

Chapter 3 • Affected Environment

This chapter describes the existing conditions found within the Crossroads Heritage Area that provide the basis for preparation of the management plan. The heritage area is large and complex in terms of both its natural context and the cultural context that has developed over the past 300 years. The purpose of this chapter is to provide a broad overview of conditions that can affect planning and implementation of the heritage area. For this reason, the chapter goes well beyond what is required purely for compliance purposes. Chapter 3 provides the background which was the basis for development of alternatives for the heritage area, selection of a preferred alternative, and crafting of strategies and programs for implementation.

Chapter 3 is divided into six broad topics that characterize the heritage area and its statewide context:

- **Cultural Resources and the American Revolution** – describing the types of resources associated with the American Revolution in New Jersey, the extent to which they have been recognized and inventoried, and their significance to the heritage area;
- **Natural, Recreational, and Landscape Resources** – providing an overview of the environmental context of the heritage area and the degree to which landscape resources have been recognized and protected;
- **Socio-Economic Environment** – looking at the people of New Jersey through a review of census data to gain an understanding of the issues and interests of the constituents that the heritage area must engage;
- **Regional and Community Planning** – providing an overview of the community planning and development context through which the heritage area must work;
- **Heritage Tourism and Interpretation** – outlining how Revolutionary Era sites are interpreted and the context for heritage tourism programming based on interpretation of the American Revolution; and
- **Transportation and Visitor Experience** – characterizing the state's overall transportation infrastructure in order to understand its impact on the heritage area and the heritage area's potential impact on this infrastructure as residents and visitors travel within it.

Chapter 3 provides an overview of the conditions observed and in some cases summarizes issues and concerns that have been raised. The primary objective is to describe the broad range of resources and their significance to the American Revolution, understand the issues facing communities today, identify organizations addressing specific areas of interest, and identify sources of information as well as apparent gaps in existing information. In effect, two kinds of contexts are involved – the context that will have a significant effect on the development of the heritage area, and the context that will be affected by the heritage area. These impacts may be positive or negative.

For the narrower purposes of compliance with federal planning requirements, the subjects outlined below (a) are directly related to the impact topics identified at the end of Chapter 1, *Purpose and Need*; (b) were needed for the development of the strategies and alternatives outlined in Chapter 2, *Alternatives*; and (c) are used in the assessment of potential impacts in Chapter 4, *Environmental Consequences*.

The information summarized below has been gathered from documents, websites, consultations, and field observation. This information has been critical in providing Crossroads and its partners with a broad understanding of the issues and opportunities facing the heritage area. The information was instrumental in the development and assessment of alternatives for the heritage area. Following completion of the *Environmental Assessment*, the information on existing conditions was used to shape recommendations for implementation of the preferred alternative.

3.1 Cultural Resources and the American Revolution

The significance of New Jersey to the history of the American Revolution has been recognized for many years. A wide range of cultural and historic resources from the Revolutionary Era remain present in the New Jersey landscape. Many have been recognized and preserved by generations of historically minded individuals and organizations. Other resources that have not been the subject of specific preservation initiatives also remain. Together, these resources help us visualize the Revolutionary landscape and can help us understand both the physical character of the times and the context in which Revolutionary Era events occurred.

For the purpose of this assessment, the state's Revolutionary Era resources have been divided into seven categories:

- Cultural landscapes;
- Historic communities;
- Historic buildings and districts;
- Military sites;
- Monuments, parks, and commemorative sites;
- Archaeological sites; and
- Collections.

In reviewing available information, it has become apparent that the inventory of Revolutionary Era resources is neither comprehensive nor complete. While many significant resources have been identified at the national and state levels, many others have not. State and national resource inventories are spotty and focus primarily on historic buildings. The character of the overall landscape that existed at the time of the Revolution is poorly studied and not well understood.

Detailed knowledge of that landscape and its resources is best understood at the local level by local historians and historical societies. The quality of that information and its availability varies based on the comprehensiveness and professionalism of the individuals and organizations involved. Local historians and enthusiasts have been studying local Revolutionary Era history for generations, and the level of their knowledge is impressive. The task of gathering, recording, and extending this knowledge on a regional and statewide basis remains and is an interesting and exciting challenge that can be undertaken by local, regional, and statewide partners through Crossroads of the American Revolution.

3.1.1 Cultural Landscapes

The geography of New Jersey had a significant impact on the conduct and outcome of the Revolutionary War. When the British occupied New York City in August of 1776, the landscape around the city became

a zone of conflict extending from White Plains and the Hudson River as far north as West Point, and southwest through New Jersey to the rebel capital of Philadelphia. New York remained the command and logistical center for the British army throughout the war, and General Washington's singular focus on containing the British and retaking New York City guaranteed that the area around the city, including most of central New Jersey, would remain a battleground.

Understanding this cultural landscape is key to understanding the war-related events that occurred. Interpretation should use that landscape as a means through which the Revolutionary War story can be told and its significance comprehended. Understanding the cultural landscape on which events played out is critical to an appreciation of the real-life context of the war.

A cultural landscape is defined as “a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes” (National Park Service).¹ Cultural landscapes are historic landscapes made up of both natural and manmade features which together give the landscape its distinctive character.

A system of 11 landscape characteristics has been developed for the study of historic and cultural landscapes and the natural and cultural forces that shaped them (National Register Bulletin 30 – Guidelines for Evaluating and Documenting Rural Historic Landscapes). Four of these landscape characteristics involve analysis of processes that have been instrumental in shaping the land:

- Land use activities;
- Patterns of spatial organization;
- Response to the natural environments; and
- Cultural traditions.

The remaining seven landscape characteristics are physical components that are evident on the land:

- Circulation networks;
- Boundary demarcations;
- Vegetation related to land use;
- Large-scale features such as buildings, structures, and objects;
- Clusters of buildings and other features;
- Archaeological sites; and
- Small-scale features in the landscape such as paths, fence lines, walls, etc.

Through the use of this system it is possible to read the contemporary landscape and identify historic elements and characteristics that remain. The integrity of the landscape to the period of the Revolution can be assessed, and through imagination and interpretation the character of the historic landscape can sometimes be reconstructed. For the most part, such studies have not been undertaken for New Jersey's Revolutionary Era landscape except in the study of specific historic and archaeological sites.

During the period of the American Revolution, the cultural landscape reaching from the vicinity of Bergen County on the Hudson River, opposite Manhattan, southwest on a diagonal line to Trenton and further south to the vicinity of Camden (then known as Cooper's Ferry), opposite Philadelphia, was a rich agricultural region and primary transportation route connecting the northern and southern states. This

¹ Secretary of the Interior's Guidelines for the Treatment of Historic Properties, “Guidelines for the Treatment of Historic Landscapes,” National Park Service, http://www.nps.gov/hps/hli/landscape_guidelines/index.htm.

region was highly populated with farmsteads and rural villages and was bountiful in its agricultural production. To the southeast was the coastal plain with its pinelands and the Atlantic coastline. To the northwest were the mountains and hill country of northern New Jersey, more remote, less agriculturally developed, but rich in natural resources. Rivers and waterways throughout New Jersey were important to commerce, influenced transportation routes, and helped shape key communities.

This diagonal region of central New Jersey was highly contested between British and American forces during the early years of the war and was the scene of most of the state's larger battles. During the war's later years, conflict was most intense in the region east of the Watchung Mountains, from Perth Amboy north into the Hudson Valley.

Peter Wacker and Paul Clemens' seminal 1995 study, *Land Use in Early New Jersey*, provides a detailed, academically rich picture of the New Jersey landscape during the late 18th century. This and related studies provide information and insight into ethnic make-up, settlement patterns, land use, boundary divisions, the agricultural economy, rural life, and changes over time. They provide a context for understanding the civilian landscape during the Revolution that is unmatched in other regions. Through these studies, local communities can fill out the details of the physical and cultural characteristics of their own communities and their relationships to events that occurred.

Good maps of New Jersey did not exist at the beginning of the Revolutionary War. Because of the military activity that occurred in the state, however, the development of reliable maps became important for both armies. The booklet *The Mapping of New Jersey in the American Revolution* by John Snyder, published by the New Jersey Historical Commission in 1995, provides an overview of mapping during the war. Most important are the maps produced by Robert Erskine, General Washington's surveyor general from 1777 to 1780, and his assistant and successor, Simeon DeWitt.

The Erskine/DeWitt maps are a unique resource through which Revolutionary Era roads can be accurately identified. Most of the maps exist as manuscript sketches of one or two roads as line diagrams connecting geographical locations. Sometimes features along the road are noted. Most of the area of New Jersey north of a line from Mount Holly to Perth Amboy is covered by the Erskine/DeWitt maps, with a particular concentration in the triangle formed by Morristown, Elizabethtown, and New Brunswick. Some local historians and historical societies have used these maps to help create composite maps of their regions during the period of the Revolution, most notably Bergen and northern Middlesex Counties. However, an accurate, contemporary reconstruction of the Revolutionary Era road network using these incredible resources has yet to be compiled. These maps ~ in combination with accurate topographic and watercourse information available today ~ will go a long way in helping us reconstruct an accurate base for mapping the physical context of the cultural landscape during the Revolution.

It is hard today to visualize the character of the landscape during the Revolution. Topography, the locations of watercourses, and the mapping of known roadways can provide a framework, but filling in that framework with buildings, farm fields, and other landscape features is extremely difficult. The best information on the character of local communities appears to be available through the work of local historians and historical societies. Through legal documents, boundary descriptions, letters and diaries, archaeological investigations, oral tradition and other clues, pieces of the cultural landscape sometimes can be placed and the visual character of communities reconstructed. Details of the cultural landscape during the Revolutionary period are not well understood, and a great deal of interesting work remains to be undertaken in piecing this information together. Local historians and historical societies would be the most appropriate lead in such work.

New Jersey's cultural landscape has seen a great deal of change over the two and one-quarter centuries since the end of the Revolutionary War. Figure 3-1, Revolutionary War Landscape, shows a number of the resources currently identified in inventories of the Revolutionary period in the vicinity of the heritage area. During the existing conditions assessment for Crossroads it was found that available information is not necessarily accurate and is far from complete.

FIGURE 3-1 The Revolutionary War Cultural Landscape of the Crossroads of the American Revolution National Heritage Area

On the Revolutionary War Landscape map, general landforms and watercourses are shown on the underlying base to provide a context for cultural information. Revolutionary Era road networks are shown to the extent that information was readily available, mostly from secondary sources. This road network needs to be fully studied and accurately remapped, extending the road networks to areas where they are not yet shown. Key military routes from major events including the Retreat across the Jerseys, Ten Crucial Days, Washington's Retreat to Morristown, the Roads to Monmouth, and the Washington-Rochambeau Revolutionary Routes are shown on the map over this network.

Locations of historic towns and villages are shown as indicated on period maps. Properties and districts from the Revolutionary period identified in the existing inventory of the National Register of Historic Places, discussed further below, are indicated. The general locations of military battles, engagements, and skirmishes in the vicinity of the heritage area are shown as derived from Rutgers University students' mapping of the Munn inventory first compiled in the 1940s and restudied in 1976. This information is also discussed further below.

All in all, the Revolutionary War Landscape map begins to give us a sense of the distribution of resources within the landscape at a heritage-area-wide scale. The limited extent of available information, however, is telling with respect to the need for further study. Contemporary mapping techniques will be available to greatly improve the quantity and quality of information as it is developed through research in the future. Through these techniques we should someday be able to zoom in on regions and individual communities to see identified resources and probable locations of lost resources in helping us to visualize and understand the character of the cultural landscape during the American Revolution.

Figure 3-2, Context Map, characterizes New Jersey's landscape today. High density urban areas are shown in dark red, with areas of decreasing density shown in various lighter shades of red. This map helps give us a picture of the degree of change that has occurred in the landscape since the Revolution. Urbanization has been concentrated in the northeast/southwest diagonal that comprised the region of rich agricultural farms extending from Bergen County to Camden County during the period of the Revolution. East of the Watchungs, intense urbanization extends north from New Brunswick to Hackensack, New Bridge and Fort Lee, with particular concentration in Newark and Elizabeth. The urbanization around Trenton and Camden is similar. These areas, once comprising farmsteads, dirt roads, mills, wharfs, and rural villages, are now urban commercial centers, industrial parks, busy highways, and densely developed residential neighborhoods.

FIGURE 3-2 Context Map

Though difficult to visualize, what remains of the Revolutionary Era cultural landscape within these urbanized areas includes the general topography, the locations of watercourses, some roadways, some boundaries, and the locations of historic communities. Though the historic communities have changed greatly, some key elements remain that can help us reconstruct the period landscape. These include street configurations, historic buildings (especially churches) and town squares, many of which have survived as contemporary urban parks.

Large portions of the Crossroads Heritage Area landscape remain undeveloped and to a large extent retain their integrity to the period of the Revolution. While land use, landscape features, and vegetative cover have changed, the form, natural features, and many cultural features of the landscape such as road networks remain. For several decades, New Jersey has had a strong land conservation program that has focused on preserving remaining open space. This has been an important initiative, as continuing rapid suburbanization along the edges of previously developed areas has been and will continue to be a serious threat to these landscapes.

Today, population growth is most intense in these suburban edge regions that include Middlesex, Monmouth, Burlington, Hunterdon, and Morris Counties. Historic landscape integrity is threatened by rapid growth and development in these areas. Southeast of the Route 1/Turnpike corridor, much of this land is used agriculturally in ways similar to its use during the Revolution. Northwest of this corridor, the land is hillier and more wooded, with regions of affluent gentlemen farms. In both areas, the integrity of the historic rural landscape is high, and the cultural landscape during the period of the Revolution can be studied, appreciated and interpreted.

A great deal of information exists that will facilitate study of the cultural landscape of the Crossroads of the American Revolution at regional and local levels. Study of the cultural landscape is a primary way through which Revolutionary Era resources can be identified and preserved and through which the stories of the American Revolution can be told. These efforts should be an important component of the Crossroads management plan.

3.1.2 Historic Communities

At the time of the American Revolution, about 184,000 people lived within the borders of New Jersey (U.S. Census Bureau). Although it lay between the two largest population centers of the time, New York and Philadelphia, New Jersey itself lacked a major urban center. Instead, New Jersey residents lived in smaller communities throughout the state. Such communities usually organized near major land and water transportation routes or major lumbering and mining centers, with the largest Colonial towns in New Jersey existing near the Delaware and Raritan Rivers. Many of the communities that played an important role in the Revolutionary landscape still exist today as assemblages of important cultural resources that are essential to communicating the Crossroads story.

For planning purposes, the management plan is specifically interested in Legacy Communities that are historically significant to the Revolution and Visitor Service Communities that can support heritage tourism. There is not, however, a strong correlation between these communities and the list of communities currently participating in such statewide historic revitalization programs as the Certified Local Government and Main Street programs.

Legacy Communities

The Crossroads management plan is using the term ‘Legacy Communities’ to denote communities that existed at the time of the American Revolution. While many of these communities have grown in size and population, the historic core of many Legacy Communities still remains at least partially intact. Through a review of period maps, 73 Legacy Communities have been identified to date within the Crossroads Heritage Area (88 including those communities just outside the Heritage Area). Local historians probably know of more and can help expand this preliminary list. Through research, the history and character of these communities can be illuminated, and their stories can be used to illustrate Crossroads interpretive themes. Legacy Communities and sites listed on period maps that have been identified to date are listed in Appendix XX.

TABLE XX Communities in and near the Crossroads of the American Revolution National Heritage Area Known to Have Existed during the American Revolution (Preliminary List)

COUNTY	MUNICIPALITY	COUNTY	MUNICIPALITY
Bergen	Fort Lee	(Mercer, cont'd)	South Trenton Ferry
	Hackensack		Trenton
	Hoppertown*		Yardley Ferry
	Liberty Pole*	Middlesex	Bonhamtown
	Little Ferry		Cranbury
	Lower Closter Landing*		Dayton
	New Bridge		Metuchen
	Slooterdam*		New Brunswick
	Tappan*		Perth Amboy
	Wagadam*		Quibble Town
Burlington	Bordentown		Raritan Landing
	Burlington		South Amboy
	Chesterfield		Spotswood
	Crosswicks		Woodbridge
	Eayrestown*	Monmouth	Allentown
	Mansfield Square		Clarksburg
	Moorestown		Englishtown
	Mount Holly		Freehold
Camden	Coopers Ferry		Imlaystown
	Gloucester		Middletown
	Haddonfield	Morris	Bottle Hill
Essex	Newark		Chatham
	Second River		Hanover
Gloucester	Woodbury*		Hibernia
Hudson	Bergen*		Morristown
	Bulls Ferry*		Rockaway
	Hoboken Ferry*	Passaic	Acquackanonk
	Paulus Hook Ferry*	Somerset	Basking Ridge
Hunterdon	Flemington		Bullion's Tavern
	Frenchtown		Pluckemin
	Howell's Ferry		Somerset Court House
	Lambertville		Somerville
	Ringoes		Rocky Hill
	Rocktown		Vealtown
Mercer	Beatty's Ferry	Union	Connecticut Farms
	Birmingham		Elizabeth Town
	Hightstown		Rahway
	Hopewell		Scotch Plains
	Johnson's Ferry*		Springfield
	Kingston (Mercer, Middlesex, Somerset)		Turkey
	Maidenhead		Westfield
	Marshall's Corner	Pennsylvania, Bucks County Pennsylvania, Philadelphia County	McConkey's Ferry*
	Pennington		Philadelphia*
	Princeton		
	Sandtown		

*Sites located just outside the heritage area boundary

SOURCE: JMA, Inc. for the Crossroads of the American Revolution Association, 2010.

Visitor Service Communities

The Crossroads management plan identifies ‘Visitor Service Communities’ as communities that have appealing historic character and can be marketed to heritage tourists based on services available, such as dining, shopping, and lodging. Specific criteria for recognition as a Visitor Service Community will be outlined in the management plan for those communities that wish to be so designated and marketed.

On a preliminary basis, 27 potential Visitor Service Communities have been identified within the Crossroads Heritage Area, based entirely on site visits undertaken by the consultant team. Not all communities have been visited, and the list will certainly be expanded in the future. Of those Visitor Service Communities that have been identified so far, 21 are also Legacy Communities (only Englewood, Medford, Collingswood, Mullica Hill, and Swedesboro are not Legacy Communities; see Table XX).

TABLE XX Visitor Service Communities in the Crossroads of the American Revolution National Heritage Area (Preliminary List)

COUNTY	MUNICIPALITY
Bergen	Englewood *
Burlington	Bordentown Burlington Crosswicks Medford* Moorestown Mount Holly
Camden	Collingswood* Haddonfield
Gloucester	Mullica Hill* Swedesboro* Woodbury*
Hunterdon	Lambertville
Mercer	Hightstown Princeton Hopewell
Middlesex	Cranbury Kingston
	New Brunswick
Monmouth	Allentown Freehold
Morris	Chatham Madison Morristown
Somerset	Basking Ridge Bernardsville Somerville

*Sites located just outside the heritage area boundary

SOURCE: JMA, Inc. for the Crossroads of the American Revolution Association, 2010.

Certified Local Governments

Certified Local Governments are communities that have been certified by the National Park Service and the New Jersey State Historic Preservation Office as having a qualified historic preservation commission, local ordinance outlining a process for designation and protection of historic resources, and system for the survey and inventory of historic resources. Certification makes a community eligible for technical assistance from the National Parks Service and State Historic Preservation Office and for federal grant

funds set aside for Certified Local Governments. The program assists historic communities in preserving their historic resources and character and supports appropriate community revitalization. Communities within the heritage area participating in the Certified Local Government program are shown in Table XX.

Table XX Certified Local Governments in the Crossroads of the American Revolution National Heritage Area

COUNTY	MUNICIPALITY
Bergen	River Edge Borough
Burlington	Burlington City Mount Holly Township
Camden	Camden City Collingswood Borough Gloucester City Haddon Heights Borough Haddonfield Borough
Essex	Maplewood Township
Mercer	Ewing Township Hopewell Township Lawrence Township Princeton Borough Princeton Township
Middlesex	South Brunswick Township Cranbury Township
Monmouth	Freehold Township
Morris	Montville Township
Somerset	North Plainfield Borough
Union	Fanwood Borough Plainfield City

SOURCE: http://www.nj.gov/dep/hpo/3preserve/clg_links.htm . January 2010.

Main Street New Jersey

The Main Street program, originally initiated by the National Trust for Historic Preservation, has been credited nationwide with helping historic communities revitalize in ways that preserve, enhance, and promote their historic character. In New Jersey, the Main Street program is managed through Main Street New Jersey, housed within the Department of Community Affairs. Main Street New Jersey Communities receive technical support and training to help preserve and restore their main streets and promote historic and economic redevelopment of their business districts. These communities usually have significant architectural resources in a downtown commercial district or corridor. There are nine Main Street New Jersey communities within the Crossroads Heritage Area (Table XX).

TABLE XX Main Street New Jersey Programs in the Crossroads of the American Revolution National Heritage Area

COUNTY	MUNICIPALITY	PROGRAM NAME
Burlington	Burlington City Maple Shade Township Mount Holly Township	Main Street Burlington, Main Street Maple Shade/ Maple Shade Business Assoc. Main Street Mount Holly
Camden	Camden City	Broadway Main Street
Mercer	Lawrence Township	Lawrenceville Main Street
Middlesex	Highland Park Borough	Main Street Highland Park
Morris	Boonton Town	Boonton Main Street
Somerset	Somerville Borough	Downtown Somerville/Somerville District Mgmt. Corp.
Union	Westfield Town	Downtown Westfield

SOURCE: <http://www.state.nj.us/dca/divisions/osg/programs/towns.html>. January 2010.

3.1.3 Historic Buildings and Historic Districts

Since the early days of the preservation movement, preservation initiatives related to Revolutionary Era resources have focused primarily on saving significant historic buildings. Throughout New Jersey, initiatives led by local individuals and organizations have preserved historic buildings significant to the American Revolution. Many of these buildings are now owned by public or nonprofit entities and made available to the public. As a result, the number of significant historic buildings available for public interpretation is a strength of the heritage area.

Similarly, the broader inventory of Revolutionary Era resources at the statewide level over the years has focused primarily on historic buildings. In some locations, multiple resources are recognized through historic district designation. The National Historic Landmarks Program, National Register of Historic Places, and New Jersey Register of Historic Places are the primary inventories of historic resources at the state level.

National Historic Landmarks

In 1960, the Secretary of the Interior and the National Park Service initiated the National Historic Landmarks Program to distinguish historic places that have an exceptional ability to illustrate or interpret the heritage of the United States. Landmark designation is the nation's highest level of recognition for historic properties. While the inventory of National Historic Landmarks includes sites, structures, and objects, most are historic buildings. Fewer than 2,500 historic places have been designated as National Historic Landmarks, and only about 20 to 25 historic places are designated every year.

Because National Historic Landmarks are considered the “crown jewels of our nation’s cultural heritage”, they tend to be key resources found within the Crossroads Heritage Area (National Park Service-3). The American Revolution is an official theme identified within the National Historic Landmarks Program. About 20 percent of the nation’s National Historic Landmarks associated with the American Revolution are in New Jersey. A search for American Revolution-themed resources in New Jersey in the National Historic Landmarks database identified 11, all of which are historic buildings or sites that have buildings associated with them (National Park Service). Three other National Historic Landmarks in New Jersey associated with the American Revolution are not identified by that theme in the National Historic Landmark database (Table XX). In addition Palisades Interstate Park is listed as a National Historic Landmark, but Fort Lee Historic Park is not listed separately and the Palisades listing does not mention the Revolutionary theme.

TABLE XX National Historic Landmarks in the Crossroads of the American Revolution National Heritage Area

COUNTY	MUNICIPALITY	FORMAL NAME	OWNERSHIP	PRIORITY	DATE LISTED	TYPE
Bergen	Ho-Ho-Kus	Hermitage+*	Public/State	Satisfactory (2008)	1970	Building
Burlington	Bordentown	Hopkinson, Francis, House	Private	N/A	1971	Building
Gloucester	National Park	Red Bank Battlefield	Public/County	N/A	1972	Site
Mercer	Princeton	Maybury Hill	Private	Satisfactory (2004)	1971	Building
	Princeton	Morven	Public/State	N/A	1971	Building
	Princeton	Nassau Hall	Private	N/A	1960	Building

COUNTY	MUNICIPALITY	FORMAL NAME	OWNERSHIP	PRIORITY	DATE LISTED	TYPE
	Princeton	President's (MacLean) House	Private	N/A	1971	Building
	Princeton	Princeton Battlefield	Public/State/Private	Threatened (2008)	1961	Site
	Trenton	Old Barracks (Trenton)	Public/State	N/A	1972	Building
	Trenton	Trent, William, House+	Public/Local	N/A	1970	Building
	Trenton	Washington Crossing State Park	Public/State	N/A		Site and Building
Monmouth	Freehold	Monmouth Battlefield	Public/State	Threatened (2004)	1961	District
	Sandy Hook	Sandy Hook Light+*	Public/Federal	Satisfactory (2006)	1964	Building
Union	Elizabeth	Boxwood Hall	Public/State	Watch (2004)	1972	Building
	Elizabeth	Livingston, William, House	Private	N/A	1972	Building

+ Not listed in the NHL list as part of the American Revolution theme. *Outside the Heritage Area.

SOURCE: <http://tps.cr.nps.gov/nhl/default.cfm>. January 2010.

National Register of Historic Places

In 1966, the National Historic Preservation Act authorized the creation of the National Register of Historic Places to serve as the official list of the country's historic places. The National Register is the centerpiece of a program that coordinates efforts to identify, evaluate, and protect America's historic and cultural resources. There are more than 80,000 properties representing about 1.4 million individual resources listed. While there are sites, districts, and objects included, the majority of the properties are individual buildings or collections of buildings.

In August 2002, the Northeast Regional Office of the National Park Service completed the Feasibility Study for Crossroads, officially titled the *Crossroads of the American Revolution in New Jersey: Special Resource Study, National Heritage Area Feasibility Study, Environmental Assessment*. The Feasibility Study notes that at that time, there were 1,491 National Register sites listed within the Crossroads of the American Revolution boundaries. Of these listed resources, 561 have a listed period of significance in the 18th century. An individual file-by-file search was conducted of these 561 resources for the Feasibility Study which found that 255 of the resources have a relationship to the Revolutionary War. (A few of the 255 resources were not included in the National Register database but were added based on the knowledge of State Historic Preservation Office historians.)

Of these resources, the Feasibility Study found that:

- 85 percent (217) retained integrity;
- 57 percent (145) were in good condition and less than 1 percent were so debilitated that they could not reasonably be rehabilitated;
- 10 percent (26) had ongoing interpretation that provided a high level experience for visitors and 73 percent (186) had the potential for developing one; and

- 12 percent (31) were in imminent danger, although all were experiencing some level of threat.

While the list of 255 National Register sites compiled in the Feasibility Study seems to be the most thorough list of Revolutionary Era sites to date, a comparison of this inventory to other lists of American Revolution-related sites indicates that there are National Register sites within Crossroads related to the American Revolution that are not included. Nine National Register sites within the heritage area do not appear to be on the Feasibility Study (Table XX)

TABLE XX National Register Sites Related to the American Revolution not Identified in the Crossroads Feasibility Study

COUNTY	MUNICIPALITY	PROPERTY
Mercer	Trenton	First Presbyterian Church (Trenton)
	Trenton	Friends Meetinghouse (Trenton)
	Trenton	Trenton Battle Monument
	Trenton	William Trent House Museum NHL
Monmouth	Freehold	Covenhoven House
	Holmdel	Holmes-Hendrickson House
Somerset	South Bound Brook	Abraham Staats House
	Bridgewater	Van Horne House
	Bridgewater	Van Veghten House

SOURCE: JMA, Inc. for the Crossroads of the American Revolution Association, 2010.

New Jersey Register of Historic Properties

In 1970, the New Jersey Register of Historic Places Act (N.J.S.A. 13:1B-15.128 et seq.) created the New Jersey Register of Historic Places (State Register) to serve as the official list of New Jersey's historic and cultural resources. The State Register has the same criteria for eligibility as the National Register, and most of the resources on the State Register are also on the National Register. The New Jersey Department of Environmental Protection Historic Preservation Office (HPO) oversees the administration and maintenance of the State Register.

During the management planning process, the HPO provided the consultant team with a GIS database of 242 historic resources within the heritage area listed on the State Register that are related to the American Revolution, including 183 historic buildings and 59 historic districts. Each of these resources is also included on the National Register and is counted among the 255 National Register sites listed in the Feasibility Study.

The HPO also maintains lists by county of resources that have been determined eligible for listing on the State or National Register but that have yet to be officially listed on the registers. These resources are represented in HPO Opinions of Eligibility, Determinations of Eligibility, and Certifications of Eligibility. These eligible resources are not included in the GIS database. It is likely, however, that some of the eligible resources are significant to the period of the American Revolution and should be inventoried.

County and Municipal Inventories

Of the 14 counties and 213 municipalities included in the Crossroads of the American Revolution National Heritage Area, no state-level information exists as to the number of municipalities that have completed historic resource inventories. Preservation planning elements are optional elements of municipal master plans required to be prepared under state law. Similarly, there is no information

collected on how many municipalities have created local historic districts for local regulatory and design review purposes outside the Certified Local Government recognition.

Historic resource inventories would be a necessary component of any preservation planning element undertaken by a municipality. Such inventories would go far beyond the number of resources listed on the State or National Registers in any community. They would include resources which might not have been identified for the State and National Registers and would also include resources that might not be eligible due to changes that have occurred to the buildings that have negatively impacted their historical integrity. It is therefore likely that many Revolutionary resources exist that are undocumented because resource inventories have not been undertaken in the communities in which they are located or because they have been inventoried but not recorded at the state level. Such an inventory will need to be undertaken on a municipality by municipality and site by site basis.

At the county level, the Morris County Heritage Commission maintains the Morris County Historic Sites Survey that encompasses 39 volumes of information. The Somerset County Cultural and Heritage Commission also maintains a survey of historic sites. Both surveys include Revolutionary Era resources that are not on the State or National Registers. In Middlesex County, relocated, reconstructed, and replica buildings at the East Jersey Olde Towne Village have Revolutionary Era significance but are not included on State or National Registers. Other examples of inventory information that are not yet compiled at the heritage area or statewide levels are probable.

Crossroads Resource List

During the Crossroads management plan process, the consultant team began assembling a database of sites associated with the American Revolution. Starting with the information from the State Register provided by the HPO, sites were mapped on the Revolutionary War Landscape map, Figure 3-1, using GIS software. Additional sites were added to the database as the project proceeded. At public meetings and in email, newsletter, and personal communication, potential partners were asked to provide information on sites within their localities. The response to these requests was piecemeal, in part because of the inaccessibility of the information. Information that has been received has not been verified. Some site information was submitted without location data that precluded it from being mapped. Some sites appear to be located beyond the boundaries of the heritage area.

FIGURE 3-1 Revolutionary War Landscape in the Crossroads of the American Revolution National Heritage Area

This map and database provide a basis on which a comprehensive inventory of American Revolution sites can be initiated. This work will be an ongoing project to be undertaken over time. Criteria and guidelines will have to be created to assure consistency, and an entity will have to be identified to manage the data and the process. The inventory will need to go beyond buildings and include other types of resources as discussed in other parts of this section.

3.1.4 Military Engagements

In its study of Revolutionary War battlefields, the American Battlefield Protection Program states that New Jersey was the scene of more Revolutionary War engagements than any other state or colony. These engagements across New Jersey's landscape took many forms. Some scenes of action were major battles that took place over several days and hundreds of acres. Many others were smaller, short-lived raids or skirmishes for which little documentary evidence remains and for which only approximate locations can be determined.

While a number of major battlefields and related military sites are preserved today as national, state, or local parks, most of New Jersey's smaller engagement sites are, at best, marked by a plaque or marker. Many are not recognized at all. Regardless of the size, type, or character of an engagement site, each faces some level of threat to its integrity. Because engagement sites are historically significant and because they tell such an engaging part of the Revolutionary Era story, it is important that they be identified and recognized and that their potential role within the heritage area be examined. The locations of engagement sites need to be accurately determined, landscape integrity assessed, and preservation actions planned. Because of the large number of engagement sites and other types of military sites, recognition and interpretation of these sites is one way that local communities can become involved in the Crossroads initiative.

Primary Inventories

Two primary sources of information about battlefield and engagement sites are David C. Munn's *Battles and Skirmishes of the American Revolution in New Jersey* (1976) and the American Battlefield Protection Program's *Report to Congress on the Historic Preservation of Revolutionary War and War of 1812 Sites in the United States* (2007). Together these two sources of information provide a foundation for documenting and analyzing the many battlefield and engagement sites in New Jersey and assessing preservation issues that confront engagement sites throughout the Crossroads of the American Revolution National Heritage Area.

Munn Inventory and Rutgers Geospatial Project

As part of the Bicentennial celebration in 1976, David C. Munn led the New Jersey Bureau of Geology and Topography and the Bureau of Archives and History in producing an inventory list and map of battles and skirmishes that took place in New Jersey during the American Revolution. Munn's inventory was based in large part on the work of John D. Alden, a historian for the New Jersey Society of the Sons of the American Revolution, whose original 1945 map, *Battles and Skirmishes of the American Revolution in New Jersey*, inventoried hundreds of Revolutionary engagement sites across the state.

Alden's work was supplemented with additions and revisions by D. Stanton Hammond in 1965; he provided the map and background information to the state with the suggestion that the inventory be published for the Bicentennial. The Bureau of Archives and History researched the listed engagements using Alden's original files. The Bureau of Geology and Topography produced the new map, showing political boundaries and names of the period and listing battles and skirmishes that occurred in each vicinity. The Munn companion inventory is sorted alphabetically by period place name, with a brief, one-line description of the event and a citation as to the source of the information. Source materials are listed at the end of the document.

The period place names in the Munn inventory and map only suggest the approximate locations of the engagements listed; no detailed location information is provided. In 2007, under the leadership of Professor David Tulloch, students in the Advanced Environmental Geomatics class at the School of Environmental and Biological Sciences, Rutgers University, used the Munn inventory and map to develop a geospatial dataset of 599 engagement and related sites associated with the American Revolution in New Jersey. While the specific locations for the engagement sites shown on the Rutgers GIS mapping are general and will require further study, the information provides a strong foundation for understanding the range and physical distribution of military events associated with the Revolutionary War in New Jersey. The Rutgers information is shown on the Crossroads Revolutionary War Landscape Map, Figure 3-1.

American Battlefield Protection Program

In 2007, at the direction of Congress, the American Battlefield Protection Program (ABPP) of the National Park Service undertook a nationwide study of Revolutionary War and War of 1812 battlefields

entitled the *Report to Congress on the Historic Preservation of Revolutionary War and War of 1812 Sites in the United States*. The study was the result of Congressional findings that Revolutionary War and War of 1812 sites provide a way for Americans to understand significant periods in the nation's history, that the historical integrity of these sites is at risk because of rapid urban and suburban development, and that alternatives for the preservation and interpretation of these sites need to be identified.

The Revolutionary War/War of 1812 study was based on a similar study of Civil War battlefields that was published in 1993. The purpose of the study was to identify Revolutionary War and War of 1812 battlefields of national significance, assess their integrity, and identify levels of threat to support future preservation initiatives. The ABPP assessment established a methodology for determining the national significance of battlefields and preservation priorities. It established a basis for the future allocation of resources for battlefield preservation. Battlefield and engagement sites that were not considered of national significance were not included in the study.

Major Battlefields

Battlefields in New Jersey have been classified by the Munn inventory, ABPP study, and through designation as National Historic Landmarks. Monmouth Battlefield, Princeton Battlefield, Red Bank Battlefield, and Fort Lee Historic Park are major battlefields that have been designated National Historic Landmarks and listed on the National Register of Historic Places. These designations recognize both the national significance of the battles and the physical integrity of the landscapes that remain today. Major battlefields that do not retain integrity cannot be designated as Landmarks or listed on the National Register.

The Munn inventory map and Rutgers geospatial project identified four major battlefields in New Jersey and 11 minor battlefields as listed in Table XX.

Table XX Major and Minor Battlefields Identified in Munn Inventory and Rutgers Geospatial Project

COUNTY	MUNICIPALITY	MAJOR BATTLEFIELDS
Mercer	Trenton	Trenton
	Trenton	Assunpink Creek (Second Battle of Trenton)
	Princeton	Princeton (NHL)
Monmouth	Manalapan/Freehold	Monmouth (NHL)
COUNTY	MUNICIPALITY	MINOR BATTLEFIELDS
Atlantic*	Port Republic	Chestnut Neck
Bergen	Fort Lee	Fort Lee (NHL)
	Northvale/Tappan	Baylor Massacre
Camden	Gloucester City	Second Battle of Gloucester
Gloucester	National Park	Fort Mercer (Red Bank) (NHL)
Hudson	Jersey City	Paulus Hook
Ocean*	Tuckerton	Osborne Island
Salem*	Quinton	Quinton's Bridge
	Hancock's Bridge	Hancock's Bridge
Union	Springfield	Battle of Springfield
	Union Township	Connecticut Farms

*Outside the heritage area boundary

SOURCE: Munn 1941, and <http://www.crssa.rutgers.edu/projects/special/revwar/> May 2009.

The ABPP study identified 18 battlefields in New Jersey with a national level of significance. These were described as battlefields "associated with events that had a demonstrable influence on the course, conduct,

and results of the Revolutionary War [and] are considered thematically tied with the nationally significant events that occurred during the Revolutionary War” (American Battlefield Protection Program 2007).

The ABPP study further classified the battlefields by priority (Priority I being the most historically significant and most threatened sites) and class (Class A being the most historically significant). These battlefields retain some degree of landscape integrity. Four Priority I battlefields and three Priority II battlefields were identified in New Jersey.

Table XX Priority American Revolution Battlefields in New Jersey

COUNTY	BATTLEFIELD	PRIORITY	SHORT-TERM THREAT	LONG-TERM THREAT	CLASS
Bergen	Fort Lee (NHL)	Priority I	Medium	Low	B
	Old Tappan	Priority II	High	High	C
Burlington Gloucester	Mount Holly	Priority II	Medium	Medium	C
	Fort Mercer	Priority II	Low	Low	B
Mercer	Princeton (NHL)	Priority I	High	Medium	B
	Trenton	Priority I	Low	Medium	A
Monmouth	Monmouth (NHL)	Priority I	Medium	Medium	A

SOURCE: American Battlefield Protection Program, 2007.

The ABBP study also identified battlefield sites needing further study (Table XX) and sites with commemorative opportunities (Table XX). Sites needing further study are battlefields for which location, condition, integrity, and threats have not yet been fully assessed. Sites with commemorative opportunities are battlefields with only minimal surviving integrity but that nonetheless may provide “focal points for commemorative activities, memorialization, and interpretation of the battles and the war” (*Report to Congress* 10). There are 18 other types of historic sites closely associated with nationally significant battlefields also identified in the study.

Table XX Battlefield Sites in New Jersey Needing Further Study

COUNTY	BATTLEFIELD	CLASS
Middlesex	Piscataway	C
Monmouth	HMS Blue Mountain Valley (off Sandy Hook)	C
Union	Springfield	C

SOURCE: American Battlefield Protection Program, 2007.

Table XX Battlefield Sites in New Jersey with Commemorative Opportunities

COUNTY	BATTLEFIELD	CLASS
Hudson	Paulus Hook*	C
Mercer	Assunpink	C
Middlesex	Metuchen Meeting House (Oak Tree)	C
	New Brunswick	C
	Samptown	C
Union	Elizabethtown	C
	Rahway	C
	Springfield (First)	C
	Springfield (Second)	B
New Jersey/New York	East River (NJ, NY)	C

SOURCE: American Battlefield Protection Program, 2007.

Smaller Skirmish and Engagement Sites

In addition to the major and minor battlefields noted by the Munn inventory, the Munn study and Rutgers project identified 586 other Revolutionary War sites, including 525 skirmishes and 61 landmarks or other types of associated historic sites. Munn describes these skirmishes and small engagements as wide-ranging in their level of intensity:

We have tried to include on the map every overt or hostile action by either side that could be documented. Generally speaking, any event, including a shot fired in anger, is listed. There are many examples of hostile actions that did not involve shots but they are significant to the course of the war and are included. In many instances events may be nothing more than opposing sides shouting obscenities at each other from safe distances. (Munn 1941, 2)

The following quotes from the Munn inventory demonstrate how these events range in scale and intensity: “Bergen Area, October 7, 1780: Two hundred Americans, infantry and horse, attack Refugee post at Bergen. Capt. Thomas Ward and men force Refugees to retreat.” “Quibbletown, February 1, 1777: Scouts from foraging parties on both sides exchange fire without results.”

In addition to the 18 New Jersey battlefields identified in the ABPP study as noted above, many other sites are recognized by the ABPP study as having significance to the Revolutionary War. The study notes 149 other engagement sites associated with events of local significance along with 229 other associated properties. These sites were noted but not studied in the ABPP initiative.

Engagement Documentation and Mapping

The breadth of the Munn inventory demonstrates that there are many significant engagement sites associated with the Revolutionary War within New Jersey and the Crossroads Heritage Area. From this important source, historians can further investigate the events, locations, and significance of these engagement sites to fill out the stories, set them in context, relate them to associated events, and record documentary sources. The Munn inventory and Rutgers project note that the intent of the product was to “suggest approximate sites of various battles and skirmishes that occurred during the Revolutionary War rather than to pinpoint the exact locations” (Munn 1941, 1). The locations of these engagements need to be further researched so that more precise locations for the sites can be identified where possible and so that the existing GIS database and mapping can be revised with increased detail.

The ABPP study outlines a methodology for studying Revolutionary War battlefields related to their national significance, level of threat, and potential for interpretation. While extremely important and appropriate for a national level study focused on the future use of federal preservation resources, the study’s methodology needs to be further developed to accommodate the much larger number of sites that are significant to the Revolutionary War story in New Jersey. The ABPP methodology should be reviewed and extended to the state and local levels in order to both broaden understanding of Revolutionary War events and identify preservation and stewardship needs and opportunities for sites at the local level.

3.1.5 Monuments, Parks, and Commemoration

In his book *A Guide to New Jersey’s Revolutionary War Trail*, Mark Di Ionno notes that while there is a great deal of information available about the American Revolution and associated events, it is “finding out exactly where things happened that gets tricky” (Di Ionno 2000, 199). Mr. Di Ionno’s book is perhaps the most comprehensive inventory of Revolutionary War sites generally available. It includes well known and well preserved sites as well as obscure sites and sites that have lost any trace of physical integrity. More than any other source, Di Ionno’s guide is hands-down the most helpful in understanding and

locating the wide range of Revolutionary Era sites in New Jersey. It is a starting point for a comprehensive Crossroads inventory.

Among the resources that Di Ionno's guide documents are many of the historical markers, monuments, and signs that have been installed in New Jersey over the years by different organizations and communities. Markers, monuments, plaques, parks, and other forms of commemoration have played an important role in providing a readily accessible means of learning Revolutionary Era stories and locating them on the landscape. New Jersey has a rich tradition of marking sites that played an important role in history, especially the American Revolution. Throughout the planning process, the consultant team noted countless place names associated with the American Revolution throughout the heritage area that embed the Revolutionary story deep in the public consciousness. Monuments and markers add to this display of public memory. New Jersey's markers and monuments vary in form, size, and content, but each one is an opportunity to unlock an aspect of the Crossroads story in a particular location.

Revolutionary Era Commemoration in New Jersey

The history and significance of commemoration related to the American Revolution in New Jersey began with a few committed groups in the late 19th and early 20th centuries, such as the New Jersey Sons of the American Revolution (SAR, founded 1889), New Jersey Daughters of the American Revolution (DAR, founded 1891), and Society of the Sons of the Revolution in the State of New Jersey (organized 1891). During this period, the SAR and DAR in particular began placing markers and monuments at the homes and gravesites of important revolutionary figures and at locations where significant events occurred (Di Ionno 2000, 201).

These early markers and monuments take a variety of forms but they tend to be stone monuments (mostly granite) and bronze plaques and sculptures. Some of the simple markers are shaped stone forms and others are natural rocks. Some stones have carved inscriptions, though many have bronze plaques. Bronze plaques mounted on historic buildings are also common. Impressive sculptures are part of many of the larger monuments that were installed and are period works of art commissioned of prominent sculptors of the time. These resources deserve to be fully inventoried, recorded, and preserved.

The work initiated by the SAR and DAR was continued and expanded on by such other history organizations as local historical societies and county or municipal heritage organizations and governments. The impressive Trenton Battle Monument was constructed in 1893. The DAR bronze plaque at Washington Rock State Park was installed in 1912. Many monuments were installed in municipal parks, such as the handsome monuments in the historic public squares in Hackensack and Newark. Markers and monuments seem to have been established in waves coinciding with the anniversaries of important events, such as the 150th anniversary of the Revolution.

For example, a memorial to the Battle of Springfield in Springfield reads, "Their deeds enriched / and glorified our nation. / This gate is dedicated / in commemoration of / the heroic service performed at / The Battle of Springfield / during the war for / American Independence / by the soldiers whose remains are / resting within this sacred tract. / Tribute of the New Jersey Society / Sons of the American Revolution / on the 150th anniversary of the engagement. / June 23, 1930."

Some markers were installed to memorialize historic routes. In 1914, the SAR installed 12 granite obelisks with bronze plaques along the route of Washington's escape from the Second Battle of Trenton to Princeton. The DAR in 1933 installed similar markers along the route of Washington's march from Princeton to Morristown.

By the mid- 20th century, however, the tradition of marking American Revolution sites with monuments and markers ebbed. Di Ionno obtained a list of 59 monuments and markers installed by the SAR. The first group of markers was dedicated in the 1890s, with the last group of markers dedicated in 1961 (Di Ionno 2000, 202).

In the late 20th century, roadside marker programs were initiated by several county governments. New Jersey has no statewide marker program. Some of the programs use heavy metal plaques while others use light aluminum signs. In general, these markers note the locations of historic sites and include limited historical information. Bergen County installed markers as early as the 1960s. The current program includes signs marking the route of Washington's retreat from Fort Lee. Morris County has the most comprehensive marker program. During the Bicentennial in 1976, Morris County initiated a program in which numerous historic sites were identified with heavy metal plaque-like signs. The program is still active with more than 135 signs installed to date, some as recently as 2007. Sussex (2000), Middlesex (2005), and Union Counties have implemented more recent programs marking historic sites within their boundaries. Union County's recent Four Centuries program features 22 historic sites.

Inventories of Commemorative Markers and Monuments

Several efforts to inventory and promote American Revolution markers and monuments in New Jersey have been undertaken for visitors and interested residents. In 1928, The Society of Colonial Wars in New Jersey published a book entitled *Historic Roadsides in New Jersey*. The book is organized by county and lists about a hundred Revolutionary War sites, among others, marked by historical organizations. The book does not, however, provide information on the locations of the markers more detailed than listing the townships in which they are located. In 1970, the New Jersey Department of Environmental Protection, Division of Parks and Forestry, began a Revolutionary War site survey for the Bicentennial, which was not completed due to a loss of funding (Di Ionno 2000, 201, 203).

The most comprehensive survey of commemorative markers and monuments to date is a 2008 survey of more than 400 American Revolution sites in New Jersey completed by Bill Coughlin of North Arlington. The survey is published in the Historical Marker Database, a "searchable online catalog of historical information viewed through the filter of roadside and other permanent outdoor markers, monuments, and plaques."² The site inventories historical markers for a wide range of subjects in many locations. "US Revolutionary War" markers are accessible in a sidebar that gives access to a listing of markers by state. More than 400 markers have been inventoried by Mr. Coughlin and entered into the site. Each site entry includes photographs of the marker; its inscription; the date erected and by whom; whether the marker is part of a series; its location (including a written description, coordinates, and Google map); links to other nearby markers; a list of related markers; and credits.

Mr. Coughlin's inventory is an invaluable service to New Jersey residents. His work should be incorporated into a heritage-area-wide GIS database of Revolutionary Era sites for Crossroads of the American Revolution. It is important that the older markers and monuments, in particular, be accurately inventoried and assessed. Many are located along roadways or at other sites that are subject to change. Responsibility for monitoring and maintaining the markers and monuments is not clear. Responsible organizations need to be identified and, if necessary, assisted. The preservation and conservation needs of these significant commemorative resources must be assessed and addressed. These will be important tasks for the heritage area program and partners to undertake.

3.1.6 Military Routes

² The information is available on the internet at www.hmdb.org. (The full website address for the Revolutionary War Era markers is <http://www.hmdb.org/Results.asp?CategoryID=16&StartAt=501>.)

Historic military routes associated with major Revolutionary War events have been documented by a variety of individuals and organizations over the years. Much of this documentation has been undertaken by local historians and Revolutionary War enthusiasts who have studied the details associated with major events and have researched information on Colonial roads. The Revolutionary War Landscape map (Figure XX) prepared for this management plan shows routes others have identified associated with:

- The retreat across the Jerseys from Fort Lee to Trenton;
- Washington's march from the Delaware crossing to Trenton;
- Washington's march from Trenton to Princeton;
- Washington's march from Princeton to Morristown;
- British and American routes to and from the Battle of Monmouth; and
- The Washington-Rochambeau Revolutionary Routes.

These and other significant routes and associated resources (e.g., encampment sites) should be fully documented in a Crossroads inventory of Revolutionary Era resources with the assistance of local partners. The documentation should be undertaken in conjunction with the study of Colonial roads discussed under the Cultural Landscape portion of this chapter.

The documentation of the Retreat across the Jerseys has been undertaken by local historians associated with regional historical societies. They have identified the locations of 18th century roads through today's largely urban landscape. The routes of Washington's marches to Princeton and to Morristown have been marked by the SAR and DAR. The "Washington Victory Trail" from the Delaware River crossing to Trenton and "Road to Monmouth" have been identified by local historians and mapped in conjunction with the 225th anniversary of the battle.

The Washington-Rochambeau Revolutionary Route was documented in a comprehensive historical and architectural survey led by historian Robert Selig for the New Jersey Historic Trust in 2006. The W3R study not only documents routes taken by the American and French armies on their march to Yorktown, but also "witness sites" with buildings, markers, and other resources present at the time and camp sites associated with the march. For the most part, the W3R witness sites are included in other National Register and marker inventories. Camp sites and other unmarked, purely landscape sites generally are not included in other formal inventories, with the exception of the state's inventory of archaeological sites, which is not made available to the public due to concerns about possible looting.

As with any subject of historical research, there are varying opinions and ongoing debate as to the precise locations of routes and sites. Available information and varying interpretations need to be fully recorded and made available to future historians for further study.

3.1.7 Archaeological Resources

Experience has shown that archaeological sites bring the past to life. This is particularly true while the archaeological investigations are in progress. Many known sites associated with the Revolutionary War have yet to receive serious archaeological attention and there are probably at least an equal number that have not been identified. Because archaeological investigations tend to attract attention, the exploration and interpretation of more Revolutionary War sites in New Jersey would add immeasurably to making this important period in the state's history better known and understood.

At least five different types of archaeological resources relating to the Revolutionary War in New Jersey deserve attention. They include encampments (both short and long term), battlefields, military headquarters, fortifications, and evidence of naval activity, including shipwrecks. Taverns, mills,

tanneries, blacksmiths, and other industrial sites were all important in the Revolution, but it is difficult to separate archaeological remains associated with the war from remains associated with 18th century activities before and after the war on the same sites. Roads were essential to troop movements and may be known only through map sources and archaeological investigations if modern roads do not follow the same routes.

Encampment Sites

The most significant of the encampment sites is Jockey Hollow, which was occupied in the winter of 1779-1780. Troops were also encamped in nearby Morristown during the previous winter, but that site has received very little attention since most of Washington's army spent the winter of 1778-1779 at Valley Forge. While the small number of troops that were in Morristown were billeted mainly with local families, there is evidence for an encampment of log huts on the farms of John Easton and Isaac Pierson in the Loantaka Brook Valley, which has not been archaeologically investigated (Veit 2002, 71). When George Washington was in Morristown during that first winter he used the Arnold Tavern as his headquarters. In 1779-1780 there were between 10,000 and 12,000 men encamped at Jockey Hollow, which is three miles outside Morristown. There were also encampments at nearby Mount Kemble and near Mendham, while Washington occupied the Ford Mansion. The final encampment in the vicinity of Morristown (south of the Wick House in Jockey Hollow) was made by the New Jersey Brigade in 1781-1782.

The National Park Service, assisted by the Civilian Conservation Corps (CCC), conducted excavations at Jockey Hollow in the 1930s. Using techniques including linear trenches to find building foundations, they worked at the Wick House, Fort Nonsense, the Ford Mansion, and campsites associated with the First Maryland, Pennsylvania, and New Jersey Brigades. Later, more sophisticated archaeological excavations at Jockey Hollow have provided the basis for accurate reconstruction and interpretation of soldiers' huts as well as an improved understanding of living conditions during the winters of 1777-1778 and 1779-1780. The analysis of food remains, in particular, has added to the picture of the difficult conditions the soldiers faced during the encampments.

An estimated 10,000 troops were encamped at Middlebrook, near present day Bound Brook, during the winter of 1778-1779. Although Middlebrook has been known for just as long as Jockey Hollow, it has received considerably less archaeological attention. In the summer of 1777, General Wayne's Brigade, including 1400 men, was camped on the rim and back slope of the First Watchung ridge between Chimney Rock and present-day Vosseler Avenue. A portion of that site, at least, has been archaeologically investigated. Most recently, Hunter Research, Inc. studied General Wayne's encampment as part of the firm's historical and archaeological study of Washington Valley Park (Hunter Research, Inc. 2003). The core of Wayne's brigade encampment site is now owned by Somerset County.

The winter encampment was about a mile away from General Wayne's encampment. Huts were sited on the slopes of the First Watchung Mountain, on both sides of Middle Brook, just below Chimney Rock gorge. According to Hunter and Burrow's overview of archaeological sites relating to the Revolution in New Jersey, the site has been largely destroyed by commercial and residential development along U.S. Route 22 in Bridgewater Township (Hunter and Burrow 2004, 176). The Wallace House in nearby Somerville was Washington's headquarters during the Middlebrook encampment. Baron Friedrich Von Steuben stayed at the Abraham Staats house in what is now South Bound Brook and General Nathaniel Greene stayed at the Van Veghten house across the river.

British and Hessian troops were encamped at Raritan Landing and in New Brunswick from December of 1776 to June of 1777. Their presence was noted during the data recovery excavations at Raritan Landing within the alignment of a storm sewer in 1979. More recently, excavations associated with improvements

to Route 18 within the Raritan Landing Archaeological District uncovered a short-term encampment on the hilltop overlooking the landing and evidence of cantonment, the practice of housing officers in private houses, within the village itself. Only very limited excavations have been conducted at Buccleuch Mansion on the New Brunswick side of the river, where it is also known that British and Hessian troops encamped during the six-month occupation of New Brunswick.

Other short-term encampment sites that have not received serious archaeological attention are the New Bridge Landing vicinity, where British troops encamped on November 25, 1776; and Longbridge Farm, now in Monmouth Junction, where the Americans were encamped for two days before the Battle of Monmouth. Hunter and Burrow (2005:180) also mention the short-term encampments at six locations in New Jersey where General Rochambeau's French army stayed as having archaeological potential. The encampments, which are located on Berthier's maps of the French campaign, were at Pompton Meeting-house (Pompton Plains), Wippany (Whippany), Bullion's Tavern (Liberty Corner), Somerset Court-house (Millstone), Prince-Towne (Princeton), and Trenton.

British and Hessian troops were housed in the Trenton barracks, now known as the Old Barracks Museum, in 1776. Archaeology done on the Trenton barracks property has turned up a good deal of material reflecting occupation in the 18th century, although few of the artifacts relate specifically to military activity. An exception is a domed brass button, found during the earliest archaeological project. The button was identified as a type used by both British and French troops between 1726 and 1776. Archaeological investigations by Hunter Research, Inc. at the Old Barracks have helped to reconstruct the architectural history of the building and to place the parade ground on a lower level than the first floor.

Battlefields

While none of the major battles in New Jersey lasted more than a day, there are good written accounts of the Battles of Trenton and Monmouth. In the case of Monmouth, the archaeological record has proved to be enlightening. With grants from the National Park Service's American Battlefield Protection Program, Dr. Garry Wheeler Stone, of the New Jersey State Park Service, has been working for many years with the Battlefield Restoration and Archaeological Volunteer Organization (BRAVO), at Monmouth Battlefield State Park. With Dr. Stone's oversight, this volunteer metal-detecting group has traced patterns of action on the Monmouth battlefield by precisely locating the distribution of both unfired and fired ammunition. The movements of two battalions of the British Royal Highlanders have been defined and the location of an American four-pound artillery piece has also been pinpointed. Metal detecting was also used to a limited extent on the Princeton battlefield and the recent application of GIS mapping techniques has contributed to clarifying troop movements there.

The patterned brick house at Hancock's Bridge in Salem County marks the massacre of patriot troops during a nighttime British raid in March of 1778, an infamous incident of the war. Another massacre, in September of the same year, occurred at the Baylor site in Bergen County. There, several soldiers of the Third Regiment Light Dragoons of Virginia were outnumbered and unceremoniously killed by a British detachment on a foraging mission from New York. Six skeletons unearthed in tanning vats in the late 1960s were believed to have been victims in that massacre. Even where they are reported (behind the Low House at Raritan Landing, for instance) it is very unusual to find bodies left behind after battles. They were apparently buried elsewhere and the clothing and accoutrements of the deceased either went with them or were removed by other soldiers or local inhabitants in the field.

Pluckemin and Military Headquarters Sites

Between 1979 and 1986, archaeologist John Seidel and historian Cliff Sekel investigated Pluckemin, a site about seven miles northwest of the Middlebrook encampment. Using a suite of techniques including magnetometry, ground penetrating radar, and overhead photography, as well as traditional hand

excavation, the multi-year project was able to identify the line of barracks, the main academy building, an armorers' shop, numerous waste disposal features, and many items of military equipment. Excavations had been conducted by Max Schrabisch at Pluckemin in 1916 and 1917. General Henry Knox established an artillery training facility for Continental troops at Pluckemin in 1778. It was, in essence, the first military academy in the country. The site is enclosed within a housing development whose owner (Hills Development Corporation) funded the excavations.

Pluckemin stands alone as a training facility, but military headquarters sites have been investigated at the Barracks in Trenton (discussed above), at the Zabriskie/Von Steuben House in New Bridge Landing, at Lord Stirling's Manor in Basking Ridge, and at a pair of houses owned by the Vanderveer family including the homestead site in Bedminster Township, Somerset County, and the Vanderveer/Knox house, also in Bedminster. Beverwyck in Parsippany-Troy Hills, reported by Barbara Silber and Wade Catts, might also be included since George Washington and several senior American and French officers were frequent guests (Silber and Catts 2001 and 2001). Officers were usually quartered in private houses and a comprehensive list of all the houses that served in that capacity during the war would be useful. There were barracks in Elizabeth, Perth Amboy, Burlington, New Brunswick, and Trenton, but only the barracks in Trenton have survived and been explored archaeologically.

Fortifications

Fortifications are known at Fort Nonsense near Morristown, at Billingsport at the mouth of Mantua Creek, at Fort Lee on the Palisades, at Fort Mercer on the Delaware River, and at Red Bank although none has been thoroughly studied. The redoubt at Fort Nonsense was excavated in the 1930s by the National Park Service with the help of the CCC, complicating subsequent archaeological interpretation of the site.

Additional Research

In their important overview of the archaeology of the American Revolution, included in Barbara J. Mitnick's edited volume, *New Jersey in the American Revolution*, Richard W. Hunter and Ian C.G. Burrow emphasize the importance of the southwest-northeast trending thoroughfare extending across New Jersey from Philadelphia to New York (Hunter and Burrow, 2004). The archaeological sites discussed here all fall within that corridor, or just outside it, and much of the discussion has been drawn from Hunter and Burrow's article, which includes a map (Figure 50) showing major site locations. Information was also gleaned from Richard Veit's chapter about the Revolution in his book, *Digging New Jersey's Past*. As must be evident, only a few Revolutionary War sites have been thoroughly investigated archaeologically in New Jersey. As Hunter and Burrow point out, however, it is probable that more sites are known to New Jersey residents and an oral history program that tapped that resource would be useful. The success of the collaborative work done by professionals and non-professionals together at Monmouth Battlefield has demonstrated the potential for such efforts to identify and study the characteristically ephemeral sites associated with the war.

Shipwreck sites might also be explored in the future. The HMS Augusta, a British frigate, remains at Gloucester Point, and several American vessels were deliberately scuttled by the Continentals or sunk by the British between the fall of 1777 and the spring of 1778. According to Hunter and Burrow, vessels were hidden in Crosswicks Creek near Bordentown and at other locations on the New Jersey side of the Delaware between Lambertton and Burlington.

3.1.8 Collections

Documentary Collections

A wealth of documentary material relating to the Revolutionary War in New Jersey is available in both local and other repositories. **The David Library**, considered the premier source of material relating to the Revolution, is located in nearby Washington Crossing, PA. The library lists items under three categories for New Jersey: New Jersey during the era of the Revolutionary War, Crossing and the Battle of Trenton, and the Battle of Monmouth. Among the holdings in the “New Jersey during the era of the Revolutionary War” category are collections and publications dating to the 19th century (e.g. *Historical Collections of the State of New Jersey*, John Warner Barber, 1852; *The Campaign of Trenton, 1776-77*, Samuel Adams Drake, 1895), and many titles dating to the 20th century, including an *Index and Service Register of the Officers and Men of NJ in the Revolutionary War*, compiled in 1965; a *Revolutionary Census of New Jersey*, compiled by Kenn Stryker-Rodda in 1986; and *Certificates and Receipts of Revolutionary New Jersey*, compiled by Dorothy Adams Stratford in 1996. In addition, the library lists approximately 60 personal accounts, diaries, and journals in its catalog, an invaluable source of information for the intimate details of soldiers’ and officers’ experiences on the ground during the war.

The New Jersey Historical Society’s collections in Newark include the personal papers of a number of individuals including Jacob Stern Thomson, Joseph Clark, Joseph Bloomfield, and Samuel Smith as well as guides to the NJ State Troops Military Record Book, 1781-1786; to Woodbridge, NJ 1668-1875; to the NJ Militia, Hunterdon Brigade, 1776; and to Nathaniel Heard’s Brigade. The society also holds the Docket of William Paterson, Governor of New Jersey and U.S. Senator. While this collection in no way seems to cover the war, it appears to contain the kinds of primary documents that provide un-sanitized and un-analyzed views of actual events. **Special Collections in the Alexander Library**, at Rutgers University in New Brunswick, likewise contain a variety of primary documents including orderly books (John Douglass, Charles Grey), and especially personal papers (Thomas Williams, Jacob Ten Eyck, Israel Shreve, Johannes Reuber, Gershom Mott). It also has various other kinds of accounts (Anthony Walton White, receipts and other financial records), a letter from George Washington to Nathaniel Heard dating to 1777, and eyewitness descriptions of the Battle of Monmouth written by Henry Beekman Livingston. Of particular interest, listed under NJ Tercentenary Commission, are the selected records on microfilm which reproduce originals in the Public Records Office and other British repositories.

The **New Jersey State Archives** in Trenton includes in its holdings the complete *Inventory of Damages by the British and Americans in New Jersey, 1776-1782* and the *New Jersey Council of Safety Records, 1776-1781*. There are also papers relating to the Barracks in Trenton and a copy of the preliminary Treaty of Paris.

Less accessible collections that include material on the Revolutionary War in New Jersey may be found in the Ann S.K. Brown Military Collection (prints, drawings, and watercolors) at the **Brown University Library** in Providence, RI and at the **Clements Library at the University of Michigan** in Ann Arbor. The Clements Library has Spy Letters of the American Revolution, the Thomas Gage Papers, an American Travel Collection including a trip through Gloucester Co., New Jersey, and the John Holker Papers. There may be additional documentary materials at the various battlefield parks in New Jersey (e.g. Princeton, Monmouth, etc.).

Archaeological Collections

Unlike the outstanding and easily identifiable documentary collections relating to the Revolutionary War in New Jersey, the archaeological collections – those that exist – are more difficult to find. They fall into two basic categories, collections relating to encampments and collections relating to battles.

Encampments

A good deal of work has been done in Morristown and the vicinity, where the Continental Army was encamped during the winters of 1777, 1780, 1781, and 1782. **Morristown** is now a **National Historical**

Park and Museum operated by the National Park Service. According to the museum's curator, there are archeological materials recovered from the following sites: Jockey Hollow, New Jersey Brigade, New York Brigade, Washington's Headquarters, and the Pennsylvania Line. He describes the Pennsylvania Line collection as the "most extensive."

Several British regiments were cantoned at Raritan Landing and in New Brunswick during the winter of 1777. The **Middlesex County Cultural and Heritage Commission** in New Brunswick is the repository for most of the recently excavated material at Raritan Landing including two sites, 28-Mi-84 and 28-Mi-212, that relate to the British occupation. One is a house site where British officers spent the winter and the other is a temporary encampment on a bluff overlooking the Landing. British and Hessian buttons were also recovered at Raritan Landing in 1979 by the Rutgers Archaeological Survey Office and those artifacts are in the **New Jersey State Museum**. The museum also has material excavated by Kardas and Larrabee at the Barracks in Trenton. Other artifacts excavated at the Barracks remain in the **Barracks Museum** collection. Military artifacts have also been collected by users of metal detectors in the woods above Raritan Landing. These materials are in private collections.

Artifacts excavated by Hunter Research, Inc. at Wayne's Brigade Encampment, Middlebrook (now Bound Brook) are in the possession of **Somerset County**. The collection from General Henry Knox's artillery camp at Pluckemin will eventually reside at the **Jacobus Vanderveer House and Museum** in Bedminster. The collection is presently being re-analyzed by Richard Veit at Monmouth University, John Seidel at Mary Washington College, and Hunter Research, Inc. This is probably one of the most extensive and well documented collections relating to the American cause in New Jersey.

There are artifacts relating to various encampments in private collections known to Revolutionary War buffs in the state. A small private collection in Ocean County includes significant military artifacts from the Virginia Line encampment in Bridgewater and from British encampments in Piscataway. A collector in Somerset County has military artifacts from encampments in Somerset (Bridgewater, Millstone), Middlesex (Piscataway, New Brunswick), and Morris Counties. This collection has been displayed at various locations and events and some of it has been included in reference works on Revolutionary War artifacts. A family formerly of Bound Brook, now living elsewhere, has a small but significant collection of Revolutionary War artifacts excavated from the Maryland Line encampment in Bridgewater. Another collector in Somerset County has a large collection, including several artifacts that have been featured in reference works on the Revolution.

Battles

There is a display of artifacts recovered on the site of the Battle of Monmouth Court House at **Monmouth Battlefield State Park** in Freehold. The material, most of which was collected by carefully controlled metal detector surveys, is well provenanced and catalogued. There is also a small amount of material relating to the Battle of Monmouth Court House at the **Monmouth Historical Society**, also in Freehold. Other battlefield collections include a display of material related to the defense of Fort Mercer and the Lower Delaware River at the **Red Bank National Park**. The material includes artillery projectiles, cannon tubes salvaged from the river, and portions of a Cheval de Frise, also salvaged from the river. There is also a small collection of artifacts relating to the Battle of Princeton at **Princeton Battlefield State Park** in Princeton. The **Bergen County Historical Society** in New Bridge at one time had a collection of materials excavated from the Baylor Massacre site, but an informant says that the most significant items from this collection (specifically the only known examples of "BD" buttons) are missing. The **Cannonball House** in Springfield has some materials related to the battles of Springfield and Connecticut Farms.

General

Washington Crossing State Park in Titusville displays the “Kels Swan Collection,” which contains archaeological materials relating to various Revolutionary War sites, particularly in Somerset and Mercer Counties. **Batsto Village** has some material on display that relates to the Revolutionary War history of that site and the **Fort Lee Visitor Center** in Fort Lee also has some materials relating to the Revolution on display. A collector in New Hope, PA has displayed some Revolutionary materials at various events, and an anonymous collector from Connecticut possesses a large, museum quality collection of American militaria that includes some pieces that were excavated in New Jersey. Among them are a partial cartridge box plate of the 5th Regiment of Foot excavated in Piscataway Township and a Hessian musket barrel excavated during construction in a backyard adjacent to Red Bank Battlefield Park.

While the contents of most of the documentary collections can be examined on-line, that is not true of the archaeological collections. Until now, in fact, no comprehensive list of existing collections relating to the Revolutionary War in New Jersey existed. The private collections have not been inventoried and it is not clear whether all the collections in museums and historical societies are inventoried. The ongoing re-analysis of the Pluckemin collection is an encouraging signal of renewed attention to the archaeological resources in New Jersey relating to the Revolutionary War.

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3.2 Natural, Recreational, and Landscape Resources

The Crossroads of the American Revolution National Heritage Area has a rich and diverse natural landscape that extends from the coastal plain in the southeast to the hills and mountains of the Highlands Province to the northwest. This landscape includes a wide range of natural resources, some of which have been heavily impacted by urban development and others that have been preserved in their natural condition.

New Jersey’s landscape had a strong impact on the events associated with the Revolutionary War. The state’s natural landscapes and resources are places where the character of the Revolutionary War Era landscape can be understood and the landscapes’ effect on the war can be interpreted. Preservation of these landscapes and natural resources are in the interest of the heritage area and will help enhance the quality of life of residents. Of particular importance to the management of the heritage area is the spatial relationship among lands with conservation value (either protected or not) and critical Revolutionary War Era landscapes whose settings are in need of protection.

The following section provides an overview of the heritage area’s natural resources and includes a discussion of agricultural and recreational resources that are closely associated with them. This discussion is organized into the following sections:

- Natural Landscapes;
- Water Resources;
- Plant Communities;
- Protected Lands within the Heritage Area;
- Agricultural Resources; and
- Recreational Resources.

3.2.1 Natural Landscapes

Despite New Jersey’s small size, its geography is diverse and complex. The state’s varied terrain heavily influenced the course of the Revolutionary War, playing a key role in troop movements, locations of

battles and encampments, and means of communication. This diversity is perhaps most evident when comparing the state's four physiographic provinces: Valley and Ridge (which does not occur in the heritage area), Highlands, Piedmont, and Coastal Plain. These are shown in the inset on the Context Map in Figure 3-2.

The Valley and Ridge Province, more than 500 square miles occupying parts of Sussex and Warren Counties, is part of a larger geologic province extending from Canada to the southern United States and is characterized by narrow ridges and interconnecting valleys. Although not overlapping the National Heritage Area, it does contribute to the heritage area's larger physiographic context. The ridges, ranging from 1,600 to 1,800 feet in elevation, are sandstone or conglomerate rock; the highest is Kittatinny Mountain. Valleys occur where there are softer rocks, which erode faster, such as limestone and shale (Collins and Anderson, 29; Dalton).

The Highlands Province overlaps the Crossroads Heritage Area in Morris County. The Highlands also has parallel ridges and valleys, an extension of New England's crystalline rock formations, generally gneiss; however, ridges here are more massive and broader, while the valleys are narrower and have steeper slopes (Collins and Anderson, 35). Glacial scouring and deposition in the northern portion created such scenic lakes as Lake Hopatcong and Green Pond, but also left the area unsuitable for agriculture. Southwest of the glaciated area, however, the valleys are fertile.

The Piedmont Province is part of a larger formation extending almost a thousand miles from the Hudson River through New Jersey and Pennsylvania into Maryland and Virginia (Collins and Anderson, 39). The underlying rock in this region is mostly shale, sandstone and argillite, which are more prone to erosion than the parent rock materials of the Highlands. Consequently, much of the Piedmont forms a lowland plateau with gently rounded hills and wide valleys (Wacker, 10). New Jersey's Piedmont is interrupted by several ridge formations made of intrusive or extrusive lava material called diabase and basaltic rock: the three Watchung Mountains (850, 650 and 350 in elevation), Cushtunk Mountain, the Sourlands, and the Palisades (Collins and Anderson, 39). In addition to volcanic activity, the Piedmont was affected by glacial activity. Two prominent lakes existed during and just after the last Ice Age, Glacial Lake Passaic and Lake Hackensack (described below in the section on wetlands; Wacker, 10).

The largest physiographic province in New Jersey is the relatively flat Coastal Plain Province, covering 4,667 square miles and almost 38 percent of the Crossroads Heritage Area. The Province can be divided into the Inner and Outer Coastal Plain, separated by a belt of hills (Collins and Anderson, 40; Dalton). The soils in the Inner Coastal Plain have more clay in them and are generally more fertile, while those in the Outer Coastal Plain are sandier, retaining very little of the moisture needed for plant growth (Collins and Anderson, 40-41).

Landscape Characteristics

During the Revolutionary War, most of the significant battles and engagements fought in New Jersey occurred in the Piedmont and Inner Coastal Plain Provinces. This area was strategically important as a relatively level, accessible corridor connecting New York and Philadelphia. From the Palisades and Watchung Mountains, the Continental Army was able to observe British troop movements in the lowlands below. (Several significant routes used by both armies and the battles in which they confronted one another are shown in the Revolutionary War Landscape map, Figure 3-1.) In addition, much of the woodland that once occupied the Piedmont had been cleared by the advent of the Revolutionary War. The fertile soils that remained, the gradual slopes – relative to the more mountainous provinces to the northwest – and the access to markets from Perth Amboy and New York to Trenton and Philadelphia encouraged the growth of farms and also made this a primary route of travelers across the state.

Today, the most intense development within the Crossroads Heritage Area is still located in this primary corridor, running southwest-to-northeast and essentially connecting Philadelphia and New York, as is evident in the Context Map (Figure XX). Development is most intense along the Interstate 95 corridor north of the Raritan River, in the Trenton area, and in the southwestern branch of the heritage area approaching Philadelphia. The corresponding counties – Passaic, Bergen, Essex, Hudson, Union, Middlesex, Monmouth, Mercer and Camden – account for approximately 67 percent of the total population of New Jersey, but only about 26 percent of the land area (Collins and Anderson, 60).

The concentration of population in urban areas and the central corridor has allowed significant natural and agricultural areas to remain relatively unaltered from the 18th century landscape. Significant agricultural land remains in the southwestern part of the Piedmont, into the southwestern portion of the Highland Province, and the central portion of the Inner Coastal Plain Province. However, over the last 30 years, formerly rural counties, particularly Morris and Sussex, have experienced accelerated population growth and development, as residents headed west to avoid the congestion of the cities. Consequently, the portion of the heritage area that overlaps the Highlands has had significant suburban development and some areas of high density development interspersed are with rural lands and state-owned open space.

The Highlands Province is not unique, however. New Jersey as a whole is facing intense development pressure that threatens its agricultural areas, as well as natural habitats and landscapes. Within the heritage area, development threatens the integrity of a landscape that helps tell the story of the Revolutionary War. Significant portions of this landscape have already been altered; even so, the agricultural tradition in New Jersey remains strong. Numerous state agencies and organizations are committed to protecting and preserving the agricultural and natural landscapes that still exist. In forging partnerships with these groups and organizations, the Crossroads of the American Revolution has an opportunity to protect a valuable historical context for understanding what took place.

3.2.2 Water Resources

Throughout New Jersey and the Crossroads Heritage Area, water is a dominant landscape feature. The state contains “over 18,000 miles of rivers and streams, more than 3,200 lakes, ponds, and reservoirs along with 127 miles of Atlantic Ocean coastline.” (NJ Statewide Comprehensive Outdoor Recreation Plan, 30). Many of these water resources are located within the Heritage Area, as seen on the heritage area maps.

Major Rivers

Each of New Jersey’s four major river systems ~ the Hudson, Delaware, Passaic and Raritan ~ flows through or adjacent to the heritage area. These rivers dictated much of the military strategy and naval action, particularly on the Hudson and Delaware, was significant to the course of the war. In addition, two major Revolutionary War battles and many smaller skirmishes and engagements which influenced New Jersey events took place on the Hudson’s eastern shore. Just outside the heritage area, along its western boundary, the Delaware River has been designated part of the National Wild and Scenic Rivers system, beginning just north of Trenton at Washington’s Crossing, PA.

Within the Crossroads Heritage Area, the Passaic River winds its way through Morris and Essex Counties before emptying into Newark Bay. The river cuts through narrow valleys in the ridges of southern Morris County, quickly reaching the lowlands of the central river basin. Here it winds through a large area of meadows and swamps, the most extensive being the Great Swamp, south of Morristown. Turning abruptly northeast, the Passaic flows along the west side of the Watchung Mountains, forming the border between Essex and Morris Counties, then takes an eastward turn as it passes through Great Piece Meadows and flows northeast through Paterson and over the Great Falls of the Passaic. From Paterson,

the Passaic flows south through Newark and unites with the Hackensack River at the northern end of Newark Bay. With the exception of the river's headwaters, much of this route passes through highly developed areas. This has put additional pressure on a river that has been identified as one of the country's most flood-prone waterways and the subject of flood control efforts as early as 1870 (Passaic River Coalition website). Stanley Park between Summit and Chatham is a vantage point; other parks along the river are located in Passaic County. Parkland is proposed along the banks of the river in Newark, part of the city's ongoing revitalization efforts (Wikipedia website).

The fourth major river in New Jersey, the Raritan River, forms the main stem of a system of branches and tributaries that extend into three of the state's four geologic provinces: the Highland, Piedmont and Coastal Plain Provinces. The river originates at the confluence of its North and South Branches in western Somerset County and flows 16 miles along a winding eastward course through Somerville and Bridgewater, converging with the north-flowing Millstone River at the northern tip of the Delaware and Raritan Canal State Park. In New Brunswick, the river slows, its estuary extending another 14 miles to the Raritan Bay at the southern tip of Staten Island. Like the Passaic River basin, the Raritan River basin – draining about 1,105 square miles – encompasses areas of intense development (Wistendahl). It served as an important transportation route, in Colonial times carrying agricultural exports from central New Jersey and attracted early industry, particularly around New Brunswick. Today, the Raritan provides water to more than 12 million residents in central New Jersey. As a result of urbanization, the river has been a victim of extensive pollution but significant progress has been made in abating contamination. The Raritan Basin Watershed Alliance is dedicated to improving water quality within the Raritan River basin in order to restore valuable natural habitats and protect the water supply on which so many New Jersey residents depend.

In addition to these four major systems, the Manasquan River in central New Jersey rises within the heritage area, beginning in Freehold Township and flowing through Monmouth County to the Atlantic Ocean. A popular recreational river along the Jersey Shore, the Manasquan River and Inlet is the northernmost terminus of the Intracoastal Waterway (Wikipedia website).

Regional Wetlands

In addition to an extensive network of waterways, the hydrology of New Jersey is supported by significant wetlands. Particularly in the Piedmont, the wetlands were the result of glacial erosion and deposition. As the most recent glacier, Wisconsin, began to retreat, it trapped meltwater “between the glacier, glacial till, and ridges to form a large (78,000-hectare or 300-square-mile) glacial lake referred to as Glacial Lake Passaic.”³ The sediments created in the course of the lake's formation formed the basis for a series of wetlands that occupy the Passaic River valley today. They begin with the largest, the Great Swamp, followed by Black Meadow, Troy Meadows, Hatfield Swamp, Lee Meadows, Little Piece Meadows, Great Piece Meadows, and Bog and Vly Meadows.

Separated from the Passaic River valley by a low ridge of sandstone, the Hackensack Meadowlands are a diverse habitat complex of tidal wetlands and adjacent palustrine wetlands and uplands long the lower Hackensack River as well as the aquatic habitat and adjacent uplands of Overpeck Creek, which joins the Hackensack River at Newark Bay. Like the Great Swamp and related wetlands, the Hackensack River wetlands formed when the last glacial advance began to melt and retreat northward. The terminal moraine

³ U.S. Fish and Wildlife Service. 1997. *Significant Habitats and Habitat Complexes of the New York Bight Watershed*. Accessed online January 13, 2010, at <http://library.fws.gov/pubs5/begin.htm>

of this glacier created Glacial Lake Hackensack, whose sediments and glacial till are now overlain with peat and muck.⁴

A third significant wetland complex in the Crossroads Heritage Area is the Hamilton-Trenton Marsh, located in the Inner Coastal Plain where Crosswicks Creek and Black Creek meet the Delaware River. Although older sediment within higher elevations can be traced to the Wisconsin glaciation or earlier, the formation of the Hamilton-Trenton Marsh is primarily due to alluvial sediments deposited from the Delaware River and Crosswicks Creek, as well as wind-blown sediments deposited during periods of drought (Leck, et al.).

Wild and Scenic Rivers

On the middle Delaware River, bordering the Crossroads National Heritage Area, several segments of the Delaware River and its tributaries – totaling 67.3 miles – were designated as Scenic and Recreational rivers under the National Wild and Scenic Rivers Act of 1968, on November 1, 2000: 1) from river mile 193.8 to the northern border of the city of Easton, Pennsylvania; 2) from just south of the Gilbert Generating Station to just north of the Point Pleasant Pumping Station; 3) from just south of the Point Pleasant Pumping Station to a point 1,000 feet north of the Route 202 Bridge; 4) from 1,750 feet south of the Route 202 Bridge to the southern boundary of the town of New Hope, PA , to the town of Washington Crossing, PA . The listing also includes three rivers in Pennsylvania (all of Tinicum Creek; Tohickon Creek from the Lake Nockamixon Dam to the Delaware River; and Paunacussing Creek in Solebury Township). Of the total designated mileage, 41.9 miles are classed as recreational and 25.4 miles are scenic.

Also in the lower Delaware drainage and outside the heritage area (close to Camden and linking the Delaware estuary and Pinelands watersheds), the Maurice River and its tributaries, the Menantico River, Manumuskin Creek, and Muskee Creek, are designated as National Scenic and Recreational Rivers. Outside the heritage area in the Pinelands, 39 miles of the Great Egg Harbor River and 89 miles of its tributaries are National Wild and Scenic Rivers.⁵

Water Quality

New Jersey has approximately 6,450 miles of rivers and streams, and 24,000 acres of lakes and ponds. New Jersey's program to protect the water quality of all of these surface waters follows federal law in establishing surface water quality standards and antidegradation policies.⁶ Existing and designated uses of surface waters must be protected for all surface waters; impaired waters must be restored. Designated uses of surface waters include aquatic life, recreation, drinking water, fish consumption, shellfish consumption, industrial, and agricultural. The maintenance of water quality is important to the many communities that depend on surface waters for drinking water, recreation, fishing, and shellfish harvesting.

⁴ U.S. Fish and Wildlife Service. 1997. *Significant Habitats and Habitat Complexes of the New York Bight Watershed*. Accessed online January 13, 2010, at <http://library.fws.gov/pubs5/begin.htm>

⁵ <http://www.rivers.gov/wsr-delaware-lower.html>, accessed June 2010.

⁶ N.J.A.C. 7:9B; the program operates in conformance with the Federal Clean Water Act at 33 U.S.C. 1313(c) and the Federal Water Quality Standards Regulations at 40 C.F.R. 131. New Jersey's statutory authority is granted by the Water Pollution Control Act at N.J.S.A. 58:10A and the Water Quality Planning Act at N.J.S.A. 58:11A. The following discussion draws from the following sources: "New Jersey Surface Water Quality Standards Antidegradation Designations, June 2009 NJDEP fact sheet found at <http://www.state.nj.us/dep/wms/bwqsa/2009%20antideg-Category%20one.pdf>, supplemented by information found at http://www.greatswamp.org/StreamMonitoring/DEP_Stream%20classifications_2006.pdf, and other sources as cited throughout.

There are three tiers of antidegradation designations. The most protective is Outstanding National Resource Waters (ONRW). These include some waters in national and state parks, wildlife refuges (though not the Great Swamp NWR, in the heritage area, probably because the streams' sources are outside the refuge⁷), and "waters of exceptional recreational or ecological significance." Waters designated as ONRW include two general surface water classifications: Fresh Water One (FW1) and Pinelands waters (PL). (All waters in the Pinelands are so designated.⁸) The FW1 waters are intended to be set aside for posterity in their natural state and not to be subjected to any wastewater discharges or increases in runoff from human activities; the NJDEP cannot approve any activity that might alter existing water quality in these waters.

The second tier of antidegradation designation is Category One (C1).⁹ C1 waters are designated through rulemaking for protection from measurable changes in water quality because of their Exceptional Ecological Significance, Exceptional Water Supply, Exceptional Recreation, and Exceptional Fisheries to protect and maintain their water quality, aesthetic value, and ecological integrity. C1 designation provides additional protection to waterbodies that help prevent water quality degradation and discourage development where it would impair or destroy natural resources and water quality.

C1 waters were originally designated in 1985 based on parks, wildlife management areas, and trout production waters. After 1985, additional streams upgraded to FW2-trout production were routinely designated as C1. In 2002, the NJDEP began an intensive effort to identify additional waters that warranted enhanced protections afforded by this designation, and in 2009 issued rules for definitions of Exceptional Ecological Significance, Exceptional Fisheries Resource(s), and Exceptional Water Supply Significance to clarify data requirements. Under the definition of Exceptional Ecological Significance, waterbodies supporting certain aquatic-dependent threatened and endangered species (bog turtles and mussels) or exceptional aquatic community can qualify for C1. Waterbodies that support unimpaired benthic macroinvertebrates and indicate exceptional value for only two of the four data sources (habitat, physical/chemical water quality data, fish assemblage, and low impervious surface) can qualify under the Exceptional Aquatic Community definition. Under the definition of Exceptional Fisheries Resource(s), trout production waters classified as FW2-TP and approved shellfish harvesting waters can qualify for C1. Under the definition of Exceptional Water Supply Significance, waterbodies that are part of the water supply system that serves a population greater than 100,000, including any reservoirs and streams that directly flow into those reservoirs, can qualify for C1.¹⁰

⁷ http://www.greatswamp.org/StreamMonitoring/DEP_Stream%20classifications_2006.pdf, accessed April 2010.

⁸ http://library.fws.gov/pubs5/web_link/text/nj_pine.htm, accessed June 2010.

⁹ The following rules implement C1 protections (see <http://www.state.nj.us/dep/wms/bwqsa/c1waters.htm> for more information):

- New Jersey Pollutant Discharge Elimination System (NJPDES) Rules at N.J.A.C. 7:14A: New or expanded wastewater discharges must maintain the existing water quality of the receiving stream. If the discharge is located above a C1 segment the applicant must meet "no measurable change" at the C1 boundary. (See www.nj.gov/dep/dwq/.)
- Stormwater Management Rules at N.J.A.C. 7:8: 300 foot Special Water Resource Protection Areas (SWRPA) or buffers are implemented on new major development adjacent to all C1 waters and upstream tributaries of C1 waters within the same subwatershed or HUC 14. (See www.njstormwater.org.)
- Flood Hazard Area Control Act Rules at N.J.A.C. 7:13: 300 foot riparian zone imposed through Flood Hazard Area Control Act rules permits to all C1 waters and their upstream tributaries within the same sub-watershed or HUC 14. (See www.nj.gov/dep/landuse/)

¹⁰ In addition to being located in Title 7 of the New Jersey Administrative Code, a copy of N.J.A.C. 7:9B can be found at <http://www.state.nj.us/dep/wms/bwqsa/December%202009%20SWQS.pdf>, accessed June 2010.

All waters not designated in New Jersey's surface water quality standards as ONRW (FW1 or PL) or C1 are designated as Category Two (C2). Similar to C1, existing water quality is maintained in C2 waters. However, lowering of water quality is authorized to accommodate necessary and important social and economic development.

The NJDEP's Bureau of Water Quality Standards and Assessment is responsible for the development, adoption, and administration of New Jersey's water quality standards and assessing all New Jersey waters. Assessments are reported through the New Jersey Integrated Water Quality Monitoring and Assessment Report (Integrated Report).¹¹ Integrated Reports submitted biennially according to federal requirements describe attainment and identify impaired waterbodies, including the identification of subwatersheds where there is no impairment.¹²

Table XX "New Jersey's Top 30 Waterways to Save" (2002)

Reservoirs [Largest to Smallest]
1. Wanaque Reservoir*
2. Round Valley Reservoir*
3. Spruce Run Reservoir*
4. Boonton Reservoir
5. Washington Valley Reservoir*?
6. Merrill Creek Reservoir*
7. Manasquan Reservoir*
8. Lake Tappan Reservoir*
9. Oradell Reservoir*
10. Swimming River Reservoir
11. Split Rock Reservoir
12. Oak Ridge Reservoir*
13. Clinton Reservoir*
14. Atlantic City Reservoir*
Rivers and Creeks [Priority Order]
1. The Delaware River and its major tributaries from Washington Crossing to the state's northern border
2. The Musconetcong River*
3. The Metedeconk River*
4. The Wanaque River *
5. The Ramapo River
6. The Rockaway River
7. The Paulinskill River*
8. The Swimming River
9. Oldmans Creek*
10. The Salem River*
11. The North and South Branches of the Raritan River
12. The Upper Passaic River
13. Rancocas Creek

¹¹ The Integrated Report satisfies the reporting and public participation requirements of Sections 303(d), 305(b), and 314 of the federal Clean Water Act; <http://www.state.nj.us/dep/wms/bwqsa/generalinfo.htm>, accessed June 2010.

¹² Maps of C1 waterbodies can be found at (all accessed April or June 2010): <http://www.state.nj.us/dep/wms/bwqsa/c1upgrades.htm>. The actual list of waterbodies and their status is available at http://www.state.nj.us/dep/wms/bwqsa/2008_revised_final_Integrated_List.pdf (accessed June 2010; this is the finalized list dated July 2009; New Jersey's 2008 303(d) List of Water Quality Limited Waters with Priority Ranking can be seen at http://www.state.nj.us/dep/wms/bwqsa/2008_Revised_final_303d_List_&_RTC.pdf).

Table XX “New Jersey’s Top 30 Waterways to Save” (2002)

14. The Hackensack River (North of the Oradell Reservoir)
15. The Wallkill River*
16. The Manasquan River

*Outside the heritage area.

Source: List released January 2002 by Defend New Jersey Waters, an environmental coalition including NJPIRG, the New Jersey Sierra Club, NJEF, NJ State Federation of Sportsmen’s Clubs, and the Jersey Coast Angler’s Association (JCAA); found at the JCAA website, <http://www.jcaa.org/JCNL0201/Defend.htm>, accessed June 2010.

3.2.3 Plant Communities

The identification and discussion of New Jersey’s ecological communities highlight the remarkable biodiversity that exists within New Jersey and, more specifically, within the Crossroads of the American Revolution National Heritage Area. That these communities have survived centuries of population growth and human activity – New Jersey is the most densely populated state in the nation – is extraordinary. But these communities have not remained unchanged. Instead, the habitats that exist today serve as evidence of the past; for example American Indians set frequent fires to clear the land for agriculture or to drive game in hunting. As a result, some plant species thrived, while those less tolerant of fire were destroyed. Within the Heritage Area, plant communities – where still intact – provide clues to the composition of both the natural and the human-influenced landscape during the Revolutionary War.

At the same time, existing habitats offer warnings about the future. More recent human activity has led to significant fragmentation of habitats. As the habitat patches have become smaller, they have suffered decreasing biodiversity. Critical to restoring biodiversity is the protection of land as open space. With an interest in preserving the Revolutionary War landscapes that remain, Crossroads can act to encourage the preservation of open space within the Heritage Area.

Given the state’s physiographic diversity and hydrologic infrastructure, it is not surprising that New Jersey plays host to multiple terrestrial habitats. Because of different combinations of soil moisture, temperatures, water salinity, and peat substrates found throughout the state, the natural habitats of New Jersey fall into eight classifications, six of which are found in the heritage area. Each of these habitats supports different types of plant communities. Together with topography and waterways, the soils (indicated by plant communities) played an important role in the colonization of New Jersey.

Type 1 habitat occurs on ***North Jersey ridges and steep slopes of higher elevations and rock outcroppings***, mainly in the Highlands and Ridge and Valley sections, though the formations of diabase and basalt on the Piedmont also have examples of this type of habitat (Collins and Anderson, 79). This habitat is characterized by rapid runoff and thin soils, which creates a very dry habitat. Two forest-type communities are common: the Chestnut Oak forest and the Pitch Pine-Scrub Oak forest. A third, successional plant community is found on rock outcroppings, which begins with the lichens and mosses that lead to conditions supporting one of the forest types.

Type 2 habitat occurs in ***North Jersey uplands***. This category includes well-drained lands on slopes, hilltops, valleys, and ravines of the Highlands Ridge and the Valley province and the flats of the Piedmont (Collins and Anderson, 79). The soils retain significant moisture, allowing three forest types to grow: Mixed Oak, Hemlock-Mixed Hardwood, and Sugar Maple-Mixed Hardwood. Red oak, white oak and black oak are prevalent in Mixed Oak forests, with some chestnut oak and scarlet oak, plus a distinct understory of smaller trees and a lower-growing shrub layer. Cooler, moister sites (ravines or steep, north-facing slopes) are home to Hemlock-Mixed Hardwood forests, with hemlocks typically making up more

than half of the larger trees. The Sugar Maple-Mixed Hardwood forest thrives in fertile limestone valleys, most of which have been cleared of natural vegetation. The mixed hardwoods in both forest types may include black birch, yellow birch, sugar maple, basswood, beech, red oak, white ash, and maple.

Type 3 habitat is *North Jersey freshwater wetlands*, including marshes, swamps, floodplains, and peatlands – bogs and fens, found primarily in the area once covered by glacial ice (Collins and Anderson, 79-80). Each has its own combination of characteristic plants, though like the upland forests, many plant species can be found in more than one habitat type. Freshwater marshes are frequently dominated by the common reed *Phragmites* or cattails, both broad-leaved and narrow-leaved. Swamps and floodplains, inundated with water for only parts of the year, are typically forested. Wetter sites are often covered by dense thickets of alders, willows, buttonbush, and occasionally winterberry, arrowwood, swamp azalea, spicebush and witch hazel. Less wet sites have greater tree coverage, including hemlock, white ash, basswood, sour gum and ironwood. Peatlands support mosses, sedges, and such low-growing shrubs as sheep laurel, swamp azalea, highbush blueberry, great rhododendron, and mountain laurel. Trees are less characteristic, usually conifers.

Type 4 habitat is *South Jersey freshwater wetlands*, including marshes, swamps, floodplains, and peatlands, for the most part associated with edges of streams or the estuaries on the ocean and Delaware Bay. The wetlands of South Jersey contain many species of plants not found in North Jersey, due to the meandering rivers flowing through relatively flat terrain, extensive shorelines, and sandy soils (Collins and Anderson, 80). The mineral-poor fen, known locally as the savannah, is dominated by sedges (woolgrass, twig rush, button sedge, and cotton grass), accompanied by grasses and shrubs (large cranberry shrub, leatherleaf sheep laurel, and dwarf huckleberry); trees are rarely found and most likely to be Atlantic white cedar. Southern swamps tend to favor certain tree species, leading to three forest types that are not found in the north: the Cedar Swamp forest, dominated by Atlantic white cedar; the Hardwood Swamp forest, home to sweet gums and (less so) red maple, pin oak, swamp white oak, and willow oak; and the Pitch Pine Lowland forest, which develops on lowland depressions where the water table is close to the soil surface.

Type 5 habitat is *South Jersey Pine Barrens*, occupying flats in the sandy Outer Coastal Plain, a drier habitat classed as excessively drained because of the poor water-holding capacity of the soils (Collins and Anderson, 80-81). About 35 percent of the Pine Barrens is occupied by the wetland habitats described earlier. The rest is characterized by dry, upland sites with sandy, infertile soils, where wildfires are common. The area is known for its Pine-Dominated forest, which thrives because pines develop a thick bark that protects them from fire damage. This forest type occupies about 50 percent of the upland area in the Pine Barrens, with pitch pine sometimes accounting for as much as 80 percent. The Pine Plains, or Dwarf Pine Community, are home to two species able to recover from fires within ten years or less, the pitch pine and blackjack oak. Finally, Oak-Dominated forests are common to the Pine Barrens. These forests, most commonly composed of black, scarlet, chestnut, post, and white oak, would have greater presence if not for the wildfires. Unlike pines, which cannot establish themselves amidst large accumulations of leaf litter on the forest floor, oak seedlings thrive when, in the absence of fire, substantial leaf litter is present.

Type 6 habitat is *South Jersey uplands*, which like those of North Jersey are well-drained lands, neither excessively dry or wet. They occur mostly on the Inner Coastal Plain but also include the parts of the Outer Coastal Plain that encircle the Pine Barrens (Collins and Anderson, 81). Two forest types predominate: Mixed Oak forest and Beech-Oak forest. Less prevalent but still common are two types of successional forest: Virginia Pine forest and Sweet Gum forest. Like the Mixed Oak forest of North Jersey, the southern forests are home to white, black, red, chestnut and scarlet oaks. Unlike their northern counterparts, however, the southern Mixed Oak forest sometimes features Spanish, or southern red, oak.

These forests are also differentiated from those in the north by the presence of persimmon, sweet gum, and Virginia pine. Although forests composed almost exclusively of American beech could be found in the early twentieth century, today's beech forests have significant numbers of oak trees, and some more closely resemble the Mixed Oak forest. In addition to American beech and a variety of oak species, Beech-Oak forests have tulip trees, shagbark hickory, pignut hickory, and red maple. Arrowwood and maple-leaved viburnum form an understory shrub layer. As their names suggest, Virginia pine and sweet gum dominate the successional forests. Some hickory and oak species can be found in the Virginia Pine forest and red maples, black cherry, and American beech, along with a sparse shrub layer, round out the sweet gum forest.

Type 7 and 8 habitats, the coastal salt marshes of North and South Jersey and the sand dunes of North and South Jersey, occur along the coast primarily from Sandy Hook to Cape May and are not found in the heritage area (Collins and Anderson, 81).

3.2.4 Protected Lands within the Heritage Area

As described in the previous section, New Jersey has retained a rich diversity of natural habitats and plant communities despite the state's intense urbanization and population density. The challenge moving forward will be protecting and preserving these resources so that they do not fall prey to future population growth and development.

The *Crossroads of the American Revolution in New Jersey, Special Resource Study, Natural Heritage Area Feasibility Study and Environmental Assessment* inventoried the natural resources of the study area and beyond. Key natural resources identified included state parks and wildlife management areas, county and municipal open spaces, and numerous land preservation projects by nonprofit and non-governmental organizations.

Of particular importance to the management of the heritage area are the spatial relationships between the lands with conservation value (either protected or not) and critical Revolutionary War landscapes whose settings are in need of protection.

Figure 3-3, the Protected Lands Map, shows the location of lands currently protected in New Jersey as well as land identified for preservation priority. The data compiled in the map reflects a variety of government sources at the state and local levels. In addition, regional planning organizations maintain GIS databases through which they track preservation, natural resources and land use data. The datasets shown in this map were obtained from the New Jersey Department of Environmental Protection; the New Jersey Department of Agriculture; Somerset, Mercer and Hunterdon Counties; and the New Jersey Highlands Council.

FIGURE 3-3 Protected Lands in the Crossroads of the American Revolution National Heritage Area

Shown on the map in green, the protected land includes

- Federally owned land (military and open space);
- NJ DEP owned land;
- State conservation easements;
- County or municipal open space;
- Preserved farmland (NJ FPP); and
- Sites and districts listed on the National Register of Historic Places.

Lands identified as preservation priorities are shown in a red hatch pattern and include

- Natural Heritage Priority Sites;
- Highlands Agricultural Priority Areas;
- Highlands Conservation Priority Areas; and
- Sites and districts eligible for listing on the National Register of Historic Places.

Within the heritage area, most of the protected land occurs in small parcels, in contrast to the larger tracts seen in the Pinelands in the southeastern portion of the state and in the Highlands to the northwest. These smaller parcels are well-distributed throughout the central part of the heritage area, though the greatest prevalence is in Somerset County, in Mercer County north of Trenton, in Hunterdon County and in the southwestern corner of Monmouth County. Few parcels exist in more urbanized parts of the heritage area near Philadelphia, Trenton, and the greater Newark/New York City area. The larger single tracts that do exist in the heritage area include the Great Swamp National Wildlife Refuge in Morris County; the Delaware and Raritan Canal State Park and Six Mile Run Reservoir Site in Somerset County; the Assunpink Wildlife Management Area in Mercer and Monmouth Counties; and the Turkey Swamp Park and Wildlife Management Area in Monmouth County.

Although the extent of protected land within the heritage area is significant, particularly given the intensity of development, land identified as a priority for preservation is scarce. Regional commissions, such as the Highlands Council and the Pinelands, have already set aside substantial areas for preservation and have identified areas not already protected as preservation priorities. Within the heritage area, however, these priorities have not been established to the extent necessary to preserve this critical landscape. As evident in Figure 3-3, Protected Lands Map, very few areas within the heritage area are shown as priority preservation sites. Because so much of the existing protected land within the heritage area is in smaller, distinct parcels, a priority should be creating connections between these parcels and establishing preservation priorities to create larger tracts of contiguous protected land. The resulting network of protected land would benefit local wildlife communities and allow for both physical and interpretive connections to be made within a segmented historical landscape.

Programs to protect historic and natural sites and open space are described in Section 3.4, Regional and Community Planning.

The Crossroads Feasibility Study noted threatened and endangered plant and animal species that are known to occur within New Jersey's natural landscapes as listed by the U.S. Fish and Wildlife Service (Table XX).

Table XX Threatened and Endangered Species Known to Occur in New Jersey

COMMON NAME - Flora	TAXONOMIC NAME	FEDERAL STATUS
Sensitive joint-vetch	Aeschynomene virginica	Threatened
Swamp pink	Helonias bullata	Threatened
Small whorled pogonia	Isotria medeoloides	Threatened
Knieskern's beaked-rush	Rhynchospora knieskernii	Threatened
American chaffseed	Schwalbea Americana	Endangered
COMMON NAME - Fauna		
Dwarf wedgemussel	Alasmodonta heterodon	Endangered
Bog turtle	Clemmys muhlenbergii	Threatened
Bald eagle	Haliaeetus leucocephalus	Threatened
Indiana bat	Myotis sodalists	Endangered

SOURCE: The National Park Service Northeast Region Philadelphia Support Office, "Crossroads of the American Revolution in New Jersey Special Resource Study, National Heritage Area Feasibility Study, and Environmental Assessment," August 2002, p. 41.

3.2.5 Agricultural Resources

New Jersey, situated between New York and Philadelphia, was in a strategically important position during the American Revolution. The travel corridor between the two cities was also of importance to both American and British forces for another reason: its abundant natural and agricultural resources. The fertile soils of the Piedmont and Inner Coastal Plain had been largely cleared of forest prior to the war and by the latter half of the 18th century yielded valuable hay and grain crops, fruits and vegetables. Today, although New Jersey is dominated by intense development and ranks as the most densely populated state in the nation, the farming tradition continues; the state boasts a productive agricultural sector.

Figure XX Agricultural Soils

The U.S. Department of Agriculture identifies soils suitable for agricultural uses and groups them into several categories. The most valuable include Prime Farmland, Farmland of Unique Importance, and Farmland of Statewide Importance, shown in Figure XX, the Agricultural Soils Map, and described as follows:

Prime Farmland: Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water).

Farmland of Unique Importance: Land other than prime farmland that is used for the production of specific high value food and fiber crops. Examples of such crops are citrus, tree nuts, olives, cranberries, fruit, and vegetables.

Farmland of Statewide Importance: This is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops, as determined by the appropriate state agency or agencies. Generally, these include lands that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.¹³

As is evident in Figure XX, the Agricultural Soils map, significant areas of Prime Farmland, shown in orange, and Farmland of Statewide Importance, shown in yellow, exist within the Crossroads Heritage Area. Much of Burlington County within the Heritage Area is occupied by Prime Farmland with some Farmland of Statewide Importance along stream corridors. Along the Delaware River and outside the Heritage Area, Burlington County has significant amounts of Farmland of Unique Importance, shown in red. Further north along the Inner Coastal Plain Province in Mercer, Middlesex and Monmouth Counties, a mosaic of Prime Farmland and Farmland of Statewide Importance exists, with small patches of Farmland of Unique Importance interspersed. Similarly, Prime Farmland and Farmland of Statewide Importance are prominent in the south portion of the Piedmont and Highland Provinces, though the agricultural soils are less prevalent in the northern portions of these provinces, because they are more intensely developed.

Given the distribution of these farmlands across three very different physiographic provinces – the Inner Coastal Plain, Piedmont and Highland Provinces – it is not surprising that New Jersey yields an array of agricultural products. These include field crops, such as barley, corn, and hay in Hunterdon County,

¹³ USDA Accessed online February 16, 2010, at <http://soils.usda.gov/technical/classification/>

potatoes and soybeans in Burlington County, sweet potatoes, and wheat WHERE?. Vegetables include asparagus, cabbage, peppers, sweet corn, and tomatoes, while fruits and berries include apples, blueberries, cranberries and peaches. On a national scale, New Jersey is the second largest producer of blueberries and freestone peaches, the fourth largest producer of bell peppers, and the third largest producer of cranberries. These last grow in the bogs of Burlington County, classified by the USDA as Farmland of Unique Importance.¹⁴

New Jersey's agricultural industry is supported by a comprehensive farmland preservation program that offers valuable incentives for landowner participation. Administered by the State Agricultural Development Committee, the Farmland Preservation Program coordinates with County Agriculture Development Boards, municipal governments, nonprofit organizations and landowners to offer several methods for preserving farmland. These include the sale of development easements, the donation of development easements, the sale of property, and eight-year preservation, through which landowners can choose to voluntarily restrict development on their land for a period of eight years.¹⁵ As of April 2010, 185,539 acres were listed under the Farmland Preservation Program in New Jersey (Table XX).¹⁶ These preserved lands are included in the protected lands shown on the heritage area's Protected Lands map, Figure 3-3, and included in the map's GIS database.

The Agricultural Water Enhancement Program (AWEP) is a voluntary conservation program under the 2008 Farm Bill available only in approved watersheds across the country. In New Jersey, a partnership between the North Jersey Resource Conservation & Development Council (RC&D), the New Jersey Water Supply Authority (NJWSA), and NRCS was approved in 2009 to provide financial and technical assistance to owners and operators of agricultural lands in the Raritan River basin to protect water quality. NRCS and RC&D professionals work with producers to develop a conservation plan for their operation, design conservation practices, and provide guidance to help implement the plan. The New Jersey Water Supply Authority may provide additional financial assistance for certain practices and projects, to further reduce the cost to participants.¹⁷

Table XX New Jersey Farmland Preservation Program, Summary of Preserved Farmland (April 2010)

¹⁴ National Agricultural Statistics Service of the U.S. Department of Agriculture. Accessed online March 24, 2010, at http://www.nass.usda.gov/Statistics_by_State/New_Jersey/index.asp

¹⁵ State Agricultural Development Committee, New Jersey Department of Agriculture. Accessed online March 24, 2010, at <http://www.state.nj.us/agriculture/sadc/farmpreserve/>

¹⁶ State Agricultural Development Committee. 2010. *STATE, COUNTY and MUNICIPALLY PRESERVED FARMLAND* as of February 2, 2010. Accessed online March 24, 2010, at <http://www.state.nj.us/agriculture/sadc/farmpreserve/progress/preserved/preservedfarmslist.pdf>

¹⁷ U.S. Department of Agriculture, <http://www.nj.nrcs.usda.gov/programs/awep/index.html>, accessed February 2010.

Participating Counties	Number of Farms	Percent of Total State Farms	Number of Municipalities	Acreage	Percent of Total State Acreage	Total Cost	Percent of Total Cost for State	Per Acre Total Cost	State Cost	Percent of State Cost for State	Per Acre State Cost	State Share Percent	County/ Municipality/ Fed Fund Cost
Atlantic	43	2.2%	6	4,801	2.8%	18,407,473	1.2%	3,418	12,472,849	1.4%	2,698	78%	3,834,824
Bergen	7	0.4%	4	318	0.2%	18,018,072	1.2%	60,382	8,718,543	1.1%	30,681	81%	8,286,428
Burlington	185	10.1%	14	24,216	13.1%	130,488,246	8.8%	5,388	78,203,340	8.0%	3,271	81%	51,284,908
Camden	8	0.4%	3	489	0.3%	12,828,817	0.8%	26,328	6,867,272	0.8%	13,976	55%	5,669,645
Cape May	44	2.3%	6	2,828	1.4%	16,411,423	1.1%	5,884	8,218,018	1.0%	3,607	80%	6,186,405
Cumberland	120	6.2%	11	14,770	8.0%	30,458,078	2.2%	2,082	23,284,982	2.8%	1,676	78%	7,184,087
Gloucester	125	6.5%	12	10,387	5.8%	88,430,166	4.9%	8,408	44,630,822	5.1%	4,286	87%	21,889,332
Hunterdon	325	18.8%	18	28,843	14.5%	224,589,130	18.3%	8,387	168,431,284	17.8%	5,828	70%	88,187,848
Mercer	85	4.9%	8	7,313	3.8%	78,054,083	5.3%	10,810	48,387,240	5.5%	8,818	81%	30,668,854
Middlesex	48	2.4%	7	4,516	2.4%	64,834,848	4.0%	12,148	37,818,088	4.3%	8,333	88%	17,218,653
Monmouth	187	8.7%	10	12,783	6.8%	184,679,070	14.4%	16,253	121,241,280	13.8%	9,489	82%	73,437,781
Morris	110	5.7%	14	7,003	3.8%	136,440,432	10.0%	19,341	72,851,181	8.3%	10,416	54%	62,608,242
Ocean	43	2.2%	6	2,922	1.8%	22,907,847	1.7%	7,840	16,270,584	1.7%	5,228	87%	7,837,283
Passaic													
Salem	208	10.7%	10	27,127	14.8%	102,167,866	7.5%	3,798	78,815,319	8.0%	2,806	77%	23,342,638
Somerset	80	4.7%	7	7,337	4.0%	112,470,003	8.3%	16,329	87,321,187	7.7%	9,178	80%	45,148,807
Sussex	114	5.9%	13	13,378	7.2%	40,282,706	3.0%	3,012	27,678,228	3.1%	2,082	88%	12,703,475
Warren	181	9.9%	17	18,743	10.1%	102,181,743	7.5%	5,452	88,780,178	7.8%	3,870	87%	33,401,684
Total State	1,829		184	186,638		1,358,438,792		7,311	878,770,633		4,742	85%	478,888,258

Source: NJ State Agriculture Development Committee,
<http://www.nj.gov/agriculture/sadc/farmpreserve/progress/stats/preservedsummary.pdf>, accessed June 2010.

3.2.6 Recreational Resources

New Jersey offers numerous recreational opportunities, several of which are located within the Crossroads of the American Revolution National Heritage Area. These range from local golf courses and athletic facilities to more nature-oriented experiences, such as hiking in the Watchung Mountains. These are among the areas in green in Figure XX, the Protected Lands Map. Some of the recreational sites, such as the Delaware and Raritan Canal State Park, provide recreational opportunities, including bicycling or canoeing, while simultaneously exposing visitors to the history of the area. Other sites are purely recreational. Regardless, they contribute to the heritage area by attracting visitors to the area and offering potential partnership opportunities for future programming that would broaden the heritage area's audience.

This section describes in greater detail the recreational network within the Crossroads of the American Revolution National Heritage Area, including recreational trails, which wind their way throughout the heritage area landscape and can be experienced by car, bicycle, foot, or boat. This network and the touring and recreational opportunities it offers are described in the following section below and are shown on Figure 3-4, Existing and Planned Touring Routes. The map also includes scenic byways, which are described in Section 3.6, Transportation and Visitor Experience. The information included in the map is a compilation of transportation and recreation data obtained from the New Jersey Department of Transportation and the New Jersey Department of Environmental Protection, as well as base data from USGS, the New Jersey Highlands Council and county governments.

Figure 3-4 Existing and Planned Touring Routes (map)

The routes shown on the map include vehicular tours and multi-use trails as well as routes that are existing and proposed. The Scenic Byways and Birding & Wildlife Trails are existing vehicular touring routes that

take visitors through some of the most scenic and naturally rich parts of the state. Four byways – the Delaware River Scenic Byway, the Millstone Valley Scenic Byway, the Palisades Interstate Parkway Scenic Byway, and the Upper Freehold Historic Farmland Byway – traverse the Crossroads of the American Revolution Heritage Area, as do two of the Birding & Wildlife Trails, the Meadowlands and the Skylands Trail networks. Although not currently designated official touring routes, several Revolutionary War routes – in red, blue, orange and gray – and Colonial-era routes – in yellow – are also shown. These are potential routes for touring the heritage area by car. These routes connect many of the key Revolutionary War sites critical to telling the Crossroads stories.

In addition to vehicular routes, the map shows several multi-use trails for walkers, hikers, and bicyclists. The most prominent of these is the East Coast Greenway. Extending from Hoboken southwest to Trenton, the Greenway travels through the heart of the heritage area, following the Delaware & Raritan Canal from New Brunswick southward. On either side of the Greenway, additional recreational trails, some existing (indicated with solid circles) and even more potential (indicated with hollow circles), create a more extensive multi-use trail network. Although the trails are fairly well-distributed throughout the heritage area, many are still in the development stage or lack connections to other existing trails. Completing the potential trails and establishing connections between existing trails would provide greater access to the heritage area for multi-use trail users and encourage greater visitation among recreational walkers, hikers, bicyclists, and others.

Delaware & Raritan Canal State Park

Centrally located within the Crossroads Heritage Area, the Delaware & Raritan Canal State Park is a popular recreation destination. Straddling the D&R Canal, the Park creates a 70-mile corridor for canoeing, jogging, hiking, bicycling, fishing and horseback riding. Part of the National Recreation Trail System, the Park is equally important to local wildlife: a recent bird survey conducted in the park revealed 160 species of birds, almost 90 of which nested in the park. The Park is also a significant historical resource with bridge tender houses still standing and remnants of locks, cobblestone spillways, and hand-built, stone-arched culverts visible up and down the canal.¹⁸

Six Mile Run State Park

Adjacent to the Delaware & Raritan Canal State Park, the Six Mile Run Reservoir Site occupies 3,037 acres rich in natural and cultural resources. Visitors to the park will find 18th century farmhouses, Dutch-framed granaries and barns that tell the story of the area's first Dutch settlers. Continuing this agricultural tradition, much of the land is leased to the public for farming today. The remainder of the park consists of forest and open fields, creating habitats for a variety of plants and animals. Visitors can enjoy the history and natural environments by hiking, biking, and horseback riding on the park's trails.¹⁹

Sourland Mountains

Roughly paralleling the Delaware & Raritan Canal, which lies to the east, the Sourland Mountains run for 17 miles from Lambertville, Hunterdon County, to just beyond the village of Neshanic in Somerset County.²⁰ The Sourland Mountain Preserve, in Hunterdon County, near the town of Ringoes, is a 273-acre park comprised of a deciduous forest with a swamp and two streams. Visitors to the Preserve can hike, bike or cross-country ski on the primary Service Road Trail as well as the three secondary trails.²¹ On the other side of Route 607, the North Stony Brook Preserve – a 421-acre public open space owned

¹⁸ D&R Canal State Park. Accessed online February 12, 2010 at http://www.dandrcanal.com/gen_info.html

¹⁹ D&R Canal State Park. Accessed online February 12, 2010 at <http://www.dandrcanal.com/interest.html>

²⁰ Sourland Planning Council. Accessed online February 12, 2010 at <http://www.sourland.org/history/history.html>

²¹ Hunterdon County Department of Parks and Recreation. Accessed online February 12, 2010 at <http://www.co.hunterdon.nj.us/depts/parks/guides/Sourland.htm>

and managed by the D&R Greenway Land Trust – offers additional walking/hiking trails. Bicycles are not permitted.²²

Watchung Mountains

The Watchung Mountains, comprised of three long, low ridges in northern New Jersey, stretching more than 40 miles from Somerville to Mahwah, offer a variety of recreational opportunities at state, county and local parks. Among the largest is the Watchung Reservation, a 2,000-acre Union County park dominated by oak forest (Collins and Anderson, 114). The nature and science center adjacent to the parking area offers films and exhibits on the wildlife found in the Reservation, and a colored trail system takes visitors to a picnic area and the Feltville Historic District, a deserted 19th century village of which eight houses, a church, a carriage house and a general house remain. Also in the Watchung Mountains, Washington Rock State Park is a popular picnicking destination, where visitors can enjoy the scenic vistas. These vistas made Washington Rock a valuable lookout point for the Continental Army during the Revolutionary War.²³ Other recreation areas in the Watchung Mountains include South Mountain Reservation, Washington Valley Park, and Riker Hill.

New Jersey Birding and Wildlife Trails

The New Jersey Audubon Society developed the Birding and Wildlife Trails program to expose a broader audience to the abundant wildlife in the small state, which, given its location on the Atlantic flyway, boasts “the highest density of wildlife per square mile of any state in the nation!”²⁴ The program offers three sets of published trails: the Delaware Bayshore Trails, the Meadowlands Trails and the Skylands Trails. The Delaware Bayshore Trails are located in the southern part of the state, outside the heritage area; however, several trails in the Skylands Trails network meander through the heritage area in Hunterdon County, including the *Hunterdon’s Highlands*, *Discover Diversity*, *Reservoir of Riches*, *Delaware River* and *Amwell Valley Trails*. In addition, the *Family*, *Independent Naturalist*, and *Meet Me in the Meadowlands Trails* in the Meadowlands Trails network pass through the heritage area in Bergen and Hudson Counties.

East Coast Greenway

The East Coast Greenway, a multi-use recreational trail linking 25 major cities from Florida to Maine, covers 94 miles in New Jersey. Located entirely within the Crossroads Heritage Area, the New Jersey portion of the greenway passes through several urban areas, including Trenton, Princeton, New Brunswick, Newark and Jersey City, as well as some quieter suburban areas and rural landscapes such as a 34-mile stretch along the D&R Canal Towpath. Currently, 53 percent of the route in New Jersey is on automobile-free paths, and of the remaining route, about 16 percent is in development to become off-road over the next few years.²⁵

Delaware River Heritage Trail and Delaware River Water Trail

The Delaware River Heritage Trail and Delaware River Water Trail are two trails under development by the Delaware River Greenway Partnership. The Heritage Trail, a 60-mile, land-based walking and bicycle trail, links river communities and state lands, providing interpretive displays along the way that convey

²² New Jersey Trails Association. Accessed online February 12, 2010 at <http://www.njtrails.org/trailguide.php?TrailID=46>

²³ New Jersey Department of Environmental Protection. Accessed online on February 12, 2010 at <http://www.state.nj.us/dep/parksandforests/parks/washrock.html>

²⁴ New Jersey Audubon Society, Birding and Wildlife Trails. 2008. Accessed online January 13, 2010 at <http://www.njwildlifetrails.org/AboutTheTrails/Introduction.aspx>

²⁵ New Jersey Department of Transportation. New Jersey East Coast Greenway Multi-Use Trail Guide. Accessed online on March 23, 2010, at <http://www.greenway.org/nj.php>

the natural and cultural history of the region. Once completed, the trail will extend from the Tacony-Palmyra Bridge at Philadelphia in the south to Trenton, and Morrisville, PA to the north.

The Delaware River Water Trail will extend 200 miles from the headwaters of the Delaware River in Hancock, NY to the head of the tide in Trenton. Immediately south of Hancock, the Upper Delaware is known for its whitewater and is one of the most popular paddling destinations in the northeastern United States. Further south, the Middle Delaware River offers a more solitary river experience. Much of this portion is part of the Delaware Water Gap National Recreation Area managed by the National Park Service and therefore features more secluded, scenic stretches. In contrast, the Lower Delaware River is the most populated section, stretching 76 miles from just south of the Delaware Water Gap to the tidal waters near Trenton. Most of the shoreline properties along this stretch are private; however, forested islands and rocky bluffs form scenic vistas from the water. On land, numerous historic towns and small cities create a rich cultural landscape.²⁶

3.3 Socio-Economic Environment

The best resource for information about population and other aspects of the socio-economic environment is the U.S. Census. Every ten years, the Census Bureau conducts the Decennial Census, which surveys every household in the nation. The Census Bureau also conducts the American Community Survey (ACS) which collects information from only a fraction of households in the United States (3 million households total) but takes place every year instead of every ten years. The ACS provides one-year estimates annually for geographic areas with a population of 65,000 or more (the nation, all states and the District of Columbia, congressional districts, 800 counties, and 500 metropolitan and micropolitan statistical areas²⁷) and three-year estimates for geographic areas with a population of 20,000 or more (the nation, all states and the District of Columbia, congressional districts, 1,800 counties, and 900 metropolitan and micropolitan statistical areas). Data on population and other socio-economic factors in this section are based on the U.S. Census 1980-2000 and the ACS three-year estimates for 2006-2008 (2008).

3.3.1 Population

New Jersey is located on a northeast-southwest axis between New York and Philadelphia, the first and fifth most populous metropolitan areas in the nation, respectively. Although New Jersey accounts for only 0.21 percent of the nation's land area, the state is home to 2.99 percent of the nation's population. Like two large metropolitan areas adjacent to it, the state of New Jersey has experienced a rapid rate of growth over the past 20 years, although that pattern is expected to slow into the 21st century.

Population and Population Density

The U.S. Decennial Census counted New Jersey's total population at 8,414,350 in 2000. The American Community Survey counted New Jersey's population at 8,682,661 in 2008.

TABLE XX Total New Jersey Population as a Percentage of US Population, 1980-2008

²⁶ Delaware River Greenway Partnership. Accessed online March 23, 2010, at <http://www.delrivgreenway.org/content/Welcome%21/Welcome%21%20Index.html>

²⁷ <http://www.census.gov/population/www/metroareas/metroarea.html>: "Metropolitan and micropolitan statistical areas (metro and micro areas) are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by Federal statistical agencies....A metro area contains a core urban area of 50,000 or more population, and a micro area contains an urban core of at least 10,000 (but less than 50,000) population. Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core."

TOTAL POPULATION	1980	% of US	1990	% of US	2000	% of US	2008	% of US
New Jersey	7,364,096	3.25%	7,730,188	3.11%	8,414,350	2.99%	8,658,668	2.87%
United States	226,545,805	100%	248,709,873	100%	281,421,906	100%	301,237,703	100%

SOURCE: U.S. Census Bureau: U.S. Census 1980, 1990, 2000; American Community Survey 2006-2008

These population statistics become more useful when examined in relation to their geographic distribution throughout the state of New Jersey and the Crossroads of the American Revolution National Heritage Area. Figure 3-5, Total Population in New Jersey, illustrates that the most populous areas of New Jersey are located along the northeast-southwest axis between Newark and Camden, and along the Atlantic coastline. This axis between Newark and Camden represents the heart of the Crossroads Heritage Area. Seven of the ten most populous municipalities in New Jersey are within the Crossroads Heritage Area, including Newark, Elizabeth, Edison, Woodbridge, Hamilton, Trenton, and Camden.

FIGURE 3-5 [map] Total Population in New Jersey

[EDITOR'S NOTE FOR REVIEWERS: Maps 3-5 to 3-22 are provided in a separate pdf packet.]

Population density, the measure of total persons per square mile, follows a similar pattern of geographic distribution as the population overall. Figure 3-6, Population Density in New Jersey, shows that the area of greatest concentration of high population densities exists in the northeast region of the state, near the Hudson River and New York City. The cities of Trenton and Camden and their surrounding areas also have high population densities. The southern one-third of the state (Pinelands area) and the New Jersey Highlands in the northwest part of the state have the lowest population densities.

FIGURE 3-6 [map] Population Density in New Jersey

Urban and Rural Populations

The state of New Jersey is a patchwork of urban and rural landscapes. In the year 2000, 94 percent of New Jersey's population lived in urban areas, or areas with high population densities; just 6 percent of the population lived in rural areas. Figure 3-7, Urban Population in New Jersey, illustrates that Bergen, Essex, and Middlesex counties in the northeast portion of the state have the highest urban populations. Counties in the northwest and southernmost part of the state have the lowest urban populations. The Crossroads Heritage Area contains some of the most urban and most rural areas in the state, which indicates the great diversity of types of landscapes and communities existing throughout the heritage area.

FIGURE 3-7 [map] Urban Population in New Jersey

Population Growth

The population of the state of New Jersey has grown over the past 30 years, although at a slower rate than the United States as a whole. The most significant period of growth in New Jersey occurred between 1990 and 2000, with a population increase of 8.85 percent.

TABLE XX Population Growth in New Jersey, 1980 – 2008

POPULATION GROWTH	Growth 1980 to 1990	% Increase 1980 to 1990	Growth 1990 to 2000	% Increase 1990 to 2000	Growth 2000 to 2008	% Increase 2000 to 2008
New Jersey	366,092	4.97%	684,162	8.85%	244,318	2.90%
United States	22,164,068	9.78%	32,712,033	13.15%	19,815,797	7.04%

SOURCE: U.S. Census Bureau: U.S. Census 1980, 1990, 2000; American Community Survey 2006-2008

While the population for the state of New Jersey has experienced overall growth, rates of growth vary widely across the landscape and communities in the state. Although the state's population grew 8.85 percent from 1990 to 2000, 145 communities within the state experienced population loss during those years. Over the same period of time, two communities grew in population by more than 100 percent. When the geographic implications of population growth are examined, a general pattern emerges with greater population loss occurring among the more urban areas of the state and population increase occurring in suburban areas of the state. This trend is illustrated in Figure 3-8, Population Growth in New Jersey 1990-2000.

FIGURE 3-8 [map] Population Growth in New Jersey 1990-2000

The New Jersey Department of Labor and Workforce Development predicts that population growth in New Jersey will slow over the next 20 years. From 2000 to 2028, the population of New Jersey is projected to grow between 8.5 and 11.5 percent, or about 715,000 to 965,000 people.

TABLE XX Population Projections in New Jersey, 2000 – 2028

POPULATION PROJECTIONS 2000 TO 2028	2000 (actual)	2008	2013	2018	2023	2028
Economic-Demographic Model	8,414,350	8,663,398	8,804,700	8,999,800	9,166,800	9,380,200
Historical Migration Model	8,414,350	8,663,398	8,780,900	8,892,600	9,008,800	9,128,900

SOURCE: New Jersey Department of Labor and Workforce Development: <http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/sptab1.htm>

New Jersey is the most densely populated state in the United States. Across the landscape of New Jersey, however, there are areas of particularly high and particularly low population and population densities. This varied distribution of population accounts for the diversity of landscapes and communities throughout the state. Like the state overall, the Crossroads Heritage Area is made up of a combination of very densely populated urban areas, suburban communities, and rural landscapes. Population growth is also occurring at varied rates throughout the state. Communities experiencing the most rapid growth, and subsequently the most development pressure, are typically suburban areas. Because population growth is expected to continue, measures must be taken to accommodate this growth in a way that preserves valuable historic and natural resources throughout all types of landscapes in the state and heritage area.

3.3.2 Race and Ethnicity

Since 2000, in both the Decennial Census and the American Community Survey, the Census Bureau has asked individuals to identify themselves as one of seven races: White, Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, "Some Other Race," or "Two or More Races." Individuals also had the option of identifying themselves as Hispanic or Latino in addition to one of the seven racial groups. Because people of Hispanic or Latino ethnicity may be of any race, this group is numbered separately from the seven racial groups to avoid duplication.

TABLE XX Race and Ethnicity in New Jersey

RACE AND ETHNICITY IN NEW JERSEY	1990			2000			2008		
	NJ Number	NJ %	U.S.%	NJ Number	NJ %	U.S.%	NJ Number	NJ %	U.S.%
White	6,135,725	79.4%	80.3%	6,099,439	72.5%	75.1%	6,067,401	70.1%	74.3%
Black or African American	1,035,386	13.4%	12.0%	1,127,266	13.4%	12.2%	1,173,798	13.6%	12.3%
American Indian and Alaskan Native	14,647	0.2%	0.8%	17,987	0.2%	0.9%	19,136	0.2%	0.8%
Asian	269,808	3.5%	2.9%	481,794	5.7%	3.6%	646,719	7.5%	4.4%
Native Hawaiian and Other Pacific Islander**	--	--	--	2,709	0.0%	0.1%	2,289	0.0%	0.1%
Some Other Race	274,622	3.6%	3.9%	456,829	5.4%	5.5%	602,662	7.0%	5.8%
Two or More Races**	--	--	--	228,326	2.7%	2.6%	146,663	1.7%	2.2%
Hispanic or Latino*	720,344	9.3%	8.8%	1,116,149	13.3%	12.5%	1,380,921	15.9%	15.1%

* Because people of Hispanic or Latino ethnicity may be of any race, this group is counted separately to avoid duplication. **In the 1990 Census, "Pacific Islander" was included with "Asian"; there was no category for "Two or More Races."

SOURCE: U.S. Census Bureau: U.S. Census 1990, 2000; American Community Survey 2006-2008.

Over the past 20 years, the racial composition of the population of New Jersey has been similar to that of the United States. Table XX illustrates that during these years, a minimum of 70 percent of the populations of both the state and the nation has been white. Minority groups, however, have become an increasingly larger portion of the population of both the state and the nation during the past 20 years.

Of minority groups in New Jersey, Black or African Americans and Hispanic or Latinos make up the largest part of the population. In 1990, Black or African Americans made up the largest minority group in New Jersey by more than 4 percent. By 2000, however, Hispanic or Latinos made up nearly the same percentage of the population as Black or African Americans, around 13.4 percent. In 2008, the most recent year for which data is available, Black or African Americans made up 13.6 percent of the

population while Hispanic or Latinos made up 15.9 percent of the population, making Hispanics or Latinos the largest minority group in the state.

Until 2008, Black or African Americans were the largest minority racial group in New Jersey but not the fastest growing racial group. Between 1990 and 2008, while Black or African Americans consistently made up about 13.5 percent of the population, the Hispanic and Latino population grew at annual rate of 5 percent, the population of individuals of “some other race” grew at an annual rate of 6.5 percent, and the population of Asian individuals grew at an annual rate of over 7.5 percent.

These patterns are expected to continue. The New Jersey Department of Labor and Workforce Development estimates that by 2028, Hispanics and Latinos will comprise 22.2 percent of the state’s population and Asians will account for 12.5 percent of the population. The Black or African-American proportion of the state population is expected to grow only slightly to 14.3 percent. Conversely, the White, non-Hispanic proportion of the population is expected to constitute a bare majority of 51.3 percent by 2028, down sharply from 66.6 percent in the 2000 Census. [See: <http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/sptab3.htm>]

Figure 3-9, Distribution of Racial Groups in New Jersey, illustrates the racial make-up of the seven primary racial groups in the state of New Jersey by county. Only in Essex County is the majority of the population composed of minority groups. In addition, figures here suggest that the populations in counties with the largest cities and most urban populations in the state and Heritage Area (Newark in Essex County, Elizabeth in Union County, Trenton in Mercer County, and Camden in Camden County) have more racially diverse populations.

FIGURE 3-9 [map] Distribution of Racial Groups in New Jersey

The most recent year for which data concerning race and ethnicity can be examined at the municipal level is 2000. Figures 3-10 through 3-13 show the distribution of particular racial and ethnic groups throughout the state for that year.

FIGURE 3-10 [map] Distribution of White Population in New Jersey

FIGURE 3-11 [map] Distribution of Black or African American Population in New Jersey

FIGURE 3-12 [map] Distribution of Hispanic or Latino Population in New Jersey

FIGURE 3-13 [map] Distribution of Asian Population in New Jersey

Figure 3-10, Distribution of White Population in New Jersey, tells an important story about race and ethnicity in New Jersey. Communities located along the northeast-southwest axis of the state, between Newark and Trenton, have the most racially and ethnically diverse populations in the state. This area also represents the most urban, densely populated area of the state and includes the cities of Newark, Elizabeth, Trenton, Hamilton, and Camden. This area could also be considered the “spine” of the Crossroads Heritage Area. Another area of the state with great diversity is the area around Atlantic City and the more rural southern section of the State.

Figure 3-11, Distribution of Black or African American Population in New Jersey, illustrates that the Newark-Elizabeth area and the southernmost counties in the state have the largest Black or African American population. The Newark-Elizabeth area also has one of the highest concentrations of Hispanic and Latinos, as shown in Figure 3-12 Distribution of Hispanic or Latino Population. Figure 3-13,

Distribution of Asian Population in New Jersey, illustrates that the central region of the state, including eastern Somerset and western Middlesex Counties, and the northeast corner of the state have the highest Asian populations within the state.

In the state of New Jersey, the racial and ethnic groups that make up the most significant portions of the population are White, Black or African American, Hispanic or Latino, and Asian. Each of these groups has a strong presence within the Crossroads Heritage Area, making the ethnic and cultural diversity communities throughout the heritage area an important aspect to consider in planning for its success.

Foreign Born Residents

New Jersey also has a large foreign-born population, estimated at 1.7 million in 2008 (Source: Migration Policy Institute <http://www.migrationinformation.org/datahub/acscensus.cfm>). Foreign-born residents comprise 19.8 percent of the state population, the third highest concentration in the country (behind California and New York), and well above the United States national proportion of 12.5 percent.

The number of foreign born residents in New Jersey increased from 12.5 percent in the 1990 census and 17.5 percent in 2000. In fact, the increase of 242,000 foreign-born residents between 2000 and 2008 is equal to the state's total population growth during this period.

Foreign born residents tend to be more prevalent in high-density urban areas, led by Hudson County at 38.5 in 2000. The remaining counties with higher than average concentrations of foreign-born residents are all within the Heritage Area, including Bergen, Passaic, Union, Middlesex, Essex, and Somerset. This population is expected to continue its growth over the next two decades and will need to be considered in planning.

3.3.3 Income

Statistics related to income and poverty serve as an indicator for the overall economic health of a geographic region. Statistics related to Per Capita Personal Income, Median Household Income, and Percent of Population Living below the Poverty Level are three such indicators. The U.S. Census Bureau provides detailed data on these three topics through the Decennial Census and the American Community Survey. The American Community Survey occurs more often than the decennial census but, unlike the decennial census, does not provide information for every municipality. A discussion of trends related to income illustrates the economic diversity of communities throughout the Crossroads Heritage Area.

Per Capita Income

Per capita personal income is a measure of the average income for every man, woman, and child in a community or geographic area and is calculated by dividing total personal income for an area by the population of that area.

Over the past 20 years, New Jersey's per capita income has been steadily increasing by more than 4.5 percent per year. In addition, the State's per capita income has been consistently higher than the per capita income for the nation overall.

TABLE XX Per Capita Income in New Jersey and the United States

PER CAPITA PERSONAL INCOME	1990	2000	2008
New Jersey	\$18,714	\$27,006	\$34,899

United States	\$14,420	\$21,587	\$27,466
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SOURCE: U.S. Census Bureau: U.S. Census 1990, 2000; American Community Survey 2006-2008.

While the per capita income of New Jersey has increased over the past 20 years, communities throughout the state vary widely in terms of per capita income. Figure 3-14, Per Capita Personal Income, indicates that, in general, communities in the northern half of the state tend to have higher per capita incomes than communities in the southern region, which is rural and has a relatively low population.

FIGURE 3-14 [map] Per Capita Personal Income

The Crossroads Heritage Area includes communities with some of the highest per capita incomes in the state. Many of these communities are clustered in southern Morris County and northern Somerset County. Far Hills Borough in Somerset County has one of the highest per capita incomes in the state. However, in the region surrounding Newark and Elizabeth, the heritage area contains communities with some of the lowest per capita incomes in the state. The City of Newark in Essex County and the City of Passaic in Passaic County have two of the lowest per capita incomes in the state.

Median Household Income

Median Household Income is the income level at which half of an area's households earn more than the median figure and half of the area's households earn less. Statistically, the measure of median income is different than an average (or per capita) income because an extremely high or extremely low value does not dramatically alter the median.

Over the past 20 years, New Jersey's median household income has been steadily increasing at about 4 percent per year. The state's median household income has also been consistently higher than the median household income for the nation overall.

Table XX Median Household Income in New Jersey and the United States

MEDIAN HOUSEHOLD INCOME	1990	2000	2008
New Jersey	\$40,927	\$55,146	\$69,674
United States	\$30,056	\$41,994	\$52,175

SOURCE: U.S. Census Bureau: U.S. Census 1990, 2000; American Community Survey 2006-2008.

Although median household income is more evenly distributed throughout the state than per capita income, Figure 3-15, Median Household Income, indicates that median household income generally follows the trend observed in the geographic distribution of per capita income, with communities in the northern half of the state generally having a higher median household income than communities in the southern part of the state.

FIGURE 3-15 [map] Median Household Income

The Crossroads Heritage Area has concentrations of both particularly high and particularly low median household incomes. Areas with concentrations of the highest median household incomes are located in

southern Morris and northern Somerset Counties and northern Monmouth County. In the northern portion of the heritage area, communities west of the Watchung Mountains tend to have higher household incomes than those east of the Watchung Mountains and in the southern portion of the heritage area. Mendham Township and Mountain Lakes Borough in Morris County have two of the highest median household incomes in the state. Communities with the lowest household incomes tend to be in or near the state's largest cities and most dense populations, including the Newark-Elizabeth area, City of Trenton, and Cities of Camden and Gloucester.

Poverty and Low-Income Populations

The poverty threshold, or poverty line, is considered to be the official level of income below which a person or family lacks adequate subsistence. For example, the average poverty threshold for a family of four in 2000 was \$17,603 in annual income.²⁸ The poverty rate is considered to be the percent of the overall population that lives below the poverty threshold. Statistics related to poverty are often used to compare economic health among nations, states, and communities.

Over the past 20 years, the poverty rate in New Jersey has been significantly less than the national poverty rate for both families and individuals. However, while there was a decrease in the poverty rate among families and individuals in the United State between 1990 and 2000, the rate of poverty among individuals and families in New Jersey continued to increase. The rate of poverty in New Jersey remained constant among families and only slightly increased among individuals between 2000 and 2008.

TABLE XX Rates of Poverty in New Jersey in New Jersey and United States

POVERTY	1990	2000	2008
New Jersey			
Families	5.60%	6.30%	6.30%
Individuals	7.60%	8.50%	8.70%
United States			
Families	10.00%	9.20%	9.60%
Individuals	13.10%	12.40%	13.20%

Source: U.S. Census Bureau: U.S. Census 1990, 2000; American Community Survey 2006-2008.

While the rate of poverty among families has been consistently lower than the national average over the past 20 years, there are certain communities within New Jersey that have poverty rates higher than both the state and the nation. As Figure 3-16, Rates of Poverty in New Jersey, indicates, these communities tend to be located within the most urban areas in the state but occur in rural parts of the state, as well.

FIGURE 3-16 [map] Rates of Poverty in New Jersey

TABLE XX New Jersey Municipalities with Highest Poverty Rates (2000)

COUNTY	MUNICIPALITY	% POVERTY
Camden	Camden City	35.52%
Monmouth	Asbury Park City*	30.13%
Essex	Newark City	28.40%
Middlesex	New Brunswick City	27.05%
Cumberland	Bridgeton City*	26.64%

*Outside the heritage area

SOURCE: U.S. Census Bureau: U.S. Census 1990, 2000; American Community Survey 2006-2008.

²⁸ <http://www.census.gov/Press-Release/www/2001/cb01-158.html>

In the year 2000, the most recent year for which comprehensive statistics on poverty are available, the cities of Newark, Passaic, New Brunswick, Trenton, and Camden had the highest rates of poverty within the Crossroads Heritage Area. As Table XX indicates, poverty rates for these five cities far exceed rates for the state and nation. These cities also represent the most densely populated areas within the state and heritage area.

3.3.4 Employment

Earnings and Employment by Major Industries

Every five years, the U.S. Census Bureau conducts an Economic Census that collects data related to earnings and employment in various sectors and industries of the economy. This information illustrates the economic health and diversity of different regions of the country. Data shown in Table XX was collected by the U.S. Census Bureau in 2007 and shows information for economic sectors, the broadest classification of industry in the North American Industry Classification System (NAICS), in the state of New Jersey.

Table XX Earnings and Employment by Major Industries

2007 NAICS ECONOMIC SECTORS	Number of establishments	Sales, shipments, receipts (\$1,000)	Annual Payroll (\$1,000)	Number of Employees
Mining, quarrying, and oil and gas extraction	21,169	369,191,012	37,308,193	703,129
Utilities	16,879	581,553,952	50,893,874	632,432
Construction	725,101	1,781,778,684	348,138,262	7,399,047
Manufacturing	293,919	5,339,345,058	612,474,100	13,333,390
Wholesale trade	432,094	6,039,227,184	336,128,248	6,295,109
Retail trade	1,122,703	3,932,027,444	364,991,713	15,610,710
Transportation and warehousing	217,926	655,857,245	172,166,275	4,435,760
Information	141,034	1,075,153,974	223,376,793	3,428,262
Finance and insurance	503,156	3,641,082,600	494,484,693	6,562,546
Real estate and rental and leasing	382,725	493,911,736	88,880,642	2,309,725
Professional, scientific, and technical services	844,552	1,344,760,849	511,818,276	8,079,319
Management of companies and enterprises	51,069	112,895,011	255,147,304	2,779,453
Administrative and Support and Waste Management and Remediation Services	389,073	636,657,422	293,802,755	10,195,685
Educational services	60,907	49,108,996	15,048,094	565,512
Health care and social assistance	779,074	1,697,230,614	665,831,857	16,859,513
Arts, entertainment, and recreation	123,965	188,975,642	57,545,590	2,070,524
Accommodation and food services	626,558	612,949,468	169,845,677	11,587,814
Other services (except public administration)	537,820	417,512,388	99,809,780	3,515,796

SOURCE: U.S. Census Bureau, 2007 Economic Census

Within New Jersey, the largest sectors of the economy based on earnings (sales, shipments, receipts, revenue) are wholesale trade (29.13%), manufacturing (25.75%), retail trade (18.96%), finance and insurance (17.56%), and construction (8.59%) sectors. The largest sources of employment based on number of paid employees (full-time and part-time) are the health care and social assistance (24.94%),

retail trade (23.10%), manufacturing (19.73%), accommodation and food services (17.15%), and administrative and support (15.09%) sectors.

Employment by Major Industries

The U.S. Census Bureau also collects data regarding employment in the Decennial Census and the American Community Survey. The economic sectors studied in these surveys are similar to those in the Economic Census but also include Agriculture and Public Service sectors and group Education and Social sectors together as one industry.

The most recent year for which employment data can be viewed spatially at the municipal level is the 2000 Decennial Census. Figures 3-17 through 3-19 illustrate the geographic distribution of the three sectors that are the largest sources of employment for residents of New Jersey.

FIGURE 3-17 [map] Population Employed in Educational, Health, and Social Services Sector

FIGURE 3-18 [map] Population Employed in Retail Trade Sector

FIGURE 3-19 [map] Population Employed in Manufacturing Sector

Employment within the Crossroads Heritage Area

Based on a geographic analysis of employment data provided by the 2000 Decennial Census, employment within the Crossroads Heritage Area is relatively diverse. Within the heritage area, about five percent of the population of Hunterdon County and several townships in Monmouth and Burlington County are employed in the agriculture sector. The largest concentration of population employed in the construction industry is southern Hunterdon County along the Delaware River. About 10 to 15 percent of population in and around the portion of the Heritage Area closest to New York City, Newark, and Elizabeth are employed in the transportation and warehousing sector.

Within the central portion of the Heritage Area that includes most of Somerset and northern Hunterdon Counties, between 15 and 40 percent of the population is employed in the information sector. Southern Morris and northern Somerset Counties have a high percentage of people employed in the finance and insurance sectors. Professional services make up between 18 and 25 percent of Somerset, southern Morris, and northern Mercer Counties. Employment in the arts and entertainment sector is focused in Atlantic County and Atlantic City, while employment in the public service sector accounts for about 25 to 40 percent of the population of Mercer County, which includes the state's capital city of Trenton.

3.3.5 Education

The most recent data for educational attainment was collected during the 2006-2008 American Community Survey. A summary of this data in Table XX comparing educational attainment in New Jersey to that in the United States shows that New Jersey's overall educational attainment exceeds that of the United States overall.

TABLE XX Educational Attainment in New Jersey and the United States (2008)

EDUCATIONAL ATTAINMENT (AGE 25+)	New Jersey	United States
High school graduate or higher	86.90%	84.50%
Bachelor's degree or higher	34.00%	27.40%

Source: U.S. Census Bureau: American Community Survey 2006-2008

TABLE XX Educational Attainment in New Jersey and the United States (2008), Detailed Analysis

EDUCATIONAL ATTAINMENT FOR POPULATION AGE 25 AND UP (New Jersey)	Male	Female	Total	% of Population Age 25+
Population 25+	2,786,396	3,050,378	5,836,774	100%
No schooling completed	23,612	24,984	48,596	0.83%
Nursery to 4th Grade	25,808	25,594	51,402	0.88%
5th and 6th Grade	48,911	46,417	95,328	1.63%
7th and 8th Grade	61,135	70,646	131,781	2.26%
9th Grade	40,595	43,077	83,672	1.43%
10th Grade	57,732	62,452	120,184	2.06%
11th Grade	58,921	62,826	121,747	2.09%
12th Grade no diploma	57,616	56,837	114,453	1.96%
High school graduate, GED, or alternative	819,740	949,445	1,769,185	30.31%
Some college, less than 1 year	137,165	166,441	303,606	5.20%
Some college, 1 or more years, no degree	319,739	336,944	656,683	11.25%
Associate's degree	146,536	211,073	357,609	6.13%
Bachelor's degree	598,648	644,085	1,242,733	21.29%
Master's degree	255,663	268,930	524,593	8.99%
Professional school degree	84,925	54,589	139,514	2.39%
Doctorate degree	49,650	26,038	75,688	1.30%

Source: U.S. Census Bureau: American Community Survey 2006-2008

A more detailed analysis of educational attainment for the population of New Jersey is available through the 2006-2008 American Community Survey (Table XX). Just 13 percent of the population lacks a high school diploma. Those with only a high school diploma number approximately 30 percent, and the remainder, fully 57 percent, have undertaken some amount of college-level education. More than 21 percent have achieved a four-year college degree and another 12.7 percent have taken post-graduate degrees.

The most recent year for which data relating to educational attainment is available at the municipal level is the 2000 Decennial Census. This information is displayed in Figure 3-20, Educational Attainment: High School Graduate or Higher, and Figure 3-21, Educational Attainment: Bachelor's Degree or Higher. More than 85 percent of the state's population has a high school diploma or higher. In addition, for every municipality in the state of New Jersey, at least 50 percent of the population age 25 and over has at least a high school diploma or equivalent. Hunterdon, Somerset, and Morris Counties have the highest populations with a high school diploma or equivalent. Areas near the state's largest cities and urban areas, including Newark, Elizabeth, Trenton, Camden, and Atlantic City, have the lowest populations with a high school diploma or equivalent. In general, communities in the northern half of the state tend to have a higher percentage of populations with a high school diploma or equivalent.

FIGURE 3-20 [map] Educational Attainment: High School Graduate or Higher

FIGURE 3-21 [map] Educational Attainment: Bachelor's Degree or Higher

About 34 percent of New Jersey's population has a bachelor's degree or higher, with the northern part of the state having a higher percentage of populations holding a bachelor's degree. Southern Morris, northern Somerset, and northern Morris Counties have the highest concentration of people with a bachelor's degree or higher. The Crossroads Heritage Area contains communities with both extremely high and relatively low levels of educational attainment.

3.3.6 Socio-Economic Environment

Characteristics of the socio-economic environment in New Jersey provide an important context in which to consider management goals and strategies for the Crossroads Heritage Area. One of the socio-economic characteristics that has the greatest affect on the management of the heritage area is New Jersey's large and increasingly diverse population. A majority of the state's population lives in urbanized areas. The population in suburban areas has grown rapidly and created significant development pressure throughout much of the state. Highly urbanized and growing suburban areas, alike, create both opportunities and challenges for management of the heritage area.

Perhaps the greatest opportunity associated with a historically urban, developed, and growing population is that organizations and agencies within the state have a wealth of experience in both growth management techniques and regulation and conservation of natural resources that they can contribute to the heritage area.

Despite this important natural resource protection and community planning experience, the level of development and urbanization within the heritage area is still a significant challenge, because many natural resources are degraded and much open space has been lost. Growth pressure also poses a continuing challenge to preservation of natural resources, scenic resources, and open space. Furthermore, many preserved historic buildings and visitor sites and attractions in urbanized areas have lost their historic landscape context to the period of the American Revolution. This poses a challenge to the interpretation and appreciation of historic resources and historic character in urban areas. Growth pressure and suburban sprawl have created similar challenges to interpretation and appreciation of historic resources in suburban areas.

New Jersey's large population and urbanized areas present opportunities and challenges to the promotion of heritage tourism, a primary goal of the heritage area. New Jersey's dense population presents a significant "home-grown" audience to support tourism within the heritage area. However, traditional heritage tourists may be dissuaded from visiting highly urbanized, sometimes unsafe, areas where central elements of the Crossroads story took place. In addition, in such a large and heavily populated area, Crossroads will have much competition for the attention of heritage tourists and potential partners.

Racial and ethnic characteristics of the socio-economic environment in New Jersey also present both opportunities and challenges. While the overall rate of New Jersey's population growth is expected to slow in the coming decades, the racial, ethnic, and immigrant composition of the state will continue to experience significant changes. In 2008, approximately 30 percent of New Jersey's population was made up of minority groups. This is expected to grow to nearly half the population in the next 20 years. Furthermore, nearly 1-in-5 New Jersey residents were born outside of the United States. While cultural diversity, in general, is an opportunity for the heritage area, many minority and immigrant communities with various ethnic and racial backgrounds do not know about or readily relate to the Crossroads story. Overcoming this challenge and reaching an ever-growing culturally diverse audience will be a goal of the Crossroads Heritage Area.

Per capita personal income and median household income as indicators of economic health also suggest both opportunities and challenges. Portions of the heritage area are affluent, where communities have preserved large areas of the landscape, thereby providing a broader physical context through which to understand the American Revolution and related historic and landscape resources. More affluent residents are also more likely to undertake heritage tourism activities and economically support historic communities that provide heritage tourism services. In other communities, many of which are highly

urbanized, the population is poor and has suffered from economic decline for many years. These areas have not had the financial means to preserve historic and landscape resources to the extent that their more affluent counterparts have.

New Jersey's highly educated population and its many academic institutions plus a diversity of employment industries provide ample opportunities for collaboration with the Crossroads Heritage Area.

3.4 Regional and Community Planning

Much like the historic and natural environments described earlier, the planning "environment" in which the Crossroads of the American Revolution National Heritage Area occurs is rich and diverse. The state is surrounded by and participates in other nationally significant protected-area initiatives concerning landscapes and routes that are recognized for both their natural and historic qualities, including two innovative programs here classed as state programs that include a federal aspect (the Highlands initiatives, which extend into other states thanks to federal law, and the Pinelands initiative, which includes a federal law establishing the Pinelands Reserve). New Jersey's state planning program is among the most advanced in the nation, and includes a mechanism for "cross-acceptance" that encourages local planning at the county and municipal levels. Land protection and historic preservation programs at the state level are equally advanced, and, again, these state programs encourage local planning (and action). A considerable array of nonprofit organizations focusing on various aspects of the land protection needs of New Jersey reinforce state programming for open-space protection. This section concludes with a discussion of county and municipal planning, including mechanisms for municipal open-space protection.

3.4.1 National Initiatives

Several national programs related to heritage and community planning present opportunities for partnership with the Crossroads of the American Revolution National Heritage Area. The Washington-Rochambeau Revolutionary Route and National Historic Trail passes through New Jersey and creates a physical and thematic link with American Revolution sites and resources both within and outside of New Jersey. The Hudson River Valley National Heritage Area and Schuylkill River Valley National Heritage Area both emphasize the interpretation of the American Revolution and are linked geographically, thematically, and in overall purpose to Crossroads. The New Jersey Highlands Region and Pinelands National Reserve highlight the critical natural features present in the state and heritage area. The New Jersey Coastal Heritage Trail Route operates as an affiliated area of the National Park System, interpreting the state's coastal region. Partnerships among these national initiatives will strengthen the Crossroads Heritage Area, leverage more support for all engaged organizations, and promote resource protection, recreation, heritage tourism, and community development throughout the region.

Washington-Rochambeau Revolutionary Route and National Historic Trail

The Washington-Rochambeau Revolutionary Route (W3R) is a trail network consisting of approximately 650 miles of roads from Newport, RI, and Boston, MA, to Yorktown, VA. This system of roads marks the route traveled by French and American troops led by allied Generals Rochambeau and Washington in 1781 on the way to Yorktown for what would become the last major battle of the American Revolution.. In 1781, the French came into New Jersey from Suffern, NY, and the Continental troops from Palisades, NY, both traveling in a southwesterly direction to Trenton. They repeated their trip across New Jersey along this route in 1782 on their return trip from Virginia to Massachusetts. The route includes a network of roads within New Jersey used by different military units. Each has interpretive potential. Because of its national and historical significance, integrity, and potential for recreation, the W3R was designated a National Historic Trail by Congress in March 2009.

The National Washington-Rochambeau Revolutionary Route Association (W3R-US) is a nonprofit organization committed to identifying and preserving W3R documents, routes, and historic sites. It acts as a coordinating body to focus the efforts of dozens of history-oriented organizations along the W3R. Activities and programs of W3R-US include an informational website, research on documents and sites, development of a historic route overlay for modern maps, wayfinding and interpretive signage, public brochures, commemorative events, educational materials, and the formation of a cooperative network of museums and parks along the route.

The W3R New Jersey Association (W3R-NJ) is a nonprofit organization formed to coordinate with W3R-US and its partners and to support the W3R National Historic Trail within New Jersey. As the organization that implements national and state programs locally, W3R-NJ maintains a website devoted to the W3R in New Jersey, sponsors speakers, lectures, and workshops, and organizes commemorations, re-enactments, parades, and exhibitions. In addition, W3R-NJ, the New Jersey Historic Trust, and the New Jersey Historic Preservation Office published the previously cited 2006 report, *Washington-Rochambeau Revolutionary Route in the State of New Jersey, 1781-1783: An Historical and Architectural Survey* (see section 3.1.).

With the National Historic Trail designation, the National Park Service has created a new park unit to work with national, state, and local partners in developing and interpreting the W3R and preserving associated historic resources, including developing a management plan in coming months.

As in the Crossroads of the American Revolution Association, national, state, and local partners associated with the W3R work to preserve physical characteristics of the landscape and built environment in order to tell the stories important to the American Revolution. These organizations also have a shared goal to promote scholarship, education, interpretation, and heritage tourism. W3R's status as a National Historic Trail enables the National Park Service to support projects and activities associated with the trail's preservation and interpretation. For these reasons, a partnership among the Crossroads Association, the W3R National Historic Trail, W3R-US, W3R-NJ, and other partners will be beneficial to all. Their collaboration will assist historic sites associated with the trail and the audience for the American Revolution in New Jersey.

Hudson River Valley National Heritage Area

In its review of the historic and cultural resources in the Hudson River Valley, the National Park Service called the Hudson Valley a "landscape that defined America." Accordingly, Congress established the Hudson River Valley National Heritage Area in 1996 to "recognize, preserve, protect, and interpret the nationally significant cultural and natural resources of the Hudson River Valley for the benefit of the Nation." Covering approximately 4 million acres along nearly 150 miles of the Hudson River, the landscape includes great urban centers, country hamlets and rural landscapes. With five National Historic Sites, 57 National Historic Landmarks, 89 Historic Districts, thousands of National Register sites, and approximately 2,000 acres of tidal freshwater wetlands, the Hudson River Valley National Heritage Area offers a wealth of historic, cultural, and natural resources.

As managing entities for the Heritage Area, the Hudson River Greenway Communities Council and the Greenway Conservancy for the Hudson River Valley, Inc. supervised the creation of the Hudson River Valley National Heritage Area Management Plan, approved on April 17, 2002. A system of Heritage Area Trails that link 60 major Heritage Sites provides the framework for implementation of the management plan. The Heritage Area Trails tell the story of Hudson River Valley using three themes: Freedom and Dignity (Revolutionary War, abolitionist movement, leadership of Franklin Roosevelt), Nature and Culture (natural landscapes and the artists, writers, and architects inspired by them), and Corridor of Commerce (role of the Hudson River in the settlement and economic development of the nation). The

management plan also outlines a partnership approach to coordination among sites and communities, private organizations, and federal and state agencies to promote community and economic development.

The Hudson River Valley National Heritage Area emphasizes the American Revolution. A Revolutionary War Heritage Trail served as a Management Plan Case Study for the development of the plan and its interpretive structure. In addition, the American Revolution is a sub-theme of Freedom and Dignity, one of the major organizing themes for the heritage area. The American Revolution is one of five suggested itineraries included on the heritage area's website, and includes five one- and two-day explorations of historic sites and landscapes related to the American Revolution. In addition to physical landscapes and historic sites, research, education, and scholarship are important to the heritage area. The Hudson River Valley Institute at Marist College is the academic arm of the Heritage Area. Its mission is "studying and promoting the Hudson River Valley and providing educational resources for heritage tourists, scholars, elementary school educators, environmental organizations, the business community, and the general public." The Institute has many resources related to the American Revolution, including a virtual guidebook, timeline, calendar of events, bibliography, lesson plans, trails, and scholarly resources.

The Hudson River Valley Heritage Area, with its emphasis on the American Revolution, provides an opportunity for partnership with the Crossroads of the American Revolution National Heritage Area. Thematically, both heritage areas share the Revolutionary War associated with the British occupation of New York City and conflict within the lower Hudson Valley. The two heritage areas are natural allies in their promotion of regional planning, preservation of resources and open space, and development of interpretive and educational programs. Specific resources will promote this partnership, such as the Hudson River, Palisades Parkway, Fort Lee, and the Washington-Rochambeau Revolutionary Route, which serve as geographic and thematic links between the two heritage areas. The Hudson River Valley Institute also offers an opportunity for scholarly collaboration. Together, the Hudson River Valley and Crossroads of the American Revolution heritage areas can work to promote tourism, stewardship, and resource protection in the New York-New Jersey region.

Schuylkill River Valley National Heritage Area

Known as the "Revolutionary River," the 128-mile Schuylkill River is the spine of the Schuylkill River Valley National Heritage Area. Through its historic, cultural, natural, and recreational resources and attractions of national importance, the heritage area tells the story of movements in American history including the American Revolution, Industrial Revolution, and Environmental Revolution. The Commonwealth of Pennsylvania designated the Schuylkill River as a state Heritage Corridor in 1995, and Congress created the Schuylkill River Valley National Heritage Area in 2000. The stated mission of the heritage area is "to conserve, interpret and develop the historical, cultural, natural, and recreational resources related to the industrial and cultural heritage of the Schuylkill River Valley."

The Schuylkill River Greenway Association (SRGA), the designated management entity for the heritage area, supervised the development of a heritage area management plan. The Secretary of the Interior approved the plan in 2003. The plan outlines management goals and strategies to guide decision-making and implementation over a ten-year horizon. Goals and strategies outlined in the plan are designed to promote resource conservation and enhancement, education and interpretation, recreation, community revitalization, and heritage tourism, within a framework of implementation and management that emphasizes partnerships, linkages, regional impact, and sense of place. The plan identifies a preferred alternative for future management of the heritage area called the "Layers" Alternative. This alternative promotes a focus "both on preserving and enhancing clusters of heritage resources/attractions (places) and on establishing thematic and physical connections between the places."

With 34 sites and destinations related to the American Revolution, the Schuylkill River Valley National Heritage Area emphasizes the struggle for American freedom. The heritage area includes such places as Philadelphia and Independence National Historical Park, the site where independence was declared, and Valley Forge National Historical Park, where patriot soldiers were encamped for the harsh winter of 1777-1778. The Schuylkill Valley's potential interpretation of the 1777 Philadelphia Campaign is directly related to events within the Crossroads Heritage Area, especially along the Delaware River and in Burlington, Camden, and Gloucester Counties. Also located within the Schuylkill Heritage Area are many mills and furnaces that helped supply the Continental army throughout the war.

This wealth of historic resources related to the American Revolution suggests that the Schuylkill River Valley National Heritage Area and Crossroads of the American Revolution National Heritage Area should partner to protect and enhance resources related to the American Revolution, as well as promote heritage tourism and community development. Located just across the Delaware River from one another with Philadelphia as a critical geographic and thematic link, the two heritage areas could collaborate to promote, interpret, and protect this diverse, dynamic and historically important region.

New Jersey Coastal Heritage Trail

The New Jersey Coastal Heritage Trail was designated by Congress in 1988 and is operated as “an affiliated area of the National Park System.” The National Park Service provides technical assistance to the State of New Jersey and various private and community-based organizations. Under this management structure, non-Federal funds make up at least 50 percent of the program's funding.

The route extends nearly 300 miles along the state's scenic coastline from Perth Amboy south to Cape May, and west along the Delaware Bay. It is at the northern end, at the mouth of the Raritan River, that the trail intersects with the Crossroads Heritage Area. A primarily vehicular trail that does not follow a single continuous route but rather links a series of destinations using local, county, state and U.S. roadways, the Coastal Heritage Trail interprets New Jersey's maritime history, coastal habitats and wildlife migrations.

Destinations along the trail represent five themes—Maritime History, Historic Settlements, Wildlife Migration, Relaxation and Inspiration, and Coastal Habitats—and are spread out among five geographic regions that include Sandy Hook, Barnegat Bay, Absecon, Cape May, and Delsea. The route is shown on Figure XX [Map - Existing and Planned Touring Routes]. Attractions include lighthouses, natural wildlife areas, state parks, maritime museums, bicycle trails, historic sites, and beautiful beaches.

The goal of the New Jersey Coastal Heritage Trail is to promote heritage tourism and preserve the state's natural and cultural resources. The Trail achieves this goal by providing route maps, highway signs, and interpretive trail markers. Along the trail route are two full service Welcome Centers, numerous sites with staff and visitor services, and many points of interest with scenic views and interpretive wayside exhibits. Additional information on the trail and specific destinations may be found on the trail's website, which is maintained by the National Park Service.

Although the New Jersey Coastal Heritage Trail exists primarily outside of the Crossroads Heritage Area, there are several sites along the trail that relate to the history of the American Revolution. These sites include Perth Amboy, Sandy Hook Lighthouse, Gateway National Recreational Area, and the Greenwich Tea Burning Monument. Perhaps more important, the Coastal Heritage Trail and Crossroads Heritage Area share a mission to promote heritage tourism and resource protection within New Jersey. A partnership between the two organizations would provide a link for continuous heritage tourism routes and visitor services throughout New Jersey's rich landscape of cultural and natural heritage.

New Jersey Highlands Region and Highlands Council

The New Jersey Highlands Region is part of a multi-state, 3.5 million-acre geophysical region containing critical open space and natural features stretching from Pennsylvania, through New Jersey, to New York and into Connecticut. Its water resources in particular help sustain the densely developed areas of the northeastern United States. In 2004, Congress passed the Federal Highlands Conservation Act authorizing \$10 million over ten years to help protect land in east-central Pennsylvania, northern New Jersey, Lower Hudson Valley of New York, and western Connecticut (<http://na.fs.fed.us/highlands>). The New Jersey State Legislature enacted the Highlands Water Protection and Planning Act in 2004 to regulate the 800,000-acre New Jersey Highlands Region. The special resource area in northern New Jersey encompassing 13 percent of the state's land area is discussed further in Section 3.5.3 Special Planning Regions.

New Jersey Pinelands Commission and Pinelands National Reserve

The Pinelands National Reserve was established by Congress through the National Parks and Recreation Act of 1978. The Pinelands National Reserve includes about 22 percent of New Jersey's land area and more than 1 million acres of forest, farms, and scenic towns in southern New Jersey. Following the designation of the Pinelands National Reserve, the New Jersey State Legislature enacted the Pinelands Protection Act of 1979, designating about 900,000 acres of the Pinelands National Reserve as the state Pinelands Area. Together, the National Parks and Recreation Act and the Pinelands Protection Act established and granted authority to the New Jersey Pinelands Commission, a 15-member regulatory body charged with overseeing the protection and enhancement of natural and cultural resources of the Pinelands National Reserve, while promoting the economic and physical development consistent with that purpose (<http://www.pinelandsalliance.org>). The New Jersey Pinelands Commission and Pinelands National Reserve are discussed further in Section 3.5.3 Special Planning Regions.

3.4.2 New Jersey State Development and Redevelopment Plan

In 1985, the New Jersey State Legislature adopted the State Planning Act (N.J.S.A. 52:18A-196 et seq). In addition to creating the Office of State Planning and a State Planning Commission, the State Planning Act provided for the creation of a State Plan with the following purpose:

Coordinate planning activities and establish Statewide planning objectives in the following areas: land use, housing, economic development, transportation, natural resource conservation, agriculture and farmland retention, recreation, urban and suburban redevelopment, historic preservation, public facilities and services, and intergovernmental coordination (N.J.S.A. 52:18A-200(f)).

Now in its third round of Cross Acceptance (the review and revision process that takes place at all levels of government), the *New Jersey State Development and Redevelopment Plan* (State Plan) provides a vision and guidance for the state through which varied and competing interests can strike a balance that achieves conservation of resources and communities but also allows for growth. The State Plan is intended to be used by citizens, the private sector, and all levels of government. While the structure of the State Plan in all three versions (1992, 2001, 2009 Draft) has remained consistent, the draft plan currently in Cross Acceptance has been changed to incorporate and/or elaborate on such priorities as Equity, Accessibility, Sustainability, and Livability. The structure of the State Plan has six major components, described below. (Keep until final edit, maybe we can eliminate the paragraphs and just keep this list: Vision Statement, Goals and Strategies, Statewide Policies, State Plan Policy Map, Resource Planning and Management Structure, and Monitoring and Evaluation.)

The State Plan and the Crossroads of the American Revolution National Heritage Area have similar visions and share many goals for New Jersey's future. Both the State Plan and the heritage area assert that

New Jersey's wealth of natural resources, social traditions, demographic diversity, cultural mix, and history are its most distinctive characteristics. Both acknowledge that a sound physical framework for individual communities and regions, and the state overall, is essential to support a diversity of uses and activities that incorporate and preserve these distinctive characteristics. Economic growth is a major goal of both, and both acknowledge a desire to accommodate a dynamic and growing population in ways that are sensitive to the important natural, cultural, and historic resources that distinguish the state.

The State Plan's Vision Statement

The State Plan's Vision Statement describes what New Jersey should be in the year 2030. This vision describes the creation and maintenance of livable communities of all types and sizes, paired with the conservation of important and environmentally sensitive landscapes, all to be achieved through careful location and design of public and private investment. The vision encourages citizens, agencies and organizations to "conserve natural resources, revitalize [New Jersey's] urban centers, protect the quality of its environment, and provide needed housing and adequate public services at a reasonable cost while promoting beneficial economic growth, development and renewal" (Governor James E. McGreevey, State of New Jersey Executive Order #4, 1/31/2002).

The State Plan's Goals

The State Plan includes nine goals derived from the original State Planning Act that provide practical direction for achieving the plan's vision for New Jersey:

- Revitalize the state's cities and towns
- Conserve the state's natural resources and systems
- Promote beneficial economic growth
- Protect the environment, prevent and clean up pollution
- Provide adequate public facilities and services at reasonable cost
- Provide adequate housing at reasonable cost
- Preserve and enhance areas with historic, cultural, scenic open space, and recreational value
- Ensure sound, coordinated and integrated statewide planning
- Increase energy efficiencies and reduce greenhouse gas emissions

In order to achieve the plan's vision and associated goals for New Jersey, the State Plan outlines a strategy for implementing statewide policies, the state plan policy map, the resource planning and management structure, and cross acceptance.

Statewide Policies

Twenty Statewide Policies, including planning topics from equity to economic development, and comprehensive planning to climate change, create a menu of priorities that are applied to each unique community in a way that helps each achieve state plan goals. The policies relate to the following topics:

Agriculture	Housing
Air Resources	Infrastructure Investments
Climate Change	Open Lands, Natural Systems &
Coastal Resources	Recreation
Comprehensive Planning	
Economic Development	
Energy Resources	
Equity	
Historic, Cultural & Scenic	
Resources	

Planning Regions Established by Statute	Urban Revitalization
Public Investment Priorities	Waste Management, Recycling & Brownfields
Special Resource Areas	Water Resources
Sustainable Built Environments	Resource Planning and Manage- ment Structure
Transportation	

The Resource Planning and Management Structure is the heart of the State Plan. The structure has three main parts: Planning Areas, Centers, and Environs. The State Plan Policy Map represents this structure, showing New Jersey's five types of Planning Areas with Centers, Environs, Critical Environmental Sites (CES) and Cultural/Historic Sites (CHS), and such other planning designations as Nodes, Cores, and Neighborhoods (Figure 3-22).

FIGURE 3-22 State Plan Policy Map

Planning Areas

Planning Areas are geographic areas that “share a common set of conditions, such as population density, infrastructure systems, level of development or natural systems.” Each type of Planning Area has a set of unique Planning Objectives tailored to promote a balance of development, redevelopment, and conservation given the area's capacity and unique qualities. Following are brief descriptions of the five primary types.

Metropolitan Planning Area (PA1) includes communities ranging from urban centers to post-war suburbs. These have tangible ties to the major metropolitan centers of New York-Newark and Philadelphia-Camden-Trenton. Planning objectives in Metropolitan Areas include providing a majority of the state's future development (to include redesigning areas of sprawl), promoting compact growth, allowing for stabilization and revitalization of towns, and protecting community character. Metropolitan Planning areas make up 16 percent of New Jersey.

Suburban Planning Area (PA2) includes communities located adjacent to Metropolitan Areas. They are characterized by dispersed, low-density development. Planning objectives include providing for future redevelopment (to include redesigning areas of sprawl), promoting growth in Centers, protecting community character and natural resources, and reversing sprawl. Suburban Planning Areas make up 9 percent of New Jersey.

Fringe Planning Area (PA3) includes largely rural landscape with scattered communities that are relatively small. Many communities in the Fringe Planning Area are older and serve as seats of county government. Planning objectives include accommodating growth in (and limiting growth to) Centers, protecting natural resources and Environs, and providing a buffer between Metropolitan-Suburban and Rural-Environmentally Sensitive areas. Fringe Planning Areas make up 2 percent of New Jersey.

Rural Planning Area (PA4) includes large areas of New Jersey's cultivated or open countryside surrounding and including rural Centers. Planning objectives in the Rural Planning Area include protecting Environs and farmland, promoting the agricultural industry, and accommodating growth in (and limiting growth to) Centers. This planning area includes the Rural/Environmentally Sensitive

Planning Area (PA4B), or agricultural land with environmentally sensitive features. Rural Planning Areas make up 12 percent of New Jersey and Rural/Environmentally Sensitive Planning Areas make up an additional 8 percent.

Environmentally Sensitive Planning Area (PA5) includes contains large contiguous areas with important ecosystems, wildlife habitats, and other rare environmental resources. Planning objectives for Environmentally Sensitive Planning Areas include protecting environmental resources on contiguous areas and accommodating growth in Centers. This planning area also includes the **Environmentally Sensitive/Barrier Islands Planning Area (PA5B)**. The Environmentally Sensitive Planning Area makes up 12 percent of New Jersey and the Environmentally Sensitive/Barrier Islands Planning Area makes up 0.5 percent of New Jersey. The heritage area does not include barrier islands.

The State Plan describes two additional types of smaller planning sites, **Critical Environmental Sites (CES)** and **Historic/Cultural Sites (HCS)**. These are located throughout New Jersey rather than being characteristic of one type of Planning Area. Planning objectives for these include statewide policies that apply to historic, cultural, scenic and environmental resources and objectives included in the Environmentally Sensitive Planning Area (PA5).

Cores, Nodes, Centers, Environs

The State Plan also acknowledges the existence of **Cores** and **Nodes** as areas that require special planning objectives and policies that may differ from the Planning Area in which they are located. “Cores” are simply areas that have more intense development than the area around them, and “Nodes” are areas dedicated to a special use, such as agriculture or industry.

Centers are defined in the State Plan as “complex, richly textured living communities, where a physical framework of buildings, infrastructure and open spaces actively supports the economy and civil society.” A central goal of the State Plan is for Centers to serve as the location for future growth, development, and redevelopment in New Jersey. The State Plan outlines five types of Centers, each of which has three components: Boundaries, Core, and Neighborhoods. Centers are categorized as Urban Center, Regional Center, Town, Village, or Hamlet. State Plan policies for Centers include using capacity information to designate Centers, and to create new or maintain current Centers as livable and compact communities.

Environs are considered to be areas outside of Center boundaries and may consist of farmland, open space or forest. A main goal of the State Plan is to preserve Environs by promoting growth within Centers using such techniques as density transfers, conservation easements, and local development ordinances.

Monitoring and Evaluation

The State Plan outlines 33 indicators to measure its success. These key indicators monitor progress in the economy, environment, infrastructure, community life, and intergovernmental coordination.

Evaluation and revision of the State Plan occurs largely through Cross Acceptance, which is “a process of comparison of planning policies among governmental levels with the purpose of attaining compatibility between local, county and State plans. The process is designed to result in a written statement specifying areas of agreement or disagreement and areas requiring modification by parties to the Cross Acceptance.”²⁹ As of this writing, the Cross Acceptance process takes place every three years.

Of the 82 designated Centers in New Jersey, 36 are located within the Crossroads of the American Revolution National Heritage Area. Table XX lists these Centers according to their type and location.

Table XX Centers Named in the State Plan in the Crossroads of the American Revolution National Heritage Area

²⁹ N.J.S.A. 18A-202b

COUNTY	MUNICIPALITY	CENTER	TYPE**
Burlington	Beverly City, Delanco Twp,	Beverly-Delanco-Edgewater Park*	T
	Edgewater Park Twp		
	Burlington City	Burlington*	T
	Chesterfield Twp	Chesterfield	H
	Chesterfield Twp	Crosswicks	V
	Florence Twp	Florence-Roebling*	T
	Palmyra Boro, Riverton Boro,	Palmyra-Riverton-East Riverton*	T
	Cinnaminson Twp		
	Delran Twp, Riverside Boro	Riverside-Cambridge*	T
	Chesterfield Twp	Sykesville	H
	Chesterfield Twp	TDC Receiving Area	V
	Edgewater Park Twp, Willingboro Twp	Willingboro-Edgewater Park*	T
Camden	Camden	Camden	UC
	Gloucester City	Gloucester	T
Essex	Newark City	Newark	UC
Hunterdon	Flemington Boro	Flemington	T
Mercer	Hightstown Boro	Hightstown	T
	Hopewell Boro	Hopewell	V
	Princeton Boro, Princeton Twp	Princeton	RC
	Trenton City	Trenton	UC
Middlesex	Cranbury Twp	Cranbury	V
	East Brunswick Twp	Historic Old Bridge	V
	Franklin Twp, South Brunswick Twp	Kingston	V
	Metuchen Boro	Metuchen	T
	Milltown Boro	Milltown	T
	New Brunswick City	New Brunswick	UC
Monmouth	Allentown Boro	Allentown	V
	Englishtown Boro	Englishtown	V
	Freehold Boro	Freehold	T
Morris	Lincoln Park Boro	Lincoln Park	T
Somerset	Bound Brook Boro, South Bound Brook Boro	Bound Brook-South Bound Brook	T
	Bridgewater Twp, Raritan Boro,	Bridgewater-Raritan-Somerville	RC
	Somerville Boro		
	Manville Boro	Manville	T
	North Plainfield Boro	North Plainfield	T
	Rocky Hill Boro	Rocky Hill	V
	Warren Twp	Warren	T
	Watchung Boro	Watchung	V
Union	Elizabeth City	Elizabeth	UC

*Plan Endorsement **UC = Urban Center, RC = Regional Center, T=Town, V=Village, H=Hamlet

Source: State of New Jersey Department of Community Affairs, Office of Smart Growth
<http://www.nj.gov/dca/divisions/osg/plan/centers.html>

3.4.3 State Programs

A number of statewide programs and organizations in New Jersey advance goals and initiatives that affect the heritage area and its resources. This section describes those historic preservation and environmental agencies and organizations with the potential to affect the heritage area.

New Jersey Historic Preservation Programs and Priorities

Together, state agencies and statewide nonprofit organizations described below represent a comprehensive approach to preservation planning in New Jersey. The Historic Preservation Office (HPO) provides a *framework* for statewide preservation efforts through the New Jersey Historic Preservation Plan, maintenance of the New Jersey Register, oversight of regulatory review processes, leadership for special resource initiatives, and promotion of the Certified Local Government program. The New Jersey Historic Trust provides funding and support for projects to preserve the important *physical* structures and landscapes that serve as an important tangible, visual link to the history of New Jersey.

In a similar way, the New Jersey Historical Commission provides funding and support for individuals and organizations that promote the *study* and *knowledge* of the history of New Jersey. Main Street New Jersey cultivates the potential of historic preservation to serve as a catalyst for the *economic* development of New Jersey communities. Preservation New Jersey advocates for the physical, training, and economic aspects of preservation, while presenting opportunities for specific, strategic partnership projects with Crossroads.

The Crossroads of the American Revolution National Heritage Area will have a mutually beneficial relationship with each of these preservation planning organizations and programs. The heritage area currently benefits from such programs as special resource initiatives of the HPO, grants to Crossroads resources from the Historic Trust, and grants for American Revolution productions and publications from the Historical Commission. In the future, Crossroads Heritage Area can help set goals and priorities for projects and funding, as well as contribute resources to important projects that help preserve the physical framework and knowledge of the history of the American Revolution in New Jersey.

New Jersey Historic Preservation Office

The New Jersey Historic Preservation Office (HPO) is the state agency charged with the preservation and protection of historic and cultural resources throughout New Jersey. Since it became a formal part of state government in 1970, the HPO has been located within the New Jersey Department of Environmental Protection's Division of Parks and Forestry. Among its staff are historians, researchers, planners, architects, engineers and archeologists who work to identify, protect, preserve and sustain New Jersey's historic and cultural resources.

The HPO provides guidance and assistance for the survey, evaluation, and treatment of historic and cultural resources in New Jersey. The HPO publishes archeological and architectural survey guidelines and maintains lists of resources including the New Jersey and National Registers of Historic Places, the National Historic Landmarks list, and architectural and archeological survey results. The HPO is also developing a Cultural Resources Geographic Information System (CRGIS) to be available as a tool online. In addition to these general lists of resources, the HPO contributes to special resource initiatives. Through the Revolutionary War Initiative, the HPO provides assistance to the Crossroads of the American Revolution National Heritage Area and collaborated with the New Jersey Historic Trust to publish the 2006 report, *Washington-Rochambeau Revolutionary Route in the State of New Jersey, 1781-1783: An Historical and Architectural Survey*.

The HPO administers several procedures to review state and federal actions and other activities with the potential for affecting important resources identified throughout the state. These include Section 106 review under the National Historic Preservation Act Review, similar review under the New Jersey Register of Historic Places Act, and permitting programs within the Department of the Environmental Protection. Although these reviews take place at the national and state levels, the HPO promotes local stewardship as the most effective way to preserve historic resources.

The HPO promotes local stewardship is through the Certified Local Government Program (CLG). Through this federal program, created in 1980 by an amendment to the National Historic Preservation Act, municipalities can participate directly in state and federal preservation programs by fulfilling certain requirements. These include establishing a historic preservation ordinance and commission, undertaking a comprehensive survey of historic resources, and providing for public participation in local preservation efforts. Benefits of becoming a CLG include eligibility for grants through the state's Historic Preservation Fund (HPF) and receiving HPO training, education, and technical assistance. Of the 45 CLG's in New Jersey, 21 are located within the Crossroads Heritage Area (Table XX [found in an earlier section]).

Other HPO activities include outreach, education, and technical assistance through an annual conference, awards, and New Jersey's state historic preservation plan. The first state plan, completed in 1997, established goals and a framework for preservation in New Jersey, outlined HPO activities, and served as a guide for other planning documents at both the state and county levels.

The second state preservation plan, *New Jersey Partners for Preservation: A Blueprint for Building Historic Preservation into New Jersey's Future 2002 – 2007*, has been extended by the National Park Service to August 2010. This most recent plan looks beyond state and county agencies with the goal of informing all New Jersey citizens about how they can help achieve a vision of New Jersey as “a place where effective public policies and sustainable funding support public-private partnerships to identify, restore and use the state's rich historic inheritance for the benefit of future generations.” As of this writing, the HPO is undergoing a third planning process that will take cues from the challenges and changes of the past few years and, in conjunction with the New Jersey State Plan, enhance efforts not only to preserve New Jersey's important historic and archaeological resources, but also promote livable communities throughout the state.

New Jersey Historic Trust

The New Jersey Historic Trust (the Trust) seeks to preserve historic resources throughout New Jersey by providing financial support and technical assistance to preservation projects. The Trust is affiliated with the New Jersey Department of Community Affairs, is governed by a Board of Trustees, and has six full-time staff members. The stated mission of the Trust is to “advance historic preservation in New Jersey for the benefit of future generations through education, stewardship and financial investment programs that save our heritage and strengthen our communities.”

The Trust has four primary funding programs available to units of county and local governments and qualified nonprofit organizations, described in Table XX.

Table XX New Jersey Historic Trust Funding Programs

FUNDING PROGRAM	ELIGIBLE APPLICANTS	ELIGIBLE ACTIVITIES	LOAN/GRANT AMOUNTS
Garden State Historic Preservation Trust Fund	Agencies or entities of county or municipal government and nonprofit organizations	Preservation Planning (Historic Sites Management Grants) and Capital Projects (Capital Preservation Grants - construction, architectural, and engineering expenses)	Level I Grants: \$5,000 to \$50,000 Level II Grants: \$50,000 to \$750,000

FUNDING PROGRAM	ELIGIBLE APPLICANTS	ELIGIBLE ACTIVITIES	LOAN/GRANT AMOUNTS
Revolving Loan Fund	Agencies or entities of county or municipal government and nonprofit organizations	Preservation, improvement, restoration, rehabilitation, and acquisition of historic properties	Minimum loan amount: \$25,000 Maximum loan amount: No more than 15% of the Revolving Loan Fund balance as of July 1 of the current fiscal year
Emergency Grant and Loan Fund*	Agencies or entities of county or municipal government and nonprofit organizations	Emergency repair or stabilization, planning or research necessary to preserve an endangered property, acquisition of a historic property, and purchase of an option to acquire a historic property	Grants: \$1,000 to \$10,000 Low-interest Loans: \$1,000 to \$10,000
Cultural Trust Capital Preservation Grant Program	Organizations with a history or humanities mission that are qualified by the New Jersey Cultural Trust	Stabilization, repair, restoration, adaptive reuse and improvements to cultural or historic properties, including adapting for increased accessibility	From 2004-2009, grant amounts ranged from \$1,500 to \$50,000

*This program was suspended September 9, 2009 until the fund can be replenished.

SOURCE: New Jersey Historic Trust Funding Programs, <http://www.njht.org/dca/njht/programs/>, January 2010.

In addition, the Trust offers two programs for private home and business owners interested in preserving historic property. Both programs involve easements, or legal restrictions that protect property from inappropriate alteration or demolition. Through its New Jersey Legacies program, the Trust accepts charitable donations of real property, which are protected by preservation easements and sold to preservation-minded buyers. Through its Preservation Easement Program, the Trust accepts charitable donations of easements. Donors may realize significant tax advantages through both programs.

Between 1990 and 2009, approximately 45 historic sites that are considered Crossroads attractions or Crossroads resources received funding assistance from the New Jersey Historic Trust (Table XX).

Table XX Sites in the Crossroads of the American Revolution National Heritage Area Receiving New Jersey Historic Trust Funding, 1990-2009

COUNTY	HISTORIC SITE
Bergen	New Bridge Landing Park, The Hermitage, Van Allen House
Burlington	Batsto Village, Bishop-Irick Farmstead, Kirby's Mill, Peachfield
Camden	Pomona Hall
Gloucester	James and Ann Whitall House
Mercer	Bainbridge House, Brearley House, First Presbyterian Church of Trenton, Howell Living History Farm, Morven, Old Barracks, St. Michael's Episcopal Church Trenton, Thomas Clarke House, Trenton Friends Meeting House, William Trent House
Middlesex	Buccleuch Mansion, Cornelius Low House, Henry Guest House, Metlar/Knapp/Bodine House, Proprietary House

COUNTY	HISTORIC SITE
Monmouth	Allen House, Burrowes Mansion, Christ Episcopal Church Shrewsbury, Monmouth Battlefield State Park, Seabrook-Wilson House, St. Peter's Episcopal Church, Marlpit Hall, Walnford State Historic Site
Morris	Ford-Faesch Manor House, Friends Meeting House, Henry Doremus House
Passaic	Dey Mansion, Long Pond Ironworks
Somerset	Abraham Staats House, Jacobus Vanderveer House
Union	Caldwell Parsonage, Clark House/Dr. William Robinson Plantation, First Presbyterian Church Elizabeth, Liberty Hall, Merchants and Drovers Tavern, Nathaniel Drake House

Source: <http://www.njht.org/dca/njht/funded/>, January 2010

The New Jersey Historic Trust also coordinates with New Jersey's Heritage Tourism Task Force. The Task Force was established by the legislature and charged with conducting inventories of historic sites, establishing signage and marker programs, promoting coordination of historic sites, promoting heritage tourism at all levels of government and identifying stable sources of funding for historic sites and heritage tourism. The New Jersey Heritage Tourism Task Force is in the process of completing a state heritage tourism plan that is being included in the heritage area planning process.

New Jersey Historical Commission

The New Jersey Historical Commission, located within the Department of State, is the state agency charged with the task of preserving New Jersey history. The stated mission of the Historical Commission is to "enrich the lives of the public by preserving the historical record and advancing interest in and awareness of New Jersey's past." The Historical Commission accomplishes this mission through a variety of activities, including funding programs, media projects, and publications.

The Historical Commission's grant funding programs are provided by legislative appropriation and include General Operating Support Grants, Projects, Mini-Grants, and Prizes. These programs are summarized in the table below. In addition to these grants, awards, and prizes, the Historical Commission accepts applications for the Caucus Archival Projects Evaluation Service (CAPES). This service provides professional assessment of historical collections of paper items. Applications for this program are accepted on an ongoing basis from New Jersey archives, libraries and historical societies.

TABLE XX Funding Programs of the New Jersey Historical Commission

FUNDING PROGRAM	ELIGIBLE APPLICANTS	ELIGIBLE ACTIVITIES	GRANT/FUNDING AMOUNTS
General Operating Support Program (funded on 2-year operating support schedule)	Organizations, including historical organizations, museums, historic sites, archives, libraries, and similar organizations with collections or programming relating to New Jersey history	General operating activities	Budgets under \$30,000: \$5,000 to \$10,000 Budgets over \$30,000: Up to 33% of non-state operating income for current fiscal year
Project Grants (funded on an annual basis)	Individuals and organizations	Conservation of historical materials (manuscripts, books, costumes, historical visuals); Editorial and publication projects; Educational initiatives; Exhibitions; Media (films, radio, videotape, digital media); Public programs; Research (archeological projects, fellowships, oral history, National and New Jersey register nominations)	\$3,000 to \$20,000
Mini-Grants (applications reviewed four times per year)	Individuals and organizations	Activities similar to those funded by Project Grants, but of a smaller nature	Up to \$3,000
Prizes			
Mildred Barry Garvin Prize (awarded annually)	New Jersey teachers, guidance counselors, and school librarians	Outstanding teaching of black American history or related activity	\$1,500
Alfred E. Driscoll Prize (awarded every other year, in even years)	Authors of doctoral dissertations	Outstanding doctoral dissertation	\$1,500
Richard P. McCormick Prize (awarded every other year, in odd years)	Authors of scholarly work	Outstanding scholarly work	\$1,500

SOURCE: New Jersey Historical Commission Grants and Prizes Programs at a Glance, <http://www.state.nj.us/state/divisions/historical/grants/>, January 2010.

The Historical Commission's many media projects and publications help to further the Commission's mission and reach New Jersey residents of all ages. Several are designed to be integrated into New Jersey educational curriculum. Two history video series produced with NJN Public Television are intended for school-age children and young adults: *Around and About New Jersey*, a series of 10- to 15-minute videos for grades K-4, and *New Jersey Legacy*, a video series for middle and high school students. Other radio and video documentary programs explore folk life and historical figures and are produced for a broader audience.

Publications of the Historical Commission include *New Jersey Gazette*, an online newspaper; print publications, including New Jersey History Series, Ethnicity History Pamphlet Series, and projects with Rutgers University; and Digital Publications, including several outstanding pamphlet series on the history

of New Jersey and the American Revolution. In addition, in fall of 2009, the Historical Commission, in association with Rutgers University Libraries, Rutgers University Press, Kean University, the New Jersey Historical Society, and New Jersey Digital Highway, re-launched *New Jersey History*, an online scholarly journal.

Main Street New Jersey

Main Street New Jersey, a program of the State of New Jersey Department of Community Affairs Office of Smart Growth, was established in 1989 to promote revitalization of downtown traditional business districts throughout the state. There are a total of 26 Main Street New Jersey communities in the state; nine are within the Crossroads Heritage Area (Table XX [found in earlier section]).

Any municipality may apply to become a Main Street Community, providing that they meet the requirements of having a market population between 4,000 and 50,000 people, commitment to employ a full-time executive director for a minimum of four years, and a defined downtown commercial district with ample historic resources. Main Street New Jersey communities receive extensive training and services that help each organization create a visually appealing and economically vibrant downtown area.

Main Street New Jersey implements a four-point approach to revitalization that is based on a similar approach developed by the National Trust for Historic Preservation's Main Street Center³⁰:

Organization: Build a strong organization with support from local residents, merchants, property owners, civic groups, bankers, public officials, and chambers of commerce, in order to sustain the program over the long term.

Economic Restructuring: Analyze current market forces as a baseline from which to design long-term goals and solutions that may include recruiting new businesses, adaptively re-using vacant space, and encouraging growth of entrepreneurial businesses.

Design: Enhance the visual appearance and functionality of aspects of the built environment and streetscape, including rehabilitating historic buildings, street cleaning, traffic calming, and landscaping and lighting.

Promotion: Market the downtown area to shoppers, investors, residents, and visitors.

Using this approach, Main Street New Jersey communities have had significant positive economic impact throughout New Jersey. Results of Main Street New Jersey initiatives have included the creation or expansion of 1,715 businesses; 7,655 new jobs; 4,821 building improvement projects. The state's return on investment is calculated at \$261 yielded for every dollar spent.³¹

Preservation New Jersey

Preservation New Jersey (PNJ), founded in 1978, is a nonprofit membership-supported historic preservation organization with a mission to "advocate for and promote historic preservation as a sustainable strategy to protect and enhance the vitality and heritage of New Jersey's richly diverse communities." Preservation New Jersey accomplishes this mission through the implementation of six primary programs:

³⁰ State of New Jersey Department of Community Affairs: Main Street New Jersey, "The Four Point Approach," <http://www.state.nj.us/dca/divisions/osg/programs/msnj.html>, accessed January 2010.

³¹ State of New Jersey Department of Community Affairs: Main Street New Jersey, "Main Street New Jersey Towns and Impacts," <http://www.state.nj.us/dca/divisions/osg/programs/towns.html>, accessed January 2010.

- **Ten Most Endangered Historic Sites** is an annual list of ten historic sites in New Jersey facing significant and imminent threat. The list increases local and regional media attention on pressing preservation issues. Princeton Battlefield and Liberty Hall Landscape were on the 2009 list.
- **Heritage Partnership of New Jersey** addresses the need for protection of historic and cultural resources that exist on publicly preserved open space and farmland. Through this program, various state and local agencies and nonprofit organizations develop solutions to encourage effective stewardship of historic resources on public land.
- **Heritage Partnership Leasing Toolkit** provides guidance to local government entities or nonprofit organizations considering a role as a steward of a historic site on public land.
- **Commission Assistance and Mentoring Program (CAMP)** is an annual one-day workshop for commissioners, staff, and officials involved with municipal historic preservation.
- **Preservation Round Tables** are meetings facilitated by PNJ that assemble representatives of diverse regions and entities across the state to create networks and to share information and techniques to find solutions to preservation concerns in New Jersey.
- **PNJ Easement** is a program through which PNJ accepts voluntary donations of preservation easements in order to ensure that a historic property is protected over the long term, even when transferred to subsequent owners.

Preservation New Jersey's Strategic Plan (2007) outlines two goals that can reinforce the Crossroads Heritage Area. First, PNJ prioritizes the promotion of historic preservation as key to sustainability and economic vitality that benefit open space and urban centers. PNJ proposes to achieve this goal, in part, by partnering with Crossroads to promote urban areas within the heritage area. Secondly, PNJ hopes to promote preservation as key to economic growth by developing two PNJ tour programs each year with local and state partners. Two proposed tours are an American Revolution Tour and a Rural Open Space Tour, both in partnership with Crossroads. PNJ and Crossroads both focus on urban areas and economic development as primary goals. A partnership between the two organizations will be key to planning and promoting Crossroads.

New Jersey Conservation Programs and Priorities

A number of national, state and local programs conserve natural resources in the Crossroads Heritage Area. Over many years, New Jersey has seen significant investment in the conservation of open space, farmland, recreational lands and wildlife habitat, and watershed lands. Both public and private programs tackle stewardship issues in New Jersey, and the state is especially respected nationwide for its longstanding land conservation efforts, protecting land permanently through both acquisitions and easements. The Green Acres and farmland protection programs have seen billions in investment. The New Jersey Conservation Foundation is one of the nation's oldest land trusts. And local environmental commissions have been at work for as much as forty years in some communities. Such work is impelled by the widespread awareness across the state of the intensity of development New Jersey has experienced and continues to face, and the potential adverse impacts of development on the natural environment and community quality of life. One of the nation's smallest states in terms of land area, New Jersey is the tenth most populous and continues to grow at a more rapid rate than nearly every other state.

New Jersey's Green Acres, Blue Acres, Farmland, and Historic Preservation

The Garden State Preservation Trust (GSPT) is the financing authority that provides state funds to preserve forests and meadows, watersheds and wildlife habitats, parks and sports fields, working farms, agricultural landscapes, and historic structures. Since 1961, New Jersey voters have approved thirteen bond issues to preserve land. In 1998, voters approved a constitutional dedication of \$98 million per year from the state sales tax, and in 2007 and 2009 voters approved bond acts of \$200 million and \$400 million. The trust leverages these funds by issuing bonds (Figure XX - State investment in land protection). According to the GSPT's mission statement,

New Jersey is tenth in population but with only 7,400 square miles it is the fifth smallest state in land area. This means the Garden State is the most densely populated state and faces a tremendous challenge to contain sprawl, preserve a good quality of life and maintain a viable agricultural industry. Development is consuming our remaining open land, changing our communities, and placing our historic sites in jeopardy.... This mission has never been more crucial, difficult or expensive as real estate costs escalate daily and landowners face mounting pressures. Preserving land is a challenge in planning and a challenge in public finance that is the responsibility of all New Jerseyans.... Prudent planning and ambitious financing will provide \$2 billion for land preservation and \$60 million for historic sites over 10 years – more than in the previous four decades combined. Today, New Jersey has the largest preservation program in the nation for a geographic area of this size.... using GSPT funds to preserve acreage two or three times faster than land is being lost to development.”³²

Three agencies administer GSPT funds:

- The Department of Environmental Protection (NJDEP), which operates the Green Acres Program to preserve natural lands and recreational parks and the Blue Acres Program, recently revived to acquire flood-prone private property in the Delaware, Raritan and Passaic rivers' watersheds;
- The independent State Agriculture Development Committee, which acquires development rights on privately owned farmland; and
- The independent New Jersey Historic Trust, which provides matching grants to save important historic buildings.

Priorities for the Green Acres Program

The Green Acres Program, part of the New Jersey Department of Environmental Protection, was created in 1961 to preserve and enhance New Jersey's natural environment through the protection of open space. With public and private partners, the program has protected almost 640,000 acres of open space. Serving as the DEP's "real estate agent," Green Acres works with the Division of Parks and Forestry, the Division of Fish and Wildlife, and the New Jersey Natural Lands Trust to determine which lands should be preserved. Once acquired, these lands are assigned to DEP divisions for management.

In addition to acquiring land itself, Green Acres provides financial assistance – low interest loans and grants – to municipal and county governments seeking to acquire open space or develop outdoor recreation facilities. The program also provides matching grants to nonprofit organizations acquiring land for the purpose of public recreation and conservation.

Finally, the Program's Bureau of Planning and Information Management assists in the preservation of open space by administering the federal Land and Water Conservation Fund monies for the preservation of open space and development of recreational facilities. The Bureau also prepares the state Open Space and Recreation Plan, which guides the allocation of federal and state funds for land preservation, and

³² Garden State Preservation Trust website, http://www.nj.gov/gspt/pdf/gspt_handout.pdf, accessed April 2010.

provides land planning assistance to guide municipal, county, nonprofit and state open space acquisition.³³

The Crossroads of the American Revolution National Heritage Area is one of 19 project areas designated for state acquisition under the Green Acres program. Other project areas located within the heritage area also offer opportunities for land conservation (Table XX).

Table XX Green Acres Priority Areas in the Crossroads Heritage Area

NAME	DESCRIPTION
Capitol to the Coast	When completed this project will create a continuous greenway from the State Capitol in Trenton to the Atlantic coast across Central New Jersey. Lands will be acquired to connect an existing trail from Manasquan through Allaire State Park to the Manasquan River Reservoir - managed for recreational use by the Monmouth County Park System - in Howell Township, to Turkey Swamp County Park and the Turkey Swamp Wildlife Management Area in Freehold Township. As envisioned the greenway will continue west through the state's Assunpink Wildlife Management Area in Millstone and Upper Freehold Townships, Monmouth County and Washington Township, Mercer County, to Mercer County Park in West Windsor Township, Mercer County, connecting to the state's Delaware & Raritan Canal State Park which leads into the historic City of Trenton. Green Acres hopes to be able to offer hikers, cyclists, horseback riders, and nature enthusiasts this opportunity to experience central New Jersey's gently rolling countryside through partnerships with local governments, conservation and community groups and local citizens.
Crossroads of the American Revolution	More Revolutionary War battles took place in New Jersey than in any other state. Remarkably, many vestiges of the Revolutionary War era still remain - mines, mills, soldier's footpaths, revolutionary leaders' homes, encampment sites, battlegrounds, and barracks. Many of these sites are already preserved in public ownership; many more can still be preserved. What is even more remarkable, though, is that much of the landscape over which Washington's army crossed on route from battle to battle is still open land. The basis of this project is to preserve land - through a variety of methods and with a variety of partners - that will help interpret New Jersey's role in the American Revolution.
Delaware and Raritan Canal Greenway	The Delaware and Raritan Canal State Park is a designated national recreation trail. It serves as a link between rolling countryside of the Piedmont and Inner Coastal Plain geologic provinces and urban areas. The park, as it exists now, is a relatively narrow strip along its 70 mile length. Green Acres and its preservation partners would like to widen the park and provide greater protection to neighboring resources. One of the major project initiatives is connecting the Delaware and Raritan Canal Greenway into a system of existing and planned greenways within the region.
Delaware River Greenway	Many consider the Delaware River Valley to be one of the most scenic areas of the Mid-Atlantic states. A trip down the 115 miles of river along New Jersey's western border would reveal dramatic palisades at the Delaware Water Gap, the steep rise of the Kittatinny Mountains, forested islands, rolling valleys, towns, historic villages, and farms. The Delaware River also serves as a section of a major flyway for migratory birds. The amount of access varies throughout the length of the river, but remarkably, the vast majority of the New Jersey land along its length is only sparsely developed and retains its scenic quality. Efforts are underway to secure greater public access, broaden the width of public holdings within its corridor, and protect the scenic and historic resources of the Delaware River and its tributaries.

³³ The Green Acres Program, NJ Department of Environmental Protection. Accessed online October 13, 2009, at <http://www.nj.gov/dep/greenacres/>

NAME		DESCRIPTION
Raritan Greenway	River	Portions of Hunterdon, Morris and Somerset counties are located within the Raritan basin watershed, a suburban area of the state that is faced with increasing residential development pressure. Green Acres will pursue land preservation efforts in the Raritan River watershed to protect areas of natural diversity and historic resource value, including the Sourlands Mountains, the largest contiguous wooded area in central New Jersey. Other parcels of open space also will be preserved, creating a greenway network connecting existing and future public open space and recreation areas throughout central New Jersey.

(NOTE: New Jersey's Highlands and Pinelands regions are also project areas that overlap the heritage area to a limited degree.)

Source: <http://www.nj.gov/dep/greenacres/currentstate.html>, accessed April 2010.

Garden State Greenways

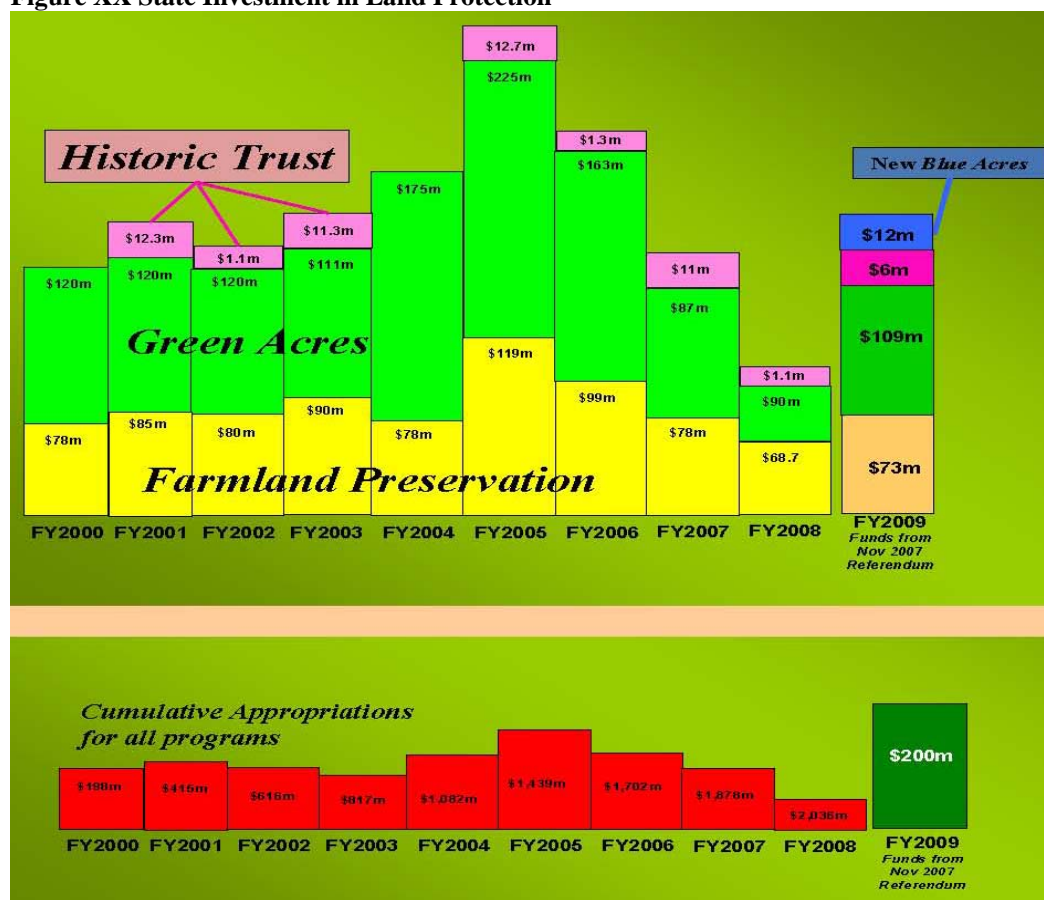
A collaboration among the New Jersey Conservation Foundation, NJDEP's Green Acres Program, and the Center for Remote Sensing and Spatial Analysis (CRSSA) at Rutgers, Garden State Greenways (GSG) is committed to the creation of an interconnected system of open space in New Jersey. It provides a statewide vision, suggested goals, detailed maps, and planning tools to help coordinate efforts of private groups and government agencies. It is primarily an online planning tool for all those involved in conserving open space, farmland, and historic areas. In order to facilitate the creation of a network of greenways, Garden GSG maintains a geographic information systems (GIS) database containing property and resources data to easily identify lands to be preserved. The maps generated with these GIS data serve as a valuable tool for open space planning and allow for better coordination across governments and agencies on local, county, regional, and statewide levels. The web-based program identifies large areas of undeveloped land with important natural resource values and then looks for potential connectors to link these hubs and create an open space network.³⁴

New Jersey Wildlife Action Plan, NJ Division of Fish and Wildlife

Developed by the New Jersey Division of Fish and Wildlife, along with the general public, several state conservation groups and other stakeholders, the New Jersey Wildlife Action Plan serves as a "blueprint

³⁴ Garden State Greenways, <http://www.gardenstategreenways.org/>, accessed April 2010.

Figure XX State Investment in Land Protection



SOURCE: <http://www.nj.gov/gsp/pdf/GSPT%20Conservation%20Appropriations%20Handout.pdf>

for the future conservation of [the] state's species of greatest conservation need."³⁵ Taking a more targeted approach than some of the organizations dedicated to preserving open space, the Wildlife Action Plan specifically identifies Species of Greatest Conservation Need (SGCN), which includes species with state or federal status and those whose populations are declining and may become threatened or endangered in the future. The plan identifies the distribution and abundance of the species, its location and the condition of key habitats essential to the SGCN. After identifying the threats to the SGCN, the plan describes the conservation actions required to conserve the species and its habitat and outlines a monitoring plan for the SGCN, its habitat and the proposed conservation action.³⁶ By establishing a comprehensive conservation vision as well as developing specific long- and short-term management actions, the Division of Fish and Wildlife aims to minimize the threats to and improve habitat quality for New Jersey's SGCN.

New Jersey's Environmental Infrastructure Financing Program

NJDEP's Environmental Infrastructure Financing Program – the state's name for funds supported through the federal Clean Water Act and New Jersey's match – provides low interest loans to eligible projects that will address water quality problems and water and sewage infrastructure needs. A wide range of nonpoint

³⁵ New Jersey Division of Fish and Wildlife. Accessed online March 17, 2010, at <http://www.state.nj.us/dep/fgw/ensp/waphome.htm>

³⁶ New Jersey Division of Fish and Wildlife. 2008. New Jersey Wildlife Action Plan: 01/23/08. Accessed online March 17, 2010, at <http://www.state.nj.us/dep/fgw/ensp/waphome.htm>

source controls and stormwater management activities are eligible for funding under this program. The Financing Program allocates a minimum of \$10 million dollars annually to finance stormwater and nonpoint source projects sponsored by local government units. Financing is provided from two sources, the New Jersey Department of Environmental Protection and the New Jersey Environmental Infrastructure Trust. The NJDEP traditionally provides loans at 0% interest for approximately 20 years for up to one-half the allowable project costs. The NJEIT offers loans at about the market rate or less for the remaining allowable project costs, also for a 20-year term. Between these two funding sources, the rate on the loans is essentially half the market rate. Approximately \$100 to \$200 million is available per year. To promote Smart Growth initiatives, the program offers even more advantageous financing to projects that serve Urban Centers/Complexes, combined sewer overflow abatement projects, and open space land acquisition projects, boosting the share of project costs are funded at 0% interest to 75 percent, with the remainder funded at market rate. Other areas suitable for development may also be added to the Smart Growth Financing Package as time goes on.³⁷

3.4.4 Regional Water Supplies

The New Jersey Water Supply Authority's began a source water protection program in 1999 for the watersheds that the Authority relies upon for its water supply, in the basins of the Raritan and Manasquan rivers, and the Delaware & Raritan Canal and its tributaries. These activities are funded by a dedicated component of the regulated rate the authority charges customers for its water. "This [program] allows the Authority to leverage these dollars to attract matching sources of state and federal funds."³⁸ To date, the Authority and its partners have participated in the preservation of more than 2,500 acres of critical watershed property, valued at more than \$53,000,000. In addition, the Authority holds conservation easements on 316 acres, valued at nearly \$2,600,000. Through this program, the Raritan Basin Watershed Alliance was formed to protect the water resources within the Basin.³⁹ More than 30 different entities have partnered with the Authority for cost sharing and management responsibilities on preserved parcels.⁴⁰ Municipal partners in the heritage area that have cooperated with this program thus far are Delaware and Franklin townships in Hunterdon County; Mendham in Morris County; and Bedminster in Somerset County.

3.4.5 Regional Resource Conservation & Development Councils

The Resource Conservation and Development Program (RC&D) of the U. S. Department of Agriculture's Natural Resources Conservation Service was initiated in 1962 to deliver resource conservation and rural development assistance through coordination among communities, various units of government – including Soil and Water Conservation Districts – and grassroots organizations. The two authorized RC&D areas in New Jersey – serving the state's less-developed counties – are among 277 serving 2,016 counties in about half of the United States, the Caribbean, and the Pacific Basin. RC&D program activities include land conservation along with community development, water management, and environmental enhancement. Some RC&D's across the country have operated or supported easement programs.

The North Jersey RC&D has recently received grants to begin a feasibility study and develop a business plan for open space management in the six counties it serves, including Hunterdon, Morris, Somerset, and Union in the heritage area (Warren and Sussex to the north and west in the Highlands are also part of the

³⁷ New Jersey Environmental Infrastructure Trust, <http://www.njeit.org/>, accessed April 2010.

³⁸ http://www.raritanbasin.org/about_us.html, accessed April 2010.

³⁹ New Jersey Water Supply Authority. Accessed online March 24, 2010, at <http://www.raritanbasin.org/>

⁴⁰ <http://www.raritanbasin.org/Projects/acquisition/about.html>, accessed April 2010.

NJRC&D). This program will provide a “framework for communities to achieve enduring protection of open space for future generations.” It is built around the recognition that simply acquiring land is not enough to maximize its protection and benefits. The program offers a comprehensive package of services to municipal governments addressing such topics as renewable energy production, local food systems, outdoor recreation, wildlife habitat, threatened and endangered species protection, local culture, invasive species management, water quality enhancements, and stormwater management.⁴¹ The South Jersey RC&D serves Burlington, Camden, Gloucester, Mercer, Middlesex, and Monmouth counties in the heritage area (also Atlantic, Cape May, Cumberland, Ocean, Salem). While it has not undertaken land protection projects directly, it operates a popular “South Jersey Tour des Farms” annual autumn bicycle tour; 2009 was the event’s third year.⁴²

3.4.6 Nonprofit Leadership

There is a host of large, active land trusts and land conservation organizations in New Jersey. Following is a description of the largest; more regional and local land trusts also exist throughout the state. Additional groups, such as Friends of the Marsh, a project of the D&R Greenway Land Trust intended to raise awareness of the Hamilton-Trenton Marsh, operate on a local level to protect water-related natural resources in their communities. The educational and stewardship activities that these organizations carry out are critical to the long-term health of New Jersey’s natural and water resources.

Conservation Resources, Inc.

Conservation Resources Inc. (CRI) is a nonprofit organization providing financial and technical services to the conservation community in New Jersey. Since 2003, the organization has provided more than \$53 million in financial assistance to more than 50 conservation organizations. CRI works as a conservation intermediary by featuring and marketing New Jersey’s exemplary land conservation and stewardship projects in The Conservation Exchange ©, providing a means for philanthropic individuals, foundations, and corporations to efficiently spend charitable capital on conservation projects. Many of the featured projects also meet the strict criteria for regulatory contributions from penalty settlements, natural resource damage (NRD) claims, or supplemental environmental projects. CRI also provides consulting services to government agencies involved in conservation and land use matters as well as to landowners who are interested in land conservation.⁴³

D&R Greenway Land Trust

The D&R Greenway Land Trust is central New Jersey’s nonprofit land preservation organization, founded in 1989 by the Stony Brook-Millstone Watershed Association, Friends of Princeton Open Space, Regional Planning Partnership, and the Delaware & Raritan Canal Commission. The organization permanently preserves watershed lands and large-scale landscapes to prevent the loss of open space to development. Since its first nonprofit acquisition using Green Acres funds in 1992, the organization has gone on to preserve 224 properties and more than 14,000 acres, including a conservation easement on nearly 600 acres of Institute for Advance Study lands adjoining Princeton Battlefield State Park . Originally named Delaware & Raritan Greenway, the organization changed its name in 2004 to better reflect its role as a land trust, and to account for the expansion of its work beyond the Delaware & Raritan Canal to more than 1,500 square miles. Its territory comprises the Delaware, Raritan and Millstone River watersheds and the Delaware & Raritan Canal. This includes Mercer, Hunterdon, Somerset, Middlesex,

⁴¹ <http://www.northjerseyrcd.org/>, accessed April 2010.

⁴² www.sjrkd.org, accessed April 2010

⁴³ Conservation Resources, Inc., website, <http://www.conservationresourcesinc.org/index.php>, accessed April 2010.

Burlington and Monmouth counties and more recently, preservation of farmlands in Salem County in the area of Mannington Meadows.⁴⁴

The Land Conservancy of New Jersey

The Land Conservancy of New Jersey is committed to preserving 26,000 acres of open space over the next decade. Of particular preservation importance is the Highlands, which includes the northern portion of the Crossroads Heritage Area. Currently, the Land Conservancy is working on projects in Morris, Sussex, Warren, Passaic, Bergen, Hunterdon, and Somerset Counties. In addition to the Highlands, the Conservancy is focusing its efforts on “land critical to protect clean drinking water, diverse plant and wildlife habitat, scenic and historic farmland and woodlands, and important recreation areas throughout northern New Jersey.”⁴⁵

To this end, the Land Conservancy performs numerous functions to assist communities, organizations, and private individuals in their conservation efforts. These include

- Landowner outreach and negotiations;
- Grant writing;
- Open space planning;
- Farmland preservation planning;
- Trail and greenway plans;
- Open space and greenway mapping;
- Conservation easement and stewardship;
- Landowner education workshops; and
- Land acquisition assistance.

The Nature Conservancy in New Jersey

New Jersey’s chapter of The Nature Conservancy has protected more than 56,000 acres since 1955. The first project preserved 500 acres of one of New Jersey’s last old growth forests at Hutcheson Memorial Forest in Somerset County. The chapter focuses on three program areas, all outside the heritage area (Skylands, territory in the northernmost part of the state and outside the heritage area; the Pine Barrens; and the shoreline region along Delaware Bay). However, the organization remains available throughout the state to address species and natural communities at risk.⁴⁶

New Jersey Audubon Society

The New Jersey Audubon Society’s Important Bird and Birding Areas Program works “with multiple partners and stakeholders to integrate sites into existing conservation initiatives and programs, including landowner incentive grants, acquisition funding and land use regulations, to further develop mechanisms for site protection.” The organization has also “initiated citizen science monitoring procedures on and use the resulting data to maintain current site-specific avian and habitat data, monitoring the progress of the program and changes in bird populations.”⁴⁷

New Jersey Conservation Foundation

The New Jersey Conservation Foundation (NJCF) protects threatened state natural areas and farmland through land acquisition and stewardship. Since 1960, the foundation has preserved more than 100,000

⁴⁴ D&R Greenway Land Trust website, <http://www.drgreenway.org/missionhistory.html>, accessed June 2010.

⁴⁵ The Land Conservancy of New Jersey. Accessed online October 13, 2009, at <http://www.tlc-nj.org/index.html>.

⁴⁶ The Nature Conservancy, <http://www.nature.org/wherewework/northamerica/states/newjersey/>, accessed June 2010.

⁴⁷ New Jersey Audubon Society, <http://www.njaudubon.org/SectionIBBA/IBBAGoalsProcess.aspx>, accessed April 2010.

acres from the Highlands to the Pine Barrens. These areas are managed by the NJCF stewardship staff to enhance biological diversity and restore habitat. The NJCF also forges partnerships with local governments and other organizations to identify and preserve critical habitats, as well as promotes public policies aimed at combating sprawl and increasing natural resources conservation. This work has been facilitated by the Garden State Greenways open space planning tools.

Within the Crossroads Heritage Area, the foundation owns the Wickecheoke Creek Preserve and has partnered with local agencies and organizations to protect and preserve critical natural resources in Union, Somerset, Hunterdon, Camden and Gloucester Counties. These partnerships include restoration and preservation projects in the Mantua Creek and Big Timber Creek watersheds, the Camden Greenway, Sourlands/Hopewell Valley, Delaware Bluffs, Wickecheoke Creek Preserve, Black River Greenway, and the Arthur Kill watershed.

The Trust for Public Land, New Jersey

A national, nonprofit organization, the Trust for Public Land is committed to conserving “land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come.”⁴⁸ In New Jersey, this has meant protecting more than 24,000 acres since 1972. Much of this work has occurred north and west of the Heritage Area in New York and New Jersey Highlands.

Within the Heritage Area, the trust has initiated the Harbor Estuaries Program, which focuses on the estuaries that connect New Jersey and New York. The Harbor Estuaries Program is dedicated to “protecting underdeveloped land in densely populated communities where open space is scarce and past industrial use has limited the public’s access to the estuary and its tributaries.”⁴⁹ After starting work in this area in the 1980s and having completed a parcel-by-parcel analysis of the region, the Trust for Public Land is now focused on acquiring critical properties and supporting local efforts to reclaim rivers and protect natural lands.

Upper Raritan Watershed Association

The Upper Raritan Watershed comprises a region of 194 square miles and 23 municipalities centered on the North Branch of the Raritan River and its tributaries in Hunterdon, Somerset, and Morris counties; most of its territory is in the heritage area. The watershed offers areas of natural beauty, wildlife habitat, agriculture, and historic and cultural resources, and provides clean drinking water for millions of New Jersey residents. The Upper Raritan Watershed Association (URWA) is a nonprofit organization formed in 1959 to protect and preserve critical habitat and the natural resources of the region, working through education, advocacy, land preservation and stewardship. Its programs include a natural science program for children. The URWA owns and manages 11 properties totaling approximately 400 acres and holds 32 easements on more than 657 acres. It has a GIS program to track its Environmental Resource Inventory to “strategically identify the most critical natural resources for protection.”⁵⁰

3.4.7 Special Planning Regions

New Jersey has two special planning regions that have been created by the state legislature to address regions with unique environmental characteristics and resources, the New Jersey Highlands Regions and the Pinelands National Reserve. Although these share relatively little geographic land area with Crossroads, the three entities have many goals and objectives in common. The Highlands Region and Pinelands Reserve both work to preserve natural and cultural resources through such innovative strategies

⁴⁸ The Trust for Public Land. Accessed online March 17, 2010, at <http://www.tpl.org/>

⁴⁹ The Trust for Public Land. Accessed online March 17, 2010, at <http://www.tpl.org/>

⁵⁰ Upper Raritan Watershed Association, <http://www.urwa.org/land/land.html>, accessed June 2010.

as transfer of development rights or credits. Both regions have plans that outline special planning areas that Crossroads could acknowledge in its implementation strategies to enhance resource protection on a regional scale.

New Jersey Highlands Region and Highlands Council

The New Jersey Highlands Region (Highlands Region) is an 800,000-acre special resource area in northwestern New Jersey. The Highlands Region in New Jersey is shown on the Crossroads Context Map and Protected Lands map, Figures 3-2 and 3-3. Part of a larger geophysical region stretching from Pennsylvania to Connecticut and providing an open space and natural resource complement to the densely developed areas from Philadelphia to New York City, the New Jersey Highlands Region is a critical source of drinking water for more than five million New Jersey residents. In addition, the Highlands Region is an area rich with recreational, natural, scenic, historic and open space resources. In 2004, the New Jersey Legislature passed the Highlands Water Protection and Planning Act (Highlands Act) to preserve these resources and promote economic growth in this region. The Highlands Act created the Highlands Water Protection and Planning Council (Highlands Council), a body that wrote the Highlands Regional Master Plan (Highlands Plan) and oversees Plan Conformance.

The Highlands Regional Master Plan, approved in July 2008, is intended to restore, enhance, and protect the significant natural and cultural resources of the Highlands Region. The plan creates two categories of land within the Highlands Region: Preservation Area and Planning Area. The Preservation Area is about 415,000 acres in size and includes all or part of 52 municipalities and seven counties. The Preservation Area includes the most critical natural resources in the region, and municipal and county conformance with the Highlands Plan is required in this area. The Planning Area is 445,000 acres in size and includes all or part of 83 municipalities. This larger Planning Area includes important natural resources, but municipal and county conformance with the Highlands Plan is voluntary in this area. To achieve the goals set forth in the Highlands Act and the Highlands Regional Master Plan, the Highlands Council carries out administrative, funding, and technical assistance aspects of the Highlands Plan, conducts project review, and works to improve and update the Highlands Plan.

All or part of 20 municipalities and two counties of the Crossroads Heritage Area are within the Highlands Region (Table XX). The Heritage Area includes 211,114 acres of land in the Highlands Region; 35,786 acres are in the Preservation Area, and 175,328 acres are in the Planning Area.

TABLE XX Crossroads Jurisdictions in the Highlands Region

COUNTY	MUNICIPALITY
Morris	Boonton Town
	Boonton Township
	Butler Borough
	Denville Township
	Dover Town
	Hanover Township
	Harding Township
	Kinnelon Borough
	Mendham Borough
	Mendham Township
	Mine Hill Township
	Montville Township
	Morris Township
	Morris Plains Borough
Somerset	Morristown Town
	Mountain Lakes Borough
	Parsippany-Troy Hills Township
	Pequannock Township
	Randolph Township
	Riverdale Borough
	Rockaway Borough
	Rockaway Township
	Victory Gardens Borough
	Wharton Borough
	Bedminster Township
	Bernards Township
	Bernardsville Borough
	Far Hills Borough
	Peapack Gladstone Borough

Source: Highlands Water Protection and Planning Council and JMA, Inc. for Crossroads of the American Revolution Association, 2010.

Within this area, the following Highlands Plan goals, initiatives, policies and programs related to open space preservation and cultural resource protection apply to the Crossroads Heritage Area.

The Highlands Plan encourages preservation of open space resources in order to protect ecosystem function, preserve drinking water resources, and provide recreational lands. The Highlands Plan recommends that open space preservation should occur through identification and maintenance of an inventory of open space and preserved land, coordinating and implementing strategies for land preservation and stewardship among preservation partners, and ensuring that financial, institutional, and innovative resources are available for open space preservation. Under the Highlands Plan, open space preservation occurs through compensation to landowners through fee simple or easement acquisition, donations, bequests, and a program for the transfer of development rights from land designated for preservation to land designated for development.

The Highlands Plan encourages protection of cultural (historic, archeological, scenic) resources because they define the character of the region, they help attract people to the region, and they support interpretation about the region's development over time. As with open space, the plan recommends identification and maintenance of an inventory of historic, archeological, and scenic resources. The Highlands Council plans to produce a historic preservation manual to provide technical guidance and information about potential funding sources for use by local government, nonprofit and preservation entities. Under the Highlands Plan, cultural resource protection occurs through development review; advocacy at the federal and state levels for grants and financial incentives to aid landowners in the preservation and maintenance of historic, cultural, and archeological resources; and encouragement of diverse and innovative methods of protection such as adaptive re-use, density transfers, easements, financial incentives, and heritage tourism.

The Highlands Region and Crossroads Heritage Area could work in partnership to preserve open space and protect cultural resources, especially for the communities and landscapes that are part of both regional initiatives. By working in partnership, the two organizations could more effectively achieve the shared goals of accommodating growth while providing for natural, cultural, and economic vitality on a regional scale.

New Jersey Pinelands Commission and Pinelands National Reserve

The Pinelands National Reserve, an area established by Congress in 1978 through the National Parks and Recreation Act, includes about 22 percent of New Jersey's land area and encompasses more than one million acres of forest, farms, and scenic towns in southern New Jersey. The Reserve is now one-third publicly owned, two-thirds privately owned, and home to such diverse uses as state parks, forests, wildlife management areas, historic villages, military installations, county and municipal parks, and conservation lands. Although the Pinelands Area and the Crossroads Heritage Area legally share only a small amount of land in common (Springfield Township in Burlington County), the two areas both take a regional approach to planning that includes open space and cultural and natural resource protection, and coordination among numerous agencies and organizations.

During the early development of the nation, the area was home to productive lumber, iron, and glass industries. While economically successful, these industries gradually stripped the Pinelands of its resources and the area became known as the "Pine Barrens." When threatened by large-scale development proposals in the 1970s, the Pinelands became the subject of much controversy and debate which ultimately caused the public to realize the environmental value of the area.

Following the designation of the Pinelands National Reserve in 1978, the New Jersey state Pinelands Protection Act of 1979 designated about 900,000 acres of the Pinelands National Reserve as the state Pinelands Area. Together, the National Parks and Recreation Act and the Pinelands Protection Act established the New Jersey Pinelands Commission, a 15-member regulatory body charged with creating and implementing the Pinelands Comprehensive Management Plan. The plan provides for the protection and enhancement of natural and cultural resources of the Pinelands National Reserve, while promoting the economic and physical development consistent with that purpose (<http://www.pinelandsalliance.org>).

The Pinelands Commission achieves its mission by overseeing county and municipality conformance to the Pinelands Comprehensive Management Plan. This plan establishes nine management areas ranging in level of protection and allowable development. Of these nine areas, the Preservation Area, Forest Area, Special Agriculture Production Area, and Agriculture Protection Area are the highest priorities for land and resource protection. The Management Plan also outlines 13 Management Programs to regulate the impact of development on Pinelands resources. Pinelands Commission responsibilities related to the Management Plan include ongoing review of municipal zoning and land use plans for consistency with the Comprehensive Management Plan, review of water supply planning activities, spatial analysis, protection of cultural and historic resources, support of permanent land protection efforts, and monitoring of the Pinelands regional economy.⁵¹

3.4.8 County and Municipal Planning

New Jersey has traditionally been a state in which home rule, or the reliance on county and municipal government to meet the needs of citizens, is the guiding principle in government. While the state legislature has the ultimate right to govern, the state delegates broad powers to local governments.

New Jersey is divided into 21 counties and 566 municipalities. Each county is governed by elected county officials called “Freeholders,” who compose each county’s Board of Chosen Freeholders. In five of New Jersey’s counties (Atlantic, Bergen, Essex, Hudson, and Mercer), voters also elect a County Executive to perform executive functions of county government. County governments are typically responsible for maintaining county infrastructure and managing such programs as emergency services, parks and recreation systems, and public health functions.

Each New Jersey municipality is classified as one of five *types* of governments: Borough, Township, City, Town, or Village. Each municipality also is classified under one of 11 *forms* of government: seven are based on historical form (Borough, Township, City, Town, Village, Commission, and Council-Manager), and four are based on the Optional Municipal Charter Law, or the Faulkner Act, which favors a strong executive and professional management (Mayor-Council Plan, Council-Manager Plan, Small Municipality Plan, Mayor-Council-Administrator Plan). Of the 566 municipalities in New Jersey, 39 percent use the traditional Borough system, 27 percent use the traditional Township system, and 21 percent are governed under plans outlined in the Faulkner Act.

The Crossroads Heritage Area contains all or part of 14 counties and 213 municipalities in New Jersey. Both county and municipal governments play a role in planning for communities, cultural and historic resources, and parks and open spaces within their jurisdictions. Therefore, it is important to examine the various ways in which local governments might play a role in planning activities within the Crossroads Heritage Area.

⁵¹ New Jersey Pinelands Commission website, <http://www.state.nj.us/pinelands/>, accessed June 2009.

County Planning

County governments in New Jersey provide regional services that municipalities could not effectively nor efficiently offer independently. The New Jersey County Planning Act (N.J.S.A. 40:27-1 et seq.) establishes the authority and role of county planning boards in providing many of these regional services. Under this law, county planning boards are to adopt a county master plan, review capital improvements and plans of other agencies for consistency with the county's master plan, oversee land development regulations, and encourage cooperation at all levels of government. Planning boards may also assemble county-wide data on a continual basis, provide planning assistance to municipalities, recommend the establishment of impact fees, and employ staff or consultants, or both, to aid in the preparation of a county master plan.

While the general framework for county planning entities is consistent among counties, the structure and activities of planning bodies at the county level vary greatly among the counties in the state and heritage area. For the purposes of this assessment, the planning commissions and cultural/heritage commissions of five counties within the heritage area are discussed below as representative of county planning agencies throughout the heritage area.

Bergen County

Structure: Bergen County is governed by a seven-member Board of Chosen Freeholders and an elected County Executive. Within the county government, the Department of Planning and Economic Development oversees community development, engineering, land use and development review, open space, public/private partnerships, data resources, regional planning and transportation, and master planning. The Department of Parks oversees cultural and historic affairs and parks and recreation.

Related Plans & Activities: The division of Comprehensive Planning is currently undergoing a county-wide planning process that will result in a Master Plan promoting sustainable growth throughout the county's 70 municipalities. The Master Plan – to be composed of nine sub-plans relating to land use, transportation, environment, open space/recreation/farmland/ historic preservation, housing utilities, economic redevelopment, and community facilities – is scheduled for completion in 2010. The Department of Planning also serves as a coordinating entity between the county and other state-recognized regional agencies, such as the New Jersey Meadowlands and the Highlands Region. The planning department guides the Cross Acceptance process for the State Development and Redevelopment Plan.

Cultural and Heritage Commission: The Bergen County Division of Cultural and Historic Affairs (DCHA) is a division of the Department of Parks. The mission of DCHA is to “encourage public outreach and greater participation through the celebration of historic events associated with county-owned historic sites and history... [to] preserve, maintain and promote eight county-owned sites and other resources, and to promote heritage tourism and education.” DCHA administers the Bergen County Open Space, Recreation, Farmland and Historic Preservation Trust Fund, which includes a matching grants program for historic preservation projects in the county.

Mercer County

Structure: Mercer County is governed by a seven-person Board of Chosen Freeholders and an elected County Executive. The Mercer County Planning Division oversees such activities as infrastructure planning, preservation of open space and farmland, and transportation, in order to promote sustainable growth and development within the county. The Mercer County Planning Board, composed of county officials and citizens, is authorized to adopt and help implement the county's master plan.

Related Plans & Activities: The Mercer County Master Plan was completed in 2008 and “identifies the region’s development and redevelopment goals needed for balanced growth in order to achieve a desired quality of life” (*Mercer Master Plan Update Preliminary Plan*, 2007). The master plan focuses on three primary systems: economy, environment, and transportation. The Planning Division also contributes to other county-wide and regional studies and projects and oversees Cross Acceptance of the State Development and Redevelopment Plan.

Cultural and Heritage Commission: The Mercer County Cultural and Heritage Commission develops programs to promote local and county history, visual and performing arts, and cultural values and traditions. The mission of the commission is to “enrich the lives of the residents of Mercer County through the promotion of arts programming; promotion of public interest and understanding of historic and cultural matters; and for the administration of the local Arts Program Grants. The Cultural and Heritage Commission, in partnership with the New Jersey Historical Commission, also offers grants for general operating support and special projects. The general operating support grants are offered to historical sites and groups, and special projects grants are available for community organizations, local governments, or schools offering historic programming.

Middlesex County

Structure: Middlesex County is governed by a seven-person Board of Chosen Freeholders. Within the county government, the Department of Planning has five divisions that carry out specific tasks related to planning: Division of Administration and Data Management; Division of Environment, Parks and Comprehensive Planning; Division of Land Development Review; Division of Transportation; and Division of Solid Waste Management. The Department of Planning serves as the staff of the county Planning Board, a body that oversees comprehensive growth management and encourages cooperation among all levels of government.

Related Plans & Activities: The Middlesex County Department of Planning is responsible for preparing and updating portions of the county’s Comprehensive Plan, including land use, demographics, open space and recreation, water supply wastewater and storm water management, and other environmental resources. The Department of Planning also prepared the *Middlesex County Comprehensive Farmland Preservation Plan* (2008) in order to provide a framework for the “long-term encouragement of a viable agriculture business climate and the continued preservation of agricultural lands in Middlesex County, enhancing the quality of life for Middlesex County farmers and residents now and in the future.”

Cultural and Heritage Commission: The Middlesex County Cultural and Heritage Commission is part of the county’s Department of Parks and Recreation. The mission of the commission is to “develop county-wide programs and promote public interest in local and county history, in the arts, and in the cultural values, goals, traditions of the community, the State and the Nation.” The Commission also works to restore, maintain, and preserve real property acquired by the county, including two Crossroads resources, the Cornelius Low House and East Jersey Olde Towne Village. The Commission also administers History Grants, that is, distributing funding from the New Jersey Historical Commission to preservation organizations and government entities.

Somerset County

Structure: Somerset County is governed by a five-person Board of Chosen Freeholders. The Planning Division of the county government is located within the Department of Public Works. The Planning Division is made up of five separate units that report to the Director of Planning: Planning Board, Agriculture Development Board, Office of Economic Development, Cultural & Heritage Commission, and Solid Waste Management.

Related Plans & Activities: The Planning Division completed a county-wide Master Plan in 1987 and the *Somerset County Parks, Recreation, and Open Space Master Plan* in 1994, with an update in 2000. Somerset County maintains a reference library with each of these plans, as well as other county resource survey and planning documents. The Planning Division also oversees the Cross Acceptance procedure and coordination with New Jersey Highlands Commission.

Cultural and Heritage Commission: The Somerset County Cultural and Heritage Commission was established in 1983 to “promote public interest in local and county history, in the arts, and in cultural values, goals [and] traditions.” The commission supports programs and initiatives relating to history and the arts. Most notably, the commission administers three annual grant programs: the New Jersey State Council on the Arts State/County Partnership Local Arts Program, the Somerset County Cultural & Heritage Commission's Mini Grant Program, and the Somerset County Historic Preservation Grant Program.

Union County

Structure: Union County elects a Board of Chosen Freeholders, which in turn appoints a County Manager, and together they oversee county government. The Division of Planning and Community Development is located within the Department of Parks and Community Renewal. Within the Division of Planning and Community Development are four sub-divisions, or bureaus, including Transportation Planning, Land and Facilities Planning, Community Development, and Housing. The county's Planning Board reviews the plans for land development in the county to ensure that standards and procedures are followed in accordance with county policy.

Related Plans & Activities: The role of the Division of Planning and Community Development is to encourage economic growth and development, pursue legislative advocacy and coordination at all levels of government and coordinate and with regional entities, and to provide for county programs through sound fiscal practices. The Division of Planning and Community Development also implements the *Long Range Strategic Plan for Union County*, which was adopted in 1996.

Cultural and Heritage Commission: The Union County Office of Cultural and Heritage Affairs exists within the Department of Parks and Community Renewal. The mission of the office is to “promote and develop public interest and participation in the arts and local, county and state history, and ensure that all citizens and residents have the opportunity to fully share in and benefit from the rich multi-cultural arts, history and historic resources in Union County.” The Office of Cultural and Heritage Affairs sponsors the annual Four Centuries in a Weekend, a heritage festival featuring about 25 historic house museums and sites. Four Centuries in a Weekend includes several Crossroads resources, such as Boxwood Hall in Elizabeth and Liberty Hall in Union. The Office of Cultural and Heritage Affairs also administers the Union County Arts Grant Program and the Union County History Grant Program.

Municipal Planning

The Home Rule Act of 1917 and the Municipal Land Use Law of 1975 (MLUL), as amended, provide the legal foundation and framework for municipal planning in the State of New Jersey. The Home Rule Act, still in much the same form as enacted in 1917, establishes the basic powers available to New Jersey's 566 municipalities, regardless of size, population, location, or form of government. The MLUL serves as the legislative foundation for municipal planning boards and zoning boards of adjustment. In 1986, the law was amended to allow municipalities to undertake historic preservation zoning. The law defines the powers and responsibilities of these boards, adoption of land use ordinances, zoning ordinances, and community master plans. Community Master Plans are required of municipalities that regulate land use and development through zoning ordinances. Master Plans must be reexamined every six years.

Community Master Plans throughout New Jersey and the Crossroads Heritage Area combine different elements to guide decisions related to growth and conservation. Under the MLUL, Master Plans must include four required elements: Statement of Purpose, Land Use Element, Housing Plan Element, and Relationship with Other Plans. The plan may include other elements, such as conservation, recreation, transportation, utilities, and historic preservation.

Examples of different municipalities' approaches to master planning illustrate the variety of plans within the heritage area. In 1996, the Princeton Regional Planning Board, which serves both Princeton Township and Princeton Borough, adopted the *Princeton Community Master Plan* to provide a vision and plan for how the community will grow. In addition to a Vision Statement, the plan includes eight sections or elements: Land Use, Housing, Circulation, Utility Service, Community Facilities, Open Space and Recreation, Historic Preservation, and Conservation. The plan was reexamined and updated in 2001 and 2007.

Larger municipalities, however, in addition to an overall master plan, have adopted many different planning documents that relate to their physical development. Trenton, for example, adopted *Living Trenton: The Downtown Capital District Master Plan* in 2008; *Bellevue-Rutherford Neighborhood Plan* in 2010 (pending); and *Sustainable Design Guidelines* in 2005. The city also engages in planning for the Transit Station Area and Bicycles/Trails.

Open Space Protection for Local Governments

County and municipal governments can bring significant funding to the table to enhance the impact of state funding for conservation lands, through the Green Acres Planning Incentive (PI) program. By collecting an open space tax and developing an Open Space and Recreation Plan (OSRP), local governments can obtain 50 percent (dollar-for-dollar) matching grants to preserve lands identified in a state-approved OSRP for recreation and conservation purposes. The open space tax is pursuant to N.J.S.A. 40:12-15.7d. and is approved by voter referendum. Local open space tax funding may be used for acquisition, development, and maintenance of lands for recreation and conservation purposes; farmland preservation; "preservation of historic properties, including the acquisition of such properties for historic preservation purposes"; or payment of debt service on indebtedness incurred by a local government for any of these purposes. As of March 2009, all 21 counties and 238 municipalities in New Jersey had passed an open space tax by voter referendum, many with large pluralities.

The Municipal Land Use Law at 40:55D-28 addresses the contents of a municipal master plan, including recreation and conservation elements. Counties are empowered to prepare a master plan that includes open space and recreation considerations under the New Jersey County and Regional Planning Act, N.J.S.A. 40:27-2 et seq. The New Jersey Green Acres program requires the local government's Planning Board to adopt their OSRP as part of their master plan. Community "open space committees" generally (customarily?) are tasked with developing and maintaining the OSRP and overseeing the spending of the funds, but these are not a formal part of the legislation permitting the open space tax.

From fiscal year 2000 through fiscal year 2009, 103 municipalities in the 14 counties of the heritage area had permanently preserved 75,526 acres of land through all state programs, in totals per jurisdiction ranging from .14 acre in Rahway City (Union County) to 5,129 acres in Hopewell Borough (Mercer).⁵²

3.5 Heritage Tourism and Interpretation

3.5.1 Overview of Tourism in New Jersey

⁵² <http://www.state.nj.us/gsp/t/pdf/GSPTLandAcquisitionsStatewide21%20Counties.pdf>

A study in 2006 conducted for the New Jersey Division of Travel and Tourism found that the top state of visitor origin for overnight leisure travelers in New Jersey is New Jersey itself. Residents traveling within their own state comprised fully 28 percent of the travel market (Table XX).

Ninety percent of all visitors to New Jersey traveled by car, and 77 percent traveled 200 miles or fewer. Nearly two-thirds of all expenditures, however, 64 percent, are made by visitors from outside New Jersey, a clear demonstration of the importance of out-of-state tourism to the travel industry.⁵³ A 2009 study placed the value of direct expenditures by New Jersey travelers at \$38 billion.⁵⁴

The 2006 study provides this description of New Jersey's leisure visitors⁵⁵:

- 49 percent of visitors are couples.
- The average age of visitors is 48.
- The top age group is 35-54; second group is 55+.
- 4/5 of visitors do not have children under age 18 in the household.
- The average length of stay is 1.91 days.
- The average expenditure per day is \$497.40 per party.
- The average total expenditure per trip is \$770.00 per party.
- July and August are the most popular months for travel to (or in) New Jersey.

Table XX Tourism in New Jersey by Travelers' State of Origin (2006)

STATE	PERCENT
New Jersey	28%
New York	25.2%
Pennsylvania	17.2%
Virginia	6%
Maryland	5.8%
Massachusetts	3.2%
Connecticut	2.4%
North Carolina	1.7%
Other	10%
Total	100%

Source: 2006 Overnight Leisure Visitor Profile Study conducted by D.K. Shifflet and Associates for the New Jersey Division of Travel and Tourism.

TABLE XX Top Activities for New Jersey Leisure Travelers (2006)

ACTIVITY	% TRAVELERS ENGAGED
Gamble	45%
Dining	40%
Entertainment	36%
Shopping	26%
Nightlife	23%

⁵³ 2006 Overnight Leisure Visitor Profile Study, conducted by D.K. Shifflet and Associates for the New Jersey Division of Travel and Tourism.

⁵⁴ Study conducted by Global Insight and D.K. Shifflet and Associates for the New Jersey Division of Travel and Tourism, presented at the 2009 New Jersey Governor's Conference on Tourism.

⁵⁵ 2006 Overnight Leisure Visitor Profile Study.

ACTIVITY	% TRAVELERS ENGAGED
Beach, waterfront	22%
Sightseeing	11%
Concert, play, dance	7%
Group tour	5%
Theme park, amusement park	4%
National or state parks	4%
Watch sports	3%
Visit historic site	3%
Festival, craft fair	2%
Shows (auto, boat, antique, etc.)	2%
Hike, bike	2%
Nature, eco-travel	1%
Camping	1%
Hunt, fish	1%
Museum, art exhibit	1%
Golf	1%
Boat, sail	1%

Source: 2006 *Overnight Leisure Visitor Profile Study* conducted by D.K. Shifflet and Associates for the New Jersey Division of Travel and Tourism.

A study conducted in 2008 concluded that⁵⁶:

- New Jersey visitation fell by 4.3%.
- Visitor expenditures fell by 4.9%.
- Overnight visitors fell by 6.4%.
- Day visitors declined 2.4%.

All states competitive with New Jersey were also down.

By 2009, travel forecasters were expecting a recovery to begin in the travel industry which would continue to build slowly in the coming years.

3.5.2 Heritage Tourism in New Jersey: Current Conditions

Assessment of existing and potential heritage tourism in the Crossroads of the American Revolution National Heritage Area is formed from an understanding of several factors: national heritage tourism trends, heritage tourism plans for the state of New Jersey, Crossroads stakeholders' interest in heritage tourism, support of Destination Marketing Organizations (DMOs) for promoting the area's heritage, the visitor experience at historic sites, the availability of visitor services, and identification of desired target audiences. This section provides context and a foundation for heritage tourism-related strategies and action steps in the management plan.

National Heritage Travel Trends

While the economic recession of recent years has had a tremendous impact on the travel industry, a major study shows that heritage travel continues to be a strong industry segment. *The Cultural and Heritage Traveler, 2009 Edition* found that 78 percent of all U.S. leisure travelers participate in cultural and/or heritage activities while traveling. This translates to 118.3 million adults each year. Cultural heritage

⁵⁶ Study conducted by Global Insight and D.K. Shifflet and Associates for the New Jersey Division of Travel and Tourism, presented at the 2009 New Jersey Governor's Conference on Tourism.

travelers spend an average of \$994 per trip compared to only \$611 for other leisure travelers, making this a highly desirable travel industry segment.⁵⁷ Travelers enjoy many different activities according to the study (Table XX).

TABLE XX Top Activities for United States Heritage Travelers (2009)

ACTIVITY	% TRAVELERS ENGAGED
Experienced local cuisine	40%
Visited historic sites	39%
Explored small towns	39%
Visited state/national parks	38%
Took a self-guided walking tour	34%
Visited historic buildings	33%
Shopped for local arts and crafts	32%
Visited history museums/centers	31%
Visited art museums/galleries	28%
Visited natural history museums/centers	25%

Source: *The Cultural and Heritage Traveler, 2009 Edition*, conducted by Mandala Research, LLC for the National Trust for Historic Preservation, the U.S. Cultural and Heritage Tourism Marketing Council, and the U.S. Department of Commerce

National Travel Trends

Travel by all segments of tourists is also on an upward trend, according to the *State of the American Traveler Survey* conducted by Destination Analysts in January 2010. The survey found that 33 percent plan to travel more in the coming year and 32.6 percent plan to spend more on travel in the next 12 months. Additionally, the study found that 21 percent plan a “staycation” (taking a vacation at home or close to home).

3.5.3 Challenges in New Jersey’s Tourism Promotion

A complex set of factors affects tourism and heritage tourism in New Jersey. The *New Jersey Heritage Tourism Master Plan*, completed in 2010, evaluated these conditions. The following information is excerpted from the plan.

For many years, New Jersey has struggled with challenges in tourism promotion, including leadership, funding, and a focused branding strategy. Specific issues include:

- The New Jersey Division of Travel and Tourism has been housed under various departments and led by directors with minimal tourism experience.
- New Jersey was the only state without a hotel/motel tax until 2003 when a portion of the tax was dedicated to the New Jersey Division of Travel and Tourism (as well as the New Jersey Historical Commission, the New Jersey Cultural Trust, and the New Jersey State Council on the Arts). Funding from this source for the tourism office fell short by \$1 million in FY10.
- Funding for the state tourism office is much lower than other states, with a current annual budget of approximately \$8 million for each of the FY09 and FY10 fiscal years. By comparison, the

⁵⁷ Conducted by Mandala Research, LLC for the National Trust for Historic Preservation, the U.S. Cultural and Heritage Tourism Marketing Council, and the U.S. Department of Commerce.

2006-2007 budgets for nearby states were: Pennsylvania, \$31.8 million, New York, \$16 million and Maryland, \$11 million.

- Tourism plans, including a comprehensive New Jersey Tourism Master Plan written in 1997, have not been implemented.
- Changing leadership has resulted in constantly changing marketing messages – messages that have not focused on New Jersey’s history and heritage destinations.

These difficulties have had predictable effects on marketing to heritage tourists. A 2005 study commissioned by the tourism office (which asked different questions from the 2006 study cited above, focusing on leisure travel) showed that New Jersey’s historic sites are not primary motivators for visits to the state when compared to other activities, an indicator that the state is not reaching the heritage traveler market (Table XX). Approximately two-thirds of all New Jersey travelers were engaged in dining and shopping, whereas roughly only a quarter of all visitors attended a museum or art exhibit. Half of all visitors, however, reported that they enjoyed “touring and sightseeing” – more than two particular activities for which New Jersey is well known in the travel industry, gaming and beach-going (each attracting approximately one-third of all visitors).

TABLE XX Top Activities for Travelers in New Jersey (2005)

ACTIVITY	% TRAVELERS ENGAGED
Dining and Local Cuisine	69%
Shopping	64%
Touring and Sightseeing	50%
Gaming/Horse/Dog Racing	37%
Beach/Lake/Waterfront	33%
Festival/Craft Fair	28%
Theme/Amusement Park	27%
Visiting Historic Sites	27%
Nightlife	25%
Museum/Art Exhibit	22%

Source: *2005 New Jersey Image Study* prepared for Winning Strategies Advertising on behalf of New Jersey Office of Travel & Tourism by D.K. Shifflet & Associates in partnership with Global Insight

The lack of tourism marketing for heritage sites and destinations was further reflected in the 2005 study, which found that some of New Jersey’s key cultural, historic, and outdoor recreation destinations were unknown⁵⁸:

- 82% of travelers did not know the location of Wheaton Village
- 74% did not know the location of Mountain Creek
- 67% of travelers did not know the location of Lambertville
- 63% did not know the location of Jockey Hollow or Washington Crossing State Park
- 46% did not know the location of Point Pleasant
- 43% did not know the location of Monmouth Park
- 41% did not know the location of the New Jersey Performing Arts Center

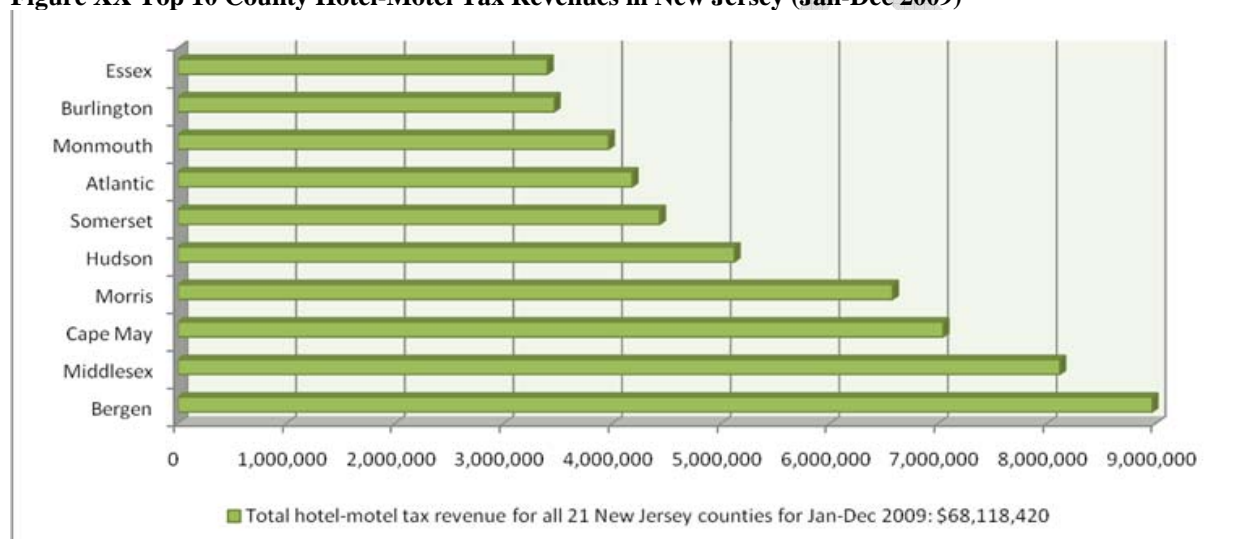
⁵⁸ 2005 New Jersey Image Study prepared for Winning Strategies Advertising on behalf of New Jersey Office of Travel & Tourism by D.K. Shifflet & Associates in partnership with Global Insight.

A step toward addressing these challenges was taken in 2007 when the New Jersey Office of Travel and Tourism was relocated to the New Jersey Department of State as a division. This placed the tourism office within the same department as the New Jersey Cultural Trust, New Jersey Historical Commission, and New Jersey State Council on the Arts.

The New Jersey Office of Travel and Tourism also discontinued its system of regional tourism councils, which were determined to be ineffective. A new system shifted the focus to the state's Destination Marketing Organizations (DMOs), which positioned the state tourism office as the marketing hub and the DMOs as the spokes.

Overall, New Jersey's tourism industry continues to struggle. Although tourism contributed \$38 billion to the state's economy in 2008, visitation fell by 4.3 percent and visitor expenditures fell by 4.9 percent.⁵⁹

Figure XX Top 10 County Hotel-Motel Tax Revenues in New Jersey (Jan-Dec 2009)



Source: New Jersey Department of Treasury, Division of Taxation.

3.5.4 Heritage Tourism Challenges in New Jersey

The enactment of a hotel/motel state occupancy tax in 2003 was intended to support cultural and heritage sites in product development and promotion; however, the reality has fallen short of the intention. In 2003, legislation was enacted to impose a 7 percent hotel/motel state occupancy fee for lodging establishments. The fee was in effect from August 1, 2003 through June 30, 2004. After July 1, 2004, the fee was reduced to 5 percent. Several cities already had a local occupancy tax, and a lower tax was approved for these cities: Newark, Atlantic City and Jersey City are at 1 percent and the Wildwoods at 3.15 percent. Figure XX shows the top 10 counties for occupancy or hotel-motel tax collection from January –December 2009.

In fiscal year 2004, the New Jersey Legislature allocated a portion of revenues generated from the hotel/motel occupancy tax to support four specific recipients and set statutory minimums:

- New Jersey State Council on the Arts \$16,000,000
- New Jersey Historical Commission \$2,700,000

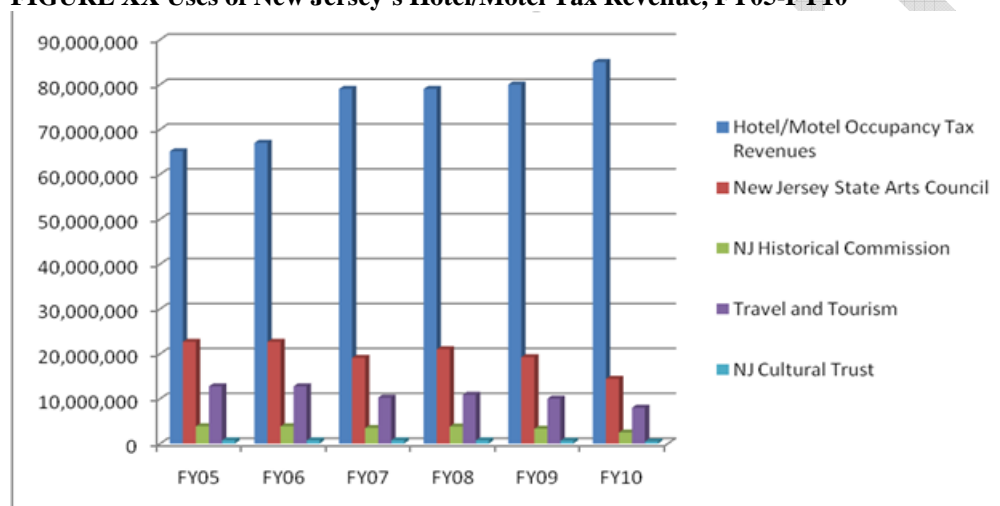
⁵⁹ Study conducted by Global Insight and D.K. Shifflet and Associates for the New Jersey Division of Travel and Tourism, presented at the 2009 New Jersey Governor's Conference on Tourism.

- New Jersey Division of Travel and Tourism \$9,000,000
- New Jersey Cultural Trust \$500,000

Most significant is that even with the economic downturn, tax collection from the hotel/motel occupancy tax increased to \$85 million in FY10 from \$65.1 million in FY05. Despite this increase, support for the four designated recipients has stayed the same or decreased (Figure XX). Revenues have instead been directed to the state treasury for use in the general fund. In FY10, all four agencies were funded at levels below the statutory minimum:

- Support for the New Jersey State Council on the Arts fell \$1,560,000 short, at \$14,440,000.
- Support for the New Jersey Historical Commission fell \$220,000 short, at \$2,480,000.
- Support for the New Jersey Division of Travel and Tourism fell \$1,000,000 short, at \$8,000,000.
- Support for the New Jersey Cultural Trust fell \$34,000 short, at \$466,000.

FIGURE XX Uses of New Jersey's Hotel/Motel Tax Revenue, FY05-FY10



Source: State of New Jersey annual budgets.

3.5.5 New Jersey Heritage Tourism Master Plan

In 2010, the state of New Jersey completed a master plan for heritage tourism development that brings together partners from across the state to implement the plan's key strategies. The plan's vision statement is:

Heritage Tourism is essential to the economic well being of New Jersey as travelers and residents visit heritage sites and towns to enjoy authentic, valued and engaging experiences, that:

- Enhance the image of New Jersey as a desirable destination with a rich history that played a vital role in our nation's growth;
- Improve the state's economy through visitor spending, and
- Contribute to the stewardship and sustainability of New Jersey's unique historic, cultural and natural assets.

Development of the plan was guided by the New Jersey Heritage Tourism Task Force, which was created by the Senate and General Assembly of the State of New Jersey. Legislation stated that the Task Force was established "to provide strategic direction for the promotion of heritage tourism in New Jersey and to create a comprehensive heritage tourism master plan for New Jersey."

The Task Force included 20 members representing many aspects of New Jersey's culture and heritage: New Jersey Historic Trust, Crossroads of the American Revolution Association, ArtPride New Jersey, New Jersey Division of Travel and Tourism, Morris County Visitors Center, Advocates for New Jersey History, South Jersey Tourism Corporation, New Jersey Department of Environmental Protection, New Jersey Public Broadcasting, Historic New Bridge Landing, New Jersey State Council on the Arts, New Jersey Department of Transportation, New Jersey Historic Preservation Office, Camden County Cultural and Heritage Commission, The Richard Stockton College of New Jersey Business Studies, Edison Memorial Tower Corporation and Mid Atlantic Center for the Arts and Humanities.

The plan includes four key strategies that were developed to achieve the vision and mission of heritage tourism in New Jersey – building partnerships, preserving and interpreting historic resources, attracting visitors, and generating economic impact. Table XX details the actions supporting these strategies.

TABLE XX New Jersey Heritage Tourism Master Plan Strategies

Develop a management and partnership system to support and advocate for New Jersey's heritage tourism industry.	Build a strong marketing network.
Develop an advocacy network. Create a New Jersey Inter-agency Heritage Tourism Council. Coordinate support between state, county and municipal agencies. Expand and leverage resources for New Jersey's Heritage Tourism Program through key partnerships. Increase revenues from Discover NJ History license plates. Implement a performance evaluation system. Invest in visitor amenities, interpretation and education programs.	Build community pride and encourage local involvement and engagement. Encourage communities to host Staycation campaigns. Create a statewide Doors Open program. Encourage and support heritage education programs. Develop a Community Heritage Tourism Toolkit. Assign a staff member as heritage tourism liaison in the New Jersey Division of Travel and Tourism. Use interpretive themes for promotions. Heritage sites will actively assist NJTT in promotions.
Enhance the state-owned heritage sites as centerpieces for heritage tourism.	Develop heritage products and infrastructure.
Survey and assess state-owned sites for visitor readiness. Establish a Foundation or Trust. Improve heritage tourism marketing with increased funding. Increase historic site and park staffing and provide training. Develop new interpretive programs. Build and sustain meaningful partnerships.	Provide guidance and technical assistance to heritage sites. Build a strong network of historic sites. Help sites get ready for visitors. Support implementation of New Jersey's Wayfinding Master Plan, developed by Celebrate NJ. Develop a statewide historical marker program.

Source: New Jersey Heritage Tourism Master Plan, 2010

In addition to adopting these strategies, the plan includes six themes to serve as the springboard for heritage tourism product development and promotion. The themes are:

New Jersey in Conflict: New Jersey's pivotal role in the Revolutionary War began a military tradition that continues today.

New Jersey By Design: The value residents of New Jersey place on aesthetics and design is reflected in designed landscapes and planned communities, as well as in vernacular and high-style buildings of many architectural types.

New Jersey at Work: Industry and creative innovation shaped New Jersey and helped transform the world.

New Jersey Land and Sea: Making a living from the land and from the sea has long been part of life in the Garden State.

Many Faces of New Jersey: New Jersey's population has grown increasingly diverse from the first Native Americans to waves of immigrants from Europe and subsequently from all over the world.

New Jersey at Play: New Jersey has a history of hosting vacationers seeking relaxation and inspiration.

Implementation of the heritage tourism master plan will begin with a request from the New Jersey Heritage Tourism Task Force for an executive order that changes the committee into an Inter-agency Heritage Tourism Council. The Council will include cabinet level officials or their designated staff. State agencies and nonprofit organizations represented on the Task Force will be included on the Council. The Council will be housed in the New Jersey Historic Trust.

Additionally, the plan proposes that a staff person be named the liaison to heritage tourism in the New Jersey Division of Travel and Tourism, New Jersey Historical Commission, New Jersey Historic Trust and New Jersey DEP/Natural & Historic Resources. Heritage Tourism staff in each of these agencies will become knowledgeable about all strategies included in the master plan and will work with the Heritage Tourism Inter-agency Council and other state agencies and organizations to implement the plan.

3.5.6 Heritage Tourism in the Crossroads Heritage Area

Heritage tourism promotional activities take place on many levels within the Crossroads of the American Revolution National Heritage Area, including activities of the Crossroads of the American Revolution Association, the region's Destination Marketing Organizations, county Cultural and Heritage Tourism Commissions, and individual heritage sites. There is currently no organizing mechanism to bring these entities together in joint heritage tourism development and marketing efforts.

Destination Marketing Organizations

The state of New Jersey, through the New Jersey Division of Travel and Tourism, recognizes 19 Destination Marketing Organizations. Although DMOs may receive grants from the Division of Travel and Tourism, there are currently no incentives to encourage a DMO to focus on the heritage tourism market.

The DMOs conduct a variety of activities traditionally undertaken by tourism promotion agencies such as maintaining websites, publishing visitor guides, operating visitor centers, producing advertising, cultivating editorial coverage, and attending sales industry trade shows. A key activity that is currently not conducted by the DMOs is visitor research. Due to budget constraints, DMOs must rely on visitor information provided by the New Jersey Division of Travel and Tourism and on anecdotal information provided by attractions and visitor services facilities in their communities.

In the Crossroads Heritage Area, some tourism organizations promote the region's history in their marketing messages, while others focus on different resources or incorporate history into a larger

message. None of the tourism organizations communicates the area's Revolutionary War history in its primary marketing message, as shown in Table XX.

TABLE XX Marketing Messages Used by Destination Marketing Organizations in the Crossroads of the American Revolution National Heritage Area

TOURISM PROMOTION AGENCY	MARKETING MESSAGES
Morris County Tourism Bureau	The Perfect Weekend Getaway – rich in historic lore, tradition and awaiting your exploration
Somerset County Business Partnership	The Place to Be! Outdoor fun, tours, weekend getaways, quality golf courses, history and ecotourism, shopping, fine dining, gardens, antiques, quality accommodations
Greater Newark Convention and Visitors Bureau	Go Newark – Great performances, great events, great shopping
Downtown Newark	Culture, business, fine dining, history, entertainment, shopping
Middlesex Chamber and CVB	Go Central New Jersey
New Brunswick (city)	Explore New Brunswick: From Historic to Hip; Experience rich arts, culture, history and dining
Monmouth County Tourism Department	Monmouth County – The place you want to be.
City of Burlington	Where the past is our present to you
Princeton Regional CVB	Princeton. Not just a town. An experience.
South Jersey Tourism Corp.	Explore South Jersey.
Trenton Downtown Association (Destination Trenton)	Your Capital of history.

Source: National Trust for Historic Preservation Heritage Tourism Program for JMA, Inc., and the Crossroads of the American Revolution Association, 2010.

In addition to tourism promotions, some tourism organizations are actively involved in creating heritage-themed events and activities to attract visitors. For example:

In April 2009, the Morris County Tourism Bureau, along with its partners including the National Park Service, began an annual event called “Revolutionary Times.” The three-day event includes demonstrations of Colonial life and re-enactments of the military operations of the Continental Army. Local hotels were recruited to serve as “host hotels,” offering discounted prices for visitors attending the event.

Destination Trenton – The Trenton Downtown Association, which also serves as the city's Destination Marketing Organization, works with numerous partners to produce “Patriots’ Week” each December. The event includes re-enactments, walking tours, dinners, concerts and other activities. The organization's website states that the event is “the cornerstone of Trenton's heritage tourism initiative.”

Heritage Sites and Organizations

The Crossroads Heritage Area has more than a hundred interpretive sites that tell some aspect of the story of the American Revolution. An overview of existing interpretation within the heritage area is provided elsewhere within this section. Of these interpretive sites, seven are major regional interpretive attractions that interpret the American Revolution as their primary story. Most others are local attractions that tell the story of the Revolution as all or part of their overall interpretation. Many sites have limited hours, days and months of operation. Some are open only by appointment or are interpreted only with signage. Some sites are managed entirely on a volunteer basis.

DMO staff interviewed in September 2009 as part of the management planning process noted the difficulty of building partnerships and promoting heritage sites due to limited staffing (“No one is

available to attend tourism meetings” noted one tourism director) and minimal open days. The overall visitor experience was noted as a concern as many sites do not have well developed and engaging interpretive programs.

A survey was conducted in the summer of 2009 by the Monmouth University Polling Institute as part of the management planning process to gather insights into the challenges and needs of the region’s historic sites and organizations. The 103 responses included 65 from historic sites and 38 from other historic organizations. Findings in the survey echoed the concerns of the tourism organizations. Visitor site respondents listed fundraising as their top challenge (74%) followed by marketing and advertising (67%). Not surprisingly, these two activities were also listed as the top areas where assistance is needed – although in the reverse order: marketing and increasing awareness (87%) and finding ways to deal with declining income (61%).

Overall, respondents said their top priority is reaching out to residents. Respondents identified as critical “increasing New Jersey residents’ awareness of New Jersey’s Revolutionary War heritage” (55%), promoting (building) New Jersey residents’ pride and identity (50%), and promoting New Jersey’s Revolutionary War heritage in (state) school curriculum (56%). Closely aligned with this priority is “increasing out-of-state visitors’ awareness of New Jersey’s Revolutionary War heritage” (52%)

This dual-audience approach is seen in the way heritage sites and organizations attempt to reach these audiences. In reaching out to visitors, respondents indicated their primary promotional venue is a website (75% – this percentage includes all respondents, both heritage sites and historic organizations). A review of sites listed in *Crossroads of the American Revolution: A Guide to New Jersey’s American Revolutionary War Sites* (published by the Crossroads of the American Revolution Association in 2009) found that most sites do have a presence on the Internet. However, many are included within others’ websites. For example, the Cornelius Low House is on the Middlesex County website; information about the Princeton Battlefield State Park is found on the New Jersey Department of Environmental Protection website as well as that of the Princeton Battlefield Society, a nonprofit group dedicated to preserving the site.

Websites are primarily informational – hours/days of operation, upcoming events, etc. In response to a survey question regarding interpretive programs, only seven percent noted that they have downloadable podcasts or videos on their web site – resources that are becoming increasingly popular with tourists to not only help plan their trip but also to help create their visitor experience. Currently there is no clearinghouse website that includes all relevant sites and helps the visitor plan a trip to the Crossroads region.

Other primary methods of promotion identified by survey respondents included mailing newsletters (59%); email communications and newsletters (55% and 31%); other mailings (51% - not specified); local print/newspaper advertising (49%), providing brochures to tourism offices or other visitor traffic areas (47%), public speaker programs off-site (44%), and newspaper columns (31%).

The assortment of promotional methods indicates that heritage sites and organizations are working to reach two audiences: Residents, through newsletters, public speaking programs, newspaper advertising and newsletter columns; and tourists, through brochures stocked in areas where visitors would go to gather information. Web sites may serve both audiences. Interestingly, only five percent of respondents indicated that they work with AAA, travel agents or tour groups.

3.5.7 Crossroads Tourism Issues and Opportunities

The following issues and opportunities were identified through an on-site visit (July 2009), meeting with DMO representatives (September 2009), reviewing background information including national and state travel trends and evaluating findings in the stakeholders' survey (discussed in the previous section) and meeting with the Crossroads Association steering committee (September 2009). The newly completed *New Jersey Heritage Tourism Master Plan* also provides an important resource for identifying linkages on a statewide basis for heritage tourism development and promotion.

The following issues and opportunities are outlined under three category headings to correspond with the three heritage tourism goals stated in Chapter 1: organization and advocacy, marketing and identity, and visitor experience.

Organization and Advocacy

The Crossroads Association has already built numerous partnerships through its work as a state heritage area and in achieving national heritage area designation. Building a successful heritage tourism component requires partnerships with DMOs, heritage sites, local governments, and others. In addition, Crossroads should continue to play an active role in the implementation of the *New Jersey Heritage Tourism Master Plan*, with representation on the Inter-agency Heritage Tourism Council.

ISSUE: What is the role of heritage tourism in the Crossroads management plan – primary or supporting?

OPPORTUNITY: The preferred alternative for the management plan, Alternative E, seeks to first build a presence among New Jersey residents. This alternative is to be supported by elements of Alternative C which also focus heritage tourism strategies on reaching out-of-state visitors. The selection of these alternatives provides an opportunity for the Crossroads Association to engage residents as supporters, ambassadors, and tourists traveling within the Crossroads region. The Crossroads Association can communicate to residents that heritage tourism provides the opportunity to find the fit between the community and tourism – asking residents for their involvement on many levels.

ISSUE: What organizational structure is needed to implement heritage tourism plans?

OPPORTUNITY: In order to achieve these goals, the Crossroads Association will need to determine its role and work with partners to determine an effective structure. Opportunities may include having Crossroads become a DMO or serving in a coordinating capacity with a tourism committee made up of the region's DMOs and historic sites. Respondents to the stakeholder survey conducted by the Monmouth University Polling Institute indicated a willingness to work with Revolutionary War sites and organizations (59% said they have “a lot” of interest, 29% have “some” interest). This provides a great opportunity for Crossroads to play a leadership role in creating a network of partners.

ISSUE: How can support be built for heritage tourism among elected officials and residents and within the tourism industry?

OPPORTUNITY: Crossroads Association can take a leadership role in developing activities and programs to reach these stakeholders through activities such as a speakers' bureau, coordinating a regional media plan, and sponsoring special events and programs to attract residents and reach elected officials with a message of economic impact. Key needs identified by DMOs include building internal support within the tourism industry for heritage tourism and offering hospitality training to the tourism industry.

Marketing and Identity

The Crossroads Association has made strides in creating name recognition for the heritage area through creation of a logo, maintaining a website, creating a visitor guide, issuing targeted publicity, hosting events, and other activities. The management plan will build on these efforts to establish Crossroads Heritage Area as a destination for New Jersey residents and out-of-state visitors.

ISSUE: How can the Crossroads brand's use be widespread to create impressions on New Jersey residents and out-of-state visitors?

OPPORTUNITY: The good will already enjoyed by the Crossroads Association provides an excellent foundation for further outreach to imprint the brand throughout the region. The association should begin by obtaining a trademark and developing guidelines for brand usage. Outreach can include using the "Revolutionary" brand and Crossroads' themes to create marketing messages for a variety of audiences. The Crossroads Association can work with DMOs, historic sites, and such local organizations as historical societies to incorporate the "Revolutionary" brand into marketing and communications.

ISSUE: How will the Crossroads Association's emphasis on New Jersey residents affect collaboration with the region's DMOs?

OPPORTUNITY: DMOs will continue to be key partners in reaching out-of-state target audiences. In addition, as many tourism organizations are focusing their promotions closer to home due to the economic downturn that began in 2008, the Crossroads Association can also investigate working with DMOs on promotions for "staycations" or "be a tourist in your own hometown."

ISSUE: How can Crossroads determine the audiences – in-state and out-of-state – that it wants to reach?

OPPORTUNITY: As noted by DMOs who were interviewed during the research phase, there is currently no ongoing visitor research due to budget constraints. DMOs must rely on the New Jersey Division of Travel and Tourism which provides statewide demographic data but does not delve into market data that looks at the motivations that cause visitors to select New Jersey as their travel destination. Additionally, according to the stakeholders' survey, historic sites noted that the majority of their visitors are from within 10 miles and a large number are from other communities in New Jersey. The Crossroads Association could take the lead in a much-needed element in marketing to residents and out-of-state visitors: conducting in-depth research that identifies target audience demographics and also gathers insights on the current visitor experience, visitor perceptions, and the desired visitor experience in the Crossroads region.

ISSUE: How can the Crossroads Association coordinate regional marketing of the Revolutionary War story and related heritage attractions?

OPPORTUNITY: The Crossroads Association can develop a marketing plan that uses select marketing tools to reach target audiences. This two-pronged approach – in-state marketing to attract New Jersey residents and out-of-state marketing to attract target audiences – will encourage both audiences to travel within the region, explore heritage sites and communities, stay longer, and plan return visits.

Visitor Experience

A key concern noted by the region's DMOs is the "mixed bag" of interpretation, operations, and services provided at historic sites. Often due to budget constraints and inadequate staffing, historic sites may have

minimal hours of operation and limited interpretation. A summary of results from an in-depth review of 120 existing attractions are detailed in Table XX; site-by-site analysis is provided in Appendix XX.

TABLE XX Summary Data on Visitor Offerings by Crossroads Attractions

DESCRIPTION OF ATTRACTION/SITE	NUMBER
Year-round operations, professional staff, American Revolution interpretation, and adequate visitor services (referred to as “full-service sites”)	7
Similar interpretation and staffing as full-service sites with varying degrees of visitor services.	28
Seasonal (spring through fall) with staff and interpretation and varying visitor services	7
Limited services including days of operation and visitor services	9
Open occasionally, usually by appointment or 1-2 days a month, and do offer interpretation	26
Offer self-guided tours through interpretive exhibits	10
Offer basic signage without interpretive context	26
Unmarked	3
Not open for visitors	4

Source: Heritage Strategies, LLC and JMA, Inc. for the Crossroads of the American Revolution Association, 2010.

ISSUE: How can heritage attractions be helped to become visitor ready?

OPPORTUNITY: The Crossroads Association can adopt the three visitor-ready criteria included in the *New Jersey Heritage Tourism Master Plan*:

- 1) The site is open as a tourism attraction during regularly scheduled hours, with a preference for weekend hours (not a requirement);
- 2) The site is promoted as a tourism attraction; and
- 3) The site supports one or more of the statewide heritage tourism themes by telling stories related to that theme(s) (in this case the “New Jersey in Conflict” theme, with an interpretive focus on the American Revolution era).

Sites that do not meet the criteria would be designated as “emerging sites” and provided assistance to become visitor-ready. Additionally, the Crossroads Association can work with the New Jersey Inter-agency Tourism Council to ensure that programs, grants and technical assistance offered to historic sites in the Crossroads Heritage Area dovetails the state heritage tourism master plan and the heritage area management plan.

ISSUE: What are key needs for visitor services and how can the Crossroads Association address these needs?

OPPORTUNITY: The Crossroads Association can work with regional DMOs to identify and prioritize such key needs as hospitality training, site accessibility, and visitor orientation. An evaluation system can be developed to determine the current level of visitor services. The evaluation would form the basis for a plan to improve and enhance visitor services. Additionally, the Crossroads Association could take the lead in placing visitor information kiosks throughout the region to supplement visitor information locations.

3.5.8 Existing Interpretation of the American Revolution

The American Revolution is currently interpreted by a wide range of sites within New Jersey and the Crossroads of the American Revolution. Appendix XX provides a list of interpretive sites that have been identified to date with respect to preparation of this management plan. The list is organized by county and includes general information for each site on location, responsible organization, hours of operation,

interpretive focus, and visitor services available. This database should be kept up to date as site-by-site circumstances and presentations vary.

The heritage area's strength is the range and number of sites involved in interpreting the American Revolution. To begin, it is important to remember that many place names throughout the heritage area and the state date from and/or commemorate places, events, or people associated with the Revolution. The number of streets named after Washington, Lafayette, and other famous Revolutionary figures is huge; you see them everywhere. Because of this recognition, the American Revolution is embedded in the consciousness of New Jersey residents to a depth that most residents probably do not realize.

Add to this the number of monuments and markers that have been erected throughout the landscape commemorating Revolutionary events or figures. They are everywhere. Though simply part of the background of daily life for residents, these monuments and markers reinforce that sense of the American Revolution in the public memory.

The number of unmarked sites associated with Revolutionary events is an untapped resource for interpretation that can help awaken public consciousness. More than 600 engagement sites have been cataloged by the 1976 Munn lists. Countless numbers of undocumented landscape resources remain throughout the heritage area that are associated with aspects of Revolutionary Era life, ranging from farmsteads, to roads, to churches, to communities, to landscapes and natural features. Plumbing the archeological significance of lost and overlooked Revolutionary sites could be tremendous as a source for information and interpretation about the era.

The core strength of the Revolutionary Era interpretation within the heritage area, however, is the large number of publicly accessible sites offering interpretive programs. Beginning in the late nineteenth century and continuing to the present, many Revolutionary Era sites have been preserved through acquisition through local and regional preservation initiatives. Most of these sites are historic houses of the period, and many have been preserved through the efforts of local historical societies and nonprofit organizations, sometimes formed specifically for the preservation effort. Many of these sites are managed by volunteers and made available to the public on a periodic basis.

During the course of planning for the management plan, approximately 75 sites were identified that actively interpret the American Revolution with some level of on-site public programming. This number does not include self-guided sites or landscape sites, such as historic districts, parks, or monuments, where public programming is sometimes conducted. Some of these sites are full-fledged public historic sites or parks owned and operated by state and federal entities. The majority by a large measure, however, are small house museums owned and operated by local historical societies, nonprofit organizations, or county Cultural and Heritage Commissions.

For purposes of assessment with respect to heritage tourism, these active interpretive sites have been divided into five categories according to the level of visitor services they provide. *These categories have nothing to do with historical significance, quality of interpretation, or the degree to which a site is important to the interpretation of a particular theme or story.* The categories are solely related to the level of service a visitor can expect when arriving at the site. They are important only to the extent that the marketing of interpretive sites can convey to potential visitors the kind of visitor experience and level of visitor services that can be expected. These five categories include:

- Full service visitor attractions;
- Regular service visitor attractions;
- Seasonal visitor attractions;
- Limited service visitor attractions; and

- Occasional service visitor attractions.

The criteria used for each of these categories are discussed below along with a list of the sites currently identified within each category. Additional sites not yet identified may be added to this list, and sites may move from one category to the next as they change their level of services. This list includes Revolutionary Era interpretive sites beyond the boundaries of the heritage area with which cooperative programming might be developed. It does not include self-guided interpretive sites, historic sites that are privately owned and not accessible to the public, or historic sites (parks, monuments, historic districts) where programming is occasionally held but which are not self-operated visitor attractions.

Full Service Visitor Attractions

Eight existing interpretive sites have been identified as full service visitor attractions (Table XX). Full service attractions are sites that (a) are located within the heritage area boundaries, (b) have interpretation of the American Revolution as a primary component of their mission, (c) are open year-round, five to six days per week, (d) have onsite professional staff and interior interpretive programming, (e) have onsite parking and rest rooms, and (f) are fully ADA accessible. Current full service sites include:

TABLE XX Full Service Visitor Attractions in the Crossroads of the American Revolution NHA

County	Full Service Visitor Attraction
Bergen	1. Fort Lee Historic Park
Mercer	2. Old Barracks Museum
	3. Washington Crossing State Park
Middlesex	4. East Jersey Olde Towne Village
Monmouth	5. Monmouth Battlefield State Park
Morris	6. Morristown National Historical Park
Somerset	7. Rockingham State Historic Site
Union	8. Liberty Hall

Source: Heritage Strategies, LLC and JMA, INC. for the Crossroads of the American Revolution Association, 2010.

Of these eight sites, **Morristown National Historical Park** is of particular importance to the heritage area. Morristown NHP is the site of the Continental Army's winter encampments of 1777 and 1779/80. It includes four separate sites, Washington's Headquarters and Fort Mifflin in Morristown, and Jockey Hollow and the New Jersey Brigade Encampment Area about four miles south of Morristown. The Park is operated by the National Park Service. It includes a visitor center, museum, two historic houses, professional interpreters, landscape exhibits, and extensive roads, trails, and visitor amenities. The park has an active program for community engagement, including participation with the Crossroads Heritage Area.

Morristown NHP is specifically cited in the heritage area legislation and is to play an active role in heritage area management and programming. Specifically, the legislation states that a purpose of the heritage area designation is "to strengthen the value of Morristown National Historical Park as an asset to the State by—

- (A) establishing a network of related historic resources, protected landscapes, educational opportunities, and events depicting the landscape of the State of New Jersey during the American Revolution; and
- (B) establishing partnerships between Morristown National Historical Park and other public and privately owned resources in the Heritage Area that represent the strategic fulcrum of the American Revolution."

The Crossroads Association, as the designated coordinating entity, will maintain headquarters at Morristown National Historical Park and in Mercer County. The legislation also explicitly states that the

Park may, on request, provide operational assistance appropriate for the supporting implementation of the heritage area's management plan.

Fort Lee Historic Park is located in Fort Lee, Bergen County overlooking the Hudson River. Significant for the redoubt and batteries constructed by American forces to control the Hudson, Fort Lee was abandoned by Washington's troops in November 1776 and captured by the British beginning Washington's retreat across the Jerseys.

Fort Lee Historic Park is a state-owned site located at the southern end of the Palisades Interstate Park and managed through the Palisades Interstate Park Commission. Fort Lee has a full service visitor center with exhibits interpreting the fort's role in the American Revolution. Particular focus is given to the fall of New York and the Hudson River defenses during 1776. Exterior exhibits in the park include reconstructed batteries with spectacular views of the river, a blockhouse, a soldiers' hut, and other features. Interpretive programming on life as a soldier and Colonial life in general is offered to school groups and other visitors along with living history and special events.

Old Barracks Museum is located in downtown Trenton adjacent to the state capital. The Old Barracks was built in 1758 by the colony of New Jersey to house British soldiers. During the American Revolution, the building was occupied by both American and British troops.

Today, the Old Barracks Museum is owned by the State of New Jersey and operated by the Old Barracks Association, a private, nonprofit organization. The state also provides a yearly allocation for maintenance of the facility. The Old Barracks Museum is among the best known and most highly visited historic sites in New Jersey. The site is visited by approximately 20,000 students a year for curriculum-supportive programming focusing upon Colonial life and the American Revolution. The museum offers a variety of special educational and interpretive programs.

Washington Crossing State Park is located in Mercer County north of Trenton and is the site where Washington's army crossed the Delaware River on December 25, 1776 to attack the Hessians in Trenton. Washington Crossing State Park is operated by the New Jersey Department of Environmental Protection. The park is 1,400 acres in size and features a visitor center with historic artifacts and displays, the historic Johnson Ferry House, picnic areas, an open air theater, a nature center, and 15 miles of hiking and biking trails. The park is highly valued by residents as a recreational area.

East Jersey Olde Towne Village is located in Middlesex County within the county's 473-acre Johnson Park along the banks of the Raritan River. East Jersey Olde Towne is a collection of original, replica, and reconstructed eighteenth and nineteenth century structures representing the vernacular architecture of central New Jersey. The original and reconstructed buildings were moved to the site, and many were saved from demolition and loss. The Village is operated by the Middlesex County Cultural and Heritage Commission. The site's interpretive focus is eighteenth and nineteenth century life in the Raritan Valley. Programming includes educational workshops, seminars, lectures, in-service training for teachers, exhibitions, concerts, storytelling sessions, community gatherings, and theme-based projects.

Monmouth Battlefield State Park is located in Monmouth County just west of Freehold, the county seat. It is the site of the Battle of Monmouth, fought in June 1778, one of the largest and most significant battles of the American Revolution. Monmouth Battlefield State Park is 1,800 acres in area and is operated by the New Jersey Department of Environmental Protection. It features a visitor center with interpretive exhibits about the battle, walking trails with wayside exhibits, and the eighteenth century Craig Farm where interpretation of daily life during Colonial times is offered. Planning is underway for construction of a new visitor center at the park.

Rockingham State Historic Site is located in southwestern Somerset County just north of Kingston, New Jersey. Relocated from its original site for expansion of a nearby quarry, Rockingham is a historic eighteenth century house that served as Washington's headquarters in 1783 at the close of the American Revolution. The site is operated by the New Jersey Department of Environmental Protection. Rockingham is interpreted to reflect the building's use and occupation by the officers and staff of General Washington. Programming also focuses upon Revolutionary military life, furniture of the Colonial period, and eighteenth-century social history.

Liberty Hall is located in Union County west of Elizabeth. Built in 1772, Liberty Hall was the home of New Jersey's first elected governor and signer of the Constitution, William Livingston, and served as the Livingston/Kean family country house for two centuries. Today the house and grounds are an interpretive site owned and operated by Kean University, which is adjacent. Liberty Hall interprets New Jersey and American history through the story of the Livingston/Kean families. The site features a visitor center, historic house and gardens, carriage house, and firehouse museum.

Regular Service Visitor Attractions

New Jersey has an outstanding set of interpretive sites telling the story of the American Revolution. While many excellent sites do not have full visitor services, they nonetheless offer high quality visitor experiences. Regular service visitor attractions are interpretive sites that (a) interpret the American Revolution, (b) are open year-round, five to six days a week, and (c) have onsite professional staff and interior interpretive programming. Many of these sites are State Historic Sites managed by professional interpreters. Others are managed by county Cultural and Heritage Commissions and nonprofit organizations. Regular service sites identified during the planning process are shown in Table XX.

Table XX Regular Service Visitor Attractions in the Crossroads of the American Revolution NHA

County	Regular Service Visitor Attractions
Atlantic	1. Atlantic County Historical Society/Atlantic Heritage Center*
Bergen	2. The Hermitage* 3. Steuben Estate Complex/Historic New Bridge Landing
Burlington	4. Bard-How House 5. Batsto Village State Historic Site*
Burlington	6. Lawrence House (Pearson-How, Cooper & Lawrence Houses)
Camden	7. Indian King Tavern State Historic Site 8. Pomona Hall (Cooper House)
Essex	9. Newark Museum 10. New Jersey Historical Society
Gloucester	11. Red Bank Battlefield Park
Mercer	12. Bainbridge House 13. Morven 14. Princeton Battlefield State Park 15. William Trent House Museum
Middlesex	16. Cornelius Low House (Ivy Hall) 17. Proprietary House (The Westminster)
Monmouth	18. Walnford
Passaic	19. Dey Mansion* 20. Long Pond Ironworks State Park and Museum* 21. Ringwood State Park and Ringwood Manor*
Salem	22. Alexander Grant House* 23. Hancock House State Historic Site*
Somerset	24. Frelinghuysen House 25. Old Dutch Parsonage State Historic Site

County	Regular Service Visitor Attractions
	26. Wallace House State Historic Site

*Located outside the heritage area.

Source: Heritage Strategies, LLC and JMA, INC. for the Crossroads of the American Revolution National Heritage Area

Interpretive attractions listed in this plan as regular service sites are among the most significant Revolutionary Era properties in New Jersey and are critical to the interpretation of the state's role in the American Revolution. Among these sites are eleven that are owned by the state of New Jersey. Nine of these state-owned sites are operated through the Department of Environmental Protection and two are operated through partnerships with other organizations. In addition, the list includes sites owned and operated by county cultural and heritage commissions, county parks, historical societies, and nonprofit organizations. Six of the listed sites are located outside of the legislated boundaries of the national heritage area.

All of these sites are open year-round and offer professional quality interpretive programming. In most cases, they are not classified as full service sites because of limited visitor support facilities or accessibility to those with disabilities. Visitors who understand and are prepared for these limitations can have an excellent experience. Two sites, the Newark Museum and New Jersey Historical Society, are included in this grouping because, although they are not authentic Revolutionary Era historic sites and because the American Revolution is not their primary interpretive focus, they are important interpretive facilities.

Seasonal Visitor Attractions

Some high quality visitor attractions interpreting the Revolution are only open on a seasonal basis. Seasonal visitor attractions are interpretive sites that (a) interpret the American Revolution, (b) are open spring through fall, five to six days a week, and (c) have onsite professional staff and interior interpretive programming. Except for their seasonal operation, these attractions provide visitor services similar to those of regular service visitor attractions. Seasonal visitor attractions are listed in Table XX.

Table XX Seasonal Visitor Attractions in the Crossroads of the American Revolution NHA

County	Seasonal Visitor Attractions
Cumberland	1. Gibbon House*
Monmouth	2. Allen House (Blue Ball Tavern)*
	3. Covenhoven House (Hankinson-Moreau-Covenhoven House)
	4. Holmes-Hendrickson House
	5. Marlpit Hall*
	6. Sandy Hook Lighthouse*

*Outside the heritage area.

Source: Heritage Strategies, LLC and JMA, INC. for the Crossroads of the American Revolution National Heritage Area

Limited Service Visitor Attractions

Limited service visitor attractions are interpretive sites that (a) interpret the American Revolution and (b) are open year-round at least two to three days a week, and (c) have interior interpretive programming. They differ from regular service attractions not only in their days of operation but also in that they do not have professional interpreters on staff providing interpretive programming. Limited service sites identified during the planning process are listed in Table XX.

Table XX Limited Service Visitor Attractions in the Crossroads of the American Revolution NHA

County	Limited Service Visitor Attractions
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Atlantic	1. Somers Mansion State Historic Site*
Bergen	2. Fort Lee Museum
Camden	3. Greenfield Hall
Gloucester	4. Hunter-Lawrence House (Hunter-Lawrence-Jessup House)
Morris	5. Morris County Historical Society / Acorn Hall
Ocean	6. Ocean County Historical Society Museum*
Somerset	7. Van Horne House
Union	8. Boxwood Hall State Historic Site

*Outside the heritage area.

Source: Heritage Strategies, LLC and JMA, INC. for the Crossroads of the American Revolution National Heritage Area

Occasional Service Visitor Attractions

Many preserved historic sites in New Jersey are owned or managed on a volunteer basis by historical societies or small nonprofit organizations. Because they rely upon volunteer support, these sites are often only open to the public on a limited basis. Occasional service visitor attractions are interpretive sites that (a) interpret the American Revolution, (b) are open by appointment or on an occasionally scheduled basis such as one to two times per month, and (c) have interior interpretive programming. A list of these sites identified during the planning process appears in Table XX.

Table XX Occasional Service Visitor Attractions in the Crossroads of the American Revolution NHA

County	Occasional Service Visitor Attractions
Bergen	1. Van Allen House
Burlington	2. Smith-Cadbury Mansion
Cumberland	3. Potter's Tavern*
Hunterdon	4. Bouman-Stickney Farmstead 5. Solitude House Museum
Mercer	6. Friends Meeting House (Trenton)
Middlesex	7. Buccleuch Mansion (White House) 8. Metlar-Bodine House
Monmouth	9. Major John Burrowes Mansion (Burrowes Mansion) 10. Murray Farm House* 11. Village Inn (Davis Tavern)
Morris	12. Henry Doremus House 13. Schuyler-Hamilton House
Somerset	14. Abraham Staats House 15. Dirck Gulick House 16. Jacobus Vanderveer House 17. Mount Bethel Baptist Meeting House 18. Van Veghten House 19. Van Wickle House 20. Wyckoff-Garretson House
Union	21. Caldwell Parsonage 22. Cannonball House (Hutchings Homestead) 23. Belcher-Ogden Mansion 24. Nathaniel Drake House (Drake House Museum) 25. Osborn Cannonball House
Warren	26. Shippen Manor & Oxford Furnace*

*Outside the heritage area.

Source: Heritage Strategies, LLC and JMA, INC. for the Crossroads of the American Revolution National Heritage Area

Self-Guided Interpretive Sites

As discussed previously, there are many historic sites significant the Revolutionary Era. Some of these sites provide self-guided interpretation and others are merely marked with monuments, markers, plaques, or signage. Self-guided interpretive sites (a) are authentic sties related to the American Revolution, (b) are publicly accessible, and (c) have onsite interpretive exhibits that are self-guided and relate the site to themes, storylines, and the significance of the American Revolution. Self-guided interpretive sites identified during the planning process are listed in Table XX.

Table XX Self-Guided Interpretive Sites in the Crossroads of the American Revolution NHA

County	Self-Guided Interpretive Sites
Bergen	Baylor Massacre Burial Site*
Bergen	Fort Lee Monument Park
Somerset	Washington Rock State Park

*Outside the heritage area.

Source: Heritage Strategies, LLC and JMA, INC. for the Crossroads of the American Revolution National Heritage Area

Self-Guided Marked Sites

New Jersey has many historic Revolutionary Era sites that are marked with monuments, markers, plaques, and signage. As discussed in the Cultural Resources portion of this chapter, more than 400 marked sites have been identified in New Jersey by Bill Coughlin of North Arlington, NJ and documented online in the Historical Marker Database (www.hmdb.org). Self-guided marked sites (a) are authentic sites related to the American Revolution, (b) are publicly accessible, and (c) have signage with facts and basic information about the site but without broader interpretive exhibits or context.

Feasibility Study Interpretive Sites

The Crossroads of the American Revolution in New Jersey National Heritage Area Feasibility Study identified 25 natural and historic resources that, together, were the minimum number of resources considered necessary to express the Crossroads themes and create a viable Revolutionary War interpretive experience in New Jersey (Table XX). Resources were assessed according to the following criteria:

- Possess integrity;
- Currently permit or posses the potential for public access;
- Have a high to moderate potential for continued resource protection and interpretation; and
- In combination with other sites, are essential to provide the minimal visitor experience and interpretation of the feasibility study's three themes.

This list includes seven of the eight full service attractions interpreting the Revolutionary Era within the heritage area. It also includes five regular service attractions and two attractions that are currently listed as occasional service. Eight landscape areas are included on the list that currently do not offer interpretive programming. This list will be considered in the development of an interpretive program for the heritage area.

Table XX Interpretive Sites Identified as Essential in the Feasibility Study for the Crossroads of the American Revolution NHA

County	Sites Identified in the Feasibility Study
Bergen	1. Fort Lee Historic Park 2. Historic New Bridge Landing
Burlington	3. Taylor-Newbold House 4. Burlington City 5. Battle of Mount Holly Site
Gloucester	6. Red Bank Battlefield Park
Mercer	7. Rockingham

	8. Nassau Hall
	9. Princeton Battlefield State Park
	10. Washington Crossing State Park
	11. Old Barracks Museum
Middlesex	12. Raritan Landing Archeological District and Ivy Hall
	13. Proprietary House
Monmouth	14. Monmouth Battlefield State Park
Morris	15. Morristown National Historic Park
Somerset	16. Great Swamp National Wildlife Refuge
	17. Pluckemin Historic District and Jacobus Vanderveer House
	18. Middlebrook Encampment Park
	19. Wallace House
	20. Millstone River
Somerset/ Middlesex	21. Raritan River
Union	22. Cannonball House
	23. Battle of Short Hills
	24. Liberty Hall
Union and Essex	25. Watchung and South Mountain Reservations

Source: Crossroads of the American Revolution in New Jersey: Special Resource Study; National Heritage Area Feasibility Study; Environmental Assessment, August 2002.

3.6 Transportation and Visitor Experience

New Jersey has served as an important corridor for transportation linking New England and the Mid-Atlantic dating back to Colonial times. What began as a rural eighteenth century network of dirt roads and paths for wagons and stagecoaches has become a complex modern infrastructure that accommodates automobile, truck, bus, light rail, train, and air transportation within the most densely populated region of the nation. New Jersey's transportation network serves hundreds of millions of passenger trips and moves billions of tons of freight each year. This complex transportation network tries to focus not only on safety and mobility, but also on social, aesthetic, historic and environmental priorities (NJDOT, *NJ Transportation Factbook 2007*, 31; hereafter "2007 Factbook") Its character impacts both the ease with which residents and visitors move through the heritage area and the quality of their experience.

The Crossroads Heritage Area is centered on the major urban northeast-southwest axis between New York, Trenton, and Philadelphia and its complex transportation network. Within this corridor, intense development has dramatically altered character of the historic Revolutionary Era landscape and with it the historic eighteenth century roadways. To the northwest and southeast of this corridor, however, the heritage area includes more suburban and rural areas where historic road networks are better preserved and more readily apparent. Due to intense population growth, traffic within the entire region is heavy, and planning entities are constantly adapting to pressures to accommodate increased traffic. These pressures significantly affect the experience of the heritage area.

Crossroads is well-served by various modes of transportation within New Jersey's overall network, which provides access to landscapes, communities, and historic sites for visitors and residents. Planning for New Jersey's transportation system and its corresponding priorities occurs mainly through the New Jersey Department of Transportation, New Jersey TRANSIT, and metropolitan and regional planning agencies. Crossroads will benefit from close coordination with these agencies on heritage area initiatives.

Centrally located in what has become the largest consumer market in the world, New Jersey is located within an eight-hour drive of 123 million people, or 45 percent of the US population. In addition to moving millions of passengers annually through the state and region, New Jersey's transportation network also accommodates millions of tons of freight each year. New Jersey is equipped with more than 700 million square feet of warehousing and distribution space and two major ports at Newark-Jersey City and Camden-Philadelphia. In 2003, more than a half-million freight employees helped to move 621 million tons of goods using New Jersey's system of roads, rail, ports, and aviation facilities (2007 Factbook, 28).

Figure XX New Jersey's Transportation Network

3.6.1 Major Transportation Routes

During Colonial times, New Jersey was a transportation hub, connecting the eastern seaboard to points west. The communities and travel routes that developed in the Piedmont and Inner Coastal Plan Provinces between New York and Philadelphia in the eighteenth century are reflected in the development patterns visible today, particularly where they cross the Delaware and Hudson Rivers. Given its transportation history, New Jersey has numerous resources available to serve the Crossroads Heritage Area.

As referenced in the Feasibility Study, the Heritage Area is easily accessible from two major ports at Newark-Jersey City and Camden-Philadelphia and four major airports, including Philadelphia, LaGuardia, John F. Kennedy, and Newark, the fifth busiest airport in the nation. In addition, an extensive highway network connects the major cities. The New Jersey Turnpike, the Garden State Parkway, the Palisades Interstate Parkway, and Interstates 76, 80, 87, 95, 195, 280, 287 and 295 connect cities including Elizabeth, Jersey City, Newark, New Brunswick, Paterson and Trenton with New York, Philadelphia and beyond. Most of these routes run northeast/southwest connecting with the interstate systems serving New England, Pennsylvania and the Mid-Atlantic coast. Finally, the Heritage Area can be reached via railroad. Amtrak makes five stops in New Jersey between Philadelphia and New York, including Newark, Metropark, New Brunswick, Princeton Junction and Trenton, and New Jersey Transit provides local train and bus service to communities throughout the Heritage Area.

Major Roadways

The road system in New Jersey comprises approximately 39,000 miles of public roadways, including interstate highways, US and state highways, and local roads. In 2008, the daily vehicle miles traveled (VMT) on public roads in New Jersey was approximately 200,651,000. About 91 percent of these miles were traveled in urban areas, while only 9 percent were traveled in rural areas.⁶⁰

Interstate highways accommodate much of the vehicular traffic in New Jersey. The New Jersey Turnpike, one of the busiest toll roads in America, is 148 miles long and 14 lanes across at its widest section.⁶¹ The New Jersey Turnpike runs on a northeast-southwest axis and connects the major population centers of Philadelphia and New York City, as well as centers of industry, population, and commerce within New Jersey. When first opened to traffic in 1951, it served as a link to all major existing highways.⁶² Today a large portion of the turnpike is designated as I-95, the nation's primary East Coast north-south highway. North of Perth Amboy in the metropolitan New York region, the Turnpike has numerous connections that serve this heavily urbanized area and link New Jersey with New York City. Within this region, visitors may find the often-congested Turnpike and its connections confusing and even intimidating. The New

⁶⁰ NJ Department of Transportation website, <http://www.state.nj.us/transportation/refdata/roadway/vmt.shtm>.

⁶¹ NJ Turnpike Commission website, <http://www.state.nj.us/turnpike/who-we-are.html>.

⁶² New Jersey Historical Society, *What Exit? New Jersey and its Turnpike*, 2002.

Jersey Turnpike has 12 service areas named for famous New Jerseyans located along its entire length, eight of which are within the heritage area. These service areas provide travelers with gasoline, food, and a limited amount of visitor information.

The Garden State Parkway, opened to traffic in 1954 and now one of the busiest roads in New Jersey, helped alleviate congestion created by commuters in the northern part of the state, heavy commercial traffic, and tourists and residents traveling to the shore in summer months. Today, the Garden State Parkway stretches 173 miles from Cape May to the New York state line at Montvale Township.⁶³ Within the heritage area, the Garden State Parkway extends from northern Middlesex County south of Perth Amboy to Bergen County. To the north, it links with New York State and I-87/287 as they cross the Tappan Zee Bridge. The Parkway provides a western alternative to the Turnpike through the urban northern core of the heritage area, paralleling the Watchung Mountains. Though less confusing than the Turnpike, the urban portions of the Parkway are also heavily traveled and can be intimidating.

The Palisades Interstate Parkway is a 42-mile highway in New York and New Jersey. The New Jersey section of the parkway is about 11 miles long and is completely within Bergen County. The parkway begins at the George Washington Bridge in Fort Lee and crosses into New York in Rockleigh Borough. The parkway is named for the line of cliffs along the western edge of the Hudson River, which it follows along the upper edge.

Interstate 295 serves the southern portion of the heritage area and connects the Delaware Memorial Bridge at Wilmington in the south to Trenton in the north. . It runs generally north-south from near Wilmington, Delaware, to Trenton, passing through Salem, Gloucester, Camden, Burlington and Mercer counties. I-295 is a non-toll alternative paralleling the New Jersey Turnpike. In general, the highway is pleasing in character, buffered by trees and similar to most interstate highways. It is a primary north-south connector for Burlington, Bordentown, Mt. Holly, and Haddonfield. While often congested at rush hour, I-295 flows freely during normal hours

Interstates 80, 78, and 195 are east-west connectors through the heritage area. I-80 and I-78 connect New York City with Pennsylvania, while I-195 connects Trenton with the northern Jersey shore. I-195 has only a short length within the heritage area and is more significant as a link to the shore than it is as a link within the heritage area; it bisects the state, running east-west from Trenton to Wall Township near the New Jersey shore. While they can be busy, both I-80 and I-78 are typical interstates and have pleasing character overall. Both are significant routes for visitors from beyond the region.

I-78 serves as a beltway around the very dense northeastern New Jersey-New York City area, providing interchanges and alternate routes to other major highways in the area. It runs east-west from Easton-Phillipsburg to Union, Newark, and the Holland Tunnel. It is a north-south route that serves as a beltway around the most urban and densely populated areas in the northeastern section of the heritage area. Traveling north, I-287 connects the Turnpike at Perth Amboy north through Raritan Landing, Somerville, Pluckemin, and Morristown to New York State and I-87, the New York Thruway to Albany. I-287 is a key route through the northern portion of the heritage area, especially for Morristown. The highway is generally less congested and more pleasant to drive than the highways east of the Watchungs.

I-80 runs in a generally east-west direction in the northern portion of the state, connecting with I-95 just west of the George Washington Bridge. It is located north of Morristown and connects the Highlands on the west with the George Washington Bridge at Fort Lee on the east. It skirts the Great Piece Meadows and crosses the north end of the Watchung Mountains at Paterson traveling east. I-78 extends east-west

⁶³ NJ Turnpike Commission website, <http://www.state.nj.us/turnpike/>.

across the heritage area north of Somerville with an interchange at I-287 near Pluckemin. East of the interchange, the highway flows through the parallel valleys of the two Watchung ranges, emerging at Springfield.

I-76 and I-676 provide access from I-295 to the Walt Whitman Bridge and Benjamin Franklin Bridge, connecting the cities of Philadelphia and Camden; and I-280 extends from the Parsippany-Troy Hills area of Morris County southeast through Orange, Newark, and Harrison.

There are approximately 14 US and state highway routes in New Jersey. The New Jersey Department of Transportation manages 13,469 miles of lanes, shoulders, and ramps associated with these state highways. Local roads account for the most number of centerline miles, the total miles of road not taking into account number of lanes, in New Jersey. Within the state, there are 6,392 centerline miles of county roads and 28,344 miles of municipal roads (2007 Factbook, 14).

Mass Transportation

Mass transportation in New Jersey includes a broad network of buses, light rail, and rail, and accommodates more than 87 million passenger trips annually. This transportation network transports residents within the state, brings outside residents to New Jersey, and provides connections to neighboring regions and the nation beyond.

Buses and light rail provide New Jersey residents and visitors with transportation opportunities on a county-wide or local scale. Bus service provided by New Jersey TRANSIT and private carriers accounts for 156,900,000 annual passenger trips in New Jersey. NJ TRANSIT owns and operates 2,035 buses, and private carriers operate and/or lease 973 buses. There are approximately 20,000 bus stops in the state. Light rail accounts for 15,400,000 annual passenger trips. This ridership count includes the Hudson-Bergen Light Rail, Newark City Subway, and RiverLINE System which serves Trenton, Bordentown, Burlington, Riverside, and Camden. There are 52 light rail stations serving these three lines (2007 Factbook, 22).

Rail service provided by New Jersey TRANSIT accounts for 68,800,000 annual passenger trips. New Jersey TRANSIT operates 11 rail lines in New Jersey, connecting all parts of the state and adjacent metropolitan areas. Rail lines include Atlantic City Line, Bergen County Line, Main Line, Montclair-Boonton Line, Morristown Line, Gladstone Branch, North Jersey Coast Line, Northeast Corridor Pascack Valley Line, Princeton Branch, and Raritan Valley Line (2007 Factbook, 22). The Southeastern Pennsylvania Transportation Authority (SEPTA) offers regional service connecting Center City Philadelphia in with the Trenton Transit Center in New Jersey via the Trenton & Chestnut Hill East Line (<http://www.septa.org/schedules/rail/che-tre.html>). The Port Authority Transit Corporation (PATCO) operates commuter rail service that runs from Philadelphia through Camden County and connects with NJ Transit rail service to Atlantic City and light rail service between Camden and Trenton.

Amtrak operates ten train services in New Jersey, providing the state with 110 trains daily and important regional and national rail links (Table XX). During 2009, more than 1.5 million passengers boarded or alighted from Amtrak trains in New Jersey. Amtrak serves the Metropark, New Brunswick, Newark, Newark Airport, Princeton Junction, and Trenton train stations in New Jersey. In 2009, Trenton was the thirteenth busiest station in the national Amtrak system. Also in fiscal year 2009, Amtrak employed 1,418 New Jersey residents, accounting for \$111,604,424 in wages (Amtrak Government Affairs: November 2009, Fact Sheet: *New Jersey 2009*).

TABLE XX Amtrak Train Service in New Jersey

Primary – serving NJ and the larger metropolitan areas in the northeast

<i>Acela Express</i>	Boston - New York - Philadelphia - Washington DC
<i>Northeast Regional</i>	Boston - Springfield/Providence - New York - Washington DC - Richmond - Lynchburg - Newport News/Virginia Beach
<i>Keystone</i>	New York - Philadelphia - Harrisburg

Longer distance Amtrak trains that serve NJ

<i>Crescent</i>	daily New York - Trenton - Atlanta - New Orleans
<i>Cardinal</i>	tri-weekly New York - Washington - Cincinnati - Chicago
<i>Palmetto</i>	daily New York - Trenton - Savannah
<i>Silver Meteor</i>	daily New York - Trenton - Miami
<i>Silver Star</i>	daily New York - Trenton - Tampa - Miami

Shorter distance Amtrak trains that serve NJ

<i>Carolinian</i>	daily New York - Trenton - Charlotte
<i>Pennsylvanian</i>	daily New York - Trenton - Philadelphia - Harrisburg - Pittsburgh
<i>Vermont</i>	daily Washington DC - Trenton - St Albans Vermont

Source: Amtrak Government Affairs: November 2009, Fact Sheet: *New Jersey 2009*; table by Heritage Strategies, LLC and JMA, Inc. for the Crossroads of the American Revolution Association, 2010.

Air Transportation

Within New Jersey, there are 46 public use airports. Three of these are air carrier airports: Newark-Liberty International Airport, Atlantic City International Airport, and Trenton-Mercer Airport. The other 43 are general aviation airports that are regional, county, or municipal airports (2007 *Factbook*, 23). In addition, three major air carrier airports are located outside of New Jersey but within the region, Philadelphia International Airport and La Guardia Airport and John F. Kennedy International Airport in New York City.

3.6.2 Travel within the Heritage Area

Regional Connectors

Regional connector roads provide important links among areas within Crossroads. Key regional connectors include Routes 1, 22, 24, 27/206, 28, 33, 202, and 130, among others. In general, these routes are heavily traveled local commuter routes, four to six lanes wide, with numerous traffic lights, and with connections to adjacent commercial areas and business parks. Some of the routes either parallel historic routes or are themselves historic linkages that have been repeatedly improved over the decades. With the exceptions of 202 and portions of 27 and 206, these roads do not evoke the region's historic landscape character, and they are not easy to negotiate in terms of wayfinding. Heavy traffic, extensive roadside commercial development, and extensive existing signage contribute to their lack of visitor appeal.

Route 1 is a four- to six-lane highway paralleling the spine of the heritage area from Trenton to Newark and Fort Lee. Route 130 also parallels Route 1 and the spine of the heritage area connecting Camden, Burlington, and New Brunswick. Route 130 is a four- to six-lane local road for most of its length. While Route 1 is a straight shot, Route 130 winds as it follows the course of an earlier, historic roadway.

Route 24 links Springfield with Morristown and I-278 with I-78. It is a four- to six-lane freeway. Because of its interstate linkages, it is an often busy and congested route to travel. Route 22 is a largely urban, limited-access roadway that links Newark with Somerville and I-78 to the west. Route 28 parallels it most of the way with extensive roadside commerce. Route 28 follows the course of an earlier historic roadway, connecting communities within the region. Route 33, in part, connects the Turnpike and Route 130 at Hightstown with Freehold and the Monmouth Battlefield to the east. As such, it is a key visitor route.

Route 206 is a two-lane road following a historic route and running north-south, connecting Trenton, Princeton, Somerville, Pluckemin, and the Highlands. Its Trenton-Princeton portion is an important interpretive link. East of Princeton, Route 27 is also an important interpretive link connecting to New Brunswick. This segment of roadway, from Trenton to New Brunswick, follows the route that the armies used in 1776-1777. Though developed, they retain a pleasing character. Similarly, Route 202 connects Morristown and points north with Pluckemin and Somerville. This roadway is marked as the route of Washington's withdrawal from the Battle of Princeton. It provides access to Morristown National Historical Park and is a pleasing route to drive. Southwest of Somerville, Route 202 follows a course through the Hunterdon County countryside to Lambertville and Bucks County, Pennsylvania.

Local Road Networks

Local road networks within the Crossroads Heritage Area vary widely in type and character reflecting the diversity of communities found within the region. In general, these local road networks can be divided into two types: urban networks and rural/suburban networks.

The heritage area's primary urban road networks are located in the urban areas east of the Watchung Mountains, between New Brunswick and Fort Lee, as well as in the vicinities of Trenton and Camden. Served extensively by the Interstate system and regional connectors, local roads within the urban areas are highly developed. Within the city centers, they form complex urban street grids with varying orientations sometimes reflecting historic road patterns that were filled in during the mid-nineteenth century. Some key historic road patterns remain, though their appearance and landscape character has been dramatically altered.

Outside of the urban centers are extensive neighborhood street networks ranging from dense areas with apartments, rowhouses, and duplexes near urban centers; to small single-family lots within rectangular blocks; to larger affluent single-family lots on winding streets and boulevards. Economic conditions vary widely in different portions of the urban landscape. Large areas of commercial, industrial, and office development are testimony to the historic economic power of the region. Within these outer urban areas, which continue to expand and develop, historic roadways and networks for the most part have been lost. In some locations, historic routes have remained but been thoroughly developed and radically altered over time. In some locations, historic road segments can be found, bypassed and cut off by new road development, and now serving as odd neighborhood remnants.

West of the Watchung Mountains, in the gap between New Brunswick and Trenton, and to the east of urban Trenton and Camden, suburban and rural roads networks largely remain within the heritage area. In these areas, regional connectors carry most of the traffic. Close to the more urban regions, extensive suburban development has occurred and continues to grow. Further out, agricultural and wooded areas preserve the historic landforms. Throughout these areas, many historic routes remain, serving now as two-lane local roads. While these roads can still become very busy, they retain their historic alignments and make reading the historic character of the landscape easier. Some historic routes could become scenic byways for interpretation.

3.6.3 National and State Scenic Byways

Byways and touring routes throughout the Crossroads Heritage Area offer scenic and recreational opportunities. These include two National Scenic Byways and five State Scenic Byways. Together with the recreational linkages described earlier, these routes create a comprehensive travel network that extends throughout the Heritage Area. This network and the touring and recreational opportunities it offers are shown on the Existing and Planned Touring Routes Map, Figure XX, and included in the map's GIS database. [Note: FIGURE XX appears earlier]

Bayshore Heritage Byway is a 122-mile State Scenic Byway. Located southeast of the Crossroads Heritage Area in Salem, Cumberland and Cape May Counties, the Byway enables heritage area visitors to continue their exploration of the Delaware River downstream through the communities of the Delaware Bay that have been dependent on the region's natural resource-based industries including fishing, trapping, crabbing, oyster and caviar processing, shipbuilding, iron making, milling, glass making and salt hay farming in addition to traditional agriculture.⁶⁴

Delaware River Scenic Byway is a National Scenic Byway running 33 miles along the Delaware River from Trenton to Frenchtown. The byway offers "a firsthand experience of the Delaware River's formative power, which shaped the cliffs and lowlands of the valley, influenced the settlement patterns of our historic river towns, and even played a critical role in America's Revolutionary War, as memorialized at Washington Crossing State Park."⁶⁵

Millstone Valley Scenic Byway is the second National Scenic Byway in New Jersey. Located in the narrow Millstone River valley of north central New Jersey, the route forms a loop drive along the west side of the Millstone River and the east side of the D&R Canal. Travel along the Byway offers a glimpse into the past where major troop movements and military campaigns greatly influenced the outcome of the American Revolution.

Palisades Interstate Parkway Scenic Byway is a State Scenic Byway located in the northeast corner of the Crossroads Heritage Area. The Parkway offers a scenic 42-mile tour from the New Jersey side of the George Washington Bridge north to Bear Mountain State Park in New York with breathtaking views of the Palisades, the Hudson River and the New York City skyline along the way.

Pine Barrens Byway is a State Scenic Byway that lies to the southeast of the Heritage Area. This Byway offers visitors the opportunity to expand their exploration of the state's natural resources as they drive approximately 130 miles through the 1.1 million-acre Pinelands, the "largest body of primarily forested open space on the Mid-Atlantic seaboard between Richmond, VA and Boston, MA and [a] natural and cultural environment unique to the world."⁶⁶ The Pine Barrens also contains Revolutionary era sites.

Route 57 Byway is a State Scenic Byway west of the Crossroads Heritage Area. Visitors to the Heritage Area can continue their exploration of the Highlands Province along Route 57, which "traverses the region's distinctive mountain ridges, Scotts Mountain, Pohatcong Mountain and Point Mountain, as well as the watershed of three streams, the Lopatcong Creek, Pohatcong Creek and Musconetcong River."⁶⁷

Upper Freehold Historic Farmland Byway is a State Scenic Byway in Monmouth County that exposes visitors to the area's unique agricultural, historical, environmental and cultural traditions. The route passes through historic Allentown founded in 1706, across the old iron bridge at Crosswicks Creek, and past several sites involved in the Revolutionary War.

3.6.4 Traffic Levels Associated with Crossroads Interpretive Sites

⁶⁴ State of New Jersey Department of Transportation. Accessed online January 13, 2010, at <http://www.state.nj.us/transportation/community/scenic/byways.shtm>

⁶⁵ Federal Highway Administration, America's Byways Program. Accessed online January 13, 2010, at <http://www.byways.org/explore/byways/2463/index.html>

⁶⁶ State of New Jersey Department of Transportation. Accessed online January 13, 2010, at <http://www.state.nj.us/transportation/community/scenic/byways.shtm>

⁶⁷ Ibid.

In November 2003, the New Jersey Department of Transportation released an updated version of its Congestion Management System (CMS). The CMS data presents, among other figures, One Way Average Annual Daily Traffic, or Vehicles Per Day, for various sections of Interstate, U.S., state, and county roads and highways throughout New Jersey. The data presents traffic counts for 2001, as well as estimates for 2010. This transportation and performance data is available for download on the web site of North Jersey Transportation Authority (NJTA), the Metropolitan Planning Organization (MPO) for a 13-county region in northern New Jersey.

Traffic counts of vehicles per day on certain sections of road near Crossroads interpretive attractions can help assess the potential impact that increased visitation to these sites may have on traffic patterns and other environmental concerns, such as air quality. A representative sampling of Crossroads primary visitor attractions has been analyzed to determine the possible impact of increased visitation. For each site, the estimated annual site visitation was compared to the daily traffic counts of the road (or nearby road) on which the site is located.

Old Barracks Museum

The Old Barracks Museum is a full-service Crossroads attraction in Trenton, Mercer County. In a survey of visitor sites conducted during the planning process, the Old Barracks Museum estimated that the site receives about 30,000 visitors every year. The Old Barracks Museum is located just off U.S. Route 206 in Trenton, which accommodated about 5,626 vehicles per day in 2001 and is estimated to accommodate about 6,170 vehicles per day in 2010.

If all visitors to the Old Barracks were traveling by automobile, and if visitors were traveling in pairs in their own vehicles, estimated visitation to the Museum would result in an average of 41 vehicle trips per day and account for .73 percent of traffic on adjacent U.S. Route 206 in 2001 and .66 percent in 2010. If Crossroads initiatives doubled visitation to Old Barracks Museum, traffic on Route 206 might increase to about 82 vehicles per day, or about 1.3 percent of vehicles per day using 2010 estimates.

However, only about 9,000 visitors annually travel to the Old Barracks by automobile. About 20,000 visitors to the site are school groups and about 1,000 visitors come as part of other group tours. These groups make up 70 percent of the total number of visitors to the site, and most of these groups come by bus. Assuming 45 passengers per bus, this would result in approximately 467 bus trips per year or 1.3 trips per day. Automobile traffic would result in 12.6 trips per day, or .2 percent of the daily traffic on Route 206.

Liberty Hall Museum

Liberty Hall Museum is a full service Crossroads visitor attraction located on Morris Avenue in Union County. According to a survey of visitor sites conducted during the management planning process, Liberty Hall receives about 14,000 visitors annually. Assuming conservatively that all of these visits were conducted during the prime tourist season of May through October, this level of visitation would translate to about 76 visitors per day (38 vehicles per day).

Morris Avenue, Route 82, accommodated as many as 15,065 vehicles per day in 2001 and may accommodate up to 14,873 in 2010. Assuming visitors traveled to the museum in pairs in their own vehicles (38 vehicles per day), visitation to Liberty Hall Museum would account for about .25 percent of the traffic on N.J. Route 82 in both 2001 and 2010. Assuming Crossroads initiatives doubled visitation to Liberty Hall Museum, traffic on N.J. Route 82 would increase to about 76 vehicles per day, or about .5 percent of total vehicles per day on N.J. Route 82.

Visitation to Liberty Hall is highest on weekends during the months between May and October. If all visitation to Liberty Hall were to occur on weekends during these six months, the site would receive as many as 259 visitors per day. Under this assumption, traffic to Liberty Hall would make up 1.7 percent of traffic on Route 82 in 2010. If visitation to Liberty Hall were to double as a result of Crossroads initiatives, under this scenario, traffic to Liberty Hall could increase to up to 518 vehicles per day, or 3.5 percent of vehicular traffic on Route 82.

However, about 60 percent of visitors to Liberty Hall travel in groups, with approximately 7,000 visitors being part of a school group and 2,000 visitors being part of some type of tour group. Because such groups generally travel on buses, the impact of increased visitation in terms of vehicles per day on local and nearby roads would likely be much less than the conservative estimates noted above.

East Jersey Olde Towne Village

East Jersey Olde Towne Village is an interpretive attraction in Piscataway, near New Brunswick, Middlesex County and is operated by the Middlesex County Cultural and Heritage Commission. In the survey of visitor sites East Jersey Olde Towne Village estimated that they receive about 25,000 visitors every year, or about 136 visitors per day if visitation occurred only during the prime months of May through October.

East Jersey Olde Towne Village is located on River Road, County Route 622. Route 622 accommodated approximately 5,624 vehicles per day in 2001 and is estimated to accommodate 6,150 vehicles per day in 2010. Assuming visitors traveled to the site in pairs in their own vehicles, visitors made up only about 1.2 percent of traffic on Route 622 in 2001 and would make up only about 1.1 percent of traffic using 2010 estimates. Assuming Crossroads initiatives doubled visitation to East Jersey Olde Towne, traffic on Route 622 would increase to about 136 vehicles per day, or about 2.2 percent of vehicles per day.

However, about 60 percent of visitors to East Jersey Olde Towne Village travel to the site in groups, with school groups accounting for 10,000 annual visitors and other tour groups accounting for 5,000 annual visitors. Because such groups typically travel on buses or vans, impact of increased visitation in terms of vehicles per day on local and nearby roads would likely be much less than the estimates based on visitors traveling in exclusively in automobiles.

Boxwood Hall State Historic Site

Boxwood Hall State Historic Site is a limited service Crossroads attraction in Elizabeth, Union County. It is located on Jersey Avenue, roughly between Broad Street (County Route 623) and U.S. Routes 1 and 9. Annual visitation at Boxwood Hall is about 1,250 visitors. The site is open to the public five days per week, so if visitation were equal on each day the site were open, Boxwood Hall would receive about five visitors per open day.

In 2001, Route 623 accommodated up to 5,860 vehicles per day and U.S. 1&9 accommodated up to 35,019 vehicles per day. Visitors to Boxwood Hall made up about .09 percent of daily vehicles on Route 623 and .01 percent of daily vehicles on Route on U.S. 1&9. In 2010, Route 623 may accommodate up to 5,578 vehicles per day and U.S. 1&9 may accommodate up to 34,246 vehicles per day. In 2010, visitors to Boxwood Hall would still make up about .09 percent of vehicles on Route 623 and .01 percent of vehicles per day on U.S. 1&9. Assuming Crossroads initiatives doubled visitation to Boxwood Hall, traffic on Route 623 and U.S. 1&9 would increase to about 10 vehicles per day, or about .18 percent of vehicles on Route 623 and .03 percent of vehicles per day on U.S. 1&9.

Schuyler-Hamilton House

The Schuyler-Hamilton House is a house museum located in Morristown. The site is open to the public on Sunday afternoons between the hours of 2pm and 4pm. Schuyler-Hamilton House is located off Morris Avenue/County Route 510 in Morristown. In 2001, Route 510 accommodated up to 13,565 vehicles per day and is estimated to accommodate up to 13,511 vehicles per day in 2010.

Annual visitation to the Schuyler-Hamilton House is about 500 visitors, or about 10 guests each Sunday that the home is house museum is open. Guests, then, could have contributed about 0.07 percent of vehicles on Route 510 each day it was open in 2001 and about the same number each day it will be open in 2010. Assuming Crossroads initiatives doubled the visitorship to the Schuyler-Hamilton House, traffic on Route 510 would increase to about 20 vehicles per day (on Sundays), or about 0.14 percent of total vehicles per day.

The Schuyler-Hamilton House occasionally hosts events with up to 150 guests. On these isolated occasions, vehicles traveling to the event have the potential to make up about 1.0 percent of vehicles on Route 510, using 2001 traffic counts.

Morristown National Historical Park Visitor Center

Morristown National Historical Park Visitor Center at Jockey Hollow is located off Route 202 near Morristown, Morris County. The historical park overall receives about 300,000 visitors per year. The visitor center, however, receives only a portion of the total visits. The visitor center is open to guests daily. In 2009, according to visitation statistics maintained by the National Park Service (<http://www.nature.nps.gov/stats/park.cfm>), 2,025 visitors traveled to the visitor center by bus, 25,954 visitors arrived as individual visits, and 231 visited in groups.

In 2001, Route 202 adjacent to Jockey Hollow accommodated up to 7,210 vehicles per day and is estimated to accommodate up to 7,231 vehicles per day in 2010. In 2009, 25,954 visitors traveled to the visitor center and were counted as individual visits. This averages out to about 71 visitors per day. Visitor center guests, then, made up about 1.0 percent of vehicles per day on Route 202 in 2001 and will make up about the same percentage in 2010. Assuming Crossroads initiatives were to double individual visitorship to Morristown National Historical Park Jockey Hollow Visitor Center, traffic on Route 202 would increase to 142 vehicles per day, or about 2.0 percent of vehicles per day.

TABLE XX Estimated Traffic Impacts at a Sampling of Heritage Area Sites

Visitor Site / Crossroads Attraction	Estimated Annual Visitation	Estimated Daily Visitation	Nearby Route with Traffic Counts	Vehicles Per Day (2001)	% Visitor Site Traffic (2001)	Vehicles Per Day (2010)	% Visitor Site Traffic (2010)	Number of Annual Visitors Traveling in Groups
Old Barracks Museum 101 Barrack Street Trenton, NJ 08608-2007	30,000	82	U.S. Route 206	5,626	0.73%	6,170	0.66%	21,000

Visitor Site / Crossroads Attraction	Estimated Annual Visitation	Estimated Daily Visitation	Nearby Route with Traffic Counts	Vehicles Per Day (2001)	% Visitor Site Traffic (2001)	Vehicles Per Day (2010)	% Visitor Site Traffic (2010)	Number of Annual Visitors Traveling in Groups
East Jersey Olde Towne Village 1050 River Road Piscataway, NJ 08854	25,000	136	County Route 622 (River Road)	5,624	1.20%	6,150	1.10%	15,000
Liberty Hall Museum 1003 Morris Avenue Union, NJ 07083	14,000	76	N.J. Route 82	15,065	0.25%	14,873	0.25%	9,000
Boxwood Hall 1073 East Jersey Street, Elizabeth, NJ 07201	1,250	5	U.S. 1&9, County Route 623	35,019 5,860	0.01% 0.09%	34,246 5,578	0.01% 0.09%	1,000
Schuyler- Hamilton House 5 Olyphant Place Morristown, NJ 07960	511	10	County Route 510	13,565	0.07%	13,511	0.07%	200
Morristown National Historical Park Jockey Hollow Visitor Center Morristown, NJ 07960	25,954 (individual visits)	71	Route 202	7,210	1.00%	7,231	1.00%	c. 2,250

SOURCE: New Jersey Department of Transportation Congestion Management System (2003), found on North Jersey Transportation Planning Authority website, <http://www.njtpa.org/DataMap/Perf/Default.aspx>, accessed April 2010; Crossroads of the American Revolution Stakeholder Survey; and JMA, Inc. for the Crossroads of the American Revolution Association, 2010.