

May 1, 2008

Planning Commission Adoption

KEY HIGHWAY

WATERFRONT

STUDY



This study is dedicated to the memory of Walter Sondheim, Jr., and to all the other city residents, whose passion, creativity, and commitment, challenge us to realize a greater vision and potential for our City.

Acknowledgments



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City of Baltimore



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Parking Authority
Urban Design and Architectural Review Panel

To the Baltimore Museum of Industry and its staff
for graciously hosting many of our meetings and
public events

And, a special thanks to all the members of the
Key Highway Taskforce who dedicated countless
nights towards the realization of this plan.

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Department of Planning Mission Statement

To provide the highest level services and leadership in urban and strategic planning, historical and architectural preservation, zoning, design, development, and capital budgeting to promote the sustained economic, social, and community development of the City of Baltimore.

Table of Contents

Executive Summary	iv
Introduction	
Origin of the Study	4
Study Process	5
Guiding Principles of the Study	6
Study Location	7
Property Ownership	8
The Waterfront Today	
Background and History	12
Existing Conditions	
Land Use & Zoning	16
Issues and Opportunities	
Waterfront Access	18
Key Highway Experience	19
Waterfront Experience	20
Urban Image	21
The Waterfront Plan and Recommendations	
Recommendations	
Waterfront Access & Views	24
Key Highway Streetscape	28
Waterfront Open Space	32
Land Use	35
Zoning	36
Building Form & Massing	37
Transportation & Traffic	40
Parking	44
Implementing the Plan	
Implementation Chart	50

Executive Summary

Key Highway Waterfront Study

The Key Highway Waterfront Study represents the culmination of over two and a half years worth of planning by a group of neighborhood residents, property owners, and other important stakeholders collectively known as the Key Highway Task Force. This study is a set of recommendations and guidelines that chart how to redevelop Key Highway into a premier waterfront boulevard with sensitive pedestrian-oriented mixed use development and generous public improvements such as open space and access to the waterfront.

Today, Key Highway is primarily used as a high-speed thoroughfare to get cars to and from I-95. Many of the properties along it are dominated by auto-oriented commercial uses, such as gas stations, or vacant properties and parking lots. Much of the residential development that has occurred turns its back to the street, reinforcing the feeling of a “no man’s land”.

The study’s recommendations and guidelines for transforming Key Highway are organized in three basic areas: Open Space and Access, Building Form and Land Use, and Transportation and Parking.

Open Space & Access

- Create world class waterfront open space
- Maximize neighborhood views and access to the waterfront
- Redesign Key Highway for people as well as cars

Today very little public activity takes place along the Key Highway waterfront as compared to other parts of the city. This is due to a lack of access and the dearth of public waterfront destinations. This study envisions over six

acres of new public waterfront open space that includes two new major view corridors and public open spaces at Lawrence Street and Webster Street.

To improve access both along and across Key Highway the study proposes to recreate Key highway as a boulevard with generous vegetation, wide sidewalks, and a center median. This will make Key Highway a friendlier street to walk along and easier to cross, enabling people to get to the waterfront.



Building Form & Land Use

- Promote an active, pedestrian-friendly Key Highway through active publicly accessible ground floor uses in new developments, and new high density residential development
- Create neighborhood-friendly buildings which provide places for people to shop, live and work.

Most buildings along Key Highway today are one or two stories. They promote a highway feeling and don't create a street wall that is present on most retail streets like Broadway in Fells Point. This plan recommends that new development provide ground floor active uses such as restaurants or shops, and encourages mixed use development to activate the street with people and create a lively place for residents to shop, eat, and do business.

On the land side of Key Highway this means ensuring new buildings that are sensitive to the scale of the abutting neighborhood row houses but still allow for significant buildings along Key Highway. The plan proposes "boulevard scale" buildings that are 4-to-8 stories in height that have street-level retail and several floors of residential apartments or offices above, but set back along neighborhood streets to the height of neighboring row houses.

High-density development along the

waterfront is necessary to support retail and the open space envisioned in the plan; this study proposes tall well-spaced slender towers on the waterfront that have low height bases to preserve neighborhood connections to the water, and ensure generous access to it. Well-spaced, slender towers avoid "a wall to the water" but still allow for significant development and the creation of public improvements like open space.

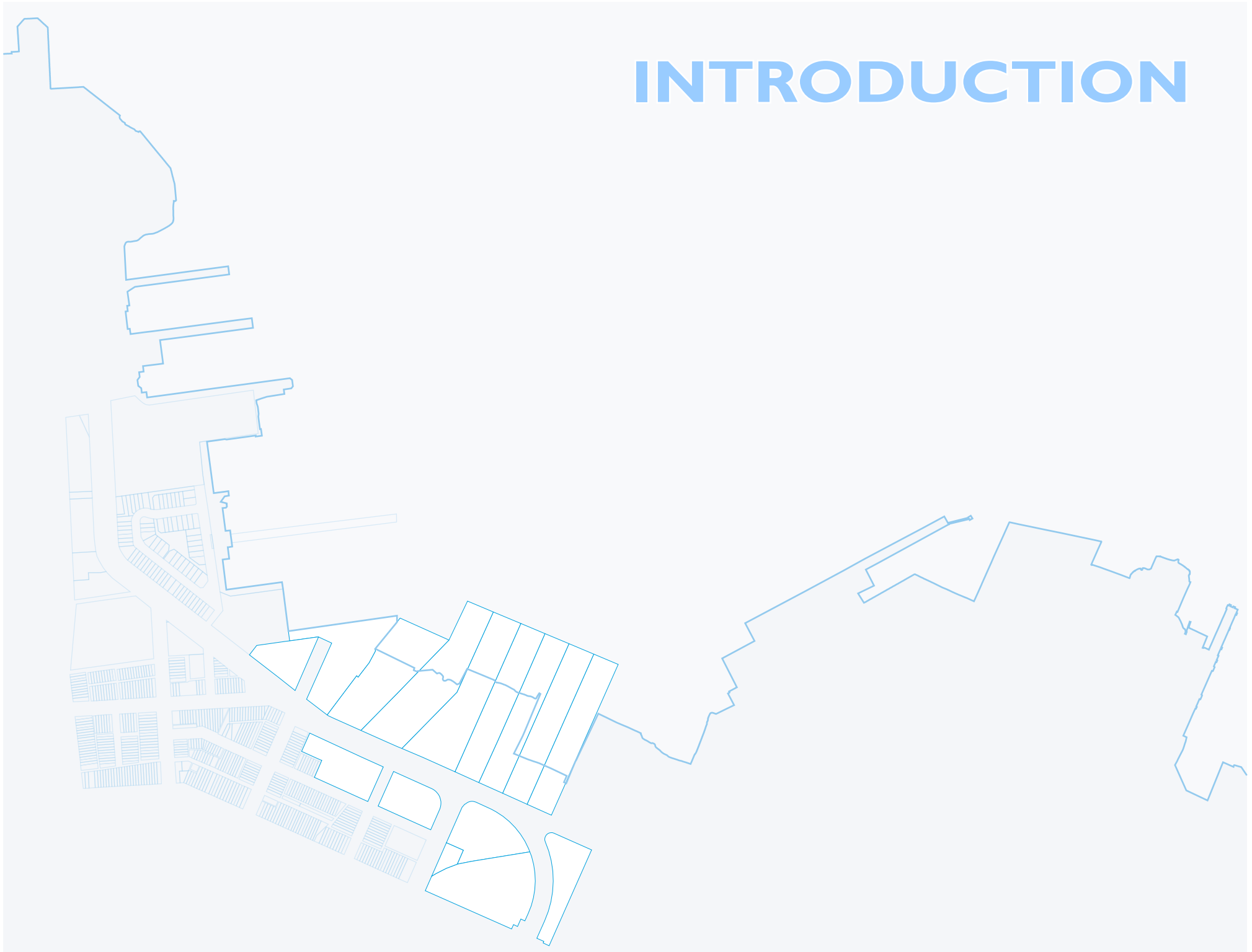


Transportation & Parking

- Provide a comprehensive plan for managing the impact of traffic and parking demand from new development
- Promote the development of transit resources along Key Highway through partnerships with responsible state agencies
- Encourage a reduction of parking demand through parking management strategies

New development should not only minimize its negative impact on problems like traffic and parking. It should also be a catalyst to expand transportation options and encourage the development of alternate modes of transportation. This plan examined all the transportation and parking issues on the South Baltimore Peninsula and makes comprehensive recommendations on transportation from intersection improvements to expanding and creating alternate transportation options such as the Water Taxi or a neighborhood shuttle. It also proposes solutions on how to better manage parking within new developments by using strategies such as shared parking and transportation demand management. In the neighborhoods the goal is to create a greater supply of parking spaces through new structured parking facilities and more efficient use of on street parking, and to decrease the demand for them by creative incentives to decrease automobile ownership.

INTRODUCTION



Origin of the Study

Development Pressure

Since the late 1990's there has been increasing development pressure on both the waterfront and the neighborhoods of the South Baltimore Peninsula. Meanwhile, many once-thriving industrial businesses on the Peninsula have left and their properties are no longer viable for other industrial purposes. Many of these sites have become vacant or underutilized and have become sources of heavy speculation by real estate developers looking for sites to redevelop. To date, much of this redevelopment has occurred within the fabric of the row house neighborhoods and has largely been compatible with them. However properties around the waterfront have been the site of larger development projects which have been less compatible with the neighborhoods and the cause of greater concern for neighborhood residents.

Sale of Fire Department Repair Facility

In December of 2004, the Baltimore Development Corporation (BDC) approached the Department of Planning about conducting a zoning study to enable the sale of the City's Fire Department Repair Facility. The City had sought to move its vehicle repair garages which are located on waterfront sites to a central facility in East Baltimore, thus freeing up waterfront sites for potential redevelopment. The BDC, acting as the City's agent, had sought to sell the Fire Department Repair Facility to help fund the construction of the new central repair garage and to help move the National Aquarium's Animal Care Facility to the Middle Branch.

Community Leaders Respond

The Department of Planning met with Peninsula community representatives and proposed to engage in a small rezoning study of the Fire Department site and a few neighboring industrial parcels to allow for mixed use development. At the recommendation of community leaders, after an initial community presentation of the zoning study in April of 2005, the Department of Planning agreed to conduct a more comprehensive study of the entire Key Highway waterfront area and its adjacent neighborhoods to explore the impacts and benefits of redevelopment and create a plan for managing them. At this point a formal study process began with the formation of the Key Highway Taskforce.



Development Pressure on Industrial Properties



Fire Department Repair Facility

Study Process

Key Highway Taskforce Membership

Elected Representatives

Delegate Brian K. McHale

Community Associations (3 representatives per association)

Federal Hill Neighborhood Association

Federal Hill South Neighborhood Association

Key Highway Community Association

Locust Point Civic Association

Riverside Neighborhood Association

Property Owners (1 representative per organization)

HarborView Properties

Main Steel

Obrecht

General Ship

Museum of Industry

General Electric, Inc.

South Harbor Business Center

Local Interest Organizations (1 representative per org.)

Friends of Federal Hill Park

Downtown Sailing Center

Key Highway Task force

In the spring of 2005, the Department of Planning organized a Key Highway Task Force of South Baltimore Peninsula community leaders, property owners, and local interest groups to investigate and make recommendations for the future of the Key Highway Waterfront and how it should be developed. The Task Force completed a report of guiding principles and recommendations in the fall of 2005.

Following the recommendations of the Key Highway Task Force, the Department of Planning, along with the help of the Task Force, drafted the Key Highway Waterfront Study which has detailed recommendations and implementation steps for the future development of the Key Highway Waterfront.

Guiding Principles

Open Space

- Create world-class waterfront open space
- Maximize neighborhood views and access to the waterfront
- Redesign Key Highway for people as well as cars



Building Form & Land Use

- Promote an active, pedestrian-friendly Key Highway through active, publicly accessible ground floor uses in new developments, and new high-density residential development
- Create neighborhood-friendly buildings which provide places for people to shop, live and work



Transportation & Parking

- Provide a comprehensive plan for managing the impact of traffic and parking demand from new development
- Promote the development of transit resources along Key Highway through partnerships with responsible state agencies
- Encourage a reduction of parking demand through parking management strategies



Study Location

Study Location

The Key Highway Waterfront Study area, generally described, is located on the waterfront of the South Baltimore Peninsula on the Northwest Branch of the Patapsco River in Baltimore City. It is generally bounded by Cross Street on the north, Covington Street on the west, Fort Avenue on the South, and Key Highway on the East. The study area is in close proximity to the traditional row house neighborhoods of Federal Hill, Riverside, and Locust Point. The study also abuts the Maritime Industrial Zoning Overlay District (MIZOD), which includes many important waterfront and port related industries such as the Domino Sugar refinery. Within the study boundaries are located portions of the HarborView Development as well as important local cultural resources like the Baltimore Museum of Industry and the Downtown Sailing Center.

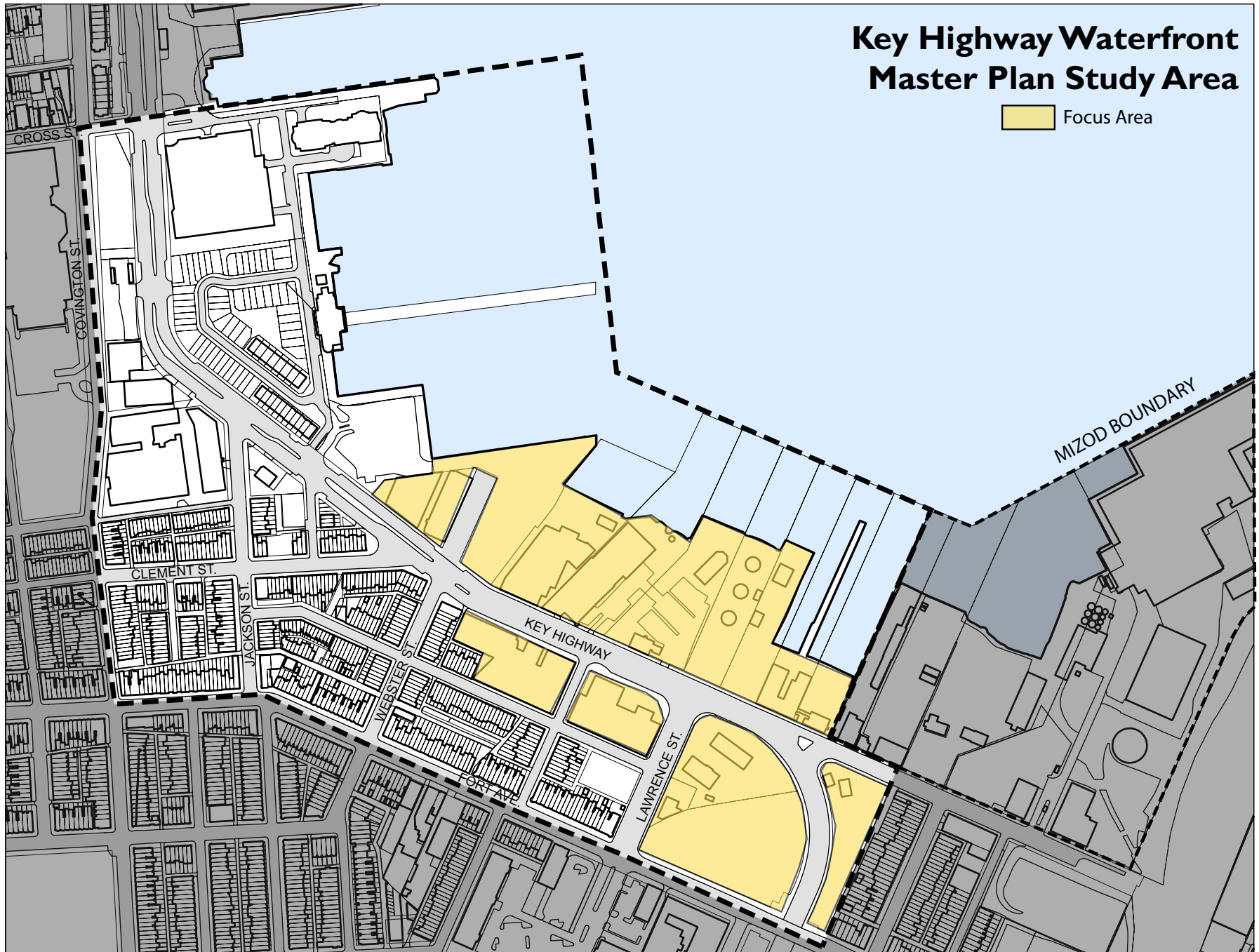


Baltimore City



Key Highway Waterfront Master Plan Study Area

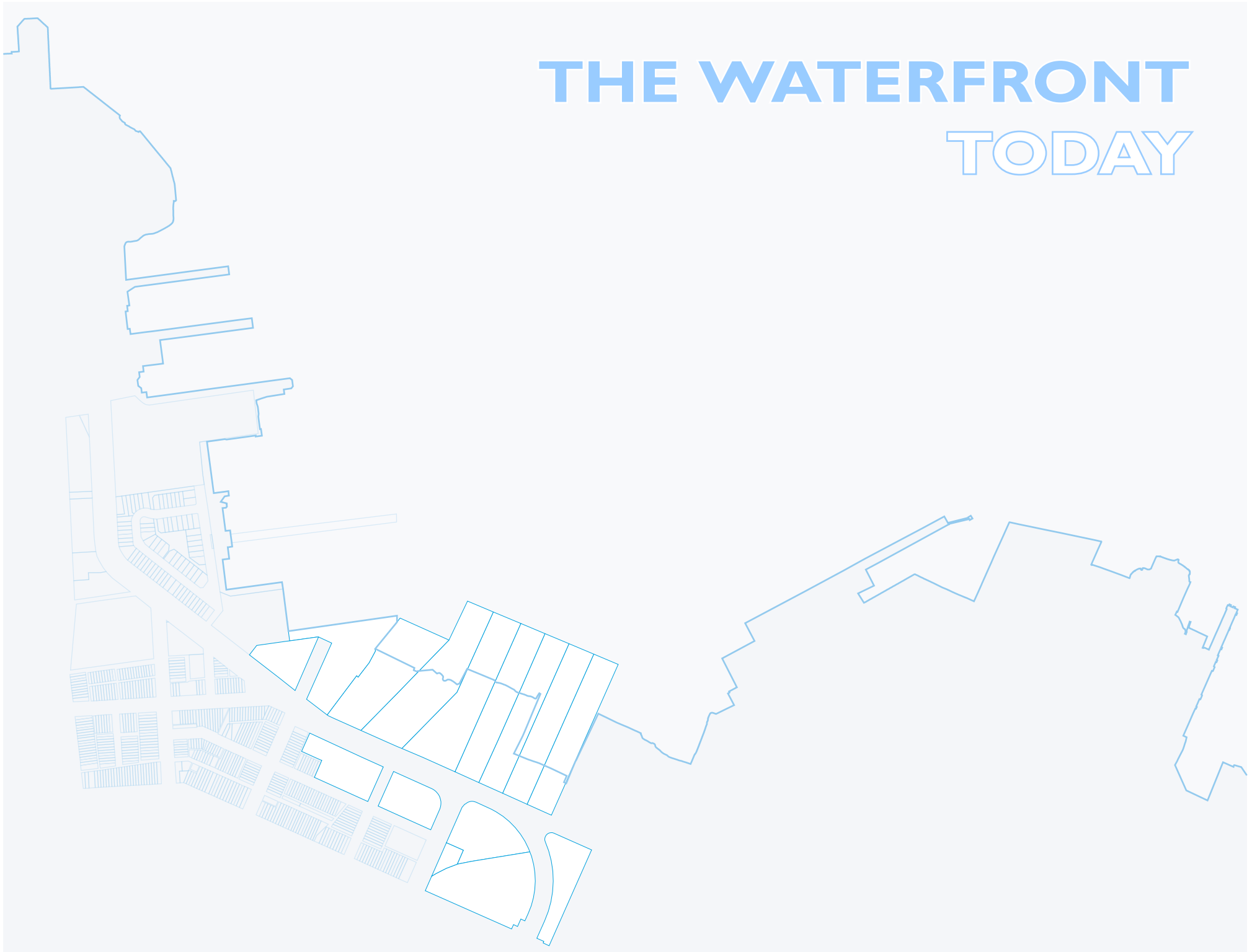
 Focus Area



Key Highway Property Ownership



THE WATERFRONT TODAY



Background and History

Historic Industrial Waterfront

From the beginning, South Baltimore's geographical closeness to the original Baltimore Town settlement made it a natural spill-over area for industries which could no longer find space for expansion in the city center proper.

A major impetus to industrial development in South Baltimore came from the construction of the B&O rail system in 1848. The railroad and the accompanying marine terminals were key to transforming South Baltimore's shoreline into a major industrial waterfront. The Key Highway area became home to a diverse group of industries such as molasses and syrup production, canneries, locomotive repair, metal fabrication, and oil reprocessing. One early major notable industry was the Columbia Iron Works which opened in 1879 on the current site of the HarborView development.

Industrial development continued in the area after World War I with the construction in the 1920's of the Proctor and Gamble plant and sugar refinery (today Domino Sugar). However, by the 1950's industrial development had stagnated and entered a period of slow decline. The underlying reasons for this decline included the deterioration of the railroad's port facilities due to lack of investment and competition from other regional ports, as well as increased industrial competition from other regions and countries.



1926 photo of the Key Highway Waterfront



Traditional South Baltimore Neighborhoods

The South Baltimore neighborhoods of Federal Hill, Riverside, and Locust Point were developed in close proximity to the waterfront industries, as was typical for development of the time. The neighborhoods were primarily composed of working-class housing which provided a ready source of labor for the area's waterfront industries. This established an unique relationship to the waterfront for residents of the South Baltimore Peninsula as their main means of economic livelihood. It is this intimate relationship of the neighborhoods with the waterfront, and its redefinition, that is the primary subject of this study.

Redevelopment of the Bethlehem Steel Shipyard

Bethlehem Steel Company's Key Highway Shipyard was a major shipyard which, at one time, employed almost 2,000 persons. However, in 1984 the shipyard was no longer considered viable and the Bethlehem Steel Company auctioned the shipyard to private developers who then set out on an ambitious plan to redevelop the property as a high-rise luxury

1981 photo of the Bethlehem Steel Shipyard

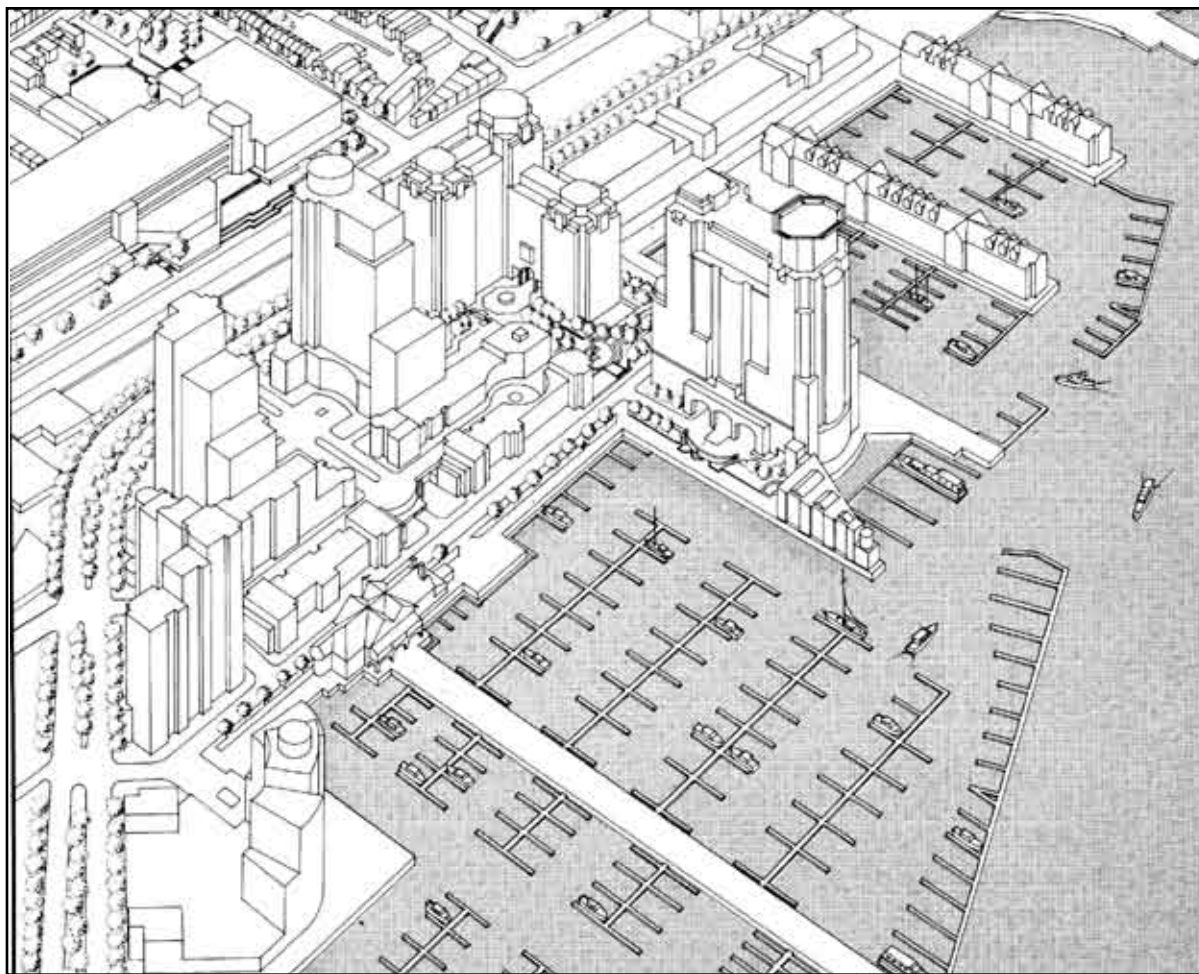
residential community. In 1986, after nearly two years of review, the City approved the Key Highway Urban Renewal Plan which codified the development controls for the HarborView development. Around this same time the city also approved the Key Highway East Industrial Renewal Plan to protect existing industries and discourage land speculation on land between HarborView and the Domino Sugar Refinery.

Key Highway Waterfront Study (1992)

In an effort to comprehensively plan the Key Highway corridor the Department of Planning undertook the first Key Highway Waterfront Study. The study encompassed the entire Key Highway waterfront from Federal Hill to North Locust Point. The study sought to balance industrial retention with neighborhood and waterfront revitalization. The study was ultimately not implemented but set some parameters for future planning such as the preservation of view corridors, height limits on buildings to preserve view sheds from the neighborhood, streetscaping and transportation planning.

Key Highway Urban Renewal Plan Amendment (2004)

As the residential housing boom began to emerge in Baltimore in the last 5 years, pressure to rezone and develop industrial properties contiguous with the neighborhoods began to emerge. The Department of Planning undertook a zoning study which began to implement some of the original Key Highway Waterfront Study's recommendations. Chief among these was the establishment of height limits to preserve the view shed of the harbor from the neighborhoods. Ultimately the study led to the rezoning of the Leonard J. properties and development as town homes. This study also resulted in the first amendment to the Key Highway Urban Renewal Plan to allow for increased building height



Rendering of the original HarborView Development proposal



Oblique Aerial Photo of HarborView Development (foreground) and Leonard J. Edwards development (upper right hand corner)

for the condominium development on the HarborView property south of the Southern High School. This study and the resulting urban renewal amendment proposed land use changes for most of the land side industrial properties to allow for redevelopment; however the issue of the under-utilized waterfront with vacant industrial buildings remained unresolved.

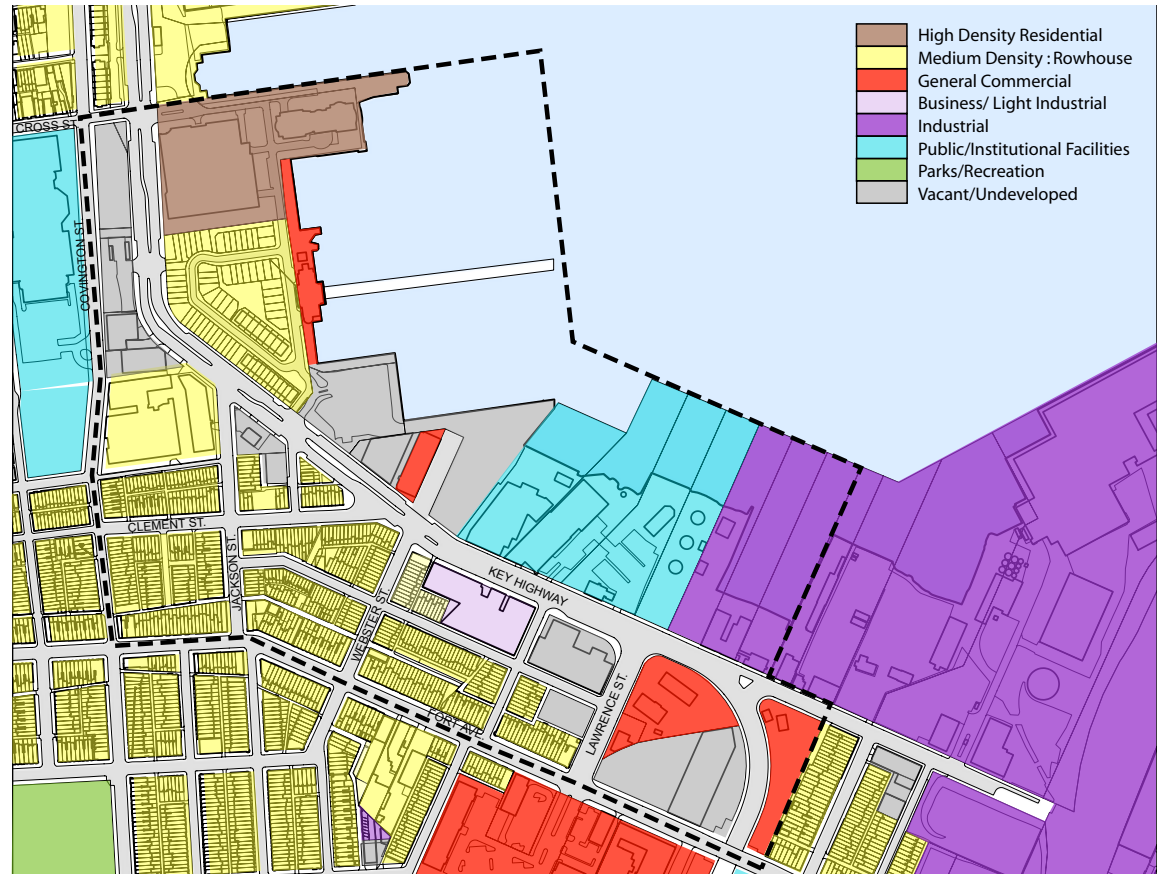
Existing Conditions

Existing Land Use along Key Highway

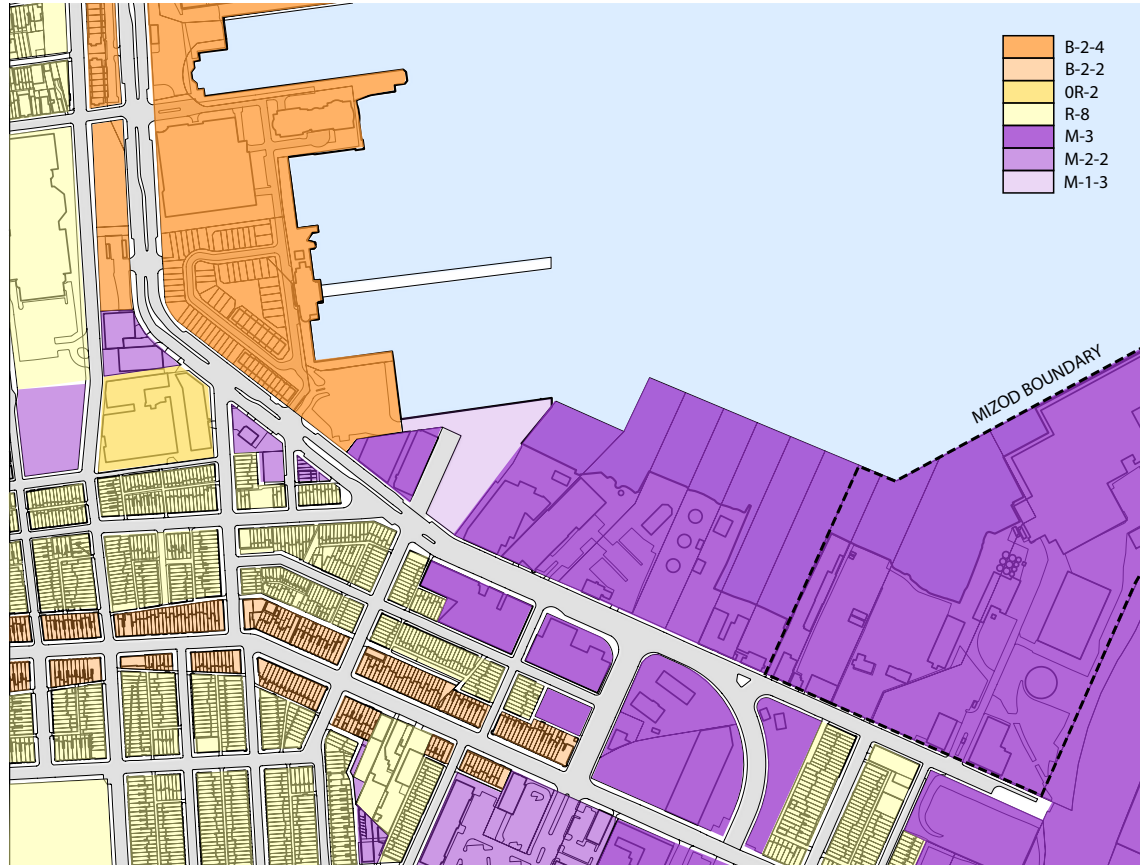
Currently the waterfront south of the Harbor-View development features parking lots, a restaurant/bar, a repair garage, an office building, the museum of industry, a gas station, General Ship Repair (one of the few remaining industrial users), and multiple vacant properties and parking lots.

A comparison of land uses along Key Highway with Fells Point or Canton clearly shows the lack of development along the Key Highway corridor. In Fells Point and Canton, the waterfront is primarily residential and office uses along with retail and restaurant uses. This has enabled public access to the waterfront and helped regenerate neighborhoods.

Much of the existing waterfront property along Key Highway is vacant or undeveloped parking lots which cut off the access to the water and make Key Highway feel unsafe and inactive. While the South Baltimore neighborhoods have experienced new infill development and renovation of existing buildings, the waterfront has remained largely undeveloped.



Existing Land Use Map



Existing zoning and its impact on development

At the last time of the comprehensive rezoning in 1971, the Key Highway area was zoned M-3 (an industrial zoning category). This zoning reflected the industrial land use at the time. Despite changes in the land use over the years, the zoning for this area has remained largely unchanged. A quick comparison of the Existing Zoning Map (on this page) with the Existing Land Use Map (on page 14), reveals a disconnect between the non-industrial uses that actually exist, and the current industrial zoning. The current industrial zoning is no longer serving its function of protecting industry from development, and prevents many forms of desirable development from occurring. It is this current industrial zoning which is in large part responsible for the lack of development or improvement of Key Highway.

Existing Zoning Map

Issues and Opportunities

Waterfront Access

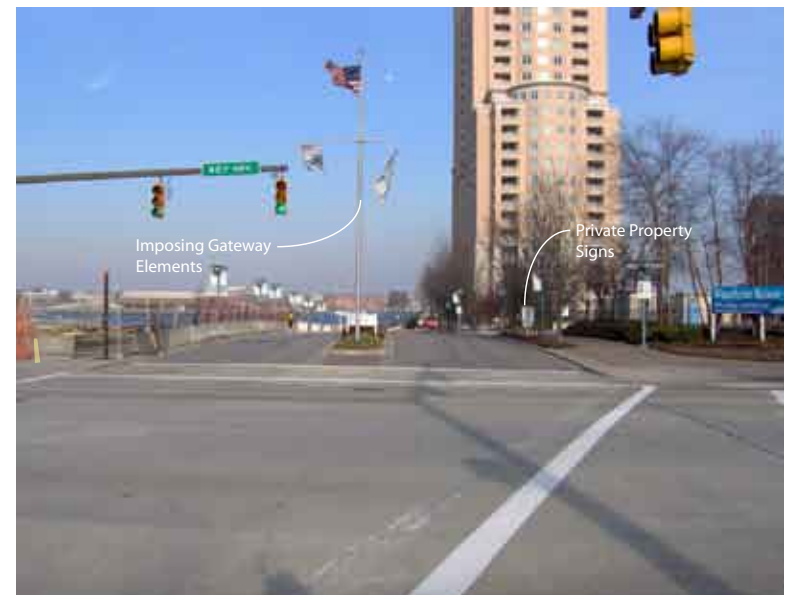
Currently most streets that terminate at the waterfront have good visual access to the waterfront; however, physical access is very limited. Where physical access has been developed it is compromised by unwelcoming design features.

Webster Street has a great view to the Harbor, but access to the waterfront is blocked by a chain link fence.



Many street crossings such as Clement Street are wide and difficult to cross during busy traffic.

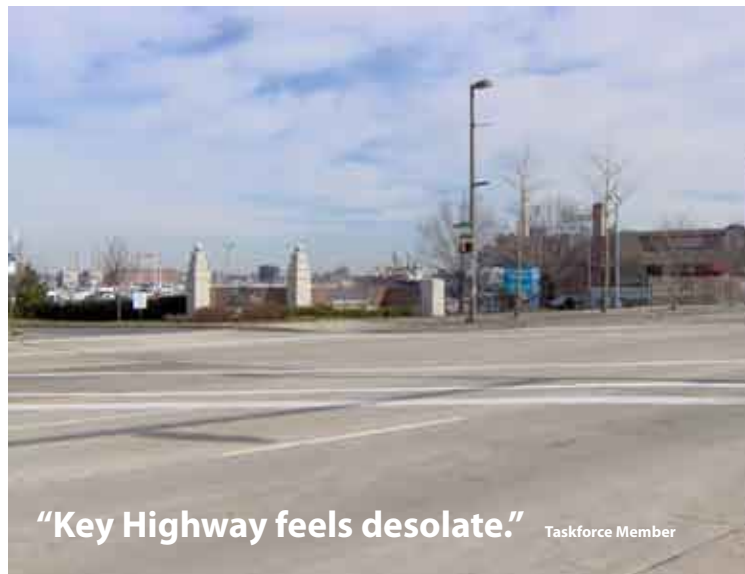
The Cross Street entrance to HarborView has direct access and view to the waterfront; however many neighborhood residents don't feel welcome due to the perception of a private community. This feeling is reinforced by gateway elements such as private property signs.





The Key Highway Experience

Key Highway lacks a pedestrian presence and is an uninviting street. Most people see it as a boundary rather than a connection to the waterfront. New development reinforces this notion with unfriendly architecture and inactive ground floors (lacking front doors and windows). This has caused Key Highway to become largely used for running and exercise rather than walking or strolling.



Waterfront Experience

The Key Highway waterfront is largely underdeveloped and inaccessible to neighborhood residents. It's mainly private property without any means of public access to the waterfront. Where sections of the promenade are developed they usually lack activity due to lack of access connections.



The waterfront along the Fire Department Repair Facility is a parking lot that is inaccessible to the public.



The waterfront along the Museum of Industry is a great public space, but access to it, and views of it, are blocked by a large parking lot.



The promenade in front of HarborView is well designed with plenty of amenities. However it's usually not activated because it's not connected to the rest of the promenade and lacks pedestrian connections to Key Highway.



Vacant land and parking lots are one of the largest land uses on Key Highway.

Urban Image

Key Highway has an unusually large number of vacant parcels for such valuable waterfront. These add to the “no man’s land” feeling of Key Highway. However, there are organizations such as the Baltimore Museum of Industry and the Downtown Sailing Center which are highly valued. They have the potential to add a great deal of unique character to Key Highway.

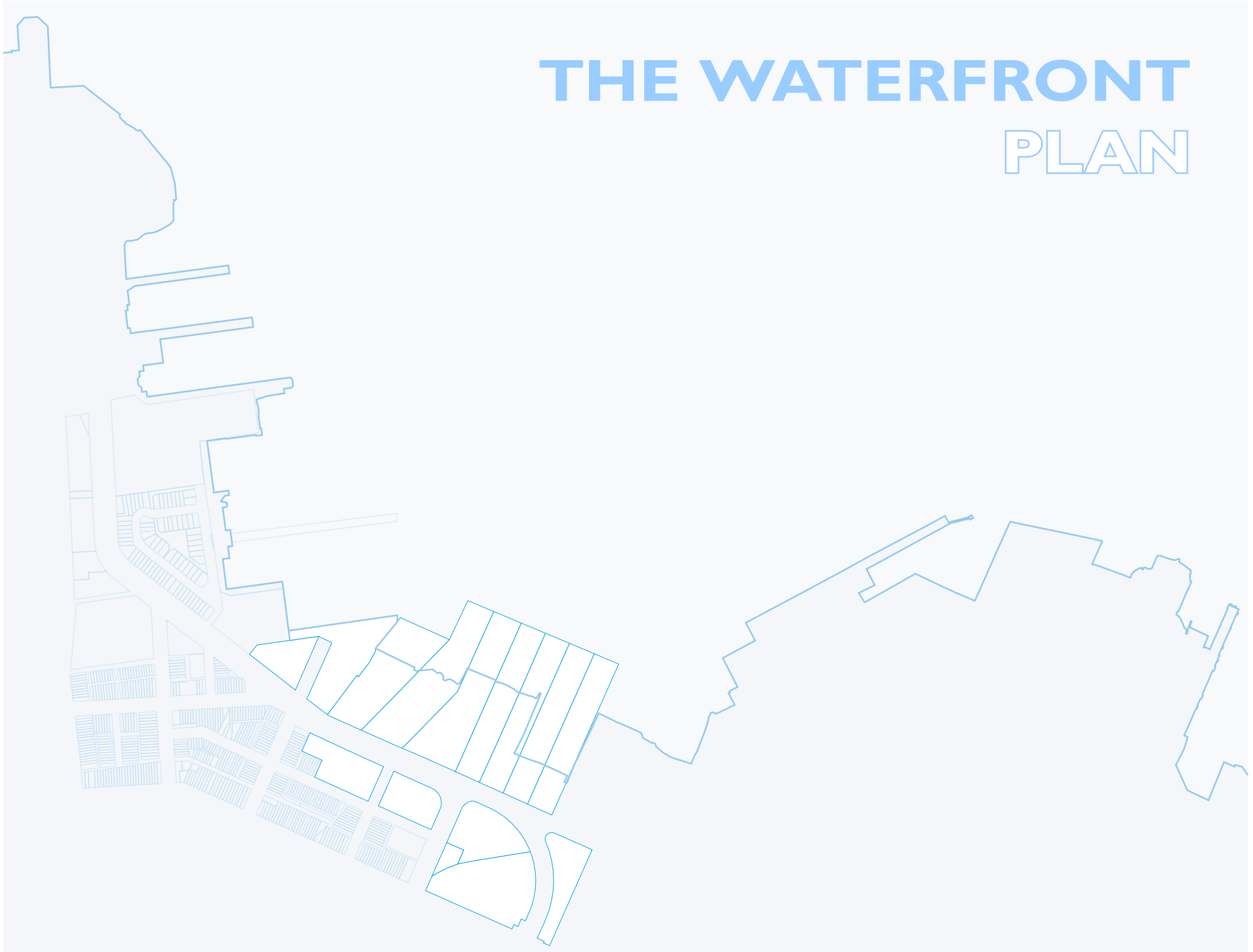


Key Highway feels like a highway and not a street. This is due to lack of active building fronts and low-scale development.



The Baltimore Museum of Industry and the Downtown Sailing Center are unique and valued resources that should be preserved.

THE WATERFRONT PLAN



Recommendations: Waterfront Access & Views

Waterfront Views and Access

Waterfront views and access are critical to the creation of a public waterfront. They provide a physical link which connects the neighborhood with the waterfront. This study proposes to significantly improve public access and views to the waterfront by extending the promenade to General Ship and designating new major view and secondary access corridors. The following are the detailed recommendation for access and views:

- Promenade: Extend the Promenade from HarborView Lot 6 to the General Ship property. Expand the width of the promenade along Key Highway from the existing 20' to 30' to allow for a landscape setback and potential bike trail (*as shown on page 25*).
- View Corridors: Add two new major street connections to the waterfront; Lawrence Street and Webster Street shall be protected as View Corridors with access to the waterfront. (*Proposed view corridor treatments are shown on pages 26 and 27*).
- Access Corridors: All streets shall lead to an access corridor that connects to the waterfront.



Promenade with landscape setback



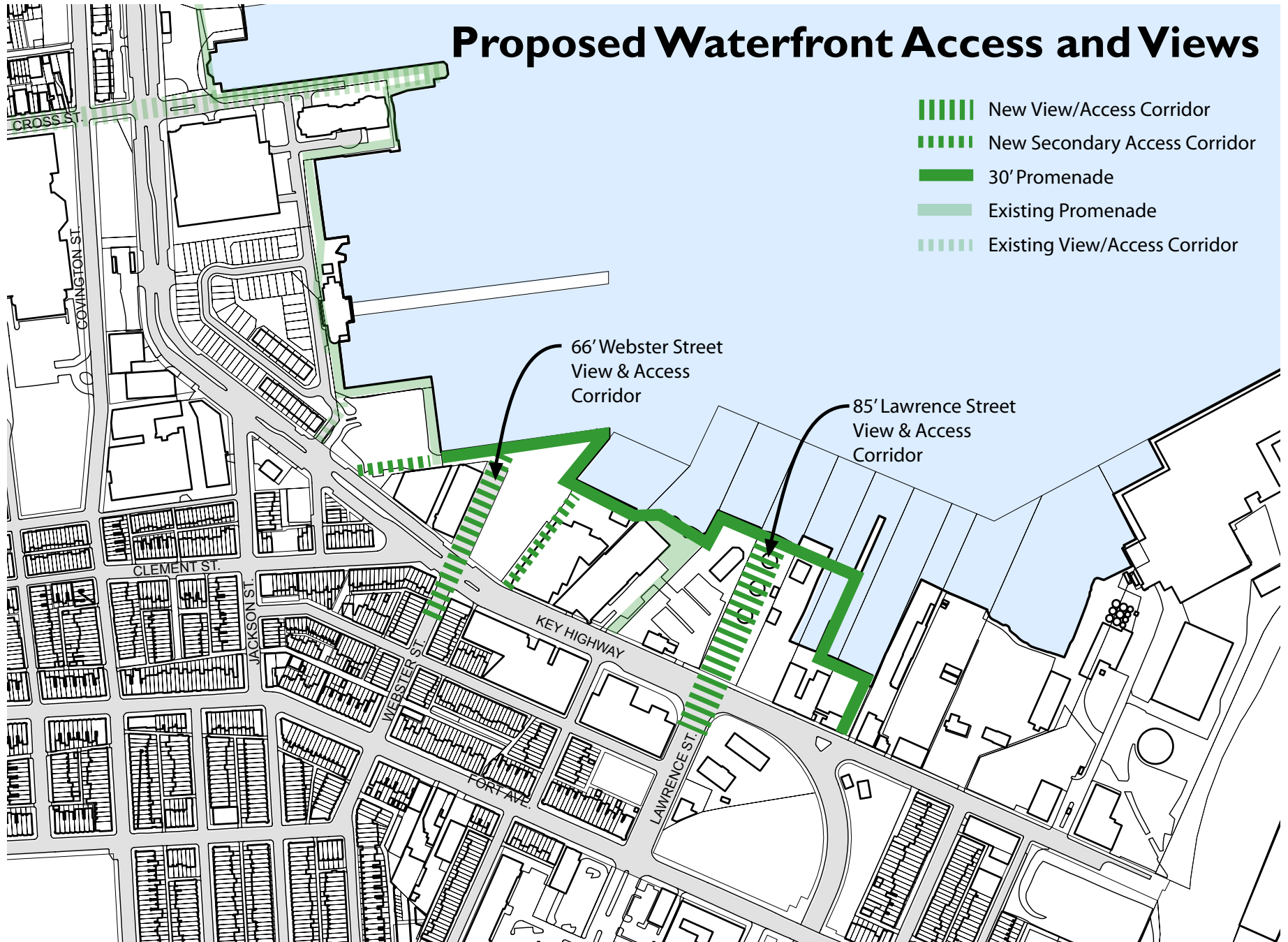
Proposed Access Corridor with landscape treatment



Promenade with bike trail

Proposed Waterfront Access and Views

- ||||| New View/Access Corridor
- ||||| New Secondary Access Corridor
- 30' Promenade
- Existing Promenade
- ||||| Existing View/Access Corridor





Proposed Lawrence Street View Corridor



Proposed Webster Street View Corridor

Recommendations: Key Highway Streetscape

Key Highway Streetscape

Redesign Key Highway to make it more friendly, safe to pedestrians, and easier to cross.

- Median: Extend Key Highway median all the way to I-95. Add new “gateway” median to Lawrence Street.
- Safe Crossings: Provide safe pedestrian crossings at all streets by narrowing overly large intersection widths at Clement Street and Lawrence Street.
- Wide Sidewalks: Encourage pedestrian activity through wide sidewalks with potential cafe seating.
- Generous Landscaping: Create a inviting pleasant boulevard atmosphere through generous trees, landscape planters, and light pole planters.
- Traffic Calming: Slow the speed of traffic through narrower lanes, parking lanes on both sides of Key Highway, and intersection “pouch-outs”.



Proposed median treatment



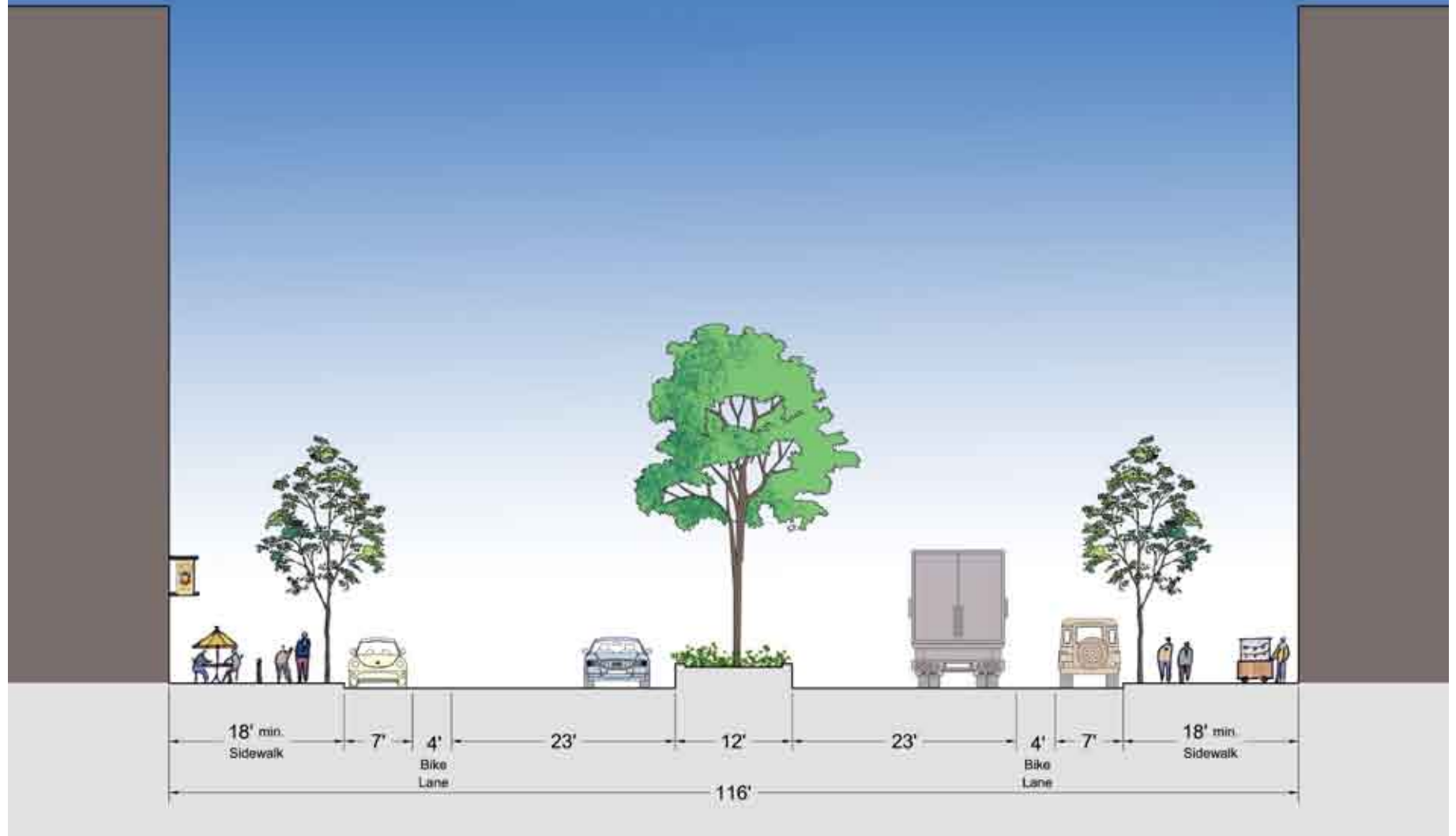
Example of a “pouch-out” to create a shorter pedestrian street crossing





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Section cut through Key Highway: **Proposed Streetscape Treatment**



Recommendations: Waterfront Open Space

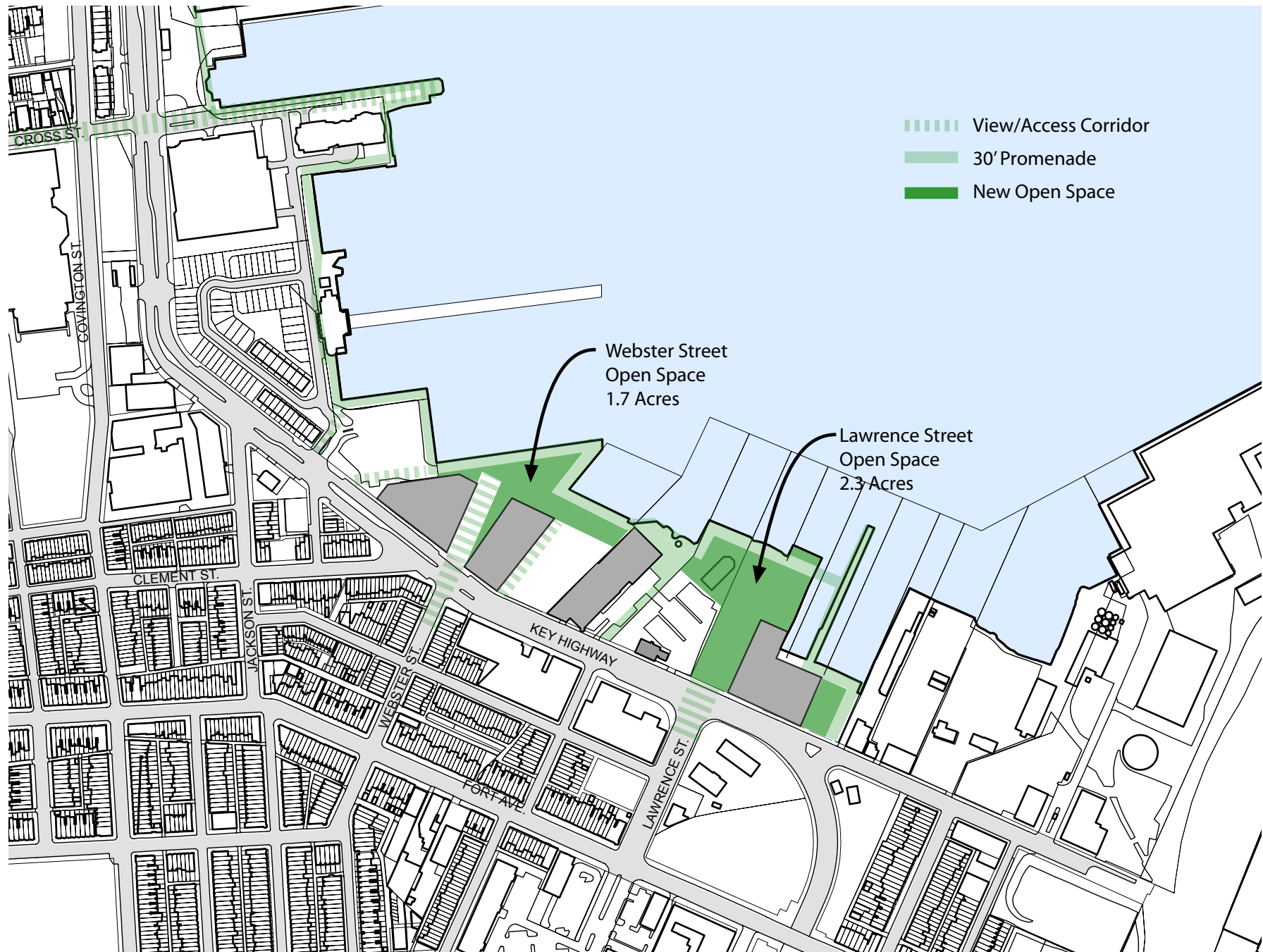
Create new public open space along the waterfront

A main focus of this study is to improve public access and enjoyment of the waterfront, and to create an enhanced waterfront experience through the creation of public waterfront open space. The creation of public waterfront open space would provide the citizens of Baltimore a place to recreate and enjoy a variety of activities from sunbathing and picnicking to more active uses like frisbee throwing and volleyball. To achieve this, the study envisions three acres of new public open space in addition to the 3.5 acres of proposed waterfront promenade and Webster Street (*as shown on the diagram on the right*).

The cost of providing public open space is very expensive. Additionally, most of it is proposed on private property where the city has less control. To implement the creation of the open space the plan proposes to link development of public open space to development credits which will allow developers to build taller buildings. Guidelines for the development of tall, slender towers are discussed in Building Form and Land Use on page 40. The following are principles for the development and placement of public open space.

- **Focus Open Space on View Corridors:** The proposed open space plan envisions two distinct major waterfront parks, one at the end of Lawrence Street and the other at the end of Webster Street. Webster Street is in close proximity to the neighborhood and is envisioned to be programmed with more active cafe and restaurant uses similar to Bond Street Wharf. The Lawrence Street open space is part of the Baltimore Museum of Industry, and is more appropriate as a passive green space that could be programmed with Museum related uses to help activate it. It would be similar in character to Canton Waterfront Park.





Waterfront Open Space Development Principles

- Open Space should be built first and as soon as possible
- Fire Department Repair Facility site is a guarantee for open space
- Property owners should be compensated for providing open space either with additional development rights or financial compensation
- If the Fire Department Repair Facility site is sold, City should receive fair market value



Developer's Sketch of Proposed Webster Street Open Space

Recommendations: Land Use



Land Use

- **Ground Floor Uses:** A fundamental key to an active pedestrian-friendly street is active ground floor uses (office, retail, restaurant, service) facing the street. Ideally the majority of space should be retail and restaurant uses which generate the most pedestrian traffic. New development along Key Highway should provide storefront space and active ground floor uses. Additionally, outdoor seating should be encouraged where there are appropriate sidewalk widths.
- **Prohibit Automobile-Oriented Uses:** Gas stations, drive-thrus, parking lots and other uses that cater to automobile traffic on Key Highway are detrimental to creating a pedestrian-oriented street environment. These uses necessitate additional curb cuts which create dangerous crossings on the sidewalk, promote setbacks from the street which take away from the street-level retail experience, and promote the general feeling of a highway environment.

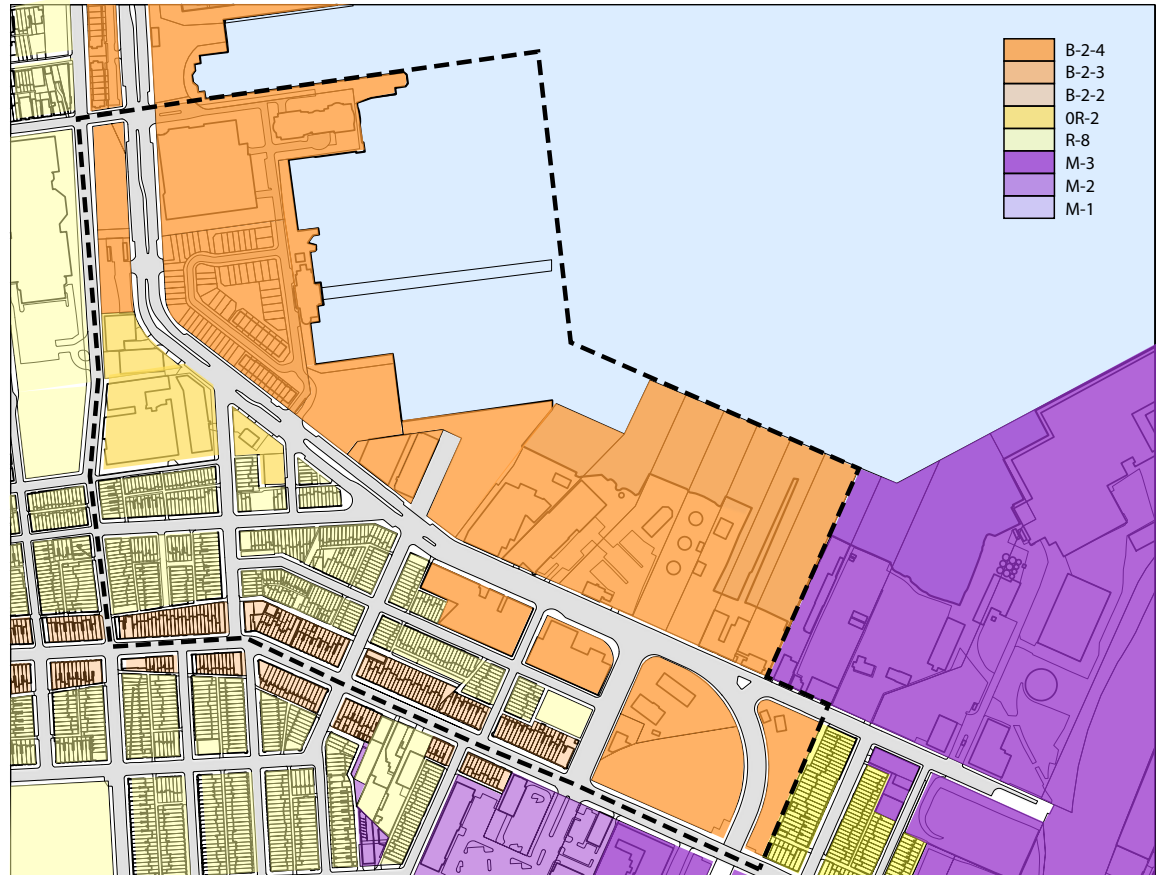


Recommendations: Zoning

Zoning

Currently most of the properties in the study area are industrially zoned. This prevents residential, mixed use, or retail development from occurring. To remedy this problem the study proposes to rezone industrially zoned properties in the study to commercial and residential zones which will allow these uses. The specific recommendations are as follows:

- Rezone Industrial properties to B-2-4 zoning: B-2-4 is a neighborhood commercial zoning which restricts automotive intensive uses (such as gasoline stations, automotive repair, and car washes) but allows residences, shops, offices, restaurants and cafes. New B-2-4 zoned properties should have additional Height and Massing controls with the use of an Urban Renewal Plan.
- In existing neighborhood areas where industrial zoning exists rezone the properties to R-8 to match the surrounding residential zoning.



Recommendations: Building Form & Massing



Building Form: Land Side

Key Highway is a wide street that can accommodate buildings of a larger scale than the surrounding neighborhoods. However, buildings on the land side of Key Highway directly abut existing residential row homes. To ensure that new development doesn't overwhelm the existing neighborhood buildings, new development should respond by being lower in scale than the waterfront development and provide setbacks where it abuts existing neighborhood buildings. To ensure that new development is in scale with Key Highway, creates a proper street wall, and provides opportunities for mixed use new development should be no less than four stories in height or at least "boulevard"

scale. "Boulevard buildings" can be seen in many cities, most notably Washington, D.C. and Paris, France, but they can even be found in Baltimore in areas like Charles Village along Saint Paul Street. They feature a tall first floor, typically at least fourteen feet, with street level retail and generally four to seven stories of either office or residential above. The following are specific recommendations for building form along the land side of Key Highway:



Boulevard Buildings (4-8 stories) with setbacks

- Maximum Building height 90'
- Minimum Building Height 45'
- Setback 30' above 35' on Harvey Street
- Setback 12' above 70' on Key Highway, Lawrence Street, and Fort Avenue



Proposed height of new development along Harvey St.

Building Form: Water Side

Tall Slender Towers with a Low Base
Recent developments along Key Highway show that mid-rise (6-7 stories) buildings create a wall to the water. While low-rise town homes often don't block the view they don't provide much open space or waterfront access either. Examples from other cities like Vancouver, CA show how tall slender towers on a low height base can create generous open space and access to the waterfront while still preserving many views to the water as well. With the goal of increasing waterfront access, open space, and mixed use density along the waterfront this plan recommends tall slender towers. The following are detailed recommendations for designing tall slender towers along Key Highway.

- Low base: Having a low base ensures that a neighborhood sense of the water can be preserved and that buildings don't overwhelm the street. To preserve neighborhood views to the water building bases should not exceed 50'. However, if extra levels of residential parking are required to meet the minimum parking requirements of the plan, building bases may exceed 50'. Parking should be designed to minimize its impact of creating a wall along Key Highway
- Well Spaced Slender Towers: Slender towers (no greater than 11,000SF) can be spaced (no less than 100' apart) to keep view corridors and vistas open. Additionally by going tall and thin the ground plane is freed up to have additional open space.



Slender tower development in Vancouver (both upper left and lower right)



New townhouse development along Boston Street.



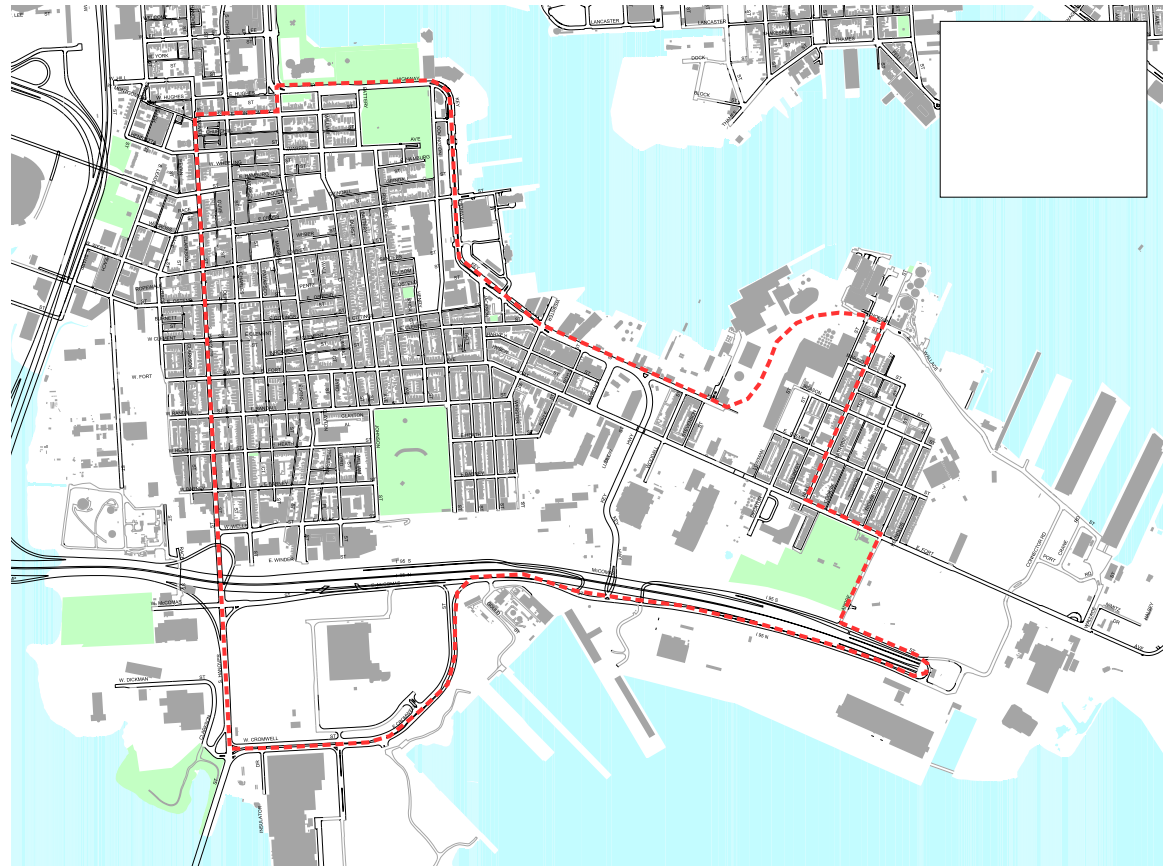
Recommendations: Transportation & Traffic

Comprehensive Transportation Study

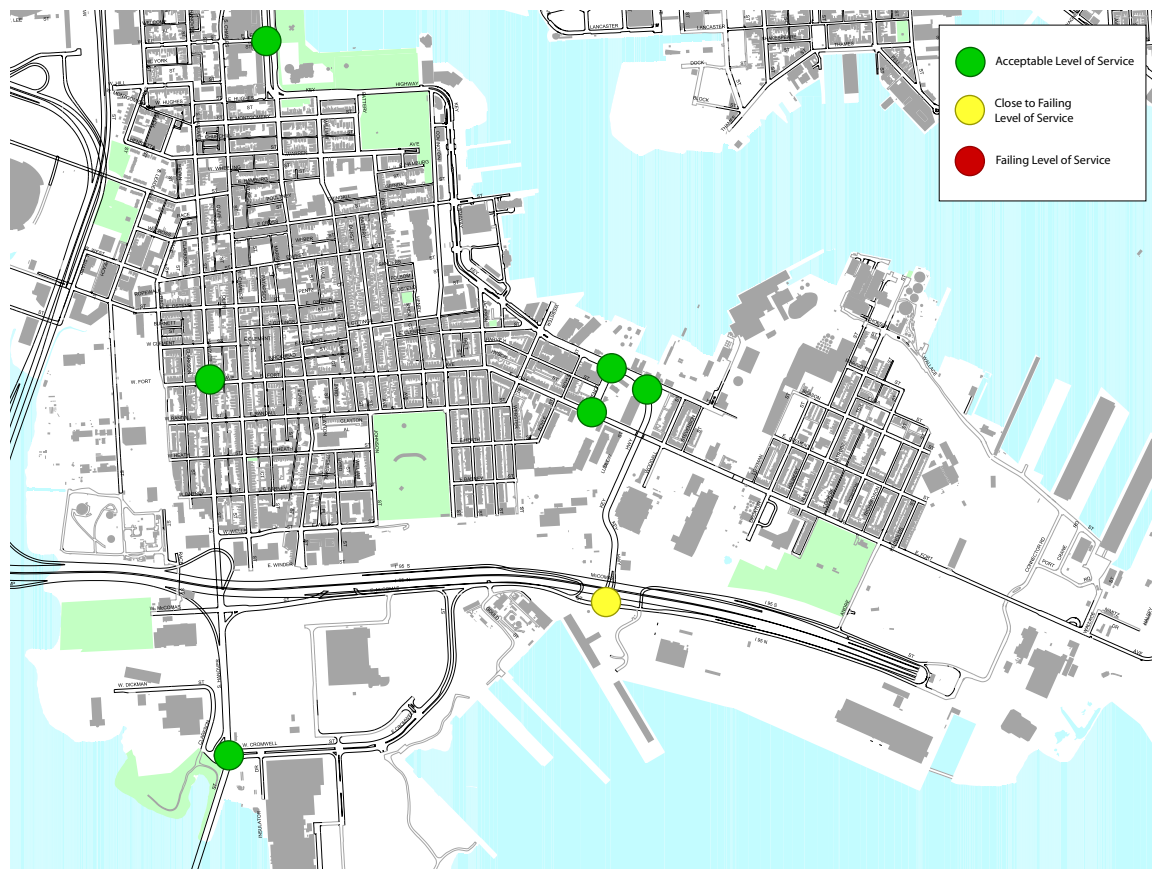
The South Baltimore Peninsula has seen a spectacular rate of redevelopment and renewal of neighborhoods over the last five years. Along with the positive changes that redevelopment brings come potential negative impacts such as traffic and parking problems. At the request of the neighborhood leaders, the Key Highway Task Force commissioned a comprehensive traffic study for the South Baltimore Peninsula. The goal of this study was to understand traffic and parking impacts associated with a full build-out of the Peninsula.

This comprehensive study also made concrete recommendations on how to mitigate and minimize the impacts of traffic and parking shortages on the peninsula neighborhoods and the transportation infrastructure.

A summary of this full study is presented here in this plan, but the entire Key Highway Transportation Study will be made available as an appendix to this plan.



Key Highway Transportation Study Area



Existing transportation level of service for key intersections

Existing Conditions: Transportation

Today, the roadway network primarily operates at an acceptable level of service. Key Highway in particular is a high capacity roadway that carries much less traffic than it was designed for.

While the roadway network in general operates well, the Peninsula suffers from a lack of coordinated transportation options. Key Highway, for example, has neither a bus line nor a bike path. Additionally, the poor pedestrian experience along Key highway means little pedestrian traffic can be seen. But, there do exist potential options if the Water Taxi and exiting bus service were expanded. In summary the existing conditions of the Peninsula transportation system are as follows:

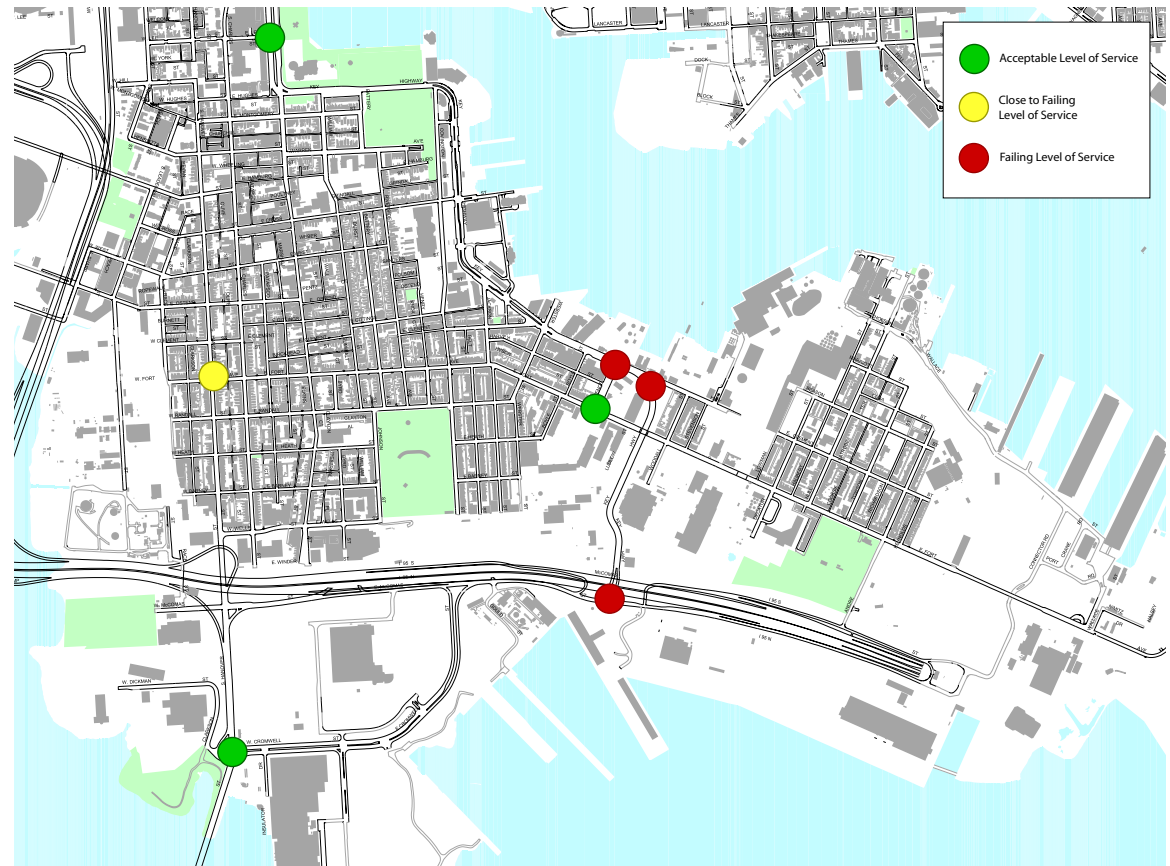
- Acceptable levels of service on existing roadways
- Lack of coordinated alternative modes of transit
- No bike trail
- Poor pedestrian experience
- Unconnected/coordinated mass transit i.e.: Bus and Water Taxi

Potential Full Build-out Conditions: Transportation

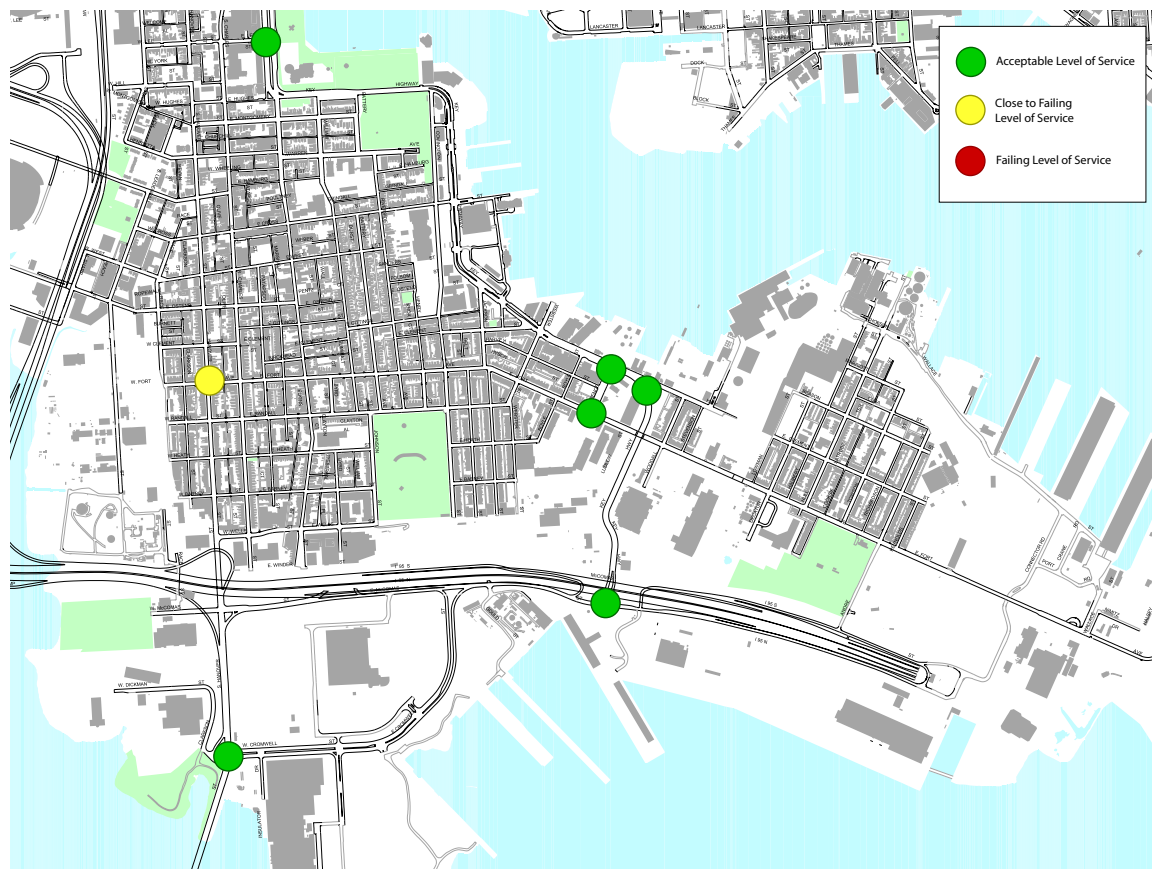
A full build-out scenario forecasts the traffic impact of all the potential development that could occur with the current zoning and development controls including the potential Key Highway developments. This totals over 1,000,000 SF of Office/ Retail and 4,000 residential units.

The traffic generated from this new development would equal over 4,200 projected new vehicular trips in the critical PM peak rush hour. Approximately 30% of this total projected new traffic is generated by Key Highway developments.

The full build-out scenario projects the impact of this new development if no improvements to the current roadway system are made. The result is that several key intersections on Key Highway would operate at unacceptable levels of service, however, Key highway and the roadway system as a whole would still have enough capacity if key intersection improvements were made.



Full build-out transportation level of service for key intersections



Future transportation level of service for key intersections with recommended transportation improvements

Mass Transit Recommendations

- Establish Commuter/ Neighborhood Shuttle
- Investigate potential for new commuter rail station/platform at existing MARC service yard facility
- Re-establish the Key Highway Water Taxi stop

Pedestrian and Bike Improvements

- Develop bike paths on Key Highway, Fort Avenue, and Lawrence Street, and the promenade
- Improve Key highway pedestrian intersection crossings

Roadway Improvements

Intersection Improvements:

- Key Highway at McComas Street
- McComas Street at Cromwell Street
- Key Highway at Key Highway Extended
- Key Highway at Lawrence Street

Interchange Improvements:

- Traffic Signal Timing
- Traffic Calming

Develop a Transportation Demand Management Policy

A policy that creates incentives for using alternative modes of travel

Recommendations: Parking

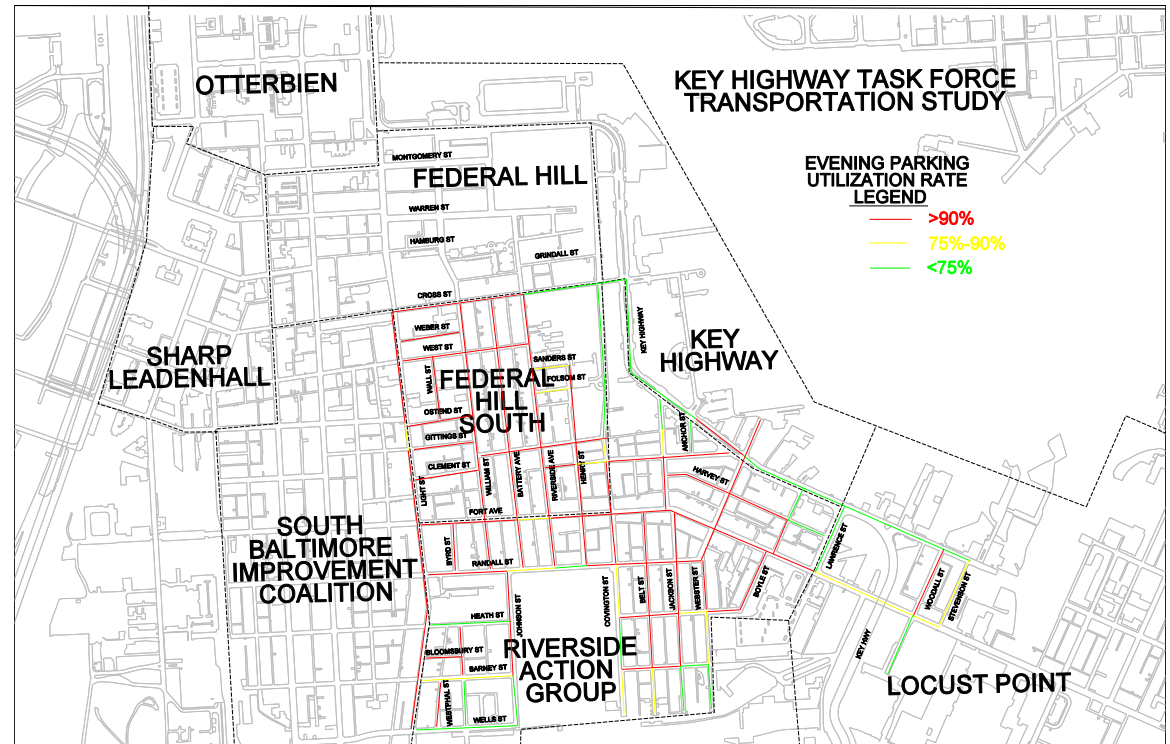
Parking: Existing Conditions

Parking Supply

- 4,460 existing on-street public parking spaces in Federal Hill, Federal Hill South, Riverside, and portion of Locust Point
- 254 spaces in the West Street public parking garage
- 214 spaces in the Rusty Scupper public parking garage

Demand for Parking

- Average On-Street parking utilization rate of 53% daytime in all neighborhoods (except Federal Hill – 72%)
- 87% average evening parking utilization rate
- 3,156 Parking Permit decals and 2,672 visitors passes in Area A, 9, 19 and 30 issued in 2005 = 1.47 vehicle decals and visitors passes per household (HH)
- Average auto ownership rate of 1.33 vehicles per House Hold (HH)
2000 census data:
17% - 0 Auto HH
43% - 1 Auto HH
35% - 2 Auto HH
5% - 3 or more Auto HH



Existing utilization of on-street parking during the evening hours



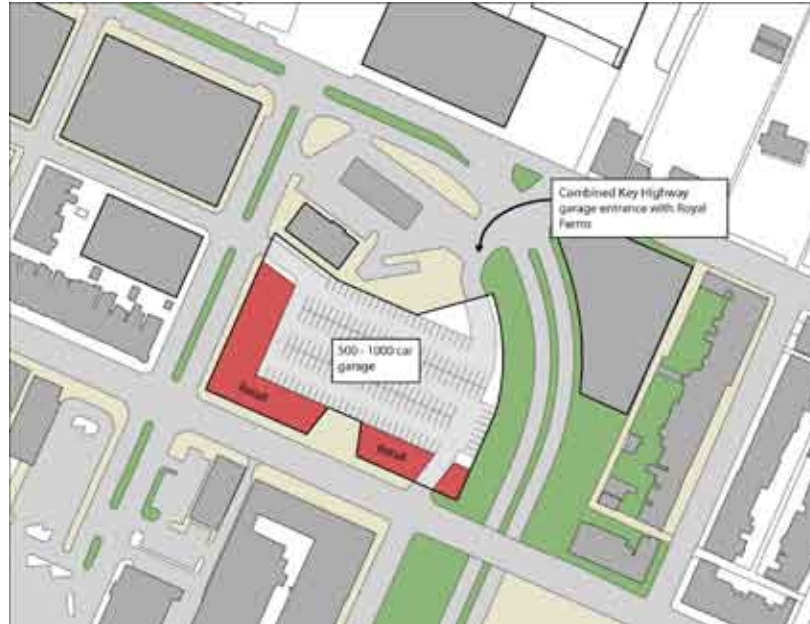
Decrease demand for parking by promoting an expansion of Residential Permit Parking and potential stepped parking permit fees:

Currently Riverside does not have residential permit parking. To ensure that parking does not overflow from new retail development, neighborhood groups are encouraged to explore adopting Residential Permit Parking.

A stepped parking permit fee system charges significantly higher fees for each additional car per household requesting on-street parking. This reduces demand by charging the most to those who over-utilize on-street parking. Such a system should not be implemented or proposed, however, till better alternative transportation methods are available on the Peninsula that provide transportation choice to residents. Neighborhood groups are encouraged to explore this suggestion at that time.

New Off-Street Parking Structures to increase parking supply.:

Structured parking, while expensive, is a space effective means of providing additional parking. Two locations, one at the West Street Garage, and the other at the former General Electric site, are designated in the plan for structured parking based on their location to existing retail areas and the proposed Key Highway development. If a shared parking facility is proposed as part of development, a full feasibility study must be performed prior to development on either of these sites. Additionally, the owners of the General Electric site should be compensated with increased development rights if a shared parking facility is created at this location.

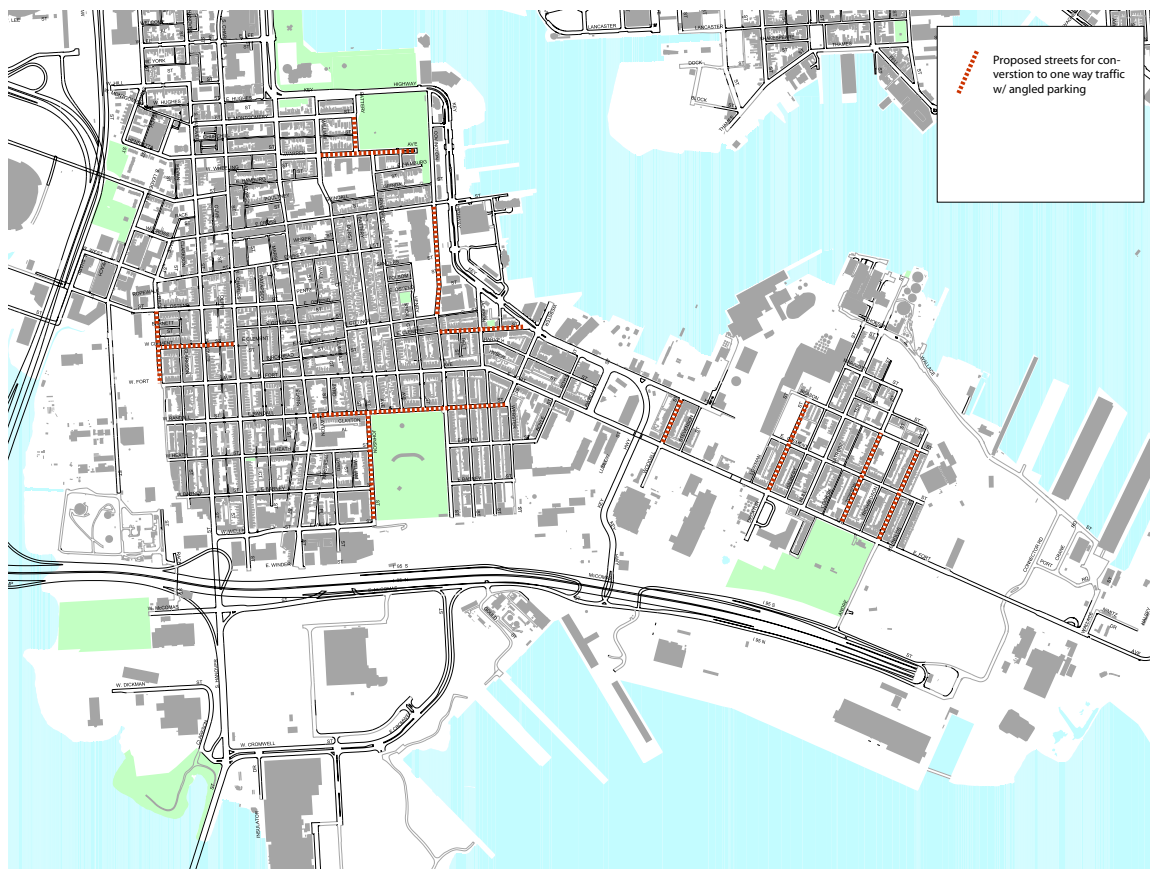


- Explore the development of a Shared Parking & Intermodal Transportation Center at the former General Electric Site. Create a hub for multiple modes of travel to interact:
 - Private vehicle, Park-N-Ride (Carpool), Public Bus/ Shuttle, Taxi stand, Water Taxi, Bicycle and Pedestrian, Carshare Rental, Bicycle locker and rental
 - Easily accessible by all modes of transportation
 - Gateway to downtown and South Baltimore
 - Minimum 600 spaces
 - Opportunity for retail or office space
 - Opportunity for share/transfer parking from waterfront sites to land side to reduce large parking garages on the waterfront
- Add 3rd level to West Street parking garage

Potential configuration for a shared parking/ Intermodal Transportation center at the former General Electric site.



West Street Garage in Federal Hill.



Proposed streets for conversion to one-way angled parking

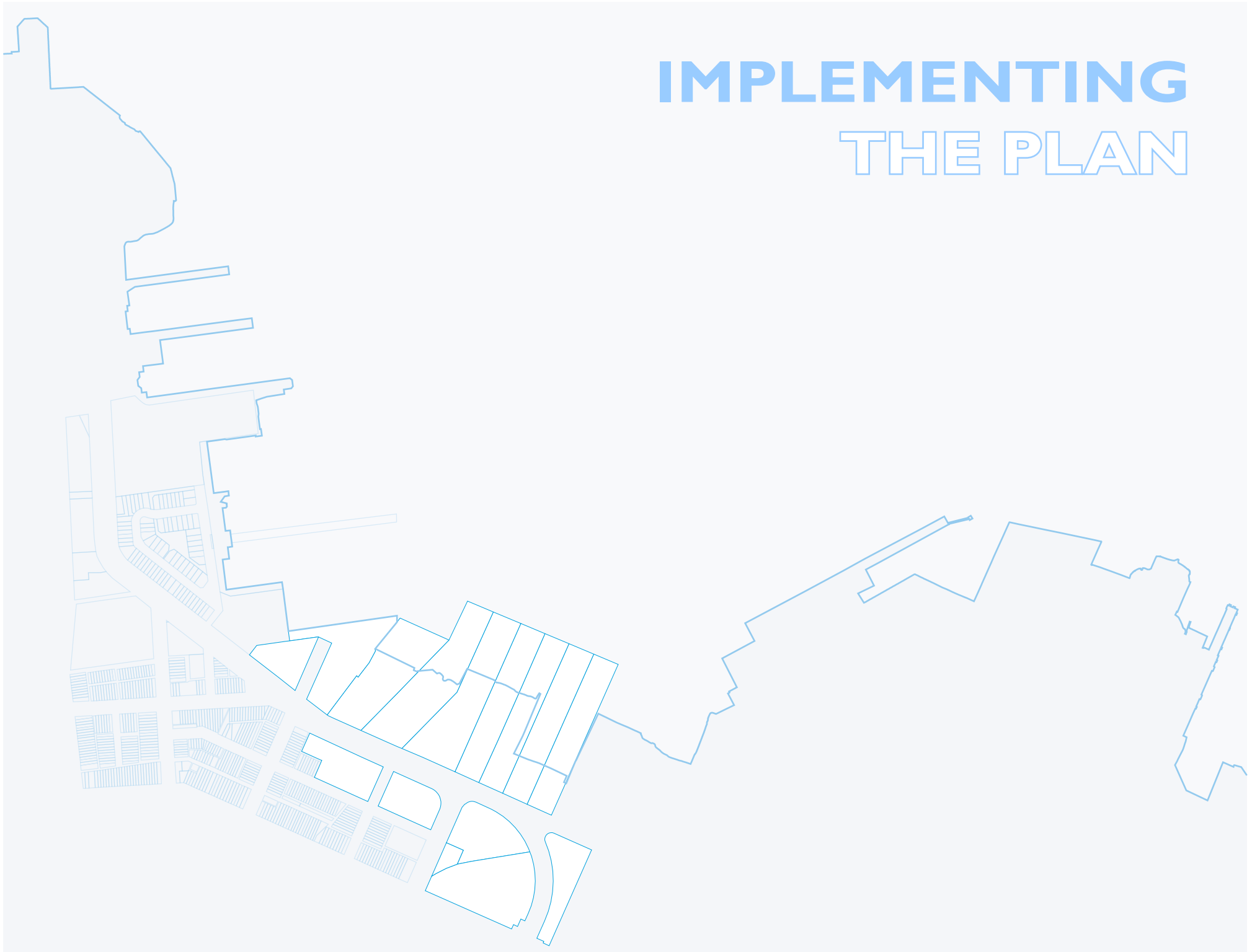
Promote conversion of select streets to one way angled parking to increase neighborhood parking supply:

Converting wide streets to angled parking is a very effective way of increasing neighborhood parking supply. However, there are potential safety concerns of cars backing up into traffic on busy streets as well as aesthetic concerns of the way angled parking looks. The diagram to the left shows streets that have been reviewed and approved by the Baltimore Department of Transportation (BDOT) as potential candidates for angled parking which pose no safety concerns with traffic. Residents are encouraged to follow the petition process established through BDOT to gain the necessary neighborhood support for angled parking on these select blocks.

Install new parking meters on Key highway to increase daytime and evening turnover:

Shorter duration regulations on parking meters increase daytime and evening turnover, which means more people can park in the same spots. This will allow more space for short-term retail users to park without using neighborhood streets.

IMPLEMENTING THE PLAN



Implementation Chart

	Department of Planning	Department of Transportation	Baltimore Development Corporation
Recommendation			
Open Space and Waterfront Access			
Open Space			
• Develop Guidelines to incentivize the creation of waterfront open space in exchange for high rise development	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
• Investigate potential for open space trade of Fire Dept. Repair facility			Management & Operations BDC to explore and execute open space trades
Waterfront Access			
• Extend Promenade: 30' waterfront Promenade with bike path and landscape buffer to new development	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
• View Corridors: Designate Lawrence St. and Webster St. View Corridors	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
• Access Corridors: Designate 40' Access Corridors	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
Streetscape Improvements:			
• Key Highway: Extend Median, Create safe pedestrian Crossings at Jackson & Clement Streets, Narrow travel lanes, Generous tree planting and landscaping, Wide Sidewalks for café seating with Pedestrian "pouch out"		Capital Improvement	
• Lawrence Street: Add median and widen sidewalks		Capital Improvement	

Parking Authority	Community	Other
		Private Developers Construct open space as part of new development
		Private Developers Construct waterfront promenade as part of new development
		Private Developers Construct tree/landscape and sidewalk improvements as part of new development

Building Form + Land Use			
Land Use:			
• Change Zoning from Industrial to B-2-4 to allow for mixed use development	Land Use & Zoning Changes CCB 07-0631: Rezoning Bill for Key Highway		
• Insure preservation for Museum of Industry and Downtown Sailing Center	Land Use & Zoning Changes CCB 07-0631: Rezoning Bill for Key Highway (residential development restrictions on Museum property)		Management & Operations BDC to issue new nominal fee lease for city owned museum property
• Restrict auto-oriented uses	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
• Allow sidewalk cafes and seating	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
• Develop Guidelines to enforce active first floor uses along Key Highway	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
Building Form:			
• Develop Guidelines to enforce 4 - 8 Story boulevard scale buildings on the landside of Key Highway with setbacks towards the neighborhoods	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
• Develop Guidelines to enforce a low height base on the waterside of Key Highway w/ slender towers with generous spacing	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		

Transportation + Parking			
Mass Transit Recommendations:			
• Establish Commuter/ Neighborhood Shuttle		Management & Operations Transportation to work with MTA to establish shuttle route	
• Investigate potential for new commuter rail station/ platform at existing MARC service yard facility behind Southside Shopping Center		Management & Operations Transportation to work with MTA & MDOT to perform feasibility study	
• Reestablish the Water Taxi stop @ Key Highway			Management & Operations Require stop as part contract renegotiation w/ water taxi operator
Pedestrian and Bike Improvements:			
• Develop bike paths on Key Highway, Fort Avenue, and Lawrence Street, and the promenade.		Capital Improvement Implement as part of Bicycle Master plan	
• Increase availability of bike facilities and parking; in new developments, in shared parking facilities, on-street	Land Use & Zoning Changes Key Highway Waterfront URP + PUD (establish guidelines)	Policy Implement as part of Traffic Impact Study Review	
Roadway Improvements:			
• Intersection Improvements: Key Highway @ McComas, Key Highway @ Future Paperboard, McComas at Cromwell		Capital Improvement	
• Traffic Signal Timing along Key Highway		Management & Operations	
• Key Highway Streetscape Traffic Calming Measures		Capital Improvement	
Create Transportation Demand Management Policies		Policy Implement as part of Traffic Impact Study Review	
Parking Requirements for New Development:			
• New Neighborhood Infill Residential: 2 spaces per unit	Project Review		

		MTA Operate and fund shuttle route from 2002 shuttle route study
		MTA perform feasibility study

<ul style="list-style-type: none"> • Shared Parking Requirements for New Mixed-Use Development 	Land Use & Zoning Changes Key Highway Waterfront URP + PUD		
Off-Street Parking Strategies:			
<ul style="list-style-type: none"> • Develop & Investigate feasibility for Shared Parking Facilities with multi-modal access and services (i.e. shuttles, car shares, etc.) 	Land Use & Zoning Changes Key Highway Waterfront URP + PUD (establish guidelines)		
<ul style="list-style-type: none"> • Investigate feasibility for a 3rd level to West Street parking garage 			
On-Street Parking Strategies:			
<ul style="list-style-type: none"> • Create additional residential permit parking zones in to protect against potential parking overflow from new retail and office development 			
<ul style="list-style-type: none"> • Investigate a stepped parking permit fee which has higher fees for each additional car per HH 			
<ul style="list-style-type: none"> • Replace parking meters along Key Highway to provide shorter duration and increase daytime and evening turnover 		Management & Operations	
<ul style="list-style-type: none"> • Install angled parking on selected streets 		Management & Operations	

Capital Improvement		
Capital Improvement		
	Policy Riverside and Locust Point Communities shall decide if Permit Parking is a feasible option	
	Policy Peninsula Parking Permit Board should further investigate feasibility	



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