This Plan addresses short-term strategic priorities (1-2 and 3-5 year actions) as well as longer term (6-10 years) and on-going priorities. In updating the Plan, it is important to consider the larger context for trails planning, development and use to ensure that the recommendations acknowledge trends and changing perspectives. Part of the data collection and analysis effort involved the examination of factors and trends that influence trails in New Jersey. In doing so, characteristics of our society and culture emerged that are profoundly interrelated with trails in New Jersey. These interrelationships have a contextual influence on the vision and goals for trails in New Jersey and the type of actions that may be proposed to achieve them. Similarly, a number of important trends were examined that will have a pronounced effect on the demand for trails and future opportunities for trails development. These also must be taken into account in formulating the vision, goals and recommended actions of the Plan.

**Trails and Transportation**

Bicycling and walking are two of the most popular trails pursuits. Bicycling and walking are healthy and non-polluting forms of transportation that contribute to our quality of life.

As mentioned previously, trails initially and for most of our existence have been considered and used as transportation facilities. With the emergence of an industrialized, urbanized economy, the evolution of transportation, and the development of mechanized travel to meet our commercial and personal transport needs, many trails were gradually transformed into roadways, railways and highways to accommodate the new modes. Trails that were once the primary links in our transport system became byways eventually serving primarily a recreational, as opposed to a utilitarian, function.

More recently, however, with the enlightened realization and acceptance of the fact that bicycling and walking are efficient, egalitarian, healthy and non-polluting forms of transportation, there has been increasing recognition that these modes have the potential - and are used more and more - for utilitarian as well as for recreational purposes. More recently, however, with
the enlightened realization and acceptance of the fact that bicycling and walking are efficient, egalitarian, healthy and non-polluting forms of transportation, there has been increasing recognition that these modes have the potential - and are used more and more - for utilitarian as well as for recreational purposes. The use of trails as a transportation alternative to vehicle use helps to reduce the state’s reliance on fossil fuels and can become part of New Jersey’s strategy to meet climate change objectives.

The link between trails and transportation is growing stronger, especially in New Jersey. The legislation establishing the Trails Council explicitly stipulates that the Council exists to provide guidance to both NJDEP and NJDOT. Since the Council’s inception, NJDOT has participated in and supported the activities of the NJDEP Trails Program and the Trails Council. In fact, through its Pedestrian and Bicycle Program, NJDOT has provided funding for this Plan update.

Since 1990, federal transportation funding legislation has provided two major funding programs for trails: Transportation Enhancements administered in New Jersey by the NJDOT, and the federal Recreational Trails Program funds, administered by NJDEP. In New Jersey, other state transportation funding programs have also been used for trails funding when it was demonstrated that these facilities could serve a “transportation” function.

Given this strengthening relationship, the Plan update recognizes, accepts and promotes the dual function of trails in providing for both recreation and transportation.

**Trails and Economic Development**

As observed in an understated fashion by the American Hiking Society, “An organized trail system is a desirable amenity and can contribute to the economical vitality of the community.” These economic benefits are both direct and indirect. Trails have been shown to significantly stimulate local economies (especially in rural locations) since trails take visitors to and through centers where they shop, eat and explore the area. A study of the economic impact of a multi-use trail on the Outer Banks in North Carolina has documented an annual economic benefit to the local economy from the construction of the trail equal to ten times the cost of providing the trail facility in the first place.

The results of the informal Trail User Survey conducted during the planning process indicate that trails and trails use are a significant economic force in New Jersey. The use of trails directly influences the purchase of trails use equipment and amenities such as horses, off-highway vehicles, bicycles, canoes, accessories (including geocaching equipment), clothing, footwear, meals, accommodations and fuel. Almost half of respondents reported that they spend more than $1000 annually on these purchases and almost a quarter of respondents spend more than $5000. Surprisingly, over 10 % of respondents indicated that trails and their use of trails influenced the location of their home purchase.

In urban areas, trails located close to or within residential neighborhoods have been shown to have a positive effect on property values and are regarded as an amenity that attracts buyers.
As one of the primary recreational opportunities available in New Jersey’s Parks and Forests, trails contribute to the significant economic benefits provided by these facilities. NJDEP has estimated that New Jersey’s State Parks and Forests provide total annual gross benefits between $953 million and $1.4 billion (2004 dollars) and support an estimated 7,039 jobs. [NJDEP: Division of Science, Research & Technology; The Economic Value of New Jersey State Parks and Forests. June 2004, revised November 2006; prepared by William J. Mates, M.S. and Jorge L. Reyes, M.F.]

In a state where opportunities for ecotourism abound, trails are an essential part of this burgeoning tourist activity because they provide access to sites for observing and photographing New Jersey’s flora and fauna, including unique ecological areas such as the Pine Barrens. Both the New Jersey Division of Travel and Tourism and the New Jersey Meadowlands Commission have made concerted efforts to promote ecotourism and identify trails where this activity can be enjoyed. Trails have been developed on farms and incorporated into farm operations as part of agri-tourism, attracting visitors, increasing business and contributing to the farming economy.

Finally, trails provide other less tangible but none the less important economic benefits, including reduced health care costs and, when trails serve as a substitute for motor vehicle travel on roadways, less damage and reduced costs for the maintenance and repair of the transportation infrastructure.

**Trails and Greenways**

Trails and greenways are not synonymous terms but they are closely interrelated. Greenways are not trails, but most greenways are inclusive of trails. Trails are not greenways, but most trails are located within and are a part of greenways. Both function best when they are linked together in a system.

![Trails with Greenways](ACOE_Wetland_Mitigation_Project,_Bridgewater_Township,_Somerset_County)

According to the Garden State Greenways Project, a collaboration of the New Jersey Conservation Foundation, NJ Green Acres and Rutgers University, “simply put, a greenway is a corridor of land or open space.” Trails as defined in this Trails Plan are linear facilities used for a variety of recreational uses and, in some cases, for transportation.

The primary greenway concept is to establish linkages to create and preserve an interconnected system of land and water habitats. The NJ State Development and Redevelopment Plan supports providing networks of greenways and blueways that link recreation and open space land in New Jersey. When greenways incorporate trails, they are a means to pursue recreational activities, e.g., walking, running, biking, birding, canoeing and fishing. They provide opportunities for transportation from one place to another. They enhance community character. These commonalities suggest the need for a strategic partnership between trails and greenway planning in New Jersey. The Garden State Greenways web-based mapping tool for planning greenways illustrates this important connection by including a trails layer within the mapping tool [http://www.gardenstategreenways.org/].
The Garden State Greenways (GSG) program, [www.gardenstategreenways.org](http://www.gardenstategreenways.org), serves as a unique complement to the New Jersey Trails Plan 2008. A collaboration involving the New Jersey Conservation Foundation, The Green Acres Program at NJDEP and the Center for Remote Sensing and Spatial Analysis at Rutgers University, GSG is a dynamic online planning tool for all those involved in conserving open space, farmland, and historic areas. This tool assists in identifying hubs – larger areas of undeveloped land with important natural resource values – and linear connectors (a.k.a. trails) between these hubs. GSG provides statewide vision, suggested goals, detailed maps and GIS data and planning tools to help coordinate efforts of private groups and government agencies. The Vision of Garden State Greenways will be accomplished when residents of New Jersey have access to a trail or greenway within walking distance of their homes.

Garden State Greenways provides:

- An interactive statewide map of undeveloped lands and potential connectors
- Information to assist in open space planning on local, county and regional levels
- Maps illustrating the Garden State Greenways concept and vision

Garden State Greenways can be used to:

- Create or update an open space plan
- Apply for Green Acres Planning Incentive (PI) grants
- Apply for a State Farmland Program Planning Incentive Grant (PIG)
- Provide regional context to local or municipal Open Space Plans
- Raise awareness and stimulate discussion about greenways and greenway partnerships
- Identify, target or prioritize tracts of land for preservation, using the:
  - Interactive mapping
  - Downloadable GIS data
  - GIS based planning tool
Trails and Open Space Preservation

Based on data compiled for the 2008 New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP), as of June 30, 2006, New Jersey had preserved 1.3 million acres of public open space and farmland. In addition to state bond issue funding that has been the primary source of open space preservation, 252 local governments (231 municipalities and all 21 counties) assessed an open space tax in 2007 for land preservation, park and recreation projects and historic preservation, collecting over $300 million in these dedicated funds. Between 2003 and 2006, Green Acres awarded funding to 173 projects sponsored by local governments and conservation organizations for hiking trails, bike trails and walking paths. Green Acres has provided $32.7 million for state acquisition of lands for trails between 2000 and 2007. All Green Acres funded projects require public access.

Although these funds can generally be used for both acquisition and development, until now the focus has been on acquisition. The public has, by and large, been supportive of these programs, understanding their environmental benefits and their contribution to the quality of life in New Jersey. However, future support of the funding needed to achieve open space goals is not guaranteed. It has been suggested in PAC discussions, interviews and comments by trail users that New Jersey citizens might better understand and accept additional expenditures for open space preservation if they had more access to the lands that are purchased. Using open space funds to establish trails that enhance public access to preserved open space is a means of increasing public awareness of the value of the preservation programs, and of building public support for future funding allocations.

Trails and Health

Though most people associate trails with recreation, trails can provide an essential health infrastructure for a community. Since the last Trails Plan was published, there has been increasing evidence to show the link between being active and improved health. Studies show that participating in outdoor activities such as trail use, whether for recreation or transportation, has recognized physical, emotional and mental health benefits. According to the Centers for Disease Control and Prevention, increasing daily physical activity can help improve health by controlling weight and high blood pressure, preventing osteoporosis, reducing symptoms of depression and anxiety and lowering risk for type 2 diabetes, heart attack and colon cancer.

What's more, using trails is a free or low cost activity that can be used by a wide variety of people as part of a healthy, active lifestyle, providing physical, mental and emotional benefits that contribute to an improved quality of life.

Trails use is not just beneficial to the individual from a health standpoint. Building trails is cost beneficial from a public health perspective. Studies have shown that there is a direct, positive cost benefit ratio between the cost of building trails and the resultant health care cost benefits.
This being the case, active use of trails for positive health outcomes is being seen more and more by health professionals as an excellent way to encourage people to adopt lifestyle changes that will bring lifetime health benefits. Using trails can result in positive health outcomes, and partnerships with the health community can lead to more trails and more trails use.

However, the full benefits of the health-trails interrelationship have not been fully realized. According to discussions at the Health Focus Group, most health professionals don’t understand the importance of advocacy for trails or how to become involved in trail advocacy and trails planning. A lack of information about trail locations, or the lack of trail facilities within communities, makes it problematic for health professions to recommend their use. While many health-related events are held in communities across the state, few promote trail use or are held along trail corridors.

It has been difficult to create common goals and to focus on bringing together trails and health. The public health community has tended to focus its efforts on lower income and minority populations in urban areas that have the greatest risk factors or needs. Trail organizations and providers tend to focus on other populations and locations when promoting or planning trails. Workplace initiatives such as wellness programs are sometimes more concerned with medical screening than promoting increased physical activity. Over the years there has been limited coordination, programs and funding to encourage the link between trails and health. More coordination is needed to realize the mutual benefits of this connection.

A notable exception is the Mayors Wellness Campaign (MWC). MWC was created to equip mayors and other key leaders with the tools to develop and implement active-living initiatives in their communities. The goal of the MWC is to improve health and the quality of life, while reducing health care costs that are associated with obesity. The MWC provides a “toolbox” of workable, user-friendly and inexpensive programs that mayors can implement in their towns. Trails are an ideal complement to many of the program activities and should be included in the “toolbox”.

**Changing Demographics - Growth and Migration**

According to reports by New Jersey Futures and the U.S. Census Bureau, as of July 2006, New Jersey has grown by 310,213 (3.7%) since the 2000 census; about a quarter of a million (254,766) is due to natural increase (births over deaths) and the remainder is due to net migration. During this time, existing residents have been rearranging themselves and spreading out. Ninety percent or more of the population growth in the fast-growing counties of Burlington, Ocean, Hunterdon and Warren resulted from people moving to those counties from elsewhere in New Jersey [Future Facts, New Jersey Futures January 31, 2006]. Even so, New Jersey is the most densely populated state with 1,176 people per square mile (the national average is 80 people per square mile). Bergen County, with a population of over 900,000, has more residents than six states (Alaska, Delaware, North Dakota, South Dakota, Vermont and Wyoming).

In general, migration has flowed from more urbanized to less urbanized areas, doubling the amount of new acres developed per new resident and leaving 297 of the state’s 566 municipalities below their peak
Though sprawling growth continues apace in the suburban and "green" sections of the state, some of New Jersey’s larger cities are, in fact, beginning to turn around. For example Newark’s population has climbed above 280,000 for the first time since 1989, after remaining essentially stagnant in the 1990s. In 2004, New Brunswick’s population topped 50,000 for the first time. Camden and Trenton have stabilized after population drops in the 1990s. Among the state’s 19 largest cities, 14 had population gains between 2000 and 2004. Hoboken tops the list with 4.1 percent growth, followed by Vineland, Elizabeth, Perth Amboy, New Brunswick, Newark, Hackensack, Linden, Passaic, Clifton, Paterson, Plainfield, Atlantic City and Camden [Future Facts, New Jersey Futures, July 29, 2005].

The implication regarding trails is that demand for trails activity and facilities is likely to increase in urban areas as well as in suburban and exurban areas.

**Changing Demographics - Age Structure of Population**

In 2006 the first Baby Boomers (the generation born between 1946 and 1964) turned 60 years old. In New Jersey, 17.2 percent of all residents were 60 or older in the 2000 census. In absolute numbers, communities with the largest numbers of residents aged 60-plus include the state’s two largest cities, Newark (35,240) and Jersey City (32,013), as well as Manchester and Berkley in Ocean County (each 23,000). [Future Facts, New Jersey Futures, December 19, 2005]

More seniors with more leisure time and more interest in non-competitive and non-extreme recreational pursuits will increase the demand for trails, increase the use of trails, and increase the pressure for new trails. There is likely to be an increase in need/demand for accessible trails to accommodate trail users with a variety of physical/mobility limitations.

**Changing Land Use - Sprawl**

New Jersey’s loss of undeveloped land continued apace through the 1990s and since. The Garden State lost 90,000 acres of farmland and forest to subdivisions, office parks and cleared lots between 1995 and 2000, matching the pace of development in the previous decade. The pace of development quickened in forested areas, including the Highlands [Future Facts, New Jersey Futures, June 1, 2004].

Every year, the state converts another 18,000 acres or 28 square miles to development, an area roughly two times the size of Jersey City. Population growth alone is not to blame; land is being consumed at roughly three times the rate of population growth. Development or "land use change" has been ranked as the number one threat to New Jersey’s environment and its residents by the New Jersey Comparative Risk Project, an independent panel of experts commissioned by the state [Future Facts, New Jersey Futures, September 23, 2003].
Opportunities to preserve undeveloped land diminish as the cost of land rises. In the final analysis, how growth is handled does make a difference. Theoretically, if everyone in the state lived at the density of the densest municipalities, the entire population would fit on 3 percent of the total land area of the state, leaving plenty of open space for everyone. Instead of a land use pattern of vital urban centers and rural communities interspersed among green space, New Jersey’s pattern of sprawl development is eliminating the green space. As land is “used up,” opportunities to package linear rights-of-way for trails diminish and land costs increase [Future Facts, New Jersey Futures, September 23, 2003]. Full build-out for New Jersey is projected within as little as one or two generations, increasing the urgency both to protect open space and to secure right-of-way for comprehensive trail networks throughout New Jersey.

Changes in Trail User Types
The most prominent current standards for multi-use trails (AASHTO Guide for the Development of Bicycle Facilities, 1999) use the operational characteristics of a bicycle to determine the design criteria for facilities. Unfortunately, many multi-use trails are not developed or maintained to these standards. Trends suggest there is an increasing number of trail devices used by increasingly diverse groups of trail users.

- Adult tricycles
- Manual and power wheelchairs
- Hand cycles
- Inline skates & skateboards
- Scooters
- Strollers
- Bike trailers
- Tandem bicycles
- Segways
- Dogsleds
- Horse carriages, etc.

The operating characteristics of these devices vary from the bicycle and from each other. In the future, greater consideration will need to be given to identifying the intended uses and users of trails and to applying the appropriate design features necessary to safely accommodate these new uses on multi-use trails.