

RIVER WARDS DISTRICT PLAN

TECHNICAL MEMORANDA: EXISTING CONDITIONS, ISSUES, AND OPPORTUNITIES

These memoranda present preliminary findings by Philadelphia City Planning Commission staff of existing conditions, issues, and opportunities, organized into seven topics within the *Philadelphia2035* themes of Thrive, Connect, and Renew. An additional memo highlights demographic characteristics.

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THRIVE

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- > **Land Management:** *Capitalize on land assets*..... 32

CONNECT

- > **Transportation:** *Improve transportation safety, efficiency, and convenience*..... 52
- > **Utilities:** *Adapt utility services to changing technology and consumption patterns*.....70

RENEW

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NEIGHBORHOODS

Philadelphia2035 Citywide Vision Goal: Improve neighborhood livability.

SUMMARY OF EXISTING CONDITIONS

- A variety of community-serving public facilities are distributed throughout the River Wards District. These include libraries, park and recreational resources, fire stations, police stations, and municipal parking lots. The District does not have a city-operated public health center.
- Several neighborhoods within the River Wards District may be under-served by convenience-oriented goods and services, although overall the District is considered very well-served by retail resources due to the large, auto-oriented shopping centers, including Aramingo Avenue.
- Parking has become increasingly contentious for residents and businesses where increased investment in housing and businesses adds parking demands to narrow streets and densely-developed blocks.
- Frequent Market-Frankford El, bus, and trolley service provides residents with convenient, non-automobile options for work and non-work trips.
- The City's Department of Public Health and Planning Commission have been working to identify gaps in walkable access to healthy food. As of 2012, gaps remained in parts of Kensington, Port Richmond, and Bridesburg.
- The River Wards is experiencing a steady amount of market-rate housing construction, yet the District also has Philadelphia's highest percentage of pre-1939 housing units. Most of the new units have been concentrated south of Lehigh Avenue.

KEY ISSUES faced by the River Wards District include:

- Because of Capital funding constraints, money for maintenance of existing, public-serving facilities continues to be a challenge.

- The ability to strengthen neighborhood centers by clustering public service facilities and schools is limited by constrained sites, lack of strategically-located large parcels, and uncoordinated location decisions among charter, parochial, and public schools.
- The Lehigh Viaduct, the Market-Frankford El, I-95, and the Trenton Avenue Viaduct are perceived as barriers between neighborhoods and between residents and shopping or services.
- The development of 1.6 million square feet of retail space on former industrial sites along Aramingo Avenue draws spending away from older, pedestrian oriented commercial corridors.
- Sponsors of development proposals are frequently urged by near neighbors to provide more off-street parking than is required by City codes.
- The attraction and retention of healthy food vendors remains a challenge in low-income areas.
- Despite significant housing construction, a substantial number of existing, older homes remain in need of modernization and repair.
- Areas with concentrations of older buildings and low-moderate income homeowners and renters. Older homes are vulnerable to housing disinvestment and deterioration.

MAJOR OPPORTUNITIES to improve conditions in the District include:

- Trees, stormwater features, wayfinding signs, and traffic-pedestrian safety measures can help to improve connections between neighborhoods and parks and recreation facilities.
- Nearly all residential areas within the District are served by traditional commercial corridors, some of which have the potential, guided by land use and transportation decisions, to maintain a viable, pedestrian-accessible mix of consumer goods and services, if the private market exists.
- Underutilized or vacant industrial areas may be appropriate for auto-repair, manufacturing, and maintenance establishments wishing to relocate from neighborhoods that are experiencing steady residential reinvestment.
- The District's walkability, bikeability and transit services create opportunities for significant, transit-oriented development on large sites near the York-Dauphin MFL Station.
- Successful strategies for healthy corner stores can be expanded into areas currently under-served by walkable access to healthy food.

- The addition to the River Wards District of households can create market demand to support additional stores and services.
- Targeted housing outreach and assistance can help preserve the existing housing stock.

NEIGHBORHOODS (SPECIFIC TOPICS)

Neighborhood Centers

Citywide Goal: *Promote strong and well-balanced neighborhood centers.*

Convenient, efficient, and attractive neighborhood centers help to retain and attract residents and businesses. In the context of *Philadelphia2035*, neighborhood centers are comprised of community-serving facilities, commercial corridors, transit-oriented development, and outlets for healthy food.

Community-Serving and Municipal-Support Public Facilities

The River Wards district has approximately 39 City-owned facilities including fixed assets such as athletic fields, public pools, and a water pollution control plant. The conditions and potential for site improvements at each facility vary by operation. Comparable to the majority of city-owned buildings, many facilities within the River Wards have been under-funding for routine maintenance and equipment updating. In the subsections below, programmed Capital Program funding is noted, where available, to provide an indication of the greatest needs and maintenance priorities.

Capital budget expenditures across the District for the fiscal years 2010 to 2014 totaled approximately \$34.3 million. Approximately 84 percent of this was directed towards the Philadelphia Water Department's (PWD) Northeast Water Pollution Control Plant (NEWPCP). The remaining \$5.3 million was spread across 19 community-serving facilities.

For the upcoming fiscal year 2015-2020 Capital Program, approximately \$95.8 million was programmed for the District, 93 percent of which went to the NEWPCP. The remaining \$6.6 million was allocated toward eleven facilities: 26th Police District (\$727,000); Northeast Transfer Station (\$4.5 million); Fire Engines 28 and 33 (\$414,000); Penn Treaty Park (\$100,000); Garage 415, 332, and 431 (\$178,000); and Richmond Branch Library (\$55,000).

PCPC staff conducted site visits of a majority of the facilities in the District between June 2014 and September 2014. Issues with facility structures, building mechanicals, public access and safety were reviewed with staff on-site and Recreation Leaders/Park Keepers/Head Librarians when available.

Issues and concerns for operational capacity of the capital facilities were also reviewed with related departmental management where applicable. Specific issues related to the improvements of interior and exterior conditions of facilities, access and public realm conditions, operations, and Capital funding, if programmed or expended, are discussed in the subsections below.

Municipal-Support Facilities

The District has a number of facilities that support public works/infrastructure and operations internal to City government.

- **The Northeast Water Pollution Control Plant – 3895 Richmond Street**

- This is one of the City's three treatment plants. Its primary function is to ensure proper treatment of the city's water and wastewater in a cost effective manner and to meet state and federal regulations.
- The NEWPCP occupies approximately 160 acres. Plant infrastructure replacements and upgrades are underway and anticipated to continue over the next several years. The plan also contains a biogas facility that turns methane from wastewater into energy for the facility's use.
- The facility and its capacity are being reviewed as part of a wastewater master planning effort. Additional capital program investments may be required to modify, reconstruct, or update the plant. The facility is programmed for \$89.1 million in FY15-20.

- **The Northeast Service Building/Transfer Station – 3701/3901 N DELAWARE Avenue**

This includes Fleet Management's shop 332. The former Northeast Incinerator site is currently being converted into office space for 125 employees. The building will be heated with 35 geothermal wells and will try to attain LEED Silver certification. The facility sits on almost 30 acres.

Fire Stations

There are three fire stations in the District. Fire and Police facilities, operations, and upgrading needs will be assessed in a facilities study as part of the Fiscal Year 16 (FY16) Capital Budget Program. The City's current administration is proposing this study. Please note that information on specific needs for each facility is pending from Fire Department administration.

- **Engine 6/ Ladder 16 & Fuel Site 247– 2601 Belgrade Street**

- **Fire Engine 28 & Fuel Site 349 – 2520 E. Ontario Street**
- **Fire Engine 33 – 4750 Richmond Street**

Police Station

The River Wards is home to one police station, the 26th District, at 615 E Girard Avenue. This station is in poor to fair condition. The site includes a fuel pump for City-owned vehicles and a parking lot located in the rear of the Fishtown Community Branch Library. Several issues need to be addressed including: plumbing backing up and flooding the basement; evidence of mold due to leaks in the roof; poor interior building condition. Additionally, there has been a sighting of asbestos in the central area of the station under the judge's bench. The station received \$7,104 from 2010 to 2014, and is slated to receive \$727,000 in FY2015-2020.

Free Library Branches

There are two Free Library branches in the District. Given that both libraries have unique needs and programming, the Planning Commission spoke to the head librarians of each facility to understand, if any, the day-to-day impediments to servicing the surrounding neighborhoods. The Kensington Branch Library (104 W Dauphin Street) and McPherson Square Branch Library (601 E. Indiana Avenue) also serve the District, but are just outside of its boundaries.

- **Fishtown Community Branch Library – 1217 E Montgomery Ave**

The Fishtown Community Branch is located in a former stable and fire station at the intersection of E. Montgomery Ave and Flora Street, and serves the neighborhoods of Fishtown and Kensington. The overall condition of the library is good, however, there are infrastructure issues related to consistent flooding, mold remediation, and insulation. Limited space is a challenge at the growing library; where space for programming, desks, and materials is at capacity. The library received \$39,517 in 2011.

- **Richmond Branch Library – 2987 Almond Street**

Richmond Library Branch is located at the intersection of Almond Street and E. Indiana Street, and serves Port Richmond. The overall condition of the library is very good. The building, originally constructed in 1910, is in sound condition. The library has \$55,000 dollars programmed for the FY15-FY20 to build new fencing, make the basement entry ADA compliant and upgrade the facility's windows.

Parks and Squares

The River Wards District is home to seven public parks that are generally passive in programming and overall are in good condition. Only one site was staffed during PCPC's visit. Five of the seven parks have a friends group that maintains and coordinates community activities. More than half of the parks have not received capital funding over the fiscal years of 2010-2014. The total expenditures for the parks, from fiscal years 2010-2014, are approximately \$526,311. For the fiscal year 2015, \$100,000 is programmed for Penn Treaty Park.

- **Harrowgate Park**

Overall, the park is in fair condition. The grounds and play area are in fair condition, and are maintained. There is a healthy tree canopy. Benches and light posts are also present. The quality of the park's fencing and sidewalks is poor. A children's' playground is in a good condition. There was also very little trash on the site during staff's visit. The park has not received funds at least since 2010, and there are no Capital funds slated for FY15-20.

- **Konrad Square**

Overall, the park is in fair to good condition. It is highly trafficked and there are signs of wear on the grounds where reseeding is needed. There is lighting present within the interior and very little perimeter lighting. Features in the park include an art piece, bollards, planting, chess tables, and a flag post. The park has not received funds at least since 2010, and there are no Capital funds slated for FY15-20.

- **Powers Park**

Overall, the park is in good condition. There is a need for additional lighting, a shed and updated benches. There is lighting present throughout the park; however, the community thinks there should be more to ensure greater safety. There is also a desire from the community to have a taller and functional fence around the landscaped area within the central circle. The "Friends of Powers Park" contributes to maintaining the park, which also hosts movie nights and a flea market. They also coordinate with the Richmond branch library, as both facilities are located on the same parcel. The park has not received funds at least since 2010, and there are no Capital funds slated for FY15-20.

- **Palmer Park**

Overall, the park is in very good condition. It is well used and is closely surrounded by homes, including the Neumann Senior Housing Building. Fixtures within the park need updating, including older lighting and a central spray fountain (wasn't working during the

visit). The park is well-maintained, has new benches, good tree cover (mature interior trees and tree lined sidewalks), and new ADA ramps within the public right-of-way. Additionally, there were three trash cans and a central circle present on the site. The park has not received funds at least since 2010, and there are no Capital funds slated for FY15-20.

- **Penn Treaty Park**

Overall, the park is in good condition. Throughout the park there are sitting areas, benches, public art sculptures, and mature trees. This site has historical significance related to the history of the Lenni Lenape American Indian Tribe and William Penn. There are seating areas located near the play equipment and large open passive space for recreation. The park is also equipped with an historic marker, two public art sculptures, and a small bulletin board that conveys some of the history of the site. There is also a parking lot that appears to be in good condition and well-used. In 2009, the Friends of Penn Treaty Park released a master plan recommending improvements that, if implemented, would cost over eight million dollars and incorporate more historical context to the park. The park has not received Capital funds from 2010-2014, however, it has \$100,000 programmed for FY15-20.

- **Pulaski Park – 3001 E Allegheny Avenue**

Overall, the park is in good condition. Used primarily as a fishing pier, a fenced off section also serves as a dog park, although this section of pier is collapsing. As part of a recent renovation, newer amenities include stone paved walkways, lighting, hand rails, and benches. There is also an un-programmed circular platform area that has retaining wall and is maintained. There is also a parking lot that appears to be in good condition and well-used. Since 2011, the park has received \$397,986.57, and there is no Capital funding slated for FY15-20.

- **Campbell Square – 2525 E Allegheny Avenue**

Overall, the park is in good to very good condition. Sidewalks, pathways and the grounds are well maintained. Tree coverage is mature, and there are numerous benches. The park also has an iconic entrance, a welded archway, embellished with imagery of the River Wards (e.g. Boats, fish, etc.), public art and planting beds \$28,324, and there is no Capital funding slated for FY15-20.

Parking Lots

There are three city-owned parking lots located in the District, with conditions ranging from poor to fair. None of these have received any funds at least since 2010, nor are they slated to receive funds over the coming five years.

- **3001-55 Martha Street**

The lot is in poor condition. It lacks adequate lighting, signage, and stripping, and needs resurfacing.

- **3721 Richmond Street**

The lot is in fair condition. Above all, it needs to be resurfaced. Infrastructure includes overhead lighting and an attendant booth.

- **1804-36 E. Clearfield**

The lot is in fair condition. This lot is a Philadelphia Parking Authority (PPA) permit parking lot. Signs indicate it is used by K&A merchants, Esperanza Health Center and Zip Car. Infrastructure includes overhead lighting, an attendant booth, and concrete bollards around the perimeter.

Recreation Centers and Playgrounds

The River Wards includes four recreation centers, one pool, and eight playgrounds.

- **Samuel Recreation Center - 2501 E Tioga Street**

- Overall, the recreation center is in good condition. However, a number of issues need attention including; evidence of the roof leaking in the multipurpose room; the lack of air conditioning in the after-school program room; and the over usage of the matting beneath the playground equipment. Additionally, the cement near the handicap ramp outside needs to be replaced and the basketball courts currently do not have hoops.
- Assets on the center's exterior include playground equipment, basketball courts, and portable bathrooms. The recreation center received about \$7,000 in 2011, and it is not slated to receive any funds between 2015 and 2020.

- **Heitzman Recreation Center - 2136 Castor Avenue**

- Overall, the recreation center's exterior is in poor condition, while the interior is in good condition. Several outdoor areas need attention, except the swimming pool, which is in very good condition. Other exterior issues include: a tree stump on the playground that needs to be removed and matting beneath the playground

equipment that needs to be replaced. The interior of the recreation center includes an arts and crafts room, staff office, bathrooms, and a gymnasium.

- Assets on the center's exterior include: playground equipment, a swimming pool, play fields (baseball), overhead lights, and portable bathrooms. The center received \$550 in 2010, and it is not slated to receive any funds between 2015 and 2020.

- **Fishtown Recreation Center - 1202-32 E Montgomery Avenue**

- Overall, the recreation center is in fair to good condition, and is well maintained. There are a number of issues that need to be addressed. Some windows are leaking, while others are bolted shut. Bathrooms and the kitchen need to be updated.
- Outside, the playground surfaces need to be replaced and there are very mature tree roots impeding the walkways. The spray fountain needs maintenance. Throughout the site, lighting conditions vary between fair and poor, and lighting in general throughout the site is outdated. The site is also in need of more shaded areas and greening, especially near the seating areas and the playground. Lederer Pool is across Montgomery Avenue from the center. The pool was overall in fair condition, however the surrounding fencing and sidewalks were in poor condition.
- Assets on the center's exterior include playground equipment, a hockey court and basketball courts. The recreation center received \$4,833 in 2014, and it is not slated to receive any funds between 2015 and 2020.

- **Cohocksink Recreation Center - 2901 Cedar Street**

- Overall, the recreation center is in fair condition. Outside, the courts need resurfacing and fields need to be reseeded. The play equipment and some sidewalks are in poor condition and need replacement. There is a pool on the site that leaks. Inside the center, staff is not able to regulate the heat. The bathroom fixtures are leaking and staff believes more stalls are needed. The windows in the gym cannot be opened.
- Assets on the center's exterior include: playground equipment, ball fields, basketball courts, and a pool. The site received about \$33,000 in 2014, and it is not slated to receive any funds between 2015 and 2020.

- **Black, Coyle & McBride Playground (Pop's Playground) - 2150 E Huntingdon Street**
  - Overall, the recreation center is in poor condition. The fencing around the basketball court, spray fountain, play equipment, and play surfaces is in poor condition. The skate park is well used. The playground, maintained by the surrounding community, had very little trash. Additionally, there is a small building or facility on the site whose purpose PCPC staff could not determine.
  - The site has not received funds at least since 2010, and it is not slated to receive any funds between 2015 and 2020.
- **Hagert Playground - 2040 East Hagert Street**
  - Overall, the recreation center varies from poor to fair condition. The playground's surfaces need replacement. The spray fountain is also in poor condition and was not operating during the visit. Play equipment on the site is outdated. Generally, the playground needs more shaded areas and greening, especially near the seating areas and the play ground (there are only two trees within the site). The basketball courts have lighting, while the remainder of the park has none. The park also has an Irish and Prisoners of War (POW) mural.
  - Assets at the recreation center include playground equipment, a spray ground, and basketball courts. The site has not received funds at least since 2010, and it is not slated to receive any funds between 2015 and 2020.
- **Trenton & Auburn Playground - 2222 E Auburn Street**
  - Overall, the playground is in very poor condition. The basketball courts need resurfacing and have hoops with no nets. They do have overhead lights. There is a small seating area with mature trees dividing the two courts. Electrical boxes are covered with graffiti.
  - The site has not received funds at least since 2010, and it is not slated to receive any funds between 2015 and 2020.
- **Stokely Playground - 3000 Edgemont Street**
  - Overall, the playground is in fair condition. The service building was recently painted and the play equipment could be updated for safety.
  - Assets in the playground include basketball courts (with nets), a hockey rink, play equipment, trash cans, and a service building. The playground received about \$58,880 in 2014, and it is not slated to receive any funds between 2015 and 2020.

- **Monkiewicz Playground - 3201 Richmond Street**
  - Overall, the playground is in very poor condition. Currently, there are no nets on the tennis courts, no swings on the swing sets and the splash pad appears to be not in operation. The pool is covered in graffiti. Parking is not available. A snow fence blocks access between play fields and the service building/pool complex.
  - Assets include basketball courts (with only one hoop), play fields, play equipment, a pool and splash pad, a hockey rink, tennis courts, and a service building. The site received about \$55,400 from 2010 to 2014, and it is not slated to receive any funds between 2015 and 2020.
- **Hetzell Playgorund - 1301 E Columbia Avenue**
  - Overall, the playground is in very good condition. It is fully lit and equipped with high fences on the baseball field. The playground is tree lined and the grass fields are seeded and in good condition. Assets include baseball fields, bathrooms, and a storage or supply shed. The site received about \$195,900 from 2010 to 2014, and is not slated to receive any funds between 2015 and 2020.
- **Cione Playground - 2600 Aramingo Ave**
  - Overall, the playground's exterior is in poor condition, while the interior building is in fair to good condition. Inside the center, there is evidence of the roof leaking. The bathrooms have plumbing issues and need to be updated. Outside, the playground equipment needs to be updated for safety. Additionally, the hockey rink needs to be resurfaced and new boards installed. There are no nets for the basketball courts (four hoops) and no diamond on the baseball field. The park is well lit, with lighting throughout, however it lacks tree cover.
  - Assets in the playground include a recreation center, baseball field, basketball courts, soccer field, pool (including a restroom), and bike racks. The site received about \$31,000 from 2010 to 2014, and is not slated to receive any funds between 2015 and 2020.
- **Frank Glavin Playground - 2600 E Westmoreland Street**
  - Overall, the playground's exterior is in good condition, while the interior building is in fair condition. Inside, the multi-purpose room has water damage due to a leaking rain downspout. Bathrooms have no doors and are in poor condition. Outside, the fountain is in poor condition and is leaking. Additionally, PCPC was told by staff that youth currently hop the fence to use the facility, which closes at 9:30 p.m.

- Assets in the playground include the main office building, basketball courts, seating areas, fountain, playgrounds for small and older youth, and a flag pole. The site received about \$35,000 in 2014, and is not slated to receive any funds between 2015 and 2020.
- **Bridesburg Recreation Center – 4625 Richmond Street**
  - Overall, the playground's exterior is in fair to good condition, while the interior of the building is in very good condition. Inside, there is no central air conditioning and the heating system needs to be updated. A hole in the gym's wall should be repaired. Outside, tennis courts should either be resurfaced or repurposed as staff indicates they are being used for basketball. The perimeter fence has gaps and staff report ATV riders trespassing on the property.
  - Assets include a pool, a sports field, two ball fields, two basketball courts, and two tennis courts. The site has not received funds at least since 2010, and it is not slated to receive any funds between 2015 and 2020.

Commercial Corridors

The River Wards District has roughly 3.6 million square feet of floor area available for consumer-oriented goods and services. About half of this floor area has been developed in past decades in an auto-oriented style on former industrial sites along Aramingo, Castor, and Erie avenues. The District's auto-oriented resources are generally well-managed. They provide a wide range of modern and competitive goods and services to residents and visitors from the District and beyond. These newer commercial centers are not designed to reinforce traditional, walkable neighborhood centers.

The 15 commercial corridors or centers that directly serve the River Wards District range from small neighborhood subcenters to the large retail centers. The District is served by five full-service chain supermarkets, including the grocery department within a large general merchandise store.

The Aramingo Avenue retail area comprises the largest concentration of commercial floor area, with approximately 1.6 million square feet of space. This area has developed an array of comparison and convenience goods that rivals traditional 'regional' retail centers such as Center City and Cottman and the Boulevard. More than 500,000 square feet of floor area has been developed along Aramingo Avenue in the past 12 years.

The next largest concentrations of consumer-oriented goods and services are Erie Avenue/Juniata Park, Kensington and Allegheny, and 2nd and Girard. All of these areas offer approximately 300,000 square feet of space as well as close proximity to MFL stations. Yet, all three areas are quite different. Erie Avenue/Juniata Park has evolved as an auto-oriented strip center. Kensington and Allegheny, the traditional pedestrian-transit oriented 'downtown' of Kensington, has seen some private investment amidst declining incomes among surrounding households. The 2nd and Girard area, reflecting the expansion of the Center City market into Northern Liberties and Fishtown, features major pedestrian-friendly investment with structured parking.

The following table lists commercial corridors, centers, and districts within or immediately proximate to the River Wards District (*Note: Center names, types, and gross leasable areas are being further reviewed by PCPC and are subject to change*).

Commercial Corridors, Centers, and Districts Serving the River Wards District, 2014.

PCPC			Gross Leasable
ID	Name	Type of Center	Area (sq. ft.)
152	2 nd and Girard	Neighborhood	270,000
190	Front and Kensington	Community	207,000
192	Frankford and Susquehanna	Neighborhood Subcenter	60,000
193	Trenton and Lehigh	Neighborhood Subcenter	20,000
194	Kensington and Somerset	Neighborhood Subcenter	110,000
196	Frankford and Allegheny	Neighborhood Subcenter	85,000
197	Kensington and Allegheny	Community	300,000
198	Kensington Ave/Harrowgate	Neighborhood Subcenter	75,000
199	Harrowgate Plaza	Neighborhood	100,000
201	Erie Avenue/Juniata Park	Community	300,000
204	Bridesburg	Neighborhood Subcenter	35,000
206	Aramingo Avenue	Community	1,600,000
207	Richmond and Allegheny	Neighborhood	150,000
208	Port Richmond Shopping Center	Neighborhood	200,000
209	East Girard	Neighborhood	125,000
TOTAL			3,637,000

Source: PCPC. Philadelphia Shops inventory, 2011-2014

Transit-Oriented Development

The River Wards District has potential to continue in-fill development and reinforce neighborhood centers around transit-nodes. The District is well served by SEPTA's Market-Frankford El, the Route 15 trolley, and an extensive bus system. The parts of the District closest to Center City have also been attracting residents who are generally receptive to traveling by transit. With increased market demand, it may be feasible to redevelop key, transit-accessible sites with more density and mixed-uses.

Healthy Food Access

Philadelphia has the highest prevalence of obesity out of the 10 largest U.S. cities. Within Philadelphia, low-income and racial-ethnic minorities are disproportionately burdened by obesity-related health issues. A lack of access to healthy, affordable foods contributes to these disparities. Access to healthy food can be improved by:

- Locating healthy food sources near transit stations to improve access for those without cars
- Identifying suitable supermarket, healthy corner store, community garden, and urban farming sites
- Improving access to existing healthy food sources through multi-mode share transportation improvements
- Permitting on-street produce vending
- Permitting and encouraging farmers' markets and urban agriculture on city-owned properties

The Philadelphia Department of Public Health and the Philadelphia City Planning Commission have been working together since 2010 to identify geographic gaps in walkable access to healthy food around the city. Many of these gaps have shrunk through the aforementioned strategies and the Health Department's incentives program to equip corner stores with healthy foods (Healthy Corner Stores Initiative), although many still remain. Healthy food access maps produced in 2010 and 2012 illustrate these changes.

- Bridesburg continues to have poor access to healthy food. There are no supermarkets in the neighborhood. Since 2010, two corner stores, both north of I-95, have begun stocking healthy food.

- With the exception of neighborhoods close to supermarkets along Aramingo Ave, much of Kensington and Port Richmond remains underserved.
- Little has changed in East Kensington and Olde Richmond in terms of healthy food access, as both continue to provide good access with four well-dispersed supermarkets, and a farmer's market on Cumberland Street.
- With the addition of an enhanced healthy corner store and the Super Fresh on Girard Avenue in Northern Liberties, Fishtowners' access improved a little since 2010, but there is still a lack of healthy food there.
- The areas of Port Richmond and Kensington between Cambria and Clearfield, from the Delaware River to the MFL, and Bridesburg above I-95, have both high poverty and poor access to healthy food. There have been few improvements to these areas since 2010.

Housing

Goal: Improve the quality and diversity of new and existing housing

Between 2000 and 2010, population in the River Wards District increased 3.3 percent (2,168 people), representing the first increase since 1980. This growth has resulted in increased housing investment. The demand for housing in Center City, Old City, and Northern Liberties has pushed north to Kensington.

Investment in the housing market is illustrated by building permits for new residential units. While the Citywide number of new-construction permits peaked in 2007, building permits issued in the River Wards have continued to increase. Data from the U.S. Census indicates that between 2000 and 2010, the number of total housing units in the District increased 2.1 percent, from 28,397 to 29,005. The number of households increased four percent, from 24,796, to 25,788 and the housing occupancy rate increased from 87.3 percent to 88.9 percent.

The contribution of new construction to the housing inventory has been moderated by the demolition of older units. This District has the highest percentage of housing units in the City built before 1939. Based on 2008-2012 ACS five- year estimates, 72.1 percent of the District's housing units were built before 1939, compared to 40.1 percent Citywide. The number of vacant housing units decreased by 10.7 percent from 3,601 in 2000 to 3,217 in 2000, and the housing vacancy rate decreased from 12.7 percent to 11.1 percent.

As with other Planning Districts, the River Wards has experienced a dramatic increase in renter-occupied housing units. Based on Census data, between 2000 and 2010, the number of renter-

occupied units increased 44.5 percent, from 6,886 to 9,948. The renter occupancy rate increased from 27.8 percent to 38.6 percent. Despite the substantial increase in renter-occupied units, rental occupancy rates are still below the Citywide rate of 45.9 percent.

The owner occupancy rate in the District declined from 72.2 percent in 2000 to 61.4 percent in 2010, while the Citywide owner occupancy rate was 54.1 percent in 2010. The number of owner-occupied housing units decreased 11.6 percent from 17,910 to 15,840. As of 2010, the census tracts with the highest rental occupancy rates were: 178, 161, and 188. The census tracts with the highest homeowner occupancy rates were: 183, 184, and 379.

Building Permits

Between 2006 and 2014, the Department of Licenses and Inspections issued building permits for 761 new housing units in the River Wards District. Over this period, the number of permits issued has fluctuated, peaking in 2007. Permit activity slowed between 2009 and 2011, and picked back up between 2012 and 2014. The majority of permits (83.3 percent) were issued for twin/row houses located in the southern portion of the District.

New Residential Construction Building Permits in River Wards by Type

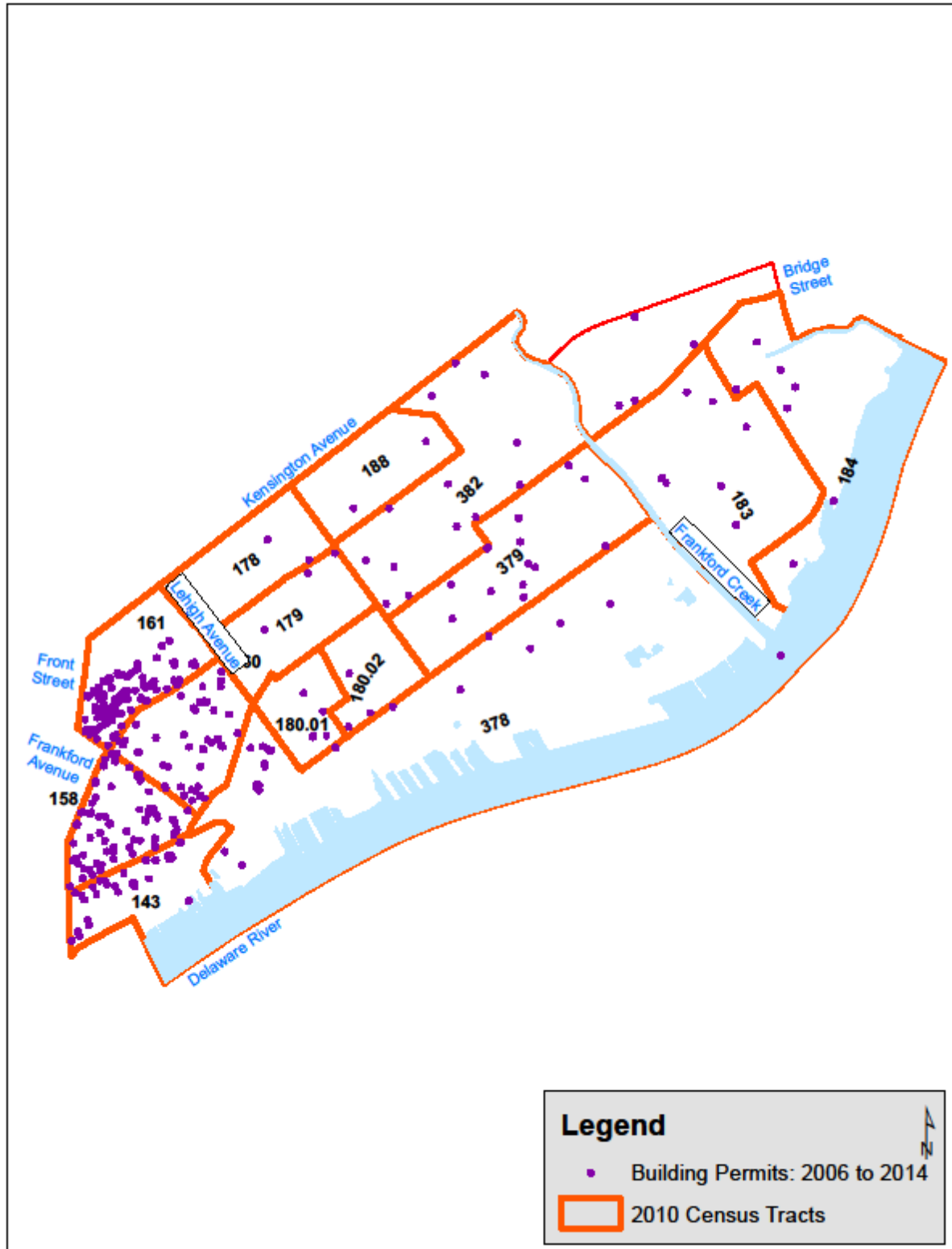
Residential New Construction Building Permits -Riverwards District By Building Type							Total New Permits
Year	101 - Single	102 - Twin/Row	103 - 2Fam.	104 - 3/4Fam.	105 - 5+Fam.	118 - Misc. Res. Bldg.	TOTAL
2006	4	49	4	0	16	0	73
2007	1	134	0	0	0	0	135
2008	15	70	0	0	0	0	85
2009	3	32	0	0	0	2	37
2010	11	37	6	1	0	0	55
2011	1	51	0	0	0	0	52
2012	0	106	4	0	0	5	115
2013	6	79	3	5	20	0	113
2014	2	76	4	6	8	0	96
Total by Building Type	43	634	21	12	44	7	761
Percentage by Building Type	5.65%	83.31%	2.75%	1.57%	5.78%	0.91%	

Of the 761 permits issued, the majority are for new housing units in census tracts, 158, 160, and 161 (see table below for further detail). **Note: These totals do not include additions or alterations. Citywide permits were issued for 17,638 new housing units during this time period.*

New Residential Construction Building Permits in River Wards by Census Tract

Residential New-Construction Building Permits - River Wards District											
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	TOTAL 2006- 2014	%Percent by Tract
Tract											
143	3	8	15	1	3	5	6	15	3	59	7.75%
158	19	16	28	10	17	12	42	33	25	202	26.54%
160	2	7	22	1	5	3	33	22	9	104	13.67%
161	2	2	2	3	18	28	30	37	50	172	22.60%
178										0	0.00%
179										0	0.00%
180	1	2	14	12	10		3		4	46	6.04%
180.01										0	0.00%
180.01										0	0.00%
159	31	8	2		1	3	1	6	5	57	7.49%
181										0	0.00%
182	10									10	1.31%
378										0	0.00%
183	5	16		3		1				25	3.29%
184			1							1	0.13%
185		7								7	0.92%
186		67	1	7	1					76	9.99%
379										0	0.00%
187										0	0.00%
189										0	0.00%
382										0	0.00%
188										0	0.00%
295										0	0.00%
296		2								2	0.26%
380										0	0.00%
TOTAL	73	135	85	37	55	52	115	113	96	761	
%Percent by Year	9.59%	17.73 %	11.16 %	4.86 %	7.22 %	6.83 %	15.11 %	14.84 %	12.61 %		

Location of Issued Building Permits in River Wards 2006-2014



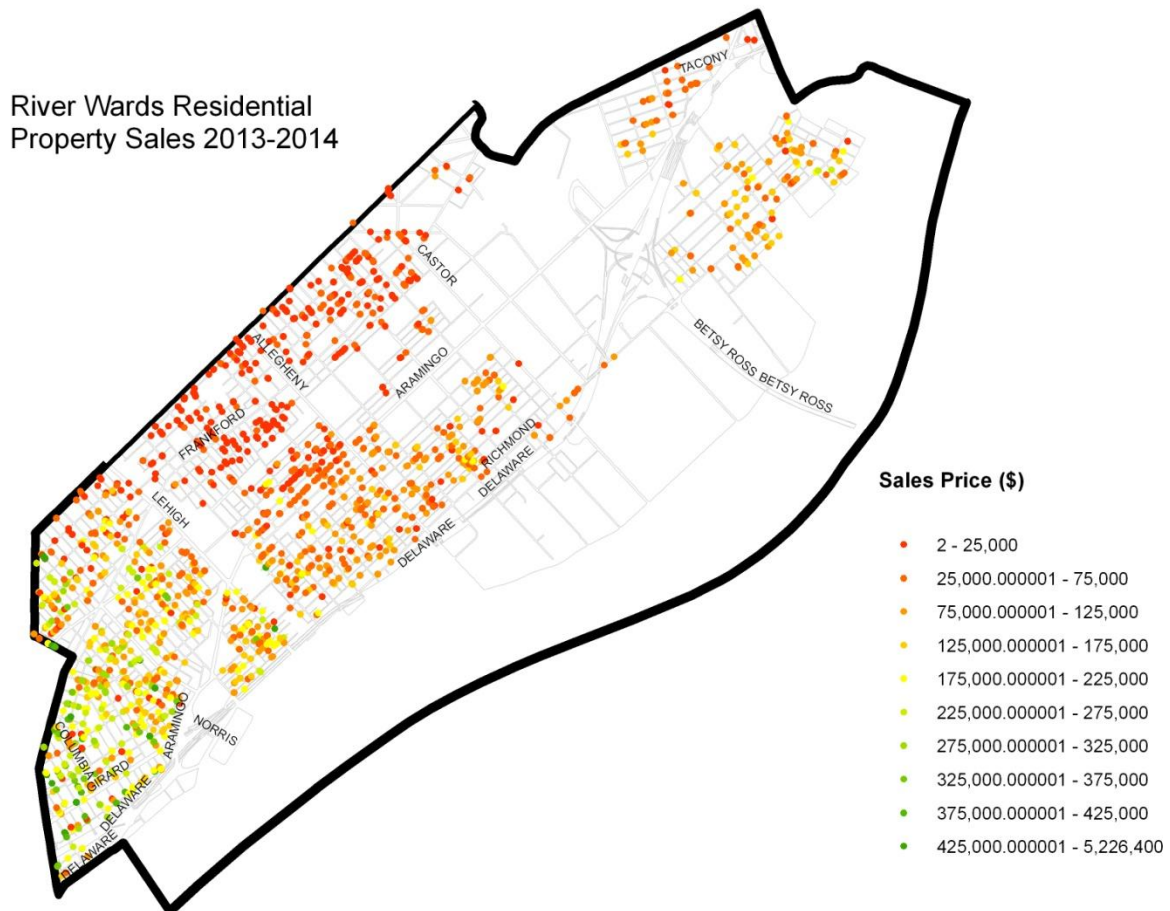
Residential Sales Prices and Trends

Between 2003 and 2013, median home sales prices in the River Wards District more than doubled from \$41,000 to \$100,000. During the same time, Citywide prices increased by 86 percent, from \$66,000 to \$123,000. From 2003 and 2013, the volume of sales in the District has fluctuated, with home sales volume peaking in 2004. Citywide home sales volume peaked in 2005.

Residential Sales and Price Trends

Year	Sale Count	Median Price \$	Median \$/Sq ft	Median Sq ft	Percent of Citywide Sales
2003	1,597	41,000	37.6	1,076	7.5%
2004	2,013	50,000	47.0	1,065	7.5%
2005	1,983	65,000	60.8	1,066	7.3%
2006	1,702	85,000	77.4	1,065	7.1%
2007	1,509	87,000	82.3	1,062	7.1%
2008	1,089	92,000	80.8	1,079	6.9%
2009	932	100,000	96.6	1,061	6.8%
2010	892	94,900	83.5	1,080	7.0%
2011	840	82,750	75.5	1,118	7.3%
2012	880	87,000	79.7	1,092	7.3%
2013	1,124	100,000	91.0	1,100	8.2%

Below is a map of recent sales from 2013 through the first quarter of 2014. While the median sales price for homes is \$100,000, this map shows the wide disparity of sales prices in the District. The higher sales values appear to be in the southern end of the District.



Recommended Follow-Up

- Consider the future of the Aramingo Avenue retail corridor in relation to reconstruction of I-95 as well as its impacts on surrounding residential and industrial communities.
- Consider additional analysis and creative mitigation strategies to address the District's parking issues.
- Identify areas where continued new housing development may constrain the ability of public facilities, commercial properties, and industrial establishments to operate efficiently.
- Identify areas where existing, affordable rental and sales housing may be at risk due to rising home sale values, property deterioration and real estate speculation.
- Evaluate the location and service levels of community-serving public facilities to determine whether relocation of existing facilities or construction of new facilities is necessary or feasible.
- Evaluate the recent Philadelphia Shops report and census data to determine which commercial districts warrant strategic public investment.

ECONOMIC DEVELOPMENT

Philadelphia2035 Citywide Vision Goal: Make Philadelphia more competitive in the metropolitan region

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SUMMARY OF EXISTING CONDITIONS

The River Wards District parallels the Delaware River just northeast of the Central District, and more broadly, the region's Metropolitan Center. Access to I-95, transit, port, and freight rail services continues to offer River Wards residents and businesses favorable access to jobs and customers. However, over the past 60 years, the River Wards has lost much of its traditional and nationally significant base of industrial establishments and jobs, reducing economic opportunities for district households and neighborhoods. While regionally significant transportation, manufacturing, utility, and waste management operations remain in the District, large amounts of former industrial land have been converted to non-industrial uses that cater to local consumer and service demands. The future use of many acres of remaining, underutilized, industrially zoned land remains uncertain.

- Jobs in the River Wards are distributed across the District's commercial and industrial areas, with more than half of employment within the District currently in tracts 179, 379, and 382 around Aramingo Avenue and in tract 378 along the Port Richmond waterfront. The total number of district jobs decreased from 18,700 to 17,900 (-4.3 percent) between 2002 and 2011. (Source: OnTheMap)
- Fifty-nine percent of the jobs within the River Wards district were held by Philadelphia residents in 2011. The next largest sources of district workers were Montgomery and Delaware Counties, with eight and seven percent respectively. (Source: OnTheMap)

River Wards District. Number of Employed Residents and District Jobs, YR2002 and YR2011

	YR2002	YR2011	Change	% Change
District Jobs	18,700	17,900	-800	-4.3
Employed Residents	22,000	24,100	2,100	9.5

[Source: OnTheMap]

- In 2011, the River Wards was home to 24,100 employed residents. The number of employed residents increased by 2,100 (9.5 percent) between 2002 and 2011, yet the number of district residents who worked in the District dropped from 3,100 to 2,100. (Source: OnTheMap)
- About 22,000 (91 percent) of the District's working residents held jobs outside of the District in 2011. The difference between the number of residents who commuted to jobs out of the District and the 15,800 non-district residents who commuted into the District resulted in a net

outflow of 6,200 workers. In 2002, the net outflow of workers was only 3,400. (Source: OnTheMap)

- Sixty-six percent of employed district residents worked within the City in 2011, with 32 percent employed just within zip codes in the Metropolitan Center. In 2002, 70 percent of district resident workers were employed in the City, with 28 percent holding jobs in the Metropolitan Center. Residents traveling to jobs in counties outside the City were primarily employed in the Pennsylvania counties of Montgomery (9 percent), Bucks (5 percent), and Delaware (4 percent). (Source: OntheMap)
- River Wards residents held jobs in a variety of sectors in 2011:

Business, professional, administrative, and related services	22 percent
Retail, food services, lodging, arts and recreation	22 percent
Industrial and industrially-related	21 percent
Health care and social assistance	16 percent
Educational services	9 percent
Public administration	6 percent
Other services	4 percent

KEY ISSUES

The following are important economic development challenges facing the River Wards:

- The labor force in parts of Kensington, Port Richmond, and Bridesburg continues to struggle with unemployment rates over 20 percent. The River Wards District unemployment rate is 18.3 percent, while the Citywide rate is 14.5 percent. Poverty rates exceed 30 percent in four of the District's 14 Census tracts (ACS, 5-year data, 2008-2012). Working-age residents in these areas may lack skills necessary to obtain jobs and/or lack access to jobs available elsewhere in the city and region.
- The District's legacy of heavy industrial activity has created sites whose reuse options may be constrained by soil contamination and older infrastructure. Additionally, industrial reuse of former industrial sites is sometimes opposed due to concerns about truck traffic, air pollution, and noise.
- The Aramingo Avenue commercial area has evolved over 40 years into a one million square foot, auto-oriented, big box retail destination that successfully serves a wide trade area. However, the large number and range of establishments along both Castor and Aramingo Avenues make it difficult for nearby, traditional pedestrian-transit-oriented commercial corridors to maintain competitive mixes of goods and services.

MAJOR OPPORTUNITIES

Economic development opportunities in the River Wards include:

- The District has a large pool of under-employed labor.
- Several hundred acres of vacant or underutilized land within the District have potential for redevelopment to create employment and tax-generating uses. With proper planning and infrastructure, significant new uses can substantially mitigate concerns about environmental impacts and traffic.

- The reconstruction of I-95 through the River Wards, when completed, can create improved access for businesses, employers, and employees in the District.
- An increase in consumer demand from growing populations in parts of the River Wards may help retain existing, and attract new, businesses and cultural enterprises.

ECONOMIC DEVELOPMENT (SPECIFIC TOPICS)

Metropolitan and Regional Centers

Goal: Support the growth of economic centers

The River Wards is situated to support the Metropolitan Center with nearby workers and business services. The District also offers a nearby alternative for establishments that require more land and/or less expensive land than typically available in Center City or University City.

- Residents close to the Market-Frankford El, Aramingo Avenue, and I-95 can readily access a wide variety of jobs in Center City and University City. These transportation assets also provide convenient access to employment opportunities in Northeast Philadelphia.
- A number of establishments in the River Wards benefit from close proximity to residential, commercial, and institutional customers in the Metropolitan Center. These establishments also benefit from the Betsy Ross Bridge and I-95 access to customers in other parts of the region.
- Once I-95 reconstruction is completed through the River Wards in the mid-2020s, auto and truck travel to and through the District should be much improved.
- Areas of the River Wards closest to the Central District have an opportunity to attract spill-over retail, entertainment, and business service establishments, while areas of the District more distant from the Central District may have an opportunity to host production, distribution, and repair firms relocating from Central District neighborhoods.

The industry sector, including transportation and warehousing, manufacturing, wholesale trade, construction, and utilities, was still by far the largest employer in the River Wards in 2011, yet the number of jobs in the sector decreased from 2002 to 2011. Employment growth in retail trade, educational services, food services, and administrative support/waste management helped diversify the District's economy between these years.

Jobs by NAICS Industry Sector	River Wards District				Philadelphia			
	YR2011		YR2002		YR2011		YR2002	
	Count	Share	Count	Shar	Count	Share	Count	Shar
Industry	7,005	39.1%	8,327	44.6	86,696	13.03	99,051	16.3
Retail Trade	3,340	18.6%	2,852	15.3	50,787	7.6%	52,284	8.6%
Educational Services	1,934	10.8%	1,607	8.6%	92,717	13.9%	79,990	13.1
Health Care and Social Assistance	1,840	10.3%	2,080	11.2	150,504	22.6%	114,863	18.9
Accommodation and Food Services	1,306	7.3%	949	5.1%	52,284	7.9%	43,301	7.1%
Admin. & Support, Waste Mgmt. and	852	4.8%	466	2.5%	28,490	4.3%	31,120	5.1%
Other Services (excluding Public Administration)	607	3.4%	808	4.3%	23,521	3.5%	22,554	3.7%
Finance and Insurance	323	1.8%	572	3.1%	38,069	5.7%	40,267	6.6%
Professional, Scientific, and Technical Services	305	1.7%	470	2.5%	47,752	7.2%	49,089	8.1%
Real Estate and Rental and Leasing	188	1.0%	249	1.3%	9,099	1.4%	9,614	1.6%
Information	82	0.5%	119	0.6%	15,027	2.3%	18,255	3.0%
Arts, Entertainment, and Recreation	59	0.3%	130	0.7%	11,065	1.7%	8,842	1.5%
Public Administration	37	0.2%	8	0.0%	46,014	6.9%	35,055	5.8%
Agriculture, Forestry, Fishing and Hunting	25	0.1%	1	0.0%	37	0.0%	60	0.0%
Management of Companies and Enterprises	14	0.1%	13	0.1%	13,504	2.0%	4,527	0.7%
Total		100%		100%		100%		100%

[Sources: LEHD, OntheMap]

The River Wards has few large, single-site employers. As recently as 2010, the largest private employer was Northeastern Hospital, now renamed the Northeastern Ambulatory Care Center which is part of the Temple University Health System (TUHS). The biggest multi-site employer was the School District of Philadelphia.

Major Employers, River Wards District, 2010

Employer	Number of Employees
Philadelphia School District	1,385
Northeastern Ambulatory Care Center (TUHS)	765
City of Philadelphia – Police Department	635
Allied Security LLC	325
ICS Corporation	225
Cramco Inc	215
Shoprite Supermarkets	200
Home Depot	200
Pathmark Stores Inc	200
United Parcel Service	200
Philadelphia Tramrail Enterprises	190
Durham School Services	180
Target Corporation	175
Honeywell International Inc.	160
CVS	120
Royal Store Fixture	120
Philadelphia Gas Works	100

[Source: DVPRC 2010; PCPC, Hoovers 2011]

A high and increasing proportion of the River Wards' working residents commute to jobs located southwest of the District. This includes 32 percent of district residents reported to be employed in the Metropolitan Center. Much smaller, yet significant, job destinations for River Wards' residents include Lower Bucks County and the Northeast Regional Center in the Far Northeast. This suggests significant utilization of the Market-Frankford El and Frankford Transportation Center, Aramingo Avenue, and I-95.

Workers traveling into the River Wards come from a wider array of communities in the region. Roughly 59 percent of those employed in the River Wards live in Philadelphia. This suggests a greater reliance on roads and transit routes that serve the District from all directions (Source: OntheMap). Between 2002 and 2011, the percentage of workers commuting into the District from distances of greater than 10 miles increased from 27 to 34 percent.

Industrial Land

Goal: Target industrial lands for continued growth and development

The history of industrial activity in the River Wards includes shipbuilding, textiles, chemicals, coal and grain exports, railroads, energy, metal fabrication, construction equipment and materials, and waste management. Today, a considerable amount of the District's former industrial footprint has been converted to retail, institutional, and residential uses. Due to the District's waterfront location, rail and highway access, utility infrastructure, and availability of contiguous industrial land, major parts of the River Wards have been addressed by recent, city-supported investments, contracts, and plans as appropriate for continued retention and attraction of industrial and industrially-related establishments. Some of these include:

- Philadelphia Industrial Land and Market Strategy (PIDC, 2010)
- Philadelphia 2035/Citywide Vision (PCPC, 2011)
- Tioga Marine Terminal (Philadelphia Regional Port Authority, 1994)
- Port Richmond Industrial Development Enterprise (PRIDE, 1999)
- Plan for the Richmond Corridor Association – Sustaining a Philadelphia Industrial Community (Brown & Keener Urban Design, 2011)

According to PIDC and PCPC plans, the roughly 1,500 acres of active or available industrial land in the River Wards may be considered as parts of three districts targeted for industrial reinvestment: the Lower North Delaware district, the Aramingo district, and the Upper North Delaware district. Prominent industrial anchors in these districts currently include, among others:

- Tioga Marine Terminal (PRPA)
- PGW Richmond Plant
- PWD Northeast Water Pollution Control Plant
- PECO/Exelon Richmond Plant
- Riverside Materials
- Honeywell International
- Kinder Morgan Terminals and Westway Terminals
- CONRAIL

- ICS, Cramco, Philadelphia Tramrail, Northeast Building Products, and Weber Display
- Allegheny Iron and Metal, S.D. Richman, and other recycling and waste management firms
- Various trucking and shipping establishments

Opportunities for reinvestment for industrial and industrially-related activities include the CONRAIL Port Richmond rail yard, parts of the CONRAIL viaduct, the former Philadelphia Coke, Rohm and Haas, Gryphon Paint sites, and areas around Frankford Junction and the CONRAIL Meadows Yard. Investments in I-95, rail, and the Delaware Avenue Extension may improve prospects for industrial reuse of these and other sites. A key community concern is how much the benefits of industrial reinvestment (e.g., community reinvestment, jobs, and site improvements) can balance environmental and traffic impacts.

PECO/Exelon recently announced plans to sell the Delaware Station generating building at Beach Street and Columbia Avenue. Philadelphia Gas Works (PGW) or subsequent owners may consider more extensive processing, storage, and transportation of liquefied natural gas (LNG) at the Richmond Plant.

Institutions

Goal: Grow Philadelphia's strong institutional job sector

The River Wards has a relatively small number of jobs in the main institutional sectors of educational services and health care and social assistance. These two sectors supported 36.5 percent of the total number of jobs in the city in 2011 compared to 21.1 percent of the jobs within the River Wards district.

Between 2002 and 2011, jobs in educational services were reported to have increased slightly within the District, as employment at new public and charter schools more than offset jobs lost in other, shuttered public and parochial schools. During this same time period, employment in health care and social assistance decreased, largely attributable to the transition beginning in 2007 of Northeastern Hospital on Allegheny Avenue from a community hospital to an ambulatory care center of the Temple University Health System (TUHS). The associated Northeastern Hospital School of Nursing, which awards two-year nursing degrees, is scheduled to close in 2016. The former St. Mary's Hospital/Neumann Medical Center in Fishtown closed in 2000 and was converted to senior housing in 2005.

Cultural Resources

Goal: Develop tourism and the creative economy into a leading economic sector

Economic activity related to arts, entertainment, and recreation in the River Wards is characterized by smaller-scale establishments that primarily serve local residents. The largest concentration of cultural businesses and emerging cultural resources is located in the southern part of the District in the Fishtown and East Kensington neighborhoods. The Frankford Avenue Arts Corridor is a long-term initiative organized by the New Kensington CDC to revitalize Frankford Avenue in this area through arts-based development. To date it has helped retain

existing and attract new residents to the area and spurred investment in new and repurposed buildings. The corridor's proximity to Center City and the Market-Frankford El has assisted in bringing non-resident spenders to the area's arts programming and events. The Trenton Avenue Arts Festival and Kensington Kinetic Sculpture Derby bring over 10,000 visitors to the one day event in East Kensington every year.

Residents' cultural participation rates as reported by www.cultureblocks.com are higher in Fishtown (above 70%) and lower in Kensington, Port Richmond, and Bridesburg (below 30%). In many neighborhoods of the River Wards, cultural resources and activities may be associated with religious or nationality-based organizations that are not included in official listings of cultural groups. Nonetheless, such organizations contribute strongly to overall neighborhood vitality and identity.

Over the past 15 years, vacant or underutilized sites along Fishtown's Delaware River waterfront have been proposed for large visitor destinations such as casino/hotels and music venues. The *Master Plan for the Central Delaware* (DRWC, PCPC-adopted 2012) notes the opportunity to repurpose waterfront sites immediately north of Penn Treaty Park for entertainment and recreation activities. Adaptive reuse of the Delaware Generating Station, now for sale by PECO/Exelon, could help implement this vision.

Recommended Follow-Up

- Identify ways in which physical development recommendations for the District can help expand appropriate job opportunities for residents of neighborhoods long troubled by high rates of poverty and unemployment.
- Ensure that development controls and traffic controls along and to/from rebuilt sections and interchanges of I-95 reflect long-term goals for economic development and mitigation of community impact.
- Consider ways in which the Aramingo Avenue commercial district could become more productive and accessible within its existing footprint.
- In conjunction with the EPA-funded Frankford Creek Brownfields project, explore approaches to the reuse of former industrial sites that can also serve as models for the integration of community amenities and sustainable building practices [www.frankfordcreekbrownfields.com].
- As part of the District plan's zoning analysis, pay particular attention to identifying lands that are to remain available for future industrial and industrially-related activities and employment.
- Work with the Delaware River Waterfront Corporation (DRWC) and development interests to encourage productive and imaginative reuse of the Delaware Generating Station.

LAND MANAGEMENT

Philadelphia2035 Citywide Vision Goal: Capitalize on Land Assets

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SUMMARY OF EXISTING CONDITIONS

The Philadelphia City Planning Commission (PCPC) surveyed land use across the River Wards Planning District from July to September 2014. The field work was conducted to update PCPC's land use GIS database last compiled in 2009, City government data sources, and to accurately assign detailed 3-digit level land use codes to all properties. This assessment is based on a draft of the Riverwards District land use and, as a result, acreage values and percentages may change. Future updates are likely to result in minor adjustments to the transportation categories due to feature editing work required for the GIS database.

PCPC categorizes land use at three different description levels with the specificity or detail of the descriptions increasing from the 1-digit to 3-digit level. At the 1-digit level, land use is aggregated into nine major categories. The 2-digit level is more detailed and includes up to 16 categories and two or three subcategories of residential, commercial, park/open space, and active recreation uses while still maintaining broad categories for the other land uses. Two digit categories are primarily used by PCPC as they are readily evaluated, mapped and charted. The 3-digit level is the most detailed description level and contains up to 68 different description codes, which may be used to distinguish with greater specificity the different types of uses within broader land use categories.

In compiling the land use, approximately 732 acres of the Delaware River that technically exist within the boundary of the River Wards District were included in the GIS tabulations of acreage under the category of "water." As a land use, water has been discounted in the overall district analysis for several reasons. First, the total acreage for water skews the entire assessment making it the third highest ranking land use by acreage. As a result, other categories would be statistically underrepresented producing misleading conclusions. Second, no land uses along the waterfronts have been lost by omitting the water category. All properties with waterfront access have been categorized including piers and transportation structures that extend into the waterways. Finally, the City does not zone water bodies nor does PCPC generally plan for uses beyond the shoreline. The remaining "water" category, or 3.47 acres (0.11%), accounts for New and Old Frankford Creeks and amounts to negligible acreage (see totals for all land uses below in Table 1).

The River Wards district is a dense mix of land uses with industrial, transportation, and residential as the primary uses accounting for over 70% of total land use categories within the District. The remaining 30% of land uses fall into commercial, civic/institutional, cultural/recreation, park/open space, or vacant/other categories. Notable is the vacant/other category. This category accounts for 410.25 acres, or 13.55% of total land use, and is the third highest category of land use within the District. However, this acreage consists almost entirely of several large chunks of land that were former industrial areas and rail yards or railroad

associated uses such as marshalling yards and sidings, particularly along the Lehigh Viaduct. Figure 1, below, clearly shows the large swaths of vacant land in brown.

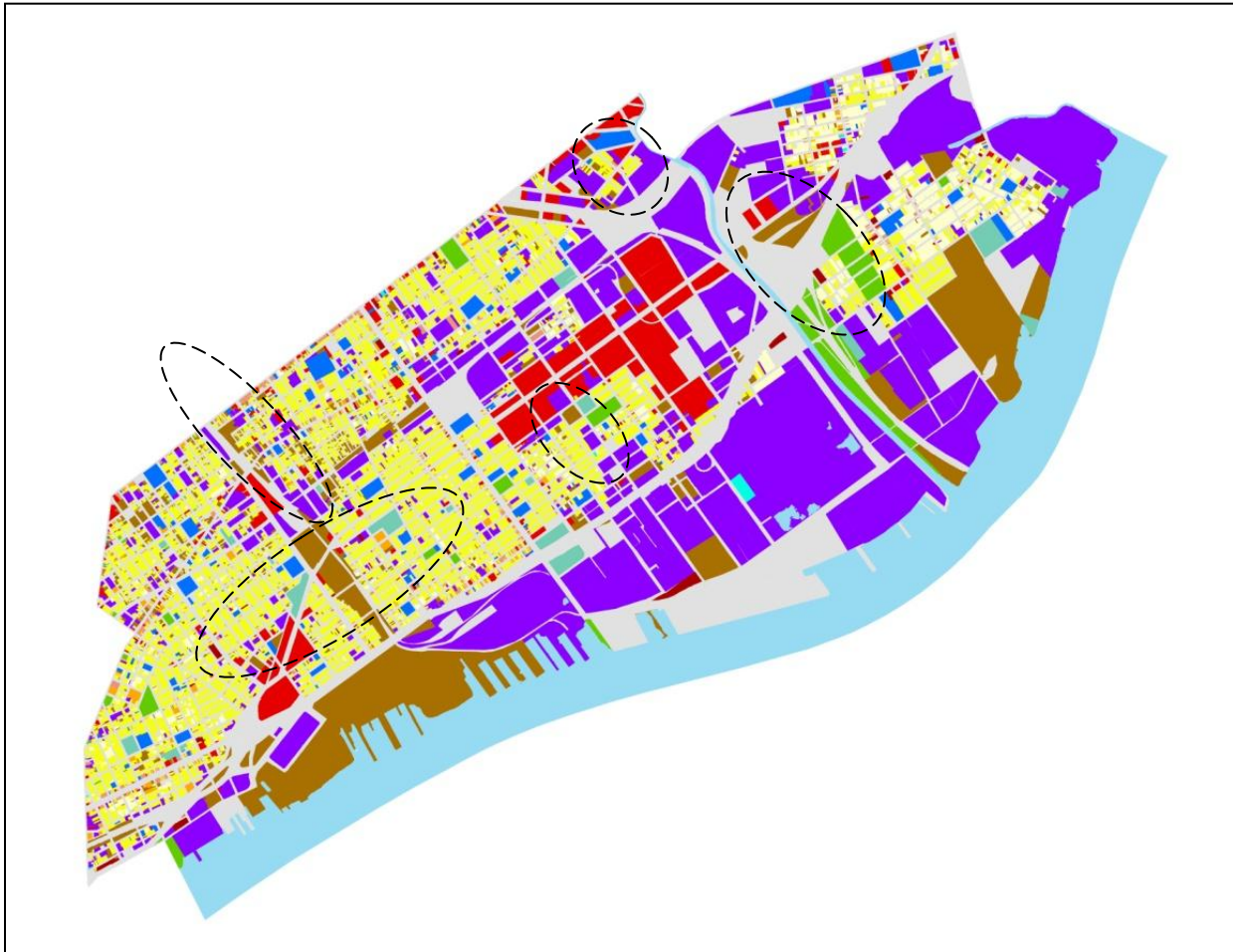
Industrial is the predominant land use by total acreage at 1,045.13 acres, or 34.52%. This category is followed by Residential with just over 735 acres, or about 24.28%. Transportation is the fourth highest land use in terms of total acreage at 364 acres, or just over 12% of total land use. Commercial uses rank fifth at almost 262 acres, or 8.65%. The four remaining land use categories combined account for only slightly more than 200 acres, or less than 7%. See Table 1, below, for detailed information.

The following table summarizes land use by a set of more detailed 2-digit descriptions. At this level both residential and commercial land uses are broken down into three subcategories including “Commercial Mixed Residential” which accounts for structures that combine residential with a mix of commercial uses (e.g., restaurants, offices, retail stores, etc.). Using these subcategories, Industrial remains highest at nearly 35% of total acreage; medium residential housing becomes the second highest land use with transportation ranked at number four, behind vacant land.

Table 1: Categories of Land Use by Acre (1-digit)

Categories of Land Use by Acres (1 digit)			
Land Use (1-digit level)	Acres	Percent of Total	Rank
Residential	735.01	24.28%	2
Commercial	261.79	8.65%	5
Industrial	1045.13	34.52%	1
Civic/Institution	90.10	2.98%	6
Transportation	364.00	12.02%	4
Culture/Recreation	48.28	1.59%	8
Parks/Open Space	69.48	2.30%	7
Water	3.47	0.11%	9
Vacant or Other	410.25	13.55%	3
Total	3027.50	100.00%	

Figure 1: Land Use Map



Legend

- Residential Low Density
- Residential Medium Density
- Residential High Density
- Commercial Consumer
- Commercial Business / Professional
- Commercial Mixed Residential
- Industrial
- Civic/Institution
- Transportation
- Culture / Amusement
- Active Recreation
- Park / Open Space
- Cemetery
- Water
- Vacant

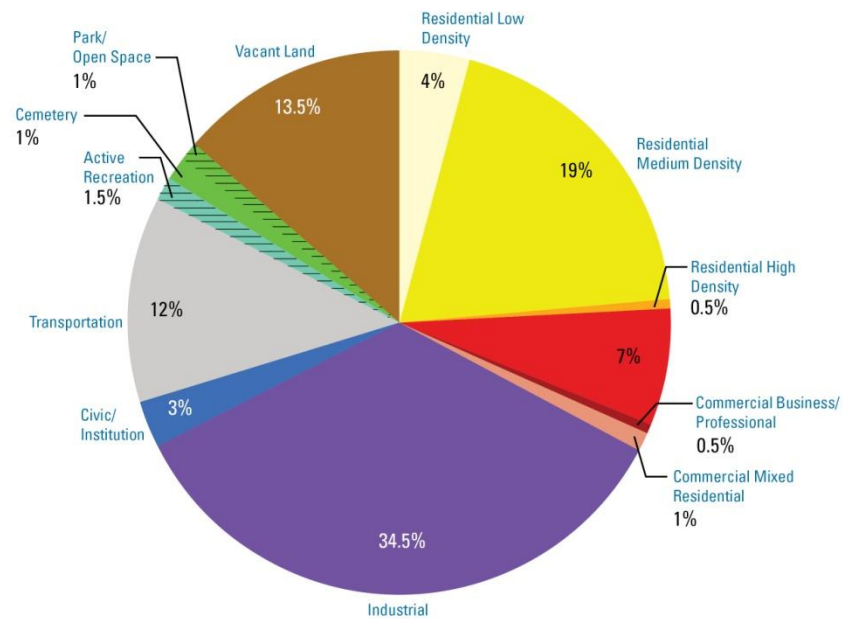


Table 2: Categories of Land Use by Acre and Percent (2-digit)

Categories of Land Use by Acre and Percent (2 digit)		
Land Use (2-digit level)	Acres	Percent of Total
Residential Low Density	133.36	4.40%
Residential Medium Density	585.27	19.32%
Residential High Density	16.43	0.54%
Commercial Consumer	210.00	6.93%
Commercial Business/Professional	16.92	0.56%
Commercial Mixed Residential	34.87	1.15%
Industrial	1045.13	34.50%
Civic/Institution	90.10	2.97%
Transportation	364.00	12.07%
Culture/Amusement	4.10	0.14%
Active Recreation	44.17	1.46%
Park/Open Space	41.17	1.36%
Cemetery	28.32	0.93%
Water	3.47	0.11%
Vacant	410.25	13.54%
Total	3027.55	100.00%

The remainder of this analysis will include an examination of the major land use categories of transportation, residential, and commercial using their respective 3-digit level classifications.

TRANSPORTATION LAND USE

In the Riverwards District, transportation is the fourth-highest ranked land use by acreage. This is not surprising given that River Wards is a hub of activity with an interstate highway, public transit, and rail lines/yards for industrial users. When this category is examined at the 3-digit level the subcategory of transportation marine and rail right-of-way (ROW) are the largest land uses, which is not surprising due to need for transportation access for the existing industrial and waterfront industries in the District.

Table 3: Breakdown of Transportation Land Use by 3-digit Descriptions

Land Use (3-digit level)	Acres	Percent of Total Land Use
Transportation Marine	95.32	26.18%
Transportation Truck/Bus/Taxi	68.85	18.91%
Transportation Rail ROW, Yards and Stations	111.5	30.63%
Transportation Parking	88.36	24.27%
Total	364.03	100%

RESIDENTIAL LAND USE

Residential Land Use is subdivided into three categories at the 2-digit level by density: high, medium, and low. The use is further subdivided at the 3-digit level by housing type. Medium Density Residential is the leading residential land use by acre among the three residential categories at 78% and is ranked second among all uses at the 2-digit level. Single-Family Residential Rowhomes by far make up the majority of not only medium-density residential uses at 92%, but also account for 73% of *all* residential uses. See Residential details in Table 4, below.

While Medium-Density Residential is widely distributed north of I-95 in the western portion of the District, there are pockets of residential communities that are widely distributed geographically with the highest concentrations found mainly along the edges of the District.

Table 4: Breakdown of Residential Land Use by 3-digit Descriptions

Residential Land Use (3-digit level)	Acres	Percent of Res'l Land Use
Residential Detached	30.30	4.12%
Residential SemiDetached	98.71	13.42%
Residential Condo 1-1.5 story	0.2	0.003%
Other Residential Low Density	4.18	0.57%
Subtotal Low Density Residential	133.21	18.11%
Residential Rowhouse	536.55	73%
Residential Detached Converted to Apts <= 3 story	2.6	0.35%
Residential SemiDetached Converted to Apts <= 3 story	3.13	0.43%
Residential Rowhouse Converted to Apts <= 3 story	18.79	2.55%
Apt House 2-4 Units incl Duplex or Quad <= 3 story	4.55	0.62%
Other Residential Medium Density	20	0.66%
Subtotal Medium Density Residential	585.62	77.61%
Apt House >= 5 Units	10.27	1.4%
Res Detached, SemiDetached Converted to Apts > 3story	1.3	0.18%
Res Rowhouse Converted to Apts > 3 story	2.27	0.31%
Hotel/Motel	0.62	0.10%
Residential Care Facility	1.48	0.20%
Dormitory	0.44	0.06%
Other Residential High Density	0.07	0.01%
Subtotal High Density Residential	16.45	2.26%
Total Res'l Land Use (3-digit level)	735.28	97.98¹%

¹ Totals may not add up to 100% due to rounding.

COMMERCIAL LAND USE

Commercial Land Use is ranked fifth in the District at the 2-digit level and is divided into three subcategories: Commercial Consumer; Commercial Business/Professional; and Commercial Mixed Residential. When all subcategories are further examined at the detailed 3-digit level, the leading commercial uses are (see Table 5 below):

- Commercial Store (62.5% of all Commercial uses, 5.41% all uses)
- Commercial Auto (12.4% of all Commercial uses, 1.07% all uses)
- Rowhouse Store/Office with Residential (8.6% of all Commercial uses, 0.75% all uses)
- Commercial Food Service and Drinking (4.9% of all Commercial uses, 0.42% all uses)
- Commercial Office (4.4% of all Commercial uses, 0.38% all uses)

Table 5: Breakdown of Commercial Land Use by 3-digit Descriptions

Land Use (3-digit level)	Acres	% of Total Land Use	% of Comm'l Land Use
Commercial Office	11.56	0.38%	4.4%
Commercial Service	4.13	0.14%	1.6%
Other Commercial Business/Professional	1.22	0.04%	0.5%
Commercial Business/Professional Subtotal	16.91	0.56%	6.5%
Commercial Store/Office with Residential	9.19	0.3%	3.5%
Rowhouse Store/Office with Residential	22.61	0.75%	8.6%
Detached or SemiDetached Store/Office with Residential	2.14	0.07%	0.8%
Other Commercial Mixed Residential	0.94	0.03%	0.4%
Commercial Mixed Use Subtotal	34.88	1.15 %	13.3%
Commercial Store	163.68	5.41%	62.5%
Commercial Food Service and Drinking	12.71	0.42%	4.9%
Commercial Auto	32.51	1.07%	12.4%
Other Commercial Consumer	1.10	0.04%	0.4%
Commercial Consumer Subtotal	210	6.94%	80.2%
Total Commercial Category	261.79	8.65%	100%

Commercial Consumer uses represent the largest quantity of commercial uses in the District at just over 80% of all commercial uses. Commercial Consumer uses, especially big-box, are found to be more highly concentrated on streets that are wider and on sites that were formerly industrial along Aramingo Avenue.

Commercial Mixed Use is the second-largest use in the Commercial category within the District at just over 13% of all commercial uses. This subcategory is made up of traditional commercial corridors with residential on the upper floors and some individual buildings with mixed uses.

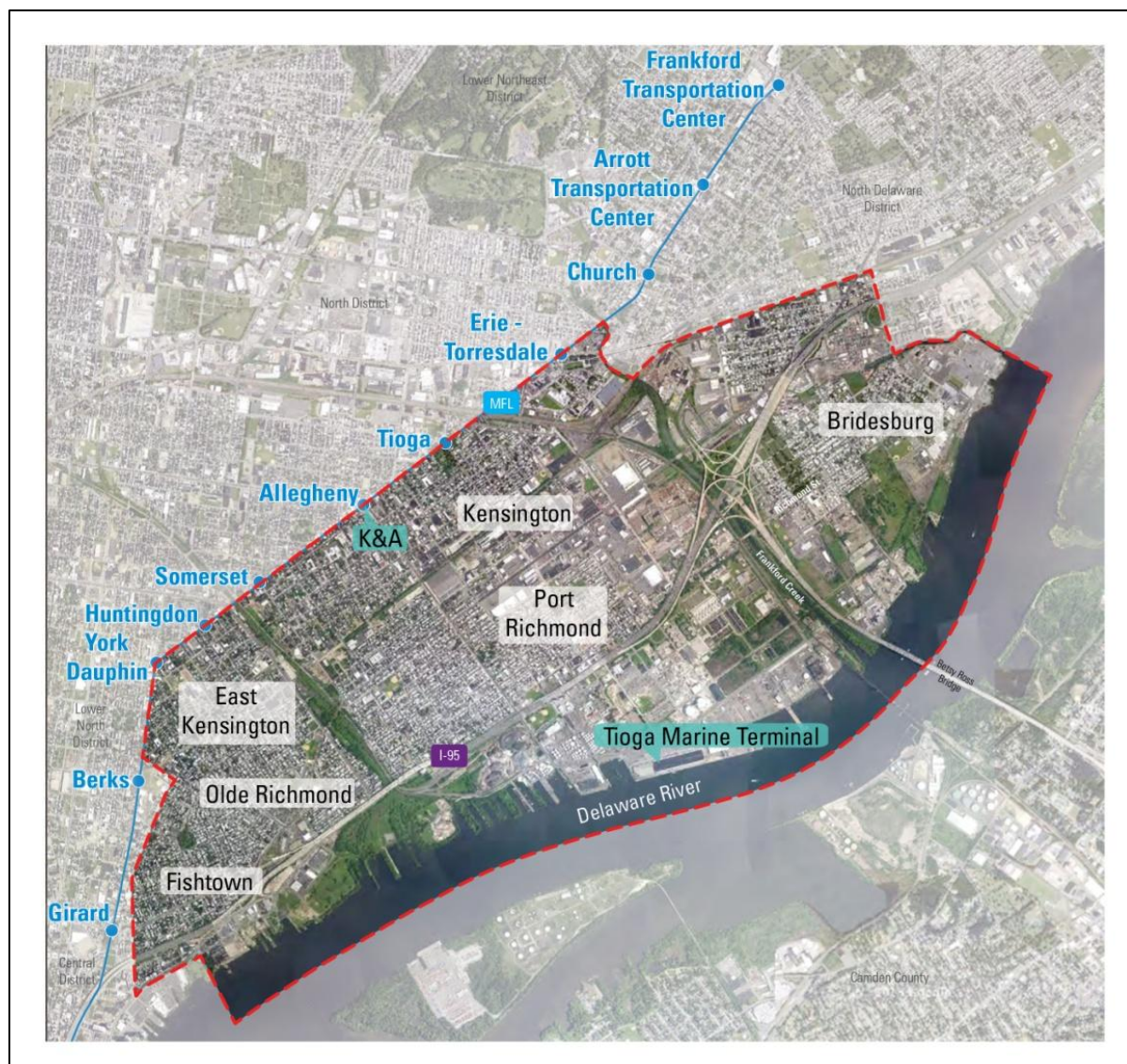
Commercial Business/Professional uses are ranked third in the District among the subcategories of commercial land uses at 6.5%. This does not necessarily mean that there are less professional offices in the District, but many could be located within the commercial corridors within buildings that contain residential uses above.

The River Wards' land use pattern has two distinct scales, a traditional rowhouse neighborhood scale and a commercial or industrial mega-block scale. Major infrastructure such as the I-95 corridor, several rail viaducts, and the Market Frankford El structure, partitions the District.

NEIGHBORHOOD LAND USE SUMMARY

Six neighborhood boundaries were used in the River Wards District Plan land use analysis. Examined on a neighborhood by neighborhood basis, land use does not proportionally mirror the District-wide percentages at the 2-digit land level. Rather, the categories that make up the highest percentage of land use are reflective of the activities occurring in these smaller geographies. Examining land use within these smaller geographies may also highlight factors that influence shifts in demographics, employment, and the real estate market. Real estate market forces may be partially driving higher rates of residential uses in some neighborhoods while leaving neighborhoods with notable concentrations of vacant land. Although as stated earlier in this memo, vacant land is only really attributable to a few outstanding large-footprint former industrial areas (see Figure 3, below, for context).

Figure 2: Neighborhood Context



The River Wards' land use pattern has two distinct scales, a traditional rowhouse neighborhood scale and a commercial or industrial mega-block scale. Major infrastructure such as I-95, active/inactive rail and the Market Frankford Line structure partitions the District. Industrial activities remain strong in the River Wards, as currently the majority of the land in the District is used for industry. Some of the now vacant land was industrial in the past. Together, vacant and industrial land uses comprise about half of the District's land area.

Figure 3: Land Use Patterns



ZONING OVERVIEW

The Riverwards District is a mix of zoning classifications and is largely represented by residential single-family attached and industrial uses that are complemented by several commercial corridors. Thirty-one percent of the River Wards District is zoned for residential use. A total of almost 940 acres is zoned a combination of residential single family or multi-family districts. The leading residential zoning district is RSA-5, residential rowhome single-family. RSA-5 accounts for more than 82% of all Residential classifications and about 40% of all zoning classifications.

Industrial districts comprise a total of 1,746 acres with Medium and Heavy Industrial classifications (I-2 & I-3) comprising 74% of all industrial zoning within the District. ICMX

(Industrial Commercial Mix) commands almost one-quarter of the total count in River Wards but only about 6% of total industrial acreage. Table 7, below, lists all the breakouts by Percent Acreage (see also Figure 1).

The majority of the District has gone through the remapping process during its first iterations (all prior to 1980) with a total of twelve remapping bills having been passed into law. Only the Fishtown neighborhood has been looked at holistically within the past decade and a Bill was introduced to Council January 2015. The remapping is slated to be presented to Commission by March 2015.

There are three different zoning overlays within the River Wards District. The first is the North Delaware Avenue NCA which regulates the use regulations for assembly and entertainment uses and eating and drinking establishments in the area bounded by Frankford Avenue, Lehigh Avenue, and the Delaware River. The second overlay is the northern portion of the Central Delaware Riverfront Overlay that runs to Allegheny Avenue; this overlay has the purpose of guiding riverfront development that will encourage a mixture of uses that create new economic growth and bring recreational opportunities along the riverfront. The Central Delaware Riverfront Overlay prohibits specific uses, creates active use requirements, enacts a waterfront setback, requires recreational trails on commercially zoned properties, and regulates public access. The third is the Delaware River Conservation Overlay District that has the purpose of promoting and protecting a system of parks and trails along the Delaware River Greenway and runs northward from Allegheny Avenue and 50 feet inland from the western bank of the Delaware River. See Figure 4, below.

Table 7: Zoning Districts in Riverwards by Percent Acreage

Zoning Districts by Acreage					
Zoning District	Total Count	Total Acres per Zoning District	Percent Total Acres	Percent Zoning District Count	Percent Total Count
CA-1	11	8.85	0.29%	1.8%	0.60%
CA-2	14	124.70	4.08%	2.2%	0.76%
CMX-1	352	21.82	0.71%	56%	19.15%
CMX-2	242	101.26	3.32%	39%	13.17%
CMX-3	8	65.22	2.14%	1.3%	0.44%
Comm'l Total	627	321.85	10.54	100%	34.12%
I-1	7	41.79	1.37%	2.2%	0.38%
I-2	216	873.37	28.59%	69%	11.75%
I-3	16	656.12	21.48%	5.1%	0.87%
ICMX	73	174.55	5.71%	23.4%	3.97%
Industrial Total	312	1745.83	57.15%	100%	16.97%
RM-1	155	111.48	3.65%	17.6%	8.43%
RMX-2	1	76.30	2.50%	0.11%	0.05%
RSA-2	1	0.47	0.02%	0.11%	0.05%
RSA-5	723	750.30	24.56%	82.2%	39.34%
Res'l Total	880	938.55	30.73%	100%	47.87%
SP-PO-A	19	48.49	1.59%	100%	1.03%
Park/Open Space Total	19	48.49	1.59%	100%	1.03%
Total	1838	3054.71	100%	100%	100%

Figure 4: Zoning Overlays



ANALYSIS OF LAND USE POTENTIALLY INCONSISTENT WITH ZONING

The land use of each parcel, as documented in the field survey by PCPC staff, was compared to the parcel's existing zoning classification. Instances of land use inconsistent with underlying zoning were summarized by count of properties and acreage by both zoning and land use categorizations. The analysis highlights individual zoning districts where a significant percentage of the properties have land uses potentially inconsistent with the underlying zoning, and may be evaluated for remapping. This is an exploratory analysis only and will require further, fine grained review by the District planning team.

Approximately 13% of the land was identified as potentially inconsistent. Statistics are summarized in Table 8 and the following bullets:

- The I-3 zoning classification has the largest percentage of land uses potentially inconsistent with underlying zoning at 4.32%, or 132 acres. I-3 zoning accounts for the third-largest percentage of zoned acreage in the District at 21.5%. This accounts for nearly 33% of total inconsistent acreage in the District – the largest percentage classification inconsistent with underlying zoning
- The I-2 zoning classification has the second-largest percentage of land uses potentially inconsistent with underlying zoning at just over 3% of total District inconsistencies, or 92 acres. I-2 zoning is the largest percentage of zoned acreage in the District at just under 30%. This accounts for nearly 23% of total inconsistent acreage in the District – the second-largest percentage classification inconsistent with underlying zoning
- The RSA-5 zoning classification has the highest total zoned acreage in the District at over 750 acres. However, it also has the third-largest percentage of land uses potentially inconsistent with underlying zoning at 2.34% of total District inconsistencies, or more than 71 acres. RSA-5 zoning is the second-largest percentage of zoned acreage in the District at about 25%. This accounts for nearly 18% of total inconsistent acreage in the District – the third-largest percentage classification inconsistent with underlying zoning

With the exception of CMX-2 accounting for slightly more than 11% of total inconsistent acreage, all other classifications each have less than 5% of total inconsistent acreage.

Table 8: Percent of land use acreage inconsistent with underlying zoning

Percent of Land Use Acres Inconsistent with Underlying Zoning						
Zoning District	Total Acres per District	Percent Total Acres	Acres of Land Use Inconsistent to Zoning	Percent Total of All Inconsistent Acreage	Percent Inconsistent of Acres within each Zoning District	Percent Inconsistent of Total Zoned Acres
CA-1	8.85	0.29%	3.47	0.86%	39.23%	0.11%
CA-2	124.70	4.08%	16.94	4.22%	13.58%	0.55%
CMX-1	21.82	0.71%	5.91	1.47%	27.07%	0.19%
CMX-2	101.26	3.32%	44.88	11.17%	44.32%	1.47%
CMX-3	65.22	2.14%	0.06	0.02%	0.10%	0.00%
I-1	41.79	1.37%	5.83	1.45%	13.95%	0.19%
I-2	83.37	28.59%	91.92	22.88%	10.53%	3.01%
I-3	656.12	21.48%	131.85	32.82%	20.10%	4.32%
ICMX	174.55	5.71%	14.15	3.52%	8.11%	0.46%
RM-1	111.48	3.65%	10.27	2.56%	9.22%	0.34%
RMX-2	76.30	2.50%			0.00%	0.00%
RSA-2	0.47	0.02%			0.00%	0.00%
RSA-5	750.30	24.56%	71.44	17.78%	9.52%	2.34%
SP-PO-A	48.49	1.59%	5.04	1.25%	10.39%	0.16%
Total	3054.71	100%	401.77	100.00%	13.15%	

VACANT LAND AND STRUCTURES

Goal: Manage and reduce vacancy

Vacant Land

PCPC's field survey could not identify a workable total number for vacant land acreage within the River Wards District. This is due to the fact that nearly all of the vacant land in the District is along the Delaware Riverfront and/or adjacent to depressed or elevated abandoned or partially abandoned dangerous rail infrastructure.

Due to the historic heavy industrial uses in River Wards District, the vacant land is generally abandoned rather than undeveloped. However, unlike a lot of other areas across the City, the vast majority of vacant land is in a few huge swaths that are self-contained and gated or blocked-off. This also means that most of the Delaware Riverfront in the District is also completely inaccessible.

Vacant Buildings

Vacant buildings are not a significant planning issue for the District. PCPC staff conducted windshield surveys for signs of long-term vacancy and qualified their observations as either fully vacant or partially vacant. This information was combined with available data from Licenses and Inspections (L&I) on properties maintaining vacant building licenses defined by expiration dates occurring in 2014 or 2015 (see Table 9).

The majority of vacant buildings within the District is very minimal and relegated to isolated individual small parcels. The majority of these are allocated along Frankford Avenue between E. Norris Street and E. Allegheny Avenue, a former bustling commercial corridor lined with many small-scale mom-and-pop type businesses.

Going back to 1988, the PCPC has periodically conducted Citywide inventories of Philadelphia's commercial centers, corridors, and districts. These *Philadelphia Shops* surveys capture information on the physical and economic conditions of each center, and they provide a helpful tool for guiding planning and investment decisions as well as for tracking a center's performance over time.

According to *Philadelphia Shops* preliminary estimates, about 30% of commercial properties are vacant on Frankford Ave in the stretch between E Berks Street and E Allegheny Avenue.

According to Table 9, there are 626 Fully Vacant Residential buildings, or 65% of all vacant buildings in the District. However, due to the small parcel sizes of many of these old rowhomes combined with the sheer number of residences (nearly 27,000), the 626 fully vacant residential buildings accounts for the smallest percent of all vacant building categories, at 2.35% - this amounts to only 2% of *total* buildings within the District.

Table 9: Vacant Building Counts

Vacant Buildings by 1-digit Land Use Code					
Land Use	Count of Fully Vacant Buildings	Count of Partially Vacant Buildings	Count of Total Buildings	Percent of Fully Vacant Building Count	Percent of Partially Vacant Buildings Count
Residential	626	20	26674	2.35%	0.07%
Commercial	136	108	1538	8.84%	7.02%
Industrial	158	14	898	17.59%	1.56%
Civic/Institution	17	2	234	7.26%	0.85%
Transportation	23	2	958	2.40%	0.21%
Culture/Recreation	4	0	59	6.78%	0.00%
Total	964	146	30361	3.18%	0.48%

LAND SUITABILITY

Goal: Protect sensitive lands from over development

Floodplain

Approximately 982 acres of land fall within the 100-year and 500-year floodplains of the Delaware River. The 100-year floodplain consists of 446 acres, with the land uses of Transportation, Industrial, and Vacant taking up 96% of that acreage. In particular, the vacant land use makes up 19% of the 100-year floodplain and will need to be considered in future development and industrial expansion.

When evaluated by 1-digit land use categories, the greatest percentages of affected land, other than vacant land, are in the Industrial and Transportation categories, with about 50% and 30% within the floodplains, respectively. These two categories combined account for 80% of all land uses within the 100-year floodplain and 65% within the 500-year floodplain. Furthermore, the Vacant Land Use category within the 500-year floodplain accounts for 25%. No other single active (i.e., non-vacant) land use category accounts for more than 3.9% of land within the 100- and 500-year floodplains and most are below even 1% (see Figure 6 and Table 10, below, for detailed information).

These statistics imply that flood events impact mostly industrial or related uses in addition to roadways and parking areas. Residential land use that is impacted by the combined 100- and 500-year floodplains amounts to just under 36 acres, or 3.7% of all acreage within the

floodplains in the District.

With regards to the floodway, according to Section 14-704(4) of the Philadelphia Zoning Code, no encroachment including fill, new construction, or any development is permitted; except that public utilities, trails, roadways, and bridges are permitted as long as these structures do not contribute to an increase in the Base Flood Elevation. This should be considered for any waterfront development or projects.

Figure 6: Floodplain Map

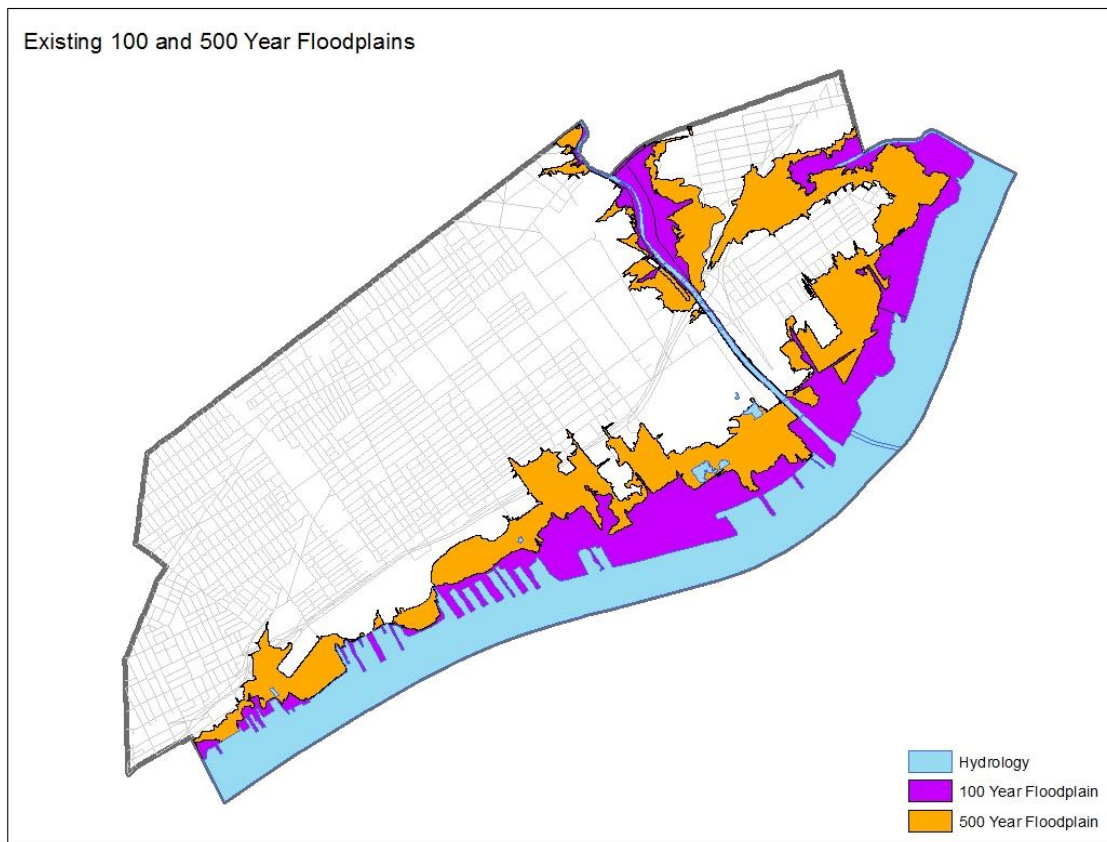


Table 10: Land Use (by 2 digit code) that Fall Within the 100- and 500-Year Floodplains

Land Use	100 Year Count	100 Acreage	100 Year Percent	500 Year Count	500 Year Acreage	500 Year Percent
Residential Low Density	43	0.72	0.16%	439	20.65	3.86%
Residential Medium Density	47	1.22	0.27%	529	13.01	2.43%
Residential High Density	N/A	N/A	N/A	1	0.08	0.02%
Commercial Consumer	8	1.44	0.32%	31	12.71	2.37%
Commercial Business/Professional	2	1.86	0.42%	9	4.04	0.75%
Commercial Mixed Residential	1	0.03	0.01%	14	0.39	0.07%
Industrial	68	212.21	47.59%	193	293.60	54.81%
Civic/Institution	3	0.08	0.02%	17	4.02	0.75%
Transportation	59	131.57	29.51%	73	48.33	9.02%
Culture/Amusement	N/A	N/A	N/A	2	0.73	0.14%
Active Recreation	2	2.53	0.57%	5	1.91	0.36%
Park/Open Space	7	8.12	1.82%	3	1.22	0.23%
Cemetery	N/A	N/A	N/A	2	3.57	0.67%
Water	23	3.46	0.78%	3	0.03	0.01%
Vacant	27	82.64	18.53%	83	131.39	24.53%
Total	290	445.88	100.00 %	1404	535.68	100.00 %

KEY ISSUES/OPPORTUNITIES

The most important land management issues and opportunities in the River Wards District over the next ten years include:

- Deciding the fate of the former industrial areas lining the Delaware Waterfront
- Continuing to foster superior road and rail access to remaining industries
- Rethinking/Redefining The Lehigh Viaduct
- Improving access to the Delaware Waterfront for all types of users, but particularly recreational
- Balancing newer development with existing development
- Redefining Frankford Creek from industrial to recreational/scenic and a key connector to the Delaware Waterfront for non-motorized access
- Guide development of large tracts of vacant and underutilized land, especially those near protected park or open space uses and active or obsolete industrial areas.

TRANSPORTATION

Philadelphia2035 Citywide Vision Goal: Improve transportation safety, efficiency, and convenience

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SUMMARY OF EXISTING CONDITIONS

The River Wards is an incredibly varied district as nearly all transportation modes are well represented within the District. There are areas of industrial abandonment as well as busy port, freight and industrial sections. Each of these transportation modes requires discussion and analysis as the District faces changes in demand and mode share.

The neighborhoods of the River Wards are dominated by single-family rowhouses and income, investment, and stability vary greatly. This affects private vehicle access and choices residents make about transportation modes. While Fishtown and southern parts of Kensington have seen an influx of new higher-income residents and in-fill residential development, these new residents have higher transit commute rates, higher bicycle commute rates and lower car access/ownership rates than Citywide and district-wide rates. In other areas, with stable middle-class incomes such as portions of Port Richmond and all of Bridesburg, automobile access/ownership is quite high and the majority of workers drive to work alone. Lower income areas have very low vehicular access rates, primarily use the bus for commuting, and typically do not bicycle commute.

Reconstruction of the interstate has currently and will continue to have a major impact on vehicular traffic in the District. While most of the I-95 reconstruction has been fully designed within the District, its reconstruction is making major changes to local streets that feed ramps or travel under the highway. With City agency guidance, PennDOT is making investments to improve pedestrian, bicycle and transit conditions wherever possible. This will improve access for all users particularly between the Delaware River waterfront and residential areas.

Data

Key Census data related to auto ownership and work commute modes in the River Wards District are summarized in the following table and are compared to Citywide averages. Auto ownership in the District is comparable to Citywide averages, while the percentage of those driving to work is slightly higher while all other commuting modes (walking, biking, and transit) are slightly lower or comparable to the City average.

There is great variation within the District and the averages above do not reflect the fluctuations between neighborhoods. Everything from household car access rate to mode of commute differs greatly between and within neighborhoods.

River Wards Work Commute Share by Type

	Citywide	River Wards District
Percent of Households without Vehicles	34%	33.6%
No. of Vehicles Available per Household	0.96	0.94 (total cars: 23,076; total households 24,599)
Means of Transportation to Work		
Automobile	60%	62% 76% of those drove alone
Public Transportation	26%	25% 63% of those took a bus
Bicycle	2%	2%
Walk	9%	7%
All Other	3%	4%

Source: U.S. Census Bureau, 2008-2012 American Community Survey

Car access rates are highest in Bridesburg and lowest in the portions of Kensington and Port Richmond that are closest to Market-Frankford Line. In the census tracts with the lowest car access rates, less than 50% of households have access. Housing typology does differ across neighborhoods, but not so drastically (most neighborhoods are high-density single family attached) as to explain the difference in car access rates. A far more likely factor is economics (both household income levels and employment rates) and employment center dispersion beyond reach of traditional transit. Proximity to the Market-Frankford Line is also unlikely to be the primary cause for the disparity as the entire district has good access to fixed rail and bus transit.

The majority of River Wards commuters drive to work and the majority of those drove alone. Bridesburg and areas of Kensington and Port Richmond near I-95 had the highest rate of car commuters. Fishtown and areas of Port Richmond and Kensington near the Market-Frankford Line have the lowest rate of car commuters. While economic factors may contribute to these commute decisions, proximity to the Market-Frankford Line in Fishtown appears to be a location factor for workers who have access to a vehicle, but choose transit for their commute.

Like most districts in the City, the majority of transit commuters take the bus as their primary mode (this does not mean that another part of their journey did not involve another mode or a transfer). In most Census tracts, 60% or more of transit commuters are primarily taking a bus. Only in Fishtown are less than 50% of transit commuters taking the bus. Here commuters are more likely to take the Market-Frankford Line as their primary mode of transit. Surprisingly, even areas near the Market-Frankford Line in Kensington and Port Richmond do not have as high rates of usage as the Fishtown neighborhood. This may be because commuters in these areas of Kensington and Port Richmond are taking a bus to access the Market-Frankford Line even within short distances of the stations.

The presence of the Bridesburg Regional Rail station is also reflective of the commute choice of neighborhood residents. Trolley commute rates were surprising low, but the Route 15 has generally been detoured within the District during the entire timeframe of the five-year ACS estimates being analyzed here. Also, tracts that show trolley commute rates may be reflecting SEPTA's trackless trolley services.

While the bike commuting rate may seem comparable to the Citywide average, there are great differences within the District. In several tracts located in Kensington and Port Richmond, no workers responded that bicycle was their commute mode. This may have to do with lack of adequate on-street bicycle facilities, distances to employment locations, or cultural conventions/barriers to bicycle commuting. Meanwhile nearby tracts in Fishtown have bicycle commuting rates of 4% or more.

Generally, the percent of commuters walking to work is low across the District - there is only one tract near the Aramingo Avenue commercial corridor that shows higher than average walk commute rates.

KEY ISSUES & MAJOR OPPORTUNITIES

Key Issues

- **Lack of Neighborhood/Waterfront Connectivity** – New waterfront parks and trails are being developed on the Delaware River waterfront. Unlike the vision plan prepared for the central Delaware Waterfront (which covers up to Lehigh Avenue only within the River Wards), there is no single master plan or guiding entity for implementation in for the entirety of the River Wards. Many of the new trails, greenways and parks are well-advanced and additional planning or visioning may not be necessary. However, a goal of this plan could be to ensure that implementation is well coordinated, facilities are accessible to residential areas, and public awareness of these projects is high.
- **Infrastructure barriers** – I-95 and the Lehigh/Richmond Viaduct are major barriers with the District. The Lehigh/Richmond Viaduct bisects the District and limits mobility with few cross streets.

I-95 traditionally provides a barrier between heavy industrial and port uses along the Delaware River waterfront and neighborhoods. However, with the expansion of waterfront recreation opportunities, connecting neighborhoods to the waterfront has become more important. I-95 also divides the Bridesburg neighborhood from the rest of the city. It is one of very few Philadelphia neighborhoods that lies fully to the east of I-95.

The Market-Frankford Line, which provides a boundary for this District, can also be seen as a barrier. It divides the neighborhoods and the corridors it operates above are often avoided, especially on foot. This is less of a physical barrier, as many streets cross under the elevated structure, than a safety and perception barrier.

Major Opportunities

▪ Strong Transit Network

The District is serviced by a variety of mass transit options including bus, trolley, Regional Rail and the Market-Frankford Line. Numerous bus routes feed into the Market-Frankford Line or provide direct service to employment centers. While the Market Frankford Line lies on the edge of the River Wards, there are six stations that are partially within the District. The Bridesburg Regional Rail station on The Trenton Line also provides access to Trenton, NJ and points north including NYC via NJTransit's Northeast Corridor Line. Ridership at that station is growing despite limited pedestrian and automobile access.

Although transit options are varied, there are some swaths of the District that have little or no coverage. These areas are generally the older neighborhoods closest to Center City and those areas characterized by a non-gridded street pattern with narrow, winding streets. These characteristics make it difficult to serve by standard 40-foot city buses.

There is another notable swath in the center of the District that is surprisingly lacking in transit connectivity. Specifically, there is no through-connecting "north-south" transit service at all between Allegheny Avenue and Orthodox Street, a distance of about 2 miles.

▪ Multi-modal Demographic Trends

The River Wards District Plan should capture demographic trends seen in Fishtown and Kensington, such as lower car ownership rates, higher transit usage, and bicycle commuting, to shape future development and public investment decisions.

TRANSPORTATION (SPECIFIC TOPICS)

Transit

Goal: Increase the use of transit to reduce environmental impacts and travel time

Market-Frankford Line

All demographic numbers for Market Frankford Line are from 2010. There may be double counts in the census information because ½ mile radii for the stations overlap.

York-Dauphin Station

- Ridership:
  - 2011 Turnstile counts: Weekday, 1,502; Saturday, 992; Sunday, 666
  - 2013 Turnstile counts: Weekday, 1,542; Saturday, 974; Sunday, 652
- Demographics:
  - Residents within a ½ mile: 14,664
  - Workers over 16: 4,430
  - Jobs within a ½ mile: 4,284
  - Percentage of residents within a ½ mile that use transit/bike/walk: 47.4%
- ADA Access: Yes
- Limited Stops: Yes, B Stop

- Bus Connections: Routes 3, 39 and 89
- Bike Parking: No bicycle parking. The DVRPC did not study this station.

Planned Improvements: No planned capital improvements.

Land Use: There is a strong commercial node along Front Street and Kensington Avenue under the El. Large vacant parcels are located within a block or two of the station that were former industrial sites. Residential redevelopment is occurring nearby, but not adjacent to the station. Market forces combined with larger parcels could allow for transit-oriented development being a realistic possibility near this station.

Huntingdon Station

- Ridership:
  - 2011 Turnstile counts: Weekday, 2,452; Saturday, 1,283; Sunday, 959
  - 2013 Turnstile counts: Weekday, 2,747; Saturday, 1,414; Sunday, 1,089
- Demographics:
  - Residents within a ½ mile: 17,006
  - Workers over 16: 4,378
  - Jobs within a ½ mile: 4,515
  - Percentage of residents within a ½ mile that use transit/bike/walk: 46.84%
- ADA Access: Yes
- Limited Stops: Yes, A Stop
- Bus Connections: Routes 3 and 39
- Bike parking: No bicycle parking. Huntingdon Station was identified by the DVRPC's Bike to Transit Stations Survey as having low-medium demand for increased bicycle parking.

Planned Improvements: No planned capital improvements.

Land Use: The station is surrounded by a high density rowhouse neighborhood, with scattered former and active industrial buildings, and a number of institutional uses nearby.

Somerset Station

- Ridership:
  - 2011 Turnstile counts: Weekday, 2,009; Saturday, 1,489; Sunday, 1,127
  - 2013 Turnstile counts: Weekday, 1,961; Saturday, 1,424; Sunday, 1,109
- Demographics:
  - Residents within a ½ mile: 19,856
  - Workers over 16: 4,933
  - Jobs within a ½ mile: 5,862
  - Percentage of residents within a ½ mile that use transit/bike/walk: 41.54%
- ADA Access: Yes
- Limited Stops: Yes, B Stop
- Bus Connections: Routes 3 and 54

- **Bike Parking:** No bicycle parking. Somerset Station was identified by the DVRPC's Bike to Transit Stations Survey as having very low demand for increased bicycle parking.

Planned Improvements: No planned capital improvements.

Land Use: There is a fair amount of residential and industrial vacancy particularly within the District. If parcels are consolidated or larger former industrial properties are redeveloped there is potential for transit-oriented development.

Allegheny Station

- **Ridership:**
  - 2011 Turnstile counts: Weekday, 5,257; Saturday, 3,224; Sunday, 2,179
  - 2013 Turnstile counts: Weekday, 5,395; Saturday, 3,153; Sunday, 2,276
- **Demographics:**
  - Residents within a ½ mile: 24,001
  - Workers over 16: 5,731
  - Jobs within a ½ mile: 3,068
  - Percentage of residents within a ½ mile that use transit/bike/walk: 40.86%
- **ADA Access:** Yes
- **Limited Stops:** No
- **Bus Connections:** Routes 3, 60 and 89
- **Bike Parking:** No bicycle parking. Allegheny Station was identified by the DVRPC's Bike to Transit Stations Survey as having low-medium demand for increased bicycle parking.

Planned Improvements: No planned capital improvements.

Land Use: There is a strong commercial node at Allegheny and Kensington. A Dense rowhouse neighborhood surrounds the station with scattered active, but mostly former industrial uses especially within the District.

Tioga Station

- **Ridership:**
  - 2011 Turnstile counts: Weekday, 1,671; Saturday, 1,039; Sunday, 773
  - 2013 Turnstile counts: Weekday, 1,692; Saturday, 1,043; Sunday, 812

Residents within a ½ mile: 16,948

- Workers over 16: 4,720
  - Jobs within a ½ mile: 2,720
  - Percentage of residents within a ½ mile that use transit/bike/walk: 44.21%
- **ADA Access:** Yes
- **Limited Stops:** Yes, A stop
- **Bus Connections:** Routes 3 and 89
- **Bike Parking:** No bicycle parking. The DVRPC did not study this station.

Planned Improvements: No planned capital improvements.

Land Use: The area is characterized by a high density rowhouse neighborhood, parks nearby, with limited commercial uses with high vacancy along Kensington Avenue under the El.

Erie-Torresdale Station

- Ridership:
  - 2011 Turnstile counts: Weekday, 4,046; Saturday, 2,066; Sunday, 1,434
  - 2013 Turnstile counts: Weekday, 4,094; Saturday, 2,033; Sunday, 1,460
- Residents within a ½ mile: 11,453
  - Workers over 16: 3,278
  - Jobs within a ½ mile: 1,759
  - Percentage of residents within a ½ mile that use transit/bike/walk: 35.96%
- ADA Access: Yes
- Limited Stops: No
- Bus Connections: Routes 3 and 56
- Bike Parking: No bicycle parking. The DVRPC did not study this station.

Planned Improvements: No planned capital improvements.

Land Use: Erie Avenue has a mix of dense residential rowhome blocks, auto-oriented uses on Torresdale Avenue, and industrial uses to the east and south. There is the potential for long-term redevelopment of auto-oriented land uses near the station to be more transit-oriented.

Regional Rail

Bridesburg Station

- Ridership:
  - 2013 Daily Weekday Boards: 209 (ranking is not available since counts are not complete for 2013)
  - 2011 Daily weekday Boards: 172 (ranked 120th in ridership)
- Residents within a ½ mile: 9,740
  - Workers over 16: 3,220
  - Jobs within a ½ mile: 1,020
  - Percentage of residents within a ½ mile that use transit/bike/walk: 30.79%
- ADA Access: No
- Bus Connections: Routes 73 and 84 provide direct service. Bus routes 25, 26 and 56 operate within one block.
- Bike Parking: No bicycle parking is currently provided or recommended to be installed. Station is only accessible by steep staircases on both the inbound and outbound sides of the station making it not ideal for passengers to bring a bike to platform. Bicycle racks could be added to the street level but it is not recommended because it is in an unsafe area.

- **Commuter Parking:** There is no off-street or on-street parking available adjacent to the station.

Planned Improvements: No planned capital improvements. However, recent maintenance improvements were made to the stairs and mini-high wooden platforms were installed on both the inbound and outbound platforms.

Land Use: The station is located in a dense neighborhood, but on a very busy street that connects to an I-95 entrance. Since there is no parking near the station, most commuters walk to the station. The walk along Bridge Street from the Bridesburg neighborhood to the station is quite desolate and the sidewalk disappears at the I-95 ramps. The walk to the station from Frankford is also unsafe through the major intersection of Bridge and Aramingo/Harbison.

Bus & Trolley

SEPTA operates a number of bus routes in the River Wards District: 3, 5, 25, 39, 43, 54, 56, 60, 73, 84, 89, J. The Route 15 trolley also operates in the District. The majority of this service connects to the Market-Frankford Line thereby linking River Ward residents to employment in Center City, University City and Northeast Philadelphia. Therefore many transit riders in this area require a transfer to reach their final destinations. At this time no new service is planned for the area. There are five transit loops in the District. Two of these loops (Richmond/Cumberland and Richmond/Westmoreland) also service Route 15 trolley operations. In addition, Route 15 trolley has a new loop at Frankford and Delaware Avenues on the River Wards District southern boundary. Both are affected by the I-95 construction. The main impact on bus and trolley service currently is the extensive I-95 reconstruction activities.

- In the 2014 Annual Service Plan, Route 43 was amended to provide two way service on Cumberland Street and Aramingo Avenue.
- Currently, SEPTA is determining the new modern light rail vehicles that will replace both the PTC and Kawasaki trolley cars on the “green line” including the Route 15. These vehicles will be low-floor for ADA accessibility. ADA accessibility will also affect the design of stops making these locations more like stations than typical bus stops.
- Route 15 trolley service will resume along Richmond Street upon completion of I-95 construction. Route 15 service will also continue to the Frankford/Sugarhouse loop after I-95 is finished. Other bus routes impacted by the I-95 construction will return to their original routings when possible.

Loops:

- **Richmond and Westmoreland Loop:** Bus routes 60 & 73 currently. Route 15 service resumes when I-95 construction is complete.
- **Cumberland Loop:** This loop will return to service after I -95 reconstruction is complete. Located near Richmond and Cumberland Streets.
- **Penn Treaty Park – Route 43,** part-time
- **Richmond/Orthodox – Route J**
- **Richmond/Cambria – Route 54**

SEPTA Bus Routes in River Wards

Rout	From/To	Connections	Average Daily Activity in the River Wards	% of Total Boards
			<i>Boards + Alights in Both Directions</i>	
3	33rd & Cecil B. Moore to FTC	FTC, BSL, Fairmount Park	5,485	47%
5	Front & Market to FTC	FTC, MFL, Northern Liberties, Old City	3,809	44%
15	63rd & Girard to Richmond & Westmoreland	MFL, BSL, PHL, Zoo	2,175	15%
25	Columbus Commons to FTC	MFL, Columbus Boulevard, Columbus Commons	5,758	50%
39	Richmond & Cumberland to 33rd & Dauphin	MFL, BSL, Ridge Avenue	1,434	24%
43	Richmond & Cumberland to 50th & Parkside	MFL, BSL, Parkside	965	11%
54	Richmond & Cambria to 33rd & Dauphin	MFL, BSL, Fairmount Park	2,461	12%
60	35th & Allegheny to Richmond & Westmoreland	MFL, BSL	8,383	31%
73	Richmond & Westmoreland to FTC	FTC	3,339	50%
89	Front & Dauphin to Arrott T.C.	MFL, Arrott Transportation Center	3,002	56%

River Wards Transit Services: Local Services



Transit Plans & Studies

There have been a number of community and non-profit led studies that touch on aspects of transportation within the River Wards District. These plans generally focus on improved safety for pedestrians and cyclists, safety improvements at or near MFL stations, transit-oriented development near MFL stations and more trail and roadway connections to the Delaware River waterfront. These plans include, but are not limited to:

- G Street and Kensington Avenue Road Safety Audits
- Take me to the River Grants
- East Kensington Transportation and Community Development Plan
- North of Lehigh Neighborhood Plan
- New Kensington Riverfront Plan

Several plans call for a new fixed-rail line on Delaware Avenue in the study area that would extend as far north as the Richmond/Conrail Rail Yard. This service would primarily traverse Delaware Avenue/Columbus Boulevard from the River Wards to South Philadelphia and have a link into Center City. *A Civic Vision for the Central Delaware, Philadelphia2035 Citywide Vision, Philadelphia Waterfront Transit Expansion Alternatives Analysis* and DVRPC's *Connections 2040 Plan* all support this transit concept.

Complete Streets

Goal: Balance use of roadways to ensure safe and efficient travel by all modes

Pedestrian Safety & Network

The 2012 *Philadelphia Pedestrian and Bicycle Plan* identifies very limited areas that lack sidewalks in the River Wards District. Those areas with sidewalk gaps include industrial-fronting areas and those next to I-95 where there are recent development of facilities, such as the Port Richmond Trail, or planned improvements, such as the rehabilitation of Richmond Street and Aramingo Avenue as part of the I-95 Improvement Project.

The plan did not call out pedestrian areas for further study. However, current and on-going projects for complete street improvements include the PennDOT I-95 Interchange areas at Betsy Ross Interchange and Aramingo/Girard, where PennDOT is adding sidepaths, sidewalks, planted buffer areas, lighting, and streetscape features at the request of the City. Though not yet in design, connector streets through neighborhoods and adjacent to I-95 are also being considered for pedestrian improvements, including Tacony Street and Bridge Street.

The Delaware River City Corporation is working on improving pedestrian access to the North Delaware Waterfront, particularly along the Port Richmond Trail. In addition, the Frankford Creek Greenway will improve pedestrian and bicycle access to the Port Richmond Trail along Wheatsheaf, Richmond Street, and Lewis Street in the coming years, pending favorable funding decisions and swift construction schedules.

Bicycle Network

The River Wards District includes areas of high bicycle commuting, including Fishtown and Kensington. The Streets Department recently put in several miles of sharrows in the River Wards on smaller streets where bike lanes or other bicycle facilities do not fit within the cartway. Sharrows send the message to roadway users to expect bicycle traffic on the route and guide cyclists where to bike in the lane. The sharrows were placed largely in Fishtown and Kensington between Frankford Avenue and Penn Treaty Park.

Other major bicycle facilities in the District include Lehigh Avenue, Aramingo Avenue, Kensington Avenue, Castor Avenue, and the Port Richmond Trail. Additional bicycle and trail facilities are proposed as high priority network expansion areas, including:

- Aramingo Avenue Sidepath from Wheatsheaf to Margaret (PennDOT)
- Adams Avenue Sidepath (PennDOT)
- Frankford Creek Greenway (Philadelphia Parks & Recreation)

Several of these projects are described in detail in the Open Space & Trails Memo.

The *Philadelphia Pedestrian and Bicycle Plan* recommends a number of new bicycle facilities in the River Wards District as high priority improvements. The majority of the recommended facilities fill gaps in the bicycle network and help cyclists connect between neighborhoods, to the Delaware River waterfront, and to existing parks and trails, from the Tacony Creek Park to the Port Richmond Trail.

- Richmond Avenue (sharrows)
- Orthodox Avenue from existing lanes at Aramingo to the North Delaware Avenue Extension (sharrows or bike lanes)
- Bridge Street Torresdale to North Delaware Avenue Extension (sharrows or bike lanes)
- Frankford Avenue from Delaware Avenue to Torresdale Avenue (sharrows)
- Richmond Avenue from Allegheny to Bridge Street (sharrows)

The East Coast Greenway, an on- and off-road trail from Maine to Florida, runs through the River Wards District mostly on-road along Aramingo Avenue.

Trails

The *Philadelphia Trails Master Plan* outlines and prioritizes a number of proposed trail projects in the District. All proposed trails in the plan were vetted by a large steering committee and multiple factors, such as connectivity, cost, demand, and feasibility, were used to determine each trail's priority.

There are several significant proposed trails in the District, primarily along the waterfront. These are listed here and are described in detail in the Open Space & Trails Memo. These trails will be designed and routed to users for both recreation and transportation purposes.

- North Delaware Avenue Extension Sidepath, Orthodox to Buckius
- North Delaware Avenue Extension Sidepath, Lewis to Orthodox

- Frankford Creek Greenway
- Port Richmond Connector Trail
- Lehigh Viaduct Trail

Streets and Highways

Goal: Provide a safe and efficient road network that supports planned land uses

Crash Data

The DVRPC has provided crash data spanning the years 2009 to 2013 for the River Wards District and created a series of maps that are included in the attached Riverwards District Maps PFD. These maps show overall crashes, crashes that involve pedestrians, and crashes that involve bicycles. There were 3,816 total crashes. There were 421 pedestrian involved crashes and 118 crashes that involved bicyclists. Eleven pedestrians and two cyclists died in crashes during this period.

Broad observations:

- Bicycle Crash Concentrations: There is a strong concentration of crashes on Aramingo Avenue between Cumberland and York Streets. Aramingo Avenue does have bicycle lanes, but this area also has a number of curb cuts and auto-oriented uses. This creates a major conflict between cars and cyclists. There is also a smaller bicycle crash concentration along Frankford Avenue between Clearfield and Cambria Streets. There are also concentrations at some intersections including Tioga Street and Frankford Avenue, Lehigh Avenue and Frankford Avenue and Girard Avenue and Frankford Avenue. This may be compounded by poor sight lines created by the Market-Frankford Line supports especially at Station locations. Most other bicycle crashes in the River Wards District appear to be distributed evenly across the District.
- Pedestrian Crash Concentrations: There are several locations with concentrations of pedestrian crashes. Some are similar to the bicycle crash locations particularly along Aramingo Avenue between Cumberland and York Streets. Other pedestrian crash concentrations include East Girard Avenue, Front Street under the MFL, all along Allegheny Avenue, Tacony Street in Bridesburg and several locations along Frankford Avenue.
- Vehicle Only Concentrations: Concentrations of vehicular crashes appear on wider, high volume roadway including Aramingo Avenue, Frankford Avenue, and Allegheny Avenue, Richmond Street near the Bridesburg entrance to I-95 and Girard Avenue near the entrance I-95. Of course, vehicular crashes are also high along I-95.

Goods Movement

The industrial areas have excellent highway access to I-95 and I-90 to New Jersey (Betsy Ross Bridge), but the Aramingo Industrial District has portions that stretch into neighborhoods. Trucks do traverse through residential areas to access parts of these industrial areas and the “big box” shopping area on Aramingo Avenue. Additionally all of I-95 within the District is currently undergoing reconstruction or is scheduled for reconstruction within the next few years. The Philadelphia Streets Department is also extending Delaware Avenue within the District to

improve access to industrial lands and reduce truck traffic on neighborhood streets. More discussion on these two major roadway projects is included in the section below.

Roadway Projects

I-95 reconstruction dominates the discussion of roadway projects in the River Wards District. I-95 is on a viaduct/bridge structure throughout the majority of the District. A number of local roadways pass underneath the highway. Reconstruction of this highway not only affects the highway structures, but major changes to highway interchanges and local roadways. As a part of this project, PennDOT is conscious that the reconstruction also creates opportunities for improved pedestrian and bicycle facilities, and to accommodate transit and provide new and enhanced connections to the Delaware River waterfront for recreation, commerce and development.

In addition to the major projects listed below - that mostly come from DVRPC's TIP (Transportation Improvement Program) project list - there may be additional roadway projects in the District that are City initiated.

Delaware Avenue Extension: The Philadelphia Department of Streets is improving access for waterfront businesses and reducing truck traffic on streets in adjacent neighborhoods by extending Delaware Avenue along the river from Lewis Street to Buckius Street under a two-phase construction project. The Delaware Avenue North Extension Project is the first new major roadway to be constructed by the City of Philadelphia in decades. When constructed, it will serve as a truck-and-people-friendly mover of commercial traffic along the Delaware Riverfront.

I-95 Construction Projects

The following I-95 projects come from the TIP. "The TIP is the regionally agreed upon list of priority transportation projects, as required by federal law (ISTEA, TEA-21, SAFETEA LU, and MAP-21). The TIP document must list all projects that intend to use federal funds, along with all non-federally funded projects that are regionally significant. We also include all other State funded capital projects."

From the TIP, "An investment of more than \$2 billion will provide for the repair, reconstruction and restoration of I-95, a major facility built in the 1960s which runs through Bucks, Philadelphia, and Delaware Counties in the DVRPC region. The reconstruction of I-95 has been broken out to over 20 separate [projects]..., and most which will occur in Later Fiscal Years and are yet to be programmed."

Bridge St. Interchange (BS2) - I-95 will be widened to four lanes in each direction from Orthodox Street to Levick Street. Long retaining walls will line I-95 through much of this section, and two sound barriers will be constructed. New interchange will be built that will demolish existing ramps. This includes reconstructing Tacony Street from Aramingo Avenue to Bridge Street, installing a new traffic signal at intersection of Tacony and Bridge Streets and installing a new traffic signal at intersection of James and Bridge Streets.

I-95 & Aramingo Ave., Adams Ave. Connector (MPMS 17782) – Construct an extension of Adams Ave. east of Tacony St. to connect to ramps constructed as part of the I-95, Delaware Expressway at Betsy Ross Bridge Interchange project and provide a connection between Torresdale Avenue (east of Frankford Avenue) and I-95.

Betsy Ross Bridge Ramps Construction/Interchange (BR0, BR3) (IMP) (MPMS 79903, 79905) –The Aramingo Avenue interchange ramps include two new ramp connections to the Betsy Ross Bridge and reconstruction of several existing ramps. Orthodox Street will be widened to provide for two-directional traffic from the northbound ramp to Aramingo Avenue. Pearce Street will be realigned at Orthodox Street.

Ann Street to Wheatsheaf Lane (AFC) (MPMS 47813) The Preferred Build Option involves consolidating the existing disjointed interchanges at Allegheny Avenue, Westmoreland Street, and Castor Avenue. These interchanges will be reconfigured into two half interchanges: half-diamond interchange at Allegheny Avenue for Southbound I-95 and a partial clover interchange at Castor Avenue for Northbound I-95. The existing off-ramp at Westmoreland Street would be removed, leaving a half-diamond interchange at Allegheny Avenue for I-95 southbound. A new northbound on-ramp would be added Castor Avenue to create a partial-clover interchange at Castor Avenue for I-95 northbound.

Allegheny Ave Interchange (AFI) (MPMS 79911) – The northbound off-ramp at Westmoreland Street will be removed and replaced with a northbound off-ramp at Castor Avenue. I-95 between Ann Street and Tioga Street will be widened and reconstructed.

Columbia-Ann St. N (GR3) (MPMS 79826) – This includes reconstruction and widening of I-95 northbound to include 4 through lanes plus a fifth auxiliary lane (12-0 lane widths) from Columbia Avenue to north of Ann Street. The existing substandard shoulder widths will be replaced with full width shoulders. This includes reconstruction of the northbound Girard Avenue Interchange ramps.

Columbia Street to Ann Street (GR1) (MPMS 79686, 79827) – In this area, most of Delaware Avenue and Richmond Street will be reconstructed and a temporary detour road will be constructed along Conrail's Port Richmond Yard. Delaware Avenue will be relocated onto Richmond Street and Aramingo Avenue will then form a T-intersection with these roadways. Girard Avenue and Aramingo Avenue will also be reconstructed as much as possible with completion of the Girard Avenue interchange ramps. This section also includes the SEPTA Route 15 Trolley relocation and associated catenaries work and relocation of Conrail's Belt and Loop Lines. Pedestrian and bicycle facilities are present along Delaware Avenue, Richmond Street, Aramingo Avenue and Girard Avenue. The pedestrian and bicycle facilities will be expanded under this project to include wider sidewalks, a shared-use trail and other pathways. Appropriate pedestrian access will be provided via signalized crossings, refuge medians, signing, hand/man signals and visible pavement markings.

Shackamaxon Street to Ann Street & Columbia (GIR, GR2) - Design (MPMS 17821.83640) – This project will widen and reconstruct I-95 in both directions at the Girard Avenue Interchange by providing 4 continuous through lanes in each direction. The existing substandard shoulders will be replaced with full width shoulders along most of the project length. This will also include retaining and sound barrier wall construction. The Girard Avenue Interchange will be reconfigured to improve access, operation and safety. Specifically, direct access will also be provided from I-95 southbound to Delaware Ave. Additional direct access is being provided from Girard and Delaware Avenues to I-95 southbound and from Aramingo Avenue to I-95 northbound. Additionally, Delaware Avenue between Columbia and Montgomery Ave will be reconstructed.

Airports, Seaports, and Freight Rail

Goal: Enhance the city and regional economy by reinforcing airports, seaports, and freight rail

Port

The River Wards District has extensive port facilities that line the majority of its waterfront above Lehigh Avenue. The Philadelphia Regional Port Authority (PRPA) has its headquarters on North Delaware Avenue at East Tioga Street. Many businesses in this area are linked to the port facilities or their imports in some way including building materials and chemical companies. The three major port facilities are:

Tioga Marine Terminal – PRPA owner; Delaware River Stevedores, Inc. operators; containers, fresh fruit, paper, plywood, cocoa beans, autos, palletized, project, breakbulk, steel shipments; six berths; 116 acres; DRPA headquarters

Kinder Morgan Liquid Terminal – Kinder Morgan owner; chemicals and petroleum shipments; storage of products; 35 acres

Pier H Port Richmond - Westway Terminals owner: specialty chemical storage and shipments

Freight

The River Wards District has extensive rail and truck freight networks that support the surrounding industrial, port and chemical and construction material industries. These freight networks create jobs, as well as barriers – both physical and visual.

There is extensive truck freight to and from the major port locations, I-95, and along Richmond Street and other arterials in the District. Truck interaction with neighborhood streets is one reason for the extension of North Delaware Avenue. The redesign of I-95 interchange and surrounding ramps and roadways is accounting for sufficient buffering of residential uses and pedestrian and bicycle roadway space from large vehicle traffic.

The most prominent freight infrastructure in the study area is the Lehigh Viaduct or the Richmond Industrial Track. This is a large earthen viaduct/berm structure that bisects the River Wards District. Some planning studies including the *Civic Vision for the Central Delaware* have shown the unused portion of this viaduct re-imagined as open space. Currently only one track is active on the viaduct. Major freight infrastructure in the area includes the following:

Northeast Corridor – Amtrak owner (with Conrail, SEPTA, and Norfolk-Southern having trackage rights); Passenger and freight rail; used by Conrail Shared Assets, Norfolk Southern, SEPTA and Amtrak; 4 tracks

Delair Branch – Conrail owner; Branches off of Northeast Corridor southeasterly near Frankford Avenue and Butler Street; it crosses over the Delaware River to New Jersey using the Delair Bridge – the oldest Delaware River Crossing, opened in 1896; used by Conrail Shared Assets, NJT Atlantic City Line; 1 to 2 tracks; interstate

Richmond Industrial Track – Conrail owner; cuts across the City from Nicetown Junction, near W Hunting Park Avenue and Pulaski Avenue and following Lehigh Avenue and then proceeding northeasterly within the District, paralleling Delaware River to Rohm & Haas facility near Richmond and Kirkbride Streets; used by Conrail Shared Assets with Philadelphia Belt Line having trackage rights; 1 track; interstate

Trenton Avenue Elevated – Conrail owner; branches off of Delair Branch southwesterly almost immediately at Northeast Corridor and follows what would be Trenton Avenue to its terminus at Westmoreland Street (one block from Frankford Avenue); used by Conrail Shared Assets; 1 track; shortline

Frankford Avenue Industrial Track – Conrail owned; branches off of Trenton Avenue Elevated near Castor Avenue, crosses Aramingo at-grade then continues onto the Honeywell Laboratories chemical facility in Bridesburg, near Tacony and Bridge Streets; used by Conrail Shared Assets; 1 track; shortline

Frankford Junction Freight Rail Yard – CSX owner; located at the junction of Delair, Trenton, and Northeast Corridor; used by Conrail, CSX, and Norfolk Southern

Major Transportation Infrastructure in the River Wards



UTILITIES

Philadelphia2035 Citywide Vision Goal: Adapt utility services to changing technology and consumption patterns.

SUMMARY OF EXISTING CONDITIONS

The River Wards District has the largest single concentration of active, major utility facilities within its immediate boundaries of any district in Philadelphia. This includes power generation, energy storage and distribution, waste water treatment, and solid waste processing. These facilities have historically been located on low-lying and flat parcels that provide access to maritime, rail, highway, and/or pipeline transportation. The locations and use of the District's utility facilities have evolved, and will continue to evolve, in response to changes in technology, regulations, ownership, and markets. Future decisions about utility facilities will have a direct impact on the economy and environment of the River Wards.

KEY ISSUES

Utility issues for the River Wards District include:

- Utilities face limited budgets and strict regulatory requirements in their efforts to maintain existing facilities in a state of good repair and enhance service with new technologies. Utilities are also increasingly aware of the need to consider adaptations to potential impacts of climate change.
- The District is in the combined sewer overflow (CSO) area of the Philadelphia Water Department (PWD). A large percentage of the District is covered by impervious surface, and several areas and infrastructure systems are subject to flooding in heavy storms. This makes the District an important area for PWD and partnership initiatives to manage stormwater and reduce risks from flooding.
- The Richmond Plant of the Philadelphia Gas Works (PGW) is the utility's principal facility for gas processing and for the storage of liquefied natural gas (LNG). The LNG capacity has received attention in recent years as an asset that could be further developed to serve new industrial and export customers. Expansion of LNG capabilities could have impacts on adjoining land uses.
- The River Wards hosts a variety of establishments that process solid waste for municipal and private customers. The truck traffic, noise, and dust generated by some of these facilities are considered a nuisance in adjoining neighborhoods.

MAJOR OPPORTUNITIES

The River Wards District presents several opportunities related to utility infrastructure and services:

- An adaptive reuse of the Delaware Generating Station property, a retired coal-fired power plant anticipated to be sold by Exelon, may help to implement recommendations of the Central Delaware Master Plan, adopted by PCPC, for the Penn Treaty Park area of the Delaware River waterfront.
- Improved regulatory compliance and technical innovation, such as the new facility at PWD's NE Water Pollution Control Plant that generates power from captured methane gas, can make the District's utility establishments more cost-effective and environmentally-friendly.
- The concentration of solid waste enterprises suggests opportunities for greater innovation in the use of land and technology, as well as cooperation to mitigate impacts on host neighborhoods.
- Building owners in the District can participate in various utility-sponsored programs, and evolving "smart" technologies, to encourage and maximize investments in energy and water efficiency.
- The District's flat topography and prevalence of flat roofs suggests ample opportunity to increase the use of solar power district-wide.
- PWD has implemented or is in the planning stages of numerous traditional and green infrastructure projects for stormwater management such as tree trenches, stormwater planters, and green roofs, among others.

UTILITIES (SPECIFIC TOPICS)

Consumption, Capacity, and Condition

Goal: Provide environmentally supportive, affordable, and reliable utility service to all customers

Utilities face financial challenges in maintaining reliability and affordability while complying with environmental and other regulatory requirements. PECO, PGW, and PWD generally appear to have capacity to meet forecasted service demands in the River Wards District. These utilities have programs to systematically upgrade their distribution systems and to encourage consumers to reduce consumption and save money.

Energy

Exelon Generation intends to sell the retired Delaware Generating Station on Beach Street, adjacent to Penn Treaty Park. Combustion turbines on the north end of the site are not part of the anticipated sale and will remain in service for use during extreme weather conditions. Adjacent PECO substations are expected to remain in place and in service. The Central Delaware Master Plan envisions this property, including the large power house, as a special

opportunity for adaptive reuse consistent with plan goals for increasing use of and access to the Delaware River waterfront.

Exelon's Richmond Station at Lewis Street and Delaware Avenue is also home to combustion turbines, major substations, and a frequency converter that conditions power for use by trains on AMTRAK's Northeast Corridor. No changes are currently planned by Exelon, PECO, or AMTRAK for this complex.

The PGW Richmond Plant on Castor Avenue features two, twelve-story LNG storage tanks constructed in the 1970s. These assets have been identified as an opportunity for the facility, whether PGW remains in city ownership or not, to play an expanded role in LNG processing and distribution related to Philadelphia's proximity to gas produced in the Marcellus shale formation. Expansion of activity at the Richmond Plant may bring new revenue and jobs, but may also increase truck and ship activity, air emissions, and safety hazards.

Water

The PWD has excess capacity to provide drinking water and process normal amounts of wastewater, but it is under an EPA consent decree to address CSOs that occur during heavy rains. The River Wards District has a combined sewer system as well as low-elevation areas and infrastructure that are prone to flooding in heavy storms. PWD's *Clean Waters/Green Cities* program is actively working to increase the capacity of public and private infrastructure to store stormwater and reduce the occurrence of CSOs (see Environmental Resources memo). The sprawling NE Water Pollution Control Plant, bounded by Richmond Street, Castor Avenue, Delaware Avenue, and Lewis Street, processes wastewater from Northeast Philadelphia and several adjoining municipalities.

The following links contain more information about water infrastructure:

http://www.phillywatersheds.org/what_were_doing/traditional_infrastructure

http://www.phillywatersheds.org/what_were_doing/green_infrastructure

The River Wards District's larger institutions and businesses may have the greatest site-specific potentials to better manage energy and water through retrofits to buildings and facilities. This may be particularly true of older facilities for which retrofits have been long deferred. Smaller establishments and households in the District, especially those in older structures that have not been upgraded, may also find savings through investments in energy and water efficiency.

Solid Waste

As host to a number of sites used for truck dispatch, trash transfer, and recycling of scrap metals, paper, and construction and demolition waste, the River Wards plays an important role in municipal and private-sector efforts to manage solid waste. The *Philadelphia2035 Citywide Vision* calls for the City to achieve reductions in waste through reuse, recycling, and composting of solid waste material. Also, the City's *Greenworks* sustainability plan sets a goal of diverting 70 percent of solid waste from landfills.

The following links contain more information about solid waste:

http://phila2035.org/wp-content/uploads/2012/06/Connect_Uilities.pdf
http://www.phila.gov/green/PDFs/Greenworks2013ProgressReport_Web.pdf

An adequate amount of properly-zoned and accessible land is required to accommodate cost-effective facilities necessary to support these goals. However, compliance with environmental and safety regulations, as well as management of truck traffic, is also essential to ensure that waste management facilities do not unduly impact adjoining neighbors and communities.

Broadband Infrastructure

Goal: Reinforce access to and use of broadband telecommunications infrastructure as a vital public utility

Element 5.2 in the Citywide Vision of *Philadelphia2035* calls for the use of broadband assets to help bridge the ‘digital divide’, maximize the efficiency of city services, and foster innovation and economic development. These recommendations largely pertain to Citywide initiatives and have found few specific applications in *Philadelphia2035* district plans so far. However, it is noteworthy that River Wards District residents in Census tracts along Kensington Avenue appeared, in 2010, to have among the lowest rates of household broadband adoption in Philadelphia (Knight Foundation, 2010. Reported in Citywide Vision, p 129).

RECOMMENDED FOLLOW-UP

- Work with PECO, PGW, and PWD to confirm the status of existing utility facilities, identify potential needs for additional land, and repurpose surplus assets.
- Identify utility sites or rights of way where needed infrastructure upgrades may be combined with community benefits to enhance economic development, transportation, recreation and open space, and/or environmental performance.
- Explore ways for solid waste enterprises and regulatory authorities to spur innovation in the use of land and technology, compliance with applicable laws, and cooperation to mitigate impacts on host neighborhoods.
- Continue the exploration, with PWD and other partners, of appropriate strategies and sites for green and gray infrastructure to manage stormwater and to responsibly address public/private risks associated with existing and potential changes in flood risk.
- Engage district stakeholders to identify potential opportunities for cost-effective investments in energy and water efficiency of district properties and buildings.
- Identify and highlight current city and partnership initiatives to improve access to broadband telecommunications in disadvantaged communities of the River Wards District.

OPEN SPACE

Philadelphia2035 Citywide Vision Goal: Increase equitable access to our open space resources.

SUMMARY OF EXISTING CONDITIONS

Open space and trails in the River Wards District is a changing landscape of new trails, upgraded parks, and neighborhood amenities. There are several areas of the District which lack publicly accessible green space, and waterfront access and amenities are limited.

Parks, Recreation, and Open Space

Major Parks & Recreation Facilities

The District is home to nineteen public parks, five of which include a recreation center. These parks range in size from less than an acre to slightly under ten acres. Most of the District's parks are small, neighborhood serving public squares and playgrounds within the street grid. Though the District has significant waterfront frontage, much of this space is taken by active or former industrial uses, therefore, riverfront parks are rare.

Major Parks

Straddling the border between the River Wards and the Central District in Fishtown, Penn Treaty Park is the District's premier historic and riverfront park. It was dedicated in 1893 to honor a peace treaty William Penn made with the local Lenape people two hundred years prior. In 2010, the Friends of Penn Treaty Park planted a descendant of the elm tree under which the treaty was signed in the park. Pulaski Park is the District's other waterfront park, and was recently renovated and expanded. It now features a new fishing area and will soon connect to the Delaware River Trail.

Monkiewicz Playground in Port Richmond is the District's largest active-use park at approximately ten acres. It features a pool, basketball courts, and ball fields, as well as day camps and extended care for toddlers and youth. The park is bisected by I-95, which impacts how it is used by park goers. The east side of the park is surrounded by industrial land and less used than the west side, which is adjacent to residential and commercial areas. The footprint, access, and size of this park may change as I-95 is redeveloped in the District over the next 10 years.

Cione Playground in Olde Richmond is the District's second largest active-use park at about five acres. This park's state of disrepair led in 2013 to the formation of the Friends of Cione community group, which has begun raising money for improvements. The park is directly adjacent to both Lehigh and Aramingo Avenues in a high vehicular traffic area, as well as the Lehigh Viaduct, a potential trail development area.

Harrowgate Park in Kensington is the District's second largest passive-use park after Penn Treaty Park. Originally the site of a spring, around which the town of Harrowgate was built, the park has fallen on hard times since the early 1980s, acquiring a reputation as a drug hotspot. By contrast, Campbell Square, similarly designed, has enjoyed success as a neighborhood gathering spot since the early 1990s due to the actions of the Friends of Campbell Square community group and frequent programming.

Several scattered green and hardscape parks of an acre or less round out the District's open spaces. Examples of the former include Palmer Park in Fishtown and Powers Park in Port Richmond; examples of the latter include Black Coyle & McBride Playground in East Kensington and Frank Glavin Playground in Port Richmond. Notable features of these include a regular farmer's market at Palmer Park and a skate park at McBride Playground.

Major Recreation Facilities

- Fishtown Recreation Center: Sitting on 1.4 acres, this facility has a hockey rink and three basketball courts.
- Cohocksink Recreation Center: Sitting on 4.8 acres, this facility has a pool, soccer court, a sports field, two ballfields and two basketball courts.
- Samuel Recreation Center: Sitting on 2.1 acres, this facility has a pool, a sports field, two ballfields and two basketball courts.
- Heitzman Recreation Center: Sitting on 2.7 acres, this facility has a hockey court, a pool, two ballfields and two basketball courts.
- Bridesburg Recreation Center: Sitting on 8.5 acres, this facility has a pool, a sports field, two ballfields, two basketball courts and two tennis courts. This center is notable for being the only major publicly owned open space easily accessible from the Bridesburg neighborhood. It is also adjacent to a large, vacant waterfront parcel.

New and Proposed Parks

General Pulaski Park located on the Delaware River waterfront at Allegheny and N. Delaware Avenue in Port Richmond. The park is newly renovated in 2013 and is frequented by fishing enthusiasts and others who enjoy the waterfront. The waterfront surrounding Pulaski Park is inaccessible to the public, as it serves the Tioga Marine Terminal.

A parcel along the North Delaware Avenue roadway extension project in Bridesburg is a planned new park as part of a City land swap with Dietz & Watson, which is developing land just north of the District. This parcel at the waterfront and Orthodox Street, will be a key public access point to the water in the Bridesburg neighborhood where there is little waterfront access.

Trails

Existing Trails

There is one riverfront trail within the District, the Port Richmond Trail, which is a sidepath along Allegheny Avenue and North Delaware Avenue between Monkiewicz Playground and Lewis Street. The project was planned and managed by the Delaware River City Corporation and

funded by federal Transportation Investment Generating Economic Recovery (TIGER) funds and other sources. The trail offers a safe and designated space for pedestrians and cyclists along the primarily industrial section of Allegheny and North Delaware Avenues. This is the southernmost portion of the North Delaware Greenway, which will ultimately extend north to the City boundary with Bucks County.

Proposed Trails

There are several proposed trails in the District, primarily along the waterfront, which are listed below in order from north to south:

- One planned project is a future phasing of the North Delaware Avenue Extension sidepath, first north from Orthodox to Buckius and then over Old Frankford Creek to Tacony Street, the northern boundary of the District. This project is in design and funding is pending through the Streets Department, PennDOT, and other sources. The sidepath along this portion of the roadway will also be designed in coordination with City agencies and serve as the North Delaware Greenway.
- There is one trail currently under construction in the District, the North Delaware Avenue Extension sidepath from Lewis to Orthodox, which connects to the above described planned project. The sidepath will run along North Delaware between Lewis Street and Orthodox Street over the Frankford Creek and connect to the Port Richmond Trail. The sidepath is a pedestrian and bicycle facility that is adjacent to the roadway and will serve as a portion of the North Delaware Greenway. The Streets Department is constructing the extension and worked with other City agencies and the Delaware River City Corporation on the design of the sidepath.
- The Frankford Creek Greenway is planned from the mouth of the Frankford Creek, near the intersection of Lewis Street and North Delaware Avenue, to Tacony Creek Park. The first phase is a combination sidepath and on-road alignment along Lewis Street, Richmond Street, and Wheatsheaf Lane to connect Aramingo Avenue to North Delaware Avenue. This phase is under consideration for state Transportation Alternatives Program funding for construction and PA Department of Conservation and Natural Resources funding for final design funding. Both program awards will be announced this fall.
- The second phase of the Frankford Creek Greenway is also within the District and involves a sidepath along Aramingo Avenue from Wheatsheaf Lane to a newly-planned Adams Avenue Connector, which is part of the I-95 Betsy Ross Interchange improvement. PennDOT will design and build this portion with guidance from the City. It extends from Aramingo along the planned Adams Avenue to Torresdale Avenue.
- The final phase of the Frankford Creek Greenway is between Torresdale Avenue and Wingohocking Avenue and involves a combination of sidepath, on-road, and off-road alignments. The alignment along this portion is still under study, as there are several property acquisition projects likely needed to connect the end points. Each of the phases

of the Frankford Creek Greenway are described in detail in the *Frankford Creek Greenway Feasibility Study* (Planning Commission, Philadelphia Parks & Recreation, 2014).

- Another proposed trail is the Port Richmond Connector Trail, which will connect the Port Richmond Trail at Allegheny to Penn Treaty Park. This section of trail is not yet well defined and a feasibility study is needed for a waterfront trail. The development of the trail and the potential alignment alternatives will depend on the I-95 improvement project and waterfront redevelopment, which could provide several alternative alignments as development occurs or as temporary staging roads are built and abandoned. The City is currently in discussion with PennDOT on potential routes and timing for a segment of trail adjacent to I-95 in this area. In addition, PennDOT will construct sections of pedestrian and bicycle trails as part of the Girard/Aramingo Interchange improvement to better connect the reconstructed Richmond Street to the neighborhood to the west of the expressway. The Delaware River Waterfront Corporation is in talks with the City and PennDOT on these sections.
- The final proposed trail is the Lehigh Viaduct Trail, which would run along the above-grade Lehigh Viaduct from the waterfront, through the District, and into Kensington and North Philadelphia. This trail is currently at the conceptual stage and PCPC is seeking funding and project partners for a feasibility study.

Open Space

Public Open Space and Undeveloped Land

There are significant opportunities for redevelopment and new open space in the River Wards along the waterfront. These opportunities do not necessarily conflict with the waterfront's status as an industrial area; for instance, the PIDC's 2010 *Industrial Land & Market Strategy* provides an example of how the partially vacant Lehigh Avenue Rail Viaduct Terminus might be redeveloped for modern industrial uses which implement stormwater infrastructure projects and open up public river access.

Two major sites are currently entirely vacant. One is the former Philadelphia Coke Co. site and the adjacent land. The other is a parcel adjacent to the viaduct terminus, at the intersection of Richmond Street and Schirra Drive. Nine acres adjacent to the Coke site are newly owned by the Department of Parks & Recreation, while the rest of the 70+ acres are owned by National Grid, an international utility company; for years, the Planning Commission and others have been talking with National Grid about development opportunities for the site.

The largest concentrations of small vacant parcels in the District can be found in Kensington, on either side of the viaduct. Five vacant parcels in East Kensington host community gardens, but community gardens are otherwise not widespread in the District.

Walkable Access to Public Open Space

The Delaware Expressway and adjacent industrial lands present the biggest barriers to pedestrians wanting to access parks and trails along the Delaware waterfront. These barriers are psychological as well as physical and are a function of the street environment the highway and industrial uses create; dark underpasses, wide and confusing intersections, and overgrown edges of industrial properties are unattractive but not insurmountable obstacles to those determined to reach the waterfront. Of the proposed trails in the District, the Port Richmond Connector Trail and the Lehigh Viaduct Trail are closest to the District's residential neighborhoods, and so present the District's best opportunity for linking local residents into the city's trail system.

Access to the District's interior neighborhood parks is generally good, with few barriers presented by the street grid's pedestrian-scaled, regular crossings. However, not all areas of the District's neighborhoods are within easy walking distance of a park. Areas outside a ten-minute walking radius of green space include eastern Bridesburg and Frankford Valley, central Kensington, and the eastern (more scarcely populated) section of Port Richmond. The residential intersection of Fishtown and Olde Richmond; and eastern East Kensington, towards the Lehigh Viaduct, could also benefit from improved access to parks and recreation.

KEY ISSUES

The following are the most important park, recreation, and trail issues the River Wards District is facing over the next ten years:

- Gaps in the walkable access to public open space walkshed
- Funding for maintenance of existing park and recreation facilities
- Funding for new trails and park and recreation facilities
- Coordination with other City agencies, PennDOT, major redevelopment parcels, and industrial property development for partnerships on waterfront access and trail development
- Lack of wayfinding or directional signage to and between neighborhoods, trails and park and recreation facilities

MAJOR OPPORTUNITIES

There are significant open space and trail opportunities in the River Wards District.

Locations for additional greening or park facilities to fill gaps in the walkable access to public open space and for trail development and public access to the waterfront include:

- Lehigh Viaduct Trail
- North Delaware Greenway
- Frankford Creek Greenway
- Delaware River Trail
- Development sites along the Delaware River

Access to park and recreation facilities can be improved by minimizing or decreasing barriers between neighborhoods and facilities, including:

- Green Connector Streets between and to existing park and recreation and trail facilities, such as Bridge Street, Lehigh Avenue, Richmond Street, and Columbia Avenue
- Wayfinding signage between neighborhoods and trail and park and recreation facilities and public waterfront areas
- Safety improvements, improved sidewalk facilities, and traffic calming along major roadways, such as Aramingo Avenue, Allegheny Avenue, Lehigh Avenue, Richmond Street, and Bridge Street, and other barriers, such as elevated and sunken railroad infrastructure and highway interchanges

RECOMMENDED FOLLOW UP

Next steps include targeting planning and recommendations on the key issues and recommendations in this memo, including:

- Prioritize park and trail improvement projects and feasibility studies.
- Focus capital improvement dollars on the most-needed park and recreation assets, in close collaboration with Park & Recreation staff.
- Address pedestrian and bicycle connections across major neighborhood barriers, such as the Lehigh Viaduct, I-95, port and industrial facilities, and major arterial roadways.
- Continue work with PennDOT, Streets, Parks & Recreation, and other entities on development of on-going projects to ensure inclusion of public-serving open space and trail amenities.

ENVIRONMENTAL RESOURCES

Philadelphia2035 Citywide Vision Goal: Fulfill city obligations to meet ambitious federal standards.

SUMMARY OF EXISTING CONDITIONS

The River Wards District shares with other city districts the same, Citywide obligation to make improvements to the city's and region's air and water quality, yet the River Wards District also has a unique set of long-standing environmental issues that require further understanding and action. The River Wards is home to petrochemical, waste treatment, trash transfer, and recycling facilities; traversed by a high-volume interstate that is currently being reconstructed; visited by numerous diesel-emitting trucks, trains, and ships; developed on low ground substantially covered with impervious surfaces; and, ranked among the city districts with the lowest amount of tree cover.

Over a period of decades, air quality conditions associated with heavy industry and transportation vehicles have markedly improved in response to citizen activism, regulatory enforcement, closure of several heavy emitters, and the introduction of more efficient and cleaner processes. Residents have been working with agencies and non-profits to improve stormwater management and plant trees.

KEY ISSUES

The following are important environmental issues facing the River Wards District:

- The River Wards has significant mobile and stationary sources of air contamination. Changes in land use and transportation patterns and practices can help reduce risks from air pollution, but certain types of increased industrial activity could also increase risks caused by air pollution.
- Water quality is affected by the District's combined sewer system, and large percentage of impervious surface. Properties and infrastructure in some areas are impacted by low elevation, high water table, and a susceptibility to flooding.
- The River Wards' minimal tree cover provides few benefits for air quality, stormwater management, or summer cooling.

MAJOR OPPORTUNITIES

Opportunities to improve environmental outcomes in the River Wards District include:

- Ongoing monitoring, compliance and partnership efforts, and management and technological innovations can continue to reduce air contamination in the River Wards.
- Development projects can help to improve air quality by incorporating energy-efficient building strategies and increasing tree cover. Projects can also reduce per-capita

contributions to air pollution from transportation by creating greater intensity of uses around walkable, bikeable, and transit-oriented centers.

- Continued cooperation among agencies and property owners can strengthen stormwater management planning and resources, spur waterfront restoration, and provide storm flood relief in areas susceptible to flooding.
- Public facilities, public streets, and parking lots offer near-term opportunities to increase tree cover.

ENVIRONMENTAL RESOURCES

Air Quality

Citywide Goal: Improve air quality within the city and region

The 2012 Philadelphia Air Quality Report, produced by the Philadelphia Department of Public Health, Air Management Services (AMS), indicates that Citywide air quality is improving, although the Philadelphia region remains non-compliant with Federal standards for ground level ozone and PM2.5. Ground level ozone (aka, smog) is formed by volatile organic compounds (VOCs) and nitrogen oxides (NOx) reacting in the presence of heat and sunlight. Ozone is particularly detrimental to the young, old, and infirmed. PM2.5, or 'fine' particulate matter, is responsible for short term respiratory irritation and long term respiratory and cardio-vascular disease illnesses. Fine particles in the air may result from fuel combustion from vehicles, power generators, and/or industry.

Vitally-needed federal transportation funds can be withheld from the Philadelphia region if progress towards air quality compliance is not demonstrated. Land use changes and transportation investments within the River Wards District can help continue progress toward compliance by reducing vehicle miles traveled (VMT) and reducing emissions from industries, trucks, trains, and ships.

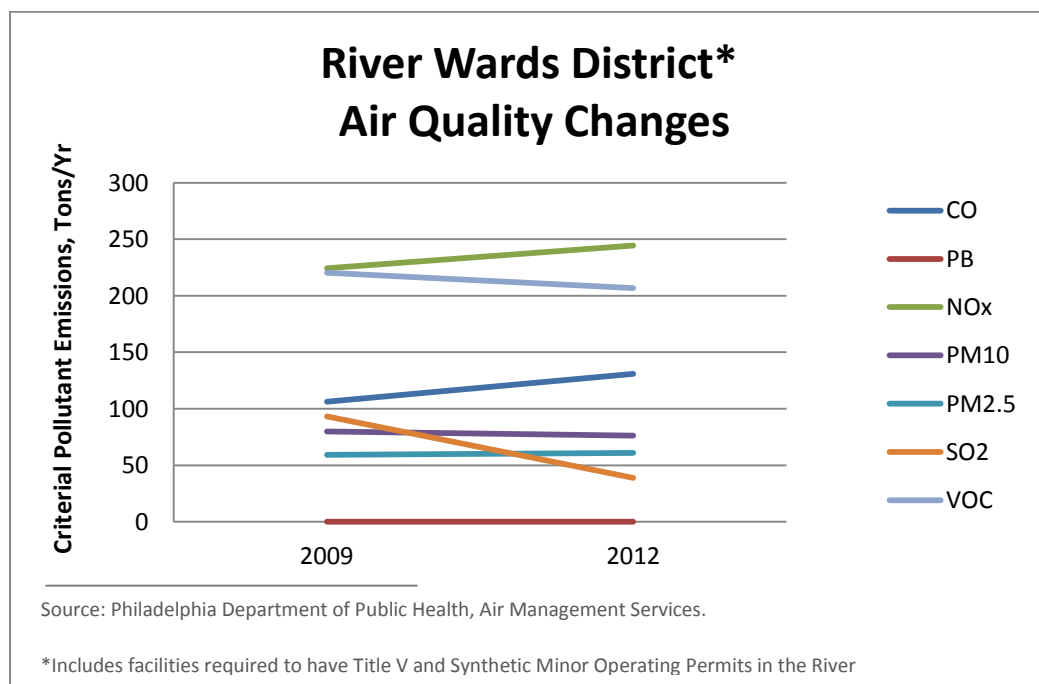
The River Wards District has an industrial legacy that continues today in its energy and chemical plants, rail facilities, trucking terminals, and ports. Overall, the District hosts a large share of the city's waste management, utilities, construction, manufacturing, wholesale, retail, and transportation industry establishments. These environmentally intense activities, coupled with associated auto and freight traffic, combine to increase risks for local air quality. The River Wards also hosts a number of auto-centric streets and shopping centers, which promotes single-occupant vehicle use, a major source of PM2.5.

The 2012 Philadelphia Air Quality Report also describes the city's performance in reducing hazardous air pollutants (HAPs), or toxins. HAPs are emitted from stationary sources (large industrial facilities), area sources (dry cleaners and household uses), as well as mobile sources (trucks and buses). The River Wards contains significant mobile and stationary sources of HAPs. The AMS air monitoring site at 2800 Lewis Street is the most comprehensive air quality monitoring site in the city, measuring most known contaminants.

Fixed Point Sources of Air Pollution

AMS regulates facility emissions through permits and licenses allowing companies to operate equipment that emits or controls air pollution. Within the River Wards District, the Exelon Generating Company at the Richmond and Delaware stations, Honeywell Frankford, Kinder Morgan, Northeast Wastewater Pollution Control Plant, and Philadelphia Gas Works Richmond Plant all hold Title V licenses for their toxic emissions. Synthetic Minor Operating permits are required by facilities with the capacity to exceed any of the Title V thresholds, but that do not do so in practice. PTR Baler & Compactor, Riverside Materials Inc, Smith Edwards Dunlap Company, and Temple University Hospital Episcopal Campus all hold Synthetic Minor Operating permits.

Emissions at each of the named facilities were captured in 2009 and 2012. During that time, increases included carbon (CO) emissions, by 19 percent; NO_x, by eight percent; and PM_{2.5}, by three percent. Emission decreases during that time included sulfur oxides (SO_x) by 140 percent, VOC by six percent and PM₁₀ by five percent. The Honeywell Frankford plant is the District's biggest emissions contributor. The plant, acquired from Sunoco in 2011, primarily manufactures phenol and acetone, which are used in the manufacture of polymers, fibers, and resins. Phenol was identified as a toxic air contaminant by the Environmental Protection Agency (EPA) in 1993, and is a strong eye and respiratory irritant.



Highway Vehicle, Non-Road, and Area Sources of Air Pollution

Highway vehicle, non-road, and area sources are major contributors to VOCs and NOx. Monitoring such varied and scattered sources requires measuring behavior-related proxies to gauge local impacts. Collectively, these sources represent a significant amount of emissions.

Highway vehicle sources refer to emissions from cars, trucks, motorcycles, and buses. I-95 extends 4.5 miles across the River Wards, including four major interchanges with high-traffic arterials and the Betsy Ross Bridge. The current redesign of I-95 will eliminate “lane drops” that have contributed to traffic bottlenecks and vehicle idling, yet congestion and idling from construction delays will occur for the next decade. Truck traffic, generated by the District’s industrial activities, and school bus services increase PM10 and PM2.5 emissions. Exposure to highway vehicle sources increases exponentially with increased proximity to a highway. The elderly, young, and medically fragile are especially vulnerable to the health effects caused by repeated, close exposure (i.e. respiratory illness and cancer).

Analysis of worker inflow/outflow shows 91 percent of employed residents work outside the District and 88 percent enter the District for work. About a third of employed residents work more than 10 miles away; and, over a quarter of district employees live more than 10 miles away. The western side of the District along Front and Kensington Avenues hosts bike lanes and SEPTA MFL and bus service, with the potential for transit-supportive development. Auto-dependency tends to be higher among district households farther from the MFL and physically separated from pedestrian-accessible destinations.

Richmond Street parallels the Delaware River and carries many trucks that need local highway access to specific sites in the River Wards. Bridesburg and Port Richmond are significantly impacted by the resultant congestion, noise, and diesel emissions. The extension of Delaware Avenue through Bridesburg will provide an alternative route that is intended to reduce truck volumes through residential areas.

Non-road engine sources in the River Wards include trains, ships, and construction equipment. VOC-emitting diesel train engines are used for NJTransit service to Atlantic City and for CONRAIL service to Port Richmond, Frankford Junction, and Honeywell, as well as across the Delair Bridge. The local air quality impacts of electric passenger trains are negligible. These include various SEPTA lines and AMTRAK’s Northeast Corridor. Diesel emissions from ships at the District’s port facilities also aggravate local air quality. Construction equipment exhaust and dust from work on I-95 will continue to impact the District’s air quality for another decade.

Area sources of air pollution consist of commercial, solvent use, waste disposal, and similar categories that do not individually emit as much as a point source. The District’s density of auto body shops, dry cleaners, and gas stations all contribute to increased hazardous air pollutants. Philadelphia adheres to the EPA’s programs to reduce the impacts of area sources, the National Emission Standards for Hazardous Air Pollutants, and the New Source Performance Standards.

Water Quality

Goal: Improve the quality and management of our water and wetland resources

The River Wards district is part of the Delaware River watershed and is part of the city's combined sewer system. The combination of the District's low elevation, tidal waterfronts, flat topography, and development over historic streams creates a significant set of challenges for water management (see also: Land Management, Utilities, and Open Space memos).

In districts north and south of the River Wards, important initial steps are being taken by public and private partners to restore formerly industrial lands of the Delaware River waterfront through the creation of wetland parks and trails. These assets provide the combined benefits of ecological restoration, public recreational access, filtering run-off, and buffering people and property from river flooding. Examples include:

- Lardner Point Park, Delaware River City Corporation (DRCC)
- Washington Avenue Green, Delaware River Waterfront Corporation (DRWC)

Early actions are also being taken in the River Wards district to directly advance compliance by the Philadelphia Water Department (PWD) with the 2011-2012 agreements with the US EPA and Pennsylvania Department of Environmental Protection to reduce combined sewer overflows. PWD's *Green City/Clean Waters* program strives, through regulation of development and direct investment, to reduce the amount of stormwater that overburdens wastewater treatment plants during intense periods of precipitation. The overburdened plants allow untreated sewage to be released into Philadelphia's rivers. In the past few years, PWD and others have installed green stormwater infrastructure and stormwater retention features to capture and delay the release of stormwater into the ground where possible, or into the combined sewer system where not possible. Examples include:

- Infiltration/storage trenches
- Stormwater tree trenches
- Rain gardens
- Stormwater bumpouts and basins

These early management steps help set the stage for further studies, plans, and actions to guide future water management policies and investments. Under present conditions, the River Wards district already has areas with high water tables that do not readily absorb infiltrated stormwater, low-lying neighborhoods and infrastructure subject to flooding during heavy rains and high tides, and waterfront acreage within the 100 and 500 year flood plains. In the future, analysis of climate change models for Philadelphia indicates that the city will experience increased precipitation and continued rise in mean sea level. This could mean more stormwater to manage as well as an expansion of the acreage regularly at risk from flooding due to heavy rain and storm surge.

The River Wards needs to strategically reduce impervious surface where practicable, implement green and grey infrastructure, and gradually adapt property and infrastructure to manage water-related risks.

Tree Cover

Goal: Increase tree coverage equitably throughout the city

The River Wards District ranks with the Lower South and South Districts as having the lowest rates of tree coverage in Philadelphia. A 2011 report, completed in collaboration with the Philadelphia Department of Parks and Recreation, indicates that tree cover in the River Wards District is less than seven percent. This is significantly lower than the Citywide total of 20 percent. (http://www.fs.fed.us/nrs/utc/reports/UTC_Report_Philadelphia.pdf).

A number of local groups, including Philly Tree People (<http://www.phillytreepeople.org>), have been active in planting and maintaining trees in the District. These groups recognize that trees have many benefits, including the ability to improve air quality, reduce air temperatures during heat waves, and absorb stormwater.

The most abundant tree planting opportunities in the densely developed River Wards district would appear to be along publicly held properties and rights of way, in parking lots, within existing and planned park areas, and within private properties where uses and layouts are compatible with the planting of additional trees. Certain developments are also now required by city ordinance to use cool roofing materials, along with planting trees.

RECOMMENDED FOLLOW-UP

The River Wards District Plan can help to communicate the environmental and other related benefits of continued, coordinated improvements to help foster positive environmental outcomes. These benefits may help attract and sustain additional commitments from public, private, and community partners.

- Work with the Clean Air Council and local universities to learn more about the findings and implications of neighborhood and street-scale monitoring of air quality.
- Explore ways in which Idle Free Philly, an initiative of the City of Philadelphia and the Clear Air Council, can help concerned citizens to report idling repeat offenders.
- Understand steps that industrial and transportation firms are taking, or could take, to decrease air emissions.
- Consider additional ways for I-95 projects to help increase tree cover, manage stormwater, improve multi-modal transportation, and buffer traffic from sensitive populations.
- Identify land use and zoning strategies to reduce automobile dependence, strengthen neighborhood-serving commercial services near housing concentrations, and broaden the mix of uses at commercial and transit nodes.
- Encourage commercial and institutional property owners who face increased PWD stormwater fees to consider strategies that can improve stormwater management.
- Work with PWD, and other partners, to identify emerging stormwater management and flood relief challenges, and identify areas where longer-term land use and infrastructure changes may be needed to manage risks associated with projected changes in sea level and storm severity.

- Document initiatives by public and private tree planting groups and work with tree advocates to address remaining barriers to increased tree cover in the River Wards.
- Coordinate River Wards environmental findings and efforts with the EPA-funded Lower Frankford Creek Watershed Brownfields Area-Wide Plan.

HISTORIC PRESERVATION

Philadelphia2035 Citywide Vision Goal: Preserve and reuse historic resources.

SUMMARY OF EXISTING CONDITIONS

Created by City Council ordinance in 1955, reorganized in 1985, and reorganized again under Section 14-1000 of the Philadelphia Code in 2012, the Philadelphia Historical Commission is responsible for ensuring the preservation of historically significant buildings, structures, sites, objects, interiors, and districts in the city. The Commission identifies and designates historic resources, listing them on the Philadelphia Register of Historic Places, and then regulates those resources for preservation through the City's building and other permitting processes.

Within the River Wards Planning District, 31 properties (excluding condominium units) are listed on the Philadelphia Register. There are approximately 12,000 properties (23,000 if condominium units are included) in total on the Philadelphia Register of Historic Places. The addresses of the historically-designated properties in the River Wards Planning District are provided below:

- 1301 Beach Street, Penn Treaty Park
- 1118 through 1137 E Berks Street, residential buildings
- 1036-38 Crease Street, Kensington Soup Kitchen
- 2136-42 E Dauphin Street, 26th District Police Station
- 262 E Girard Avenue, Green Tree Tavern
- 410-22 E Girard Avenue, First Presbyterian Church of Kensington
- 1400-02 E Montgomery Avenue, Palmer Burial Ground
- 122 through 126 Richmond Street, residential buildings
- 300-04 Richmond Street, Kensington M.E. Church
- 308-310 Richmond Street, Richmond Fire Company
- 1120 and 1122 Shackamaxon Street, residential buildings
- 212 and 214, and 506 through 512 E Wilkey Street, residential buildings

Currently, there are no historic districts within River Wards Planning District listed on the Philadelphia Register. It should be noted that all of the locally designated properties fall within the Fishtown neighborhood; none lies north of E. Norris Street in the neighborhoods of Kensington, Port Richmond, or Bridesburg. Of the designated properties, 22 are residential, three are governmental, two are religious, one is recreational, one is commercial, one is institutional, and one is a non-denominational cemetery site. Two residential properties still listed on the Philadelphia Register were demolished many years ago, prior to the Historical Commission's authority to prevent demolition; these properties, 122 Richmond Street and 700 E Thompson Street, should be rescinded from the Register.

The National Park Service, a federal agency, and the Pennsylvania Historical & Museum Commission, a state agency, maintain the National Register of Historic Places in the Commonwealth of Pennsylvania. The federal and state governments protect historic resources by factoring historic preservation into their decision-making whenever they are involved with construction projects directly or through funding, permits, licenses, or other indirect means that may impact historic resources listed on and eligible for the National Register. There are 11 National Register listed properties in the River Wards District, including seven public school buildings listed as elements of the Philadelphia Schools Thematic Historic District:

- 109 E Wilkey Street, Daniel Boone School
- 1050 E Montgomery Avenue, George Chandler School
- 1951 E Clearfield Street, Russell Conwell School
- 2075 E Cumberland Street, Kensington High School for Girls
- 2942 Belgrade Street, Richmond School
- 2950 Memphis Street, John Paul Jones Jr. High School
- 3340 Richmond Street, James Martin School

The following buildings within the River Wards Planning District are listed individually on the National Register:

- 262 E Girard Avenue, Green Tree Tavern
- 2142 E Dauphin Street, 26th District Police Station
- 2410 E York Street, H.W. Butterworth Company
- 2468 Coral Street, Beatty's Mills

One National Register listed Thematic Historic District and four eligible Historic Districts are located within the River Wards Planning District:

- Kensington Industrial Thematic District (Listed: 2012)
- Fishtown Historic District (Determination of Eligibility (DOE): 1994)
- Richmond Industrial Historic District (DOE: 1994)
- Port Richmond Historic District (DOE: 2014)
- Kensington/Allegheny Historic District (DOE: 1999)

RECOMMENDED FOLLOW-UP

The staff of the Historical Commission has preliminarily surveyed the Planning District and finds that there are many significant industrial, religious, institutional, commercial, and residential sites that likely satisfy one or more Criteria for Designation to the Philadelphia Register of Historic Places as outlined in the historic preservation ordinance, Section 14-1000 of the Philadelphia Code. Given the cursory nature of this survey, priorities for consideration for designation have not been assigned to the potential historic resources. Additional survey work is recommended within the River Wards to fully assess the extant historic resources in the District; areas of particular interest are described below.

The following recommendations have not been vetted by the full 14-member Historical Commission.

- **Consider Properties for Potential Designation to the Philadelphia Register of Historic Places**
  - ***Industrial***
    - 2155 Castor Avenue, Schlichter Jute & Cordage Factory/Sterling Paper Company, c.1885
    - 2000 E Dreer Street, Harbison's Dairies (c. 1900) & Milk Bottle Water Tower (c. 1914)
    - 1100-02 N Delaware Avenue, Edward Corner Marine Merchandise Warehouse, 1921
    - 1101-27 Frankford Avenue, Landenberger Hosiery Complex/Morse Elevator Works, c.1851-1920
    - 2301 N Front Street, Bromley Mill, c. 1870
    - 2601 Belgrade Street, Ladder 16 Firehouse, 1912
    - 1325 N Beach Street, Delaware Power Station, c. 1920
    - 3895-99 Richmond Street, PECO Richmond Generating Station, 1925
  - ***Religious***
    - 4268 Richmond Street, Most Holy Redeemer Cemetery, c.1883-87 (in particular, gatehouse)
    - 2639 E Allegheny Avenue, St. Adalbert Polish Roman Catholic Church, 1909
    - 3200 Belgrade Street (E Allegheny Ave and Belgrade St), Nativity of the Blessed Virgin Mary (BVM) Catholic Church, c. 1890
    - 2424 E Allegheny Avenue (E Allegheny Ave and Gaul St), Our Lady Help of Christians, c.1898
    - 1403-09 Marlborough Street, Ebenezer Church (now Pilgrim Congregational United Church of Christ), c. 1841
    - 1600-06 E Berks Street, St. Laurentius Catholic Church, c. 1890
    - 2651 Buckius Street, All Saints Catholic Parish, c.1861
    - 2645 E Venango Street, St. George's Chapel (now Grace Church and the Incarnation), 1888

- ***Institutional/Other***
  - 1801 E Huntingdon Street, Textile National Bank, c. 1900
  - 2965 Almond Street/2600 E Indiana Avenue, Carnegie Library, Free Library of Philadelphia, Richmond Branch, c. 1910
  - 2624 Haworth Street, Bridesburg/Irving School (NR Listed), c. 1847
  - 2715 E Allegheny Avenue, Lithuanian Music Hall, 1908
  - 1340 Frankford Avenue, Lutheran Settlement House, c. 1911
  - 1601 E Palmer Street, St. Mary's Hospital, c. 1915 (original building c. 1866, with additions through the early 20th century) c. 1915
  - 1420 Frankford Avenue, 10th District Police Station, c. 1890
- ***Residential***
  - 2176 E York Street, Dr. Thomas Skinner House, by Frank Furness, 1886
  - 2162-64 E Norris St, Fishtown
  - 4802 Garden Street, Bridesburg
  - 2616/18 Bridge Street, Bridesburg
  - 2700 Blocks of Kirkbride Street and Pratt Street, Bridesburg
  - 4700 Blocks of Mercer Street and Garden Street, Bridesburg
  - 325-31 E Allen Street, Fishtown
  - 1001-1003, 1005, and 1007 Frankford Avenue, Fishtown
  - 1144 and 1146 Frankford Avenue, Fishtown
  - 1300-08 and 1404 Marlborough Street, Fishtown
- **Re-survey Eligible Fishtown Historic District**
  - It has been more than 20 years since the Fishtown Historic District was surveyed and determined eligible for the National Register of Historic Places. Since that time, rapid development has occurred, and continues to occur, in the area. A new survey should be conducted that identifies potentially significant properties and evaluates and adjusts the boundaries of the eligible district.
- **Survey Bridesburg for Potential Individual Designations and/or the Establishment of a Conservation District**
  - Developed largely in isolation from other parts of Philadelphia, Bridesburg is an often overlooked locale with a dynamic social and industrial heritage. Despite its isolation, an initial cursory survey indicates that it retains its historic scale and many historic buildings that speak to its significant developmental history. In particular, for a neighborhood measuring approximately one square mile, Bridesburg is home to five extant historic churches, a parochial school, and a large non-denominational cemetery. These churches, and the residences that surround them, represent the immigrant communities that established themselves in Bridesburg due to the availability of industrial-related jobs from the mid- to late-19th century through the third quarter of the 20th century.

- **Encourage Adaptive Reuse of Industrial Buildings and Listing on the National Register**

- While not all of the extant industrial buildings in the River Wards district may be significant enough to qualify for designation on the Philadelphia Register of Historic Places, the creative reuse of buildings has numerous preservation, environmental, and economic benefits. The buildings not only speak to the history of the area, but their reuse also provides sustainable development, bypassing wasteful demolition and reconstruction processes.

One incentive for reuse is the historic preservation tax credits available to properties listed on the National Register of Historic Places. The nineteen textile-related industrial buildings in the River Wards already listed on the National Register as part of the Kensington Textile Thematic District qualify for such tax credits, as would numerous other buildings not currently designated.

PUBLIC REALM

Philadelphia2035 Citywide Vision Goal: Achieve excellence in the design and quality of Philadelphia's built environment.

SUMMARY OF EXISTING CONDITIONS

The River Wards District's public realm has two distinctive scales, a traditional rowhouse neighborhood scale and a commercial or industrial mega-block scale. Major infrastructure projects divide the District such as the I-95 corridor, several rail viaducts, and the Market Frankford El structure. Often infrastructure marks the boundary between these two scales. For example, I-95 buffers the industrial mega blocks along the Delaware waterfront from residential areas yet in other instances it isolates neighborhoods of similar scale from each other. The myriad needs of these different built environments leave the District without a predominant development pattern and without a single set of urban design issues. Instead, a fractured mix of public realm issues exists in a physically and socially changing District.

Recent infill development contributes to the shifting public realm of rowhouse neighborhoods such as Fishtown, Port Richmond, and sections of Kensington. Improvements to some of the District's more permanent infrastructure are also affecting the public realm. I-95 is undergoing significant reconstruction including widening, street extensions and ramp reconfiguration. Public recreation and river access opportunities are increasing as the Frankford Creek Greenway, the Delaware Riverfront trail, and the Delaware Avenue extension are being constructed in phases. And while change occurs slowly to the large-scaled former industrial sites along the Delaware River, many efforts are underway to study their potential to contribute to a more robust waterfront public realm.

Significant regional destinations located across the District vary from restaurants and commercial activities in Fishtown, to passive recreation at Penn Treaty Park, to port activity at the Tioga Marine Terminal. Due to limited public access points to the Delaware River and Frankford Creek, open space is primarily found in small neighborhood parks and recreation centers. McPherson Square is an especially active neighborhood park, and Bridesburg Recreation Center is the only open space for the Bridesburg neighborhood. The public realm could benefit from an expanded pedestrian and bicycle circulation network, especially adjacent to open spaces and commercial nodes.

The District includes a significant amount of industry; both active and vacant, including scrap yards which typically have a haggard appearance and often times lack complete sidewalks. Building type and condition also vary greatly within the District, from abandoned textile mills, to well-maintained rowhouses, to handsome early 20th century utility buildings. The spectrum of scale, condition, occupancy, and use of buildings also indicates the wide shifts in the quality of the public realm in the River Wards district.



Figure 1 SWOT Analysis

KEY ISSUES

The following are important public realm issues the River Wards District is facing over the next ten years:

- *Transition zones between neighborhoods.* Major infrastructure creates barriers between neighborhoods; therefore, particular attention is needed where neighborhood corridors intersect with infrastructure, such as I-95 and the Lehigh Viaduct.
  - Transition zones need to be safe, welcoming environments for pedestrians.
- *Access to the Delaware River both regionally and from within the District with a focus on maximizing existing networks.* This includes the quality of the connector streets, as identified in the Master Plan for the Central Delaware; bicycle networks along the waterfront; existing open spaces such as Pulaski Park and Penn Treaty Park; and, the multi-modal capacity of streets that connect neighborhoods to the river.
- *Environmental legacy sites and their history of brownfield uses in terms of their potential to transition small, strategic sections into public space.* Particular attention is needed in the sections that are accessible from neighborhood streets, or accessible via rail right of way.

- Transitioning strategic sections of brownfield sites into public space is a first step in addressing issues of environmental justice for the current residents.
- *The public realm beneath the Market Frankford El structure.* The public realm that is affected by transportation infrastructure should be addressed holistically to include safety, place-making/keeping tools, and neighborhood context.
- *Access to the Frankford Creek.* This includes the Frankford Creek Greenway, and the public realm at the confluence of the creek and the Delaware River, and where streets intersect the creek.

MAJOR OPPORTUNITIES

There are significant public realm opportunities in the River Wards District.

- Opportunity 1
  - York Street between the York Dauphin El Station and Trenton Avenue
    - The El is a defining characteristic of the District as it comprises its northwestern boundary and includes eight stations within, or in close proximity to, the District.
    - There is a node of activity at the York Dauphin Station.
    - Intersection of York Street, Frankford Avenue, and Trenton Avenue (could be considered a separate area, or the terminus of this opportunity area - see below).
- Opportunity 2
  - Intersection of York Street, Frankford Avenue, and Trenton Avenue
    - This is the intersection of three prominent streets. It has excess cartway and irregular triangular residual spaces that could be revised.
    - The intersection is located in a transitional area between neighborhoods where public realm improvements are needed. It is also located within a concentrated creative arts and manufacturing node between Fishtown, East Kensington and Olde Richmond. One of the intersection's anchor buildings is a public school (Horatio B. Hackett Elementary) with a seemingly large amount of under-utilized space around it. The school currently has an open space plan developed by the local community, civic organizations, and the Community Design Collaborative.
- Opportunity 3
  - Aramingo Avenue between York Street and Lehigh Avenue
    - This section of Aramingo Avenue has a mix of commercial uses and is situated in a transitional zone between neighborhoods.
    - The node is anchored at one end by a recreation center and the Lehigh Viaduct, giving the location potential to become a neighborhood gateway.
- Opportunity 4
  - Dow Chemical site at the Delaware River edge

- The abandoned “K & T” rail R.O.W. offers a boundary to where site remediation could be done to a level that allows public access to the river’s edge.
  - Incorporate findings and recommendations from the on-going EPA brownfield study.
- Opportunity 5
  - Frankford Arsenal Boat launch – the new location at the southern node of the Philly Coke site
    - A recent land swap has provided the opportunity to assess the design and amenities for an expanded public boat launch located on a portion of the former Philly Coke site.
    - Possible opportunity to integrate a future riverfront trail (using the abandoned “K & T” rail R.O.W.), the new public boat launch area, and the existing private boat launch area just to the north.
- Opportunity 6
  - Frankford Creek at the Betsy Ross Bridge anchorage
    - The confluence of the Frankford Creek and the Delaware River offers the opportunity for public space at the waterfront at one of the District’s gateway landmarks.
    - The Frankford Creek Greenway will terminate at this point, the end of its on-street segment paralleling Lewis Street. The Greenway will also intersect with the Delaware Avenue extension and trail.
- Opportunity 7
  - Expand Pulaski Park to the north
    - Possible opportunity to expand into the adjacent PPA property to provide more park area, as Pulaski Park is one of the few places in the District where residents can reach the river’s edge.
    - Opportunity to improve Allegheny Avenue to become a true “connector street” (terminates at Pulaski Park), as identified in the Master Plan for the Central Delaware.
- Opportunity 8
  - Lehigh Viaduct from Trenton Avenue to the Delaware River (includes “coal piers” site)
    - An elevated, continuous linear open space exists and is abandoned to the southeast of the active rail lines. Bridges span streets and provide circulation under I-95 to the former “coal piers” site.
    - Re-engaging this space into the public realm of the surrounding neighborhoods is another potential route to allow people to access the riverfront.
    - Opportunity to investigate the ownership and feasibility of the “coal piers” parcels for future development, including open space.

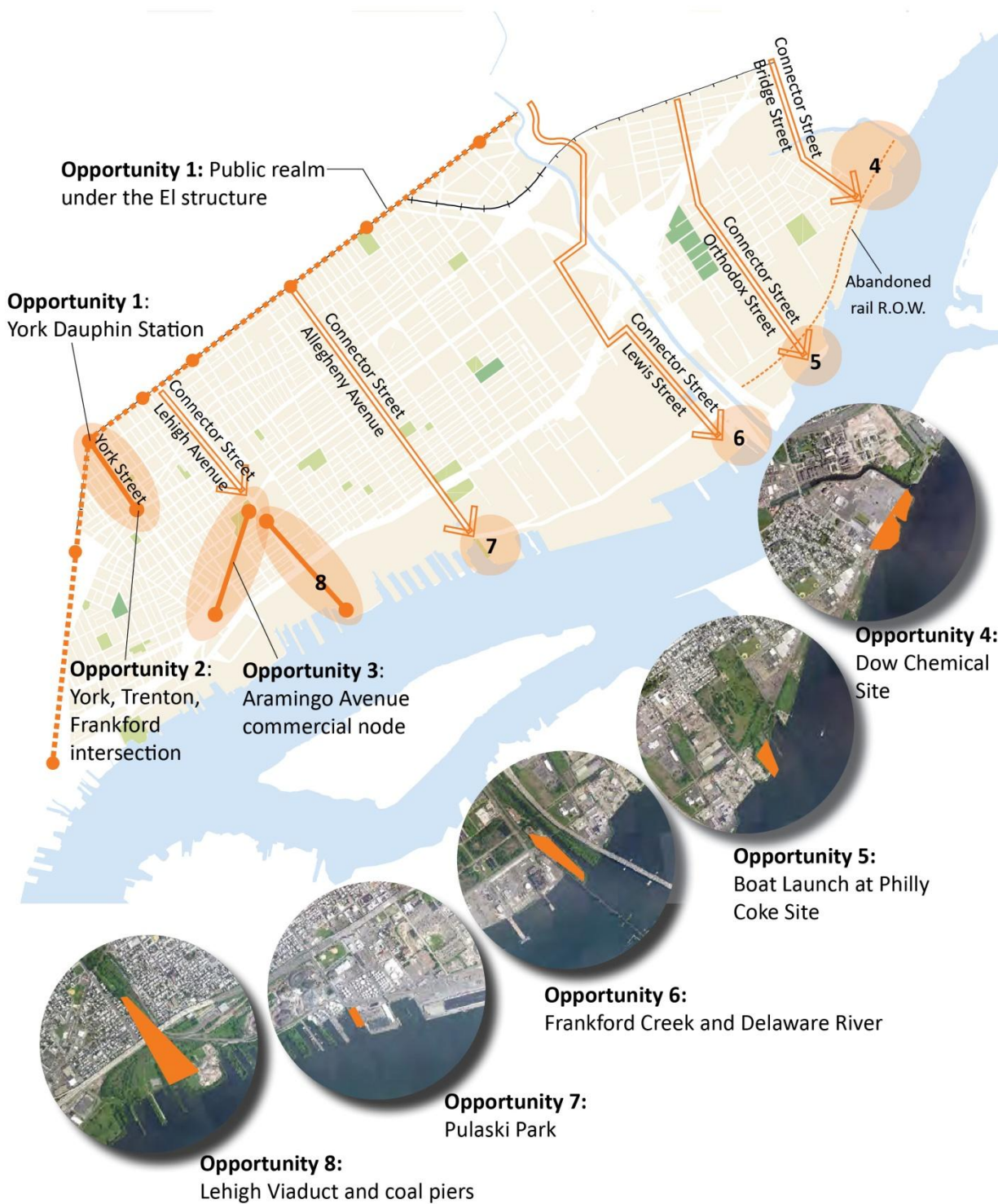


Figure 2 Opportunity Locations

PUBLIC REALM

Development Patterns

Goal: Enhance and improve the walkable form with buildings and spaces that have appropriately scaled heights, massing, and setbacks

- Walkable scale of the city
  - Block Structure
    - The industrial legacy sites along the river are large parcels of land that are out of scale with the surrounding neighborhood. They have poor walkability due to a lack of through streets, which prevents pedestrian access to the riverfront.
    - The dominant street grid of the city drastically shifts as it crosses Front Street and also Kensington Avenue. This rotation of the grid orients the blocks within the District to the river, as major east-west streets shift to become perpendicular to the river bank.
    - The street grid pattern, and therefore block structure, of Bridesburg, Port Richmond, and Kensington is largely consistent, while the grid pattern within Fishtown is almost indiscernible as blocks become smaller and irregular in shape and streets become more segmented. But this creates an engaging, village-like environment in Fishtown.

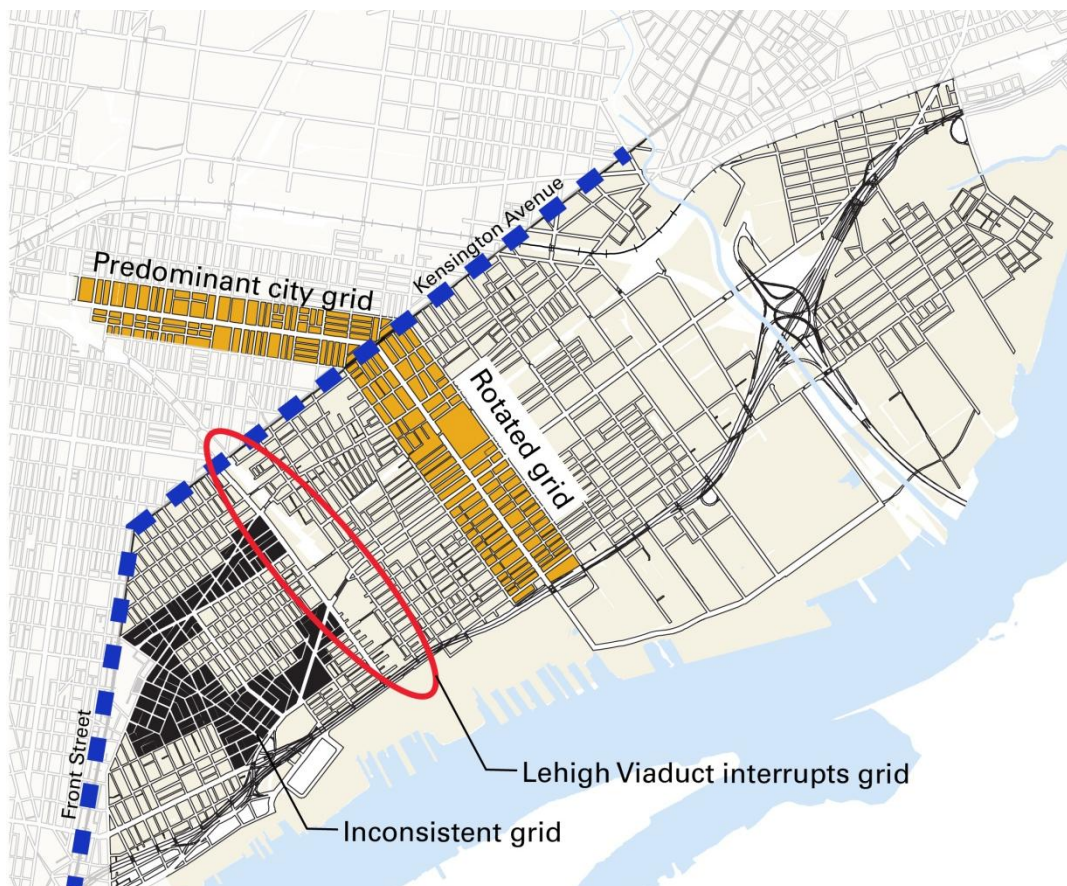


Figure 3 Street Grid Patterns

- Infrastructure impediments
  - The Bridesburg neighborhood is physically distinct, being bounded by I-95; I-95, ramps to the Betsy Ross Bridge, the Frankford Creek, and the Delaware River define its perimeter. This neighborhood has little commercial development or open space; therefore, the streets that do cross through the perimeter are important for the community to be able to shop, recreate, and perform other daily activities.
  - The Lehigh Viaduct creates a physical barrier between adjacent neighborhoods. Gateway opportunities should be explored and through-streets should be enhanced.
  - The EI structure also divides neighborhoods, although neighborhoods to the west of the EI are outside of the District boundary. The public realm beneath and adjacent to the EI should be fully explored within the River Wards district plan.
- Development reinforces a traditional urban scale
  - Some of the new residential infill construction respects the existing urban fabric while other projects disrupt the established streetscape. Context sensitive design, such as consistent setbacks and cornice heights and limited curb cuts along primary streets, needs to be reinforced.
  - Amid these dense residential areas are large buildings and parcels of former textile mills. Fire and other results of long-term abandonment have left sizeable vacant lots scattered throughout the neighborhoods.
    - The “mega lots” area near York and Emerald Streets is one such concentration of vacancy where the scale of the empty lots is in stark contrast to the surrounding small rowhouse parcels.
    - Alternatively, some of the former mill buildings are being adaptively reused for residential and mixed-use projects, which have had a positive impact on the public realm.



(Environmental Legacy Site)



(Infrastructure Impediment)



(New Infill)



(Abandoned Textile Mill)

Urban Design

Goal: Elevate public demand for good design in the public realm

- Sound design principles to guide development
  - There are opportunities to improve the pedestrian realm in commercial areas in the District, including a large-format commercial area in the center of the District along Aramingo Avenue (between Westmoreland and Butler Streets) which was once composed of former industrial sites.
  - The smaller commercial node along Aramingo Avenue between York Street and Lehigh Avenue.
- Create welcoming, well-designed public spaces, gateways, and corridors
  - Gateway opportunities:
    - Lehigh Avenue and Aramingo Avenue
    - York Street, Trenton Avenue, and Frankford Avenue
    - Frankford Avenue and N. Delaware Avenue
    - Confluence of the Frankford Creek and the Delaware River
    - Richmond Street and Buckius Street
  - Corridor improvement opportunities:
    - Connector Streets identified by the Master Plan for the Central Delaware, including Berks Street, Cumberland Street, Lehigh Avenue, and Allegheny Avenue
    - Key intersections along the District's major north-south streets of Aramingo Avenue, Kensington Avenue, Frankford Avenue, and Delaware Avenue
    - Strengthen trail head at Lewis Street at N. Delaware Avenue, including more wayfinding signage
  - Link public art with major capital initiatives
    - Penn Treaty Park lacks a compelling visual narrative or identity considering its profound history. More interpretative and historical signage installations can benefit the space.
    - Pulaski Park offers an opportunity for public art within the empty, but well-defined, circular space where it meets the river's edge.
    - Frankford Avenue in Fishtown has recently seen a growth in public art in the form of decorative street furniture (bus stops, bike racks, trash bins), thanks to community efforts.
    - Abandoned rail infrastructure such as the abandoned "K & T" rail lines and the Lehigh Viaduct bridges are important vestiges of the District's history that could remain as public art pieces to enhance future redevelopment efforts.
- Ensure maintenance and protection of public works of art
  - The District is underrepresented in public art compared to other districts.
  - The District has numerous war memorials that would benefit from having the public space that they occupy improved as a way to increase the visual identity of various neighborhoods.



Figure 4 Development Patterns



Figure 5 Corridors that connect through infrastructure barriers

RECOMMENDED FOLLOW UP

- Develop focus areas as previously described, considering waterfront sites based on their potential for redevelopment and ability to stimulate reinvestment in the larger community.
- Investigate historic preservation opportunities concerning the “Kensington Station” terminus and railroad line that headed north to New York City. (Possibly related to Trenton Avenue.)
- Check for consistency between public realm recommendations and recent and on-going plans (Master Plan for the Central Delaware, I-95 improvement plan, Trail Master Plan, EPA brownfield study, Frankford Creek Greenway, North of Lehigh Plan, other community plans).
- Continue environmental legacy and environmental justice research.
- Compare and contrast the built form of traditional rowhouses and the recently constructed housing in areas such as Fishtown to articulate the desired urban design of the streetscape (i.e. create design guidelines that discourage front loaded parking, etc).
- Work with the PWD to identify areas for stormwater infrastructure to leverage resources for pedestrian-scaled streetscape improvements. Obtain details about the existing stormwater management district on Aramingo Avenue.
- Identify the key intersections, or gateways, along the District’s major streets for potential improvements.
- Work with PIDC to identify which industry is still active and how / whether it will continue to be in the next ten years. Identify opportunities for “clean economy” improvements.
- Assess waterfront ownership.

DEMOGRAPHIC ANALYSIS

BOUNDARIES

This demographic analysis, based on Decennial Census data (1980-2010), and American Community Survey (2008-2012) data, is for the River Wards Planning District. As of 2010, the census tracts included in the boundaries of the River Wards are: 143, 158, 160, 161, 178, 179, 180.01, 180.02, 183, 184, 188, 378, 379, 380, and 382. Between the 2000 and 2010 Censuses, there were a number of changes to census tract boundaries in the area, reflecting population growth and decline. Where population increased, tracts were split (tract 180 was split into tracts 180.01 & 180.02). Where population declined, tracts were consolidated into new tracts (tracts 187 and 189 were consolidated into the new tract 382). These changes are important to note because the analysis of 2010 Decennial Census data will be based on the new tract boundaries as listed above. While the analysis of trend data from the 1980, 1990 and 2000 Decennial Censuses, will be based on the older tract boundaries (listed here: 143, 158, 159, 160, 161, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 295 and 296).

River Wards Map



OVERVIEW

The River Wards District is comprised of various neighborhoods, but for the purposes of this analysis we will focus on the following neighborhoods. (2010 Census tract boundaries):

- **Fishtown** - Census tracts: 143 and 158;
- **Olde Richmond** - Census tract: 160;
- **East Kensington** - Census tract: 161;
- **Kensington** - Census tracts: 178, 179, 188, and 382;
- **Bridesburg** - Census tracts: 183, 184, and 380;
- **Port Richmond** - Census tracts: 180.01, 180.02, 378, and 379.

Major Indicators –River Wards District

Trend Data River Wards	1980	%	1990	%	2000	%	2010	%	2010 Citywide	%
Total Population	72,970		68,657		66,321		68,489	4.48 % of City wide	1,526,006	
White	71,779	98.37%	66,054	96.21%	54,305	81.88%	48,613	70.98%	626,221	41%
Black	454	0.62%	709	1.03%	4,266	6.43%	7,839	11.45%	661,839	43%
Asian	301	0.41%	1,068	1.56%	1,585	2.39%	1,725	2.52%	96,405	6%
Other Race	336	0.46%	826	1.20%	4,440	6.69%	7,666	11.19%	90,731	6%
Latino (any Race)	823	1.13%	1,454	2.12%	7,323	11.04%	14,035	20.49%	187,611	12%
HH Population *	72,649	99.56%	68,398	99.62%	65,633	98.96%	67,836	99.05%	1,468,623	96%
GQ Population **	321	0.44%	259	0.38%	688	1.04%	653	0.95%	57,383	4%
Total Hus***	29,777		28,928		28,397		29,005	4.3% of City wide	670,171	
Vacant		9.67	3,037	10.5	3,601	12.6	3,217	11.0	70,435	11%

Trend Data River Wards	1980	%	1990	%	2000	%	2010	%	2010 Citywide	%
HUs	2,878	%		0%		8%		9%		
Occupied HUs	26,889	90.33%	25,891	89.50%	24,796	87.32%	25,788	88.91%	599,736	89%
Owner Occup	20,996	78.05%	20,148	77.82%	17,910	72.23%	15,840	61.42%	324,536	54.11%
Renter Occup	5,903	21.95%	5,743	22.18%	6,886	27.77%	9,948	38.58%	275,200	45.89%
Avg. HH Size	2.62		2.58		2.58		2.61		2.45	
Median Age	34.9		N/A		35.5		34.1		33.5yrs	
Age <20	21,558	29.54%	19,641	28.61%	20,602	31.06%	19,343	28.24%	400,817	26.27%
20 to 44	22,671	31.07%	25,470	37.10%	23,990	36.17%	26,961	39.37%	581,102	38.08%
45 to 64	17,381	23.82%	12,338	17.97%	13,189	19.89%	15,646	22.84%	358,778	23.51%
65+	11,360	15.57%	11,208	16.32%	8,540	12.88%	6,539	9.55%	185,309	12.14%
Median HH Income	\$12,875		\$23,453		\$28,871		ACS 08_12 \$34,966		ACS 08_12 \$37,016	
% 4yrs+College	3.22%		5.07%		6.58%		17.02%		23.20%	
%Unemployed	13.06%		9.62%		12.99%		18.31%		14.45%	
%Poverty	16.93%		17.63%		27.36%		27.82%		26.24%	
%HH No Car	N/A		N/A		37.35%		33.59%		33.74%	

* HH - Household

** GQ - Group Quarters

*** HU - Housing Unit

SUMMARY

Historically, the River Wards District has been a racially homogeneous, White community. However, over the past few decades the District has grown more racially and ethnically diverse with the rapid growth of Black, Asian, Other Race, and Latino populations. Despite these population gains, between 1980 and 2000, the District lost a significant portion of White population which resulted in the overall total population decline. By 2010, the loss of White population in the River Wards District slowed. Due to the steady growth of Black, Asian, Other Race, and Latino populations, the District experienced its first total population increase in thirty years. Based on current trends, continued population growth is projected in the River Wards District through 2035, particularly in school age population less than 20 years of age. Other positive signs of growth in the District include the increase in housing units, increased housing occupancy rates, decreased housing vacancy rates and increased educational attainment levels. However, there are also some troubling socio-economic indicators that show a district burdened with high poverty and unemployment rates, high housing costs, and an old and dilapidated housing stock.

POPULATION

As of 2010, the River Wards had a total population of 68,489 people, comprising 4.48% of the City's total population (1,526,006). Between 2000 and 2010, the total population in the River Wards District increased 3.27% (by 2,168 people), from a total population of 66,321 in 2000 to a total of 68,489 in 2010. While seemingly modest, this was the first population increase in the District since 1980. Rapidly growing Black, Asian Other Race, and Latino populations are driving this new growth.

- Prior to 2010, the District's total population steadily declined. Between 1980 and 1990 the total population declined 5.91% or by 4,313 people. Between 1990 and 2000 the total population declined -3.40% or by 2,336 people.
- The sole driver of population loss in the River Wards District has been the outflow of White population. Between 1980 and 2010, the District lost a total 23,166 White people, or 32.27% of the White population. Over the thirty year period, between 1980 and 2010, the River Wards District total population declined -6.1%, with a net loss of 4,481 people. It was the growth of Black, Asian, Other Race, and Latino populations during this time that slowed the overall total population loss.
- Between 1980 and 1990, the District's White population declined 7.98%, or by 5,725 White people.
- The largest decline in White population occurred between 1990 and 2000, when the District lost a total of 11, 749 White people (or -17.79%).
- Between 2000 and 2010, the White population decline in the District slowed to just -10.48% (-5,692 people).
- Despite the overall total loss of White population in the District, between 2000 and 2010 the White population actually increased in the following census tracts: 183, 184 (Bridesburg) and 379 (Port Richmond).
- As previously mentioned, the steady growth of the Black, Asian, Other Race, and Latino populations in the District, helped to offset the decline of White population. By

2010, this growth resulted in a net total population increase of 3.27% (or by 2,168 people).

- Between 1980 and 2010, Black population in the District increased 1626.65% (or by 7,385 people).
- Between 1980 and 2010, Asian population in the District increased 473.09% (or by 1,424 people).
- Between 1980 and 2010, Other Race population in the District increased 1,321.40% (or by 1,424 people).
- Between 1980 and 2010, Latino population in the District increased 908.67% (or by 13,212 people). It is important to note that the Census Bureau considers Latinos to be an ethnicity and not a race, so although Latino population is discussed along with other racial groups, Latino population is included in the total population count of the racial group that Latino people self-identified with.
- Despite the significant loss of White population in the River Wards District, the area still has a majority White population. As of 2010, the District's total population was 70.98% White, 11.45% Black, 2.52% Asian, and 20.49% Latino. In 1980, the River Wards District's Total Population was 98.37% White, 0.62% Black, 0.41% Asian, 0.46% Other Race and 1.13% Latino.
- Of the fifteen census tracts in the District, nine tracts have 87% or more White population. One tract has 74% White population, and the remaining four tracts (161, 178, 179, 188, and 382) have larger percentages of Black, Asian, Other Race, and Latino population.
- With 20.49% Latino population, the River Wards has the third highest percentage of Latino population of all districts in the City, behind the North District (47%) and the Lower Northeast District (23%).
- The Census tracts with higher percentages of Latino population appear to be in the Kensington section of the District. The tracts are: 178 (50.27%), 188 (46.44%), 179 (34.79%), and 161 (31.06%).
- It is interesting to note that Black, Asian, and Other Race population do not comprise a majority of the population in any of the census tracts in the District. The tracts with higher percentages of Black population, Asian, and Other Race populations are all in the Kensington section of the District, in Census tracts: 161, 178, 179, and 188.

GROUP QUARTER POPULATION

- As of 2010, 0.95% of the population in the River Wards District lived in Group Quarters, with the other 99.05% of the population living in households. Citywide, 3.6% of the population lived in Group Quarters in 2010, with 96.4% of the population living in Group Quarters.
- In 2000, the percentage of the population living in Group Quarters was slightly higher at 1.04%, with 98.96% of the population living in households. Citywide, 3.6% of the population lived in Group Quarters in 2000, with 96.4% of the population living in Group Quarters.
- In 1990, 0.38% of the population lived in Group Quarters, with 99.62% of the population living in households. Citywide, 2.8% of the population lived in Group Quarters in 1990, with 97.2% of the population living in Group Quarters.

- In 1980, 0.44% of the population lived in Group Quarters, with 99.56% of the population living in households. Citywide, 2.1% of the population lived in Group Quarters in 1980, with 97.9% of the population living in households.

POPULATION BY AGE

Between 2000 and 2010, the River Wards District population under the age of 20, and the population 65 years and older decreased, while population 20 to 44 years old and 45 to 64 years old increased. Historically, the River Wards District has had a higher than average percentage of population under the age of 20, and 65 years and older. But over the past few decades population in these age cohorts has steadily declined. Despite these decreases, as of 2010, the River Wards District still has a higher than average percentage of population Under the Age of 20. However, as of 2010, population 65 Years and Older is below average.

- In 2010, population under 20 years of age comprised 28.24% of the River Wards District's total population, compared to 26.27% Citywide.
- In 2010, population in the 20 to 44 age cohort (39.37%) comprised the largest percentage of the River Wards District's Total Population. Citywide 38.08% of the total population was in the 20 to 44 age cohort.
- In 2010, population 45 to 64 years old comprised 22.84% of the River Wards District's total population, compared to 23.4 % Citywide.
- In 2010, population 65 years and older comprised 9.55% of the River Wards District's total population, compared to 12.1 % Citywide.
- In 2000, 31.06% of the population in the River Wards District was under the age of 20 years old, compared to 28.5 % Citywide.
- In 2000, 36.17% of the population in the River Wards District was 20 to 44 years old, compared to 37% Citywide.
- In 2000, 19.89% of the population in the River Wards was 45 to 64 years old, compared to 20.2% Citywide.
- In 2000, 12.88% of the population in the River Wards was 65 years and older, compared to 14.08% Citywide.
- In 1990, 28.61% of the population in the River Wards District was under the age of 20, compared to 26.9 % Citywide.
- In 1990, 37.10% of the population in the River Wards was 20 to 44 years old, compared to 39.4% Citywide.
- In 1990, 17.97% of the population in the River Ward was 45 to 64 years old, compared to 18.31% Citywide.
- In 1990, 16.32% of the population in the River Wards was 65 years and older, compared to 15.2% Citywide.
- In 1980, 29.54% of the population in the River Wards was under the age of 20, compared to 29.6% Citywide.
- In 1980, 31.07% of the population in the River Wards District was 20 to 44 years old, compared to 34.8% Citywide.
- In 1980, 23.82% of the population in the River Wards District was 45 to 64 years old, compared to 14% Citywide.

- In 1980, 15.57% of the population in the River Wards District was 65 years and older, compared to 14.1%% Citywide.
- The Median Age in the River Wards District has declined. In 2010, the Median age in the River Wards District was 34.1 years, compared to the 1980 median age of 34.9 years.
- When examining Age data by census tract, you can see specific changes in more detail. In 2010, the median age for population by census tract in River Wards varied from a low of 25.3 years old in Census tract 178, to a high of 38.8 years old in Census tract 379.
- As of 2010, the Census tracts with the highest percentage of population under the age of 20 in the River Wards District were: 178, 188, and 179.
- As of 2010, Census tracts: 143, 158, and 160 had the highest percentage of population in the 20 to 44 age cohort.
- As of 2010, Census tracts: 379, 180.02, 180.01, 183, and 184 had the highest percentage of population 45 to 64 years old.
- As of 2010, Census tracts: 183, 379, and 180.02 had the highest percentage of population 65 years and older.

HOUSING

- **Between 2000 and 2010, the River Wards District population increased 3.27%** (or by 2,168 people). During this time the number of total housing units in the River Wards District increased 2.14% (or by 608 units) from 28,397 units in 2000 to 29,005 units in 2010. The number of occupied housing units (Households) increased 4.00% (by 992 units) from 24,796 occupied units in 2000, to 25,788 occupied units in 2010. The housing occupancy rate increased from 87.32% in 2000, to 88.91% in 2010. The number of vacant housing units decreased -10.66% (by -384 units) from 3,601 vacant units in 2000, to 3,217 vacant units in 2010. The housing vacancy rate also decreased from 12.78% in 2000, to 11.24% in 2010.
- The biggest total housing unit increases were in the Fishtown and Port Richmond sections of the District, in Census tracts: 158, 143, 378, 379, and 160.
- In 2010, housing occupancy rates increased in every census tract in the District, except census tracts: 178, 179, 188 and 382 (all in Kensington).
- As of 2010, the census tracts with the highest vacancy rates were: 178, 161, 159, 179, and 181.
- In 2010 the Citywide, housing occupancy rate was 89%, with a vacancy rate of 11%.
- In 2000, the Citywide housing occupancy rate was 89.1%, with a vacancy rate of 10.9%.
- Historically, homeownership rates in the River Wards District have been higher than the Citywide average, and as of 2010 this was still true. However, the percentage of owner-occupied housing units in the District has declined while the percentage of renter-occupied housing units increased.
- In 2010, the homeowner occupancy rate in the River Wards District was 61.42%, with a renter occupancy rate of 35.58%. In 2010 the Citywide homeowner occupancy rate was 54.10 %, and the Citywide renter occupancy rate was 45.90%.
- In 2000, the homeowner occupancy rate in the River Wards District was 72.23%, with a renter occupancy rate of 27.77%. Citywide the homeowner occupancy rate was 59.3%, with a renter occupancy rate of 40.7%.

- Between 2000 and 2010, homeownership rates in the River Wards District declined - 11.56% (by – 2,070 units). During this time, all Census tracts in the District experienced a decline in homeownership units.
- In 2010, the census tracts with the highest percentage of owner occupied housing units were Census tracts: 183, 184, and 379.
- Between 2000 and 2010, renter occupancy rates in the District increased 44.47 % (by 3,062 units). During this time rental occupied units increased in every Census tract in the District.
- In 2010, the Census tracts with the highest percentage of renter occupied housing units were: 161, 178, and 188.
- As of 2010, 23.03% of all homeowners in the River Wards District were senior citizens compared to a Citywide rate of 27.2%. As of 2000, 29.83% of all homeowners in the District were senior citizens compared to a Citywide rate of 30%. As of 1990, 35.11% of all homeowners in district were senior citizens compared to a Citywide rate of 31.3%. *Note: 1980 Senior Homeowner data is not available*
- In 2010, the census tracts with the highest percentage of senior homeowners were census tracts: 183, 180.01, and 379.
- Based on 2008-2012 ACS 5-year Estimate data, renters in the River Wards District are much more burdened by housing costs than owners which is consistent with Citywide and national trends. The housing costs burden for renters in the River Wards District is higher than the Citywide average. The housing costs burden for owners in the River Wards District is slightly lower than the Citywide average housing costs for owners. **It should be noted that research indicates that renters generally bare a higher housing cost burden than owners. Housing costs in excess of 30% or more of household income are considered a burden.*
- Based on 2008-2012 ACS 5-year Estimate data, 56.75 %of all renter occupied households in the River Wards District pay 30% or more of their household income for gross rent. Citywide 51.96% of renter occupied households pay 30% or more of their household income for gross rent.
- Based on 2008-2012 ACS 5 year Estimate data, the highest percentage of rental occupied households in the River Wards District paying 30% or more of their household incomes for gross rent are in census tracts: 180.01, 188, 380, 179, and 180.02.
- Based on 2008-2012 ACS 5-year Estimate data, 30.97 %of all owners occupied households in the River Wards District pay 30% or more of their household income for monthly mortgage costs. Citywide, 32.58% of owner occupied households pay 30% or more of their household income for monthly Mortgage Costs.
- Based on 2008-2012 ACS 5-Year Estimate data, the highest percentage of owner occupied households in the River Wards District paying 30% or more of their household income monthly mortgage costs are in Census tracts: 161, 178, and 180.01.
- Average household Sizes in the River Wards District are larger than the Citywide average. As of 2010, the average household size in the River Wards District was 2.61 persons per household, compared to the Citywide average household size of 2.44 persons per household. This is probably attributable to the higher percentage of children in the District. When examining average household size by census tract, household

sizes range from a low of 2.12 persons per household in tract 143, to a high of 3.26 persons per household in tract 188.

- In 2000, the average household size in the River Wards District was 2.58 persons per household compared to a Citywide average of 2.48 persons.
- In 1990 the average household size in the River Wards District was 2.58 persons per household compared to a Citywide average of 2.56 persons.
- In 1980 average household size in the River Wards District was 2.62 persons per household compared to a Citywide average of 2.66 persons per household.
- The River Wards District has lower than average percentage of one-person households. In 2010, 29.73% of all households in the River Wards District were one-person households, compared to 34.13% Citywide.
- In 2000, 30.30% of all households in the River Wards District were one-person households compared to 33.8% Citywide.
- In 1990, 29.47% of all households in the River Wards District were one-person households compared to 31.9% Citywide.
- In 1980, 27.63% of all households in the River Wards District were one-person households compared to 28.8% Citywide.
- Although the percentages of family households in the River Wards District have declined, the District still has a slightly above average percentage of family households compared to the Citywide average. Based on the most recent ACS 5-Year Estimate Data 2000-2012, 55.46% of all households in the River Wards District were family households and 44.54% were non-family households. Citywide 53.80% of all households were family households and 46.20% were non-family households.
- Based on ACS Data, census tracts in the River Wards District with the highest percentage of family households are: 188, 379, 183, and 184.
- Based on ACS Data, census tracts in the River Wards District with the highest percentage of non-family households include: 378, 143, 158, and 180.02.
- In 2010, 60.34% of all households in the River Wards District were family households and 39.66% were non-family households. *Citywide 56.75% of all households were family households and 43.25% were non-family households.*
- In 2000, 64.56% of all households in the River Wards District were family households, and 35.44% were non-family households.
- Between 2000 and 2010, the number of female headed households in the River Wards District declined. As of 2010, only 23.27% of all households in the District were female headed households, down from 40.44% in 2000. In 2010, 22.50% of all Citywide households were female headed compared to 22.25% in 2000.
- In 2010, census tracts in the River Wards District with high percentages female headed households are: 178, 188, and 179.
- In 1990, 37.18% of all households in the River Wards District were female headed households compared to 20.20% Citywide.
- In 1980, 33.97% of all households in the River Wards District were female headed households compared to 18.50% Citywide.
- Based on 2008-2012 ACS data, 21.36 % of the population in the River Wards District is comprised of long-term residents who moved to the District in 1989 or earlier. Citywide 22.07% of the population moved to the City in 1989 or before.

- Census tracts in the River Wards District with high percentages of population who are long-term residents, who moved to the District in 1989 or before are: 180.02, 184, and 379.
- Based on 2008-2012 ACS data, 10.38% of the population in the River Wards District moved to the District in 2010 or later, compared to 10.45% Citywide.
- Census tracts with high percentages of population who moved to the District in 2010 or later, are: 178 and 188.
- Based on 2008-2012 ACS data, 51.02 % of the population in the River Wards District moved to the District in 2000 to 2009, compared to 50.62% Citywide.
- Based on 2008-2012 ACS data, 17.25 % of the population in the River Wards District moved to the District between 1990 to 1999, compared to 16.86% Citywide.
- Based on 2008-2012 ACS data, 9.45 % of the population in the River Wards District moved to the District between 1980 to 1989, compared to 8.72% Citywide.
- Based on 2008-2012 ACS data, 5.33 % of the population in the River Wards District moved to the District between 1970 to 1979, compared to 6.41% Citywide.
- Based on 2008-2012 ACS data, 6.58 % of the population in the River Wards District moved to the District between 1960 to 1969, compared to 6.94% Citywide.
- **The River Wards District has the highest percentage of the housing units built before 1939 of all districts in the city.** Based on 2008-2012 ACS data, 40.09% of the Housing Units in the City were built before 1939 compared to the River Wards District where 72.07% of the Housing units were built before 1939.
- Census tracts in the River Wards District with the highest percentages of housing units built before 1939 are: 143, 161, 184, 158, and 160.
- 9.61% of the units in the River Wards District were built between 1940 and 1949, compared to 15.79% Citywide.
- 7.99% of the units were built between 1950 and 1959, compared to 17.05% Citywide.
- 3.69% of the units were built between 1960 and 1969, compared to 10.52% Citywide.
- 2.17% of the units were built between 1970 and 1979, compared to 6.85% Citywide.
- 1.29% of the units were built between 1980 and 1989, compared to 3.78% Citywide.
- 1.00% of the units were built between 1990 and 1999, compared to 2.54% Citywide.
- 2.18% of the units were built between 2000 and 2009, compared 3.26% Citywide.
- 0 % of the units were built in 2010 or later, compared to 0.12% Citywide.

EDUCATIONAL ATTAINMENT

Historically, the River Wards District has had below average percentages of population 25 and older with 4 years or more of college. However, over the past few decades educational attainment levels for the population in the River Wards District with 4 years or more of college have increased dramatically.

- The 2008-2012 ACS estimates showed an increase in educational attainment levels for college graduates in the River Wards District with 17.02% of the total population 25 years and older having 4 years or more of college, compared to 23.20% Citywide.
- In 2000, just 6.58% of the total population 25 years and older, in the River Wards District, had 4 years or more of college, compared to 17.8% Citywide.

- In 1990, 5.07% of the total population 25 years and older in the River Wards District, had 4 years or more of college, compared to 15.2% Citywide.
- In 1980, 3.22% of the total population 25 years and older, living in the River Wards District, had 4 years or more of college, compared to 11.1% Citywide.

UNEMPLOYMENT

- **The unemployment rates in the River Wards District has steadily increased over the past few decades, and is currently at an all time high of 18.31%** (*this is an estimate number from the U.S. Census Bureau and varies from other numbers from the Bureau of Labor & Statistics BLS*), compared to the Citywide unemployment rate of 14.45%.
- According to 2008-2012 ACS estimates, the census tracts with the highest unemployment rates are: 382, 178, 180.01, and 188.
- In 2000, the River Wards District had an unemployment rate of 12.99%, compared to the Citywide unemployment rate of 10.9%.
- In 1990, the River Wards District had an unemployment rate of 9.62%, compared to the Citywide unemployment rate of 9.7%.
- In 1980, the River Wards District had an unemployment rate of 13.06%, compared to the Citywide unemployment rate of 11.4%.
- *Note: The Unemployment rate is calculated based on population over the age of 16 years old in the Labor force.*

POVERTY

- **The poverty rate in the River Wards District has steadily increased over the past few decades, and is currently at an all time high of 31.49%.** According to 2008-2012 ACS data, the Citywide poverty rate was 26.24%.
- In 2000, the poverty rate for the River Wards District was 27.36%, compared to the Citywide poverty rate of 22.1%.
- In 1990, the poverty rate for the River Wards District was 17.63%, compared to the Citywide poverty rate of 19.7%.
- In 1980, the poverty rate for the River Wards District was 16.93%, compared to the Citywide poverty rate of 20.6%.
- When reviewing the 2008-2012 ACS estimates poverty data by census tract, you can see that poverty rates in the District range from a low of 11.05% in census tract 143, to a high of 55.82% in census tract 178.
- Other census tracts with higher than average poverty rates are census tracts: 188, 179 and 161.

VEHICLES

- In the River Wards District households without access to cars are decreasing. **In 2000, 37.35%** of all households in the District **did not have a vehicle available**, compared with 35.74% Citywide. **According to 2008-2012 ACS estimates, 33.59 %** of all households in the River Wards District did not have a vehicle available to their household, compared with 33.74% Citywide.

INCOME

- According to 2008-2012 ACS estimate data, the median household income in the River Wards District was **\$34,966** dollars. The Citywide median Income was \$37,016.
- According to 2008-2012 ACS estimate data, median household incomes in the River Wards District range from a low of \$20,586 in Census tract 178 to a high of \$57,024 in Census tract 143.

River Ward Household Income by Census Tract

Census Tracts	Median HH Income 1979	Median HH Income 1989	Median HH Income 1999	Median HH Income ACS 2008- 2012
143	\$13,979	\$26,970	\$40,293	\$57,024
158	\$12,348	\$25,205	\$31,862	\$44,936
160	\$13,154	\$25,305	\$29,621	\$42,994
161	\$8,266	\$15,352	\$19,098	\$24,091
178	\$9,263	\$17,072	\$14,793	\$20,586
179	\$12,330	\$19,943	\$26,021	\$23,516
180	\$12,194	\$24,185	\$30,866	
180.01				\$33,611
180.02				\$34,966
159	\$14,063	\$19,479	\$28,871	
181	\$9,375	\$9,724	\$18,571	
182	\$9,219	\$22,045	\$26,331	
378				\$45,441
183	\$14,388	\$26,299	\$32,820	\$44,742
184	\$13,327	\$30,018	\$33,065	\$42,639
185	\$12,875	\$35,179	\$41,875	
186	\$12,892	\$21,154	\$28,531	
379				\$31,169
187	\$12,238	\$23,750	\$30,950	
189	\$12,949	\$22,788	\$24,032	
382				\$26,715
188	\$13,650	\$23,453	\$22,489	\$23,237
295	\$11,890	\$26,171	\$27,689	
296	\$12,917	\$18,167	\$31,167	
380	\$18,714			\$42,744
Districtwide	\$12,875	\$23,453	\$28,871	\$34,966
Citywide	\$16,388	\$30,140	\$29,839	\$37,016

Note: The historic data has not been adjusted for inflation.

For more detailed demographic data see the accompanying demographic tables.

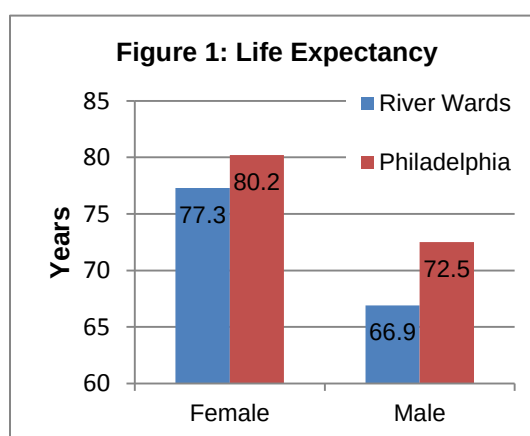
HEALTHY COMMUNITIES

SUMMARY OF EXISTING CONDITIONS

The major health disparities in the River Wards District, when compared to all other Districts, include: childhood obesity, smoking-related deaths, child asthma hospitalizations, and access to care. These and other issues described below should be considered in the District planning process.

General Health

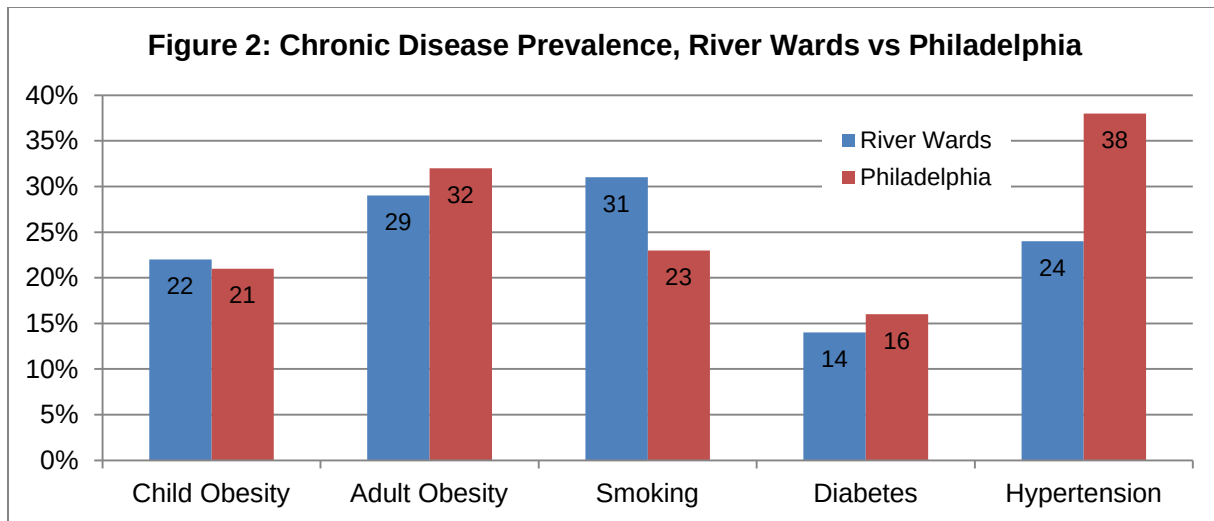
General health is a reflection of physical and mental health combined. A slightly smaller proportion of the River Wards District report good health (versus poor or fair health) compared to the city as a whole (75% and 77%, respectively)ⁱ, and life expectancy is lower in this District relative to the city (Figure 1)ⁱⁱ. Only the Lower North District has a lower male life expectancy at 65.2 years.



Chronic Disease

Chronic diseases – long-lasting conditions that can be controlled but not cured – are the leading cause of death and disability in the United States. Chronic disease conditions are pervasive and costly, but the impact of these conditions can be partially remediated through lifestyle and environmental changes. Lack of physical activity, poor nutrition, and tobacco use are key health-risk behaviors that can be modified to improve health.

Adult and childhood obesity have reached epidemic proportions in the United States. Patterns and risk factors, or determinants, of obesity are different for children and adults, and obese children are more likely to become obese adults. At 22%, the River Wards District is tied with the Lower North District for the second highest childhood obesity rate in the city.ⁱⁱⁱ While adult obesity is not particularly high in the River Wards District compared to the city as a whole (Figure 2), obesity rates in Philadelphia remain among the highest in the nation. Figure 2 provides additional information on chronic disease prevalence in the River Wards District.



Source: PHMC Household Health Survey, 2010 and School District of Philadelphia, 2009-2010

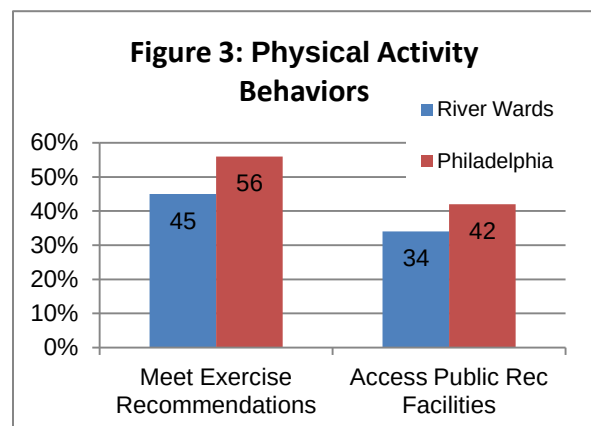
Vital statistics provide further insight into chronic health conditions across planning Districts. The tobacco-related mortality rate is higher in the River Wards District than any other District. In the River Wards District, 420 out of every 100,000 deaths are attributed to tobacco-related causes, compared to 262 per 100,000 deaths Citywide. This statistic is mirrored in the high smoking prevalence observed in the River Wards District relative to the city as a whole (Figure 2). Premature cardiovascular disease mortality is also high in the River Wards District (88/100,000 vs. 59/100,000 deaths Citywide).

Access to Healthy Foods

Evidence shows good nutrition helps prevent chronic disease conditions like obesity, diabetes, and heart disease. Pedestrian access to healthy foods is paramount among low-income residents, who may not have cars, or may have competing priorities that further restrict their ability to access hard-to-get healthy foods. 25% of the River Wards District residents live in areas with high poverty and low access to healthy foods, compared to 20% of residents Citywide^{iv}.

Physical Activity

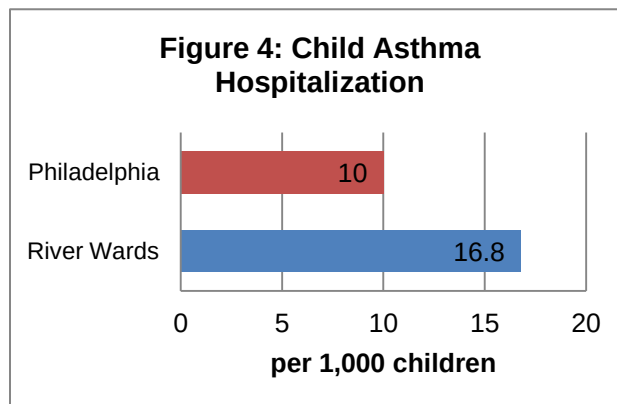
Many River Wards' adults do not meet the recommended amounts of exercise. The Centers for Disease Control and Prevention (CDC) recommend adults get two and half hours of moderate physical activity per week. Compared to Philadelphia, residents of the River Wards District are less likely to report meeting exercise recommendations and less likely to use public recreation facilities once a month or more (Figure 3).



Real and perceived bike and pedestrian safety is closely linked to physical activity. The River Wards District has a slightly higher rate of combined bike crashes and pedestrian crashes involving children compared to the city as a whole, 2.42 versus 2.17 per 1,000 children.ⁱⁱⁱ Regard for physical safety is most frequently cited as the number one deterrent to bicycling^v

Environmental Health

Asthma is a chronic condition related to poor air quality. The River Wards District has the highest child asthma hospitalization rate of all planning Districts (16.75 per 1,000 children under 18, compared to 10.01 Citywide)ⁱⁱ. High asthma hospitalization rates may be linked to the District's aforementioned high adult smoking prevalence, and to air quality issues discussed in the Environmental Memo.



Access to Careⁱ

At 28%, the percentage of uninsured adults in the River Wards District is the highest of the planning Districts and almost 50% higher than the Citywide rate of 19%. To compound the issue, we see this trend reflected in the rate of adults who report forgoing needed care, 30% in River Wards and 19% Citywide. Additionally, in the River Wards, 14% of residents report no regular source of care, compared to 11% Citywide.

Violence

Violence is not only a direct threat against our health and well-being, but indirectly, violence and the threat of violence limits our movement and restricts our physical activity. In the River Wards District, the homicide mortality rate is slightly lower (17 per 100,000 residents) than the Citywide rate of 19 per 100,000 residents.ⁱⁱ

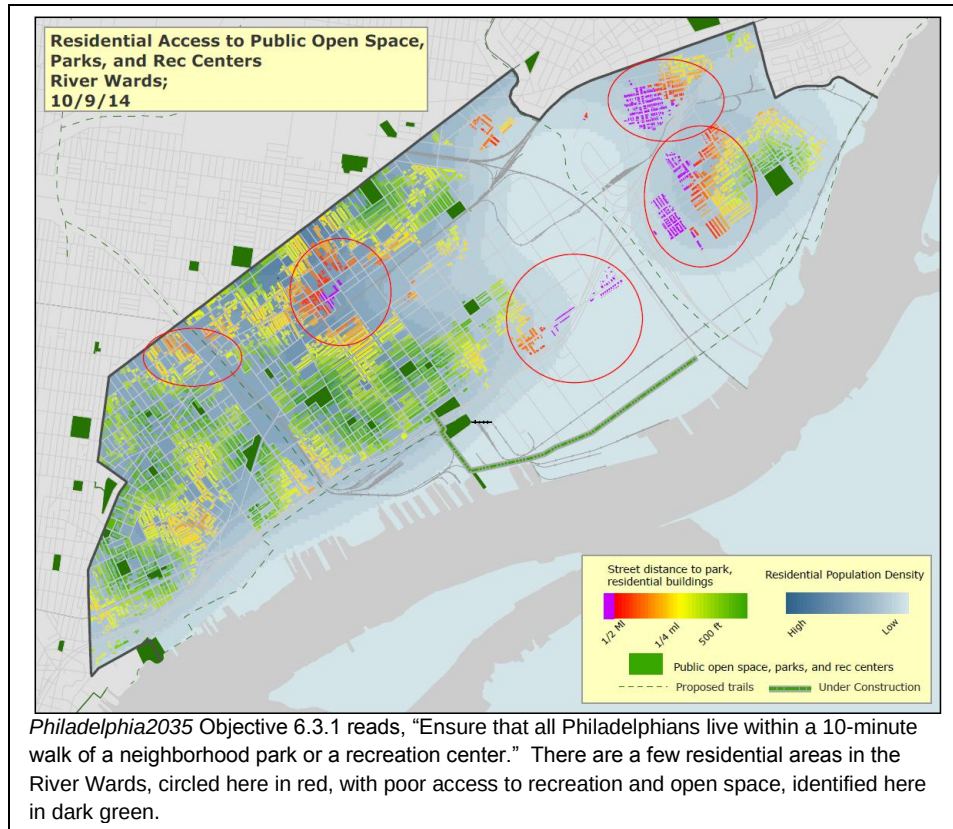
Drug and Alcohol Abuse. The Kensington and Port Richmond zip code (19134) had 387 emergency and medical service (EMS) calls for drug overdoses (Phila avg/zip = 64 calls), and 37 deaths due to opiate-related drug intoxication (Phila avg/zip = 8 deaths) in just the second half of 2012. These numbers represent the highest across the city's 46 zip codes.

KEY ISSUES

Physical Activity

Physical activity helps prevent chronic disease by strengthening our bodies and burning calories. The built environment influences the amount of physical activity we get. The River Wards' built environment has some barriers, outlined below, to engaging in physical activity that the District Plan could address.

- **Physical Activity – Access to Recreation and Open Space.** Barriers to physical activity include both *geographic access to* and *safety at* parks, open space, and



recreation centers. An analysis of River Wards' residents' ability to access parks, open space, and recreation centers to play and exercise within just a 10 minute walk from their homes reveals areas of need.

- *Allegheny and Frankford.* This is a densely populated neighborhood of residents and commercial businesses. It is on the edge of a large commercial / industrial section of the District, and bounded on its south by train tracks. Nearby schools include Mastbaum K-12 Vo-tech and the Willard School Annex; neither of which have outdoor play spaces. Nearby, the Old Francis Willard School is for sale, offering a potential park site from its parking lot.
- *The western half of Bridesburg, both north and south of I-95.* The Bridesburg Recreation Center is a large indoor and outdoor center located on this densely populated neighborhood's southwestern edge. It is more than a 10 minute walk from many neighborhood residents. Carmella Playground, just north of the District, may serve some northern Bridesburg residents. Non-public facilities presenting as opportunities for active recreation include the Home of the Bridesburg Tigers' athletic fields, on the Bridesburg side of the Betsy Ross Bridge, currently restricted by a fence; and the Bridesburg cemetery, with its tree-lined walking paths.
- *Lehigh, south of Kensington.* This area is at the intersection of the Market Frankford El (MFL) and the Lehigh viaduct. This is a highly underutilized urban neighborhood with a lot of commercial and residential vacant buildings, and

underutilized vacant properties. There is a tot-lot in the neighborhood, but it is part of the Archdiocese' private property.

District wide, the applicability of the standard "10-minute walk" to a River Wards park should be questioned. Safety from violence and automobiles may limit the distance residents are willing to walk, especially in the dark. Also, because the District has such densely populated areas, the carrying capacity (or "ability to accommodate comfortably") of parks and recreation areas is also important to consider.

- **Physical Activity – Active Living.** "Too little time in the day" and "required travel to multiple destinations" is often identified by adult residents as major barriers to getting the required 45-60 minutes of exercise each day. Environments that promote active transportation, defined as human-powered transportation, helps overcome this barrier by integrating physical activity into residents' normal activities of daily living.
  - o **Mixed Use.** Co-locating residents, goods, and services in dense urban environments promotes physical activity by encouraging walking and discouraging driving. There are 13 identified commercial corridors in the River Wards District. Many of the District's commercial corridors are pedestrian focused, promoting physical activity in their surrounding residential communities (i.e., Frankford, Allegheny, and Kensington Avenues in Kensington; along Richmond Street and Allegheny Avenue in Port Richmond; Girard Avenue in Fishtown; Orthodox Road in Bridesburg, and Front Street and Kensington Avenue in East Kensington.) However, the relatively low distribution of these pedestrian-oriented commercial corridors, the majority of residents in the District, especially in Olde Richmond and in communities along much of lower Frankford Avenue and Aramingo Avenue, must drive to commercial and entertainment venues^{vi}.
  - o **Transportation.** Bike lanes and public transit connecting residents with jobs and markets make living without a car more practical. A jobs analysis reveals many residents work in Center City and West Philadelphia, Districts directly connected to the River Wards by the MFL (U.S. Census, Longitudinal Employer- Household Dynamics). Most District residents live within 1 mile of an MFL station, with the exception of Bridesburg residents, who are further. The presence of bike lanes and Septa bus stops along the MFL's major arterials, Lehigh and Allegheny Avenue, make the MFL more accessible to families with limited car access. The completion of the Delaware Trail will make bike recreation and Center City bike-commuting a more viable option for residents closer to the Delaware River.

Healthy Food Access

Philadelphia has the highest prevalence of obesity out of the 10 largest U.S. cities. Within Philadelphia, low-income and racial-ethnic minorities are disproportionately burdened by obesity-related health issues. It has been well-documented that poor accessibility to healthy, affordable foods contributes to these disparities. To support Philadelphia's goal to improve

neighborhood livability, the Citywide Vision seeks to provide convenient access to healthy food for all residents by:

- Locating new healthy food sources near transit stations to improve access for those without cars
- Identifying suitable supermarket, healthy corner store, community garden, and urban farming sites
- Improve access to existing healthy food sources through multi-mode share transportation improvements
- Permit on-street produce displays
- Permit and encourage farmers' markets and urban agriculture in city-owned properties

The Philadelphia Department of Public Health and the Philadelphia City Planning Commission have been working together since 2010 to identify geographic gaps in access to healthy foods around the city. Through the aforementioned strategies and the Health Department's incentives program to equip corner stores with healthy foods (Healthy Corner Stores Initiative), many of these gaps have shrunk, although many still remain. Healthy food access maps produced in 2010 and 2012 illustrate these changes.

- Bridesburg continues to have poor access to healthy foods. There are still no supermarkets in the neighborhood. Since 2010, two corner stores, both north of I-95, have begun stocking healthy foods.
- With the exception of a string of supermarkets along Aramingo Avenue, much of Kensington and Port Richmond remains underserved by walkable access to healthy foods. Ongoing efforts with grocers to improve their infrastructure for selling and storing healthy foods (PDPH Get Healthy Philly's Enhanced Healthy Corner Store Program) has improved conditions here beneath the MFL and along Aramingo Avenue.
- The neighborhoods of East Kensington and Olde Richmond continue to provide good access with 4 well-dispersed supermarkets, and a farmer's market on Cumberland Street.
- With the addition of an enhanced healthy corner store and the Super Fresh on Girard Avenue in Northern Liberties, Fishtown resident's access improved slightly since 2010, but there is still a need for improved access to healthy food there.
- The area between Cambria and Clearfield, from the Delaware River to the MFL; and Bridesburg north of I-95 have both high poverty and poor access to healthy foods. There have been few improvements to these areas since 2010.

recreational and transportation uses as the Lehigh Viaduct. While plans have been drawn, it remains in the possession of Conrail. Also, there are opportunities to explore how crime-sensitive urban design characteristics might be able to break down visible and invisible neighborhood barriers restricting access to parks and other city amenities.

- **Active Transportation Infrastructure.** Proposed trails on the Lehigh Viaduct, along the Betsy Ross Bridge, and along the North Delaware River will connect with a recently completed N. Delaware River trail, encouraging passive and active recreation.
- **Healthy Food Access.** Strategically located farmers markets and continued work with local merchants to enhance their corner stores will erode the healthy food desert. An assessment of the success of the recently converted *enhanced healthy corner stores* may help convince other corner store owners in the District to carry healthy foods.
- **Mixed Income Communities.** Disinvestment in neighborhoods precedes the absence of essential retail and other quality of life services that impact our health outcomes. The New Kensington CDC (Community Development Center) and the East Kensington CDC have been effective at breaking up pockets of poverty through their organizing activities and their strategic planning efforts. Both represent models for other District neighborhoods.

RECOMMENDED FOLLOW-UP

- Perform GIS analysis to determine the carrying capacity of parks and recreation centers
- Assess land use challenges related to drug addiction in the District
- Interview social services organizations and behavior specialists with knowledge of the barriers to healthy living in the District, especially as it relates to vulnerable populations
- Conduct an environmental audit (PEQI) to identify gaps in the pedestrian sheds surrounding major urban amenities.
- Partner with PDPH's Get Healthy Philly to identify opportunity stores for continuing their Enhanced Healthy Corner Stores Program, especially in low-income sections of the District.

ⁱ Public Health Management Corporation, Household Health Survey, 2012

ⁱⁱ Vital Statistics, 2010

ⁱⁱⁱ School District of Philadelphia, 20019-2010

^{iv} ⁴PDPH, Walkable Access to Health Food in Philadelphia, 2010-2012

^v Reynolds, C. C., et al. "The impact of transportation infrastructure on bicycling injuries and crashes: a review of the literature." *Environmental Health* 8.1 (2009): 47.

^{vi} Data from PhilaShops analysis