The most significant visual resources in the viewshed are features in the natural environment consisting of sand dunes, large bodies of water (Atlantic Ocean and Great South Bay), mixed upland vegetation, small trees and various grasses.

The man-made features associated with Jones Beach and the Parkway are significant because of their historical context. Jones Beach State Park is listed on the National Register of Historic Places. The park was developed under the auspices of Robert Moses, after he was appointed Commissioner of the newly formed Long Island State Park Commission in 1924. Jones Beach State Park opened to the public in 1929. Architecturally significant buildings include the neo-gothic bathhouses and boardwalk on the south side of the Parkway, the Jones Beach Monument at the traffic circle, and a 10,000 seat marine theater at Zachs Bay that was originally separated by the mainland by a moat.

Ocean Parkway is one of a series of Parkway that are eligible for the National Historic Register. The parkway system was designed to link the state parks with the urban areas in metropolitan New York. Ocean Parkway was constructed on dredge spoil and is slightly raised above the surrounding barrier beach. The most significant visual structures associates with the Parkway are the wooden light standards.

4. Existing Visual Character and Visual Quality

Each Landscape Unit is described in terms of its existing visual character and visual quality as follows:

*Visual Character* - A viewer's understanding or cognition of the view is based on the visual character, or the relationship of the objects in the view. The attributes of visual character include pattern elements (line, form, color and texture) and pattern character (dominance, scale, diversity and continuity). Visual character is a measure of how a view is seen and does not relate to the viewer's preferences. These attributes are used to assess the project's compatibility with the existing visual setting.

*Visual Quality* - The viewer's enjoyment of a view, or interpretation of the visual experience, is based on the visual quality of the view. Attributes used to rate visual quality of a visual setting are vividness, intactness and unity. Explanations of these attributes can be found in the glossary attached as Appendix A.

The visual character and visual quality of the existing visual environment are assessed in order to have a baseline from which to measure change in visual resources.

*Landscape Unit 1: Undeveloped Barrier Beach*

*Visual Character* - The Ocean beach and dune complex exists along the south side of the Parkway. This area is comprised of smooth undulating formations of sand and beach grass with a cover of low native shrubs. The inner edge of the dunes run...
parallel to and are bordered by the Parkway and often contains a small transition strip
of vegetation.

The light colored sand dunes are in sharp contrast with the dark plant material that
provides a random pattern of growth throughout the sand formations. There also
exists a strong contrast in texture between these two elements, providing an even
greater interest within the dunes. The natural buffer that transverses to the north of
the Parkway is predominantly comprised of native shrubby plant materials, small
pines, phragmites and beach grasses. This area receives much of its contrast between
the various textures and growth habits that exist between the numerous salt tolerant
plants and encroachment of phragmites.

The strong lines of the highway and the smooth texture of the grass slopes are
inconsistent with the natural surroundings along the barrier beach. These man-made
features are dominant in the foreground views, especially in areas where no median
exists between the roadways.

This area maintains a strong and apparent size relationship between all of the
components that make up this landscape unit. This landscape unit poses a strong
uninterrupted flow of pattern elements and demonstrates positive or proper scale, as
does many natural environments.

**Visual Quality** - The vividness of this landscape unit measures in the high range
because of its uniqueness and memorability. There are very few natural barrier
beach landscapes that can be appreciated while traveling along a Parkway.

The sand dunes and existing vegetation provide distinct and contrasting visual
patterns. Within the vegetation patterns there exists a pleasing contrast in textures and
growth habits between many of the low growing shrubby materials and the various
grasses. The existing landform contributes to the strength of the landscape's
vividness. The strong curving lines of the edges of the dunes, areas of vegetation and
their rolling habit provide for a dramatic experience.

The visual intactness of this area is measured by the integrity of visual pattern and the
extent to which the landscape is free from visually encroaching features. Based upon
this analysis this unit will maintain high visual intactness. The natural visual order of
this untouched area appears intact and free of disruptions.

The visual unit within the undeveloped barrier dune region demonstrates a high level
of cohesion and harmonious pattern. The introduction of man-made elements to this
area such as the Parkway, have minimally effected the unity of the landscape.

The overall visual quality of the unit is considered “high”.

**Landscape Unit 2: Developed Parkland (Bay Side)**

**Visual Character** - The dominant visual element of this unit is the large open paved
parking surfaces. The parking areas are very-level and distant views exist across the
parking facilities to the south of the Atlantic Ocean and to the north of Great South Bay. The flat horizontal plane of the paved surfaces is the dominating form that maintains a different character during times when the parking spaces are occupied. This typically occurs during the summer when the reflective sun glares off of windows and surfaces of the cars. The parking areas also receive changes in texture and color throughout the day as the density increases or decreases. The light colored surface has a reflective quality and is consistent with that of the Parkway.

The intent of the parking fields is to hold large quantities of cars and to accommodate the visitors of these facilities. For this reason scale was not a factor of design and the open paved areas are not in relationship with the surrounding features and landscape.

Both continuity and diversity are lacking in there man-made areas. They have been designed to be utilitarian in nature, confining activity to distinct areas in order to preserve the remaining open spaces.

The paved elements seem to have been carved out along the barrier beaches, lacking any sense of connection between the adjoining landscape features.

Most of the architecturally significant structures at Jones Beach State Park exist on the south side of the Parkway. The Zachs Bay Theater is most dominant visual element in the view at the northeast end of the developed part of Jones Beach.

**Visual Quality** - This unit maintains a moderate level of memorability or vividness. Most of the developed parklands offer some distant views of dunes, water or other natural elements beyond the expanse of parking. At Jones Beach State Park, Zachs Bay, the theater and some of the architectural structures are visible from the north side parking areas. Many of the walkways leading to the beach offer views of interesting pattern elements of line and form.

The developed parklands demonstrate a low level of intactness. The integrity and visual pattern of the long flat barrier beach landscape has been interrupted by man-made intrusions and encroachments.

This area maintains a moderate level of unity. Elements such as buildings, walkways, paved parking and the landscaped areas seem to join together in an orderly fashion to form a coherent visual pattern. Man-made environments with no visual relationship to landform or landcover pattern lack this element of unity.

The overall visual quality of the unit is described as "moderate."

**Landscape Unit 3: Residential Areas**

**Visual Character** - The dominant component of the landscape is the one and two story facades of the residential structures interrupt distant views of the barrier beach from the Parkway. Most of the construction is of wood framing, many with large horizontal decks extending from the structure. Many of the homes are light in color or have light colored trim. In many areas, large plantings of non-indigenous black...
pines have served as a buffer between the Parkway and residences have died, allowing
very little visual buffering of the man-made visual elements.

There exists a great diversity among the man-made and natural elements within this
area. The vertical and horizontal lines of the edges of the structures dominate the
horizon. There exists a moderate flow of pattern elements of roof lines, vegetative
masses and paved surfaces.

**Visual Quality** - The residential areas are few in number along Ocean parkway, yet
they provide a striking and distinctive visual pattern as a whole. The vividness or
memorability of this area is “moderate”. The vertical lines of the wood framed
structures seem to grow out of the heavily buffered and landscaped areas. The
deliberate utilization of contrasting pattern elements achieves a high degree of
memorability.

Intactness of the community is measured as “moderate.” The man-made patterns of
residential homes spaced consistently along the narrow roadways presents an orderly
view in the landscape. The homes are pleasing to the eye and the style conforms to
that of a seaside development. The area is free from visual disruption and
encroachment.

Unity of the communities is measured as “moderate.” Although the homes combine
to form a harmonious and coherent visual pattern, the man-made visual elements
contrast with the surrounding barrier beach landscape.

Based on the following information this unit has been evaluated to have a
“moderate” level of visual quality.

Visual quality for each of the landscape units is summarized below in Table No 1:

<table>
<thead>
<tr>
<th>Landscape Unit</th>
<th>Vividness</th>
<th>Intactness</th>
<th>Unity</th>
<th>Visual Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undeveloped Barrier Beach</td>
<td>High</td>
<td>High</td>
<td>Moderate to High</td>
<td>High</td>
</tr>
<tr>
<td>Developed Parkland</td>
<td>Moderate</td>
<td>Low</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Residential Area</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

**Table 1 - Existing Visual Quality**

---

C. **VIEWERS**

Who sees the visual environment and how it is seen is as important as what is seen. The
type and number of viewers, the viewers position or viewpoint, and the values that
viewers place on the appearance of visual resources is the basis for predicting viewer
response.
1. **Visual Issues**

Local values or cultural aspects often influence the visual experience. A major factor in assessing visual impacts is that the Ocean Parkway and Jones Beach State Park are eligible and listed, respectively, on the National Historic Register.

2. **Viewer Groups, Sensitivity and Exposure**

Viewers within the visual environment can be categorized into viewer groups that have similar reactions to the appearance of visual resources.

In order to assess viewer groups response to the change caused by the project, two attributes of viewers, sensitivity and exposure, must be considered. Viewer sensitivity is the receptivity of the view by viewer groups. Viewer sensitivity is related to the values placed on the appearance of visual resources by the viewers. It can be considered as a qualitative measure of the response to the view.

Viewer exposure defines the physical parameters of how viewers see and perceive visual resources. It can be considered a quantitative measure of the view. Aspects of viewer exposure include number of viewers, distance, viewer position, traveling speed and duration of view.

Four separate viewer groups are represented in the project area; travelers along the Parkway, visitors at the public recreation facilities, residents of the area, and bicyclists and pedestrians. These observer groups are differentiated by their visual response to the project and its setting. Viewer activity, awareness and values affect the visual response.

**Travelers along the Ocean Parkway**

This group maintains a wide range of diversity, from the local commuter to the beach traveler. Each viewer may interpret the environment differently and ultimately gain a personalized experience. Within this audience we are looking at the average impact on the viewing group.

*Viewer Sensitivity* - These travelers along the Ocean Parkway have a moderate sensitivity to visual change. Travelers include commuters, residents, and travelers to the one of the parks or facilities. These travelers generally are traveling at a high rate of speed and mobility is their greatest concern. Within this viewing group there are individual groups that may experience different levels of sensitivity. An example of this is the commuter versus the leisurely driver. The commuter has a lower rate of sensitivity and less likely to be affected by the surroundings, whereas the leisurely driver’s main objective may be to take in the sights of the area and maintain a high level of sensitivity. For this reason we have designated this group as having a moderate level of sensitivity.

*Viewer Exposure* - Viewer Exposure is high. Based upon the design year 2023 an estimated 20,750 vehicles will travel along Ocean Parkway between Parking Field
6 and the County line on an annual basis. An estimated 23,890 vehicles will travel between the County line to the Robert Moses Causeway on an annual basis. There exist two peak periods of travel, one during the morning hours and the second during evening travel. Trucks are not permitted to use the Parkway.

**Viewer Response to Change in Visual Environment** - Viewer response to visual change is dependent on the proximity of the change in relationship to the Parkway. Viewer sensitivity is moderate and viewer exposure is high within the area of the Parkway. Sensitivity will increase as the visual change encroaches on the Parkway or enters the traveler's cone of vision. As the distance of visual change increases off the Parkway, the viewer's response decreases, as typically the travelers become focused on the road surface ahead of them.

For purposes of evaluating visual impacts, the viewer's response of this group is considered as **moderate to high**.

**Visitors at the public recreational facilities**

This group consists of beach and park visitors. It is common for visitors to arrive at the park and spend a great part or all of the day here. They congregate here to enjoy the natural environment and the beach experience.

**Viewer Sensitivity** - This group of viewers has a moderate level of sensitivity to the visual setting. Many visitors to the parks live within an hour drive and are familiar with the environment of the area. These local travelers are less sensitive to the visual environment for the same reasons as travelers along the Parkway are. They are usually more concerned with the mobility and movement within the park than their visual surroundings. Once inside the parking fields their main objective is to reach their final destination, most times the beach. Their visual sensitivity increases on the southern side of Ocean Parkway as the viewer experience the historical architecture of the buildings and the layout of the park. The southern area at Jones Beach maintains a much higher degree of refinement of design, circulation, planted areas and other landscape features.

**Viewer Exposure** - Viewer exposure is high for this viewer group. More than 13 million visitors travel to the parks along Ocean Parkway. Many of the viewers will see the project from a seated, walking or standing position. The exposure is limited to the daily hours of operation of the parks.

**Viewer Response to Change in Visual Environment** - In the area on the southern side of Ocean Parkway any visual changes in character will be viewed very sensitively. Changes in the visual environment would be much lower on the northern side where the parking lots dominate the landscape. Based upon this, the area would be considered as **moderately** responsive to visual change.

**Residents of West Gilgo and Gilgo Beach**

Three separate and distinct communities exist along Ocean Parkway. The...
communities that will be affected by an alignment along the north side of the Parkway are West Gilgo Beach and Gilgo Beach.

**Viewer Sensitivity** - This viewer group will have a high sensitivity to change in the visual setting. These communities provide year-round housing for many residents. The boundaries and limits of the area are clearly defined and border Ocean Parkway. This is an area where many residents spend much of their time. It is their home and many have large decks and outdoor structures for entertaining and utilizing the outdoor environment. Homeowners take pride in the appearance and overall condition of their immediate environment and nearby surrounds. This creates a highly sensitive group and a group less likely to accept change.

**Viewer Exposure** - This area maintains a high level of exposure, for it provides "home" to many and therefore is viewed seven days a week, 24 hours a day. They view the area from inside their homes, during outside activities and every time they leave their residence. Exposure to the bikeway aligned along the Parkway will be greatest from the residents that face the Parkway.

**Viewer Response to Change in Visual Environment** - Both viewer sensitivity and viewer exposure are high among the resident, providing a group who will be very involved and concerned with any changes or planning of their environment. This group will be less likely to accept change, as they may become directly influenced by any change. They may fear any change may result in a negative impact on their community and their lifestyle that they have established here within this waterfront development. The viewer response to change will be high.

**Bicyclist and Pedestrians**

This group consists of people walking or bicycling along the Parkway specifically for transportation or recreational purposes. The group is very small under existing conditions, and consists almost entirely within the existing parks and along local roads and paths in existing communities. This group is expected to grow rapidly after the completion of the project.

**Viewer Sensitivity** - This viewer group will have a high sensitivity to change in the visual setting. These users are generally moving at lower speeds, are in the open air and have a strong connection with their physical environment. They often choose to use these areas for the experience of the landscape and the natural surrounds and views it offers.

**Viewer Exposure** - Currently bicyclists area prohibited from using the Ocean Parkway and are limited to the southerly terminus of the Wantagh Parkway Bikeway. During the off-season bicyclist are permitted access to the boardwalk. Joggers and pedestrians have been observed using the slope of the Parkway shoulders, especially in the vicinity of the communities of Gilgo Beach, West Gilgo and Oak Beach. Under the present conditions viewer exposure would be characterized as low, as the area does not facilitate for such activity. However, the bikeway, when finished, is
anticipated to experience heavy use and viewer exposure will be high.

**Viewer Response to Change in Visual Environment** - As a group these users are highly aware of their visual environment, and sensitive to change. This group would be receptive to visual change if it resulted in greater mobility and circulation along the Parkway and into the park. As with the visitor group, change would be less likely supported along the southern side of the Parkway. This is due to the historical nature and layout of the park and the ocean dunes that border the Parkway.

The viewer response to visual changes for this viewer group will be high.

Table 2 summarizes the sensitivity, exposure and response of each of the Viewer Groups:

<table>
<thead>
<tr>
<th>Viewer Group</th>
<th>Viewer Sensitivity</th>
<th>Viewer Exposure</th>
<th>Viewer Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travelers along Parkway</td>
<td>Moderate</td>
<td>High</td>
<td>Moderate to High</td>
</tr>
<tr>
<td>Visitors to Parks</td>
<td>Moderate</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Residents</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Bicyclists and Pedestrians</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

### IV. IMPACTS ON VISUAL RESOURCES

After analyzing and establishing a baseline for the existing visual environment, the changes to the visual environment caused by the project are assessed. Visual impacts are predicted based on the change in visual resources, and the viewer response to the change. Viewer response is strongly related to values attached to the viewing experience by viewer groups. Viewer response is the reaction to the change in the visual environment by viewer groups. The view of the road and from the road are described and assessed.

Following is a description of the change to the visual environment caused by the project, and the predicted visual impact for each visual district for each viewer group. Change in visual resources is measured in terms of change in visual character and visual quality. Viewer response is measured in terms of change in viewer exposure and viewer sensitivity. The
magnitude of visual impacts is described as "low," "moderate," or "high." Photosimulations of typical key views are presented to illustrate visual impacts.

A. LANDSCAPE UNIT I: UNDEVELOPED BARRIER BEACHES

1. Changes to the Visual Environment and Visual Resources as a Result of the Project

A four meter (13 feet) wide asphalt paved bike path will be constructed adjacent to the westbound traffic lanes on the north side of Ocean Parkway. A minimum of 1.7 meters (5 feet) of separation from the highway will be required.

The bike path will be an additional man-made feature in the view from the road for Westbound travelers along the Parkway. Although the pavement will not interrupt the distant view of marshes and the Great South Bay, users of the bike path could interfere with the distant view from the road.

2. Potential Visual Impacts (Changes in Visual Character and Quality)

The visual character of the view of and from the highway will change only slightly. The strong lines of the bikeway will be consistent with those of the parkway. Because of its location on the slope of Parkway, the man-made visual element will be more associated with the highway than the natural areas of the barrier beach. The high level of cohesion and visual pattern of the natural environment will be maintained. The existing landform will not be compromised or greatly altered.

The size and scale of the proposed bikeway will create a transitional element between the man-made parkway and the natural surrounds.

With very little change in the distant views of marsh and open water, this area will maintain the same level of vividness or memorability. However, there will be a minor lowering of the visual intactness and unity of this landscape unit with the introduction of semi-intrusive elements into the landscape. These will include users of the paved surface (bicyclists, walkers, joggers and rollerbladers) as well as the pavement itself.

The overall visual quality of this landscape unit will be moderate to high, a value slightly lower than existing.

B. LANDSCAPE UNIT II: DEVELOPED PARKLAND (NORTH SIDE)

1. Changes to the Visual Environment and Visual Resources as a Result of the Project

Within the developed parkland on the north side of the Parkway, the dominating visual resources are the expanses of asphalt pavement of the parking areas and park buildings and structures.
At Jones Beach State Park, the bikeway will generally follow the edge of the parking lots from the existing bicycle coral to the southeast corner of Parking Lot 5. At this point the bike path will traverse the open lawn area between the Parkway and the Zachs Bay Beach. The bike path will be widened in this area to two five meter asphalt paved lanes separated by a three meter landscaped median in order to accommodate the anticipated high volume of use by bicyclists, pedestrian and in-line skaters. The only historically significant visual element at Jones Beach on the north side of the Parkway that could be affected by the bikeway is the circular plaza near the pedestrian underpasses. Historically significant structures within the viewshed on the north side of the Parkway include the Zachs Bay Theater, the East Bathhouse, and the Jones Beach Monument.

At Tobay Beach Park, the bikeway will be located along the northerly edge of the parking lot. In some areas the bikeway will be set back from the parking lot and will traverse the dune/shrub areas of the park.

At Cedar Beach Marina, the bikeway will be located between the Parkway and the parking lot/campground.

With the exception of the area east of Parking Lot 5 at Jones Beach, the addition of the paved bikeway will not alter the visual environment significantly as the pavement will be adjacent to parking lots constructed of large expanses of asphalt.

2. Potential Visual Impacts (Changes in Visual Character and Quality)

The visual character of this landscape unit will not change. The visual patterns created by the linear pavement and users of the bikeway will be visually consistent with the existing views of paved parking lots, paths, park structures and multitude of park visitors.

The area of the developed parklands will maintain the current level of vividness and intactness of the visual environment. The strong horizontal lines will be concealed from the views within the parking fields to the north. Although the bikeway pavement itself will not be noticeably evident from this view, the strong sense of movement along this horizontal plane will exist visually with the introduction of users to the bikeway. The side slope of the Parkway along the north side will be interrupted creating a visual mid-ground within the view of the landscape. This will be highly evident from views within the park of the parkway. The orderly layout and character of these elements will not restrict or compromise views of or within the parkland.

The overall level of visual quality of this landscape unit will not change and remain moderate.
C. LANDSCAPE UNIT III: RESIDENTIAL AREAS

1. Changes to the Visual Environment and Visual Resources as a Result of the Project

The bikeway will be located adjacent to the Parkway between the highway and the residential communities of West Gilgo Beach and Gilgo Beach. Until recently, these areas were screened from the highway by a stand of black pines that have been removed. The first row of residences adjacent to the Parkway currently has a view of the roadway towards the south. The bikeway and its users will be a new visual element in that view.

The visual environment of the Oak Beach residential area will not change as the bikeway will be located on the north side of the Parkway across a wide median.

2. Potential Visual Impacts (Changes in Visual Character and Quality)

Views of this area from the Parkway have been altered over the past few years with the disease and consequent death of many of the Black Pines along the roadside. As a result, man-made features such as the Parkway and residences are visually dominant. The bikeway itself will reinforce the strong sense of pattern elements, the repetition of strong parallel lines along the ground plane. This paved surface will create an intermediary viewing plane, both horizontally and vertically, between the residences and the Parkway. The sense of scale, unity and intactness will remain relatively unchanged. The introduction of the bikeway, another man-made visual element, into the visual environment will not greatly change the visual character of this landscape unit.

The view of the bikeway against the background of the highway or residential area will not change the memorability of this landscape unit. The vividness of the view will not change. However, the users of the bikeway will present a new visual element, especially in the view of the road from the residences. Residents are unaccustomed to seeing pedestrians and bicyclists traveling along the Parkway. This new element will result in a slightly lower level of intactness.

The overall level of visual quality will remain moderate. However, the bikeway along the Parkway adjacent to the residential areas will result in a slightly lower level of visual quality, especially during peak use times.

Table 3 summarizes the change in visual character and visual quality of each of the landscape units:
Table 3 - Change in the Visual Environment and Potential Visual Impacts

<table>
<thead>
<tr>
<th>Landscape Unit</th>
<th>Change in Visual Character</th>
<th>Existing Visual Quality</th>
<th>Predicted Visual Quality</th>
<th>Potential Visual Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undeveloped Barrier Beach</td>
<td>Slight</td>
<td>High</td>
<td>Moderate to High</td>
<td>Small Negative</td>
</tr>
<tr>
<td>Developed Parkland</td>
<td>None</td>
<td>Moderate</td>
<td>Moderate</td>
<td>None</td>
</tr>
<tr>
<td>Residential Area</td>
<td>None</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Small Negative</td>
</tr>
</tbody>
</table>

V. PREDICTED VISUAL IMPACTS:

Based on changes to the visual environment and the response to the change, the following visual impacts are predicted for each of the viewer groups:

Travelers along Ocean Parkway

A moderate negative visual impact is predicted for travelers along Ocean Parkway in Landscape Unit 1 - Undeveloped Barrier Beach. The bikeway and its users will introduce a new man-made visual element into the view from the road of the natural barrier beach landscape and Great South Bay. The degree of impact results from the close proximity of the bikeway to the Parkway. Where the bikeway is immediately adjacent to the Parkway, additional barriers will be necessary, which will increase the negative visual impact. The negative visual impact will also increase in severity where the users of the bikeway are at the same elevation of motorists, and the motorists distant view is interrupted.

Figure 11 is a photosimulation that illustrates the view of the Bikeway from the westbound lane of Ocean Parkway. The bikeway will be constructed towards the bottom of the slope so that users of the bikeway will be least likely to interrupt the distant view of the Great South Bay. The photograph shows the color of new asphalt pavement that is very dark. As the asphalt ages, the color will be more like the light gray of the shoulder shown in the photograph.

Not all of the people in this viewer group will experience a moderate negative impact. The sensitivity to visual change varies with the type of traveler. The bikeway will cause little or no visual impact on commuters or travelers to recreational facilities as these travelers are more interested in mobility and less sensitive to their visual surroundings. Leisurely travelers...
Figure 11 - Photosimulation of Proposed Bikeway Looking North Towards the Great South Bay From Ocean Parkway
or sightseers interested in experiencing the barrier beach landscape will be negatively impacted by the bikeway and passing users.

Little or no impact is anticipated for this viewer group in Landscape Unit 2 - Developed Parkland or Landscape Unit 3 - Residential Areas. Travelers currently view people and man-made visual elements in these areas. The bikeway will be compatible with the existing visual elements.

**Visitors at the public recreational facilities**

With the bikeway located on the north side of the Parkway near existing parking lots, no impact is predicted for visitors to the four recreational facilities along the north side of Ocean Parkway. The only exception is at the southeast corner of Jones Beach State Park in the vicinity of Zachs Bay Beach. The bikeway will be viewed in the context of an open space enclosed by the Parkway, the Bay and surrounding landscaping. Many of the park’s pathways and architectural features are within view of this area and visual compatibility will be important.

**Residents of Oak Beach, West Gilgo and Gilgo Beach**

A low negative visual impact will occur on the view of the road from the adjacent residential areas. Although there will only be a slight change in visual quality, the response to this change by the residents is high resulting in a small negative visual impact. The greatest impact will occur on residents with homes adjacent to the Parkway where the recent evergreen buffer has died and been removed.

**Bicyclists and Pedestrians**

A high positive impact will occur on this group of viewers in Landscape Unit 1 - Undeveloped Barrier Beach. Currently very few pedestrians and bicyclists walk or bicycle in the undeveloped area because of the lack of facilities. Bicycling and Walking will greatly expand in these areas after the bikeway has been completed and opened to the public. As a result new views in an area of moderate to high visual quality will occur for a viewer group with high sensitivity and exposure.

No visual impact will occur on this viewer group in parklands and residential areas. In these areas, positive visual impacts resulting from new views associated with the facility will be offset by the small negative visual impact caused by the addition of the new facility in these areas.

Table 4 summarizes the visual impact of the bikeway project on each viewer group in each landscape unit:
Table 4 - Summary of Predicted Visual Impacts

<table>
<thead>
<tr>
<th>Landscape Unit</th>
<th>Travelers on Ocean Parkway</th>
<th>Visitors at Parks</th>
<th>Adjacent Residents</th>
<th>Bicyclists and Pedestrians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undeveloped Barrier Beach</td>
<td>Moderate Negative</td>
<td>None</td>
<td>N/A</td>
<td>High Positive</td>
</tr>
<tr>
<td>Developed Parkland</td>
<td>None</td>
<td>None</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Residential Area</td>
<td>None</td>
<td>None</td>
<td>Low Negative</td>
<td>None</td>
</tr>
</tbody>
</table>

VI. RECOMMENDED MEASURES TO MITIGATE ADVERSE VISUAL IMPACTS

The following measures can be applied to the bikeway design to reduce the impact and improve the visual environment:

**Landscape Unit I: Undeveloped Barrier Beach**

*Sensitivity to surrounding Landform* - The bikeway should be designed with a curvilinear or undulating layout with long gradual sweeping curves. This will soften the edges of the hard pavement allowing for the lines to be more compatible with the existing landform and more consistent with the long flowing lines of the Parkway. The alignment of the bikeway should avoid disturbing the existing level landform and grading should be sensitive to the gradual natural grades. This will help achieve a visual harmony between the proposed bikeway and the existing landscape.

*Vegetative buffers and distance from Parkway* - When the landform and existing plant materials allow, the bikeway should be aligned away from the Parkway among the existing natural vegetation to allow a natural buffer between the Parkway and the bikeway. These areas may be supplemented with indigenous maritime plant material to help provide a visual enclosure. In these areas the bikeway and the users will be shielded from the view of travelers along Ocean Parkway. This will help reduce the exposure of the view from the Parkway, and maintain the visual continuity and apparent scale of the existing landscape.

*Changes in elevation* - Alignment of the bikeway along the downward slope of the Parkway R.O.W. should be considered as shown in Figure 12. This will help minimize the visual impact of the bikeway and the users by suppressing the activity below the grade of the elevated Parkway. The distinct edge of the bikeway will be obscured and the users will be removed from the viewer’s visual horizon. This will help preserve distant views across the bay.
Figure 12 - Section through Proposed Bikeway at Bottom of Highway Slope
Landscape Unit II: Developed Parkland

Bikeway Alignment - The north and south sides of the developed parklands maintain separate and distinct characteristics. The southern side, especially at Jones Beach, maintains a higher degree of refinement and design. This is exhibited through the existing architecture, circulation patterns and landscaped areas. To help minimize the impact on these areas a northern alignment would greatly reduce visual impact. From the north side, the bikeway would generally be viewed from an elevation depressed in the parking fields. As previously discussed the viewers in this area are less sensitive to change and a landscaped buffer or maintaining existing vegetation would help minimize the impact of the bikeway.

Design Park-like Features - The state and town parks along Ocean Parkway have site features such as pavement designs and patterns, signing, barriers, site amenities and landscaping that give each park its own distinct identity. The design of the bikeway and its amenities should complement the design of the park facilities. Amenities such as picnic tables and benches should be installed along the bikeway to allow the facility to more visually compatible with the park. At Jones Beach State Park, the bikeway should be designed as a “boulevard” with pavement patterns similar to the existing pedestrian circulation system on the north side of the Parkway.

Landscape Unit III: Developed Residential Areas

Limit Distance from Parkway - The bikeway should be aligned along the Parkway in such a manner that it minimizes the visual encroachment on the community. The Ocean Parkway borders many homes directly along the north side. These homes will receive the greatest visual impact. Their present foreground view in this direction is of the Parkway and its related elements. Alignment of the bikeway in close proximity to the Parkway and reinforcement of the landscaped buffers in these areas will help minimize the visual impact.

Maintain Parkway Elevation - Setting the elevation at or near that of the Parkway will additionally help minimize visual impact. This will maintain all activity along one continuous visual plane, that of the existing Parkway. Although activity will increase in these areas, visual impact will be less likely to be greatly effected, either positively or negatively.

Establish Vegetative Buffer - In many of the residential areas the existing buffer consists of primarily Black Pine evergreen trees, which have become diseased and subsequently removed. This has left open areas between the residential areas and the Parkway, especially in the vicinity of Gilgo Beach. The introduction of indigenous plant materials to re-establish the buffer will greatly reduce any visual impact of the bikeway and help screen the existing Parkway.
VII. UNAVOIDABLE VISUAL IMPACTS

Regardless of which alternative is implemented, some unavoidable visual impacts will occur within these areas along Ocean Parkway. These negative impacts are generally associated with any development or man-made construction within a naturalistic setting. Highly sensitive design will help minimize these negative impacts and provide other positive impacts, such as enhancement of significant views.

The introduction of a paved 4-meter wide bikeway along the natural R.O.W. will provide an unavoidable impact. Areas of undisturbed natural vegetation and landform may necessitate being altered in order to implement this plan. The color of the pavement, patterns created, proximity to other man-made structures and views of the bikeway will be addressed during construction. These will receive additional attention and have been discussed under mitigation.

Color of the bikeway - The dark color of the bikeway and proposed width will become an unavoidable impact on the landscape. This feature will become the dominant element in the landscape to the north of the parkway. Design techniques will be utilized in order to create a design that will promote a final product that establishes a greater unity and intactness to help offset the appearance of the dark surface.

Visual Patterns created - The long parallel lines of the edge of the bikeway will create dominant visual patterns along the roadside when viewed from the Parkway. A sensitive design utilizing curvilinear lines and undulating patterns of vegetation will help minimize this impact.

Proximity to Parkway - The bikeway alignment along edge of Parkway may be necessary depending on prevailing conditions. This will be unavoidable in areas where the existing topography or close proximity to the Bay or wetlands dictate.
APPENDIX A
GLOSSARY OF VISUAL RESOURCE ASSESSMENT TERMS

BACKGROUND - A distance zone used to describe the approximate distance of visual resources from an observer. The background includes visual resources from approximately 5 miles to the horizon. Only the line and form of visual objects in the background view perceptible.

COLOR - The third of the four basic elements of visual pattern; the hue (e.g. red or blue) and the value (e.g. light or dark) of the light reflected or emitted by an object.

DISTANCE ZONES - Three conventional terms in painting -- foreground, middle ground, background -- which can be helpful in describing distance relationships between observer and visual resources (See Foreground, Middle Ground and Background for description).

DIVERSITY - The number of pattern elements as well as the variety among them, and edge relationships between them.

DOMINANCE - Dominance of components or specific features in a scene may be dominant because of prominent positioning, contrast, extent, or importance of pattern elements.

FOREGROUND - A distance zone used to describe the approximate distance of visual resources from an observer. The foreground includes visual resources immediately in front of the viewer to a distance of approximately ¼ mile. All visual patterns in the foreground view (line, form color and texture) are easily seen and perceived.

FORM - One of the four basic elements of visual pattern (usually the strongest); the mass or shape of an object.

INTACTNESS - The integrity of visual order in the nature and man-built landscape, and the extent to which the landscape is free from visual encroachment.

LANDSCAPE FORM (LANDSCAPE SUBUNIT) - A landform or landcover mass composed of heterogeneous visual elements, but distinguished from surrounding areas by overall form, pattern, and edge. Landscape forms have physical dimensions and a specific location.

LANDSCAPE UNIT (LANDSCAPE DISTRICT) - (a) An area or volume of distinct landscape character which forms a spatially enclosed unit at ground level; it may include more than one landscape type; (b) The extent of a single landscape type which is not spatially enclosed at ground level.

LINE - Geometrically, a point that has been extended, or the intersection of two planes, e.g. a silhouette, or a boundary between patterns in the landscape. The second strongest of the four basic visual pattern elements.

LOCAL VALUES AND GOALS - The landscape setting and its visual resources may be valued by local view groups for reasons not evident in an assessment based strictly on visual resources and not widely known outside the community.
MIDDLE GROUND - A distance zone used to describe the approximate distance of visual resources from an observer. The middle ground includes visual resources from approximately ¼ mile to 3 miles away. Line, form and color are easily seen and perceived, but the texture of visual objects is not perceptible.

OBSERVER POSITION - A term employed to describe the observer's elevational relationship between himself and the landscape he sees. It is used to indicate if he is essentially below, essentially at the same level, or essentially above the visual objective. Three specific terms are used: 1) observer inferior, view below object; 2) observer normal, view on level of object; 3) observer superior, viewer above object.

OBSERVER VIEWPOINT - A point from which a select view is analyzed and/or evaluated.

PATTERN CHARACTER COMPATIBILITY - The degree to which the visual character of the highway blends with that of the surrounding landscape, in terms of dominance, scale, diversity and continuity; related to intactness and lack of encroachment.

PATTERN ELEMENT COMPATIBILITY (DISCORDANCE) - The degree to which the line, form, color, and texture of the highway and related facilities conform, rather than contrast, to the basic visual pattern of the landscape setting; related to the vividness of highway in its setting.

SCALE - Visual scale is the apparent size relationships between landscape components or features and their surroundings.

SIGHTLINE - The unobstructed line of sight between an observer and viewed object.

TEXTURE - The visual or tactile surface characteristic of various elements in the landscape; often the least dominant of the four visual pattern elements.

UNIQUENESS - A resource-oriented criterion: a visual resource, visual character, or visual quality which is rare or uncommonly found at a regional or national scale.

UNITY - The degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or intercompatibility between landscape elements.

VIEW - A scene observed from a given vantage point.

VIEW CORRIDOR - A narrow, distant view of a visual resource confined and framed by visual objects. An example would be the distant view of a mountain from a street lined with tall buildings.

VIEWER RESPONSE - Measures of viewer response to change in visual resources include view exposure, viewer sensitivity, cultural significance and local values.

VIEWER EXPOSURE - The degree to which viewers are exposed to a view by their physical location, numbers viewing and duration of the view.
VIEWER GROUPS - Classes of viewers differentiated by their visual response to the highway and its setting; response is affected by viewer activity, awareness and values.

VIEWER SENSITIVITY - The viewer's variable receptivity to the elements within the environment that he is viewing, affected by viewer activity and awareness. A person cannot readily notice every object and all the attributes of the objects that compose the total visual environment.

VIEWSHED - 1) All the surface areas visible from an observer's viewpoint; 2) Surface areas from which a critical object or viewpoint is seen.

VISUAL CHARACTER - The visual character of a landscape is formed by the order of the patterns composing it. The elements of these patterns are the form, line, color and texture of the landscape's visual resources. Their interrelationships can be objectively described in terms of dominance, diversity, continuity and so on.

(VISUAL) COGNITION - The process of recognizing visual relationships among objects and between objects and their setting.

VISUAL COMPATIBILITY (DISCORDANCE) - The degree to which development with specific visual characteristics is visually unified with its setting. Visual compatibility can be elevated with reference to Pattern Elements and Pattern Character.

VISUAL IMPACT - The degree of change in visual resources and viewer responses to those resources caused by highway development and operations.

VISUAL INFORMATION - Visual information in a landscape is: a) The identity of landscape components or features such as mountains, valleys, rivers, forests, towns or highways; b) The message conveyed by signs and symbols in verbal or graphic form.

VISUAL PATTERN ELEMENTS - Form, line, color, texture.

VISUAL QUALITY - While many factors contribute to a landscape's visual quality, they can ultimately be grouped under three headings: Vividness, Intactness and Unity.

VISUAL RESOURCES - The appearance of the features that make up the visible landscape. Includes land, water, vegetative, animal, and other features that are visible on all national resource lands.

VIVIDNESS (DISTINCTIVENESS) - The memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern.