

2009 SUMMARY

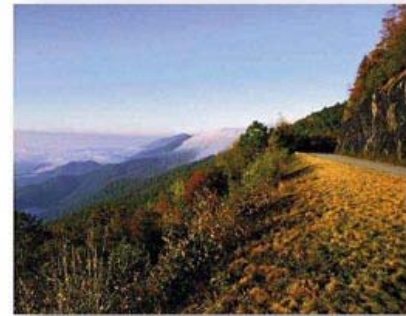
In its most recent assessment of national infrastructure needs, the American Society of Civil Engineers graded the nation's public parks and recreation facilities a "C-" based on the continued loss of open space in our urban area despite vigorous state and local spending; the unaddressed \$7B backlog of maintenance items in our National Parks and the failure to improve access and security on our federal lands. The 2009 national report cites lack of sustained funding mechanisms and failure to plan and balance alternative uses as significant deficiencies in the management of these assets across the nation.

Positive notes in the national report include citation of the public support of public parks and recreation initiatives in 2008, noting that nationwide, voters supported 62 of 87 local ballot initiatives, representing \$7.3B allocated for parks and open space improvements. This was matched with another \$1.1 billion in legislative allocations, bringing the nationwide total to \$8.4B in 2008 the largest annual allocation in 10 years for state and local recreation improvements.

Virginia's public park system is a combination of national, state and local parks and facilities. This diverse system of parks is best described in the Virginia Outdoors Plan which is the state's official document for land conservation, outdoor recreation and open space planning. The 2007 plan was the ninth edition, written in accordance with Section 10.1-200 of the Code of Virginia. It was based heavily on the 2006 Virginia Outdoors Survey and encompasses all aspects of our parks and recreational infrastructure. It is also the basis of the information contained in this report card. Future updates are recommended to follow revisions to the Virginia Outdoors Plan so that the ASCE report card can help promote the recognized infrastructure needs and accomplishments in a cooperative and complimentary way.

INTRODUCTION AND BACKGROUND

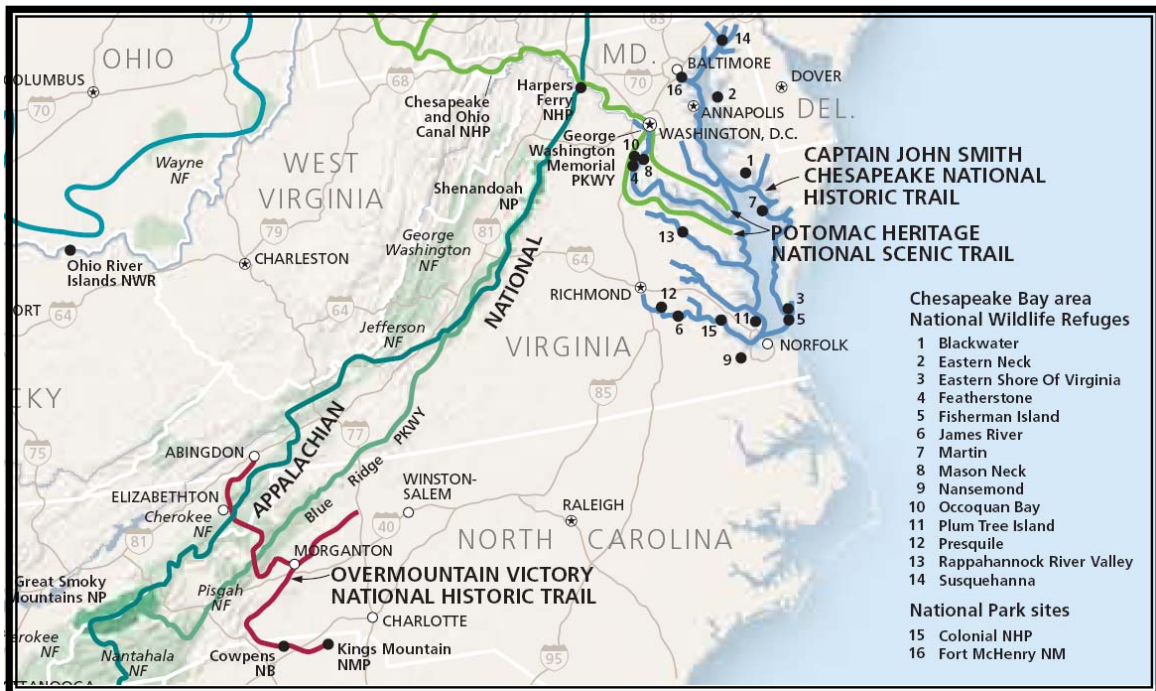
The National Park Service (NPS) has a significant presence in Virginia with 20 parks and a combined land area of approximately 400,000 acres throughout the state. **The NPS parks in Virginia have 14 million visitors annually and generate \$263 million in spending, providing 6,100 jobs statewide.** This is approximately 2 percent of total travel and tourism related spending in the state. The NPS also enhances the capacity of states, communities and private organizations through its partnership program and outreach activities.



Some parks, such as Assateague Island, Prince William Forest Park and Richmond National Battlefield have seen significant increases in visitation in recent years but total visits to national parks in Virginia decreased 1.7 percent from 15,237,960 in fiscal year 2000 to 14,974,938 in fiscal year 2005. Future studies will show if the trend downward is continuing.

In addition to the NPS facilities, the United States Department of Agriculture's Forest Service manages the 1.8 million-acre George Washington and Jefferson National Forests (GW-Jeff) in Virginia. **Virginia national forest lands constitute nearly 50% of the total outdoor space accessible to the public in the Commonwealth.** The National Forests stretch the length of the western portion of the state, through 31 counties. Recreation use on the GW-Jeff National Forests for calendar year 2006 were estimated at 1.37 million visits, with the 17 designated wilderness areas providing a majority of the recreational

opportunities. The National Forests provide the only publicly managed motorized trails in Virginia and include comprehensive equestrian trail systems with campgrounds, a range of trail types and lengths, and support facilities for horse riders.



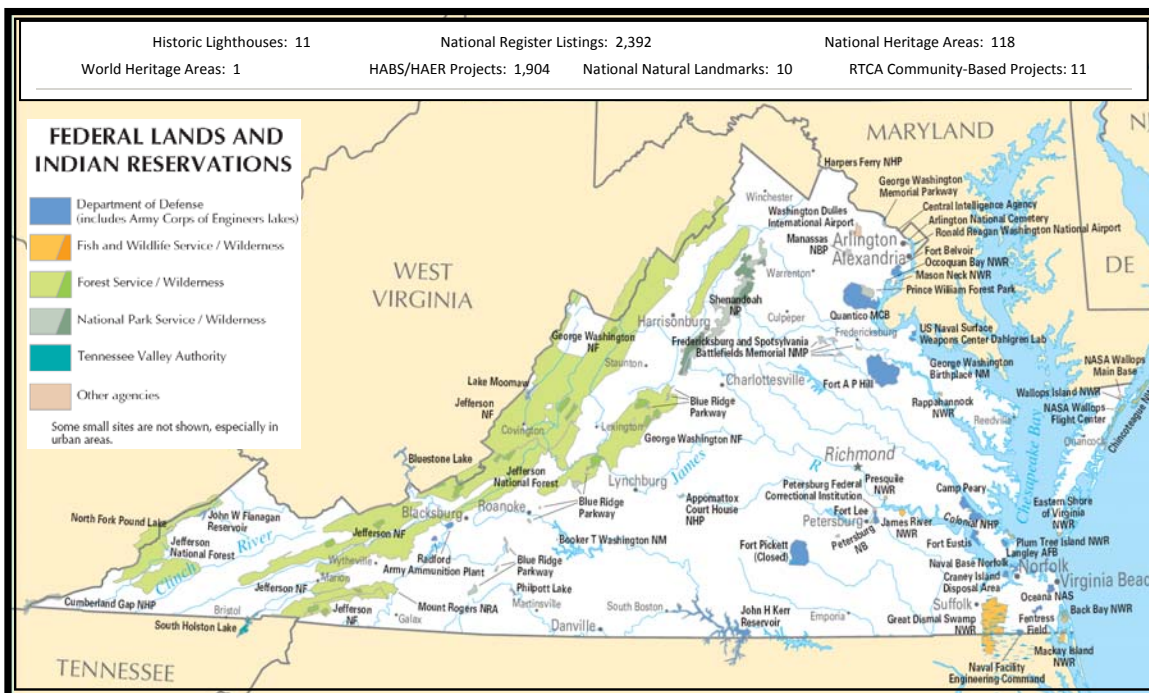
National Heritage and Historic Trails in Virginia – (Source: U.S. Forest Service, 2007)

The U.S. Fish and Wildlife Service (USFWS) manages 15 National Wildlife Refuges (NWR) and one national fish hatchery in Virginia comprising more than 161,032 acres. The refuges are managed primarily to provide habitat and to protect natural ecosystems however, they also provide outdoor recreational opportunities. Some of the refuges are grouped together into complexes with one project leader managing two or more refuges.

The NWR System Improvement Act of 1997 provided guidance for management and public use of the refuge system and requires each refuge in the system to prepare a comprehensive conservation plan by 2012. A key provision of the act defines compatible wildlife-dependent recreation as a legitimate public use which includes hunting, fishing, wildlife observation, photography, environmental education and interpretation.

The refuge system also helps to fulfill conservation objectives to preserve, restore and enhance natural ecosystems including endangered or threatened species; to perpetuate migratory bird resources; to preserve the natural diversity of plants and animals; and to provide an understanding of wildlife ecology while offering refuge visitors safe, wholesome and enjoyable recreational experiences. Level or declining budgets for refuges nationwide, and accompanying increases in fixed costs, have caused some refuges in Virginia to reduce recreational opportunities in recent years.

The figure on the following page shows the geographic distribution of these federal recreational assets around Virginia. These assets are complimented by the large number of state parks, historical sites and high quality natural areas managed by the Virginia Department of Conservation and Recreation.



Federal Parks, Forests and Monuments in Virginia – (Source: National Atlas, U.S. Dept. of Interior, 2003)

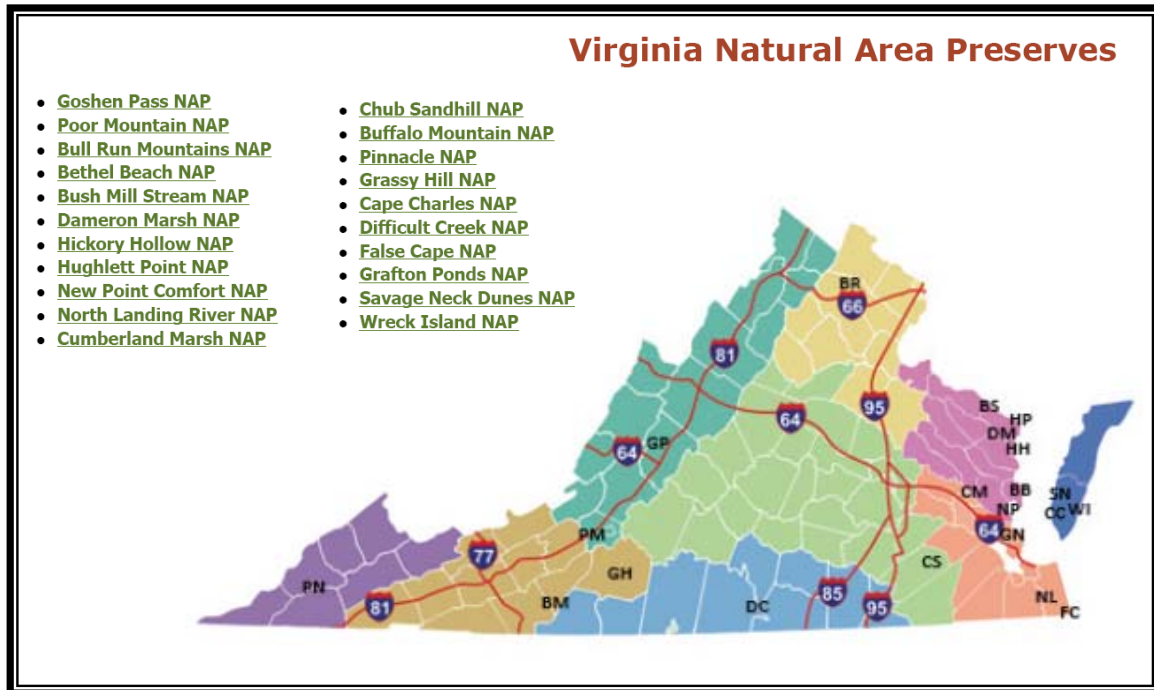
Virginia opened its first 6 state parks in 1936. **Since then, development of state parks has continued and as of 2006, the Virginia Department of Conservation and Recreation (DCR) was managing more than 66,000 acres of state park lands, which includes 34 state parks with associated historic and natural sites.** In addition, as of January 2007, DCR had acquired and land-banked 6,900 acres for 5 new state parks to be named High Bridge, Powhatan, Middle Peninsula, Seven Bends and Widewater. According to DCR, there is still a need for an additional 12,000 acres of park land by 2010 to meet the standard for state park acreage based on population projections.



State Parks in Virginia – (Source: VA DCR, 2009)

On October 3, 2001 at the National Recreation and Park Association Annual Congress & Exposition, Virginia's State Parks were awarded the National Gold Medal for "Excellence in Park and Recreation Management". Virginia was selected based on improvement, service, continuing development, extent of future planning and degree of involvement and acceptance by communities throughout the state. The award is recognized as the most prestigious award a state park system can receive, and Virginia joined only Ohio (1997) and Florida (1999) in receiving this national recognition in 2001.

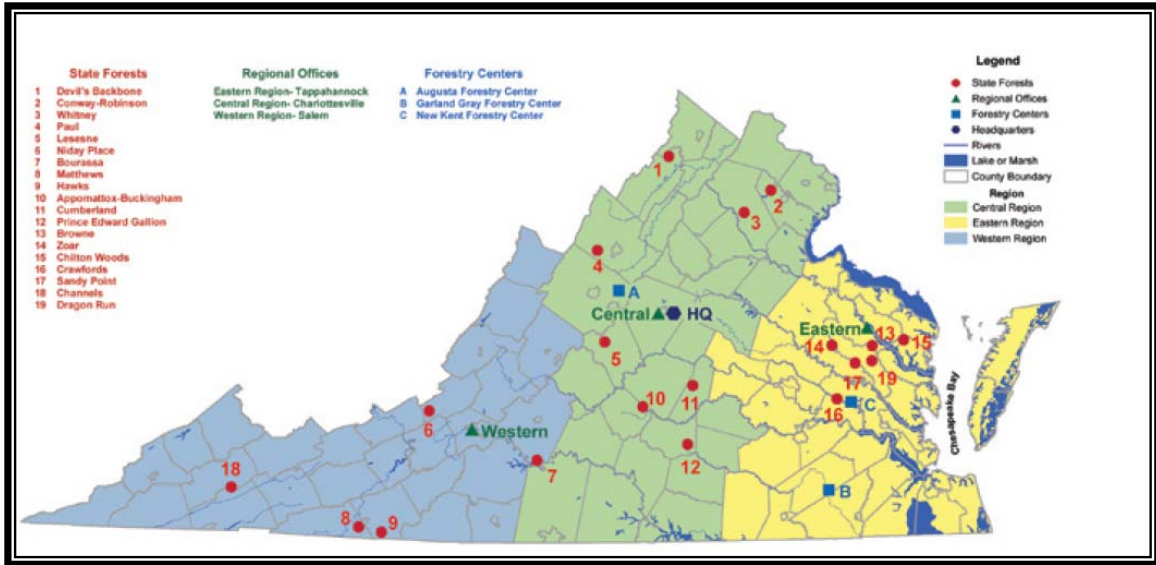
Attendance at Virginia State Parks in 2006 exceeded 7.0 million people, as compared to 6.3 million in 2000. **Approximately 40% of state park visitors are believed to be from out of state. State parks visitors contribute an estimated \$157 million to the state's tourism industry. This is particularly important for many of the rural communities in which state parks are located.**



Natural Area Preserves in Virginia – (Source: VA DCR, 2009)

The Virginia Department of Forestry (DOF) managed 2 seed nurseries and 19 forests encompassing 55,000 acres of state forest land in 2008, much of it protecting Virginia's Natural Area Preserves and Parks. These self-sustaining lands provide forest products, wildlife habitat, water quality protection, recreation opportunities and aesthetic benefits needed to sustain Virginia's ecological balance, as well as a healthy quality of life.

In 2008 urban development resulted in an average loss of 27,000 acres of forested land per year in Virginia, up 30% from the 20,000 acres per year in 2001. At this rate Virginia could lose another million acres of forest land over the next 25 years. Forest loss is not only an environmental impact, but also significant impact on the timber business, currently valued at \$27.5B annually in Virginia. The industry also generates 144,000 jobs, and landowners received \$350 million in timber sales revenue in 2008 according to the DOF 2008 annual report.



State Forest Resources in Virginia – (Source: VA DOF, 2009)

The Virginia Department of Game and Inland Fisheries (DGIF) manages the Commonwealth’s wildlife and inland fisheries on these forestlands and other assisting the DOF with protecting state and federally threatened or endangered species. The mission of DGIF is to maintain optimum populations of all species of wildlife and fish to serve the needs of the Commonwealth; to provide opportunities for all to enjoy wildlife, inland fishing, boating and related outdoor recreation; and to promote safety for persons and property in connection with fishing, boating, and hunting.

Fishing is rated the 7th most popular outdoor activity with Virginia’s and boating is 10th, hunting is further down the list, however Virginians still spend almost 11.2 million days sport hunting annually. **Including wildlife observation in with these pursuits, these outdoor activities brought in \$789M in business revenues in 2001, this included \$172 million for travel-related expenses.**

The biggest challenge to sustaining this economic engine is maintaining accessibility to public hunting grounds. This was exacerbated in 2001 when military bases closed open acreage due to security concerns. Since then it is estimated that 80% of the lands used for hunting are in private ownership, and most are west of the Blue Ridge Mountains, this makes access more difficult from Virginia’s major metropolitan areas.

DGIF’s 37 Wildlife Management Areas (WMA) encompassing over 200,000 acres help offset some of these losses. These lands were procured with and are maintained using revenue from the sale of hunting, fishing and trapping license fees and with periodic use of Wildlife Restoration Funds, and are an excellent example of a self-sustaining system, protecting Virginia’s resources and hunting heritage.

License fees also help DGIF maintain access to 35 public fishing lakes (totaling over 3,318 acres); fund contract fishery operations on 24 large reservoirs and 166 small impoundments (totaling over 173,000 acres); and assist the DGIF with maintenance of public access and management of 3,000 miles of native and stocked trout waters and 25,000 miles of warm water streams and rivers.

DGIF is actively working to restore anadromous fish on Virginia Rivers, partnering with a variety of conservation groups to restore habitat and reduce barriers to fish propagation; most notably through

construction of the Boshers Dam Fish Passage on the James River in early 1999, and the removal of the Embrey Dam on the Rappahannock River in 2004.

DGIF was instrumental in completing the Virginia Birding and Wildlife Trail in 2004, creating the first statewide wildlife viewing trail in the United States. It links together more than 650 wildlife viewing areas and is a partnership with local government and landowners to improve access to wildlife viewing statewide.

In addition to the outstanding freshwater resources managed by the DGIF, the Commonwealth of Virginia is endowed with more than 5,242 miles of tidal shoreline, encompassing 2,300 square miles of water surface and 1,472,000 acres of state-owned bottom lands. **These submerged lands, greater in area than the State of Delaware, harbor some 21,000 acres of Chesapeake Bay grasses, 251,000 acres of public oyster grounds and 90,000 acres of oyster grounds under private lease.** Oversight of these resources is managed by the Virginia Marine Resources Commission, the lead agency for protecting our state's saltwater and tidal environment.

These lands are a public resource and a valuable habitat for shellfish, crabs and finfish. Along the fringes of the coves, creeks, great rivers and bays of the Chesapeake estuary grow 225,000 acres of vegetated tidal wetlands. These vegetated areas, particularly the salt marshes, provide a vital spawning and nursery area and are an important element of the marine food webs for marine resources of the Commonwealth.

Virginia is ranked third in the United States in volume of seafood products harvested and landed. Sales for recreational fishermen have increased over the past 10 years, and support more than 9,000 jobs in coastal Virginia. The estimated number of saltwater recreational anglers in Virginia has increased from 562,000 (2002) to 724,000 (2006). Likewise, the number of saltwater fishing trips has increased from 2.6 million to 3.1 million during the same period. **Approximately \$2M is collected annually from the sale of Recreational Saltwater Fishing Licenses, an additional \$750,000 is expected to be collected each year due to fee increases.**



Local access to regional parks and recreation facilities are the foundation of an effective outdoors system as citizens need recreational opportunities close to where they live. Seventy-five percent (75%) of all people use local parks and recreational services, and more than forty percent (40%) visit local parks more than 10 times per year.

Providing these local facilities is generally considered a basic responsibility of local government, however there is a trend in rural Virginia to disband local parks and recreation departments and instead provide public funding to private organizations (such as the YMCA) to provide recreational services to its citizens. In Virginia, parks and recreation is not a mandated service and no operational funding is provided to local governments by the state for these services. This results in highly variable funding of these amenities

based on local economic factors and as a result there are significant differences in levels of service within local park systems around the Commonwealth.

The 2008 Commonwealth of Virginia Report of Local Government Expenditures indicates localities invested \$575M on parks and recreation activities in FY08, with less than 4% of this emanating from state and federal sources. This equates to average spending of \$71.50 per capita average for FY08. Citizen involvement as volunteers or as members of citizen boards, friends groups or commissions helps keep these costs low and donations are also an important way of controlling the need for increased spending at the local level.



CONDITION AND ADEQUACY

There are a number of overall trends and observations to consider in evaluating overall adequacy of infrastructure for public parks and recreation. Some of the more notable trends are highlighted below.

Recent studies have indicated that people want more parks and recreation areas, especially near large cities with better facilities for organized sports and for unstructured free-play. **Surveys in Virginia show 92% consider access to outdoor recreation opportunities as “important” or “very important”, and volunteerism, friends groups and donations show people are willing to contribute.**

The travel industry continues to be a mainstay of Virginia’s economy and in Virginia we embrace the fundamental importance of marketing outdoor recreation opportunities, such as state parks, wildlife areas and historic sites. The relationship and partnership of sharing user data, including visitation records, demand, supply and needs information, with the Virginia Tourism Corporation and others is continuing to grow. **Virginia’s heritage is closely tied to the top marketing opportunities for the travel industry and the financial benefits of outdoor recreation related to tourism provides a basis for a stable and reliable source of funding for maintaining and improving these opportunities in years to come.**

The Virginia Outdoors Plan is a comprehensive document that addresses all aspects of outdoor recreation. Along with the Virginia Outdoors Survey and other related studies, these plans provide a framework for maintaining and improving the system and should continue to be developed on a periodic basis. In addition, local and regional planning agencies are needed, with full-time directors, to champion and implement the strategies established in the plans. Local leaders can also help encourage land use planning at the local level, including conservation and preservation areas, clustering of development plans where appropriate, and other smart growth and green design initiatives. With Virginia’s population in poised to grow to 9.83 million residents by 2030, this 21% increase over the current levels will strain existing recreational resources unless proactive steps are taken to increase open space opportunities in Virginia.

Also, at the local level, schools have begun to open recreational facilities to the community and private facilities (such as the YMCA) sometimes receive conjunction public funds to promote recreational development. These measures help supplement but should not replace public programs and the need to develop long-term and reliable public parks infrastructure.

In addition to the local planning, national and state park facilities and staff can help by monitoring statewide land use planning initiatives with research guidance and support, other technical assistance, providing legal powers for running a local program, and by providing matching funds and grants to encourage certain areas of parks and recreational facility development. Overall planning at the state level includes preservation of working farms and forests, protection of our natural, historic and cultural resources, protection of threatened and endangered species, and improved access to some of the larger recreational facilities in the state.

The National Recreation and Parks Association (NRPA) held a forum in 2006 and established a national agenda for local and regional park facilities in America. **The needs they identified include promoting health and wellness, stimulating community and economic development, protecting the urban environment, and educating, enriching and protecting America's youth.** Concerns have been voiced on the national stage for obesity in children and the need to promote healthy children in our society. Parks can play an important role in reversing this trend.

State funding is mostly provided through grants for the local programs, while bond referendums in 1992 and 2002 helped expand the state funding for new and improved park facilities. Grants appropriate to local governments for outdoor recreation and conservation are outlined in Chapter VI of the 2007 VOP and are continually updated through the DCR website.

Virginia is known to have one of the most attractive land preservation tax credit incentive programs in the nation. **Since the establishment of the Virginia Outdoors Foundation in 1966, Virginia has become one of the nation's leaders in holding conservation easements and purchasing development rights for agriculture and forest lands. The VOF currently holds the 2nd most conservation easements in the nation.** In 2006 alone, more than 70,000 acres of land was put into conservation easements through the VOF. In addition, many agencies and nonprofit land trusts have developed over the past decade to play an important role in the use of easements to protect land. With the loss of forest land estimated to have grown to 27,000 acres per year in 2008, the land preservation tax credit system is as important as ever to counteract urban sprawl and development.

Today, the Virginia Outdoors Fund is made possible through the federally funded Land and Water Conservation Fund (LWCF). Since 1999, the funding for land conservation has been administered by DCR's Virginia Land Conservation Foundation (VLCF), which is a matching grant program. With no stable funding source for outdoor recreation and land protection, state funding has fluctuated dramatically over the past decade. Over the lifetime of these two funds, the Virginia Outdoors Fund has contributed over \$80 million in matching grants and the Virginia Land Conservation Foundation over \$21 million, for a total of more than \$100 million in funding.

Through leadership by the NPS, DCR and others, the state has a good track record of making public lands available for a wide range of recreational uses, although there is some evidence of changes to this policy due to the budgetary constraints on national wildlife refuges and other facilities. To counteract this trend, more can be done to encourage advance planning in areas of major water impoundments. **Surveys show that Virginians want better water access, and planning for new reservoirs to support growth should also include providing water access and promoting best management practices in treating surface water runoff, promoting water quality.** This also applies to existing rivers, streams and lakes that need environmental stewardship and protection, recreational easements can provide access and great outdoors experiences while improving water quality along impaired urban waterways.

INVESTMENT NEEDS AND FUNDING DEDICATED

Recent funding for expanding and improving the state park system has been most notably from General Obligation Bond packages in 1992 and 2002. **For example, with 69% approval the 2002 Parks and Natural Areas General Obligation Bond (GOB) Referendum provided \$119 million for the acquisition of new state parks and natural area preserves, and 75 projects were funded to upgrade infrastructure in existing state parks.** New developments as a result of the 2002 GOB included visitor centers, cabins, campground loops and campsites, equestrian areas, meeting facilities, and development of miles of roadways, utilities and associated parking lots. **Efforts to re-benchmark the system continue and state funding was provided for 88 additional state park needs from 2005 to 2008.**

Revenues generated by park visitation are an increasingly important source of funding. All park revenues are returned to the state parks system and are used for operations, maintenance and equipment. **Over the past 5 years on record, revenues from “normal” park activities (camping, cabins, parking, etc.) have increased by almost \$2.3 million (40 percent) due to the combination of increased visitation, opening of new facilities and park fee increases.** Parks have also become increasingly successful with “park operated concessions” (merchandise, food, swimming, etc.). These activities now generate gross revenues of more than \$3.3 million and provide an important source of funds for equipment and improvements to snack bars, stores and swimming areas.

Volunteerism is also vital to the support of state parks. Between 2000 and 2006, volunteer hours increased 23 percent with volunteers contributing more than 142,000 hours. AmeriCorps (the National Civilian Conservation Corps), college spring break groups and various camp host programs supplement volunteers who live near parks. State parks “friends” groups are also vital in organizing volunteer efforts under park staff guidance and at least 29 support groups have been formed across the state, focused on highlighting Virginia’s rich cultural and natural heritage through experiential park visits.

ESTIMATED 5-YEAR FUNDING REQUIREMENTS FOR PUBLIC PARKS AND RECREATION

Total investment needs
\$85 BILLION

Estimated spending
\$36.835 BILLION

Projected shortfall
\$48.17 BILLION

Solutions

- Create partnerships between public agencies and private recreation and conservation groups to provide benefits to the public at a lower cost;
- Adopt regional planning approaches that recognize recreation use and demand trends to maximize the use of limited funds for park acquisition and maintenance. Care must be taken to avoid overextending limited operation and maintenance budgets by creating too many new properties;
- Establish state and local dedicated funding sources for parks and recreation facilities to ensure consistent future funding;
- Continue to increase federal leadership through programs like the Centennial Initiative and the Land and Water Conservation Fund to meet growing population demands for outdoor recreation opportunities;
- Establish a federal commission to study ways to improve access to recreation in the United States. A bipartisan commission could assess use and demand of outdoor recreational facilities and better track the spending and effectiveness of federal investments in parks and recreation facilities.

ASCE 2009 National Infrastructure Report Card Needs – Parks & Recreation Category (Source: 2009 ASCE IRC)

BASIS OF GRADE

Assigning an overall grade to Virginia’s recreational infrastructure is based on evaluation of the accessibility, reliability, current and future capacity, sustainability and economic needs of Virginia’s recreation areas as shown below:

Rating of Virginia’s Parks and Recreation Infrastructure			
Category	Percent of Systems Meeting Goals	Percent Compliance Desired	Rating
Current Capacity and Quality	85%	100%	Excellent (B+)
Future Capacity	75%	100%	Fair (C)
Economic Needs and Sustainability	80%	100%	Above Average (C+)

The Parks and Recreation category of Virginia’s 2009 infrastructure report card rated the highest grade for the Commonwealth a “B-“. This is significantly better than the national 2009 report card grade of “C-“ for Parks and Recreation show below.

Public Parks and Recreation Parks, beaches, and other recreational facilities contribute \$730 billion per year to the U.S. economy, support nearly 6.5 million jobs, and contribute to cleaner air and water and higher property values. Despite record spending on parks at the state and local level, the acreage of parkland per resident in urban areas is declining. While significant investments are being made in the National Park Service for its 2016 centennial, the agency’s facilities still face a \$7 billion maintenance backlog.



ASCE 2009 National Infrastructure Report Card Summary – Parks & Recreation Category (Source: 2009 ASCE IRC)

Virginia’s favorable rating is primarily due the wide variety and dispersed nature of recreational opportunities available to Virginians. Existing facilities are relatively new and the inventory of state and local parks continues to grow. Federal facilities have suffered from reduced funding but still provide some of the most scenic and remote recreational opportunities in the Commonwealth.

A primary reason Parks and Recreation are rated so highly is that the public strongly supports investments in parklands and recreational development, recognizing the long term benefit to our state. Sustaining funding through affordable rate structures and public-private partnerships will increase the frequency of use and continue to enhance experiences for visitors to our State. There is still room for improving access to our parklands, and reopening closed areas as described in this report, but overall Virginia’s various entities provide excellent opportunities for recreational enjoyment.

Public parks in Virginia are second to none, however declining attendance at national parks and an immediate shortfall of 12,000 acres for state parks show that more is needed to maintain and improve existing facilities.

The Virginia Outdoors Plan and other strategic plans provide good information, but available data is sometimes incomplete or inconsistent as you consider the wide variety of facilities associated with outdoor recreation. Also, the lack of local and full-time directors for park programs in rural areas can

hinder conservation, recreational development and tourism growth. Strong leadership along with a statewide vision built upon local interests are needed to achieve continued success.

While the data continues to show the tremendous advantages for parks in donations, volunteerism and user fees, funding is still needed for such a large and diverse infrastructure. Local parks lack dedicated state or federal funding on a continual basis which makes it difficult to establish a long range plans.

CONCLUSIONS, RECOMMENDATIONS AND POLICY OPTIONS

The conservation of natural, cultural and scenic resources have always been important to Virginians' quality of life, but our relationship with the land grows more complicated every day. Every census brings news that a number of Virginia's localities are among the fastest growing in the nation. The forests and farms that have historically served as the foundation of our economy are increasingly under pressure. In this report card, we want to remind everyone to examine our relationship with the land and our future together, including having a plan for outdoor recreation and public parks high on our list of priorities.

REFERENCES AND CREDITS

ASCE National 2009 Infrastructure Report Card: www.infrastructurereportcard.org

US Census Bureau, State Interim Projections: www.census.gov/ipc/www/usinterimproj/

2008 State of the Forest, Virginia Department of Forestry

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<http://www.fs.fed.us/recreation/programs/trails/natltrails.pdf>

USGS Products, Acknowledgement: Data available from the U.S. Geological Survey, See USGS Visual Identity System Guidance for further details. Questions concerning the use or redistribution of USGS data should be directed to: ask@usgs.gov or 1-888-ASK-USGS (1-888-275-8747).

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