approximately $85.

| Total Improvement Abatement Value | |
|---|---|
| Total Abatement for Improvement | $2,035,484,304 |
| Total Improved Properties | 6,246 |
| Average Abatement Per Improved Property | $325,886 |
| Sq.ft | 24,042,130 |
| Avg. Abated Value (psf) | $85 |

[11] All abated property charts are per Philadelphia's historical property tax and abatement data.

The following is a chart of how abatements from these improvements will expire, by property type, as the city begins to recognize full tax income levels for these properties

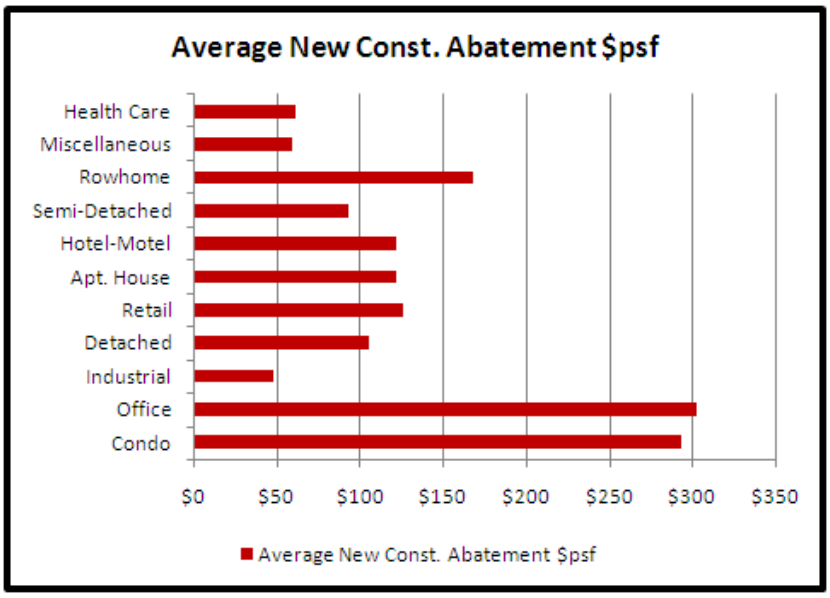
**Historical and Projected Value of Improvement Abatements in place through 2013**[12]




Unlike with new construction, condo improvements become an increasingly smaller portion of abatement expirations, while offices, row homes, and apartment houses remain a significant part of the mix as time progresses.

[12] All abated property charts are per Philadelphia's historical property tax and abatement data.

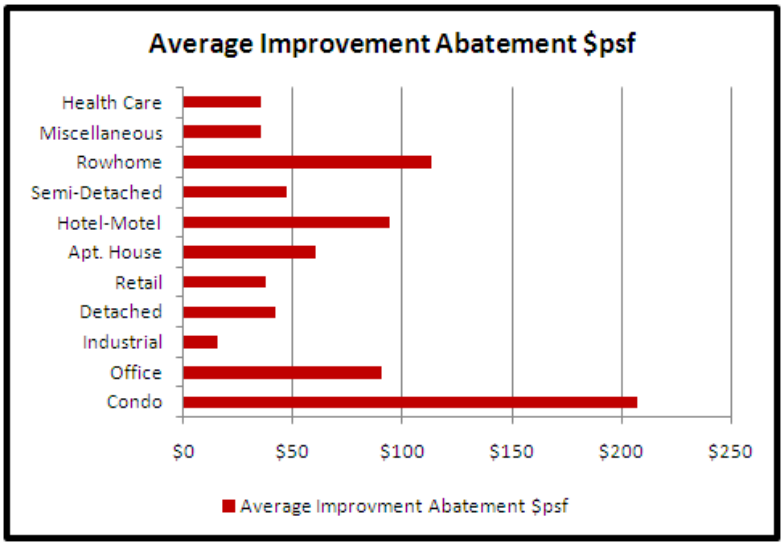
**Average New Construction Abatement Value (psf) by Property Type**[13]




The average value of new construction abatements for residential new construction is highest for condominiums at almost $300 psf, followed by row homes and semi-detached units that average $120 psf.

**Average Improvement Abatement Value (psf) by Property Type**

Condo improvement abatement values per square foot also outpaced other residential sectors by a factor of more than 2 to 1.




[13] All abated property charts are per Philadelphia's historical property tax and abatement data.

# Section 3 – Model Overview

## 3.1 Methodology

Since most investors are yield (or profit) driven, a method of calculating the likely impact of changing the abatement is to:

1. Define "yield", for our purposes, simply as average rent for the zip code of a property/divided by the average development costs for the type of property.
2. Use the historical data to calculate the "floor", in terms of yield, under which the likelihood of transacting is found to be small. (<25% chance)
3. Tabulate how many properties transacted above that floor.
4. Calculate the change in average yield as result of a change in abatement.
5. Calculate the "new" implied floor (since the investor will now need to compensate for the loss of capital).
6. Tabulate how many properties transact above the new floor.
7. The percent change between the quantities found in steps 3 and 6 is the implied loss of likely development, or the impact of changing the abatement on future development.

*Simple example 1 (Macro)*

1. Historically, we find that most properties (say 100,000 properties), are developed at yield rates of 5% or better.
2. Assume we also find that a given change in the abatement results in a loss of an average yield of 1%.
3. The new floor underneath which properties are unlikely to transact is now 6% (5% +1%).
4. Now assume we also find that, historically, the number of properties that transacted above 6% is 80,000.

We would say with this example that the change in yield results in a 20% ((100,000 - 80,000)/100,000) loss of development market.

*Simple example 2 (Micro)*

1. Property X was built at a development cost of roughly $200 psf, with the abatement.

2. Rents in that zip code average $10 psf.

The yield expectation for property X is 5%. If our floor is also 5%, this property is at risk of not being completed. But, in our logic, this property "would likely transact" at the current yield level expectation.

1. Assume we know that a change in the abatement results in a change in yield such that the new floor is 6%,

2. Since rents won't change as quickly, property X's expected yield of 5%, is now below the floor and thus, would fall into our category of "unlikely to transact."

### 3.2 Future Development Volume Estimation

Development volume in 2013 was near a 7 year low for Philadelphia for reasons that have more to do with national economic conditions and less to do with anything specific to Philadelphia's economy.

Our baseline, or status quo, projection is based on the assumption that development volume will move back towards long term averages, along with the larger economy, in an orderly fashion over a period of 5 years.

For our pro forma projection, we apply the development reduction that was estimated from our yield calculations to 2013 total development volume to estimate year 1 and 2 of the projection[14]. Then we apply adjusted annual growth rates that simulate a return to an adjusted average volume level within 5 years.

For both cases, growth rates post year 5 are assumed at a conservative 2% per annum.[15]

As such, this estimate is not a development volume forecast, but merely a baseline projection forward of the historical behavior of this market.

Since Philadelphia has mature commercial, residential, and industrial real estate markets, along with historical data that extends through an economic cycle, we feel that this is a reasonable way to establish a conservative, baseline estimate of future developmental activity.

By contrast, if this were a smaller, less mature market with substantial recent structural changes, we would be hesitant to use this method.

---

[14] To simulate the effect of some, imminent, but unconsummated, transactions moving forward even if the abatement is adjusted, we apply only 50% of our modeled impact to Year 1 of the analysis.

[15] To not unduly impact the "eliminate completely" case, years 3 -5 are grown at 3% per annum, to simulate ordinary "CPI like" growth. All other cases are based on a discount to the assumed status quo growth rate.

### 3.3 Model Inputs

1. **% of RE Tax Abated** – Used to simulate the effects of:
    a. Retaining Status Quo - This variable is set for an abatement amount equal to 100%, under this scenario.
    b. Adjusting the abatement to allow only the non school district portion – This variable is set for the abatement amount to equal 45%, under this scenario.
    c. Keeping the abatement for 5 year and phasing out over the next 5 years – For this case, this variable will obviously be different throughout the 10 year adjustment window.
    d. Removing the abatement completely – This variable is set for an abatement amount equal to 0%, under this scenario.
2. **Interest rate change** – Used to simulate the effect of a changing interest rate environment
    a. To isolate the interaction between rate movement and abatement adjustments, the model assumes that newly unsubsidized capital will have to be borrowed.
    b. The impact on yield is the present value of 30 yrs. of increased interest expense on new capital required due to the abatement adjustment.
3. **Phase out Switch** – Used to simulate a phase out of the abatement after year 5

### 3.4 Model Outputs

1. **Status Quo Philadelphia Yield Metric**– This result approximates an average yield expectation for Philadelphia properties from historical data.
2. **Effective Yield post-subsidy adjustment –** This result approximates an average effective yield for Philadelphia properties that is inclusive of the implied yield loss due to abatement adjustment.
3. **Estimated Historical yield floor** – The yield level underneath which less than 25% of properties have transacted historically.
4. **Yield Floor post-abatement** adjustment – The historical yield floor (#3) adjusted for the yield loss expected from changing the abatement (#2-#1).
5. **Loss of Development Estimate –** Calculates the 10 year projected loss of development volume, given the structural loss of development demand that results from the implied increase to development costs from the adjusted subsidy.

# Section 4 – Modeled Results

**Scenarios**[16]

To examine the short and long term results of our case analysis, we look at scenarios from the following perspectives and time frames

- Quadrant 1 (Upper left) – shows a 10 year comparison, in terms of number of units developed, between doing nothing (Blue bars), and making an adjustment (Red Bars).
- Quadrant 2 (Upper right) – shows a 30 year comparison, for all cases, from a Net Present Value of Real Estate Taxes only perspective, with splits to show the school district and City portions of the total expected revenue
- Quadrant 3 (Lower right) – shows a 30 year comparison in terms of accumulated Real Estate Tax revenue, between doing nothing (Blue solid lines), and making an adjustment (Red solid lines). We also show the same comparison for only the school district portion of the tax (Dotted blue and red lines).

### 4.1 Keeping the Abatement As-is ("Status Quo/Do Nothing")

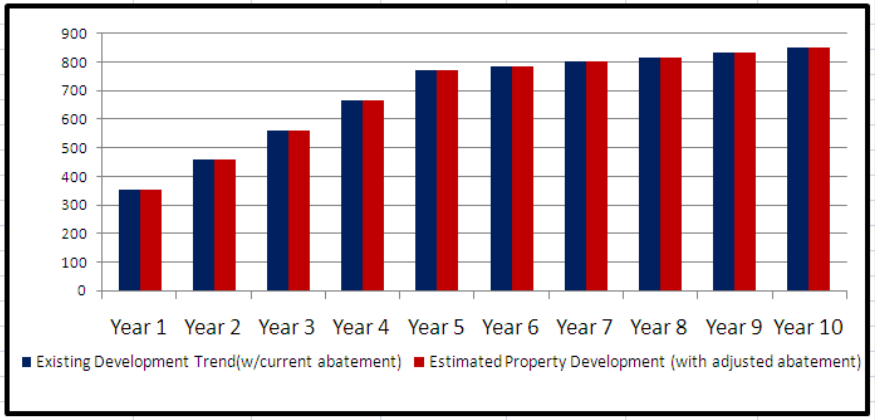
In this run of the model we keep the abatement the same (100% RE Taxes Abated)

- In this case, since there is no change in policy, Red and Blue bars and lines in quadrants 1 and 3, respectively, are equal. There is a level of revenue in quadrant 2, for this case, which represents the present value of collections in yrs 11 thru 30.
- As was mentioned earlier, our assumption is that this market does not return to the highs of the previous cycle but does return to the average level achieved during that period by year 5, as the national economy improves, and then only modest (1.5% to 2% growth subsequent to that.

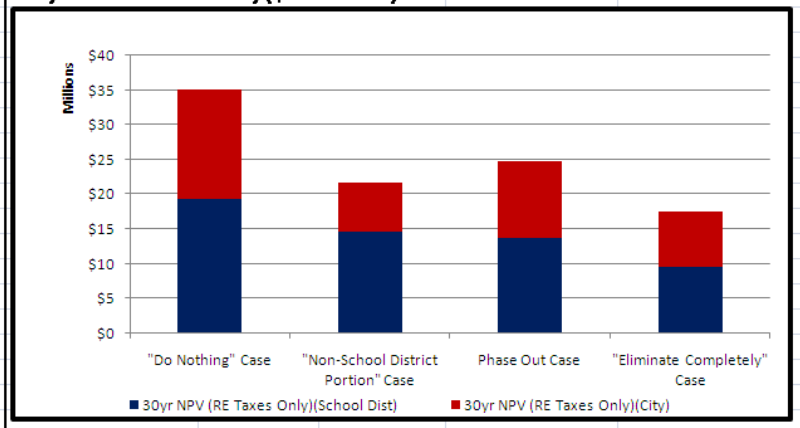
[16] Since residential abatements form the vast majority of abatements under this program, we limit the analysis of the main body of this paper to the residential properties. Impacts to other property types will be summarized in the appendix.

"Do Nothing" Case

## 10 Yr Projected Development Volume

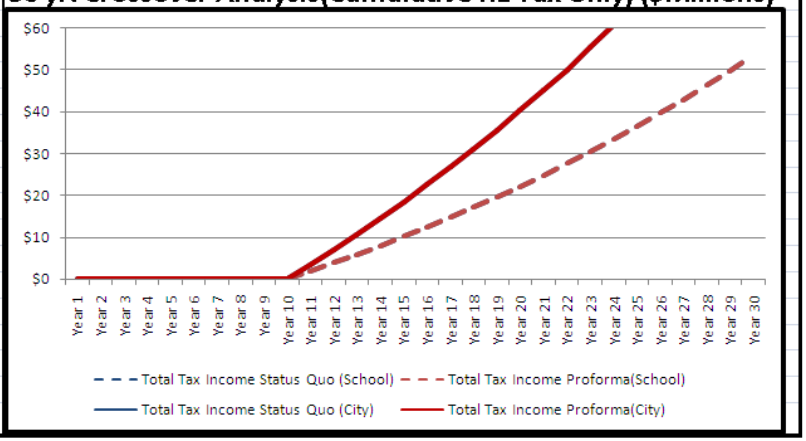



## 30 yr Case Summary($Millions)




| | | | |
|---|---|---|---|
| % of RE taxes abated | 100% | *toggle* | |
| | | *toggle* | |
| NPV of abated taxes | $40.4 | psf | |
| Interest rate change | 0% | | |
| Interest rate change psf | $0.0 | psf | |
| Total impact psf | $40.4 | psf | Case Selector |
| | | | 1 |
| Status Quo Philadelphia Yield Metric | 7.0% | | "Phase out" 1 = yes |
| Effective Yield Post Subsidy Adjustment | 7.0% | | 0 |
| Effective Change in Yield Metric | 0.0% | a | |
| Estimated Historical Yield floor | 5.1% | b | |
| Yield floor post abatement adjustment | 5.1% | a+b | |
| 10 yr Loss of Development Estimate | 0% | | |
| | | | |
| Job Loss | - | Annual full time equivalent jobs | |

## 30 yr. Crossover Analysis(Cumulative RE Tax Only) ($Millions)



### 4.2 Removing Only the School District portion of the Abatement

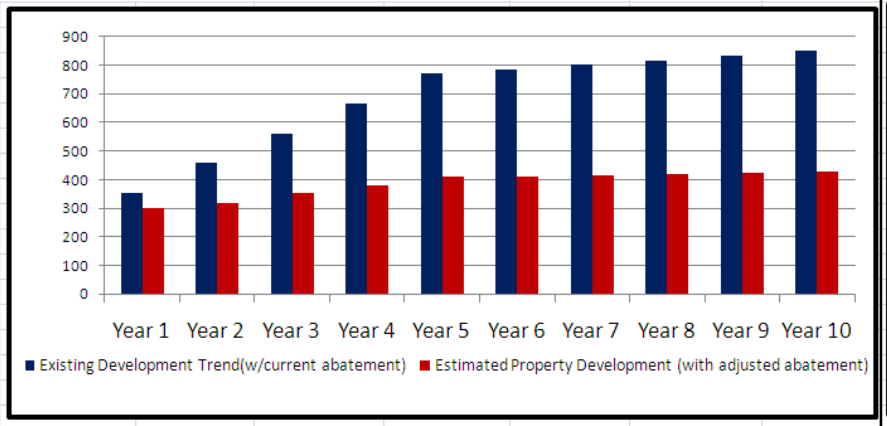
In this run of the model we simulate removing the school district portion of the abatement (45% RE Taxes Abated)

- In this case we simulate the effects of having 55% of the abatement not in place over the past economic cycle. The data suggests that the projected future development volume loss implied from the historical pricing tolerances for this market, would be in the range of 40% to 50%
- Quadrant 3 shows us that the short term gains from reducing the abatement are outweighed by the long term benefits of a broader tax base within 5 years after the existing abatement expires.[17](See solid red and blue line crossover point)
- The long term benefits to the school district outweigh the short term gains within 8 years after the abatement expires. (See dotted red and blue line cross over point)
- We estimate that the loss of development will result in a loss of construction employment in Philadelphia of roughly 1,200 to 1,300 jobs.[18]

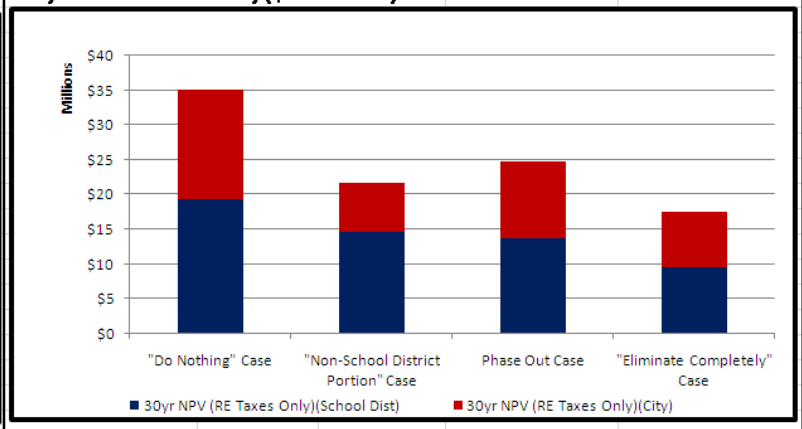
[17] For conservatism, this does not include land taxes paid during the abatement period.
[18] Jobs estimate calculates direct construction employment only and assumes a local labor spend factor of 40%..

"Non-School District Portion" Case

## 10 Yr Projected Development Volume

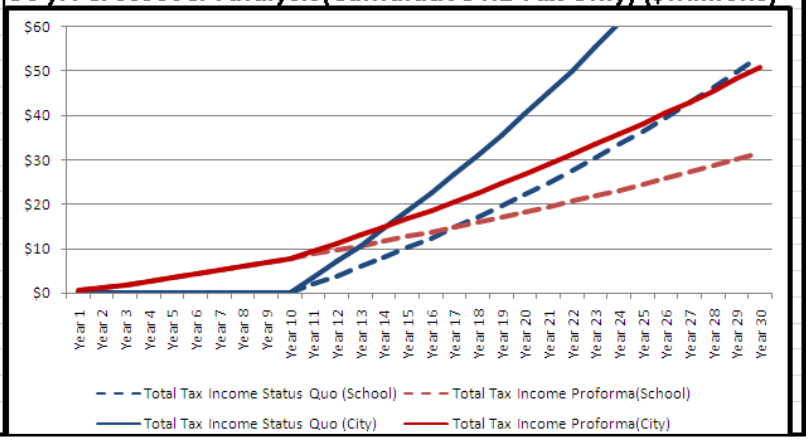



## 30 yr Case Summary($Millions)




| | | | | |
|---|---|---|---|---|
| % of RE taxes abated | 45% | *toggle* | | |
| | | *toggle* | | |
| NPV of abated taxes | $18.2 | psf | | |
| Interest rate change | 0% | | | |
| Interest rate change psf | $0.0 | psf | | |
| Total impact psf | $18.2 | psf | Case Selector | |
| | | | 2 | |
| Status Quo Philadelphia Yield Metric | 7.0% | | "Phase out" 1 = yes | |
| Effective Yield Post Subsidy Adjustment | 6.4% | | 0 | |
| Effective Change in Yield Metric | -0.6% | a | | |
| Estimated Historical Yield floor | 5.1% | b | | |
| Yield floor post abatement adjustment | 5.7% | a+b | | |
| 10 yr Loss of Development Estimate | 44% | | | |
| | | | | |
| Job Loss | 1,309 | Annual full time equivalent jobs | | |

## 30 yr. Crossover Analysis(Cumulative RE Tax Only) ($Millions)



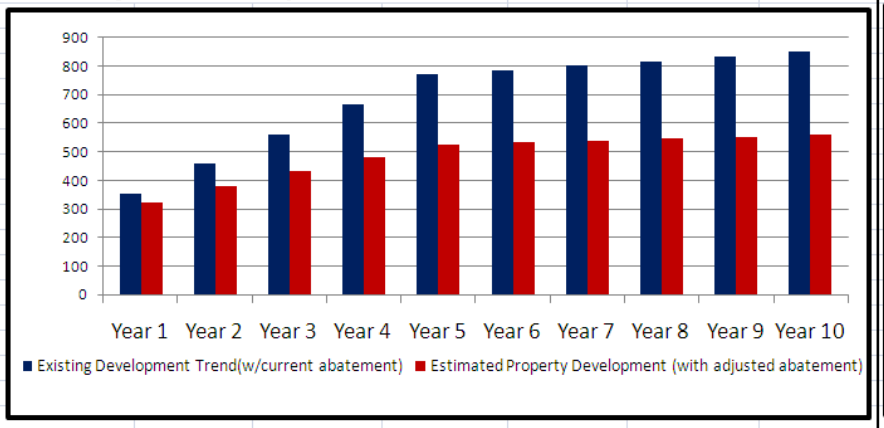
### 4.3 Phasing out the Abatement after 5 years

- In this case, we simulate reducing the individual abatements after year 5 year by phasing it out by 20% every year for the subsequent 5 years. In this simulation, the estimated 10 year development loss is estimated at approximately 30%.
- If we project that relationship into the future, quadrant three shows us that the accumulated Real Estate taxes from this adjustment to the abatement are matched by those associated with keeping the abatement in place, within 10 years, for both the school district and the City, after the unadjusted abatement would end and full revenue collection starts.[19]
- We estimate that the loss of development will result in a loss of construction employment in Philadelphia of roughly 800-1,000 direct construction jobs.

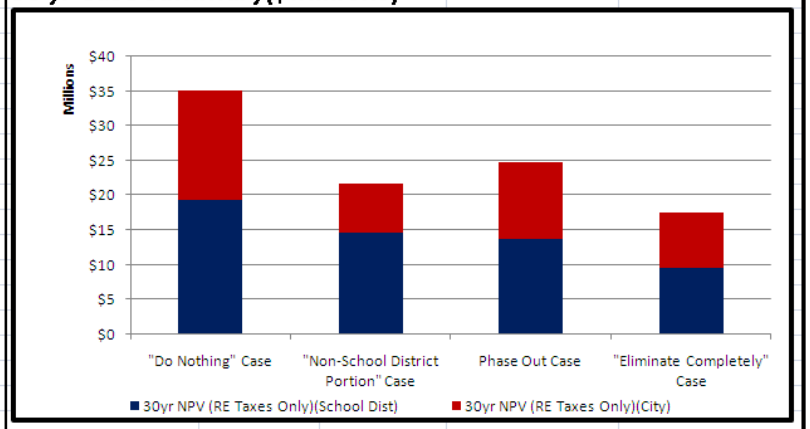
[19] For conservatism, this does not include land taxes paid during the abatement period.

**Phase Out Case**

## 10 Yr Projected Development Volume

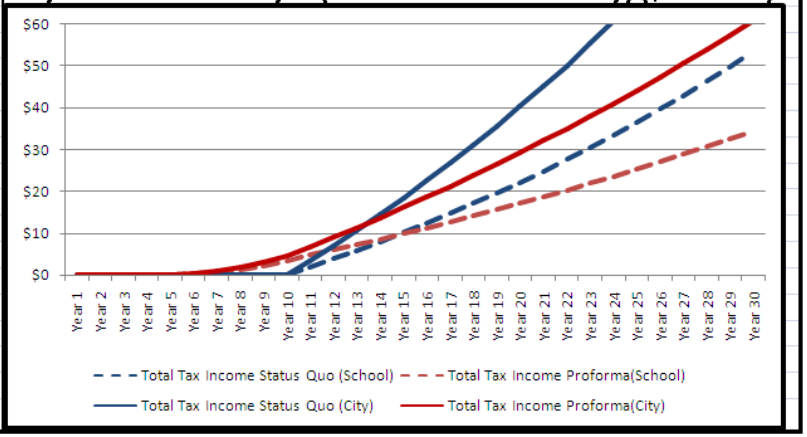



## 30 yr Case Summary($Millions)




| | | | |
|---|---|---|---|
| % of RE taxes abated | Varied | *toggle* | |
| | | *toggle* | |
| NPV of abated taxes | $27.7 | psf | |
| Interest rate change | 0% | | |
| Interest rate change psf | $0.0 | psf | |
| Total impact psf | $27.7 | psf | Case Selector |
| | | | 2 |
| Status Quo Philadelphia Yield Metric | 7.0% | | "Phase out" 1 = yes |
| Effective Yield Post Subsidy Adjustment | 6.6% | | 1 |
| Effective Change in Yield Metric | -0.3% | a | |
| Estimated Historical Yield floor | 5.1% | b | |
| Yield floor post abatement adjustment | 5.4% | a+b | |
| 10 yr Loss of Development Estimate | 29% | | |
| | | | |
| Job Loss | **872** | Annual full time equivalent jobs | |

## 30 yr. Crossover Analysis(Cumulative RE Tax Only) ($Millions)



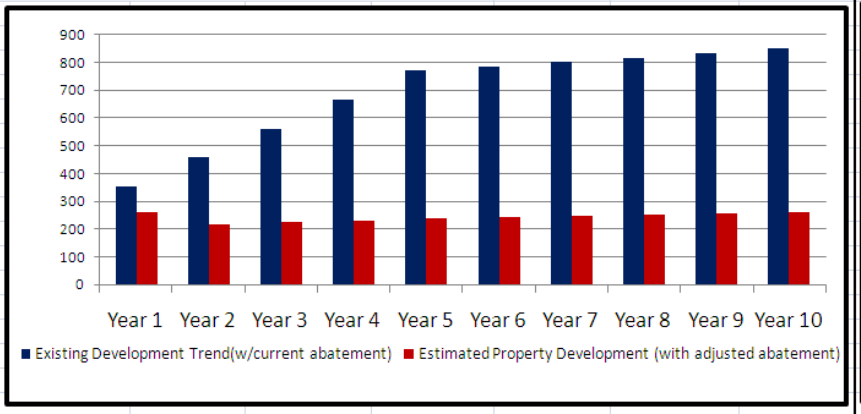
### 4.4 Eliminating the Abatement Completely

- In this case we simulate the effects of having 0% of the abatement not in place over the past economic cycle. The data suggests that the projected future development volume loss implied from the historical pricing tolerances for this market, would be in the range of 60% to 70%
- Quadrant 3 shows us that the short term gains from reducing the abatement are outweighed by the long term benefits of a broader tax base within 3 years after the existing abatement expires.[20](See solid red and blue line crossover point)
- The long term benefits to the school district outweigh the short term gains within 6 years after the abatement expires. (See dotted red and blue line cross over point)
- We estimate that the loss of development will result in a loss of construction employment in Philadelphia of roughly 1,900 - 2,100 direct construction jobs.

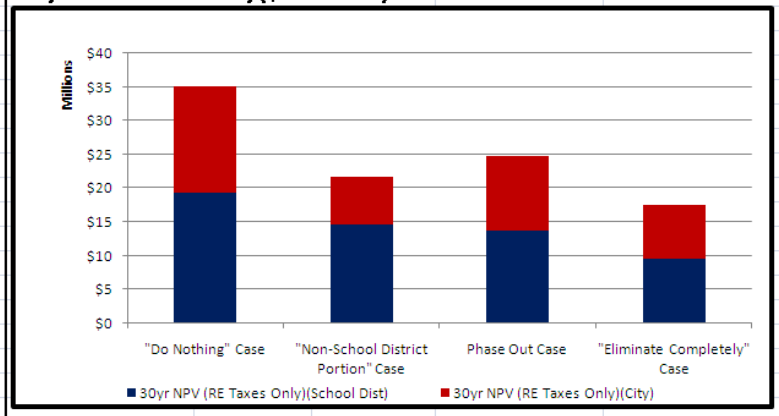
[20] For conservatism, this does not include land taxes paid during the abatement period.

"Eliminate Completely" Case

## 10 Yr Projected Development Volume

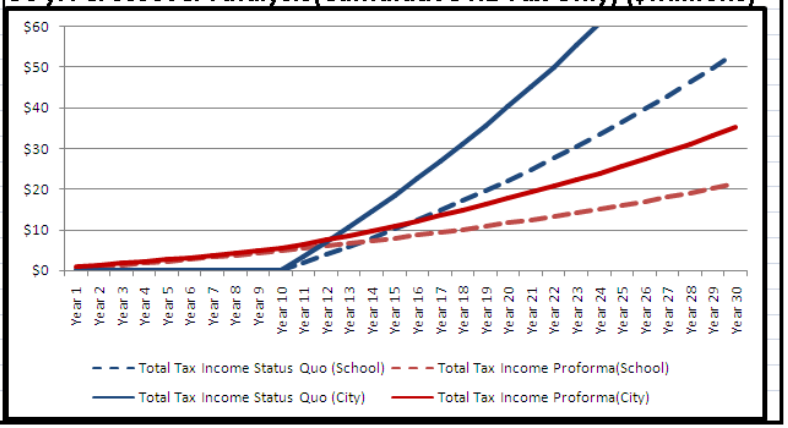



## 30 yr Case Summary($Millions)




| | | | |
|---|---|---|---|
| % of RE taxes abated | 0% | *toggle* | |
| | | *toggle* | |
| NPV of abated taxes | $0.0 | psf | |
| Interest rate change | 0% | | |
| Interest rate change psf | $0.0 | psf | |
| Total impact psf | $0.0 | psf | Case Selector |
| | | | 3 |
| Status Quo Philadelphia Yield Metric | 7.0% | | "Phase out" 1 = yes |
| Effective Yield Post Subsidy Adjustment | 6.0% | | 0 |
| Effective Change in Yield Metric | -1.0% | a | |
| Estimated Historical Yield floor | 5.1% | b | |
| Yield floor post abatement adjustment | 6.1% | a+b | |
| 10 yr Loss of Development Estimate | 65% | | |
| | | | |
| Job Loss | 1,928 | Annual full time equivalent jobs | |

## 30 yr. Crossover Analysis(Cumulative RE Tax Only) ($Millions)



## Crossover Analysis Data Tables

| "Do Nothing" Case | | | | |
|---|---|---|---|---|
| Year | Total Tax Income Status Quo (School) | Total Tax Income Proforma(School) | Total Tax Income Status Quo (City) | Total Tax Income Proforma(City) |
| 1 | $0 | $0 | $0 | $0 |
| 2 | $0 | $0 | $0 | $0 |
| 3 | $0 | $0 | $0 | $0 |
| 4 | $0 | $0 | $0 | $0 |
| 5 | $0 | $0 | $0 | $0 |
| 6 | $0 | $0 | $0 | $0 |
| 7 | $0 | $0 | $0 | $0 |
| 8 | $0 | $0 | $0 | $0 |
| 9 | $0 | $0 | $0 | $0 |
| 10 | $0 | $0 | $0 | $0 |
| 11 | $1,885,172 | $1,885,172 | $3,427,586 | $3,427,586 |
| 12 | $3,836,891 | $3,836,891 | $6,976,166 | $6,976,166 |
| 13 | $5,857,506 | $5,857,506 | $10,650,011 | $10,650,011 |
| 14 | $7,949,448 | $7,949,448 | $14,453,542 | $14,453,542 |
| 15 | $10,115,236 | $10,115,236 | $18,391,338 | $18,391,338 |
| 16 | $12,357,476 | $12,357,476 | $22,468,138 | $22,468,138 |
| 17 | $14,678,867 | $14,678,867 | $26,688,850 | $26,688,850 |
| 18 | $17,082,204 | $17,082,204 | $31,058,552 | $31,058,552 |
| 19 | $19,570,378 | $19,570,378 | $35,582,505 | $35,582,505 |
| 20 | $22,146,384 | $22,146,384 | $40,266,153 | $40,266,153 |
| 21 | $24,813,324 | $24,813,324 | $45,115,135 | $45,115,135 |
| 22 | $27,574,407 | $27,574,407 | $50,135,285 | $50,135,285 |
| 23 | $30,432,956 | $30,432,956 | $55,332,646 | $55,332,646 |
| 24 | $33,392,411 | $33,392,411 | $60,713,475 | $60,713,475 |
| 25 | $36,456,336 | $36,456,336 | $66,284,247 | $66,284,247 |
| 26 | $39,628,417 | $39,628,417 | $72,051,666 | $72,051,666 |
| 27 | $42,912,472 | $42,912,472 | $78,022,676 | $78,022,676 |
| 28 | $46,312,455 | $46,312,455 | $84,204,463 | $84,204,463 |
| 29 | $49,832,457 | $49,832,457 | $90,604,466 | $90,604,466 |
| 30 | $53,476,715 | $53,476,715 | $97,230,390 | $97,230,390 |

| "Non-School District Portion" Case | | | | |
|---|---|---|---|---|
| Year | Total Tax Income Status Quo (School) | Total Tax Income Proforma(School) | Total Tax Income Status Quo (City) | Total Tax Income Proforma(City) |
| 1 | $0 | $560,958 | $0 | $560,958 |
| 2 | $0 | $1,167,482 | $0 | $1,167,482 |
| 3 | $0 | $1,846,335 | $0 | $1,846,335 |
| 4 | $0 | $2,592,991 | $0 | $2,592,991 |
| 5 | $0 | $3,404,289 | $0 | $3,404,289 |
| 6 | $0 | $4,235,169 | $0 | $4,235,169 |
| 7 | $0 | $5,086,102 | $0 | $5,086,102 |
| 8 | $0 | $5,957,572 | $0 | $5,957,572 |
| 9 | $0 | $6,850,075 | $0 | $6,850,075 |
| 10 | $0 | $7,764,119 | $0 | $7,764,119 |
| 11 | $1,885,172 | $8,700,223 | $3,427,586 | $9,466,126 |
| 12 | $3,836,891 | $9,658,920 | $6,976,166 | $11,209,212 |
| 13 | $5,857,506 | $10,640,755 | $10,650,011 | $12,994,366 |
| 14 | $7,949,448 | $11,646,287 | $14,453,542 | $14,822,606 |
| 15 | $10,115,236 | $12,676,087 | $18,391,338 | $16,694,970 |
| 16 | $12,357,476 | $13,730,741 | $22,468,138 | $18,612,524 |
| 17 | $14,678,867 | $14,810,850 | $26,688,850 | $20,576,357 |
| 18 | $17,082,204 | $15,917,027 | $31,058,552 | $22,587,588 |
| 19 | $19,570,378 | $17,049,901 | $35,582,505 | $24,647,360 |
| 20 | $22,146,384 | $18,210,118 | $40,266,153 | $26,756,844 |
| 21 | $24,813,324 | $19,398,336 | $45,115,135 | $28,917,241 |
| 22 | $27,574,407 | $20,615,232 | $50,135,285 | $31,129,779 |
| 23 | $30,432,956 | $21,861,498 | $55,332,646 | $33,395,717 |
| 24 | $33,392,411 | $23,137,842 | $60,713,475 | $35,716,343 |
| 25 | $36,456,336 | $24,444,991 | $66,284,247 | $38,092,977 |
| 26 | $39,628,417 | $25,783,688 | $72,051,666 | $40,526,972 |
| 27 | $42,912,472 | $27,154,694 | $78,022,676 | $43,019,711 |
| 28 | $46,312,455 | $28,558,790 | $84,204,463 | $45,572,612 |
| 29 | $49,832,457 | $29,996,774 | $90,604,466 | $48,187,127 |
| 30 | $53,476,715 | $31,469,463 | $97,230,390 | $50,864,744 |

| Phase Out Case | | | | |
|---|---|---|---|---|
| Year | Total Tax Income Status Quo (School) | Total Tax Income Proforma(School) | Total Tax Income Status Quo (City) | Total Tax Income Proforma(City) |
| 1 | $0 | $0 | $0 | $0 |
| 2 | $0 | $0 | $0 | $0 |
| 3 | $0 | $0 | $0 | $0 |
| 4 | $0 | $0 | $0 | $0 |
| 5 | $0 | $0 | $0 | $0 |
| 6 | $0 | $214,842 | $0 | $390,621 |
| 7 | $0 | $656,204 | $0 | $1,017,319 |
| 8 | $0 | $1,336,242 | $0 | $1,892,637 |
| 9 | $0 | $2,267,604 | $0 | $3,029,627 |
| 10 | $0 | $3,463,449 | $0 | $4,441,867 |
| 11 | $1,885,172 | $4,688,156 | $3,427,586 | $6,668,607 |
| 12 | $3,836,891 | $5,942,421 | $6,976,166 | $8,949,089 |
| 13 | $5,857,506 | $7,226,957 | $10,650,011 | $11,284,611 |
| 14 | $7,949,448 | $8,542,497 | $14,453,542 | $13,676,500 |
| 15 | $10,115,236 | $9,889,786 | $18,391,338 | $16,126,117 |
| 16 | $12,357,476 | $11,269,593 | $22,468,138 | $18,634,857 |
| 17 | $14,678,867 | $12,682,701 | $26,688,850 | $21,204,144 |
| 18 | $17,082,204 | $14,129,914 | $31,058,552 | $23,835,441 |
| 19 | $19,570,378 | $15,612,056 | $35,582,505 | $26,530,245 |
| 20 | $22,146,384 | $17,129,970 | $40,266,153 | $29,290,088 |
| 21 | $24,813,324 | $18,684,518 | $45,115,135 | $32,116,539 |
| 22 | $27,574,407 | $20,276,585 | $50,135,285 | $35,011,207 |
| 23 | $30,432,956 | $21,907,077 | $55,332,646 | $37,975,738 |
| 24 | $33,392,411 | $23,576,921 | $60,713,475 | $41,011,817 |
| 25 | $36,456,336 | $25,287,067 | $66,284,247 | $44,121,173 |
| 26 | $39,628,417 | $27,038,486 | $72,051,666 | $47,305,572 |
| 27 | $42,912,472 | $28,832,177 | $78,022,676 | $50,566,828 |
| 28 | $46,312,455 | $30,669,158 | $84,204,463 | $53,906,793 |
| 29 | $49,832,457 | $32,550,474 | $90,604,466 | $57,327,369 |
| 30 | $53,476,715 | $34,477,197 | $97,230,390 | $60,830,500 |

| "Eliminate Completely" Case | | | | |
|---|---|---|---|---|
| Year | Total Tax Income Status Quo (School) | Total Tax Income Proforma(School) | Total Tax Income Status Quo (City) | Total Tax Income Proforma(City) |
| 1 | $0 | $486,657 | $0 | $884,832 |
| 2 | $0 | $897,742 | $0 | $1,234,085 |
| 3 | $0 | $1,327,511 | $0 | $1,679,140 |
| 4 | $0 | $1,776,813 | $0 | $2,144,424 |
| 5 | $0 | $2,246,536 | $0 | $2,630,854 |
| 6 | $0 | $2,732,839 | $0 | $3,130,724 |
| 7 | $0 | $3,236,310 | $0 | $3,648,240 |
| 8 | $0 | $3,757,553 | $0 | $4,184,024 |
| 9 | $0 | $4,297,195 | $0 | $4,738,721 |
| 10 | $0 | $4,855,887 | $0 | $5,312,999 |
| 11 | $1,885,172 | $5,434,301 | $3,427,586 | $6,364,661 |
| 12 | $3,836,891 | $6,033,133 | $6,976,166 | $7,453,446 |
| 13 | $5,857,506 | $6,653,104 | $10,650,011 | $8,580,665 |
| 14 | $7,949,448 | $7,294,959 | $14,453,542 | $9,747,676 |
| 15 | $10,115,236 | $7,959,473 | $18,391,338 | $10,955,881 |
| 16 | $12,357,476 | $8,647,443 | $22,468,138 | $12,206,737 |
| 17 | $14,678,867 | $9,359,699 | $26,688,850 | $13,501,747 |
| 18 | $17,082,204 | $10,097,097 | $31,058,552 | $14,842,472 |
| 19 | $19,570,378 | $10,860,526 | $35,582,505 | $16,230,524 |
| 20 | $22,146,384 | $11,650,904 | $40,266,153 | $17,667,574 |
| 21 | $24,813,324 | $12,469,181 | $45,115,135 | $19,155,352 |
| 22 | $27,574,407 | $13,316,345 | $50,135,285 | $20,695,649 |
| 23 | $30,432,956 | $14,193,413 | $55,332,646 | $22,290,318 |
| 24 | $33,392,411 | $15,101,441 | $60,713,475 | $23,941,279 |
| 25 | $36,456,336 | $16,041,523 | $66,284,247 | $25,650,519 |
| 26 | $39,628,417 | $17,014,790 | $72,051,666 | $27,420,095 |
| 27 | $42,912,472 | $18,022,413 | $78,022,676 | $29,252,137 |
| 28 | $46,312,455 | $19,065,605 | $84,204,463 | $31,148,850 |
| 29 | $49,832,457 | $20,145,622 | $90,604,466 | $33,112,517 |
| 30 | $53,476,715 | $21,263,764 | $97,230,390 | $35,145,502 |

**Commercial Property Summary Annual Development Volume Graph**