2.0 PURPOSE OF AND NEED FOR PROPOSED ACTION

2.1 Project Purpose

The overall purpose of the Choctaw Point Terminal project is to develop a world-class, deep water, integrated intermodal terminal complex to service existing and emerging industries, to create new economic activities in the Mobile area, and to support similar opportunities on a statewide level. This goal is consistent with the 1978 and 1982 resolutions (see Section 1.2.3) approved by the Governor of Alabama and Amendment Number 1 passed by the voters of Alabama in 2000. From an economic perspective, the creation of jobs associated with container port and value-added activities would help address unemployment conditions in the area.

2.2 Need for the Proposed Action

In recent years the ASPA has witnessed a growing statewide move away from heavy industry to light manufacturing and value-added activities. Traditionally, the Port of Mobile has been an import and export location for high volume bulk products, such as coal and iron ore, with a lesser emphasis on the classes of cargo needed by modern light industry. The Port has become a distribution center for forest products, steel, iron, and aluminum cargoes. A 1999 economic study by the University of Alabama, based upon the fiscal year ending in September 1999, found that the ASPA generated revenues totaling $55.2 million, expended $37.1 million in payroll and out-of-pocket costs, and spent $37.0 million in capital acquisitions and construction. There were 431 permanent employees, resulting in a total payroll of $17.4 million. ASPA direct economic impacts produced an estimated total impact for the state of Alabama of $719 million in output (the total value of goods and services produced in the state of Alabama). The total earnings impact was estimated at $285 million, and the total employment impact was 10,782 direct and indirect jobs. State income and sales taxes totaling $16.2 million were generated (University of Alabama 1999). From this data, it is apparent that ASPA makes a substantial contribution to the local and state economy. However, until now, the ASPA has not endeavored to develop a major container terminal.

The U.S. Department of Transportation (USDOT) issued a report to the U.S. Congress in September 1999, entitled “An Assessment of the U.S. Marine Transportation System” (USDOT 1999). The report emphasized that the marine transportation system (MTS) does not consist only of waterways, ports, and terminals, but also includes inland rail, roadway, and pipelines that permit cargo to reach marine facilities. The importance of intermodal connections was recognized in the National Highway System Designation Act of 1995. “The adequate development and maintenance of the intermodal connections – roadways and railroads – is a particularly crucial capacity consideration for the MTS. . . Good intermodal access is a prerequisite to support the growing demand on the MTS” (USDOT 1999). A 1997 study of 58 ports, including 31 container ports, determined that half of the container ports lacked near-dock rail terminals that would ease transfer of containers from rail to vessel. In order to promote transportation cost savings, the intermodal connections must maximize
throughput and minimize transloading times and costs (USDOT 1999). Project development should consider both existing markets and needs as well as future projections and trends in the container industry.

The report also provided information on the growth in the number and increase in the size of container ships. The number of container ships is expected to continue to grow at a significantly higher rate (eight to ten percent) than other vessel types. There has also been an increase in the size of the container vessels being built. Approximately 40 percent of the new capacity on order is container ships in the 4,500+ TEU mega-ship category.

The objective of the ASPA development program is to address the need for the effective and efficient movement of containers to Alabama industries and other industries, especially in light of the state’s recent success in attracting new industries such as Mercedes, Honda, Toyota, Hyundai, and others. The ASPA Board of Directors has determined that future port development must go hand-in-hand with the provision, expansion, and marketing of value-added services to optimize its value to the state. The ability to develop an intermodal rail yard as an integral component of the container port together with the excellent Interstate connections make the Choctaw Point Terminal project area an ideal location to meet the growing capacity needs of the container industry. The proposed Choctaw Point Terminal project would provide needed container terminal facilities and would generate new employment opportunities. In March 2004, the unemployment rate for the Mobile area was six percent (US Department of Labor 2004).

The Choctaw Point Terminal project is described in Joint Permit Application Number AL01-04269-U, dated December 17, 2001 (M&N 2001) (see Appendix C). The proposed project involves the construction and operation of a modern, world-class container handling facility. The applicant has conducted conceptual design, engineering, economic, and market analysis for the Choctaw Point Terminal project. The Joint Permit Application (M&N 2001) and supporting materials (M&N 2002) provide information regarding the justification for the project, its size and configuration, the need for supporting facilities, and their location.

Container throughput for the Port of Mobile varied from 8,000 to 12,000 TEUs between 1991 and 2001. The ASPA handled 18,439 TEUs and 23,960 TEUs in 2002 and 2003, respectively. Container shipments continue to increase with 18,277 TEUs being handled during the first six months of FY 2004. A TEU is the industry standard of measure for containerized cargo based on the volume of a single 20-foot-long container. Recent operational changes and equipment upgrades at the existing container handling area are expected to increase container throughput capacity to 50,000 to 75,000 TEUs per year.

The existing container handling area (Berth 2) at the Port of Mobile is very small (approximately 16 acres) and will reach capacity at 75,000 TEUs. Expansion opportunities are limited by surrounding development. Additional information on Berth 2 is presented in Sections 3.4 and 3.4.2.3 (see Figure 3-3). The Mobile
Convention Center is immediately south of Berth 2, and the main dock area for the Port of Mobile is north of the site. Railroads, highways, and downtown Mobile block expansion to the west (M&N 2002). The size of existing and planned future container ships is a significant issue affecting the proposed project. In February 1998, the USDOT released a report entitled *The Impacts of Changes in Ship Design on Transportation Infrastructure and Operations* (USDOT 1998). The report lists the following changes in port terminal designs and operations required to accommodate these larger ships:

- Deeper navigation channels to accommodate ships with drafts up to -46 feet;
- Longer and deeper berths;
- Larger container cranes;
- Larger container processing and storage areas with up to 75 acres per berth; and
- More efficient land transportation facilities with increased use of rail.

In order to be competitive, the proposed project must produce enough transportation cost savings to attract existing and future container shipments (see Appendix D). The facility must also provide an integrated marine, rail, and highway transportation system to be competitive. The rail and truck intermodal facilities must be contiguous or immediately adjacent to the marine terminal to function in a cost-effective manner. Also, U.S. Customs regulations, port security concerns, and operational efficiencies require that containers stay within a secure fenced area until they leave the facility by rail, truck, or vessel.

The ASPA’s Master Plan projects a relatively rapid increase in container shipments over the first five years of operation based on capturing shipments with the largest cost savings first. The rate of increase would then be reduced because businesses with lower cost savings would be slower to convert to the new facility. The projected shipments for the 20-year planning window are shown in Table 2-1. The Master Plan projects that initially approximately 88 percent of the containers would be shipped by rail with the remaining 12 percent shipped by truck. The percentage of containers moving by truck would increase over time in response to the growth in local value-added facilities.

**Table 2-1: Projected Shipments for 20-Year Planning Window**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PROJECTED SHIPMENTS (TEUs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>46,000</td>
</tr>
<tr>
<td>2010</td>
<td>291,000</td>
</tr>
<tr>
<td>2015</td>
<td>364,000</td>
</tr>
<tr>
<td>2020</td>
<td>614,000</td>
</tr>
<tr>
<td>2025*</td>
<td>614,000</td>
</tr>
</tbody>
</table>

* Assumes that the Choctaw Point Terminal project reaches maximum capacity in 2020.

Based on the information presented by the applicant, the USACE, Mobile District, has assumed that appropriate economic evaluations have been completed, the
proposal is economically viable, and is needed in the marketplace. However, the District Engineer may make an independent review of the need for the project from the perspective of the overall public interest, if warranted (33 CFR 320.4(q)).

2.3 Additional Information Regarding the Proposed Project

The anticipated trade routes that would be serviced by the new terminal include the West Coast countries of South America, Central America, Mexico, and the Far East, via the Panama Canal and the rapidly growing transshipment terminal in Panama. Accordingly, the Choctaw Point Terminal project would be capable of handling the largest vessels now transiting the Panama Canal. The Choctaw Point Terminal would also service trade routes to and from the east coast of South and Central America, Mexico, and the Caribbean routes. Internal cargo destinations or origins for containers extend from Alabama to Atlanta or Memphis and then north to the Great Lakes area and Canada (M&N 2002). The Panama Canal Authority is considering expanding the Panama Canal to accommodate larger vessels and additional traffic. A news article regarding the proposed expansion stated: “Container ships, the fastest-growing segment of canal traffic, are the second-biggest users of the canal, according to reports. Alabama’s port expansion would give it 14 times more container shipping capacity than it has now, and several other ports nationwide are expanding container shipping operations. Three-quarters of the products shipped by water worldwide are now containerized” (Mobile Register 2004).

The estimated maximum throughput of the new terminal would be approximately 614,000 TEU’s per year, which is considered adequate to attract a major container carrier or operator and also offer sufficient capacity to meet demand until approximately 2020 (M&N 2002).

The existing container terminal located at Berth 2, which is too small to accommodate the anticipated throughput, would be the incubator project and ultimately offer flexibility and additional capacity for container cargoes once the Choctaw Point Terminal is online (M&N 2002).

An economic impact analysis conducted by Dr. Semoon Chang, Center for Business and Economic Research, University of South Alabama, for the proposed Choctaw Point Terminal project provides an estimate of the impact of the facility on the local economy as shown in Table 2-2 (Chang and Canode 2003). A copy of the entire economic impact analysis is included in Appendix F.

<table>
<thead>
<tr>
<th>Source of New Employment</th>
<th>Number of Employees</th>
<th>Estimated Wages ($000)</th>
<th>Tax Revenues ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>City of Mobile</td>
</tr>
<tr>
<td>Choctaw Point Terminal</td>
<td>483</td>
<td>16,295</td>
<td>268.2</td>
</tr>
<tr>
<td>and Support Activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Sector</td>
<td>1,696</td>
<td>57,220</td>
<td>941.6</td>
</tr>
<tr>
<td>Total</td>
<td>2,179</td>
<td>73,515</td>
<td>1,209.8</td>
</tr>
</tbody>
</table>

Source: Chang and Canode 2003
The above estimate represents a snapshot projection of the economic benefits with the Choctaw Point Terminal project operating at a TEU level of 364,000 which represents approximately 59 percent of capacity. Existing businesses in the Mobile trade cluster area would save an estimated $2,045,000 in transportation costs during 2015. Additional benefits would accrue from construction of the facility.

The project also offers an opportunity to convert existing brownfield sites into a water-dependent facility that would produce significant economic benefits to the region and state. The 120-acre Choctaw Point portion of the site qualifies for brownfield designation. The Alabama Legislature encourages the use of brownfield sites for redevelopment. The goal is to redevelop contaminated properties into beneficial re-uses that do not affect public health and safety. The ASPA has completed a Brownfields Economic Development Grant Application to help fund demolition of existing facilities and implementation of corrective measures to remediate existing contamination on the Choctaw Point portion of the project. The proposed redevelopment is being fully coordinated with ADEM and USEPA. Removal and/or confinement of contaminated materials would restore the area and allow it to be utilized as a container terminal. The ASPA is legally required to remediate the property in accordance with their USEPA permit (EPA ID #ALD 058 221 326). The Corus DRI steel mill located adjacent to Choctaw Point is not operating due to economic factors associated with high energy costs. The site is under long-term lease and is too small and inappropriately oriented to serve as a container terminal or an intermodal rail facility.

Modern commerce and production firms place increasing emphasis on the importance of high-quality logistics, just-in-time delivery, and sophisticated inventory control. The ASPA combination of modern port facilities, efficient intermodal connections, and high-quality interstate highways can encourage major consumer products companies to establish distribution centers in the Mobile area or elsewhere in the state of Alabama (M&N 2002).

The existence of Brookley Downtown Airport directly south of the project site also offers opportunities to create links between air cargo, the Foreign-Trade Zone (FTZ) and the Choctaw Point Terminal maritime-based distribution and value-added installations (M&N 2002).

The convergence, adjacent to the site, of two of five major Class I railroads serving Mobile offers efficient rail access to all parts of North America. This concentration of major railroads is unique among Gulf Coast ports. Accordingly, it is anticipated that 88 percent of the cargo initially passing through the Port could ride on rail rather than over the roads and highways (M&N 2002).

The proposed Choctaw Point Terminal project can provide a cost-effective means for ocean freight to access a distribution network that would serve the state and a hinterland market extending to Canada. The main focal point for these facilities would be a modern container facility to support a value-added warehousing and distribution center. Analyses indicate that such a facility would provide access to and from world markets for firms throughout Alabama and elsewhere and provide added incentives for manufacturing firms with container capable products to
locate in the state. The Choctaw Point Terminal project adds a dimension by placing intermodal facilities adjacent to the value-added facilities, with both immediately adjacent to rail and interstate highway corridors. The growth of logistics operations, including distribution, storage, and value-added services, is vital to the continued development of the port (M&N 2002).

It is envisioned that potential businesses wishing to locate within the value-added distribution warehousing area would lease land and construct or lease their own buildings on the properties. A plan has been developed to establish zoning and other planning criteria and to establish design standards for the development, including maximum area and height of buildings, exterior materials, building setbacks, signage, protective buffers, landscaping requirements, protection of heritage trees, etc. (TAG 2004).

The value-added facilities would be located on ASPA lands that are currently undeveloped and under-utilized. The proposed plan envisions the construction of commercial, value-added distribution and warehousing facilities on the remaining property west of the intermodal rail yard. Value-added services are activities performed to increase the potential resale value of the commodities being handled, such as bar-coding, kitting, product manipulation, “pick and pack,” and assembly of components and marketing materials. Peripherally associated activities, such as product returns handling, may also exist. Locating value-added activities on under-utilized land immediately adjacent to gateway ports throughout the world strengthens ports’ competitiveness and would do the same for Mobile as these new activities provide globally involved livelihoods for the region’s inhabitants. As new activities provide globally involved livelihoods for the region’s inhabitants, ports would be empowered to expand capacity. In this manner, development of value-added activities on land in close proximity to the port would fuse regional development and port economic objectives into a single win-win program. The growth of logistics operations, including distribution, storage, and value-added services, is vital to the continued development of the port (M&N 2002).

2.3.1 Project Response to Projected Level of Demand

Analysis made during preparation of the Master Plan considered the capability of the project site to accommodate initial and projected future development. Further site development refinements have increased the area available for terminal activities adjacent to the Mobile River Navigation Channel. Based upon these analyses, the two-berth container terminal would meet the projected level of demand until approximately 2020. The intermodal terminal should meet demand beyond 2030, and the value-added warehousing and distribution complex should meet the forecasted level of demand until approximately 2030. The projected level of demand is based upon transportation cost savings (M&N 2002).

2.3.2 Long Term Expansion

The primary future expansion requirement would involve the construction of additional container facilities, to be online by approximately 2020, or when demand exceeds 600,000 TEU’s per year. The McDuffie Terminal offers the
potential for container terminal expansion, and conversion of this site could increase capacity by approximately 750,000 TEU’s per year. However, the site may or may not be available for conversion to another use at that time. Other sites with potential for container terminal expansion include land immediately north and south of the project site (M&N 2002). Future expansion of the project is not part of the Proposed Action.

It is expected that expansion of the value-added distribution warehousing area would move outside the Choctaw Point-Garrows Bend area as demand grows. In the long-term, the successful expansion of the overall program is likely to lead to development of value-added distribution warehousing area clusters in the Mobile area and also statewide, connected by the intermodal corridors serving the primary maritime center at the Choctaw Point Terminal project (M&N 2002). Future expansion of the project for additional value-added distribution warehousing areas is not part of the Proposed Action.