

1. PURPOSE AND NEED FOR ACTION

1.1 OVERVIEW

The New Jersey Department of Transportation (NJDOT) and the Federal Highway Administration (FHWA) propose to reconstruct approximately 4.5 kilometers (2.8 miles) of NJ Route 52(1) between Somers Point, Atlantic County and Ocean City, Cape May County, New Jersey. The project area extends from the intersection of Route 52 with Route 9 in Somers Point over Great Egg Harbor Bay to the intersection of 9th Street with Bay Avenue in Ocean City. (See Figure S-1: Proposed Alternative) The purpose of the proposed project is to reconstruct an important but deteriorated section of the National Highway System in order to provide efficient vehicular and marine traffic flow as well as to improve safety.

This Final Environmental Impact Statement (FEIS)/Section 4(f) evaluation has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA) and Section 4(f) of the United States Department of Transportation Act. It has been prepared to identify and measure the social, economic, and environmental impacts associated with the proposed project. This FEIS presents:

- ◆ Summary of information from the Draft Environmental Impact Statement (DEIS) that has not changed.
- ◆ Changes in the project that have occurred since the DEIS was circulated.
- ◆ Description of the Preferred Alternative.
- ◆ The social, economic and environmental consequences if the Preferred Alternative is implemented.
- ◆ A description of appropriate mitigation for each of the identified adverse impacts that may result from the Preferred Alternative.
- ◆ Comments received from circulation of the DEIS and public hearing and the responses to all substantive comments.

The FEIS is an independent document, but avoids repetition of material from the DEIS by incorporating the DEIS by reference. Its format parallels that of the DEIS. Each major section of the FEIS briefly summarizes the important information contained in the corresponding section of

the DEIS, references the section of the DEIS that provides more detailed information, and discusses any noteworthy changes that have occurred since the draft was circulated. The FEIS affords the reader a complete overview of the project and its impacts on the human and ecological environment.

The FEIS has been prepared by the FHWA and the NJDOT, with the cooperation of the U.S. Army Corps of Engineers (USACOE), the U.S. Coast Guard (USCG), and the U.S. Fish and Wildlife Service (USFWS).

This section gives a brief history of the project, its description and project setting, and establishes the purpose and need for the project. For details, please refer to Section 1 of the DEIS.

1.2 PROJECT HISTORY

The existing Route 52 causeway between Route 9 in Somers Point and the resort town of Ocean City was constructed in 1933. This causeway spans Great Egg Harbor Bay and crosses the Rainbow Islands as well as four water thorofares: Ship Channel, Elbow Thorofare, Rainbow Channel, and Beach Thorofare. Beach Thorofare, located off the Ocean City waterfront, is part of the Intracoastal Waterway (ICWW) and is managed by the USCG. (See Figure S-1: Proposed Alternative)

Ocean City has been a summer resort since 1880. A trolley service ran between Ocean City and Somers Point from about 1910, but the service was abandoned when a fire in 1946 consumed portions of the trolley trestles. Adjacent to the trolley trestles and offset to the west, a wooden bridge was built in 1912. It was replaced by the existing concrete causeway in 1933. The S-shaped alignment of the causeway at its 9th Street entrance into Ocean City was adopted to avoid conflict with old trolley operations on 8th Street.

The causeway includes four concrete bridges. Bascule bridges, also called drawbridges, span the two designated navigational channels in Great Egg Harbor Bay, Ship Channel and Beach Thorofare. Taller boats or vessels must utilize one or the other of these passages to navigate across Great Egg Harbor Bay. The remaining two bridges are low concrete trestle bridges that cannot accommodate passage of the taller boats or vessels.

The Route 52 causeway has been maintained by rehabilitation as needed. However, recent inspections show substantial cracking and spalling on all four bridges with severe deterioration of the bridge decks. Therefore, permanent replacement or reconstruction of all Route 52 causeway bridges is needed.

The increasing popularity of Ocean City as a summer resort has led to substantial increases in vehicular traffic along the Route 52 causeway. Also, use of the ICWW for recreational sailing has increased, resulting in more frequent openings of the Beach Thorofare bascule bridge particularly during late spring and summer. The combination of increased bridge openings and increased traffic volumes is the source of significant vehicular congestion along the causeway and the access roads. In addition, the congestion and bridge openings potentially hamper emergency vehicle access to and from Ocean City.

NJDOT began the planning for permanent improvement of Route 52 in 1992 with the development of a preliminary set of alternative concepts. Studies were conducted to determine the feasibility of relocating the ICWW into Rainbow Channel where a fixed-span bridge of sufficient height could be constructed that would allow passage of tall vessels but would not change the location of the touchdown areas in either Somers Point or Ocean City. The findings of these studies resulted in the development of the first two of the alternatives for the project. These alternatives were presented in a partnering workshop, in May 1996, to the representatives of interested federal, state, and county agencies as well as representatives of the cities of Somers Point and Ocean City. As a result of discussions and comments received at this workshop, additional alternatives were developed. A draft report comparing these initial alternative concepts was prepared in June 1996.

In July 1997, NJDOT authorized preparation of various Technical Environmental Studies (TESs) and an Environmental Impact Study (EIS) for the Route 52 reconstruction project. A traffic study and TESs for Noise, Air Quality, Hazardous Waste, Socioeconomics and Land Use, Natural Ecosystems, Historic Architecture and Archaeology were prepared.

In a second partnering workshop conducted in December 1997, eight alternatives were proposed for discussion and comments. Two new alternatives were added after the workshop discussions, while four alternatives, deemed not feasible, were dropped from further consideration. Six

alternatives (along with three causeway options for two of the alternatives) were assessed in the TES and DEIS documents.

The formal scoping process for this project was instituted by NJDOT in 1997 to obtain input from the various NJDOT divisions involved. Also a Public Partnering Meeting was held that year. Based on input from this coordination process, as well as the findings of the technical studies, a draft Selection of Alternatives Report was prepared and submitted to the FHWA for review in 1998. The report recommended that three alternatives with three bridge combinations all on viaduct be considered on alignment 5 and that two alternatives, numbered 9 and 9A, with bridges on the existing alignment be considered. Alternatives 9 and 9A were to include three different causeway options. The report recommended that Alternatives 5A, 5B, 5C, 9, 9A plus the No Build Alternative be analyzed in detail during the preparation of the DEIS. Based on the above-mentioned detailed analysis and input from the public and federal and cooperating agencies, Alternative 9 option 1 was selected as the preferred alternative and is presented as such in the FEIS.

1.3 PROJECT DESCRIPTION

The Route 52 reconstruction project area extends from the intersection of Route 52 with Route 9 in Somers Point over Great Egg Harbor Bay to the intersection of Route 52 (9th Street) with Bay Avenue in Ocean City. This is a distance of approximately 4.5 kilometers (2.8 miles). The project entails:

- ◆ Replacement of the causeway with its four bridges over Great Egg Harbor Bay, [approximately 3.5 kilometers (2.2 miles)].
- ◆ Construction of standard width driving lanes and shoulders for the length of the causeway.
- ◆ Construction of a sidewalk along one side of the causeway and bicycle-compatible shoulders along both.
- ◆ Replacement of the Somers Point traffic circle with a signalized intersection that includes turning lanes.

- ◆ Widening of Route 52 (MacArthur Boulevard) in Somers Point from Shore Road to US Route 9 from two lanes to up to four lanes plus a center turning lane [approximately 1.0 kilometers (0.6 miles)].

The two bascule bridges are to be replaced with fixed-span structures. The primary factor in the selection of the bridge type(s) is the need to improve vehicular and marine traffic flow within the project area.

1.4 PROJECT SETTING

The project area extends along Route 52 from Somers Point on the New Jersey mainland over Great Egg Harbor Bay to the barrier island community of Ocean City. Both Ocean City and Somers Point are small, established coastal communities with year-round populations of 18,000 and 12,000, respectively. During July and August, the population of Ocean City, a major summer resort area, grows to as much as 200,000 persons.

Great Egg Harbor Bay is a shallow, tidally influenced bay composed of large expanses of open water and scattered wetland islands. In the vicinity of the Route 52 causeway these wetland islands are separated by a series of channels: Ship Channel, Elbow Thorofare, Rainbow Thorofare, Rainbow Channel, and Beach Thorofare. The ICWW is aligned through Beach Thorofare.

1.4.1 Infrastructure

Between US Route 9 and the Somers Point traffic circle, Route 52 (MacArthur Boulevard) is a two-lane arterial street with uncontrolled access to abutting properties. Beyond Somers Point, Route 52 crosses four channels located between the low-lying Rainbow Islands of Great Egg Harbor Bay. The causeway consists of four travel lanes, with no paved shoulders. Adjacent to both sides of the causeway there exists a generally flat area of compacted sandy, which is up to 18 meters (60 feet) wide on the east side. This embankment provides access to the bay waters for fishing and other recreational purposes. The Ocean City Information Center is located on the west side of Route 52, immediately north of the existing Beach Thorofare bridge. Within Ocean City Route 52 becomes 9th Street. The project extends to the intersection of 9th Street and Bay

Avenue. Throughout the causeway and in Somers Point, Route 52 does not provide bicycle or pedestrian facilities. Sidewalks are provided in Ocean City along the entire length of 9th Street.

The causeway segments over both Elbow Thorofare and Rainbow Channel are low, concrete, fixed-trestle structures. These spans provide a 1.2-meter (4-foot) vertical clearance over the Mean High Water (MHW) level. The Ship Channel bridge, known as the World War Memorial Bridge, and the Beach Thorofare bridge each have a single leaf bascule span (with a 4.3-meter, or 14-foot, vertical clearance when closed). When open these bridges accommodate through passage for boats of all heights.

Most of the Route 52 causeway over Great Egg Harbor Bay is relatively level. During very high tides, storm winds cause waves to wash onto the causeway, which forces the causeway to be shut down. The area of Ocean City between Bay Avenue and the beginning of the causeway is lower than the causeway. This area is frequently blocked by floodwater during heavy rains and storms. Route 52 is designated as an emergency evacuation route between Ocean City and the mainland. It is also the shortest route to the regional medical facility, Shore Memorial Hospital, in Somers Point.

Route 52 is the principal access route into Ocean City. There are three other approaches available to Ocean City: County Route 623 from Garden State Parkway Interchange 25, Route 152 / County Route 619 from Somers Point and County Route 619 over Corson's Inlet. These alternate routes are two lane highways with limited capacity (See Figure 1.4-1: Alternative Routes to Ocean City in the DEIS). There is currently no rail, air, water taxi, or ferry access between Somers Point and Ocean City.

1.4.2 Vehicular Traffic

Ocean City and Somers Point are small, resort communities. Traffic in these towns consists of trips made by local, year-round residents as well as tourists. Tourist traffic peaks during the summer months when the area population swells by over 1000 percent.

The two primary routes used into Ocean City are Roosevelt Boulevard (34th Street Bridge) from the west and Route 52 causeway from Somers Point. Two additional routes, County Route 619

from the north and County Route 619 from the south also provide access to the city. Route 52 is the most direct route for visitors coming from areas north of the site, including northern New Jersey and New York.

Traffic exiting the Garden State Parkway at Interchange 30 in Somers Point travels to Route 52 along Laurel Drive -- a local two-lane roadway. Route 52 begins at the intersection of US Route 9 as MacArthur Boulevard.

The junction of Route 52, Shore Road, and Mays Landing Road is the Somers Point traffic circle. Large number of vehicles at this junction and weaving movements create traffic congestion which result in the circle to be a bottleneck to traffic flow along Route 52 and is the source of a higher than average number of traffic accidents. Traffic volumes are expected to increase at this location by the design year for this project (2024) and therefore the existing traffic circle cannot safely and effectively manage the current and future traffic needs. The limited capacity of the circle also hampers evacuation efforts from Ocean City during flooding situations.

Bascule bridge openings are an additional source of hindering traffic flow entering or leaving Ocean City. These bridge openings also affect the ability of emergency vehicles to respond in a timely manner, since the connection between Ocean City and the regional hospital, Shore Memorial Hospital in Somers Point, is most directly served by Route 52.

1.4.3 Marine Traffic

Vessel heights and bridge data (1991-1994) indicate 2,590 openings on average per year for the bridge over the ICWW at Beach Thorofare and 658 openings on average per year at the Ship Channel bridge near Somers Point. The height of most boats passing through these two waterways exceeded the existing 4.3-meter (14-foot) clearances at high tide. Most common boat heights ranged from 7.9 meters (26 feet) to 11.0 meters (36 feet). However, some vessels were over 27.4 meters (90 feet) in height.

Currently, bridge openings for the ICWW are scheduled every half-hour during the summer. Each opening is estimated to cause an average of eight to nine minutes of delay to motorists

crossing the Route 52 causeway. Most openings occur during the summer months. On a typical summer Sunday, there are 22 openings at the Beach Thorofare bridge. Openings over the Ship Channel are less frequent and are coordinated with openings at the ICWW to minimize interruptions of traffic. Data for the Ship Channel Bridge indicated that during the peak summer months of 1993, over 27% of the vessels exceeded 10.7 meters (35 feet), but all were less than 16.8 meters (55 feet) in height. The 1993 data for the Beach Thorofare bridge over ICWW was used as base to project future vessel traffic and the number of openings that would occur given different bridge heights. (This data is corroborated by more recent data collected in the summer of 2001.) See tabulation below.

Vertical Clearance Over ICWW	Projected Number of Annual Openings Required	Percent of Total Passing Without Bridge Opening
4.3 m (14 ft.)	2,787	0 %
6.1m (20 ft.)	2,690	3.5 %
7.6m (25 ft.)	2,373	14.9 %
9.1m (30 ft.)	2,102	24.6 %
10.7m (35 ft.)	1,009	63.8 %
12.2m (40 ft.)	677	75.7 %
13.7m (45 ft.)	197	92.9 %
15.2m (50 ft.)	73	97.4 %
16.8m (55 ft.)	38	98.6 %

The above tabulation indicates that 93% of the vessels passing at the ICWW would clear the bridge if it is raised to 13.7 meters (45 feet), and 98.6% would clear the bridge if the bridge clearance were raised to 16.8 meters (55 feet).

The USCG vertical and horizontal guidelines for proposed fixed bridges across the New Jersey ICWW call for 19.8 meters (65 feet) as the desirable vertical clearance above MHW and 45.7 meters (150 feet) as the desirable horizontal clearance. Several different alternative bridge alignment studies were performed to provide 19.8 meters (65 feet) vertical clearance. They all resulted in significant impacts to private property and businesses in Ocean City or additional impacts to wetlands and additional dredging in the Great Egg Harbor Bay with attendant ecological consequences. In addition, based on the vessel height survey data obtained at Beach Thorofare and a survey conducted in the Summer of 2000 of marinas that service and operate

boats in Beach Thorofare, over 98.6% of the vessels passing through this location can pass below a height of 16.8 meters (55 feet). Based on this data, the NJDOT has requested a waiver of the 19.8 meters (65 feet) vertical clearance and 45.7 meters (150 feet) horizontal clearance requirement.

1.4.4 Natural Ecosystems

Route 52 passes over Great Egg Harbor Bay, a shallow, tidally influenced bay that is composed of large expanses of open water and scattered islands. Virtually the entire area of low-lying islands on which the present causeway embankments are located is classified as tidal marsh wetlands. The island surfaces are covered predominately with cordgrass (*Spartina alterniflora*). Several small watercourses are present on these islands. In addition:

- ◆ In the vicinity of the project, the bay area is classified as a commercially valuable hard clam shellfish resource, which is the most widely distributed shellfish species in New Jersey. These shellfish beds are classified as “seasonal”, indicating that harvesting is prohibited except seasonally and under specific conditions.
- ◆ Past studies indicated good water quality conditions, with low nutrient levels and average to high dissolved oxygen.
- ◆ Two areas of submerged aquatic vegetation are within the project area. One is at the northwest edge of the island that contains the site of the Ocean City Information Center and the other is in Rainbow Channel east of the causeway.
- ◆ Great Egg Harbor Bay provides a fish migratory pathway for diadromous and anadromous fish to reach seasonal spawning areas. Rainbow Channel is reported to be an important migratory pathway. The project area supports an array of commercial and recreational fish including weakfish, striped bass, black seabass, Atlantic croaker, bluefish, and summer flounder.
- ◆ Cowpens Island near Ocean City and west of the causeway has been identified as a heron rookery that supports nesting colonies of yellow-crowned night herons and little blue herons.

1.4.5 Human Environment

Ocean City is a tourist-based community located on a barrier island in the extreme northern part of Cape May County, New Jersey. The city incorporates 8.0 square miles, which includes eight miles of beachfront, 2.5 miles of boardwalk, over 100 miles of municipal roads and alleys, nearly 550 commercial establishments, over 1,300 hotel/motel rooms, and close to 16,000 housing units. The permanent population of Ocean City is around 18,000. The seasonal population approaches as much as 200,000 during the busy summer months of July and August. During the tourist season (May 1 to October 31) beach and boardwalk usage dramatically increases as 75,000 to 100,000 people use the beach during the day and over 60,000 visitors congregate on the boardwalk during the evening hours. Also, Ocean City sponsors many special events at which attendance often exceeds 50,000 per event.

Route 52 enters Ocean City along 9th Street, which is bordered on both sides by commercial establishments of various sorts. The point of entry is flanked on both sides by condominiums that front the bay. With some exceptions, residential buildings line the waterfront east and west of 9th Street.

Somers Point is also a tourist community, but to a lesser degree. In contrast with Ocean City, there are fewer summer residents than year-round residents. Most businesses located around and near the Somers Point traffic circle, located at the northern end of the Route 52 causeway, are heavily dependent on visiting tourists. These businesses primarily include several restaurants and liquors stores. All of these benefit from the fact that Ocean City is a “dry” community, where law prohibits alcoholic beverage sales.

The current population of 12,000 represents the number of year-round residents. Like Ocean City, there is a seasonal swing in the population. The difference consists of both summer residents as well as tourists. However, the average summertime population is estimated by officials to be only slightly higher than the year-round population.

The commercial center of Somers Point is east of the traffic circle. Shore Road feeds traffic from the circle into the downtown commercial district. The city also provides a golf course and a medium-sized waterfront park as recreational amenities. These are located near the downtown commercial district.

1.5 PURPOSE AND NEED

1.5.1 General

The residents of Somers Point and Ocean City, and all users of the existing Route 52 roadway between US Route 9 in Somers Point and Bay Street in Ocean City, are adversely affected by the current condition of Route 52. The need for permanent reconstruction is summarized below:

- ◆ The four causeway structures are badly deteriorated.
- ◆ Substandard horizontal and vertical curves on the present causeway cannot support acceptable speed limits.
- ◆ The Somers Point traffic circle and the two-lane section of MacArthur Boulevard leading to US Route 9 (milepost 2.20 to 2.74) are bottlenecks to vehicular flow and the movement of emergency vehicles.
- ◆ Frequent delays to vehicular and marine traffic results from the numerous bridge openings during the late spring and summer peak tourist season. These delays significantly contribute to serious traffic congestion and rear-end accidents and are a hindrance to the timely movement of emergency vehicles between Ocean City and the regional medical facility in Somers Point.
- ◆ Route 52 is a designated emergency evacuation route and a part of the Coastal Evacuation System. The current elevation of the causeway lends itself to frequent closures due to high tides and wave runup during severe storms.

The general purpose of the project is based on the needs described above. The purpose is to:

- ◆ Reconstruct or replace severely deteriorated structures supporting Route 52 between Somers Point and Ocean City.
- ◆ Improve the safety of Route 52 as a primary access route between Route 9 and Ocean City.
- ◆ Improve marine and vehicular traffic flow, including that of emergency vehicles.
- ◆ Improve safety and the function of the causeway as an emergency evacuation route.
- ◆ Maintain access to Recreational Areas.

1.5.2 Detailed Purpose and Needs

The primary need of the project is to rehabilitate and improve the safety and operation of Route 52 as a primary access route into Ocean City. Historically, Route 52 is the most heavily used access point into Ocean City during the tourist season. In addition, Route 52 feeds the economic heart of both communities. As such, a large percentage of the economy of both Somers Point and Ocean City is dependent on the continued use of Route 52 as its principal access.

Shore Memorial Hospital is the regional hospital for the area. The most direct link between Ocean City and Shore Memorial Hospital is via Route 52 across Great Egg Harbor Bay. The use of any of the alternative routes, such as Roosevelt Boulevard (34th Street) or the Ocean City-Longport Bridge, would increase the travel time for emergency vehicles by a minimum of 15 to 30 minutes.

Route 52 is a designated Coastal Evacuation Route and, therefore, must be maintained as an emergency egress from Ocean City to the mainland. During severe storms, the existing Route 52 causeway often is impassible due to heavy wave action and runup. To maintain the effectiveness of Route 52 as a coastal evacuation route, the height of the causeway should be raised a minimum of 0.3 meters (1 foot) above the 100-year flood level – an elevation of 3.2 meters (10.5 feet).

The four existing structures that carry Route 52 across Great Egg Harbor Bay are severely deteriorated and should be replaced or reconstructed. The substructures of all the bridges exhibit substantial cracking and spalling and the bridge decks are severely deteriorated.

NJDOT expects the recently completed rehabilitation project to extend the useful life of the Route 52 structures another six to eight years.

Ship Channel and Beach Thorofare (ICWW Channel) are each spanned by a bascule bridge (drawbridge). The openings that are needed to pass marine traffic adversely affect vehicular traffic flow. The duration of a typical bridge opening is eight to nine minutes. During the peak summer season, twenty-two bridge openings are required on a daily basis. The effect of the openings is motorist delay and decreased roadway efficiency. In addition, bascule bridges are

more expensive to operate than a fixed-span structure and the mechanical systems require constant maintenance.

The present Route 52 causeway has narrow 3.0-meter (10-foot) travel lanes, unpaved shoulders, and no median separation of traffic. To improve the safety and efficiency of the roadway, the Route 52 causeway should be widened to meet current design standards. Shoulder areas should be included as emergency pull-off areas, to provide lateral stability, and serve as storm-water collection areas. The design should provide at a minimum: four 3.6-meter (12-foot) travel lanes; 1.5-meter (5-foot) inside shoulders; 3.0-meter (10-foot) outside shoulders; and a median barrier to separate the opposing directions of travel.

Improvements to both the vertical and horizontal geometry are needed along the Route 52 causeway. Long segments of Route 52 are relatively flat with less than 0.5 percent highway profile. The result is poor drainage. Grades along Route 52 should be 0.5 percent or greater to meet current design standards and provide adequate drainage.

The existing vertical curve on the Route 52 causeway near Beach Thorofare (ICWW Channel) allows a safely driven speed of 48 km/h (30 mph). To meet current design standards, a vertical curve for the design speed (posted speed plus five mph) of 64 km/h (40 mph) is required.

Likewise, the horizontal curve on the Route 52 approach into Ocean City can only be safely driven at a speed of 32 km/h (20 mph). A design curve of 64 km/h (40 mph) is required.

MacArthur Boulevard (Route 52), between Route 9 and the Somers Point traffic circle, now provides a single travel lane in each direction and a paved shoulder on either side of the road. Access to these travel lanes is uncontrolled and does not conform to NJDOT access standards. This roadway section lacks sufficient capacity to accommodate the large volume of traffic currently using Route 52. To carry the peak season traffic volumes and function effectively as a continuation of the coastal evacuation route, MacArthur Boulevard must be widened to accommodate two 3.6-meter (12-foot) travel lanes in each direction plus shoulders on both sides of the roadway.

An unusually high number of accidents occur at the Somers Point traffic circle. The traffic circle has an inside diameter of 60 meters (200 feet) and provides two travel lanes. There are short

distances between the intersections of the four approach roads at the circle. Currently motorists entering the circle must merge with other vehicles, drive around the circle to their selected exit point, then maneuver through the traffic to exit. The short distances and the relatively high traffic volumes are difficult and create an unsafe situation. A signalized intersection is warranted at this location given the peak season traffic volumes.

1.5.3 Project Goals

Based on the project purpose and needs, the environmental considerations, and design parameters discussed herein, the following goals have been developed for the project. These goals are generally consistent with the goals developed during the partnering meetings held between NJDOT, FHWA, the cooperating agencies, and other interested state and federal agencies and local government representatives. There has been a general recognition among the agencies that with a complex project, such as this one, it may not be possible to identify an alternative that fully meets all of these goals. It is intended that these goals shall be met to the greatest extent possible. Selection of the Preferred Alternative involved tradeoffs among the project goals.

1. Reconstruct or replace all the four deteriorated causeway structures.
2. Increase the safety and efficiency of traffic through the causeway by modernizing the roadway geometry to current design standards.
3. Improve traffic flow and safety on MacArthur Boulevard from Route 9 through the Somers Point Circle.
4. Improve the function of the causeway as a primary evacuation route from Ocean City to Route 9 by raising the elevation above flood level.
5. Maintain or improve the flow of marine traffic under the structures spanning the Ship Channel and the ICWW by maintaining adequate horizontal and vertical clearances for these channels.
6. Avoid or minimize any shift in the alignment of the existing navigational channels.
7. Make the facility bicycle/pedestrian accessible.
8. Maintain recreational access to the islands traversed by the causeway.

9. Avoid or minimize social, environmental and economic impacts to communities on both ends of the causeway.
10. Avoid or minimize impacts to historic and cultural resources, including takings from Green Acres open space land.
11. Avoid or minimize impacts to fish, wildlife, and other ecological resources of the open waters as well as the wetlands.
12. Avoid or minimize impact to water quality of the bay.

1.5.4 State Development and Redevelopment Plan (SDRP) – Consistency Analysis

The proposed project has been deemed consistent with the SDRP because it falls within the category of system preservation.

The project can also be viewed as consistent with State Plan policies as follows:

- ◆ Statewide Public Investment Priorities Policy 1 advocates that highest priority be given to infrastructure projects that mitigate life-threatening situations and emergent threats to public health and safety. This applies to the causeway replacement as well as the Somers Point traffic circle elimination.
- ◆ Since the project also contains a drainage component, it relates to Statewide Transportation Policy 7, which states that preservation and maintenance of the existing transportation network is the highest transportation priority.
- ◆ Since the proposed design of the bridges includes the installation of a sidewalk on one side and bicycle paths along the connecting islands, the project also addresses the objectives outlined in Statewide Transportation Policy 11, which emphasizes the movement of people through such alternative travel modes as bicycle and pedestrian.
- ◆ Route 52 provides access to Ocean City, a major summer seaside resort. The project therefore supports Statewide Transportation Policy 19, which calls for the promotion of

travel and tourism by making appropriate transportation investments that consider seasonal demands.

- ◆ Since the circle elimination falls within the category of Congestion Management-Highway Operational Improvements, it is consistent with Statewide Transportation Policy 12, which advocates efficient utilization of capacity and management of the existing transportation system.
- ◆ The project is in keeping with a general policy direction the Department has taken in recent years to eliminate traffic circles because of their inability to handle New Jersey's increasing traffic volumes in a safe and efficient manner.
- ◆ The project is located in an area delineated on the State Plan Resource Planning and Management Map as the Metropolitan Planning Area (PA 1), closely adjacent to Planning Area 5 (Environmentally Sensitive), where the Causeway is located. The Transportation Policy Objective for this Planning Area urges capitalization on the high-density settlement patterns that encourage the use of public transit systems and alternative modes of transportation to improve travel among major population centers, employment centers, and transportation terminals. While the circle elimination does not directly relate to this policy, it does not appear to conflict with the Planning Area intent to guide new development and redevelopment into compact patterns.

In addition, New Jersey First: A Transportation Vision for the 21st Century, pledges to eliminate all bridge deficiencies in its national highways and reduce the backlog of all other state bridge deficiencies by 50 percent by the year 2010.