DRWC and the Delaware River Waterfront's Transformation

Implementation of the Master Plan for the Delaware Waterfront: 2022 Economic Impact Assessment

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Submitted to Delaware River Waterfront Corporation



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economics | strategy | insight

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Executive Summary

The Delaware River Waterfront Corporation (DRWC) is successfully leading the ongoing transformation of Philadelphia's Central Delaware Waterfront into an inclusive, vibrant and growing asset that strengthens the city's economy and proves the quality-of-life for all Philadelphians in the future. DRWC is doing so through the implementation of the 2012 *Master Plan for the Central Delaware* and the 2014 Penn's Landing Feasibility Study, which called for strategic investment in public infrastructure to facilitate private development along the Waterfront. The ultimate objective is to help (a) develop a vastly expanded waterfront, more physically appealing and economically inclusive and vibrant, (b) improve the Waterfront's accessibility and attractiveness to all Philadelphians, (c) strengthen the City's economy, (d) increase a diverse set of employment opportunities, and (e) support the tourism & hospitality industry.

Since its establishment in 2009 through 2022, DRWC has coordinated more than $100 million in public infrastructure, and plans for $500 million more by 2032. Centered around the creation of a new "Park at Penn's Landing", linking Center City to the river via a cap covering I-95 and Delaware Avenue, the Master Plan and the Feasibility Study envisioned the economic revitalization and active reuse of an expanded central Delaware River waterfront radiating north and south of Penn's Landing, which we refer to herein as the "DRWC District".

In the years since the plan's inception, the transformational vision for Penn's Landing and the Waterfront has largely progressed according to plan, even accounting for the COVID-19 Pandemic. DRWC has successfully secured the funding for implementing key project components, including the new cap over I- 95, the extension of the South Street Pedestrian Bridge, and the completion of the Delaware River Trail. The central segment of the Delaware River Trail, which connects sites along the waterfront via a protected pedestrian and bike path, was completed in Spring 2022. Connections to adjacent neighborhoods under I-95 at Race Street, Spring Garden Street, and Columbia Avenue have been improved and made safer. New parks, like the Race Street Pier and Washington Avenue Pier, were created and existing public spaces were improved and reimagined into exciting destinations. DRWC developed and operates a variety of public events and programs that activate the waterfront, increasing its attractiveness to residents and visitors alike.

Due in large part to DRWC's effective coordination across multiple public and private entities, this infrastructure investment has already increased the attractiveness of the DRWC District. DRWC continues to serve as a significant catalyst for private investment and development all along the river, and in adjacent, newly connected neighborhoods. DRWC has been actively involved in this process, selling several parcels via competitive processes that are being developed with significant private investment.

These improvements have increased demand for residential, retail, commercial, recreational and hospitality accommodations along the river. Improved green park spaces, increased accessibility, and the multi-use trail have added to the overall quality of life: the availability of waterfront outdoor

recreation space and a natural environment attracts tourism, businesses, new residents, and retains residents. This attraction then in turn sparks development to meet the expanded demands of those going to the Waterfront to enjoy its many amenities, most of which are free to the public.

To date, DRWC's efforts have been hugely successful: the DRWC Development District has become one of the hottest real estate submarkets in the Philadelphia metropolitan area, and increased access to a wide swath of the riverfront has improved the quality of life for all residents and visitors, not only in the District and adjacent neighborhoods, but across the City and metropolitan region.

The Waterfront District has seen nearly $100 million in public infrastructure investment and roughly $1.11 billion in new or substantially completed private development investment since 2014. ESI estimates that the economic impact of this investment to be roughly $2 billion.

The Plan has public capital investments scheduled through 2032, so today it is essentially halfway to completion. However, as we begin 2023, near-term general economic conditions are shifting from tailwinds to headwinds for real estate development. Looking forward over the longer-term, the public and private investments will continue to generate significant economic benefits and opportunities for the City of Philadelphia and the Commonwealth of Pennsylvania. In the near future, public capital infrastructure investment will play an even more crucial role as private development slows. The I-95 cap and South St. Pedestrian Bridge components are funded and scheduled, after some pandemic-induced delay. Steps are underway to expand the Delaware River Waterfront Trail to part of the East Coast Greenway and to connect it to the Schuylkill River Trail via Spring Garden.

Continued implementation of the Plan promises much more in the future, especially as we enter a period where conditions are less attractive for private development. The branding and established market acceptance of the Waterfront today suggests that the "best is yet to come". Through completed and future capital investments, both DRWC and the private sector will create even more expanded business opportunities, increase employment with a wide variety of local jobs available to all residents, generate new state and local tax revenues, and enhance an exciting destination for all residents and visitors alike.

Future public capital investments and private development and investments are expected to produce an economic impact of nearly $10 billion in Philadelphia, supporting roughly 64,000 jobs over the span of 2023-2032.

Conclusion: DRWC's effective leadership in this planning and reinvestment effort has led to a staggering change for Philadelphia's Delaware waterfront: Instead of being a symbol of the city's decline and decay, the Waterfront's aggregate is now, and will be even more so in the future, much greater than the sum of its parts, and a significant contributor to Philadelphia's future economic growth and vibrancy. The expanded waterfront DRWC Development District is now seen as a valuable asset, rather than a liability, to the City and ALL its residents and visitors, improving their quality of life and doing so in an equitable fashion. The key roles played by DRWC, including planning, coordination, marketing, improving & programming public spaces, making the case for, securing & administering public capital infrastructure investment to facilitate private development investment,

connecting the waterfront to adjacent neighborhoods, soliciting private investment via RFPs and working with developers are significant drivers of this success, and will continue to be so in the future.

Warning: Current national economic conditions and the corresponding real estate development headwinds suggest we are entering a short period of decreasing private real estate development. Key for the City will be DRWC's continuing, and even increasing, investment in the public capital infrastructure that will foster conditions to make private development investment and activity more attractive in the future. These investments are never wasted; they create the basis for future private investment and economic growth.

1. Introduction

1.1. DRWC and Penn's Landing in Historical Context

Once a thriving shipping and industrial area, today most of the Delaware River waterfront in Philadelphia is underutilized and inaccessible to the densely populated communities immediately to its west. The construction of a major interstate highway (I-95) created both a physical and psychological barrier between the waterfront and city neighborhoods. At the same time, deindustrialization led to the abandonment, speculation, and disconnection. In response to some of these forces, a grassroots effort to reinvest in and reconnect to the waterfront began in the mid-2000s and culminated in the creation in 2012 of the Master Plan for the Central Delaware, a vision for the transformation of six-and-a-half miles of waterfront into a vibrant, mixed-use neighborhood and destination.

The Master Plan called for making the waterfront physically more accessible by:

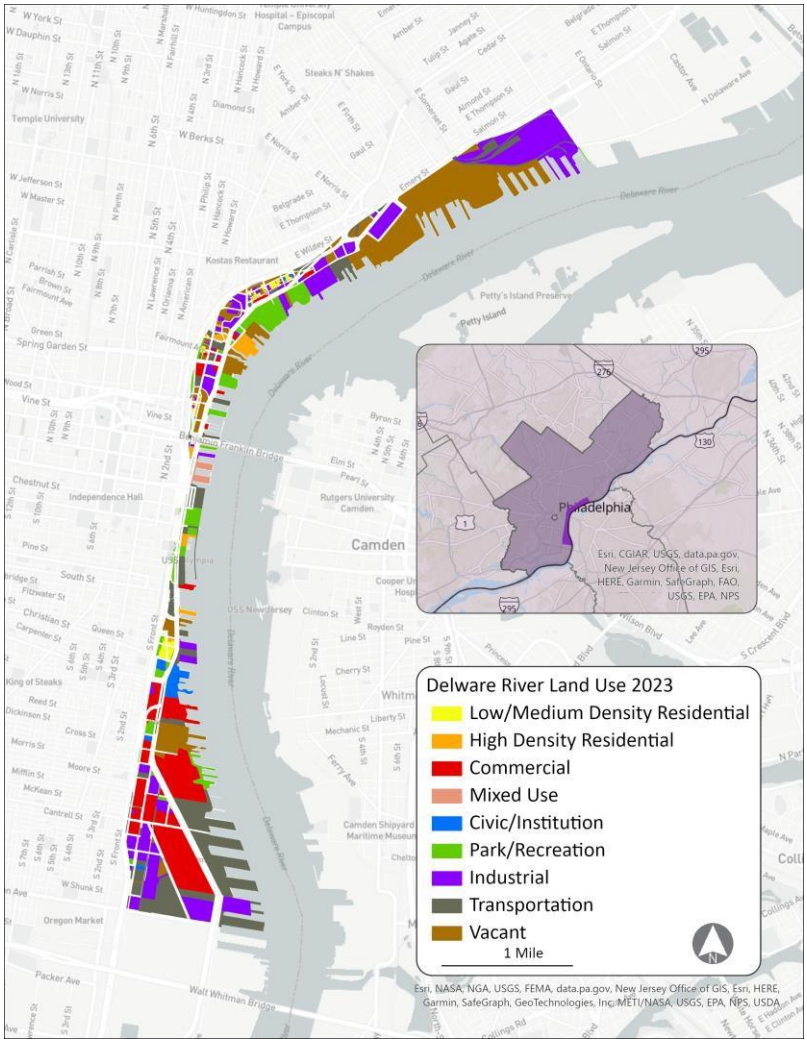
- Creating new or improve existing parks every half-mile along the river, ensuring every neighborhood has a public destination on the Waterfront,
- Connecting those parks and other Waterfront destinations via a multi-modal trail that provides safe and attractive infrastructure for pedestrians and cyclists,
- Improving the streets that go under or over-95 to repair the physical and psychological disconnect between adjacent neighborhoods and the Waterfront created by the highway and other auto-oriented infrastructure.

In 2014 DRWC completed the Penn's Landing Feasibility Study, which advanced the concept for the development of the central area of Philadelphia's Waterfront first put forth in the 2012 Master Plan. The Feasibility Study responded to changes in the Philadelphia economy (recovering from the great recession) and a desire to further revitalize the riverfront, by developing and embarking on a comprehensive, long-term capital improvement plan to create a more active, engaging and expanded central Delaware Riverfront, open to and enjoyed by all, centered around a visionary proposal to cap I-95 and Columbus Boulevard from Chestnut to Walnut Streets, creating a 12-acre park connecting Center City with Penn's Landing. We refer to the 2012 Master Plan and the 2014 Feasibility Study collectively here as "The Central Delaware Plan", or "The Plan".

This bold and comprehensive plan married thoughtful design with economic analysis and was created via an open and public process. It envisioned using the public capital infrastructure investments to create exciting new spaces and connect riverfront parcels not only to the Center City and adjoining neighborhoods, but also to each other along the river, north and south. The public capital infrastructure investment was designed to make the riverfront more attractive for a variety of uses, encouraging commercial, recreational, and residential development activity along a much larger waterfront district to the north and south, as well as a significant reuse of the Penn's Landing site itself. We refer to this expanded area in this report as the "**DRWC District**". The focus of this report is on Philadelphia's new, expanded Central Delaware riverfront: The "**DRWC District**" covers over 1,100 acres of waterfront land,

stretching from Allegheny Avenue to the north and Oregon Avenue to the south, between the river and I-95, as depicted in Fig. 1.1 below.

Figure 1.1: DRWC District



Source OpenDataPhilly (2023)

The Plan represents the largest and most transformative vision for, and associated public capital infrastructure investment in, the Delaware riverfront since the initial construction and operations of Penn's Landing 60 years ago.

1.2. DRWC as Catalyst for Continuing Revitalization

DRWC's fundamental role is to elevate the value of the central Delaware riverfront to a higher level for Philadelphia and its residents and visitors: to turn the expanded riverfront from an underperforming asset into an overperforming asset for the city with benefits accruing to and accessible to all Philadelphians.

Specifically, DWRC is more than just a steward for the waterfront; its role is to envision, design, create, and develop infrastructure for an expanded, exciting 21st century version of Philadelphia's central Delaware River waterfront. DWRC is accomplishing this by providing leadership and infrastructure to increase the attractiveness of the central Delaware waterfront, providing, and encouraging more exciting recreational, cultural, and commercial activities for the residents and visitors of Philadelphia. DWRC's planning programs and public capital infrastructure improvements serve as a direct and powerful catalyst for high quality private capital investment in maritime, residential, retail, hotel and other developments that create a more economically vibrant and diverse amenity for all.

Since 2014, a significant amount of the Plan's public capital investment has been completed, some is in process, and even more is planned over the next few years. As noted, DRWC's public capital infrastructure investment has helped revitalize the waterfront, making the area more attractive to real estate developers and catalyzing third party investment in nearby areas. DRWC has also made other investments in the design and development of engaging programs and public safety improvements that allow all residents to access the waterfront and create a more attractive area for all developers to focus their efforts more easily. These projects have brought and will continue to bring job opportunities to all Philadelphia residents through both the construction activity and ongoing business operations. These investments create a more welcoming waterfront, which will in turn have and will continue to catalyze private investment in the area and produce further economic returns.

As we begin 2023, the current and short-term forecasted general economic environment is less friendly than over the past decade. Similar to most entities engaged in economic growth and development, DRWC finds itself at a crossroads looking at the near-term future. Economic conditions have shifted from significant tailwinds to growing headwinds. We continue to forecast excellent long-term, structural demand conditions favoring significant long-term private development in the DRWC district. However, due to near-term cyclical economic conditions suggesting slow growth or recession, private development is slowing down, and will continue to do so for 12-18 months. We find that the catalytic role of DRWC, primarily but not exclusively in the form of providing continuing public capital infrastructure improvements, plays an even more important role during a cyclical downturn. The City should strongly encourage and support DRWC's continuing public capital investments, to make sure the infrastructure is in place so that private development can re-start as the economy turns back to an up-cycle.

1.3. Objective of this Report

In 2014, as part of the Feasibility Study effort to identify and make the case for public and institutional funding for the capital improvements, ESI conducted an analysis of the potential economic and fiscal impacts of DWRC's proposed capital infrastructure investments, dealing primarily with and around Penn's Landing. Using these forecasts, ESI calculated a significant potential return on public investment (ROI) if the extensive plan were to be fully implemented.

In 2022, roughly the half-way mark for the Plan implementation, DRWC approached ESI to help take account of and measure the impact of their efforts to date, after nearly a decade and the pandemic. Specifically, DRWC asked ESI to:

- Assess the economic and real estate value impacts of the plan's implementation to-date – both public and private capital development and programmed activity, and the resulting increase in annual economic activity -- along the riverfront since 2014,
- Forecast the potential future impacts that could be assisted by proposed future public capital infrastructure investment and further private development over the next decade,
- Assess the need to continue funding underway and future public capital infrastructure improvements in response to a short-term slowing of private real estate markets to maximize public benefits accruing from continued growth and investment throughout the entire DRWC District,
- Assess DWRC's efforts to make sure that the Delaware riverfront continues to be a leader in the City's equitable growth and development, with expanded investment, employment, residential, recreational and leisure benefits and opportunities open for all Philadelphians and visitors.

In the years since that study was conducted, the project has largely progressed according to plan: DWRC has successfully secured most of the necessary public capital funding for implementing the various project components. The central segment of the Delaware River Trail, which stretches over 2-miles from Washington Avenue to Penn Treaty Park and connects sites along the Waterfront via walk, jog and bike paths, was completed in 2022. The construction of the new Penn's Landing Park and the extension of the South Street Pedestrian Bridge are underway, and a nationally known development team was selected to create a transformative redevelopment of the Market Street and Marina Basin sites adjacent to the new Park at Penn's Landing.

These key achievements and the solid progress made on the other components of The Plan have already served as significant catalysts for private investment and development all along the central Delaware waterfront. To date, DRWC's efforts have been hugely successful: the central waterfront has seen huge private re-investment and is now one of the hottest real estate submarkets in the entire metropolitan area. Furthermore, increased access to the river has improved the quality of life for thousands of residents and households in adjacent neighborhoods and across the entire City.

1.4. Report Outline

This report is structured as follows:

- Section 2 presents estimated economic and fiscal impacts from DRWC's public capital investments and associated new private development and investment activity, from 2014 through 2022,
- Section 3 presents forecasts of the potential economic and fiscal impacts from DRWC's future public capital investments and private development and investment activity through 2032,
- Section 4 presents estimated annual economic and fiscal impacts generated by the increased economic activity in the district, for 2022,

- Section 5 presents the real estate market value and property tax impacts of the new development for 2015 – 2022,
- Section 6 discusses the equity, inclusion and diversity issues associated with DRWC's activities and the riverfront's commercial and residential development and increased, ongoing use by businesses and individuals.

2. Economic and Fiscal Impacts from Public Capital Investments and Private Development Activity in the DRWC District (2014 -2022)

Since 2014, public and private investments have changed the face of the waterfront within the DRWC District. The actual development and construction activity has generated significant economic spending in the city and state, supporting substantial, living-wage employment and increased procurement of a wide range of goods and services, translating into economic opportunities for city and state vendors. Residential and large-scale retail have dominated the southern portion DRWC district, while residential mixed-use has been the primary investments north of Penn's Landing.

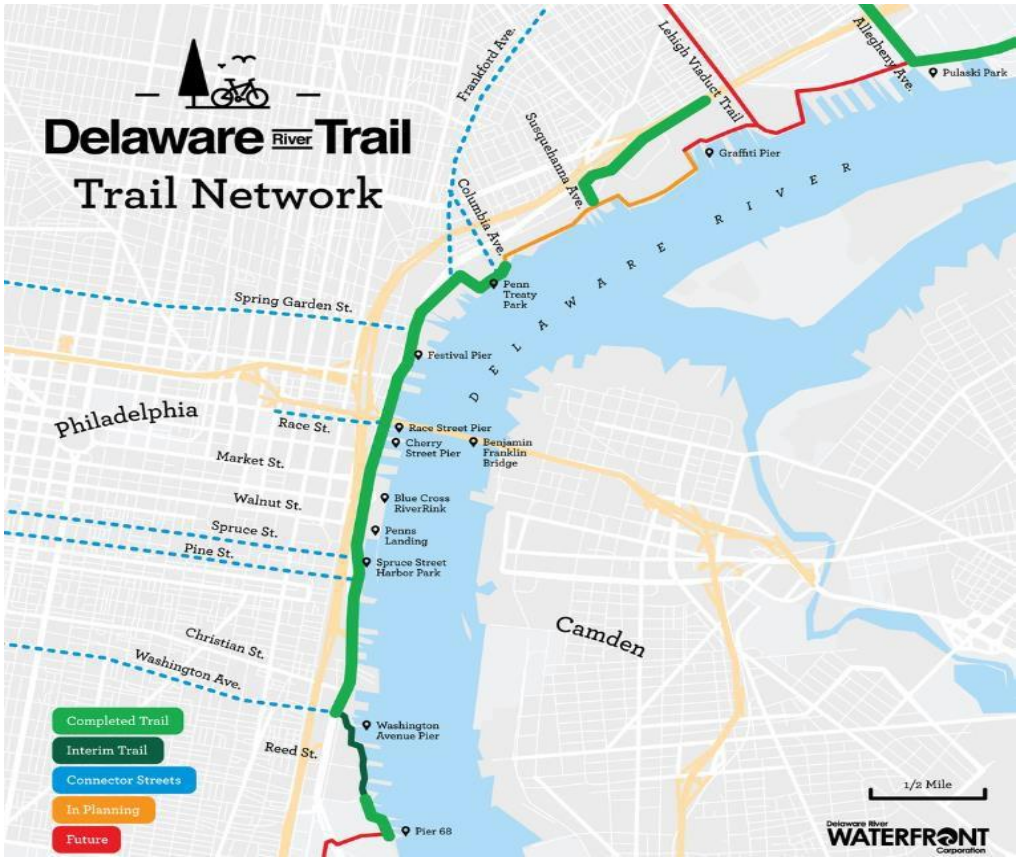
In this section, ESI estimates the overall economic and fiscal impacts of these investment expenditures between 2014 and 2022. Information on public and private capital investment projects and expenditures since 2014 was compiled and these data were then used as inputs into our impact model to estimate the aggregate spending and employment impacts as well as the fiscal impacts generated for both the city and state economies during that time.

2.1. Public Infrastructure Investments (2014-2022)

DRWC provided data on the Plan's public infrastructure investments. To date, approximately $100 million of the Plan's $600 million public capital investments have been made. Note that except for the Penn's Landing CAP project, this does not include the significant PennDOT I-95 project expenditures improving access connections at Girard Avenue and below the Betsy Ross Bridge at the northern end of the DRWC district. Notable completed public projects include newly created public parks (including Race Street Pier, Washington Avenue Pier, and Pier 68), improved transportation infrastructure (including the Race Street, Spring Garden Street, and Columbia Avenue Connector projects and the Delaware River Trail), and new and improved public destinations (including Cherry Street Pier, Spruce Street Harbor Park, and BlueCross RiverRink Winter-and Summerfest). These projects created enjoyable public spaces that drew people to the District and created safe and enjoyable infrastructure for accessing the District (see Appendix C for a partial list of projects included in the estimates).

Public infrastructure projects underway in early 2023 include: (i) South Wetlands Park, (ii) Graffiti Pier revitalization, and (iii) the Washington Ave/Connector.

Figure 2.1: Delaware River Trail Map (as of 2022)



Source Delaware River Waterfront Corporation (2022)

2.2. Private Capital Investment: DRWC Development District (2014-2022)

Recent private development along the waterfront is mostly residential, including mixed-use projects featuring retail and commercial office. By examining the addition or alteration of permits, as well as new construction permits in the area, we can gauge the increased interest in developing the area. Since 2019, there has been a sharp increase in the number of new residential permits pulled, and construction within the district, including major projects such as the Battery, Festival Pier, Canal St. development, One Dock St., NorthBank residential development, and the Durst Organization's $300 million 26-story apartment building being developed at 300 N Delaware at Callowhill St. adjacent to One Water Street. This last project has just recently been put on hold, after $40 million site prep and foundation completion; the developer noted the deteriorating near-term economic conditions for the pause. This is the first active development to go on hold due to the economic headwinds discussed in the introduction.

This private development activity information was compiled from a variety of real estate sources and DRWC. Where available, reported construction costs were used for completed projects, and where data was unavailable, construction costs were estimated by using industry averages for cost per square foot. Based on this approach, we estimate that the DRWC District has seen $1.11 billion in new or

substantially completed private development investment since 2014 (see Appendix A). Examples of development projects underway in the area immediately north of Penn's Landing are presented below.

Figure 2.2: Development along North Delaware: Projects in progress in yellow, proposed in blue



Source: OCF Naked Philly

Figure 2.3: One Water Street Apartments on Delaware Avenue



Source: PMC Property Group, 2021

Figure 2.4: The Battery 1325 Beach St.



Source: OCF Naked Philly

Figure: 2.5: 700 North Delaware Avenue



Source: OCF Naked Philly

Figure 2.6: Riverview at Festival Pier, 501 N. Columbus



Source: OCF Naked Philly

Figure 2.7: Durst, 300 N. Columbus Ave. (on hold after foundation completed)



Source: OCF Naked Philly

Figure 2.8: 918 N. Delaware Ave



Source: OCF Naked Philly

Figure 2.9: The Ryland at One Dock St



Source: OCF Naked Philly

Figure 2.10: North Penn Street Rendering



Source: Harman Deutsch Ohler Architecture

Figure 2.11: Building Permits by Year Pulled



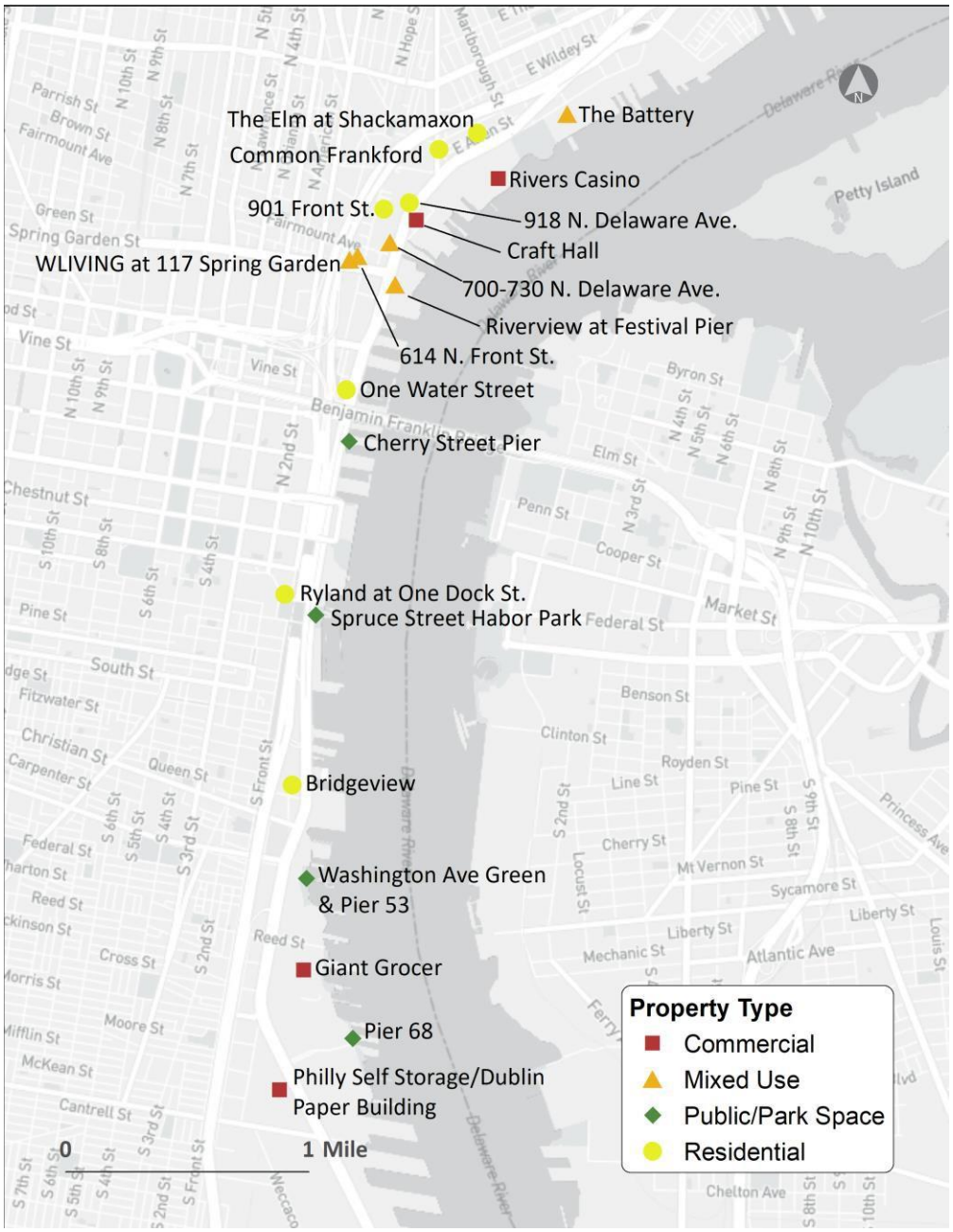
Source: OpenDataPhilly (August 2022)

Figure 2.12: The Battery 1325 Beach St.

Year Issued	Addition or Alteration	New Construction Unspecified	New Residential	New Commercial	Total
2014	50	47	0	0	97
2015	79	58	0	0	137
2016	44	32	0	0	76
2017	49	15	0	1	65
2018	45	29	44	4	122
2019	49	22	32	52	155
2020	63	7	461	41	572
2021	109	0	705	38	852
2022YTD	***56***	***0***	***591***	***13***	***660***

Source: OCF Naked Philly (August 2022)

Figure 2.13: Notable Public Improvements and Private Capital Investment along the Delaware Waterfront (2014- Present)



Source: Costar (2023), Philly YIMBY (2023), Delaware River Waterfront Corporation (2022)

2.3. Economic Impact of Public and Private Investments (2014-2022)

These private capital expenditures, via their spin-off benefits, have generated significant new economic spending and employment within the City and Commonwealth economies. ESI estimates that the overall economic impact within the City from public capital investments since 2014 has been over $153 million, supporting about 680 jobs and nearly $50 million in labor income. The economic impact of the private

sector investments that these investments helped catalyze was about $1.11 billion, supporting about 13,000 jobs and $751 million in labor income.

This has already significantly increased the City's annual economic activity, and business, employment and recreational opportunities for all Philadelphians. ESI estimates the total (direct, indirect and induced) economic impact of the investments and developments completed between 2014 and 2022 to be roughly $2 billion generated from the construction and development, generating $800 million in employee compensation, supporting roughly 13,500 job-years of employment.

Figure 2.14: Economic Impacts of Capital Investment 2014-2022

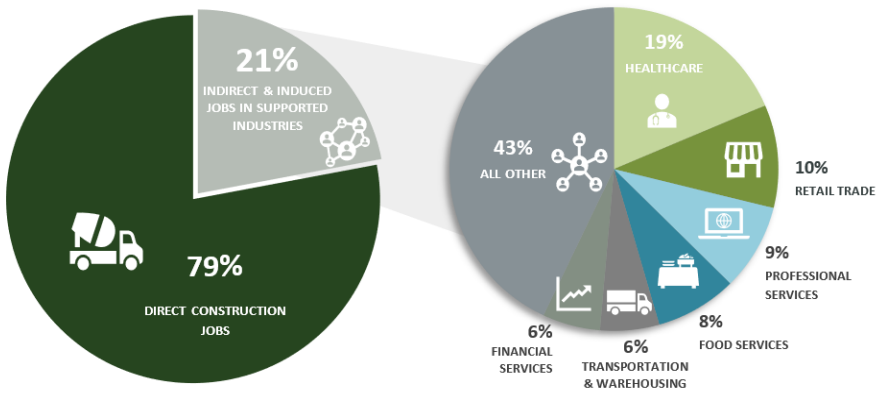
	Philadelphia			Pennsylvania		
	Public	**Private**	**Total Impact**	**Public**	**Private**	**Total Impact**
Direct Output ($M)	$98.6	$1,250.0	$1,348.6	$98.6	$1,250.0	$1,348.6
Indirect and Induced Output ($M)	$55.3	$620.2	$675.5	$80.8	$968.3	$1,049.1
Total Output ($M)	**$153.9**	**$1,870.2**	**$2,024.1**	**$179.4**	**$2,218.3**	**$2,397.7**
Employment Supported (FTE)	**680**	**12,810**	**13,490**	**800**	**14,590**	**15,390**
Employee Compensation ($M)	**$49.4**	**$750.6**	**$800.0**	**$64.1**	**$854.6**	**$918.7**

Source: Econsult Solutions, Inc. (2022), IMPLAN (2021)

2.4. Industry Distribution of Impacts

While the construction industry has clearly been the main beneficiary of the public and private construction expenditures, other industries have benefited, as the spillover effects from the construction activity -- increased demand for goods and services from local vendors, increased spending power by employees -- emanate throughout the City and Commonwealth economies. Within the City alone, significant indirect and induced employment in other industries besides construction resulted from the completed projects in the DRWC district.

Figure 2.15: Industry Distribution



Source: Econsult Solutions, Inc. (2022), IMPLAN(2021)

2.5. Fiscal (Tax) Impacts

These impacts from public and private investment in turn created a cumulative increase in various City and Commonwealth tax bases and therefore generated increases in tax revenues to the City and Commonwealth governments. ESI estimates that the fiscal impact (inclusive of fees and real estate transfer taxes) derived from the public and private construction projects alone conducted from 2014-2022 was approximately **$85 million in City tax revenues** and **$50 million in Commonwealth tax revenues**.

Figure 2.16: Aggregate Fiscal Impact of Public and Private Construction from 2014-2022

Tax Type	Philadelphia	Pennsylvania
Wage/Income ($M)	$23.5	$19.3
Sales ($M)	$10.2	$27.1
Business ($M)	$7.5	$3.1
Permits and Fees[1] ($M)	$18.7	*
RE Transfer Tax[2] ($M)	$25.0	*
Total ($M)	**$84.9**	**$49.5**

Source: Econsult Solutions, Inc. (2022), IMPLAN (2021)

3. Forecasted Economic and Fiscal Impacts from Potential Future Public Capital Investment and Private Development Activity

DRWC's plans call for over $500 million additional public capital expenditures over the next decade, a significant portion of which is for the Penn's Landing CAP project. As with the public capital investments made to date, the future planned investments are expected to spur further substantial private development activity. We estimate this will help spur an additional $6 billion in private development. An illustrative list of announced developments in the pipeline is included in the Appendix.

Future public capital investments and private development and investments are expected to produce an economic impact of nearly $10 billion in Philadelphia, supporting roughly 64,000 jobs over the span of 2023-2032.

[1] City only: Assumes development fees and permit revenues to be 1 percent of total capital project costs.
[2] City only: Assumes RE Transfer Tax revenues to be 2% of the total development costs.

Figure 3.1: Economic Impact: Potential Future Public and Private Capital Investment 2022-2032

Impact Type	Philadelphia	Pennsylvania
Direct Output ($M)	$6,520	$6,520
Indirect and Induced Output ($M)	$3,260	$4,680
Total Output ($M)	$9,780	$11,200
Employment Supported (FTE)	64,130	71,170
Employee Compensation ($M)	$3,300	$3,660

Source: Econsult Solutions, Inc. (2022), Delaware River Waterfront Corporation (2022), IMPLAN (2021)

3.1. Future Public Capital Investments

The Delaware River Waterfront is expected to see an additional $517 million in public capital over the next 10 years. Much of this spending, over $300 million, will go towards the Penn's Landing CAP Project. Other significant projects include the northward expansion of the Delaware River Trail, as well as improvements to the planned Graffiti Pier Park (The total list of future public projects can be found in Appendix D).

Figure 3.2: The Park at Penn's Landing Rendering



Source: Delaware River Waterfront Corporation

3.2. Future Private Capital Investments

Over the next decade, private capital investment in the DRWC District is expected to continue to increase. Significant residential developments have already broken ground along the waterfront, with

more announced and planned for the future. Even with a potential economic slowdown in 2023-4, we consider the long-term appeal of the waterfront to continue generating demand at a faster rate than the city as a whole.

Overall, public spending is anticipated to leverage over $6 billion in private investment. The cumulative direct spending of $6.5 billion is expected to create substantial employment for Philadelphians in the building trades and expand the City's overall tax base. In 2020, DRWC selected the Durst Organization to develop the Market Street and Marina Basin sites at Penn's Landing with a proposed $2.2 billion, 3.5-million-square-foot mixed-use project. Durst proposed developing the project in four phases over nine years, The development would involve the construction of 1,834 residential units, a 225-key hotel and 94,000 square feet of retail space, as well as an affordable housing component on Penn's Landing.

3.3. Economic Impact of Public and Private Investments (2022-2032)

DRWC plans call for an additional $518 million public capital investments over the next decade. The economic impact within the City from future public capital investments will be about $800 million, supporting about 5,000 jobs and about $300 million in labor income. It is estimated that the economic impact within the City from full buildout of the private development will be about $9 billion, supporting about 59,000 jobs and about $3 billion in labor income. In total the economic impact throughout the City will be roughly $10 billion in economic output, supporting over 64,000 jobs and $3.3 billion in employee compensation (Figure 3.3).

Throughout the Commonwealth the economic impact of future public investment will be about $930 million, supporting about 5,500 jobs and about $370 million in labor income. The economic impact of private investment within the Commonwealth will be about $10 billion, supporting about 66,000 jobs and about $3.3 billion in labor income. The total impact of future private and public investment will result in an economic output of $11 billion, accompanied by 71,000 jobs and $3.6 billion in employee compensation (Figure 3.3).

Figure 3.3: Potential Economic Impact of Capital Investments 2022-2032

	Philadelphia			Pennsylvania		
	Public	**Private**	**Total Impact**	**Public**	**Private**	**Total Impact**
Direct Output ($M)	$517	$6,000	$6,517	$517	$6,000	$6,517
Indirect and Induced Output ($M)	$269	$2,996	$3,265	$417	$4,266	$4,684
Total Output ($M)	**$786**	**$8,996**	**$9,782**	**$934**	**$10,266**	**$11,201**
Employment Supported (FTE)	**4,700**	**59,430**	**64,130**	**5,450**	**65,720**	**71,170**
Employee Compensation ($M)	**$284**	**$3,020**	**$3,304**	**$369**	**$3,296**	**$3,665**

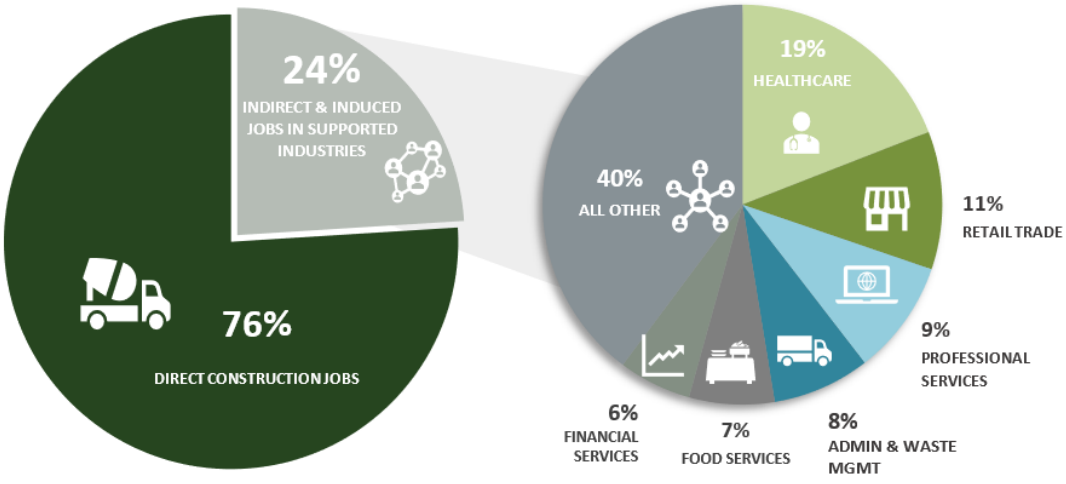
Source: Econsult Solutions, Inc. (2022), IMPLAN (2021), Delaware River Waterfront Corporation (2022)

3.4. Industry Distribution of Impacts

Mirroring previous trends from past construction projects, various other industries stand to benefit from the various development projects along the waterfront. The increases in secondary goods and services

purchasing linked to these projects, as well as the increased spending power of those directly employed in these projects will have ripple effects throughout the City and Commonwealth economy. Within the City of Philadelphia alone, significant indirect and induced employment in other industries besides construction will result from the completed projects in the DRWC district. Of the total employment, the plurality of jobs will be in the Healthcare and Retail industries (Figure 3.4).

Figure 3.4: Industry Distribution of FTE Within Philadelphia



Source: Econsult Solutions, Inc. (2022), IMPLAN (2021)

3.5. Fiscal (Tax) Impact

The public and private development anticipated to take place along the waterfront from 2022-2032 will generate significant fiscal impacts through employment, goods purchasing, and operation. It is estimated that impacts from the projects full-buildout operations will generate nearly $364 million taxes for Philadelphia, and $188 million in income, sales, and business tax revenues for the Commonwealth of Pennsylvania (Figure 3.5).

Figure 3.5: Potential Fiscal Impact of Public and Private Construction from 2022-2032

Tax Type	Philadelphia	Pennsylvania
Income ($M)	$114.2	$126.7
Sales ($M)	$20.6	$23.1
Business ($M)	$34.6	$38.9
Permits and Fees[3] ($M)	$65.2	*
RE Transfer Tax[4] ($M)	$130.3	*
Total ($M)	**$364.9**	**$188.8**

Source: Econsult Solutions, Inc. (2022), IMPLAN (2021)

4. Annual Economic Business Activity in the DRWC Development District: A 2022 Baseline

In this section, we describe the composition and the magnitude of the current level of business and economic activity within the DRWC District boundaries. The purpose of the public capital infrastructure investment is not merely to generate more private capital investment and building. The ultimate objective is to increase the ongoing business economic activity and associated employment that utilizes these capital investments, as well as the standards of living of Philadelphia residents. Below we establish a 2022 baseline description of current ongoing economic activity, and comment on the influence of the DWRC investments and actions that may have helped generate this level of activity.

Consistent with the definition used in our 2014 analysis, we consider this annual economic activity to be comprised of from a three basic of sources:

- **annual business activity** associated with business operations of both public and private entities located within the DRWC District,
- **household income** and spending (anywhere in the city) by residents living in the District (including newly constructed residential developments),
- **visitor spending** brought into the City by visitors coming to the programs and attractions along the central Delaware waterfront.

Each of these sources of ongoing economic activity create additional spillover impacts, supporting additional permanent job creation and tax revenue generation throughout the City and Commonwealth. Note that we do not include property taxes as part of this annual economic activity or spending. Property taxes are analyzed in detail in Section 5 of this report.

[3] City only: Assumes development fees and permit revenues to be 1 percent of total capital project costs.
[4] City only: Assumes RE Transfer Tax revenues to be 2% of the total development costs.

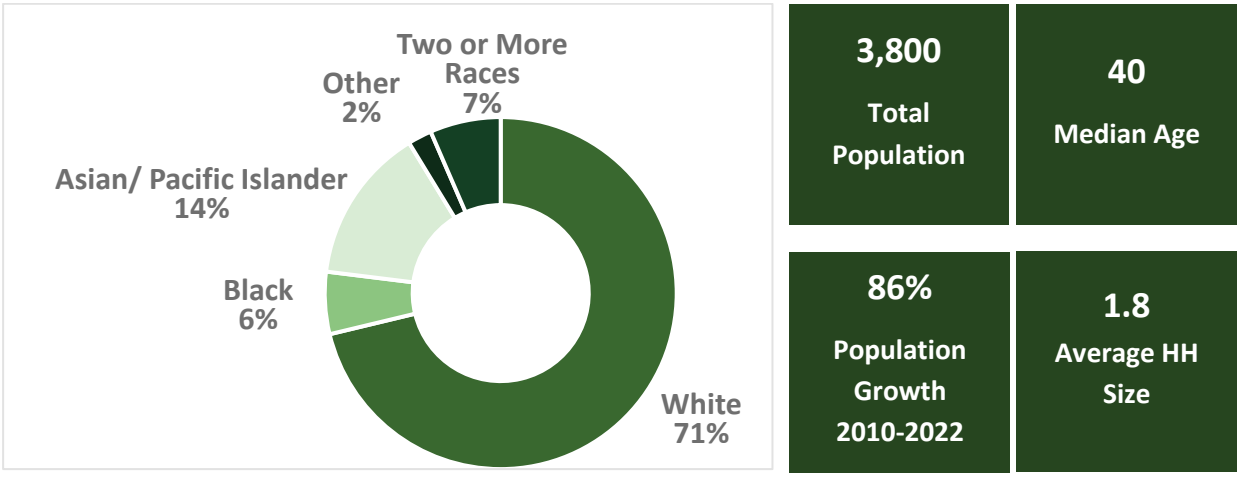
4.1. Current 2022 Baseline Economic Activity Footprint of the DWRC District

The public capital investment, as well as new private development, has added residential, office, and retail space within the DRWC Development District. Each of these uses in turn supports ongoing increases in economic activity, and together they represent the annual magnitude of economic activity that the District contributes to the City and Commonwealth's economies. We examine each in turn.

Demographic Trends

The DRWC Development District has a residential population of 3,800 with a median age of 40 years. The district is majority white, accounting for 71 percent of the population. The average household size is 1.8, much lower than the average household size of the rest of the city.

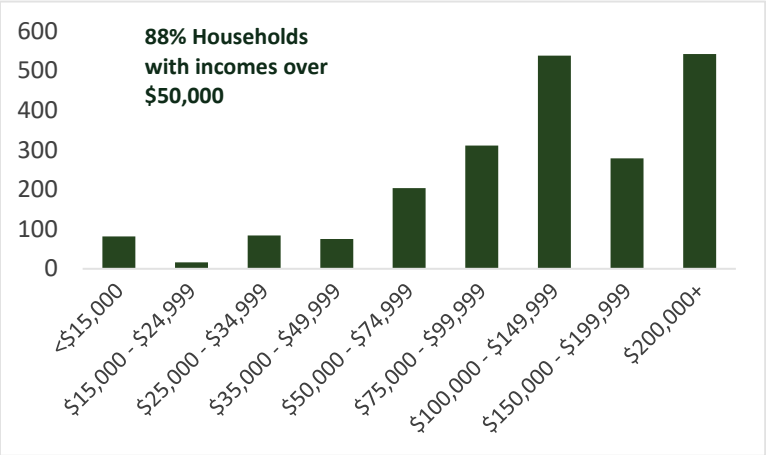
Figure 4.1: An Overview of the Demographic Make Up of the DRWC Development District



Source: ESRI (2022), Econsult Solutions, Inc. (2023)

According to Esri, The District has a median household income of $121,600, more than twice the median household income of Philadelphia ($52,600). Within the district 88 percent of households have incomes over $50,000 and the unemployment rate is 3 percent. The area has a very high labor force participation rate of 73 percent, higher than the rest of the city (58 percent).

Figure 4.2: Income and Employment Overview of the District



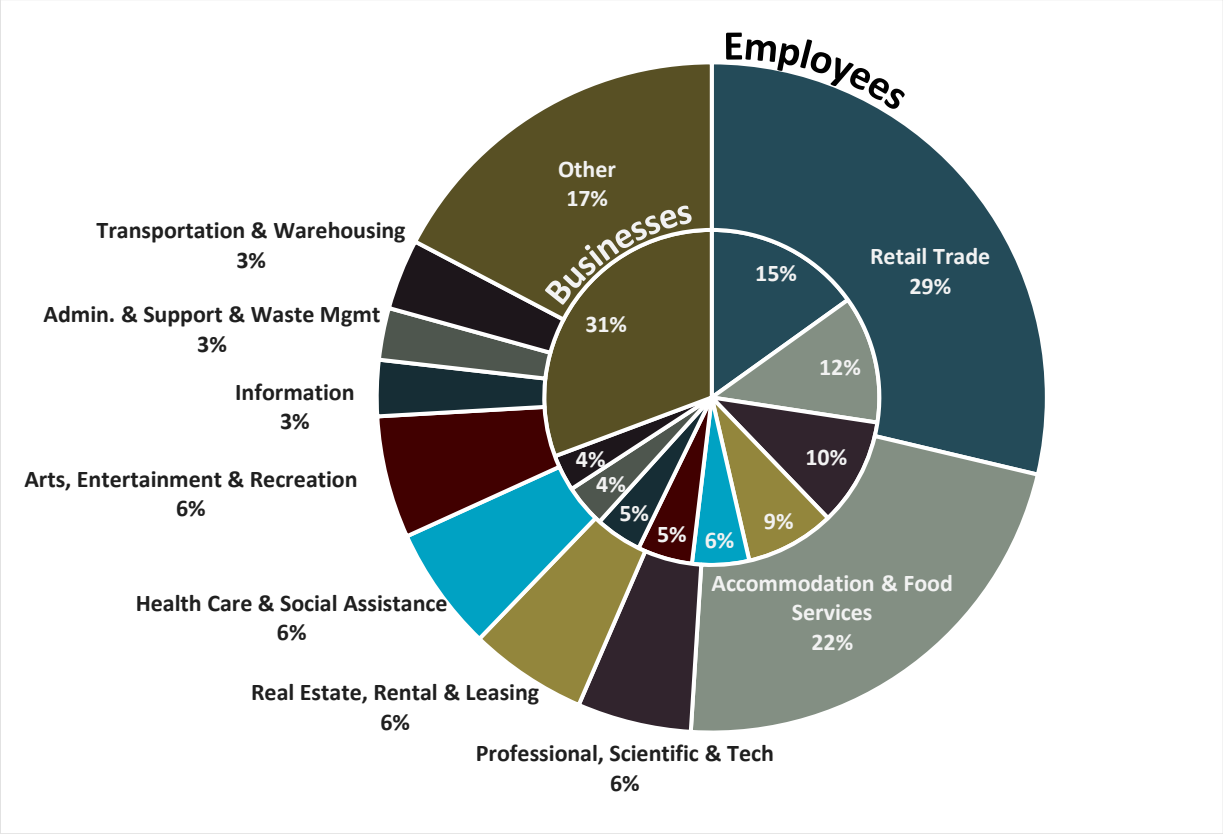
2,400 Living and Working in the District	**3%** Unemployment Rate
73% Labor Force Participation Rate	**$121,600** Median Household Income

Source: ESRI (2022), Econsult Solutions, Inc (2023)

Private and Public Business Operations (2022)

Currently (2022), Esri identifies 489 businesses operating in the Development District, employing 8,386 workers. The plurality of these businesses (15 percent) operate in the retail sector, which also accounts for the plurality of employees (29 percent). The second most common employers in the district are accommodation and food services businesses, which make up 12 percent of businesses present in the area and employee 22 percent of individuals employed along the waterfront. Significant employment centers along the Delaware River include the Columbus Commons and Columbus Crossing retail hubs. These shopping centers, located along the Delaware in South Philadelphia are home to various large retail outlets including Ikea, Best Buy, Walmart, Target, as well as various grocery and restaurant offerings. The northern portions of the Delaware River Waterfront are home to notable entertainment businesses, including the Rivers Casino, The Filmore Complex, Dave and Buster's and Morgan's Pier.

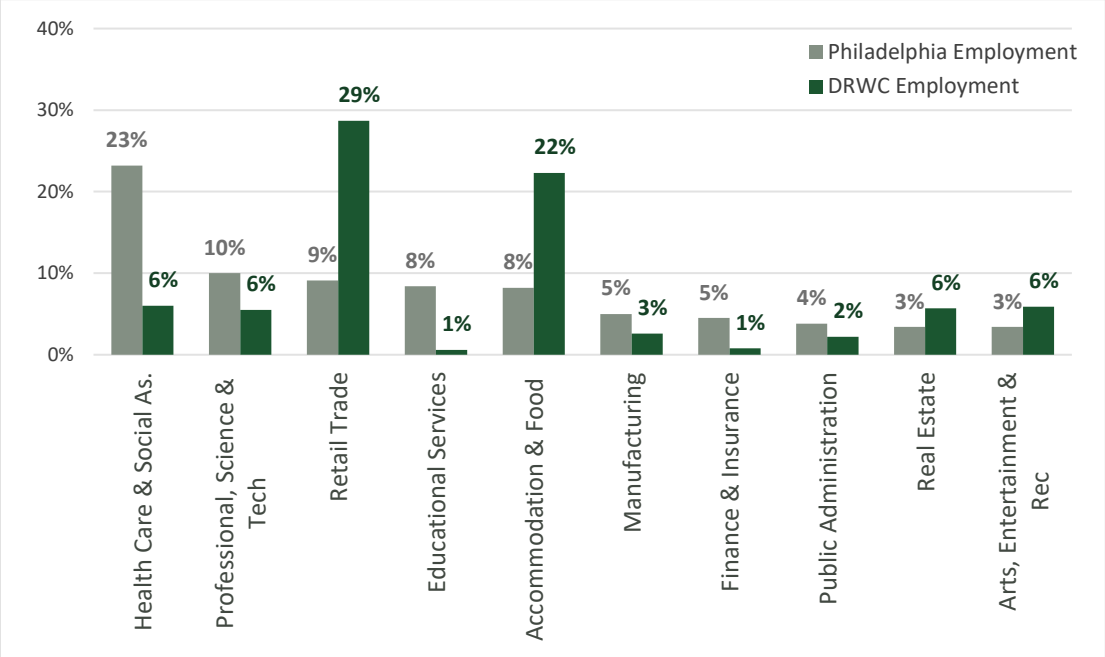
Figure 4.3: Business and Employment NAICS Breakdown of the District



Source: ESRI (2022), Econsult Solutions, Inc. (2023)

The Delaware River Waterfront employment breakdown varies significantly from the rest of the City. Employment throughout the City of Philadelphia is concentrated in the "Meds and Ed's" sectors, with Health Care and Social Assistance, Professional, Scientific, and Technical Sectors comprising 33 percent of citywide employment. The difference in employment sector breakdown between the City of Philadelphia and employment along the Delaware Waterfront reflects the waterfront's position as a retail, entertainment, and tourism center.

Figure 4.4: District and City Employment Sector Comparison



Source: ESRI (2022), Econsult Solutions, Inc. (2023)

As the area's residential population increases and the need for a greater variety of businesses and amenities increases, a greater diversity of employment trends will likely follow. In the first half of 2022, thirteen new commercial property permits were pulled (see Figure 2.11), reflecting the continued interest in developing commercial businesses along the waterfront.

5. Real Estate Value Impacts

DRWC's implementation of the Plan and associated economic development efforts described and quantified in this report have helped increase the attractiveness of the Waterfront as a location for various types of economic uses. This, combined with generally favorable real estate market conditions, led to a significant growth in the demand for real estate in the DRWC District; this in turn has led to a significant increase in the aggregate property values within the district boundaries. This increase has generated substantial property tax revenue increases for the City as well as for the School District of Philadelphia, even adjusting for the tax abatements applied to the new developments.

These property value gains come from two sources: (1) new investment in District properties whose value will greatly exceed that of whatever it is replacing, including vacant parcels and (2) increased demand for existing properties (their proximity to the revitalized waterfront and to new development makes them more attractive in a generally favorable real estate cycle). Redevelopment and amenity investment typically generate positive impacts on other properties (especially residential parcels) that

are within walking distance. In the real estate markets, these increase demand (the Demand curve for land shifts out).[5]

In 2014, we estimated potential property value impacts in the area immediately surrounding Penn's Landing that could be generated by DRWC implementing the Plan. At that time, the city's assessment records were not in synch with true property values. Since that time, the city government has improved its assessment practices (AVI) and the records can be used to measure real estate market values more accurately. Using available OPA and City Revenue data we compare the property values today (2023 assessments) with those of 2015, in order to then estimate the marginal impact of DRWC's efforts on property values in the District. Since most new development and significant redevelopment is tax abated, the taxable (assessed) values are not the same as market value changes. However, as the abatements roll off, the assessed values, and hence property taxes generated, will continue to increase.

ESI examined at these changes broken down by major land use categories, to describe property value and taxable assed value increases by type:

Figure 5.1: Property Value Detail – 2015

Property Type	Property Count	Market Value	Total Taxable	Total Exempt
Residential	1,310	$467,389,300	$272,529,743	$194,859,557
Hotels and Apartments	21	$109,689,600	$82,906,351	$26,783,249
Store and Dwelling	7	$2,664,000	$2,664,000	$0
Commercial	95	$431,907,600	$283,973,629	$147,933,971
Industrial	59	$105,497,500	$90,451,702	$15,045,798
Vacant Land	60	$16,862,800	$15,136,400	$1,726,400
Total	**1,552**	**$1,134,010,800**	**$747,661,825**	**$386,348,975**

Source: Philadelphia Office of Property Assessments (2022), Econsult Solutions, Inc. (2022)

Figure 5.2: Property Value Detail – 2023

2023 Property Type	Property Count	Market Value	Total Taxable	Total Exempt
Commercial	102	$899,072,500	$574,123,468	$55,040,682
Industrial	69	$258,534,720	$149,721,071	$292,442,310
Mixed Use	10	$5,388,700	$4,250,730	$86,580,663
Multi Family	31	$244,083,500	$157,276,962	$1,137,970
Single Family	1,539	$731,268,200	$547,724,217	$86,854,598
Vacant Land	184	$575,584,400	$251,488,780	$507,034,023
No Category	1	$3,160,400	$0	$557,520
Total	**1,936**	**$2,717,092,420**	**$1,684,585,228**	**$1,029,647,766**

Source: Philadelphia Office of Property Assessments (2022), Econsult Solutions, Inc. (2022)

[5] The positive property value impacts extend beyond the district borders into the adjacent neighborhoods. We limit our estimates to property values in the District, so our estimates of increased property tax revenues can be considered very conservative.

Figure 5.3: Property Value Detail – 2015 v 2023 comparison

	Property Count	Market Value	Total Taxable	Total Exempt
Value Change	394	$1,583,081,620	$936,923,403	$243,531,359
% Change from 2015	25%	140%	125%	63%

Source: Philadelphia Office of Property Assessments (2022), Econsult Solutions, Inc. (2022)

5.1. Two Components of Property Value Increases

New public and private capital investments, along with increased demand for existing land and buildings, have increased market values in the DRWC District. In this section we estimate how much of this growth could be attributed to DRWC actions. Fortunately, as noted above, the starting time for our analyses coincides with the City's implementation of the Actual Value Initiative (AVI) and hence the assessment data presents a much better picture of market values than existed before 2013.

The (OPA-recorded/established) property value increases from 2015 to 2023 are due to two factors:

(1) generally favorable economic and housing market conditions, in particular growing demand and low interest rates, and,

(2) the fact that the city did not fully adjust parcel property values (especially non-residential) when AVI was initially implemented (this does NOT represent real value growth).

In this case, some of what might look like property value increases during the period was really the OPA catching up over the years on getting the base (2014) numbers right. In analyzing this growth, we assume that fully 1/3 of the observed increase in market values was due to this multi-year catch-up adjustment, and 2/3 of the increase represents real market value growth.

Figure 5.4: DRWC District Property Valuation Change 2015 – 2023

Year	Property Count	Total Market Value	Total Taxable Value
2015	1,552	$1,134,010,800	**$747,661,825**
2023	1,936	$2,717,092,420	$1,684,585,228
% Change	25%	140%	63%
Value Change	384	$1,583,081,620	$936,923,403
Value Change from Catch Up Adjustment		$527,704,427	
Real Market Value Growth		1,055,377,193	

Source: Philadelphia Office of Property Assessments (2022), Econsult Solutions, Inc. (2022)

5.2. Market Value and Property Tax Impacts: DRWC Contribution

After applying our catch-up adjustment, we turn to estimate the property market value impact attributable to DRWC Plan efforts, ESI analyzed the adjusted OPA property records of parcels within the district. With the transformative changes that have happened at Penn's Landing and the many other improvements along the Waterfront, the district has experienced positive increases in property values.

From the 2015 assessment to the 2023 assessment (published 2022), total recorded market value in the District has increased by $1.06 billion, or 140% after adjusting for the catch-up component.

Using these assumptions, we estimate the marginal impact of the DRWC Plan on property market values to have been $264 million, or roughly 25%.

ESI excluded assigning credit for increases in total taxable land and building value because in addition to the factors noted above, a portion of this increase is from the expiration of property tax abatements, further complicating our ability to identify and estimate the DRWC Plan-specific marginal impact.

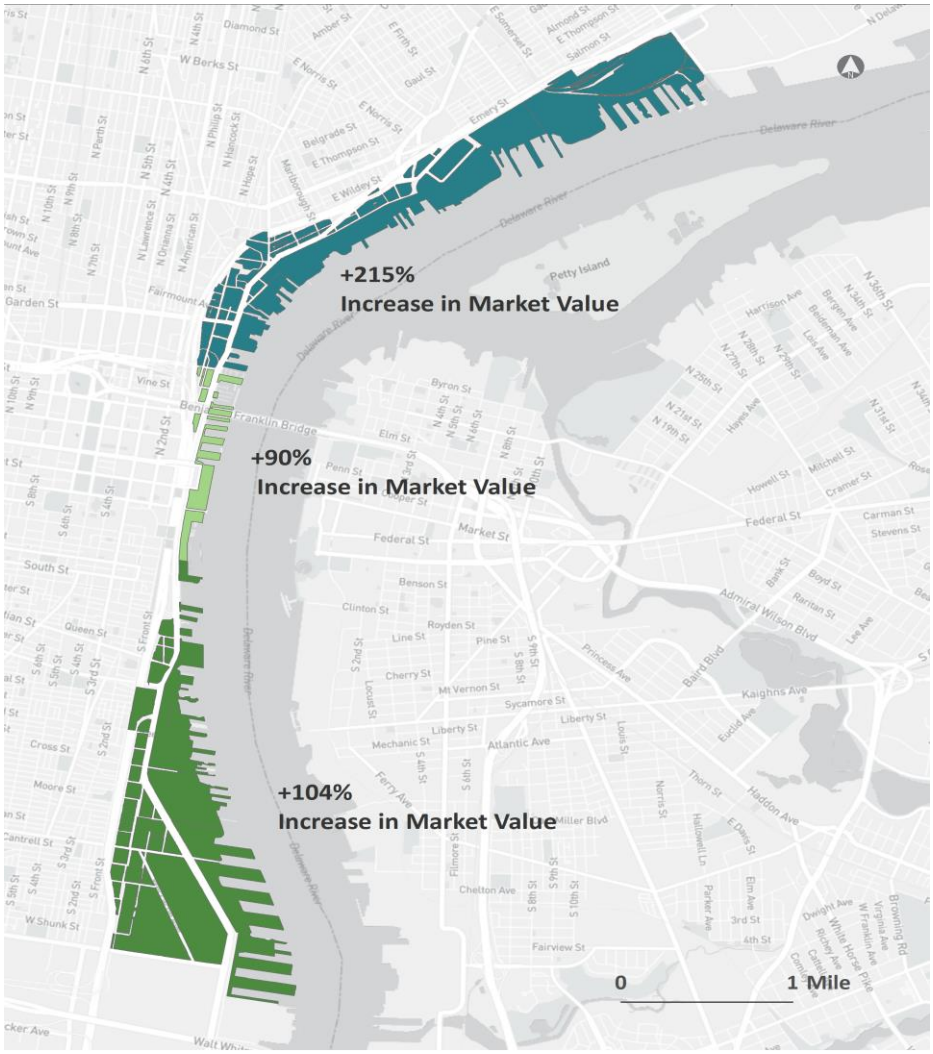
The new construction will result in higher tax revenues for Philadelphia and the Commonwealth in several ways (see Figure 2.16 for fiscal impacts of completed construction). Relevant to property values, however, the new construction will result in growing property taxes for all construction, residential, retail and mixed use. Economic theory and empirical analyzes show us that an improvement along a riverfront or waterfront can have significant positive impacts on the attractiveness and hence the market value of land adjacent to the riverfront. Figure 5.4 shows the upward shift in property values and associated property taxes since 2015.

Figure 5.5: Estimated Market Value Increase attributable to DRWC Actions 2015 – 2023

	Total Market Value
Real Market Value Growth	1,055,377,200
% Change due to Overall Market Growth	75%
% Change due to DRWC Actions	25%
Value Change "Attributable" to DRWC	**$263,844,300**

Source: Philadelphia Office of Property Assessments (2022), Econsult Solutions, Inc. (2022)

Figure 5.6: DRWC Development District Market Value Changes by Area 2015-2023



Source: Philadelphia Office of Property Assessments (2022)

6. Broader Social Impacts of DRWC's Investments in the Delaware River Waterfront

6.1. DRWC as an Engine for Equitable Development

DRWC's commitment to racial equity and economic inclusion is reflected most explicitly in its vigorous Economic Opportunity and Wealth-Building Plan (EOP), which stipulates that all our spending meet our goals for the hiring of Minority- Woman- and Disadvantaged-Owned Businesses as well as spending within the City of Philadelphia. DRWC strives for an overall goal of 40% of spending with M/W/DBEs, including 25-35% with MBEs, 10-15% with WBEs, and best efforts for DBEs. In the past few years, we

have met or exceeded that goal. We are flexible with the many small businesses and individuals we do business with that many not be officially certified with these designations.

For sites that DRWC works to redevelop with private developers, DRWC requires the selected partner to implement their own robust EOP, including specific goals for minority and women-owned businesses to participate in the equity, construction, and on-going operations of the project. For example, the Durst Organization, the major developer of the Penn's Landing project, has agreed to partner with the Badger group, a black owned development firm on transforming the Delaware River waterfront. Badger Group will take part in the management of construction activities and selection and supervision of contractors and subcontractors, as well as community engagement. In addition to this, the deal also provides Badger with an opportunity to acquire a 20 percent stake in the project. "Breaking down barriers in the development industry is key if we are going to build a fairer and more equitable city in which every person has the opportunity to thrive," said Councilmember Derek Green, a longtime champion of equity and inclusion in the construction industry. "The Durst Organization's choice of a strong, local leader to partner with on this critical project is an important next step in our efforts and highlights the work we have done in raising awareness around these key issues."

6.2. DRWC's Contributions to Placemaking and Waterfront Access

DRWC's mission is to design, develop, program, and maintain public amenities along the central Delaware River Waterfront for the use and benefit of all Philadelphians and visitors. Through their work to increase the accessibility of the Waterfront, the quality of public spaces, and the variety of cultural events offered, the DRWC works to ensure that the waterfront is inclusive and welcoming to all. Penn's Landing and the expanded riverfront district see increasing use each year, and the user base, from all walks of life, may be one of the most diverse of any location in the city. It is truly a place where people of different races, cultures, ethnicities, incomes, ages and interests take advantage of the riverfront together.

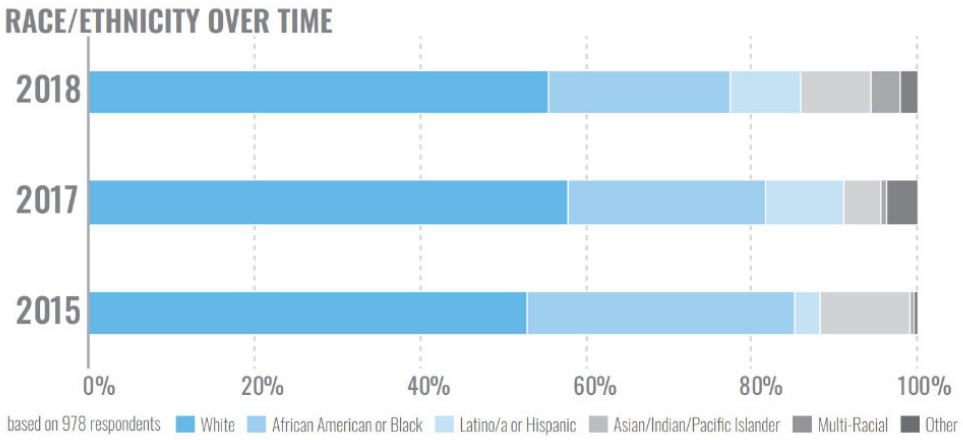
In order to better understand who is utilizing the various parks, amenities, and events along the Delaware River, the DRWC collected surveys of visitors from 2014 to 2018. The data collected in these surveys has enabled the DRWC to critically examine their programing to see who was utilizing their services and who may be facing barriers to usage. Data collected included home zip code, age, family status, race, ethnicity, gender, and more. This data assists the DRWC in identifying gaps in park usage and developing strategies to increase access and engagement among underrepresented groups.

The most recently collected data found significant geographic, racial, and ethnic diversity of Delaware Waterfront visitors. Visitors from every zip code in Philadelphia were represented in the 2018 sample, exemplifying the draw of the DRWC parks and events. In addition to a strong geographic representation across the city, thirty-two states and eight countries were represented in the sample.

Across the sample years, half of visitors to the Delaware Waterfront self-identified as white and half self-identify as people of color (Figure 6.7). The smaller parks and piers further from Center City tend to draw visitors from the immediate vicinity and therefore are more likely to be city residents. The north-south expansion of the Waterfront District brings direct riverfront access to a larger variety of city

neighborhoods. In conjunction with these findings the DWRC reaffirms their commitment to ensuring their parks, riverfront trails, and piers provide a safe and welcoming space for all residents and visitors.

Figure 6.1: Race and Ethnicity of Delaware Waterfront Visitors



Source: Delaware River Waterfront Corporation (2019)

The organization continues to transform the waterfront into a vibrant destination for recreational, cultural, and commercial activities, while being a responsible steward of the natural resource that is the riverfront. While major cities in the United States continue to face issues of lack of recreational spaces, DRWC has undertaken a number of initiatives to make the waterfront more friendly for the community with a combination of bike trails, public art displays, and accessible places to relax including the following placemaking activities:

- **Development of Parks and Public Spaces:** created new parks and public spaces along the waterfront, including Spruce Street Harbor Park, Blue Cross RiverRink Winterfest, and Race Street Pier. In addition to park developments near Center City, the DRWC has made numerous improvements to neighborhood focused parks including the Washington Avenue Green and Piers 53 and 68. These spaces offer a range of amenities, including food and beverage vendors, recreational activities, and events, that make the waterfront a more attractive destination for residents and visitors alike.



Courtesy: Delaware River Waterfront Corporation

- **Pedestrian and Bicycle Infrastructure:** invested in new pedestrian and bicycle infrastructure along the waterfront, including new trails, sidewalks, and bike lanes. Additionally, the DWRC works to increase the connection between the Philadelphia and the Delaware Waterfront by investing in various improvements that improve the street linkages between various neighborhoods and the waterfront, including the Columbia Avenue, Spring Garden, and Race Street Connectors. Furthermore, DRWC is continuing to improve the ADA accessibility of their facilities to ensure that the waterfront can be enjoyed and accessed by the elderly, mobility impaired, and differently abled.



Courtesy: Delaware River Waterfront Corporation

- **Food and Beverage Offerings:** worked to improve the food and beverage offerings along the waterfront, including adding new restaurants and food vendors, as well as diverse small businesses from all over the city. This has helped to create a diverse and vibrant dining scene on the waterfront and has made the area a destination for foodies and other visitors looking for a unique dining experience.
- **Cultural and Arts Programming:** works to uplift various community organizations by providing the space and physical assets needed to conduct culturally specific programing. Penn's Landing has hosted a number of successful cultural events including the PECO Multi-Cultural Summer Series, which included events celebrating Caribbean, Indian, Islamic, and Latino/a culture. These events simultaneously provide a space for communities to gather and celebrate their culture, while also creating enjoyable, educational events for all visitors.
- **Development of New Attractions:** worked to develop new attractions along the waterfront that can help draw a diverse group of Philadelphians and visitors from all over to explore and enjoy the waterfront. Examples include the very successful Spruce Street Harbor Park, IBC RiverRink, the Cherry and Race St. Piers, a new Ferris wheel and observation deck as well as the massive Park at Penn's Landing, construction just underway.

Overall, the DRWC plays a critical role in providing and maintaining accessible and inclusive spaces for people to gather, relax, and enjoy a wide range of activities. The organization is committed to creating public spaces and programing that reflects the diverse needs and interests of the community.

7. Appendix

7.1. Economic Impact Analysis

Overview

Economic impact estimates are generated by utilizing input-output models to translate an initial amount of direct economic activity into the total amount of economic activity that it supports, which includes multiple waves of spillover impacts generated by spending on goods and services and by spending of labor income by employees. This section summarizes the methodologies and tools used to construct, use, and interpret the input-output models needed to estimate this project's economic impact.

Input-Output Model Theory

In an inter-connected economy, every dollar spent generates two spillover impacts:

- First, some amount of the proportion of that expenditure that goes to the purchase of goods and services gets circulated back into an economy when those goods and services are purchased from local vendors. This represents what is called the "indirect effect," and reflects the fact that local purchases of goods and services support local vendors, who in turn require additional purchasing with their own set of vendors.
- Second, some amount of the proportion of that expenditure that goes to labor income gets circulated back into an economy when those employees spend some of their earnings on various goods and services. This represents what is called the "induced effect," and reflects the fact that some of those goods and services will be purchased from local vendors, further stimulating a local economy.

The role of input-output models is to determine the linkages across industries in order to model out the magnitude and composition of spillover impact to all industries of a dollar spent in any one industry. Thus, the total economic impact is the sum of its own direct economic footprint plus the indirect and induced effects generated by that direct footprint.

Input-Output Model Mechanics

To model the impacts resulting from the direct expenditures ESI developed a customized economic impact model using the IMPLAN input/output modeling system. IMPLAN represents an industry standard approach to assess the economic and job creation impacts of economic development projects, the creation of new businesses, and public policy changes within a county and its surrounding area.

IMPLAN has developed a social accounting matrix (SAM) that accounts for the flow of commodities through economics. From this matrix, IMPLAN also determines the regional purchase coefficient (RPC), the proportion of local supply that satisfies local demand. These values not only establish the types of goods and services supported by an industry or institution, but also the level at which they are acquired locally. This assessment determines the multiplier basis for the local and regional models created in the

IMPLAN modeling system. IMPLAN takes the multipliers and divides them into 542 industry categories in accordance with the North American Industrial Classification System (NAICS) codes.

The IMPLAN modeling system also allows for customization of its inputs which alters multiplier outputs. Where necessary, certain institutions may have different levels of demand for commodities. When this occurs, an "analysis-by-parts" (ABP) approach is taken. This allows the user to model the impacts of direct economic activity related to an institution or industry with greater accuracy. Where inputs are unknown, IMPLAN is able to estimate other inputs based on the level of employment, earnings, or output by an industry or institution.

Employment and Wages Supported

IMPLAN generates job estimates based on the term "job-years," or how many jobs will be supported each year. For instance, if a construction project takes two years, and IMPLAN estimates there are 100 employees, or more correctly "job-years" supported, over two years, that represents 50 annual jobs. Additionally, these can be a mix of full and part-time employment. Consequently, job creation could feature more part-time jobs than full-time jobs. To account for this, IMPLAN has a multiplier to convert annual jobs to full-time equivalent jobs.

Income to direct, indirect, and induced jobs is calculated as employee compensation. This includes wage and salary, all benefits (e.g., health, retirement) and payroll taxes (both sides of social security, unemployment taxes, etc.). Therefore, IMPLAN's measure of income estimates gross pay opposed to strictly wages.

Tax Revenue Impact

The economic impacts in turn produce one-time or ongoing increases in various tax bases, which yield temporary or permanent increases in various tax revenues. To estimate these increases, Econsult Solutions, Inc used an economic impact modelling software, IMPLAN. IMPLAN is an input-output modeling system that uses annual, regional data to map these buy-sell relationships so users can predict how specific economic changes will impact a given regional economy or estimate the effect of past or existing economic activity. Taxes on Production & Imports, includes sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. The tax revenues were produced at a sub county and state level.

7.2. DRWC Development District Projects

APPENDIX A: Illustrative List of Private Capital Investments on the Delaware Waterfront, 2014-2022 (Completed)

Name	Developer	Address	Construction Type	Primary Use	SF	Construction Cost (M)
The Battery Phase 1	L-A Battery QOZ	1325 Beach St	New	Retail	500,000	$200
The Filmore Complex	GY Properties	29 E Allen St	New	Retail	420,000	$195
One Water Street	PMC Property Group	250 N C. Columbus Blvd	New	Residential	275,000	$100
Philly Self Storage/Dubin Paper Building	Gary Ott	1910 S C. Columbus Blvd	Renovation	Retail	230,000	$49
Bridgeview	National Realty Investment Advisors	787 S Swanson St	New	Residential	171,000	$28
Giant Grocery Store	Tower Investments	1403 S. C. Columbus Blvd	New	Retail	46,000	$21
Craft Hall	FCM Hospitality	901 N. Delaware Ave	Renovation	Retail	35,000	$16
Common Frankford	Elk Street Management	965 Frankford Ave	New	Residential	4,150	$2
Northbank Concordia/D3 The Ryland at One Dock St.	LCOR	1 Dock St.	New	Residential	270,000	$200

APPENDIX B: Pipeline of Potential Future Private Capital Investments on the Delaware Waterfront, 2023-2032 (*Project underway in 2022)

Name	Developer	Address	Construction Type	Primary Use	SF	Construction Cost ($M)
Mixed Use Complex*	Saxum Real Estate	700-30 North Delaware Ave	New	Residential	500,000	$250
Liberty on the River	Brevet Capital/K4 Philadelphia, LLC	1301 S Christopher Columbus Blvd	New	Residential	3,084,095	$1,200
Renaissance Plaza	Carl Marks & Company	400 N Christopher Columbus Blvd	New	Residential	1,900,000	$920
Sugar Mill Development	Tower Investments	1525 S. Columbus Blvd	New	Mixed Use	1,306,800	$610
Penn's Landing Redevelopment	The Durst Organization	301 S Columbus Blvd	New	Mixed-use	660,000	$2,200
Former Foxwoods Site*	US Construction	1401 S. Columbus Blvd.	New	Mixed-use	505,000	$236
Spring Garden Site/Festival Pier*	JAG/Haverford Properties	501 N. Columbus Blvd	New	Mixed-use	479,000	$223
Core Realty Mixed Sue Buildings*	Core Realty	918 North Delaware Ave	New	Mixed Use	418,480	$195
300 N Columbus	The Durst Organization	Columbus Blvd at Callowhill	New	Mixed Use	370,000	$300
Piers 34/35 South	Ensemble Investments, LLC	735 S Christopher Columbus Blvd	Renovation	Residential	350,000	$169
195-unit Mixed Use Building	Ensemble	933 North Penn Street	New	Residential	187,636	$91
DeSimone Building	Cosica Moos Architecture	626 N Delaware Ave	New	Residential	140,055	$4
1100 N. Delaware	Core Realty	1100 N Delaware Ave	Renovation	Residential	45,756	$11
1000 N Delaware	Archive Development	1000 N Delaware	New	Residential	69,160	$33
1130 N Delaware	Streamline	1130 N Delaware	New	Residential	183,780	$89
Realty Multi Family Building	Realty, LLC	408-10 North Front Street	New	Residential	16,000	$7

APPENDIX C: DRWC Capital Projects, 2010-2022

Name	Construction Cost (M)	Date Completed
Washington Avenue Green	$0.5	2010
Race Street Pier	$7.0	2011
Race Street Connector Phase I	$1.9	2011
Delaware River Trail - Penn Street Segment	$1.9	2013
PREIT Acquisition	$2.5	2013
Washington Avenue Pier	$2.5	2014
Water Taxis	$1.5	2014
Columbia Avenue Connector	$0.5	2014
Penn's Landing - Feasibility Study	$0.7	2014
Market Street Dog Park	$0.1	2014
Spruce Street Harbor Park	$2.1	2014
Pier 68	$2.1	2015
Dredging	$2.2	2015
K4 Acquisition	$0.9	2015
Spruce Street & Callowhill Street	$1.4	2015
BlueCross RiverRink Winter/Summerfest	$1.1	2015
Spring Garden Connector Street	$2.7	2016
Scissor Ramp Removal & Market Street Ramp	$3.9	2016
Henry Stewart Acquisition	$0.8	2016
Race Street Connector Phase II	$0.5	2017
Foglietta Plaza / Sculpture Garden	$0.1	2017
Delaware River Trail - South	$1.8	2018
Heliport	$0.7	2018
Frankford Avenue Connector - Design	$0.7	2018
Washington Avenue Connector - Design	$0.4	2018
Cherry Street Pier	$6.8	2018
Delaware River Trail - North	$2.4	2019
Delaware River Trail - Design	$0.7	2019
Festival Pier	$2.0	2019
Graffiti Pier Planning	$0.3	2020
South Wetlands Park Planning	$0.5	2020
Cherry Street Pier Phase II	$1.5	2020
Delaware River Trail - Central	$20.0	2021
Penn's Landing - CAP Design	$21.0	2021
	$98.6	

APPENDIX D: DRWC Planned Capital Projects, 2023-2032

Name	Construction Cost(M)	Anticipated Completion
Delaware River Trail - The Battery	$1.5	2023
Delaware River Trail - Northbank Phase I	$1.5	2023
Graffiti Pier Acquisition	$1.0	2023
Frankford Avenue Connector Phase I	$0.08	2023
Graffiti Pier Park Phase I	$2.3	2024
Northbank Phase II Acquisition	$2.0	2024
Glasco Acquisition	$1.0	2024
Washington Avenue Connector Phase I	$5.0	2024
Passenger Ferry Improvements	$2.0	2025
Delaware River Trail - Washington to Tasker	$5.0	2025
Delaware River Trail - Northbank Phase II	$3.0	2025
Anderson/Berks Acquisition	$5.0	2025
Penn's Landing Marina Improvements	$5.0	2026
Penn's Landing CAP	$306	2026
South Wetlands Park Phase I	$6.5	2026
Washington Avenue Connector Future Phases	$5.0	2026
South Street Parking Garage	$35.0	2027
Callowhill Parking Garage	$14.0	2027
Frankford Avenue Connector Future Phases	$2.5	2028
Cumberland Street Connector	$3.0	2028
Penn's Landing Esplanade	$60.0	2030
Graffiti Pier Park Future Phases	$30.0	2032
South Wetlands Park Future Phases	20.8	2032
	$ 517.2	

7.3. About Econsult Solutions, Inc.

This report was produced by Econsult Solutions, Inc. (ESI). ESI provides businesses and public policy makers with consulting and thought leadership services in urban economics, real estate, transportation, public infrastructure, economic development, public policy and finance, strategic planning, as well as expert witness services for litigation support.

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