

The Fiscal Impact of the Wilmington Riverfront

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by

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Executive Summary

The Center for Applied Demography & Survey Research at the University of Delaware conducted this study to explore the fiscal impact of redeveloping the Wilmington Riverfront. The study was funded by the Riverfront Development Corporation. Although the work was performed for the Riverfront Development Corporation, the author is solely responsible for its design and execution.

The Wilmington Riverfront has been home to many different businesses in Delaware's history. Harlan and Hollingsworth, for example, was a major shipbuilder located on the Riverfront in the 19th century. In the 20th century, the Dravo Corporation also built ships and made an important contribution to the U.S. efforts in World War II. The Riverfront has also been home to railroad car manufacturing, warehouse companies, and international shipping operations.

The Riverfront's industrial base had largely shut down by the 1960s, and most of the businesses had long since abandoned the area twenty years later. Left behind was a polluted and mostly vacant industrial footprint. In the early 1990's, state leaders sought to reclaim the Riverfront and transform it into a premier tourist destination. That plan has since evolved so that the Riverfront would also be an attractive location for corporate headquarters and upscale residences.

In order to redevelop the Riverfront, substantial expenditures were made by the State of Delaware and the City of Wilmington. As new activities emerged, they generated financial returns for the state and city through increased tax revenues. This report analyzes the fiscal impact from the Riverfront's public expenditures and revenues. Below is a summary of the most important findings in the report.

Change in Economic Conditions on the Riverfront

- In the first quarter of 1997 there were 1,140 employees on the Riverfront. In 2007, there were more than 4,500 employees on the Riverfront. Employment fell to a low of 4,250 in 2010, but has likely turned around since then and resumed its positive growth.
- In 1997, the average Riverfront employee had an annual wage of \$48,500.² The average annual wage reached a peak of \$69,000 in 2007, and then fell slightly to \$68,600 in 2010. The increase in wages is primarily due to the replacement of lower paying jobs with higher paying jobs. In particular, executive compensation at corporate headquarters drove these wage gains.
- After accounting for businesses that moved from other locations in Delaware to the Riverfront, businesses that existed on the Riverfront before 1996, and businesses that have since shut down or moved away, there have been 2,000 net new jobs created on the Riverfront. Had these 2,000 new jobs been the only ones responsible for the growth in Riverfront wages, the average annual wage of each new job would be \$107,000.

¹ Employment reflects both part-time and full-time jobs at establishments physically located on the Riverfront.

² All dollar figures are in 2011 prices unless indicated otherwise. Prices have been adjusted using the Consumer Price Index for All Urban Consumers in the Philadelphia-Wilmington-Atlantic City region.

- Between 1996 and 2004, the total assessed value of Riverfront properties increased from \$36 million to \$49 million.³ Assessed values increased rapidly after that, growing to \$146 million by 2010. The taxable portion of assessed values increased from \$31 million in 1996 to \$91 million in 2010.
- Between 1996 and 2010, private investment on the Riverfront totaled \$716 million. More than 75% of this investment took place between 2005 and 2007.
- Approximately 760 residential units have been added to the Riverfront. This includes 387 apartments, 105 townhomes, and 268 condominiums.

Public Revenues Collected from Riverfront Activity

- The report measures public revenues in two ways. The first calculates the fiscal impact that is associated with any *new* state and city activity that occurred on the Riverfront since 1996 (a.k.a. *net activity*). The second measures the impact from *all* activities that have taken place on the Riverfront (a.k.a. *gross activity*) since 1996. This includes some events that could have transpired in absence of the Riverfront's post-1996 development.
- In 1996, gross Riverfront activity added \$3 million to public revenues. By 2012, the contribution was \$32 million. Between 1996 and 2012, approximately \$308 million of public revenue has been generated from gross activity. The three most important sources include the state's personal income tax, the City of Wilmington's wage tax, and the state's bank franchise tax.

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³ Assessed values in New Castle County reflect property values based on market conditions in 1983 (e.g. 1983 \$).

- Since 1996, approximately \$230 million in public revenues have been generated from net Riverfront activity. Annual public revenue from net activity was initially \$30,000 in 1996, but that has grown to \$25 million in 2012. The three largest sources public revenue coming from net activity are still the personal income tax, the bank franchise tax, and the city wage tax.
- Approximately \$28 million in public revenue has been generated since 1996 due to temporary construction spending, most of which occurred between 2005 and 2007. Just more than \$40 million of net public revenue has been generated from the sale of land, property taxes, real estate transfer taxes, and taxes on new residents.
- The City of Wilmington has received approximately \$50 million in new public funds due to the Riverfront's development. Similarly, the State of Delaware has received \$173 million in public revenue.
- In addition to public revenues, redevelopment has also brought about new public assets. In 2010, the Riverfront Development Corporation listed that it had \$62 million of assets in land, buildings, and equipment and \$14 million of liabilities to secured mortgages and other third parties. In addition, one simple measure of market valuation finds that the City of Wilmington and the State of Delaware own \$26 million worth of Riverfront properties.

Public Funds Spent on Developing the Riverfront

- This report makes a distinction between those public funds that have been invested in the Riverfront and all public expenditures. The main distinction is that funds which are invested are expected to generate financial returns. Total public expenditures, on the other hand, include money spent on amenity projects, such as the Tubman-Garrett Park, the Riverwalk, and the DuPont Environmental Education Center. Although these amenities contribute real social benefits, they are not expected to directly create future revenue streams.
- Between 1996 and 2012, total public expenditure on the Riverfront was \$346 million and total public investment was \$280 million. This implies that approximately \$66 million has been spent on amenity projects.
- After accounting for all sources, the State of Delaware has spent \$306 million to develop
 the Riverfront since 1996, \$240 million of which is the state's investment in nonamenities. The City of Wilmington has expended \$24 million, and \$16 million of
 expenditures has come from other sources (e.g. New Castle County, federal sources, nonprofits, etc.).
- The largest source of the Riverfront's public funds came from the Delaware Department of Transportation (\$149 million), which receives its funding through the sale of state issued bonds. This money has primarily been spent on public parking, new roads, walkways, bridge repair, and other infrastructure enhancements.
- The second largest source of revenues is the money given directly to the Riverfront Development Corporation (\$99 million), also funded from annual sale of state issued bonds.

 Most of the public spending on the Riverfront occurred in the late 1990's and the mid 2000's. After accounting for inflation, public expenditures on the Riverfront were lower in 2009 and 2010 than in any other year since the RDC was founded.

Forecast for Public Revenues and Public Expenditures

- In this report, three forecasts were made to estimate public revenues from 2012 to 2017.
 Each scenario was based on an independent third party's employment projections for
 Delaware or New Castle County. None of these forecasts includes the fiscal impact of any specific future development project.
- In each of the three forecasts, future fiscal expenditures are set to equal the Governor's FY 2013 recommended payment (\$2,350,000 – nominal \$) to the Riverfront Development Corporation.
- The baseline forecast uses a conservative employment growth rate that averages to 1.76% per year. The scenario assumes that bank franchise tax revenues will grow by 1% each year in the future, and that property tax revenue will increase by the same growth rates that applied to the historical tax rates between 1996 and 2010. The baseline scenario predicts that the annual public revenues from net riverfront activity will grow from \$25 million in 2012 to \$27 million in 2017. Annual public revenues from gross riverfront activity are estimated to grow from \$32 million in 2012 to \$35 million in 2017.

- The second forecast took a pessimistic view of the future business environment. The scenario uses a low and sometimes negative job growth rate that averages to 0.7% per year. Complications arising in the financial services industry are assumed to cause revenues from the bank franchise tax to fall 10% each future year. Finally, property tax revenues are assumed to increase by just 0.5% each year, reflecting a virtual standstill to the historical growth in property values and tax rates. In this scenario, annual revenue from net activity falls from \$23 million in 2012 to \$21 million in 2017. Annual revenue from gross activity falls from \$30 million in 2012 to \$29 million in 2017.
- The third and final forecast took an optimistic view of the Riverfront's future and assumed that both the bank franchise and property tax revenues grow at 5% each year. In addition, employment is assumed to increase by the same rate that the Congressional Budget Office projects GDP to rise (an average annual growth rate of 3.1%). Under these assumptions, the annual public revenue from net Riverfront activity grows from \$26 million in 2012 to \$32 million in 2017. Annual revenue from gross activity grows from \$33 million in 2012 to \$40 million in 2017.
- We expect that revenues from net Riverfront activities will equal total public investment between 2014 and 2015. Public revenue from gross Riverfront activities has already surpassed public investment and will equal total public expenditures between 2013 and 2014.
- The State of Delaware invested \$240 million in the Riverfront between 1996 and 2012. By 2012, the state has received \$173 million in revenue from net Riverfront activity and \$210 million from gross Riverfront activity. Beginning in 2013, we expect that net Riverfront activity will generate \$16 million more in annual state revenues than will be expended. Gross activity will generate \$18 million more in annual revenues than in annual expenditures for the State of Delaware.

- Previous fiscal forecasts in Condliffe (2007) predicted that public revenues from Riverfront activity would be recovered by 2013. Estimates in this updated report differ for the following reasons:
 - The previous report did not control for inflation. Since costs were initially much higher than revenues, accounting for inflation raises the relative value of public expenditures.
 - O Previous forecasts were based on gross activity instead of net activity. Net activity reflects only changes that occurred after 1996 and were not expected to occur elsewhere in the state or city. Using gross activity is a more appropriate assumption if one voids all Riverfront activity in absence of its redevelopment.
 - o The previous report assumed that future construction, land development, and employment would continue to grow at the same rates as had been occurring on the Riverfront up until 2006. The deep economic downturn that began in late 2007 was unanticipated and adversely affected revenues to a large degree.

Introduction

The Wilmington Riverfront has undergone dramatic transformations over the past two centuries. Once a bustling area and home to Delaware's largest employer, by 1990 the Riverfront's streets were lined with moldering warehouses and neglected factories. Debris piles and abandoned capital created de facto junkyards, as leaking underground storage containers and chemical spills contaminated the soil.

In the early 1990's, a combination of state and local government agencies, civic organizations, nonprofit institutions, businesses, and citizens proposed a plan to revitalize the Riverfront. Sustained efforts by Delaware's leaders followed through on this commitment. The Riverfront is now home to the corporate headquarters of an insurance company, two financial service companies, and many other businesses. It has a robust nightlife scene, an entertainment complex, a state-of-the-art convention center, luxury residences, a park, educational and environmental activities, and even an urban nature preserve.

Of course, this transformation has not been costless; significant sums of money have been spent by both private and public sources. By the same token, the Riverfront has also generated large and steady streams of public revenue and private profit. The Riverfront Development Corporation of Delaware (RDC) has contracted with the Center for Applied Demography & Survey Research at the University of Delaware to measure the fiscal impact generated by the Riverfront's development. While the report was written in contract for the RDC, the author is solely responsible for its design and execution.

The remainder of this report is divided into four sections. The first gives a brief historical overview of the Riverfront. The second section reviews definitions and concepts that are important to consider when assessing the report's findings. The third section estimates the public expenditures and revenues, while the fourth section forecasts the fiscal impact of the next five years. The final section discusses the important implications and limitations, and then it concludes.

Overview of the Riverfront

Beginning in 1840, the land adjacent to the Christina River has been the location of important economic activity in Delaware. Railroad car manufacturing was the first industry to develop on the Riverfront, followed later by manufacturers of railroad car wheels, boilers, iron ships, steam boats, and paper mill rolls. In the early and middle part of the 20th century, the Riverfront was an important hub of shipbuilding activity. During WWII, the Dravo Corporation built hundreds of watercraft and was the largest employer in the state (11,000 employees). Since the company closed in 1965, the Riverfront lay economically dormant. Junkyards, chemical spills, cesspools, and crumbling, abandoned buildings soon consumed the once vibrant area.

In the early 1990's, the desire to reclaim the Riverfront caught hold in Delaware, and the area became a strategic location for state-sponsored redevelopment. A task force commissioned by then Governor Carper was instructed to lay out a plan to revitalize the areas along the Brandywine and Christina rivers. Led by Arthur Trabant and Russell Peterson, their vision was to give the Wilmington Riverfront an urban wildlife refuge, upscale residences, an active nightlife scene, a sports complex, and cultural sophistication. Over time, the Riverfront was also viewed as a location that would attract many high paying jobs to Delaware.

⁴ This vision was outlined in the 1994 state document, A Vision for the Rivers.

Delaware Department of Natural Resources and Environmental Control. A Vision for the Rivers: The Final Report of the Governor's Task Force on the Future of the Brandywine and Christina Rivers. Dover, DE, 1994.

In 1995, the state created the Riverfront Development Corporation (RDC) to oversee the development of the Wilmington Riverfront. The RDC was initially given \$4.5 million (nominal \$) and ordered to "1) provide financial incentives, including loans and grants to stimulate significant private investments; 2) assist and cooperate in capital development and public works programs funded in conjunction with other governmental agencies; 3) acquire and maintain land and open space; 4) acquire, erect, improve and maintain buildings, structures or other public works; and 5) act generally in a planning and development capacity."⁵

Since that time, the RDC has overseen a dramatic transformation on the Riverfront. By the late 1990's, the Riverfront had a convention center that housed international art exhibitions, brand name retail outlet stores, a park, a walking path along the river, new restaurants, a nightclub, and a stadium for a minor league baseball team.⁶

In the early 2000's, the Marketplace opened, offering an array of foreign cuisine, seafood, flowers, baked goods, and more. More restaurants began to dot the Riverfront, and the startup bank ING chose the Riverfront for its headquarters. The convention center was updated and expanded for multi-purpose use.

During the middle of 2000's, private investment poured into the Riverfront. Juniper Bank (now Barclays), AAA, and the Buccini-Pollin Group located their headquarters on the Riverfront, greatly expanding employment in the area. A series of upscale apartments, condominiums, and townhomes were built at Christina Landing and Justison Landing, dramatically raising property values. Restaurants continued opening, retail shops faltered and were converted into a broader range of business enterprises, and many pointed to the redevelopment as exemplary and a resounding success.

⁵ The 138th General Assembly of the State of Delaware. (1995) "State Senate Bill 260". State of Delaware.

⁶ Some of these improvements occurred prior to the RDC's founding.

During the last five years, however, the economic conditions sharply worsened. As problems in the real estate sector surfaced in Delaware and across the nation, the rapid increase in property values and surge in construction were seen as a speculative bubble. When this bubble burst, demand and credit plummeted and the U.S. sank into one of the worst and prolonged economic downturns since the Great Depression. Many companies went out of business and others significantly reduced their work force. Most construction on the Riverfront came to a halt, though a few local projects continued to create a limited demand for the construction industry. A supermarket, urban wildlife refuge, educational center, children's museum, and public artwork were added to the Riverfront.

This retransformation required spending from the state, city, county, non-profit organizations, private companies, and individual citizens. State funds paid to upgrade the roads, repair old bridges, and remediate pollution. Private businesses spent money to build new residential and commercial real estate. Nonprofit groups funded different historical, environmental, and artistic projects. By breathing life back into the Riverfront, these various groups also began receiving a mix of benefits. Government organizations saw increases in their tax revenues, many businesses saw rising profits, and nonprofit organizations received recognition and support for their work. Ultimately, Wilmingtonians and Delawareans reclaimed a long neglected piece of their history.

Important Concepts and Definitions

In this section, we layout three important concepts and definitions that are critical to understand before reviewing any results of this report.

Nominal Dollars vs. Real Dollars

It is well known that one dollar today is worth more than one dollar tomorrow since prices tend to rise over time. For example, \$1 million spent in 1996 may not be equivalent as \$1 million spent in 2010. In *nominal* terms, the two amounts are the same. However, because the average price level rose nearly 40% between 1996 and 2010, \$1 million in 1996 could have purchased significantly more goods and services than \$1 million in 2010. The \$1 million in 1996 is said to be larger in *real* terms than the \$1 million in 2010.

Of course, it is natural for most people to think of money in nominal terms. In particular, dollars expended from each year's annual bond bill are reported in nominal dollars. If inflation is relatively low and the time between two separate time periods is relatively short, comparing nominal values across time does not make much meaningful difference. However, comparing (or summing) nominal figures that are many years apart will largely understate the real value of that sum.

Table 1 Consumer Price Index for All Urban Consumers - Philadelphia-PA, Wilmington-DE, Atlantic City-NJ Metropolitan Region

Year	CPI	Year	CPI
1996	162.8	2004	196.5
1997	166.5	2005	204.2
1998	168.2	2006	212.1
1999	171.9	2007	216.7
2000	176.5	2008	224.1
2001	181.3	2009	223.3
2002	184.9	2010	227.7
2003	188.8	2011	232.3

- Source: U.S. Bureau of Labor Statistics
- The 2011 index value reflects the average price level for January through June.

Nominal dollars that are aggregated across time must therefore be interpreted carefully. When applied to bond bill expenditures, the aggregated sum reflects total "budget dollars" that have been spent. Such nominal sums may feel more natural, but they understate the real value of those dollars.

In order to compare monetary values across different time periods without losing the real value, the figures must be adjusted for inflation. We used the Consumer Price Index in Table 1 to make that adjustment. All real values listed in the report were translated into 2011 price levels by multiplying the nominal value by 232.3, and then dividing that product by the appropriate index value in the table. For example, \$1 million (nominal) in 1996 would be adjusted to \$1.43 million ($1.43 \text{ million} \times 232.3 / 162.8$) to put it in 2011 prices.

For ease of exposition and the logical presentation of results, real values are listed by default in this report. However, we denote real values by the parenthetical expression "(2011 \$)". Nominal values are denoted with the parenthetical expression, "(nom. \$)" and are reported when they complement the text. All nominal values are fully detailed in the appendix.

Public Investment vs. Public Consumption

Another important concept is how to view the expending of public funds to redevelop the Riverfront. Given current budget difficulties, project sponsors are increasingly being asked to justify their need for public monies and when these monies will be repaid. Such justification largely depends on whether the public expenditure is seen as consumption or investment.

When viewed as an investment, public outlays are expected to make future financial returns that more than compensate any upfront expenditure. When viewed as consumption, these outlays are used to purchase something of value that may not necessarily bring financial benefits. The test for public consumption is whether the good or service is deemed valuable enough to merit the public expenditure. Value is determined by state, county, and municipal leaders. For projects viewed as public consumption, any future financial return is viewed as a price reduction, not an investment return. In short, the main distinction we draw between public investment and public consumption is whether the primary intent of the project is to increase fiscal revenues, citizen income, or to develop the economy.

Admittedly, *not* judging government projects by their impact on jobs and the economy goes against today's popular sentiment. However, it is necessary to recognize that much of the expenditure on the Riverfront was public consumption. The public paid for the rejuvenation of a blighted area, cultural sophistication, and alleviating environmental degradation. Because the state believed these goals to be worthwhile, one should not expect that every dollar of expenditure yields a direct financial return.

The Wilmington Riverfront has been a combination of both public investments and public consumption. For example, the \$6 million (nom. \$) spent to incentivize AAA to relocate its headquarters on the Riverfront was an investment, because the economic development created in Delaware (jobs, income, tax revenues, etc.) was compensation to the public for that expense. On the other hand, the \$16 million spent on the DuPont Environmental Education Center and restoration of the Urban Wildlife Marsh was public consumption because that money was never intended to be recovered.

This report conducts a fiscal analysis of the Riverfront's development, which is simply an analysis that measures the public dollars flowing into and out of the Riverfront. Because we cannot precisely quantify the intangible social benefits created by the public consumption on the Riverfront, we identify those public expenditures made on non-revenue generating amenity projects instead. The balance that remains after subtracting these amenity expenditures from the total public expenditures is considered to be the public's investment.

Developing the Riverfront vs. the Riverfront Development Corporation

The third important concept is the distinction between developing the Wilmington Riverfront and the Riverfront Development Corporation (RDC). When we refer to "developing the Riverfront", we include the private decisions of Riverfront businesses, residents, investors, and employees. This definition also includes the decisions of the State of Delaware, New Castle County, and the City of Wilmington to improve Riverfront amenities, remediate decades old pollution, offer incentives for economic expansion, and manage real estate projects. In short, when we refer to the Riverfront's development, we refer to all of the changes that have occurred in the geographical area highlighted in Figure 1.

In contrast, the RDC is a public corporation created by the State of Delaware in 1995. Its mission is to:

"promote the common good of the citizens of Delaware through the planning, development and management of programs and projects intended to foster, encourage and promote recreational, residential, commercial and industrial development [on the Wilmington Riverfront]".

While many of the changes on the Riverfront are influenced by the RDC, many changes are not. For example, the RDC does not determine how many employees AAA chose to locate to the Riverfront. Similarly, the RDC does not decide which, when, or if certain infrastructure projects take place; the Delaware Department of Transportation makes that decision. In addition, some of the money given to the RDC has been used to fund activity that technically falls outside of the Riverfront's physical boundary (e.g. Kalmar Nyckel).

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⁷ The 138th General Assembly of the State of Delaware. (1995) "State Senate Bill 260". State of Delaware.



Figure 1 Aerial View of this Report's Definition of the Wilmington Riverfront

• Source: 2007 aerial photograph obtained from the Delaware Datamil

Furthermore, most of the fiscal revenue generated from the Riverfront's development does not go through the RDC. For example, property tax revenues are paid directly to the City of Wilmington or New Castle County. The bank franchise tax revenue generated from the profits of ING Direct and Barclays (both headquartered on the Riverfront) is not reflected in the RDC budget.

Finally, because the RDC has been given the responsibility of overseeing the Riverfront's development, it is often the conduit to fund projects that would normally fall under the auspices of a separate public organization. For example, the RDC has contributed funds to repair infrastructure and remediate land, even though such spending would have been the responsibility of DelDot or DNREC even if the Riverfront had never developed. Hypothetically, if projects would have been done on the Riverfront in absence of its redevelopment, their costs should not be assigned to developing the Riverfront, much less to the RDC. Of course, we do not know which remediation and infrastructure projects would have been completed in absence of the Riverfront's development. Therefore we make the simplifying assumption that nothing would have been done in this hypothetical situation (a.k.a. the counterfactual). This assumption is admittedly a simplification, but is the justification behind including all public expenditures spent on the Riverfront.

Thus, this report is not an assessment of the RDC's performance over the last 15 years. Instead, it is an analysis of the fiscal impact that has come from developing the Riverfront. Obviously, the RDC has been instrumental to that development, but it would be inappropriate to tie all of the Riverfront's development to just the RDC. Other governmental organizations have contributed to the Riverfront's development, including the Department of Natural Resources and Environmental Control (DNREC), the Delaware Department of Transportation (DelDot), the Delaware Economic Development Office (DEDO), the City of Wilmington's Economic Development Office, and the New Castle County Executive Office.

Fiscal Expenditures and Revenues

This section estimates the history of public expenditures and revenues that have been generated by the Riverfront's development. "Public expenditures and revenues" refers to funds that have been transferred out of and into the various departments and offices of the City of Wilmington and the State of Delaware between 1996 and 2012.

Fiscal Expenditures

Total Expenditures

The first type of economic activity we analyze is public expenditures. We gathered private information from the City of Wilmington, the Department of Natural Resources and Environmental Control (DNREC), the Riverfront Development Corporation (RDC), the Delaware Department of Economic Development (DEDO), and the Department of Transportation (DelDot). We also used publicly available expenditure information from an earlier report on the Riverfront (Condliffe, 2007)¹⁰, the state's annual bond bills (FY 1996 to FY 2012), and the Delaware Hazardous Substance Cleanup Act Expenditure Plan and Annual Reports (FY 2009 – 2011). The next few pages detail the different types of public spending on the Riverfront.

⁸ Due to data limitations, the last two years of expenditures and revenue estimates had to be derived using forecasted amounts. Details to those forecasts are provided in the next section of this report.

⁹ Duplicate tables reflecting the current-year, nominal values are included in the appendix.

¹⁰ Condliffe, Simon. (2007) "The Fiscal and Economic Impacts of the Wilmington Riverfront" Center for Applied Demography & Survey Research, University of Delaware. Online Document. http://128.175.63.72/projects/DOCUMENTS/RDCfinal5.pdf>.

Table 2 Estimated Expenditures (Thousands of 2011 \$) by the Delaware Department of Transportation, 1997-2009

														Total	Total
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	(2011 \$)	(Nom \$)
Wilmington Transit Center II*	\$0	\$3,453	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,453	\$2,500
Windscreens Tressle Painting*	\$0	\$1,105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,105	\$800
MLK BLVD Modifications*	\$0	\$0	\$3,040	\$2,961	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,002	\$4,500
Reily Bridge Rehab*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,389	\$3,261	\$3,140	\$0	\$0	\$0	\$9,789	\$8,600
Justison Landing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,608	\$297	\$16,905	\$16,310
Christina Crescent Garage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,944	\$11,500	\$0	\$0	\$0	\$23,444	\$21,000
Program Management	\$1,674	\$1,657	\$1,622	\$1,579	\$1,537	\$1,508	\$1,476	\$1,419	\$1,365	\$1,314	\$0	\$0	\$0	\$15,152	\$12,000
S. Madison - West Street	\$0	\$0	\$8,743	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,743	\$6,470
Christina Crescent	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,161	\$9,331	\$14,616	\$0	\$0	\$26,108	\$24,057
Browntown Beech St*	\$0	\$0	\$0	\$0	\$0	\$0	\$1,092	\$0	\$0	\$0	\$0	\$0	\$0	\$1,092	\$888
Riverwalk Phase III & IV	\$0	\$0	\$5,600	\$1,229	\$999	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,828	\$5,858
Riverwalk V & VI	\$0	\$0	\$0	\$3,276	\$1,033	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,309	\$3,296
Riverwalk VII	\$0	\$0	\$0	\$0	\$961	\$0	\$71	\$0	\$0	\$0	\$0	\$0	\$0	\$1,032	\$808
Various(Bioswales, Bell Alley)	\$0	\$0	\$0	\$0	\$0	\$2,350	\$0	\$887	\$0	\$365	\$0	\$0	\$0	\$3,602	\$2,954
Bulkheads	\$0	\$0	\$0	\$0	\$0	\$785	\$0	\$4,729	\$0	\$0	\$0	\$0	\$0	\$5,514	\$4,625
Madison St Stadium Access	\$0	\$0	\$0	\$0	\$0	\$1,721	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,721	\$1,370
A Street Market South Bank	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,067	\$279	\$0	\$0	\$0	\$12,346	\$10,862
Railwalk Railing	\$0	\$0	\$0	\$0	\$0	\$384	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$384	\$305
Total (2011 \$)	\$1,674	\$6,215	\$19,006	\$9,045	\$4,531	\$6,747	\$2,640	\$10,423	\$30,799	\$25,928	\$14,616	\$16,608	\$297	\$148,527	
Total (Nom. \$)	\$1,200	\$4,500	\$14,065	\$6,873	\$3,536	\$5,370	\$2,145	\$8,817	\$27,074	\$23,674	\$13,637	\$16,025	\$285		\$127,202

- Center estimates using data provided by the Riverfront Development Corporation and Condliffe (2007).
- There were no DelDot expenditures on the Riverfront in 2010.
- The complete listing of nominal values is reported in Table A 1 on page 66.
- * Projects may be considered independent from Riverfront's development.

Table 2 reports those DelDot expenditures associated with the Riverfront projects conducted between 1997 and 2010. Overall DelDot spent \$149 million (\$127 million – nom \$). ¹¹ The largest level of spending came in 2005 and 2006 when DelDot invested more than \$55 million on Riverfront infrastructure. In 2009, practically all of DelDot's funding for various Riverfront projects came to a halt. The three most expensive DelDot projects are Christina Crescent (\$26 million), the Christina Crescent Garage (\$23 million), and Justison Landing (\$17 million). ¹²

Table 3 shows the total expenditures that DNREC has spent remediating various Riverfront locations. As of 2010, the agency spent nearly \$18 million on these projects. Expenditures on the Justison Landing project (\$11 million) captured two-thirds of this and nearly a fifth of DNREC's Riverfront expenditures (\$4 million) went to the Howard Street Commercial project. The bulk of these expenditures occurred in 2007 and 2008.

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¹¹ Except where otherwise indicated, all dollar figures are in 2011 prices.

¹² Five DelDot infrastructure projects associated with the Wilmington Riverfront (see Condliffe, 2007) either fall on the Riverfront's periphery or may have arguably been conducted in absence of the Riverfront's development. These projects (indicated by the * in Table 2) used \$21 million (\$17 million – nom \$) of public funds. These costs are included in this report given the simplifying assumptions of the counterfactual scenario. See the discussion on page 12.

Table 3 Estimated Expenditures (Thousands of 2011 \$) by the Delaware Department of Natural Resources and Environmental Control, 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total (2011 \$)	Total (Nom. \$)
Christina River Bridge	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24	\$0	\$24	\$22
P & C Roofing (Pre-Remedial)	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$17	\$0	\$20	\$19
International Petroleum Corp	\$0	\$0	\$0	\$0	\$0	\$16	\$0	\$0	\$0	\$16	\$14
Salvation Army - Wilmington	\$0	\$0	\$0	\$0	\$0	\$49	\$0	\$0	\$0	\$49	\$43
Justison Landing	\$0	\$0	\$0	\$0	\$0	\$6,870	\$3,064	\$1,564	\$0	\$11,498	\$10,296
Howard St. Commercial Dev.	\$0	\$0	\$0	\$0	\$0	\$17	\$3,584	\$0	\$51	\$3,652	\$3,337
Burns & McBride	\$0	\$0	\$0	\$0	\$0	\$225	\$0	\$0	\$0	\$225	\$198
Cobra Machine	\$0	\$0	\$0	\$33	\$0	\$0	\$0	\$0	\$0	\$33	\$27
320 "A" Street	\$0	\$0	\$59	\$0	\$0	\$0	\$0	\$0	\$0	\$59	\$47
Riverfront HQ /AAA	\$0	\$0	\$0	\$46	\$0	\$0	\$0	\$0	\$0	\$46	\$37
707 S. Market Street	\$0	\$0	\$0	\$0	\$0	\$14	\$0	\$0	\$0	\$14	\$12
Christina Crescent Property	\$0	\$0	\$0	\$0	\$0	\$199	\$0	\$0	\$0	\$199	\$175
Schwartz Property	\$0	\$0	\$0	\$0	\$0	\$151	\$0	\$0	\$0	\$151	\$133
Mt. Vernon Street Property	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$0	\$0	\$7	\$7
1020 Christiana Avenue	\$0	\$0	\$0	\$0	\$0	\$0	\$86	\$0	\$0	\$86	\$78
Other Riverfront Properties	\$317	\$0	\$296	\$0	\$0	\$0	\$573	\$466	\$591	\$2,243	\$2,004
Total (2011 \$)	\$317	\$0	\$355	\$79	\$0	\$7,540	\$7,316	\$2,071	\$642	\$18,320	
Total (Nom. \$)	\$241	\$0	\$282	\$64	\$0	\$6,628	\$6,681	\$1,932	\$619		\$16,448

[•] Center estimates using data provided by the Riverfront Development Corporation, the Department of Natural Resources and Environmental Control, Condliffe (2007), and the Delaware Hazardous Substance Cleanup Act Expenditure Plan and Annual Report (FY 2009 – FY 2011).

[•] The complete listing of nominal values is reported in Table A 2 on page 67.

Table 4 State Funded Riverfront Expenditures (Thousands of 2011 \$) by the RDC and from Others: 1996-2010

	Bond Bill						
	Riverfront Development Corporation	First State Center Funds	Strategic Fund and DEDO	DelDot Grant	Budget Office	Total (2011 \$)	Total (Nom. \$)
1996	\$71	\$0	\$0	\$0	\$0	\$71	\$50
1997	\$6,208	\$7,673	\$4,185	\$0	\$0	\$18,067	\$12,950
1998	\$2,762	\$0	\$4,834	\$801	\$35	\$8,431	\$6,105
1999	\$18,918	\$0	\$0	\$0	\$0	\$18,918	\$14,000
2000	\$15,793	\$0	\$0	\$0	\$0	\$15,793	\$12,000
2001	\$11,531	\$0	\$0	\$0	\$0	\$11,531	\$9,000
2002	\$4,146	\$0	\$1,759	\$0	\$0	\$5,905	\$4,700
2003	\$3,076	\$0	\$0	\$0	\$0	\$3,076	\$2,500
2004	\$1,773	\$0	\$473	\$0	\$0	\$2,246	\$1,900
2005	\$10,238	\$0	\$6,939	\$0	\$0	\$17,177	\$15,100
2006	\$6,024	\$0	\$6,024	\$0	\$0	\$12,047	\$11,000
2007	\$6,430	\$0	\$5,895	\$0	\$0	\$12,325	\$11,500
2008	\$2,073	\$0	\$0	\$0	\$0	\$2,073	\$2,000
2009	\$2,081	\$0	\$0	\$0	\$0	\$2,081	\$2,000
2010	\$2,397	\$0	\$0	\$0	\$0	\$2,397	\$2,350
Total (2011 \$)	\$93,522	\$7,673	\$30,108	\$801	\$35	\$132,139	
Total (Nom. \$)	\$75,650	\$5,500	\$25,400	\$580	\$25		\$107,155

- Center estimates using data provided by the Riverfront Development Corporation and Condliffe (2007).
- The complete listing of nominal values is reported in Table A 3 on page 68.

Column 1 of Table 4 reports the money that has been directed to the RDC via the annual bond bill. Between 1996 and 2010, the RDC received nearly \$94 million (\$76 million – nom \$) in direct payments from the state. The RDC received particularly large amounts of funding in 1999, 2000, 2001, and 2005. The remaining columns in Table 4 show other sources of state expenditures. Approximately \$8 million was spent by the state in 1997 to build the First USA Riverfront Arts Center (now the Chase Center on the Riverfront), and more than \$30 million (\$25 million – nom \$) of the strategic fund was used between 1996 and 2010 for Riverfront projects. The Strategic Fund includes expenditures to move the public works yard (\$11 million – nom \$), the AAA relocation incentive (\$6 million – nom \$), and other items.

Table 5 Riverfront Expenditures (Thousands of 2011 \$) paid by the City of Wilmington and Other Non-State Sources: 1996-2010

			City of Wi	lmington					Othe	r		
	Econ Dev. Office	Artwork	Employer Incentives	Christina Landing	Christina Crossing	Total (2011 \$)	Total (Nom. \$)	New Castle County	Christina Gateway	Federal	Total (2011 \$)	Total (Nom. \$)
1996	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$691	\$0	\$691	\$500
1999	\$4,524	\$0	\$0	\$0	\$0	\$4,524	\$3,348	\$0	\$0	\$0	\$0	\$0
2000	\$85	\$0	\$0	\$0	\$0	\$85	\$64	\$987	\$395	\$0	\$1,382	\$1,050
2001	\$30	\$0	\$0	\$0	\$0	\$30	\$23	\$0	\$0	\$0	\$0	\$0
2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$565	\$283	\$0	\$848	\$675
2003	\$1,722	\$0	\$0	\$0	\$0	\$1,722	\$1,400	\$0	\$0	\$0	\$0	\$0
2004	\$0	\$0	\$0	\$4,256	\$0	\$4,256	\$3,600	\$11,821	\$0	\$1,053	\$12,875	\$10,891
2005	\$828	\$0	\$171	\$4,095	\$0	\$5,094	\$4,478	\$0	\$0	\$407	\$407	\$358
2006	\$209	\$0	\$0	\$3,943	\$0	\$4,152	\$3,791	\$0	\$0	\$0	\$0	\$0
2007	\$0	\$14	\$139	\$0	\$0	\$154	\$143	\$0	\$0	\$0	\$0	\$0
2008	\$0	\$14	\$135	\$0	\$1,156	\$1,305	\$1,259	\$0	\$0	\$0	\$0	\$0
2009	\$0	\$14	\$135	\$0	\$1,190	\$1,340	\$1,288	\$0	\$0	\$0	\$0	\$0
2010	\$0	\$14	\$133	\$0	\$743	\$889	\$872	\$0	\$0	\$0	\$0	\$0
Total (2011 \$)	\$7,399	\$56	\$713	\$12,294	\$3,090	\$23,550		\$13,374	\$1,368	\$1,460	\$16,202	
Total (Nom. \$)	\$5,755	\$53	\$670	\$10,800	\$2,988		\$20,267	\$11,200	\$1,025	\$1,249		\$13,474

[•] Center estimates using data provided by the Riverfront Development Corporation, the Wilmington Economic Development Office, and Condliffe (2007).

[•] The complete listing of nominal values is reported in Table A 4 on page 69.

Table 5 shows Riverfront expenditures made by the City of Wilmington and other public sources. Between 1996 and 2010, the City of Wilmington has invested nearly \$24 million (\$20 million – nom \$) on various Riverfront projects, half of which has been spent on Christina Landing. Excepting for a \$10 million (nominal \$) payment by New Castle County in 2004, expenditures paid by non-city and non-state public entities have been relatively minor.

Figure 2 and Table 6 show the total expenditures made each year by the State of Delaware, the City of Wilmington, and other public entities. Overall, we find that \$346 million (\$293 million – nom \$) has been spent in public funding on Riverfront activities between 1996 and 2012. DelDot made the greatest level of public outlays, spending \$149 million (\$127 million – nom \$). The RDC received \$99 million (\$81 million – nom \$) during this time period in state funding, and DNREC, DEDO, and other state agencies spent a total of \$58 million (\$49 million – nom \$) on the Riverfront. Overall the State of Delaware has spent \$306 million (\$258 million – nom \$) on the Riverfront between 1996 and 2012, an average of \$18 million (\$15 million – nom \$) per year. However, Figure 2 clearly shows that the level of public spending on the Riverfront has fallen dramatically in recent years.

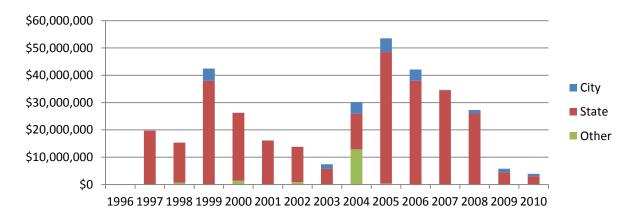


Figure 2 Total Spending (2011 \$) on Riverfront Activity, by Source

• Source: Center for Applied Demography & Survey Research

Table 6	Estimated Public Expenditures	(Thousands of 2011 \$) or	Riverfront Projects
I able 0	Estimated I upile Expenditures	CEROUSARIUS OF ACEE OF OF	I IXIVEI II UIIL I I UIECIS

	RDC	DelDot	DNREC	Other State	City of Wilmington	Other Funds	Total (2011 \$)	Total (Nom. \$)
1996	\$71	\$0	\$0	\$0	\$0	\$0	\$71	\$50
1997	\$6,208	\$1,674	\$0	\$11,859	\$0	\$0	\$19,741	\$14,150
1998	\$2,762	\$6,215	\$0	\$5,669	\$0	\$691	\$15,336	\$11,105
1999	\$18,918	\$19,006	\$0	\$0	\$4,524	\$0	\$42,449	\$31,413
2000	\$15,793	\$9,045	\$0	\$0	\$85	\$1,382	\$26,305	\$19,987
2001	\$11,531	\$4,531	\$0	\$0	\$30	\$0	\$16,092	\$12,560
2002	\$4,146	\$6,747	\$317	\$1,759	\$0	\$848	\$13,817	\$10,998
2003	\$3,076	\$2,640	\$0	\$0	\$1,722	\$0	\$7,438	\$6,045
2004	\$1,773	\$10,423	\$355	\$473	\$4,256	\$12,875	\$30,154	\$25,508
2005	\$10,238	\$30,799	\$79	\$6,939	\$5,094	\$407	\$53,556	\$47,080
2006	\$6,024	\$25,928	\$0	\$6,024	\$4,152	\$0	\$42,127	\$38,465
2007	\$6,430	\$14,616	\$7,540	\$5,895	\$154	\$0	\$34,634	\$32,316
2008	\$2,073	\$16,608	\$7,316	\$0	\$1,305	\$0	\$27,303	\$26,344
2009	\$2,081	\$297	\$2,071	\$0	\$1,340	\$0	\$5,788	\$5,563
2010	\$2,397	\$0	\$642	\$0	\$889	\$0	\$3,928	\$3,851
2011 (est)	\$2,350	\$0	\$583	\$0	\$541	\$0	\$3,474	\$3,474
2012 (est)	\$3,088	\$516	\$64	\$0	\$121	\$0	\$3,789	\$3,865
Total (2011 \$)	\$98,960	\$149,042	\$18,967	\$38,617	\$24,212	\$16,202	\$346,000	
Total (Nom. \$)	\$81,150	\$127,728	\$17,985	\$31,505	\$20,931	\$13,474		\$292,773

- Center estimates using data provided by the Riverfront Development Corporation, Condliffe (2007), the Department of Natural Resources and Environmental Control, and the City of Wilmington.
- The complete listing of nominal values is reported in Table A 5 on page 70.

Since public agencies typically track their expenditures, it was relatively straightforward to collect direct Riverfront expenses. However, there are at least three reasons why this compilation may be incomplete. First, it is possible that some expenses associated with the Riverfront were not reported. For example, we were unable to receive annual operating expenses and revenues from DelDot for the Christina Crescent parking garage. Second, the negative effects from financing these public expenditures are omitted from the analysis. Finally, the increased infrastructure will raise future maintenance costs, but the net present value of these future obligations was not included.

 $^{^{13}}$ These negative effects include the impact from raising taxes, raising debt, or cutting funding from other government programs.

Expenditures on Non-Revenue Generating Amenities

There are many examples of social benefits that are difficult to quantify but have value to society nonetheless. ¹⁴ Many projects on the Riverfront fall into this category. For example, Dravo Plaza and the Riverwalk are used informally by joggers every day and formally by those participating in official 5-K competitions. Similarly, many people attend the annual Bob Marley festival in the Tubman-Garrett Park or learn about Delaware's natural habitat in the DuPont Environmental Education Center. Other such examples abound. In short, there are real social benefits coming from the Riverfront's development that do not translate into fiscal revenues.

The following is an excerpt from a 2002 editorial coauthored by State Senator Patricia Blevins and then State Representative Roger Roy; 15

"We've been asked if the Riverfront will turn a profit someday. Former Gov. Peterson said it well when he told us the profits lie in the jobs it has created, the optimism it has fostered, and the renewal it has sparked.

Will the Riverfront ever make money? Of course not. As Delaware Finance Secretary David Singleton aptly put it, "Will Rockford Park ever make money?" No, it won't. But aren't we fortunate to have places such as Rockford Park and the Wilmington Riverfront for the public to enjoy beauty and tranquility.

The mountains of work involved have been eclipsed by the visible results. Even in these difficult economic times, we feel certain the Riverfront's best days are yet to come."

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¹⁴ Although methods do exist to help quantify the social value of these benefits, such methods are rarely direct or precise. In addition, translating social value into fiscal revenues adds and compounds to that imprecision.
¹⁵ Blevins, Patricia., and Roy, Roger. *Riverfront Will Progress Past Today's Setbacks*. The News Journal, Wilmington, Del.: Jun 3, 2002. p. A.9

The point being made in this editorial is that some expenditures are worth making even if there is no reasonable chance that the cost will be repaid. Logically, it is just as appropriate for a citizen to calculate the rate of return for a hamburger he or she eats for lunch as it is for a public to do so for a park, a replica of a 17th century Swedish ship, or an urban nature preserve. Thus, it is a legitimate question whether these expenditures should be cast in the same light of fiscal analysis as the expenditures used to purchase land, develop area infrastructure, erect new buildings, and recruit businesses.

Table 7 indicates the expenditures that have been made by the RDC on amenities chosen for their social value, not for their impact on the economy. Overall, we estimate that the RDC has spent \$66 million (\$54 million – nom \$) on such projects, the bulk of which (63%) was spent prior to 2003. The two most expensive projects are the Riverwalk (\$30 million – 2011 \$) and the DuPont Environmental Education Center (\$14 million – 2011 \$)

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¹⁶ The timeline of expenditures was estimated.

The Fiscal Impact of the Wilmington Riverfront

Table 7 Estimated RDC Expenditures (Thousands of 2011 \$) on Non-Revenue Generating Amenities (i.e. Public Consumption)

															Total	Total
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	(2011 \$)	(nom \$)
Public Artwork	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14	\$14	\$14	\$14	\$56	\$53
Christina River Taxi	\$0	\$0	\$0	\$105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105	\$80
Crane Restoration	\$0	\$0	\$103	\$100	\$98	\$96	\$94	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$580	\$457
DE Children's Museum	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,202	\$0	\$5,202	\$5,000
Dravo Plaza	\$0	\$0	\$738	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$738	\$546
DuPont Env. Ed. Ctr	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,536	\$0	\$0	\$13,536	\$13,061
Kalmar Nyckel	\$3,509	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,509	\$2,515
Public Docks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,138	\$1,100	\$0	\$0	\$2,238	\$2,123
Riverwalk	\$5,485	\$5,430	\$5,313	\$5,455	\$4,385	\$2,935	\$376	\$1,118	\$0	\$0	\$0	\$0	\$0	\$0	\$30,496	\$22,949
Tubman-Garrett Park	\$5,487	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,487	\$3,933
Urban Wildlife Marsh	\$0	\$499	\$489	\$476	\$463	\$454	\$445	\$427	\$411	\$396	\$0	\$0	\$0	\$0	\$4,061	\$3,254
Total (2011 \$)	\$14,481	\$5,929	\$6,643	\$6,136	\$4,946	\$3,485	\$914	\$1,635	\$411	\$396	\$1,152	\$14,650	\$5,215	\$14	\$66,008	
Total (nom \$)	\$10,379	\$4,293	\$4,916	\$4,662	\$3,861	\$2,774	\$743	\$1,383	\$362	\$362	\$1,075	\$14,136	\$5,013	\$13		\$53,972

[•] Center estimates using data provided by the Riverfront Development Corporation, Wilmapco (2002)¹⁷, and various articles from The News Journal.

[•] The complete listing of nominal values is reported in Table A 6 on page 71.

¹⁷ Wilmapco. (2002.) "Riverfront Development Corporation Five Year Report: 1996-2001". Commissioned by the Riverfront Development Corporation. Wilmington, DE.

Fiscal Revenues

In this section, we estimate the fiscal revenues associated with Riverfront development. Unlike expenditures, most of these revenue sources are not recorded by public entities as being directly tied to the Riverfront. No public entity, for example, will provide information on how much tax revenues a specific individual or employer paid to the state. Therefore, most revenues associated with the Riverfront had to be estimated rather than tallied. We derive tax revenue estimates from wages, employees, property values, residents, franchise taxes, gross receipts taxes, real estate transfers, and permit fees.

Tax Revenues from Riverfront Employment

Before we can estimate the tax revenues from Riverfront employment, we first had to determine how much employment had actually increased and how much would be credited to the Riverfront. Using employment records of all those Delaware businesses and non-profit organizations that paid unemployment insurance, we identified any one that reported an owner's address or physical address on the Riverfront sometime between the first quarter of 1997 and the second quarter of 2011. A timeline of quarterly wages and employment for these businesses was then constructed.¹⁸

Figure 3 highlights the employment (left axis, solid line) and average annual wages (right axis, dashed line) for businesses while they were on the Riverfront. Prior to 2005, employment was increasing on the Riverfront, rising from 1,250 in 1997 to 1,900 in 2004. The Riverfront then experienced a major influx of business activity between 2005 and 2008, rising to a peak of 4,500 employees in late 2007. Since 2008, employment has declined slightly.

¹⁸ Once each had been identified, the employment and wage histories were analyzed and manually adjusted to reflect just the activity of the establishments located on the Riverfront. A combination of news reports, business licenses, and local knowledge were used to make these adjustments.

¹⁹ Each line in Figure 3 and Figure 4 reflects a lagged, 4-quarter moving average.

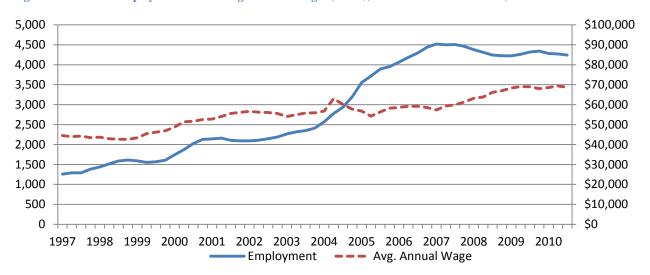


Figure 3 Smoothed Employment and Average Annual Wages (2011 \$) for Riverfront Businesses, 2000-2010

• Center estimates using Delaware Department of Labor Unemployment Insurance files, 1997 Q1 – 2011 Q2

Figure 3 also indicates the timeline of the average annual wage for businesses on the Riverfront. The graph shows that between 1997 and 1999, the average annual wage declined slightly from \$44,500 to \$42,900. Since 1999, the average wage has been rising steadily as multiple corporations moved their headquarters to the Riverfront. By 2010, the average wage of employees on the Riverfront was approximately \$68,600. The increase in the average wage is all the more remarkable given the large gains made in employment. We should note that the average wage increases quickly as higher paying jobs replace lower paying jobs.

Although employment and wages in Figure 3 show strong signs of economic growth on the Riverfront, this does not necessarily translate into revenue growth for the city or state. It is entirely possible that some firms simply moved between two different Delaware locations and had no impact on tax revenues. In addition, there was some economic activity on the Riverfront prior to 1996, so that activity should not be credited in this analysis. We refer to the remaining changes on the Riverfront as *net economic activity*.

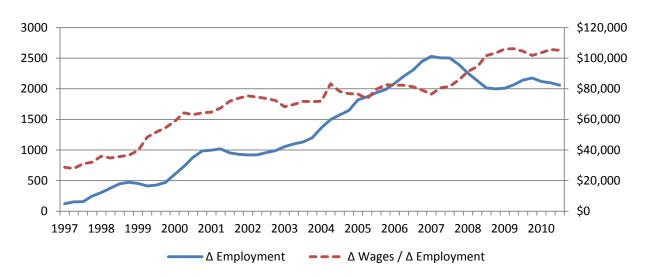


Figure 4 Employment and Implied Annual Wages (2011 \$) of New Economic Activity among Riverfront Businesses

• Center estimates using Delaware Department of Labor Unemployment Insurance files, 1997 Q1 – 2011 Q2

Figure 4 adjusts the series of employment and annual wages to reflect net Riverfront activity. Since 1997, there are nearly 2,060 total net new jobs in Delaware as a result of Riverfront activity. Moreover, the total area wages have increased so much such that if these wages came from just the net new jobs, the average annual wage of each job would be \$107,000. 21

390 jobs moved from the Riverfront to other locations in the state (Penoni Associates, Burns & McBride, P&C Roofing, etc.). Thus, the number of net new jobs was calculated as 4.250 - 1.140 - 1.440 + 390 = 2.060. The

²⁰ In 2010, the physical boundary of the Riverfront (see Figure 1) was estimated to contain 4,250 jobs. The area held 1,140 jobs at the beginning of our analysis. Over time, 1,440 jobs moved to the Riverfront from other locations in the state (e.g. Buccini-Pollin Group/E.J. Deseta, Horizon House, Integrity Staffing, Phillips & Cohen, etc.), and

location of each business is subject to certain data limitations in the Delaware Department of Labor source files. ²¹ Real wages have increased for both new and existing jobs, however the average wage calculated in Figure 4 credits those additional wages to just the net new jobs (i.e. the average wage of existing jobs is assumed to stay constant).

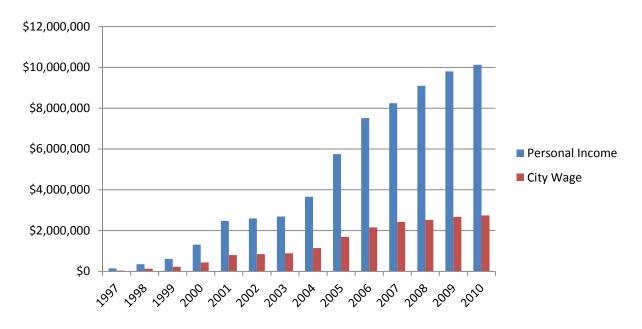


Figure 5 Estimated Personal Income and City of Wilmington Wage Tax Revenues (2011 \$) from New Economic Activity

• Center estimates using Delaware Department of Labor Unemployment Insurance files, 1997 Q1 – 2010 Q4

Using the timelines of employment and wages, along with external information provided to the Center by the Delaware Department of Finance and private businesses, we estimate the personal income tax revenues collected by the State of Delaware and the wage tax revenues collected by the City of Wilmington. Figure 5 shows these revenues. Similar to the adjustments made in Figure 4, only revenues generated from net activity are included.²² The employment and wages have been adjusted for in-state relocations.

The addition to the personal income tax increased from essentially nothing to \$2.5 million per year by 2003. Between 2004 and 2008, the net contribution of Riverfront employees to income tax revenues increased rapidly to \$9.1 million per year. As of 2010, these businesses were contributing \$10.1 million to the state's income tax revenue.

 $^{^{22}}$ Tax rates were calculated using actual average annual wage at each establishment, not the implied annual wage of net new jobs represented in Figure 4.

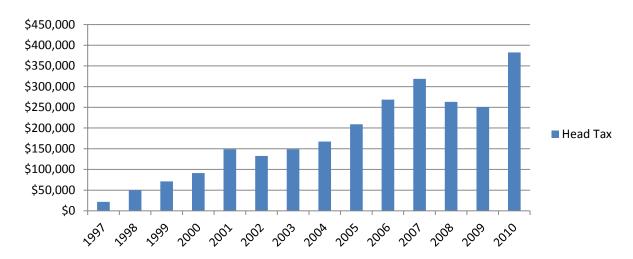


Figure 6 Estimated Revenues (2011 \$) for the City Wilmington Head Tax for Employees in a Riverfront Business

• Center estimates using Delaware Department of Labor Unemployment Insurance files, 1997 Q1 – 2010 Q4

Wage tax revenues for the City of Wilmington showed a similar timeline. In the 1990's, revenues from the wage tax were negligible. Between 2001 and 2003, the revenues had increased to between \$0.8 and \$0.9 million each year. Four years of quick growth then followed, and by 2010, the wage tax on these businesses raised the city's revenues by \$2.7 million.

In addition to the 1.25% wage tax, the City of Wilmington also imposes a tax per employee, called the head tax. Prior to 2010, the tax equaled \$10 per month for each employee beyond a company's first 5 employees. That rate has since risen to \$15 per employee, per month. Using the previous estimates of Riverfront employment, we estimate that the contribution of the head tax rose from \$150,000 in 2000 to \$325,000 in 2007 (see Figure 6). Employment losses from the recession cut these revenues to \$250,000 in 2009, but that jumped to \$375,000 per year when the new rate took effect.

Table 8 Tax Rates for Delaware's Bank Franchise Tax

Taxable Income Range	Tax Rate
Not greater than \$20 million	8.70%
\$20 million to \$25 million	6.70%
\$25 million to \$30 million	4.70%
\$30 million to \$650 million	2.70%
Greater than \$650 million	1.70%

• Source: State of Delaware Office of the State Bank Commissioner

Revenues from the Bank Franchise Tax

Another major source of funding attributed to the Riverfront is the bank franchise tax (BFT). The BFT applies to financial institutions with corporate headquarters in Delaware, and it is levied in lieu of other business taxes. Not only do both Barclays and ING Direct have their corporate headquarters on the Riverfront, but prior conversations with bank executives indicated that the Riverfront's development and the RDC were the major influencing factors in their decision to move to Delaware. BFT revenues were estimated as income before taxes, multiplied by 0.56 and the applicable tax rate. The tax rate is regressive (the rate declines as income increases) and is shown in Table 8.

We assume that banks pay the normal BFT rate except in the years where a loss before income is reported. Of course, banks can apply deductions that reduce their tax liability, and these deductions can include examination fees and taxes paid in other states. However, deduction information is not publicly available, so the estimates derived in this report do not consider them. We also recognize that banks could file the "Alternative Method" and face a separate tax treatment altogether. All of these caveats should be considered when analyzing the BFT estimates in Table 9.

Table 9 Estimated Bank Franchise Tax Revenues from Riverfront sources (Thousands of 2011 \$)

2000	\$0
2001	\$0
2002	\$1,518
2003	\$2,038
2004	\$4,470
2005	\$6,369
2006	\$5,818
2007	\$6,398
2008	\$1,468
2009	\$0
2010	\$7,066
Total (2011 \$)	\$35,146
Total (Nom. \$)	\$31,871
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- Source: Center for Applied Demography & Survey Research
- The complete listing of nominal values is reported in Table A 7 on page 72.

The estimated BFT revenue from Riverfront banks grew rapidly between 2002 and 2007, driven by the rapid expansion of ING Direct and Barclays. By 2007, the BFT added approximately \$6 million to state coffers due to ING Direct and Barclays. BFT revenue fell sharply in 2008 to \$1 million as the recession hit the banking industry. In 2009, both Riverfront banks posted losses and were estimated to have not paid the BFT. As the sector recovered, profits were posted once again, causing the BFT estimates to rebound to \$7 million in 2010. By 2010, the BFT levied on these banks had created \$35 million (\$32 – nom \$) in fiscal revenue for the state.

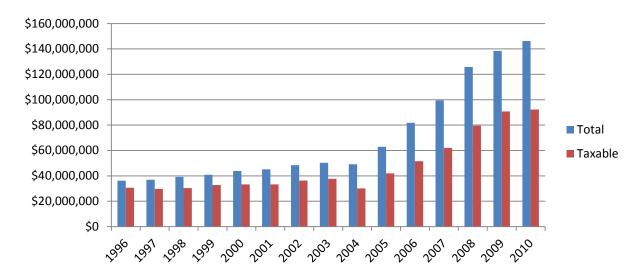


Figure 7 Total Assessed Value (1983 \$) of Riverfront Properties, 2000-2011

• Center's estimates using New Castle County's Department of Land Use historical parcel records

Tax Revenues from Property Assessments and Real Estate Transfers

The assessed values of Riverfront properties have also increased, as shown in Figure 7 above. Assessed property values rose from \$36 million in 1996 to \$49 million in 2004. Beginning in 2005, property values on the Riverfront appreciated rapidly for the next four years. The total assessed value of Riverfront properties was \$146 million in 2010, a growth of 233% in just 10 years.

Figure 7 also indicates the portion of those assessed values that are subject to taxation. While there has have always been some properties that were exempt from paying property taxes, the amount has escalated since 2005. Between 2000 (\$33 million) and 2010 (\$93 million), the amount of taxable assessed values increased 178%.

 $^{^{23}}$ All assessed values in New Castle County reflect 1983 market conditions and so are below the actual market value.

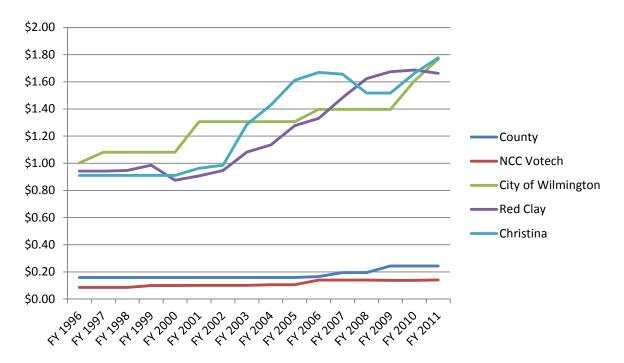


Figure 8 Nominal Property Tax Rates Applicable to the Riverfront (per \$100 of Taxable Assessed Value)

 Source: New Castle County Office of Finance, Comprehensive Annual Report (various years). New Castle County Division of Land Use, Parcel Search. City of Wilmington Department of Finance, Parcel Search. Christina Connection Newsletter, July 2001. Red Clay Consolidated School District FY 2005 Final Budget.

Figure 8 above indicates the various property tax rates applicable to the Riverfront since FY 1996. Property tax rates levied for New Castle County and the New Castle County Vocational Technical school district are much lower compared to the rates for the City of Wilmington, the Red Clay school district, or the Christina school district. All of these rates have been increasing over time. Since FY 2001 the vo-tech property tax increased the least (41% increase), while the tax rate on residential properties going to the Christina School District increased the most (95% increase). The rise in assessed values and tax rates both contribute to the growth in tax revenues.

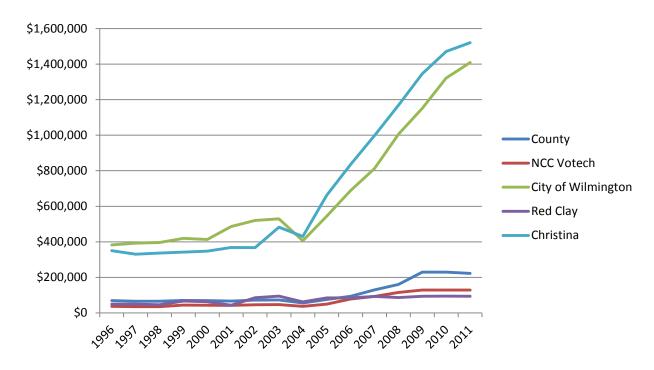


Figure 9 Gross Property Tax Revenues (nominal \$) Generated from Riverfront Parcels, FY 2001 - FY 2012

Source: Center for Applied Demography & Survey Research

Figure 9 indicates the timeline of revenue that was generated from the property taxes levied on Riverfront parcels. One can see that while all of the tax revenues increased from their FY 1996 levels, the contributions to the City of Wilmington²⁴ and the Christina School District were the most significant. In 2012, the property tax revenues generated for these organizations were \$1.6 million and \$1.5 million respectively, an increase of nearly \$1.3 million since 1996. New Castle County receives nearly \$225,000 each year in revenue from the Riverfront, the county's vo-tech high school district receives \$130,000, and the Red Clay School District receives \$90,000.

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²⁴ City of Wilmington assessed values were estimated using the New Castle County assessed values.

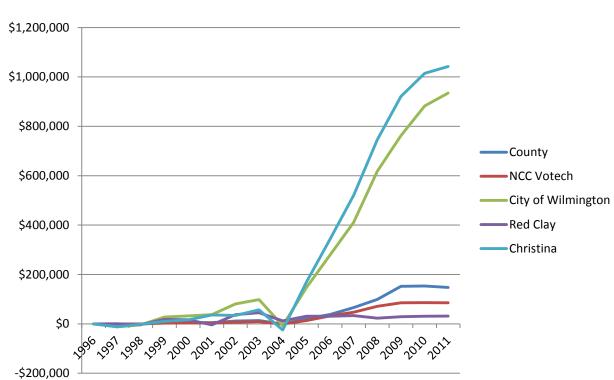


Figure 10 Estimated Net Tax Revenue (2011 \$) from Increased Assessed Values

• Source: Center for Applied Demography & Survey Research

Because the Riverfront development increased only the assessed values and not the property tax rates, it is inappropriate to credit the entire revenue gains that occurred to the Riverfront development. Figure 10 adjusts those revenues to reflect the annual tax revenues that occurred strictly due to rising property values. The City of Wilmington and Christina School District still receive the bulk of these revenues, but Riverfront property development itself is responsible for approximately \$1 million per year, not \$1.5 million per year.

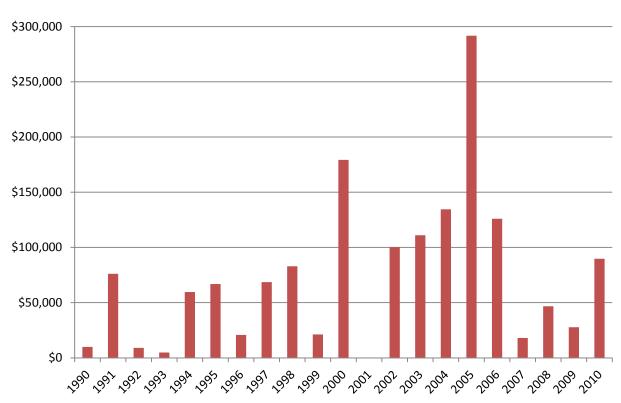


Figure 11 Real Estate Transfer Tax Revenues (nominal \$) for Riverfront Properties

- Center estimates using New Castle County's Department of Land Use historical parcel records
- Revenues are split evenly between New Castle County and the City of Wilmington.

Figure 11 indicates the estimated tax revenues that were generated through the real estate transfer tax for Riverfront properties since 1990.²⁵ Although there had been some tax revenue generated in the 1990's, the activity increased markedly in 2000. Over the next six years, the revenues from the real estate transfer tax generated an average of \$157,000 each year. As Delaware's real estate market burst in 2007, revenue from this tax plummeted 86% in a single year to just \$18,000. There was a moderate recovery to these revenues in 2010.

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²⁵ These estimates were created by taking 3% of the final sales price of any property that sold in each year. Because some parcels were rezoned but maintained the original sales information associated with the older parcels, only unique price and date combinations were used in the above calculations. This method yields a conservative estimate only if two separate Riverfront parcels sold for the same price on the same day.

Table 10 Estimated Construction Costs (Thousands of 2011 \$) for Riverfront Projects

	Private	RDC	Other Public	DelDot	Total	Total
Í	Funds	Contribution	Funding	Construction	(2011 \$)	(Nom. \$)
1997	\$0	\$0	\$4,741	\$1,674	\$6,415	\$4,598
1998	\$13,715	\$0	\$15,191	\$6,215	\$35,121	\$25,431
1999	\$21,877	\$5,090	\$0	\$19,006	\$45,973	\$34,021
2000	\$21,678	\$0	\$7,783	\$9,045	\$38,507	\$29,258
2001	\$30,342	\$4,197	\$0	\$4,531	\$39,070	\$30,494
2002	\$2,638	\$0	\$0	\$6,747	\$9,385	\$7,470
2003	\$22,515	\$0	\$0	\$2,640	\$25,155	\$20,445
2004	\$14,067	\$0	\$0	\$10,423	\$24,490	\$20,717
2005	\$139,351	\$0	\$22,751	\$30,799	\$192,901	\$169,574
2006	\$125,947	\$0	\$0	\$25,928	\$151,875	\$138,674
2007	\$295,583	\$0	\$2,566	\$14,616	\$312,765	\$291,831
2008	\$0	\$0	\$0	\$16,608	\$16,608	\$16,025
2009	\$2,601	\$0	\$0	\$297	\$2,897	\$2,785
2010	\$25,910	\$0	\$0	\$0	\$25,910	\$25,400
Total (2011 \$)	\$716,226	\$9,287	\$53,032	\$148,527	\$927,073	
Total (Nom. \$)	\$639,774	\$7,043	\$42,706	\$127,202		\$816,725

- Center estimates using data provided by the Riverfront Development Corporation and Condliffe (2007).
- The complete listing of nominal values is reported in Table A 8 on page 72.

Revenues from Construction and Infrastructure

Table 10 indicates that \$927 million (\$817 million – nom \$) of public and private funds have been spent on construction and infrastructure projects since 1997. The table indicates that the majority of this spending took place between 2005 and 2007, coinciding with the rise in property values. The majority of funding came from private sources (77%), followed by DelDot (16%), and then other sources (7%).

Table 11 estimates the fiscal impact of construction spending. An earlier report on the Riverfront (Condliffe, 2007) assumed that the labor costs were 40% of total construction costs, total labor compensation was \$50 per hour, and nonwage compensation was 33% of the wage rate. We also estimated the expected number of labor hours under these assumptions. Designating 2,080 hours for each full time equivalent (FTE) implied that Riverfront construction generated 3,141 FTE's since 1997.

Table 11 Estimated Costs, Employment, and Tax Revenues (Thousands of 2011 \$) Collected from New Construction on the Riverfront

		Labor		Permit			Gross	Personal
	Labor Costs	Hours	FTE's	Fees	Wage Tax	Head Tax	Receipts	Income Tax
1997	\$2,566	36,784	17.7	\$47	\$24	\$0	\$32	\$77
1998	\$14,048	203,448	97.8	\$289	\$132	\$2	\$195	\$424
1999	\$18,389	272,168	130.9	\$270	\$173	\$2	\$182	\$555
2000	\$15,403	234,067	112.5	\$295	\$145	\$2	\$199	\$465
2001	\$15,628	243,952	117.3	\$345	\$147	\$2	\$233	\$472
2002	\$3,754	59,764	28.7	\$26	\$35	\$0	\$18	\$113
2003	\$10,062	163,564	78.6	\$225	\$95	\$1	\$152	\$304
2004	\$9,796	165,733	79.7	\$141	\$92	\$1	\$95	\$296
2005	\$77,161	1,356,595	652.2	\$1,621	\$725	\$9	\$1,092	\$2,329
2006	\$60,750	1,109,393	533.4	\$1,259	\$571	\$7	\$849	\$1,833
2007	\$125,106	2,334,652	1,122.4	\$2,981	\$1,176	\$14	\$2,009	\$3,776
2008	\$6,643	128,200	61.6	\$0	\$62	\$1	\$0	\$200
2009	\$1,159	22,281	10.7	\$26	\$11	\$0	\$18	\$35
2010	\$10,364	203,200	97.7	\$259	\$97	\$1	\$175	\$313
Total (2011 \$)	\$370,829	6,533,802	3,141	\$7,785	\$3,485	\$43	\$5,247	\$11,192
Total (Nom. \$)	\$326,690	6,533,802	3,141	\$6,895	\$3,070	\$38	\$4,647	\$9,860

- Center estimates using data provided by the Riverfront Development Corporation and Condliffe (2007)...
- The complete listing of nominal values is reported in Table A 9 on page 73.

Columns 4 through 8 in Table 11 show the impact that this spending has had on tax revenues. The fourth column estimates that \$7.8 million was collected in permit fees over the years, which was derived as 1% of all non-DelDot spending. By taking 1.25% of the total labor cost, we also estimated that the City of Wilmington wage taxes likely increased by \$3.5 million between 1997 and 2010. The contribution of construction spending to the city's head tax was approximately \$43,000 over that time period. Revenues from the gross receipts tax were estimated by multiplying non-DelDot construction spending by 0.6739% (totaling \$5.2 million – 2011 \$). Finally, the personal income tax revenue from construction worker compensation was estimated using an average effective tax rate of 4.014%. We estimate that \$11.2 million in personal income tax revenue was generated from this temporary construction spending.

Table 12 Assumptions for Estimating Fiscal Impact for New Residents

Project	Unit Type	Year Built	# Units	% New State	% New City	Assumed Income	Residents per unit
Justison Landing	Condo	2008	84	29.1%	80.0%	\$54,285	1.75
Justison Landing	Apartment	2008	214	29.1%	80.0%	\$56,667	1.5
Justison Landing	Townhouse	2008	42	29.1%	80.0%	\$87,500	2
Christina Landing	Condo	2007	184	29.1%	80.0%	\$54,285	1.75
Christina Landing	Apartment	2006	173	29.1%	80.0%	\$56,667	1.5
Christina Landing	Townhouse	2006	63	29.1%	80.0%	\$87,500	2

• Source: Center for Applied Demography & Survey Research

Revenues from New Residents

The next source of revenues came from new residents to the Riverfront. Justison Landing is comprised of 214 apartments and 120 condos and townhomes. Christina Landing has 173 apartments and 247 condos and townhomes. The Christina Landing apartments and condos were completed by 2006 and the townhomes were completed by 2007. The two Justison Landing buildings were completed in 2008.

In order to estimate the fiscal impact of these new residents, we used the same assumptions that had been given to us by the City of Wilmington. First, we assumed that 29.1% of new residents came from outside the state and 80% came from outside the city. We also assumed that all residential units would gradually become occupied within two years (Buccini-Pollin). Further, residents living in condominiums were assumed to have an average annual income of \$54,285. We also assumed that residents living in apartments had an average annual income of \$56,667 and that residents living in townhomes had an average annual income of \$87,500. Our assumptions are listed in Table 12. The corresponding rise in tax revenues is shown in Table 13.

Table 13 Estimated Tax Revenues (Thousands of 2011 \$) from Residents on the Riverfront

	All Resi	dents	New Residents				
Year	City Wage Tax	State PIT	City Wage Tax	State PIT			
2006	\$384	\$1,145	\$307	\$333			
2007	\$496	\$1,465	\$397	\$426			
2008	\$852	\$2,507	\$682	\$729			
2009	\$952	\$2,775	\$761	\$808			
2010	\$1,008	\$2,912	\$806	\$847			
Total (2011 \$)	\$3,692	\$10,804	\$2,953	\$3,144			
Total (Nom. \$)	\$3,538	\$10,353	\$2,831	\$3,013			

- Source: Center for Applied Demography & Survey Research
- The complete listing of nominal values is reported in Table A 10 on page 73.

Table 13 highlights the total increase in revenues from Delaware's personal income tax and the City of Wilmington's wage tax from those people moving to the Riverfront's residences. We estimate that the state received nearly \$2.9 million and the City of Wilmington received nearly \$1 million in 2010, but just \$850,000 and \$800,000 of those respective funds came from new residents.

Revenue Summary

Table 14 lists the total public revenues generated from new Riverfront activity, including the effects of business activity, construction, and residential development. In total, \$230 million (\$214 million – nom \$) has been added to various public entities as a result of developing the Riverfront. The primary source of these revenues is the state's personal income tax. The bank franchise tax and the City of Wilmington's wage tax are the second and third most important sources of revenue, respectively. We should mention that although large, the estimated revenues generated from the bank franchise tax have been extremely variable due to the recession's effects on the financial sector.

²⁶ Revenue estimates from our baseline growth forecasts (detailed in the next chapter) are included for 2011 and 2012 so that the summary is as up to date as possible.

Table 14 Total Estimated Public Revenues (Thousands of 2011 \$) due to Net Riverfront Activity

	Bank Franchise	Personal Income	Real Estate Transfer	Gross Receipts	City Property	Permit Fees	City Head Tax	City Wage Tax	School Property	County Property	State Other	Total (2011 \$)	Total (Nom. \$)
1996	\$0	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30	\$21
1997	\$0 \$0	\$225	\$96	\$32	-\$12	\$47	\$22	\$69	-\$13	-\$2	\$0 \$0	\$464	\$333
1998	\$0	\$781	\$115	\$195	-\$4	\$289	\$51	\$268	-\$4	-\$1	\$0	\$1,689	\$1,223
1999	\$0 \$0	\$1,165	\$29	\$182	\$28	\$270	\$73	\$400	\$31	\$5	\$0 \$0	\$2,182	\$1,615
2000	\$0 \$0	\$1,775	\$236	\$199	\$32	\$295	\$93	\$589	\$36	\$5 \$5	\$0 \$0	\$3,260	\$2,477
2001	\$0 \$0	\$2,954	\$0	\$233	\$38	\$345	\$151	\$951	\$35	\$5 \$5	\$0 \$0	\$4,712	\$3,677
2002	\$1,518	\$2,711	\$126	\$18	\$81	\$26	\$133	\$880	\$33 \$78	\$11	\$0 \$0	\$5,583	\$4,444
2003	\$2,038	\$2,994	\$137	\$152	\$98	\$225	\$150	\$983	\$111	\$14	\$0 \$0	\$6,901	\$5,609
2003	\$4,470	\$3,957	\$157 \$159	\$95	-\$7	\$141	\$150 \$168	\$1,235	-\$13	-\$1	\$0 \$0	\$10,204	\$8,632
										•	•		
2005	\$6,369	\$8,077	\$332	\$1,092	\$147	\$1,621	\$218	\$2,417	\$213	\$20	\$0	\$20,507	\$18,027
2006	\$5,818	\$9,654	\$138	\$849	\$279	\$1,259	\$276	\$3,061	\$406	\$38	\$8,214	\$29,991	\$27,384
2007	\$6,398	\$12,413	\$19	\$2,009	\$411	\$2,981	\$333	\$4,027	\$600	\$66	\$8,038	\$37,297	\$34,800
2008	\$1,468	\$9,979	\$48	\$0	\$618	\$0	\$264	\$3,316	\$840	\$99	\$0	\$16,633	\$16,048
2009	\$0	\$10,597	\$29	\$18	\$762	\$26	\$251	\$3,495	\$1,036	\$152	\$0	\$16,366	\$15,732
2010	\$7,066	\$11,239	\$92	\$175	\$883	\$259	\$384	\$3,694	\$1,131	\$153	\$0	\$25,075	\$24,581
2011 (est.)	\$7,136	\$11,035	\$47	\$0	\$917	\$0	\$386	\$3,632	\$1,183	\$158	\$0	\$24,493	\$24,493
2012 (est.)	\$7,208	\$11,129	\$47	\$0	\$952	\$0	\$390	\$3,663	\$1,237	\$162	\$0	\$24,787	\$25,282
Total (2011 \$)	\$49,490	\$100,686	\$1,678	\$5,247	\$5,221	\$7,785	\$3,343	\$32,681	\$6,907	\$884	\$16,252	\$230,173	
Total (Nom. \$)	\$46,359	\$93,899	\$1,413	\$4,647	\$5,049	\$6,895	\$3,076	\$30,500	\$6,684	\$857	\$15,000		\$214,379

- Other state funds includes \$15 million (nominal \$) transfer from Buccini-Pollin to the State of Delaware for a real estate purchase.
- State revenues: Bank Franchise Tax, Personal Income Tax, half of the Real Estate Transfer Tax, Gross Receipts Tax, and other state funds.
- City revenues: half of the Real Estate Transfer Tax, City Property Tax, Permit Fees, City Head Tax, and City Wage Tax.
- Source: Center for Applied Demography & Survey Research
- The complete listing of nominal values is reported in Table A 11 on page 74.

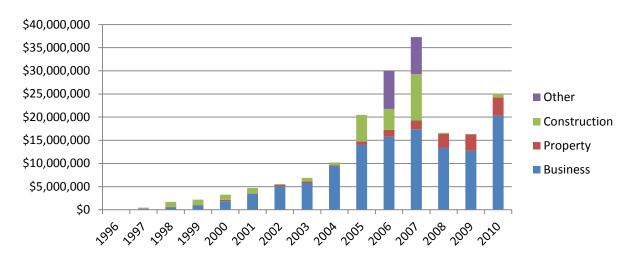


Figure 12 Tax Revenues (2011 \$) Created by Riverfront Activities, by Source

• Source: Center for Applied Demography & Survey Research

Figure 12 decomposes the revenues listed in Table 14 by their source. Business revenues include the head tax, wage tax, personal income tax, and the bank franchise tax that resulted from new activity on the Riverfront. Property revenues include revenues from increased assessed values, real estate transfers, and new residents. Construction revenues include all temporary revenues from developing the Riverfront, including permit fees, the gross receipts tax, and the head, wage, and personal income taxes levied on construction workers. Other revenues reflect the one-time sale of public property.

The figure indicates that new business activity is the main source of public revenue generated on the Riverfront. Although revenue coming from construction activity and other funds was quite large between 2005 and 2007, the effects were temporary. In fact, the figure shows just how extraordinary these short term revenues were. As the level of private investment fell in 2008, banks experienced heavy losses, and public revenues declined significantly.

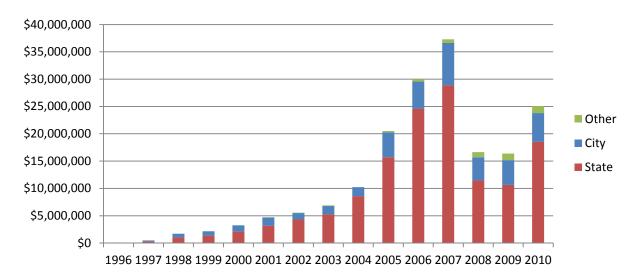


Figure 13 Tax Revenues (2011 \$) Created by Riverfront Activities, by Destination

• Source: Center for Applied Demography & Survey Research

Figure 13 shows the destination of the revenues listed in Table 14. It indicates that the State of Delaware (73%) and the City of Wilmington (23%) receive nearly all of the public revenues generated on the Riverfront. In 2010, we estimate that state revenues increased \$18.7 million, and city revenues increased \$4.9 million as a result of net Riverfront activity.

Revenue Summary for Gross Riverfront Activities

One of the assumptions made in this report is that only *new* activity on the Riverfront should be considered when estimating the fiscal impact. One of the reasons for this assumption is to ensure that business activity already on the Riverfront prior to 1996 does not affect the fiscal analysis. The focus on net activities also negates the impact of in-state business relocation. Alternatively, one may prefer to measure public revenues generated by all activity on the Riverfront since 1996. We refer to this alternative definition as *gross Riverfront activities*.

Table 15 summarizes the total public revenue generated from gross activity on the Riverfront.²⁷ This includes tax revenues levied on businesses that were on the Riverfront prior to 1996, as well as taxes levied on businesses and households that were new to the Riverfront, but not necessarily new to the state. As of 2012, nearly \$32 million in fiscal revenue is generated from Riverfront activity each year, \$23 million of which comes directly from the state's personal income tax and the bank franchise tax.

Since 1996, nearly \$308 million (\$284 million – nom \$) has been generated from gross business activity, property development, and residential in-migration since 1996. The largest contributing factor to these revenues was the \$144 million generated by the personal income tax. The bank franchise was also a major source of revenue, accounting for just over \$49 million. The City of Wilmington also received \$47 million through the wage tax.

43

 $^{^{27}}$ As in Table 14, revenue estimates from our baseline growth forecasts (detailed in the next chapter) are included for 2011 and 2012 so that the summary is as up to date as possible.

Table 15 Total Estimated Public Revenues (Thousands of 2011 \$\) due to Gross Riverfront Activity

			Real					City					
	Bank	Personal	Estate	Gross	City	Permit	City	Wage	School	County	State	Total	Total
ı	Franchise	Income	Transfer	Receipts	Property	Fees	Head Tax	Tax	Property	Property	Other	(2011 \$)	(Nom. \$)
1996	\$0	\$1,548	\$30	\$0	\$383	\$0	\$192	\$635	\$437	\$69	\$0	\$3,294	\$2,308
1997	\$0	\$1,804	\$96	\$32	\$392	\$47	\$212	\$730	\$415	\$66	\$0	\$3,794	\$2,719
1998	\$0	\$2,349	\$115	\$195	\$396	\$289	\$242	\$925	\$419	\$66	\$0	\$4,996	\$3,617
1999	\$0	\$2,702	\$29	\$182	\$419	\$270	\$262	\$1,043	\$454	\$70	\$0	\$5,430	\$4,018
2000	\$0	\$3,273	\$236	\$199	\$414	\$295	\$279	\$1,215	\$455	\$69	\$0	\$6,434	\$4,889
2001	\$0	\$4,432	\$0	\$233	\$486	\$345	\$333	\$1,567	\$454	\$67	\$0	\$7,918	\$6,180
2002	\$1,518	\$4,280	\$126	\$18	\$521	\$26	\$318	\$1,526	\$499	\$72	\$0	\$8,904	\$7,088
2003	\$2,038	\$4,568	\$137	\$152	\$529	\$225	\$338	\$1,634	\$625	\$73	\$0	\$10,318	\$8,386
2004	\$4,470	\$5,609	\$159	\$95	\$406	\$141	\$368	\$1,929	\$530	\$56	\$0	\$13,763	\$11,642
2005	\$6,369	\$10,022	\$332	\$1,092	\$545	\$1,621	\$497	\$3,264	\$797	\$75	\$0	\$24,615	\$21,639
2006	\$5,818	\$12,423	\$138	\$849	\$689	\$1,259	\$545	\$3,947	\$999	\$94	\$8,214	\$34,976	\$31,936
2007	\$6,398	\$15,422	\$19	\$2,009	\$812	\$2,981	\$600	\$4,933	\$1,184	\$130	\$8,038	\$42,525	\$39,679
2008	\$1,468	\$13,973	\$48	\$0	\$1,005	\$0	\$549	\$4,389	\$1,370	\$161	\$0	\$22,964	\$22,157
2009	\$0	\$14,811	\$29	\$18	\$1,152	\$26	\$531	\$4,592	\$1,569	\$230	\$0	\$22,958	\$22,068
2010	\$7,066	\$15,571	\$92	\$175	\$1,322	\$259	\$793	\$4,799	\$1,695	\$229	\$0	\$32,000	\$31,370
2011 (est)	\$7,136	\$15,410	\$47	\$0	\$1,372	\$0	\$800	\$4,748	\$1,772	\$236	\$0	\$31,521	\$31,521
2012 (est)	\$7,208	\$15,541	\$47	\$0	\$1,425	\$0	\$806	\$4,789	\$1,853	\$243	\$0	\$31,912	\$32,549
Total (2011 \$)	\$49,490	\$143,738	\$1,678	\$5,247	\$12,269	\$7,785	\$7,664	\$46,666	\$15,528	\$2,006	\$16,252	\$308,323	
Total (Nom. \$)	\$46,359	\$132,677	\$1,413	\$4,647	\$11,093	\$6,895	\$6,900	\$42,793	\$14,169	\$1,822	\$15,000		\$283,769

- Other state funds includes \$15 million (nominal \$) compensation from Buccini-Pollin to the State of Delaware for a land purchase.
- State revenues: Bank Franchise Tax, Personal Income Tax, half of the Real Estate Transfer Tax, Gross Receipts Tax, and other state funds.
- City revenues: half of the Real Estate Transfer Tax, City Property Tax, Permit Fees, City Head Tax, and City Wage Tax.
- Source: Center for Applied Demography & Survey Research
- The complete listing of nominal values is reported in Table A 12 on page 75.

Other Related Items

Public Assets

The fiscal analysis in this report addresses public expenditures and revenues. When public funds are used to purchase an asset, this analysis counts that purchase as either an investment or consumption. Of course, the asset retains value, but this analysis only considers that as a benefit the asset is sold to a private party. According to a 2010 filing to the IRS, the RDC possessed \$129 million (nom \$) of assets, \$62 million of which was related to land, buildings, and equipment. ^{28, 29} The RDC also had \$19 million (nom \$) in liabilities, \$14 million of which are attributable to secured mortgages and notes payable to other third parties. While these assets are not as liquid as cash and do not directly impact the fiscal analysis, their value certainly speaks to the gain in public wealth created by the Riverfront development.

²⁰

²⁸ The figure reflects the book valuation and deducts for asset depreciation.

²⁹ Internal Revenue Service. (2010.) "Form 990 – Return of Organization Exempt from Income Tax." Online document. http://irs990.charityblossom.org/990/201006/510373101.pdf>.

Table 16 Reported Value (Thousands of 2011 \$) of the Riverfront Development Corporation's Assets

	Asset Value	Remaining Liability	Net Asset (2011 \$)	Net Asset (nom \$)	
Chase Center	\$30,937	\$5,585	\$25,352	\$24,853	
Amtrak CNOC Building	\$1,754	\$0	\$1,754	\$1,949	
707 S Market St	\$1,004	\$464	\$540	\$529	
720 Justison St	\$2,844	\$2,822	\$22	\$22	
516 S Market St	\$617	\$306	\$311	\$305	
525 S Market St	\$755	\$714	\$41	\$40	
Total	\$37,912	\$9,891	\$28,021	\$27,698	

- Source: Riverfront Development Corporation
- The asset value of the Amtrak CNOC Building was calculated as the present value of the estimated income from a five year lease and a buyout provision.
- The complete listing of nominal values is reported in Table A 13 on page 76.

Table 16 indicates the value of specific assets owned by the RDC. In total, the net value of these assets is \$28 million, most of which is concentrated in the Chase Center on the Riverfront. Of course, the RDC is not the only public agency that owns assets on the Riverfront. For example, the State of Delaware owns the parking garage on West St. and Justison St. and paid \$23 million (\$21 million – nom \$) to build it.

Table 17 Estimated Value of Public Properties Held by the City of Wilmington, the RDC, and the State of Delaware

	Assessed Value (1983 \$)	Est. Market Value (2010 \$)
City of Wilmington	\$1,392	\$4,370
Riverfront Development Corp.	\$7,150	\$22,412
State of Delaware	\$6,931	\$21,729
Total	\$15,473	\$48,511

Center's estimates using New Castle County's Department of Land Use 2011 parcel records

Table 17 reports the assessed values of all land and structures on the Riverfront owned by a public entity. The assessed values of these properties, valued in 1983 prices, were inflated to 2010 prices using sales to assessment ratios.³⁰ In total, this method estimates that the public owns nearly \$49 million of Riverfront properties. 31,

³⁰ Ratledge, Edward. (2011) "Assessment-To-Sales Ratio Study for Division III Equalization Funding: 2011 Project Summary - DRAFT." The Center for Applied Demography & Survey Research.

31 Assessment to sales ratio applies a county-wide average ratio to translate 1983 market conditions to the current

year. This methodology is best suited for analyzing many properties at once and is fairly imprecise when applied to just a handful of properties. Thus, the aggregation in Table 17 is an admittedly crude approximation of the actual market value. Differences between Table 16 and Table 17 largely reflect methodological differences in property valuation.

Table 18 Total Amount of Private Investment (Thousands of 2011 \$, Thousands of Nominal \$) Spent on the Riverfront

	Total Value (2011 \$)	Total Value (nom \$)
1998	\$13,715	\$9,931
1999	\$21,877	\$16,190
2000	\$21,678	\$16,472
2001	\$30,342	\$23,682
2002	\$2,638	\$2,100
2003	\$22,515	\$18,300
2004	\$14,067	\$11,900
2005	\$139,351	\$122,500
2006	\$125,947	\$115,000
2007	\$295,583	\$275,800
2008	\$0	\$0
2009	\$2,601	\$2,500
2010	\$25,910	\$25,400
Total	\$716,226	\$639,774

• Source: Riverfront Development Corporation

Private Investment

One of the RDC's mandated tasks is to leverage public funds in order to stimulate significant private investments. Table 18 shows this private investment explicitly. Between 1996 and 2010, the Riverfront has stimulated \$716 million (\$640 million – nom \$) of private investment, which is 2.1 times as large as all public expenditures on the Riverfront (see Table 6 on page 20). Table 18 also indicates that the bulk of private investment dollars came between 2005 and 2007, as Christina Landing and Justison Landing were being constructed.

Forecasts of the Fiscal Impact

In this section, we compare the expenditures and revenues estimated in the previous section to evaluate the fiscal impact that the Riverfront activity has had on the State of Delaware and the City of Wilmington. We then present 5-year forecasts of these revenues and expenditures to assess the Riverfront's future fiscal impact.

Table 19 summarizes the public revenues and expenditures for the City of Wilmington, the State of Delaware, and all other sources. Overall, \$230 million (\$214 million – nom \$) has been collected and \$346 million (\$293 million – nom \$) has been spent from new Riverfront activities. The table also indicates that between 1996 and 2012, the City of Wilmington has received nearly \$50 million (\$46 million – nom \$) from new Riverfront activity and spent \$24 million (\$21 million – nom \$) on various Riverfront projects over that time period.

The State of Delaware, on the other hand, has spent nearly \$306 million (\$258 million – nom \$) since 1996 to develop the Riverfront and has received \$173 million of revenues in return (\$161 million – nom \$). In other words, the state has spent approximately \$133 million (\$97 million – nom \$) of net expenditures to redevelop the Riverfront. In 2012, net Riverfront activities generated \$15 million more in state revenues than they cost in state expenditures.

Table 19 Comparison of Fiscal Revenues and Expenditures (Thousands of 2011 \$) Credited to the Riverfront

	Fiscal Revenues					Fiscal Expenditures				
				Total	Total				Total	Total
	City	State	Other	(2011 \$)	(Nom. \$)	City	State	Other	(2011 \$)	(Nom. \$)
1996	\$15	\$15	\$0	\$30	\$21	\$0	\$71	\$0	\$71	\$50
1997	\$174	\$305	-\$15	\$464	\$333	\$0	\$19,741	\$0	\$19,741	\$14,150
1998	\$661	\$1,033	-\$5	\$1,689	\$1,223	\$0	\$14,646	\$691	\$15,336	\$11,105
1999	\$785	\$1,361	\$36	\$2,182	\$1,615	\$4,524	\$37,924	\$0	\$42,449	\$31,413
2000	\$1,127	\$2,092	\$41	\$3,260	\$2,477	\$85	\$24,838	\$1,382	\$26,305	\$19,987
2001	\$1,485	\$3,187	\$40	\$4,712	\$3,677	\$30	\$16,062	\$0	\$16,092	\$12,560
2002	\$1,183	\$4,310	\$90	\$5,583	\$4,444	\$0	\$12,969	\$848	\$13,817	\$10,998
2003	\$1,525	\$5,252	\$125	\$6,901	\$5,609	\$1,722	\$5,716	\$0	\$7,438	\$6,045
2004	\$1,617	\$8,602	-\$14	\$10,204	\$8,632	\$4,256	\$13,023	\$12,875	\$30,154	\$25,508
2005	\$4,569	\$15,704	\$233	\$20,507	\$18,027	\$5,094	\$48,055	\$407	\$53,556	\$47,080
2006	\$4,943	\$24,604	\$444	\$29,991	\$27,384	\$4,152	\$37,975	\$0	\$42,127	\$38,465
2007	\$7,763	\$28,868	\$666	\$37,297	\$34,800	\$154	\$34,480	\$0	\$34,634	\$32,316
2008	\$4,222	\$11,472	\$938	\$16,633	\$16,048	\$1,305	\$25,998	\$0	\$27,303	\$26,344
2009	\$4,549	\$10,629	\$1,188	\$16,366	\$15,732	\$1,340	\$4,448	\$0	\$5,788	\$5,563
2010	\$5,265	\$18,525	\$1,285	\$25,075	\$24,581	\$889	\$3,039	\$0	\$3,928	\$3,851
2011 (est)	\$4,958	\$18,194	\$1,341	\$24,493	\$24,493	\$541	\$2,933	\$0	\$3,474	\$3,474
2012 (est)	\$5,028	\$18,360	\$1,399	\$24,787	\$25,282	\$121	\$3,668	\$0	\$3,789	\$3,865
Total (2011 \$)	\$49,869	\$172,514	\$7,790	\$230,173		\$24,212	\$305,586	\$16,202	\$346,000	
Total (Nom. \$)	\$46,227	\$160,611	\$7,541		\$214,379	\$20,931	\$258,368	\$13,474		\$292,773

[•] Source: Center for Applied Demography & Survey Research

[•] The complete listing of nominal values is reported in Table A 14 on page 77.

Forecasts for Net Riverfront Activity

One of the primary goals of this report is to forecast the Riverfront's fiscal impact. Given the inherent uncertainty of this task, our forecasts ignore the temporary receipts coming from new construction or one-time land deals. In addition, the impact of any specific future project is omitted from these forecasts. The forecasts include only those revenues stemming from natural employment growth, increases in property taxes, and changes to the bank franchise tax.

Employment growth forecasts were obtained from Economy.com, the Congressional Budget Office, and the Delaware Population Consortium. Economy.com predicts weak job growth (<1%) for 2011 and 2012, accelerating into 2013 (1.56%) and 2014 (3.08%), but then tapering off in 2016 and 2017. Similar to the Economy.com forecast, the Delaware Population Consortium assumes that employment in New Castle County will increase slowly at a rate of 0.2% in 2011, reach a peak growth of 3.3% in 2013, and then contract in 2016 and 2017. The growth rates from the Congressional Budget Office's Gross Domestic Product forecast varying between 2% to 3.5%, were also selected.³²

Figure 14 shows the three forecasts. The first forecast, our baseline measure, assumes that permanent employment on the Riverfront will grow at the same rate as the Economy.com projections, causing the personal income tax, the city wage tax, and the city head tax revenues to also grow at that rate. In addition, this scenario assumes that the bank franchise tax will grow 1% each year into the future. Finally, property tax revenue increases by the average annual rise in tax rates that occurred between 1996 and 2010. Under these assumptions, the annual increase in public revenues ranged between \$24.5 million in 2011 to \$27.3 million in 2017.

³² The assumption that employment growth mirrors GDP growth assumes that productivity remains constant, which is admittedly optimistic given the underlying factors that have prolonged the recovery.

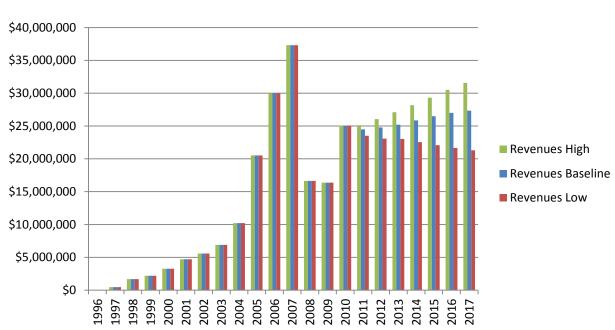


Figure 14 Forecast for Public Revenue (2011 \$) Assuming No New Construction

• Source: Center for Applied Demography & Survey Research

The second forecast took a pessimistic view on the Riverfront businesses. This forecast used the smallest job growth estimates from the Delaware Population Consortium and further assumed that the bank franchise tax will lose 10% of its value each year. Property tax revenues are assumed to increase by just 0.5% each year, reflecting a virtual standstill to the historical growth in property tax revenues. In this scenario, revenues coming from the Riverfront continue to fall, from \$23.5 million in 2011 to \$21.3 million in 2017, largely because of the importance of the bank franchise tax.

The final forecast in Figure 14 presents an optimistic scenario in which annual revenue grows from \$21.5 million in 2011 to \$31.5 million in 2017. This forecast assumes that both the bank franchise tax revenues and property tax rates grow at 5% each year. In addition, employment is assumed to grow by the same rate as the Congressional Budget Office's GDP forecast.

Table 20 Total Public Expenditures and Public Revenues due to Net Riverfront Activity (Thousands of 2011 \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$334,809	\$268,815	\$155,818	\$155,818	\$155,818
2010	\$338,738	\$272,730	\$180,893	\$180,893	\$180,893
2011	\$342,211	\$276,204	\$205,386	\$204,402	\$206,020
2012	\$346,000	\$279,993	\$230,173	\$227,478	\$232,062
2013	\$348,259	\$282,252	\$255,367	\$250,503	\$259,151
2014	\$350,518	\$284,511	\$281,210	\$273,036	\$287,329
2015	\$352,777	\$286,770	\$307,695	\$295,117	\$316,643
2016	\$355,036	\$289,029	\$334,687	\$316,790	\$347,139
2017	\$357,295	\$291,287	\$362,036	\$338,096	\$378,688

- Source: Center for Applied Demography & Survey Research
- "Total Public Investments" refers to total public expenditures minus public expenditures made on non-revenue generating amenities (see Table 7).
- The corresponding table of nominal values is Table A 15 on page 78.

The aggregate impact that these forecasts have on public revenues is listed in Table 20, along with aggregate public expenditures and investments. Future public expenditures are assumed to be \$2.35 million (nom \$) for all future years, and are reported in the table's first column.

By 2012, we expect that the Riverfront has used \$280 million of public funds and generated \$230 million in new public revenues. Our forecasts predict that by 2014, the public revenues created from new activity on the Riverfront will nearly exceed the public investments. By 2017, public revenues associated with new Riverfront activity will pay for all public expenditures, including those amenities that were never intended to "make money".

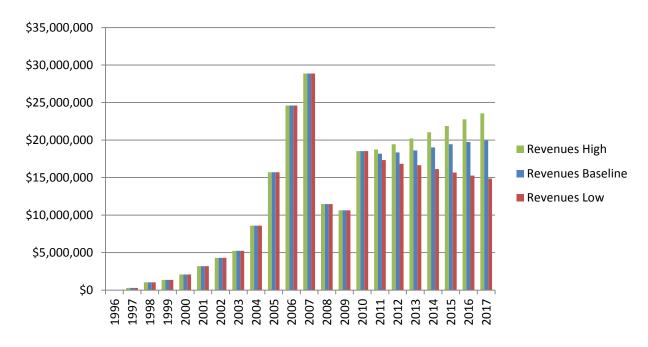


Figure 15 Forecast for Total Public Revenue for the State of Delaware (2011 \$) Assuming No New Construction

• Source: Center for Applied Demography & Survey Research

In Figure 15, we evaluate only those public revenues and expenditures coming to and from the State of Delaware. Our baseline forecast estimates that new Riverfront activity will generate between \$18 million and \$19 million for the State of Delaware each year for the next five years. The optimistic scenario forecasts that the annual state revenues will increase from \$19 million in 2012 to \$23.5 million in 2017, and the pessimistic scenario finds that annual revenues will fall to \$15 million in 2017.

Table 21 shows the forecast for the fiscal analysis for just the State of Delaware's revenues and expenditures. By the end of 2012, we expect that the State of Delaware will have invested \$240 million in the Riverfront and generated \$173 million from that investment.

Table 21 Total Public Expenditures and Public Revenue for the State of Delaware due to Net Riverfront Activity (Thousands of 2011 \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$295,946	\$229,952	\$117,434	\$117,434	\$117,434
2010	\$298,985	\$232,978	\$135,959	\$135,959	\$135,959
2011	\$301,918	\$235,911	\$154,154	\$153,300	\$154,709
2012	\$305,586	\$239,579	\$172,514	\$170,147	\$174,145
2013	\$307,845	\$241,838	\$191,119	\$186,795	\$194,364
2014	\$310,104	\$244,097	\$210,146	\$202,936	\$215,400
2015	\$312,363	\$246,356	\$229,584	\$218,614	\$237,286
2016	\$314,622	\$248,615	\$249,334	\$233,874	\$260,058
2017	\$316,881	\$250,873	\$269,280	\$248,756	\$283,621

- Source: Center for Applied Demography & Survey Research
- "Total Public Investments" refers to total public expenditures minus public expenditures made on non-revenue generating amenities (see Table 7).
- The corresponding table of nominal values is Table A 16 on page 78.

Extending the forecasts in Table 21 out five years, we predict that the state's Riverfront investment will equal the revenues generated by the new Riverfront activity by 2016. Repaying the State of Delaware for all of the spending on the Riverfront is anticipated to take an additional two to five years. The biggest reason for the difference between Table 20 and Table 21 is the fact that the City of Wilmington receives a substantial amount of Riverfront revenue relative to its Riverfront expenditures. The primary channel for this is the wage tax levied on employees that work in the city.

Table 22 Total Public Expenditures and Public Revenues due to Gross Riverfront Activity (Thousands of 2011 \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$334,809	\$268,815	\$212,890	\$212,890	\$212,890
2010	\$338,738	\$272,730	\$244,890	\$244,890	\$244,890
2011	\$342,211	\$276,204	\$276,411	\$275,346	\$277,178
2012	\$346,000	\$279,993	\$308,324	\$305,451	\$310,606
2013	\$348,259	\$282,252	\$340,784	\$335,709	\$345,351
2014	\$350,518	\$284,511	\$374,131	\$365,485	\$381,465
2015	\$352,777	\$286,770	\$408,353	\$394,816	\$419,006
2016	\$355,036	\$289,029	\$443,266	\$423,743	\$458,032
2017	\$357,295	\$291,287	\$478,657	\$452,307	\$498,352

- Source: Center for Applied Demography & Survey Research
- "Total Public Investments" refers to total public expenditures minus public expenditures made on non-revenue generating amenities (see Table 7).
- The corresponding table of nominal values is Table A 17 on page 79.

Forecasts for Gross Riverfront Activity

Table 22 reports three similar forecasts for total public funds stemming from gross Riverfront activities. As of 2012, total public investments and expenditures are still \$280 million and \$365 million, respectively. Approximately \$308 million of total public funds has been generated from these activities. The forecasts indicate that total public revenues generated by gross Riverfront activities will be between \$452 million and \$498 million by 2017.

Table 23 Total Public Expenditures and Public Revenue for the State of Delaware due to Gross Riverfront Activity (Thousands of 2011 \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$295,946	\$229,952	\$147,366	\$147,366	\$147,366
2010	\$298,985	\$232,978	\$170,224	\$170,224	\$170,224
2011	\$301,918	\$235,911	\$189,876	\$188,989	\$190,437
2012	\$305,586	\$239,579	\$209,705	\$207,277	\$211,379
2013	\$307,845	\$241,838	\$229,804	\$225,416	\$233,154
2014	\$310,104	\$244,097	\$250,368	\$243,049	\$255,799
2015	\$312,363	\$246,356	\$271,388	\$260,220	\$279,348
2016	\$314,622	\$248,615	\$292,750	\$276,971	\$303,841
2017	\$316,881	\$250,873	\$314,324	\$293,345	\$329,165

- Source: Center for Applied Demography & Survey Research
- "Total Public Investments" refers to total public expenditures minus public expenditures made on non-revenue generating amenities (see Table 7).
- The corresponding table of nominal values is Table A 18 on page 79.

Similarly, Table 23 reports fiscal forecasts on the State of Delaware's budget using gross Riverfront activity instead of net Riverfront activity. As of 2012, we estimate that approximately \$210 million of state revenues has been generated from gross business activity on the Riverfront, compared to the \$240 million of state investments and \$306 million of total state expenditures. By 2014, we expect that state revenues from gross riverfront activities will equal the state's investments in the Riverfront. We expect that state revenues will equal the state's total Riverfront expenditures by 2017.

Because our forecasts ignore all planned construction projects, growth only comes from existing businesses and households. Of course, we recognize that projects are slated to occur. Phase II of Justison Landing, for example, is expected to begin in early 2012 at a private cost of \$17 million. Similarly, a \$37 million Westin hotel may be built adjacent to the Chase Center on the Riverfront, and a \$25 million IMAX movie theater may also be in the Riverfront's future. However, the financial arrangement of these projects is not yet known, so the fiscal impact of each project would require a detailed analysis. Such a focus is beyond the scope of this study.

Discussion and Conclusion

The vision to transform the Riverfront from an industrial graveyard to a vibrant business and residential community had taken root among Delaware's leaders by 1990. Given the scale and scope of this vision, state leaders created the Riverfront Development Corporation (RDC) in 1995 to oversee and manage this transformation.

In this report, we analyze the fiscal impact that has occurred as a result of redeveloping the Wilmington Riverfront between 1996 and 2010. Although this time period was chosen to correspond with the RDC's existence, the report is *not* an assessment of the RDC itself since multiple public agencies, businesses, investors, nonprofit groups, and private citizens have been quite influential. Instead, the report assesses only the fiscal impact of the development itself.

Discussion of Results

As of 2012, we estimate that approximately \$230 million (\$191 million – nom \$) in public revenues have been generated from new Riverfront activity, and \$345 million (\$292 million – nom \$) in public expenditures have been spent. 33 Of course, it is the natural for investments to risk money upfront in order to receive future benefit streams, and the Riverfront is clearly in the process of accruing those benefits. We estimate that new Riverfront activity is currently generating \$22 million more in annual public revenues than it uses in public expenditures. The State of Delaware is expected to receive \$15 million of these funds.

The analysis in this report focuses only on the public expenditures and revenues, and therefore ignores important, non-financial social benefits. For example, the report does not capture the social value of remediating and reusing polluted land, the value of leisure in the Tubman-Garrett Park and on the Riverwalk, the educational value of the DuPont Environmental Education Center and the Delaware Children's Museum, or the environmental value of the urban wildlife preserve. These projects will never pay off as a financial investment and should not be viewed as such. Excluding the costs of these and similar projects is more appropriate when judging the Riverfront as an investment. As of 2012, approximately \$280 million of public funds have been invested in the Riverfront.

³³ All dollar figures are in 2011 prices unless indicated otherwise.

The revenue estimates are derived from new economic changes that occurred on the Riverfront since 1996, well after the transformation had begun. Alternatively, one could assume that the Riverfront would still be a barren, industrial wasteland today in absence of the state's long term, committed efforts to retransform the area. If so, revenues from gross Riverfront activity (instead of net activity) would be more appropriate. Under this alternative assumption, public revenues (\$308 million) are already \$29 million more than the public investments.

The transformation of the Riverfront has also increased the total value of public assets. In 2010, the RDC reported that it had \$114 million in net assets and fund balances. In addition, we estimate that the City of Wilmington and the State of Delaware own Riverfront property that is conservatively valued by at least \$26 million. So far, \$716 million in private investment has been stimulated.

Given the scale and scope of the Riverfront's transformation, it is fair to expect that it should take decades to recover the public costs. Just 10 years ago, in fact, state leaders believed that the Riverfront may never recover all of its costs, but that the value of redeveloping the area was worth the public expenditures. The analysis presented in this report estimates that the investments in the Riverfront are in fact paying off financially, both for the City of Wilmington and the State of Delaware. The city has long since recovered the public funds it invested, and the State of Delaware will likely do so quite soon.

One should note that these forecasts do not consider any projects currently under proposal. The worthiness of any project should be evaluated on its own merits. In addition, historical growth is no guarantee for future growth. Unexpected shocks, such as the Great Recession, can render all forecasts irrelevant.

Limitations

Though we are confident in this report's findings and believe our assumptions to be both unbiased and appropriate, it is not without limitations. First and foremost, many of the numbers presented in this report had to be estimated. Perfect data is never available, so we used the best data available, which may have excluded certain information. For example, the city, county, or state may have offered tax breaks over the last 15 years that were not fully reported to our Center. Similarly, we were unable to obtain revenue and expense data from the Christina Crescent parking garage (operated by DelDot). Finally, the Delaware Department of Labor files may not have perfectly mapped every business on the Riverfront to their correct physical location.

One issue encountered in this report was that much of the expenditure data were documented in fiscal years, while much of the underlying data used to estimate revenues were reported in calendar years. Although this distinction will not impact the nominal sums across time, there are some issues when adjusting for inflation. Ignoring the difference between fiscal and calendar years, means that any overestimate of one year's figure is compensated by an underestimate of the next year's figure. Thus, any changes that this would make in the final summation are expected to be negligible.

Third, we cannot say that the activities credited to the Riverfront were *caused* by the Riverfront's development. Although we try to control for causation as best as possible by using net activities instead of gross activities, causation is exceptionally difficult to prove. We simply do not know what would have occurred on the Riverfront in absence of its development. For example, perhaps AAA, ING Direct, and Barclays would have located their headquarters elsewhere in the city had the Riverfront not undergone its transformation, though this hypothetical account is at odds with previous conversations. On the other hand, it is fair to say that the Riverfront has proven itself to be a place that has attracted economic activity.

Another limitation is that the forecasted fiscal revenues apply statewide or countywide growth rates to a rather small group of businesses. In fact, most of the fiscal revenues depend on the business decisions and market environments of just a handful of companies, namely Barclays, ING Direct, the Buccini-Pollin Group, and AAA. Although we expect employment growth for these companies to equal statewide or countywide growth rates, actual changes in employment will likely be more volatile due to the high concentration of activity in just a handful of companies and industries.

Another point to make about our analysis is that it only measures the *direct* fiscal impact. Certainly, redeveloping the Riverfront has brought about other changes that were not factored into the tables in this report. For example, the dollars spent on infrastructure and construction had ripple effects and created positive indirect and induced economic effects that eventually contributed to the fiscal impact. By the same token, raising tax revenues to pay for the public expenditures also created ripple effects that burdened markets, reduced economic activity, and causes a fiscal impact.

Along these lines, many who are familiar with economic impact studies are used to seeing multipliers inflate the analyst's direct estimates to capture second and third order effects. Indeed these multipliers can be quite large. Multipliers are not used in this report because the focus is on the *fiscal* impact, not the *economic* impact. The fiscal impact measures the dollars flowing into and out of public budgets, while the economic impact measures the changes in the macroeconomy due to a particular event or change in policy. Due to methodological differences between the two types of analyses, aggregation constraints of our Center's economic models, and the uncertainty of how the state will repay its future obligations, we did not attempt to use economic simulation to estimate the indirect fiscal impact.

Comparison to Previous Results

Previous fiscal forecasts in Condliffe (2007) predicted that public revenues from Riverfront activity would be fully recovered by 2013. The estimates in this report are less optimistic for three main reasons. First, the previous report did not adjust for inflation. Since costs were initially much higher than revenues, accounting for inflation will prolong the time it takes to recover public expenditures and tend to lower the financial return on any investment. *Measured in nominal terms*, the Riverfront expended \$292 million and collected \$214 million by 2012. (revenues based on net activity - see the collection of tables in the appendix).

The second reason for the lower estimates is that the previous forecasts used gross revenues instead of net revenues. The decision not to credit certain public revenues to the Riverfront reduced the financial benefits. In absence of this assumption, the Riverfront would be credited with generating \$308 million (\$284 million – nom \$) by 2012, instead of \$230 million.

The final reason that previous forecasts were more optimistic is that the previous report assumed that future construction, land development, and employment would continue to grow at the same rates as had occurred on the Riverfront up until 2006. This report shows just how unusual revenue growth had been at this time and how quickly revenues fell during the recession, which occurred after the previous report had been written.

Conclusion

The Riverfront has been an important component to Delaware's economy for two centuries. In the middle of the 20th century, industrial and manufacturing businesses on the Riverfront closed, and the area gradually decayed into abandoned industrial structures and junkyards. Beginning in the 1990's, a concerted effort was made to redevelop this area. That effort has meant both increased public expenditures and revenues. In this report, we quantified how much those expenditures and revenues have been for the last 15 years, and what they could be for the next 5 years. We hope that this information is found to be useful to Delaware's leaders, policy makers, and all interested citizens.

Appendix

This appendix redisplays many of the tables in the main report in nominal dollars instead of 2011 prices. Since the tables below aggregate nominal amounts across time, the implied purchasing power of those sums do not reflect their real values.

Table A 1 Estimated Expenditures (Thousands of Nominal \$) by the Delaware Department of Transportation, by Riverfront Project

Wilmington Transit Center II
Windscreens Tressle Painting
MLK BLVD Modifications
Reily Bridge Rehab
Justison Landing
Christina Crescent Garage
Program Management
S. Madison - West Street
Christina Crescent
Browntown Beech St
Riverwalk Phase III & IV
Riverwalk V & VI
Riverwalk VII
Various(Bioswales, Bell Alley)
Bulkheads
Madison St Stadium Access
A Street Market South Bank
Railwalk Railing
Total

-	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
II	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500
g	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800
	\$0	\$0	\$2,250	\$2,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,500
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,867	\$2,867	\$2,867	\$0	\$0	\$0	\$8,600
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,025	\$285	\$16,310
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,500	\$10,500	\$0	\$0	\$0	\$21,000
	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$0	\$0	\$0	\$12,000
	\$0	\$0	\$6,470	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,470
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900	\$8,520	\$13,637	\$0	\$0	\$24,057
	\$0	\$0	\$0	\$0	\$0	\$0	\$888	\$0	\$0	\$0	\$0	\$0	\$0	\$888
	\$0	\$0	\$4,145	\$934	\$780	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,858
	\$0	\$0	\$0	\$2,489	\$806	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,296
	\$0	\$0	\$0	\$0	\$750	\$0	\$58	\$0	\$0	\$0	\$0	\$0	\$0	\$808
/)	\$0	\$0	\$0	\$0	\$0	\$1,870	\$0	\$750	\$0	\$333	\$0	\$0	\$0	\$2,954
	\$0	\$0	\$0	\$0	\$0	\$625	\$0	\$4,000	\$0	\$0	\$0	\$0	\$0	\$4,625
S	\$0	\$0	\$0	\$0	\$0	\$1,370	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,370
Κ	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,608	\$254	\$0	\$0	\$0	\$10,862
	\$0	\$0	\$0	\$0	\$0	\$305	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$305
	\$1,200	\$4,500	\$14,065	\$6,873	\$3,536	\$5,370	\$2,145	\$8,817	\$27,074	\$23,674	\$13,637	\$16,025	\$285	\$127,202

Table A 2 Estimated Expenditures (Thousands of Nominal \$) by the Delaware Department of Natural Resources and Environmental Control, by Riverfront Project

Chairtine Diver Daides							
Christina River Bridge							
P & C Roofing (Pre-Remedial)							
International Petroleum Corp							
Salvation Army - Wilmington							
Justison Landing							
Howard St. Commercial Dev.							
Burns & McBride							
Cobra Machine							
320 "A" Street							
Riverfront HQ /AAA							
707 S. Market Street							
Christina Crescent Property							
Schwartz Property							
Mt. Vernon Street Property							
1020 Christiana Avenue							
Other Riverfront Properties							
Total							

2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22	\$0	\$22
\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$16	\$0	\$19
\$0	\$0	\$0	\$0	\$0	\$14	\$0	\$0	\$0	\$14
\$0	\$0	\$0	\$0	\$0	\$43	\$0	\$0	\$0	\$43
\$0	\$0	\$0	\$0	\$0	\$6,039	\$2,797	\$1,460	\$0	\$10,296
\$0	\$0	\$0	\$0	\$0	\$15	\$3,272	\$0	\$49	\$3,337
\$0	\$0	\$0	\$0	\$0	\$198	\$0	\$0	\$0	\$198
\$0	\$0	\$0	\$27	\$0	\$0	\$0	\$0	\$0	\$27
\$0	\$0	\$47	\$0	\$0	\$0	\$0	\$0	\$0	\$47
\$0	\$0	\$0	\$37	\$0	\$0	\$0	\$0	\$0	\$37
\$0	\$0	\$0	\$0	\$0	\$12	\$0	\$0	\$0	\$12
\$0	\$0	\$0	\$0	\$0	\$175	\$0	\$0	\$0	\$175
\$0	\$0	\$0	\$0	\$0	\$133	\$0	\$0	\$0	\$133
\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$0	\$0	\$7
\$0	\$0	\$0	\$0	\$0	\$0	\$78	\$0	\$0	\$78
\$241	\$0	\$235	\$0	\$0	\$0	\$523	\$435	\$570	\$2,004
\$241	\$0	\$282	\$64	\$0	\$6,628	\$6,681	\$1,932	\$619	\$16,448

Table A 3 State Funded Riverfront Expenditures (Thousands of Nominal \$) to the RDC and from Other Sources

Bond Bill

Other State Funds

	Riverfront Development	First State Center	Strategic Fund and	DelDot	Budget	
	Corporation	Funds	DEDO	Grant	Office	Total
1996	\$50	\$0	\$0	\$0	\$0	\$50
1997	\$4,450	\$5,500	\$3,000	\$0	\$0	\$12,950
1998	\$2,000	\$0	\$3,500	\$580	\$25	\$6,105
1999	\$14,000	\$0	\$0	\$0	\$0	\$14,000
2000	\$12,000	\$0	\$0	\$0	\$0	\$12,000
2001	\$9,000	\$0	\$0	\$0	\$0	\$9,000
2002	\$3,300	\$0	\$1,400	\$0	\$0	\$4,700
2003	\$2,500	\$0	\$0	\$0	\$0	\$2,500
2004	\$1,500	\$0	\$400	\$0	\$0	\$1,900
2005	\$9,000	\$0	\$6,100	\$0	\$0	\$15,100
2006	\$5,500	\$0	\$5,500	\$0	\$0	\$11,000
2007	\$6,000	\$0	\$5,500	\$0	\$0	\$11,500
2008	\$2,000	\$0	\$0	\$0	\$0	\$2,000
2009	\$2,000	\$0	\$0	\$0	\$0	\$2,000
2010	\$2,350	\$0	\$0	\$0	\$0	\$2,350
Total	\$75,650	\$5,500	\$25,400	\$580	\$25	\$107,155

Table A 4 Riverfront Expenditures (Thousands of Nominal \$) paid by the City of Wilmington and Other Non-State Sources

			Other							
	Economic		Employer	Christina	Christina		New Castle	Christina		
-	Dev. Office	Artwork	Incentives	Landing	Crossing	Total	County	Gateway	Federal	Total
1996	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
1999	\$3,348	\$0	\$0	\$0	\$0	\$3,348	\$0	\$0	\$0	\$0
2000	\$64	\$0	\$0	\$0	\$0	\$64	\$750	\$300	\$0	\$1,050
2001	\$23	\$0	\$0	\$0	\$0	\$23	\$0	\$0	\$0	\$0
2002	\$0	\$0	\$0	\$0	\$0	\$0	\$450	\$225	\$0	\$675
2003	\$1,400	\$0	\$0	\$0	\$0	\$1,400	\$0	\$0	\$0	\$0
2004	\$0	\$0	\$0	\$3,600	\$0	\$3,600	\$10,000	\$0	\$891	\$10,891
2005	\$728	\$0	\$150	\$3,600	\$0	\$4,478	\$0	\$0	\$358	\$358
2006	\$191	\$0	\$0	\$3,600	\$0	\$3,791	\$0	\$0	\$0	\$0
2007	\$0	\$13	\$130	\$0	\$0	\$143	\$0	\$0	\$0	\$0
2008	\$0	\$13	\$130	\$0	\$1,116	\$1,259	\$0	\$0	\$0	\$0
2009	\$0	\$13	\$130	\$0	\$1,144	\$1,288	\$0	\$0	\$0	\$0
2010	\$0	\$13	\$130	\$0	\$728	\$872	\$0	\$0	\$0	\$0
Total	\$5 <i>,</i> 755	\$53	\$670	\$10,800	\$2,988	\$20,267	\$11,200	\$1,025	\$1,249	\$13,474

Table A 5 Estimated Public Expenditures (Thousands of Nominal \$) on Riverfront Projects

				Other State	City of		
	RDC	DelDot	DNREC	Funds	Wilmington	Other Funds	Total
1996	\$50	\$0	\$0	\$0	\$0	\$0	\$50
1997	\$4,450	\$1,200	\$0	\$8,500	\$0	\$0	\$14,150
1998	\$2,000	\$4,500	\$0	\$4,105	\$0	\$500	\$11,105
1999	\$14,000	\$14,065	\$0	\$0	\$3,348	\$0	\$31,413
2000	\$12,000	\$6,873	\$0	\$0	\$64	\$1,050	\$19,987
2001	\$9,000	\$3,536	\$0	\$0	\$23	\$0	\$12,560
2002	\$3,300	\$5,370	\$253	\$1,400	\$0	\$675	\$10,998
2003	\$2,500	\$2,145	\$0	\$0	\$1,400	\$0	\$6,045
2004	\$1,500	\$8,817	\$300	\$400	\$3,600	\$10,891	\$25,508
2005	\$9,000	\$27,074	\$69	\$6,100	\$4,478	\$358	\$47,080
2006	\$5,500	\$23,674	\$0	\$5,500	\$3,791	\$0	\$38,465
2007	\$6,000	\$13,637	\$7,035	\$5,500	\$143	\$0	\$32,316
2008	\$2,000	\$16,025	\$7,059	\$0	\$1,259	\$0	\$26,344
2009	\$2,000	\$285	\$1,991	\$0	\$1,288	\$0	\$5,563
2010	\$2,350	\$0	\$629	\$0	\$872	\$0	\$3,851
2011 (est)	\$2,350	\$0	\$583	\$0	\$541	\$0	\$3,474
2012 (est)	\$3,150	\$526	\$65	\$0	\$123	\$0	\$3,865
Total	\$81,150	\$127,728	\$17,985	\$31,505	\$20,931	\$13,474	\$292,773

Table A 6 Estimated RDC Expenditures (Thousands of Nominal \$) on Non-Revenue Generating Amenities (i.e. Public Consumption)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Public Artwork	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13	\$13	\$13	\$13	\$53
Christina River Taxi	\$0	\$0	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80
Crane Restoration	\$0	\$0	\$76	\$76	\$76	\$76	\$76	\$76	\$0	\$0	\$0	\$0	\$0	\$0	\$457
DE Children's Museum	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$5,000
Dravo Plaza	\$0	\$0	\$546	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$546
DuPont Env. Ed. Ctr	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,061	\$0	\$0	\$13,061
Kalmar Nyckel	\$2,515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,515
Public Docks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,061	\$1,061	\$0	\$0	\$2,123
Riverwalk	\$3,932	\$3,932	\$3,932	\$4,145	\$3,423	\$2,336	\$305	\$945	\$0	\$0	\$0	\$0	\$0	\$0	\$22,949
Tubman-Garrett Park	\$3,933	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,933
Urban Wildlife Marsh	\$0	\$362	\$362	\$362	\$362	\$362	\$362	\$362	\$362	\$362	\$0	\$0	\$0	\$0	\$3,254
Total	\$10,379	\$4,293	\$4,916	\$4,662	\$3,861	\$2,774	\$743	\$1,383	\$362	\$362	\$1,075	\$14,136	\$5,013	\$13	\$53,972

 Table A 7
 Estimated Bank Franchise Tax Revenues from Riverfront sources (Thousands of Nominal \$)

2000	\$0
2001	\$0
2002	\$1,208
2003	\$1,656
2004	\$3,781
2005	\$5,599
2006	\$5,312
2007	\$5,970
2008	\$1,417
2009	\$0
2010	\$6,927
Total	\$31,871

Table A 8 Estimated Construction Costs (Thousands of Nominal \$) for Riverfront Projects

		RDC	Other Public	DelDot	
	Private Funds	Contribution	Funding	Construction	Total
1997	\$0	\$0	\$3,398	\$1,200	\$4,598
1998	\$9,931	\$0	\$11,000	\$4,500	\$25,431
1999	\$16,190	\$3,767	\$0	\$14,065	\$34,021
2000	\$16,472	\$0	\$5,914	\$6,873	\$29,258
2001	\$23,682	\$3,276	\$0	\$3,536	\$30,494
2002	\$2,100	\$0	\$0	\$5,370	\$7,470
2003	\$18,300	\$0	\$0	\$2,145	\$20,445
2004	\$11,900	\$0	\$0	\$8,817	\$20,717
2005	\$122,500	\$0	\$20,000	\$27,074	\$169,574
2006	\$115,000	\$0	\$0	\$23,674	\$138,674
2007	\$275,800	\$0	\$2,394	\$13,637	\$291,831
2008	\$0	\$0	\$0	\$16,025	\$16,025
2009	\$2,500	\$0	\$0	\$285	\$2,785
2010	\$25,400	\$0	\$0	\$0	\$25,400
Total	\$639,774	\$7,043	\$42,706	\$127,202	\$816,725

Table A 9 Estimated Costs, Employment, and Tax Revenues (Nominal \$) Collected from New Construction on the Riverfront

	Labau Casta	Labor	CTC!o	Permit	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Used Toy	Gross	Personal
i	Labor Costs	Hours	FTE's	Fees	Wage Tax	Head Tax	Receipts	Income Tax
1997	\$1,839	36,784	18	\$34	\$17	\$0	\$23	\$56
1998	\$10,172	203,448	98	\$209	\$96	\$1	\$141	\$307
1999	\$13,608	272,168	131	\$200	\$128	\$2	\$134	\$411
2000	\$11,703	234,067	113	\$224	\$110	\$1	\$151	\$353
2001	\$12,198	243,952	117	\$270	\$115	\$1	\$182	\$368
2002	\$2,988	59,764	29	\$21	\$28	\$0	\$14	\$90
2003	\$8,178	163,564	79	\$183	\$77	\$1	\$123	\$247
2004	\$8,287	165,733	80	\$119	\$78	\$1	\$80	\$250
2005	\$67,830	1,356,595	652	\$1,425	\$637	\$8	\$960	\$2,047
2006	\$55,470	1,109,393	533	\$1,150	\$521	\$6	\$775	\$1,674
2007	\$116,733	2,334,652	1,122	\$2,782	\$1,097	\$13	\$1,875	\$3,523
2008	\$6,410	128,200	62	\$0	\$60	\$1	\$0	\$193
2009	\$1,114	22,281	11	\$25	\$10	\$0	\$17	\$34
2010	\$10,160	203,200	98	\$254	\$95	\$1	\$171	\$307
Total	\$326,690	6,533,802	3,141	\$6,895	\$3,070	\$38	\$4,647	\$9,860

Table A 10 Estimated Tax Revenues (Thousands of Nominal \$) from Residents on the Riverfront

	All Resi	dents	New Residents		
Year	City Wage Tax	State PIT	City Wage Tax	State PIT	
2006	\$350	\$1,045	\$280	\$304	
2007	\$463	\$1,367	\$370	\$398	
2008	\$822	\$2,418	\$658	\$704	
2009	\$915	\$2,668	\$732	\$776	
2010	\$988	\$2,855	\$791	\$831	
Total	\$3,538	\$10,353	\$2,831	\$3,013	

Table A 11 Total Estimated Public Revenues (Thousands of Nominal \$) due to Net Riverfront Activity

	Bank Franchise	Personal Income	Real Estate Transfer	Gross Receipts	City Property	Permit Fees	City Head Tax	City Wage Tax	School Property	County Property	State Other	Total
1996	\$0	\$0	\$21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21
1997	\$0	\$161	\$69	\$23	-\$9	\$34	\$16	\$49	-\$9	-\$1	\$0	\$333
1998	\$0	\$566	\$83	\$141	-\$3	\$209	\$37	\$194	-\$3	-\$1	\$0	\$1,223
1999	\$0	\$862	\$21	\$134	\$20	\$200	\$54	\$296	\$23	\$3	\$0	\$1,615
2000	\$0	\$1,349	\$179	\$151	\$24	\$224	\$71	\$448	\$27	\$4	\$0	\$2,477
2001	\$0	\$2,306	\$0	\$182	\$29	\$270	\$118	\$742	\$27	\$4	\$0	\$3,677
2002	\$1,208	\$2,158	\$100	\$14	\$64	\$21	\$106	\$700	\$62	\$9	\$0	\$4,444
2003	\$1,656	\$2,433	\$111	\$123	\$80	\$183	\$122	\$799	\$90	\$11	\$0	\$5,609
2004	\$3,781	\$3,347	\$134	\$80	-\$6	\$119	\$142	\$1,045	-\$11	-\$1	\$0	\$8,632
2005	\$5,599	\$7,100	\$292	\$960	\$129	\$1,425	\$192	\$2,125	\$187	\$18	\$0	\$18,027
2006	\$5,312	\$8,815	\$126	\$775	\$255	\$1,150	\$252	\$2,795	\$370	\$35	\$7,500	\$27,384
2007	\$5,970	\$11,583	\$18	\$1,875	\$383	\$2,782	\$311	\$3,758	\$560	\$61	\$7,500	\$34,800
2008	\$1,417	\$9,629	\$47	\$0	\$596	\$0	\$255	\$3,200	\$810	\$95	\$0	\$16,048
2009	\$0	\$10,187	\$28	\$17	\$733	\$25	\$241	\$3,360	\$996	\$146	\$0	\$15,732
2010	\$6,927	\$11,018	\$90	\$171	\$865	\$254	\$376	\$3,621	\$1,109	\$150	\$0	\$24,581
2011 (est)	\$7,136	\$11,035	\$47	\$0	\$917	\$0	\$386	\$3,632	\$1,183	\$158	\$0	\$24,493
2012 (est)	\$7,352	\$11,351	\$48	\$0	\$971	\$0	\$397	\$3,736	\$1,261	\$165	\$0	\$25,282
Total	\$46,359	\$93,899	\$1,413	\$4,647	\$5,049	\$6,895	\$3,076	\$30,500	\$6,684	\$857	\$15,000	\$214,379

Table A 12 Total Estimated Public Revenues (Thousands of Nominal \$) due to Gross Riverfront Activity

	Bank Franchise	Personal Income	Real Estate Transfer	Gross Receipts	City Property	Permit Fees	City Head Tax	City Wage Tax	School Property	County Property	State Other	Total
1996	\$0	\$1,085	\$21	\$0	\$268	\$0	\$134	\$445	\$306	\$48	\$0	\$2,308
1997	\$0	\$1,293	\$69	\$23	\$281	\$34	\$152	\$523	\$298	\$47	\$0	\$2,719
1998	\$0	\$1,701	\$83	\$141	\$287	\$209	\$175	\$670	\$303	\$48	\$0	\$3,617
1999	\$0	\$2,000	\$21	\$134	\$310	\$200	\$194	\$772	\$336	\$52	\$0	\$4,018
2000	\$0	\$2,487	\$179	\$151	\$314	\$224	\$212	\$924	\$346	\$53	\$0	\$4,889
2001	\$0	\$3,459	\$0	\$182	\$379	\$270	\$260	\$1,223	\$354	\$52	\$0	\$6,180
2002	\$1,208	\$3,407	\$100	\$14	\$414	\$21	\$253	\$1,215	\$397	\$57	\$0	\$7,088
2003	\$1,656	\$3,713	\$111	\$123	\$430	\$183	\$274	\$1,328	\$508	\$60	\$0	\$8,386
2004	\$3,781	\$4,745	\$134	\$80	\$344	\$119	\$311	\$1,632	\$448	\$48	\$0	\$11,642
2005	\$5,599	\$8,810	\$292	\$960	\$479	\$1,425	\$437	\$2,869	\$701	\$66	\$0	\$21,639
2006	\$5,312	\$11,344	\$126	\$775	\$629	\$1,150	\$498	\$3,604	\$913	\$85	\$7,500	\$31,936
2007	\$5,970	\$14,390	\$18	\$1,875	\$757	\$2,782	\$559	\$4,602	\$1,104	\$121	\$7,500	\$39,679
2008	\$1,417	\$13,482	\$47	\$0	\$970	\$0	\$530	\$4,235	\$1,322	\$155	\$0	\$22,157
2009	\$0	\$14,237	\$28	\$17	\$1,107	\$25	\$510	\$4,414	\$1,509	\$221	\$0	\$22,068
2010	\$6,927	\$15,265	\$90	\$171	\$1,295	\$254	\$777	\$4,705	\$1,662	\$225	\$0	\$31,370
2011 (est)	\$7,136	\$15,410	\$47	\$0	\$1,372	\$0	\$800	\$4,748	\$1,772	\$236	\$0	\$31,521
2012 (est)	\$7,352	\$15,851	\$48	\$0	\$1,454	\$0	\$822	\$4,884	\$1,890	\$248	\$0	\$32,549
Total	\$46,359	\$132,677	\$1,413	\$4,647	\$11,093	\$6,895	\$6,900	\$42,793	\$14,169	\$1,822	\$15,000	\$283,769

Table A 13 Reported Value (Thousands of Nominal \$) of the Riverfront Development Corporation's Assets

	Asset Value	Remaining Liability	Net Asset Value
•	Asset value	Liability	value
Chase Center on the Riverfront	\$30,328	\$5,475	\$24,853
Amtrak CNOC Building	\$1,949	\$0	\$1,949
707 S Market St	\$984	\$455	\$529
720 Justison St	\$2,788	\$2,766	\$22
516 S Market St	\$605	\$300	\$305
525 S Market St	\$740	\$700	\$40
Total	\$37,394	\$9,696	\$27,698

Table A 14 Comparison of Fiscal Revenues and Expenditures (Nominal \$) Credited to the Riverfront

		Fiscal R	evenues		Fiscal Expenditures			
	City	State	Other	Total	City	State	Other	Total
1996	\$10	\$11	\$0	\$21	\$0	\$50	\$0	\$50
1997	\$124	\$219	-\$10	\$333	\$0	\$14,150	\$0	\$14,150
1998	\$479	\$748	-\$4	\$1,223	\$0	\$10,605	\$500	\$11,105
1999	\$581	\$1,007	\$26	\$1,615	\$3,348	\$28,065	\$0	\$31,413
2000	\$856	\$1,589	\$31	\$2,477	\$64	\$18,873	\$1,050	\$19,987
2001	\$1,159	\$2,487	\$31	\$3,677	\$23	\$12,536	\$0	\$12,560
2002	\$942	\$3,431	\$71	\$4,444	\$0	\$10,323	\$675	\$10,998
2003	\$1,240	\$4,268	\$101	\$5,609	\$1,400	\$4,645	\$0	\$6,045
2004	\$1,367	\$7,276	-\$12	\$8,632	\$3,600	\$11,017	\$10,891	\$25,508
2005	\$4,017	\$13,805	\$205	\$18,027	\$4,478	\$42,244	\$358	\$47,080
2006	\$4,514	\$22,465	\$405	\$27,384	\$3,791	\$34,674	\$0	\$38,465
2007	\$7,243	\$26,936	\$621	\$34,800	\$143	\$32,173	\$0	\$32,316
2008	\$4,074	\$11,069	\$905	\$16,048	\$1,259	\$25,084	\$0	\$26,344
2009	\$4,373	\$10,217	\$1,142	\$15,732	\$1,288	\$4,276	\$0	\$5,563
2010	\$5,161	\$18,160	\$1,259	\$24,581	\$872	\$2,979	\$0	\$3,851
2011 (est)	\$4,958	\$18,194	\$1,341	\$24,493	\$541	\$2,933	\$0	\$3,474
2012 (est)	\$5,128	\$18,726	\$1,427	\$25,282	\$123	\$3,741	\$0	\$3,865
Total	\$46,227	\$160,611	\$7,541	\$214,379	\$20,931	\$258,368	\$13,474	\$292,773

Table A 15 Total Public Expenditures and Public Revenues due to Net Riverfront Activity (Thousands of Nominal \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$281,583	\$227,625	\$140,023	\$140,023	\$140,023
2010	\$285,434	\$231,462	\$164,604	\$164,604	\$164,604
2011	\$288,908	\$234,936	\$189,097	\$188,112	\$189,731
2012	\$292,773	\$238,801	\$214,379	\$211,650	\$216,293
2013	\$295,123	\$241,151	\$240,588	\$235,603	\$244,474
2014	\$297,520	\$243,548	\$268,010	\$259,512	\$274,373
2015	\$299,964	\$245,993	\$296,673	\$283,409	\$306,098
2016	\$302,458	\$248,486	\$326,469	\$307,333	\$339,762
2017	\$305,001	\$251,029	\$357,261	\$331,321	\$375,282

Table A 16 Total Public Expenditures and Public Revenue for the State of Delaware due to Net Riverfront Activity (Thousands of Nominal \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$248,715	\$194,756	\$105,530	\$105,530	\$105,530
2010	\$251,694	\$197,722	\$123,690	\$123,690	\$123,690
2011	\$254,627	\$200,655	\$141,885	\$141,031	\$142,440
2012	\$258,368	\$204,396	\$160,611	\$158,214	\$162,264
2013	\$260,718	\$206,746	\$179,967	\$175,533	\$183,298
2014	\$263,115	\$209,143	\$200,155	\$192,660	\$205,619
2015	\$265,560	\$211,588	\$221,193	\$209,628	\$229,305
2016	\$268,053	\$214,082	\$242,993	\$226,472	\$254,442
2017	\$270,597	\$216,625	\$265,451	\$243,228	\$280,971

Table A 17 Total Public Expenditures and Public Revenues due to Gross Riverfront Activity (Thousands of Nominal \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$281,583	\$227,625	\$188,328	\$188,328	\$188,328
2010	\$285,434	\$231,462	\$219,698	\$219,698	\$219,698
2011	\$288,908	\$234,936	\$251,219	\$250,154	\$251,986
2012	\$292,773	\$238,801	\$283,769	\$280,860	\$286,082
2013	\$295,123	\$241,151	\$317,538	\$312,338	\$322,227
2014	\$297,520	\$243,548	\$352,921	\$343,933	\$360,548
2015	\$299,964	\$245,993	\$389,959	\$375,676	\$401,177
2016	\$302,458	\$248,486	\$428,497	\$407,608	\$444,255
2017	\$305,001	\$251,029	\$468,344	\$439,768	\$489,651

Table A 18 Total Public Expenditures and Public Revenue for the State of Delaware due to Gross Riverfront Activity (Thousands of Nominal \$), Forecasted Scenarios

	Total Public Expenditures	Total Public Investments	Revenues Baseline	Revenues Pessimistic	Revenues Optimistic
2009	\$248,715	\$194,756	\$131,186	\$131,186	\$131,186
2010	\$251,694	\$197,722	\$153,593	\$153,593	\$153,593
2011	\$254,627	\$200,655	\$173,245	\$172,358	\$173,807
2012	\$258,368	\$204,396	\$193,470	\$191,012	\$195,166
2013	\$260,718	\$206,746	\$214,379	\$209,882	\$217,819
2014	\$263,115	\$209,143	\$236,199	\$228,592	\$241,847
2015	\$265,560	\$211,588	\$258,948	\$247,175	\$267,333
2016	\$268,053	\$214,082	\$282,529	\$265,666	\$294,370
2017	\$270,597	\$216,625	\$306,819	\$284,101	\$322,882