

**VOLUSIA SMART GROWTH  
IMPLEMENTATION COMMITTEE**

**FINAL REPORT**

**August 2005**

## **VOLUSIA SMART GROWTH IMPLEMENTATION COMMITTEE MEMBERS**

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## TABLE OF CONTENTS

I.	INTRODUCTION	4
II.	VISION	8
III.	OVERVIEW OF RECOMMENDATIONS	10
	Relationship to Senate Bill 360	11
IV.	RECOMMENDATIONS	12
	A) Protecting the Environmental Core	12
	B) Directing Development to Appropriate Locations	20
	C) Developing Vibrant, Livable, and Sustainable Communities	23
	D) Ensuring the Continued Existence of Rural Lands and Agriculture	27
	E) Meeting the Infrastructure Needs of Smart Growth	32
	F) Integrating Education and Smart Growth	36
	G) Integrating Economic Development and Smart Growth	41
V.	IMPLEMENTATION	42
	Keystone Recommendations	42
	Keystone Recommendation Implementation Strategies	44
VI.	APPENDICES	
	A. The “Tool Box”	2
	B. Clustering concept	7
	C. Volusia Conservation Corridor and Florida Forever project descriptions	8
	D. Habitat Assessment Methodology	11
	E. Bluebelt enabling legislation	17
	F. Fiscal Impact Assessment Model (FIAM)	19
	G. Workgroup Membership Lists	20
	H. Committee Staff	21
	I. Contributing Sponsors	22

## I. INTRODUCTION

### The Challenge

Volusia County is facing a challenge and an opportunity that will determine its future. That challenge is growth.

Since 1950 Volusia has participated in the growth that has reshaped Central Florida. New arrivals moved into the dispersed, low density, automobile dependent neighborhoods and suburbs that characterized most development in the postwar United States. They enjoyed the quality of life afforded by proximity to beaches and natural areas, and by the mix of small-city and rural life that characterized Volusia County. While such development consumed relatively large amounts of land and services, until recently that growth was not sufficient to transform Volusia to the same degree experienced by other parts of the region. The balance between the various elements (rural and urban, developed and natural areas) changed as the county grew, but much of its basic character remained. As the state continues to grow, however, and other Central Florida counties approach build-out, growth in Volusia has quickened to a point that threatens to transform the county.

A few numbers make clear the scale of the challenge. Between 1960 and 1980, the population of the County grew from approximately 125,000 to just over 258,000. From 1980 to 2002, the population grew to approximately 479,000. Between 2002 and 2020, the population of Volusia is expected to grow again, from 479, 000 to approximately 650,000 (a mid-range projection). The exceptionally active land and housing markets of the last few years have further accelerated this trend.

If this additional population is accommodated in Volusia County *using the same pattern of development* that has predominated since the 1960s, it will consume the majority of Volusia's private undeveloped land. It will have significant negative effects on environmental resources, rural lands, the costs of providing services, and the quality of life for Volusia's residents.

At the same time, this growth presents an opportunity. Continued growth can bring increased vitality to Volusia communities and new resources that can be harnessed to improve protection of environmentally important areas, support the continued existence of rural areas, enhance communities, and retain the quality of life Volusia County residents value so highly.

A recent study by the University of Pennsylvania's Urban Design Studio (PennDesign) further highlights the challenge and the opportunity (*Alternative Futures for the Seven County Orlando Region 2005-2050*). It begins by noting that the region is expected to grow by 136% between 2000 and 2050 compared to a national growth rate of 47% over the same period. It examined current development trends in the seven-county Central Florida region, and compared them to an alternative future scenario that reflects many of the characteristics of smart growth as outlined in this report: greater emphasis on

protecting environmental lands and green infrastructure; alternative development patterns producing vibrant communities with higher densities where appropriate; greater choice of housing options and transportation modes; and supportive economic development. Projecting current trends and the alternative scenario to 2050, the study concluded that the alternative scenario would consume 66% less land, resulting in urbanizing slightly over 420,000 acres, compared with over 1,163,000 acres (including over 650,000 acres of environmentally sensitive lands) if current trends continue. The study estimated the cost of servicing development over that period in the alternative scenario at slightly over \$37 billion, compared to over \$104 billion if current trends continue. The study estimated the total costs of the alternative model, including the additional costs attributable to transit and intensified acquisition of environmental lands, at \$90.4 billion, compared to \$116.7 billion for continuation of current trends. Across all areas examined in the report, the alternative model, incorporating smart growth principles, produced a more livable region, with vibrant communities, more intact environmental assets, and a much improved quality of life, at a much lower cost than the continuation of current trends.

### **What is Smart Growth?**

Smart Growth is a set of principles for managing growth. It has emerged across the country as communities have increasingly concluded that current development patterns, dominated by “sprawl”, are no longer in the interest of our cities, existing suburbs, small towns, rural communities, and wildlife areas. It is a vision based on three principles: a clean, healthy environment (“green infrastructure”), strong, livable communities, and a strong economy.

#### ***Environment***

Smart growth emphasizes the early identification and preservation of environmentally important areas, open space, and agricultural areas. These are conceived of as a connected network of multi-purpose lands that form the community’s “green infrastructure.”

#### ***Communities***

Smart growth emphasizes compact, walkable, mixed use ***communities*** that feel and function like communities, not just developments. It emphasizes redevelopment wherever possible, while recognizing that redevelopment alone is not sufficient to accommodate new growth. It seeks to use land and infrastructure efficiently to reduce the costs of servicing new development.

In order to achieve these characteristics, smart growth development is usually denser than typical contemporary suburban development. These higher densities allow population to be accommodated while preserving larger amounts of environmentally important lands and open space. They also promote walkability and mixed uses within communities. It is important to understand that these densities, while higher than usual in contemporary development, do not need to be

high in absolute terms. The model most often sought by smart growth communities is that of the nineteenth century American small town, with a defined center and a preponderance of single-family housing. High-quality design integrates the higher density development with surrounding lower-density areas. Communities have almost unlimited latitude to accommodate these higher densities in ways consistent with each community's vision of itself and its future.

Another key characteristic of smart growth communities is the provision of a range of housing choices, including choices designed for different age groups, incomes and household sizes. This helps ensure that those who work to support the community – teachers, police officers, service workers – can live in or near the community where they work, and can benefit from the vibrant communities that smart growth seeks to create. This is especially important as smart growth has the potential to contribute to increasing property values and housing prices.

### ***Economy***

Finally, smart growth emphasizes a strong economy. Public investments contribute to economic competitiveness; communities plan with the needs of economic development in mind; and, in turn a healthy economy provides the resources to achieve the goals of smart growth.

At the core of Smart Growth is partnership and collaboration, the collective work of many diverse stakeholders- from the public and private sectors- looking for innovative solutions to some of our more pressing growth issues. These groups overcome their differences to plan and find strategies to create healthy communities with the high quality of life that we all want.

Smart growth seeks to achieve livable, healthy, and economically robust communities through compact, orderly development and re-development. Smart Growth patterns bring lasting abundance and vitality for the environment, our communities, the economy and people of all income levels.

### **The Volusia Smart Growth Implementation Committee**

This report presents the conclusions and recommendations of the Volusia Smart Growth Implementation Committee. The Committee met from August 2004 to August 2005. It was jointly sponsored by Volusia County, Volusia cities, the Volusia County School Board and private interests, with members formally appointed by a broad range of Volusia governments, and citizen, business, and environmental organizations. Other interested residents of Volusia County served with members as volunteers on workgroups established by the Committee. [For a complete list of workgroup members please see Appendix G.]

The mission of the Committee was the following:

*To seek agreement among the county, cities, and stakeholders to further define, adopt and implement “smart growth” principles within Volusia County.*

These include 15 “keystone” recommendations and 49 additional recommendations that outline how the principles of smart growth could be implemented in Volusia County. The Committee believes that these recommendations, if implemented, have the potential to harness growth to produce outcomes that are better for the environment, better for Volusia communities, and better for Volusia’s economy, than the approach to growth that has predominated in the county in the past.

This report follows two years of engagement by Volusia residents with the concepts of smart growth as a response to the challenges and opportunities described above. In 2003, the Volusia County Council adopted smart growth as one of its priorities. In response, in 2003-2004 the Volusia County Association for Responsible Development (VCARD) convened a steering committee with representation from a broad range of governmental, private, citizen and environmental groups to sponsor a series of Smart Growth Summits to explore the ideas behind smart growth. Participants at these summits concluded that the concepts of smart growth did indeed hold promise for Volusia County and strongly supported their further exploration. They recommended that a group be formally appointed to develop specific recommendations for implementation of smart growth in Volusia County.

The Volusia Smart Growth Implementation Committee was formed in response to that recommendation. It is the Committee’s hope that its recommendations, in turn, provide a point of departure for a new phase of smart growth activity centered on implementation.

## II. THE VISION

*The future that Volusia has planned for is here. (It may be the year 2020, or whenever the population of the County approaches 700,000. It is a future that has been made sustainable over time and regardless of the exact population figure as a result of the sound planning efforts of the past.) Since the landmark “smart growth” effort in 2004-2005, Volusia has been known far and wide as one of the leading examples of “smart growth.”*

Volusia is recognizably different from the rest of Central Florida because its unique natural areas define the urban landscape. Bounded on the west by fifty miles of the St. Johns River and on the east by 45 miles of the Atlantic Ocean Beach, Volusia is like no other place. Within our boundaries are beaches, estuaries, rivers, springs, and a sole source aquifer which are the foundation for a special quality of life for our residents and a natural attraction to visitors from around the world. Volusians live, work, and play in a diverse mosaic of national, state, and local parks, preserves, rivers and beaches which differentiate us from the rest of Central Florida.

Volusia's unique sense of place derives from diverse urban and rural communities designed in harmony with the unique natural setting. Cities and other places within the county are family-oriented and provide a sense of community. . They provide housing for a range of socio-economic levels, and schools to accommodate all the county's school children in small classes. At the same time, they have preserved their distinct characters, so there are a variety of communities within the county. Growth has been accommodated in part by significant redevelopment and infill in urban areas. City centers host a vibrant urban life and there is a clear distinction between urban and rural or natural areas. Redevelopment of beachside communities has occurred in a way that respects the historic scale and character of those communities, and protects access to the beach. Where growth has occurred in rural areas, it has been clustered and situated in ways that have preserved natural resources and rural character. Historic rural communities remain distinct and have preserved their identities. Traffic is managed well.

This has happened because the standards for land-use and development are high in Volusia and its cities. Volusians really went “out of the box” to think about how to encourage creative “smart growth.” They defined “smart growth” and figured out how to say “yes” quickly and efficiently to the kinds of development they wanted. A wide range of innovative tools were used to encourage good development and “smart growth,” including clustering, varying impact fees, incentives, density requirements, and smart growth plans and codes. The ability to say “no” to projects that were not consistent with the county's desired character was also important. The intent of development regulations was made very clear, and guided their interpretation whenever there was a question about what to do. Development “best practices” were learned and implemented by local governments. There is much greater alignment and coordination between the governmental entities in the county regarding growth and provision of services.



The county has preserved its unique natural areas and ecosystems that lend the county so much of its character. It has done this by establishing a strong and connected conservation corridor that links the St. Johns River, areas in the center of the county, and the Indian River Lagoon, all serving the needs of wildlife and people. This happened because environmentally significant areas of the county were identified early and preserved. Wetlands have not been developed. The culture of water use has changed. Careful attention was paid to the future of lands that were agricultural in 2005.

The county is economically sustainable, with an abundance of high-paying jobs. Its economic development has been balanced and has met the needs of all income levels. The beachside communities have more diversified economies and are no longer dependent on just tourism. This has happened in part because the county has been able to say “no” to enterprises that were not consistent with its vision of itself.

### **III. OVERVIEW OF RECOMMENDATIONS**

The recommendations presented in this report offer a consistent, comprehensive approach to applying “smart growth” in Volusia. At the core of the approach is a set of recommendations that would direct new urban development and redevelopment to appropriate areas, change the character of much of that development, ensure the availability of the needed schools and infrastructure, and integrate economic development strategies with future growth.

The first component of the approach is early identification and protection of environmentally important areas. These are the areas where development and the impacts of development should be avoided while fully protecting the rights of landowners. The Committee has explored a variety of tools that could be used to achieve these results.

Within the remainder of the county, primary and secondary water and sewer service areas would be used to direct development. The boundaries of these areas would not necessarily correspond to those of currently existing service areas. Primary water and sewer service areas would in effect be areas suitable for urban development or redevelopment. Secondary water and sewer service areas would be rural, but would allow provision of water and sewer for limited clustered development in designated areas through an approach that protects natural resources, preserves the overall rural character of the area, and prevents the presence of water and sewer from leading to additional development.

Within the areas appropriate for development or redevelopment, application of a wide range of tools would promote compact, mixed use, somewhat denser, walkable communities that will better accommodate Volusia’s future population without the impacts on the environment of today’s development patterns. Coordinated or consolidated administration of concurrency will support smart growth development patterns.

Throughout Volusia, close cooperation between governments, developers, and the School Board would ensure that sites needed for new schools are identified and reserved, purchased, or donated in a timely fashion.

This is an approach that minimizes the impacts of growth on current residents. It is also an approach that will require the cities and the county to collaborate in the development and implementation of a shared vision. Some of these recommendations can be implemented by the county and the cities acting independently. Full implementation of these recommendations, especially those that direct urban development to appropriate areas and that shape the character of development in rural areas, can only be achieved through close cooperation between the county and the cities. Recommendations for achieving that degree of cooperation are an integral part of the Committee’s report.

## **Relationship to Senate Bill 360**

During the deliberations of the Committee, the Florida Legislature passed and the Governor signed growth management legislation commonly referred to as Senate Bill 360 (SB 360).

SB 360 provides significant incentives and benefits for counties and cities that cooperate in developing a vision for future growth and then cooperate in directing urban development to appropriate areas in accordance with that vision. The incentives include the following:

- A comprehensive plan amendment process that is streamlined and has greater flexibility within approved urban service boundaries,<sup>1</sup> urban infill and redevelopment areas, and rural land stewardship areas.
- Comprehensive plan amendments related to the construction of certain affordable housing units are streamlined.
- Amendments that change residential development but do not increase density can be accomplished under small-scale amendment change.
- Relief from Development of Regional Impact Review is provided in approved urban service boundaries, urban infill and redevelopment areas, and rural land stewardship areas if mitigation of impacts on state and regional transportation facilities is addressed through a binding agreement with adjacent jurisdictions.

Since the recommendations in this report directly and effectively address the issues of a joint city-county vision for the future, and of directing urban development to appropriate areas, implementation of these recommendations would put Volusia in a favorable position to quickly take advantage of these incentives.

The act further includes a number of requirements and/or incentives related to transportation planning, school concurrency, and other issues. Many of these requirements are addressed proactively by the recommendations of this report. SB 360 also provides funding to support much of the cooperation called for in the act, especially in the areas of transportation and planning for urban development.

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<sup>1</sup> SB 360 uses the term “urban service boundaries.” The Department of Community Affairs has preliminarily and informally indicated that the use of other tools which achieve substantially the same effect, including the urban service areas described in this report, would qualify for the incentives.

Throughout this report, recommendations the Committee believes would comply with the requirements of SB 360, or that would help Volusia jurisdictions qualify for the incentives provided in the bill are followed by *[SB 360.]*

## **IV. RECOMMENDATIONS**

### **A) PROTECTING THE ENVIRONMENTAL CORE**

#### **Background**

The recommendations in this section respond to what the Committee believes are two realities facing Volusia. The first is that protecting and preserving Volusia's ecosystems and environmentally sensitive lands is crucial to bringing about a "smart growth" future for the county and ensuring the quality of life the county's residents value. The second, in the Committee's view, is that in the current growth environment Volusia County and other public entities will not be able to purchase all of the land needed to protect Volusia's ecosystems and achieve a "smart growth" future.

The recommendations that follow suggest marshalling resources and tools to afford the highest degree of protection to the most sensitive or important environmental lands. Implementation of these recommendations will result in an interconnected core network of undeveloped, environmentally important lands that will help ensure the preservation of the county's ecosystems into the future. The recommendations also offer strategies for stretching and augmenting the resources available for protection by harnessing the potential of new development to contribute to preservation. Through clustering, transfer of development rights, or other approaches, these recommendations offer the possibility of protecting the rights of property owners and accommodating development in an environmentally responsible manner, while protecting significantly more than could be done by acquisition alone.

Map A outlines the environmental core lands the Committee believes should receive the greatest degree of protection, and therefore suffer the least impact, from development. Map A includes the Conservation Corridor, Florida Forever Priority A lands, portions of the Environmental Systems Corridor, additional lands needed to ensure connectivity between large natural areas, and lands already in public ownership or under conservation easement. Every effort should be made to avoid development or development impacts within the boundaries of Map A, while fully protecting the rights of property owners. [Project descriptions for Volusia Conservation Corridor and Florida Forever Priority A Lands are attached in the Appendix C.]

Map B outlines lands that are outside the environmental core but have significant environmental value or are in a natural or semi-natural state. It includes areas with high wetland or upland habitat value, as well as most of the Natural Resources Management Area and portions of the Environmental Systems Corridor. The Committee believes the areas in Map B contain some lands appropriate for some development, but with measures to maximize protection of the natural values of the area.

In order to develop these recommendations, the Environment Workgroup of the Committee reviewed information about habitat value and the presence of sensitive natural systems or features such as wetlands or aquifer recharge areas. It paid particular attention to the importance of preserving corridors that allow wildlife to pass from one large area of habitat to another or from one already protected area to another, and that connect Volusia's natural areas with important preservation lands outside the county. The Workgroup also considered and built upon earlier work done by Volusia County to identify the Volusia Conservation Corridor, Natural Systems Management Area, and Environmental Systems Corridor. [For a more detailed discussion of the methodology used to develop these recommendations, please see Appendix D.]

### **Recommendation A1 – Protect Core Environmental Areas**

Protect the environmental core, consisting of the Conservation Corridor, Florida Forever Priority A lands, currently permitted mitigation banks, other areas identified as important for habitat and wildlife connectivity, and lands already in public ownership from development and development impacts. These lands are depicted in Map A.

The Committee recommends the following tiered approach to protecting the lands within Map A.

- a) The county should seek full-fee or less-than-fee acquisition of these lands. Lands within the Map A boundary should be priorities for acquisition whenever acquisition dollars are available. Lands that support undisturbed or largely undisturbed natural communities should be priorities within Map A.
- b) Lands within the Map A boundaries should be identified as donor sites for transfer of development rights or rural land stewardship programs that transfer development outside the boundary of Map A. (These programs are described and recommended in Section D of this report.) This approach will protect the rights of landowners inside the boundary while avoiding development of Map A lands.
- c) Whenever possible, upland acquisition or wetland acquisition or restoration undertaken as mitigation for development elsewhere in the county should be undertaken within Map A lands.
- d) The county should adopt heightened environmental standards for any development within Map A. These standards should at a minimum address protection of substantially all wetlands and fifty percent of natural uplands, including significant habitat. The standards should also freeze underlying densities within Map A at levels currently allowed by the county comprehensive plan. (This would not preclude the 25% density bonus for clustered development describe in Recommendation A1e below.) These standards should apply in incorporated as well as unincorporated areas of Map A.
- e) Clustering should be allowed as-of-right within privately held Map A lands, through approval of a "binding development agreement." Clustered development in Map A lands should receive an as-of-right density bonus of 25% for in return placing at least

50% of the project under a conservation easement held by Volusia County, as long as it meets the heightened environmental standards applicable to Map A lands. The development should be sited on that portion of the land identified as most suitable/least inappropriate for development, based on the study outlined in Recommendation A3 below. The easement should be placed so as to ensure that the lands it protects form part of the connected network of environmental lands outlined in Map A. [For a definition of clustering as the term is used in this report, please see Appendix B.]

- f) Densities for as-of-right development that do not use clustering should remain as currently indicated on the county's future land use map, and should be adopted as part of the heightened environmental regulations described in d above.
- g) Map A lands should be recognized in county and city future land use maps.
- h) Within privately held Map A lands, existing agricultural or silvacultural operations that use recognized best management practices should be allowed to continue.

### **Recommendation A2 – Maximize Compatibility of Development and Natural Resources in Other Natural Areas**

Maximize the compatibility of development within Map B lands with the protection of natural systems. The degree of compatibility required should be greater to the extent that an area proposed for development meets any of the following criteria, and should be determined based on the results of the study outlined in Recommendation A4 below.

- It is part of the county's currently designated Environmental Systems Corridor.
- It is identified as a high value upland or wetland habitat area.
- Wetlands are present.
- Natural communities are present that are underrepresented among lands currently in public ownership or otherwise protected in Volusia County.
- Occurrences of rare or endangered species have been confirmed on the land.
- The land comprises part of a natural drainage corridor.
- It is adjacent to or near lands in Map A.
- Buffering is necessary to protect Map A lands from the impacts of proposed development.

The character and density of development in these areas should be agreed upon by the cities and the county as described in Recommendation B4 of this report. Measures to ensure compatibility should include clustering, transfer of development rights, or development conditions as appropriate. If the county and a city do not agree, the decision-making board described in Recommendation V7 should have jurisdiction.

### **Recommendation A3 – Further Study of Map A Lands**

The Committee recommends that the county, in cooperation with Volusia cities, conduct a study of privately held Map A lands to identify areas where cluster development might

be considered, if necessary, and areas that should be protected. This study is intended to provide the detailed information necessary to implement Recommendation A1. The study should take into consideration the following criteria:

- The heightened environmental protections applicable to Map A lands pursuant to Recommendation A1d above.
- Natural systems or habitat value (this includes all criteria outlined in Recommendation A2.)
- Suitability for development.
- Proximity to, or contiguity with, existing urban areas.
- Proximity to existing infrastructure and school capacity.

#### **Recommendation A4 – Study of Map B Lands**

The Committee recommends that the county, in cooperation with Volusia cities, conduct a study of Map B lands to identify areas where urban development might be accommodated, where cluster development might be appropriate, and areas that should be protected (including the county's currently designated Environmental Systems Corridor.) This study is intended to provide the detailed information necessary to implement Recommendations A2, B2 and B3, and D1, D2, and D3.<sup>2</sup> The study should take into consideration the following criteria:

- Presence of Environmental Systems Corridor lands. [These lands should enjoy the highest degree of protection within Map B.]
- Natural systems or habitat value (this includes all criteria outlined in Recommendation A2.)
- Presence of natural drainage corridors.
- Suitability for development.
- Proximity to Map A lands.
- The amount of buffering required to protect Map A lands from the impacts of proposed development.

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<sup>2</sup> Recommendations B2 and B3 address directing development to appropriate areas of the County. Recommendations A2, and D1 address clustering or locating the development on the most appropriate portions of the parcel to be developed. Recommendation D2 addresses establishment of a transfer of development rights program, and Recommendation D3 describes use of the Rural Lands Stewardship program.



- Proximity to, or contiguity with, existing urban areas.
- Proximity to existing infrastructure and school capacity.

The Committee believes that buffering sufficient to protect Map A lands from the adverse impacts of development, including potential degradation of water quality, is essential and should be reflected in the study and in the design of any development in Map B lands.

### **Recommendation A5 – Process to Pay Market Values for Some Environmentally Important Lands**

The county should work with the St. Johns River Water Management District and other acquisition partners to develop an agreed-upon process that allows the county to pay the difference between market value and appraised value for selected environmentally important lands while allowing the acquisition partners to participate in the acquisition based on appraised values. Any such process must incorporate safeguards, including identification of criteria for when the process should be used, and review and endorsement of the proposed acquisition by an independent third party institution. This mechanism is intended for use only in extraordinary circumstances, where the conservation objectives outlined in this report cannot be achieved through other means.

### **Recommendation A6 – Evaluation of Need for Additional Funding**

Recent escalation of land values in Volusia County has made acquisition of environmentally important lands with available funds more difficult. In addition, some of the mechanisms (such as Transfer of Development Rights programs) recommended in this report for protection of environmentally important lands can more easily be implemented with start-up funding.

To address these concerns, the Committee recommends the following:

- a) The county should evaluate whether additional funding is needed, through Volusia Forever or other sources for protection of environmentally important lands. Possible needs include, but are not limited to, increased funding for acquisition or management of environmentally important lands, and creation of a TDR credits bank.
- b) The county should consider whether to raise its bonding ceiling for Volusia Forever revenues, in order to increase its ability to respond to acquisition opportunities.

### **Recommendation A7 – Minimize Adverse Impacts of Roads on Natural Systems**

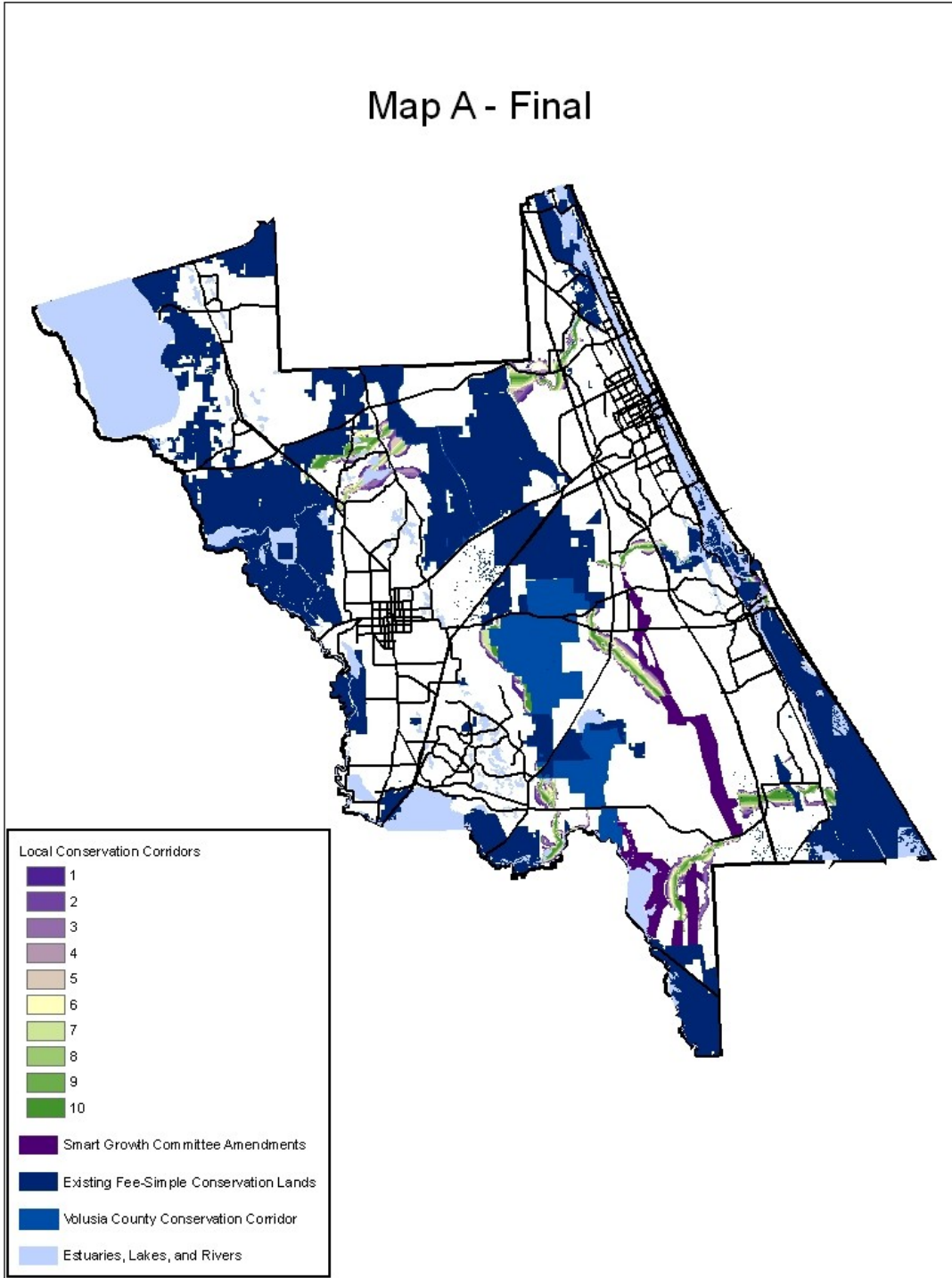
Roads can have negative impacts on natural areas in a variety of ways. They can create barriers to the movement of wildlife effectively fragmenting natural area into smaller blocks that are less valuable as habitat; they can contribute directly to increased wildlife

mortality through road-kill; and they can promote development that further reduces or damages habitat.

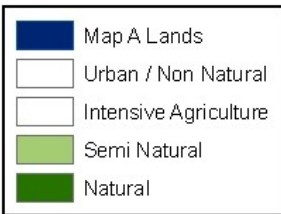
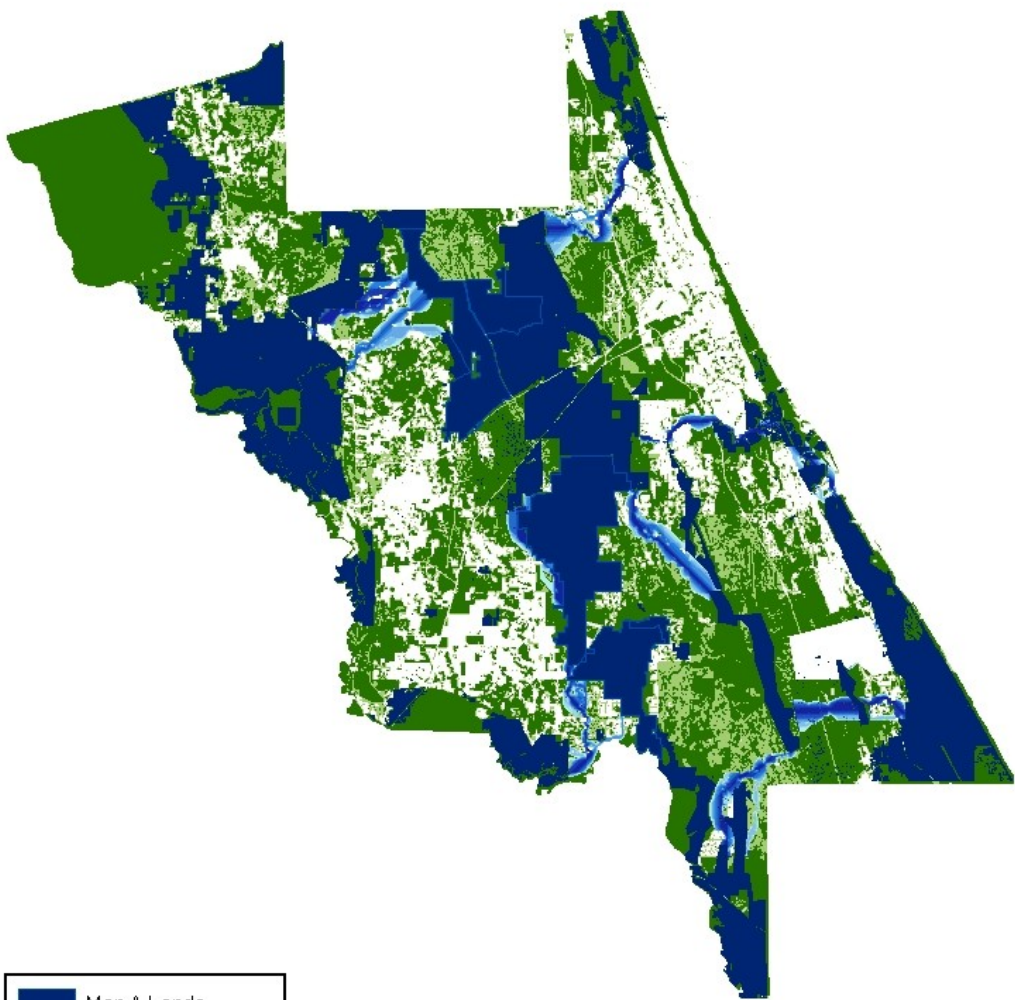
To address these concerns, the Committee recommends the following:

- a) The county should review and revise the Future Thoroughfares map to identify areas that are inappropriate for new roads by virtue of their high environmental sensitivity.
- b) In or through the environmental core, the county should meet transportation demand whenever possible by improving existing roads rather than constructing new ones.
- c) Improvements to existing roads across environmentally sensitive lands should only be considered in conjunction with effective measures for preventing development of lands in Map A or other environmentally sensitive lands not consistent with the recommendations of this report. These measures should include maximum land-use protections or acquisition of access rights along the right-of-way.
- d) If new roads across environmentally sensitive lands are unavoidable, they should only be considered in conjunction with effective measures for preventing development of lands in Map A or other environmentally sensitive lands not consistent with the recommendations in this report. These measures should include maximum land-use protections or acquisition of access rights along the right-of-way.
- e) Improvements to existing roads or construction of new roads through environmentally sensitive areas should include measures to minimize habitat fragmentation and wildlife mortality. These measures should include wildlife underpasses or overpasses, and may include traffic calming or other measures to reduce speed.
- f) The county should work with FDOT to ensure that improvements to SR 415, which crosses the Conservation Corridor and a critical wildlife corridor, include wildlife underpasses or overpasses, and other measures to minimize habitat fragmentation.
- g) The county should work with FDOT to retrofit SR 44, which crosses the Conservation Corridor and critical wildlife corridors, with wildlife underpasses or overpasses and other measures to minimize habitat fragmentation.
- h) The county should ensure that any future roads through environmentally important lands not allow for additional interchanges or access that opens environmentally important lands to development.
- i) Roads should only be built to support development that is consistent with the recommendations of this report.

# Map A - Final



# Map B - Final



## **B) DIRECTING DEVELOPMENT TO APPROPRIATE LOCATIONS**

### **Background**

A key element of smart growth is ensuring that new development occurs where it is appropriate and does not occur where it would be inappropriate. Strategies to ensure this takes place work together with strategies to protect environmentally sensitive areas and conserve rural areas to produce an overall pattern of development that is relatively compact, uses infrastructure and natural resources efficiently, and is consistent with the goals and principles of smart growth.

Over the past two years in Volusia County, the conversation about strategies to direct development to appropriate locations has often focused on urban growth boundaries (UGBs.) (The Volusia Smart Growth Implementation Committee includes proponents and opponents of UGBs.) Recent growth management legislation (SB360) has strongly encouraged measures to direct urban growth to appropriate areas using urban service boundaries. The Committee agreed that the recommendations in this section of the report, if fully implemented, will achieve the goal of directing development to appropriate locations, while providing flexibility and protection for the rights of property owners.

The recommendations in this section of the report represent an approach to directing development to appropriate locations that Committee members believe is more flexible and implementable than the UGB proposals in earlier circulation.

### **Recommendation B1 – Primary Water and Sewer Service Areas [SB 360]**

The county and cities should cooperatively identify primary water and sewer service areas within Map B lands and within currently urbanized areas, appropriate for urban development or redevelopment. These areas would be presumed appropriate for urban development. The county and the cities should jointly develop incentives for development to occur in these areas in a smart growth fashion [Note: This recommendation meets the requirements of Florida Laws 2005-290 (SB 360) regarding steering development to appropriate areas.]

### **Recommendation B2 – Secondary Water and Sewer Service Areas [SB 360]**

The county and cities should cooperatively identify secondary water and sewer service areas within Map B lands and Map A lands currently in private ownership. These areas would be rural, but would allow provision of water and sewer for limited cluster development in designated areas. Such cluster development should be consistent with the provisions of Recommendations A1, D1, D2 or D3 of this report. Sites for such development should be identified pursuant to Recommendation A3 and A4 of this report. Provision of water and sewer in this area must be in conjunction with the application of

tools, such as conservation easements, that ensure that extension of water and sewer service to these clusters cannot result in additional urban development inappropriate for the area. This area could also allow limited extension of water and sewer service to address environmental concerns associated with septic tanks. [Note: This recommendation meets the requirements of Florida Laws 2005-290 (SB 360), regarding steering development to appropriate areas.]

### **Recommendation B3 – Extent of Primary and Secondary Water and Sewer Service Areas**

All areas of the county, with the exception of publicly owned lands, should be within a primary or secondary water and sewer service area. Each primary or secondary water and sewer service area should have only one provider.

### **Recommendation B4 – Joint Visions and Planning for “Areas of Influence” and Potential Annexation Areas [SB 360]**

Cities and the county should enter into interlocal agreements that delineate and describe a joint vision for the future of the unincorporated areas surrounding cities. This joint vision should be adopted into the comprehensive plans of both jurisdictions and should address the issues listed below. An area so delineated should be known as the “area of influence” of the municipality involved.

- The future character of the area and development in it.
- Compatibility of design standards between the county and the municipality or municipalities, and between adjacent municipalities if appropriate. In any case, the higher design standards should prevail.
- Service provision, including the delineation of primary and secondary water and sewer service areas.
- Future annexation.

Where two or more cities share an interest in an unincorporated area, all interested municipalities should be party to the agreement, and the agreement should address compatibility of design standards and service provision between the cities, as well as between the cities and the county.

An important purpose of the joint visions and plans described in this recommendation is to establish a desired future character for these areas that is independent of whether the area remains unincorporated or is annexed by a municipality. The focus is on smart growth land use, not jurisdiction. The potential future annexing jurisdiction shall be specified for all areas of influence. Once the joint vision and implementing comprehensive plan provisions have been agreed-upon and adopted, concurrence of all parties to the agreement should be required for any changes to land use. This

requirement should remain in effect after any annexation. Disputes should be appealable to the decision-making body described in Recommendation V5.

## **C) DEVELOPING VIBRANT, LIVABLE AND SUSTAINABLE URBAN COMMUNITIES**

### **CHARACTER OF DEVELOPMENT**

#### **Background**

As discussed in the *Introduction* section of this report, smart growth development typically displays a number of characteristics. It typically seeks to produce compact, walkable, mixed-use environments that feel and function like communities, not just developments. It seeks to use land and infrastructure efficiently to reduce the costs of servicing new development. A key characteristic is the provision of a range of housing choices, including choices designed for different age groups, incomes and household sizes. In order to achieve many of these characteristics, smart growth development is denser than typical contemporary suburban development, and emphasizes redevelopment where possible.

What new smart growth development actually looks like varies from community to community. A community's vision of its future, local market preferences for one type of housing over another, differing architectural styles, the proportion of redevelopment to new development, and other local conditions will all influence the outcome.

A review of selected zoning ordinances and local government comprehensive plans for cities in Volusia County yielded a mixed review of current support for smart growth principles. While many jurisdictions, for example do have "mixed-use" districts or overlays, they are often limited in their geographical applicability and in the range of uses they allow. In addition, their provisions are often much more difficult for developers to use than other types of zoning, requiring additional reviews and approvals. As a result, they often work against rather than support the widespread mixed-uses called for in smart growth.

Commitment to expanding housing choice seems limited. There is no mention of affordable housing in any of the local land development regulations reviewed, with the exception of support for accessory dwelling units in one jurisdiction. Although language in comprehensive plans supports the concept of making housing affordable for citizens, there is a lack of support for programs that increase affordable housing stock. For other aspects of smart growth, e.g., language that would support compact design and development and transportation alternatives, there is an absence of language that supports required higher densities.

In addition to the obstacles presented by land use plans, zoning and land development codes, public reaction to proposed higher densities is often an obstacle. The term "higher density" can evoke images of very high density, high-rise development, when in fact the densities required to make smart growth work are much closer to those found in a



traditional American small town, and are exemplified in cities such as Winter Park, which are widely considered good examples of livable, mixed-use communities. State and even federal regulation can also pose obstacles.

The recommendations in this section address these obstacles, and suggest ways for local governments to overcome them and implement smart growth development patterns. Because of the range of possible variation in the character of smart growth development from one community to another, the recommendations in this section focus on kinds of actions that each Volusia community needs to take to establish what smart growth should “look like” for its residents.

### **Recommendation C1 – Visioning [SB 360]**

Each Volusia local government should identify the community’s vision for future development or redevelopment. This vision should be included in the comprehensive plan and clearly identified as the guide governing interpretation of the relevant land use regulations. Jurisdictions should use these visions to avail themselves of the incentives provided in SB 360.

### **Recommendation C2 – Checklist and Scorecard**

Each Volusia local government should develop, concurrently with its vision, a smart growth checklist or scorecard that clearly states the kind of smart growth development the jurisdiction wants and sets out smart growth criteria for evaluating proposed development. The criteria and the weight assigned to each should be based on the jurisdiction’s vision of smart growth. These scorecards should be used to rate proposed development on the degree to which it meets the jurisdiction’s smart growth criteria.

### **Recommendation C3 – Physical Characteristics of Smart Growth Development [SB 360]**

Each jurisdiction should ensure that its comprehensive plan, zoning, and land development regulations strongly promote at least the following physical characteristics of smart growth for development and redevelopment:

**Mixed-Use** The flexibility and effectiveness of the comprehensive plan at promoting and facilitating rather than just allowing mixed-uses is crucial to making smart growth development and redevelopment possible.

**“Town Centers”** Local governments should identify areas for higher density, mixed-use, walkable development or redevelopment with the look and feel of the historic downtowns of small to mid-sized communities.

**Diversity of Housing Options.** Local governments should ensure that the comprehensive plan allows for a range of housing types, including higher densities, rental housing, and affordable housing.

**Urban Public Space/Green Space.** These should be “places” rather than just “spaces.” – they should have a distinctive character, be open and attractive for public use, and integrated with surrounding development.

**Green Construction.** This refers to the degree to which new construction incorporates environmentally friendly construction techniques.

#### **Recommendation C4 -- Affordable Housing**

Affordable housing is essential to the success of smart growth in Volusia County. Local governments should develop strategies to ensure the continued availability of affordable housing as smart growth development and redevelopment proceed, and to ensure that new development and redevelopment participate in the provision of affordable housing. Local governments should provide incentives that promote affordable housing and should consider density bonuses, accessory dwelling units, community land trusts, inclusionary zoning, linkage plans, and affordable lot sizes and construction types (including appropriately designed modular housing) in developing affordable housing strategies.

#### **Recommendation C5 – Incentives**

Local governments should provide incentives, including at a minimum significantly simplified and expedited approval of development, for projects that meet the jurisdiction’s smart growth criteria and receive a high score on the jurisdiction’s “scorecard.” A range of incentives may be used, including process based incentives, and other non-monetary or monetary incentives.

#### **Recommendation C6 – Revision of Comprehensive Plans to Implement Smart Growth and Remove Obstacles to It**

Local governments should use the upcoming Evaluation and Appraisal Report [EAR] process, and other timely means as appropriate, to explicitly evaluate the degree to which their comprehensive plans allow for and promote the following:

- Mixed uses
- Town centers
- Diversity of housing options
- Urban public space/green space
- Green construction
- Affordable housing

Based on this review, local governments should revise their comprehensive plans, land development codes, and customary procedures to implement the recommendations in this report and to identify and remove obstacles to smart growth.

**Recommendation C7 – Dissemination of Information Regarding Densities**

Volusia County and Volusia Council of Governments [VCOG] should establish a permanent, on-going program to inform Volusia residents about the role and benefits of appropriately used higher densities in smart growth. The program should illustrate where higher densities might be appropriate, how design can make higher density compatible with existing development and other forms of proposed development, the benefits of areas of higher density to the community as a whole, including the increased viability of mass transit.

## **D) ENSURING THE CONTINUED EXISTENCE OF RURAL LANDS AND AGRICULTURE**

### **Background**

The Committee believes that the presence of a rural landscape in Volusia County – areas that are open and green, and that consist of agriculture, rural communities, and natural areas – is an essential component of the quality of life that Volusia residents value.

Traditionally, the rural landscape has been defined and maintained by the presence of working agriculture. By acreage and product value, two kinds of agriculture have predominated in Volusia County over the past decade -- silviculture and cut foliage (ferns). Silviculture currently covers 150,000 acres and continues to be economically viable in Volusia County. The cut foliage industry covered 9,000 acres at the beginning of 2004. In recent years, the value of cut foliage production in the county has gone from \$135 million/year to approximately \$70 million/year. The industry is currently looking for new niche markets.

Other types of agriculture are present in Volusia, but on a much smaller scale. Dairy farming is present in the county. There are between 8,000 and 11,000 head of cattle. Approximately 2,500 acres are in citrus production, down from 10-12,000 acres before the 1983 freeze. Sod operations, nurseries, vegetable farms, apiaries, swine, clams, and hunting preserves are also present, most on a very small scale. Aquaculture and horse rearing (primarily for personal recreation) are present and may be expanding.

The 2002 Agricultural Census estimated the value of agricultural production in Volusia County at \$98 million, although other sources believe it may be higher. According to the 2002 Agricultural Census, Volusia County had 1,114 farms (defined as any operation that sold more than \$1000 of product) in 2002.

Increasingly, agriculture in Volusia County has been under pressure that will make it difficult to retain the variety and extent of agricultural activities of years past. Part of this pressure arises from national and international developments, such as trade agreements and competition from countries and regions with lower land and labor costs. Part arises from development pressures related to the pace of growth and the appreciation of land values in the county. Damage from the 2004 hurricanes has contributed additional pressure, particularly on the cut foliage industry.

The recommendations in this section of the report outline an approach to retaining rural landscape in Volusia. The approach recognizes that some development will occur in currently rural areas of the county, and seeks to make it compatible with protection of natural resources and rural character. At the same time, the approach encourages the continuation of agriculture and offers support to those agricultural enterprises that choose to continue to operate in the county. (The Committee recognizes that meeting the needs

of the agricultural community is a dynamic process, and suggests that these recommendations be reviewed and updated on a regular basis.) Finally, the approach addresses the needs of existing and future rural communities.

***ENSURING THAT DEVELOPMENT IN THE SECONDARY WATER AND SEWER SERVICE AREA PROTECTS NATURAL RESOURCES AND RURAL CHARACTER***

**Recommendation D1 – Clustering [SB 360]**

Clustering of development in the secondary water and sewer service area should be encouraged in Volusia County as a tool for protection of open space, scenic vistas, historic sites, rural landscapes, agricultural lands, and environmentally sensitive lands as described below, and in Recommendation A1e. (For a definition of clustering as the term is used in this report, please see Appendix B.)

- a) Cluster developments should be allowed “as a matter of right” in the Map B secondary water and sewer service area through approval of a “binding development agreement.” These developments should receive an as-of-right density bonus of 25% for protecting substantially all wetlands and placing 50% of the project under a conservation easement held by Volusia County.
- b) Density bonuses in excess of 25% should be available in Map B lands to cluster developments that place more than 50% of the project under a conservation easement, protect environmentally sensitive lands, wetlands, water features, or recharge areas, scenic vistas, or contribute to an integrated system of protected natural areas. Such bonuses should be negotiated between the county or other jurisdictions and the developer, on a sliding scale that considers the degree to which the proposed development exceeds the minimum criteria for as-of-right cluster developments. The bonus should only be granted if the area to be developed meets the criteria of the study outlined in Recommendation A4 for land suitable for development.
- c) Cluster developments could also be allowed that protect working landscapes, agricultural practices, or continued forestry operations.
- d) Land protected by easement as a result of clustering should have natural resource or agricultural value and should, wherever possible, connect to networks of protected lands. Land protected by conservation easements should not be available for use as golf courses.
- e) Filing fees for cluster developments should be adjusted so as to not penalize clusters.

- f) Procedures should be adopted which treat cluster developments differently and less onerously than Planned Unit Developments [PUDs.]
- g) Design standards should be adopted which could be incorporated into cluster development agreements to encourage conservation results.

**Recommendation D2 – Transfer of Development Rights [SB 360]**

In order to protect the rights of property owners while protecting lands that may not be appropriate for any development, Volusia County and Volusia municipalities should establish a transfer of development rights program. The donor and receiving areas within the secondary water and sewer service area should be identified based on the study outlined in Recommendation A3 and A4 of this report. Additional receiving areas within already urbanized areas should be identified jointly the cities and the county.

**Recommendation D3 – Rural Lands Stewardship [SB 360]**

In order to protect the rights of property owners while protecting lands that may not be appropriate for any development, Volusia County and Volusia municipalities should fully explore the possibility of establishing a Rural Lands Stewardship Program as authorized in Florida Statutes. The donor and receiving areas should be identified based on the study outlined in Recommendation A3 and A4 of this report.

**Recommendation D4 – Rural Vista Setbacks**

In order to protect the rural appearance of rural areas, the county should adopt “rural vista management plans for all development along designated rural transportation corridors. These plans should identify the factors that contribute to the rural character of the vista for each road, and provide development guidelines (including, among others, minimum setbacks, design standards, tree protection standards, and native plant buffers with opacity standards) that will ensure the preservation of that rural character. These guidelines should not result in lower net densities on the parcels affected.

***SUPPORTING AGRICULTURE***

**Recommendation D5 – Additional Sources of Revenue**

Agriculture is a market based activity that must remain profitable to remain viable. Current county zoning and land-use regulations relating to agriculture limit the activities allowable on agricultural land, and therefore limit potential revenue sources that could contribute to keeping agricultural lands in production or rural in character. The Committee therefore recommends the following:

- a) Volusia County should expand uses permitted (see Appendix A “Tool Box”) in agriculturally zoned land to allow for additional income producing activities. The Agri-Business Inter-relation Committee and county staff should review what is currently permitted, based on size of acreage and make provision for additional uses.
- b) To encourage broader utilization of the expanded range of uses resulting from Recommendation D5a, the county should explore mechanisms to limit the liability of landowners for public use of private lands.
- c) Support the River of Lakes Heritage Corridor initiative by the West Volusia Tourism and Advertising Authority and encourage similar activities to promote eco-tourism and agriculture throughout the county.
- d) The county and municipal economic development departments should target agricultural product processing as viable economic activities that can contribute to keeping agricultural lands in production or rural in character.

**Recommendation D6 – Bluebelt Ordinance**

State law provides that counties may adopt “bluebelt” ordinances providing tax relief for properties that meet criteria for contributing to aquifer recharge. Volusia County should explore adoption of a Bluebelt ordinance (see Appendix E) for properties that meet the requirements under state law.

**Recommendation D7 – Vesting Easements**

Explore the use of vesting easements as a non-monetary way to compensate landowners for maintaining land in agricultural production. (Please see the *Toolbox* section of this report for a description of the vesting easement concept.)

**Recommendation D8 – Agricultural Use of Public Lands**

Explore the leasing of appropriate government-owned land for agricultural uses, either for a flat fee or a percentage of the return on the continuing agricultural operation. The revenues generated from such leasing should be used to purchase additional environmentally sensitive lands.

**Recommendation D9 -- Funding for Rural and Family Lands Protection Act**

Direct the Volusia County Legislative Delegation to implement and fund the Rural and Family Land Protection Act

## ***RURAL COMMUNITIES***

### **Recommendation D10 – Definition of Rural Communities**

The county should define what is meant by rural communities in terms of density and levels of service.

### **Recommendation D11 – Planning for Rural Communities [SB 360]**

The county should conduct additional small area studies of rural communities to develop appropriate plans for their future.

### **Recommendation D12 – Short Term Protection of Rural Communities [SB 360]**

To provide protection to rural communities in the short-term, the cities and the county should develop joint planning agreements and adopt compatible zoning and land use regulations in and around the communities that will protect these communities from encroaching urban development. There is a need for longer-term assurance of protection.

### **Recommendation D13 – Long-Term Protection of Rural Communities [SB 360]**

The Charter Review Commission should consider a charter amendment that will protect appropriate rural communities and villages from encroaching urban development.

### **Recommendation D16 – New Rural Communities [SB 360]**

The county should allow for the development of new rural communities



## **E) MEETING THE INFRASTRUCTURE NEEDS OF SMART GROWTH**

### **Background**

Smart growth seeks to make efficient use of infrastructure and to use the provision of infrastructure to encourage smart growth development. A review of selected zoning ordinances and local government comprehensive plans for cities in Volusia County revealed that plan provisions for infrastructure to support new development are strong and would be sufficient to support smart growth. None of the plans reviewed, however, incentivize smart growth patterns through infrastructure provisions.

The recommendations in this section single out four infrastructure issues of special relevance to smart growth: transportation concurrency management, transportation levels of service, water supply and conservation, and the possibility that smart growth policies might shift infrastructure costs from one area to another. (Note that infrastructure issues related to the provision of water and sewer are dealt with in Section II B of this report, *Directing Development to Appropriate Locations*, because of their centrality to the overall approach recommended by the Committee.)

A myriad of differences in how jurisdictions administer transportation concurrency, including differences in how jurisdictions calculate levels of service and how they calculate the transportation impacts of new development, distort the efforts of individual jurisdictions to promote “smart growth,” and sometimes result in unaddressed impacts across jurisdictional boundaries.

Currently, roadway levels of service (LOS) sometimes work against the smart growth goals of orderly, compact development. Lower levels of service on the county portion of roads than on the same roads within municipal boundaries result in greater capacity appearing to be available in rural areas, and provide an incentive for “sprawl,” -- i.e. development at a greater distance from established urban areas and infrastructure.

Water supply is a major factor affecting the possibility of smart growth and the health of natural systems, that must be addressed.

Lastly, the denser development called for by smart growth has the potential to concentrate the infrastructure (and especially transportation) impacts of new development into smaller areas, in or near already urbanized areas. In order to make smart growth work equitably, mechanisms must be found to harness and concentrate the financial resources provided by new development in ways that offset the impacts to those areas, whether they are in the county or within a municipality.

### **Transportation**

#### **Recommendation E1. – Coordinated Approach to Transportation Concurrency Management [SB 360]**

Volusia County and Volusia municipalities should develop a single, coordinated approach to defining and implementing transportation concurrency. This should include a common approach to designating and calculating levels of service, and an entity or mechanism charged with making final concurrency decisions if local governments cannot agree. This entity may be the decision-making board described in Recommendation V5. The Volusia Metropolitan Planning Organization (MPO) should be tasked with providing a recommendation for action by the decision-making board in cases where the local governments cannot agree.

**Recommendation E2 – Coordinated Approach to Transportation Levels of Service**  
*[SB 360]*

Volusia County and Volusia municipalities should coordinate transportation levels of service designations to support the direction of development to agreed-upon areas

**Recommendation E3 – Scenic Roads**

The county and the cities should jointly establish a scenic road program to protect the character of scenic roads such as the Loop. The program should:

- identify the values that contribute to the scenic character of the road (including, among others, historical significance, natural beauty, scenic vistas, trees and vegetation);
- develop corridor management plans to protect those values;
- establish guidelines for allowable improvements, buffers, minimum setbacks, speed limits, design and development standards, access management, and tree and canopy protection.

The protection afforded by the program should remain unaffected if the road is annexed by a municipality.

**Recommendation E4 – Transit**

Mass transit has the potential to contribute significantly to the smart growth goals of compact development and vibrant, walkable, livable communities, if appropriately integrated with other strategies. The county and cities should cooperate to implement transit options that support smart growth. This cooperation should include the following.

- Planning, where appropriate, for areas with sufficient density (approximately 8-16 units per/acre or higher) to support transit options such as light rail.
- Support for commuter rail between all of Volusia County and other counties in the region.

- Support for the transit goals identified by Volusia jurisdictions through the Volusia MPO.

### **Recommendation E5 – Smart Growth Alternatives in Studies of Proposed Transportation Improvements**

Any analysis of proposed improvements to a roadway should include specific alternatives that accommodate and promote the principles of livable and walkable communities.

### **Water and Water Conservation**

#### **Recommendation E6 – Protection of Recharge Areas**

Volusia County and Volusia municipalities should protect the capacity of high recharge areas to continue to replenish the aquifer.

#### **Recommendation E7 – Enforcement of Water Wise Ordinance**

Volusia County should continue and improve enforcement of the Volusia WaterWise Ordinance.

#### **Recommendation E8 – Retrofitting of Homes for Water Conservation**

Local governments should consider requiring retrofit of homes for water conservation on resale.

#### **Recommendation E9 – Sub-metering for Consumption-Based Pricing**

In order to allow conservation through consumption-based pricing, local governments should consider requiring apartment owners to sub-meter for each dwelling unit.

#### **Recommendation E10. – Policy to Address Private Wells**

Volusia County, the St. Johns Water Management District, and Water Authority of Volusia (WAV) should work together to develop a policy that addresses private wells, including the potential for metering new private wells.

#### **Recommendation E11 – Dissemination of Information Regarding Water Conservation**

Volusia County, Volusia municipalities, and the WAV should publicize the need to conserve water and measures to achieve water conservation.

## **Infrastructure Costs**

### **Recommendation E12 – Responding to Potential Shifts in Infrastructure Burdens**

Volusia County, Volusia municipalities, and the Volusia MPO should review current procedures and enter into agreements as necessary to ensure that the allocation of infrastructure funds (including transportation funding) reflects the relatively greater needs that may be experienced by areas subject to increased densities as a result of smart growth policies.

## **F) INTEGRATING EDUCATION AND SMART GROWTH**

### **Background**

Education is a crucial component of smart growth. The provision of sites and schools ought to be regarded as an essential component of any effort to manage growth. In addition, the location, design, and use of schools has the potential to contribute significantly to the smart growth goals of livable, compact, walkable development.

The recommendations in this section address several issues relating to education and growth: cooperation between local governments, the school board, and developers to identify school sites in a timely way as new areas develop; designing schools and facilities to maximize their contribution to achieving smart growth goals; and the use and construction of the facilities themselves.

### **Siting**

#### **Recommendation F1 – Interlocal Agreements Addressing School Siting [SB 360]**

Local governments should adopt processes through interlocal agreement with the School Board to plan and provide for school sites as residential development is being planned. These processes should be supplemented as necessary with adoption of comprehensive plan policies and land development code amendments in order to sufficiently and legally implement the identified coordinated processes.

#### **Recommendation F2 – Public School Facilities Elements [SB 360]**

Volusia County and Volusia municipalities should adopt Public School Facilities Elements as part of their comprehensive plans.

#### **Recommendation F3 – Early Identification of Needed School Sites [SB 360]**

Local governments should require that new school sites necessary to serve proposed residential development be identified and reserved as soon as practicable in the planning process. Such sites should be purchased and/or dedicated before issuing final development approvals.

#### **Recommendation F4 – Area Plans for New School Facilities [SB 360]**

Local governments and the school district should work together to develop subregional area plans for new educational facilities where the development of large amounts of undeveloped lands across jurisdictional boundaries will create the need for new schools.

### **Recommendation F5 – Developer Participation in Dedication, Reservation, or Acquisition of School Sites [SB 360]**

Local governments should require developers of residential projects that will require new schools to participate in the provision of school sites that will serve their development.

Fulfillment of this requirement should take one of three forms:

- Dedication or reservation of an appropriate site within the proposed project.
- Cooperative dedication or reservation of an appropriate site by several developers working together.
- Purchase of “adequate school facilities” credits from an entity (landowner, developer or school board) that is dedicating, reserving or acquiring a site that will serve the development in question. (See Recommendation 4) below for a description of “adequate school facilities credits”.)

Dedication of a site or purchase of “adequate school facilities” credits should result in eligibility for school impact fee credits.

### **Recommendation F6 – Adequate School Facilities Credits [SB 360]**

Volusia cities and the county should jointly develop and implement a county-wide “adequate school facilities credit” system. Such a system would work in conjunction with the identification of school sites described above and would allow developers whose projects require a new site to pool resources to provide that site. Under such a system, the entity acquiring, dedicating, or reserving a site would sell credits, according to a formula determined by the system, to recoup a portion of the costs associated with providing the site. Developers purchasing the credits would thereby share in the costs associated with providing the site needed by their development.

### **Recommendation F7 -- Landbanking**

The School Board of Volusia County currently provides funding for landbanking sites for future educational and ancillary facilities as part of its capital program. This practice should be supported in order to further the processes identified in the interlocal agreement and coordinated through the efforts of local government. (See above.)

### **Recommendation F8 – Siting Schools for Maximum Integration into Communities**

New schools should be located in order to facilitate the design and development of neighborhood schools and community centers that contribute to the overall well being of a safe community. These locations should assist in maximizing the ability to walk and bicycle to school and deemphasize the need to drive to school. Support infrastructure, including water, sanitary sewer, roads, and sidewalks, should be planned for and designed to accommodate the needs of the school.

### **Design and Use of Facilities**

### **Recommendation F9 – Designing Schools for Maximum Integration into Communities**

Wherever possible, the design of new schools should be consistent with the character of the surrounding community and contribute to the integration of the school into the community. This should include the possibility, where appropriate, of multi-story designs for schools.

### **Recommendation F10 – Change in Requirement for K-2 on Ground Floor**

To allow maximum flexibility in achieving design and architectural compatibility between schools and their surrounding communities, the legislature should change the state building code that requires all K-2 classrooms to be on the ground floor of new school facilities.

### **Recommendation F11 – Shared Facilities Agreements**

Common and shared drainage facilities, colocation of compatible uses, shared parking, and other strategies should be explored that assist in the design and development of neighborhood schools and community centers. Such efforts can reduce the acreage being devoted to school sites and allow after-hours use of school facilities.

### **Capacity**

#### **Recommendation F12 -- Mitigation for School Capacity [SB 360]**

Proportionate share mitigation is tied to the land use density, not to the applicant. It can be offered in the form of school site donation; provision of necessary storm water retention area for the school site off of the school property; and up front payment of impact fees in order to reserve capacity (allowable as credits against impact fees); or off-site utility extensions, road improvements to a school site, or architectural features not typically associated with a school but desired/required by the development (not allowable as credits to impact fees.)

Proportionate share mitigation needs to be time certain.

- a) Proportionate share mitigation should be discussed during the land use map amendment (comprehensive plan amendment) and/or rezoning of the subject property.
- b) Proportionate share mitigation should be required as part of an approval of an increase in residential units/density over the number entitled by the existing land use designation.
- c) Proportionate share mitigation should be required for the difference between the maximum number of residential units currently entitled and the maximum

allowable number of residential units assuming approval of a land use map amendment.

**Recommendation F13 – Infill/Redevelopment Areas and School Capacity [SB 360]**

- a) Recognizing that the reinvestment in existing and/or older schools can contribute to the revitalization of neighborhoods and communities, local governments and the school district should work together in areas where the shared resources of each can benefit the redevelopment of older areas.
- b) Where a city has designated a specific geographic area as a Community Redevelopment Areas (CRA) and residential development is an identified goal of the CRA plan, an exemption to the requirements of proportionate share mitigation should be allowed.
- c) Where a school district wishes to increase the student enrollment in a school that 1) has shown a decline in enrollment over the past 5 years (not based on relief being provided by new school construction), 2) is not scheduled for relief of overcrowding, and 3) is not more than 10% over permanent capacity, an exemption to the requirements for proportionate share mitigation should be allowed.

**Recommendation F14 – Addressing Needs Created by Smaller Developments [SB 360]**

Currently an Interlocal Agreement between the School Board, the cities and the county, defines small projects (*de minimus* projects) as those of less than 100 units.

- a) Small residential projects should continue to be defined by units and not acreage.
- b) Local governments and the school board shall cooperate to develop a policy that addresses the cumulative capacity impact of multiple *de minimus* projects within the same attendance boundary, particularly when the area in question has schools more than 10% over-capacity with relief not programmed within three years.
- c) Local governments and the school district may wish to consider lobbying for amendments to SB 360 in order to recognize the benefits of infill development and to provide for a tiered school concurrency management system that would address small developments, where other community goals are addressed by an increase in student population.



**Recommendation F15 – Capacity Review and Capacity Enhancement Agreements**  
*[SB 360]*

All proposed development in Volusia County should be reviewed by the Volusia County School Board for its impact on public school capacity. If capacity does not exist, or will not be available within three years, then the developer shall provide a proportionate share of funds toward capacity required by the School Board capacity impact report. In the alternative, in order to proceed with development and allow for the provision of capacity in a timely fashion, said provision may include phasing or concurrent construction of the facilities, or such other means acceptable to the School Board. If development is approved where capacity does not exist, the potential adverse impact must be acknowledged by the elected body.

## **INTEGRATING ECONOMIC DEVELOPMENT AND SMART GROWTH**

A strong economy is a key component of smart growth. Economic development and smart growth can be naturally complementary concepts. Smart growth results in community characteristics that help attract new economic activity. Economic development in turn can contribute to the resources available to a community as it tries to achieve the goals of smart growth.

Because Volusia County has an established, effective economic development initiative that is consistent with and supports smart growth principles, the recommendations in this section emphasize the desired relationship between economic development and smart growth, rather than describing desired economic development actions or strategies. The recommendations also highlight and directly address the importance of understanding the fiscal implications of different patterns of development.

### **Recommendation G1 – Economic Development Support for Smart Growth**

Private sector and local government economic development efforts shall be consistent with and supportive of smart growth. Special emphasis should be placed on the wise use of impacted lands in urban and suburban core areas where infill and redevelopment efforts can benefit the community.

### **Recommendation G2 – Smart Growth Support for Economic Development, Social Equity**

Local government smart growth planning should address education, workforce housing, inadequate infrastructure, and the potential social equity consequences of smart growth development.

### **Recommendation G3 – Understanding the Costs of Development Patterns [SB360]**

Cities and the county should acquire and use the Fiscal Impact Analysis Model (FIAM) to understand the full cost of providing services and meeting concurrency requirements for smart growth or other development scenarios (see Appendix F.)

## V. IMPLEMENTATION

### “Keystone” Recommendations

This report contains sixty-four recommendations that, if implemented, would work together to produce a smart growth future for Volusia County. The Committee believes that fifteen of these are “keystone” recommendations – without them the other recommendations, although still desirable and beneficial, will not produce the overall structure of smart growth that is essential to the vision of the future outlined in this report.

The **keystone recommendations** are:

- **Recommendation A1    Protect Core Environmental Areas**  
Identifies core environmental areas and recommends mechanisms for protecting them.
  
- **Recommendation A2    Maximize Compatibility of Development and Natural Resources in Other Natural Areas**  
Provides criteria for identifying areas appropriate for development, and for determining what kind of development is appropriate, in rural areas.
  
- **Recommendation A3    Study of Map A Areas**  
Recommends a study needed to provide information for the implementation of the recommendations relating to protecting Map A areas.
  
- **Recommendation A4    Study of Map B Areas**  
Recommends a study needed to provide information for the implementation of the recommendations relating to protecting environmentally important areas, and guiding development in currently undeveloped areas.
  
- **Recommendation B1    Primary and Water and Sewer Service Areas**  
Recommends the identification of a primary water and sewer service areas as the area appropriate for urban development.
  
- **Recommendation B2    Secondary Water and Sewer Service Areas**

Recommends the identification of secondary water and sewer service areas to support only clustered rural development.

- **Recommendation B3**     **Extent of Water and Sewer Service Areas, Single Providers**

Recommends that each primary or secondary water and sewer service area have only one service provider, and that primary and secondary areas collectively cover the entire county, except for public lands.

- **Recommendation B4**     **Joint Visions and Planning for “Areas of Influence” and Potential Annexation Areas**

Recommends that cities and the county develop and adopt joint visions and plans for unincorporated areas and that the land use component of these visions and plans be subject to change only with the concurrence of the original signatories, regardless of annexation. Places emphasis on smart growth land use rather than jurisdiction, and recommends identification of potential future annexing jurisdictions for unincorporated areas. Also recommends agreements between cities to ensure compatibility of development in adjoining areas and that higher development standards prevail.

- **Recommendation D1**     **Clustering**

Recommends allowing clustering as-of-right in secondary water and sewer service areas (rural area), subject to certain conditions. Works with recommendations D2 (transfer of development rights) and D3 (rural lands stewardship) to preserve the character of rural areas.

- **Recommendation F3**     **Early Identification of Needed School Sites**

Recommends identification of needed school sites as early as possible in the development approval process, and recommends mechanism for local governments, developers, and the school board to cooperate to reserve, donate or purchase such sites.

Because these recommendations are central and crucial to bringing about smart growth in Volusia County, the Committee makes the following recommendations regarding their implementation.

### **Keystone Implementation Recommendation V1 -- Relationship of Implementation to Florida Growth Management Legislation 2005-290**

Volusia County and Volusia municipalities should use their joint adoption and implementation of the relevant recommendations in this report to demonstrate compliance with the requirements of the 2005 Florida Growth Management Act, and thereby secure access for Volusia jurisdictions to the incentives and funding it provides.

### **Keystone Implementation Recommendation V2 -- City-County Collaboration on Implementation [SB 360]**

The cities and the county should designate VCOG to serve as the convening or facilitating body for efforts to implement those recommendations in this report that require intergovernmental collaboration. This body should serve the following functions:

- Promote implementation of the recommendations.
- Convene city, county, school board and other stakeholder representatives as needed and appropriate to jointly agree-upon or develop the following:
  - Primary and secondary water and sewer service areas
  - Joint plans for unincorporated areas, including the identification of potential future annexing jurisdictions.
  - Scenic road program.
  - Interlocal agreements regarding adequate school facilities credits.
  - Other recommendations requiring intergovernmental cooperation.
- Make available voluntary facilitation or mediation to local governments or other stakeholders for the purpose of reaching agreement on implementation of the recommendations of this report. This body should not directly facilitate, mediate, or make advisory recommendations regarding the resolution of differences among stakeholders.

### **Keystone Implementation Recommendation V3 – Heightened Environmental Standards for Map A Lands**

The county should use its existing charter authority to adopt heightened environmental standards for Map A lands that require protection of substantially all wetlands, half of uplands, including significant habitat, and that freeze underlying densities within Map A at levels currently allowed by the county comprehensive plan. (These standards would not preclude the 25% density bonus for clustered development describe in Recommendation A1e.) These standards should apply and be enforced in incorporated as well as unincorporated areas of Map A.

**Keystone Implementation Recommendation V4 – Requirement for Primary and Secondary Sewer and Water Areas in Charter [SB 360]**

The Charter Review Commission should recommend that a requirement that the cities and the county agree upon and plan for primary and secondary water and sewer areas, unincorporated areas, and potential future annexation areas as described and defined in Recommendations B1 – B4 be adopted as a provision of the Volusia County Charter.

**Keystone Implementation Recommendation V5 -- Decision-Making Board in Charter [SB 360]**

The Committee recognizes that in some instances, the cities and county, notwithstanding their best efforts, may be unable to reach agreement as called for in this report. The existing Volusia Growth Management Commission (VGMC) is unsuited in the role of decision-maker by virtue of its composition and structure. The Committee therefore makes the following recommendation.

The Charter Review Commission should recommend that the VGMC be reconstituted as a decision-making board to be established in the charter for the purpose of making final decisions, when cities and the county are unable to agree, regarding:

- the location and allocation of primary and secondary water and sewer service areas, as described in Recommendations B1, B2, and B3;
- joint city-county planning for unincorporated areas as described in Recommendation B4;
- concurrency and levels of service as described in Recommendations E1 and E2;

The board should consist of seven members. All members should be elected officials. Three members should be appointed by the county, and acceptable to VCOG. Three members should be appointed by the cities through VCOG, and acceptable to the county. The seventh member should be a School Board member and be acceptable to the county and city appointees.

## **VI. APPENDICES**

## APPENDIX A -- THE “TOOL BOX”

The *Toolbox* CD-ROM that accompanies this report is intended to provide an initial resource for local governments and others as they develop detailed implementation strategies for the recommendations. It is a compilation of materials reviewed or developed by the workgroups of the Committee. It is not intended as a definitive “how to” manual, but rather as a point of departure for further exploration of smart growth concepts.

The materials include general resources, descriptions of smart growth tools and concepts, model tools, and case studies. Also included are a number of Working Papers developed by the UCF Team as working documents for use by the Committee during its deliberations.

Appendix A contains two subsections. The first is a cross-index of the recommendations in this report with the tools in the “toolbox.” It identifies those tools most relevant to implementing each of the recommendations. The second section lists the contents of the *Toolbox* CD-ROM, numbered for easy reference.

To access the tools provided on the CD\_ROM, insert the CD\_ROM in your computer and open either version of *Toolbox Contents* (Word and HTML versions are provided). If you have opened the HTML version (with Microsoft Explorer or other web browser), you may simply click on the title of the toolbox file you wish to access and the file will open. If you have opened the Word version, you must depress the “Control” key while clicking on the title in order to open the toolbox file.

### CROSS INDEX OF RECOMMENDATIONS AND TOOLS

#### A) Protecting the Environmental Core

1. Smart Growth America Website
16. Rural cluster concept paper – Smart Growth Implementation Committee
18. Rural Lands Stewardship Program
23. Transfer of Development Rights

#### B) Directing Development to Appropriate Locations

1. Smart Growth America Website

#### C) Developing Vibrant, Livable and Sustainable Communities

##### Recommendation C1 – Visioning

1. Smart Growth America Website

##### Recommendation C2 – Checklist and Scorecard

37. Checklist for Smart Growth Development
39. Scorecard for Smart Growth Development



**Recommendation C3 – Physical Characteristics of Smart Growth Development**

12. Congress for the New Urbanism Website
15. Form Based Development Codes
4. Volusia Smart Growth Audit – UCF Team Working Paper
13. Density – UCF Team Working Paper
23. Transfer of Development Rights
38. Mixed Use Overlay District -- Ft. Myers Beach
48. Mizner Park
49. Stapleton Denver
50. Birkdale Village Huntsville NC
54. Horizons West Case Study
55. Smart Growth Photo Gallery

**Recommendation C4 -- Affordable Housing**

5. Accessory Dwelling Units – UCF Team Working Paper
6. Affordable Housing Community Land Trusts – UCF Team Working Paper
7. Affordable Housing Inclusionary Zoning Techniques – UCF Team Working Paper
8. Affordable Housing Linkage Fees – UCF Team Working Paper
9. Affordable Housing Community Land Trust Option Information – Fannie May
10. Affordable Housing Implementation Guidelines – UCF Team Working Paper
26. Affordable Housing Accessory Dwelling Units – Cary North Carolina Ordinances
27. Affordable Housing Accessory Dwelling Units -- Zoning Ordinance, City of Santa Cruz, CA
28. Affordable Housing Linkage Program Model, Winter Park Florida
29. Affordable Housing Community Land Trust -- DNI (Dudley Neighbors Incorporated) Lease Agreement Document
30. Affordable Housing Community Land Trust -- MKLT (Middle Keys Community Land Trust) Eligibility Guidelines
31. Affordable Housing Inclusionary Zoning Ordinance Madison WI 01-26-04
32. Affordable Housing Inclusionary Zoning Ordinance Model
33. Affordable Housing Moderately Priced Dwelling unit Program, Montgomery MD

**Recommendation C5 – Incentives**

1. Smart Growth America Website

**Recommendation C6 – Revision of Comprehensive Plans to Implement Smart Growth and Remove Obstacles to It**

1. Smart Growth America Website
2. Additional Smart Growth Websites
12. Congress for the New Urbanism Website
4. Volusia Smart Growth Audit – UCF Team Working Paper

**Recommendation C7 – Dissemination of Information Regarding Densities**

14. Density -- Higher Density Plans: Tools for Community Engagement

**D) Ensuring the Continued Existence of Rural Lands and Agriculture**

**Ensuring That Development In The Secondary Water And Sewer Service Area Protects Natural Resources And Rural Character**

16. Rural cluster concept paper – Smart Growth Implementation Committee
17. Rural Areas – UCF Team Working Paper
18. Rural Lands Stewardship Program
23. Transfer of Development Rights
34. Cluster Development Example -- UCF Team Working Paper
35. Cluster Subdivision Ordinance
36. Cluster Zoning Ordinance

**Supporting Agriculture**

2. Additional Smart Growth Websites – American Farmland Trust Website
11. Agriculture –Supplemental Allowable Activities and Land Uses for Agriculturally Zoned Areas
24. Vesting Easements
18. Rural Lands Stewardship Program

**Rural Communities**

16. Rural cluster concept paper – Smart Growth Implementation Committee
34. Cluster Development Example -- UCF Team Working Paper

**E) Meeting the Infrastructure Needs of Smart Growth**

19. Innovative Infrastructure Solutions – UCF Team Working Paper
25. Water Efficiency in Smart Growth
43. Water Conservation -- Volusia Water Wise Ordinance
42. Specific area plan -- Horizons West: Adequate Public Facilities and Transfer of Development

**F) Integrating Education and Smart Growth**

20. Schools and Smart Growth – UCF Team Working Paper
21. Schools -- Developer Funding of Capacity Enhancement – UCF Team Working Paper
22. School Facilities Siting Best Practices Guide – Draft
53. North Lake Park Community School Case Study

## TOOLBOX CONTENTS

### General Resources

1. Smart Growth America Website [www.smartgrowthamerica.com](http://www.smartgrowthamerica.com) (website only – no document in *Toolbox*)
2. Additional Smart Growth Websites
3. Smart Growth Bibliography – UCF Team Working Paper
4. Volusia Smart Growth Audit – UCF Team Working Paper

### Descriptions Or Discussions Of Smart Growth Tools And Concepts

5. Accessory Dwelling Units – UCF Team Working Paper
6. Affordable Housing Community Land Trusts – UCF Team Working Paper
7. Affordable Housing Inclusionary Zoning Techniques – UCF Team Working Paper
8. Affordable Housing Linkage Fees – UCF Team Working Paper
9. Affordable Housing Community Land Trust Option Information – Fannie May
10. Affordable Housing Implementation Guidelines – UCF Team Working Paper
11. Agriculture –Supplemental Allowable Activities and Land Uses for Agriculturally Zoned Areas.
12. Congress for the New Urbanism Website <http://cnu.org> (website only – no document in *Toolbox*)
13. Density – UCF Team Working Paper
14. Density -- Higher Density Plans: Tools for Community Engagement
15. Form Based Development Codes
16. Rural cluster concept paper – Smart Growth Implementation Committee
17. Rural Areas – UCF Team Working Paper
18. Rural Lands Stewardship Program
19. Innovative Infrastructure Solutions – UCF Team Working Paper
20. Schools and Smart Growth – UCF Team Working Paper
21. Schools -- Developer Funding of Capacity Enhancement – UCF Team Working Paper
22. School Facilities Siting Best Practices Guide – Draft
23. Transfer of Development Rights
24. Vesting Easements
25. Water Efficiency in Smart Growth

### Model Tools

26. Affordable Housing Accessory Dwelling Units – Cary North Carolina Ordinances
27. Affordable Housing Accessory Dwelling Units -- Zoning Ordinance, City of Santa Cruz, CA
28. Affordable Housing Linkage Program Model, Winter Park Florida

29. Affordable Housing Community Land Trust -- DNI (Dudley Neighbors Incorporated) Lease Agreement Document
30. Affordable Housing Community Land Trust -- MKLT (Middle Keys Community Land Trust) Eligibility Guidelines
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34. Cluster Development Example -- UCF Team Working Paper
35. Cluster Subdivision Ordinance
36. Cluster Zoning Ordinance
37. Checklist for Smart Growth Development
38. Mixed Use Overlay District -- Ft. Myers Beach
39. Scorecard for Smart Growth Development
40. School Capacity Enhancement Agreement (CEA) -- example in Orange County Commission Agenda  
[http://www.orangecountyfl.net/eAgenda/archive/Agenda\\_03-02-04/css/Agenda\\_03-02-04\\_1.htm?PrinterFriendly=1](http://www.orangecountyfl.net/eAgenda/archive/Agenda_03-02-04/css/Agenda_03-02-04_1.htm?PrinterFriendly=1) (website only – no document in *Toolbox*)
41. School Facilities Element -- Orange County Comprehensive Plan
42. Specific area plan -- Horizons West: Adequate Public Facilities and Transfer of Development.
43. Water Conservation -- Volusia Water Wise Ordinance
44. Village Development Ordinance -- Horizons West

### **Case Studies**

45. Crocker Center Ft. Lauderdale
46. Affordable Housing Murphy Park St. Louis
47. Mixed Use Fruitvale Village I Oakland CA
48. Mizner Park
49. Stapleton Denver
50. Birkdale Village Huntsville NC
51. Kinsey Flats Cincinnati
52. The Walk at University Walk at Coral Springs
53. North Lake Park Community School Case Study
54. Horizons West Case Study
55. Smart Growth Photo Gallery

## APPENDIX B -- CLUSTERING

Cluster Development is a smart growth tool for promoting open space, conservation of natural resources, and agriculture in subdivision development. In a cluster development, smaller lots than would otherwise be allowed in the zoning district are permitted so long as a specified percentage of the development remains protected or in open space. This approach has been given different names around the country including open space development, conservation development, hamlet style, farm village, or clustering. It is sometimes confused with “new urbanism” because many so called “new urbanism” developments have used the cluster approach. They are not, however, synonymous.

Under typical land use and zoning, property is assigned a density and a landowner is allowed under various zoning procedures to subdivide property so as to achieve that density. A cluster subdivision generally concentrates lots on smaller parcels than would otherwise be allowed by the zoning ordinance and converts the remainder to some form of shared open space. Typically cluster subdivisions are density neutral meaning there is no increase in density over what is otherwise provided by the land use plan. Cluster subdivisions have been used to maintain the rural character of areas, protect historic sites, protect scenic vistas, provide open space for a community, and to preserve important natural areas including wetlands, floodplains and wildlife habitat. Proponents of clustering believe that clustering reduces sprawl, reduces costs associated with development of infrastructure, and allows greater private contribution to protection of open space.

Clustered developments have been used in many parts of the country as a means to preserve rural areas and protect natural resources. Florida’s Growth Management Act encourages “innovative techniques and strategies such as clustering” Sec. 163.3177(11)(b), Fl. Stat.

**APPENDIX C**

**VOLUSIA FOREVER**

**2004 2nd Cycle Eligible Application Ranking**

Approved by Volusia Forever Advisory Committee April 20, 2005

Approved by County Council May 19, 2005

<b>1</b>	Volusia Conservation Corridor (VCC)*	30,000	<b>A</b>
<b>2</b>	Stanaki Sections 1&2 DLSCP	450	<b>A</b>
<b>3</b>	Ocklawaha DLSCP	26	<b>A</b>
<b>4</b>	Townsend-Schroeder Trust (VCC)	637	<b>A</b>
<b>5</b>	Ponce Preserve Conservation Project*	155	<b>A</b>
<b>6</b>	Festival Properties (VCC)	2,924	<b>A</b>
<b>7</b>	Festival Properties Addition (VCC)	396	<b>A</b>
<b>8</b>	Akers Quail Ranch	1,337	<b>A</b>
<b>9</b>	Charlene Strawn Old Growth Forest & Rec. Area	150	<b>A</b>
<b>10</b>	Double B Ranch (1)	3,700	<b>A</b>
<b>11</b>	Timberlands Consolidated & WDA Partnership	219	<b>A</b>
<b>12</b>	Lafayette Landings	152	<b>A</b>
<b>13</b>	Russell Port Orange	17	<b>A</b>
<b>14</b>	Progress Energy Astor (LGCA)	1,600	<b>A</b>
<b>15</b>	Holiday Haven Campsites, Inc.	49	<b>A</b>
<b>1</b>	Krol SR 415 Samsula	667	<b>B</b>
<b>2</b>	RBD Limited	400	<b>B</b>
<b>3</b>	Volusia Plantation Estates Limited	29	<b>B</b>
<b>4</b>	O'Reilly-King	2,200	<b>B</b>
<b>5</b>	Scheible LGWMA (In-Holding)	10	<b>B</b>
<b>6</b>	Hamlin-Dann (1)	1,190	<b>B</b>
<b>7</b>	MacFarlane Central Park Addition	8	<b>B</b>
<b>8</b>	Raulerson Road Day	62	<b>B</b>
<b>9</b>	Eagan DeBary SJR	170	<b>B</b>
<b>10</b>	Murphy DeBary SJR	102	<b>B</b>

(1) Conservation Easement.

\* Property owners within the project boundaries will be contacted project boundaries will be contacted on a parcel by parcel basis as to their willingness to participate in the project.

## FLORIDA FOREVER PROJECT DESCRIPTIONS

Two projects within Volusia County are on the Florida Forever “A” priority list: the Volusia Conservation Corridor as a whole; and the Doris Leeper Spruce Creek Preserve. Brief description of each are provided below.

### **Volusia Conservation Corridor – Executive Summary**

The Volusia Conservation Corridor (VCC) is a mosaic of contiguous parcels of land, approximately 55,000 acres in size, which sits essentially in the middle of the county and connects lands north of the city of Deltona and east to the city of Edgewater. These lands include habitat needed for federal and state listed endangered and threatened species such as the Florida black bear, Florida sandhill crane, Florida scrub jay, bald eagle, wood stork, red-cockaded woodpecker, gopher tortoise, indigo snake, and Florida pine snake. Preliminary ground water modeling and natural resource assessments have indicated the potential for additional water supply development; thus it provides for water resource development. The land is also critical in providing flood protection for existing and future populations, protecting surface and ground water quality, and providing resource-based recreation for both residents and tourists alike.

The potential acquisition area is highly suitable due to its large size, relatively intact natural systems, extensive wetlands and water resources, and critical habitat for migrating waterfowl, black bear and other important species. While significant as an independent resource, the project is perhaps even more valuable in its function as a connector and wildlife corridor linking numerous protected areas. Land connections prevent further habitat fragmentation that causes the isolation and demise of small populations. This corridor is the link that will connect land from the Okefenokee Swamp at the top of the state to the Everglades.

Excellent recreational potential exists for hiking, fishing, hunting, camping, horseback riding, and nature study. Close proximity to large urban areas and major transportation corridors suggests that recreational needs will increase. The Florida Scenic Trail system traverses the region and provides further opportunities for public access and recreation.

The Volusia Conservation Corridor is a cooperative project between the St. Johns River Water Management District (SJRWMD), the State of Florida and the County. The State, via the Acquisition and Review Committee (ARC), has established the Volusia Conservation Corridor as an “A” List project, which means it is eligible for state funding. The County, via the Volusia Forever initiative, has also identified this project as an “A” List project, eligible for funding from this program. The SJRWMD has already made acquisitions within the VCC with assistance from Volusia Forever.

To date, approximately 25,000 have been acquired, either by fee simple or the purchase of a conservation easement. The total value of the properties acquired is just over \$26 Million, with Volusia Forever paying \$9.4 Million and funding partners paying \$16.6 Million.

### **Doris Leeper Spruce Creek Preserve**

#### ***Introduction (Excerpts)***

The acquisition of approximately 2,000 acres along Spruce Creek in Volusia County, now known as **Doris Leeper Spruce Creek Preserve (the Preserve)**, was begun in the mid-1980's, and involved several individuals, conservancy groups, and state and local governments and agencies. The Preserve was purchased through a joint effort with Volusia County and the State's Conservation and Recreation Lands (CARL) Program. Volusia County manages the land, although the State of Florida owns the majority of the property.

The Doris Leeper Spruce Creek Preserve showcases diverse coastal habitats, endangered and unique wildlife and plants, numerous cultural and archaeological sites and a navigable, undisturbed blackwater stream. The diversity and pristine condition of the aquatic habitat and flora and fauna within the Spruce Creek watershed and the unique cultural resources make the Preserve an ideal setting for resource based recreational activities, environmental and historical education and research opportunities. The Preserve is an integral part of an extensive system of conservation and recreation lands in central Florida. This system of conservation and recreations lands is detailed in a later section of this plan.

Doris Leeper Spruce Creek Preserve is part of Volusia County's conservation land program and one of the premier sites in the Environmental, Cultural, Heritage, Outdoor Recreation, Volusia ECHO and Volusia Forever initiatives.

***Existing Condition -- Background (Excerpts)***

The approximately 2,000 acre the Preserve is located along the east coast of Volusia County between Daytona Beach and New Smyrna Beach. Spruce Creek empties into the Halifax River Lagoon, just west of Ponce DeLeon Inlet. The project site extends from U.S. 1 on the east, to Interstate 95 on the west.

The site includes approximately 45,600 linear feet (8.6 miles) of waterfront along Spruce Creek, Rose Bay, Turnbull Bay and Strickland Bay. The property serves as an upland buffer to Strickland Bay and Spruce Creek, both of which are designated Outstanding Florida Waters. The site contains significant cultural and historical sites, including an impressive prehistoric earthen work, the Spruce Creek Mound. The property provides habitat for the West Indian Manatee, bald eagles, wood storks and other threatened and endangered species. The presence of ecologically significant upland plant communities and river wetland areas and the relatively undisturbed nature of the property provides excellent habitat for a wide variety of wildlife and opportunities for resource-based recreation and education.



**APPENDIX D – HABITAT ASSESSMENT METHODOLOGY**

**VOLUSIA COUNTY LEGIST MODELLING SUMMARY**

Re: Contract to assist Volusia County Smart Growth Implementation Committee 2004-2005

The Volusia County Smart Growth Advisory Committee (Committee) is charged with identifying the most important, ecologically valuable, and sensitive areas within the County. Then, utilizing this information the Committee will advise the Volusia County Board of County Commissioners on growth management policies that reflect these ecological values. Pandion Systems, Inc. (Pandion), in association with GIS Associates and Dr. Tom Hctor, developed a county-specific version of the Landscape Evaluation Geographical Information Systems Toolbox (LEGIST). LEGIST is a GIS modeling tool that provides information to decision-makers. It can be used to improve evaluation of the [potential ecological](#) impacts of various development scenarios and to make sound science-based decisions.

The Committee prioritized five broad areas on which they would like LEGIST to provide information. The approach and output for each are described in the table below. A more detailed view of the layer development follows.

<b>Topic Area</b>	<b>Approach and Output</b>
Habitat for Threatened and Endangered Species	LEGIST Modeled Layer(s) of a few T&E species (or their habitats) selected by the Committee to reflect their status of high importance, umbrella species, or keystone species.
Corridors/Connectivity	LEGIST Modeled Layer(s) of corridors between natural habitat patches. Weighted to reflect important corridor values such as length, width, attributes of associated patches, etc.
Aquifer Recharge Areas	LEGIST Layer of aquifer recharge, using an already developed aquifer layer.
Under Represented Habitats	A proportionality analysis of available vs. preserved habitats.
Dune Line/Beach Habitats	LEGIST Layer indicating the undeveloped shoreline/beach dune habitats. Use Volusia County’s existing Layer

**OVERVIEW OF VOLUSIA COUNTY LEGIST INDEX LAYER DEVELOPMENT**

The steps below are a summary overview of the process to develop initial LEGIST Index Layers for Volusia County. These raster layers (in ESRI’s Grid format) were developed using well-established but complex raster modeling techniques developed over the years by a consortium of Pandion Systems, GIS Associates, and Dr. Tom Hctor. These techniques and any assumptions are presented below in brief.

**Index 1: Natural Integrity Layer**

*PURPOSE:* Create the base layer for the other modeled layers.

*SOURCE DATA :* Volusia County Vegetation layer and SJRWMD 2000 Land Use Land Cover layer

1. Created a raster version of Vegetation layer (from Volusia County) and 2000 LU/LC layer (SJRWMD – District-wide).
2. Replace values in SJRWMD 2000 LU/LC layer with the Volusia County Vegetation layer (where it exists)
3. Convert Land Cover codes to Natural Integrity Codes:
  - a. 4 = Natural
  - b. 3 = Semi-natural
  - c. 2 = Agriculture
  - d. 1 = Urban
4. Clip by County Boundary (Volusia County)

**Index 2: Landscape-Level (Large) Corridor**

*PURPOSE: Identify large patches of potential natural areas.*

*SOURCE: Natural Integrity Layer*

1. Subset natural (4) and semi-natural (3) areas from Natural Integrity Layer
2. Use major roads (FDOT) to divide natural/seminatural areas into contiguous pieces
3. Assign unique values to each contiguous group of cells, or “patches” (natural and semi-natural combined)
4. Filter out any patches less than 500 acres and clip by County boundary
5. Reclassify to 6 categories based on size
  - a. 4 = 500-25,000 ac
  - b. 5 = 25,000-50,000 ac
  - c. 6 = 50,000-75,000 ac
  - d. 7 = 75,000-100,000 ac
  - e. 8 = 100,000-125,000 ac
  - f. 9 = 125,000-150,000 ac
  - g. 10 = 150,000-172,129 ac
  - h. NoData = 0 (to allow smoothing)
6. Smooth patches using statistical mean of ¼-mile circular neighborhood (to capture edge effects). The process of smoothing the data reduced the large corridor values along the edges of roads and built areas. This reduction in values resulted in class values of 1 through 3 in addition to the original values of 4 through 10.

**Index 3: Local-Level (Small) Corridor**

*PURPOSE: To identify optimal paths between existing conservation lands. Conservation of these corridors will promote flow of resources between these conservation lands. Resources might be individual plants or animals, genetic material, etc. The shortest path through the most natural habitat was the most optimal path.*

*SOURCE: Natural Integrity Layer*

1. Create raster version of Conservation Lands (from Volusia County).
2. Assign unique values to each contiguous group of conservation land cells
3. Filtered out any contiguous conservation areas less than 500 acres
4. Created small corridor cost surface by reclassifying Natural Integrity Index Layer to corridor cost values:
  - a. 4 (Natural) = 1
  - b. 3 (Semi-Natural) = 10
  - c. 2 (Agriculture) = 50
  - d. 1 (Urban & Roads) = 100
5. Create individual conservation area “source” and “destination” grids for corridors (visually selected large gaps between conservation areas for needed connections). Visually selected 8 combinations for which to develop corridors.
6. Create “cost distance” grids for corridors using source and destination grids and cost surface.
7. Run corridors for each combination of source and destination.
8. Visually select max cost to define corridor of sufficient width
9. Slice each corridor subset into 10 values (based on equal area)
10. Combine all corridors into single layer and add conservation areas to the layer (value = 11 to distinguish from corridor values themselves)

**Index 4: Mesic/Wet Habitat Model**

*PURPOSE: To identify large patches of wet and mesic habitats that would preserve areas of sufficient size for a wide array of plant and animal species.*

*SOURCE: SJRWMD 2000 Land Use Land Cover layer*

An umbrella species is a species whose habitat is large enough and habitat requirements are large enough that, if given a sufficiently large area for conservation, will result in conservation of many other species.

The Florida black bear was used as an umbrella species for wet to mesic habitat types. The habitat was identified in four classes based on natural community type, patch size, distance from primary habitat patches, and connectedness to large habitat patches. Water Management District (WMD) land use data was used to identify bear habitat. Steps:

1. Identified primary and secondary habitats using WMD land cover FLUCCS codes as identified by FWC (Cox et al. 1994; Maehr et al. 2001).
2. All patches of primary habitat greater than 37 acres were identified, based on the methods used in Cox et al. (1994).
3. Some patches of secondary habitat or smaller patches of primary habitat that are near larger primary habitat (37 acres and larger) can also be used by bears. However patches separated by intensive land uses that cannot be reached or easily reached may not be used. Therefore, the potentially “traversable matrix” of land cover and land uses was identified. The traversable matrix included everything except intensive land uses though roads also were included in order to model patches across roads that bears might be able to access (Maehr, personal communication).
4. Large water bodies were not included as potential habitat, but narrow channels that might be crossable were identified and included within the traversable matrix. Narrow water gaps were defined as anything 100 meters or narrower.
5. A traversable matrix data layer was created by combining all primary, secondary, matrix landcover and land uses and water gaps less than or equal to 100 meters wide.
6. Then, all primary habitat patches more than 37 acres and all secondary habitat within 1 kilometer of the 37 acres+ patches and connected directly to those patches or through suitable matrix land uses were identified.
7. Narrow areas only connected by roads within traversable matrix were removed. This was done to allow road crossings where other suitable landcover or land use existed on each side of roads but to delete out road areas that were surrounded by unsuitable areas so that they could not serve as “artificial” connections between otherwise suitable areas. Also, interstate highways were deleted from the habitat surface in order to identify habitat and classify patch sizes in following steps in a way that accounts for the filter effect of large, wide, heavy traffic highways.
8. All primary, secondary, and matrix habitats were combined to identify blocks 10,000 acres or larger. This was done to identify areas that are more likely to be large enough to serve as minimum functional habitat units for black bear (Hellgren and Maehr 1992). To identify other areas that are potentially significant, patches between 5,000 and 10,000 acres were also identified. All habitat in blocks smaller than 5,000 acres (including traversable matrix) were deleted.
9. The final habitat map includes 6 ranks:
  - a. All primary habitat in blocks 37 acres or larger within combined patches of primary, secondary, and traversable matrix containing 10,000 acres or more of primary and secondary habitat are given a value of 1;
  - b. All secondary habitat (including primary habitat in blocks less than 37 acres and secondary cover types) within combined patches of primary, secondary, and traversable matrix containing 10,000 acres or more of primary and secondary habitat are given a value of 2;
  - c. All traversable matrix within combined patches of primary, secondary, and traversable matrix containing 10,000 acres or more of primary and secondary habitat is given a value of 3;
  - d. All primary habitat in blocks 37 acres or larger within combined patches of primary, secondary, and traversable matrix containing 5,000 acres or more of primary and secondary habitat are given a value of 4;
  - e. All secondary habitat (including primary habitat in blocks less than 37 acres and secondary cover types) within combined patches of primary, secondary, and traversable matrix containing 5,000 acres or more of primary and secondary habitat are given a value of 5; and
  - f. All traversable matrix within combined patches of primary, secondary, and traversable matrix containing 5,000 acres or more of primary and secondary habitat is given a value of 6.

No habitat in Volusia County was classified as a 4, 5 or 6.

**Index 5: Upland Habitat Keystone Species Model**

*PURPOSE: To identify the upland habitats associated with gopher tortoises. These habitats are important to many other species and hundreds of species are directly associated with tortoise burrows.*

*SOURCE: SJRWMD 2000 Land Use Land Cover layer and USDA SSURGO Soils for Volusia County*

A keystone species is a species whose habitats are important to many other species such that the conservation of the keystone species is essential for the conservation of the associated species.

The gopher tortoise was used a keystone species for xeric habitat and its inhabitants. Two classes of potential habitat for Gopher Tortoises (*Gopherus polyphemus*) were identified using WMD land use data and USDA Detailed Soils (SSURGO) data. Primary habitat was identified to represent the land cover types that most commonly support gopher tortoises. Secondary habitat was identified to represent other potentially appropriate land cover types with suitable soils that may support gopher tortoises under current conditions or with restoration.

Steps:

1. Primary habitat was identified by selecting the following xeric habitat types typically known to support gopher tortoises: longleaf sandhill (4120), scrub (4130), oak sandhill (4210), and sand live oak (4320) (Cox and Kautz 2000).
2. Then SSURGO data was used in combination with WMD land use data to identify secondary habitat. All excessively drained, well-drained, and moderately well-drained soil polygons were selected when they also overlapped with rangeland (3000s), other upland forest types other than the three xeric types that have the potential to be xeric communities described above (4000s), unimproved pastures (2120), woodland pastures (2130), and open land (1900). Moderately well-drained soils were used (along with excessively well-drained and well-drained soils) because they also were found to overlap with sandhills in the land cover/land use data.
3. The two levels of potential habitat were then combined into one map and separated into three size classes: 1) 100 acres and larger, 2) 25-99 acres, and 3) less than 25 acres. The final habitat map was created by separating the size ranked habitat patches into ranked categories based on their status as primary or secondary habitat:
  - 1 = primary habitat within patches 100 acres or larger
  - 2 = secondary habitat within patches 100 acres or larger
  - 3 = primary habitat within patches 25-99 acres
  - 4 = secondary habitat within patches 25-99 acres
  - 5 = all other potential habitat (either primary or secondary within patches less than 25 acres)
4. The 100 acre size threshold for the largest patch size was based on recent research from Auburn University suggesting that patches over 100 acres may be necessary to support viable gopher tortoise populations.
5. The 25-99 acre size threshold was determined by halving the basic recommendation for minimum patch size used in Florida (50 acres) and then going up to the largest size threshold.
6. All patches under 25 acres were retained since gopher tortoises may still be found on smaller habitat patches.
7. Combination of variables to create final habitat map:
  - a. Patches 100 acres or greater were split into values of 1 or 2 based their overlap with either primary or secondary habitat respectively.
  - b. Patches 25 acres to 99 acres were split into values of 3 or 4 based their overlap with either primary or secondary habitat respectively.
  - c. All patches less than 25 acres were given a value of 5 or 6 based their overlap with either primary or secondary habitat respectively.
8. The rationale for the combinations used to create the final ranked habitat map was predominantly a subjective decision. More emphasis was placed on patch size than primary and secondary habitat classes since large patches are critical for supporting viable populations and secondary habitats may either turn out to be good quality habitats or could be restored into good habitat.

- However, it could be argued that primary habitats over 100 acres and between 25-99 acres should receive rankings of 1 and 2 respectively and secondary habitats over 100 acres and between 25-99 acres should receive rankings of 3 and 4 respectively if the desire was to put more emphasis on primary natural community types (e.g., sandhill and scrub) known to support gopher tortoises.
9. The resulting map should be considered a potential habitat map where it is more likely that gopher tortoises will be found in some areas but may be completely absent in others, especially where fire suppression has resulted in dense canopies. This map shows all areas that still have the potential to support gopher tortoises with proper management. However, this potential habitat map is only as good as the St. Johns Water Management District 2000 land use data, the Florida Fish and Wildlife Conservation Commission 2003 land cover data that was used to update the WMD land use data, and the USDA Detailed Soils (SSURGO) data used as the base for developing it. Therefore, there is a possibility that some areas of sufficiently sandy, open habitats in the county that currently support gopher tortoises that are not identified in this potential habitat map.

**Index 6: Potential Recharge Areas**

*PURPOSE: To identify the recharge areas within the county.*

*SOURCE: SJRWMD Potential Recharge Area 2005*

The 6 categories established by SJRWMD were used.

- Discharge
- 0-4 inches of recharge annually
- 4-8 inches of recharge annually
- 8-12 inches of recharge annually
- 12-20 inches of recharge annually
- 20 or more inches of recharge annually

**Index 7: Natural Community Rarity Model**

*PURPOSE: To identify natural communities that may benefit from additional conservation efforts. These may be natural communities that are rare in the state, not well represented in the County Conservation Lands, or not well represented in private ownership (i.e. not much left) .*

*SOURCE DATA : Volusia County Vegetation layer and SJRWMD 2000 Land Use Land Cover layer*

Only natural and semi-natural lands within the Vegetation and LULC layers were considered. The rarity was evaluated using 3 measures.

*MEASURE 1 – the presence of the community within existing conservation lands in Volusia County.*

This is a measure of how well represented the community is on public conservation lands. If there is very little on public lands then this may suggest that additional conservation efforts should be directed towards this community. This was measured as the percent of this community type compared to all conservation lands (after non natural areas were removed). Formula: [(acres of NCtype)/(acres of all conservation lands)]\*100.

For each Natural Community type the classes were:

- <1% of the public lands is of this Natural Community type
- 1-2.9%
- 3-4.9%
- 5-9.9%
- =>10%

*MEASURE 2 – the presence of the community within private lands within Volusia County.*

This is a measure of how much of the community is potentially available for future conservation. If this community is very rare on private lands then this indicates that little is yet available for future conservation. This was measured as the percent of this community type compared to all private lands (after non natural areas were removed).

Formula: [(acres of NCtype)/(acres of all private lands)]\*100.

For each Natural Community type the classes were:  
 <1% of the private lands is of this Natural Community type  
 1-2.9%  
 3-4.9%  
 5-9.9%  
 =>10%

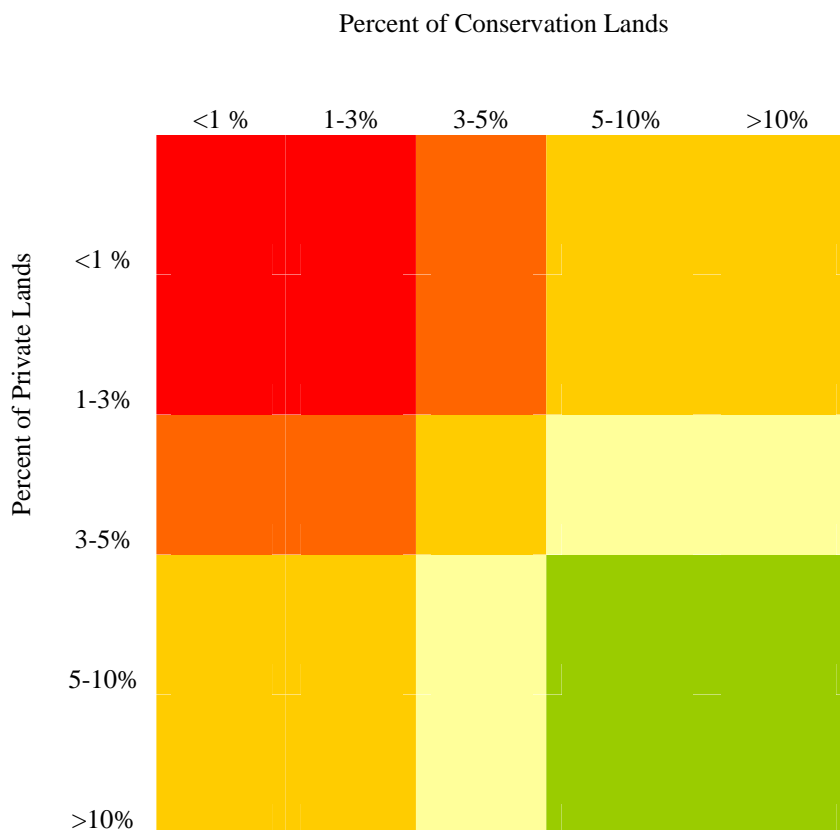
**COMBINATION OF CONSERVED and AVAILABLE LAND MEASURES:**

Natural Communities that are poorly represented in the conservation lands and also scarce on private lands are at risk of not being sufficiently conserved in the County (identified in red in the figure below). Whereas those Natural Communities that are both well represented in conservation lands and well represented on private lands are likely be present in the County in the long term (identified in green below).

Areas in Red are at an Extreme Risk of being under-conserved in the County.  
 Areas in Orange are at High Risk of being under-conserved in the County.  
 Areas of Gold are at Moderate of being under-conserved in the County.  
 Areas of pale Yellow are at Low Risk of being under-conserved in the County.  
 Areas of Green are at Very Low of being under-conserved in the County.

**MEASURE 3 – the statewide rarity of the community.**

An additional Risk factor for all of these categories is the inherent (state-wide) rarity of the Natural Community. If the Natural Community is rare (FNAI Srank = S1 or S2) then the Natural Community moves up a risk category. For example, from Moderate to High Risk.



**APPENDIX E – BLUEBELT ORDINANCE ENABLING LEGISLATION  
(CHAPTER 193, FLORIDA STATUTES)**

**193.625 HIGH-WATER RECHARGE LANDS; CLASSIFICATION AND ASSESSMENT.--**

(1) Notwithstanding the provisions of s. [193.461](#), the property appraiser shall annually classify for assessment purposes all lands within a county choosing to have a high-water recharge protection tax assessment program as either agricultural, nonagricultural, or high-water recharge. The classification applies only to taxes levied by the counties and municipalities adopting an ordinance under subsection (5).

(2) Any landowner whose land is within a county that has a high-water recharge protection tax assessment program and whose land is denied high-water recharge classification by the property appraiser may appeal to the value adjustment board. The property appraiser shall notify the landowner in writing of the denial of high-water recharge classification on or before July 1 of the year for which the application was filed. The notification must advise the landowner of a right to appeal to the value adjustment board and of the filing deadline. The board may also review all lands classified by the property appraiser upon its own motion. The property appraiser shall have available at her or his office a list by ownership of all applications received showing the acreage, the full valuation under s. [193.011](#), the valuation of the land under the provisions of this section, and whether or not the classification requested was granted.

(3)(a) Lands may not be classified as high-water recharge lands unless a return is filed on or before March 1 of each year. The property appraiser, before so classifying the lands, may require the taxpayer or the taxpayer's representative to furnish the property appraiser such information as may reasonably be required to establish that the lands were actually used for a bona fide high-water recharge purpose. Failure to make timely application by March 1 constitutes a waiver for 1 year of the privilege granted for high-water recharge assessment. The owner of land that was classified high-water recharge in the previous year and whose ownership or use has not changed may reapply on a short form as provided by the department. A county may, at the request of the property appraiser and by a majority vote of its governing body, waive the requirement that an annual application or statement be made for classification of property within the county after an initial application is made and the classification granted.

(b) Subject to the restrictions set out in this section, only lands that are used primarily for bona fide high-water recharge purposes may be classified as high-water recharge. The term "bona fide high-water recharge purposes" means good faith high-water recharge use of the land. In determining whether the use of the land for high-water recharge purposes is bona fide, the following factors apply:

1. The land use must have been continuous.
2. The land use must be vacant residential, vacant commercial, vacant industrial, vacant institutional, nonagricultural, or single-family residential. The maintenance of one single-family residential dwelling on part of the land does not in itself preclude a high-water recharge classification.
3. The land must be located within a prime groundwater recharge area or in an area considered by the appropriate water management district to supply significant groundwater recharge. Significant groundwater recharge shall be assessed by the appropriate water management district on the basis of

hydrologic characteristics of the soils and underlying geologic formations.

4. The land must not be receiving any other special classification.
5. There must not be in the vicinity of the land any activity that has the potential to contaminate the ground water, including, but not limited to, the presence of:
  - a. Toxic or hazardous substances;
  - b. Free-flowing saline artesian wells;
  - c. Drainage wells;
  - d. Underground storage tanks; or
  - e. Any potential pollution source existing on a property that drains to the property seeking the high-water recharge classification.
6. The owner of the property has entered into a contract with the county as provided in (5).
7. The parcel of land must be at least 10 acres.

Notwithstanding the provisions of this paragraph, the property appraiser shall use the best available information on the high-water recharge characteristics of lands when making a final determination to grant or deny an application for high-water recharge assessment for the lands.

(4) The provisions of this section do not constitute a basis for zoning restrictions.

(5)(a) In years in which proper application for high-water recharge assessment has been made and granted under this section, for purposes of taxes levied by the county, the assessment of the land must be based on the formula adopted by the county as provided in paragraph (b).

(b) Counties that choose to have a high-water recharge protection tax assessment program must adopt by ordinance a formula for determining the assessment of properties classified as high-water recharge property and a method of contracting with property owners who wish to be involved in the program.

(c) The contract must include a provision that the land assessed as high-water recharge land will be used primarily for bona fide high-water recharge purposes for a period of at least 5 years, as determined by the county, from January 1 of the year in which the assessment is made. Violation of the contract results in the property owner being subject to the payment of the difference between the total amount of taxes actually paid on the property and the amount of taxes which would have been paid in each previous year the contract was in effect if the high-water recharge assessment had not been used.

(d) A municipality located in any county that adopts an ordinance under paragraph (a) may adopt an ordinance providing for the assessment of land located in the incorporated areas in accordance with the county's ordinance.

(e) Property owners whose land lies within an area determined to be a high-water recharge area must not be required to have their land assessed according to the high-water recharge classification.



(f) In years in which proper application for high-water recharge assessment has not been made, the land must be assessed under s. [193.011](#).

## APPENDIX F – FLORIDA IMPACT ASSESSMENT MODEL (FIAM)

Fishkind & Associates has developed the FIAM under contract with the Florida Department of Community Affairs (DCA.) FIAM is designed to serve as the prototype fiscal and economic assessment tool for local governments in Florida. FIAM provides estimates of the costs and revenues to local governments associated with their land use decisions. The model examines both the long range and near term impacts and it provides estimates for the effects of land use decisions on both the operating budget and the capital budget of the local government. FIAM is suitable for conducting analysis of individual projects, development corridors, and entire comprehensive plans.

DCA has continued contracting the consultant to further refine and develop FIAM. Currently FIAM version 5.0 is available for use in Florida. Version 7.0 is currently being developed. Recently an Urban Land Institute (ULI) panel provided a peer review of FIAM on behalf of DCA. The ULI panel was very complementary, made recommendations for further improvements, and endorsed FIAM for use in Florida. DCA is continuing its contract with Fishkind & Associates for FIAM and DCA is planning for the implementation of FIAM statewide. FIAM has been used for fiscal impact analysis in 36 Florida communities.

**APPENDIX G – WORKGROUP MEMBERSHIP LISTS**

Workgroups were charged by the Committee with developing draft recommendations for further review and refinement by the Committee as a whole. The workgroups were composed of Committee members and volunteers from the community.

**AGRICULTURE WORKGROUP**

Sam Daugharty	Andy Kelly	Kathy Turner
Ted Erwin	Elizabeth Layton	Earl Underhill
Gerald Fieser	Jim McCroskey	Georgia Zern
Bob Fitzsimmons	Doug McGinnis	
David Griffis	David Strawn	

**ECONOMY WORKGROUP**

Dave Castagnacci	Frank Kinsley
Gwen Azama Edwards	Candace Lankford
Jim Cameron	Shannon Lewis
Peggy Farmer	William Whitson
Jack Hayman	

**DEVELOPMENT/REDEVELOPMENT WORKGROUP**

Dave Castagnacci	Mike Holmes	Jim Russell
Janet Deyette	Ted Irwin	Ken Russell
Frank Dragoun	Suzanne Konchan	Stoney Sixma
Gwen Azama Edwards	Candace Lankford	Lisa Ford Strobeck
Art Giles	Mary Martin	Steve Tonjes
Deborah Green	Sara Lee Morrissey	Karl Welzenbach
Jack Hayman	Rita Press	

**ENVIRONMENT WORKGROUP**

Frank Dragoun	Joel Ivey	Ken Russell
Janet Deyette	Steven Kintner	Glenn Storch
Gerald Fieser	Elizabeth Layton	Earl Underhill
Mark Garrett	Bob Miller	Rob Walsh
Art Giles	Michele Moen	Georgia Zern
Rosemarie Gore	Alexa Ross	
Clay Henderson	Jim Russell	

## **APPENDIX H – COMMITTEE STAFF**

### **Facilitators**

Rafael A. Montalvo, Florida Conflict Resolution Consortium

Marilyn E. Crotty, Florida Institute of Government, University of Central Florida

### **Faculty**

Jay D. Jurie, PhD, Department of Public Administration, UCF

Wendell C. Lawther, PhD, Department of Public Administration, UCF

### **Graduate Students – Masters in Public Administration, UCF**

Margarita Macon

Kevin O'Farrell

Janna Souvorova

Sarah Sprouse

## APPENDIX I – CONTRIBUTING SPONSORS

### PRIVATE SECTOR CONTRIBUTIONS

Consolidated Tomoka Land Company	\$1,000
Daytona Beach & Halifax Area Chamber of Commerce	200
DeLand Area Chamber of Commerce	200
Ford Group Four	2,000
Ivey Planning Group	200
Kirkland Sod	500
Lassiter Transportation	250
Masterpiece Homes, Inc.	1,000
Miami Corporation	500
Ormond Beach Chamber of Commerce	200
Port Orange-South Daytona Chamber of Commerce	200
Southeast Volusia Chamber of Commerce	200
Storch & Morris	500
Tomoka Holdings	500
Tomoka Engineering	250
VCARD	1,000
West Volusia Chamber of Commerce	200
Zev Cohen & Associates	250
Total	<u>\$9,150</u>

### PUBLIC SECTOR CONTRIBUTIONS

City of Daytona Beach Shores	\$1,000
City of DeBary	\$4,000
City of DeLand	4,000
City of Edgewater	4,000
City of New Smyrna Beach	4,000
City of Orange City	2,000
City of Ormond Beach	5,000
City of Port Orange	4,000
Town of Ponce Inlet	1,000
Volusia County	35,000
Volusia County School Board	<u>4,000</u>
Total	\$68,000
GRAND TOTAL	\$77,150