

July 29, 2015

To Whom it May Concern:

The attached document, titled "Report on Brooklyn Bridge Park's Financial Model," was prepared by Barbara Byrne Denham in July 2015, to provide an independent third-party objective review of Brooklyn Bridge Park's (BBP's) long term financial model. BBP operates under a long-standing mandate to be financially self-sufficient, generating revenues from a limited number of development sites to cover the costs of maintaining and operating the park. In order to ensure that projected revenues meet projected expenses over the life of the Park, BBP staff has created a long-term financial model and presents updates to this model from time to time. The most recent update, from July 2015 can be seen here.

Ms. Denham is a well-respected economist with specialties in regional economic issues, real estate valuations and quantitative analytics. She is currently an economist with REIS, the industry leader on providing real estate economics analyses and market data. Previously, she was the chief economist at both Eastern Consolidated and Jones Lang LaSalle, two of the most active real estate brokerage and investment firms in New York City. Her previously published reports have been widely cited in publications including the New York Times, Wall Street Journal, Crains New York, and a host of other real estate publications.

This report presents the independent findings of a months-long analysis conducted by Ms. Denham. It does not represent the opinions of the BBP Board of Directors or staff. Indeed, there are sections of this report that are critical of the BBP model's assumptions. However, we do note that the report's findings correspond to BBP staff's conclusions in several significant ways:

- 1) The economic assumptions are reasonable and, in some cases may be too optimistic;
- 2) The model projects well into the future, which inevitably involves considerable risk. Accordingly, its projections of necessary reserve levels are appropriate;
- 3) BBP will not be able to fulfill its mandate to be financially self-sufficient without the projected revenue from the proposed development on Pier 6;
- 4) BBP borrowing for maritime maintenance and electing to never develop Pier 6 would increase the likelihood of bankrupting the Park.

Sincerely,

Regina Myer President

Brooklyn Bridge Park

Reginallyer



REPORT ON BROOKLYN BRIDGE PARK'S FINANCIAL MODEL

Introduction

Brooklyn Bridge Park Corporation (BBP) is a public entity responsible for the planning, construction, maintenance and operation of Brooklyn Bridge Park (The Park). BBP operates under a mandate outlined in its 2002 Memorandum of Understanding between New York City and New York State and further defined by the General Project Plan adopted by the Brooklyn Bridge Park Development Corporation and its parent, Empire State Development, to be financially self-sustaining. All costs to maintain and operate the Park must be covered by revenues generated within the borders described in the General Project Plan. Several development sites for residential and commercial activities are designated within that plan to generate the necessary revenues.

To guide its fiscal management of the Park, BBP has developed an in-depth, fifty-year financial model. The model includes detailed revenue and expense projections for the Park as well as projected reserve funds for capital maintenance costs, Park operations and capital expenditures associated with future maritime repairs. The objective of the model is to help BBP monitor its finances as it manages the Park over the next five decades and ensure that it adheres to its mandate of maintaining self-sufficiency.

Given the complexity of this model, members of the community, the BBP Board of Directors, and local elected officials have asked that a third party review the analysis and provide research support for the model. As the consultant chosen for that task I was asked to identify and research all of the risk factors that the Park faces, vet the model's assumptions, evaluate the financial projections and test the model under various scenarios given the myriad of risk factors identified.

After completing my research and analysis, I am providing the following report listing my findings. This report is outlined as follows:

- I. Executive Findings
- II. Approach and Methodology
- III. Risk Factors
- IV. Scenarios and Sensitivity Analysis
- V. Conclusion
- VI. Appendices

I. Executive Findings

- 1. BBP is tasked with the mandate of operating Brooklyn Bridge Park under the provision that it stay financially self-sufficient over the long term. Because it is not possible to predict the timing and magnitude of business cycles over a long period of time, a prudent financial model must build in protections to ensure there are sufficient funds to survive the low points and remain solvent. Given the myriad of risk factors it faces (outlined herein) including an unpredictable real estate market from which it derives nearly all of its revenue, BBP has sought to ground its revenue and expense projections in sound, conservative assumptions.
 - a. BBP's financial model (The model) accounts specifically and in detail for all known revenue and expense considerations associated with Brooklyn Bridge Park.
 - b. The model maintains a balanced revenue and expense growth assumption of 3.0% which is within the parameters of historic economic conditions yet oversimplifies the past erratic history of Brooklyn's economy and real estate market.
 - c. BBP's market assumptions on residential PILOT revenues are grounded in current assessment data provided by the NYC Department of Finance.
 - d. The model includes comprehensive capital maintenance expense projections based on detailed and carefully researched estimates of the "useful lives" of its vast pool of capital assets as well as projections of 3.0% inflation per annum.
 - e. The model includes current capital costs associated with the maritime needs for fortifying the piles and seawall. These estimates were provided by engineering firm, CH2M Hill, which is the consultant that has been studying the piles and structures over the last few years.
 - f. The model includes (1) an expense reserve of one year's total operating expenses, (2) a capital reserve that approaches 1.3% of the total capital asset value of BBP, as well as (3) a maritime reserve; all of which protect it from the volatility of market forces that can create sharp imbalances between revenues and expenses.
 - g. The model includes interest revenue earned on its accumulated reserves at a rate of 1.0% which is above the current rate but in line with the ten year average rate on one-year U.S. Treasury Bills.
 - 2. BBP faces a number of risk factors that include but are not limited to a persistently volatile economy and real estate market, inconsistent property value assessments by the New York City Department of Finance and potentially higher maritime costs that represent its largest cost component.
 - 3. A stress test of the model's assumptions shows that BBP would run a deep negative cash balance under all low-to-high risk scenarios without the proposed upfront long-term lease payment for Pier 6 as well as the annual recurring revenue that Pier 6 is expected to generate. Whether it opts for the preventative maintenance maritime plan or the traditional maritime plan, the funds from the other revenue-generating sources will not cover projected expenses even under the most optimistic, low-risk scenario.
 - 4. The baseline model including funds from Pier 6 development shows BBP maintaining a positive cash balance in most years which will provide it with an ample cash cushion or reserve that it will need in

- future years should worsening economic conditions yield lower revenues for the Park and/or should expenses climb higher than the model assumes.
- 5. Given the Park's complex cost structure that includes steep maritime expenses, as well as the challenges associated with *forecasting economic conditions over a fifty year horizon in a borough and city that has endured higher than average market vicissitudes*, BBP's conservative approach to managing its finances is not only appropriate but necessary given the high level of risk that it faces.

The enclosed report includes (1) a thorough review of the model, (2) macro- as well as micro-level research on the risk factors that BBP faces, (3) a series of stress tests of the model's assumptions, and (4) based on the foregoing, a clear conclusion.

II. Approach and Methodology

As the consultant, I thoroughly reviewed the financial model, researched a number of issues that underlie the model and vetted every assumption on revenues, expenses, capital and maritime costs in order to verify the integrity of the model and to consider the risks associated with the financial management of the Park. My findings listed above show that BBP has carefully and appropriately modeled the finances associated with BBP.

The methodology for testing the model included the following:

- Re-calculating the PILOT payments for each development site, tweaking the assumptions to show how sensitive revenues would be if PILOTs were assessed at different rates.
- Comparing PILOT revenues with current property tax data assessed at neighboring properties.
- Verifying sources for all expenses including staffing and capital replacement costs.
- Conference calls with the maritime engineer to understand the difference between the traditional maritime and preventative maintenance costs as well as the benefits of each program.
- Other independent research on maritime management, property taxes, other New York City park finances, hotel development and more. See appendices for supporting research analytics.

With this research, I created a series of alternative scenarios to show how vulnerable the model is to both market forces that could generate higher or lower revenues and/or costs, as well as the highly uncertain maritime costs that BBP faces in either the traditional maritime program or preventative maintenance program.

Finally, with the research I undertook for the model that included the testing of assumptions listed above as well as a thorough analysis of Brooklyn's macroeconomic history and real estate market, I derived a final set of assumptions that I believe are the most appropriate given the risk factors that BBP faces.

III. Model Assumption Overview

Revenues

The financial model includes projected revenue data on five assets and other revenue streams:

- 1. **Pier 1** development sites 348,120 square feet of residential, 68,000 square feet of hotel with an additional 25,500 square feet of parking at the hotel. One-time revenues include payment in lieu of sales taxes (PILOST), payment in lieu of mortgage recording taxes (PILOMRT) and an upfront rent payment; recurring revenues include ground rent and payment in lieu of taxes (PILOT).
- 2. **John Street** development site -- 108,000 square feet of residential development. One-time revenues include PILOST, PILOMRT, an upfront rent payment and upfront participation rent payment; recurring revenues include ground rent, PILOT and participation rents.
- 3. **Empire Stores** development site 237,523 square feet of office and 106,261 square feet of retail. West Elm has already signed an office lease for half the space as well as a large retail lease. Other retail leases include Shinola. One-time revenues include PILOST, PILOMRT and an upfront rent payment; recurring revenues include ground rent and PILOT.
- 4. **One Brooklyn Bridge Park** -- 851,853 square feet of residential, 84,134 square feet of retail and 115,684 square feet of garage. Recurring revenues include ground rent and PILOT.
- 5. **Pier 6 development site** 258,906 square feet of residential including affordable housing units, 5,000 square feet of retail and 36 parking spaces. One-time revenues include PILOST, PILOMRT and an upfront rent payment; recurring revenues include ground rent and PILOT.
- 6. **Ancillary revenues** from concessions (food carts and restaurants), permits for events and fees from parking and marina rents.

As to the model's assumptions on PILOTs: an analysis of comparable nearby residential buildings shows how inconsistently the Department of Finance assesses properties. Given the lack of reliability of DOF assessments, BBP's residential PILOT revenues may not grow in line with market conditions [see Risk Factor III].

As to the model's interest rate assumption: the current one-year T-bill rate has averaged 0.1% to 0.25% over the last five years, but it has averaged 2.6% over the last twenty years. The BBP model currently assumes a 1.0% interest rate that is moderately conservative and below the twenty-year average.

The model's market assumptions on commercial PILOT at Empire Stores development site as well as the hotel PILOT at Pier 1 are grounded in somewhat optimistic assumptions on the sites' potential market values. Both commercial properties face growing competition from development in the broader area [See Section V: Sensitivity Analysis Scenario IV].

Operating and Maintenance Expenses

The model carefully and reasonably projects operating and maintenance expenses based on current expenses associated with staff, contractors, landscaping, technology, etc.

Capital Expenses

The model carefully and reasonably projects capital maintenance costs associated with 187 asset classes of capital equipment from benches and light poles to maintenance buildings, ball fields and vehicles. The capital expense projections and useful lives of each piece of equipment were determined by the BBP staff

operations team under the guidance of Gardiner and Theobald, BBP's construction consultants. The firm's cost management department together with the BBP operations department made the estimates based on warranties, current conditions of the assets and initial installation costs.

Maritime Expenses

Finally, the model includes projections of maintenance and structural repair costs for 13,400 pilings under several piers with pier extensions. These expenditures¹ are needed to restore the piles that have decayed over fifty years due to shipworms, or marine borers, eating away at the timber.

After careful consideration, BBP prefers to pay for expected maritime repairs using a preventative maintenance approach (PM). This approach essentially uses epoxy as a sealant to prevent shipworms (often referred to as marine-based termites) from eating into the wood. It also cuts off the oxygen supply that the preexisting shipworms need to thrive, thus preventing them from growing any bigger and/or displacing more interior timber.

The PM program is preferred over the "traditional" maritime replacement plan that uses poured concrete to fortify the piles. Specifically, the PM would pay for preventatively maintaining most of the piles that are not structurally damaged starting in 2016. Those that are damaged would need to be repaired using the traditional concrete fortification process, and these would be repaired over a series of years until 2055 such that the majority would be treated by 2034.

The estimated costs of these repairs are included in the model but actual costs may be higher. The engineering firm has already raised its per-linear-foot estimate for structural repairs by a factor of 26% (\$1,100 per foot in 2015, up from \$876.40 in 2012).

Conclusion

As stated above, all of the above assumptions in the model were carefully reviewed, vetted and/or recalculated. After considerable research, I have determined that the assumptions underlying BBP's model are grounded in reliable data and/or thorough analysis. The only assumptions I questioned were those pertaining to the PILOT projections at Empire Stores and the hotel at Pier 1. I believe these assumptions overestimate the likely PILOT revenues that the properties will generate due to increased competition as well as limited subway access to the properties.

¹ The engineers walked me through the preventative maintenance program explaining every step of the process and the benefits and costs to each. Moreover, I independently researched the issues related to maritime engineering; in particular, how marine borers called shipworms have eaten away at the core of the timber pilings like termites destroy wood. Only a handful of engineering firms are engaged in this business, and the few that are have a number of projects under contract.

IV. Risk Factors

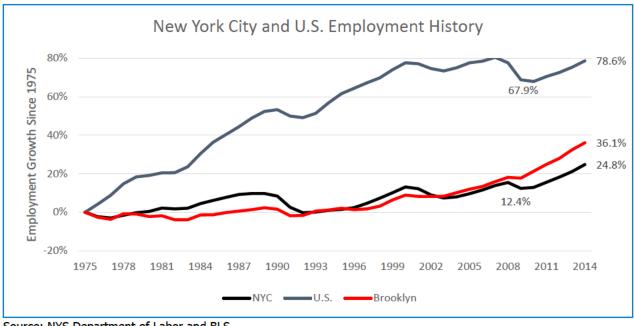
As stated above, given the unique challenge of forecasting market conditions over a fifty-year horizon, I sought to identify the numerous risk factors that BBP faces in planning for the future. This section addresses each of these risk factors in detail.

One of the primary assumptions of this financial model is the underlying annual growth rate of 3.0%. While this rate seems reasonably in line with recent growth in Brooklyn and the surrounding economy, a brief look at historic national, New York City and Brooklyn economic statistics shows that the 3.0% growth assumption far oversimplifies the volatile economic past and can only approximate the unpredictable future. Not only have recent real estate market fluctuations demonstrated that growth in property values is anything but a sure thing, but the macro-level analysis provided below shows why a waterfront investment in Brooklyn's real estate market requires far more conservative assumptions than that of a comparable investment elsewhere.

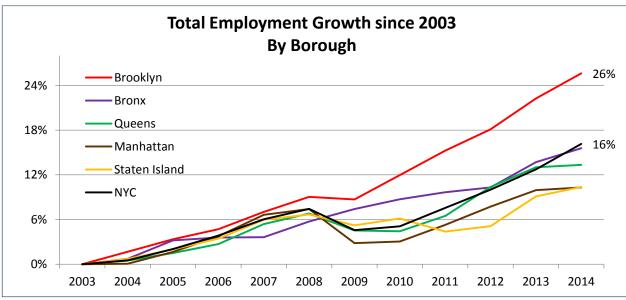
Risk Factor I: The Economic History for New York City and Brooklyn has been more volatile than that of the U.S. The prospect for growth is limited by competing forces in Manhattan as well as limited subway access.

New York City has had a very volatile economy over the last 40 years, losing as many jobs during recessions as it added in prior expansions. The chart below shows the stark difference between New York's economy and the U.S. economy. That is, the U.S. grew steadily over the last 40 years; in contrast, New York City has only netted 25% more jobs than it had 40 years ago for an average annual growth rate of less than 1.0%. The U.S. average annual growth rate is close to 2.0%.

The chart also shows Brooklyn's contribution to New York City's economy. From 1975 through 1995 Brooklyn recorded almost no net growth. Since then, however, it has added jobs at a much higher rate than the rest of New York City.



Source: NYS Department of Labor and BLS



In fact, since 2003 Brooklyn has added jobs at a much higher pace than the other boroughs.

Source: NYS Department of Labor

While this is not a surprise to many who have been living Brooklyn's renaissance for more than ten years, it should be noted that Brooklyn and most of New York City's growth has been largely driven by four industries: health services, private education, retail and restaurants.

The table below shows how these four industries added the lion's share of the jobs since 2008.

| | | | | | | Staten | |
|-----------------------------------------|--------|---------|----------|-----------|---------|--------|-----------|
| | | Bronx | Brooklyn | Manhattan | Queens | Island | Sum |
| Employment in Health, | 2002 | 113,118 | 215,067 | 487,439 | 174,351 | 47,144 | 1,037,119 |
| Education, Retail and | 2014 | 152,524 | 309,083 | 658,864 | 240,003 | 54,915 | 1,415,388 |
| Restaurants | Growth | 39,406 | 94,016 | 171,425 | 65,652 | 7,771 | 378,269 |
| Total Employment 2002 | | 211,448 | 438,727 | 2,365,004 | 477,213 | 87,607 | 3,580,000 |
| Total Employment 2014 | | 247,354 | 552,142 | 2,440,504 | 534,587 | 96,868 | 3,871,455 |
| Growth | | 35,906 | 113,415 | 75,500 | 57,374 | 9,261 | 291,455 |
| Health, Educ. Retail, Restaurant growth | | | | | | | |
| as a % of Total | | 110% | 83% | 227% | 114% | 84% | 130% |

Source: NYS Department of Labor

While the growth in these four industries was driven by the fact that Brooklyn was long underserved by retailers, restaurants and health care providers, these industries largely serve the growing residential base of Brooklyn [See Appendix A for further charts]. In order for Brooklyn's economy to truly expand its commercial base it needs to add jobs that serve the "export" sector; that is, jobs whose clientele is not necessarily Brooklyn based. Export industries include professional business services (law, accounting, advertising), finance, film and broadcasting.

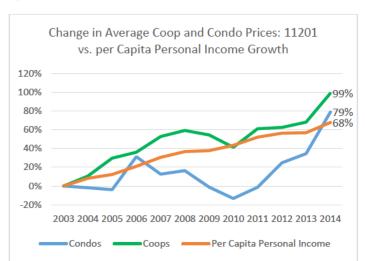
Indeed, planners had hoped that Brooklyn would spur more of the professional services, finance and creative sector jobs during the recent renaissance. Brooklyn added a respectable 17,000² professional services jobs from 2000 to 2014, for a growth rate of 55%. This, however, represents only 20% of the added professional services jobs City wide. In other words, despite the high-profile expansion of Steiner Studios at the Brooklyn Navy Yard and Vice Media's large lease on Kent Avenue, the impact has yet to significantly show in the jobs numbers.

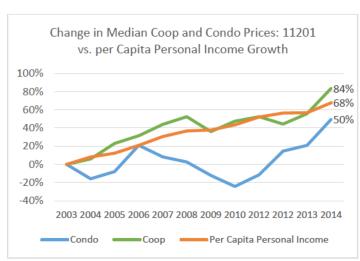
In short, Brooklyn is a thriving commuter base for Manhattan. Future job growth will likely be further driven by the consumer-driven industries (retail, restaurants and real estate). Recent employment data suggests that Brooklyn's potential for office growth is modest. Given its limited subway access, Brooklyn is not viewed as an office market. Moreover, it will always be overshadowed by Manhattan, especially Lower Manhattan. Brooklyn's office market has seen growth when Manhattan rents have spiked in the past, but with new office construction in Lower Manhattan and Hudson Yards adding 13.4 million square feet to the overall supply, Manhattan office rents are not likely to accelerate in the next decade or so.

Risk Factor II: Brooklyn's Residential Real Estate Market has fluctuated at a rate that far exceeds New York City and the U.S.

Condominium and Cooperative Prices Have Been Volatile.

Brooklyn's residential real estate market has soared in recent years after emerging from the real estate recession in 2008-2010. The chart below showing average and median condominium and coop prices for zip code 11201 not only shows how rapidly prices increased but how volatile they have been in the last 12 years.





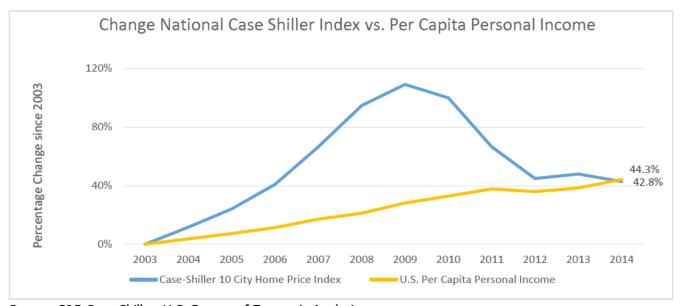
Source: NYC Department of Finance, U.S. Bureau of Economic Analysis

The charts above show how average condominium and coop prices have risen 80% and 100%, respectively, from 2003 to 2014, an overall pace that exceeded the growth in per capita personal income by a considerable margin. The right chart shows the median prices for the same data set. While median

² Of these, 2,800 (16.5%) were real estate jobs that likely serve the residential base. Brooklyn added less than 1,000 finance-related jobs in the last 14 years. The Information sector that includes film, television, telecommunications and publishing has not added any net new jobs since 2000. It had lost as many as 2,000 jobs from 2000 to 2006 (mostly in telecommunications) and has since added back nearly as much (more than half of which were in film).

prices did not climb as high in 2014, the charts both clearly show how volatile real estate prices have been in Brooklyn.

In contrast a chart showing the Case-Shiller national housing index with the growth in national per capita personal income shows that the national market has "corrected" and the price of housing is in line with the per capita personal income. The fact that Brooklyn's prices have climbed at a more rapid rate in recent years relative to per-capita personal income suggests that prices in Brooklyn have reached levels that fewer residents can afford and could be pushing the market into a new bubble.

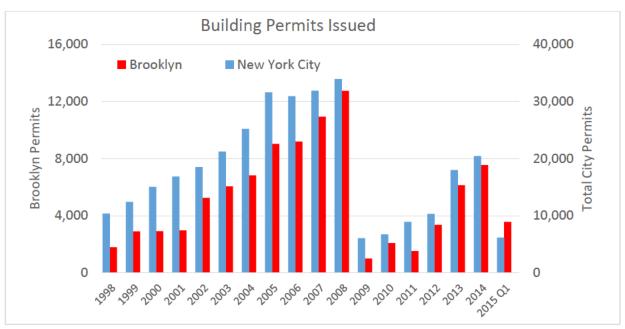


Source: S&P Case-Shiller, U.S. Bureau of Economic Analysis

The Jump in Brooklyn Permits Issued from 2005 through 2008 led to a surge in Stalled Construction Sites.

Further evidence of Brooklyn's erratic real estate market can be found in both the growth in building permits and new construction as well as in the stalled construction site data.

Brooklyn's real estate market started to soar in the late 1990s. Building permits climbed sharply in New York City from 1999 through 2009 and Brooklyn led the charge with as much as 35% of the permits filed. Construction plummeted in 2008 and only started to rebound in the last two years. Current permits issued suggest that the number of units that will be added in 2015 will climb by 22% over the units added in 2014.



Source: U.S. Census and New York City Rent Guidelines Board



Source: U.S. Census and New York City Rent Guidelines Board

While there is generally a lag between the time permits are issued and when new units are added, these two variables should stay in equilibrium in a healthy market. The charts above show how the spike in permits issued was not matched by a spike in new units added. Instead, it led to a jump in stalled construction sites.

These stalled construction sites were a City-wide as well as national phenomenon, but the data from the Department of Buildings shows that *Brooklyn had a disproportionately higher rate of stalled construction sites from 2009 to 2013*. Stalled construction sites create a hazardous environment for neighboring

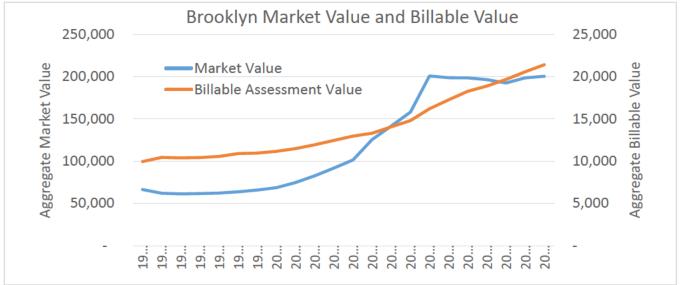
residents. Given the jump in new permits in recent years as well as market values, these stalled sites could re-emerge if the market were to turn.



Source: NYC Department of Buildings

Property Tax Data Shows that Aggregate Market Values Are Still Absorbing the Excess from The 2005-2009 Surge.

Another indicator showing the volatility in Brooklyn's real estate market over the last 15 years is the aggregate property tax data. The tables below show that the total market value for Brooklyn properties saw little change between 1993 and 2000 before starting to grow. Values then doubled from \$100 billion in 2004 to \$200 billion in 2008 and has since not changed even though the supply of properties has grown³.

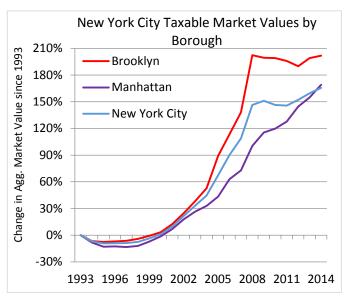


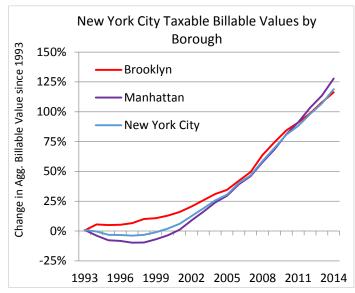
Source: NYC Department of Finance

³ Total market value includes added building inventory as well as market value growth on existing properties. Brooklyn added 32,000 housing units from 2009 through 2014 for a growth rate of 3.3%, yet there was no net aggregate market value change.

Because the Department of Finance is prohibited by law from increasing assessments by more than 6% per year⁴, the billable taxable values increased at a steadier rate. More specifically, Brooklyn's aggregate billable assessed value increased from \$14.8 billion in 2007 to \$21.4 billion in 2014, a 45% increase in seven years.

The charts below comparing Brooklyn's market and billable assessed property values to Manhattan and New York City illustrate how Brooklyn's property values have evolved at a far more volatile rate over the last seven years.





Source: NYC Department of Finance

The statistics shown above for employment, coop/condo sales, construction and market values demonstrate that Brooklyn's economy and real estate market are very unpredictable. While the desirability of living in Brooklyn has increased significantly, and it will probably continue to grow over the next few decades, the charts above show how market values have gotten ahead of the underlying fundamentals in the past which led speculators to overpay for properties only to lose them when the market corrected. Prices have rebounded above the highs seen in 2007 even though personal income has not kept pace. As recent price data has demonstrated, Brooklyn remains vulnerable to market histrionics that pushed many investors into default in 2008 through 2011.

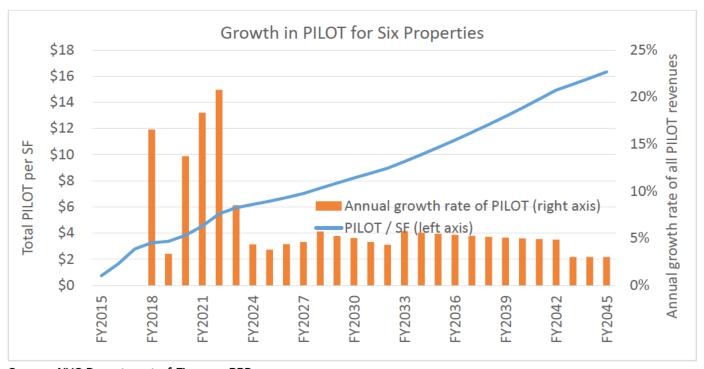
Moreover, Brooklyn is still stymied by its infrastructure and limited access to transportation. Brooklyn Bridge Park neighborhoods such as DUMBO and Brooklyn Heights attract a large crowd of locals and tourists on weekends, but with limited parking and subway access, these neighborhoods will not necessarily get the same daily foot traffic on weekdays that its stores and offices need to thrive.

The erratic market trends conveyed in the charts above confirm why it is necessary for BBP to take a conservative approach to assuming risk and allow for surpluses to grow some years in order to cover deficits in others.

⁴ According to the NYC DOF, the assessed value (AV) cannot increase more than 6 percent each year or more than 20 percent in five years. For Class 2, the AV cannot increase more than 8 percent each year or more than 30 percent in five years.

Risk Factor III: The model's PILOT assumptions are in line with comparable properties which are assessed at inconsistent rates.

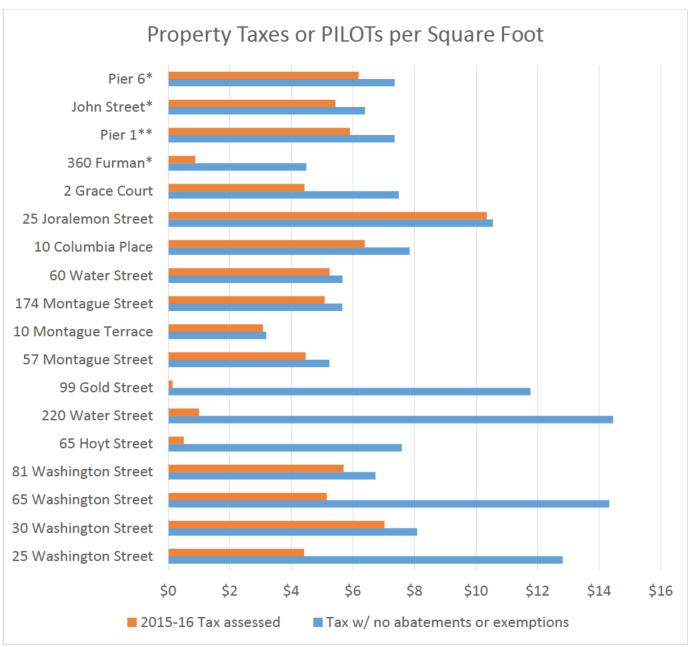
BBP's financial model relies heavily on PILOT payments made by owners on an annual basis. Because of abatements, BBP is not expected to collect much in the way of PILOT in the next two years but then due to periodic expirations of these abatements, the value of the PILOTs accelerate over the next 10 years. As shown in the chart, as more abatements expire, the model shows the PILOTs growing at a rate that averages 5%, then 3% when all abatements have expired. Note in the chart how sharply the steady PILOT growth for the model contrasts with the uneven growth in historic aggregate market values in Brooklyn shown in charts above.



Source: NYC Department of Finance, BBP

The PILOT assumptions are grounded in market value assumptions that are based on comparable property values in Brooklyn. To get a sense of how the expected PILOTs in the model compare to neighboring properties, the property assessment data for a sample of high-end residential buildings was obtained from the New York City Department of Finance records. The chart below highlights both the property taxes that the NYC DOF has assessed for the 2015-2016 fiscal year, net of abatements and exemptions, and what these properties would owe without abatements and exemptions⁵.

⁵ All properties in the sample are Class 2 that are assessed at 45% of market value and are taxed at a 12.855% rate. The unabated tax numbers were determined by multiplying the market value (as determined by NYC DOF) x.45 x .12855.



^{*}As per the model.

Source: BBP, NYC Department of Finance

The chart above not only shows that the PILOTs assumed for the four residential properties are slightly higher than most of the high-end properties in the area, but it clearly illustrates how inconsistently properties are assessed by City Finance officials. That is, all of these properties were selected based on being either newly constructed/converted or having very high sale prices. Yet the range of market values per square foot for this elite set of properties was very broad.

This suggests that the Department of Finance may not assess properties within the Brooklyn Bridge Park Project at the rates assumed in the model which could result in lower revenue for the Park. Indeed the FY

^{**}Pier 1's PILOT does not include the hotel PILOT.

2016 tentative assessment roll for One Brooklyn Bridge Park shows a lower market value than from the FY2014 PILOT bill (\$35.637 million in 2014 to \$35.543 million in 2015).

The analysis above confirms how risky it is to rely on PILOT as a primary revenue source. It also confirms why BBP must allow for a growing cash reserve in order to insure itself not only against market forces but also against unpredictable DOF assessments.

Risk Factor IV: Unforeseen macroeconomic risks can and will impact the model's assumptions.

Exogenous Shocks

The one-year Treasury Bill rate included in the model has averaged less than 0.2% since 2010. However, the 45-year average one-year T-Bill rate is 5.2% and the 20-year average is 2.6%. BBP assumes that any surplus will earn interest at 1.0% which is conservative given the long-term history of interest rates but not unreasonable given the short-term history of one-year rates. Indeed, it seems unlikely that the current economy will emerge from this low-interest-rate environment it has enjoyed these last six years, but to assume otherwise would be imprudent. [See appendix B for interest rate discussion.]

One could argue that the tumultuous period of the 1970s highlighted in Appendix B was driven by the OPEC oil embargo that drove up gas prices and inflation which was only "cured" by interest rate hikes in the early 1980s. This was one of many "exogenous shocks" the economy has faced in the last few decades. An exogenous shock is an economic term that is used to label unmitigated forces stemming from outside the U.S. economy. The 1970s oil crisis would not be as crippling today as it was in the 1970s, but large exogenous shocks are arguably as probable today given the many outstanding geo-political risks the U.S. economy faces. These include the ongoing Greek debt crisis, the sagging economy in China and continued problems in the Middle East. These threats have already pushed the dollar higher, hurt U.S. exports and stalled the recent U.S. recovery.

Other exogenous shocks include tornadoes, storms, droughts, earthquakes, etc. The likelihood of these weather-related significant events has increased considerably given how climate change has been cited for the rise in "superstorms" such as Sandy in 2012. Some would have labeled Sandy the "storm of the century" but most climate experts consider it ever more likely as the planet gets warmer and oceans rise.

Still another exogenous shock that has impacted New York City's economy in recent decades is terrorism. One cannot rule out the terrorism risk faced both by New York City as well as the Brooklyn Bridge Park situated so close to world-renowned landmarks. While it's been 14 years since 9/11, recent ISIS-related events in Texas and Tennessee suggest that the U.S. is still vulnerable.

Endogenous Shocks

An exogenous shock is one caused by a sudden change in a variable outside an aggregate economy, whereas an endogenous shock comes from within the economy. "The big difference between endogenous and exogenous shocks is that an exogenous crisis is unforeseeable while an endogenous one is predictable—even if getting the timing right is very challenging." [Mauldin Economics]. The most common endogenous shock is over-leveraging.

The two most recent economic recessions were largely driven by endogenous shocks. The "dot-com" boom/bust of the late 1990s/early 2000 was a classic example of a market "bubble." The high returns earned on early tech-firm investment fueled significant speculation that was underwritten with debt. When so many of the late 1999 tech companies imploded, the stock market crash and debt crisis that ensued knocked the economy into a recession that lasted for nearly four years. While many would have assumed that underwriters and lenders had learned their lesson, the housing bubble that burst only five years later proved that speculative markets can drive bankers and investors to be very shortsighted.

In short, even the best economists cannot predict when the current business cycle will end and what the impact will be [See Appendix B: The Lesson from Interest Rates]. Real business cycle theory states that the seeds of the next recession are sown in the economic growth that preceded it⁷ which is to say that if the history of one-year T-Bill rates are any indication, the economy will likely not grow steadily at a 3.0% rate per year over the next ten or 50 years. This reaffirms why BBP needs to allow for excess reserves to accumulate in order to account for economic downturns that are inevitable.

Risk Factor V: Maritime Costs could escalate at a rate that far exceeds the model's assumptions.

The preventative maintenance (PM) program calls for treating the piles upfront in order to eliminate repair costs in outer years. This plan that uses epoxy to treat the piles, cutting off oxygen to prevent shipworms from causing any further damage, would be an alternative to the traditional maritime program that uses concrete to structurally reinforce the piles. The PM model has been tested in other maritime restructuring projects including one underway on the FDR Drive.

The benefits of the PM plan over the traditional plan are listed as follows:

- 1. Although epoxy costs more than concrete on a per-cubic-foot basis, the **process requires considerably less epoxy per finished pile** than is required of concrete in the traditional process. That is, the thickness of the restored pile in PM is between 13 and 14 inches in diameter when using epoxy; the traditional restoration creates a piling that is 24 to 30 inches thick⁸.
- 2. According to engineering firm CH2M Hill, the PM program has significantly **lower per-pile** <u>labor</u> **costs which is the biggest driver of costs**. The labor required to apply the epoxy to the piles requires fewer steps or "touch points" with the piles than pouring concrete. It is these touch points that drive labor costs higher.
- 3. A significant upfront PM investment offers **economies of scale** in that the one contract is more cost-effective than doing multiple contracts over a series of years which would be required for structural repairs.

⁶ This naiveté was the subject of a recent (2009) book entitled "This Time is Different: Eight Centuries of Financial Folly" by Kenneth Rogoff and Carmen Reinhart." In the book, Rogoff and Reinart recount a number of examples of both rich and poor countries lending, borrowing, crashing and recovering through a range of different financial crises. Each time, experts claimed, "this time is different-- the old rules of valuation no longer applied," only to see the same market forces respond as macroeconomic theory suggests they would.

According to economist Hyman Minsky, "paradoxically, the longer a period of financial stability, growth, and prosperity, the more likely a debilitating crisis will knock the economy off balance." This quote was aptly cited after the last recession.

⁸ The difference yields a ratio of concrete required per structural repair to epoxy used for preventative maintenance of at least 6:1; that is, 2,370 to 3,556 cubic feet of concrete per piling required vs. 198 to 395 cubic feet of epoxy.

- 4. PM is **better for the environment** because you are adding less bulk material to the river, an issue for which the NYS Department of Environmental Conservation has expressed their concern.
- 5. The PM approach will **lower future risk of cost escalation** because it would complete most of the work earlier, before the piles suffer more deterioration.

Already CH2M Hill has raised the estimated cost for structural repairs by 26% in three years (\$1,100 per foot in 2015, up from \$876.40 in 2012). This suggests that any previous costs associated with diving and/or pier maintenance and repair will have increased on a similar scale. In my judgement, BBP needs to account for higher future maritime costs and a more rapid rate of acceleration of costs in its model.

Conclusion

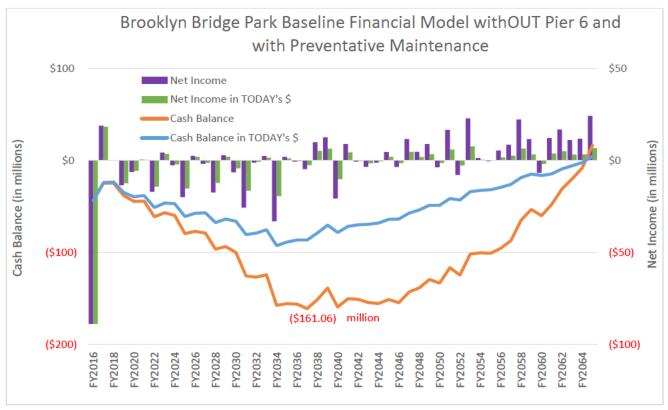
All of the risk factors identified above demonstrate how critical the need is for sound risk management. BBP's approach to managing its risk – maintaining healthy reserves – is not only appropriate but the size of its cash reserve accounts for a potential level of expenses (operating, capital and maritime) that it may need to cover in "bad" years when revenues decline due to a softening economy.

Section V: Scenarios and Sensitivity Analysis

Given the multiple assets, the capital needed to be considered in the BBP model, how much the maritime costs account for the total future costs of BBP, I constructed a series of scenarios that test the models assumptions. These scenarios allow for various changes in the model's assumptions to show how much net income would be earned and accumulated under the different scenarios.

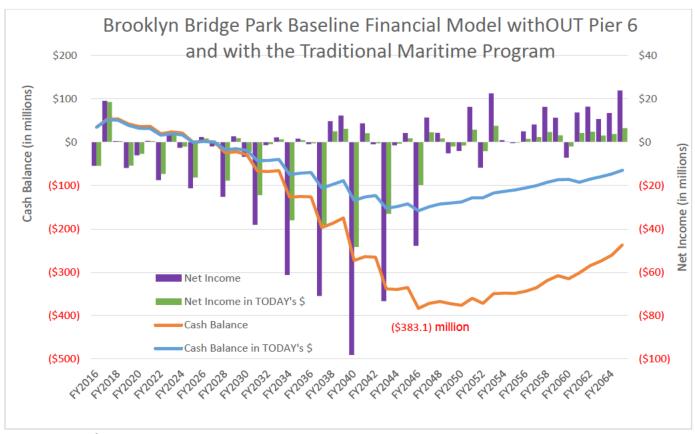
Baseline Model WITHOUT Pier 6

The current cash reserves of approximately \$45 million are not sufficient to cover the significant upfront Preventative Maintenance (PM) program. While net income is positive most years under this scenario the cash balance falls as low as negative \$161.1 million before climbing out of the red in 47 years.



Source: BBP and BBD

Assuming that BBP opts instead to follow the traditional maritime program, the current model assumptions yield higher future expenses that will not be covered by future revenues as shown in the baseline chart below. BBP would start to run a negative cash balance as early as 2025 and it will accumulate a deeper negative balance that approaches (negative \$383 million) before climbing back towards \$0.

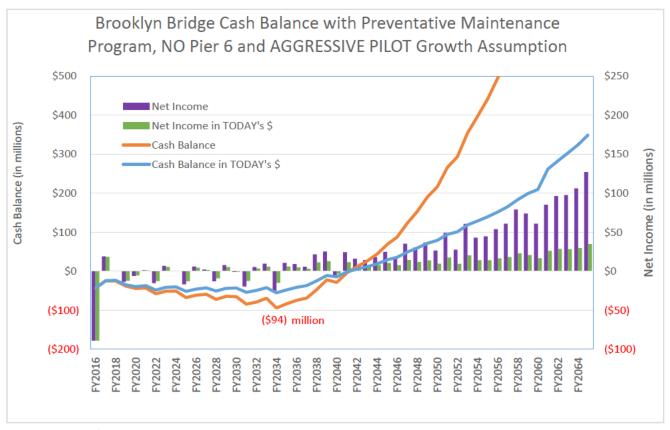


Source: BBP and BBD

In short, without Pier 6, BBP will run a negative cash balance. Regardless of the maritime plan they choose, the expected revenue stream from existing sources will not cover the Park's operating, capital and maritime costs.

Scenario I — PILOTs and Ancillary Revenues Grow at a 25% higher rate than the Model Assumes

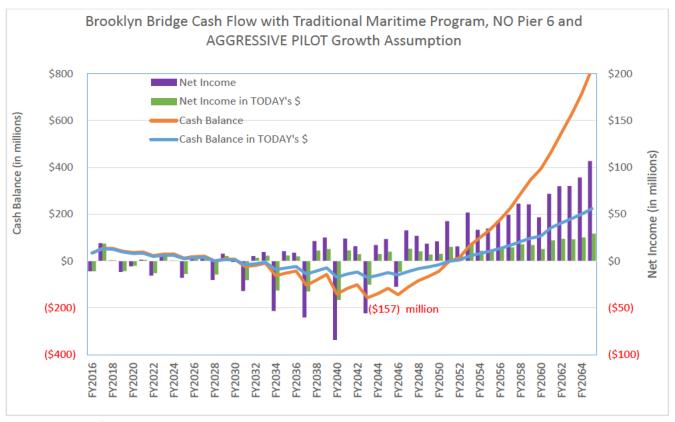
If one were to assume that current revenue assumptions are too conservative and that PILOT revenues were to grow at a <u>25% higher rate</u>, the cash balance using preventative maintenance but without Pier 6 would look as shown below.



Source: BBP and BBD

Due to the significant abatements in the early years, regardless of how rapidly PILOT assessments were to grow, the BBP model would run a negative cash balance for 24 years if it opted for the PM plan. The impact of this assumption change would be seen in years 2040 and beyond as revenues would eventually soar as shown in the chart above.

The chart below shows that even with 25% higher PILOT and ancillary revenues, when using the traditional maritime program BBP's cash balance still goes negative for twenty years and it goes deeper into the red than for preventative maintenance. Note that neither the above nor below chart includes interest to be paid when running a negative balance, but the charts do include interest earned on the surplus in the early and the latter years using a conservative interest rate assumption of 1.0% in 2016 growing at a 3% rate per year [see Appendix B].



Source: BBP and BBD

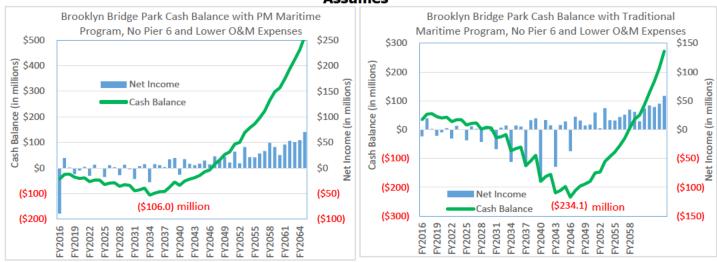
Tweaking the analysis further shows that in order for BBP to maintain a positive cash balance with the traditional maritime plan, PILOT and ancillary revenues would have to grow at a <u>41%</u> <u>higher</u> rate than the model currently assumes.

Note that the \$45 million balance that the BBP currently holds in reserve slowly declines and cash flow goes negative starting in 2031 and exceeds negative \$150 million. In time, revenues start to offset the negative balance creating a positive balance starting in 2051, but this again does not include any interest paid on the (assumed) debt.

Scenario II – Baseline Model without Pier 6 and with (A) Lower Operating and Maintenance Costs (B) Lower Capital Costs and (C) Lower Maritime Costs

A) When operating and maintenance costs were assumed to grow at a 50% lower rate than the model assumes, the PM model's cash balance (left chart below) stays negative for 30 years and its balance at the nadir is negative \$106 million. The traditional maritime model at right does not go into a negative cash balance until 2031, but the net drops to (negative \$234 million) at the nadir (vs. negative \$383 million with the baseline expense growth).

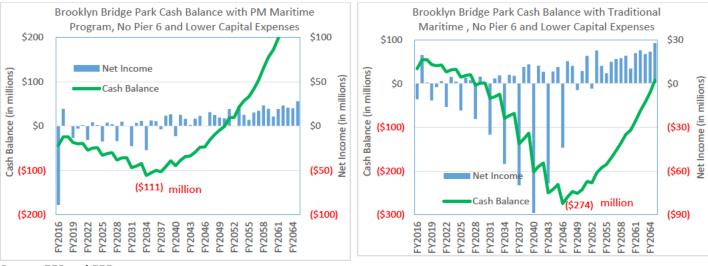
Financial Model When Operating Costs grow at a Slower (50%) rate than the Baseline Model
Assumes



Source: BBP and BBD

B) When <u>capital expenses</u> are assumed to grow at half the rate that the current model assumes, the model evolves as shown below. Similar to the scenario in A above, BBP runs a negative cash balance for 35 years if they opt for the PM program (below left). The balance drops to negative \$111 million at the nadir (vs. negative \$161 million in the baseline model). If instead they choose to go with the traditional maritime program, cash flow goes negative in 2031, and it drops to negative \$274 million at the nadir (vs. negative \$383 million with the baseline expense growth). Note that the cash balance does not turn positive again until 2064, much later than in the lower operating expense scenario in A above.

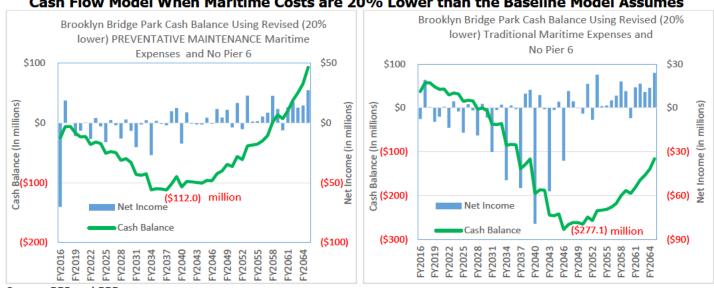
Financial Model When Capital Costs grow at a Slower (50%) rate than the Baseline Model Assumes



Source: BBP and BBD

C) When maritime expenses were tweaked to be 20% lower than the current model assumes, the chart shows very similar results as shown above in scenarios II A and B. That is, the (20% lower) preventative maintenance costs still drive the BBP into a deficit for 43 years (vs. 48 years in the baseline model). In the traditional maritime model, the lower maritime costs have the same reduced impact as the lower capital costs but it takes more years to emerge from the negative cash balance. The negative cash balance starting in 2030 drops to negative \$277 million at the nadir (vs. negative \$383 million with the baseline expense growth).

Cash Flow Model When Maritime Costs are 20% Lower than the Baseline Model Assumes



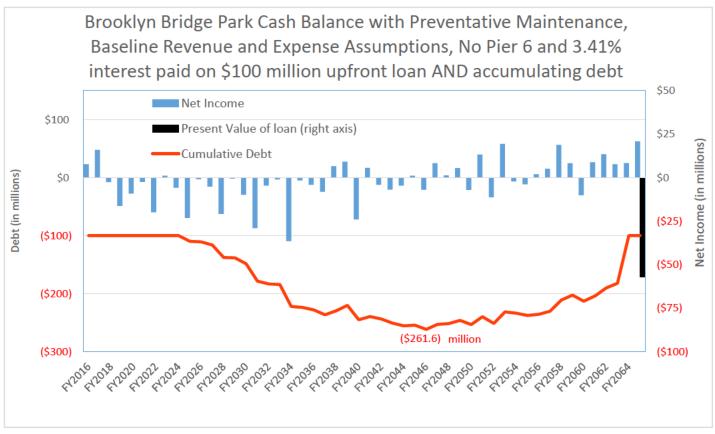
Source: BBP and BBD

These four scenarios shown above were constructed to show that even under liberal assumptions of (higher) revenue growth and/or (lower) expense growth, the BBP goes deep into a negative cash balance within twenty years if it did not have the one-time as well as recurring revenue to be generated by the Pier 6 development. Any negative balance would defer necessary maintenance and capital investment decisions which would make future repair, maintenance and capital costs higher in outer years. Neither these presumed higher deferred maintenance costs nor interest on any debt costs were factored into the four scenarios shown above.

Scenario III – Borrowing to Cover Preventative Maintenance Program

I understand from BBP that borrowing is not a realistic option because it poses both legal as well as policy challenges; however, I am including the following analysis purely as an economic illustration.

For argument sake, if BBP were to "borrow" money on terms comparable to New York City General Obligation (GO) municipal bonds that currently carry a 3.41% 20-year interest rate [see Appendix B], BBP could show a positive cash balance in some future years, but it would still run a negative cash balance throughout the next fifty years as shown in the chart. Not only would BBP be required to pay an annual interest expense of \$3.41 million on the upfront \$100 million loan, but since it will not be able to cover this added interest cost most years, it will need to take on additional debt when cash flow is negative which will incur additional interest costs that will compound the debt.



Source: BBP and BBD

In fact, taking on a higher debt load to finance operations in the early years would be worse because annual interest costs would be higher leading to a steeper annual deficit most years. *In short, any level of debt that would be incurred in lieu of Pier 6 development revenue to cover the preventative maintenance or*

⁹ A loan of \$150 million yields a debt that reaches \$308 million; a loan of \$50 million yields a debt of \$212 million vs. \$261 million in the baseline scenario of a \$100 million loan.

traditional maritime costs would adversely affect the model in future years because of compounding finance costs.

Scenario IV: REALISTIC ASSUMPTIONS including Pier 6, lower PILOT revenues from commercial sources and higher Maritime Costs even with the Preventative Maintenance Program

Given the careful consideration of all the parts of the BBP financial model and given the recently proposed development lease transaction with RAL Development Services and Oliver's Realty Group, I have arrived at a final set of assumptions that reflect a more risk averse yet not overly conservative approach to managing the finances for Brooklyn Bridge Park. I believe that while the PILOT assumptions for the residential properties are based on sound, current market value assessments, the PILOTs for the hotel at Pier 1, as well as the retail and office components of the Empire Stores development site are based on somewhat overly optimistic assumptions of demand, occupancy and rent growth. That is, given their location and limited subway access, I believe Empire Stores will likely not lease up its space in two years nor earn the rents that the model assumes. Likewise, I believe the retail in Empire Stores will not get the foot traffic in winter months that it needs to earn a strong profit. Finally, I believe the hotel in Pier 1 will not enjoy the same high occupancy levels in the winter that other Brooklyn hotels will, the room rates will likely be lower and the market value, and as a result, PILOT assessments will be lower than the model assumes. The Pier 1 hotel will be competing with at least 53 new hotels recently opened and/or planned for Brooklyn (see Appendix C).

In my judgement, it would be more prudent to change the model assumptions as follows:

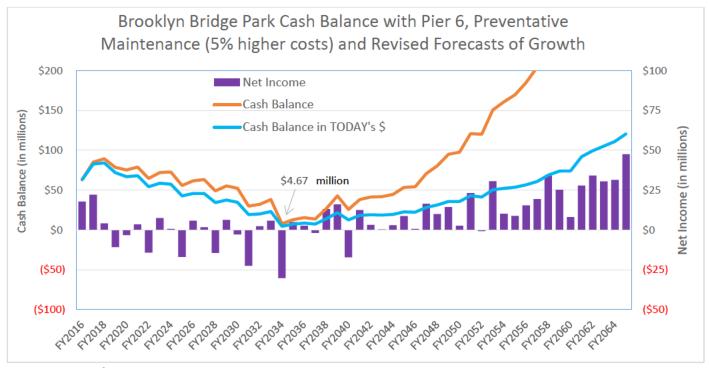
Action Items

- Reduce PILOT revenues on the hotel at Pier 1 to 80% of what the current model assumes. This largely impacts outer year revenue due to the ICAP earned on four commercial units within the hotel. In 2040, PILOT revenue is \$734,500 lower than it would be with the current assumptions.
- Reduce PILOT revenues at Empire Stores to reflect the assumption that the remaining space is leased in five years, not two. This only impacts the PILOT in the first fifteen years when the ICAP applies such that the net effect of the PILOT assumption change yields a modest decline \$280,570 in 2018 (23% lower) and up to \$220,000 in 2027 (3.7% lower).
- Leave all other PILOT and revenue generating assumptions unchanged
- · Leave all operating, maintenance and capital expense assumptions unchanged
- Let the interest rate on the surplus start at 1.0% but then grow it at a rate of 3.0% per year; that is, 1.03% in year 2 (see Appendix B for interest rate growth assumption).
- Increase preventative maintenance and all maritime costs by 5% higher¹⁰.

Finally, with the development of Pier 6, BBP would earn enough upfront cash¹¹ to cover the PM costs; moreover, it would earn annual revenues from Pier 6 PILOT and ground rent that will provide it with the required revenue to maintain a positive cash flow most years.

¹⁰ Because the maritime engineer has already confirmed that the per-linear-foot structural costs for repairing the pilings has increased by 26% in two years (\$876.40 to \$1,100), the model needs to take this into account not only for structural repair costs but for any maritime-related engineering costs including the PM program. Not only do contracts of this sort require considerable capital, high-level engineering and labor, but few firms are in the business of providing these services.

The estimates for the one-time rent payment, PILOST and PILOMRT as well as the recurring Pier 6 revenue assumptions (PILOT and ground rent) were included in the analysis below along with the revised (lower Empire Store and hotel) PILOT assumptions and 5% higher PM costs. The results are striking: BBP will maintain a positive cash flow in two out of every three years, but the cash reserve from the upfront Pier 6 payments will erode over the next twenty years to a level that puts it close to \$0. It then increases as maritime costs decline. This final scenario which again reflects a more conservative set of assumptions clearly shows that in order to fulfill its self-sustaining mission, BBP is unequivocally dependent not only on the upfront costs that help pay for the PM, but on the extra recurring revenue from Pier 6 to cover expenses over time. While cash flow should accelerate after 2038 under this scenario, the model does not incorporate the inevitability of a market downturn that could significantly alter revenue projections.



Source: BBP and BBD

¹¹ One-time rent payment, PILOST and PILOMRT.

V. Conclusion

In short, the current BBP financial model carefully considers every facet of its complex, 85-acre Park. The model takes on a considerable level of risk and therefore incorporates appropriate conservative assumptions. If BBP were only responsible for covering operating, maintenance and capital costs, it could feasibly do so with the forecasted revenue stream that does not include Pier 6. However, the analysis above shows that Pier 6's upfront and recurring revenue are needed to cover the significant maritime costs that are estimated to total \$342 million (preventative maintenance) or \$600 million (traditional). With Pier 6 revenue, BBP should continue to generate a modest surplus of reserves that will earn interest. But a few underlying considerations need to be underscored.

1) Expenses will grow at a steady rate regardless of economic conditions. This rate could exceed the 3.0% assumed rate in the model; maritime costs could grow at an even higher rate.

Expenses associated with the Park's growing visitor base will grow steadily regardless of economic conditions. Furthermore, BBP is faced with the paradox that the better it maintains the Park, the more use it will get, which will exert greater wear and tear on the Park's capital that could lead to higher maintenance costs.

The maritime maintenance and repair costs -- the biggest component of BBP's responsibilities and its biggest risk factor – pose a significant cost risk for BPP in both the near term and long run. The proposed benefits of the preventative maintenance program clearly justify the upfront high costs of \$95 million in 2016. Yet these costs are likely to be even higher given the early estimates for structural repairs rising 26% in three years.

2) Revenues should grow steadily most years but economic forces will inevitably lead to swoons in property assessments which will yield an erratic revenue stream.

BPPC's revenues will be driven by future PILOTs that will be determined by future market conditions which for Brooklyn have proven to be more erratic than most parts of the U.S. and New York City, as described above. Moreover, the model does not nor cannot predict either when the economy will turn or the extent to which the next recession will impact Brooklyn's real estate market. History has shown that most recessions negatively impact Brooklyn's real estate values far greater than those in most of New York City and the U.S.

3) Relying on an uncertain revenue stream to cover known repairs and maintenance costs is a very risky endeavor.

Therefore, given the likely scenario that maritime costs could increase by as much as 5% and perhaps more from initial estimates and given that BBP is dependent on revenues from PILOTs which may not increase in line with the model, in order to preserve its self-sustaining mission, BBP will need to maintain a positive cash reserve. The cash reserve that the current model yields in outer years is at an appropriate level given the degree of risk that BBP faces.

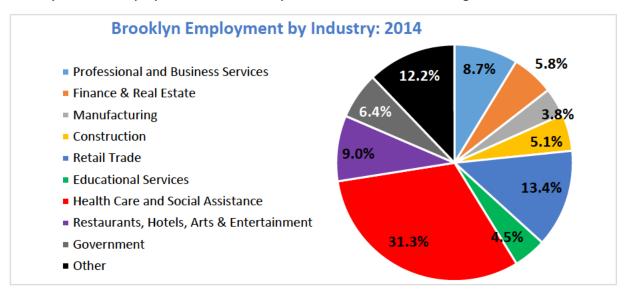
BBP's financial model is both thoughtful and thorough. It carefully accounts for market volatility by allowing a cash reserve to accumulate. This reserve, however, will likely decline over the first twenty years to a level that approaches \$0. It will likely grow beyond these years due to reduced maritime costs but the risk

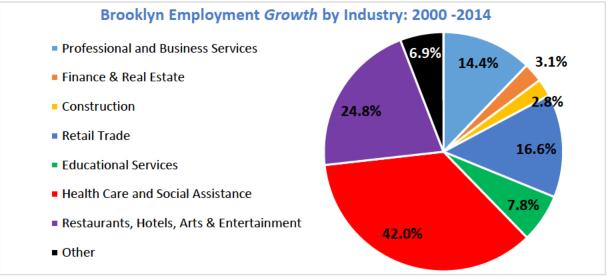
that the next economic downturn will adversely impact revenues projected for the Park is considerable. The risk that expenses could grow beyond a 3.0% rate is equally as high. Therefore, it is incumbent upon BBP to adhere to the current financial model as strictly as it can in the early years in order to preserve the capital reserve it will need in outer years.

VI. Appendices

Appendix A Brooklyn Employment and Unemployment

The charts below show how health services, private education, retail and restaurants make up 56% of Brooklyn's total employment base but they accounted for 83% of the growth from 2002 to 2014.



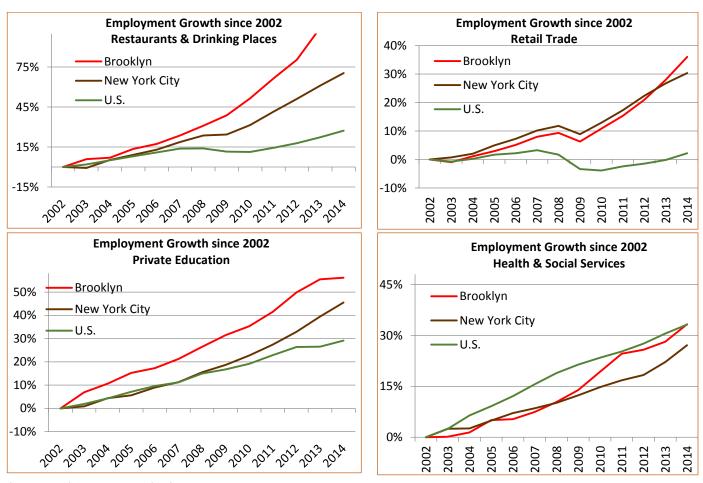


Source: NYS Department of Labor

How much growth is Brooklyn capable of? For decades, Brooklyn and most of the outer boroughs were starved for retail. Most traveled out of the City or borough to shop. In 2000 there were only 20 retail employees per 1,000 residents. By 2014, that number climbed to 26 such employees per 1,000 residents. In contrast, the U.S. had as many as 39 retail employees per 1,000 residents in 2014, down from 44 in

 $^{^{12}}$ All retail-employment-per-1,000-residents numbers cited above do not include automotive retail employment or gasoline station employment.

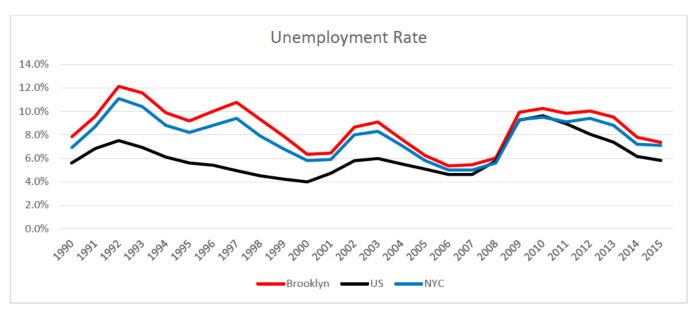
2000. This suggest that Brooklyn's retail industry has room to grow, and can accommodate more stores like Wegman's coming to the Brooklyn Navy Yard and another Trader Joe's to Williamsburg. But given Brooklyn's street-level retail landscape, limited transportation access and iconoclast culture, it is unlikely that Brooklyn will add significantly more retail other than what is still in demand in a number of neighborhoods. As for health and social services jobs, Brooklyn's health employment per 1,000 residents is already higher than the U.S. (65 per 1,000 residents vs. 57 in the U.S.) which suggests that growth in health services jobs may not stay as strong as it has been.



Source: NYS Department of Labor

While each of these industries is likely to grow as the population grows, these industries are driven by consumer patterns and less so from business patterns. Future employment growth in Brooklyn will likely track the growth in population.

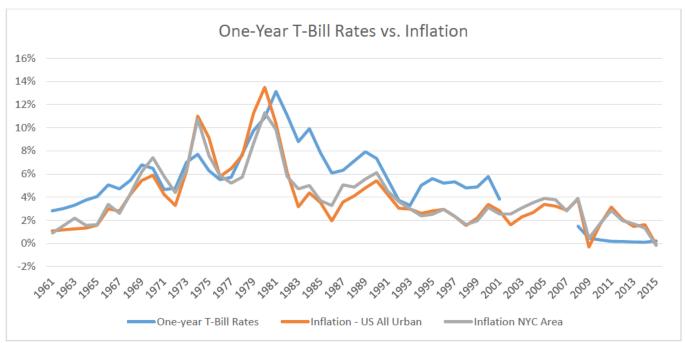
As a separate comparison, the chart below shows how Brooklyn's unemployment rate has been more erratic than the rest of New York City, although it should be noted that the statistical reliability of the unemployment rate at the county level is far lower than employment growth statistics shown in the charts above.



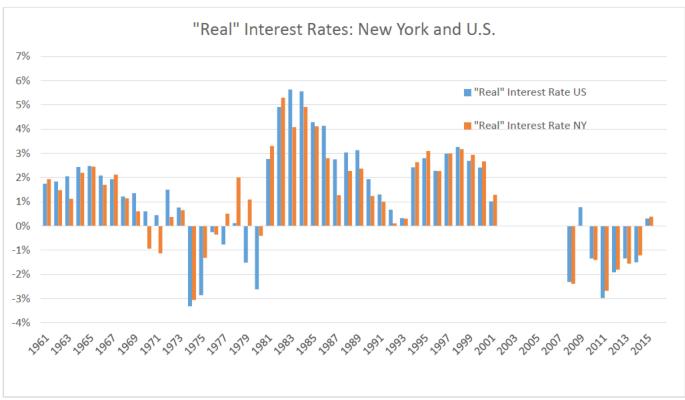
Source: NYS Department of Labor and U.S. Bureau of Labor Statistics

Appendix B Interest Rates

The one-year T-Bill rate has averaged less than 0.2% since 2010; however, the 45-year average rate is 5.2% and the 20-year average is 2.6%. From 2002 through 2008, the U.S. discontinued one-year T-Bills due to the budget surplus.



Source: U.S. Treasury, BLS, Federal Reserve



Source: U.S. Treasury, BLS, Federal Reserve

The real interest rate is calculated as interest rate less the rate of inflation. The chart shows that low interest rates did not "cover" inflation from 2009 through 2014.

The Lesson from Interest Rates

More than any other indicator, the history of interest rates reveals how the economy has evolved over time. A reader of the above charts could argue any of a number of arguments: interest rates are driven solely by inflationary pressures; the Federal Reserve has mastered the art of managing the economy wisely; globalization has opened markets and has stripped the U.S. of many manufacturing jobs putting less pressure on wages and prices yielding to a more low-inflation climate that is here to stay; without significant job growth, the U.S. may not emerge from this low-inflation environment for some time; or, with recent job growth and low interest rates, inflation could spike in the next year.

Any of these sentiments could be deemed accurate, but what can be said about the future based on the past is that the economy could take many different paths and each one is as predictable as the other which is to say they are all unpredictable.

In the analyses herein, I assumed a one-year interest rate of 0.25% in 2015 and 1.0% starting in 2016 that grows at a rate shown as per the table below.

Interest Rate Growth Assumption Table

| | Initial Interest | Interest rate grows | | | |
|---------------|------------------|---------------------|--|--|--|
| | Rate | at a rate of | | | |
| Year 1 | 0.25% | | | | |
| Years 2 -10 | 1.00% | 3% per year | | | |
| Years 11 - 19 | 1.16% | 4.5% per year | | | |
| Years 20 - 50 | 1.58% | 5.0% per year | | | |
| Year 50 | 3.89% | | | | |

The twenty-year 3.41% borrowing rate was obtained by the recent New York City general obligation bond sale as listed in the press release copied below.

FOR IMMEDIATE RELEASE Date: Wednesday, June 3, 2015 Release #060315 Contact: Deputy Comptroller for Public Finance, Office of NYC Comptroller Scott M. Stringer 212-669-8334

THE CITY OF NEW YORK ANNOUNCES SUCCESSFUL SALE OF GENERAL OBLIGATION BONDS

The City of New York ("the City") announced the successful sale of approximately \$965 million of General Obligation bonds. The sale included \$300 million of tax-exempt fixed rate new money bonds, \$300 million of taxable fixed rate new money bonds, approximately \$315 million of tax-exempt fixed rate bonds converted from variable-rate demand bonds ("VRDBs"), and a conversion of \$50 million of VRDBs to floating rate notes. The City received over \$313 million of retail orders for the \$615 million of tax-exempt fixed rate bonds during the two-day retail order period preceding yesterday's sale. Final stated yields on the bonds ranged from 0.40% in 2016 to 3.41% in 2036 for a premium coupon bond and 3.82% in 2037 for a discount coupon bond.

Appendix C Hotel Development

Hotel development in Brooklyn has been brisk, Brooklyn is now home to 53 hotels, most of which were built in the last 10 years. A list of 53 hotels is shown below.

Sheraton Brooklyn New York Hotel, Best Western Plus Prospect Park Hotel, Henry Norman Hotel, The Condor Hotel, Pointe Plaza Hotel, Marriott New York at the Brooklyn Bridge, Aloft New York Brooklyn, The Box House Hotel, NU Hotel, Hotel Le Bleu, Holiday Inn Express Brooklyn, McCarren Hotel & Pool, Chelsea Hotels, Best Western Plus Arena Hotel, Hampton Inn Brooklyn / Downtown, Hotel BPM – Brooklyn, Hotel Indigo, Hotel Le Jolie, Sleep Inn Brooklyn Downtown, Best Western Plus, Brooklyn Bay Hotel, Fairfield Inn & Suites New York Brooklyn, Super 8 Brooklyn, Comfort Inn Brooklyn, Wythe Hotel, Avenue Plaza Hotel, Park House Hotel, Best Western Gregory Hotel, Comfort Inn Brooklyn – Downtown, La Quinta Inn & Suites Brooklyn Downtown, Hotel Luxe, Kings Hotel, Sleep Inn Prospect Park South, Union Hotel, Sleep Inn Brooklyn, Comfort Inn, Comfort Inn Brooklyn, Red Carpet Inn Brooklyn, Midwood Suites, Galaxy Motel, Oasis Motel, Quality Inn, Americas Best Value Inn Brooklyn, Atlantic Motor Inn, Brooklyn Motor Inn, Days Inn Brooklyn, Dazzler Brooklyn, Holiday Inn Brooklyn - Nevins Station, Imperial Hotel, Lexington Inn, Linden Motor Inn, Red Carpet Inn, Sleep Inn, Princess Lefferts Hotel, Shkolnick Motel.

The Brooklyn hotel industry is a relatively new industry, Brooklyn had only a small handful of hotels 15 years ago. Still, Brooklyn's hotel industry competes with Manhattan's and Queens' (especially Long Island City's) hotel industries. Both of these markets have seen a surge in hotel development over the last 10 years as well. While the numbers show that demand for hotels have grown in line with supply over the last few years, tourism would have to grow at a robust rate to maintain the same high occupancy rates when the new hotels open in the next few years. Moreover, with Airbnb and similar outlets providing further competition, new hotels in Brooklyn may not fare as well as projected.