
RECORD OF DECISION**IMPROVEMENTS TO INTERSTATE ROUTE 195
WASHINGTON BRIDGE TO INTERSTATE ROUTE 95
PROVIDENCE (PROVIDENCE COUNTY), RHODE ISLAND
FHWA-RI-EIS-93-01-F****PROJECT OVERVIEW**

This Record of Decision contains the rationale employed to reach a decision on implementation of a highway project alternative for the Improvements to Interstate Route 195 between the west end of the Washington Bridge and Interstate Route 95 in Providence, Rhode Island. It is issued under the requirements of 40 CFR 1502.2 and 23 CFR 771.127.

Periodic repairs and safety improvements have made it possible for I-195 to serve traffic needs for over 30 years. Despite recent repairs to the bridges, the existing I-195 through Providence is essentially beyond the end of its service life. It does not meet current design criteria, has poor operational and safety characteristics, and the bridge structures will continue to deteriorate.

The Rhode Island Department of Transportation (RIDOT), along with the Federal Highway Administration (FHWA), published a Notice of Intent to conduct an Environmental Impact Statement (EIS) for the proposed project in the October 31, 1991, Federal Register. Early coordination and identification of issues actually began two years earlier with the initiation of work on an Environmental Assessment (EA) in December 1989. The original focus of the EA was to evaluate alternatives to rehabilitate or improve the existing alignment. It was through the early EA coordination process that the concept of a Hurricane Barrier Alignment (HBA), one-half mile to the south of the existing viaduct, was forwarded by the Providence Foundation. Given the size and scope of the HBA, it was decided that a full EIS was warranted to rigorously explore and objectively evaluate the alternatives.

Key issues and areas of concern were identified through a formal scoping process. The scoping process included brochures and surveys mailed to Federal, State, and local agencies, interest groups, and property owners, as well as day and night public scoping sessions held on December 9, 1991. Section 7 of the Final Environmental Impact Statement (FEIS) documents the scoping and coordination process undertaken in the development and analysis of alternatives throughout the EIS process.

Three candidate alternatives were retained and evaluated through the EIS process. They are (1) the Reconstruction of Existing Alignment, (2) the North Alignment, and (3) the Hurricane Barrier Alignment. The Reconstruction of Existing Alignment was developed to represent the least cost alternative and to serve as the No-Build alternative. It includes the minimum level of reconstruction and rehabilitation of the existing six-lane facility needed to ensure the highway continues to function, but provides for no operational improvements. The North Alignment is an eight-lane alternative parallel and offset immediately to the north of the existing facility on new alignment at the

Providence River. It eliminates the Dyer Street ramps and makes other minor operational improvements at the I-95 interchange. It provides sufficient operational characteristics through the design year, though it retains the existing I-95 interchange with most of its poor operating characteristics. The Hurricane Barrier Alignment includes an all new eight-lane facility and interchange with I-95 located immediately south of the Providence Hurricane Barrier.

The Draft Environmental Impact Statement (DEIS) was published and approved in May 1993. The DEIS presented a detailed analysis for three candidate alternatives. A public hearing on the DEIS was held on June 30, 1993. FHWA and RIDOT received public comments at the hearing and by written correspondence throughout the public comment period. Substantive comments received on the DEIS and at the public hearing, together with appropriate responses, are included in Section 7 of the FEIS. Comments received on the FEIS are analyzed and addressed in this Record of Decision (see "Response to Comments on Final EIS").

The input received through coordination efforts was fully evaluated in reaching a decision on the preferred alternative. The input was integral to the consideration and implementation of design modifications to reduce traffic and environmental impacts. These design revisions are described in Sections 4.1.1 and 4.5.2 of the FEIS.

DECISION AND SUMMARY OF FINDINGS

The Hurricane Barrier Alignment (HBA) alternative was identified as the preferred alternative in the FEIS and has been selected for further project development and subsequent construction. FHWA has carefully reviewed all concerns in the course of approving the selected alternative. We have concluded that the selected alternative, based on a rigorous exploration and objective evaluation, reasonably maximizes transportation benefits and minimizes environmental harm, including harm to Section 4(f) resources.

Based upon the analysis contained in the EIS, the selected alternative clearly provides the best alternative to satisfy the project's purpose and need. The stated project purpose and need is "*. . . to provide a transportation improvement alternative to relieve present and future traffic demands on Interstate 195 between the west end of the Washington Bridge and Interstate 95 in Providence, RI. Additionally, the project shall provide for the implementation of the City of Providence's Old Harbor Plan between Crawford Street and Fox Point.*" The HBA received strong support from the general public and local business community, as well as local, State, and Federal agencies in the oral and written comments received on the DEIS.

MAJOR FACTORS INFLUENCING THE SELECTION OF ALTERNATIVES

The reasons for selecting the HBA include the following: it improves highway safety, reduces impacts on historic districts, allows for the fullest implementation of the city's Old Harbor Plan, has a net positive impact on India Point Park, provides improved access to Rhode Island Hospital, and incurs the least impact to traffic during construction. The HBA includes improvements to the alignment and operational characteristics of over one-half mile of I-95 and includes an all new interchange with I-95 that is a substantial improvement over the existing condition. The other two

alternatives considered, the Reconstruction of Existing Alignment (No-Build) and North Alignment, were generally less effective and desirable than the HBA. A thorough description of each of the considered alternatives is included in Section 2 of the FEIS. The following provides additional detail regarding the principal reasons for selecting the HBA:

Capacity and Safety

The HBA provides the best transportation improvements to relieve present and future traffic demands on Interstate 195. The proposed alignment provides the best configuration from a safety and capacity standpoint. The safety improvements afforded by the HBA include the following: all seven existing substandard weaves are eliminated, access to and from the Rhode Island Hospital and the Women and Infants Hospital is greatly improved, and the existing substandard interchange between I-95 and I-195 is replaced. The North Alignment eliminates all but two substandard weaves in the I-95 interchange, but does not improve access to the hospital.

As a result of the improved safety characteristics, the projected number of accidents over a 5-year period for the HBA is 655, substantially less than either of the other alternatives considered—half that of the Reconstruction of Existing Alignment alternative (1,156 accidents) and two-thirds that of the North Alignment (963 accidents). The new interchange and associated extended transportation benefits are a major reason for the cost differential between the HBA and the North Alignment alternative.

Constructability

The alignment of the HBA is largely independent of the existing alignment; therefore, the HBA is the easiest alternative to construct without affecting traffic flow on the existing interstate. Three lanes in each direction can be maintained throughout the construction period. The other alternatives considered would require extensive detours and lane closures and would result in substantial congestion and delays during the estimated 5-year construction period.

Implementation of the Old Harbor Plan

Of the alternatives considered, the HBA is the most compatible with the city of Providence's Old Harbor Plan. The Old Harbor Plan, adopted by City Ordinance in 1994, is an element in their Comprehensive Plan. In fact, the plan envisions the relocation of I-195 as a key element. The HBA allows for the most complete implementation of the Old Harbor Plan among the three alternatives. The Old Harbor Plan itself will have a number of positive benefits including: improved waterfront access in the form of pedestrian walkways along the shore of the Providence River from Crawford Street south to the Hurricane Barrier; improved water transportation; increased public park land; and economic development opportunities. Along with the redevelopment of the surplus right-of-way, the Old Harbor Plan allows for the reuniting of the Downtown Central Business District with the Jewelry District.

Historic Resources

Implementation of the HBA and the Old Harbor Plan results in a net positive benefit to historic resources in the city. Removal of the existing I-195 on the west side of the Providence River substantially reduces the noise and visual impact on both the Downtown and Jewelry Manufacturing National Register Historic Districts. Although implementation of the HBA requires the acquisition and demolition of three buildings on or eligible for the National Register of Historic Places, it reduces the overall length of Interstate 195 through the College Hill National Register Historic District from 3,200 feet to 2,000 feet and moves the highway from between 500 and 1000 feet from the highest concentration of historic structures in the district. Coordination efforts indicate that the Rhode Island State Historic Preservation Officer (RISHPO) and Blackstone River Valley National Heritage Corridor Commission (BRVNHCC) support the implementation of the HBA and the Old Harbor Plan. A copy of the executed Section 106 Memorandum of Agreement is included in the Section 5 of the FEIS.

India Point Park

The HBA has a net positive effect on India Point Park. Construction will require the acquisition of a narrow strip (21,382 square feet) along the northwest edge of the park. As mitigation, the elimination of the existing Gano Street on-ramp allows for 51,908 square feet of additional park land—a net increase of over 30,000 square feet. The existing narrow pedestrian overpass will be replaced with a 50-foot wide landscaped pedestrian bridge. This connection will greatly improve the connection between India Point Park and the Fox Point Neighborhood. Although not considered a mitigation, removal of the ramps also makes possible the creation of a landscaped parking area on the five acres immediately northeast of the park, under the I-195 viaduct at Gano Street. The ramp modifications in the vicinity of India Point Park will change India Street from a little used street to a relatively busy street. The increased traffic will occur on India Street primarily during the morning and evening rush hours, which are not peak usage times for the park.

SECTION 4(F)/6(F)

Where historic and/or park resources are affected by a proposed project, a determination is necessary, pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, that there is no feasible and prudent alternative to the use of the historic and park resources and that all possible planning to minimize harm to the affected resources is employed. Also, the acquisition of park land for which Land and Water Conservation Fund Act (LCWF) funds have been used, called "Section 6(f) lands," requires replacement lands be provided in consultation with the National Park Service.

Based upon the information in the Section 4(f) Evaluation contained in the FEIS, and for the reasons discussed below, FHWA has determined that there are no feasible or prudent alternatives to the use of land from public parks and historic districts or structures for the Hurricane Barrier Alternative and that the selected alternate includes all possible planning to minimize harm to these resources.

While the Reconstruction of Existing Alignment alternative would have no new 4(f) impact, it does not satisfy the basic transportation objective of the project and is therefore not considered a feasible

or prudent alternative. In addition, the Reconstruction alternative does not allow for the net positive benefits attributable to the HBA; specifically, the relocation of the existing highway away from high concentration of historic buildings in the College Hill National Register Historic District, and the reunification of the Downtown and Jewelry Manufacturing National Register Historic Districts.

The HBA involves unavoidable impacts to 4(f) and 6(f) resources. The impacts and mitigation measures are discussed in Section 5 of the FEIS. It has been determined that after mitigation, of the practicable alternatives, the HBA incurs the least harm to 4(f) and 6(f) resources. Central to this conclusion is the concurrence of the RISHPO that the HBA has a net positive benefit on historic resources in the project area. This net positive benefit is obtained though the relocation of the highway away from the most sensitive concentrations of historic buildings in three National Register Historic Districts. The other alternatives considered have comparable impacts upon the same historic districts as the HBA, without any of the associated positive benefits.

With respect to the Section 6(f) resource, India Point Park, the State Liaison Officer and the National Parks Service have agreed to the designated conversion of replacement land.

MEASURES TO MINIMIZE HARM OF THE SELECTED ALTERNATIVE

FHWA will ensure that all practical measures to avoid or minimize adverse environmental impact, which are related to the selected alternative, will be implemented. The following measures, described in more detail in the referenced sections of the FEIS, have been identified. At the time implementation of any of these measures becomes appropriate, responsibility for funding will be assigned by agreement among the concerned parties in accordance with normal FHWA procedures. The first section below describes the mitigation program for the HBA (Section 4.9, page 4-314) of the FEIS, which has been developed to address the impacts of the selected alternative in conjunction with Federal and State regulatory agencies and the Providence Parks Department.

FHWA has determined that the measures described below in the Interstate Route 195 Mitigation Program are adequate to mitigate the impacts for the selected alternative and to meet the legal requirements of other statutes mandating the consideration of or provision for mitigation of environmental impacts, such as Section 4(f) of the Department of Transportation Act. Therefore, the measures constitute those which must be implemented and those which will be encompassed by FHWA approvals. (See 23 CFR Part 630, Subpart C, Appendix A.)

INTERSTATE ROUTE 195 MITIGATION PROGRAM

● Traffic and Transportation

Local Street Pattern: An urban street pattern will be established across the vacated right-of-way to provide for adequate traffic circulation, access, and complement the proposed land uses. New and reconstructed streets will include amenities, such as 8-foot wide pedestrian sidewalks, standard city street lighting, and street trees (generally 100 feet apart).

Landscaping: Landscaping and architectural treatment of retaining walls will be employed to provide a buffer to adjacent land uses.

Bridge Piers: The pier spacing for the Providence River Bridge in the HBA includes mitigation and avoidance considerations for navigation impacts. The new bridge will be designed to maintain the existing navigation clearances.

Aesthetics: Special architectural treatment to soften the visual impacts and increase compatibility with the surrounding urban and historical districts have been considered for the proposed bridge over the Providence River. A Bridge Technical Committee (BTC) and a Public Advisory Committee (PAC) were formed to develop and review alternatives for the bridge. The PAC reviewed alternatives for the bridge over the Providence River (see Appendix A of the FEIS) developed by the BTC.

These alternatives were all considered to be visually compatible. The Arch style structure was shown in the FEIS because the PAC favored an Arch style structure and recommended it to RIDOT.

RIDOT is completing alternate bridge designs of concrete and steel, which constitutes the first step in the final design of a major structure. This effort will better define the technical issues, constructability, and estimated cost of the concept presented in the FEIS. In the course of final design and development of the preferred alternative, RIDOT may consider a range of other types of long span bridges that are visually compatible. In the event that the Arch style is not selected, RIDOT and FHWA will coordinate the decision with the PAC.

Pedestrian: The existing 8-foot wide pedestrian overpass between George Cohan Boulevard and India Point Park will be replaced with a 50-foot wide overpass.

● Land Use

Vacated Right-of-Way: The vacated parcels shall be seeded as an interim measure to mitigate the visual impact of demolishing the highway and abandoning the existing right-of-way.

Parking: (1) Impacted *private* parking stalls will be replaced either by reconfiguration of the impacted lot or by replacement on adjacent excess right-of-way, or (2) owners of the private parking spaces which are not replaced will be compensated for their loss.

Parks: In kind replacement will be provided for acquired land at India Point Park. Disturbed areas will be fully restored. The existing pedestrian overpass will be demolished and replaced by a landscaped, 50-foot wide park bridge.

Memorials: All impacted memorials will be relocated in an equivalent or more prominent setting in areas adjacent to their present location.

- **Cultural Resources**

Historic Districts and Buildings: The Hurricane Barrier Alternative will require acquisition of three buildings on or eligible for the National Register of Historic Places. Mitigation measures per Section 106 of the National Historic Preservation Act of 1966, as amended, will include data recovery and documentation in accordance with the Historic American Building Survey (HABS) prior to building demolition. Additionally, the RISHPO and BRVNHCC shall be given an opportunity to review and approve the final design plans and specifications prior to their implementation. In accordance with the Section 106 Memorandum of Agreement (MOA), FHWA has agreed to ensure that the redevelopment of the excess or surplus right-of-way parcels shall be carried out under the review and approval of the RISHPO. In the MOA, the RISHPO has agreed to allow the city of Providence to fulfill the role of developing and administering the design review of the surplus right-of-way through the Old Harbor Plan. The RISHPO reserves the right to terminate the city's review and revert back to RISHPO review and approval.

Archaeological Resources: Mitigation for the Central Wharf archaeological site shall consist of the development of an appropriate Phase 3 data recovery strategy (in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation, 48 FR 44734-37) in cooperation with the RISHPO and the ACHP to be executed prior to construction or disturbance.

- **Environmental and Coastal Resources**

Water Quality: No stormwater management controls are in place for the existing I-195 facility. Best Management Practices (BMP) will be used to minimize water quality impacts of the proposed project. Sedimentation basins, or equivalent treatment, will be used in conjunction with the selected alternative. Appropriate interim measures will be taken during construction in accordance with the guidance contained in the Rhode Island Department of Environmental Management's (RIDEM) Soil Erosion and Sediment Control Handbook. All reasonable and feasible measures were examined to obtain the Rhode Island Coastal Resource Management Council (CRMC) standard of 80 percent total suspended solid (TSS) removal rates projectwide. The water quality section of the FEIS demonstrates that a TSS removal rate of approximately 63 percent is reasonably obtainable. A waiver from the CRMC standard, which is allowed for under CRMC policy, will be sought as part of the CRMC application process.

Wildlife Impacts: After consultation with the Army Corps of Engineers and the National Marine Fisheries Service, it has been agreed that impacts to shallow water aquatic habitat as a result of

modifications to riverwalls and riverbottom are to be mitigated by providing a 700-foot shallow water terraced area along the east shore of the Providence River.

Soils and Hazardous Materials: Measures shall be taken during construction to minimize exposure to contaminated materials, including soil, fugitive dust, and fumes. A contingency plan shall be designed and implemented as part of the final design to address actions to be taken in the event that contaminated material is discovered during construction.

Contaminated soils located in the Old Harbor portion of the project will require special handling, off-site disposal, and/or treatment. All other slightly contaminated soils are to be excavated prior to completion of the new highway embankments and will therefore be available for disposal in embankments or off-site disposal and treatment. All handling and disposal of this material is subject to review and approval by RIDEM in accordance with Rhode Island Solid Waste Regulations, and State and Federal Resource Conservation and Recovery Act (RCRA) regulations.

Prior to construction, and in order to facilitate clean-up plans, the nine contaminated and two hazardous sample locations shall be further characterized by a detailed remedial site investigation. The detailed remedial site investigation will include a Health Risk Assessment for each of these locations to ensure worker safety in accordance with Occupational Safety and Health Administration standards. The investigation will provide information necessary to determine clean-up costs, assist in determining the potentially responsible person(s), and will provide the information needed to design a clean-up strategy for review and approval by RIDEM.

A Risk Assessment will be conducted for all locations where sample concentrations exceed RIDEM's soil and groundwater contamination criteria (DEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases DEM-DSR-01-93). The Health Risk Assessment should specify measures to be taken, if necessary, to minimize worker exposure to contaminated materials. The health risk assessment will include recommendations for the monitoring of soils during construction. The risk assessment will include consideration of not only worker exposure, but also potential exposure to site visitors and adjacent communities.

Demolition and removal of the existing bridge structures for the HBA will involve cutting and removal of steel painted with lead-based paint. Precautions to avoid the generation of lead fumes include the proper removal of paint prior to cutting, in accordance with applicable State regulations.

- **Social and Economic Factors**

Right-of-Way Acquisition: Acquisition of property and relocation assistance will be provided in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources will be available to all residential and business relocatees without discrimination.

Public Facilities and Utilities: RIDOT will continue to coordinate on the relocation of the existing helicopter pad on South Main Street. Utilities will be relocated in kind as required without interruption of service.

● **Construction Impacts**

Traffic: Measures will be included to maintain traffic flow as efficiently as possible during construction. These include staged construction, traffic control devices, enforcement of reduced speeds, and incident management.

Water Quality: Measures will be taken to protect water quality during construction, in accordance with the guidance in the RIDEM Soil Erosion and Sediment Control Handbook. These measures include the use of hay bales or filter fabric along earth embankments and temporary vegetative cover on bare ground if it is to be exposed for long periods. New detention ponds to be built for final water quality will be constructed early on to act as temporary retention ponds for eroded materials. Special actions for construction over the water will include the use of nets with fabric to contain fine material during demolition. Construction in the water will include using cofferdams at pier excavation sites, containing excavated materials, and placing clean material as backfill if it is required.

Dredging materials will be handled and disposed of appropriately. Adverse impacts of dredging will be minimized through the implementation of the following procedures as determined and further refined in consultation with the Army Corps of Engineers, National Marine Fisheries Service, CRMC, and RIDEM as part of the Section 404 permit process, CRMC assent, and Water Quality Certification process.

- Selection of proper dredge equipment
- Employment of silt curtains to contain suspended solid transport
- On-site inspection and water monitoring by RIDOT during dredging
- Observance of seasonal restrictions (October 1 through January 1) on dredging.

Noise: Construction noise will be attenuated through proper use of mufflers and limitation of excessive noise producing activities to normal working hours.

Other: Rodent control measures will be designed as part of the project final design.

MONITORING AND ENFORCEMENT PROGRAM

The FHWA's Rhode Island Division Office will monitor further project development of the HBA through its day-to-day administration of the Federal-aid program. This monitoring will ensure that all practicable mitigation measures, as summarized above and as described in Section 4.9 of the FEIS, will be included in the final project design. The staff will also perform periodic inspections during the construction phase to ensure that these measures are constructed in accordance with plans and specifications.

To facilitate effective monitoring, a system will be developed to enable FHWA to comprehensively track the fulfillment of project-related mitigation and enhancement commitments. A detailed list of all commitments made in the FEIS will be prepared. Each commitment shall be keyed to the appropriate design contract, as applicable, to ensure its implementation. The Department will report on the status of each commitment when the preliminary design and Plans, Specifications, and Estimates (PS&E) documents are submitted to FHWA. A commitment database will be developed for use by RIDOT and FHWA to track the assignment and status of each commitment. The commitment database shall indicate responsibility for each of the implementation commitments, such as the project engineer, for each of these design sections.

RESPONSE TO COMMENTS ON FINAL EIS

Comments on the FEIS were received from Federal and State Agencies, local governments, affected landowners, and a variety of neighborhood, transportation, and other citizen organizations as well as some individuals. To a great extent, these comments reflect issues previously raised by many of the same organizations in comments on the draft. The majority of comments (76 of 88 letters received) indicate general support for the selected alternative, satisfaction with the resolution of relevant environmental issues presented in the FEIS, particularly the mitigation program for the HBA, and a desire to move forward with the project.

FHWA has carefully reviewed all comments received on the FEIS and is generally satisfied that the substantive issues raised have been fully responded to. FHWA has considered all FEIS comments in reaching the decisions documented in this Record of Decision.

The following discussions highlight the various comments regarding issues which generated a high level of interest.

● Cost and Finance

Several comments were made regarding the impacts of financing such a large project on the statewide transportation program. Concern was expressed that other projects may be eliminated or reduced in scope in order to fund the I-195 project. One commentator noted that the HBA may require a toll road which would require the issuance of revenue bonds possibly by the Rhode Island Turnpike Authority instead of financing the project with general obligation bonds.

The cost of the project is a consideration in the evaluation and selection of the preferred alternative. The EIS documents many benefits of the HBA that tend to compensate for the cost differential. Among these benefits are increased tax revenue from the sale of excess right-of-way, improved safety, longer sections of I-95 are repaired/replaced, and the replacement of the I-95/I-195 Interchange. In addition, there are several intangible benefits, such as the reduced impact to historic districts, improved opportunities for tourism and access to the waterfront, and the economic redevelopment of the excess right-of-way.

Construction spending for the preferred alternative will have an influence upon the funding of other transportation projects throughout the State. The State's transportation priorities are delineated in

the Transportation Improvement Program (TIP), which is prepared by the Rhode Island Department of Administration, Division of Planning in conjunction with RIDOT, and a Transportation Advisory Committee through a public discussion of the priorities. In developing priorities for transportation projects in the TIP, planners strive to balance and spread out the spending to maximize benefits and minimize negative impacts. RIDOT, in cooperation with FHWA, is investigating additional funding sources that may help alleviate the cost burden that the project will have upon the State's transportation program. Regardless of additional sources of funding, RIDOT believes that the project can be adequately funded within existing resources by the careful scheduling of construction phases over a number of years.

FHWA notes that the FEIS does not specifically indicate that tolls will be used to finance the construction of this project. If the State of Rhode Island concludes that tolls are the primary tool with which to finance this project, then a supplemental EIS might be required to evaluate the impacts of tolls.

RIDOT has agreed to submit a funding plan for the project for FHWA review and approval prior to proceeding with the construction of elements of the project that do not have independent utility.

- **Navigation**

The U.S. Coast Guard asked how the city's proposal to "fix" the Point Street Bridge is compatible with the Old Harbor Plan. Reconstructing the Point Street Bridge so that it is no longer able to open will have relatively little impact on the desire and need to facilitate navigation in the river north of the bridge. There are initiatives underway to establish water taxi and commuter/tour boat services on the Providence River with the existing navigation constraints (including the Point Street bridge which currently cannot be opened). Also, it is expected that Old Harbor will become a destination for smaller recreational boats. RIDOT is constantly coordinating with the city of Providence as they are a proponent of the Old Harbor Plan.

- **Historic Resources**

The SHPO has noted that the HBA has the least severe effects on historic resources and districts. It removes the physical and visual intrusion on existing districts and reunites them. FHWA has determined that there is no feasible and prudent alternative to the use of land from public parks and historic structures for the Hurricane Barrier Alternative, based upon the information in the Section 4(f) Evaluation in the FEIS. The preferred alternative includes all possible planning to minimize harm to these resources as described in the Section 106 MOA.

- **Impacts on Traffic Operations--Gano Street/Gano Street On-Ramp**

Several comments expressed concern with the existing high traffic volumes and operations on Gano Street and concern with how the project would impact Gano Street in the future. They identified an increase in traffic of up to 75 percent.

Gano Street currently serves as the primary access route in Providence to and from I-195 for a considerable portion of the east side of Providence including Fox Point, Wayland Square, Blackstone Boulevard, Brown University, Rochambeau Avenue, Waterman and Angell Streets. These neighborhoods include dense residential, professional office, and commercial zones, as well as large institutions such as Brown University, Butler Hospital, and several public and private schools. Because there are no other through streets which access the interstate, Gano Street serves as a collector-distributor street for this area.

A comparison of projected traffic volumes for Gano Street, for both the Reconstruction and Hurricane Barrier Alternatives as shown on Attachments 1 and 3 (the maps in the pocket at the back of the FEIS), indicate the traffic impacts of the HBA on Gano Street are predicted to be negligible when compared to the Reconstruction Alternative, with a small decrease in AM volumes and no change for the PM volumes.

The increases in traffic discussed in the comments are on the Gano Street on-ramp to I-195 Westbound, as shown in FEIS Tables 4-2 and 4-3. The traffic on this ramp is predicted to increase from 380 vehicles per hour (VPH) in the Reconstruction Alternative to 665 VPH or 75 percent in the AM peak hour and from 489 VPH to 991 VPH or 103 percent in the PM peak hour. These increases are just on the on-ramp, and they result from the fact that the Gano Street on-ramp will be the only direct access point to I-195 westbound from the East Side. The reasons why traffic volumes on Gano Street are predicted to remain relatively stable are related to the changes in the eastbound access. The direct access to Gano Street from I-195 eastbound is relocated to India Street, allowing traffic to access the East Side via Gano or South Main Streets. The on-ramp to I-195 eastbound from Gano Street has been eliminated, thereby making it less attractive for most of the traffic on Gano Street destined for I-195 east; although, Gano Street can still be used to access I-195 east via India Street.

Although it is not considered a mitigation for effects of this project, RIDOT has indicated it will work with the city of Providence to investigate ways to both improve existing operations and reduce the impacts of *existing* traffic on the quality of life in the neighborhood. However, because there are no readily identifiable or feasible alternative routes for Gano Street, it will continue to provide access to I-195 and function much as it does today.

● **Interstate Access to and from the East Side of Providence**

According to several commentors, access to the interstate from the east side of Providence will be reduced by the HBA. In the westbound direction, two off-ramps will remain, but the number of on-ramps will drop from two to one. Eastbound, the number of off-ramps will drop from two to one, and on-ramps from three to one. The commentors expressed concern over the impacts of reduced access.

Access to the east side will be reduced; however, the need for access will be reduced as well. The studies for EIS revealed that almost all of the traffic entering westbound I-195 is destined for I-95. Presently, there is no convenient access directly to I-95 from the east side. Under the HBA, convenient, direct access to I-95 north and south will be provided via Point Street.

Conversely, eastbound traffic exiting at Wickenden Street and Gano Street is originating from I-95. Traffic from I-95 northbound can access Wickenden Street by exiting directly to Point Street under the HBA, and southbound I-95 traffic can use the newly completed Memorial Boulevard to get to College Hill and South Main Street, which was previously all but impossible to do. The proposed India Street exit from I-195 eastbound will still provide access to Gano Street and Wickenden Street via South Main Street.

Much of the traffic entering I-195 eastbound at Point Street is coming from the hospital via the Point Street Bridge. That traffic will be served via a proposed on-ramp to I-195 east from Plain Street, which will obviate the need for it to use Point Street. Traffic from Downtown and Gano Street will still use the proposed on-ramp from South Water Street and India Street, which will not need to merge with the mainline traffic, but will have its own lane across the Washington Bridge. In addition, traffic from Downtown can use the on-ramp from Plain Street or the Civic Center Interchange.

These changes in access will not result in increased traffic in Fox Point. They will not "induce" new traffic to travel through Fox Point, but they may change travel patterns through the east side. For instance, trips originating on Hope Street may choose to access I-195 east via Wickenden and South Water Streets instead to Gano Street. Traffic headed for I-95 may use Angell Street and Memorial Boulevard instead of Wickenden Street. Trips to Hope Street from I-95 north may use Point Street instead of the Wickenden Street exit. Traffic originating from areas such as Wayland Square will experience an increased travel time to access I-195 eastbound of about 1½ minutes.

- **Wickenden Street at South Water and South Main Streets--Fox Point**

The Fox Point Citizens Association expressed concern that the proposed intersections at Wickenden Street and South Water and South Main Streets will become congested during the peak hours resulting in traffic diverting to local streets. They asked that construction of a ramp be considered over Wickenden Street.

Providing the at-grade intersections is in keeping with the goal of removing the barrier between different parts of the city that the existing I-195 now creates. Removing the highway will link Wickenden Street with the waterfront, improve the aesthetics of the area, and is more sensitive to the historic nature of the neighborhood. The design notwithstanding, FHWA and RIDOT are sensitive to the changes the immediate neighborhood might experience and are willing to work with the residents and the city to evaluate alternatives and/or provide additional mitigation if warranted.

The proposed intersections are designed to handle the projected traffic and reduce congestion. This dictates the size of the intersections. The intersection at Wickenden and South Main/Benefit Streets is especially critical because traffic backups out to the interstate are unacceptable. This intersection is predicted to have a level of service (LOS) D during the peak hours with a 39-second average delay in the AM peak and a 31-second average delay in the PM peak. At Wickenden and South Water Streets, the LOS is predicted at B in the AM peak and predicted LOS at the PM peak is E with an average delay of 44 seconds. LOS D is acceptable in an urban area where there are relatively high volumes of traffic. The fact that South Main and Water Streets are one-way should make these

intersections work efficiently. Coordinating the signals between the two intersections will reduce delay as well.

● **Environmental Issues and Review Process--Water Quality**

The U.S. Environmental Protection Agency (USEPA), RIDEM, and CRMC all commented on the stormwater quality mitigation in that it does not meet the standard set by CRMC's Coastal Management Program Section 300.6.B.6 to reduce total suspended solids (TSS) from stormwater by 80 percent. They (USEPA) indicate that there are other technologies available or there should be some documentation as to why full compliance cannot be achieved. CRMC acknowledged the efforts RIDOT expended to use "best management practices" on the complex urban site.

There were also specific comments from RIDEM and USEPA regarding the concentrations of various metals and exceedance of criteria and the need for RIDOT to commit to a maintenance program.

RIDOT is aware that this project does not meet the 80 percent removal standard; however, there are several issues which make the treatment of stormwater challenging on this project. Constraints imposed by existing land use, proposed land use, the densely developed downtown core, topography, the Providence River, and underground utilities all had to be considered. The Department has met and coordinated with the two State agencies, RIDEM and CRMC, responsible for regulating stormwater quality several times, the latest being in October and July of 1995.

The proposed "best management practices" developed to date for the project will remove an estimated equivalent of 63 percent of the TSS from stormwater from the project. This was accomplished through a series of twelve proposed wet sedimentation basins. Wet sedimentation basins are an effective method for treating stormwater. Other methods were considered but deemed unworkable. Roadside swales were used on a very limited basis, but were not possible in most cases because the expanded cross section needed to accommodate swales would have imposed additional impacts on existing land uses along the right-of-way. It should be noted that currently there are no stormwater management practices in place for the I-195 and I-95 drainage in the project area.

The Department has taken steps to mitigate the lack of treatment in the project area by treating runoff from beyond the project limits in other areas. Approximately 25 acres of watershed beyond the project limits will be included in the drainage systems for treatment. This contributes to the 63 percent TSS removal achieved with the project mitigations. In addition, a total of 67 acres of watershed was removed from the combined sanitary and storm sewer system. This was accomplished by capturing runoff that was already routed through the State highway drainage systems or that crossed the interstate to get to the river. Removal from the runoff from the combined systems was accomplished where systems were parallel or where new drainage had to be constructed to serve reconnected city streets. This will reduce the frequency and amount of overflows into the Providence River after large storms.

Infiltration basins were not used because the inverts of the drainage systems are typically at or below mean high water and below the water table. In addition, the industrial, commercial, impervious nature of the urban district would generate higher sediment and pollutant loads. In any case, sedimentation basins were employed wherever infiltration basins could have been used. Porous pavement designs for interstate highways are generally not applicable because they will not provide the required integrity under the weather and load conditions they are designed for. The project was divided into three areas for water quality purposes: the area east of the Providence River and south of James Street, the area west of the Providence River and along the I-95 corridor, and the Old Harbor/Downtown area which includes the land adjacent to the river and the existing I-195 corridor. The first two areas are each served with six proposed wet basins. The third area, the Old Harbor/Downtown has no proposed treatment. All six inverts, on the west side of the river, of the drainage systems are below mean high water, ranging from -7.4 feet to -3.8 with one at -1.3 feet. With the ground at elevation +5 or 6 feet, the sedimentation basins for these systems would be up to 14 feet deep and below the water table. The reason why the drainage systems are so low is that there is a large existing utility corridor in Dyer Street under which the drainage systems must cross. In addition, the city objected to sedimentation ponds of this magnitude in an area that holds so much potential for positive redevelopment.

As stated in the comments from RIDEM and CRMC, the details of the best management practices will need to be worked out to the satisfaction of these agencies before they issue permits. The Department will ask for a waiver from the standard, as provided for under Coastal Resource Management Program Section 120; however as CRMC noted, a considerable good faith effort has been made to meet the removal requirement. As part of the permit process, the Department will determine the maintenance requirements with the agencies and will make the commitment to maintain these facilities. The project will conform to the RIDEM Stormwater Design Standards Manual, and additional steps will be taken, where feasible, to minimize the impacts of stormwater. In addition, as a requirement for receiving Federal-aid highway funds, RIDOT must maintain the facilities, including stormwater quality management facilities, as part of the standard Construction and Maintenance Agreement.

USEPA and RIDEM commented on the exceedance of copper and zinc dissolved concentration criteria in the treated stormwater and also indicated that the criteria were incorrectly stated. Errata has been included in this Record of Decision to correct the concentrations of metals. As suggested by RIDEM, the level of dissolved metals will be calculated per the new RIDEM regulations during the Storm Water Quality Certification process, which may result in fewer violations. RIDOT will work closely with RIDEM during the Water Quality Certification process to explore alternate measures to refine stormwater treatment.

RIDEM expressed concern about the lack of discussion on contingencies if it is determined that containment booms are not effective during dredging. If this situation arises, RIDOT will determine the reasons for increased turbidity and take the appropriate measures to remedy the problems.

- **Hazardous and Contaminated Material**

The USEPA commented on the status of hazardous material contingency plans. All hazardous and contaminated material will be handled in accordance with the appropriate State and Federal regulations, including the Resource and Conservation and Recovery Act (RCRA) regulations. Specific contingency plans will be drafted upon completion of a more detailed remedial site investigation at the sites identified in Section 4.5.3, Soils and Hazardous Materials, of the FEIS.

- **Alternative Transportation Mode**

Several comments were made indicating that the resources dedicated to this project would be used more productively on mass transit improvements.

Decisions on long range funding for highway improvements versus mass transit improvements are made during the statewide planning process as opposed to the project level planning process. At the project level however, mass transit improvements for the corridor *were* analyzed to comply with Clean Air Act requirements and FHWA policy, because the project increased single occupancy vehicle (SOV) capacity in a carbon monoxide or ozone nonattainment area.

The alignment deficiencies and condition of the bridges for this section of I-195 must to be addressed in order to at least maintain even the lowest level of highway service for the future. Making improvements to mass transit systems will not address these issues. Concepts for transit improvements have been evaluated by the Department on a regional basis. More specifically, the Department is currently embarking on a separate project to evaluate improved commuter rail service on the Amtrak mainline between Providence and Westerly.

The Metropolitan Providence Transportation Improvement Project evaluated various mass transit alternatives for the east-west corridor that I-195 serves. That study provided part of the analysis to satisfy the Clean Air Act requirements for SOV increases noted above. It concluded that none of the alternatives, including rail through the east side tunnel, High Occupancy Vehicle (HOV) lanes on the existing highway system, or a combination thereof, reduced single occupancy vehicle trips sufficiently to warrant the costs. Only a two percent reduction in the number of vehicles was predicted. Even if these alternatives are implemented, alignment improvements and bridge replacement would still be required on I-195. The safety issues and number of accidents would not be affected by a two percent volume reduction. The HBA does, however, make strategies, such as HOV lanes, more feasible in the future by providing full ten-foot wide shoulders through this area. HOV lanes on the existing facility are not feasible due to width and alignment restrictions.

The project also advances the possibilities for water transportation by dredging the Providence River and providing places for boats to access the banks of the river south of Crawford Street.

Bus service for East Providence and the east bay communities will be enhanced by providing a safer, more efficient highway and additional opportunities for servicing Fox Point and lower South Water Street by making stops in those neighborhoods instead of passing over or by them as the existing facility does.

- **Public Participation**

One comment was made indicating that the scoping process was not accessible and the public process was not sufficient. Two scoping meetings were held on December 9, 1991. One at 10 AM and one at 6 PM. Approximately 150 notices were sent to representatives of local, State, and Federal agencies, community groups, businesses, institutions, and owners of properties which could be potentially affected. The sessions were advertised in the Federal Register.

During the preparation of the DEIS and development of the alternatives, two public workshops were held at the Fox Point School, one each in May and November of 1992. A public hearing was held to receive comments on the DEIS on June 30, 1993. All of these meetings were advertised in the Providence Journal and were well attended. In addition, there have been several feature articles in the Providence Journal and on television news broadcasts which indicated the scope and estimated cost of the HBA; the most recent was September 5, 1996.

- **Major Investment Study**

One commentator objected to the waiver of the formal Major Investment Study (MIS) requirements under 23 CFR Part 450.318. It was the conclusion of the Federal Transit Administration; the Federal Highway Administration; the Rhode Island Department of Administration, Planning Division; the Rhode Island Public Transit Authority; and the Rhode Island Department of Transportation that the studies documented in the DEIS, the public participation on the EIS, and the strong public support for the preferred alternative fulfilled the requirements for a MIS and signed a Memorandum of Understanding on December 14, 1994. A copy of the Memorandum can be found in Section 7 of the FEIS immediately after page 7-23.

- **Executive Order 12898--Environmental Justice**

One commentator referred to the HBA as a "Racist Transportation Policy" since she believes it "clearly discriminates against the economically disadvantaged, often composed of minorities." This comment falls under the purview of Executive Order 12898 as it relates to environmental justice in minority and low income populations. This recent executive order directed every Federal agency, to the greatest extent practicable, to make achieving environmental justice part of its mission by identifying and addressing as appropriate "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities" on those populations. While the Executive Order itself does not purport to create any new substantive right, we will clarify our position given the fact that it is a relatively recent issuance.

As noted earlier, decisions regarding integrating Mass Transit elements into the TIP and STIP to address the transportation concerns of all the traveling public, including the economically disadvantaged, are appropriately addressed on a Statewide Planning level, rather than at the level of a specific project. However, we have analyzed such strategies for the corridor to comply with the requirements of the Clean Air Act. None of the congestion management strategies, including mass transit, were found to satisfy the purpose and need of the project or substantially reduce SOV trips.

Commitments were made to further study of incident management and ramp metering, and to implement incident management in the corridor.

After careful analysis, FHWA has concluded that the impacts, benefits, and mitigation for the I-195 project will not result in "disproportionately high" adverse environmental effect to low income or minority groups. See Section 4.6.3 of the FEIS for more discussion on this issue.

- **Old Harbor Plan--Land Use**

One comment was made regarding the land use plans for the waterfront along the Providence River and the commitment to establish riverwalks. The Old Harbor Plan, which has been formally adopted as part of the city's Comprehensive Plan, includes provisions for riverwalks and some open space along the rivers. RIDOT is committed to accommodating the Old Harbor Plan, and some of its elements, such as the riverwalks, have been included in the project as enhancements. As part of the Section 106 Case Report Memorandum of Agreement, FHWA is committed to ensure that the Rhode Island State Historic Preservation Officer (RISHPO) reviews and approves the development of the surplus right-of-way.

Another comment specifically quoted from the FEIS is the area of land that will be dedicated to particular land uses. The long term redevelopment of surplus right-of-way is based on the city's current Old Harbor Plan. RIDOT and FHWA are not committed to the scope and size of new development, other than ensuring that the RISHPO has the opportunity to review and approve the redevelopment.

- **Errata to the FEIS**

Several comments pointed out errors in the FEIS. They are as follows:

Pages 3-105 and 3-109--The existing classification of the waters in the Providence River are incorrectly listed as "SD" when it should be "SC."

Pages 4-169 (Table 4-29), 4-173 (Table 4-31), and 4-175 (Table 4-33)--The USEPA Acute Criteria for pollutants is not consistent among these tables. They should be as follows: Copper--.0029mg/l; lead--.140 mg/l; and zinc--.095 mg/l.

These changes do not change the analysis or conclusions on Water Quality.

- **Other Comments**

Comment: Senator Rooney suggested installing a dam at the Hurricane Barrier to control the level of river.

Response: The I-195 project does not preclude consideration of a control dam as a separate project some time in the future.

Comment: The Narragansett Bay Commission (NBC) stated their requirement for a 30-foot wide easement centered on their lines and their concern for the integrity of the 48-inch siphon under the Providence River near the proposed Providence River Bridge.

Response: The Department acknowledges the easement requirements. The Department is also aware of the need to maintain the integrity of the siphon. Concepts for ensuring the integrity will be developed and finalized during final design.

Comment: Was widening the existing structure to eight lanes and/or making other safety improvements evaluated.

Response: Yes, this was considered but not evaluated as a build alternative because it would not meet one of the purposes of the project--to improve the substandard geometrics and safety. However, the North Alignment alternative was derived from this. See Section 2 of the FEIS for a more detailed discussion of the alternatives considered.

CONCLUSION

Based on the analysis and evaluation in the FEIS and after careful consideration of the social, economic, and environmental factors and input from the public involvement process, it is my decision to adopt the recommended alternative, the HBA, as the proposed action for this project.

Date: _____

Stephen Moreno, Director
Office of Planning and Program Development