

5.5 Traffic and Transportation

Adoption of the LWRP is expected to have a significant beneficial impact on traffic patterns and transportation systems in the Village of Hastings-on-Hudson by expanding and improving both vehicular and pedestrian flow through the Village and specifically between the downtown business district and the newly redeveloped waterfront. The LWRP specifically highlights the recommendations discussed in the *Waterfront Development Strategy*, in which numerous examples were provided on how to increase the public access options between the downtown area and the waterfront. There are four individual recommendations that are believed to be key to the success of this plan:

- Improvements to the Train Station which would ultimately allow for a new pedestrian bridge at Washington Avenue to connect the realigned south-bound train platform;
- A new road network on the 43-acre waterfront properties consisting of two north-south roads linked by smaller east-west side streets.
- Improved vehicular connections with an improved Dock Street bridge and new or rebuilt ramps west of the tracks.
- Reconstruction of the Zinsser Bridge

There are previous traffic analyses conducted for the Village that have looked at varying development proposals for the waterfront [i.e., by the firms Allee King Rosen and Fleming, Inc. (AKRF) and the Regional Plan Association (RPA)] that have explained how varied types of development proposals can impact the Village. These proposals have contained development alternatives with a range of residential, commercial and industrial uses. Of particular interest is the AKRF traffic analysis (dated April 1989), which focused on a large-scale development proposal for the ARCO site, known as the Harbor at Hastings.

This Harbor at Hastings proposal called for a rezoning of the 36.084-acre industrial ARCO parcel to a classification of RMC-80, *Multiple Residence Commercial District*, which would allow for a mix of residential, commercial and even industrial uses, occupying 62% of the Village's available waterfront. This development proposal (which was previously subject to SEQRA review through an EIS and Findings Statement) represents a much more intensive development project than that which is currently proposed by the Village with this LWRP, one that would have resulted in a much higher demand on the Village's transportation infrastructure. The Harbor at Hastings plan consisted of creating 622 residential dwelling units, approximately 27,000 square feet of retail/commercial space, a 200-seat restaurant with a floor area of 7,400 square feet, an expanded sports and tennis center, and parking for over 1,200 cars. More than 10 acres would be publicly accessible for such uses as a public park, a waterfront promenade, and a commercial plaza and club. Access to the site would occur from the Dock Street Bridge and River Street. The residential proposal included a number of transportation improvements, not only on-site, but also incorporating an expansion of the Dock Street Bridge with pedestrian and vehicular considerations, signaling adjustments at several intersections within the Village, as well as curb cuts and the widening of lanes to better facilitate traffic flow.

These mitigation measures were presented because the Harbor at Hastings development would result in increased vehicular traffic on Village streets, particularly in the vicinity of the train station and main business district, which could result in a reduction of pedestrian safety and service levels during peak traffic periods. The AKRF analysis concluded that “...for several downtown intersections and at Dock Street itself, the new traffic [from the Harbor at Hastings proposal] would substantially add to intersection approach volumes.”

The LWRP, by comparison, recommends rezoning the waterfront to an amended MW-B (marine waterfront) district, which would allow for much less intensive development on the site. The MW-B district was established specifically with the ARCO site in mind, in an effort to promote the development of large waterfront land tracts in a unified, comprehensive manner that would provide for public access to the waterfront (while also considering the needs of target housing). The specifics of this district are described in further detail in § 5.7 below on *Land Use and Zoning*. The amount of development envisioned in the LWRP, as compared to the Harbor at Hastings proposal, would result in a significant decrease in the number of vehicle trips generated in the Village, particularly in the commercial zones, and to a lesser extent where there is a potential for residential units. The 2001 *Redevelopment Plan* for the Hastings waterfront states that “vehicular traffic, especially commercial traffic, should not dominate the waterfront.” The 2001 *Plan* focused on the Village’s desire to promote pedestrian traffic and linkages while also improving existing vehicular opportunities. The *Plan* also states that “adequate provision for north-south vehicular circulation with appropriate east-west crossroads” should be given, to allow for proper integration between the waterfront, the business district and the rest of the Village. Furthermore, the *Findings Statement* released by the Village Board in response to the proposed MW zoning districts indicated that a benefit of this district would be the “substantive elimination of the existing truck traffic to the Village waterfront.” The result will be an overall reduction in potential vehicular traffic as residential uses and most traffic generating commercial uses are to be concentrated at the north end of the site within easy walking distance of downtown Hastings and the Metro North train station.

Through the LWRP, the Village hopes to improve waterfront access by creating an open public area consisting largely of recreation-oriented opportunities, which present a much less anticipated increase in vehicular traffic in the area than that of the Harbor at Hastings proposal. The Hastings on Hudson LWRP committee, through its Traffic and Infrastructure subcommittee and with assistance from the Village Planner, conducted a survey of resident’s practices and opinions regarding walking and driving to the downtown and train station areas of the Village. The results of this survey were utilized to fully understand the issues encountered regarding pedestrian and vehicular traffic particularly in the downtown area and to develop new recommendations. The committee found that almost ½ of the residents they polled reported walking to key destinations, such as the train station and downtown area, 40% of the time, and that 1/3 walk at least 80% of the time.

Hence, the LWRP promotes development that would focus on community-based needs, such as establishing a civic center, recreation or arts building (instead of extensive residential and commercial development); creating an enhanced pedestrian and bicycle trailway system; improving pedestrian and vehicular bridge access across the railroad tracks, linking the downtown to the waterfront; improving public parking opportunities; and expanding public transportation opportunities. Also, the Zinsser Bridge on the south side of the Village is planned for rehabilitation through NYS DOT funding, offering a necessary traffic alternative. This project had initially been incorporated as a recommendation of the LWRP. However, Metro North included it with reconstruction plans for 14 other bridges that span Metro North railroad tracks reconstruction and NYS DOT included it in the Transportation Improvement Plan (TIP) in the interim). There are several maps located at the end of this DGEIS that were based on the information presented in the AKR&F traffic study figures (which were redrawn for improved clarity). These maps illustrate the expected traffic patterns through the main Village corridors with different route alternatives considered. These maps demonstrate the traffic reduction that would result if the Zinsser Bridge was opened for public use.

All of the recommended projects in the LWRP would serve to promote and enhance traffic flow within the Village and alleviate existing traffic problems, while also serving to assist the Village in planning for potential future problems. Implementation of the LWRP will alleviate existing and potential future traffic problems by rehabilitating existing roadways and constructing new waterfront streets to create enhanced pedestrian and vehicular access to the waterfront. Also, the LWRP will restore a now heavily contaminated waterfront (~43 acres) to a largely open space community area that will result in a much less significant impact on local traffic patterns due to reduced commercial truck traffic.

Whereas the Harbor at Hastings development proposal focused solely on the ARCO property, the LWRP addresses redevelopment of the entire waterfront as a whole. This means that the entire waterfront will be protected from potential future development that could be more intensive and demanding on Village resources (thus preserving a greater percentage of open space). By limiting the types and density of development, the LWRP seeks to minimize the potential volume of vehicular traffic that could burden the Village infrastructure.

The proposed rezoning of the waterfront, in addition to being less intensive than the amended MW-B zone as currently drafted, is less intensive than the type of "big box" retail use that is permitted by the current industrial zoning. Under its current GI zoning, the waterfront area could potentially be developed by a large commercial entity, such as Home Depot or a Stew Leonard's market. Building and impervious surface cover would be increased under this option, with less open space available for public use. There would also be an increased percentage of commercial traffic associated with the property remaining as currently zoned, which would lead to a need for more expansive roadway and intersection improvements. This would directly contradict what the Village Board has identified as a desired benefit of the proposed re-zoning, and that is the "substantive elimination of the existing truck traffic to the Village waterfront" (as written in the *Statement of Findings* released by the Board in response to the initial MW zoning proposition).

The planned transportation-related improvements associated with the LWRP will serve to improve local conditions. In addition, the LWRP recommends undertaking a feasibility study that seems to further improve roadway and pedestrian connections to the waterfront redevelopment area – a study that fully addresses all important environmental parameters in the area (including traffic capacity and safety, preservation of natural vegetation, stability of steep slopes, etc.). Therefore, it is anticipated that the LWRP will not have an adverse impact on local traffic and transportation.

5.6 Air Resources

The LWRP will not have a significant adverse impact on air resources within the Village's coastal area. Actions undertaken within this area would have to consider potential impacts on air quality during the consistency review (pursuant to Policy 8).

5.7 Land Use and Zoning

The LWRP will have a beneficial effect on the pattern of land use and zoning districts in the Village, since recommendations of the program include an amendment to the current zoning classification of the approximately 43 acres of deteriorating waterfront property. The result will be increased public waterfront access, expanded community facilities, and improved infrastructure. There will also be significant environmental remediation conducted to rehabilitate the heavily contaminated land along the waterfront (see § 4.13 of this DGEIS for discussion on waterfront contamination issues). There will also be a significant reduction in the amount of paved surfaces and building coverage in the area as well.

A major basis for the LWRP is to ensure that the Village's zoning and land use pattern serve to achieve the ultimate goals of the Village. Under the proposed zoning change, the ~43 acres of Village waterfront land would be modified from the existing GI (general industrial) zoning classification to the more appropriate amended MW-B (marine waterfront) district. The MW-B District is a floating district that was created in 1989 in anticipation of a development proposal for the ARCO (then known as Harbor at Hastings) property. This zone has not yet been mapped though is only applicable for properties greater than 25 acres in size with over 3000 feet of river frontage. The stated purposes of this district include: to provide public access to the waterfront; to encourage development that promotes economic growth while affirming the character of the Village as a "locus of waterfront activity"; to promote the orderly development of large waterfront parcels; and to assist in meeting the housing needs of middle income and senior residents. It will be amended to reduce the scale of permitted development before being mapped.

A key planning principle embraced by the Village centers around the concept that open spaces should not be concentrated in one part of the redevelopment area but should instead create a network of open spaces woven through the entire development. As per the stipulations of the amended MW-B district, at least 50% of the total dry land area shall be devoted to public or private open space, excluding streets and at-grade parking lots, and the maximum permitted building coverage is 25% of the total dry land area. The MW-B district requires property owners of parcels within this category to provide and maintain a public pedestrian esplanade (at least 25 feet wide) extending along the entire river frontage of the lot and a 100-foot building setback (in most cases) from the shoreline. This requirement seeks to establish and maintain an increased area for public access to and along the riverfront that would otherwise be lost if the land remained as it is presently zoned. Instead of the large residential high-rise towers previously proposed for the waterfront, the marine waterfront district, as amended, will restrict height, density, lot coverage and provide for view preservation corridors and public access. Any development that would ensue under the MW districts would, according to the district, be responsible for such things as site soil stabilization, repair and maintenance of bulkhead and similar features, mitigation of traffic impacts, and reducing the first flush of stormwater flow into the Hudson River. Special design guidelines would be applied in the MW-B district as part of the site plan review with the objective of establishing "a general design framework that will preserve and enhance scenic views, assure an attractive environment for public access to the waterfront, respect the architectural character and scale of buildings in the Village center area, and preserve economic value."

According to the 2001 *Redevelopment Plan for the Hastings-on-Hudson Waterfront*, a key waterfront planning principle is to promote mixed-use development. The Plan states that "new development in the waterfront district should be a balanced mix of residential, recreational, and appropriate water-enhanced commercial activities that are complementary to the downtown" and "should be economically self-sustaining." The amended MW-B zoning classification for the site would allow for a mix of uses, and will be tied into a series of performance standards designed to provide specific requirements with regard to various aspects of the redevelopment. The performance standards shall be consistent with the provisions of Policy 1.4 of the LWRP and the federal Consent Decree between ARCO, the Village and the Riverkeeper and may include, but may not necessarily be limited to:

- site design parameters;
- dimensional requirements (building height, floor area ratio, lot coverage, set backs, etc.); and
- requirements for facades, architectural features, stormwater management, streetscapes, lighting, landscaping, and signage.

As discussed in the previous section on transportation, the amended MW-B district will allow for much less intensive development to occur along the waterfront than had been previously proposed for the land and that is permitted under the present GI zoning. The EIS that was prepared for the Harbor at Hastings proposal thoroughly analyzed the impacts associated with re-zoning a majority of the waterfront to RM-C, and allowing for more intensive residential and commercial land use development. This former proposal included 622 residential dwelling units, close to 30,000 SF of retail/commercial space, as well as a restaurant and expanded sports center and at least 10 acres of public park space (including new parking for all areas with ingress/egress improvements). The Harbor at Hastings development proposal states that *“given the physical characteristics and current use of each parcel in the remainder of the waterfront, it is quite likely that rezoning the Harbor at Hastings site to RMC-80 would not lead to any rezoning of other waterfront properties and that the remainder of the waterfront would remain in the GI-30 zone south of the site and in the MW zone to the north.”* The properties that would remain industrially zoned could then be redeveloped as such, contradicting the Village’s goals for the waterfront (as detailed in § 1.2 of this DGEIS). These parcels may also be acquired as parkland, further limiting their potential and economic contribution to the Village.

The LWRP, by comparison, represents a much more protective redevelopment plan for the entire waterfront corridor, restoring and enhancing the Village’s unique riverside landscape. There will be some growth associated with the eventual LWRP-backed redevelopment, though it is not anticipated that this growth would impact the pattern of zoning in the Village.

The LWRP proposes to increase pervious surface cover (promote fewer buildings and more open space); improve natural trailway systems; and establish a more restrictive zoning classification for key waterfront parcels. The recommendations and goals outlined in the LWRP would result in a decreased potential for adverse impacts to the waterfront and overall Village character, while preserving viewsheds and the local “small town” feel. As the now heavily contaminated waterfront is gradually remediated and redeveloped, it is anticipated that the increased public access and awareness to the river will result in an increased pressure for public park facilities that the LWRP will address.

The Village is proposing to redevelop a large, underutilized section of the Village’s waterfront (~43 acres) that was formerly comprised of deteriorated former industrial buildings with a mix of uses, including parkland, designed in accordance with the standards set forth under Policy 1.4. The exact form that this development will take is not completely certain at the present time, and will be subject to further assessment pursuant to SEQRA once an actual development proposal is received by the Village. However, as established under Policy 1.4.1, the land use mix ultimately should include extensive areas of public open space woven throughout the entire development, a variety of residential housing types, commercial uses, civic and cultural uses, and possibly an institutional use. Policy 1.4.1 calls for the discontinuation of industrial uses on this property. Section 4.13 of this DGEIS fully documents the issues of contamination at the major sites on the Village waterfront.

The redevelopment plan prepared by RPA recommended up to 250 residential units; however, during the review and potential amendment of the MW-B zoning under the LWRP Implementation project, a reduction in density will be reconsidered vis-a'-vis new information that may have changed conditions since the RPA plan was prepared. This development will be substantially less than considered in the Harbor at Hastings proposal, resulting in a reduction in the potential for adverse impacts to land use patterns, particularly as new development would now be limited to select, pre-approved areas, whereas the previous proposal had residential dwellings spread along the length of the waterfront and included towers.

The Harbor at Hastings development would have created a series of narrow, interrupted viewsheds of the waterfront area. As stated above, the LWRP recommends the re-zoning of this waterfront area to an amended MW-B, which would allow for the preservation of large tracts of land creating a more expansive viewshed. The Village Board released a Findings Statement in reference to the proposed MW zoning districts which stated that a potential benefit of redeveloping the waterfront would be "elimination of visually polluting industrial structures; provision for new view preservation corridors from the Village waterfront and the Village upland areas." Therefore, the proposed action would be consistent with the stated Village waterfront planning principle discussed in the 2001 *Redevelopment Plan*: "Visibility of the Hudson River is important and building design must provide for open-view corridors. Structures and plantings should not wall off the river; some views should be open even at street level; special attention should be given to the most public views."

5.8 Human Resources

Implementation of the LWRP will have a positive effect on the human resources of the Village of Hastings-on-Hudson. The planned waterfront redevelopment strategy, as outlined in the LWRP, would provide area residents and visitors with increased recreational, educational, employment, and transportation alternatives, as well as new housing opportunities, including affordable housing, as provided for in the Village's affordable housing law. All of these features will enhance the overall quality of life in the Village.

5.9 Educational Resources

The proposed redevelopment of the waterfront will potentially include up to 250 new residential units (the composition of which has yet to be definitively decided as of the date of this report, in terms of one-, two-, or three+ bedroom units). The addition of new residential development along the waterfront will not only provide new housing options for area residents, but it is also expected to bring new people to move to the area from outside communities. This new development will therefore result in an increase in general school enrollment as a portion of new residents are expected to either have children or have the intent to start a family.

To determine the potential impact of new school students that will result from the proposed waterfront development, recently completed development projects of comparable size from the general vicinity were consulted, as were local population trends. The Hastings-on-Hudson Union Free School District (UFSD) was contacted to determine if the projected increase would create a strain on their existing facilities. The District was given an elevated projection range of 60 to 125 potential new school-aged children relating to the proposed waterfront development.

To determine this 60-125 student projection, the proposed 60-unit development on Route 9A (in Hastings) was considered. Based on project information, this project is expected to generate 16 students for the Ardlsey public schools (the development site is one of the only properties in Hastings that is not in the Hastings School District), or 0.24 school children per unit. Applying that ratio to 250 units would generate 60 more children for the Hastings public schools. Alternatively, we know that there are 3,193 housing units in the Village and approximately 1700 children in the Hasting public schools. This would result in a ratio of approximately 0.50 children per unit, which is on the high side, as some of the school children live in residential units that aren't in the Village (because the Hastings school district is larger than the Village and some out-of-district children attend the Hastings public schools). By using 0.5 as the upper bound estimate of the number of children per residential unit, it would mean that 250 units on the waterfront would result in 125 new school children for the Hastings public schools. Thus, the number of school children who would live in the 250 units can be estimated at somewhere in the range of 60-125 students.

The Hastings-on-Hudson UFSD provided their own data on historic as well as projected school enrollment statistics. According to this data, the number of public school students has varied significantly over the years. After reaching its peak in 1970 at 2,119 students (subsequently after a general population high experienced in the 1960's), enrollment steadily declined through the 1980's to a low of 991 students in 1988. School enrollment has since increased gradually through the 1990's to today, with current data indicating that there are 1,632 students in the 2005-06 school year.

According to representatives from the Hastings-on-Hudson UFSD, their existing facilities have been sufficient to accommodate the 75% increase in enrollment that the District has experienced since the 1989-90 school year. Furthermore, the District's enrollment projections for the coming years indicate that enrollment is expected to experience a 7.9% decrease over the next decade. Based on this projected decrease, the District indicated that a potential of 60 to 125 new students resulting from the proposed waterfront development would thus in essence balance the figures out. The District indicated confidence that existing facilities are sufficient to accommodate the proposed waterfront redevelopment. Therefore, the project will not have an impact on the Village's scholastic resources.

Further limiting the potential impact on Village schools is the fact that the initial projection of 60 to 125 new school-age children provided to the UFSD is likely quite higher than what may actually occur, based on a subsequent review of additional projects in the surrounding communities. Current enrollment projections have since been obtained pertaining to several development projects located in surrounding villages such as Irvington, Mamaroneck, Dobbs Ferry, and Bronxville. For example, a March 2003 analysis was obtained that had previously reviewed eight (8) local development projects to compare school generation statistics. Of these eight projects, only two were of a larger scale that could be considered comparable to the currently proposed 250-unit waterfront development project: the *Avalon Willow*, a 227-unit project in the Mamaroneck School District and the *Avalon*, a 110-unit project in the Bronxville School District. This 2003 analysis indicated that 227-unit project generated a total of nine (9) new students (grades K-12), at an average of 0.04 students per unit, whereas the 110-unit project generated a total of 21 new students, or an average of 0.19 students per unit (**the analysis report indicates that this number was rounded off*). Based on these figures, the proposed waterfront development is most closely comparable to the *Avalon Willow* project, and thus would likely generate approximately 10 to perhaps almost 50 new students (as per *Avalon* rate). These figures are much lower than those initially provided to the school district and further reinforce the determination that the project will not have an impact on the Village's scholastic resources.

5.10 Recreational Facilities and Community Services

Implementation of the LWRP will have a positive effect on recreational resources available in the Village. Recommended remediation of the waterfront area will enhance public access between the downtown and the shoreline of Hastings-on-Hudson, in addition to providing for a greater array of opportunities. Enhanced recreational opportunities provided for include, but are not limited to:

- new parkland;
- expanded recreational vessel access to the river, in the form of marina and/or docking facilities to serve one or more mooring areas;
- possible new ferry terminal, water taxi, and/or dockage for small touring boats (i.e., for cruising and/or sightseeing);
- a swimming area;
- an enhanced trailway system for pedestrians and bicyclists;
- rehabilitation of the cluster piers in the deep-water area of the waterfront for use as a fishing pier and dockage for large boats; and
- dockage for educational and scientific uses (i.e., possible institutional facility).

The LWRP also recommends the development of institutional, or community-based structures, such as a performing arts center, a community center/indoor civic center, or a museum on a portion of the waterfront.

The LWRP sets forth development standards that will preserve the recreational value of the Village's waterfront by preventing structures that would adversely affect visual resources, hinder navigation, or impair boating safety. Also, implementation of the LWRP is not expected to result in significant adverse impacts to community services, such as the school system, fire and police departments, health care facilities, or solid waste disposal operations.

5.11 Utilities

As the waterfront area has historically been developed (predominantly with large-scale industrial uses), there is an existing infrastructure for public utility connections, including sewage, drinking water, and natural gas. The proposed development is not expected to increase demand beyond the capacity of existing local utility services.

5.12 Scenic Resources

Implementation of the LWRP will have a beneficial impact with respect to scenic resources, particularly through the goals outlined under *Policy 12: Enhance visual quality and protect outstanding scenic resources*. This policy promotes the enhancement of visual and aesthetic aspects of the village, avoiding activities that would obstruct valuable scenic views. The Village is fortunate to have extensive views of the scenic Hudson River and Palisades from many locations, and hopes to maximize the availability of these resources for its residents. Several of the other policies also serve to enhance these features (*i.e.*, *Policies 1 and 11*).

Through the LWRP, the Village hopes to identify and preserve its locally significant habitat areas. The Village recommends several habitat restoration and public access improvement projects in the LWRP that will serve to enhance the public enjoyment of the Village's scenic resources. Compared to previous development proposals, the LWRP would provide for much more open space, fewer parking spaces, and fewer impervious surfaces. This would create a more visually pleasing aesthetic environment. Also, the deteriorating unsightly former industrial buildings that presently dominate the Village's waterfront will be demolished (or re-used as deemed feasible) to create an open access area to the Hudson River. As such, the LWRP represents a beneficial impact on the Village's scenic resources.

As discussed previously, the Village is seeking to re-zone the waterfront area from general industrial (GI) to an amended marine waterfront (MW-B) district. The amended MW-B district will provide for strict height limitations to preserve views of the River and Palisades. It is stated in the MW-B regulation that "development in a MW-B district shall be designed in such a way as to respect the scale and character of the existing village, preserve and enhance views of the Hudson River and the Palisades as seen from upland areas and enhance views of the Subject Property as seen from the Palisades and the river." This statement is in accordance with the goals of the LWRP to promote the local scenic views currently disrupted by deteriorating industrial buildings that now dominate the Village's waterfront.

As discussed above in § 5.7, a key Village waterfront planning principle involves the preservation of scenic view corridors, particularly those offering views of the Hudson River waterfront. Visual access to the river will be significantly improved from many Village locations where existing buildings on the waterfront create a visual barrier. Therefore, the LWRP is consistent with existing Village's accepted goals and plans.

5.13 Historic and Archaeological Resources

The LWRP will not have an adverse impact on historic and archaeological resources within the Village's coastal area, since all actions undertaken within the Village would have to consider potential impacts on these resources during the consistency review process (pursuant to Policy 13). In addition, the LWRP recommends that consideration be given to the strengthening of local historic preservation laws which would: regulate future development that may affect designated historic and cultural resources; establish procedures for the designation of additional historic buildings and landmarks; and set up an Historic Preservation Commission to recommend structures and sites that merit preservation due to historic or archaeological resource value.

The 2001 *Redevelopment Plan for the Hastings-on-Hudson Waterfront* states that one key planning principle of the Village is to ensure that "careful consideration ... be given to the preservation of historic elements on the waterfront. The water tower and portions of selected brick structures should be woven into the planning of any future development." The proposed projects detailed in the LWRP represent an effort to maintain any potentially historic structures that remain on the waterfront. The ARCO site has had a thorough engineering inspection on numerous buildings on the property to determine the extent of their potential re-use. If feasible and consistent with the final development plans and the DEC-required remediation, the water tower will remain, as will Building 51 and at least a portion of Building 52. According to a Fall 2004 progress report produced by ARCO, the company has made an effort to "preserve the historical character of the former Anaconda site, whether in terms of the preservation of facades, historical building materials or in the look of future redevelopment projects that reflect the site's history."

5.14 Growth-Inducing Aspects

Growth-inducing aspects are those characteristics of an action which would cause or promote further development, either due directly to the proposal or indirectly, as a result of a change in the population or development conditions of that community or its market. The LWRP is not expected to result in a significant adverse change in the growth potential in the Village.

5.15 Cumulative Impacts

Cumulative impacts are those resulting from the combined effects of the proposed LWRP in combination with all other proposed actions. Since the LWRP encompasses all aspects of land use and development in the Village's coastal area, cumulative impacts within this area have already been considered in the preceding sections of this DGEIS, consistent with the generic nature of this document.

5.16 Irreversible and Irretrievable Commitment of Resources

Implementation of the LWRP will have a generally beneficial impact on natural resources and community character, since many of the LWRP policies call for the preservation and enhancement of these resources. Although the proposed action will require the commitment of resources based on site-specific development, yet it is believed that the amount of these resources represents a reduction in comparison to the amount that would be consumed if the proposed action is not implemented. Also, it should be noted that if the proposed action is not implemented, the Village's waterfront could then be developed in a more intensive manner that would be significantly greater in extent and more impactful to ecological and wildlife resources than that associated with the proposed LWRP. Accordingly, the LWRP serves to minimize the irreversible and irretrievable commitment of resources.

5.17 Impacts on the Use and Conservation of Energy

The proposed action is intended to significantly reduce the amount of future development, largely on the Village's waterfront, in comparison to what could occur if the action were not implemented, as well as to shift such potential growth to appropriate areas that would be efficiently and economically served by public transportation infrastructure. In addition, Policy 9.1 requires that new buildings on the waterfront have an energy efficient design. Consequently, the LWRP represents a reduction in future consumption of energy resources in comparison to what could be expected if the proposed action were not implemented and more intensive development ensued.

6.0 MITIGATION MEASURES TO MINIMIZE ENVIRONMENTAL IMPACTS

6.1 Mitigation Measures

In general, the significant impacts associated with the adoption of the Village of Hastings-on-Hudson's LWRP are beneficial, and therefore require no mitigation. The LWRP integrates a variety of laws and regulations, proposed projects and activities, and an implementation framework in order to protect the environmental quality of the coastal zone.

The Village has a number of existing laws and regulations which serve to ensure that potential environmental impacts resulting from coastal development projects are mitigated. In addition, the proposed zoning changes and actions identified in the LWRP will augment the ability of the present legislative and regulatory framework to protect the environment in the Village's coastal area.

6.2 Unavoidable Adverse Environmental Impacts

Implementation of the LWRP will not have any direct unavoidable adverse environmental impacts. To the contrary, implementation of the LWRP is expected to have a beneficial impact on the environment, including environmental remediation of the heavily contaminated waterfront and preservation of much of the area as natural open space. Section 2.13 of the LWRP and § 4.13 of this DGEIS both provide a detailed discussion of the existing industrial contamination on the approximately 43 acres of Village waterfront. The goal of the LWRP is to remediate this large area and establish a publicly accessible and economically feasible waterfront. The LWRP also recommends projects that entail wetland and marsh restoration, as well as the enhancement of scenic trailways and parks. Not only will these new uses be aesthetically pleasing, they also would benefit the ecology of the area.

Also, the LWRP will allow for less intensive development of the land, thus preserving a wider array of the Village's resources for future use and opening up a large area of land that is currently inaccessible to Village residents. The lower development density promoted by the LWRP represents an increase in pervious surfaces and the preservation of a greater percentage of public open space.

7.0 ALTERNATIVES

The alternatives to the proposed LWRP which were considered are:

- 1) taking no action and not adopting the LWRP, and
- 2) adopting a different plan containing a variation of the specific policies and/or proposed projects.

The no-action alternative is not desirable because it would not provide for increased protection of environmental resources in the Village's coastal area nor would it provide a comprehensive plan for future development activities in this area, as does the proposed LWRP. Furthermore, if the Village does not adopt an LWRP, the review of actions in the Village's coastal area would remain under the control of the State, and would continue to be conducted in accordance with general policies developed by the State rather than the specific policies formulated to address local concerns within the Village. In addition, the lack of an approved LWRP would result in projects within the Village being given a lower priority for State funding through the Environmental Protection Fund and Clean Water/Clean Air Bond Act programs.

Also, under the no Action alternative, the development of the waterfront would remain uncertain. As the LWRP currently incorporates the re-zoning of the 43-acre waterfront parcel from predominantly general industrial to marine waterfront, the no-action alternative would leave the site in its current zoning classification. This leaves open the possibility for the land to remain under commercial/industrial use, with the potential for new businesses to utilize the valuable waterfront location, thus limiting or preventing public access to the waterfront. These potential commercial/industrial businesses would also create increased commercial and passenger traffic in the area, thereby increasing the burden on these roads.

The no-action alternative may be more desirable to some property owners since, compared to the proposed LWRP, as it places fewer restrictions on the types of activities that can be undertaken in the coastal zone. However, in terms of the enjoyment of coastal resources and the conservation of important environmental features, the LWRP provides more benefits to Village residents in general than does the no-action alternative.

Numerous intermediate development options exist between the proposed action and the no-action alternative, as it pertains to waterfront development. The property can house a variety of residential, commercial and recreational uses in varying degrees. In any of these other alternatives, the Village loses the ability to guide the waterfront development towards promoting public access.

There exists the likelihood for increased traffic congestion and negative impacts on intersection service levels. Some of these building scenarios would be considerably more land-intensive than that which is proposed under the LWRP. This would directly contradict the planning goals and recommendations of the Village Board, which include taking steps towards improving public access to a new pedestrian-friendly waterfront, improving traffic conditions at key intersections, and limiting the potential development density on the waterfront. The proposed action would facilitate the removal of the large commercial entities on the waterfront and allow for a much less intensive development strategy that encompasses the entire waterfront area.

None of the alternative plans would be as desirable as the proposed action since the LWRP represents the product of intensive and careful consideration of land and water use policies, administrative actions, and development projects that would provide for maximum protection of environmental resources in the Village's coastal area.

MAPS BASED ON THE AKRF LWRP TRAFFIC STUDY FIGURES

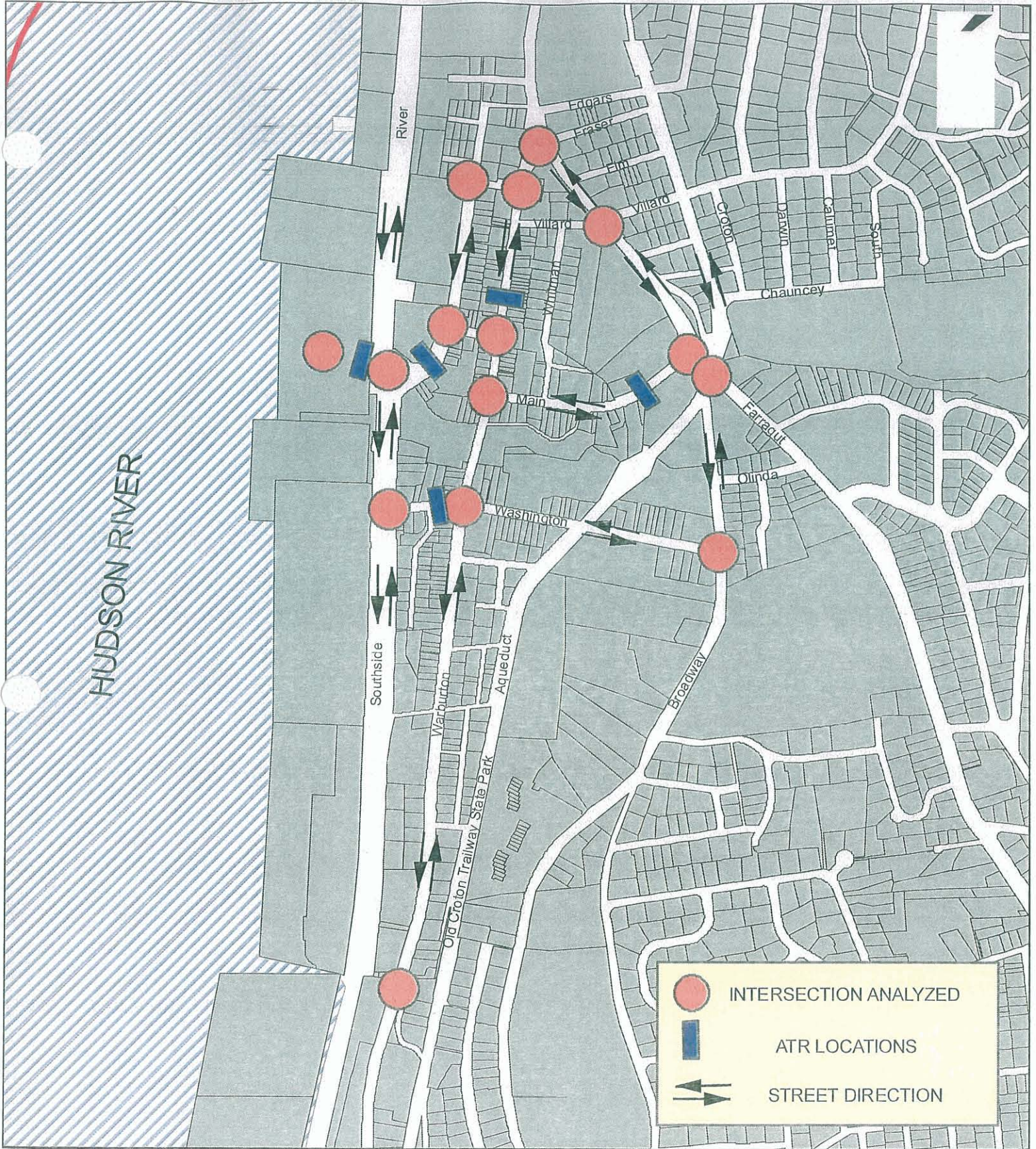


FIGURE 9-1
 VILLAGE OF HASTINGS-ON-HUDSON
 LOCAL WATERFRONT REVITALIZATION PLAN
 DGEIS
 AKRF TRAFFIC STUDY AREA

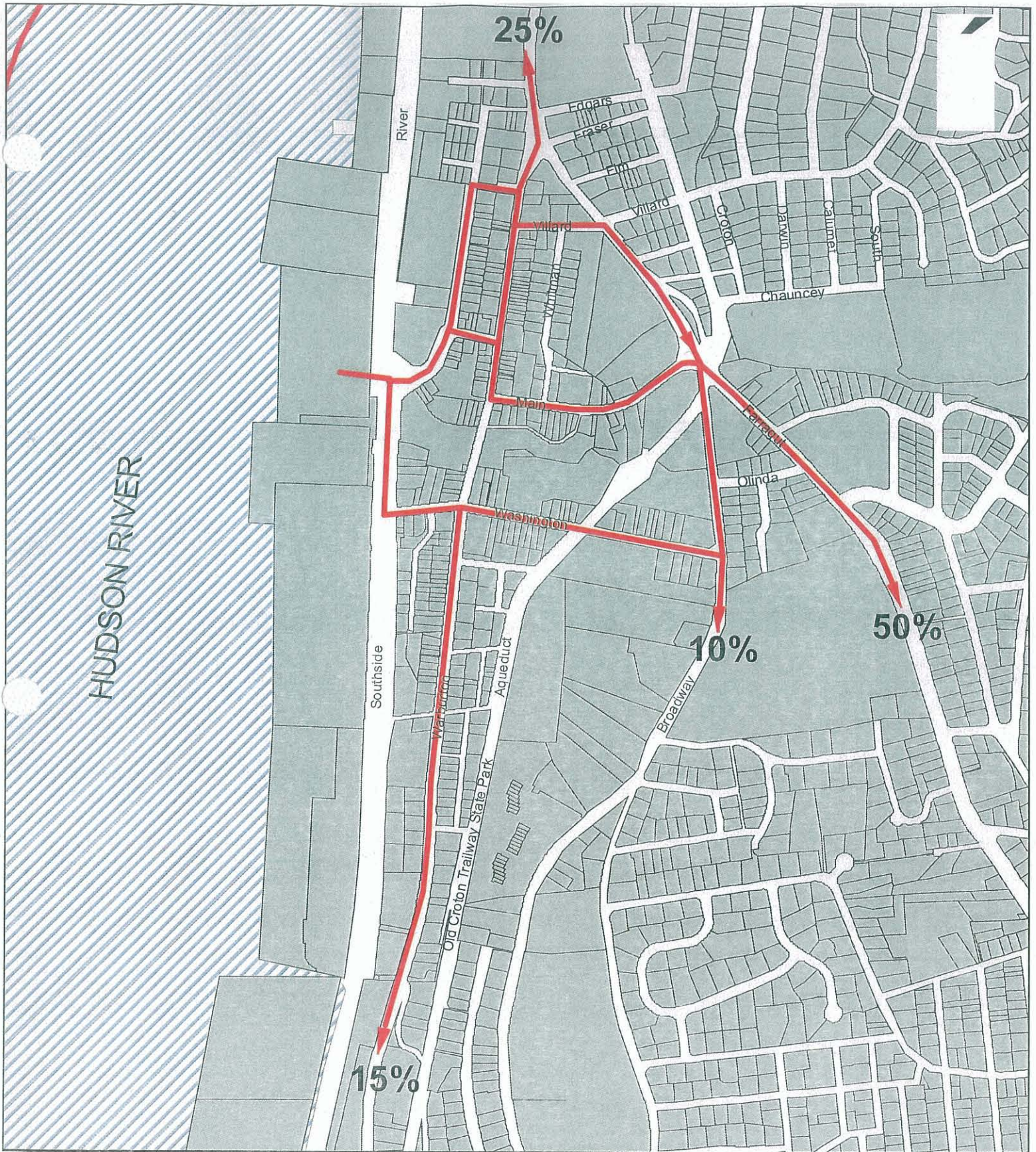


FIGURE 9-2
 VILLAGE OF HASTINGS-ON-HUDSON
 LOCAL WATERFRONT REVITALIZATION PLAN
 DGEIS
 PROJECTED TRAFFIC WITH ZINSSER BRIDGE CLOSED



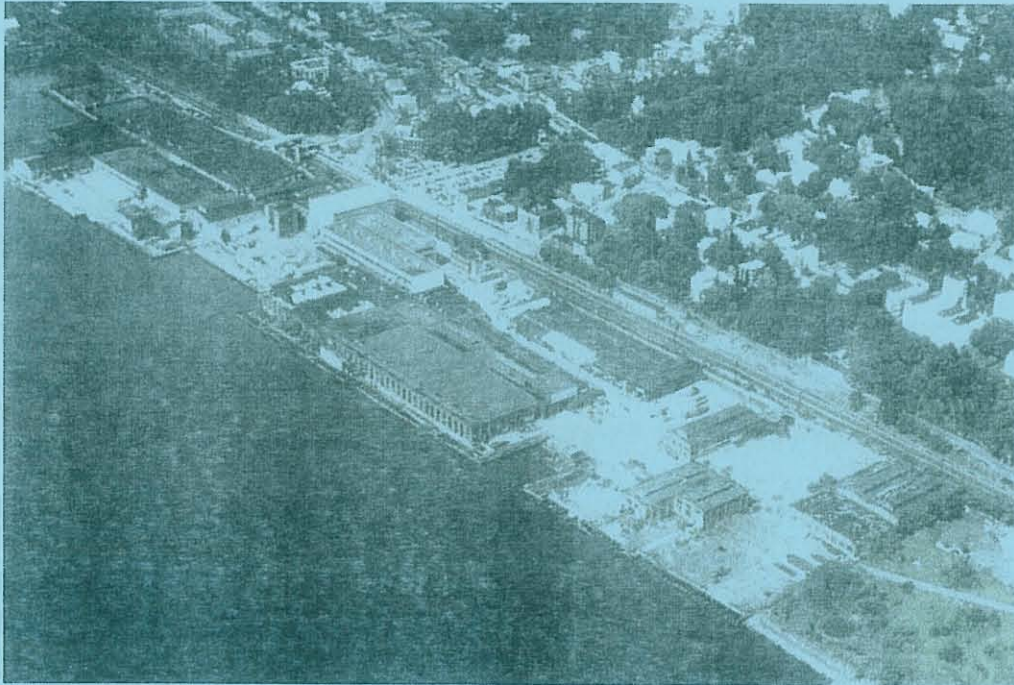
FIGURE 9-3
 VILLAGE OF HASTINGS-ON-HUDSON
 LOCAL WATERFRONT REVITALIZATION PLAN
 DGEIS
 PROJECTED TRAFFIC WITH ZINSSER BRIDGE OPEN

LWRP

APPENDIX A

A REDEVELOPMENT PLAN FOR THE HASTINGS-ON-HUDSON WATERFRONT

FALL 2001



Sponsored by:
Westchester Community Foundation
NYS Department of State
ARCO Environmental Remediation LLC

Organized by:
Regional Plan Association
Village of Hastings-on-Hudson

1. Introduction and Overview of the Project

In May of 2000, Regional Plan Association (RPA), was asked by the Village of Hastings-on-Hudson and ARCO Environmental Remediation Limited (AERL) to design and implement a community-based planning process to produce a land use plan for the Hastings waterfront. The land use plan has the following purposes:

- To build community consensus regarding a vision for the future of the Hastings waterfront.
- To assist in the completion of that portion of the Local Waterfront Revitalization Program (LWRP) that addresses proposed land uses.
- To assist in determining the remedial solutions that may be applied to the site.
- To recommend implementation strategies for the redevelopment of the waterfront.

The process was managed by a Steering Committee made up of the Mayor, the Village Manager, a Village Trustee, the chair of the LWRP Steering Committee, a member of Hastings Waterfront Watch (a local citizens' group), the Village's Planning Consultant, three representatives of AERL, RPA, and a representative of the New York Department of State Division of Coastal Resources.

The committee provided on-going direction to RPA and the consultant team, critiqued documents as they were generated and generally provided a forum for dialogue between the Village government, Village stakeholders, AERL, and state agencies. The project was funded by the New York Department of State, AERL, and the Westchester Community Foundation.

The starting point was the "waterfront planning principles," that the community developed through the LWRP process that began in November 1997. The principles became an essential part of the planning document, "A Community Vision for Comprehensive Planning and Strategic Action Plan" that was accepted by the Village Board in 1999.

Insure Viable and Sustainable Development:

The development should be economically self-sustaining—there should be no negative fiscal impact on the Village.

Create a Pedestrian Friendly Environment:

Vehicular traffic, especially commercial traffic, should not dominate the waterfront. Ensure pedestrian access and connection to the village pedestrian network.

Integrate New Development:

The waterfront west of the Metro North tracks should be an integral part of the village, and requires public streets and adequate provision for north-south vehicular circulation with appropriate east-west crossroads. Planning for the waterfront should be coordinated with that of the business district and the rest of the Village to ensure integration.

An important criterion was that the plan be economically feasible. Non-revenue producing uses such as park land and public amenities are viewed by the community as the most essential parts of the plan. In order to avoid a situation in which the scale of development is driven by the need to subsidize these public uses, we have provided an order of magnitude analysis (see discussion of fiscal impacts below) that assumes a significant public contribution.

We have also provided an analysis of the impacts of this plan on taxes, the school system and traffic. It must be pointed out that these impact analyses are preliminary and are for the purposes of dimensioning the problem and identifying obstacles that would be impossible to overcome. As the planning process moves forward, more detailed studies will be required. Also, the impacts of waterfront development must be understood in the overall context of the village and the cumulative impacts of other developments.

The essential information about this project is summarized within this report. However, there are also a number of documents generated during the project that are appended to this report. This includes the Briefing Book for the workshop, the market study by Abeles Phillips Preiss & Shapiro, Inc., a more detailed cost analysis for the development pro-forma and other miscellaneous documents and research.

This project builds upon the many excellent efforts that have come before. The Acknowledgements identify those many individuals who have been directly involved in this most recent effort. Over the years, hundreds of Hastings residents have worked on the planning of the waterfront and ultimately the entire Village will take both the credit and the responsibility for the final outcome. For this reason, the land use plan should provide a "road map" for the residents of the Village that may yet take many years to complete. We would suggest that in the spirit of this effort, it is essential that the implementation of the waterfront plan should continue as an open and public process that engages as many citizens as possible.

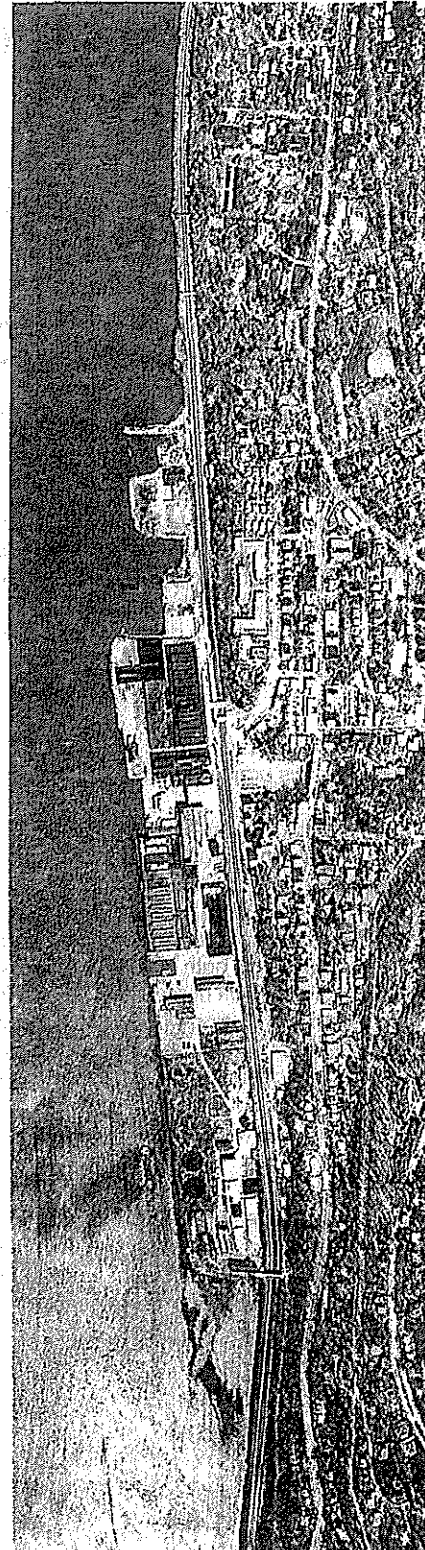


figure 2: aerial photograph

3. Planning Framework

3.a Overall Planning Framework

Village planning documents made it clear that the waterfront should be developed in such a way that it is an integrated extension of the existing Village core, centered around the train station. New residential development on the waterfront should not create a separate enclave, but rather another neighborhood, comparable in scale to other neighborhoods in Hastings, and with the same positive relationship to the downtown and the Village as a whole. (figure 3)

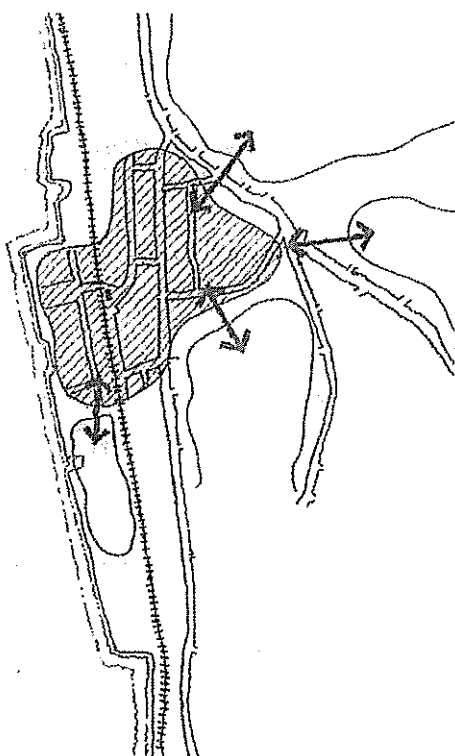


figure 3: waterfront as extension of village

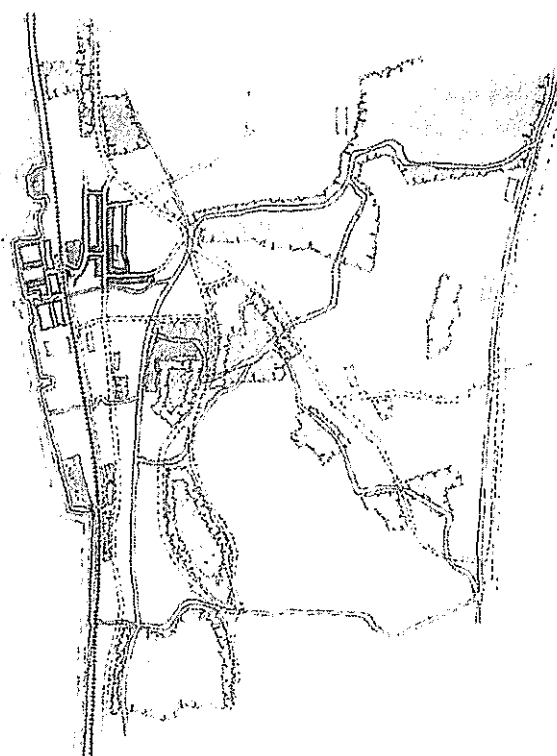


figure 4: waterfront and village open spaces

3.c Major Issues for Future development

Many issues need to be considered prior to developing a conceptual plan: (figure 6)

1. 100 year flood plain

Most of the site is below the 100 year flood plain. Regulations require that the lowest floor of any residential structure, including basement or cellar, be at or above this elevation. New construction and substantial improvements of any commercial, industrial or other nonresidential structure, together with attendant utility and sanitary facilities, must either have the lowest floor, including basement or cellar, elevated to or above the base flood elevation or be flood-proofed so that the structure is watertight below the base flood level. Insurance and flood proofing costs often prohibit building below the flood level. Therefore any new developments may require raising the site two to four feet with clean fill (see discussion of Contamination Issues).

2. Limited access

At present, automobile and pedestrian access is limited to the Dock Street Bridge and the pedestrian bridge at the train station. The Zinsser Bridge, at the south end of the waterfront, is owned by Metro North, leased by Uhlich Color Company and is in a poor state of repair. Any significant redevelopment will require improvements at the Dock Street bridge and the ramps connecting to it, new pedestrian bridges, improvement of the Zinsser Bridge and possibly a new connection to Warburton Avenue (see discussion of Traffic Impacts below).

3. Traffic

A number of intersections in the downtown and its vicinity are at marginal levels of service and may be impacted by future development. Mitigation of these impacts will burden future development (see discussion of traffic impacts below).

4. Site Control and Phasing

While a single owner (ARCO) is in control of the northern two-thirds of the site, a long-term plan must incorporate the two parcels at the southern end of the site owned by Exxon-Mobil and Uhlich Color Company. The Exxon-Mobil and Uhlich parcels are subject to a similar remediation process as the ARCO property, but without the necessity of removing PCB's. Uhlich Color Company has expressed its intention to move its current operations to another site and possibly put the property on the market.

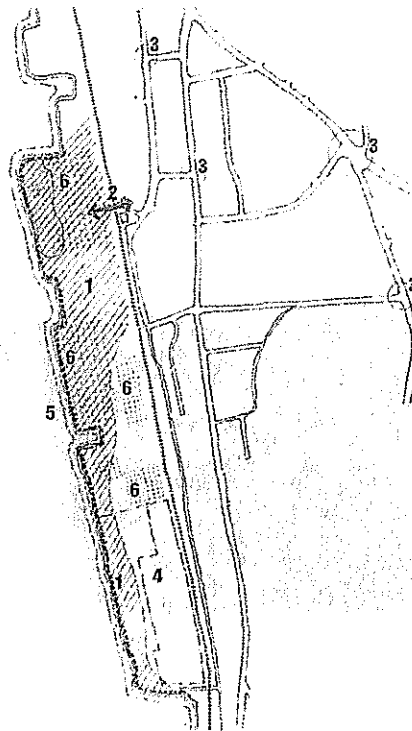


figure 6: site constraints

3.d Environmental Contamination Issues.

The site is heavily contaminated. For the purposes of this study, it was a working assumption that the site would be cleaned up to levels that would support the uses proposed. In addition, the long-term use of the site may be constrained even after a cleanup plan is agreed to and implemented. These constraints might include institutional controls such as restrictions on digging new trenches for new utilities or foundations.

Portions of the Hastings waterfront contain varying levels of PCBs, heavy metals, PAHs, petroleum, and other chemicals. The New York State Department of Environmental Conservation (DEC) is now determining what kind of cleanup to require for the three properties. The proposed remedial action plan (PRAP) for the northern portion of the site, which is now owned by ARCO Environmental Remediation L.L.C. (AERL), is expected to be issued in early 2002. Separately, DEC is now preparing a PRAP for the Mobil/Uhlich parcels (which are being considered together). Yet another PRAP will cover contaminated sediment in the Hudson River off the northwest portion of the site. DEC expects to release that plan in early 2002.

AERL is currently replacing the existing bulkhead along a portion of the site. As part of the remedy, DEC may require replacement of the bulkhead along other portions of the site as well.

DEC is considering several possible approaches to the cleanup of the sites. These include excavation of fill material to various depths; capping with clean fill; capping with impervious material such as asphalt; and others. For the Mobil/Uhlich site, groundwater treatment of volatile contaminants is also being considered.

For all the sites, the selection of the final remedies will be based on the regulations that govern remediation of contaminated sites in New York State. By law, every cleanup must be designed to protect human health and the environment. State groundwater quality standards and soil cleanup objectives are also considered. The future use and design of the property does not in itself determine which remedies will ultimately be selected, but any cleanup must be protective for the range of reasonably anticipated reuses. For the purposes of this study, no possible future uses were discounted because of the contamination of the site.

However, the remediation strategy that is ultimately chosen will have some repercussions on the future development of the site. For the purposes of this study, the following issues are relevant:

Bulkhead – Additional sections of the existing bulkhead may have to be replaced as part of the remediation. The new bulkhead should accommodate proposed new land and water uses of the waterfront. The bulkhead may have to be maintained in perpetuity as part of the remediation strategy. For purposes of this study, this capital investment as well as the on-going maintenance of the bulkhead were not factored into the development pro-forma for the ARCO site. It was included for the Mobil/Uhlich site.

Piles – Due to the structural characteristics of the existing fill, new buildings will have to rely on piles for support. The proposal assumes that new piles are feasible and would not create extraordinary costs.

Clean fill and site stabilization – Since much of the site is three to four feet below the 100-year floodplain, fill may have to be brought in to raise the ground surface above the floodplain as part of the redevelopment of the site. Additionally, new, clean soil or other capping technology is likely to be mandated as part of the cleanup of the site. Provisions for management of stormwater may also be part of the remediation. For purposes of this effort, RPA assumed that the developer will have to bring in an additional two feet of fill to raise the ground surface above the 100-year floodplain and that the developer would pay for site drainage.

Subsurface construction – Because of the floodplain elevation and the structural condition of the fill, subsurface construction (such as parking garages and foundations for buildings) may not be possible. Additionally, any subsurface work (such as the installation of utility lines) will have to take into consideration whether contamination remains, and if so whether special designs and construction techniques are necessary. The waterfront concept plan assumes no subsurface construction would be possible.

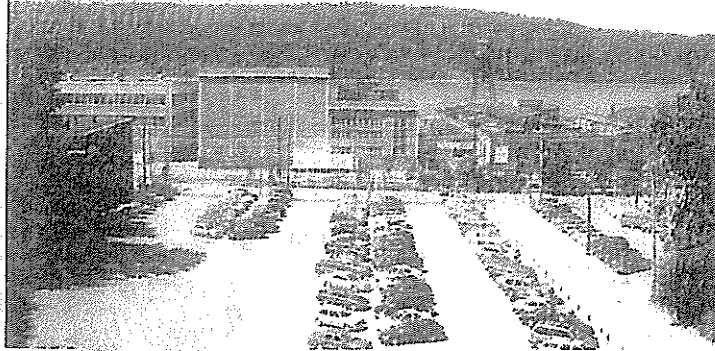


figure 10: view from Warburton Bridge

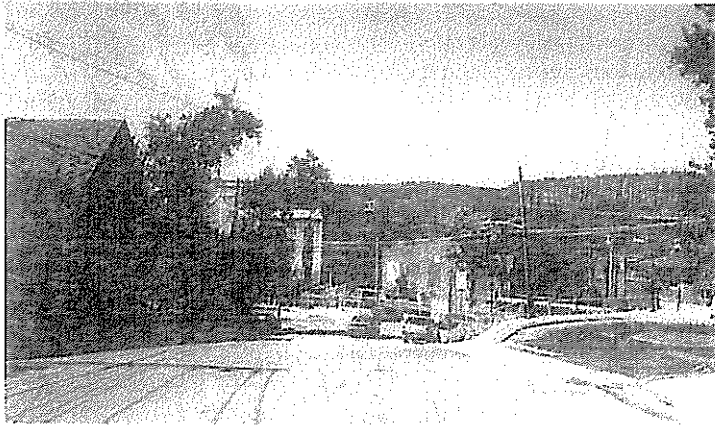


figure 11: view from Southside Avenue

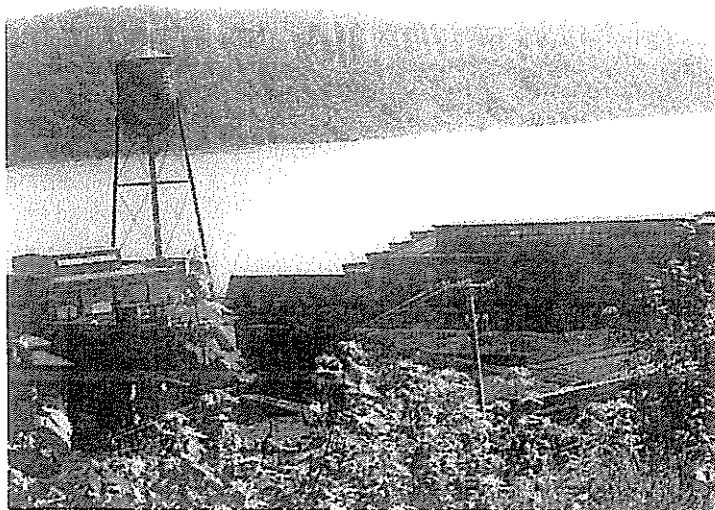


figure 12: view from Fulton Park

4. Market Study

Market considerations are a factor in the decision-making for future uses of the waterfront. The uses were screened in terms of market criteria such as demand, market sustainability, profitability, risk and ability to generate cross subsidies for site amenities and important non-revenue producing uses. However the screening was also in terms of programmatic factors (design, location bias, size), impact factors (impacts on traffic, fiscal, village services) and most importantly, planning goals: does the use promote public enjoyment of the waterfront, extend and bolster downtown, protect and enhance views, and promote affordable housing and other community amenities.

The success of the total project is contingent upon creating something more than a monolithic residential or institutional or park or commercial complex walled off from the community by the railroad. Market factors are thus an important consideration to what uses are part of the eventual redeveloped waterfront.

Over 100 potential uses were raised for consideration. These were grouped into approximately 15 use categories. For each of these categories (1) a market/site suitability and (2) cursory impact/planning analysis was prepared. Our conclusion was that, from a market perspective and independent of the desire to subsidize uses for their own sake, the 15 uses could be grouped as follows:

Profitable uses that can be counted upon to generate significant cross-subsidies for site improvements and amenities:

- Midrise housing
- Townhouse housing
- Senior housing/assisted living

Break-even or high-risk uses that cannot be counted upon to generate significant cross-subsidies for site improvements or amenities, but which may be useful in order to create a mixed-use environment.

- Retail
- Offices
- Inn

Non-profitable uses that would require some sort of subsidy to locate on the site, but which may be useful as "loss-leaders" for other uses (indicated in parentheses); that is, uses that are themselves non profitable but support other uses by increasing visitation to the site.

- Live/work space for artists and others
- Outdoor sales (retail, park)
- Inn (retail)
- Boutique industry (retail)
- Private recreation/health club (retail or housing, depending on the use)
- Theaters (retail)
- Excursion boats (retail)
- Museum/institute (retail)

Other non-profitable uses that would enliven the site, in general, but are not needed as loss-leaders, per se:

- Conference center
- Marina
- Boat launch
- Ferries and water taxis
- Indoor play space

5. The Community Design Process

Community Design Workshop #1

On September 23rd and 24th, 2000, a two-day community design workshop was convened at the Hillside Elementary School. About 150 residents attended the workshop which began with a series of presentations summarizing the background research, the planning framework, and the preliminary analysis of the "test schemes" which were the platform for this design session.

In the afternoon, residents worked in focus groups (8-10 people), each group co-facilitated by a planner and a designer—a landscape architect, architect, or urban designer. There were eight focus groups that were asked to come up with a recommended plan for the entire waterfront either by critiquing the test schemes, by developing an entirely new scheme or combining elements of both approaches. At the end of the afternoon, each of the groups presented its findings.

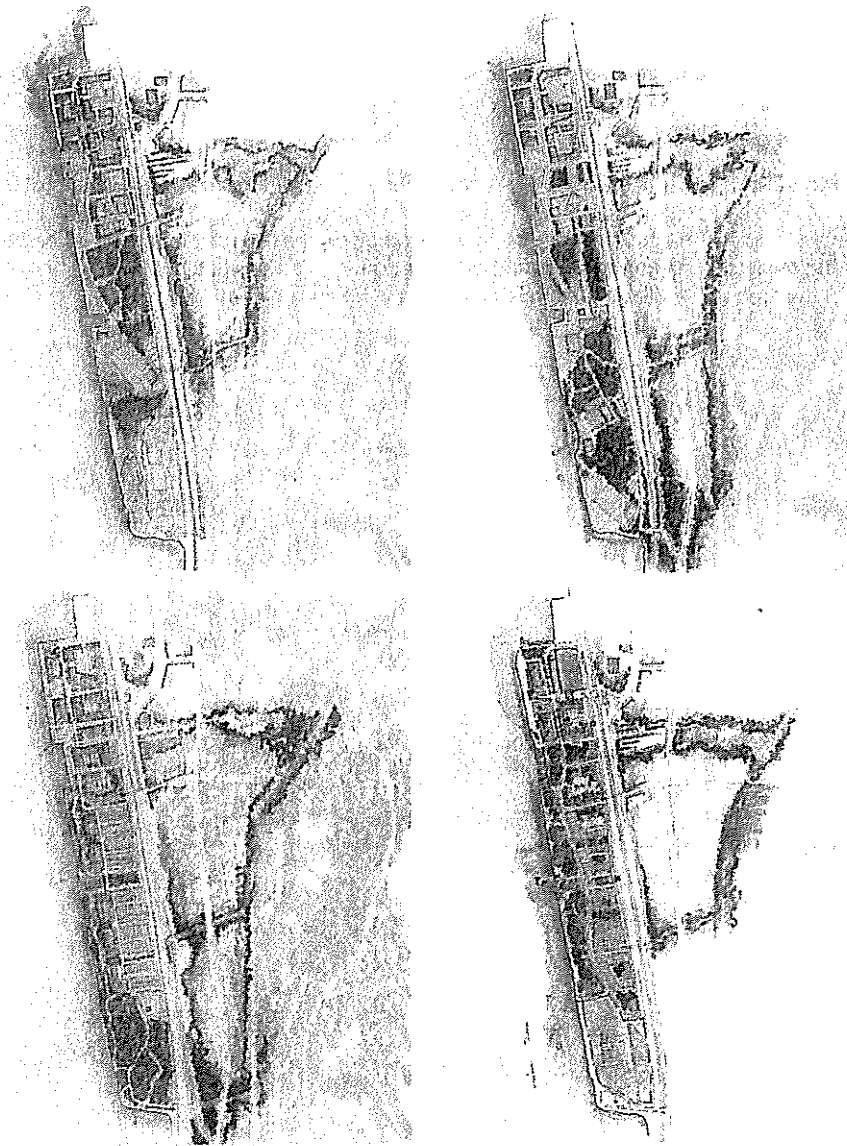
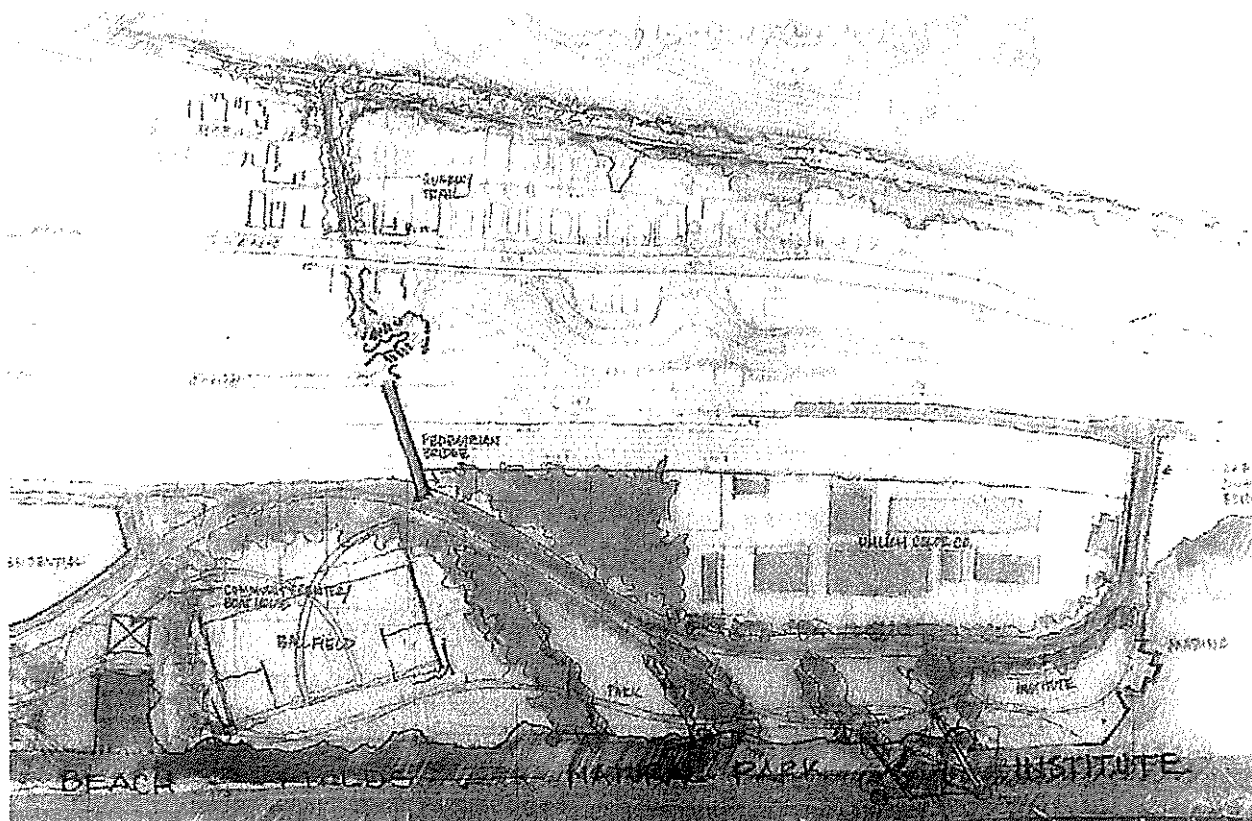


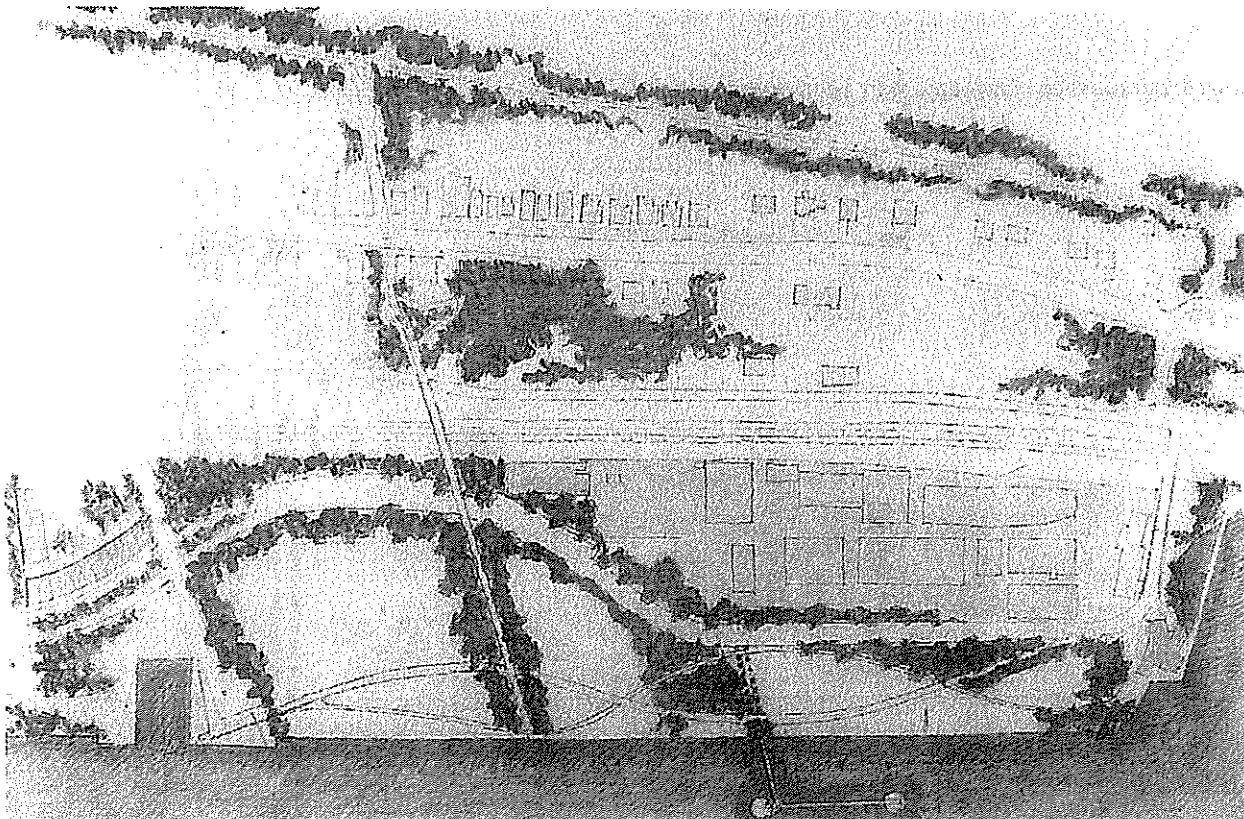
figure 15: test schemes

The other major open space in the north end was a waterfront plaza created by a widening of the esplanade near the water tower at the north cove. This space would be enlivened by a ferry landing, restaurants and small convention center. Other potential uses should be waterfront-related.

- Continuous waterfront access was described, although the water's edge would change along the length of the site. At the north end, a hard surface esplanade was described. South of the south inlet, the esplanade was described as more of a soft surface waterfront trail following a progressively more irregular and natural water's edge, perhaps of riprap, or even restored river habitat areas.
- Linkages between the waterfront and the village were proposed as part of the concept plan. These included: two new pedestrian bridges (one at Washington Avenue and one in the area of the Quarry right-of-way) improved pedestrian access at both the Dock Street Bridge and the re-built Zinsser Bridge; a connection through the ravine between the station area and the Old Croton Aqueduct State Historic Park; and an improved pedestrian passageway adjacent to the Steinschneider parking lot behind the stores on Warburton. This last connection functions as an extension of Main Street, across Southside Avenue to the Dock Street Bridge.
- The railroad station area was made more coherent by re-locating the southbound platform to a position opposite the northbound platform. This created a more integrated station area at the center of the site, opposite the ravine and the proposed waterfront plaza. The site would be re-graded so that the new southbound platform would be at grade. The new pedestrian bridge at Washington Avenue would join the southern ends of the two platforms.



- There was concern that the buildings, as they appeared both in the model and the drawings, were too uniform. In the current proposal this has been addressed by providing more variation in the scale and massing of buildings.
- There was concern that the residential blocks were too closed. This has been addressed in the current proposal by breaking down the edges of the residential blocks into smaller groupings of attached dwellings. This also creates more visual access into the residential blocks.
- There was concern that the green spaces were not sufficiently interwoven into the entire development. This has been addressed in the current proposal by allowing more of the greenery to penetrate the residential blocks and by providing more landscaping on the streets of the mixed-use area at the north end of the site.
- There was concern that the "riverside drive" was too large—too much of a grand boulevard. This has been addressed in the current plan by reducing the scale of the road, even at the most intensively developed north end.
- The desire to give the waterfront a cultural or civic identity was also reaffirmed. However, the requirements of a new institution are not known. The need for flexibility and a proactive effort to identify a potential cultural or institutional use was identified. Whatever institutional use is finally favored, residents felt that it must satisfy the same planning goals and criteria articulated for the rest of the waterfront, specifically, the need to provide public access and to be fiscally responsible. In the current proposal, the property belonging to Uhlich Color Company is shown with a grouping of buildings meant to represent an institutional campus of some kind. In the time since the second community design workshop, the Uhlich Color Company has indicated their intention to relocate their operations to New Jersey.



Overall land-use and road network

The waterfront redevelopment plan respects the central planning framework proposition that the waterfront should be an extension of the village. The northern third of the site, in particular, is conceived of as an extension of the downtown: a mixed-use area with a variety of building types and commercial, institutional and residential uses. The heart of this "village" portion of the site is a one and one half acre "waterfront plaza" that steps down to the esplanade at the North Cove, where ferry landings, restaurant, fishing piers and other water-related uses are situated. The northern portion of the waterfront would accommodate the wide variety of community-oriented activities which residents identified and might include an indoor recreation facility such as a pool or gym, a multi-purpose space for community meetings and events, or a performing arts facility.

To the south of the proposed waterfront plaza are three blocks where residential uses predominate: a variety of attached townhouses, garden apartments, and stacked flats. The buildings become progressively smaller as one moves farther south on the site. The balance of the site, approximately 22 acres to the south and west of the residential area, is devoted to open space uses:

The north-south roads—a service road adjacent to the tracks and a smaller scale serpentine "riverside drive" along the west edge of the residential blocks, are linked by smaller east-west side streets. The proposed riverside drive connects to the Zinsser Bridge at the south end of the site. The resulting road network creates a series of blocks that are of similar scale and character as the streets and blocks found elsewhere in Hastings.

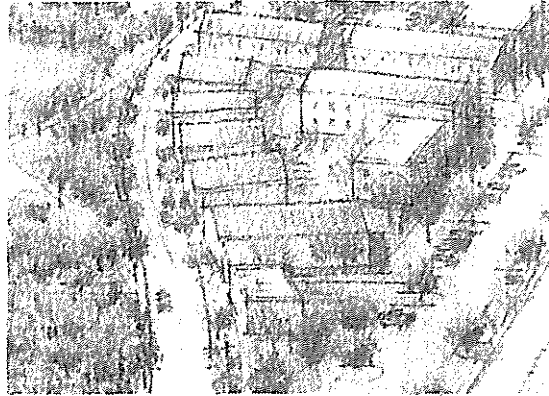
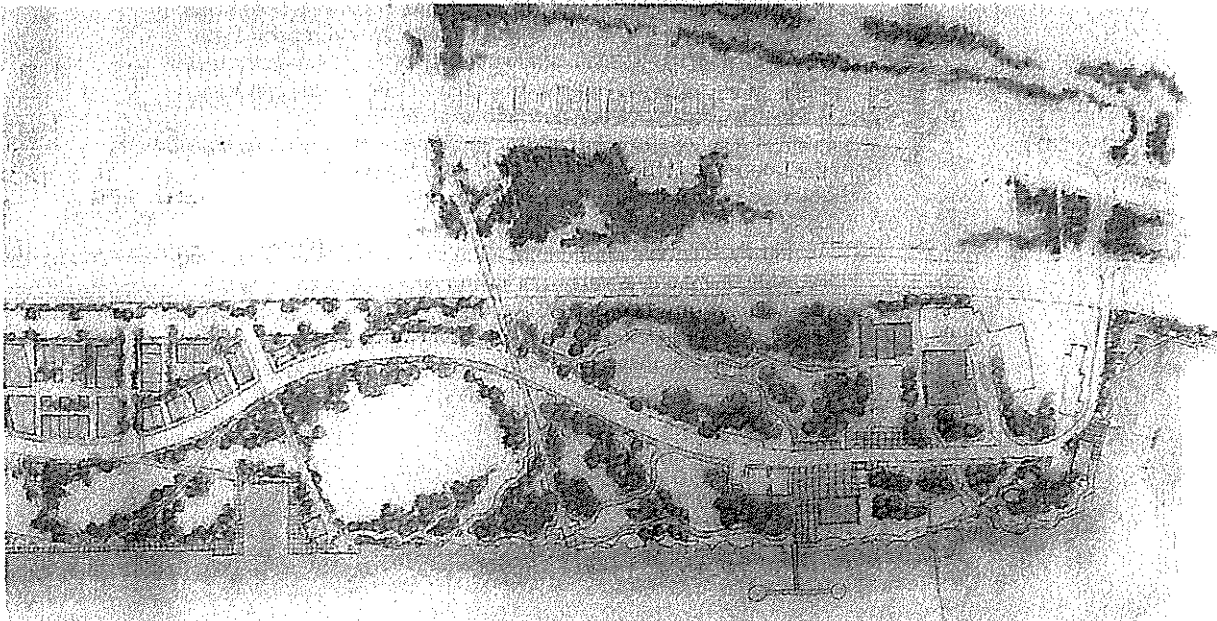


figure 20: new residential block



figure 21: existing buildings on Southside Avenue



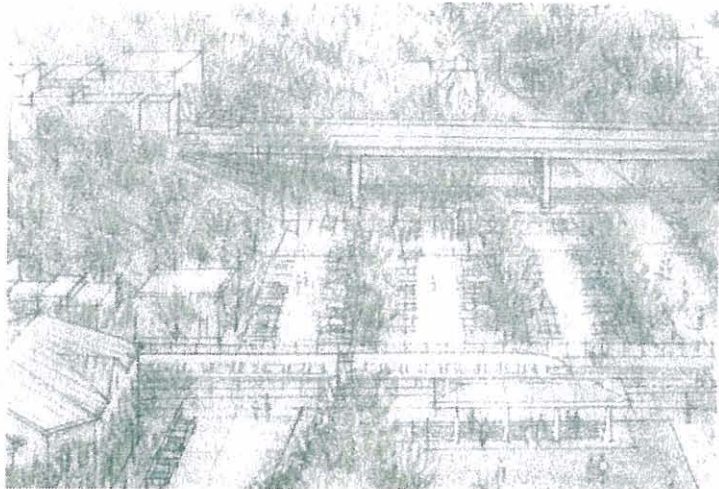


figure 24: perspective of re-developed commuter parking lot and new train platform



figure 25: photo of commuter parking lot



figure 29: aerial perspective of park spaces

Open Space Uses

Most of the plan is devoted to open space uses which vary tremendously in scale, character and the kinds of active and passive uses they will support. The plan reflects the principle that open spaces should not be concentrated in one part of the plan but should create a network of open spaces woven through the entire development. The responsibility for programming these open spaces has not been resolved; in other words, who would organize the various events and activities that take place, from farmers markets, to outdoor concerts, to nature walks. The Village will have to address that issue as part of its implementation strategy.

At the north end of the site there are three primary open spaces: a park at the north-west corner, a waterfront space at the north end of the cove, which is also the site for a floating dock and potential ferry landing; and the waterfront plaza.

The waterfront plaza is the heart of the waterfront redevelopment plan. This space, a visual extension of the ravine, is a multipurpose space, ideal for performance, outdoor sales, or simply looking at the Hudson and the Palisades. It steps gradually down from the elevation of the proposed southbound platform to the elevation of the esplanade. The space is asymmetrical: the north side is flanked by the long existing Building #51. The uses in this building, which should be public/civic in nature, can spill out onto the road along this side of the plaza. For example, the road could be the site of the Farmers Market and the Flea Market. The south side is flanked by residential buildings, the first of the three residential blocks. The landscaping on this side of the plaza marks the beginning of the riverside park.

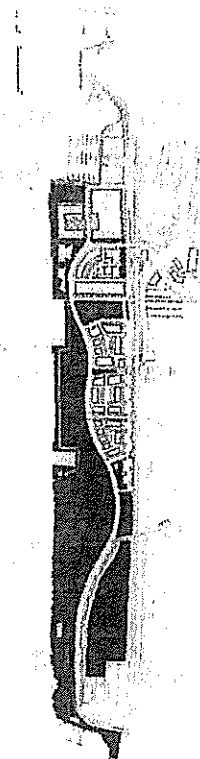


figure 30: open space diagram

7. Preliminary Assessment of Impacts

Fiscal Impacts and Financial Feasibility

In order to dimension the cost implications of the project, RPA analyzed the costs and revenues associated with the vision developed at the workshop. This analysis was undertaken to help the Village and its residents understand the cost implications associated with restoring the site, including the tradeoffs involved with various public and private improvements, and the extent to which a public subsidy would be required to realize the Village's desire for various public improvements. This is summarized below. The complete cost tables and sources are included in an appended report.

RPA estimated costs and revenues associated with both the initial capital investments needed to build the project as well as on-going annual costs and net property tax revenues once the project is completed.

Several major assumptions were made in order to account for factors that are unknown at this point.

- There would be no cost associated with acquiring the land. This was based on statements made by AERL (contingent on DEC selecting a technically feasible and cost effective remedy) and unclear values for the Mobil site;
- The clean-up of contaminants at the site would result in the construction and maintenance of new bulkheads around the AERL property as well as importing several feet of new clean fill (important also to raise the development above the 100 year floodplain);
- The State would pay the costs of moving the Metro-North Station and the reconstruction of the Zinsser Bridge. Our estimate for creating the "Warburton Connector" from Railroad Avenue to Warburton (\$ 4.2 million) is highly speculative;
- No attempt was made to account for debt service, present value, or the phasing of expenditures and revenues.

Capital Costs and Revenues The proposed project would cost approximately \$ 45 million. This includes costs of creating 22 acres of parks and other public spaces as well as other public improvements such as the dock space, fishing pier and the performance space. It also includes major transportation improvements such as two pedestrian bridges and the Warburton Connector. Other documented capital costs include the costs associated with providing bulkhead, site drainage and utility lines.

RPA estimated that about 18% of the selling price for any residential unit could be available for the kinds of site improvements listed above. These improvements will directly benefit builders as they construct and market their properties. Our 18% figure is well within the industry standard. No allowance was made for non-residential construction or below market affordable or artists housing. The final community proposal suggested approximately 250 units of market rate housing. The sale of these units at an average of \$ 500,000 each would generate about \$ 21 million.

In summary, there is a gap of approximately \$24 million between the total capital costs for the complete build-out and the revenues generated by private development. This estimate represents the amount of public subsidy that would be required to realize the vision developed at the workshop. Such funding could be made available from a variety of State, County, and private sources. Many of these improvements could be phased in over time. By way of comparison, the City of Yonkers received some \$ 100 million for their waterfront from the State and County. The Village of Irvington received about \$ 3 million for their new park from the State.

CAPITAL REQUIREMENTS	Acres/Units	COST
Parks and Public Open Spaces	22	\$ 12,705,000
Other Public Improvements		\$ 6,440,000
Total Transportation		\$ 13,783,000
Bulkhead/Fill/Drainage (ARCO Bulkhead not included in costs and long-term maintenance would not come out of generate revenue.)		\$ 2,135,097
Grand Total: Capital Requirements (includes 25% soft costs and 5% contingency)		\$ 45,582,026

SOURCES OF REVENUE

Developer Contribution for Site Improvements (\$85,000 per housing unit)	250	\$ 21,250,000
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Net Capital Costs/(Public Sector Request) **\$ (24,332,026)**

ANNUAL NET MUNICIPAL REVENUE/COSTS

Annual Net Revenue (After Expenditures for Schools and Normal Municipal Services)

Townhouse Housing (per unit)	120	\$ 647,932
Mid-Rise Housing (per unit)	160	\$ 236,377
Office/Retail/Inn	80,000	\$ 260,000

Other uses are speculative and/or do not have a significant positive or negative fiscal impact

Total: Net Revenue **\$ 1,144,309**

Total: Site Specific Costs **\$ 504,275**
(Maintenance of ARCO bulkhead not included in costs)

TOTAL: Annual Revenue/(Costs) **\$ 640,034**

Impacts on School System

As the presentation of fiscal impacts indicates, our preliminary analysis suggests that new multi-family housing in this location will provide a significant net benefit to the Village. A key component of this analysis is the impact on the schools because this is the greatest cost to the village and the greatest impact on perceived quality of life in the Village. It is important to note that it is not a goal of this project to create an enclave on the waterfront of professionals or families without children. Hastings residents have clearly stated their goal that the waterfront should be an extension of the Village and that there should be a broad range of housing types, sizes and costs. This means that there should be a range of ages represented in the waterfront neighborhood.

The Planning Board Subcommittee on Housing and Population conducted an extensive audit of the numbers of public school children contributed by multi-family developments over the last decade in Hastings, Irvington and Ardsley. Its findings support an important proposition: that the numbers of public school children is a function of multiple variables, of which unit size is only one, and which includes other more qualitative criteria including the physical setting (size of yards, proximity to parks and schools, etc.).

It is likely, in keeping with the trends established over the last decade, that the new attached units and apartments will contribute no more than one public school child for approximately every five and one half units, or one for every ten bedrooms. Conservatively, the 250 units will generate sixty children of various ages over the build-out time frame.

The projected school population and capacity figures for six years from now, when the first units may be coming on line, suggest that there would be capacity for these new children (based on the most recent report by the school's consultant, Focus Consultants). Note that the high school would be over capacity and the middle school would be under capacity. But because the two schools are connected, the combined capacity of 1222 is ample for the combined projected population of 1,083.

There will be incremental costs to transport and teach the additional students. Again, the housing committee found that, based on current costs, the costs for the first 25 students is about \$1000 per student, primarily in transportation. In our analysis this would be a cost of \$100,000 (25 x \$4000). For the next 35 students, because new faculty must be hired, the cost goes up to \$11,000 per student or \$385,000 (35 x \$11,000). So the total cost imposed by the 60 new school children is \$485,000 (\$100,000 plus \$385,000).

As large as this cost may seem, it is more than offset by the tax revenues generated by new units. Again, looking at a mix of new multifamily housing projects (Hastings Landing, Clarewood, Riverpointe) these have generated about \$5,587 per unit. In this sample analysis, the 250 proposed units would generate, \$1,396,000 offsetting the \$485,000 additional school costs by almost a factor of three.

This above analysis is not definitive and makes numerous assumptions. It also does not take into account the impact of other developments which may be built in Hastings. Still, the analysis suggests that the prospect of more housing and school age children cannot in and of itself be considered a "fatal flaw" that should prevent a continued consideration of new housing on the waterfront.

well as the appropriate regulatory framework while the details of the cleanup are being worked out. The three parallel tracks are not mutually exclusive, but rather interdependent; decisions regarding one could influence the others.

Some constraints to development that are intrinsic to the contaminated nature of the site have been identified by AERL and DEC:

Institutional controls. Deed restrictions and institutional controls on such activities as excavation and planting will be part of a remedial plan. If a private party or redevelopment agency takes title to the property, ARCO might provide a trust fund for the future maintenance of the bulkhead and the oversight of land use controls. The question of where that money would reside and who would be responsible for it must be resolved.

Stable ownership. The proposed remedy should be treated like a dam or other public structure that must be maintained in good condition over time. If this structure is transferred to successive private owners, it may be difficult to ensure property maintenance and to enforce institutional controls. A stable, long-term owner would be preferable.

Liability. Liability for remaining contamination is an obstacle to private development. Environmental Liability Insurance may make ownership more palatable to a private developer or other third party.

2. Establish the Land Use Regulations

The Village should continue the local planning process and create a regulatory plan to guide the redevelopment of the waterfront. This should include the following steps:

Complete the Local Waterfront Revitalization Program (LWRP). The LWRP that is nearing completion will be an official comprehensive plan for the waterfront, approved by the Village Board and eventually approved by the New York State Department of State. The LWRP report will conceptually describe the proposed waterfront redevelopment plan in Section 3, Proposed LWRP Policies, and Section 4, Proposed Land and Water Uses and Proposed Projects, with this report attached as an example. A Generic Environmental Impact Statement will be completed in conjunction with the LWRP. Before approval, the Village will seek input on the LWRP and the waterfront redevelopment plan from all interested state and county agencies, as well as waterfront property owners, as part of the required process implementing the LWRP. Agency and owner involvement at this stage will help with implementation later. The Village should also do a "reality check" with developers, real estate consultants and architects to ensure the plan's viability.

Develop Design Standards. The Village will next engage a consultant or consultants to develop performance standards and design guidelines that will ensure that the design, height, massing, and site coverage of new buildings and structures are compatible with the site and surrounding areas, and with the "village" character of Hastings. The consultant should also develop open space and landscape guidelines that would include standards for streets, walkways, planting, lighting and amenities. Environmental considerations, such as measures to reduce stormwater runoff and reduce energy consumption, should also be included. These guidelines should be developed with the active participation of the community.

Revise and Map Waterfront Zoning. The existing MW-B zoning text, which applies to the ARCO, Uhlich and Mobil properties, was created to allow a mixed-use development on the waterfront, but was never mapped. The text of this "floating zone" should be revised to reflect the land uses and overall development concepts recommended in this redevelopment plan. The new design standards should also be incorporated into the zoning. The requirements for the management and maintenance of the parks and open space, bulkheads and community amenities should be revised to reflect the conclusions drawn from the implementation investigation (see below).

The revised zoning district should then be mapped, changing the allowable use on these properties from industrial to mixed-use. Since the SEQRA process was completed ten years ago for the proposed development for

A Local Development Authority. The board of a development authority could be made up of the village, the state and, possibly, a not-for-profit, but the entity would operate parallel to and in partnership with Village government. (Or it could operate as a subsidiary of ESDC.) It would operate under a set of constraints and objectives established by the Village, and receive its operating funds through state and foundation grants. After completion of the project, it could evolve into a public/private partnership for the operation and programming of the public spaces.

A development authority would operate with a small staff and would contract out much of the redevelopment work. The authority would parcel out properties to different developers, would ensure high quality design and enforcement of design guidelines, would raise money for construction of public amenities and would manage the development process for both the public and private developments. This structure would ensure local control, with a significant role for the Mayor and the Board of Trustees, but the Village would have the option not to be a co-applicant for funding.

Recommendation

RPA strongly recommends this last option – that of creating a local development authority – as the best way for the Village to proceed with implementation of the plan. Preliminary discussions and research indicate that this is the best way for the Village to maintain control of the development process and respond to the implementation criteria. The entity could, as well, be a hybrid of the development options described above. The development authority model has generally been used for large-scale projects such as Battery Park City, which is owned and operated by the Battery Park City Authority, or Brooklyn Bridge Park, which is being planned by the Brooklyn Bridge Park Development Corporation. Nevertheless, there are examples appropriate for Hastings, including waterfront revitalization efforts in Glen Cove, Long Island, which is being directed by a local Community Development Authority. The management and structure of such an entity and the extent of other government agency involvement must be determined.

One of the many benefits is that a local development authority would be in the most advantageous position to leverage the partnerships with governmental entities and not-for profit organizations that will be an essential part of any implementation program. Because of the significant costs of the public open space and the infrastructure, a governmental partner, and possibly not-for-profit partners will be needed. Possible partners include: the state's new Waterfront Rediscovery Initiative, which is administered by DOS, but is a joint venture between DOS, DEC, OPRHP, DOT and the Governor's office; Westchester County, with significant funding and input from the state; and/or Scenic Hudson.

It would be advisable for the Village to undertake, as a next step, a study of these development options, in conjunction with ownership and regulatory scenarios. If a LDA is considered to be a viable entity for the Village, recommendations should be sought regarding the appropriate legal framework, the make-up of a Board of Directors, and a management structure and business plan.

Finally, once the appropriate development entity is selected and the zoning is in place, the Village can begin implementation by approving the legislation or charter required to form the development authority and by appointing a Board of Directors. The next step would be to hire a Waterfront Coordinator who would begin to oversee the development process, meet with other government agencies and raise funds.

The public sector or a development authority may acquire all the properties or just those to remain public in the future. The programming, operation and maintenance of public properties should be undertaken by a public/private partnership or a not-for-profit entity. The development authority could become the operational agency once its development function is completed.

Not-For-Profit Organizations

Jean McGrane, Scenic Hudson
Mannajo Green, Hudson River Sloop Clearwater
Kevin McLoughlin, Hudson River Valley Greenway Conservancy
Gudrun LeLash, Executive Director, Federal Conservationists of Westchester County
Paul Gallay, Executive Director, Westchester Land Trust
John Chervokas, President, Historic Rivertowns of Westchester
Catherine J. Marsh, Executive Director, Westchester Community Foundation

U.S. and State Representatives

Congressman Benjamin Gilman
NY State Senator Nicholas Spano
Assemblyman Richard L. Brodsky

Westchester County Representative

County Legislator, Thomas Abinanti

Waterfront Property Owners

Sandra Stash, ARCO Environmental Remediation, LLC
Michael Drace, Uhlich Color Company
Steve Trifiletti, ExxonMobil
John Hannig, ExxonMobil
Bruce Bernaccia, Harvest on Hudson Restaurant
Jennifer Paternostro, Manager, Hudson Valley Health and Tennis Club,
Susan Knauss, River Glen Tenants Corp.

Boat Clubs

George Farrell, Commodore, Tower Ridge Yacht Club
Pioneer Boat Club

Developers

Jonathan Rose, Jonathan Rose and Companies
John Vogel, Jonathan Rose and Companies
Martin Ginsburg, President, Ginsburg Development Corporation
Susan Newman, Ginsburg Development Corporation
Anthony Tarricone

Hastings Boards & Organizations

Robert Schnibbe, Volunteer Fire Department Peter Wolf, Chair, Conservation Advisory Commission
Jeremiah Quinlan, Chair, Zoning Board of Appeals
William Logan, Planning Board
Christina Griffin, Chair, Architectural Review Board
Ellen Bush, Chair, Park and Recreation Commission
Helen Barolini, Hastings Historical Society
Julius Chemka, Southside Club
David Hutson, Local Waterfront Revitalization Program Steering Committee (LWRP)
Jeff Bernstein, LWRP
Arthur Riolo, LWRP

Village Staff

Ray Gomes, Park and Recreation Commissioner
Susan Maggiotto, Deputy Village Manager
Chief Joseph Marsic, Police Department
Karen Kleinman, Intern

George Schieferdecker
Stephen Tilly
Nancy Seligson
John Shapiro
Chris Stienon
Mark Strauss
Jim Tinson
Lee Weintraub
Claire Weisz
Merrill Wheaton

Volunteers

Many thanks to our volunteers who generously gave of their time to help publicize, manage and clean-up after the events:

Gillian Anderson
Marjorie Hollingsworth
Mitch Koch
Susan Maggiotto
Amy Parekh
Annie Patten
Debbie and Tom Quinn
Lynn Tompkins
David Zung

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