

# INTRODUCTION TO THE 3-STAGE PLAN

STAGE 1: WATERFRONT AMENITY

STAGE 2: TRANSPORTATION IMPROVEMENTS

STAGE 3: ECONOMIC AND INSTITUTIONAL DEVELOPMENT



WEST HARLEM



A major goal of the Master Plan is to develop a critical path to the economic development of West Harlem while enhancing the character of the neighborhood and fulfilling the visions of the community. This is a daunting task in the present fiscal context, but one that can be accomplished with the proper coordination, cooperation and timing.

The key is to begin with the doable and seek to build momentum towards success. The Master Plan proposes a 3-stage process that begins with immediate improvements on the waterfront and grows over time to encompass the full economic development of the neighborhood.

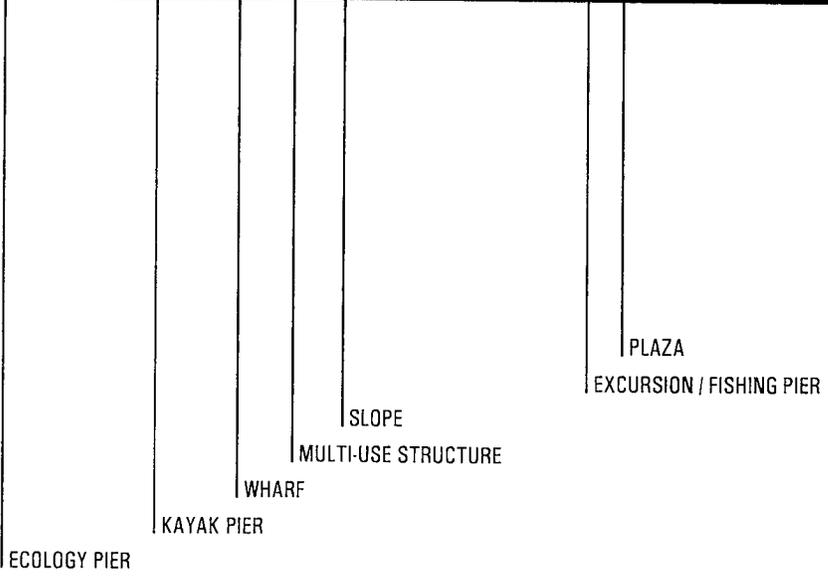
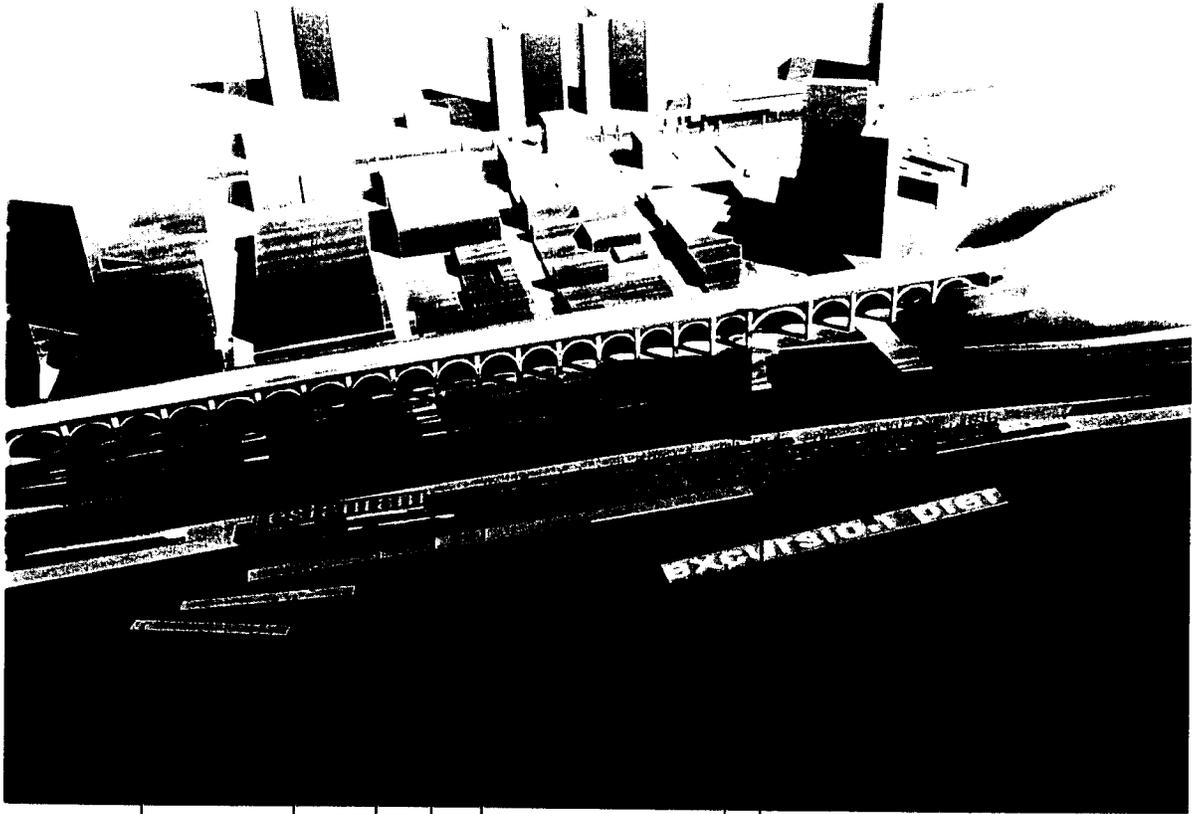
The 3-Stage Plan:

- STAGE 1 Waterfront Amenity:  
Improving the Water's Edge
- STAGE 2 Transportation Improvements:  
Creating and Improving the Means to Get There
- STAGE 3 Economic and Institutional Development:  
Supporting the Community and Creating Jobs

The goal of Stage 1 is to make the waterfront a destination. It transforms a city-owned parking lot at the river's edge into a lovely and accessible waterfront amenity that will attract the community and begin a cycle of private investment.

The goal of Stage 2 is to capitalize on the neighborhood's geographical location by improving its transportation connections to the region while at the same time instituting a streetscape plan to beautify and improve the local streets.

The goal of Stage 3 is to build on the success of a new waterfront amenity and new transportation connections and begin a process of neighborhood economic development with techniques of zoning and long-term development management.



THIS PAGE:  
AERIAL RENDERING OF  
WATERFRONT

# STAGE 1: WATERFRONT AMENITY

The goal of Stage 1 is to make the waterfront a destination. It transforms a city-owned parking lot at the water's edge into a lovely and accessible waterfront amenity that will attract the community, better connect the area to greater Manhattan, and help bring tourism from 125th Street.

This plan is based on extensive community involvement from the Working Committee and incorporates many of the features first put forward by the community in the "Vision Plan," a 1999 document prepared by WEACTION (West Harlem Environmental Action, Inc) and Community Board 9.

The plan involves landscape improvements to the area along the water, new piers into the Hudson, and a small, multi-purpose building that will help to maintain the new open space, create activity on the waterfront and attract investment.

Plans are currently at the schematic design level and have been reviewed by professional cost-estimators. The total estimated project cost for Stage 1: Waterfront Amenity is approximately \$16 million. This does not include the cost of construction of the multi-purpose building, which is envisioned to be developed by a private developer or not-for-profit institution.

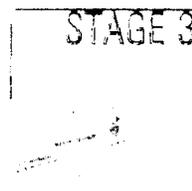
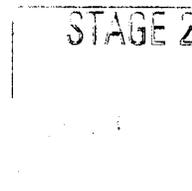
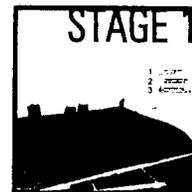
The commitment of public funds in Stage 1 will have an immediate impact on the redevelopment of this area. In today's fiscal environment, it is critical for a project to aid economic development in order to balance public funding. Therefore, the fundamental public policy issue is to link Stage 1 into a critical path process that will ultimately yield substantial economic development.

## CRITICAL PATH PROCESS

The critical path from vision to reality depends upon public-private partnerships. The Master Plan proposes a three-stage process to tie the waterfront amenity into the economic development of the neighborhood. Each stage represents increasingly larger investment. All are conceived to work in character with the neighborhood and to amplify its physical, institutional and demographic advantages.

The integration of Stage 1 into a larger process that leads to overall economic development is a strong rationale to seek public funding and secure private investment, and increases the chances of implementation.

To make the waterfront a destination, it is essential to improve the number and quality of the connections to it. Improvements to the transportation and local streetscapes are discussed in Stage 2. Economic development and zoning changes that would contribute to making the area a regional attraction are discussed in Stage 3.

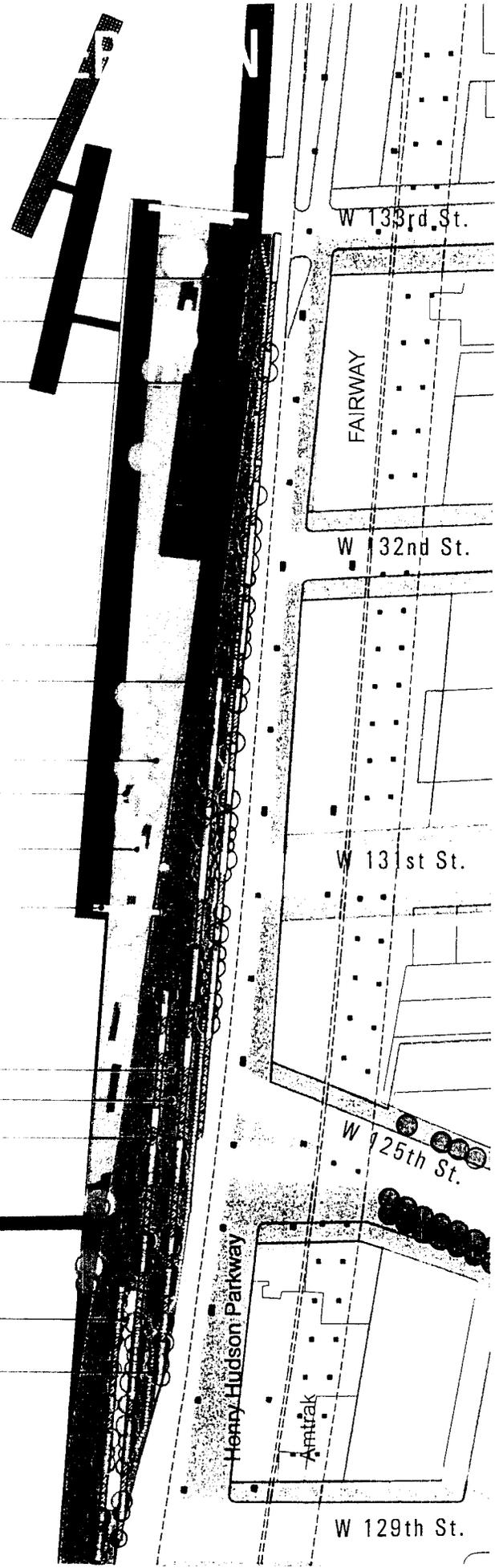


**WEST HARLEM**



New York City  
Economic Development  
Corporation

- ECOLOGY PIER
- COVERED MARKET SQUARE
- KAYAKING PIER
- MULTI-USE STRUCTURE
- RECREATION
- RETAIL
- NOT FOR PROFIT
- CULTURAL
- FOOD
- EDUCATIONAL
- WHARF
- BOARDWALK - BUILDING ACCESS
- SLOPE
- PLANT BEDS
- STEPS / BENCHES  
DOWN TO WATER
- ADA RAMP
- PLAZA
- GATHERING PLACE
- URBAN STREAMS
- PIERS
- EXCURSION/  
FERRY PIER
- PLAZA NATURE AREA
- BIKE PATH
- FISHING PIER

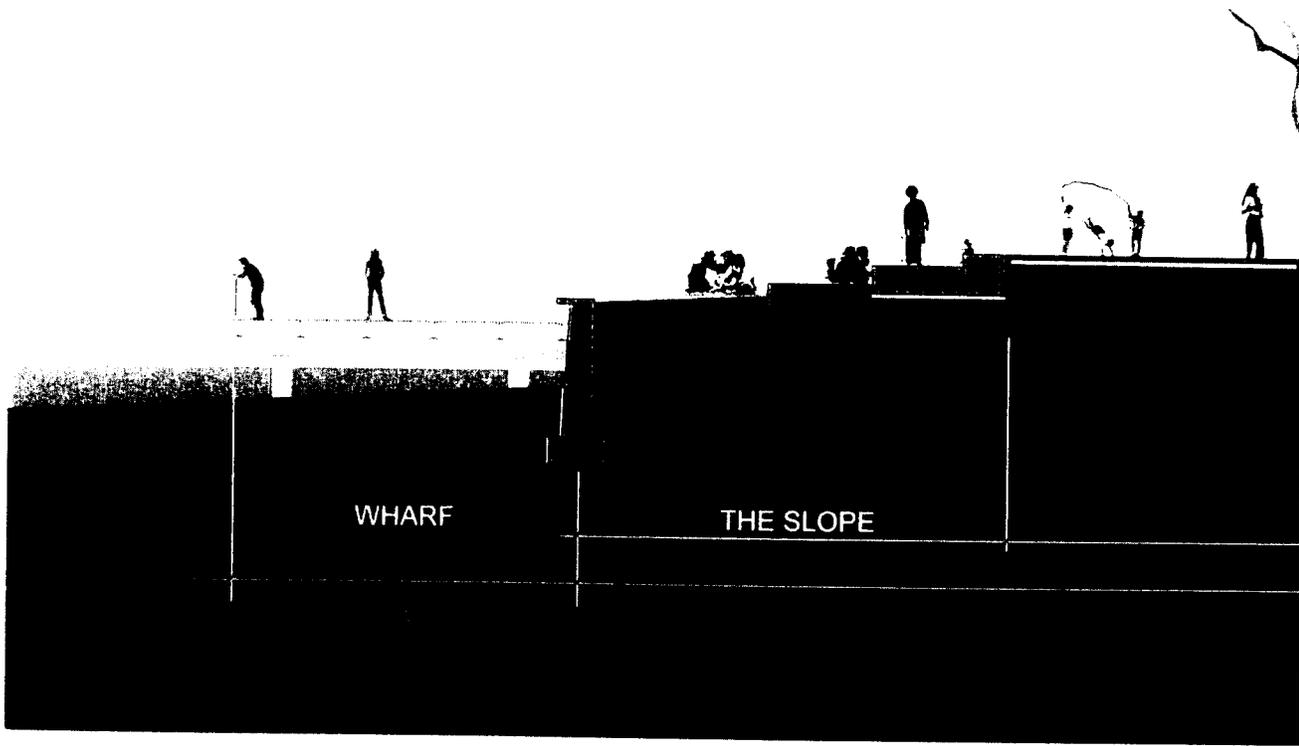


THIS PAGE:  
WATERFRONT PLAN

NEXT PAGE LEFT:  
SHORT TERM TRANS-  
PORTATION IMPROVE-  
MENTS

NEXT PAGE RIGHT:  
VIEW OF URBAN STREAM  
LOOKING NORTH

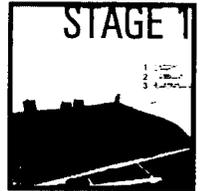
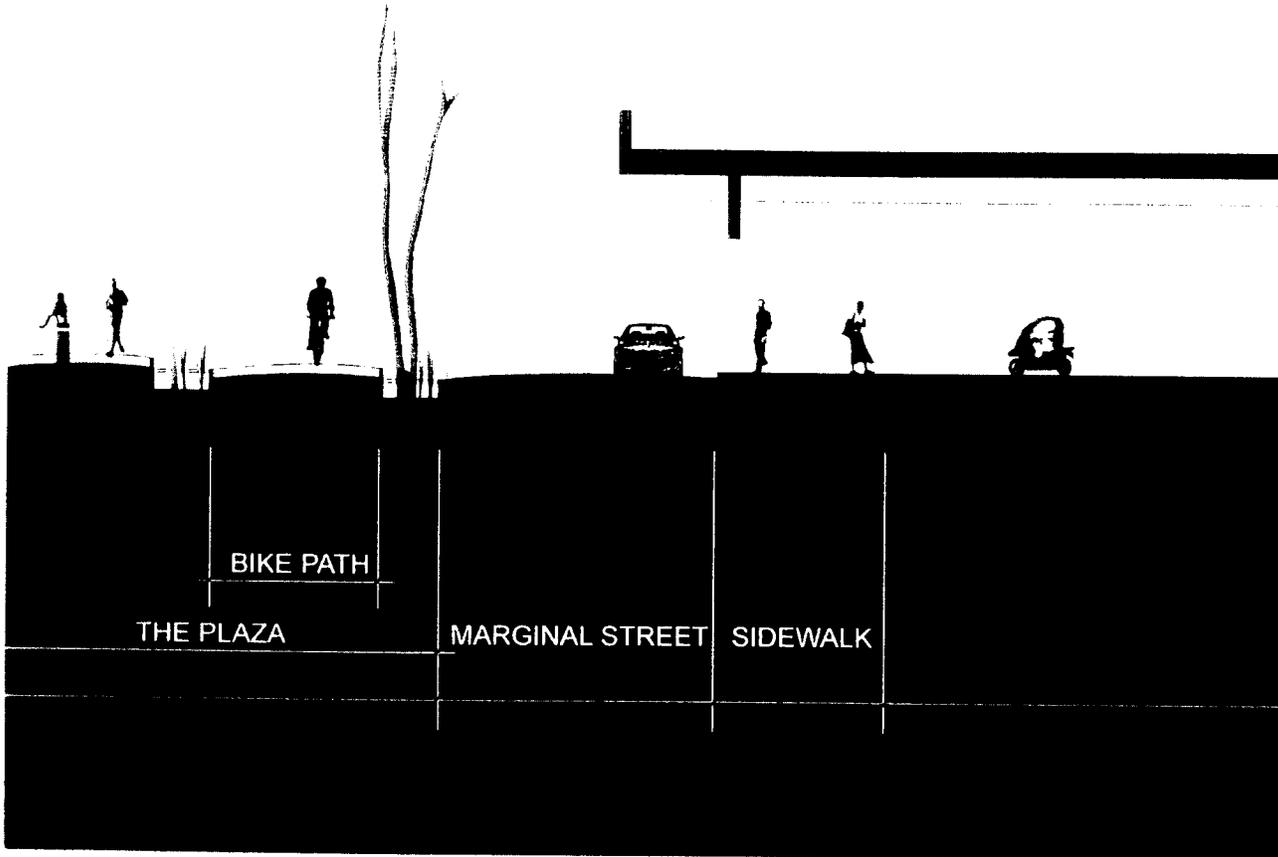




WATERFRONT SECTION  
THROUGH WHARF, SLOPE,  
PLAZA, MARGINAL WAY  
AND HENRY HUDSON  
PARKWAY.

# RECOMMENDATIONS

## STAGE 1: WATERFRONT AMENITY



## WEST HARLEM



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Corporation

The urban stream system comes together at the center of the plaza where 125th Street meets the waterfront. Here, the streams "disappear" under metal grating and a large gathering space is created.

At the southern end of the plaza, where the streams are most dense, a place of discovery is created. Artist designed bollards protect nature discovery areas. Locally designed stools and tables create places to sit between the streams. Lights and fog are part of the streams and water-play area. The emphasis is on ecological discovery, revealing the natural movement of water from the sky to the sea, across the urban landscape.

*The Slope:* The Slope is the green section of the waterfront design that angles down from the Plaza towards the water. It includes a lawn, specimen shade trees, perennial plantings and seating areas. Ramps and steps lead down to the water at the intersection with major view corridors.

Among possibilities for the specimen shade trees are American Yellowwood and Goldenrain tree. Placed near the seating areas, shade trees with large canopies will create an island of repose and will make the slope a particularly attractive space in the summertime. The perennial plantings such as clumps of iris and grasses will keep the area visually lively in all seasons, and the lawn will be made of a hardy turf grass. The Slope should be provided with irrigation for efficient and regular watering. Grey water from the amenity building could be stored and reused for irrigation.

One important function of the Slope is to bring people to the water's edge. Lowering the bulkhead approximately two feet would bring people closer to the water. For most of its length, the Slope leads to the Wharf, a pier that extends over the water. It is part of the Piers described in the next section.

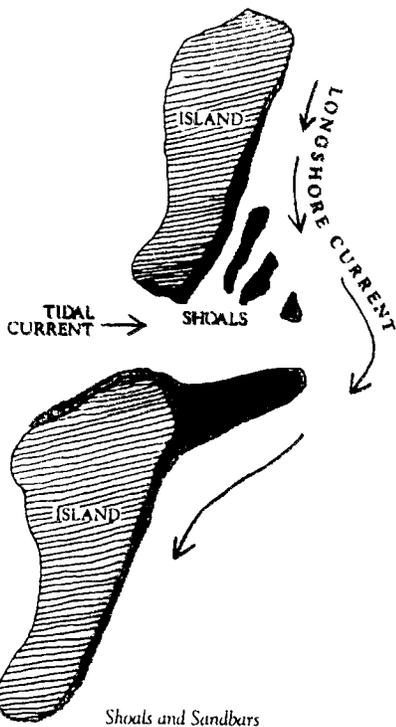
### PIERS

The pier design goals are to accommodate the variety of uses requested by the community, including ferry and excursion boats, fishing, kayaking and ecological study. The design goals must also accommodate the pier approval process, which involves the US Army Corps of Engineers, the New York State Department of State, the New York State Department of Environmental Conservation, and various New York City agencies.

In researching possible designs, government agencies indicated the following: first, all pier construction would be considered new pier construction with no consideration given to the presence of previously existing piers; second, the smaller piers with less shadow are better; and third, water related uses are desirable on all piers.

With these considerations in mind, a variety of ecologically minded piers have been designed for the community desired uses. Initial feedback from the regulating government agencies has been positive. Historically, of course, the study area waterfront supported one of the largest pier complexes in Manhattan. Historic documentation exists showing several large piers with varying uses, from the main ferry terminal for upper Manhattan to a very large amusement pier serving the region. Within the technical constraints of modern-day pier building, it is important to revive the vitality that a multiplicity of uses would bring to the Harlem waterfront.

Each pier's design is adapted to a specific role, addressing the vitality and diversity of pier uses. One characteristic that all the piers share is a new natural model that works with the riverbed and the tides. Instead of the traditional perpendicular design, a design model has been researched and adopted based on the forms of shoals and sandbars.



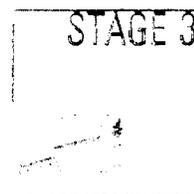
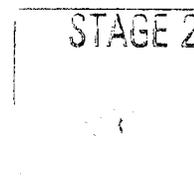
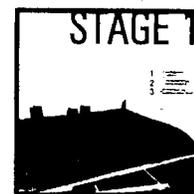
THIS PAGE TOP:  
VIEW OF WHARF LOOKING  
SOUTH.

THIS PAGE BOTTOM:  
SANDBAR DIAGRAM

NEXT PAGE:  
VIEW FROM EXCURSION  
PIER LOOKING NORTH  
EAST.

# RECOMMENDATIONS

## STAGE 1: WATERFRONT AMENITY



## WEST HARLEM



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The piers are all angled slightly, some more than others, working with the underwater contours of the land. The pier shapes take into consideration river currents, wave action and water depths. The result is a more ecologically determined set of piers that should prove functional while still in harmony with the complex water patterns of the area.

*Wharf:* While it is attached along its entire length to the Slope, the Wharf is a pier, to be built on pilings over the water. The design goal of the Wharf is to get people nearer to the water as they approach the water from planted areas of the Slope. The Wharf deck is constructed of metal grating that allow the water to be seen and heard underneath. In the summertime, this also allows breezes cooled by the water to come up from below to make a more comfortable environment at the water's edge.

*Excursion Pier:* The Excursion Pier, like the Wharf, is nearly parallel to the waterfront. However, it is placed well out in the water, following the 10' depth line of the riverbed and connected back to the Plaza by walkways. By placing the pier at this depth, excursion and ferry boats with substantial drafts can reach the Excursion Pier without the requirement of dredging.

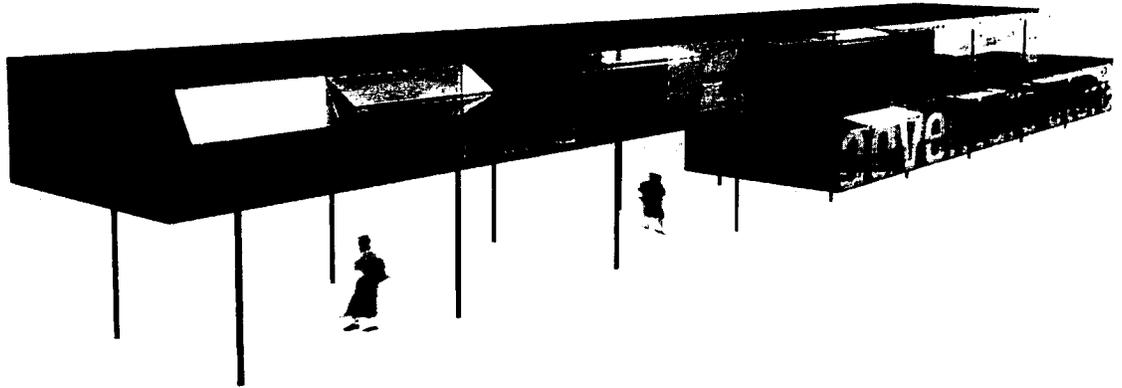
Another benefit of placing the pier at this depth is that it creates a sheltered area of the river between it and the waterfront, allowing a pleasant place for beginners to practice kayaking and other small boating skills, while giving a sense of "floating" to those who wish to stroll along its length. The pier surface is ironwood decking, with pole mounted light fixtures and a wood-topped guard rail running along its length (not shown in artist's rendering).

*Fishing Pier:* Taking advantage of the deeper water, a Fishing Pier is attached to the southern end of the Excursion Pier. Situated at the far end of all the piers, the Fishing Pier will have a spectacular view and be out of the path of strollers.

*Ecology Pier:* The design goal of the ecology pier is to bring visitors into contact with the various aspects of the river ecosystem. The ecology pier would be closer to the water with openings to touch the water and grates providing glimpses of the water, waves, and the aquatic life below.

*Kayaking or Small Boating Pier:* The kayaking pier is designed to rise and fall with the level of the water. Hinged, galvanized gangways, with a non-slip finish, slope to the water's surface to facilitate launching and removal of kayaks and other small non-motorized boats. The pier might be also used to launch boats from a proposed new boat house at West 134th Street.

The exact location and configuration of the piers will be determined in the next phase of design development.



#### BUILDING

A mixed-use building is proposed as an additional attraction to encourage activity on the waterfront. It would be located at the northern end of the Plaza, across Marginal Street from Fairway. It is recommended that the building be developed by the private sector or by a not-for-profit organization. Revenue from the building would finance the development costs, and could provide a revenue stream for maintenance of the open space improvements.

The design of the building is geared to accomplish multiple programmatic requirements, to take up as little of the land as possible, and to preserve and enhance views.

The building contains 9,000 square feet on two stories. In order to have a minimum footprint, the first story contains only 3,000 square feet. The remainder of the building is on the elevated second-story, leaving the ground plane open, and providing great views from the windows and terraces above.

The building is designed to be ecologically sensitive and energy efficient with a LEEDS rating of silver or above (Leadership in Energy and Environmental Design is the building rating system approved by the US Green Building Council). The construction is light, with movable wooden screens and awnings that can be adjusted to take advantage of shading and breezes. Natural ventilation is maximized. Photovoltaic panels supplement the electrical supply for the building, and rainwater runoff is collected and recycled into the watering system.

On the ground floor, the building could accommodate an adventure store with bike and kayak rentals, a community space and the circulation and mechanical core of the building. The floor above might be a

café & restaurant with an outdoor seating terrace overlooking the water and flexible interior space for dining. If an institution or a not-for-profit organization develops the building, other possibilities for uses include a visitor's, ecological or educational center. Gallery space or entertainment uses might also be viable and complement the area.

On the exterior, the building provides several amenities. The south wall can be used for projection of art, movies and community messages, making the lawn a viewing and picnic area on warm weather nights. On the north end of the building, the elevated second story provides shelter for a market adjacent to Marginal Street and across from Fairway. An ironwood boardwalk on the east side of the building raises pedestrians to the level of the buildings' first floor, providing views through the building of waterfront activities.

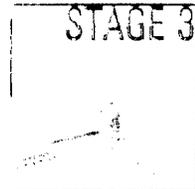
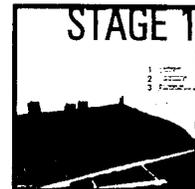
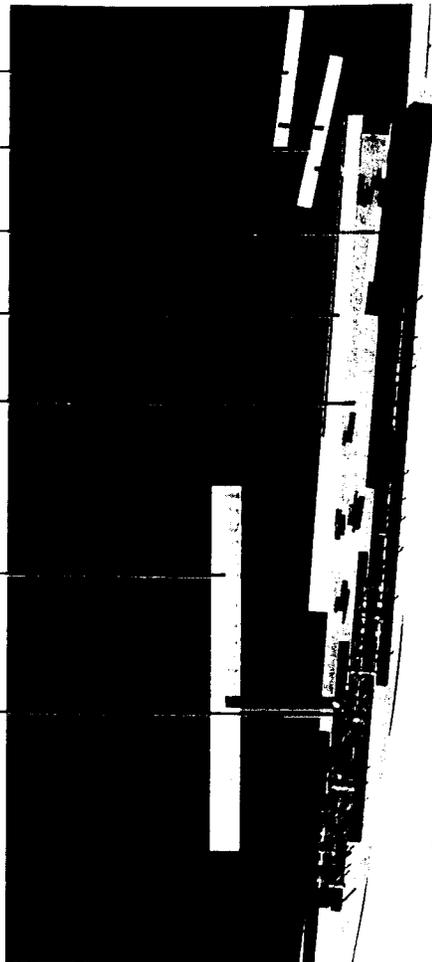
THIS PAGE:  
AERIAL PERSPECTIVE OF  
THE BUILDING LOOKING  
SOUTHEAST

NEXT PAGE:  
WATERFRONT AMENITY  
& PRIVATE INVESTMENT

# RECOMMENDATIONS

## STAGE 1: WATERFRONT AMENITY

- ECOLOGY PIER —————  
\$0.8 MILLION
- KAYAK PIER —————  
\$0.9 MILLION
- BUILDING —————  
\$4.5 MILLION (PRIVATE INVESTMENT)
- WHARF —————  
\$4.0 MILLION
- PHASE 1 SITE / LANDSCAPE —————  
\$4.7 MILLION
- EXCURSION / FISHING PIER —————  
\$3.0 MILLION
- PHASE 2 SITE / LANDSCAPE —————  
\$2.6 MILLION
- TOTAL PUBLIC INVESTMENT**  
\$16 MILLION



### IMPLEMENTATION

#### ZONING CHANGES: STAGE 1

Stage 1 of the Master Plan envisions open space, a restaurant, excursion boats and all types of waterborne activities on rebuilt piers. Current zoning prevents this from becoming a reality. Most of the waterfront is zoned M2-3, which does not allow for a park.

A park on the waterfront is a key component of the Master Plan. One solution for the waterfront is to rezone it M1-1. This would allow for a 1.0 FAR and a variety of uses including a restaurant, pleasure boats, and open space. All of the foreseen development for the waterfront would be allowed as-of-right under a M1-1 zoning designation.

#### SCHEDULE

##### STAGE 1 - Waterfront Amenity

Public Investment: 3 piers, bikeway, esplanade, seating, landscaping

- Design: 6 months
- Bid Period: 3 months
- Construction: 9 months

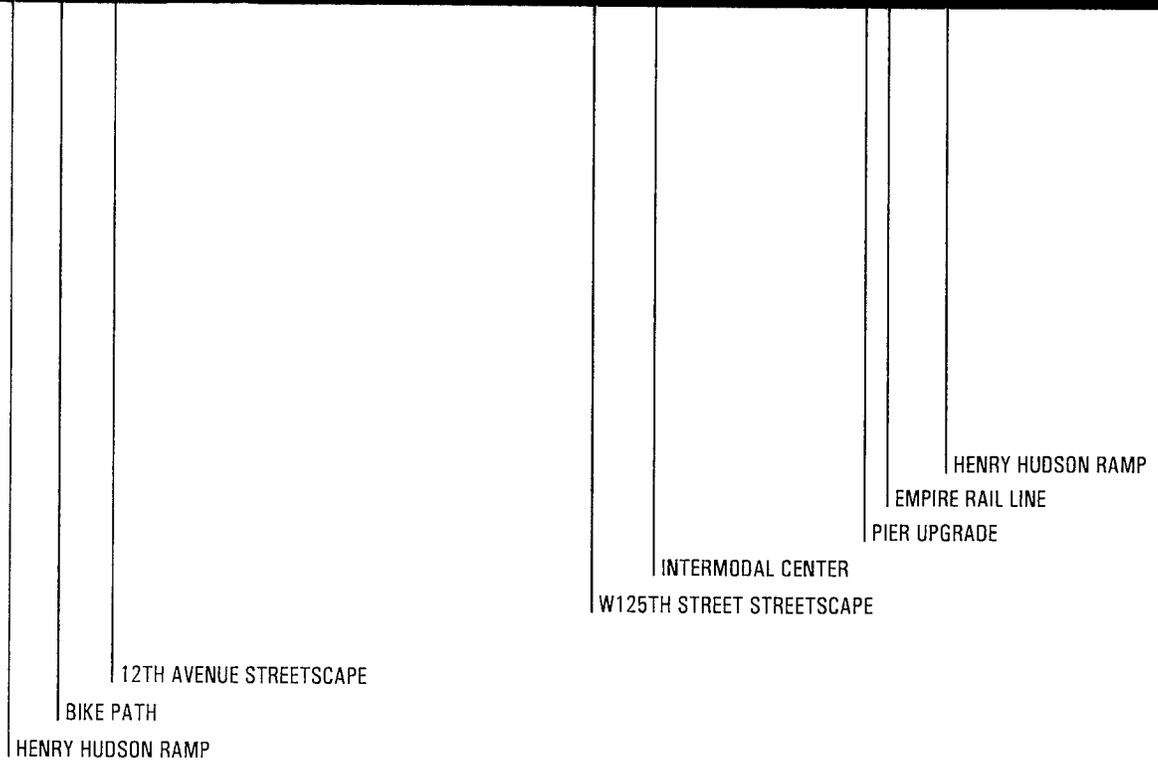
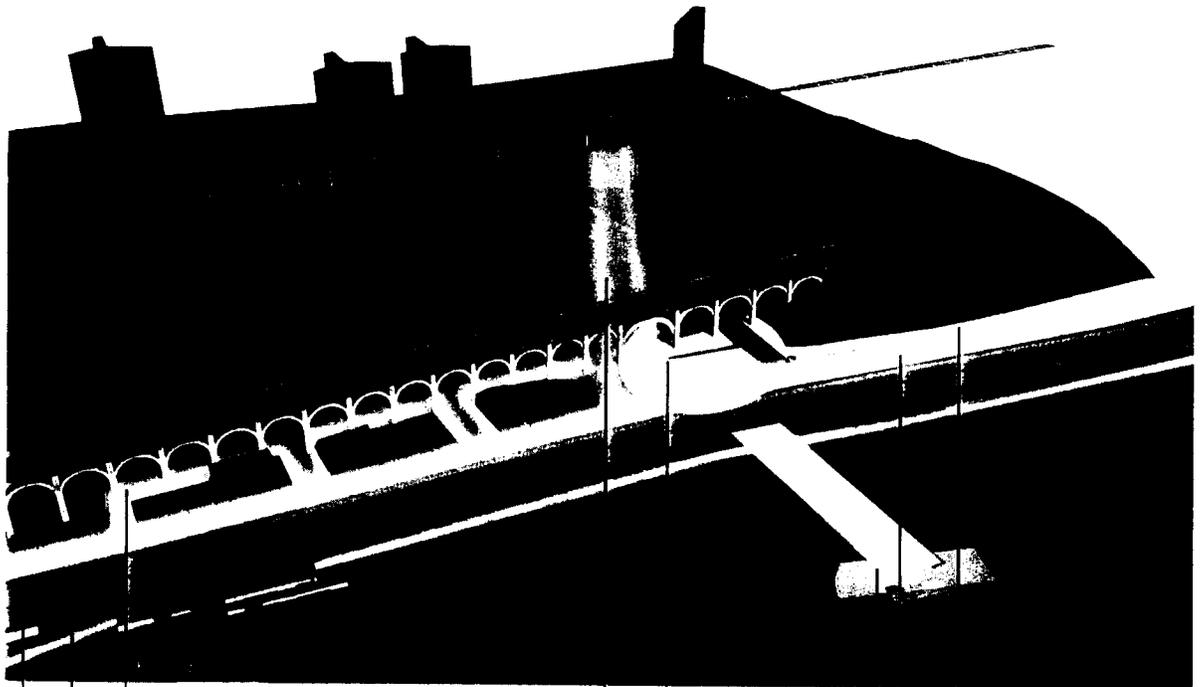
##### Private Investment

- EDC to determine appropriate mechanism for development of building.
- EDC to release RFP for use of Excursion Boat Pier

### WEST HARLEM



- 1 WATERFRONT AMENITY
- 2 TRANSPORTATION IMPROVEMENTS
- 3 ECONOMIC AND INSTITUTIONAL DEVELOPE



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STAGE 2 DIAGRAM INDICATING LOCATION OF MAJOR ELEMENTS

# STAGE 2: TRANSPORTATION IMPROVEMENTS

The goal of stage 2 is to capitalize on the neighborhood's geographic location by improving its transportation connections to the region. In essence, it seeks to give the neighborhood a "regional address" through improved intermodal connections. At the same time a streetscape plan is instituted to beautify and improve the local streets, creating a more hospitable connection to the waterfront.

Building on the momentum and commitment of Stage 1, improvements can be made to the streets and transportation networks, connecting the area to the city and region. New transportation facilities, including ferry and transit stops, would increase the accessibility of the area. Rerouting of high-speed traffic, and improving the quality and character of the street with pedestrian traffic in mind, would reconnect the waterfront with West Harlem.

Improving public access and transportation options are critical to attracting private and institutional investment which is the focus of Stage 3. Close coordination and cooperation of government agencies will be a major goal and challenge.

## TRANSPORTATION ELEMENTS

No matter how successful in appearance and character the area might be, it must have a regional transportation address. The elements of transportation necessary to support a regional attraction and lay the foundation for the full economic development of the neighborhood are

- Intermodal center
- Off-street parking
- Henry Hudson ramp reconfiguration
- Streetscape

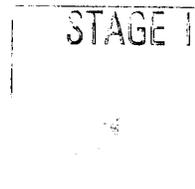
Transportation improvements and their funding often require the cooperation of the City, State and Federal Governments in some combination. Therefore, the underlying public policy issue is: *political consensus among the City, State and Federal governments.*

Because the project will require decisions on a major intermodal transportation center (Federal and State funding primarily) and zoning amendments (City and community level action), all levels of government must work together.

### INTERMODAL CENTER

The key to making West Harlem a regional attraction is to ensure its regional transportation needs are addressed. The study by the MTA which may lead to the location of a new Metro-North station at 125th Street along Amtrak's Empire Corridor Rail line, in the heart of the study area, supports this.

Metro-North Railroad has initiated a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to examine the potential social, economic and environmental impacts of connecting Metro-North's Harlem, Hudson and New Haven Line services to Penn Station,



WEST HARLEM



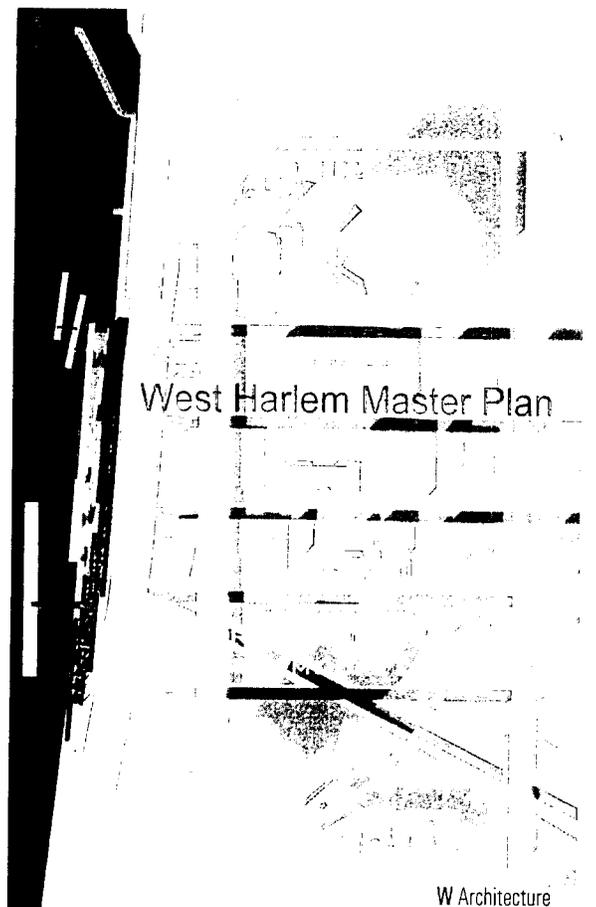


THIS PAGE UPPER LEFT:  
PHOTO OF BX15 BUS ON  
12TH AVENUE

THIS PAGE LEFT:  
VIEW OF APPROXIMATE  
SITE OF INTERMODAL CENTER

THIS PAGE RIGHT:  
POSSIBLE LOCATION FOR  
INTERMODAL CENTER

NEXT PAGE LEFT:  
VIEW OF VIADUCT AT 12TH  
AVENUE - THE FUTURE  
HEART OF THE AREA.



New York. Metro-North's Harlem, Hudson and New Haven Lines currently terminate at Grand Central Terminal on the East Side of Manhattan. There are existing track connections from Metro-North's New Haven and Hudson Lines to Penn Station on the West Side of Manhattan which could be used to provide access for Metro-North trains into Penn Station. The study will examine the potential to construct and provide service to intermediate station(s) on the Hudson Line on the West Side of Manhattan. The Penn Station Access MIS/DEIS will include analysis of alternatives, environmental documentation, and proactive public outreach and interagency coordination. As of November 2001, Metro-North had decided to recommend two station locations for further study: 59th Street and the 125th Street location in the study area.

In addition to advancing the 125th Street location, the new stop should have connections to adjacent transportation nodes, including ferry landings and bus service. This new intermodal station would serve several modes of transportation at one location. Not only would it provide a platform to access Metro-North trains on the Empire Corridor on their way to Penn Station and points north, but it could also access ferry boats from the adjacent Excursion Pier and buses from 125th Street. Other considerations might include integrating structured parking for cars, facilities for bicycles from the 125th Street and Cherry Walk bike paths, and pedestrians, including subway riders transferring from the nearby Broadway IRT station stop. An intermodal station would connect the study area into the regional transportation network.

Intermodal stations, by virtue of their superb accessibility, frequently support private sector activity, such as retail and lodging. The financing and development of an intermodal station becomes a public-private

venture of substantial complexity but tremendous potential. Examples include the renovation of Grand Central Terminal, the planned Pennsylvania Station terminal in the Farley Building and the new Staten Island Ferry Terminals. Intermodal stations are the jewels in the region's crown of transportation.

#### OFF-STREET PARKING

While the intermodal center could provide perhaps 250 parking spaces, it is important for the long-term viability of the neighborhood to maximize the off-street parking available. This parking should not be on the waterfront. Structured off-street parking should be upland.

Both this plan and the Harlem Vision Plan recommend providing off-street parking. Adequate off street parking is also a key factor in the economic growth of the area (discussed further in Stage 3).

One existing housing development ingeniously uses the height difference of Riverside Drive over 12th Avenue to provide direct access to its own multi-level parking garage from both roads. A new parking garage could also provide pedestrian access vertically from 12th Avenue to Riverside Drive. Optimally, parking for the intermodal center would be located in the study area to the south and the remainder of parking to the north, bracketing access to the center.

#### HENRY HUDSON RAMPS

After conducting extensive traffic studies which analyzed ways to improve traffic flow and also examined the feasibility of closing Marginal Street, redirecting local traffic was found to be a low-cost, short-term fix for Henry Hudson Parkway access and to calm traffic along the waterfront. To substantially increase safety and separate high-speed from local traffic, the long-term solution requires the

# RECOMMENDATIONS

## STAGE 2: TRANSPORTATION IMPROVEMENTS



reconfiguration of the on and off-ramps. Without these substantial, longer-term changes to the ramps by New York State DOT, complete closure of Marginal Street is not feasible. There are short-term measures, however, to improve the nature of Marginal Street, such as narrowing it and using special pavers.

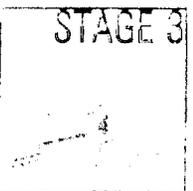
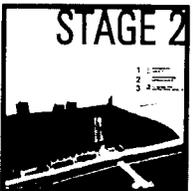
In the long term, reconfiguring the parkway ramps and access to and from them would separate local and through traffic. This would ease congestion in the area and Marginal Street could become a slower-moving, park-like drive.

The relocation and re-alignment of the on and off-ramps of the Henry Hudson Parkway to remove high-speed traffic from the local traffic patterns requires a policy decision by the New York State Department of Transportation (NYS-DOT) to allocate appropriate highway funds to that purpose. This matter is under the control of the NYS-DOT Commissioner as a line officer of the Governor. However, the allocation of funds must be approved by NYMTC (the New York Metropolitan Transportation Council) as part of the STIP (State Transportation Improvement Program) and therefore the input of NYC Planning Department and the Federal Highway Administration is required.

As part of rerouting traffic, both short-term and long term recommendations have been made to make traffic intersections in the area safer for both pedestrians and motorists. Although the overall level of service is good, many intersections in the study area are not signalized, both signalized and unsignalized intersections fail to meet level of service standards at peak travel times, and the intersection at 125th Street and Broadway is considered an accident prone location.

The specific reconfiguration will require further study along these lines:

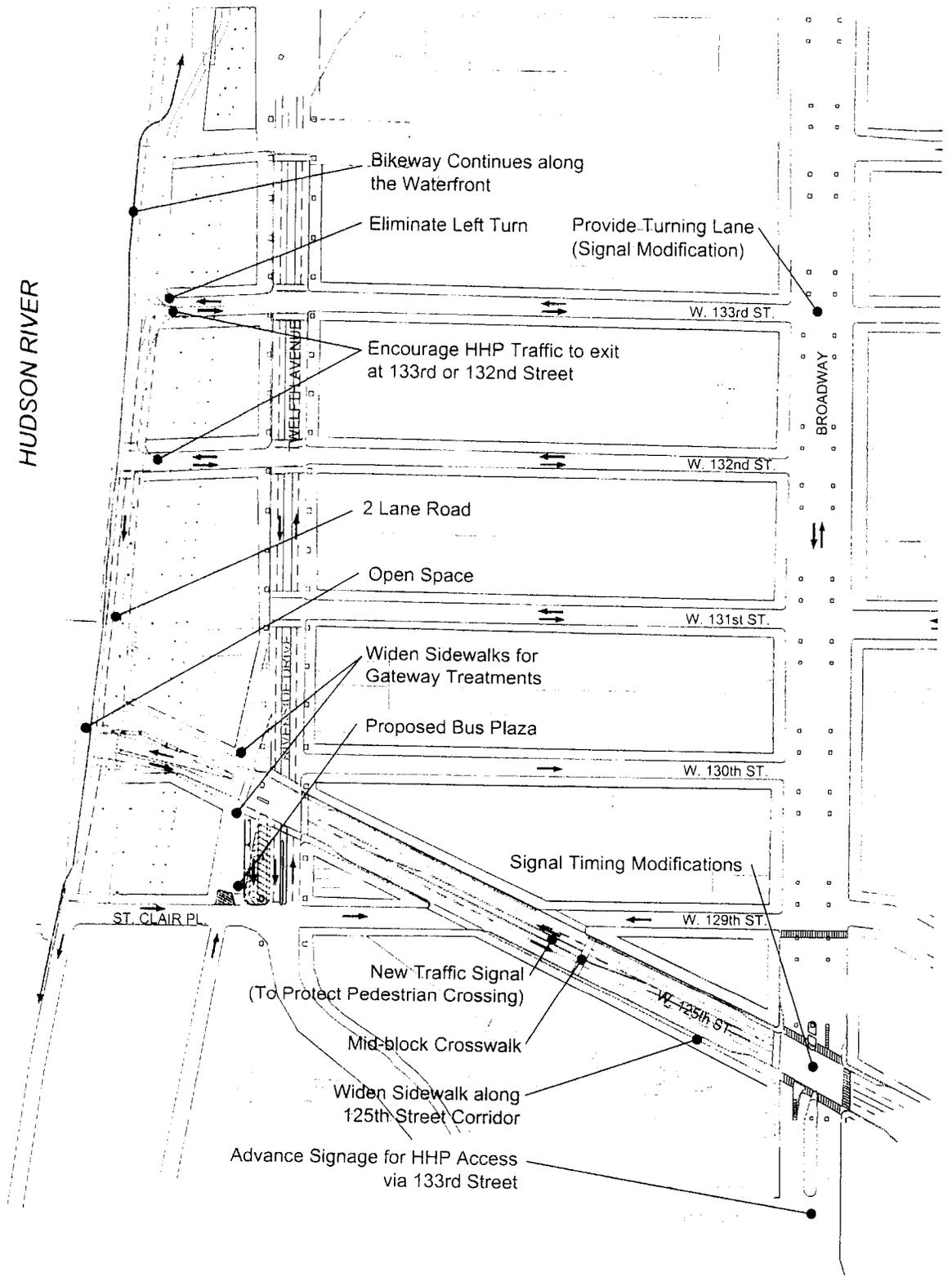
- Reconfigure the northbound Henry Hudson Parkway on-ramp to West 134th Street, one block north of the existing ramp. Currently, West 134th Street is an unused city street blocked off by fencing.
- Re-design and re-sign through streets so that motorists exiting the parkway at this location would be directed to use St. Clair Place onto 125th Street. Motorists entering the parkway would take 125th Street to 12th Avenue onto St. Clair Place. Marginal Street and the southern portion of the study area would be relieved of any parkway-bound motorists, and be limited to local vehicles.
- Narrow Marginal Street to a one-lane southbound, low speed road with parking allowed on one-side. Subject to further review by Fairway, we recommend restricting use of Marginal Street between W133rd and W132nd Streets to loading and unloading only.



### WEST HARLEM



HUDSON RIVER

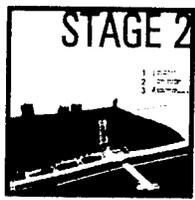
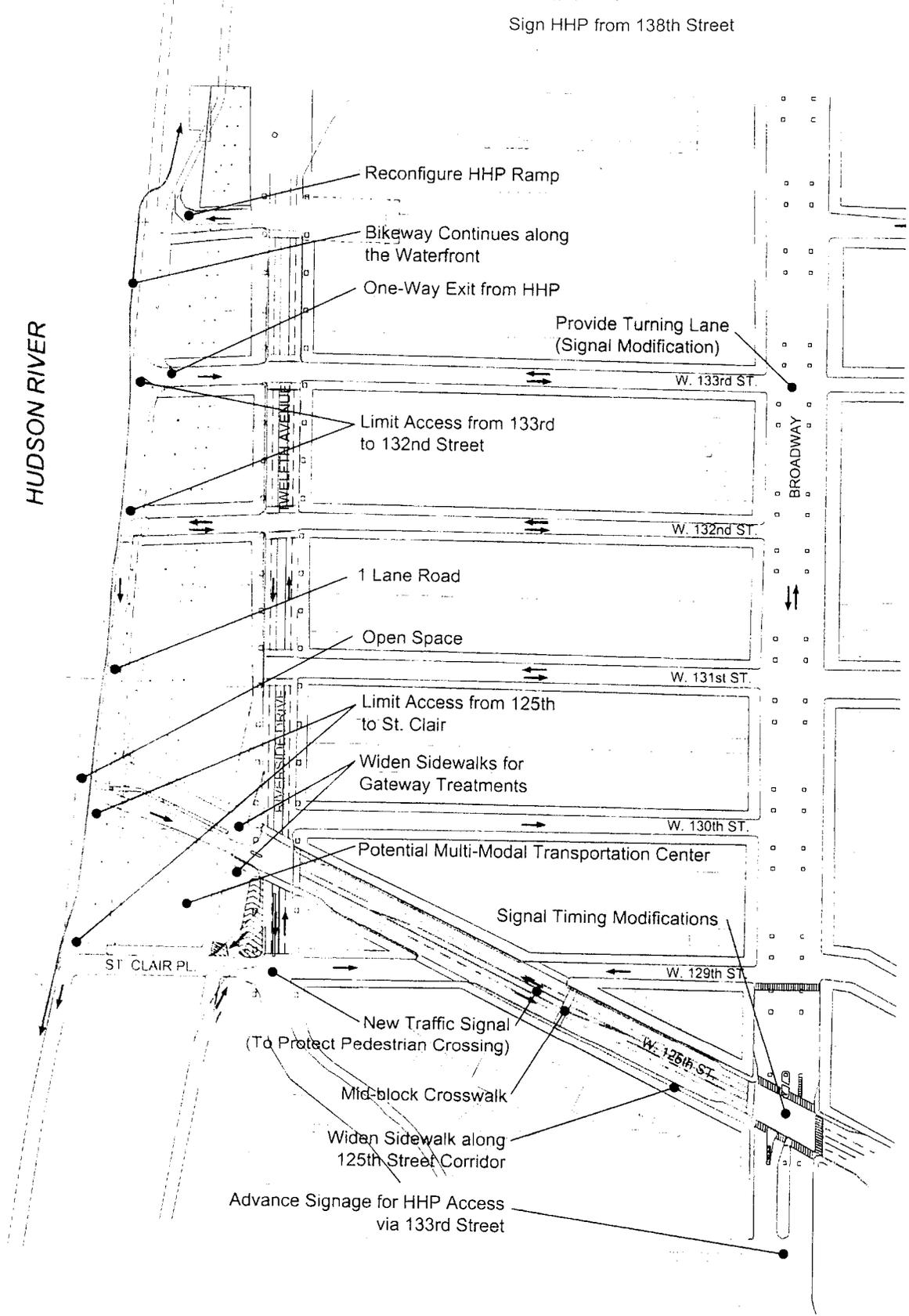


THIS PAGE:  
 THE SHORT-TERM PLAN  
 PROVIDES RECOMMENDA-  
 TIONS THAT CAN BE  
 IMPLEMENTED WITHIN 1-3  
 YEARS.

NEXT PAGE:  
 THESE RECOMMENDA-  
 TIONS WILL SET THE  
 STAGE FOR THE LONG-  
 TERM PLAN, WHICH WOULD  
 REQUIRE MAJOR CAPITAL  
 IMPROVEMENTS AND A  
 MINIMUM OF TEN YEARS  
 TO IMPLEMENT.

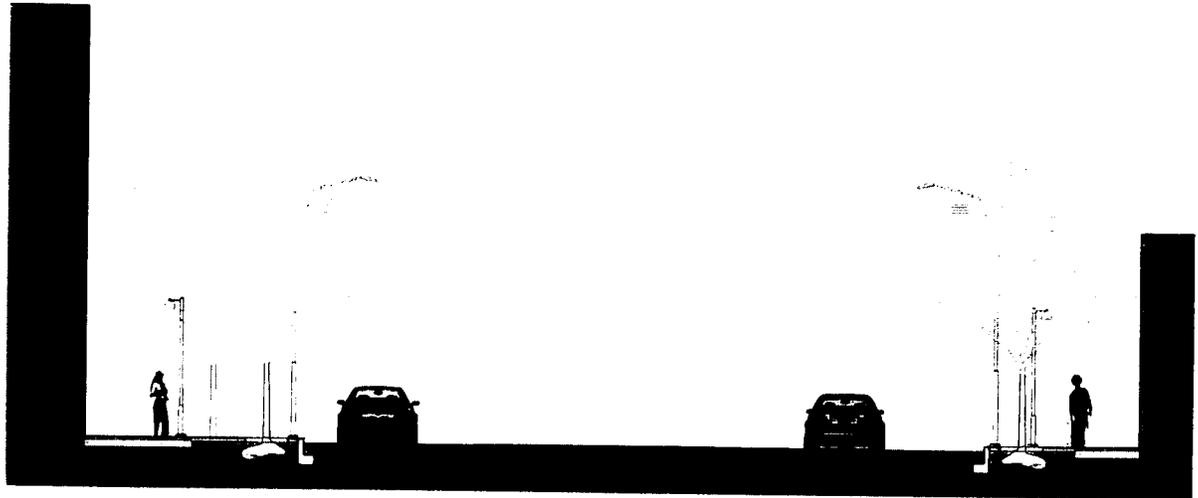
# RECOMMENDATIONS

## STAGE 2: TRANSPORTATION IMPROVEMENTS



### WEST HARLEM





## STREETSCAPE

To support the economic development of the neighborhood, it is essential to improve the quality of its streets and sidewalks. Streetscape improvements are proposed for 125th Street, 12th Avenue and the Broadway viaduct.

At the Broadway viaduct, improvements to the existing subway station atop the monumental viaduct arch would make the arch a luminous gateway to the neighborhood. While requiring coordination with possible future MTA renovations, the potential is there to transform the enclosure of the passenger platform into a translucent skin, making a beacon at night, and opening glimpses of activity within during the day. As it stands, the landmarked viaduct arch is already a monumental marker for 125th Street. A luminous renovation would adapt it to the aspirations of the neighborhood.

For the 125th Street Streetscape, the park-like character of the waterfront could be extended to Broadway by reconfiguring the street to maximize pedestrian space and to allow for tree planting on both sides. This creates a canopy of trees down 125th Street, echoing the great arches of the viaducts and framing the view. Further reducing the street width at pedestrian crossings would create safer intersections, along with recommended signal and traffic changes. An on-street bike lane is also incorporated into the design, making use of the bow-tie street configuration to reduce conflicts with vehicles.

Street lighting would be improved as well. In addition to the taller fixtures lighting the roadway, we propose medium height fixtures that would illuminate the sidewalk and “wash” the building facades with light. This increases safety for the pedestrian and gives a sense of definition and privacy to this major pedestrian corridor of movement.

In collaboration with artists, we propose that elements of the streetscape be personalized, reflecting the character of the neighborhood and the aspirations of local artists. These artistic interventions can be remarkably simple - some artists have made metal reliefs that are cast into the concrete of a sidewalk paver. Others are more systematized, such as panels attached to the street lights. The key is to include artists and historians in the next phase of the streetscape design to make something ordinary become something extraordinary. In a neighborhood as vital and creative as Harlem, the results would be spectacular.

The overall result of the streetscape improvements to 125th Street should be a green boulevard from Broadway to the water's edge.

On 12th Avenue, sidewalks and roadbeds would be adjusted to make the area under the viaduct particularly well-suited to the type of holiday and weekend markets popular at other Manhattan locations such as Union Square. The most important addition to 12th Avenue would be new lighting. The landmark viaduct structure, recently renovated is unique in the city. Careful, state of the art lighting would make the arcaded space the centerpiece of the area.

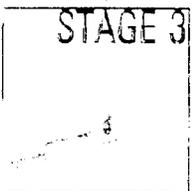
THIS PAGE:  
125TH STREET  
STREETSCAPE SECTION  
SHOWING PROPOSED  
TREES AND LIGHTING

NEXT PAGE TOP:  
VIEW OF 125TH STREET  
LOOKING WEST

NEXT PAGE BOTTOM:  
PROPOSED LUMINOUS  
GATEWAY TO THE STUDY  
AREA AT BROADWAY AND  
125TH STREET

# RECOMMENDATIONS

## STAGE 2: TRANSPORTATION IMPROVEMENTS



## IMPLEMENTATION

### ZONING CHANGES

A central goal of Stage 2 is to improve the pedestrian experience and to create a link to the waterfront. Present zoning hinders pedestrian friendly development of 125th Street. Zoning changes that should be implemented as part of improving the streetscape are discussed in Stage 3.

### SCHEDULE - STAGE 2

#### Streetscape Improvements

- EDC and New York City DOT to coordinate improvements along 125th Street to the water.  
Schedule: 10 months  
Cost \$7million (Request made to NYS DOT TEA - 21 Enhancement Program for \$2 million pending - will leverage future dollars)

#### Henry Hudson Parkway Improvements

- EDC to coordinate with NYSDOT to redesign exit and entrance ramps to change traffic patterns at the waterfront;  
cost approx. \$8 million
- Intermodal Center/ MTA / Metro North stop at 125th Street; cost not determined, further study necessary.

#### Public transit improvements

- Bus route changes
- Off-street parking
- Further study necessary



WEST HARLEM



- 1 [ ] WATERFRONT AMENITY
- 2 [ ] TRANSPORTATION IMPROVEMENTS
- 3 [ ] ECONOMIC AND INSTITUTIONAL DEVELOPE

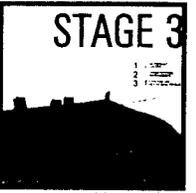
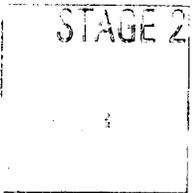


REGIONAL ATTRACTION

NEIGHBORHOOD ECONOMIC AND INSTITUTIONAL DEVELOPMENT

THIS PAGE  
 STAGE 3 DIAGRAM  
 INDICATING LOCATION OF  
 MAJOR ELEMENTS

# STAGE 3: ECONOMIC AND INSTITUTIONAL DEVELOPMENT



WEST HARLEM



### CRITICAL PATH PROCESS

The goal of Stage 3 is to build on the success of a new waterfront amenity and new transportation improvements and to begin a process of neighborhood economic development that capitalizes on the new waterfront amenity created in Stage 1 and improvements to transportation and to the pedestrian experience made in Stage 2. Economic data show that residents currently commute out of the neighborhood to work and travel outside the neighborhood to shop. This can be reversed by developing both jobs and retail in the neighborhood with techniques of zoning and long-term development management.

Physically, Stage 3 envisions a plan that follows the contours of the neighborhood's natural valley. Along the 12th Avenue corridor and 125th Street, adjacent to the waterfront, would be a low-rise regional attraction with retail development and cultural amenities. At the perimeter of the neighborhood, up the slope of the hill, parcels would be built out to the density of existing historic buildings, such as the Alexander Doll Factory.

Stage 3 of the Master Plan looks at growing the nascent commercial activity at the neighborhood's center to reach a critical mass of shops and cultural and transportation facilities in order to become a regional attraction. The plan also looks to rezone the surrounding sloping area at the scale of the neighborhood's best buildings in order to produce space for broad economic development in partnership with the neighborhood's institutions.

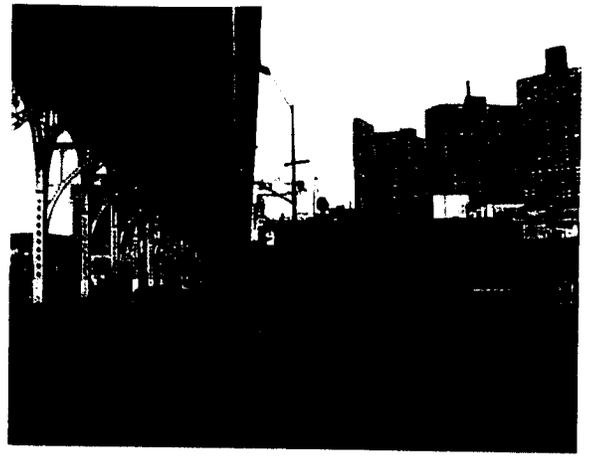
Stage 3 can begin concurrently with Stage 2 because it shares many of the same policy goals. The difference for Stage 3 is that the process is truly long-term. In addition, the process is to some degree

iterative, developing a sequence of individual small-scale parcels over time with maximum flexibility and community input. The process for Stage 3 breaks down into 2 parallel tracks: policy implementation and development management.

### POLICY

In the economic development of the West Harlem neighborhood, job creation, local entrepreneurship and the creation of retail corridors are primary objectives. Therefore policy considerations should be organized around:

- Zoning to allow uses that support new job creation, enlivens street life and creates shopping opportunities.
- Density that permits the construction of adequate space to accommodate job creation and triggers economic growth.
- Tax policy that encourages job growth and retention.
- Regulatory policy that streamlines approvals.
- Community partnerships for worker training and community job placement
- Institutional partnerships.
- Coordination of continuing public and private investment with the community, the Master Plan and the long-term policy interests of city, state and federal governments.



## REGIONAL ATTRACTION

A regional attraction is a successful urban place containing a compelling mix of shopping, cultural and recreational facilities to draw people to it. A regional attraction for West Harlem would create jobs and attract substantial private sector investment.

When a regional attraction reaches a critical mass of approximately 200,000 square feet, it generates enough character and interest that it becomes a destination in its own right for people throughout the region. It can build on the character of the neighborhood in which it is located and heighten the neighborhood's incipient advantages of site, culture and population to make a lively, unique and ultimately irresistible destination. And one very important factor: a regional attraction requires a regional transportation system to serve it.

### LOCATION

At the center of the West Harlem neighborhood, at the base of the natural topographic bowl of the study area, the regional attraction should become a low-rise pedestrian focus for the neighborhood. Located along 125th Street and 12th Avenue, the regional attraction should be:

- Vibrant, dense, low-rise and pedestrian scaled, building on the success of West Harlem's markets, clubs and cultural attractions.
- Organized along the area under the 12th Avenue Viaduct with pedestrian crossings to new amenities on the river.
- Served by new transportation facilities, including ferry and transit stops, intermodal facilities and parking garages.

### CHARACTER

West Harlem is one of the most diverse and vital neighborhoods in America. For development to succeed here, it must reflect and celebrate the advantages of the neighborhood. It must re-use existing buildings where possible, and it must become a part of the working, walking city.

To heighten the pedestrian character we suggest cutting new alleys through the tremendously long east-west blocks, creating a cross-network of paths from north to south. In addition, we recommend maintaining the two and occasionally three-story scale here in the center and using the existing texture of steel, brick and cobbles as a baseline for unique elements of art that can be inserted into the streetscape by local artists.

Too frequently, cities starved for culture have strained to recreate fictional "festival" shopping in place of a regional attraction, missing the opportunity to heighten the true character of their location. West Harlem is brimming with character, and its citizens are brimming with entrepreneurial and artistic energy. A regional attraction will reflect that energy and diversity.

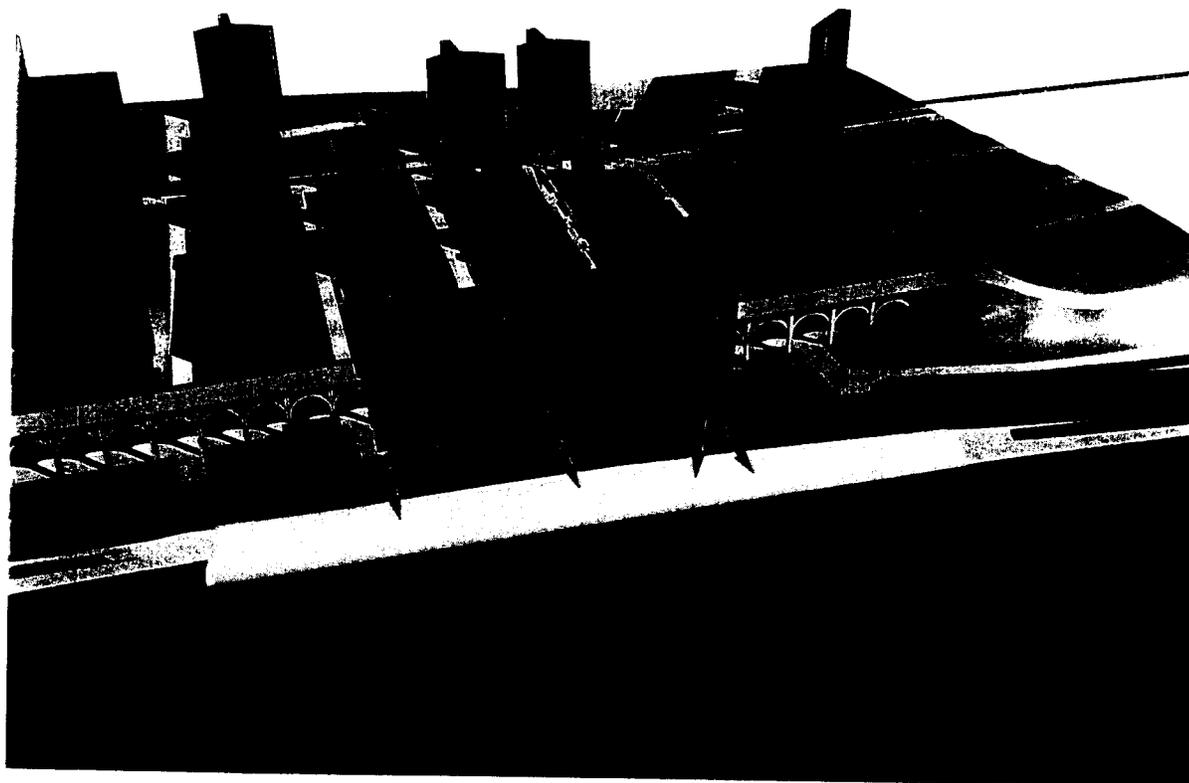
The economic analysis in later sections documents untapped wholesale, retail, and entertainment spending power in the study area that could be captured by better integrating existing businesses and encouraging new development. Non profit groups such as UMEZ and NYRIN are already working in the community to develop industrial clusters that could become an integral part of the regional attraction.

THIS PAGE:  
VIEW OF 12TH AVENUE  
LOOKING NORTH

NEXT PAGE:  
AERIAL INDICATING  
REGIONAL ATTRACTIONS  
AND LINKAGES TO  
WATERFRONT AND  
SURROUNDINGS

# RECOMMENDATIONS

## STEP 3: ECONOMIC AND INSTITUTIONAL DEVELOPMENT



STAGE 1

STAGE 2

STAGE 3

WEST HARLEM



### PROGRAM ELEMENTS

Urban design and economic analysis suggests that to be successful, a regional attraction must reach a critical mass of program which includes at least 200,000 square feet of retail or entertainment uses and incorporates unique elements of interest or utility such as cultural attractions, transportation hubs or natural recreation amenities. West Harlem has all these elements available.

### WATERFRONT

Following Stage 1, the improvement of the waterfront, there will be a natural recreational amenity in place. Stage 2, Transportation Improvements, will improve access to the waterfront and calm traffic. It is strongly recommended that the fully developed waterfront *not including parking or significant retail uses*. Such elements should be kept inland.

A working ferry landing will greatly enhance inland development potential. This will entail the up-grading of the Excursion Pier in Stage 1 to work for multiple embarkations and disembarkations and to tie into the Intermodal Center proposed at 125th Street.

Ideally, the waterfront should also have one signature cultural element - a waterfront cultural pavilion. This element should be small but brilliant, a focal point. Further study is required to site and program such a cultural element. However, an "Apollo's Landing" where Harlem's best cultural attractions can perform in the coolness of a summer's evening in a glittering setting is one attractive possibility.

The waterfront recreational amenities would be increased by the development of a regional attraction. Facilities should be expanded at the piers to handle not just kayaks but other types of small recre-

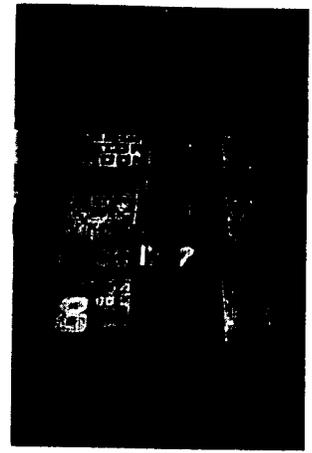
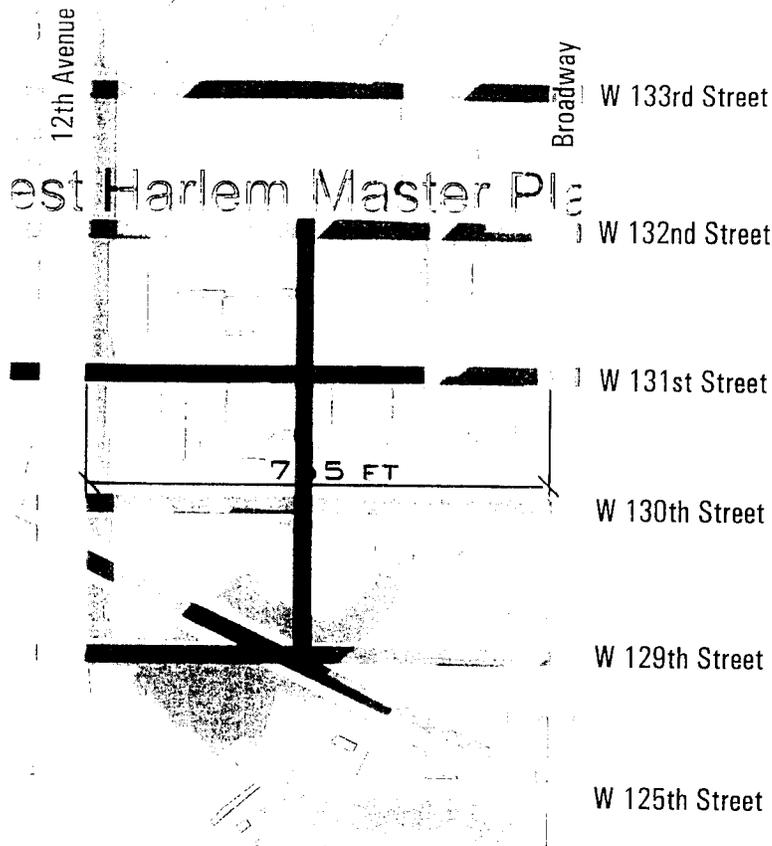
ational boats, and educational programs should be expanded to bring a working knowledge of the river to the neighborhood's children.

### UPLAND

The heart of the development is upland, centered around the 12th Avenue viaduct between 130th and 132nd Street. The Master Plan proposes energizing the street level with storefronts open to the street and sidewalk cafes and restaurants that in good weather can open their doors and windows and place tables outside.

Better accommodating and engaging pedestrians is crucial. A significant transformation must occur from the automobile dominance of the area. The first step is to break down the scale of the long east-west blocks from 12th Avenue to Broadway. Proposed development could be limited to halfway up these blocks between 130th and 132nd Streets to provide for a north-south pedestrian passage. In addition, it may be advisable to provide further passages through the blocks, perhaps even using pedestrian ways and piazzas to set up view corridors to a new cultural or market element set against the arches of the 12th Avenue Viaduct.

The area under the 12th Avenue viaduct could become an important outdoor space if traffic is calmed. This is also necessary to maintain easy and important pedestrian links from upland to the waterfront. The area under the arches might be used for periodic green and holiday markets. The buildings between 12th Avenue and the water present a special challenge because they are limited in height by the elevation of the Henry Hudson Parkway, under which they sit.



The street area also should have a cultural attraction as an architectural focus. In keeping with the pedestrian, low-scale strategy of the regional attraction blocks, this cultural attraction should be highly visible but small. Examples such as Covent Garden in London may be appropriate. Whether this cultural attraction is a black-box theater, library or gallery, it should relate to the brick, steel and cobble context. It will serve as a focal point, organizing the orientation of the commercial spaces around it both physically and programmatically, giving character to the micro-neighborhood and effectively defining an intimate plaza in front of it, which can be further energized by outdoor display of the works of local artists.

Columbia's proposed School of the Arts, with its public performance and gallery spaces, could serve as a significant anchor and development catalyst at the Broadway and 125th Street side of the regional attraction. Fairway, with its expansion and related food businesses could serve as an anchor at the other end. The result will be a corridor of activity coming down 125th Street to a remarkable area centered under the 12th Avenue viaduct, accessible to the waterfront and integrated with the neighborhood as it slopes up toward Broadway.

THIS PAGE LEFT:  
DIAGRAM SHOWING LONG  
EAST-WEST BLOCKS AND  
THE NEED TO PROVIDE MID-  
BLOCK PEDESTRIAN PAS-  
SAGE.

THIS PAGE RIGHT:  
EXISTING BUILDING ON  
BROADWAY

NEXT PAGE LEFT:  
THE ALEXANDER DOLL FAC-  
TORY BUILDING (STUDE-  
BAKER BUILDING)

NEXT PAGE RIGHT:  
SECTION SHOWING IDEA OF  
SLOPE OF BUILDINGS

## NEIGHBORHOOD PERIMETER

### ECONOMIC AND INSTITUTIONAL DEVELOPMENT

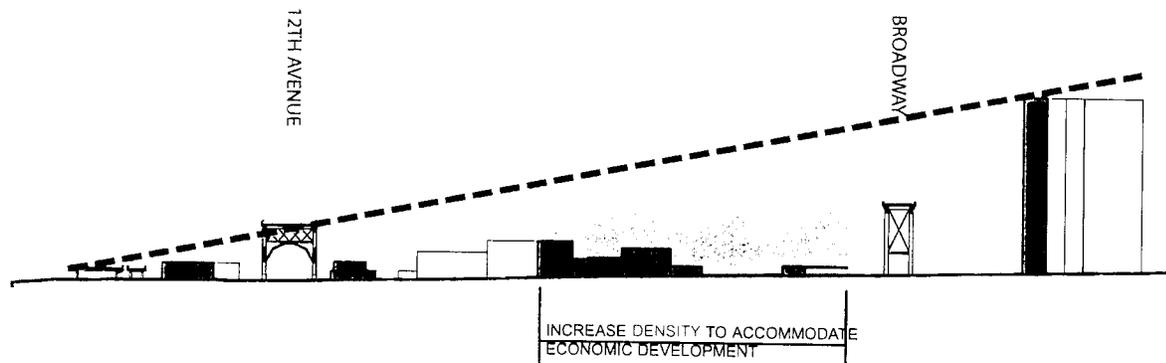
The stage is set to take advantage of the neighborhood's latent economic strengths and sturdy stock of industrial buildings. Surrounding the market, cultural and entertainment core, existing and new mid-rise buildings would be redeveloped one by one to house new jobs - over 10,000 in total. Multiple uses and mixtures of existing and new jobs would grow in the maturing neighborhood. The significant institutions and their research capabilities that ring the neighborhood provide a long-term anchor. New jobs would take advantage of the neighborhood's existing Empowerment Zone benefits and the new attractiveness of the waterfront and the activity of the regional attraction core, all accessible through one of the best intermodal connections in the city.

Physically, it takes the form of infill development of the blocks in the study area surrounding the regional attraction centered on 12th Avenue, and moving up the slope towards Broadway. Zoning is changed to permit the area to develop to a uniform, mid-rise density, matching the neighborhood's best historical buildings such as the Alexander Doll Factory.

One consideration is to keep new building heights within the neighborhood "slope line," as illustrated in the diagram. The West Harlem neighborhood is a natural valley, with existing tall buildings on its perimeter and lower buildings at its center. This works with the topography to reinforce the "valley" or "amphitheater" feeling of the neighborhood.

### USES

The new and renovated buildings will house a mix of retail, commercial, research, institutional, and academic purposes.



### IMPLEMENTATION

Implementation of Stage 3 is a long-term, multi-dimensional undertaking requiring coordinated action among the public and private sector. The two broad categories of implementation are public policy and development management. Public policy implementation consists primarily of zoning changes. Development management implementation consists of managing the regional attraction process and coordinating the economic and institutional development process.

### ZONING CHANGES

Zoning changes required to develop the waterfront are described in Stage 1. Recommended zoning changes that would affect the successful implementation of Stage 2 and 3 are described here. Zoning changes along 125th Street and 12th Avenue would encourage pedestrian scaled development and activity. Zoning changes around the perimeter and in the core manufacturing area would allow a higher FAR to create space for job creation and institutional investment.

#### West 125th Street

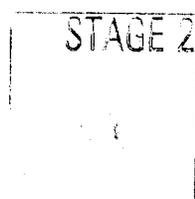
The main corridor to the waterfront is West 125th Street. Currently, most of West 125th Street approaching the waterfront is zoned for manufacturing uses except for the southern portion of 125th Street between Broadway and St. Clair Place which is zoned R8. Present zoning has not allowed West 125th Street to become an appropriate link to the waterfront. Commercial ground floor uses are not allowed in an R8 district.

The R8 zoning that exists on this portion of West 125th Street could be changed to R8 with a C2-2 overlay. This would mean that the ground floor of buildings in this zoning district could be developed as a commercial use while the FAR of 6.02 is maintained for the whole site. Ground floor uses make the sidewalk more active, keeping things inter-

esting for visitors. Building owners on this stretch would be motivated to convert their first floors to uses that relate to pedestrians. For example, Columbia University, which owns a building in this district, would be able to provide cultural amenities, such as a gallery and café. These ground floor uses would provide for greater interaction between the university and the public. These uses are prohibited by the current zoning.

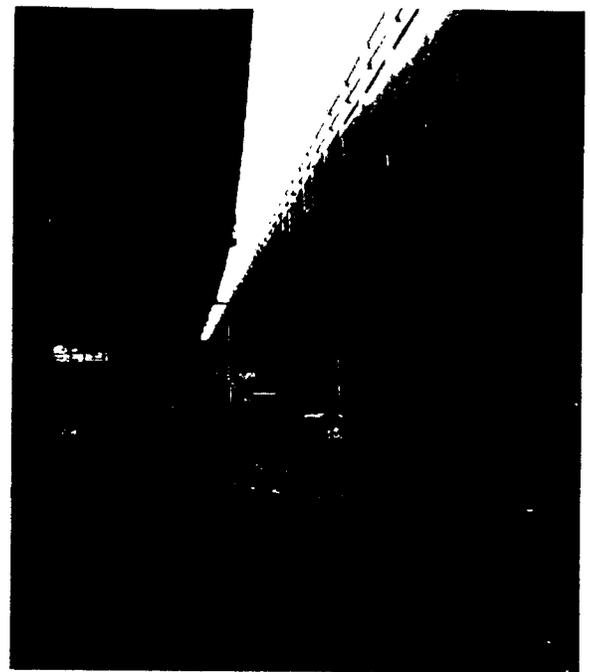
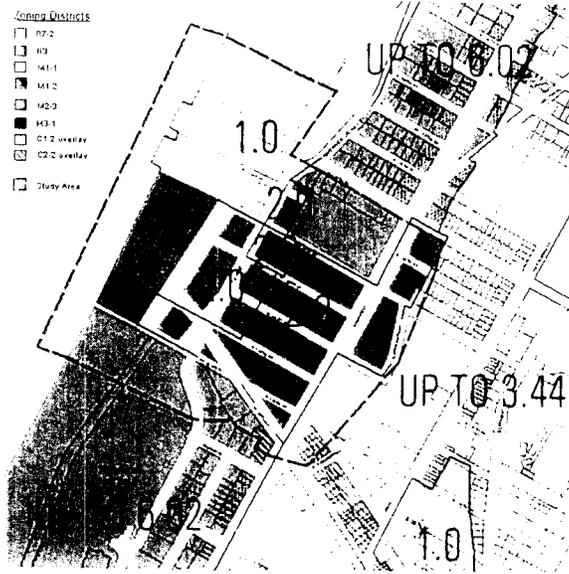
The rest of West 125th Street approaching the waterfront, which comprises the south side of West 125th Street from St. Clair Place to the waterfront and the north side of West 125th Street between Broadway and the waterfront, is zoned for manufacturing uses. There are no remaining industrial manufacturing uses on 125th Street. Current uses include a gas station, a storage facility, and an automotive use. Commercial uses include the famous Cotton Club, the Realty House, Taco Bell, KFC, and Floridita. It is important that West 125th Street becomes a more appealing and more active street to entice people to travel to the waterfront. One possible way to accomplish this would be to rezone this stretch of West 125th Street to a commercial designation. Another possible solution is to allow for manufacturing uses to co-exist with retail, cultural, and even residential uses within the same building (currently not allowed). A way to accomplish this is by designating the area a Mixed Use district, which is described below.

Zoning changes should also support the activity that could be generated by a potential intermodal station as contemplated in Stage 2.



### WEST HARLEM





#### 12th Avenue

The entire 12th Avenue corridor is zoned for manufacturing. There are some remaining meatpacking establishments and other manufacturing and warehousing uses, although the numbers of these have been consistently decreasing over the years. There is also one significant commercial use along the 12th Avenue corridor: Fairway. However, retail uses that are larger than 10,000 square feet are not allowed in M2-3 districts. There has been interest from commercial developers, who want to locate stores on this corridor. One example is the N store proposal, which would be a 26,000 square foot upscale clothing store. Another example is Fairway itself, an existing supermarket, which comprises approximately 25,500 square feet. Rezoning along the entire 12th Avenue corridor, except for the Manhattanville Bus Depot, should be considered to encourage greater retail street-life. For example, a C4-4 zone allows for an FAR of 3.4. Existing manufacturing uses would be allowed to stay.

#### Perimeter of Study Area

The perimeter of the study area is zoned for manufacturing uses. There are a good number of 2-story manufacturing buildings that conform to zoning, but they are not able to expand because zoning currently limits them to an FAR of 2.0. This limited FAR hinders any potential institutional or private sector development. Cultural uses, such as university space or museums, are not generally permitted. In addition, there have been some illegal conversions of buildings to residential uses in this area.

One possible response to these pressures is to increase the allowable FAR. One way to do this would be to change the existing zoning to M1-5. This would increase the allowable FAR to 5.0. Buildings that currently conform to zoning (2-story manufacturing buildings) might be

encouraged to expand due to much higher allowable densities. Also, some of the open lot parking lots might be developed with this greater density incentive. A higher density manufacturing zone could accommodate demand generated by market forces and entrepreneurial programs sponsored by UMEZ, Highway 125, and neighboring academic institutions. High value research and development activity, as well as high-tech light manufacturing (i.e. medical devices) may provide an economic basis for the construction of specialized high-tech flex space required to meet this potential demand. An M1-5 zoning district would not allow educational facilities or residential uses, thereby not taking advantage of the area's unique institutional partnerships. It does not allow for mixed-use development or creation of a commercial core, as it excludes entertainment and cultural uses such as educational facilities, museums, libraries and non-commercial art galleries.

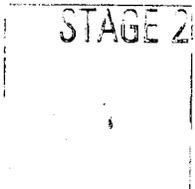
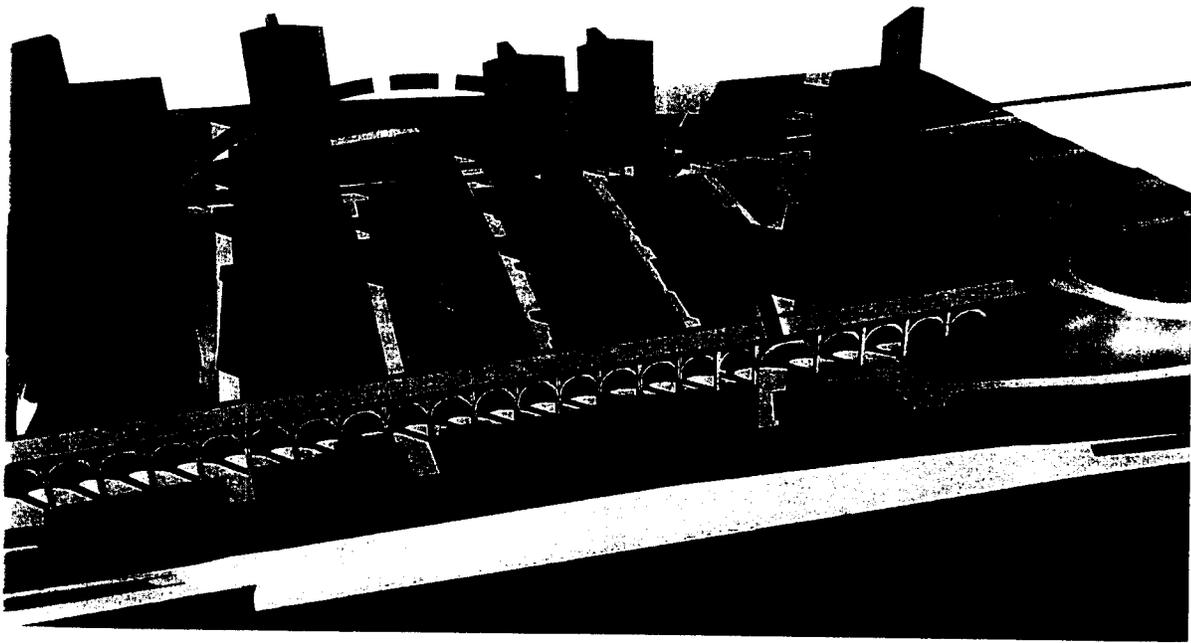
A preferred option is to create a Mixed Use District since it allows for a variety of uses to exist as-of-right. Mixed Use districts are a combination of a M1 district and a residential district. There are a few combinations that are possible. Three examples of Mixed Use districts currently used in New York City suggest different possible pairings. These districts are West Chelsea, Fulton Ferry, and Port Morris. The zoning pairings for West Chelsea are M1-5/R9A (5.0 FAR/7.5 FAR) and M1-5/R8A (5.0 FAR/6.02 FAR). The zoning pairings for Fulton Ferry are M1-2/R8A (2.0 FAR/6.02 FAR). The zoning pairings for Port Morris are M1-2/R6A (2.0 FAR/3.0 FAR). Most recently, rezoning in Long Island City resulted in areas of M1-6/R-10, M1-5/R9 and M1-5/R7-3.

If a Mixed Use District is chosen, it will be necessary to choose a manufacturing district to pair with a residential district. Each zoning designation encourages specific uses. It is important to keep a number of issues in mind when choosing the zoning pairings. One issue is that the

THIS PAGE LEFT:  
WEST HARLEM ZONING  
MAP.

THIS PAGE RIGHT:  
VIEW IN BETWEEN HENRY  
HUDSON PARKWAY AND  
AMTRAK LOOKING NORTH

NEXT PAGE:  
AERIAL OF SITE MODEL  
SHOWING TALLER BUILD-  
INGS SURROUNDING THE  
STUDY AREA



### WEST HARLEM



New York City  
Economic Development  
Corporation

higher the R designation is - R9, R10 - the greater the possibility of conversion to primarily residential uses. Also, during the public outreach for the Master Plan, some participants expressed that they do not want residential uses in the study area.

In picking the pairings, the Department of City Planning should consider those combinations that discourage large-scale residential conversion while allowing for mixed-use development that creates a viable commercial and cultural zone. Such pairings could encourage office and retail, light manufacturing, and community facility uses.

Zoning that encourages pedestrian friendly facades and activity, reuse of existing structures, and design sensitive to surrounding properties as part of a regional attraction is appropriate for the center areas of the study area. Landmark and significant buildings should be preserved, encouraging infill and maintaining the historic character. New zoning could be stepped down, with higher densities along Broadway and lower densities along 12th Avenue, keeping the historic fabric.

Further analysis by the City would be necessary to determine the exact configuration of the zoning changes.

#### POLICY AND PARTNERSHIPS

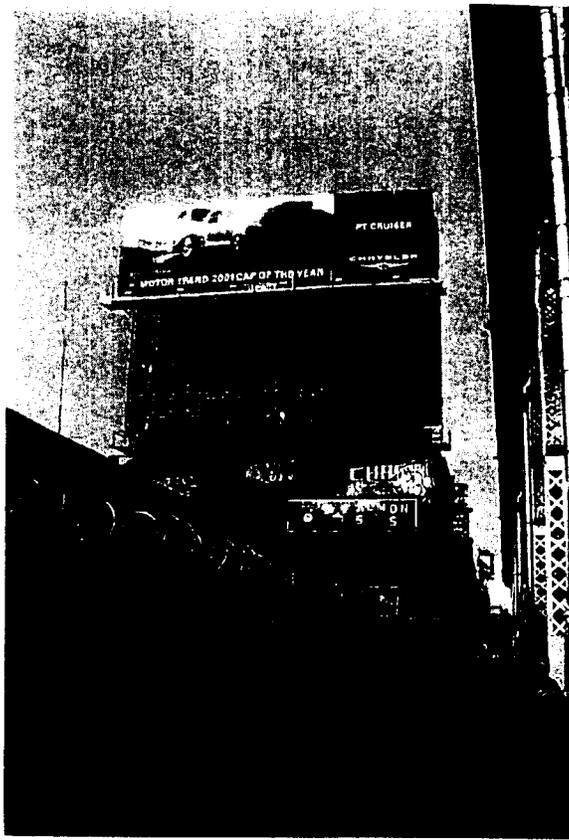
It is the good fortune of the West Harlem study area to have in place or at hand some of the nation's most advantageous tax policies, institutional partnerships and community partnerships. This triad of job creation elements: facilitation mechanism (tax policy), demand generator (institutional partnerships) and workforce supply (community partnerships) makes the economic development of West Harlem attainable with the proper coordination process. The maintenance of a joint sense of purpose among the groups involved is one of the most important process goals of the development.

#### TAX POLICY

Much of the study area lies within the Upper Manhattan Empowerment Zone, providing a host of federal, state and city tax incentives and financial supports targeted to create and retain jobs. They are in place, funded and administered by the Upper Manhattan Empowerment Zone. This is an advantage that cannot be underestimated as a mechanism to facilitate job creation and retention.

#### INSTITUTIONAL PARTNERSHIPS

West Harlem's cluster of institutional partners is among the finest in the world. Neighboring institutions such as Columbia's Morningside Heights campus, the main campus of City College, and the Columbia Presbyterian Medical Center can be key catalysts in the economic development of West Harlem. Not only can these institutions provide the day-to-day presence that will enliven the area as a regional attraction, they can also act as partners in job creation. Initiatives such as City College's new Center for Structural Biology are likely to attract commercial enterprises and generate spin-off businesses and jobs beyond the academic community. Examples include a multi-institutional, multi-disciplinary Mind/Brain Institute and a Computational



Sciences Institute, which could attract both scientists and businesses in bioengineering, genomics, internet technology and robotics. In addition, new incubators to support research and new product development in science and technology are feasible and some are in place already. The combination of business and academic uses could generate thousands of jobs.

#### COMMUNITY PARTNERSHIPS

Many community partnerships are already in place, providing job training and placement. However, for the economic development of Harlem to proceed to Stage 3, it is recommended that substantial resources be applied to expand and integrate the programs to be first on the scene as the neighborhood's economic development unfolds. Coordination with institutional partners through the development process is key.

#### FUNDING

The process will require public funding for planning before private funds will be attracted. It will require a government grant for due diligence, urban design and development management efforts. Several possible government sponsors are available to provide funding. The most effective form of action will come with agreement among the City, State and Federal governments to proceed, at which point the resources of each can be targeted to the redevelopment through entities such as the Upper Manhattan Empowerment Zone (City, State and Federal), the Empire State Development Corporation (State), and the Economic Development Corporation (City) working in concert.

Funding hinges on consensus, and consensus on planning is the prerequisite for consensus on implementation. Because the project will require decisions on a major intermodal transportation center (Federal and State funding, primarily), possible condemnation of land (State

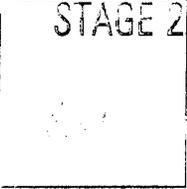
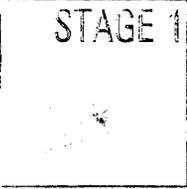
action, primarily) and zoning amendments (City and community-level action) all levels of government must work together so their individual investments and powers will add up to the intended effect.

THIS PAGE:  
VIEW OF 12TH AVENUE  
LOOKING AT THE BILL  
BOARD.

NEXT PAGE:  
VIEW OF 132 STREET LOOK-  
ING EAST.

# RECOMMENDATIONS

## STEP 3: ECONOMIC AND INSTITUTIONAL DEVELOPMENT



### SCHEDULE: STAGE 3 Public Action

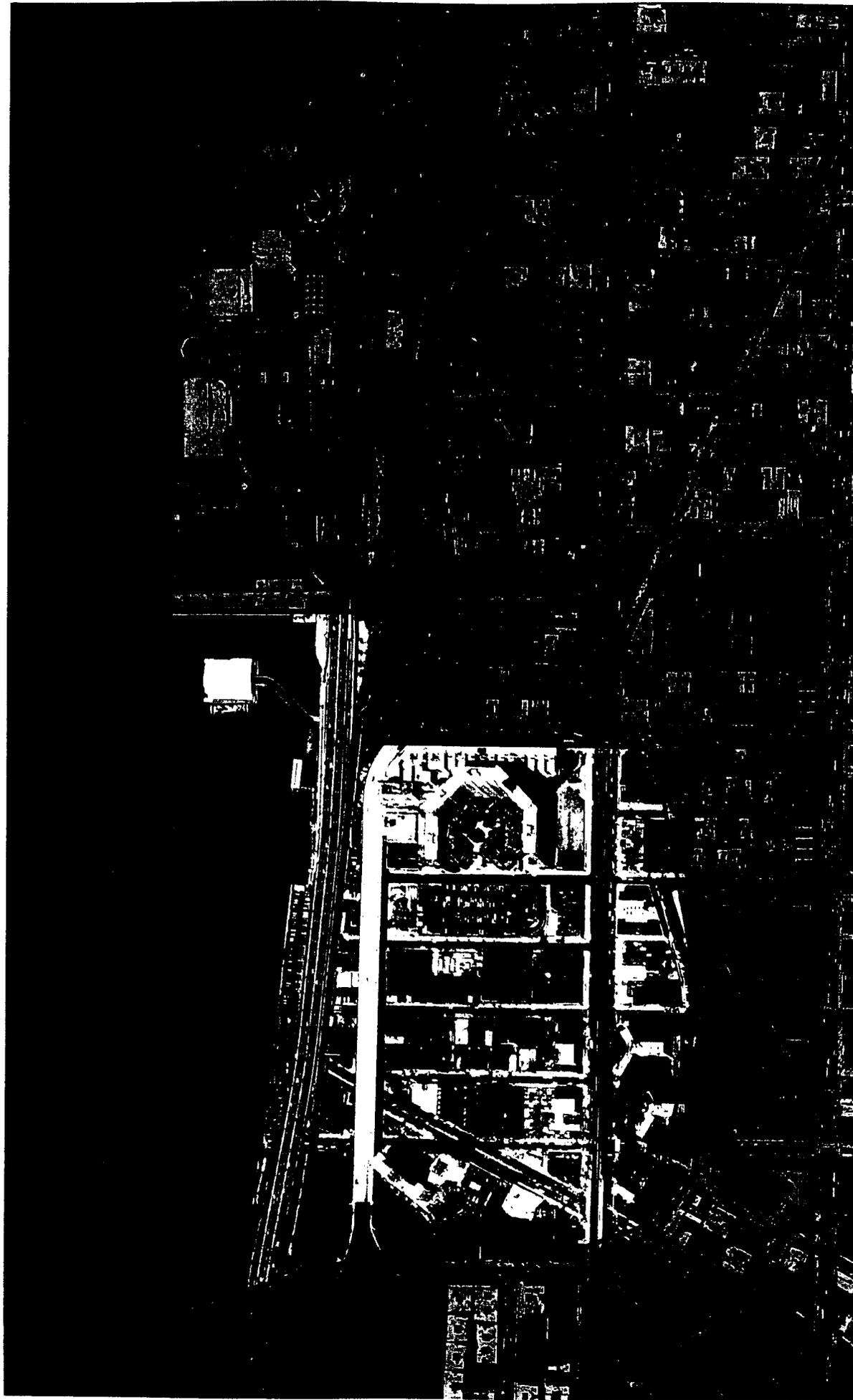
- Rezoning of M-zone to increase range of uses and increase density (discussions with City Planning to begin process)
- Institute development management program, partnerships with local institutions and community groups and organizations.

### Private Action

- Institutions, Developers, local entrepreneurs, and others to infill area.

### WEST HARLEM





THIS PAGE:  
AERIAL IMAGE OF WEST  
HARLEM STUDY AREA AND  
SURROUNDINGS

# INTRODUCTION

The Existing Conditions chapter is divided into sections on Neighborhood Character, Economic Analysis, Traffic and Parking Analysis, and Engineering Analysis prepared by the individual disciplines of the Master Plan report team.

### NEIGHBORHOOD CHARACTER: W ARCHITECTURE

Physical characteristics and land uses were mapped and analyzed. In addition, photographic and topographic data was gathered on open space and institutional, community, and historic resources.

### ECONOMIC DEVELOPMENT: ERNST & YOUNG LLP

The Real Estate Advisory Services Practice ("REAS") of Ernst & Young LLP ("E&Y") prepared an economic development analysis for the study area, including a review of uses complementary to existing uses and community visions, uses that promote economic development along Harlem Piers and the surrounding area, revenue generating uses that cover waterfront open space maintenance costs and other costs related to redevelopment, uses suggested in the Vision Plan, and a ferry market assessment

The overall analysis looked at the underlying economic trends of the neighborhoods and has determined that there is latent retail demand in the neighborhood. The analysis has also determined that there is significant job creation potential from the institutions that ring the area, if space can be developed for jobs within the neighborhood.

### TRAFFIC: THE SAM SCHWARTZ COMPANY

The Sam Schwartz Company ("SSC") analyzed public transportation, traffic, and parking conditions along the waterfront area of West Harlem to help develop the West Harlem Master Plan. The traffic and transportation survey of the study area provides recommendations to

improve traffic flow and maximize open space along the waterfront. To address the likely increase in the number of visitors and users of the future waterfront area, recommendations include: improving pedestrian access and safety; mitigating demands of local traffic with through traffic (i.e., Henry Hudson Parkway users); improving public transportation; and increasing local on- and off-street parking availability. Traffic calming measures such as neckdowns, crosswalk and increased sidewalk widths are suggested as part of an overall streetscape plan for the study area.

### ENGINEERING: DMJM + HARRIS

The Master Plan report contains engineering analysis that provide an understanding of the prevailing site conditions and that have informed the planning.

*Hydrographic Report.* This report analyzes characteristics of the water and wave action that influence the design and use of piers.

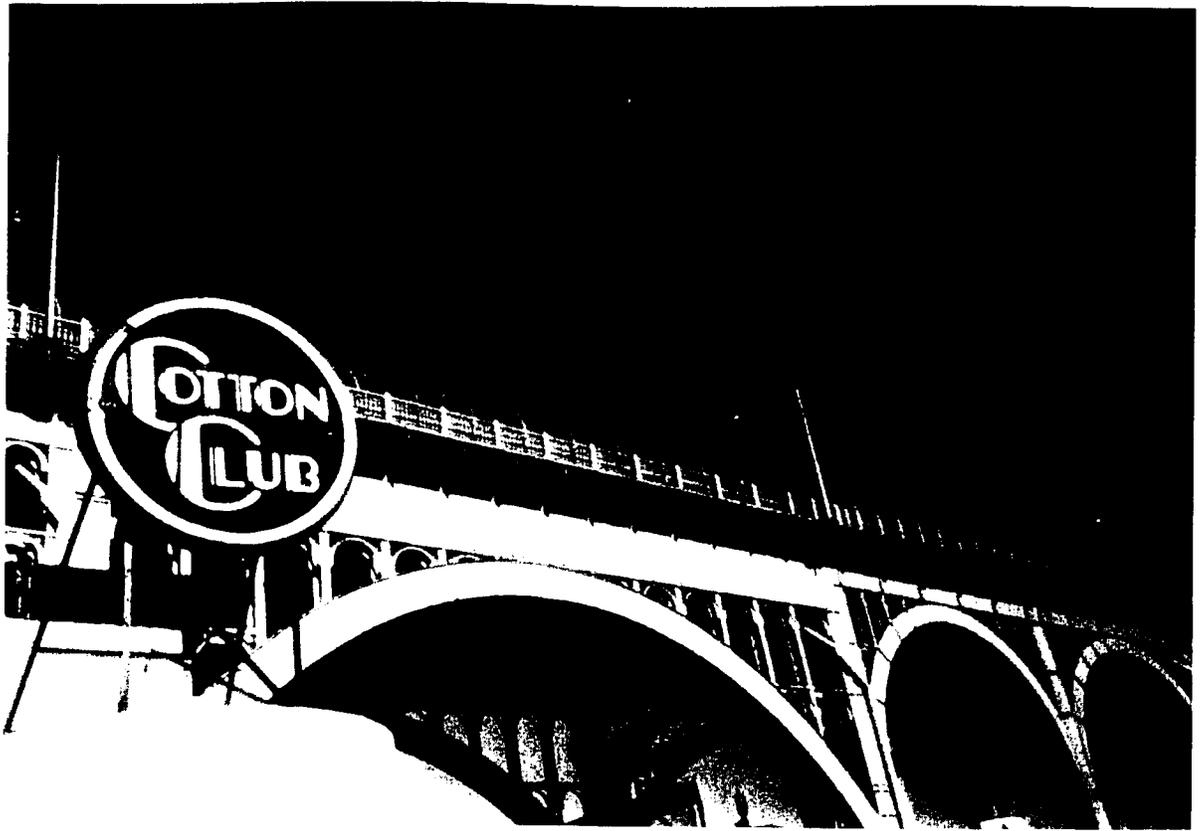
*Bulkhead Report.* This report assesses the general condition of the bulkhead and the previous repairs. Recommendations are included developing criteria for future structures/buildings to be located behind the seawall and for the future protection of the seawall.

*Pier Reconstruction Analysis.* This analysis investigates the possibilities and engineering requirements for a variety of new piers.

*Subsurface Investigation.* This report looks at the soil conditions beneath both the water and upland waterfront area.

## WEST HARLEM





THIS PAGE:  
THE COTTON CLUB LOCATED  
UNDER THE 12TH AVE  
VIADUCT