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This plan is the result of a year-long process that involved the communities of Fishtown, Kensington, and Port Richmond; state and local agencies; the New Kensington Community Development Corporation (NKCDC) and Wallace Roberts & Todd, LLC (WRT). Rooted in a public outreach initiative and guided by a broad task force, the New Kensington Riverfront Plan provides a flexible framework for development along, and public access to, the Delaware River. Funded by the PA Department of Conservation and Natural Resources (DCNR) in cooperation with the Pennsylvania Environmental Council, the plan focuses on the balance between development and open space, with three major plan elements:

1) Development Framework
2) Gateway Concepts
3) Implementation.

The first two plan elements will enable NKCDC and the community to work with the city to shape future development while ensuring access to natural resources. The third plan element focuses on partnership and funding opportunities to accomplish the first two plan elements.
PURPOSE OF THIS PLAN

The purpose of this plan is to expand upon and update the neighborhood plan prepared by WRT in 2003, in reaction to current development pressures, state infrastructure investments, and opportunities to coordinate with other planning efforts. Specifically, NKCDC finds itself in the midst of development pressures moving north from Center City, other planning efforts in and around the NKCDC service area, and the broader planning efforts that began with the 2001 North Delaware Riverfront Plan and continued most recently with Penn Praxis’ Civic Vision for the Central Delaware.

NKCDC participated in the year-long planning process conducted by PennPraxis that resulted in a development framework that is the basis for NKCDC’s riverfront plan in this document. Because of NKCDC’s involvement in that inclusive and ongoing effort, the development framework is viewed as the basis for future dialogue with the city and developers. The purpose of this plan is to provide a flexible framework that is focused on implementation, particularly in light of the zoning reform effort currently underway and endorsed by the city administration.

In order to build consensus for the plan and to set an implementation strategy, a Riverfront Task Force was created that includes community organizations, stakeholders, and future project funders. The broad membership of this guiding body is an attempt to ensure that the effort will be followed through to implementation.
The staff of NKCDC and WRT worked closely together to develop a scope of services that leveraged WRT’s work with PennPraxis on the Civic Vision for the Central Delaware. In January 2007, NKCDC contracted with WRT to carry out the work.

A broad Riverfront Task Force comprised of local and State agencies, community organizations, and residents from NKCDC neighborhoods was formed to guide the planning process. This group was charged with reviewing WRT’s work and vetting the plan recommendations.

New Kensington Riverfront Task Force:

- Brian Abernathy
  Councilman DiCicco’s Office
- Glen Abrams
  Philadelphia Water Department
  Office of Watersheds
- Win Akeley
  Friends of Penn Treaty Park
- Jeremy Beaudry
  Neighbors Allied for the Best Riverfront
- Theresa Costello
  Port Richmond Community Group
- Spencer Finch
  Pennsylvania Environmental Council
- Ben Ginsberg
  Center City District
- Mike Greenle
  PennPraxis
- Bridget Keegan
  PennPraxis
- Laura Lanza
  Resident
- Chris Linn
  Delaware Valley Regional Planning Commission
- Kathleen Lunn
  PA Department of Community and Economic Development
- Jim Mancinelli
  Friends of Penn Treaty Park
- Nancy Martino
  Friends of Penn Treaty Park
- Barbara McCabe
  Philadelphia Recreation Department
- Joe McNulty
  New Kensington CDC
- Mike O’Brien
  Pennsylvania House of Representatives
- David Ortiz
  Philadelphia City Planning Commission
- Christine Rabe
  Resident
- Shawn Rairigh
  Neighbors Allied for the Best Riverfront
- Joan Reilly
  Pennsylvania Horticultural Society
- M. Simone
  Resident
- Patrick Starr
  Pennsylvania Environmental Council
- Sandy Salzman
  New Kensington CDC
- Shanta Schachter
  New Kensington CDC
- Sarah Thorp
  Delaware River City Corporation
- Carolyn Wallis
  Pennsylvania Department of Conservation and Natural Resources
- Dennis Winters
  Clean Air Council
- Maryann Womelsdorf
  New Kensington CDC
1. Data Collection and Coordination with Other Planning Efforts
WRT collected data from the NKCDC and coordinated with other waterfront planning efforts to provide the basis for the development of the riverfront plan. Key to this coordination was the concurrent PennPraxis riverfront planning effort, which was also led by WRT and involved surrounding communities, such as Northern Liberties Neighborhood Association.

2. Riverfront Best Practices Presentations
Parallel to the Riverfront Task Force review was a community outreach and engagement process designed by NKCDC to support the planning effort. This program included an initial series of neighborhood meetings that reviewed locally relevant riverfront issues and national best practices to facilitate community comment and direction. A PowerPoint slide show was given to visually present the possibilities for the Delaware Riverfront through case studies and best practices from other urban waterfronts.

3. Community Design Workshop: Draw Me a River
NKCDC and WRT facilitated a community workshop on June 2nd, 2007, that engaged a broad neighborhood constituency. The workshop began with a review of existing conditions on the Delaware River, a presentation of riverfront best practice case studies, and the plan framework developed concurrently with the PennPraxis plan. The community then participated in break-out sessions that explored possibilities for riverfront gateway projects. The work of the break-out sessions was summarized at the workshop and in a report document.

4. Development Framework, Goals, and Priorities
Through the Riverfront Task Force, WRT and NKCDC set and prioritized the goals of the development framework. The four primary areas of concern defined were:

1) The community’s definition of public access to and along the river;
2) The characteristics of the ‘greenway’ and the river’s edge;
3) The character of the development in the riverfront area; and
4) The integration of environmental, historic, and cultural identity programs.

With the help of the Riverfront Task Force, a summary matrix was created that
includes jurisdictional and tasked responsibilities of various entities.

5. Framework Plan
A NKCDC framework plan was developed with three framework components that relate to the PennPraxis plan:

- Land Use Concept
- Circulation + Access Plan
- Open Space Concept

The components of the Framework Plan were vetted with the community and

6. Development Guidelines
WRT prepared general development guidelines based on the general urban design principles recommended in the Civic Vision for the Central Delaware prepared as part of a civic engagement process. The guidelines were then extended and tailored to the input of the residents of the NKCDC service area. These guidelines for new development interpret the land use concept and are seen as the basis for a dialogue with the city as zoning reform moves forward. In the short-term, these guidelines will serve the community in their discussions with developers and the city when addressing basic urban design concepts such as arrangement of land uses, massing, scale, interface between buildings and surrounding streets and parks, etc.

7. Gateway Projects’ Concept Plans
Working with the Riverfront Task Force and NKCDC, WRT developed concept plans for public access and open space. These concept plans set early action projects to seek funding for implementation and are categorized into three types, Access, Parks and Key Streets:

Access
- Lehigh Viaduct
- Frankford Creek

Parks
- Penn Treaty Park
- Gunner’s Run Park
- Pulaski Park

Key Streets
- Frankford Avenue
- Columbia Avenue

8. Plan Documents
Final documentation is provided to NKCDC in the form of a report, digital presentation, and poster.
BACKGROUND: DEVELOPMENT PRESSURES

In 2007, New Kensington Community Development Corporation (NKCDC) and the neighborhoods within its service area found themselves facing development pressures that ranged from state-initiated casino sites to high-density housing development proposals. With three of the five proposed casino sites in the neighborhood, thousands of units of high-rise housing on the drawing boards, the Philadelphia housing market going strong even as the national market softened, and a permissive zoning environment, interest in NKCDC riverfront property reached a fever not seen since the turn of the 20th century. With only hints of a housing recession surfacing in the final months of 2007 and with the SugarHouse casino site moving slowly into the city approval process, the neighborhood groups in Fishtown continued to be engaged by development interests and pressures.
Philadelphia’s Delaware Riverfront is facing many kinds of development pressures. New Kensington’s riverfront is experiencing all of them and offers very little public access to the river.
At the same time that development of riverfront property is the focus of local government, neighborhood groups, and property owners, the Pennsylvania Department of Transportation (PennDOT) is finalizing plans to rebuild Interstate 95 in the NKCDC service area. The rebuild of this section will begin in 2008 and last for eight years. While one purpose of this Federal Highway Administration-funded reconstruction project is to better accommodate the increasing through traffic volume from I-95 to the Vine Street Expressway (I-676), a significant focus of the project is the reconfiguration of the Girard Avenue interchange. The planned reconfiguration is an opportunity to improve street connections between neighborhood and riverfront property and extend Delaware Avenue through to Cumberland Street as a major ground-level investment.

The new ramp configuration for the interchange centers access to and from northbound I-95 at the intersection of Schirra Drive and Delaware Avenue. This reconfiguration includes improved pedestrian access along Aramingo Avenue and stormwater management parks.

Through the PennPraxis planning effort, WRT worked with PennDOT, their planners and engineers, the Philadelphia Water Department (PWD) Office of Watersheds, and the city to envision environmental and connectivity enhancements in the reconstruction effort. A review of historical mapping provided by the Philadelphia City Planning Commission (PCPC) identified the location of an historic stream and canal, Gunner’s Run, that was the basis for the conceptual design of a stormwater park that connects Aramingo and Girard Avenues to the river at Dyott Street.

The new ramp locations require demolition of the primary remaining historic Cramp Shipyard building. While the owner of the property has moved forward on development plans for the property, PennDOT is in the process of acquiring all land necessary for the reconstruction project.

When completed in 2016, the new ramps will privilege the riverfront property along Delaware Avenue from Aramingo Avenue to Cumberland Street with increased highway access, which will alter the real estate value of these parcels.
INTRODUCTION

Conversion of Highway Embankment to Structure

Open Space under I-95

Stormwater Run-off Infiltration (8 acre-feet)

Park-like Open Space under Girard Interchange

Local, At-Grade Road (under interchange)

Proposed At-Grade Local Road Reconfiguration

Pedestrian Circulation Concept

Significant Pedestrian Portals under I-95

Highway On/Off Ramps (at-grade barriers)

Local, At-Grade Road (under interchange)

2008—2016: Full Reconstruction,
Current Schedule

2032—2040: Superstructure Replacement,
Schedule Based on Cap Structure Condition
Other development interests include plans for port-related uses from the Girard Avenue interchange north through the property associated with the Tioga Marine Terminal. Once the Pinnacle Casino site was not selected as one of the two Philadelphia sites, the ownership interests in the Cramp Shipyard area have been seeking other development opportunities in anticipation of the improved access from I-95.

An area of significance is the Conrail property between Cumberland Street and Allegheny Avenue. The Philadelphia Industrial Development Corporation (PIDC) has been in discussions with Conrail and its owner companies – Norfolk Southern Railway and CSX Transportation – for the sale and development of a warehouse and distribution center in the area south of the current rail line.

As part of the PennPraxis planning effort, PIDC was contacted to discuss future, more intensive use of the land and the acreage requirements for the subdivision of land for different types of uses. Economics Research Associates, Inc. (ERA), a market and economics consultant firm out of Washington, DC, assisted the PennPraxis effort in determining the site’s market potential and investigating a tax increment financing (TIF) strategy to finance public improvements on the portion of the Conrail property that PIDC was interested in.

The northern section of the Conrail property is occupied by active industrial uses under a lease agreement and like the Tioga Marine Terminal is currently prime industrial land due to its easy rail and highway access. A portion of the Conrail property following the active rail line from Richmond Street to Allegheny Avenue near Pulaski Park is also being leased as part of the temporary access plan for PennDOT’s reconfiguration of the Girard Avenue interchange. The term of the lease is 20 years.

The Conrail site is also prominently featured in another concurrent planning effort. GreenPlan Philadelphia, a city-wide vision for open space, developed by the City of Philadelphia and WRT, identifies the viaduct as a notable opportunity for park and trail creation. As a park with trails, the viaduct could serve several highly underserved communities and connect them to the riverfront.
The area north of Allegheny Avenue has seen little change in the past decade, but talks of a bio-mass energy facility at the Tioga Marine Terminal occurred in the past year. The area from Allegheny Avenue to the Frankford Creek was part of a study commissioned by the Philadelphia City Planning Commission that was completed in 2001, titled *Renovating Post-Industrial Landscapes: The North Delaware Riverfront*. The recommendations of the study included restoration of the banks of the Frankford Creek and employing best practices for renewable energy and water treatment at the site of the PECO electrical plant, Philadelphia Gas Works, and the Philadelphia Water and Control Plant. The plan proposes a new public park that integrates a wind and solar panel farm as well as constructed wetlands for water treatment. To date, there has been no implementation for this area of the plan.
A Vision of Tioga Marine Terminal
Possible new “infra-scapes” south of Bridesburg at the Philadelphia Water Treatment Central Facility, the Richmond PECO Energy Facility, and Philadelphia GasWorks plant. Diagram by Field Operations.

Tioga Marine Terminal
The “tank farms” of the Tioga Marine Terminal as seen from the street, and the Terminal as seen from above.
The development framework envisioned by NKCDC and the Riverfront Task Force is a flexible one that can accommodate changes in market conditions, but provides access and open space amenities that will serve the riverfront neighborhoods as well as the development of private property. The primary goals of the framework are:

- Public access to and along the river.
- Defined character of the “greenway” and the river’s edge.
- Integration of environmental, historic, and cultural program and identity.
- Defined character of the development in the riverfront area.

The development framework is presented in two sections:
A Framework Plan and Development Guidelines
The Framework Plan was developed in concert with the PennPraxis’ Civic Vision for the Central Delaware with three framework components, land use, circulation and access, and open space. The components of the Framework Plan were vetted with the community and the Riverfront Task Force and serve as the basis for development guidelines and gateway concept plans.
LAND USE CONCEPT

The general concept is a gradation of residential mix starting at Spring Garden with the most residential use to Allegheny Avenue with mostly job-producing uses – commercial and industrial uses. The Tioga Marina Terminal area from Allegheny Avenue to the Frankford Creek is assumed to remain industrial. As imagined in the Civic Vision for the Central Delaware and the preceding North Delaware Master Plan, the industrial uses should look to future technologies both alternative energy production (bio-fuel, solar, and wind) and alternative water treatment related to the existing plant and surrounding land.

The residential mix is shown in three grades or zones but does not address height or specific density by parcel or block. The specifics of land use and height should be addressed in the communities’ engagement with the City’s zoning reform initiative. In terms of intensity of use the concept assumes that a floor area ratio (FAR) of 4 is established for the entire area. The current zoning calculates FAR to include water rights and exclude parking, resulting in much higher FARs – sometimes twice as high. This plan recommends revising the FAR calculation to take these factors into consideration and reducing the potential for overdeveloping specific sites.

Brief descriptions of the three mixed-use zones shown in the diagram on the facing page:

Mixed Use 1

With close proximity to Center City and adjacencies to booming residential neighborhoods of Old City, Northern Liberties, and Fishtown, this zone is seen as the greatest opportunity to build residential density to support transit service improvements and expanded retail services. Proposed build out in this area already leans toward residential intensity, so future discussions with the city on zoning reform should focus on the inclusion of retail services.

Mixed Use 2

With proximity to the Girard Avenue I-95 Interchange, access to the Girard Avenue Trolley line, and strip retail along Aramingo Avenue, the market potential is for retail and commercial services. This potential was identified through the Central Delaware planning process and also identified the need to mix residential uses with retail use in a neighborhood center that would also serve as a regional retail destination.

Mixed Use 3

With PIDC and Conrail in discussions about developing portions of this area for the creation of jobs, this area is seen as mostly businesses that integrate physically and economically with the adjacent neighborhoods. Like the industrial zone at the Tioga Marine Terminal the intent for this area is to attract businesses that focus on future technologies – in energy, sustainable manufacturing, medicine, communications, etc.
DEVELOPMENT FRAMEWORK

Mixed Use 1
Mixed Use 2
Mixed Use 3

LAND USE CONCEPT

Industrial
Public
Greenway
CIRCULATION AND ACCESS CONCEPT

The circulation and access plan is an outgrowth of WRT’s work with PennPraxis in collaboration with PCPC, PennDOT, their consultants (URS and Glatting Jackson), and review with the Riverfront Task Force. The extension of Delaware Avenue as a riverfront boulevard and the adoption of a grid of streets are the central concepts of this plan.

Also key to the access concept is the adoption of ‘green streets’ by the city and neighborhood groups. The identification of these streets is based on the dimension of the street right-of-way, connection of neighborhood parks to Delaware Boulevard and/or the river, and the ability to accommodate state-of-the-art stormwater management in the streetscape. Opportunities vary among the different green streets but through WRT’s work with the Riverfront Task Force, GreenPlan, and the Central Delaware, the Office of Watersheds at PWD has been involved in the identification of specific strategies. The following streets have been identified through this planning process as potential green streets: Spring Garden, Frankford, Columbia, Cumberland, Lehigh, Anne, Allegheny, Castor, and Lewis.

Delaware Boulevard is part of this ‘green streets’ concept, and is supported by primary and secondary streets, as shown in the Circulation and Access Concept diagram on the facing page. The intent of the primary streets is two-fold:

Adding Value
The adoption of a street plan has the power to add value to the properties beyond the boulevard frontage and the current right-of-ways. As the city has done in the past through its charter, the street plan can be acted on at the time of development of the site. At this point, the task at hand is determining the ownership structure and value of these streets in relationship to development value.

Managing Traffic
An incremental approach to accommodating increased automobile traffic results in lane-widening and the degradation of the pedestrian environment. Adopting a framework of primary and secondary streets allows for a balanced approach to traffic management as development occurs across the district.

The secondary streets provide the framework for another level of support to development that relate to use, intensity, and service. In the diagram on the facing page, these streets are shown in a lighter shade of orange to indicate that the use and location of this system is flexible. For instance, the use of the secondary streets is appropriate if lower intensity residential is proposed for a specific development block defined by the primary streets. Another example is the interim development of industrial uses that preserve the right-of-ways through zoning for future redevelopment purposes as the market shifts. Related to access for building uses, the secondary streets might be used as service alleys, like Ludlow, Sansom, and Delancey Streets do in different parts of Center City.
CIRCULATION AND ACCESS CONCEPT

[Map image showing various streets like Boulevard, Primary Street, Green Street, and Secondary Street]
**OPEN SPACE CONCEPT**

The open space concept responds to input from the Fishtown, Port Richmond, and Bridesburg communities; from WRT’s work with PennPraxis in collaboration with PCPC, the Philadelphia Water Department (PWD), PennDOT, their consultants (URS and Glatting Jackson); and review with the New Kensington Riverfront Task Force. It is also developed in response to the specific physical and cultural characteristics and potential of the riverfront area. The riparian buffer at the river’s edge and the river trail provide extension of the East Coast Greenway and connects proposed new parks, enhanced parks, and green streets. The overarching goals of the open space concept are:

- Create access to and along the river;
- Increase and enhance access between neighborhoods and the river;
- Improve ecological functions of land development;
- Enhance land value through park recreation amenities.

The design and implementation of the specific projects and places identified in the plan have a plethora of potential sources and objectives beyond the goals stated above, which include the truly fascinating and unique history and culture of the community; the range of views and vantage points to the river; and the ability of the proposed parks to support sustained neighborhood regeneration.
OPEN SPACE CONCEPT

Green River Edge
River Edge Park
Park Under I-95
City Park
Boulevard
Green Streets
River Trail
DEVELOPMENT GUIDELINES

With the Framework Plan as the basis for discussions with the city on issues of access, open space, and land use, the Development Guidelines in this section of the plan have been developed as the basis for specific zoning changes or overlays that relate to the form of development. As the zoning reform initiative begins to take shape, these guidelines have been crafted to be general enough to begin more neighborhood-specific discussions with the PCPC about the form of development and allow for different approaches along the length of the riverfront.

The guidelines illustrated on the following pages are an outgrowth of the general urban design guidelines in the Civic Vision for the Central Delaware, addressing block configurations and how buildings relate to the street. They were developed as models based on residential and residential/mixed-use block types. This plan did not address more specific retail or industrial buildings because it was determined that the specific types of development needed to be vetted through a more in-depth community planning process, led by the city in conjunction with the zoning reform initiative.

The models presented herein are not prescriptive, but merely illustrative of the basic design principles and can apply to both infill and larger land development that is possible along the riverfront. Based on the Circulation and Access Concept in the Framework Plan, the models illustrate the subdivision of the primary street grid with secondary streets and alleys related to development types and allowing for flexible build-out of uses. The models are organized into three types: Rowhouse, Mixed-Development, and High-Rise.
Urban Setbacks
Buildings should be built up to the sidewalk line with active ground floors along the boulevard and primary streets.

Parking
Consider incentives to developers that limit visible surface parking lots and freestanding structure parking garages.

Green Infrastructure
Sustainable building practices provide opportunities for privately developed open space and green roofs.

High-Rise Development
Integrate towers into low-rise blocks by staggering them so as to ensure views from adjoining buildings.
Rowhouse Type: Typical Block Subdivision
In this model the blocks, as defined by the primary streets, are subdivided based on a typical rowhouse development, with secondary streets creating additional residential frontage. Alleys are used to provide access to park cars.
Rowhouse Type: Distribution of Uses
The model assumes a flexible build-out that maintains private yards, opportunities for parking within buildings, and commercial frontages along primary streets. This approach addresses market expectations for this development type at the block level.
**Rowhouse Type: Block Dimensions**

As defined by the primary, secondary, and alley streets, the dimensions of the blocks continue the scale and rhythm of neighborhood streets. These are for illustrative purposes only and can be used in discussions with the city for more in-depth planning.
Rowhouse Type: Distribution of Uses

The model addresses the basic elements of architectural design at the urban scale, without prescribing or limiting architectural style. The important elements focus on building articulation and relationships at the human scale.
Mixed-Development Type: Typical Block Subdivision

In this model, the blocks, as defined by the primary streets, are subdivided based on a range of development types with secondary and alley streets creating additional residential frontage. The use of alleys for additional residential frontage and elevator buildings along primary streets will provide opportunities for higher density in low-rise development.
Mixed-Development Type: Distribution of Uses

The model assumes a flexible build-out that maintains private yards, opportunities for parking within buildings, and commercial frontages along primary streets. This approach addresses market expectations for a variety of development types depending on location.
Mixed-Development Type: Block Dimensions
As defined by the primary, secondary, and alley streets, the dimensions of the blocks continue the scale and rhythm of neighborhood streets and provide for a variety of street types. These are for illustrative purposes only and can be used in discussions with the city for more in-depth planning.
Mixed-Development Type: How Buildings Meet the Street
The model addresses the basic elements of architectural design at the urban scale without prescribing or limiting architectural style. Illustrating rowhouses along the alley streets with garage fronts, the important elements focus on building articulation and relationships at the human scale.
High-Rise Type: Integrating Scales of Development

The integration of high-rise buildings is a matter of scale and, like the other models, maintaining block subdivisions and uses that contribute positively to the surrounding neighborhood.
High-Rise Type: How Buildings Meet the Street
The model addresses the basic elements of architectural design at the urban scale without prescribing or limiting architectural style. The important elements focus on building articulation and relationships at the human scale. Of particular concern is the integration of parking within the block of development so as to not negatively affect the streetscape. Typical techniques within the market are wrapping parking with residential buildings or building underground parking garages, where price points will support the cost differential of building underground.
There are specific key opportunities for forging more powerful connections between the neighborhoods and the riverfront and promoting interest in neighborhood activities and services. These gateway opportunities are grouped into three typologies: access, parks and streetscapes. Gateway opportunities are presented as separate projects within distinct typologies in order to highlight their different functions and to align them with funding opportunities that are focused upon either types of projects or functions. All three typologies contribute to a proposed infrastructure armature designed to support community development, health, and cohesion.

**Access gateways** are new easements over or acquisition of private property to ensure public access to the river as development occurs. The access points proposed in this plan are new neighborhood connections that supplement river access that exists only at Penn Treaty and Pulaski Parks. These proposed access points are a minimum interval of access and assume that a riverfront trail and the network of streets will provide continuous, integrated access to the river.

**Park gateways** are areas of land protected for public use and benefit, owned and managed by a public agency. The gateway parks proposed in this plan are new parks and enhanced existing parks. These parks can provide a myriad of environmental, economic and social benefits to the New Kensington area. They can increase real estate value, provide space for recreation, promote human health, play a role in a city’s tourism economy, and increase community cohesion.

**Streetscape gateways** are publicly accessible corridors that accommodate vehicles and encourage pedestrian and bicycle circulation through a variety of design strategies, including traffic calming, lane narrowing, pedestrian-friendly lighting and furnishings, extensive tree plantings, and accessibility features. Many of the proposed streetscapes are also green streets. Definitions of green streets can vary considerably. For this plan, it is a tree-lined street that encourages pedestrian use and that manages rainfall by employing certain design elements in the right-of-way. Converting an existing street to a green street can entail adding bioswales, pervious pavement, vegetated strips, tree canopy, curb bump-outs, and medians with infiltration beds.
COMPOSITE GATEWAY CONCEPTS

Streetscapes
Access Gateways
Park Gateways
Lehigh Viaduct
Dyott Street
Penn Treaty Park
Frankford Avenue
Pulaski Park
Delaware River
GATEWAY CONCEPTS: ACCESS

Frankford Avenue
Dyott Street
Lehigh Viaduct
Frankford Creek
Frankford Avenue has always been an important neighborhood access corridor to the riverfront. Historically, a small square was situated at the intersection of Frankford and Delaware Avenues, serving as the gateway to the district. This square later became the site of a public bathhouse. From the square, a public corridor led to the river’s edge. This public corridor is preserved today as a public easement for a major storm sewer outfall.

Bottom middle: Lawn terraces at Bladensburg Waterfront Park, Bladensburg, MD (WRT)

Right: Douglas Senft's “Cathedral” sculpture at Waterfront Park in North Vancouver.

Opposite: The vision for this site is to recreate the square as a major riverfront gateway, and to preserve an access corridor leading to the river.
ACCESS: DYOTT STREET

The circulation plan proposes to create a continuous North Beach Street. Currently, there is a gap in Beach Street between Dyott Street and Schirra Drive. This connection will later be used for the creation of Delaware Boulevard, and is vital to creating a connected grid of streets to distribute traffic and create a pedestrian-accessible streetscape.

Left: Concept sketch from “Draw Me a River,” envisioning substantial green space at the river’s edge, mixed uses along Beach Street, green boulevards on Cumberland and York Streets, and a gateway at Richmond and Cumberland Street.

Top right: An inviting, active open space overlooking the water.

Bottom right: Current view of Dyott Street, swathed in asphalt and severed from the surrounding neighborhood by I-95.
Ownership information and land acreage estimates for parcels critical to the establishment of a stormwater management park at Dyott Street.

Aerial view indicating proposed extension of Beach Street, which would eventually become part of the extended Delaware Boulevard.
The Lehigh Viaduct stands above the rooftops adjacent to Lehigh Avenue, a wide corridor currently off-limits to the public. Once the site of dozens of railroad tracks, most of the corridor is now overgrown, and only a few sets of rails remain in use. The Viaduct offers a tremendous opportunity to establish a major regional open-space connector with an extensive green network enhanced by adjoining historic streams and creeks.

The community vision for the Lehigh Viaduct is to create a major park with significant environmental enhancements that will absorb and filter stormwater runoff and help to mitigate air pollution. The realigned Delaware Boulevard and the continuous riverfront greenway will link the Viaduct and surrounding neighborhoods to other areas along the riverfront. New development could extend the city to the river’s edge, meeting the continuous riverfront park.

This page:
An aerial view of the vast natural resources encompassing the Lehigh Viaduct, currently off-limits to the public.

Opposite page:
Left: “Draw Me a River” participants envisioned a trail spanning the Lehigh Viaduct and extending to a continuous park along the riverfront. The neighborhood grid also extends to the waterfront with a vibrant mix of uses along Lehigh Avenue.

Top center: The overgrown Lehigh Viaduct is in sight but off-limits to neighborhood residents.

Top right: Restored natural habitat protects endemic species, manages stormwater runoff, and offers opportunities for passive recreation as well as riverfront access.

Bottom center: Once heavily traversed by rail, the viaduct is now a wide swath of open space with only a pair of operable rails.
Frankford Creek runs in a man-made canal between the approaches to the Delair Railroad Bridge and the Betsy Ross Bridge. The creek is extremely difficult to access, compounded by security restrictions that took effect after 9/11.

The vision for the creek is to upgrade the natural habitat and green corridor while providing access for passive recreation and a bicycle trail that will eventually connect to Tacony Creek Park. The creek will tie into the expanded Delaware Boulevard and preserve valuable habitat along the river.

This page:
Top left: Riverfront boardwalk, Brooklyn Bridge Park.
Top right: Viewing benches at Schuylkill River Park, Philadelphia (WRT).
Bottom right: Lawn at Commodore Barry Bridge Park, Chester, PA.
Bottom left: Currently the best view of Frankford Creek is through a chain-link fence.

Opposite page:
Left: Residents expressed their desire to see Frankford Creek restored to its natural state at the “Draw Me a River” workshop. They also envisioned filtrating swales along Delaware Avenue, a museum occupying the PECO building, and a greenway connection north of the Betsy Ross Bridge.

Middle: The North Delaware Plan, completed by Field Operations, proposes continuous access and recreation fields along the northern bank of Frankford Creek.

Far right: Rip-rap edge and lawn at Hudson River Park, New York City, NY
GATEWAY CONCEPTS: PARKS

Penn Treaty Park
Dyott Street
Lehigh Viaduct
Pulaski Park
Frankford Creek Park
Improvements to Penn Treaty Park will assist this existing green space retain its value as an important community asset and gathering space. The proposed improvements will provide enhanced stormwater management and complement the proposed boulevard running along Delaware Avenue. Recommended enhancements include the creation of a naturalized edge and a connection to the proposed greenway. The restored riparian edge would stabilize the river/park edge, create a sustainable habitat for endemic species of plants and animals, and preserve the unimpeded view to the Ben Franklin Bridge and the city skyline. Other recommended changes include redistribution of certain park features to better encourage views into and across the park and enhanced use of the park. Those recommendations include flattening of the earthen mound along Delaware Avenue; relocation of the children’s play zone from a flood-prone area to a more prominent location; and relocation of park parking to the southern perimeter. Negotiation with PECO for use of their property immediately adjacent to the north face of the park for overflow parking is also recommended. Proposed additional features for the park include a vending kiosk at the edge of the southern parking court and a solar-powered environmental education exhibit near the wetland area. The proposed greenway and new paths leading to the park will attract residents from Fishtown and the proposed riverfront developments to an enhanced Penn Treaty Park.

Because of the park’s historic significance, its key riverfront location and its proximity to both existing, underserved neighborhoods and to proposed high-rise development, it has the potential to become a signature park for the city. As a signature park, it would serve its immediate neighbors and act as a destination for others from beyond the neighborhood.
Great Lawn
Tree Canopy
Restored Riparian Edge
Plaza
Rain Gardens; Educational Component
Relocated Playground
Art installation
Street Parking
Cafe
Paths
Boardwalks
Sculpture
Water feature
Environmental Education Exhibit

51 gateway Concepts
The intersection of Allegheny and Girard Avenues is currently a tangled knot of highways, underpasses, and on and off ramps, severing the neighborhood from the riverfront and creating an environment that is hostile to pedestrians. PennDOT was scheduled to begin the reconstruction of the Girard Avenue Interchange in January of 2008. The changes to the interchange present an opportunity for PennDOT to construct a park that will be accessible to the community and manage stormwater runoff.

The vision for the park beneath Interstate 95 entails:

- Enhanced walkway along Aramingo Avenue to Dyott Street and to the river, including traffic management at Girard Avenue;
- A greenway between Penn Treaty Park and Richmond Street;
- The absorption of stormwater runoff from the highway;
- Planted sound walls to help mitigate noise and air pollution;
- Innovative lighting beneath the structure to create a safer, more traversable portal between the riverfront and the surrounding neighborhoods;
- Recreational sites and parking beneath the elevated structure.

Top right: The open space beneath I-95 offers an abundant opportunity to capture and treat runoff from the highway while creating pedestrian-friendly portals between the riverfront and surrounding neighborhoods.

Bottom: The plan dramatically transforms a highly visible, physical impediment into a community amenity.
Stormwater Park at Girard Interchange

Working with PennDOT during the Central Delaware planning process, WRT developed conceptual plans for this NKCDC gateway. Continuing the dialogue with PennDOT is critical for the successful implementation of this gateway concept.
The Lehigh Viaduct offers a large open space that could serve as both a destination and a green corridor. The community vision for the viaduct is a park with nature trails, restored habitat, and space for active recreation. Access to the neighborhood would be convenient and pedestrian-friendly. The greenway connection would also connect the East Coast Greenway and the riverfront to other areas of the city, potentially reaching all the way to the Schuylkill River. The Viaduct is of such potential significance, environmentally, culturally, and in terms of providing much needed access to recreation for underserved neighborhoods, that it is a prime candidate for a new state park.

Middle: Paths and open space at Coolidge Park in Chattanooga, TN

Opposite page: The Civic Vision for the Central Delaware proposes more intensive use of the Conrail site with a restored natural edge and nature trails forming a continuous riverfront park. The Lehigh Viaduct would extend the park from the river through the city, creating a regional green corridor.
Top right: A recent aerial view of Pulaski Park barely shows the sliver of green along the edge of the heavy industrial area.

Bottom right: The vision for Pulaski Park significantly expands the park’s acreage and public offerings with playing fields, community festival space, environmental enhancements, and improved riverfront access.

Opposite page: Creating a tidal wetland by planting vegetation along the north edge of the Conrail site would enhance habitat, fishing opportunities, and other river recreation. The piers also offer opportunities for adaptive reuse as fishing piers.

Pulaski Park is a sliver of green space in an otherwise concrete-covered industrial corridor. It is a treasured community amenity, but not without design and maintenance challenges. The community vision for Pulaski Park entails expansion over time. Currently, the Park is adjacent to property controlled by the state and occupied through lease agreements.

The vision for Pulaski Park includes the creation of a naturalized edge along the river, providing a public landscape. The existing gantries could be featured, representing Port Richmond’s identity as a former industrial powerhouse and as focal points for an enlarged park. Environmental enhancement concepts demonstrate the potential for the restoration of ecological function in the river. One concept shown is a grid of rafts with experimental plantings that could provide habitat and create a rich aquatic ecosystem for fish and nesting birds. The restored barge pier could become an attraction for fishing and a visual platform that offers open views of the river, the adjacent pier housing and its park, New Jersey, and the area abutting Pulaski Park.

Pulaski Park is also envisioned as a large green space that will tie into the extended green boulevard running along Delaware Avenue and away from the river along Allegheny Avenue, extending the green corridor well into the neighborhood of Port Richmond.
Frankford Creek is envisioned as a linear riparian park connecting Tacony Creek Park to the Delaware River. The vision for this corridor is of a restored environment, left partly in a natural state but with public access. DRPA maintains the land near the Betsy Ross Bridge as a lawn, but this area is fenced. This land could be reclaimed as public space. A bicycle trail would run parallel to the creek connecting to Tacony Creek Park.
Waterfront recreation trails at Emscher Park, a brownfield redevelopment in the Ruhr Valley, Germany (above), and Schuylkill River Park in Philadelphia (right).
**GATEWAY CONCEPTS: STREETSCAPES**

Frankford Avenue
Columbia Avenue
Cumberland Street
Lehigh Avenue
Allegheny Avenue
Delaware Boulevard
The six gateway streetscapes were identified with the Riverfront Task Force members to ensure better connection along major streets to the west and north, connecting to the proposed trail north of the Betsy Ross Bridge.
A major thoroughfare in the community, Frankford Avenue presents an opportunity to create a distinctive green corridor that extends to the riverfront. The existing cross section includes a travel lane in each direction and a parking lane on each side of the street.

The vision for this street is a green street and bicycle corridor. The cross section of the corridor would be changed. Parking on the south side of the street would be removed to create a bicycle lane in each direction, creating a high-quality bicycle link to the new riverfront trail. The sidewalk area would be widened into the remaining parking lane at intersections to create rain garden areas that would be used to filter stormwater and also serve as a place to locate bicycle racks, landscape, and artwork. The parking lane would be paved with pervious pavement to reduce stormwater runoff. Street trees would be installed on both sides of the streets and overhead utilities would be relocated or placed underground. Where minor cross streets intersect with Frankford Avenue, the sidewalk will be extended at an even level across the crossing street to create a continuous pedestrian realm. Cars would drive over a gentle rise to enter or exit the crossing streets, also serving to calm traffic in the neighborhood. At the intersection with Girard Avenue, new medians and sidewalk widenings would create a major public node at Girard Avenue and help create a green identity for the surrounding neighborhood. The Commerce Department has received Transportation Enhancement funding for streetscape improvements on Girard Avenue that includes this intersection. New pedestrian lighting would be installed on the corridor to create a safer and more attractive streetscape.
Frankford Avenue East of Girard Avenue
This photo simulation illustrates the streetscape concepts for Frankford Avenue, which include bike lanes, rain gardens, reconstruction of I-95 as a viaduct, and parking and recreational uses under I-95. This model for I-95 emulates the skating rink and public parking in South Philadelphia.

Proposed Streetscape Plan
This plan illustrates potential locations of bump-outs, rain gardens, parks and recreation along Frankford Avenue from Palmer Square to the river.
EXISTING FRANKFORD AVENUE STREET SECTION

[Diagram showing street section with dimensions: 60' width, 12' lane, 7' sidewalk, 11' median, 7' sidewalk, 12' lane, 36' total.]
The section of Frankford Avenue to the east of Girard Avenue can accommodate bike lanes and rain gardens that will move parking under the I-95 viaduct. The community should advocate for a viaduct reconstruction to facilitate this streetscape recommendation.
For this stretch of Frankford Avenue, the plan recommends corner bump-outs and rain gardens only because this area needs to maintain its on-street parking resources.
The plan recommends pedestrian crosswalk enhancements at the smaller side streets to improve pedestrian connectivity. This approach is typical and applicable to many of the streetscapes highlighted in this plan.
In order to improve pedestrian connections along Frankford Avenue to the river, this plan recommends bump-outs and lane realignments to create shorter pedestrian crossing distances and areas for sidewalk retail services, such as cafes.
Columbia Avenue connects Palmer Square, Hetzel Playground, and Penn Treaty Park. It is a pedestrian-scaled, primarily residential street, with a 50-foot right of way.

The vision for Columbia Avenue is a green street that links important open spaces in New Kensington. Street trees would be planted throughout the corridor and lighting would be upgraded. Rain gardens would be installed at intersections to filter stormwater. The parking lanes would be repaved with pervious paving to further reduce stormwater runoff. Where minor cross streets intersect with Columbia Avenue, the sidewalk will be extended at an even level across the cross street to create a continuous pedestrian realm. Cars would drive over a gentle rise to enter or exit the crossing streets, also serving to calm traffic in the neighborhood.

Right: The area where Columbia Avenue passes under I-95 and connects to Delaware Avenue is hostile to pedestrians. When the reconstruction of I-95 takes place, the intersection is expected to improve for both cars and pedestrians.
Existing Plan
Currently, the Girard Avenue Interchange of I-95 begins with ramping at Columbia Avenue, which will be consolidated to the north above Aramingo Avenue.

Proposed Plan
Based on PennDOT’s reconstruction plans, Delaware Avenue is extended at grade, parallel to I-95, creating better pedestrian connections from Columbia Avenue to the north. This plan recommends additional enhancements to Columbia Avenue, which include parking under a viaduct version of I-95, pervious surface parking lanes, bump-outs with rain gardens and parks.
In addition to the streetscape improvements that will "green up" Columbia Avenue, the plan recommends pedestrian crosswalk enhancements at the smaller side streets to improve pedestrian connectivity.
Like the intersection at Frankford Avenue, this plan recommends enhancements to this intersection of Columbia and Girard Avenues. The reduction in pedestrian crossing distances provides opportunities for sidewalk retail services, such as cafes.
Cumberland Street is an arterial street that connects to Aramingo Avenue, Delaware Avenue, and I-95. This street could be upgraded as part of the I-95 reconstruction project.

The vision for this corridor is to create a green boulevard that connects Aramingo Avenue to the riverfront. New pedestrian connections would be established to Delaware Avenue and the riverfront. Intersections would be designed with safer pedestrian and bicycle crossings. This plan advocates for best practices in the design of viaduct structures and the uses that can be accommodated under them. At Cumberland Street, the height of the I-95 viaduct allows for a park landscape beneath the structure that includes stormwater infiltration and dramatic nighttime lighting of the proposed structure.

Far Right: Cumberland Street borders residential and auto-oriented retail uses, but does not present a cohesive pedestrian environment.
Far left: The I-5 Colonnade in Seattle, WA, is a 7.5-acre city park under Interstate 5, with a dog park, art installations, and a mountain biking park.

Middle: Overpass lighting creates a dramatic effect in Alingsas, Sweden. “Light in Alingsas” is an annual event where lighting designers from all over the world are invited to creatively light structures. (Flickr.com; user: iapia)

Right: A stormwater infiltration planter on SW 12th Avenue on the Portland State University campus is part of a series of landscaped stormwater planters designed to capture and infiltrate about 8,000 square feet of street runoff. (portlandonline.com)
In addition to the streetscape improvements that will "green up" the street, Cumberland Street provides pedestrian access to the Girard Avenue trolley and buses that stop under the I-95 viaduct.
Lehigh Avenue is a wide street that leads to the Conrail property on the Delaware River. The generous 120-foot right of way offers ample opportunity to create a green corridor with enhanced bicycle facilities. This corridor was studied as part of the City’s GreenPlan Philadelphia, which addresses the open space system of the city. GreenPlan Philadelphia includes simulations and concepts for Lehigh that exemplify the green street approach.

The vision for this corridor is to create a linear park-like street that reduces stormwater runoff and provides good bicycle access. The street cross section currently has much unused area. The proposed concept includes physically separated bike lanes, retention of existing back-in diagonal parking, a green stormwater-filtration median, and rain gardens at intersections. Street trees would be installed throughout the corridor and lighting would be upgraded. Lehigh would be extended to the river under the circulation concept proposed in this and other riverfront plans.

This page:
In coordination with GreenPlan Philadelphia, the plan proposes a “greening” of Lehigh Avenue.

Opposite page, clockwise, from left: Lehigh Avenue parallels the Lehigh rail viaduct and connects Aramingo Square to the riverfront property.

While the Lehigh rail viaduct is abundant with trees, Lehigh Avenue is a wide swath of impervious pavement with few trees.

Diagonal parking on the street coexists with bike lanes and two travel lanes.

The I-95 viaduct at Lehigh Avenue provides a great opportunity for uses such as a farmer’s market, like this one in Portland, OR.

Lehigh Avenue’s connection to the river is blocked by the change in grade at the Conrail site’s terminus.

The center turn lane provides an opportunity for a landscaped, stormwater-filtering median.
Lehigh Avenue provides ample dimension for parking, bicycles and the transformation of the street into a tree-lined boulevard.
Allegheny Avenue is an important arterial street that connects Campbell Park, Monkiewicz Playground, and Pulaski Park, has access to I-95, and provides an important route to the Tioga Marine Terminal and associated industrial areas. It also hosts a major flow of traffic to and from the Interstate. The 120-foot right of way offers many opportunities for an enhanced streetscape. Cairone & Kaupp Inc., in collaboration with David S. Traub Associates, have developed a greenway concept for Allegheny Avenue entitled “Returning the Port to Port Richmond” that emphasizes the community landmarks, such as illuminated church spires, and creates a green corridor linking the parks.

The vision for Allegheny Avenue is a beautiful mixed-use corridor connecting the parks of the avenue to each other and to the river. The church steeples and architectural landmarks will receive architectural lighting. The streetscape will be enhanced with new street trees, pedestrian lighting, improved paving, sidewalk widening at intersections, façade restoration, rain gardens, and possibly a landscaped median.
As part of the Civic Vision for the Central Delaware, Allegheny Avenue is proposed to connect to an extension of Delaware Boulevard along the river. This view shows Allegheny Avenue as a boulevard with a median and a park edge along the Tioga Marine Terminal to the north.
The proposed extension of Delaware Boulevard is envisioned as a wide, tree-lined boulevard with a center median, stormwater filtration gardens, commuter bike lanes, and a 12-foot-wide recreational path.
EXISTING ALLEGHENY AVENUE STREET SECTION WEST OF I-95
Building on grass-roots efforts by Cairone & Kaupp Inc. and David S. Traub Associates to enhance the streetscape along Allegheny Avenue, this plan recommends a comprehensive greening strategy. By integrating stormwater management and landscape design, the plan can serve as a model "green street" for the city.
The Civic Vision for the Central Delaware proposes a riverfront boulevard between Tioga Marine Terminal and Oregon Avenue. This boulevard is an integral concept to developing the riverfront as a mixed-use district.

The vision for Delaware Avenue is a multi-modal boulevard with a light rail line, bike facilities, pedestrian amenities, and a tree-lined streetscape that incorporates best practices in stormwater management. The boulevard will be extended past Penn Treaty Park and the PECO power station along the alignment of North Beach Street, and then extending through the Conrail property to connect with Allegheny Avenue at a new open space and expanded Pulaski Park.

A mix of recreational spaces along waterfront boulevards can support a variety of programs and landscapes, from running paths to soft lawns, and from urban plazas to riparian edges. The boulevard edge becomes the “seam” between riverfront park uses and the urban streetscape, as in Portland’s South Waterfront (top left) and at Battery Park City in New York (right and bottom). (image at right: flickr.com; user: bethlet).
The proposed Delaware Avenue street section along the river at the Conrail site.
EXISTING DELAWARE AVENUE STREET SECTION

8'

75'

17'

95'

8'

1000'
Important to connecting to the North Delaware River is the safe integration of a multi-use trail between Allegheny Avenue and the Betsy Ross Bridge through Tioga Marine Terminal. The plan recommends the separation of truck traffic from the trail and pedestrian enhancements.
Implementation includes short-term actions and long-term improvement campaigns. Some of the improvements described in this plan can be realized in the near term by creating strategic partnerships and employing available funding streams. Potential near-term improvements include:

1. Frankford Avenue
2. Columbia Avenue and Penn Treaty Park
3. Girard Interchange Accessibility Improvements and Park
4. Lehigh Viaduct Access
5. Pulaski Park
6. Frankford Creek Corridor
STAKEHOLDERS AND PARTNERS

It will take considerable support, funding, and organization to carry out these projects. A broad array of stakeholders and partners should be engaged for implementation.

Stakeholders and partners who will be critical for implementation include:

**Business Associations**  Pennsylvania Department of Conservation and Natural Resources
**Civic Organizations**  Pennsylvania Department of Environmental Protection
**Commerce Department**  Pennsylvania Department of Transportation
**Conrail**  Pennsylvania Environmental Council
**Delaware River Port Authority**  Pennsylvania Horticultural Society
**Fairmount Park Commission**  Philadelphia City Planning Commission
**Girard Coalition**  Philadelphia Industrial Development Corporation
**Land Owners**  Philadelphia Recreation Department
**New Kensington CDC**  SEPTA
POTENTIAL FUNDING SOURCES

Potential funding sources for improvements include:

**Transportation Enhancements**
This is a capital funding program administered by DVRPC and PennDOT to fund transportation-related improvements.

**Home Town Streets & Safe Routes to School**
PennDOT programs for downtown streetscapes and pedestrian-safety improvements related to access to schools.

**ReStore Philadelphia**
A City of Philadelphia funding program for improvements to commercial corridors.

**Growing Greener**
A multi-faceted state funding program to protect and improve natural areas and parks and to invest in downtown urban areas.

**Treevitalize**
A partnership to restore tree cover in Southeast PA.

**New Starts**
Sponsored by the Federal Transit Administration (FTA), the program supports locally-planned, implemented, and operated transit “guideway” capital investments.

**PennDOT I-95 Reconstruction (Revive 95)**
Reconstruction of I-95 could include mitigation elements described in this plan.

**Casino Related Improvements**
A future casino could potentially contribute upgrades and maintenance to surrounding areas as part of its community benefit package.

**Delaware River Port Authority**
DRPA was among the project sponsors for Barry Bridge park, which could be a model for a park under the Betsy Ross Bridge along Frankford Creek.

**Department of Housing and Urban Development Grants and Loans**
HUD Brownfields Economic Development Initiative, Economic Development Initiative, and Section 108 Guaranteed Loans may be potential funding sources. Congressional grants are also possible; Congress can allocate funding for specific projects on an annual basis.
SHORT-TERM ACTIVITIES

The following projects that are in the pipeline require immediate intervention to coordinate with the NKCDC Riverfront Plan.

**PennDOT I-95 Project**

This project will require several critical changes to achieve the design goals in this plan:

1. The highway should be rebuilt as a viaduct rather than on an earthen embankment. The viaduct should be designed to have useable space underneath for recreation, including potential structures for ice rinks, basketball courts, gymnasiums, pools, etc. Parking can also be located under the viaduct, supporting adjacent land uses. Recreational facilities under I-95 may be developed incrementally, with the first phase of facilities being developed in key locations such as along Columbia Avenue, providing programmatic connections to Penn Treaty Park.

2. The project should contain a bicycle trail connection between Aramingo, Girard, and Penn Treaty Park.

3. The project should help create Delaware Boulevard. The current PennDOT design narrows sidewalks on Delaware Avenue in some places from fifteen feet to five feet. Sidewalks should be enhanced, not reduced, and the landscape should conform to boulevard standards. Ideally, PennDOT would help create the final alignment of Delaware Boulevard rather than a temporary alignment.

4. The boulevard design should anticipate future light rail to the maximum extent possible in the location of curb lines, medians, and utilities.

**SugarHouse Casino**

If the SugarHouse Casino goes forward at the foot of Frankford Avenue, it will create a major node on Delaware Avenue. However, it is important to negotiate with the city and the casino to modify the current plan to respond to the objectives and designs contained in this plan. Subjects of negotiation include:

- Recreating Frankford Square: this will require changes to the casino access and circulation plan.

- Creating access to the Delaware River: this will require upgrades to the access corridors from Delaware Avenue to the riverfront, and potentially a rethinking of how the casino faces the river. Currently the casino places the loading docks at the water’s edge, which will compromise the pedestrian experience of the riverfront.

- Creating a continuous bike path along the river and Delaware Avenue: this will require changes to the streetscape on Delaware Avenue and an upgraded riverfront design.

- Off-site improvements: which could include upgrades to the underside of I-95, such as recreation space.
### IMPLEMENTATION MATRIX: ACCESS SYSTEM

<table>
<thead>
<tr>
<th>Access System</th>
<th>Partners/Potential Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action</strong></td>
<td><strong>Description</strong></td>
</tr>
</tbody>
</table>
| Create a river access corridor at Frankford Avenue and build Frankford Square. | Casino Community Benefit Agreement  
Transportation Enhancements |
| Create a continuous Beach Street connected with Dyott Street. | PennDOT I-95 Project |
| Create a new state park and greenway corridor at the Lehigh Viaduct that connects to the river. | Pennsylvania Department of Conservation and Natural Resources  
Transportation Enhancements |
| Create a linear greenway, park, open space, and habitat restoration at Frankford Creek. | Treevitalize  
Pennsylvania Department of Conservation and Natural Resources  
Pennsylvania Department of Environmental Protection  
Growing Greener  
Transportation Enhancements  
Delaware River Port Authority  
Philadelphia Water Department |
## IMPLEMENTATION MATRIX: PARK SYSTEM

<table>
<thead>
<tr>
<th>Action</th>
<th>Partners/Potential Funding Sources</th>
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</table>
| Enhance Penn Treaty Park. | City of Philadelphia  
Pennsylvania Department of Conservation and Natural Resources  
Fairmount Park  
Friends of Penn Treaty Park  
Private Grants |
| Create a new state park and greenway at the Lehigh Viaduct. | Pennsylvania Department of Conservation and Natural Resources  
Transportation Enhancements |
| Expand and improve Pulaski Park. | Pennsylvania Department of Conservation and Natural Resources  
Philadelphia Water Department  
Philadelphia Parking Authority |
| Create a linear park, greenway, and open space at Frankford Creek. | Pennsylvania Department of Conservation and Natural Resources  
Transportation Enhancements  
Delaware River Port Authority  
City of Philadelphia  
Philadelphia Recreation Department |
| Recreate Frankford Square. | PennDOT  
Developer Agreements |
| Create recreation space under I-95. | PennDOT I-95 Project  
City of Philadelphia Parks and Recreation  
Private Partners |
## IMPLEMENTATION MATRIX: STREETSCAPES

<table>
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<tr>
<th>Streetscapes</th>
<th>Partners/Potential Funding Sources</th>
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<tbody>
<tr>
<td>Create a Frankford Avenue Bikeway and Green Street.</td>
<td>Home Town Streets, Transportation Enhancements, Treevitalize</td>
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<tr>
<td>Create Riverfront Greenway Connections.</td>
<td>Developer Agreements</td>
</tr>
<tr>
<td>Create the Columbia Green Street.</td>
<td>Transportation Enhancements, Home Town Streets, Safe Routes to School, I-95 Reconstruction, Treevitalize</td>
</tr>
<tr>
<td>Implement Aramingo Avenue Streetscape.</td>
<td>PennDOT</td>
</tr>
<tr>
<td>Implement Lehigh Avenue Streetscape/Bikeway.</td>
<td>Home Town Streets, Transportation Enhancements, Treevitalize, Philadelphia Water Department</td>
</tr>
<tr>
<td>Implement Allegheny Streetscape/Bikeway.</td>
<td>Transportation Enhancements, Growing Greener, Safe Routes to School, I-95 Reconstruction, Home Town Streets, Treevitalize, ReStore Philadelphia Corridors</td>
</tr>
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