



## Virginia Beach, Virginia – Perpetual Frontier

Envisioning a model community for our nation's sustainable future, in the birthplace of our new world heritage.

Proposal for the  
2009 Sustainable Design Assessment Team Program  
AIA Center for Communities by Design

November 14, 2008



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AIA SDAT 2009 Proposal

PROJECT:

**Virginia Beach, Virginia – Perpetual Frontier**  
Creating a model community for our nation's sustainable future

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ABSTRACT:

Virginia Beach is a community and a geographical region with tremendous historical as well as contemporary significance. As a citizenry and as a local government, we are keenly aware of the local, national, and global need to progress our way of life to manage our resources, restore and protect our environment, and achieve fundamental *sustainability*- in the most holistic essence of that word. Within our reach is unparalleled potential towards this end, including geography and climate, natural resources, agricultural capability, alternative energy opportunities, economic framework, and a motivated and resourceful population with an emergent, progressive local cultural identity.

This proposal seeks Virginia Beach's inclusion in the AIA Communities by Design 2009 SDAT Program. The City has taken initial steps towards creating a Sustainability Plan and a long term vision for our community, but with our potential we could benefit greatly from the expertise of an assessment team at this stage. We seek guidance to maximize the efficiency of our current efforts and to recommend further action that will facilitate the emergence of Virginia Beach as a locally resilient community and a model of comprehensive sustainability. There are several specific requested focal points, which are discussed in the body of this proposal.



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**COMMUNITY DESCRIPTION:**

**History:**

The rich history of the city of Virginia Beach dates back nearly 400 years, when the first English colonists ventured to the New World. On April 26, 1607, vessels Susan Constant, Godspeed, and Discovery stopped at the mouth of the Chesapeake Bay. The colonists spent three days at the site of the first landing, erecting a cross and naming the spot Cape Henry. From Cape Henry, they sailed across the bay and up the river, ultimately settling the colony of Jamestown. The first settlement inside the current city limits of Virginia Beach was made on the Lynnhaven Bay in 1621. The area that is now Virginia Beach remained thinly settled for well over a century. In the 1880s, an oceanfront resort was developed. And the by the turn of the century, the city had become a popular tourist destination. In 1906, Virginia Beach became a town. In 1963, the resort town merged with Princess Anne County to form the City of Virginia Beach.

**Population and Demographics:**

Virginia Beach is now the most populous city in Virginia, with approximately 441,000 residents, and the 39th largest in the United States. The demographics are as follows:

	VB	Region	USA
Median Age . . . . .	35.09 . . . . .	35.12 . . . . .	36.53
Male . . . . .	49.42% . . . . .	49.37% . . . . .	49.27%
Female . . . . .	50.58% . . . . .	50.63% . . . . .	50.73%
White . . . . .	69.13% . . . . .	60.97% . . . . .	73.07%
African-American . . . . .	19.87% . . . . .	31.52% . . . . .	12.37%
Asian/Pacific Islander . . . . .	5.38% . . . . .	3.05% . . . . .	4.43%
American Indian or Alaskan Native . . . . .	0.37% . . . . .	0.37% . . . . .	0.92%
Two or More Races . . . . .	3.50% . . . . .	2.75% . . . . .	2.80%
Other . . . . .	1.76% . . . . .	1.34% . . . . .	6.41%

Estimated levels of education in 2007 (25+) are as follows:

Graduate Degree . . . . .	8.76%
Bachelors Degree . . . . .	19.16%
Associates Degree . . . . .	7.59%
Some College (13-15) . . . . .	29.04%
High School Grad or GED (12) . . . . .	25.93%
Some High School (9-11) . . . . .	7.09%
Elementary . . . . .	2.43%

**Form of Local Government:**

The City of Virginia Beach has a council-manager form of government. Seven seats of the 11-member council are filled by individuals who reside in the seven respective districts of the City. The four remaining “at large” seats do not carry a district requirement. The Mayor is elected by popular vote, and holds one of the four “at large” seats.



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### Economic Information:

Virginia Beach's business base is comprised of seven major economic sectors. The first is Agribusiness, which contributes significantly to the City's overall economy. The economic impact of the agricultural community is estimated at more than \$80.3 million, based on product valued at approximately \$25.1 million. There are 172 farms in the City, resulting in approximately 27,000 acres of land under cultivation. The others include Business, & Industry, Construction & Real Estate, Conventions & Trade Shows, Military, and Retail & Wholesale Trade. The seventh is Tourism. In the most recent calendar year, 2.75 million overnight visitors arrived in Virginia Beach. These visitors spent approximately \$857 million during their stay for accommodations, meals, entertainment and other services, and created more than 14,900 jobs in the City of Virginia Beach. Visitor expenditures generated \$73.2 million in direct city revenue.

### Geography and Climate:

The city encompasses 307 square miles with 38 miles of Chesapeake Bay and Atlantic Ocean beaches, including 248 sq. miles (642 km<sup>2</sup>) of land and 59 sq. miles (153 km<sup>2</sup>) of water. The average elevation is 12' above sea level (4 meters).

Virginia Beach enjoys a temperate climate with mild winters and spectacular spring and fall seasons. Summer days are generally warm, cooling off in the evenings. According to the National Climatic Data Center Report: "The geographic location of the city with respect to principal storm tracks is especially favorable, being south of the average path of storms originating in the higher latitudes and north of the usual tracks of hurricanes and other tropical storms." Hurricanes, however, are a significant issue for the City.

### Regional Setting:

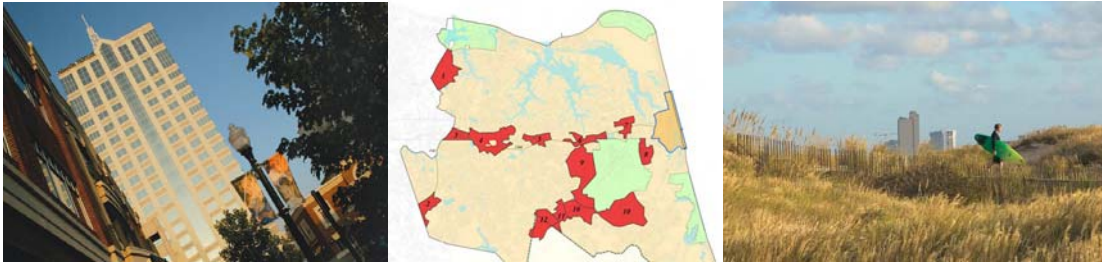


Located in the southeastern corner of Virginia, where the state meets the sea, the Virginia Beach Metropolitan Statistical Area (MSA) is the 34<sup>th</sup> largest in the United States, with a population of almost 1.65 million. The market encompasses 15 cities and counties including Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg, as well as the Virginia counties of Gloucester, James City, Mathews, Isle of Wight, and York, and the North Carolina county of Currituck. Virginia Beach's strategic mid-Atlantic location and superior transportation network provide swift access to domestic and foreign markets. More than two-thirds of the nation's population and marketplace are within 750 miles of the city.



### Past and Ongoing Planning Efforts and Reports:

There are several efforts ongoing in Virginia Beach which contribute to the goal of Virginia Beach as a sustainable community. Foremost is the **Comprehensive Plan**. Required by state law and adopted by City Council, the Plan is the official land use planning guide for Virginia Beach and used to help channel growth, protect neighborhoods, improve our economy, help manage our limited resources and, ultimately, advance the overall quality of life for citizens. The last two plans, one adopted in 1997 and the other in 2003, received the highest award from the Virginia Chapter of the American Planning Association for a professional planning document. It seeks to bring together the desire for growth and economic development in the City with the local lifestyle and our citizens' environmental connectivity. Portions of this document are included in the attachments to this proposal.



The City Council has also initiated the **Blue Ribbon Committee** and the **Green Ribbon Committee**, to provide recommendations concerning critical quality of life issues in Virginia Beach. The Green Ribbon Committee was initially tasked with water quality issues, and soon realized the need to extrapolate into general environmental concerns. A copy of the initial report is included in the attachments to this proposal.

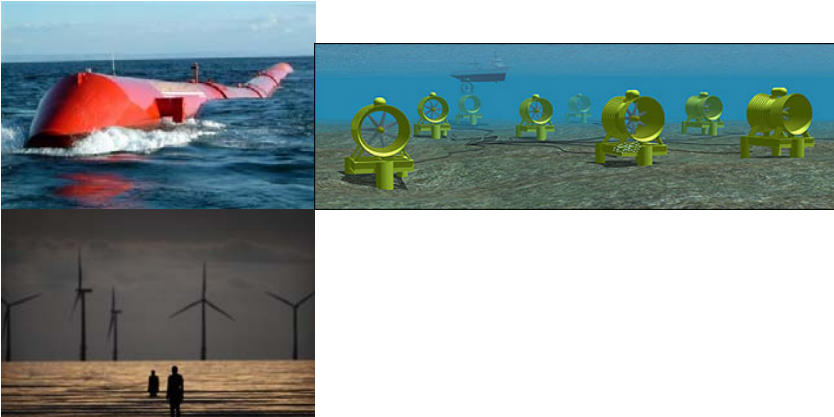


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This year, as a result of alarming increases in energy costs, the City Manager formed a **Joint Energy Commission**. This commission's goal is to reduce the City government's energy use and increase energy efficiency. Multiple methods and alternatives are being explored.

A few years ago, City of Virginia Beach Mayor Meyera Oberndorf joined the U.S. Council of Mayors, and signed on to the **U.S. Council of Mayors' Climate Protection Agreement**. This agreement is intended to prompt individual cities to reduce their emissions in accord with the Kyoto Protocol. Recently, the City Council of Virginia Beach was motivated to sign on in full support of the Mayor's participation.

To consolidate and advance the sustainable causes within City government and the population of Virginia Beach, a group of City staff have founded the **Sustainability Advisory Team**. This advisory group recently achieved a **City Council Resolution**, which sanctioned the Advisory Team and tasked it with the development of a Sustainability Plan. The groups seeks to foster the vision of Virginia Beach as a truly sustainable community, and a model for other municipalities and localities across the nation and globe. The resolution as passed by City Council and a draft of the initial mission and goals of the Sustainability Advisory Team are included in the attachments to this proposal.



**PROBLEM STATEMENT AND ISSUES ANALYSIS:**

**Study Area:**

The proposed area of study is the City of Virginia Beach with regard to the development of our Sustainability Plan. Several specific aspects of sustainability in Virginia Beach would be involved. The proper implementation of the recommendations of Virginia Beach's council-appointed Green Ribbon Committee (created initially to address water quality issues in the City) is an immediate concern, as is guidance for the recently established Sustainability Advisory Team. A continuously significant ongoing process for Virginia Beach is the evaluation of local agriculture and seafood production and the outlook for the future. Utilization of our wide range of local alternative energy possibilities is a high priority, as is the advancement of our public transportation. Important to our local economy as well as our vision for the City is the establishment of a green industry economic development plan.

In addition, the City of Virginia Beach is part of a well-integrated regional setting, Hampton Roads. Some insight into the potential for the creation of a sustainable system on a regional level (and possibly future SDAT programs) is desired.

**Barriers to Success:**

There are a few barriers to success for Virginia Beach's effort to become a comprehensively sustainable community. Virginia Beach is a large city geographically, and in recent decades much development has occurred in a spread-out manner without strict adherence to an integrated long-term plan. Growth tendencies and philosophies have been said to favor individual developers in some ways, and while this is not necessarily counter-productive to sustainability, it does need to be guided and rational. While it can also be viewed as an asset, further growth and population pressure arises from the popularity of the City among transplants and the transient nature of the large military contingent.

Development and growth in the city have also been based primarily on automobile transit. This is a significant barrier in the effort to create a thorough and popular mass transit system, and is a difficult aspect of our way of life to deviate from.

The economics of local farming are a key issue as well. Much of local farming is geared towards specific crops for specialized use, and it may be difficult to transition these privately-owned farms towards helping to provide the complete range of produce and products needed to sustain the local population. Physical deterioration of Virginia Beach's waterways in the past decades has led to an alarming decrease in seafood harvests, and while concerted effort is helping to reverse this trend, it is still an issue going forward.

The framework with which the local power provider (Dominion Virginia Power) operates may also be a barrier to the success of the effort to expand our energy supply to local, diverse, and renewable sources.



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Lastly, while the citizenry of Virginia Beach is forward-thinking and environmentally conscious, there are certain aspects to the way of life and the perceived quality of life in Virginia Beach which at least initially might complicate comprehensive sustainability efforts, and may be difficult to alter or reduce (reliance on automobiles and housing trends, for example).

### Scope of Issues:

In general, the scope of issues involved is comprehensive- the vision is a Virginia Beach and a region that are locally resilient, independent and self-reliant, naturally vibrant and healthy, sustainable and enduring. In the long term we seek to be a community at the forefront of sustainability and livability, and our immediate goal is develop a formal Sustainability Plan to start us on that path. This Plan is a goal of the City's newly sanctioned Sustainability Advisory Team. It will aim to steer our energy use to promote maximum efficiency and the use of clean renewable sources, to implement robust and environmentally benign infrastructure and municipal operations, to help us realize the concept of zero waste in practice, and to continue to elevate our health, culture and quality of life, among other goals. Due to obvious environmental and energy resource pressures in the global context, Virginia Beach understands that we must make the perhaps subtle but fundamental transition from our current open-end, energy intensive way of life to an integrated, local and sustainable civil system. We aspire to be among the pioneering communities of this effort. In general, consultation from the Sustainable Design Assessment Team is desired within this context.

However, the intended focus of the Sustainable Design Assessment Team effort is specific. From the list in the Request for Proposals, the following are key areas of interest for Virginia Beach:

**Environmental** – Water Quality, Wildlife Habitat/Wetlands, Natural Disaster, Transit and Land Use, and Energy Efficiency

**Social** – Housing, Sense of Community/Place, Pedestrian/Bicycle Options, and Managing Growth

**Economic** – Diversity, Public Policy/Planning, Agricultural Preservation, and Transportation

Each of these is critical on a regional level as well as municipal, and many affect individual neighborhoods and projects. The water quality issues encompass the Chesapeake Bay, Back Bay, and the James, Elizabeth and Lynnhaven Rivers, each of which is regional in watershed and use. The infrastructure of all of Hampton Roads is interconnected, making transit and natural disaster issues pervasive. The housing, sense of place, agricultural preservation and managed growth issues stretch from a regional level down to the level of the individual citizen in Virginia Beach.



**OBJECTIVE OF THE SDAT PROCESS:**

The goal of the Sustainable Design Assessment Team process would be to help the City of Virginia Beach, and the Council-sanctioned Sustainability Advisory Team in particular, to develop the framework for a City Sustainability Plan. The City of Virginia Beach Sustainability Plan was recommended to City Council by the Advisory Team, and the Council resolved for delivery on December 31, 2009. The Plan will establish 1, 5, and 10 year targets, as well as specific initiatives to meet those targets.

The experience and the range of expertise provided by the SDAT process could prove crucial to the solidification and the realization of the sustainable city vision emerging within the citizens and government of Virginia Beach. Global culture is becoming increasingly aware of the necessity to advance our current lifestyle away from consumptive, unbounded, and unsatisfying patterns and into a self-perpetuating, vibrant, and planetary-systemic way of life. The people of Virginia Beach are similarly aware, and we find ourselves in a rare position- within our reach is a range of natural and social resources potentially sufficient for a truly sustainable community. The SDAT process could help us take full advantage of this incredible opportunity, and hopefully to become a model for other communities as our necessarily sustainable future unfolds. A subtle but critical expectation we have for the SDAT process is to help us foster and coalesce the “grassroots” ideas and efforts spread within the citizenry into a fruitful momentum.

In the context of the Sustainability Plan, and more generally the vision of Virginia Beach as a model community, any or all of the following specific actions would be requested of the Sustainable Design Assessment Team:

- Review and advise on the Comprehensive Plan
- Guide the growth and application of the Sustainability Advisory Team
- Provide expert assistance regarding the effective implementation of the Green Ribbon Committee report recommendations
- Help foster projects to utilize our multitude of local, renewable energy alternatives
- Advise on our complex public transportation situation
- Advise on our local agriculture/seafood and associated local economy
- Provide strategies to promote the sustainability vision and seed community-based initiatives, to cultivate solidarity in local culture and a sense of place
- Help establish a green industry economic development strategy
- Advise on the potential for a regionally interconnected Sustainability Plan

Given the magnitude of the vision for our City and the scope of specific efforts involved, perhaps the most fundamental initial services the Assessment Team might provide would be to encourage patience and advise on a simple methodology...

We are excited by the challenge presented, and we sincerely hope that the Center for Communities by Design elects to include the City of Virginia Beach as a 2009 SDAT Community. We look forward to the chance to work with you on our project.



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**BUDGET AND FUNDING INFORMATION:**

The City of Virginia Beach us prepared to make available funds required to cover costs of the SDAT consultation and implementation as well as any in kind contributions. However, the direct funds requested will be raised from within the community. Multiple organizations and businesses have volunteered time, goods, and services as required also.

Specifically, the following are expected:

- \$1500 - Hampton Roads AIA
- \$1500 - Hampton Roads Green Building Council
- \$500 - each, solicited from Hampton Roads ACRE, Virginia Society of Professional Engineers, U.L.I., ASHRAE, SAME, CSI
- \$5000+ TOTAL

Additionally, many local Architecture and Engineering firms have stated willingness to contribute finances should that become required. Each was very clear about their willingness to contribute time and in kind services.

The City will contribute work space and meeting space, supplies, photocopying, advertising and media contact, and local transportation.

Light plane use and pilot services are volunteered personally by the project primary contact.

An owner of a local restaurant and local environmental awareness organization has volunteered catering services and meeting locations. Other restaurant owners have offered similar services.

Estimates for specific itemized expenses for the SDAT team are as follows:

Travel	\$2000
Local Transportation	\$750
Food and Lodging	\$4500
Meeting and Presentation	\$3000
Printing and Supplies	\$2000
Aerial Survey	\$250
Miscellaneous	<u>\$1000</u>
TOTAL	\$13,500

This amount does not include time spent by the SDAT team or all the local participants willing to donate their time. Also, portions of this figure will be contributed in kind by the involved parties. This estimate is based only on information provided in the RFP, the Communities by Design website, and the conference calls. The full potential of the project in Virginia Beach may prompt further effort or involvement, but the City of Virginia Beach is confident that any required funds would be readily obtainable should further time or expenditures be required or desired.



EDUCATIONAL PARTNERS:

The City of Virginia Beach has multiple institutions of higher learning within its reach, and it is expected that each will become involved in the SDAT process. Also, Virginia Tech has a research institute here and may become involved as well. Initially, three major ones will take part. They are listed below, with their corresponding contacts:

**Old Dominion University**

Dr. Mujde Erten-Unal  
Director, Sustainable Development Inst.  
Dept. of Civil & Environmental Eng.  
Kaufman Hall Room 135  
Norfolk, VA 23529-0241  
757.638.3753  
[munal@odu.edu](mailto:munal@odu.edu)



**Regent University**

Dr. Douglas Walker  
Robertson School of Government  
1000 Regent University Drive  
Virginia Beach, VA 23464  
757.352.4302  
[cwdunn@regent.edu](mailto:cwdunn@regent.edu)



**Tidewater Community College**

Tracy Breiger  
Adjunct Professor, Horticulture  
1428 Cedar Road  
Chesapeake, VA 23322  
757.822.5090  
[tbreiger@tcc.edu](mailto:tbreiger@tcc.edu)



**COMMUNICATION AND MEDIA OUTREACH PLAN:**

The City of Virginia Beach has an internal media and television production department, and maintains VBTV, a City and locally-broadcast television station. We also have close ties with local television and radio stations, as well as the local paper The Virginia Pilot.

The City has every intention and incentive for thorough media involvement in the SDAT process, should we be selected. Wide community involvement and enthusiasm is a high priority and would have significant benefits.

Also, the City Sustainability Advisory Team (with the participation of V.B. Economic Development and several local volunteer marketing professionals) is developing a concept for the publicizing and marketing of the City sustainability initiative, and this concept may be applicable to the SDAT process as well.

The following person will function as media contact and will help to develop a coverage, publicity and community involvement plan as the process progresses:

Marc Davis  
Media Communications Group  
City of Virginia Beach  
2405 Courthouse Drive, VB, VA 23456  
757.385.4242  
[cbernick@vbgov.com](mailto:cbernick@vbgov.com)

**PROJECT TIMELINE:**

Virginia Beach is flexible with the project timeline, but does have a few relevant items to consider when scheduling the visits and the report. The City Council resolution regarding the Sustainability Plan calls for delivery of the Plan on December 31, 2009. An update to the Comprehensive Plan is scheduled to be begin in the summer of 2009. The recommendations of the Green Ribbon Committee are currently being evaluated for inclusion in policy, and are the most immediate item.

A preliminary target for the instigation of the SDAT process would be late winter or early spring 2009. However, as the City would like the scope of our project to range from the specific issues mentioned to the long-term sustainability plan, if an earlier initial visit worked better for the SDAT team we would readily accommodate. Any timeframe which better aided the selected experts on the assessment team could easily be managed.



COMMUNITY PARTNERSHIPS AND SUPPORT:

Community support for this project is widespread and enthusiastic. The Mayor and City council support the effort and will actively participate, as well as multiple members of City staff. This is very high interest from the local architecture, engineering, and building community, as well as from local educational institutions. Also, the many environmental and activists group in the City and region are excited at the potential and more than willing to offer help and support.

A representative selection of letters of support is attached to illustrate the strength of support and involvement.

