

# Bucks County Waterfront Revitalization Plan

Prepared for:  
The Redevelopment Authority  
Of The County of Bucks

and:  
The County of Bucks  
Bensalem Township  
Bristol Borough  
Bristol Township  
Falls Township  
Morrisville Borough  
Tullytown Borough

Prepared by:  
HNTB Corporation

February 2005







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Prepared by  
**HNTB Corporation**  
with the assistance of  
**A.D. Marble**  
**Economic Research Associates**  
**The Northeast-Midwest Institute**

February 2005

## ACKNOWLEDGMENTS

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The Redevelopment Authority of Bucks County and the Bucks County Planning Commission were the lead agencies in charge of managing the study. Special appreciation is extended the Redevelopment Authority's Board of Directors who had the foresight to support and spearhead this study. The plan was prepared by a consultant team lead by HNTB Corporation with the assistance of A.D. Marble and Company, Economics Research Associates, and the Northeast-Midwest Institute.

Several public meetings were held throughout the planning process, enabling many citizens to participate. The plan was also substantially improved by the contributions of municipal officials, as a result of their participation in work sessions held in and for each municipality. The members of the Waterfront Committee, under the auspices of the Bucks County Enterprise Zone, are given special recognition for their time and efforts spent on guiding the Plan over a one-year period.

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### **Bucks County Commissioners\***

Charles H. Martin, Chairman

James Cawley

Sandra A. Miller

\* Current U.S. Congressional Representative and former County Commissioner  
Michael G. Fitzpatrick was also an active champion of this project.

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Lynn Bush, Director, Bucks County Planning Commission

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Councilman Kenneth Worthington, Bristol Township (Vice Chairman)

Edmund Armstrong, Tullytown Borough

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## TABLE OF CONTENTS

Acknowledgments .....	ii
A Vision for the Lower Bucks County Waterfront .....	1
Introduction .....	3
How Was the Plan Developed? .....	5
General Development Principles .....	7
Existing Conditions .....	9
General Recommendations .....	17
Theme: Enliven the River's Edge by Increasing and Improving Public Access to the Delaware River .....	19
Theme: Incorporate Design with Development .....	25
Theme: Enhance the Economy .....	28
Theme: Expand Mobility and Accessibility .....	30
Theme: Foster Environmental Sustainability .....	35
Theme: Reinforce our Sense of Place and Identity .....	38
Primary Opportunity Areas .....	43
Implementation .....	59
Background Resources .....	73

## TABLE OF TABLES

Table 1: Study Area Geography .....	9
Table 2: 2000 Study Area Demographic Profile .....	9
Table 3: Distribution of Land Use Types .....	11
Table 4: Acres of Vacant Land by Generalized Zoning Designations .....	14
Table 5: Potential Buildout for Vacant Lands .....	15
Table 6: Implementation Tools for Brownfield Reuse and Redevelopment .....	61
Table 7: Agencies and Groups Involved in Preservation of the Delaware River Corridor .....	68
Table 8: Listed or Eligible Historic Resources .....	70

**LIST OF MAPS**

**Map 1: Study Area Boundary and Opportunity Areas ..... 4**

**Map 2: Current Land Use ..... 12**

**Map 3: Bucks County Waterfront Revitalization Plan..... 18**

**Map 4: Public Riverwalks..... 20**

**Map 5: Riverfront Corridors and Gateways ..... 22**

**Map 6: Public Water Access Facilities ..... 24**

**Map 7: Address Streets..... 27**

**Map 8: Planned and Recommended Transportation Improvements..... 30**

## **A VISION FOR THE LOWER BUCKS COUNTY WATERFRONT**

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What will the Lower Bucks County's Delaware River Waterfront and adjacent lands look like in 20 years?

This plan envisions a vibrant and accessible waterfront with a public riverwalk flanked by natural areas, stable existing communities complemented by vibrant new businesses and residential uses. It calls for a return to the Delaware River waterfront, and for new and enhanced facilities to encourage interaction with the area's most valuable resource. This plan will be implemented through the hard work and discrete actions of many implementers in the public and private sectors. The result will be the rebirth of the Bucks County Delaware River Waterfront for the enjoyment of those who live and work in the area.

This plan embraces six key themes:

- Enlivening the river's edge by improving waterfront access.

- Incorporating design with development to improve the attractiveness of the area and foster its renaissance.

- Enhancing the economy by fostering redevelopment of underutilized lands and buildings.

- Expanding mobility and accessibility to and within the study area.

- Fostering environmental sustainability of the Delaware River and its tributaries.

- Reinforcing our sense of place and identity by reinforcing key historic and community assets.

The plan is the result of collaboration between Bucks County, Bensalem, Bristol, and Falls Townships, and the Boroughs of Bristol, Tullytown, and Morrisville.





# INTRODUCTION

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The Delaware River plays a number of important roles in the lives of the waterfront communities in Lower Bucks County. It is a vast natural resource that supports diverse natural habitat and recreational pursuits. The river also has a historic and contemporary identity as a maritime and economic resource that helped to create prosperous communities and an extensive array of manufacturing and heavy industrial uses on the riverfront.

In recent years, however, this industrial image of the river has begun to change. A shrinking national manufacturing sector has reduced the viability, number, and intensity of the heavy industrial uses, leaving behind large tracts of vacant and underutilized land—some of which may have significant industrial contamination.

This plan seeks to improve access to the riverfront and promote targeted economic development in the study area. The study area includes portions of Bensalem Township, Bristol Borough, Bristol Township, Falls Township, Morrisville Borough, and Tullytown Borough.

## Role of the Plan

This plan provides a vision for the entire Lower Bucks County Delaware Waterfront. It provides a framework for the enhancement of the riverfront and adjacent lands and outlines steps to reach the vision. It also outlines action steps for each municipality.

The plan will be implemented over time. Municipalities will need to amend their Comprehensive Plans and Zoning Ordinances as well as invest in the improvement of the riverfront, entrance corridors, and public amenities.

This plan is thus a guide to the riverfront's rebirth. Momentum and public will to implement the plan must come from residents, property owners, and elected and appointed officials.

## Plan Organization

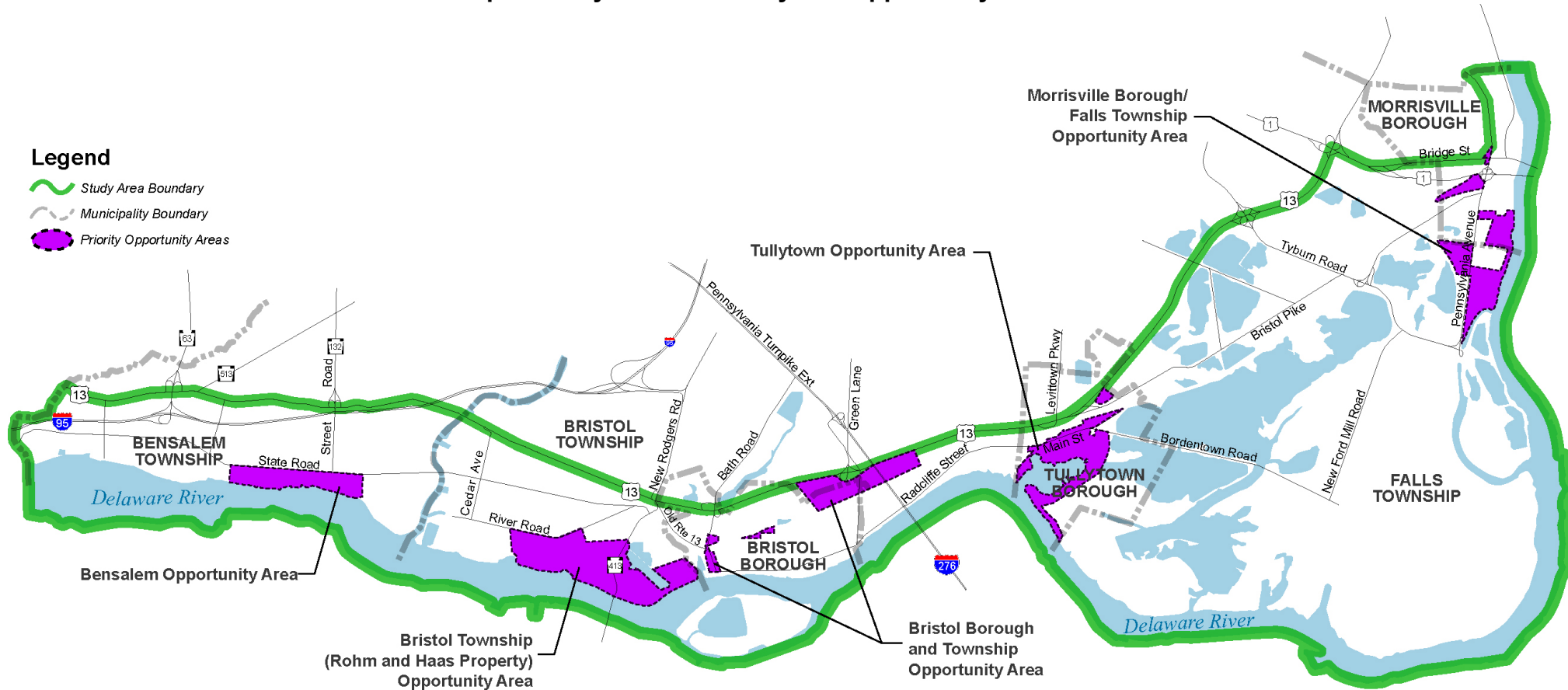
This plan is presented in four main sections. **The Plan Development** section answers the question “how was this plan developed?” It describes the public involvement process and the importance of the Waterfront Steering Committee and the involvement and consultation with the six individual study area jurisdictions. It also provides a brief overview of the study area, its demographic make-up, and its key characteristics.

The **General Recommendations** section provides specific overall recommendations to improve the study area. Together, these recommendations call for a return to the waterfront and for new and enhanced facilities and development, and for protection of the area's prime environmental resource: the Delaware River. These recommendations are organized around six guiding themes that serve as the plan's goals. These are supported and reinforced with numerous specific recommendations and associated actions and strategies.

The **Primary Opportunity Areas** section provides more detailed concept plans and recommendations for key areas in the study area that are considered priority and catalytic redevelopment and enhancement projects in each jurisdiction. Map 1 shows the study area boundary as well as the location of the Primary Opportunity Areas.

The **Implementation** section provides additional implementation strategies and financing tools to implement the plan and supplement the “actions and strategies” presented in the **General Recommendations** and **Primary Opportunity Areas** sections. The municipalities will need to act to implement the recommendations of the plan.

**Map 1: Study Area Boundary and Opportunity Areas**





## HOW WAS THE PLAN DEVELOPED?

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### Public Participation

The development of this Bucks County Delaware River Waterfront Revitalization Plan emphasized community participation, a close working relationship with Bucks County and the Waterfront Steering Committee and the full participation of Bensalem, Falls, and Bristol Townships and Bristol, Morrisville and Tullytown Boroughs in the plan development process.

This plan provides a vision, plan of action and concrete implementation steps developed with the guidance of the Steering Committee and the input of study area residents and business owners. Local ownership of the plan is essential to its successful implementation.

The components of the public participation process are described below.

**Stakeholder Interviews:** One-on-one interviews with Borough/Township/County officials, selected landowners and stakeholders, real estate professionals, civic and interest groups, and others were conducted to understand issues, goals, and expectations.

**Steering Committee Meetings:** Over the 12 months of the planning process, the Steering Committee met seven times to develop the goals, strategies, and specific elements of the plan. The Steering Committee provided guidance on the study process and the products throughout the study. The Steering Committee includes representatives of each the six study area jurisdictions as well as representatives of key county and local public agencies as well as for key business and civic organizations.

**Municipality Work Sessions:** At key points in the process, the study team conducted work sessions with the leadership of each jurisdiction for a total of 12 collaborative work sessions. These work sessions with the stakeholders of Bensalem Township, Bristol Borough, Bristol Township, Falls Township, Morrisville Borough, and Tullytown Borough helped to define priorities, examine best practices, and assess alternatives for the future development of the area. The most important outcome of these sessions was the overall agreement on a vision and plan for the study area as well as the individual jurisdictions.

**Public Forums:** To involve the broader community, the plan process included a series of public forums—each with a different purpose—to advance understanding of the study process and findings. The first forum focused on relevant waterfront development case studies. A panel of planning and economic development experts shared their expertise and explained how other communities have improved their communities, redeveloped brownfields, and stimulated economic development. One of the key lessons learned from this forum was the need to have long-term goals supplemented by short-term implementation steps. This plan's dual focus on study area goals and local priority redevelopment opportunity areas is the result of the advice and recommendations of the expert panel. The second public forum focused on assets and strengths of the study areas and on possible planning and development options. The last public meeting was held at the draft plan stage to review and hone draft recommendations, before the plan was finalized.



# GENERAL DEVELOPMENT PRINCIPLES

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The plan builds on a set of development principles that were developed in concert with the Steering Committee. These are highlighted below.

## Access and Transportation

Develop a continuous riverwalk along the Delaware River.

Promote and enhance public access and meaningful interaction with the waterfront for pedestrians, boaters, and vehicles.

Maintain viewsheds to the Delaware River using waterfront open space, roadways that run perpendicular to and terminate at the river, and roadways that are located immediately adjacent to the river.

Develop bicycle lanes and a hiker/biker pathway system along State Road, River Road, Radcliffe Road, Main Street, Bordentown Road, New Ford Mill Road, Tyburn Road, and Pennsylvania Avenue.

Minimize truck traffic along State Road, River Road, Radcliffe Road, Main Street, and Pennsylvania Avenue.

Enhance and redevelop primary gateways along US 13.

Create a uniform wayfinding system throughout the study area, especially along key waterfront and downtown access corridors.

Promote the Delaware River Heritage Trail.

Enhance pedestrian access to transit stations.

Extend the street grid into development and redevelopment sites.

Limit off-street parking in front of buildings. Where necessary, limit this parking to one bay. The preferred option is to locate off-street parking behind or along the sides of buildings.

## Land Use

Promote the redevelopment of underutilized industrial sites.

Promote mixed-use development (primarily residential) along the river's edge.

Promote mixed-use development of parcels that front on the Delaware Canal.

Promote transit-oriented development within a half-mile radius of transit stations.

Enhance comprehensive plans and development regulations to promote the jointly agreed upon goals of the communities and to encourage revitalization.

Promote development on primary streets that brings the front of buildings to the edge of the pedestrian zone.

## Natural and Historic Resources and Recreation

Preserve, restore, and enhance existing natural and historic resources.

Promote and enhance the physical linkages between natural and historic resources.

Provide active recreational uses in existing and future parks.

Maximize the restoration of the Delaware Canal and Towpath for connectivity, recreational pathways, and development/redevelopment of adjacent property.

Encourage canal boat activity where possible.

Encourage activities in Neshaminy State Park that reflect the needs of local residents.





## EXISTING CONDITIONS

The Lower Bucks County Waterfront extends for approximately 30 miles along the Delaware River, from the Philadelphia border to Morrisville Borough's northern border. Equally represented in this geography are urban environments and high-quality natural environments that are an important habitat for a number of fishes and migratory waterfowl. An extensive array of industrial and commercial land uses are interspersed with residential neighborhoods. The area is also home to historic districts, public parks, waterways, and wetlands.

The study area covers parts of six jurisdictions (Bensalem Township, Bristol Borough, Bristol Township, Falls Township, Morrisville Borough, and Tullytown Borough), and includes a total of about 20,000 acres (32 square miles) with about 30 miles of river frontage. Table 1 shows the distribution of study area geography and Delaware River frontage in each jurisdiction.

Approximately 27,000 people live in the study area. Table 2 shows the base year (2000) demographics for the study area.

**Table 1: Study Area Geography**

Jurisdiction	Acres in Study Area	Share of Total Study Area	Share of Municipality in Study Area	Length of Riverfront (Approximate)	Share of Total Riverfront
Bensalem Township	3,005	15%	24%	5.5 mi	19%
Bristol Borough	1,060	5%	98%	2 mi	7%
Bristol Township	3,135	15%	30%	7 mi	23%
Falls Township	11,400	56%	80%	12 mi	40%
Morrisville	740	4%	64%	2.5 mi	8%
Tullytown	1,030	5%	95%	1 mi	3%
<b>Total Study Area</b>	<b>20,370</b>	<b>100%</b>		<b>30 miles</b>	<b>100%</b>

*Note: Study Area acreage includes major bodies of water such as Van Sciver Lake. Excluding water features, the study area has approximately 24 square miles of land area.*

**Table 2: 2000 Study Area Demographic Profile**

Population	27,200
Households	10,800
Population per Household	2.52
Housing Units	11,400
Vacancy Rate	5.2%

## **Socio-Economic Indicators**

As a whole, Bucks County's population increased by about 10 percent between 1990 and 2000, while the nine-county Delaware Valley Regional Planning Commission (DVRPC) region grew by only four percent. The total population for the six study area jurisdictions remained constant at about 171,000 during this period.

Among the study area jurisdictions, Bensalem has the highest share of non-white population (about 17 percent); more than double the County's proportion. This is still lower than the regional share; more than a quarter of the nine-county DVRPC region's population is non-white.

The median household income for the study area jurisdictions is lower than the median household income for Bucks County, although the employment profile of each of the study area jurisdictions is roughly comparable to that of Bucks County, with more than a third of the employed persons in the service sector.

## **Housing**

As a whole, about two-thirds of Bucks County's housing stock consists of single-family dwelling units. Among the study area jurisdictions, Bensalem has the highest share of multi-family homes (about 40 percent) and Bristol Borough has a high proportion of townhomes (about 45 percent). By contrast, Bristol Township—the second largest of the study area jurisdictions—has the highest proportion of single-family homes (about 77 percent).

Homeowners occupy the majority of units in all jurisdictions. However, in all but Falls and Bristol Townships, renters occupy a larger share of housing than is found throughout the county or the DVRPC study area.

Homeowner vacancy rates are generally very low in Bucks County as well as the study area jurisdictions. This is one indicator of a healthy housing framework. Rental vacancy rates are more comfortable, but are by no means slack. The overall vacancy rates for both the study area jurisdictions and Bucks County are roughly comparable to those in the nine-county DVRPC region.

## **Transportation**

Transportation has played a strong role in shaping the communities along the Delaware River in Bucks County, and will continue to do so.

The combination of interstate and US highways, freight and commuter rail, and shipping and boating facilities contributed to the area's industrial identity. Those same resources give the communities in Lower Bucks County a high degree of accessibility from surrounding areas, and provide important opportunities to enhance, diversify, and change that identity.

## **Market Analysis**

Bucks County will add 115,000 new residents—more than any other Philadelphia-area county—by 2024. Bucks County will also add more than 42,000 new households in this time period, again the fastest growth in the region. Bucks County is forecasted to add 55,300 new jobs by 2024. This is the second-largest number of forecasted new jobs (behind Montgomery County), and it represents the highest growth rate in the region, at 19.7 percent.

Preliminary forecasts shed some light on the employment and residential mix that the study area might be able to support. These forecasts are based on recent market trends, historical development activity, regional accessibility and other factors. These forecasts indicate that, with no additional public investment, the study area would absorb (by 2024):

Approximately 2 million square feet of industrial space (comprised of approximately 80 percent warehouse/distribution/bulk space and 20 percent flex space);

Approximately 185,000 square feet of office space; and

Approximately 800 single family and 300 multi-family residential units.

However, with the level of public investment called for in this report, these base absorption rates are increased, meaning that by 2024, the study area could absorb:

Approximately as 2.2 million square feet of industrial space;

Approximately 230,000 square feet of office space;

Approximately 615,000 square feet of retail space; and

Approximately 1,000 single family and 400 multi-family residential units.



## Land Use

The study area comprises 24 square miles of land, excluding another eight square miles covered by major bodies of water such as the Delaware River and Van Sciver Lake. The distribution of existing land use categories in the study area is shown in Table 3. Map 2 provides a graphic representation of the existing land use in study area. Industrial land uses (manufacturing, extraction, light industrial, and warehousing) occupy nearly 7,000 acres, or 45 percent of the study area. This is not surprising given the large role industrial development has played and continues to play in the study area. Of that total, almost 5,400 acres are located in Falls Township, accounting for two-thirds of the portion of that jurisdiction's land area that is located within the study area.

Residential land occupies the next-highest share of the study area, accounting for nearly 3,000 acres, or 20 percent of the study area. There are another 1,700 acres of vacant land in the study area, of which nearly half (841 acres) is found in Falls Township. Much of the vacant land in Falls Township and other municipalities is found near industrial land uses.

**Table 3: Distribution of Land Use Types**  
**Bucks County Waterfront Revitalization Plan**

Land Use Type	<i>Bensalem Township</i>		<i>Bristol Borough</i>		<i>Bristol Township</i>		<i>Falls Township</i>		<i>Morrisville Borough</i>		<i>Tullytown Borough</i>		<i>Entire Study Area</i>	
	Acres	Share	Acres	Share	Acres	Share	Acres	Share	Acres	Share	Acres	Share	Acres	Share
Agricultural	26	1%	0	0%	0	0%	0	0%	0	0%	0	0%	26	0%
Commercial	151	6%	147	15%	188	8%	181	2%	66	11%	46	7%	779	5%
Institutional	133	6%	115	12%	51	2%	2	0%	23	4%	12	2%	336	2%
Industrial	653	28%	122	13%	656	28%	5,363	66%	66	11%	64	9%	6,924	46%
Parks/Open Space	89	4%	80	8%	3	0%	68	1%	31	5%	1	0%	273	2%
Rural Residential	341	15%	49	5%	75	3%	520	6%	48	8%	6	1%	1,040	7%
Single Family Residential	99	4%	0	0%	18	1%	11	0%	0	0%	0	0%	128	1%
Multi Family Residential	313	13%	231	24%	687	29%	256	3%	226	37%	30	4%	1,743	12%
Transportation/Utilities	287	12%	96	10%	335	14%	925	11%	83	13%	441	65%	2,166	14%
Vacant	244	10%	127	13%	326	14%	841	10%	75	12%	77	11%	1,691	11%
<b>Grand Total</b>	<b>2,337</b>	<b>100%</b>	<b>967</b>	<b>100%</b>	<b>2,338</b>	<b>100%</b>	<b>8,168</b>	<b>100%</b>	<b>618</b>	<b>100%</b>	<b>677</b>	<b>100%</b>	<b>15,105</b>	<b>100%</b>

Notes:







"Share" is expressed by (acres of this land use type in each municipality in the study area)/(total acreage of each municipality that falls within the study area)

These totals exclude the portions of the study area covered by major bodies of water, such as Van Sciver Lake.

Source: Land use information provided by Bucks County Planning Commission; analysis by HNTB. HNTB assumes that the information provided by the county is accurate.

## Map 2: Current Land Use

### Land Use Type

- |  |   |
|--|---|
|  Rural                    |  Rural-Density Residential |
|  Commercial               |  Single-Family Residential |
|  Institutional            |  Transportation, Utilities |
|  Heavy Industrial         |  Vacant                    |
|  Multi-Family Residential |  100 Year Floodplain       |
|  Open Space, Parks        |   |

### Sources:

Zoning: Bucks County Planning Commission, 1996



Some examples of common land uses in the study area (left to right): single-family residential, institutional, light industrial, and heavy industrial.

## Vacant Land Analysis

Based on the County's GIS information, there are nearly 1,700 acres of vacant land in the study area. Table 4 shows the distribution of this vacant land by zoning type and by study area jurisdiction. Three-quarters of the vacant land (1,250 acres) is zoned for industrial or extraction uses, 18 percent (300 acres) is zoned for residential uses, and the remainder is zoned for other uses. The amount of industrially zoned vacant land represents a substantial amount of developable land. Zoning designations do not account for the presence of historic resources, floodplains, wetlands, or hazardous waste sites, any of which may alter or preclude the future development of vacant parcels. Based on GIS data for floodplains and wetlands, it is estimated that approximately 550 acres, or just less than one third of vacant land in the study area, is comprised of floodplain and wetlands and thus is generally not suitable for development. Thus Table 4 also shows that there are approximately 1,136 "net" vacant acres in the study area – those vacant lands that are not in the floodplain or impacted by wetlands.



There are more than 1,100 acres of developable vacant land in the study area.

## Potential Buildout Analysis

Table 5 shows the amount of net vacant acres (those not impacted by wetlands or 100-year floodplains) by generalized zoning category and then presents the additional development potential based on assumed development yields. The analysis presented in Table 5 shows that there is a theoretical potential of 1,500 additional dwelling units, 9.3 million new square feet of industrial and more than 860,000 square feet of commercial development in the study area. This does not represent the demand for such development, but indicates what is possible if every vacant acre of land not constrained by floodplains or wetlands were to develop.

When this theoretical potential is compared to the demand forecast for new development, it is clear that there is an abundance of vacant land in the study area—many times more than can be absorbed in the next 20 years. For instance, the industrial demand forecast finds that the study area will be able to support approximately 2,200,000 square feet of new industrial development or about 155 acres of new industrial development over the next 20 years. However, based on existing zoning, there is approximately 850 acres of net (not impacted by floodplains or wetlands) industrial vacant acres with the capacity for 9.3 million additional square feet of new industrial development, representing about 90 years of industrial land supply, based on the baseline demand forecast. However, it appears that there may be insufficient residentially-zoned vacant land to accommodate projected demand. The residential demand forecast is for approximately 1,400 units within the next 20 years while the vacant zoned residential land at assumed densities would accommodate only 1,500 new dwelling units. This nearly one-to-one ratio of demand to supply is too low to allow for market flexibility. Additional housing supply—made possible by rezoning—is necessary to avoid inflated land prices.

**Table 4: Acres of Vacant Land by Generalized Zoning Designations**  
**Bucks County Waterfront Revitalization Plan**

<b>Zoning Type</b>	<i>Bensalem Township</i>		<i>Bristol Borough</i>		<i>Bristol Township</i>		<i>Falls Township</i>		<i>Morrisville Borough</i>		<i>Tullytown Borough</i>		<i>Entire Study Area</i>	
	<b>Acres</b>	<b>Net Acres*</b>	<b>Acres</b>	<b>Net Acres*</b>	<b>Acres</b>	<b>Net Acres*</b>	<b>Acres</b>	<b>Net Acres*</b>	<b>Acres</b>	<b>Net Acres*</b>	<b>Acres</b>	<b>Net Acres*</b>	<b>Acres</b>	<b>Net Acres*</b>
Commercial	3	3	10	10	40	11	0	0	8	8	2	2	63	35
Light Industry	57	48	38	36	150	98	162	88	12	12	8	0	428	281
Heavy Industry	70	68	31	19	101	63	601	409	23	13	2	1	827	573
Mixed Use	0	0	0	0	0	0	0	0	0	0	13	6	13	6
Open Space	1	1	1	1	0	0	15	15	16	16	0	0	34	34
Institutional	6	6	0	0	0	0	0	0	0	0	0	0	6	6
LD Residential (< 1/Ac)	68	66	0	0	0	0	0	0	0	0	0	0	68	66
SF Residential (1-2/Ac)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD Residential (2-4/Ac)	20	20	0	0	72	0	3	2	0	0	0	0	95	23
HD Residential (> 4/Ac)	3	3	7	7	47	27	59	57	16	11	7	7	139	112
<b>Grand Total</b>	<b>229</b>	<b>216</b>	<b>87</b>	<b>73</b>	<b>409</b>	<b>199</b>	<b>841</b>	<b>572</b>	<b>75</b>	<b>60</b>	<b>32</b>	<b>16</b>	<b>1,672</b>	<b>1,136</b>

Notes:

\*Net acres are those vacant acres not impacted by wetlands or floodplains.

"LD" is "Low Density" residential; "SF" is "Single-Family" residential; "MD" is "Moderate Density" residential; and "HD" is "High Density" residential.

Source: Zoning and vacant land information provided by Bucks County Planning Commission; analysis by HNTB

**Table 5: Potential Buildout for Vacant Lands**  
**Bucks County Waterfront Revitalization Plan**

<b>Zoning</b>	<b>Net Estimated Acres</b>	<b>Assumed Density/Intensity (DU/Ac or FAR)</b>	<b>Potential New Housing Units</b>	<b>Potential New Square Feet</b>
Industrial	854	0.25 FAR	-	9,300,000
Commercial (office/retail)	35	0.30 FAR	-	457,000
Mixed Use: 50% Commercial	6	Commercial: FAR 0.30	-	39,000
50% Residential		Residential: 12 du/ac	36	-
Low Density Residential	66	0.5 du/ac	33	-
Medium Density Residential	23	3 du/ac	69	-
High Density Residential	112	12 du/ac	1,344	-
<b>Grand Total</b>	<b>1,096*</b>		<b>1,482</b>	<b>9,796,000</b>

*Net Estimated Acres refers to the vacant acres in the study area that are not impacted by floodplains or wetlands.*

*\* Total excludes 40 acres of open space and institutionally-zoned land.*

*Source: Zoning acreage provided by Bucks County; analysis by HNTB.*





## GENERAL RECOMMENDATIONS

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These broad recommendations set forth specific ways to improve the study area as a whole, making it more attractive to residents, businesses, and visitors. These recommendations provide approaches that should be applied throughout the six municipalities in the study area, as well as a few more targeted recommendations. The general recommendations also reflect the desires and values held by residents and employers in the six waterfront jurisdictions as articulated during the planning process: the need to reconnect the communities with the Delaware River and the desire to promote economic development in the area.

Six overall themes serve as the plan's goals, and are used to organize this section of the plan. These themes are:

- Enlivening the river's edge by increasing and improving public access to the Delaware River;
- Incorporating design with development;
- Enhancing the economy;
- Expanding mobility and accessibility;
- Fostering environmental sustainability; and
- Reinforcing our sense of place and identity.

Map 3, the Bucks County Waterfront Revitalization Plan, depicts the overall plan recommendations and framework. This map is supplemented by the text of this plan and the concept plans for each primary opportunity area.

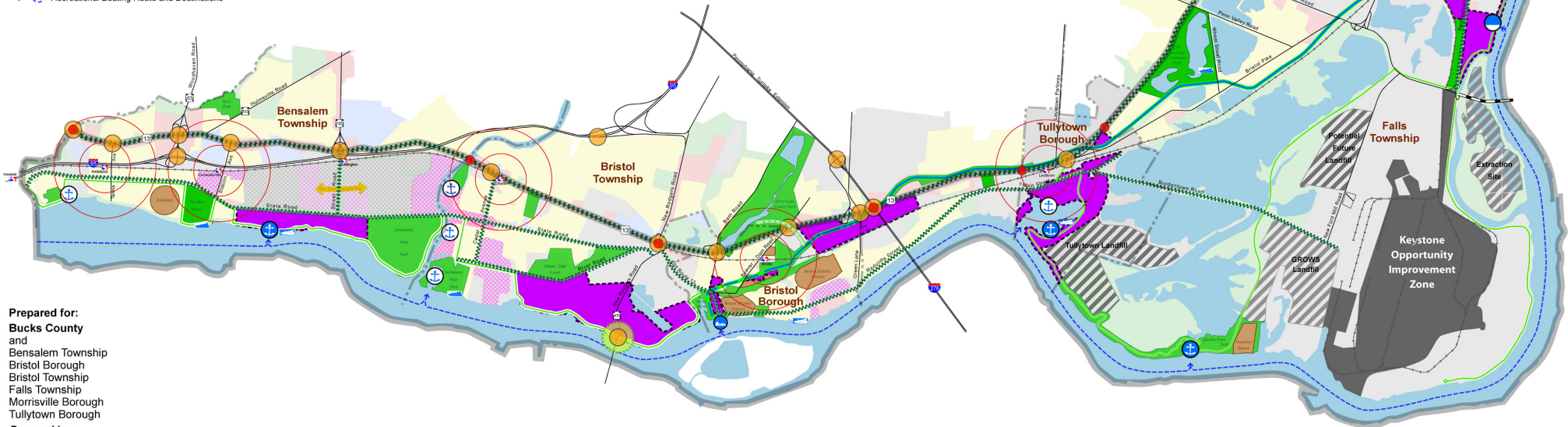
## Map 3: Bucks County Waterfront Revitalization Plan

### ***Bucks County Waterfront Revitalization Plan***

Bucks County, Pennsylvania

#### Legend

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>Existing Marinas (Public and Private)</li> <li>Existing Boat Ramps</li> <li>Proposed Public Marina</li> <li>Proposed Boat Ramp</li> <li>Proposed Public Floating Dock</li> <li>Proposed Public Water Access</li> <li>SEPTA Stations with 1/4 mile and 1/2 mile pedestrian buffer (dashed indicates proposed Morrisville station)</li> <li>Delaware Canal and Towpath (dashed indicates Canal Restoration)</li> <li>Address Streets</li> <li>Proposed Non-Motorized Path System</li> <li>Recreational Boating Route and Destinations</li> </ul> | <ul style="list-style-type: none"> <li>Public Parks and Open Space</li> <li>Historic Features</li> <li>Study Area Boundary</li> <li>Municipality Boundary</li> <li>Landfill/Extraction Uses</li> <li>Keystone Opportunity Improvement Zone (KOIZ)</li> <li>Priority Opportunity Areas (see Opportunity Area plans)</li> <li>Medium-Term Redevelopment Areas</li> <li>Long-Term Redevelopment Areas</li> </ul> | <p><b>Future Land Use</b></p> <ul style="list-style-type: none"> <li>Commercial</li> <li>Industrial/Manufacturing</li> <li>Residential</li> <li>Mixed Use</li> <li>Institutional</li> <li>Open Space</li> </ul> <p><b>Gateways</b></p> <ul style="list-style-type: none"> <li>Jurisdictional Gateways</li> <li>Riverfront Gateways</li> <li>Regional Gateways</li> </ul> |
|---|---|--|



Prepared for:  
Bucks County  
and  
Bensalem Township  
Bristol Borough  
Bristol Township  
Falls Township  
Morrisville Borough  
Tullytown Borough

Prepared by:

**HNTB**

A.D. Marble & Company  
Environmental Planning & Studies

ERA

1 inch equals 1 mile



February 2005

## Theme: Enliven the River’s Edge by Increasing and Improving Public Access to the Delaware River


The importance of the Delaware River to Lower Bucks County cannot be overstated. The river provides transportation, recreation, scenic beauty, and wildlife sanctuary, and is the element that links all of the study area’s communities. Industrial development, pollution, and transportation infrastructure have made it difficult for residents and visitors to find existing facilities to access the river.

This plan calls for a return to the waterfront, and for new and enhanced facilities to encourage interaction with the study area’s most valuable resource. In addition, this plan recognizes the need for facilities that enable water-borne visitors to visit the study area’s communities.

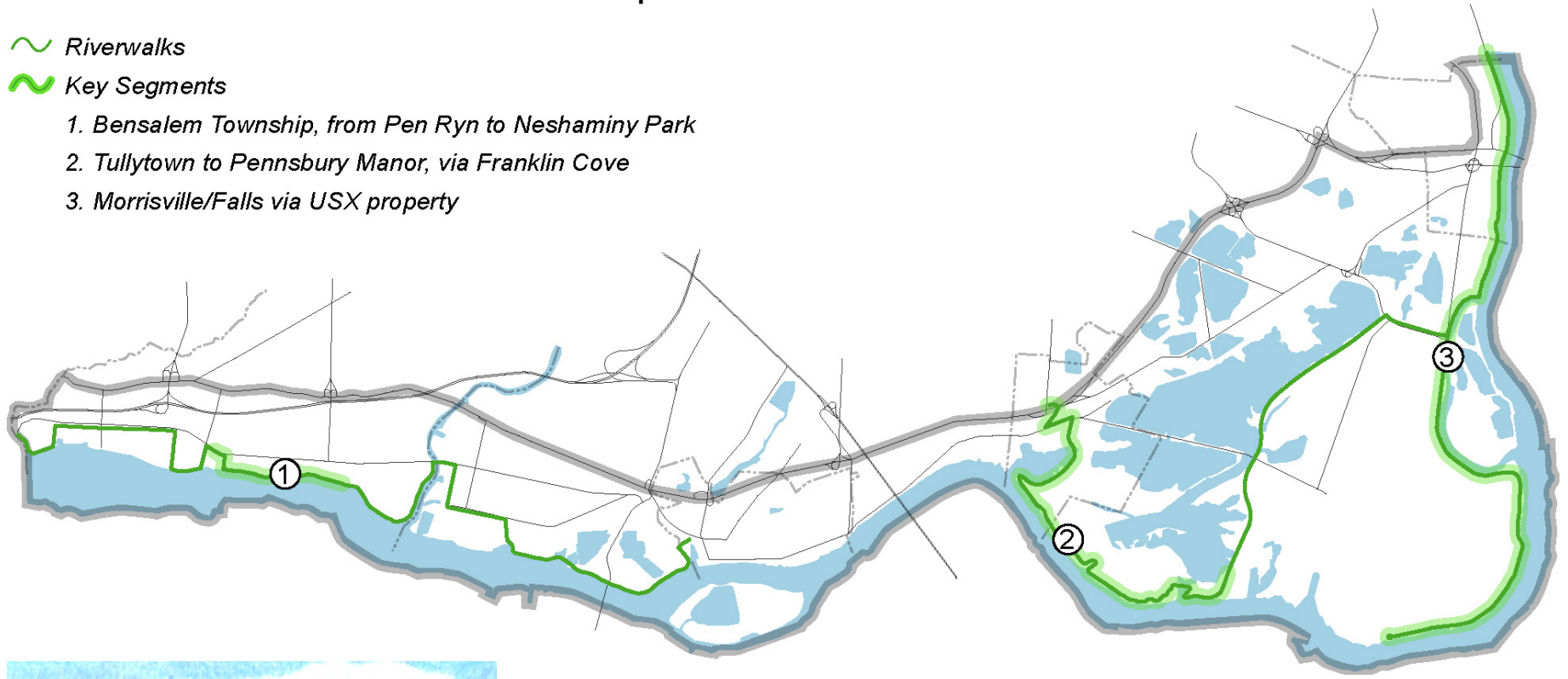
Recommendation	Actions and Strategies
Construct a continuous public riverwalk along the Delaware River.	
<p>The municipalities in Lower Bucks County should seize the opportunity to create continuous public access along as much of the Delaware River as possible. Key stretches are numbered and highlighted on Map 4, including:</p> <ol style="list-style-type: none"> <li>1. Bensalem Township, from Pen Ryn Manor to Neshaminy State Park;</li> <li>2. Tullytown Borough/Falls Township, from the Tullytown SEPTA station to Pennsbury Manor via Franklin Cove; and</li> <li>3. Morrisville Borough/Falls Township trail from Morrisville’s northern border to the easternmost point in the study area near the Port of Bucks County. This segment would include the in-progress walkway along the top of Morrisville’s levee, and would traverse land owned by U.S. Steel.</li> </ol>	<p>Where possible, reinforce the public nature of the river by establishing a strip of land along the river’s edge as a public linear (or ribbon) park. Each jurisdiction should set a “condition of approval” for every redevelopment on waterfront property, dedicating a public riverwalk along the entire river frontage of the property. This should also be reflected in each municipality’s zoning ordinance.</p> <p>Construct a public riverwalk—consisting of a bicycle/pedestrian path and appropriate furniture and amenities—along the length of the Delaware River.</p> <p>Maintain clear public access to the water by requiring pedestrian access to the waterfront (either along public roads or via a separate path) through all new or redeveloped riverfront properties.</p> <p>Where access to the river’s edge is not possible, maintain continuity of the riverwalk by connecting riverwalk segments to pedestrian facilities along the nearest major road that runs parallel to the river.</p> <p>In coordination with the state, the county and the jurisdictions should consider applying for Transportation Enhancement, and Transportation and Community and System Preservation Pilot Program (TCSP) funds to implement the riverwalk. The riverwalk integrates alternative transportation modes, community preservation and environmental restoration, which are goals that are supportable for TCSP funding. Pedestrian and bicycle facilities, landscaping and other scenic beautification, and acquisition of scenic easements are all eligible for Transportation Enhancement funding.</p>

#### Map 4: Public Riverwalks

 Riverwalks

 Key Segments

1. Bensalem Township, from Pen Ryn to Neshaminy Park
2. Tullytown to Pennsbury Manor, via Franklin Cove
3. Morrisville/Falls via USX property



## Theme: Enliven the River's Edge by Increasing and Improving Public Access to the Delaware River

### Recommendation

### Actions and Strategies

#### Develop enhanced riverfront gateways, corridors, and wayfinding systems.

New and enhanced public access to the Delaware River will be underutilized unless the waterfront communities also develop a wayfinding system (a series of uniformly designed signs and navigation aids) that brings people to those access points. This navigation system falls into three broad categories: regional information, local riverfront corridors, and riverfront gateways.

**Regional Information:** Major transportation corridors such as I-95 and I-276 (the Pennsylvania Turnpike) present an excellent opportunity to inform travelers of the recreational, cultural, and economic resources in the waterfront study area. Although outside the study area, the new Pennsylvania Turnpike/I-95 interchange should also be a location for these wayfinding signs.

**Local Riverfront Corridors:** Riverfront corridors—many of which are also address streets (*see pages 26-27*)—lead visitors from major transportation routes to public riverfront access points. These corridors should be marked with special signage that highlights important points in the waterfront communities, as well as the river access areas themselves.

**Riverfront Gateway Sites:** Gateways are highly visible points that mark an entry point into waterfront community. Gateways also serve as a part of the wayfinding system that highlights the communities and their waterfront.

A uniform wayfinding system—one that is consistent through the six jurisdictions—will provide an overall framework for design-related guidelines and improvements. Wayfinding signage and design elements should be general enough to serve the overall riverfront study area, while still reflecting the unique identities of each jurisdiction.

Work with PennDOT to add wayfinding signage on I-95, I-276, and other major thoroughfares. If possible, the design of this signage should match the designs used throughout the study area.

Work with the Delaware River Heritage Trail to coordinate their forthcoming signage efforts with overall wayfinding efforts in the study area municipalities.

Local riverfront corridors in the waterfront study area are shown on Map 5 and should be marked with special signage. These include:

- Street Road;
- Old Route 13/Mill Street;
- Cedar Avenue;
- Green Lane;
- New Rodgers Road (PA 413);
- An access corridor to the new Tullytown marina in Franklin Cove, via Fallsington Road and Main Street;
- An access corridor to Pennsbury Manor and the adjacent marina development, via Bordentown Road and Pennsbury Road; and
- Bridge Street/Pennsylvania Avenue.

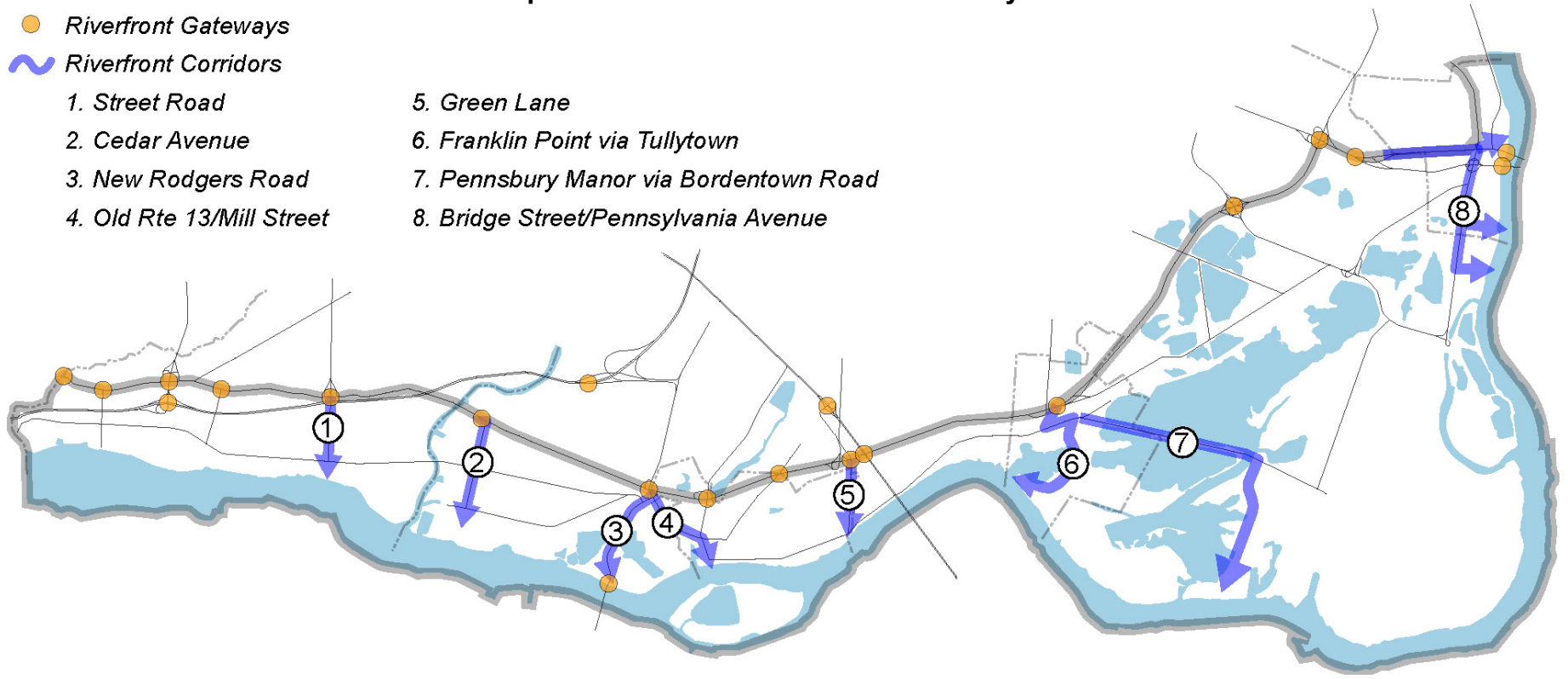


## Map 5: Riverfront Corridors and Gateways

● Riverfront Gateways

~ Riverfront Corridors

- |                           |  |
|---------------------------|--|
| 1. Street Road            | 5. Green Lane                          |
| 2. Cedar Avenue           | 6. Franklin Point via Tullytown        |
| 3. New Rodgers Road       | 7. Pennsbury Manor via Bordentown Road |
| 4. Old Rte 13/Mill Street | 8. Bridge Street/Pennsylvania Avenue   |



## Theme: Enliven the River's Edge by Increasing and Improving Public Access to the Delaware River

### Recommendation

### Actions and Strategies

#### Provide additional community parks, open space, and active recreation opportunities at the river's edge.

Public parks can and should be places for quiet contemplation and low-impact activities such as walking and nature watching. Open space can often be created in natural and tidal restoration areas that enhance both the beauty and the health of the riverfront.

However, recent public health information also makes it clear that Americans need additional opportunities for active recreational pursuits, such as hiking, bicycling, and organized sports. Efforts to activate waterfront parks should focus on these more active uses, and should pay special attention to water-related activities.

Proposed community parks include new linear parks along the Delaware River in Bensalem Township; Bristol Township (the Rohm and Haas property); and Tullytown and Falls Township (from Franklin Cove to Pennsbury Manor).

A new park system is also proposed along the Delaware Canal in Bristol Borough, linking several pieces of open space (including school athletic fields, existing trails, and other segments of green space).

#### Develop public marinas and boat ramps to increase access.

The presence of public marinas will help to improve residents' access to the Delaware River, and will encourage visitors to use these facilities as access points *from* the river into the waterfront communities. Marinas can create a strong sense of place, and are catalysts for economic development, including increased land values, increased residential and business development, and destinations for water-borne visitors.

Proposed public water access facilities are shown on Map 6.

In all cases, municipalities should coordinate the development of marinas with the U.S. Army Corps of Engineers (*see box*).





When the marinas are developed, the user fees from these public facilities could be used to capitalize a fund to develop additional enhancements in these areas including increased landscaping and public amenities.

### The Corps of Engineers and Waterfront Development

The U.S. Army Corps of Engineers' traditional missions have been flood control and navigation. In recent years, however, environmental restoration has become an equally important mission. This new mission includes items such as the restoration of stream banks to more natural conditions and re-forestation of riverfronts. The Corps cannot directly provide funds for recreational boating facilities. However, Corps funds can be used to study these facilities as part of an environmental restoration project. The Corps can also fund recreational facilities (e.g., pathways and trails, or small parks) that are a small part of a larger restoration, navigation, or flood control project.



## Map 6: Public Water Access Facilities

-  *Proposed Public Marina*
-  *Proposed Boat Ramp*
-  *Proposed Bristol Floating Dock*
-  *Proposed Public Water Access*



## Theme: Incorporate Design with Development

Design considerations play a critical role in any development or redevelopment project, and are especially important for the Delaware River Waterfront. Improved waterfront access can help to bring people to the water, and can generate interest in waterfront development and redevelopment. However, proper design of that development is necessary to create a waterfront environment that will stand the test of

time. Without cohesive design guidance, waterfront developments run the risk of turning into the kind of structures that occupy the waterfront today—structures whose usefulness and value faded with time. High-quality design can help to turn a collection of buildings into a lasting community.

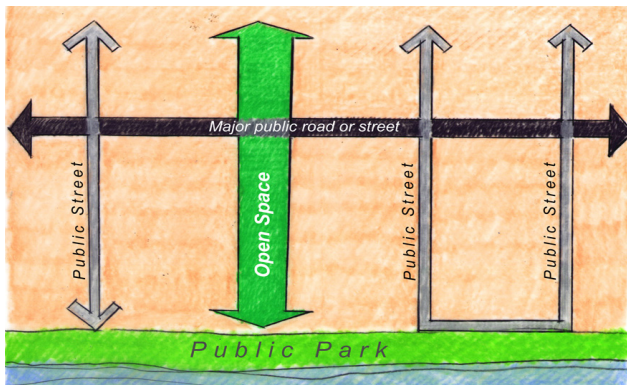
### Recommendation

### Actions and Strategies

#### Create architectural and site design guidelines for the redevelopment process along the river's edge and the Delaware Canal.

Because the Delaware River waterfront is such a critical economic and environmental resource for the Bucks County Waterfront, special attention should be paid to the nature of development and redevelopment that occurs near the water. Each of the waterfront communities should adopt a set of design guidelines that govern the nature of waterfront development. Elements of these guidelines should include:

- Extending the street grid;
- Clustering near the water, while maintaining public access and views;
- Striving for appropriate density;
- Maintaining a natural edge; and
- Fostering parcel consolidation.



Design guidelines are important for waterfront communities.

**Extend the Street Grid:** This is important for roads that run perpendicular to the river. Extending the existing street grid, or creating a new grid, will help maintain a visual and physical connection between communities and the river.

**Cluster Near the Water, but Maintain Public Access and Views:** At the riverfront, buildings should be a maximum of six stories, with lower structures stepped back from the water's edge. High-rise buildings (those higher than six stories) are entirely inappropriate near the river, since they block views and disrupt the waterfront's visual character.

**Strive for Appropriate Density:** Infill or new residential units along the riverfront should strive to achieve moderately high residential densities, while still respecting existing residential units. Single-family detached or attached units should be built on sites that abut existing single-family units. On other sites, garden apartments should be the norm.

**Maintain a Natural Edge:** Along the river itself, efforts should focus on maintaining and enhancing a natural edge. Appropriate plantings and buffers can be important elements in this effort. Municipalities should reserve the floodplain as public open space. Development near the waterfront should include public open space that is oriented perpendicular to the river. This will provide viewsheds and pedestrian access within commercial and residential developments.

**Foster Parcel Consolidation:** To implement this plan, piecemeal development should be avoided, particularly in the plan's primary opportunity areas. Municipalities should facilitate parcel consolidation for new and infill development to promote the integration of that development with adjacent parcels. The proposed consolidation should not preclude nearby properties from developing as recommended by this plan.

## Theme: Incorporate Design with Development

### Recommendation

### Actions and Strategies

#### Establish address streets and associated design guidelines.

An "address street," is a community's "main street" in form and function. These streets provide opportunities for great first impressions through a unique combination of aesthetics and attractions. The address street is a pedestrian-friendly environment that is designed at a human scale, and also serves as the center of retail, commercial, and residential activity. In addition, address streets are often the primary travel routes to or within a community, serving the travel needs of residents and visitors.

The address street is the place where residents want to live, shop and recreate, where businesses want to locate, and the street that visitors patronize. An address street expresses the community's identity and creates an attractive, safe, and bicycle- and pedestrian-friendly environment.

#### Address Streets

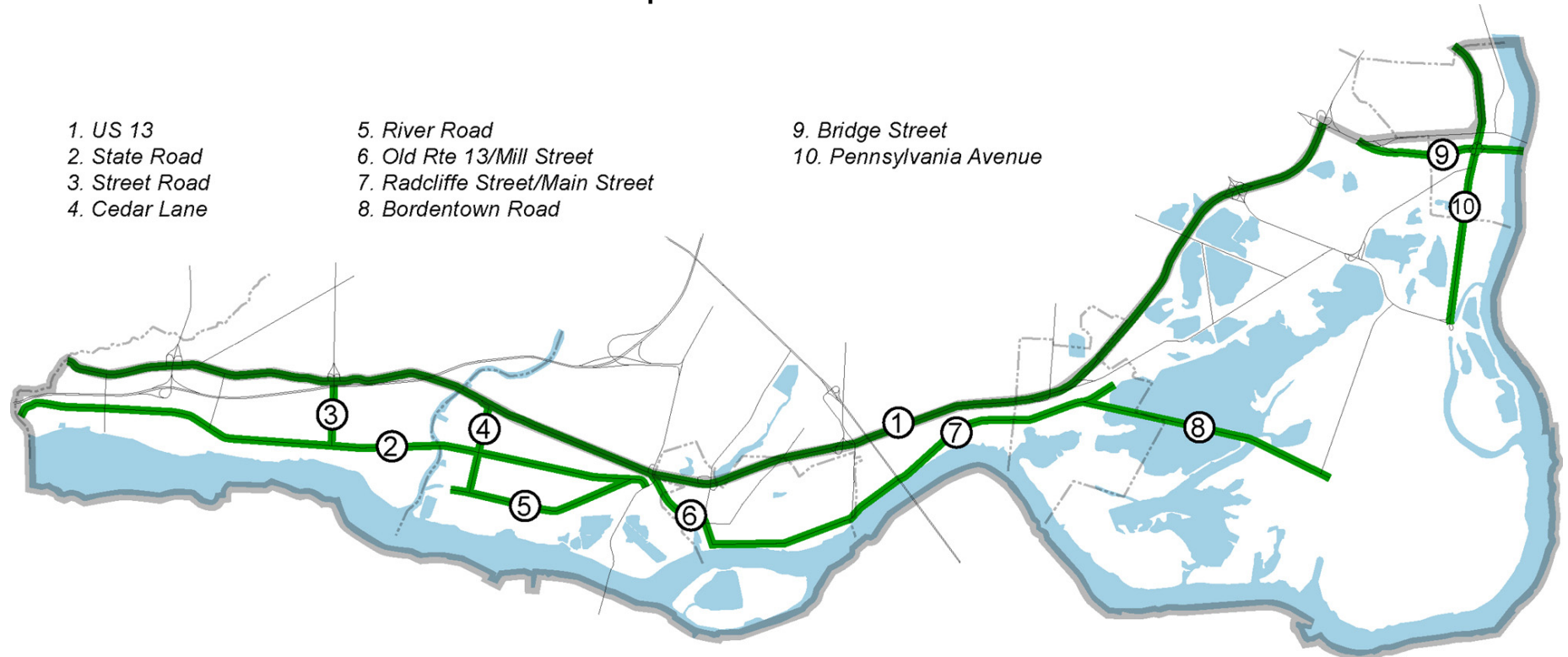
Address streets in the study area should include State Road, Street Road, River Road, Mill Street, Radcliffe Street/Main Street, Bordentown Road, Pennsbury Road, Bridge Street, and Pennsylvania Avenue. U.S. 13 should also be considered an "address street," although its treatment will be somewhat different, given its role in regional mobility.

Address streets are shown on Map 7. Specific design and policy elements of an address street include:

- street trees and accent plantings,
- special paving,
- continuous sidewalks,
- pedestrian amenities such as street furniture and buffer zones,
- distinct wayfinding and signage features,
- architectural guidelines,
- signage control guidelines,
- lighting for streets and sidewalks,
- minimized curb cuts,
- overhead utilities placed underground or behind buildings,
- bicycle lanes, and
- screening of unsightly areas.

The individual jurisdictions or the county should consider applying for funds from the Transportation and Community and System Preservation Pilot Program (TCSP). This federal program provides funds for planning and implementation grants, technical assistance and resources to address the relationship between transportation, community and system preservation and private sector initiatives. Trails, pedestrian and bicycle improvements are all potentially fundable through this program. After the project justification is fine-tuned, the county/jurisdictions should hold a meeting with their congressional delegation as a start to the application process.

## Map 7: Address Streets



Radcliffe Street has many of the elements that should be present in other address streets.



## Theme: Enhance the Economy

The Delaware River remains a primary center of economic activity for many of the waterfront communities in Bucks County. Even with weaknesses in the industrial sector—the waterfront’s historic strength—communities on the Delaware River still possess the transportation and

land resources necessary to attract new economic vitality. Efforts to make the waterfront more pleasant for residents and visitors must be matched by the long-term stability that comes with enhanced economic activity along the river.

### Recommendation

### Actions and Strategies

#### Promote the redevelopment of underutilized and brownfield sites.

The Pennsylvania Department of Environmental Protection defines brownfields as “abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”

Financing the redevelopment of these sites—including site assessment, cleanup, and preparation of sites for proposed new uses (i.e., removal of contaminants, demolition, land restoration)—is a critical challenge. If site redevelopment is to succeed, then critical public injections of capital will have to be secured to help cover brownfield-related costs not readily absorbed by the private market as part the development process.

There are a number of programs and tools that the county has already employed to facilitate the redevelopment of underutilized sites. The county should continue to use the full range of federal and state programs available. Specific recommendations to employ programs and recommended next steps are included in the **Implementation** section.

#### Use innovative strategies to enhance the attractiveness of underutilized sites for new uses.

Bucks County already makes use of a number of local real estate investment tools and approaches to value capture. Other tools are commonly used across the country, and could be useful mechanisms in Bucks County.

Bucks County currently uses the following funding strategies:

- Tax Increment Financing (TIF)
- Property tax abatements

In addition, the county and municipalities should consider the following strategies:

- General Obligation Bonds (GOB) to pay for public improvements and amenities
- Special Taxing Districts

See the pages 66-67 of the **Implementation** section for additional information on methods for stimulating real estate investment.

## Theme: Enhance the Economy

### Recommendation

### Actions and Strategies

#### Secure adequate water and wastewater resources to support future development.

Appropriate water and wastewater capacity are required to support new development and redevelopment. While regional capacity exists, there exist some unresolved issues regarding the distribution of that capacity, which may affect plans in the waterfront study area.

Bucks County should confirm that water and wastewater treatment capacities are sufficient to support future development. If insufficient capacity exists, the county should pursue additional capacity through new or expanded facilities or new or revised agreements with facilities outside the study area.



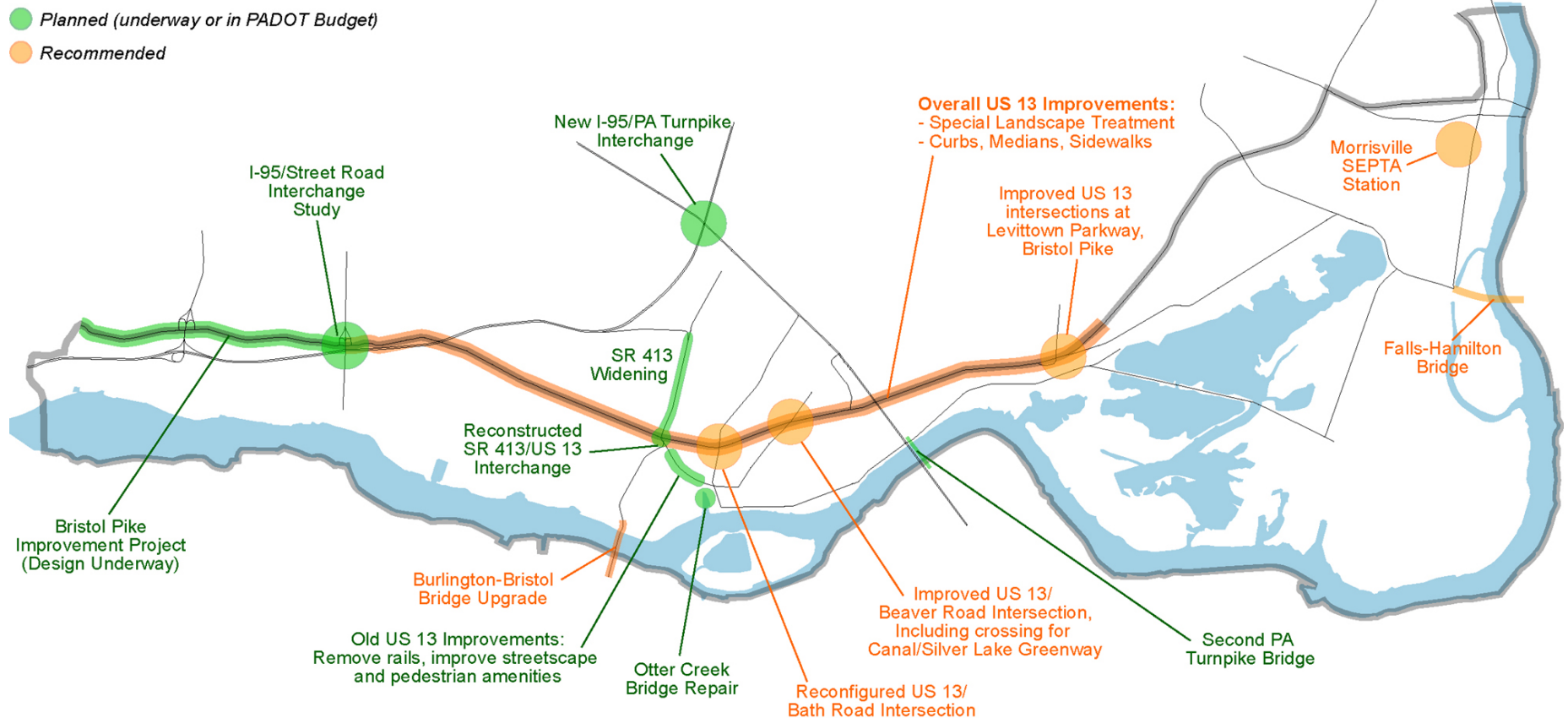
The county should confirm that the study area has adequate water and wastewater treatment capacity.

## Theme: Expand Mobility and Accessibility

Transportation has played a strong role in shaping the communities along the Delaware River in Bucks County, and will continue to do so. The combination of interstate and US highways, freight and commuter rail, and shipping and boating facilities contributed to the area's industrial identity. Those same resources give the communities in Lower Bucks

County a high degree of accessibility from surrounding areas, and provide important opportunities to enhance, diversify, and change that identity. Map 8 depicts planned transportation projects (those that are underway or already in PennDOT's budget) and those that have been recommended in this plan.

**Map 8: Planned and Recommended Transportation Improvements**



## Theme: Expand Mobility and Accessibility

### Recommendation

### Actions and Strategies

#### Transform US 13 into a safe, attractive route for motorized and non-motorized transportation.

US 13 is a common thread that links together the municipalities of Lower Bucks County. As such, the road should be enhanced to make it more functional, safe, and attractive for residents and visitors alike.

The *US Route 13 Revitalization Plan* outlines a series of recommended improvements to US 13 and its intersections, as well as pedestrian/bicycle improvements. This Bucks County Waterfront Revitalization Plan endorses those recommendations, including:

Continuous sidewalks—with appropriate pedestrian buffer zones—on both sides of the road;

Pedestrian-oriented lighting, street furniture, and landscaping, and bicycle lanes in both directions on US 13;

Consolidated utilities (i.e., power lines only on one side of the road, and set back as far as possible);

Minimized use of billboards (see also the first two recommendations on page 40—part of the theme of Reinforcing Our Sense of Place and Identity); and

A uniform wayfinding system that directs motorists to the study area's waterfront communities.



## Theme: Expand Mobility and Accessibility

### Recommendation

### Actions and Strategies

#### Create Transit Oriented Development (TOD) overlay zones around SEPTA stations.

Across the United States a growing amount of attention has been paid to the role of land use planning in the success of transit systems. Transit oriented development (TOD) is one response to this focus. In essence, TOD is pedestrian-friendly development focused around transit access points. Elements of TOD include compact, mixed-use development patterns with facilities and design that enhance the environment for pedestrians in terms of safety, walking distances, comfort, and the visual appeal of the surroundings.

With the cooperation of local governments, transit agencies and developers, TOD projects can create attractive and vibrant mixed-use, pedestrian-oriented environments.

The goals of TOD are to reduce vehicle ownership and usage while increasing livability. Because transit users are often pedestrians, the elements that support transit and pedestrian activity are generally the same. Successful TOD projects have buildings and public spaces that are oriented and designed to make pedestrian movement convenient and pleasant.

Successful TOD areas at SEPTA stations could help achieve local economic development goals, while serving as gateways for access to the Delaware River and study area communities.

**Undertake station area planning that responds to the market and to community needs and goals:** The mix of uses, their scale and location, and how well these uses serve their markets ultimately will determine whether a TOD project is successful.

**Reward development that promotes transit ridership and supports the principles of smart growth:** The development review process should be expedited through the use of "fast-track" permit approvals. "Good" TOD projects should be encouraged through the use of density bonuses, tax-exempt financing, and similar tools.

**Tailor zoning provisions to station areas:** Overlay districts, use controls, building standards, and requirements for pedestrian amenities help to tailor zoning to station areas.

**Allow for flexibility that responds to market conditions and the particulars of local situations:** Development regulations should be relaxed in locations where that flexibility will facilitate TOD projects.

**Encourage pedestrian-friendly infrastructure:** Zoning provisions should require amenities to enhance the pedestrian environment.

**Consider joint development opportunities to facilitate TOD:** Joint development between local government, SEPTA, and private developers should be encouraged.

## Theme: Expand Mobility and Accessibility

Recommendation	Actions and Strategies
<b>Improve regional access by investigating ways to enhance the Delaware River bridge crossings in the study area.</b>	
<p>The Burlington-Bristol Bridge is an historic structure. However, it is also a choke point in the area's transportation system: traffic congestion due to the bridge is a significant problem for the study area—specifically Bristol Township and Bristol Borough.</p> <p>A new Falls-Hamilton bridge crossing has been studied previously. This bridge—an extension of Tyburn Road across Biles Island and the river—would re-route the truck traffic that now travels through residential areas of Morrisville and Falls Township along Pennsylvania Avenue. The issue of heavy truck traffic on local streets remains a major issue for Falls Township and Morrisville, and may impede economic redevelopment activities in these municipalities.</p> <p>Pedestrian facilities should be included as part of the planned I-95/I-276 interchange, as well as the new Pennsylvania Turnpike bridge across the Delaware River. This pedestrian crossing would connect walking trails in New Jersey with the Delaware Canal and Towpath in Bristol Township.</p>	<p>The county and municipalities should continue to assert the need for:</p> <ul style="list-style-type: none"> <li>Improvements to the Burlington-Bristol Bridge and/or changes to its toll system,</li> <li>A new Falls-Hamilton crossing, and</li> <li>Pedestrian and bicycle access to the I-95/I-276 interchange and the new Pennsylvania Turnpike bridge across the Delaware River.</li> </ul>
<b>Insist that new development addresses the impacts of new growth on our transportation system.</b>	
<p>New development and redevelopment will have a number of impacts on the study area's transportation system, beyond the simple need for increased roadway capacity. Improvements will be necessary to maintain and enhance public safety, and to create a more pedestrian- and bicycle-friendly environment, especially in neighborhoods and near the Delaware River.</p>	<p>The county and municipalities should work with developers and PennDOT to ensure that the following issues are addressed:</p> <ul style="list-style-type: none"> <li>Increased roadway capacity and improved intersections;</li> <li>Safe ingress and egress for neighborhoods, public facilities, and waterfront access areas; and</li> <li>Appropriate facilities for safe and convenient pedestrian and bicycle circulation.</li> </ul>

## Theme: Expand Mobility and Accessibility

### Recommendation

### Actions and Strategies

#### Create a bicycle/pedestrian trail along Adams Hollow Creek, connecting the Delaware Canal Towpath to Silver Lake County Park.

Silver Lake Park already hosts a well-developed series of recreational trails. The Adams Hollow Creek corridor provides an opportunity to link this system with the canal towpath, the study area's trail system, and, by extension, the East Coast Greenway.

Work with the Bucks County Parks and Recreation Department to evaluate the feasibility of this trail linkage.

#### Restore the full length of the Delaware Canal Towpath as a bicycle/pedestrian trail.

The Delaware and Lehigh National Heritage Corridor traverses the study area. Although much of the existing canal is flanked by a usable towpath, neither side is continuous through the study area. Privately held property and major transportation facilities are usually the cause of these breaks. A high priority should be placed on the elimination of all obstructions to continuity of the towpath and the canal's waters. Such obstructions must be addressed with the support of the Delaware and Lehigh National Heritage Corridor, and should be given high funding priority.

Re-establishing the towpath's continuity can provide residents and visitors with a unique recreational and cultural resource—the ability to traverse the study area from Bristol Borough to Morrisville and beyond. This restored towpath will become part of the East Coast Greenway, a unique opportunity to link the entire eastern seaboard with non-motorized trails and paths. The towpath will also become part of PennDOT's Bicycle Route System.

Work with the Delaware and Lehigh National Heritage Corridor (a unit of the National Park Service) and the East Coast Greenway project to restore the towpath on both sides of the Delaware Canal. The Corps of Engineers has also undertaken projects to remove Canal obstructions, and should be involved as a partner in these restoration efforts. The restored towpath should be suitable for pedestrian and bicycle use.



A fully restored canal and towpath can be an important regional recreational amenity.

## Theme: Foster Environmental Sustainability

The Bucks County Waterfront study area contains a number of waterways, parks, and unique natural resources. Chief among them is the Delaware River, which begins in central New York and flows 330 miles before emptying into Delaware Bay and the Atlantic Ocean. The northeastern corner of the study area also marks the point at which the river leaves the piedmont (as evidenced by the falls near Trenton and Morrisville) and enters the Atlantic Coastal Plain. Although not a true estuary, the portion of the river in the study area is influenced by tides, and is often considered part of the Delaware Estuary.

Several streams and unnamed tributaries reach their confluence with the Delaware River within the study area. These waterways include

Poquessing Creek and Neshaminy Creek, as well as Biles, Mill, Scotts, Black Ditch, and Martin's Creeks. Van Sciver Lake and Warner Lake, as well as several smaller lakes in the vicinity, were formed by sand and gravel quarrying. These lakes are used for boating, swimming, and fishing.

Parks and open space, most commonly defined as land that is free of buildings and impervious areas, are found throughout the study area. Two state parks are located in the study area: the Delaware Canal State Park (including Tinicum Park) and Neshaminy State Park. Bristol Marsh and Silver Lake County Park enhance the study area's natural resources.

### A Healthy River System

A river's health is largely dependant on the dynamic interaction between hydrology and its terrestrial components, such as its banks and floodplains. This interaction dictates the river's ability to transport floodwaters and sediment loads while providing aquatic habitat, both in-stream and along its riparian corridor. When riverbanks and floodplains are altered or lost to development, the interaction between the terrestrial and aquatic components is affected and many of the natural functions and values along the river corridor are compromised. For example, during base flow periods, riverbanks serve as a natural conduit for these flows, while providing a substrate for aquatic plants (hydrophytes) and habitat for both aquatic and upland species along the river corridor. During flooding events, rivers overflow their banks and floodwaters and invade adjacent floodplains. Floodplains store this overflow, filter nutrients and debris from the water column, provide temporary habitat for aquatic species, recharge local aquifers, and protect life and property from further destruction. When development infringes on floodplains or alters riverbanks, flooding events may be intensified, riparian species and their habitat may be lost, and the overall river water quality is impaired.

## Theme: Foster Environmental Sustainability

### Recommendation

### Actions and Strategies

#### Restore riverbanks and floodplains to a more natural condition.

The full riparian system—including the river, its banks, its floodplain, and any associated meanders, wetlands, and marshes—can absorb flood waters, filter impurities, and provide a haven for wildlife. In many cases in the study area, intense industrial and residential development has obliterated these natural conditions.

Within the Bucks County Waterfront corridor, the Delaware River and its tributaries—such as Otter Creek, Hog Run, and Martins Creek—often lack adequate riparian buffers or include highly eroded or unstable stream banks. In addition, much of the 100-year floodplain is now covered by a large amount of impervious surface, compromising the floodplain's ability to store or filter floodwaters.



Restoration of riverbanks, wetlands, and riparian areas should be a priority.

Through preservation and restoration of riverbanks and floodplain, improvements to the natural riparian corridor can be made. This will benefit both resident aquatic and terrestrial species, and local citizens whose properties are in the floodplain. Bodies of water to be restored include:

- The Delaware River, throughout the study area;
- Otter Creek, from the Bristol Marsh to Silver Lake;
- Hog Run, from the Delaware River to River Road; and
- Martins Creek, from Franklin Cove to Tullytown Borough Hall.

General guidelines for improving the condition of the Delaware River and its tributaries include:

- Promote the preservation of existing intact floodplain and natural stream banks;
- Reduce the percentage of impervious material within the 100-year floodplain;
- Develop stream bank restoration projects, including installation of bioengineering measures to stabilize banks, improve stream bank vegetative cover and in-stream habitat (riffle and pool zones);
- Promote native plant usage for stabilization of river banks; and
- Remove human-made impediments or impoundments and then re-plant native plant species as part of efforts to restore the Delaware and its tributaries.

The implementation of such projects would involve federal, state, and local agencies and citizen groups within the watershed. The agencies can provide guidance for the municipalities on effective strategies to protect the river corridor and improve riverbank and floodplain areas. In addition, the local municipalities can translate this information to their citizens and reduce the impacts by providing clear guidelines for the preservation and protection of floodplain, forested buffers, and stream bank vegetation.



## Theme: Foster Environmental Sustainability

### Recommendation

#### Protect the Delaware River and its tributaries and related wetlands through buffering.

Development in the floodplain leads to increased flood damage and decreases the river's ability to contain floods. Prevention and removal of floodplain development can help to restore the river's natural function. A 100-foot buffer is generally cited as the minimum distance necessary to protect water quality and habitat.

### Actions and Strategies

For all new development and redevelopment, mandate a 100-foot riparian buffer around the Delaware River and its tributaries. Buffers should be populated with native plant species, and not private lawns or gardens. These buffers should ideally be reserved as public open space, and can contain pedestrian/bicycle trails or riverwalks.



Buffering can help to preserve the natural health of the Delaware River and its tributaries, while creating a recreational resource for waterfront communities.

## Theme: Reinforce our Sense of Place and Identity

One inherent challenge for new development or redevelopment is to create a “sense of place,” the un-measurable but powerful feeling of uniqueness and personality that characterizes successful cities, towns, and neighborhoods. The communities in the Waterfront Study Area are fortunate in the sense that they possess historic and natural resources, compact downtowns, , and many other qualities necessary to form this “sense of place.” In planning for the future, it is critical to emphasize the unique qualities of each of the waterfront communities. At the same time, however, it is necessary to link these communities with some common themes.

Within the study area lie 46 properties eligible for or listed on the National Register of Historic Places, including historic districts, transportation corridors and individual historic structures. The Bristol

Historic District contains residential, commercial, and industrial architecture dating from the early 18<sup>th</sup> century. The Delaware Division of the Pennsylvania Canal traverses the study area. The canal was part of early to mid-nineteenth century canal building efforts that helped to develop the anthracite coal industry in the Upper Lehigh Valley. One of more prominent historic resources is Pennsbury Manor, the recreated country home of William Penn, situated on the Delaware River in Falls Township.

The recommendations in this plan enhance existing cultural and historic resources and expand those qualities in a way that infuses the entire waterfront with life. Communities are highlighted for their individual qualities and linked to the overall sense of place along the waterfront.



Marinas and other public water access points can help to reinforce community character.

## Theme: Reinforce our Sense of Place and Identity

### Recommendation

### Actions and Strategies

#### Protect and enhance the area's cultural resources.

There are currently many significant cultural resources distributed throughout the project corridor that should be highlighted with promotional materials and tours. The protection of these resources is a key element of this plan, and a complete cultural resources strategy should include:

- A full area survey;
- An assessment of significance (based on survey findings); and
- A management and promotional plan.



A detailed survey is necessary to identify historic resources, such as the Grundy Mill.

**Cultural Resources Survey:** A cultural resources survey of the entire study area should consist of an evaluation of all resources, complementing the documented results of previous surveys. The Heritage Conservancy has already evaluated many of these historic resources for inclusion in a historic tour; therefore, an expanded evaluation could complement their research. The information would be placed on a GIS data layer and integrated with the other information in the county's database and GIS system.

**Assessment of Significance:** Once a full survey is complete, it is important to assess the significance of these resources according to National Register eligibility. All of the resources within the project limits would be evaluated according to the four National Register criteria (see pages 68-71 of the **Implementation** section for more information).

**Management and Promotional Plan:** Once a full picture of all of the significant cultural resources within the study area has been obtained, a management and promotional plan should be developed. Key resources should be linked via the Delaware Canal, the Delaware River, and historic roads. Such linkages could include:

A linkage of the riverfront mansions in Bensalem with Bristol Borough's historic district, using the Delaware River (tour boats, excursions, etc) or historic stage coach routes.

A second linkage from Bristol Borough to Pennsbury Manor, where tour boats could dock, and passengers can access both the historical site and adjacent parks.

A consistent interpretive signage campaign illustrating the history and significance of this portion of Bucks County. Signs could be placed at key locations noting historic resources, and could be set up as steps on the cultural resources tourism paths to be established via the river and the local roadway networks.



## Theme: Reinforce our Sense of Place and Identity

### Recommendation

### Actions and Strategies

#### Improve the visual appearance along our corridors and at our municipal gateways.

Distinct from the riverfront gateways described earlier, municipal gateways are located on major transportation facilities. Their role is to welcome travelers to each municipality, conveying a sense of place through distinct landscaping and signage.

Municipal gateways include:

Major transportation facilities such as US 1 and 13, and the Burlington-Bristol Bridge terminus.

The rail bridges that carry the SEPTA/Amtrak tracks across a number of study area roads. These bridges are often visually unappealing. Through visual enhancements (removal of advertising, addition of public art, etc) these bridges can serve as gateways to the River and riverfront communities.

#### Reduce the amount of advertising signage throughout the area, particularly along US 13.

Many of the study area corridors are characterized by a proliferation of on-site and off-site signs that detract from the overall appearance of the study area. Sign regulations should present balanced approach between various community goals including the need for businesses to identify their place of business, the need to protect against hazards of travel and transportation, and the desire to promote an attractive community environment.

The jurisdictions should review and amend their sign ordinances to reduce sign height and the numbers of signs permitted. It is recommended that off-site signs be prohibited. In some instances, where billboards present severe challenges to the visual quality and economic renewal of the study area, the county and study area jurisdictions should consider the use of US Department of Transportation, Transportation Enhancement funds or other funding sources to purchase and remove billboards. See page 72 in the **Implementation** section for a more thorough discussion of approaches to sign regulation.

#### Investigate the possibility of transferring Neshaminy State Park to the County or to local control.

Although a state park in name, Neshaminy State Park serves a number of local functions (including a swimming pool). Transferring it to local control would allow the park to enhance its locally oriented focus, while still serving as a regional resource.

The county should perform a feasibility study to assess the desirability and pros and cons of transferring the park to local control.

## Theme: Reinforce our Sense of Place and Identity

### Recommendation

#### Restore and re-water the terminus of the Delaware Canal in Bristol Borough and Township.

Restoration of the canal, locks, and bump bridges would reinforce Bristol's historic role as the terminus of the Delaware Canal and would once again physically link the canal to the Delaware River. The restoration can be a catalyst for redevelopment of lands adjacent to the canal and locks. Restoration of the canal and reuse of historic buildings can also contribute to the borough's historically oriented tourism economy. Adding functional canal boats could further enhance the borough's historic district by providing additional programs and events. A major portion of the lands adjacent to the canal is also within one-half mile of the Bristol SEPTA station, making it especially accessible.

### Actions and Strategies

The county should continue to partner with federal and state agencies to complete the restoration of the entire canal, including the critical section in Bristol at its terminus. Federal Transportation Enhancement dollars have been used to restore the canal in other sections and could be used for this section. Qualifying Transportation Enhancement activities include the rehabilitation and operation of historic transportation-related buildings, structures, or facilities (including historic canals). The next round of project selections for Transportation Enhancement funding will potentially occur in FY 2005/2006.



The Delaware Canal terminus, its towpaths, and locks should be restored.



## PRIMARY OPPORTUNITY AREAS

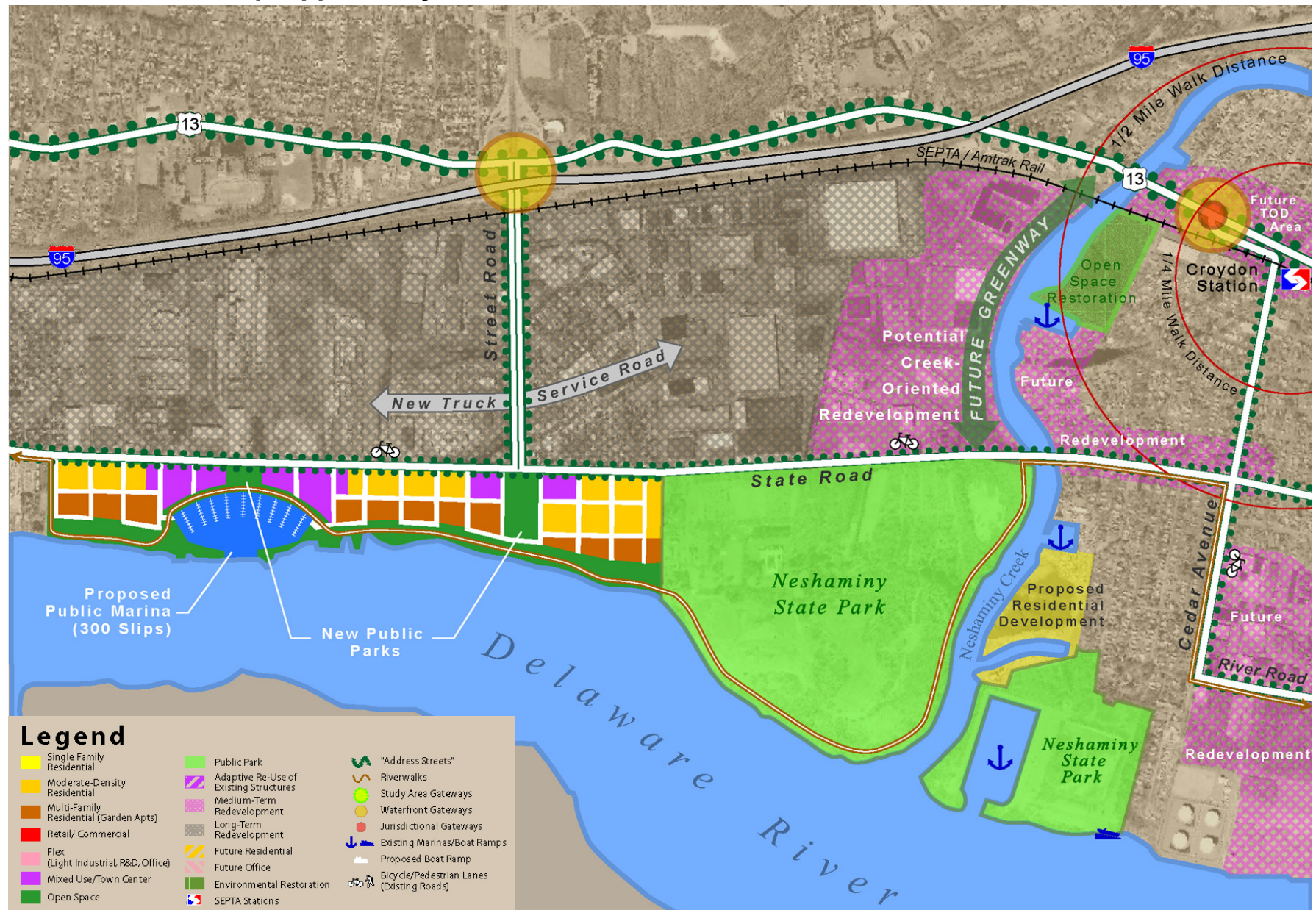
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General principles are necessary to set the stage for the revitalization of the Delaware River waterfront. However, these principles—and even a few site-specific recommendations—can only do so much. Making the waterfront a beautiful, active, and productive place also requires a detailed approach to a few selected locations.

The **Primary Opportunity Areas** addressed in this section of the plan represent areas that show particular promise for achieving the general goals outlined above. They represent all six study area jurisdictions, and embody the need to connect people to the water while creating lasting economic benefits.



## Bensalem Township Opportunity Area





## Bensalem Township Opportunity Area

This plan envisions a waterfront development stretching from the Echo Beach neighborhood to Neshaminy State Park, composed primarily of mixed residential development. Parcel consolidation is recommended and needed to implement this plan. A new 300-slip marina will be the focal point, surrounded by mixed-use development. Special design treatments will give Street Road a “boulevard” identity. A new public park at the end of Street Road would enhance public access to the Delaware River, and a riverwalk will offer recreational access along the entire shoreline. This park concept should be incorporated into proposed developments for this area.

This area should be redeveloped with mixed density residential units. Mixed-use office and commercial units should be located along State Road. State Road and Street Road should be remade into address streets. The recommendations under “Incorporate Design with Development” on pages 26-27 describe these address streets,

architectural and height guidelines, and parcel consolidation recommendations that development in the Bensalem Opportunity Area should incorporate.

### Specific Recommendations and Action Steps

#### *Land Use and Zoning Changes*

The Bensalem Zoning Ordinance currently provides for R-55—Planned Residential Community District. This district appears to permit a mix of residential uses and densities. It also permits “clubs, clubhouses, marinas, dining and lodging facilities...parking and security facilities, and such other conditional uses as may be necessary to promote the overall purpose of the R-55 district.” This district may be a good starting place for Bensalem Township, but it will need modifications. The Township might consider:



Conceptual elevation sketches for the Bensalem Opportunity Area.

## Bensalem Township Opportunity Area

Specifying other uses, including neighborhood commercial, that will be allowed as part of a mixed-use development;

Including greater detail about the preferred mix and location of uses (single family along the waterfront, mixed use around the marina);

Creating a “non-planned” approach to mixing uses and densities/units so that this development can happen in stages without a single overall developer;

Reducing or eliminating the minimum site area of 30 acres and instead placing geographic limitations on the district (e.g., adjacent to the Delaware River); and

Enhancing the design standards and purpose statement.

### **Access Recommendations**

A waterfront gateway should be established at the Street Road interchange with I-95. The improved Street Road boulevard would serve as an access corridor, with the new public park at Street Road’s terminus serving as a primary public waterfront access point.

There is also a need for a new service road in Bensalem Township. The road would run parallel to State Road, between State and I-95. This road will provide access between Bensalem’s industrial sites and I-95/US 13 while minimizing truck traffic on State Road.

### **Parks and Recreation**

Through joint public-private efforts, develop a new public park, located at the intersection of Street Road and State Road. This park should provide public waterfront access. The riverwalk will be part of a wider linear park that stretches along the Delaware waterfront for the entire length of the opportunity area.

Bensalem Township should work with the county’s Department of Parks and Recreation and Pennsylvania Department of Conservation and Natural Resources to seek ways to provide more local-serving uses in Neshaminy State Park. In addition, township and county officials should pursue options for transferring the park to local ownership and operation.

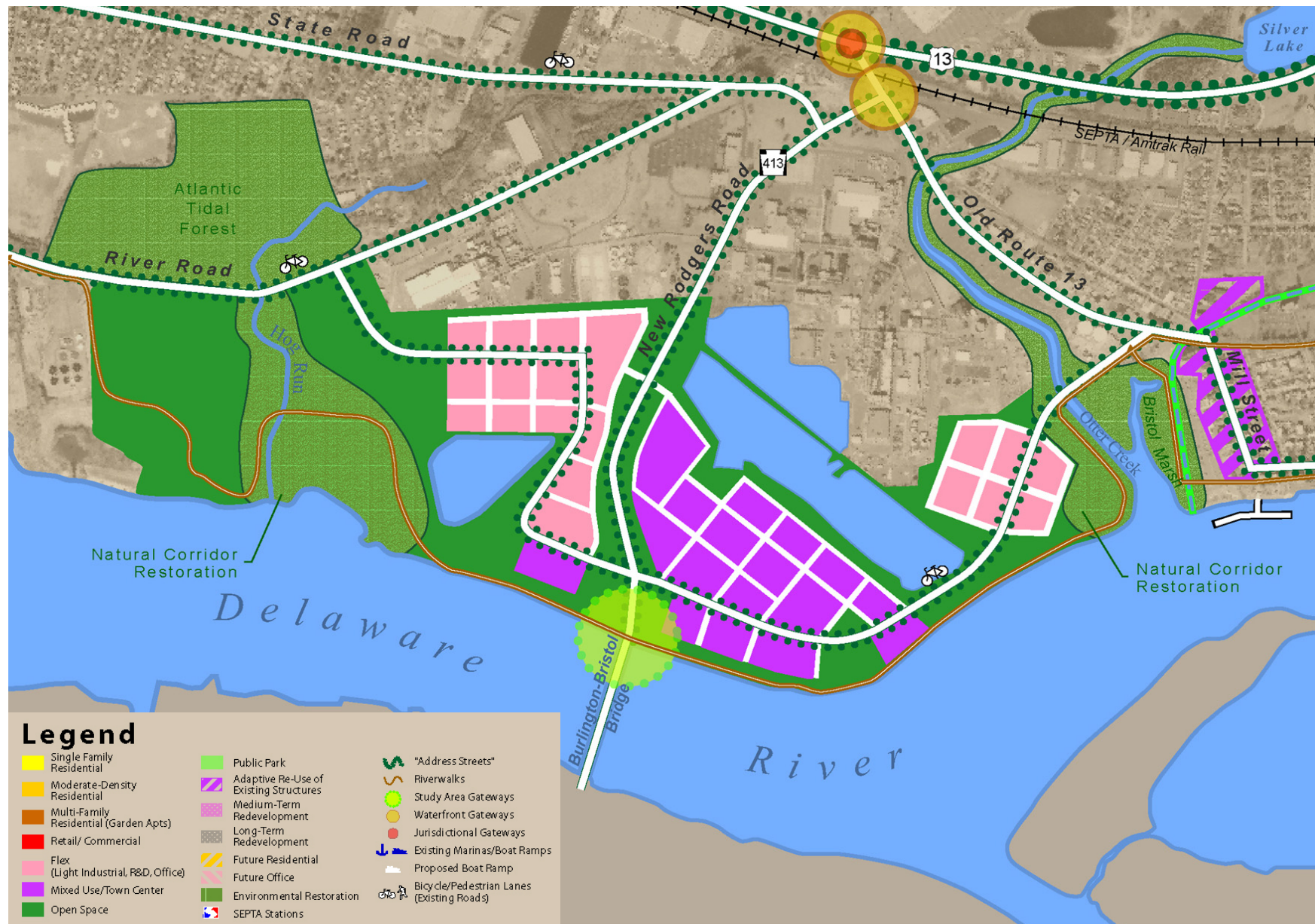
To bring the new public marina to fruition, the township should develop a more detailed feasibility study and plan, and review it with the Corps of Engineers.



A new public park and waterfront access area is envisioned at the end of Street Road.



## Bristol Township Opportunity Area (Rohm and Haas Property)



## Bristol Township Opportunity Area (Rohm and Haas Property)

This concept envisions the comprehensive redevelopment of land currently owned by Rohm and Haas, and would create a large amount of high-quality space for office, flex, commercial, and residential development, taking advantage of this superior riverfront location. Mixed-use areas along the Delaware River and in the center of the site would include commercial/office, flex, and residential development.

This concept plan also incorporates a significant gateway feature that creates an attractive entrance into Bristol Township from the Burlington-Bristol Bridge. The areas around Otter Creek and Hog Run would be restored to a more natural condition, with substantial areas of wetlands preservation. Public open space will be provided along the river's edge, and a riverwalk would run along the river, connecting the site to Bristol Borough and points south.

### Specific Recommendations and Action Steps

#### *Land Use and Zoning Changes*

The opportunity area is currently zoned for heavy commercial and single-family residential development. Bristol Township's R-4 Multi-Family Residential District would permit mixed residential development, while either the R-1, R-2, or R-3 districts would address the single-family development (R-1, R-2, and R-3). Bristol Township allows mixed non-residential uses in all of its commercial districts, but allows mixed residential development only in the portion of the C—Commercial district that borders Neshaminy Creek. With the possible exception of the TC—Town Center overlay, none of the township's zoning designations permit the kind of mixed-use/town center development called for in this plan. Based on existing zoning districts, the township should consider the following steps:

- Create a Mixed Use district (as opposed to the existing overlay district) that permits the development of both residential and commercial uses, as well as other elements such as mixed lot sizes,

- vertical mixing of uses, walkability provisions, and architectural design controls;

- Barring the creation of a Mixed Use district, create a mixed use *overlay* zone (similar to the Neshaminy Creek provisions of the C—Commercial district or the TC—Town Center overlay) that permits a residential mix in C—Commercial or CN—Neighborhood Commercial zones, provided specified design guidelines are met;

- Expand the mix of uses allowed in the C—Commercial district and eliminate the geographic requirements of that district to permit redevelopment of the Opportunity Area;

- If the list of uses in the C—Commercial district is too extensive for development in other locations, amend the CN—Neighborhood Commercial district to permit combinations of residential and commercial uses.

- Create a mixed-use overlay that allows a residential mix in certain locations that are zoned C—Commercial or CN—Neighborhood Commercial provided specified design guidelines are met;

- Enhance the existing Statement of Community Goals and Objectives provisions (Section 108) to incorporate goals and objectives for the Opportunity Area; and

- Expand the Purpose section of any amended zoning district to describe in more detail how to achieve a desired mix of uses.

In addition to these considerations, the township may also want to consider adopting a program for the acquisition and maintenance of open space that will be important in defining the edges of the individual projects and enhancing the overall development.

## Bristol Township Opportunity Area (Rohm and Haas Property)

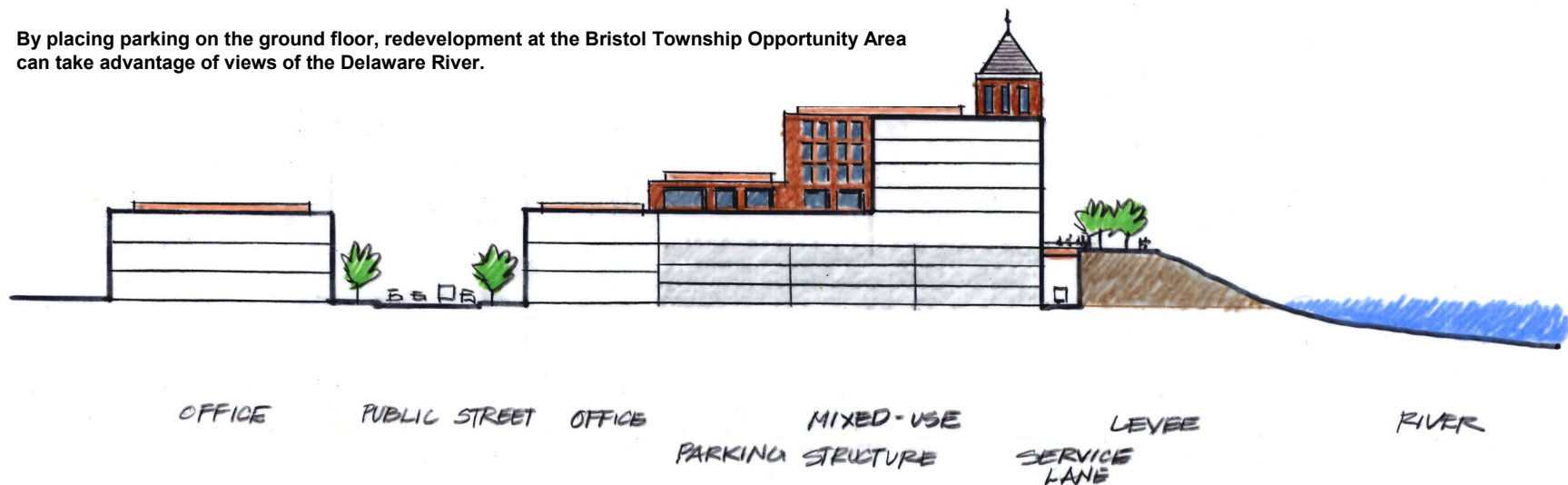
### *Access Recommendations*

The intersection of New Rodgers Road, State Road, and Old Route 13 is in need of significant improvement to provide safe and efficient access to the Rohm and Haas Opportunity Area, as well as Bristol Borough. The Pennsylvania terminus of the Burlington-Bristol Bridge should be configured as a regional gateway, with a green corridor along New Rodgers Road.

### *Environmental Enhancements*

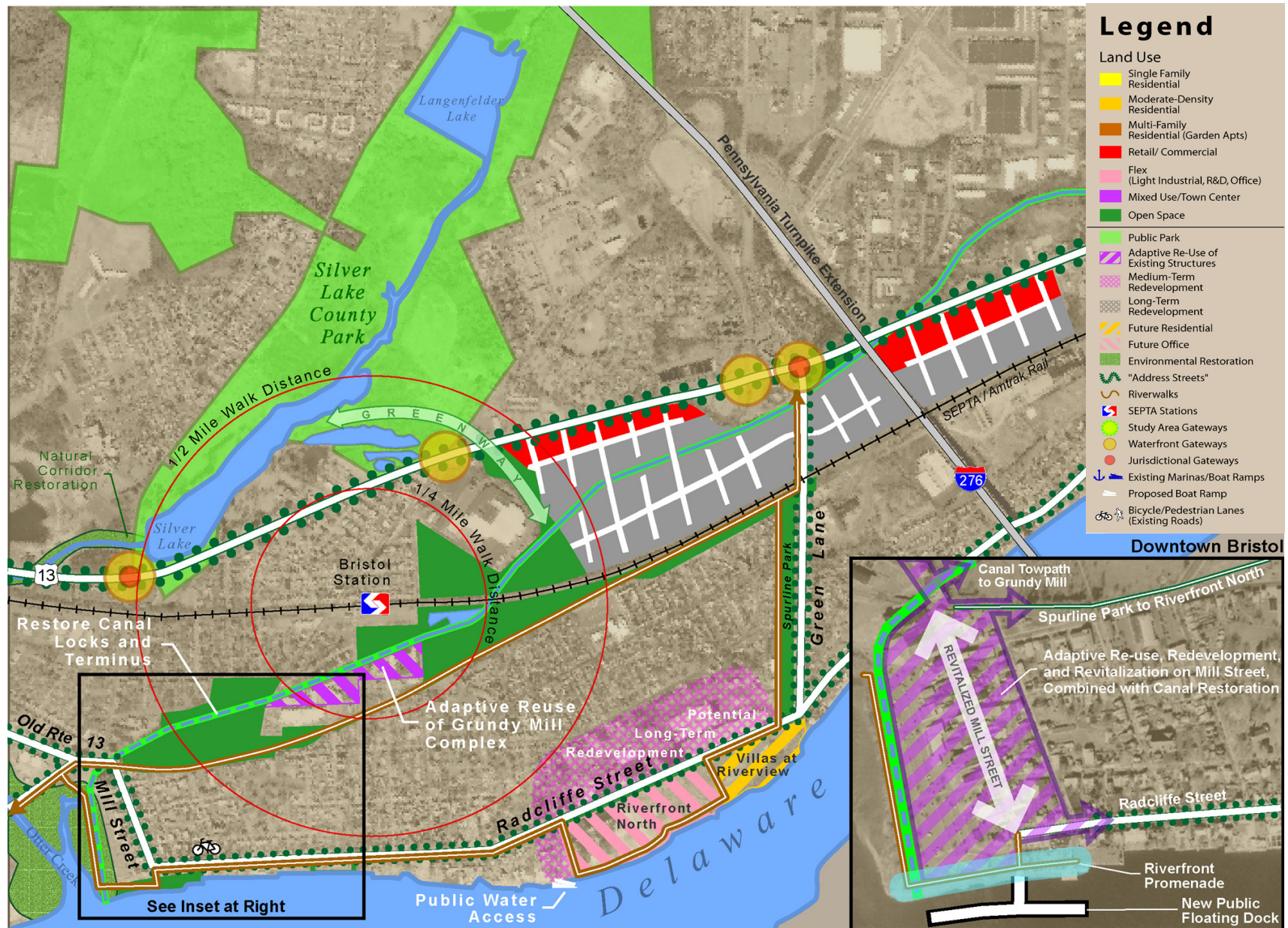
The entire area between River Road and the Delaware River, south of the Opportunity Area, should be reserved as public open space. The Hog Creek floodplain should be restored to a more natural state.

By placing parking on the ground floor, redevelopment at the Bristol Township Opportunity Area can take advantage of views of the Delaware River.





## Bristol Borough and Township Opportunity Area



Bucks County Waterfront Revitalization Plan



## Bristol Borough and Township Opportunity Area

With its historic downtown, riverfront location, and high-quality urban environment, Bristol Borough is in an enviable position to build on the framework outlined in this plan. This opportunity area plan focuses on improving access to Bristol Borough from the river and enhancing the borough's built environment to capture additional economic development and visitation.

A permanent floating dock is envisioned at the end of Mill Street to link Bristol Borough to the Delaware River. A riverfront promenade will capitalize on the borough's waterfront setting. Adaptive re-use in highlighted areas in Bristol Borough would add a more mixed identity to the area, with residential, office, and retail uses reinforcing and enhancing existing buildings.

The area between US 13 and the Amtrak rail line, near the Pennsylvania Turnpike interchange, can be redeveloped to take advantage of these transportation resources. As recommended in the *US Route 13 Revitalization Plan*, commercial development would occur along US 13, while the rest of the site would be dedicated to flex and warehouse uses. The Delaware Canal, locks, and bump bridges (small bridges that could be "bumped" aside by passing canal boats) should be restored to once again make the canal navigable, and Otter Creek should be restored to a more natural condition.

### Specific Recommendations and Action Steps

#### Land Use and Zoning Changes

The opportunity area is currently zoned primarily industrial, with some commercial and a small amount of residential.

The Borough currently has an MX—Mixed Use District which is intended to:

*[p]rovide areas which are suitable for a series of water-related facilities, all potentially located on one (1) or more sites, including: gaming facilities, marina, office and professional buildings, amusement park, museum, restaurant, hotel, conference center, so as to prevent conflicts between these uses and other land uses.*

The use list does not indicate that residential uses can be included in the mix, and it appears that the MX district was created to meet a specific need, such as a gaming facility. To create an appropriate zoning

atmosphere for the recommendations of this study, Bristol Borough should consider the following steps:

Maintain existing districts but allow moderate commercial (such as Neighborhood Commercial) and residential uses to be jointly located without significant buffers between the uses and with pedestrian connections that create a mixed use feeling;

Create a mixed use district that includes both residential and commercial uses, with some features of newer development types such as lot size mix, vertical use mix, walkability, and architectural design controls;

Add a Statement of Goals and Policies to the ordinance to detail the vision of the Opportunity Area;



A permanent floating dock and a riverfront promenade will be important new assets for Bristol Borough's downtown.

Enhance the Purpose statements of the zoning districts to provide more information about design, layout, and fit of the district within the plan and the community; and

The Bristol Borough Zoning Ordinance is showing some signs of obsolescence, especially in terms of development types and attendant requirements. The Borough may therefore want to consider drafting a new district as one of its first options.

### ***Parks and Recreation***

Construction of a permanent floating dock, reconstruction of the terminus of the Delaware Canal, the implementation of a complete bicycle/pedestrian facility along the canal towpath, and the creation of a riverfront promenade at the end of Mill Street are the major park and recreation elements of the plan for the Bristol Opportunity Area. The plan also includes enhancements to existing public parks and open space along the Delaware Canal.

### ***Environmental Enhancements***

Special attention should be paid to preservation of the Bristol Marsh, even as efforts proceed to reconstruct the terminus of the Delaware Canal. The marsh should be one terminus of a natural environmental corridor that follows Otter Creek, up to Silver Lake Park.

### ***Economic Development***

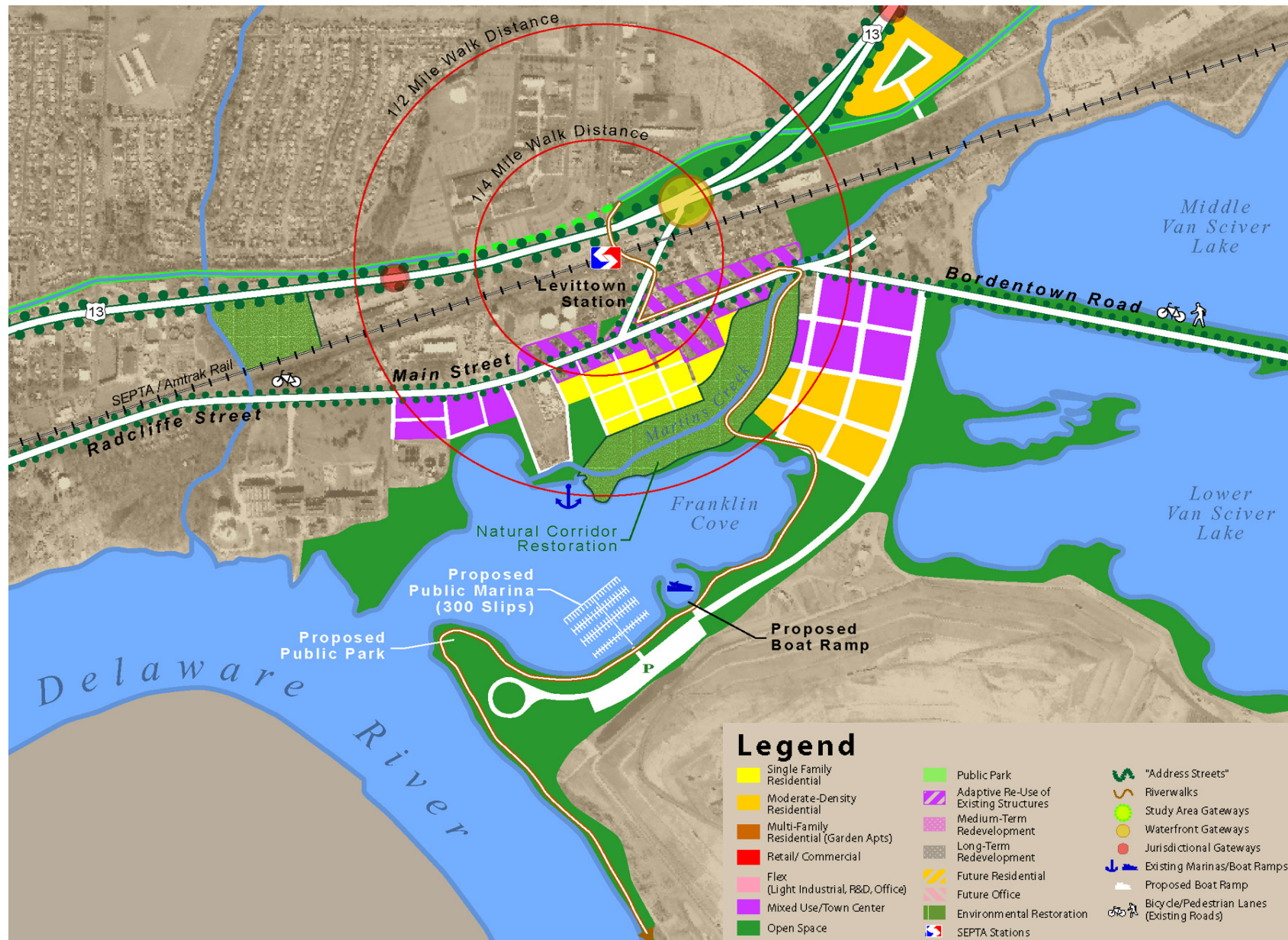
In addition to rehabilitation and re-use of Mill Street, economic development efforts should continue to focus on the river's edge. The investment in public infrastructure and improvements, including the riverfront promenade and floating dock, and their integration with the borough's Spurline Park and a restored Delaware Canal will put Bristol in a strong position to take advantage of future investments. In addition, properties adjacent to Riverfront North and the Villas at Riverview should continue the redevelopment trend set by these projects, while extending the borough's street grid to the river.



The Riverfront North project in Bristol Borough incorporates adaptive re-use of the Dial property.



## Tullytown Borough Opportunity Area





## Tullytown Borough Opportunity Area

The redevelopment concept for Tullytown capitalizes on the borough's existing strengths: a well-preserved, historic Main Street, access to US 13 and SEPTA, and the significant recreational resource represented by Franklin Cove.

Main Street and Fallsington Avenue will become “address streets,” with landscaping and wayfinding improvements, as well as municipal gateway features to emphasize the entrance into Tullytown. Adaptive re-use of structures along Main Street will encourage a mix of residential, office, and retail uses in the center of the borough. Additional low-density residential development on the south side of Main Street will enhance the borough's existing residential character. The triangular parcel at the intersection of US 13 and Bristol Pike will become a moderate-density residential development.

It is envisioned that Martins Creek will be restored to a more natural environment. Flex, retail, and moderate-density residential units will be added to the area to the east of Martins Creek. This area will provide retail and services for Tullytown residents. A new park, boat ramp, public marina, and riverwalk would be located on land acquired from Waste Management. The riverwalk would run from Franklin Cove to Pennsbury Manor, skirting the perimeter of Waste Management's facilities. This riverwalk would serve as a local and regional resource.

### Specific Recommendations and Action Steps

#### *Land Use and Zoning Changes*

The area is currently zoned a mixture of industrial and BC Borough Center. The Borough appears to have sufficient residential districts available to meet the needs of the Opportunity Site. The BC—Borough

Center designation may also remain appropriate along Main Street; the purpose of the district is:

*[t]o maintain the character of the borough core by preventing overcrowding, encouraging coordinated efforts to meet circulation and parking needs, to provide for public convenience, and to fulfill the other broad purposes of this ordinance. This district provides for a variety of housing types and few neighborhood type commercial and professional services.*

The BC district allows almost all categories of residential use along with less-intense commercial uses either by conditional use permit or special exception, depending upon the use.

The Tullytown Borough Zoning Ordinance is more performance-based than some of the other local regulations. This means that while the ordinance contains districts, a use table, and bulk measurements, it tends to allow greater mixing of uses and flexibility of layout depending upon how the elements of the development interact. Typically, performance zoning incorporates flexibility; the question here will be how best to direct development. Tullytown should consider the following steps:

- Create a Redevelopment section in the Statement of Community Goals and Objectives;

- Add a redevelopment overlay district to the BC zoning district that incorporates some of the more specific requirements of the site design (this could be similar to the ordinance's Appendix A: Special Zoning Provisions for Areas Adjoining the Delaware Canal); and

- Incorporate a market feasibility performance standard against which to consider proposed amendments.

## Tullytown Borough Opportunity Area

### ***Parks and Recreation***

The recreation complex on the north side of Franklin Cove—consisting of a public marina and boat ramp, a public park at the cove's mouth, and a riverwalk connection to Pennsbury Manor—is the major recreational feature of this Opportunity Area. Land for this complex, including the riverwalk, will have to be acquired from Waste Management.

### ***Access Recommendations***

A new public road is needed to connect the Franklin Cove recreation facilities with Bordentown Road. Bicycle/pedestrian connections to the Levittown SEPTA station are especially important, as well.

### ***Environmental Enhancements***

Martins Creek should be restored to a more natural condition, especially the portion of the creek that runs from Bordentown Road to Franklin Cove.



A recreation complex at Franklin Cove would serve as a local and regional resource.

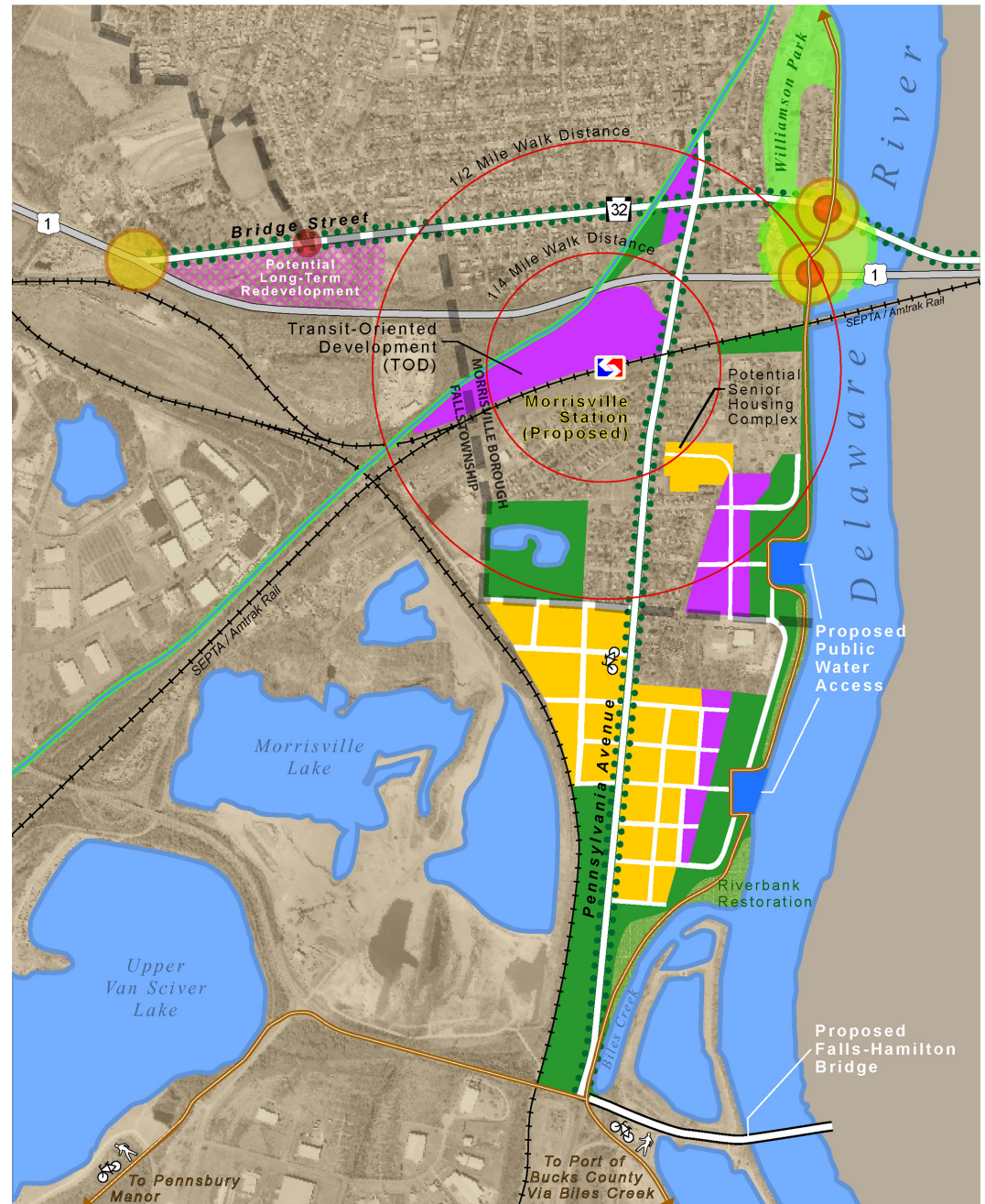
## Falls Township/Morrisville Borough Opportunity Area

This concept envisions redevelopment of key sites in Morrisville and Falls Township. The development of a new SEPTA station is envisioned in Morrisville, supported by complementary transit-oriented development. This center would have significant frontage on the Delaware Canal, the SEPTA tracks, and Pennsylvania Avenue.

Another area of potential redevelopment would encompass significant segments of the Delaware River shoreline in both Morrisville and Falls. New public water access, with nearby mixed use development, would give residents recreational access to the river. An over-50 housing complex would be located nearby.

The park along West Post Road will be enhanced. New residential development, as well as a small amount of mixed use, would occur along South Pennsylvania Avenue in Falls Township. Public open space would be located along the Delaware River from Morrisville's northern border to Biles Island, and a riverwalk would extend the length of the redevelopment area—including the levee walkway already under construction in Morrisville.

Since this opportunity area covers contiguous portions of Falls Township and Morrisville Borough, it is important for these two municipalities to work together on elements of this plan that are of common concern. The riverwalk and address street treatment on Pennsylvania Avenue are clear examples of such interjurisdictional issues.





## Morrisville Borough/Falls Township Opportunity Area

### Specific Recommendations and Action Steps

#### *Land Use and Zoning Changes for Morrisville Borough*

The sites are currently zoned predominately industrial, with some commercial, residential, and open space. Morrisville has multiple single family and commercial districts currently available. Not available, however, is a mixed-use district. Similar to some of the communities described above, Morrisville should consider the following steps:

Maintain existing districts but allow moderate commercial (such as C-3—Neighborhood Commercial) and residential uses to be jointly located without significant buffers between the uses and with pedestrian connections that create a mixed use feeling;

Update the Community Development Objectives and Classifications of Districts to detail the vision of the Opportunity Area; and

Create a mixed use district that includes both residential and commercial uses with some features of newer development types such as lot size mix, vertical use mix, walkability, and architectural design controls;

Enhance the Purpose statements of the zoning districts to provide more information about design, layout, and fit of the district within the plan and the community; and

Consider creating a new Mixed Use district.

#### *Land Use and Zoning Changes for Falls Township*

The sites are currently zoned predominately industrial, with some commercial, residential, and open space. Falls Township has many appropriate residential districts, including LMR—Low-Medium Density Residential, and MR—Medium-Density Residential. Falls also has a mixed-use designation, the CR—Commercial Recreation District. However, this latter district is oriented toward recreational uses. To implement this opportunity area plan, Falls Township should consider the following steps:

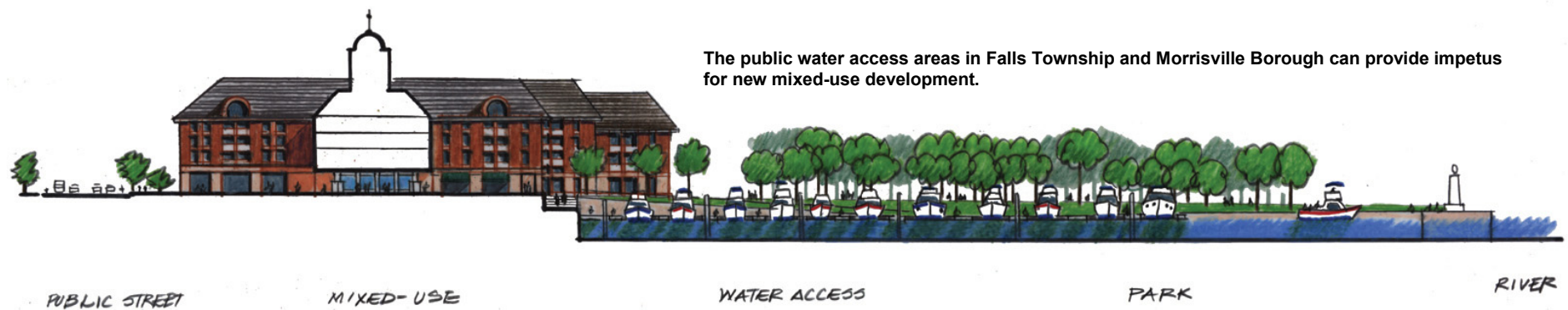
Create a mixed use district that is compatible with more residentially-oriented uses and that incorporates site layout and design standards;

Amend the NC—Neighborhood Commercial district to allow residential uses either as conditional uses or as-of-right uses;

Add a Statement of Goals and Objectives to the ordinance to detail the vision of the Opportunity Site; and

Enhance the Purpose statement of the zoning districts to provide more information about design, layout, and fit of development within the district and the district within the plan and the community.

Portions of Pennsylvania Avenue in Falls Township are characterized by an abundance of industrial and other uses with outdoor storage and a predominance of visual clutter. The long-term vision for this area is for it to redevelop for uses other than industrial such as residential uses.



The Township should consider enacting a Corridor Overlay Zone along Pennsylvania Avenue to improve the visual appearance of structures and site design. Features of the overlay zone could include requirements for service areas and storage to be located in the rear of buildings and away from primary views and the use of landscape screening and architectural fencing to improve and thus safeguard the long-term viability of lands along this corridor.

### ***Parks and Recreation***

The public riverwalk stretching from Biles Island to the Morrisville levee is the major recreational feature of this Opportunity Area. Additional public open space can be found along the Delaware Canal in the vicinity of the

proposed Morrisville SEPTA station. A public park is also proposed for the area between Pennsylvania Avenue and the railroad tracks.

### ***Access Recommendations***

The proposed Morrisville SEPTA station would greatly improve the Opportunity Area's accessibility to the rest of the study area, and to the Philadelphia region overall.

### ***Environmental Enhancements***

The banks of Biles Creek should be restored to a more natural condition.



**A new riverwalk would link new development, recreation, and natural areas in Falls Township and Morrisville Borough.**

# IMPLEMENTATION

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## Local Government's Role in Redevelopment

This section provides additional plan implementation guidance. Local government plays a critical role in fostering the redevelopment process. It is a participant in three separate processes that are all necessary for redevelopment to move forward: regulatory review, financial incentives,

and direct participation. The local governments in Bucks County may select from all or a combination of these roles as they move forward with implementation.

- Regulatory Review:** This encompasses the application of federal, state, and local regulations to a redevelopment site. Local government in this role can function to clear the path for redevelopment by taking a proactive approach to the regulatory process. For example, municipal government can start a brownfield cleanup in anticipation of encouraging businesses to relocate to a redevelopment site. Local government can also review their own regulations (e.g., zoning, subdivision, codes) and identify ways to incorporate the flexibility necessary to allow redevelopment at a particular site. Specific zoning strategies are recommended in the **Primary Opportunity Areas** section of this plan and are tailored to each jurisdiction.
- Financial Incentives:** These include the combination of public funding and tax relief that are typically part of the financial mix that moves a redevelopment project which would not otherwise develop. This might include tax increment financing (TIF), Keystone Opportunity Zones, Federal Historic and Renovation Tax Credits, Local Economic Revitalization Tax Abatement (LERTA), or other programs administered by the Pennsylvania Department of Community and Economic Development. Some local governments also add to these choices with local programs such as façade grants or fee waivers. Additional details are included below in this **Implementation** section of the plan.
- Direct Participation:** This occurs when local government becomes a player in the project. Traditionally, local governments participate in redevelopment through site acquisition and assembly. Other opportunities include paying for or constructing associated pieces of the project (such as public parking), providing or co-developing necessary infrastructure, and/or incorporating the location of public institutions (library, community center) onto a project site to add to the overall uses.
- Political Will and Coordination:** One of the most important legacies of this Waterfront Plan will be that it created a *common sense of destination* among the six jurisdictions and Bucks County. It also produced an understanding of the need for localities to cooperate and work together to implement key provisions of the plan, such as the riverwalk.
- The Waterfront Plan Steering Committee is an example of the consultative and cooperative efforts that will be needed. Local elected officials of the six jurisdictions—in cooperation with the County Commissioners—should continue to work together and speak with one voice to state and federal agency officials, as well as their congressional delegation, so that Lower Bucks County can successfully compete for funding and assistance to implement the vision expressed in this plan. Successful cooperation can and will lead to real and lasting change.



## Implementation—First Steps

### **Work with county, state, and local government agencies to implement the recommendations of this plan.**

A revitalization plan covering this much area, and this complex in scope, will face many challenges to its implementation. Funding will be a key consideration. Bucks County officials have shown great sophistication in their grasp of, and ability to procure, various public program resources. However, the needs as defined in the plan are significant, and will require even more effort to gain the public resources necessary to bring the plan to fruition. Therefore, county officials and staff should focus on three specific efforts to alert potential public sector partners about what Bucks County needs in order to move its plan forward, and what return will be realized from these public investments.

#### ***Convene a working roundtable meeting of key federal agency representatives who could partner with Bucks County on its revitalization efforts.***

Bucks County should convene a working meeting with participation from a dozen or so key federal agencies with programs that might be helpful to meet specific county redevelopment needs. Participation from HUD, the Economic Development Agency (EDA), EPA, and the Army Corps of Engineers is especially important. At this meeting:

Bucks County will present its plan, and its need for resources. The presentation should be designed in such a way that needs are linked with various program criteria. For instance, infrastructure needs at commercial sites should be laid out in a way that would prompt EDA to respond. Agencies are much more likely to respond to specifics, and the possibility more layering or leveraging are more likely to emerge during the discussion.

Each agency should be asked how its programs can contribute to successful plan implementation, and how they can dovetail with others (with potential commitments/process noted) and what next steps Bucks County must take to secure assistance.

Each agency should define an application or program point of contact for Bucks County.

The purpose of this meeting is to figure out how to put the financing puzzle together, and what public resources can be put into this mix. Bucks County should prepare minutes or a short report on this meeting which can be distributed to all participating agencies, as well as congressional offices and others as needed, to keep the process moving along.

#### ***Convene a working roundtable meeting of key state agency representatives who could partner with Bucks County on its revitalization efforts.***

Similar to the effort outlined above, state agencies should be pressed to explain what they can contribute to the implementation of the plan elements, and how their efforts can complement other state and federal efforts. This would be a great opportunity to show off the plan and educate state agency staff about plan components, what resources are needed, and determine what they could bring to help with its implementation. Bucks County may also decide to brief state legislative staff on this meeting and its outcomes.

#### ***Provide a program briefing for staff representing Bucks County's Congressional delegation.***

Each spring, often in April at the start of the appropriations process, congressional appropriations sub-committee members and staff solicit "member projects" for consideration within the funding bills. Therefore, Bucks County should use the implementation of its revitalization plan as the focus for local staff briefings -- or even a town hall meeting with the delegation members themselves. The plan's recommendations, along with the information gained from the federal and state agency roundtable meetings, should allow for specific and plausible project funding ideas to develop.

Bucks County should try to hold these congressional staff briefings by the end of March, to take advantage of the fiscal year 2006 appropriation cycle.

## Funding Strategies

Table 6 includes a number of recommended tools to encourage brownfields reuse and redevelopment and indicates what associated next steps the county should employ,

**Table 6: Implementation Tools for Brownfield Reuse and Redevelopment**

<b>EPA brownfield programs</b>	<p>EPA's Brownfields Program provides direct grant assistance to municipalities and counties of all size, as well as to redevelopment authorities, non-profits (for cleanup only), and similar entities. Bucks County received \$1 million in FY2004 grants to capitalize a revolving loan fund (RLF) for cleanup purposes. By law, up to 40 percent of that amount can be used for cleanup "sub-grants" to individual communities. Communities can compete for:</p> <p>Site assessment grants to fund a variety of pre-cleanup environmental activities such as site assessment, inventories, characterization and prioritization, cleanup planning, design, and community outreach. Jurisdictions can receive up to \$200,000 per community or site for these purposes. Petroleum contamination is now eligible.</p> <p>Site cleanup grants, up to \$200,000 per site. These funds can pay for cleanups by cities, development agencies, non-profits, and similar entities at sites that they own.</p> <p>As individual site plans crystallize, the county should pursue additional site assessment and cleanup grants, specifically by preparing to apply for fiscal year 2006 grants. These applications will be due in the autumn of 2005. The county should seek funding for sites in several of the jurisdictions, and should make an effort to put together a petroleum site application, which may be more competitive within the EPA process.</p>
<b>Brownfields Revolving Loan Fund (RLF)</b>	<p>Brownfield cleanup RLF grants are awarded to provide up to \$1 million to establish locally administered loan funds. These RLFs can be used for low/no interest loans for cleanup. Recipients may use up to 40 percent of their capitalization award for cleanup sub-grants. As described above, the County received the maximum \$1 million RLF grant in FY 2004. The county now needs to determine the focus for this RLF grant. The 40 percent sub-grant set-aside could be helpful in some of the park/wetland areas.</p>
<b>State Clean Water Revolving Loan Fund (CWRLF)</b>	<p>EPA uses the CWRLF to provide capital grants to states to use at the community level for water quality projects. These grants can be used for loans of up to 20 years, for activities that can include brownfield mitigation to correct or prevent water quality problems (including petroleum contamination. Pennsylvania has not yet started to take advantage of this approach.</p> <p>Project priorities are set by the states, within broad EPA guidelines, and brownfield projects with water-related issues can tap into these state funds. Specifically, brownfield cleanup can be considered eligible if it focuses on correction of groundwater contamination; or cleanup of petroleum contamination. Funds can cover the costs of activities such as excavation and disposal of underground storage tanks; capping of wells; excavation, removal, and disposal of contaminated soil or sediments; well abandonment; or Phase I, II, or III assessments.</p> <p>EPA allows communities, municipalities, individuals, citizen groups, and non-profit organizations to be loan recipients. Usually, loans are repaid through sources such as fees paid by developers, recreational fees, dedicated portions of state, country, or local government taxes; stormwater management fees, or wastewater user charges.</p> <p>Within the study area, cleanup activities along the river should be considered for CWRLF grants. In particular, efforts at the housing sites could be attractive for funding.</p>

**Table 6: Implementation Tools for Brownfield Reuse and Redevelopment (Continued)**

<b>State and Federal DOT Programs</b>	<p>This plan features a number of transportation-linked components, which could lend themselves to creative use of federal Department of Transportation funds, either secured directly from DOT headquarters, or pass-through funding from the state. This plan includes a number of activities that could receive DOT funding (likely through the state DOT or a congressional earmark). Such projects include a new SEPTA station, roadway infrastructure improvements, waterfront pedestrian paths, and others. The county needs to pull together a comprehensive list of projects from the plan that could be soon implemented and meet with the local congressional delegation to jump start this process.</p> <p>Specific DOT programs to consider include:</p> <ul style="list-style-type: none"> <li>Discretionary capital program;</li> <li>Mass transit capital funding;</li> <li>Transportation and community and system preservation pilot program (TCSP);</li> <li>Transportation Enhancement funds; and</li> <li>Congestion mitigation and air quality improvement program (CMAQ).</li> </ul>
<b>Brownfield Expensing Incentive</b>	<p>The Brownfield Tax Expensing Incentive is the only federal tool directly targeted to private owners of contaminated sites. This program could be marketed to potential site users; an information campaign/meeting for county chamber of commerce/lenders might be useful. In early October 2004, this incentive was extended to December 31, 2005. It could be helpful in marketing a number of sites, especially Rohm and Haas if sold to a new user.</p>
<b>Brownfields Economic Development Initiative (BEDI)</b>	<p>HUD's Brownfield Economic Development Initiative program was established to provide an additional financial tool for brownfield development projects. BEDI funds are required to be used in tandem with HUD Section 108 grants. This has proven to be a barrier in many communities who are unwilling or unable to pursue the necessary 108 linkage.</p> <p>The county should pull together an application for BEDI funding for next year. An office park on the Rohm and Haas site could be an attractive application, given the program's funding history. However, successful applications also depend on the track record of the county's existing BEDI. (Pennsylvania communities did very well in this year's BEDI competitive process, winning 5 of 17 grants awarded nationally.)</p>
<b>Rehabilitation Tax Credits</b>	<p>Rehabilitation Tax Credits were adopted by Congress to discourage the unnecessary demolition of sound older buildings and to slow the loss or relocation of businesses from older urban areas. This incentive offers to investors a credit against their total income, which is taken for the year in which the renovated building is put into service. Rehabilitation of certified historic structures qualifies for a credit equal to 20 percent of the costs of the work; rehabilitation work on non-historic structures built before 1936 qualifies for 10 percent.</p>
<b>Low Income Housing Tax Credits (LIHTC)</b>	<p>These credits may be used as part of a project financing package if affordable housing is included as part of a community's revitalization strategy. LIHTCs are issued by each state to attract investment capital into this type of housing. They have been successfully used in Pennsylvania and other states as part of mixed-income housing developments, sometimes as infill projects.</p>
<b>U.S. Army Corps of Engineers</b>	<p>The Corps has been tapped for planning and preparation funding at projects that can be tied to navigation, flood control, or environmental restoration. Many of the study area's riverfront locations could meet these criteria. The Corps can offer technical assistance, contracting support, and help with site planning and remediation. One drawback to using the Corps is that the agency requires the local jurisdiction to match a portion of the project cost.</p>
<b>National Park Service</b>	<p>Through its Rivers and Trails Program, the National Park Service supports state and local governments and community organizations in conservation efforts by providing river, trail, and greenway planning; resource assessment; and conservation workshops and consultations. Much of Rivers and Trails assistance is targeted to urban areas through four project categories that include or affect underutilized contaminated properties: urban area projects, trails and greenway projects, rails-trails projects, and river projects. These resources may be used concurrently with redevelopment efforts.</p> <p>A few small grant programs—from agencies as diverse as EPA, the Department of the Interior, and the National Park Service—also exist. These programs include coastal zone management, riparian restoration, park revitalization, and other topics. They need to be explored in detail, to see what funding might exist for the waterfront study area. Most of these programs are very small—\$10,000 to \$50,000 or so—and specifically targeted to projects, but some projects might be applicable. For example, Tullytown might pursue "Main Street" funding.</p>

**Table 6: Implementation Tools for Brownfield Reuse and Redevelopment (Continued)**

<b>Pennsylvania Infrastructure Bank (PIB)</b>	<b>Pennsylvania Infrastructure Bank (PIB):</b> The PIB is a revolving loan fund administered by PennDOT that offers flexible financing opportunities for eligible highway, transit, and bridge projects. It has two accounts (highway/bridge and transit) that seek to leverage private and local revenues. The end results are to accelerate of project implementation, spur economic development, facilitate non-traditional projects, and respond to emergencies/natural disasters. Eligible projects include transit improvements, shared-ride services, traffic flow improvements, demand management strategies, pedestrian/bicycle facilities and programs, inspection and maintenance programs, and alternative fuel projects. Loan amounts vary and the interest rate is one-half the prime lending rate. The maximum loan term is ten years.
<b>Pennsylvania Infrastructure Investment Authority (PENNVEST)</b>	<b>The Pennsylvania Infrastructure Investment Authority (PENNVEST):</b> PENNVEST is a low-interest revolving loan program to assist municipalities with installation of new, or the repair and replacement of existing water, sewer, and stormwater management infrastructure. In order to be eligible for PENNVEST, a municipality will be required to show evidence of need in the form of water or sewer studies and adopted stormwater management regulations and/or that the municipality is implementing its respective Act 167 plans.
<b>Department of Environmental Protection (PaDEP)</b>	<p>The Pennsylvania DEP administers several grant and loan programs. Those that may offer direct assistance in implementing the recommendations of this plan include (but are not limited to):</p> <p><b>Brownfields Inventory Grants:</b> This program—which awaits re-authorization—provides money to municipalities and economic development agencies to inventory their Brownfields properties and to post this information on the state's website.</p> <p><b>Growing Greener Grants:</b> This program funds a number of environmental projects across the state, including farmland-preservation projects; open space protection; state park maintenance; watershed restoration; recreational trails and local parks; land use technical assistance; and new and upgraded water and sewer systems.</p>
<b>Department of Community and Economic Development (DCED)</b>	<p>The Pennsylvania DCED offers a number of programs and potential funding sources that can aid in the implementation of this plan. Municipalities can apply for a number of these funding sources through DCED's Single Application for Assistance. DCED programs include (but are not limited to):</p> <p><b>Housing and Redevelopment Assistance Program:</b> This program provides state-funded grants for community revitalization and economic development activities that occur on a local level. Specifically the program assists communities in becoming competitive for business retention, expansion, and attraction. It also funds projects that assist with community revitalization for housing and low-income housing.</p> <p><b>Community Revitalization Program (CR):</b> This program provides grant funds to support local initiatives that promote the stability of communities. The program also assists communities in achieving and maintaining social and economic diversity to ensure a productive tax base and a good quality of life.</p> <p><b>The Elm Street Program:</b> This grant funds planning, technical assistance and physical improvements to residential and mixed use areas in proximity to central business districts.</p> <p><b>Local Municipal Resources and Development Program (LMRDP):</b> This program provides grants that promote community development; improve the stability of the community; enhance the delivery of local government services through inter-municipal approaches to service delivery; improve and/or develop civic, cultural, recreational, industrial, infrastructure and other facilities; assist in business retention, expansion, creation or attraction; promote the creation of jobs and employment opportunities; enhance the health, welfare and quality of life of Pennsylvania citizens.</p> <p><b>Urban Development Program (UDP):</b> UDP grant funds may be used for urban development and improvement projects. Urban development activities may include, but are not limited to, programs and projects designed to strengthen Pennsylvania's neighborhoods.</p>

**Table 6: Implementation Tools for Brownfield Reuse and Redevelopment (Continued)**

<b>Department of Conservation and Natural Resources (DCNR)</b>	<p>The Pennsylvania DCNR offers grants through its Community Conservation Partnerships Program provides state and federal grant dollars to help fund Community Recreation, Land Trust, Rails-to-Trails, Rivers Conservation, Snowmobile and ATV Trails and Areas, and PA Recreational Trails projects. Municipalities, municipal agencies, land trusts, and other organizations are eligible to apply for these grants.</p> <p>Grants may be issued for planning and technical assistance projects; acquisition projects; development projects; and federally funded projects.</p>
<b>Historical and Museum Commission (PHMC)</b>	<p>PHMC offers multiple funding opportunities to a wide variety of nonprofit organizations and public agencies throughout the Commonwealth. These programs include:</p> <p><b>Certified Local Government Grant Program:</b> Certified Local Government Grants are available to support projects in six categories: Cultural Resource Surveys, National Register Nominations, Technical and Planning Assistance, Educational and Interpretative Programs, Staffing and Training, and Pooling and Third Party Administration.</p> <p><b>Keystone Historic Preservation Grant Program:</b> Funding under this program is available to nonprofit organizations and local governments for preserving or restoring historic resources listed in or eligible for listing in the National Register of Historic Places.</p> <p><b>Historic Preservation Project Grants:</b> These grants can be used to fund Cultural Resource Surveys, National Register Nominations, Planning and Development Assistance, Educational and Interpretive Programs, and Archaeology.</p>
<b>Bucks County Department of Community and Business Development</b>	<p>Bucks County administers a number of programs designed to promote development and redevelopment. Programs that may be used to implement the recommendations of this plan include (but are not limited to):</p> <p><b>Community Development Block Grant (CDBG) Program:</b> Bucks County receives annual Community Development Block Grant (CDBG) funding from the Department of Housing and Urban Development. The program focuses on benefiting low- and moderate-income persons, aiding in the prevention or elimination of slums and blight, and/or meeting community urgent needs. Eligible activities include acquisition of real property, demolition, and rehabilitation of structures, construction of public facilities, and provision of handicap access, historic preservation, community planning, and energy conservation.</p> <p><b>HOME Program:</b> The HOME program seeks to expand the availability of affordable housing for low-income residents through partnerships between the public and private sectors. Eligible program activities include the acquisition, demolition, rehabilitation, or new construction of affordable units to the target groups. In addition the program also seeks to provide homeownership and tenant-based rental assistance, along with reimbursement for relocation costs.</p> <p><b>Brownfields Reclamation Fund:</b> This program provides financing for the redevelopment of brownfields. Eligible activities include the acquisition, preparation, environmental remediation, and construction or rehabilitation of commercial and industrial property. The program requires applicants to have a reuse plan, an identified end-user for each project, and meet CDBG requirements.</p> <p><b>Economic Development Revolving Loan Fund:</b> This program provides funding when there is no other available. Eligible activities include acquisition of real property, machinery and equipment, and working capital.</p> <p><b>Revitalization Subsidy Fund:</b> This program funds the reclamation of vacant and underutilized properties, and "write-down" redevelopment costs. Eligible activities include the acquisition, preparation, environmental remediation, and the construction or rehabilitation of commercial and industrial property. An environmental assessment and a remediation plan may be required.</p>



**Table 6: Implementation Tools for Brownfield Reuse and Redevelopment (Continued)**

<b>Bucks County Economic Development Corporation (BCEDC)</b>	<b>Economic Development Loan Program:</b> Most economic development loan programs offer low-interest, longer-term financing to help businesses expanding in, or relocating to Bucks County finance fixed assets such as real estate or equipment. Loans are typically tied to a commitment by the borrowing company to retain or create a number of jobs based upon the size of the loan. Loans are usually secured by the asset being financed, as well as guarantees by the borrower. Under normal circumstances, loans are devoted to Real Estate, Machinery and Equipment, or Working Capital, although uses and terms can be blended in certain cases.
<b>Delaware Valley Regional Planning Commission (DVRPC)</b>	<p><b>Transportation Community Development Initiative (TCDI):</b> The TCDI program is intended to assist in reversing the trends of disinvestment and decline in many of the regions core cities and first generation suburbs by supporting local planning projects that will:</p> <ul style="list-style-type: none"> <li>Lead to more residential, employment, or retail opportunities;</li> <li>Improve the overall character and quality of life within these communities to retain and attract business and residents, which will help to reduce pressure for further sprawl and expansion into the growing suburbs;</li> <li>Enhance and utilizing the existing transportation infrastructure capacity in these areas to reduce the demands on the regions transportation network; and</li> <li>Reduce congestion and improving the transportation systems efficiency.</li> </ul>

## Real Estate Investment Strategies

Bucks County already makes use of a number of local real estate investment tools and approaches to value capture. Other tools are commonly used across the country, and could be useful mechanisms in Bucks County. The following provides a summary of the various approaches and explains how they might be useful in implementing the various plan elements.

### ***Tools currently used in Bucks County***

**Tax Increment Financing (TIF)** is a locally sponsored real property value capture mechanism that supports public investment in a project—usually in the form of locally issued bonded debt. A TIF district is drawn around the new project, and usually remains in effect for a period of between 15 and 25 years. During which time the base year property value assessment in that district is frozen. New taxes (or a portion thereof) derived from the increase in taxable value in that district are applied to a TIF fund.

The key to the concept of TIF are the terms “but for” and “net new:” but for the public investment in the project, the net new incremental tax revenues would not otherwise be realized. That is, without public investment (in the form of the TIF district), additional private investment—which creates increases in the taxable value of the TIF district’s property—would not occur at that magnitude and timing.

TIF bonds could be used for the acquisition, assembly, and preparation of the property, utility provision or upgrades, road and intersection improvements, parking facilities, and on-site infrastructure. Within the plan area, TIF might best be applied to those areas characterized by fragmented ownership patterns. This would encourage the comprehensive redevelopment of a collection of properties. TIF may be particularly useful for the Rohm and Hass site in Bristol Township. In addition, it is potentially most useful in older industrial areas of the study area in Bristol Borough, Bristol Township, Morrisville Borough, and Bensalem Township.

**Property tax abatements** are reductions in property tax liabilities, usually for a specified period of time between five and 15 years. Abatements can often substantially improve the financial performance and feasibility of project pro forma and attract private investment that would not otherwise have occurred.

Property tax abatement might best be used to encourage investment in the improvement or redevelopment of designated individual properties throughout the plan area. The business districts of Bristol Borough and Morrisville Borough could benefit from this approach. Where appropriate, it would appear reasonable to place certain conditions on the magnitude and duration of the abatements, which typically last for no more than 10 years. Conditions could apply to the type of project and the land use that can benefit from the program. For example in a downtown business district (i.e., Bristol Borough), one condition might require retail uses on the ground floor, in order to avoid other uses that fragment the business district at street level.

### ***Other Implementation Financing Sources and Approaches***

**General obligation bonds (GOB)** are a type of voter-approved municipal bond where principal and interest are secured by the full faith and credit of the issuer (i.e., the municipality) and are usually supported by the issuer's taxing power. GOB are usually repaid over a period that lasts between 10 and 30 years, depending on the size of the project and the anticipated public benefit.

In the study area, the public benefit can be quantified in terms of additional fiscal revenues or improved public health, safety and welfare. This rationale is somewhat similar to TIF, although there is usually no specific GOB district, and the magnitude of the bonded debt is not necessarily limited by the size of the anticipated incremental new fiscal revenues. GOB could be used for a variety of purposes in the study area, including site acquisition and preparation, infrastructure improvements, new parks, marinas, boat ramps and beautification. One option would be undertake these projects with GOB and then institute users fees or related revenues that would be used to retire the bonds.

**Special taxing districts** are designated areas where additional taxes are levied to support public services and investments over and above that usually provided in a community. The revenues generated by the increase in tax revenues are used to fund investments and activities such as beautification, street cleaning and trash collection, and marketing. Business Improvement Districts (BID), usually in the form of downtown business improvement districts, fall into the category of special taxing districts. The communities of Bristol Borough and Morrisville Borough could best benefit from the unified design/marketing themes and public services funded by special taxing districts.

## Cultural/Historic Resources Evaluations

This plan calls for a comprehensive inventory of cultural and historic resources in the study area jurisdictions. Table 7 lists the agencies and groups that already participate in historic preservation activities in the study area. The Heritage Conservancy has already evaluated many of these resources for inclusion in a historic tour; therefore, an expanded evaluation could compliment their research. Such a survey and evaluation can be funded through a grant at a relatively low cost to the county. Grant projects for an area this size typically cost less than \$50,000. The result of this effort would be a thorough overview of all of the historical assets of the region, including the buildings, structures, objects, archaeological sites, and historic districts. The information would be placed on a GIS data layer and integrated with the other information in the county's database and GIS system.

### Eligibility

Once the survey is completed, resources should be evaluated for their historical and cultural significance and for their eligibility for inclusion on The National Register of Historic Places (NRHP). The NRHP uses the following four criteria as a guide:

Criterion A: significant for an association with an important historical event;

Criterion B: significant for an association with an important person;

Criterion C: significant as an example of architecture, engineering, or construction; and

Criterion D: significant for its information potential and archaeological potential.

The data supporting the evaluations of eligibility would be presented using either abbreviated survey forms or full Pennsylvania Historic Resource Survey (PHRS) forms. The eligibility recommendations should be developed in coordination and consultation with the Heritage Conservancy to ensure that all information and recommendations are consistent with their research and opinions. The final arbiter of eligibility is the Pennsylvania Historical and Museum Commission (PHMC), and the documentation package would have to be submitted to them for a formal finding. It is likely that a field view would be required by the PHMC

in order to field verify the findings. This field view would be a daylong trip in which the project corridor would be visited by representatives of the PHMC, the County, and a historian familiar with the resources and the findings. *Funding for Habitat Restoration Projects: A Citizen's Guide* (Restore America's Estuaries 2002) provides an excellent resource for historic preservation funding.

**Table 7: Agencies and Groups Involved in Preservation of the Delaware River Corridor**

<b>Federal</b>
Army Corps of Engineers
US Fish & Wildlife Service
National Park Service
<b>State</b>
Pennsylvania Historical and Museum Commission
Pennsylvania Department of Environmental Protection
Department of Conservation and Natural Resources
Pennsylvania Rivers Conservation Program
Pennsylvania Farmland Protection Program
<b>Local/Regional</b>
Delaware River Basin Commission
Delaware River Greenway Partnership
Delaware River Watershed Initiative
Friends of Poquessing Watershed
Friends of the Delaware Canal
Heritage Conservancy
Neshaminy Watershed Association
Friends of Silver Lake
Delaware Riverkeepers
The Nature Conservancy
Ducks Unlimited
Natural Lands Trust
Partnership for the Delaware Estuary

## **Cultural Resources Brochure**

Once a full picture of all of the significant cultural resources within the project area has been obtained, a management and promotional plan should be developed. The promotional plan should be developed in coordination with a number of groups, including the Bucks County Planning Department, Bucks County Tourism, and Bucks County Heritage Conservancy. The plan should blend preservation and restoration elements with educational and tourism efforts, and coordinate funding sources to support both historic preservation and heritage tourism in the area.

The key known cultural resources include: Delaware Canal, Bristol Historic Districts, Tullytown Historic District, and key resources in Morrisville. A complete list of known listed and eligible resources is included in Table 8. It is recommended that the core part of the promotion of the region's cultural heritage include documentation of resources across the project area from the Philadelphia line to Morrisville.

## **Cultural Resources Funding Sources**

There are a number of funding sources for cultural resources efforts, but most tie in to the economic development/heritage tourism approach. It is recommended that grant organizations be contacted, using the network already established by the Bucks County Heritage Conservancy and the Bucks County Historical Society. As in the previous section, it is recommended that political connections be established to ensure that

enhancement funds are earmarked for projects such as these in the next transportation bill. A meeting between key team member, the project sponsor, and the legislators who govern this portion of Bucks County is recommended. It will be critical to receive backing from Bucks County's Congressional delegation, especially the more senior members.

Funding options, including grants, include:

US Department of Education—Programs and Services

US Department of Housing and Urban Development

US Department of Transportation – Grants and Cooperative Agreements, [www.dot.gov/ost/m60/grant/](http://www.dot.gov/ost/m60/grant/)

US Economic Development Administration

US Environmental Protection Agency—Grants and Fellowship Information, [www.epa.gov/epahome/grants.htm](http://www.epa.gov/epahome/grants.htm)

US Department of the Interior—Interior Grants Management, [www.doi.gov/pam/elecgrnt.html](http://www.doi.gov/pam/elecgrnt.html)

National Science Foundation – Grants and Awards

The federal government's Non-Profit Gateway: [www.firstgov.gov/Business/Nonprofit.shtml](http://www.firstgov.gov/Business/Nonprofit.shtml)

Foundation Center

[www.grants.gov](http://www.grants.gov)



**Table 8: Listed or Eligible Historic Resources**

<b>Resource</b>	<b>Status</b>
<b>BENSALEM TOWNSHIP</b>	
AM24 Station Road Bridge	Eligible
AM23 Amtrak R.R. Station Road,-Cornwells Heights Substation	Eligible
Eddington Presbyterian Church	Eligible
AM25 Bridge	Eligible
AM21 Bridge Mill Road	Eligible
St. Elizabeth's Convent (farm), 3800 Bristol Pike	Eligible
Stone Tavern/Eddington Presbyterian Church Manse	Eligible
Holy Ghost Prep School	Eligible
Allen Family Cemetery, Vandergift Lane	Eligible
Andalusia	National Historic Landmark
St. Elizabeth's Convent Sisters of the Blessed Sacrament for Indians and Colored People	Listed
Bensalem Public School #1	Eligible
<b>BRISTOL BOROUGH</b>	
Bristol Historic District	Listed
Bristol Industrial Historic District	Listed
The Dorrance Mansion, 300 Radcliffe Street	Listed
Grundy Mill Complex/Bristol Worsted Mills	Listed
Harriman Historic District	Listed
Jefferson Avenue School	Listed
Jefferson Land Association HD	Listed
General Stores and Mold Loft Building/Merchant Shipbuilding Corporation	Listed
Bell, Frank House, 824 Radcliffe Street	Eligible
Bristol R.R. Station	Eligible
Bristol U.S. Post Office	Eligible

**Table 8: Listed or Eligible Historic Resources**

<b>Resource</b>	<b>Status</b>
<b>BRISTOL TOWNSHIP</b>	
White Hall of Bristol College 701-721 Shadyside Avenue	Listed
Burlington Bristol Bridge	Eligible
Shadyside-6934 N Radcliffe Street	Eligible
<b>TULLYTOWN BOROUGH</b>	
Tullytown Historic District	Eligible
749 Brown Street	Eligible
742 Brown Street	Eligible
755 Brown Street	Eligible
51 Fallsington Avenue	Eligible
55 Fallsington Avenue	Eligible
73 Fallsington Avenue	Eligible
75 Fallsington Avenue	Eligible
100 Fallsington Avenue	Eligible
112 Fallsington Avenue	Eligible
129 Fallsington Avenue	Eligible
<b>MORRISVILLE BOROUGH</b>	
Gersham, Craft House, 105 Barnsley Avenue	Listed
Pennsylvania R.R. Bridge at Trenton over Delaware River	Listed
Summerseat School/George Clymer House	National Historic Landmark
Trenton City Bridge-Calhoun Street Bridge (City of Trenton)	Listed
<b>FALLS TOWNSHIP</b>	
Morrisville Yard	Eligible
Pennsbury Manor	Listed
<b>MULTIPLE JURISDICTIONS</b>	
Green Lane R.R. viaduct (Bristol Borough and Bristol Township)	Eligible
Delaware Division of the Pennsylvania Canal (entire corridor except Bensalem Township)	National Historic Landmark
Penn Central Line (throughout entire corridor)	Eligible

## Implementing Better Sign Regulations

Good signs are the result of cohesive regulations. The first place the communities will want to look for better signage is their regulations. Sign regulations should reflect community standards and preferences for number, size, type, and placement of signs. The regulations should clearly identify procedures for nonconforming signs and abandoned signs. The municipalities should focus on abandoned signs and nonconforming signs, as well as finding funding sources for purchasing offending signs.

Signs that are not in use, e.g., the business is no longer in use, should be identified as abandoned as early as possible. Ideally, the business should remove the sign when it closes. If that is not the case—somebody will argue the need for time to sell or re-lease the property—then abandonment should be considered at the earliest time at which the community is comfortable, such as 45 or 60 days. Abandoned signs should be removed at the expense of the property owner, and the community should retain the right to remove the sign and bill the property owner.

Nonconforming signs should be brought into conformance in conjunction with the development approval process. Where development with existing signs seeks changes that require municipal approved permit, bringing the sign into conformance should be a condition of that approval.

Off-site signs should be prohibited, with existing off-site signs made nonconforming.

Sign cleanup should be identified as a goal of the redevelopment process. Public/private funds can be leveraged for the purchase of signs, and the removal of signs can be a consideration of establishing boundaries for redevelopment. While Pennsylvania communities cannot amortize signs, they can consider condemning them if that power is being used for redevelopment.



The entire study area would benefit from improved regulation of billboards and other signage.

## BACKGROUND RESOURCES

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This plan is based on a substantial amount of supporting analysis and information. To make the plan as reader-friendly as possible, much of this analysis and background data has been placed in a separate resource. The reader seeking more background information and data analysis is directed to this valuable resource material, available through the Redevelopment Authority of Bucks County, and on their website at [www.bcrda.com](http://www.bcrda.com). The following studies and documents are available:

### **Brownfields Redevelopment Case Studies**

- Consumers Energy Corporate Headquarters—Jackson County, MI
- The Crane Site—Trenton, NJ
- Mitchell Park—Greenport, NY
- North Colony Street Industrial Park—Meriden, CT
- Taber Park—New Bedford, MA
- Thames Street Landing—Bristol, RI
- Willingboro Town Center—Willingboro, NJ

### **Waterfront Study Existing Conditions**

- Study Area Demographics
- Natural and Cultural Resources
- Community Design and Waterfront Access
- Future Market Potential
- Environmental Contamination
- Transportation
- Water and Wastewater Service
- Study Area Regulatory Overview
- Land Use
- Existing Land Use Map
- Future Land Use Map
- Natural and Cultural Resources Map
- Site Assessment Map

### **Draft Concept Plans—Analysis**

- Regulatory Analysis
- Financial Tools
- Development Principles
- Transportation Impact Analysis
- Economic and Fiscal Impact Assessment

