Table of Contents

INTRODUCTION 1
EXECUTIVE SUMMARY 3
THE DIAMOND 10
CONNECTIVITY & INNOVATION 19
IMPLEMENTATION 31
DAT LESSONS LEARNED 34
TEAM ROSTER 38
INTRODUCTION

In December of 2012, Lee County, FL submitted a proposal to the American Institute of Architects (AIA) for a Sustainable Design Assessment Team (SDAT) to assist the community and its citizens in addressing key issues facing the community. The issues included economic development, connectivity, and sustainable design. The AIA accepted the proposal and, after a preliminary visit by a small group in June 2013, recruited a multi-disciplinary team of volunteers to serve on the SDAT Team. In October 2013, the SDAT Team members worked closely with local officials, community leaders, technical experts, non-profit organizations and citizens to study the community and its concerns. The team used its expertise to frame a wide range of recommendations, which were presented to the community in a public meeting. This report represents a summary of the findings and recommendations that were presented to the community.

The Sustainable Design Assessment Team (SDAT) Program

The Sustainable Design Assessment Team (SDAT) program focuses on the importance of developing sustainable communities through design. The mission of the SDAT program is to provide technical assistance and process expertise to help communities develop a vision and framework for a sustainable future. The SDAT program brings together multidisciplinary teams of professionals to work with community stakeholders and decision-makers in an intensive planning process. Teams are composed of volunteer professionals representing a range of disciplines, including architects, urban design professionals, economic development experts, land use attorneys, and others. Today, communities face a host of challenges to long-term planning for sustainability, including limited resources and technical capacity, ineffective public processes and poor participation. The SDAT approach is designed to address many of the common challenges communities face by producing long-term sustainability plans that are realistic and reflect each community's unique context. Key features of the SDAT approach include the following:

• Customized Design Assistance. The SDAT is designed as a customized approach to community assistance which incorporates local realities and the unique challenges and assets of each community.

• A Systems Approach to Sustainability. The SDAT applies a systems-based approach to community sustainability, examining cross-cutting issues and relationships between issues. The SDAT forms multi-disciplinary teams that combine a range of disciplines and professions in an integrated assessment and design process.

• Inclusive and Participatory Processes. Public participation is the foundation of good community design. The SDAT involves a wide range of stakeholders and utilizes short feedback loops, resulting in sustainable decision-making that has broad public support and ownership.

• Objective Technical Expertise. The SDAT Team is assembled to include a range of technical experts from across the country. Team Members do not accept payment for services in an SDAT. They serve in a volunteer capacity on behalf of the AIA and the partner community. As a result, the SDAT Team has enhanced credibility with local stakeholders and can provide unencumbered technical advice.

• Cost Effectiveness. By employing the SDAT approach, communities are able to take advantage of leveraged resources for their planning efforts. The AIA contributes up to $15,000 in financial assistance for each project. The SDAT team members volunteer their labor and expertise, allowing communities to gain immediate access to the combined technical knowledge of top-notch professionals from varied fields.
The SDAT program is modeled on the Regional and Urban Design Assistance Team (R/UDAT) program, one of AIA's longest-running success stories. While the R/UDAT program was developed to provide communities with specific design solutions, the SDAT program provides broad assessments to help frame future policies or design solutions in the context of sustainability and help communities plan the first steps of implementation. Through the Design Assistance Team (DAT) program, over 500 professionals from 30 disciplines have provided millions of dollars in professional pro bono services to more than 200 communities across the country. The SDAT program leverages the pivotal role of the architectural community in the creation and support of sustainable livable communities.

The following report includes a narrative account of the Lee County SDAT project recommendations, with summary information concerning several principle areas of investigation. The recommendations are made within the broad framework of sustainability, and are designed to form an integrated approach to future sustainability efforts in the community.
INTRODUCTION

In November 2012, The Lee County Florida AIA SDAT Steering Committee submitted a proposal to the American Institute of Architects (AIA) for a Sustainable Design Assessment Team (SDAT) to assist Lee County to realize their commitment to promote long term sustainability goals for an area known as the Research & Enterprise Diamond. Their proposal specifically focused on, “the cultivation of a livable and resilient community where there is an unmistakable balance between social and well-being equity, economic prosperity and environmental resource conversation.” AIA accepted the proposal and after an initial visit by the SDAT leader and AIA staff in June 2013, a team of multidisciplinary expert volunteers from around the county were selected to serve on the SDAT.

Background and Context

After three decades of steady growth, Lee County has been impacted by the recent economic downturn throughout the county. As Lee County moves forward, they are searching for alternatives that provide a sustainable approach to future development.

Economy

A commitment to the Research & Enterprise Diamond can be a catalyst for sustainable design and diverse economic development in the region. There are over 600 technology businesses located within a three county region. The economy in Lee County is currently dominated by tourism, hospitality, retail trade, health care, and construction related industries. Lee county has a population of approximately 630,000 (2011). The Diamond area consists of low density residential areas, an international airport, Florida Gulf Coast University (FGCU), technology businesses, shopping centers, retail strip malls, and entertainment centers.

Study Area Characteristics

Lee County is located in Southwest Florida in the south central portion of the county and is approximately 1,200 square miles, 800 square miles is land area and 400 square miles is water area. In comparison, the Diamond area consists of 40 square miles.

Lee County’s topography is relatively flat. The geography includes coastal beaches located adjacent to the Gulf of Mexico, uplands with marsh, wetland and riverine systems. The Research & Enterprise Diamond area is primarily uplands and is located outside of Lee County’s projected sea level rise zone. The Diamond area is bordered on the east by flow ways and wetlands designated Density Reduction Groundwater Resource (DRGR), a critical underground water aquifer recharge area. The DRGR is also an important resource for habitat connectivity. The western area of the Diamond is bisected north to south by Interstate 75. Also, there are several residential neighborhoods located on the Diamond’s north and south boundaries and within the western portion of the area.
Ongoing Planning Efforts

In 2010, Lee County conducted a major update to their comprehensive plan based on four critical community issues; livability, community character, strong connections, and sustainability.

In 2012, Lee County received technical assistance from the Urban Land Institute (ULI). This Technical Assistance panel of real estate professionals reviewed the Diamond area and provided findings on the market potential, planning and design, and implementation strategies. Also in 2012, the Diamond received an infrastructure improvement grant from the US Department of Commerce’s Economic Development Administration. The County is currently in the process of updating their comprehensive plan and has the opportunity to incorporate the SDAT’s recommendations.

The Lee County AIA Steering Committee identified the following unique assets and challenging barriers for the Diamond:

**Assets**

- Southwest Florida International Airport
- Skyplex Commercial and Aviation Development Area
- Florida Gulf Coast University
- Substantial vacant land zoned for industrial, commercial and residential uses
- Access to Interstate 75
- I-HUB (A potential Public-Private Research Innovation Hub)
- Existing and planned infrastructure improvements
- High-quality of life and comparatively low cost of living environment within Southwest Florida
- Existing technology businesses
- Sports and entertainment venues, such as, jetBlue Park and Alico Areana
Barriers

- Lack of integrated land use, transportation alternatives, and urban areas
- A large area with significant vacant land entitled for low density, single use development
- Lack of a defined transportation grid network
- Roadway design discourages safe bicycle and pedestrian facilities
- Long transit headways and infrequent service
- Lacks identity and sense of place
- Lacks a diverse economy

The Vision

The Lee County AIA Steering Committee set the vision for the project. “A Livable, Economically Diverse Hub for Sustainable Business” The committee goes on to state: The vision for the Research & Enterprise Diamond is more than creating business. It is about meeting the lifestyle needs of new employees and students as well as those who already live and work there. It means creating walkable, transit-oriented communities that support Lee County’s complete street objectives. It also means creating places that are socially exciting and convenient. This vision is supported by the Lee County AIA Steering Committee’s goals and objectives:

Goals

- Prioritize and implement strategies for optimal public-private partnerships
- Develop an implementation plan to address design challenges and identify protocol for addressing economic development issues
- Develop steps necessary to create a sense of place that will attract entrepreneurs, and a strong work force
- Develop phased implementation, benchmarks and metrics for self-evaluation

Objectives

- Review and assess the work to date
- Convene stakeholders and catalyze local resources to establish a common vision
- Analyze codes and regulations
- Facilitate consensus-building communication among stakeholders and the community

THE SDAT PROCESS

Initial Visit

Once the AIA SDAT grant was awarded to Lee County, the planning process began with an initial site visit by the team leader, which was followed with the SDAT on-site three day charrette. This final report documents the team’s assessment process, charrette and recommendations.

Team leader Colie Hough-Beck conducted an initial site visit in June 2013 to meet with key stakeholders, AIA SDAT Steering Committee Members, and Lee County officials. During this visit and after several meetings there was a greater understanding of the Diamond as well as defined questions for the SDAT to answer.

The airport and university are major assets in the Diamond. The airport is the front door to the beaches and is a gateway to the region. They have established international flight relationships with Canada and several European Countries. The airport also owns Skyplex, a large development area for aviation and non-aviation uses. The airport is one of the largest employers in the area.

The University, though relatively new to the State's educational system, is a facilitator of innovation and leadership. They are advocates for smart growth and would like to see the area develop with the potential to attract brain power in bio-science, technology and applied research. Part of their mission is to provide educational opportunities to an underserved area to educate people in careers so they can stay within the area. The University has partnered with a private developer with aspirations of developing the I-Hub, an area identified for Renewable Energy and Science Technology.

Additional assets in the study area include jetBlue Park, the Red Sox training facility, several technology businesses and retail centers. There is also an abundance of vacant land that has received entitlements for development.

The County is in the process of updating their comprehensive plan and the outcome of the SDAT process has the opportunity to influence this update. The county has adopted a complete streets resolution, a major step in planning for sustainability. Complete Streets is a major component of the four critical community issues; livability, strong connections, community character and sustainability. The following key aspects reinforce the Complete Street resolution:

- Delineate and Define Urban/Suburban/Rural Areas
- Encourage Compact Development Patterns
- Promote Mixed Use Centers
- Coordinated Land Use and Transportation Planning
The initial site visit generated several questions for the SDAT to answer:

- Where are the development opportunities?
- How do you connect the University with the economy?
- What is the proposed I-Hub’s relationship to the Diamond?
- How do you complete an existing fragmented infrastructure system?
- What is the marketing strategy?
- How do you attract technology business to the entitled properties?
- What is the long term vision for the Diamond?
- What is the quality of life and livability in the Diamond?

The SDAT Visit

In October 2013, after the initial visit, the AIA’s Communities by Design assembled a team of national experts in land use planning, architecture, and urban design, economic strategies, multi-modal transportation planning, public outreach and civic activation. This team convened for three days to assess the study area, talk with stakeholders, conduct publics meetings, and work together in a planning studio to formulate recommendations for the Diamond.

Diamond Area Assessment

The SDAT had the opportunity to review the 40 square mile Diamond by helicopter. It quickly became apparent the study area was very ambitious. This review also revealed the enormous amount of residential properties, marsh wetlands and water bodies left over from mining activities. The two major assets, the airport and the university appeared as bookends in the study area connected by major arterials. jetBlue Park, the Boston Red Sox training facility and Alico Arena stood out as major assets in the Diamond area. The study area also has a string of strip shopping malls as well as two large retail centers, Gulf Coast Town Center and Miromar Outlet.
Stakeholder and Town Hall Meetings

The SDAT members conducted round table discussions with key stakeholders comprised of property and business owners, representatives from the airport, members with the AIA Steering Committee, current and former students from FGCU and officials from Lee County. They were asked the following three questions:

- How can the Diamond concept help to provide an economic advantage for the community?
- How can the Diamond concept be set up to foster better development and places?
- What are the best ways the Diamond can create better mobility?

What we heard:

- What does the Diamond boundary mean?
- How can we be competitive nationally?
- We want to diversify the Tourism dominant economy through innovative research and sustainable industries.
- Is this a marketing exercise?
- Skyplex adjacency to the airport is a competitive advantage.
- Potential synergy with the University.
- Some DRGR and lands bordering areas that will be mined pose challenges for development.
- Effective public-private partnerships are essential.
- Concerned the planning efforts will not bear fruit.
- People need to be patient. It will take time to achieve the vision.
- We do not want more of the same.
- Need support from the County Commissioners.
- Need integrated public-private partnerships to reach potential implementation.
- Create a place where young graduates will want to live and work.
- Innovation needs to be one step ahead of the curve instead of keeping up with the curve.
- Complete communities that attract young families.
- Need unique architecture and landscape improvements.
- Need a transportation grid system other than major arterials to access development.
- Walkable and comfortable environment.
- Establish an international renown, livable and economic thriving community.

Later that evening the findings from the stakeholder meetings were presented at a Public Town Hall Meeting. More than 100 people attended the presentation at Lee County Port Authority’s Conference Center. The SDAT also received extensive coverage from the press and local media.

The following day, we learned from The Tourism Bureau that tourism supports a significant number of jobs in Lee County. The Bureau also stated tourists would like transit options to and from the airport. Between 2007 and 2009 over 1,700 hotel rooms were built along the I-75 corridor. These improvements are a distinct asset for business travelers attracted to the Research & Enterprise Diamond. The last thing we learned was their desire to preserve the natural assets of the South Florida ecosystem.

During a stakeholder meeting with the Arts Council of Lee County we learned that art and culture are important to the quality of life in Lee County. The economic impact of the arts exceeds the economic impact of the Red Sox. There is also increased participation in the arts by local residents. Lee County lacks any formal program of support for the arts and at this time does not recognize the tremendous benefit from investing in the arts. There is no public art program in Lee County and the City of Fort Myers which means that art is not integrated into public projects. All art that is publicly sited has been donated, with the exception of Florida Gulf Coast University which benefits from the State of Florida’s Percent for Art Program.
WE HEARD YOU WANT:

- A complete community to attract families
- A Walkable, comfortable livable community with transportation choices
- Attract and retain FGCU faculty and students
- Develop distinctive architecture and landscape improvements program
- Provide cool things to do
WORKPLACE DISTRICTS: THEN AND NOW

The future success and sustainability of the Research and Enterprise Diamond makes rethinking the format and types of tomorrow’s workplace districts critical for planning and strategy. We are all living through the Digital Revolution’s transformation of work today. Just as fossil fuels and internal combustion engines enabled human societies to vault past the limits of muscle power, the 21st Century “energy source” - computing power coupled with the internet - has fundamentally changed human activity, especially in the workplace. In combination with cultural, political and regulatory changes, digital information has led to unprecedented connectivity across the world, enabling multitudes of highly motivated people and companies in both established and emerging economies to work, collaborate, and compete in the global marketplace.

Yet not much more than 170 years ago, the world’s settlement patterns were agriculturally based - scattered across farms and multitudes of tiny mill towns and trading posts, connected by wagons and sailing ships. Though major cities were critical to trade networks, they made up less than 5% of the population and were not part of most people’s experiences of the world. Metropolitan regions and suburbs as we know them today didn’t yet exist. That pattern was transformed by the mid-19th Century explosion of invention, mass-mechanization and the assembly line. The rise of new labor-intensive workplaces set off a tidal wave of migration from the countryside to factory towns located along new railroad networks. Big industrial cities emerged and began to dominate economies, bringing urban lifestyles to a rapidly growing proportion of the population.

About 90 years into this process, planners and architects conceived a dramatic reorganization of cities based on assembly-line principles. They envisioned the standardization and mass-production of cities’ components, with land development, transportation, and building types segregated and optimized according to specialized function. These concepts were immediately put to use in meeting the enormous pent-up demand for development after 15 years of the Great Depression and World War II. The residential tract subdivision, commercial strip, shopping mall, and business park became the kit models were based on mass-production, repetition, and standardization; the shift to innovation has resulted in a widespread reorganization around networks of smaller and more interdisciplinary creative teams of skilled people operating independently within as well as outside of large companies. Leading innovative firms such as Pixar, 3M and Google have redesigned their offices to accommodate group collaboration and to actually force maximum interaction and exchange. 

The realization that innovation is fostered by providing settings that bring people together to collaborate and exchange ideas (rather than the assembly-line model of segregating work by specialty) has already resulted in profound changes inside the workplace. Vertical integration and top-down control worked well when business models were based on mass-production, repetition, and standardization; the shift to innovation has resulted in a widespread reorganization around networks of smaller and more interdisciplinary creative teams of skilled people operating independently within as well as outside of large companies. Leading innovative firms such as Pixar, 3M and Google have redesigned their offices to accommodate group collaboration and to actually force maximum interaction and exchange. New organizational formats and office designs such as co-work, work cafes and incubators have also emerged to fit the growing legion of start-ups and small businesses that make up the fastest growing segment of the innovation economy.

As in the 19th and 20th centuries, fundamental changes in how we work are spilling over into daily life. Lifestyles, consumer preferences, and real estate demand are all affected. Because synchronized labor is no longer necessary as it was for the mass production assembly line economy¹⁴, the 9-to-5 workday is being replaced by work happening “24/7.” In addition to happening anytime, work is also increasingly happening anywhere. The use of traditional office space continues to shrink significantly as work has reorganized and also spread to coffee shops, temporary work spaces, home offices, co-work spaces, and other non-traditional work environments. The widening range of choices permits a much broader variety of lifestyles, inviting a similarly broad spectrum of personalities and talents to engage in productive contributions to the economy. It is also giving rise to a growing demand for more choice in living and working environments, and especially for places that mix work, home and socializing. Dense, mixed-use, pedestrian-friendly districts with transit service have become the preferred location for a significant portion of knowledge
workers and companies.¹⁶

This is in many ways a repetition of the same sequence of transformation we saw in the early phases of the industrial economy: changes in the nature of work are again rippling out in ever-widening influence on businesses, lifestyles, ideas and, ultimately cities. The planning and urban design that so closely fit the assembly line economy is now out of synch with the requirements of the innovation economy and the society that is emerging in its wake. The assembly-line city facilitated work-and-life synchronization, separation of work from home and other daily functions, and compartmentalization of specialized work types—all of which are no longer relevant in the innovation economy. Once again, changes in how we engage in productive work and daily life are transforming many of the things we need the city to do for us.

This is a time of enormous opportunity. But securing the full benefits of the rapidly unfolding new economy calls for realigning city-building ideas, practices, and institutions with the new drivers of prosperity.

The Regional Pattern. To make metropolitan regions prosperous as well as sustainable, they must be “nucleated.” Urban, compact districts each characterized by a particular mix of concentrated workplaces, homes, shops, and services at the crossroads of the transportation infrastructure are now critical to prosperity and sustainability. By offering settings with sufficient charm, liveliness, and public amenities to bring people out and in contact with one another, these centers are magnets for exchange and information spillover. Revitalized downtowns; industrial districts re-inhabited by start-ups, co-work and small businesses; redeveloped shopping mall sites; the activity centers of “Next Generation” business districts; and the campustowns of educational and medical districts will become the critical place-type infrastructure for innovative regions.

As the innovation economy takes hold, the desire for a multitude of venues for meeting and exchange is providing a growing source of market demand. Determining appropriate locations in the region to reinforce or build new centers characterized by density and a synergistic mixture of uses (while protecting and properly serving existing single-family neighborhoods) is a critical strategic decision for business, municipal, and regional success.

Workplace Districts. The 20th century Business Park and central business district (CBD) are legacies of the industrial economy and are now out of sync with the demands of the innovation economy¹⁷ and the preferences of innovators. These places that house the primary drivers of our economy can no longer be isolated, sprawling, single-use employment zones filled with uniform building types. They must be cohesive and connected urban districts with diversity and vitality.

Creative industry and municipal leaders can be expected to begin by infusing the old formats with the clustering and density, synergy and mix, public places and amenities that enable the interchange critical to the innovation process. A vital distinct public realm is an essential part of this. Walking and bicycling connections that enable street life and links to transit will be enhanced by pedestrian-scaled ground-floor architecture, smaller blocks, and a more nuanced hierarchy of walking streets and service streets (the latter especially where trucks and freight still play an important role). Instead of being used to separate and privatize company facilities, parking and landscaping will need to be configured to maximize activity and interaction both within secure company compounds and among businesses.

Instead of strip malls requiring workers to drive for lunch or office supplies, 21st Century workplace districts will need to be organized around the all-important activity centers—centrally located shops and services in settings that instigate “collision”¹⁸ and conversation. Flexible, market-based workplace district master plans should ensure that buildings with greater concentrations of employees will be positioned closest to (as well as in floors above) these centers. To add to the mix and vitality, it will make sense in many instances for side streets and outer layers of workplace districts to feature a range of work-live, live-work, and apartment buildings amid smaller office buildings than those likely to dominate the district’s workplace core.

The Role of Retail Development. In its late 20th Century formats - strip mall, superstore-anchored center, power-center—the pattern of retail development has been single-function and auto-oriented in keeping with the principles of the assembly-line city. Following the Great Recession, the location and configuration of new shops, services, eateries and entertainment venues will be precious to a city’s success in ways that go beyond sales tax revenues. The retail uses are needed to generate clustering and interaction between people, not to necessitate auto trips. Competitive cities will deploy retail as an activity generator in innovation districts and to provide places for meeting and socializing—which are key to attracting many knowledge workers. Those that fritter away their portable market share of retail as stand-alone, auto-oriented developments will lose out.

Mobility. Value in the industrial economy was created by making and moving vast quantities of physical products. Combined with the synchronization and segregation of work and daily life functions, this created an insatiable demand for roadway capacity. Twentieth century city-building practices necessarily placed the highest priority on mobility, dedicating street spaces to the movement and parking of vehicles. Sidewalks shrank, trees and other amenities disappeared, and street life went with them as engineers were tasked with squeezing as much vehicular capacity into right-of-ways as possible.

In the innovation economy, cities derive their value from attracting and delighting a large population of knowledge workers. Market demand has begun to favor walkable urban districts instead of segregated sprawl.¹⁹ Leading city decision-makers are shifting their priorities to providing the infrastructure and amenities that support
Planning for Prosperity and Sustainability in the New Era. The urban framework required for prosperity today is a network of districts that function as places of interaction and idea exchange at the dense hubs of our social and transportation networks. Aligning with the innovation economy requires retrofitting sprawling metropolitan areas to ones structured around transit networks and characterized by clustering and density, synergy and mix, public spaces and pedestrian amenities. These are the same planning and development outcomes needed to conserve energy, decrease greenhouse gas emissions, conserve land and natural resources, and preserve species habitats.

The convergence of the requirements of sustainability and prosperity are changing everything. While new kinds of jobs and investment may be the most urgently needed, they are a part of general hunger for a better future, for a new vision that describes where we are going and why that is good and worth working for – especially in the context of climate change. To move forward, a major challenge for planning and development is to help community leaders and stakeholders to understand the opportunities and imperatives of the new era. The last time work changed, Americans eagerly remade the world and its cities and got rich doing so. Work is changing again, opening up a space for conversation, innovation and a new basis for prosperity.

REFERENCES

8Between December 2010 and October 2012, the top two keyword categories for a wider range of business publications including Harvard Business Review articles were “creativity” and “innovation,” returning 67 and 41 tagged articles, respectively. In contrast, “leadership” returned 12 tagged articles. See http://www.mindwerx.com/blogs/topics/134?page=4.
10Legendary companies with world-beating records of innovation such as 3M, Google, and Pixar, employ these processes. Early innovators like the iconic 3M were the first to formalize a work process that involves not only deliberately mixing specialists with different technical expertise, but also changing the mixtures at regular intervals to freshen the exchange with different types of knowledge and perspectives. See Jonah Lehrer, Imagine: How Creativity Works. Boston: Houghton Mifflin Harcourt, 2012.
13Lehrer, op. cit.
14There are still plenty of repetitive work tasks: call centers, data entry, etc. And not everyone is involved in cutting-edge innovation. One of the largest types of employment falls within the wide range of pink-collar service jobs from fast food to hair cutting and home care assistants. Richard Florida advocates that we find a way to unleash the creative potential of people in these jobs, to make these jobs more valuable.
17Duffy, op. cit., and Flint, op cit.
18Lehrer, op. cit.
19Leinberger, op. cit.
STABILITY AND CHANGE AREAS

To understand and “get one’s arms around” the 40 square mile Research Diamond and its adjacent areas, it is important to have a large-scale perspective on the stability and changeability of development patterns on the land, in both land-use policy and development trend terms. Is all of the 40 square miles “in play”? How do I understand the potentials from the perspectives of, say, an existing district business, a nearby homeowner, an FGCU student or researcher, a potential investor or entrepreneur, a visiting shopper or a tourist?

To start at the broadest levels, the Stability Areas and Change Areas map prepared by the SDAT team has identified and applied four “broad brush” classifications of stability and change, as Stable Areas (yellow), Change Areas (red), Institutional Areas (blue), and Natural Preserves (green). The first two categories are mostly private lands that are already developed (i.e., urbanized) or are potentially developable, as governed by current County or City of Fort Myers policies. Institutional Areas are large areas of land controlled by two major institutions, the Southwest Florida International Airport/Lee County Port Authority (RSW), and the Florida Gulf Coast University (FGCU). Natural Preserves are wetlands and open space areas that are constrained from urban development by the County or higher governmental policies.

**Stability:** From a land use and development perspective, urbanized areas that have been already developed as residential districts (particularly in the predominant single-family subdivision pattern) are considered as stable (Stable Areas) and not likely to change. Land use and infrastructure policies (as well as development dynamics) for such Stable areas will typically be oriented towards their preservation and protection. For the purposes of this analysis, Natural Preserves are also assumed to be stable with analogous policies towards preservation and protection.

**Change:** The development process and evolution of Institutional Areas are described by the respective master plans of the RSW and FGCU. While influenced by market forces, they are governed by their institutional missions and policies. Their master plans identify sub-areas of near-term change and development potential. Urbanized areas composed of multiple private properties that are developed or as-yet undeveloped, and zoned for commercial uses including retail, industrial, the Innovation Hub or I-Hub (a proposed partnership area with FGCU and a private developer), and mixed uses, are presumed to be areas of change (Change Areas) to a greater or lesser degree. While more strongly influenced by market forces, they are also conditioned by...
County development policies.

**Result:** Major portions of the Research Diamond are Stable Areas that also create boundaries for Change Areas. Similarly, the master plans of RSW and FGCU lands contain relatively small subareas of change – subareas of access, engagement and activity that may possibly catalyze activity and investment on adjacent private parcels. For the most part, however, longer lengths of institutional area edges are inactive or are low-activity “buffers.”

**Overall:**

1. Not all of the 40 square mile Research Diamond can be considered to be in “Change Areas.” With the Stability Areas, Institutional Areas, and Natural Preserves identified, it appears that less than half of the Research Diamond area is actually within a likely “Change Area.”

2. In adjacent Natural Preserve areas, Stability areas, and Institutional areas, their edges with little or no activity or development change bordering on “Change Areas” help define where areas of higher access or activity focus are more likely to occur (elsewhere) in the Change Areas.

3. Aside from the proposed I-Hub and the RSW and FGCU-identified near term areas of change and within their master plans, the private land pattern of potential “Change Areas” within the Research Diamond is shaped a bit more like an irregular capital “I”, with its upper horizontal stroke along Daniels Parkway, a thicker lower horizontal stroke between Terminal Access Road and Alico Road, and its vertical stroke along I-75 and Treeline Avenue.

**LEE COUNTY DIAMOND AREA MARKET CONSIDERATIONS**

**Current Conditions**

The Research Diamond’s 42 square miles presents a very large area from a market analysis perspective, as well as the other perspectives shown in this report. Absorption of land uses in the Diamond compete in larger market contexts. Stakeholders report that in general, Lee, Charlotte, and Collier counties represent the real estate market in which the Diamond will compete for market share.

The recent recession was very hard on these three counties. Currently, in the three counties combined, there are 1.8 million s.f. of vacant industrial space, 1.5 million s.f. of vacant office space, and 1.5 million s.f. of vacant retail. The real estate market expanded rapidly from 2001 to 2008 leading up to the recession, bringing online a lot of built space across these three building types, as well as 2,700 hotel rooms. Development stopped in 2008 with the national recession, and vacancies increased through 2012.

The market shows strong signs of recovery, absorbing 300,000 s.f. of industrial, 200,000 s.f. of office, and 200,000 s.f. of retail in 2013. At this rate of absorption, however, market trends suggest several years before vacancies return to an industry norm of 5% to 10%, not including absorption of net new development that will occur.

**Diamond Development Capacity**

The areas suitable for development and expected to change within the Diamond, present capacity for an estimated 10 million s.f. of flex-tech or business park space, 5 million s.f. of retail and 10 million s.f. of office, based on the land uses assumed in the SDAT vision and floor to area ratios consistent with area development patterns (roughly 0.28 s.f. of building space for every s.f. of land suitable for development, net of rights of way and undevelopable areas). This presents a tremendous amount of additional supply added into the Lee, Charlotte, and Collier counties market area.

**Employment Trends**

Jobs in the three counties followed similar trends as the real estate market since 2001. The three counties combined added jobs across all sectors between 2001 and 2008, then lost jobs from 2008 through 2011. Jobs began increasing again in 2009 and have added some back through 2013.

If the market area were to continue to grow steadily at the same rate as in 2012 and 2013, and if one out of every three jobs in the three counties were to be accommodated in the Diamond, then we would expect ten years required to absorb the industrial and retail space as envisioned. Office space absorption would require many, many more years, given the relatively few jobs in those sectors that utilize office space.

**Conclusions**

Analysis conducted during AIA workshops found that the Diamond area as a whole includes too much commercial development capacity and too slow of absorption to justify infrastructure investments and planning efforts throughout the entire area simultaneously. Therefore, a smart planning strategy would be to focus on key activity nodes to invest in that could spur catalytic developments. The land use plan espoused in the body of the AIA report reflects priorities that make sense both from a market perspective and an economic impact perspective.
POTENTIAL DEVELOPMENT PATTERN

The SDAT team has prepared the “Potential Development Pattern” map diagram to illustrate a potential synthesis of:

- Existing conditions
- Stability and Change Areas
- Trends in business development, generational and workforce preferences, and real estate
- Supportive Connectivity/Multi-Modal Corridor concepts
- Innovation Focus Area concepts

The diagram does not strictly map land uses in a conventional sense – it depicts more of a broad-brush pattern of development and place types and their key linkages.

As outlined in the Stability and Change Areas diagram, the Natural Preserves (Natural Area – in light green color) and Stable Areas (Residential – which are mostly detached single family home neighborhoods and their park/recreation facilities – in beige yellow color) are similarly shown here. While they define an essential part of the appeal and value of the area in terms of its landscape character, attractive neighborhoods and housing choices, they provide more of a framing background to the innovation/research and enterprise opportunities.

The “Workplace Districts – Then and Now” discussion outlined the emerging shift away from the 20th Century “assembly line” paradigms of firms/workforce and real estate development and towards the draw and competitiveness of denser places of talent, interaction and innovation. For the Research and Enterprise Diamond Area of Lee County, those opportunities will arise and be maximized from how its present and future assets can be clustered, connected, and synergized among the Institutional Areas (in aqua color) and the Change Areas (shown with a variety of commercial development types and corresponding colors). This strategic approach is
especially necessary to address the area’s large geographic scale and relatively low
density of firms and activity.

Existing commercial and institutional use and place pattern: The future pattern
of the Research and Enterprise Diamond will grow and be built from the present. The
basis of that pattern includes the master-planned institutional assets of Southwest
Florida International Airport (RSW) and the FGCU campus; the I-75 freeway and its
connecting arterial street corridors (Treeline Boulevard/Ben Hill Griffin Parkway,
Daniels Parkway, Alico Road, Corkscrew Road, et al), and clusters of existing hospitality/
convenience retail use (Hospitality & Services, at the Daniels Parkway interchange,
Alico Road interchange, and Corkscrew Road interchange), regional shopping
centers (Commercial Retail at the Gulf Coast Town Center and Miromar Outlets), and
entertainment anchors (Entertainment at JetBlue Park, Regal Gulf Coast Stadium 16/
IMAX, Alico Arena, and Germain Arena). A portion of “Commercial Strip” development
(i.e., oriented linearly to an arterial corridor) is located along a short length of Daniels
Parkway west of I-75. The present pattern also includes two broad belts of envisioned
and as-yet largely unbuilt Tradeport/Industrial development lands in an inverted “T”
shape abutting the west and south boundaries of the airport. Nearly all of the existing
buildings and sites of these places have been developed in the auto-oriented format
of the late 20th Century, i.e. primarily low-rise drive-to buildings with large surface
parking fields. As sites within these places are renovated, infilled, or redeveloped,
their formats should be enhanced for orientation to roads and public spaces, and
better connectivity and visibility.

Tradeport/Industrial development areas: These extensive lands will play a key
role in providing flexible opportunities to capture the value of airport and university
proximity. Existing industrial uses in the western areas of the east-west “belt” of
Tradeport/Industrial land extending outside the Diamond largely support the local
construction and furnishings market. It is the SDAT team’s understanding that in
terms of goods movement, in addition to serving RSW, the “market” for warehouse
and distribution space extends east to the Miami International and Ft. Lauderdale
airports. Low cost, flexible space will also be essential for innovation opportunities
catalyzed by FGCU research in biofuels and other advanced manufacturing initiatives.
A small but important urban planning and land use aspect to the physical layout of
these industrial workplace districts is for small clusters or “corner store” settings for
food and convenience retail uses (and meeting places) to be conveniently distributed
and nearby (suggested conceptually as small red diagonally-striped squares within
the larger light violet Tradeport/Industrial areas).

Connectivity Network: At the regional scale of the Research and Enterprise Triangle,
there is little that identifies the district and the place. Its lowland terrain extends over
great distances; developments and buildings are often far apart and well set back from
roads; and building architecture is not particularly unified. Three of its major street
corridors, however – Daniels Parkway, Terminal Access Road, and Treeline Boulevard/
Ben Hill Griffin Parkway- are connection corridors between the area’s highest value
assets - the FGCU campus and the airport (and their respective potential innovation
focus areas). They are also the local “gateways” to and from those assets out to the
region, and would be primary local linkages for bikeability, walkability and livability.
In concert with enhancements to multi-modal mobility (see “Multi-Modal Corridor”),
a visible corridor place treatment would increase the district’s “imageability” for
employees, customers, investors, students and faculty, visitors, and residents.

For those reasons, the three corridors are depicted on the Potential Development Map
Diagram with a continuous tree-lined “boulevard streetscape” symbol. A continuous
boulevard-scale canopy street tree planting, regularly spaced on both sides of the
rights-of-ways, would identify help to identify the corridor and add to place identity.
Extended over the indicated lengths, they would be a “quality statement” that could
physically mark the scale and extents of the “Diamond.” The shade and microclimate
value of the trees would benefit pedestrians, bicyclists and transit users, and strongly
relate to the sustainability theme of the Diamond. An early investment in relatively
small size (and lower cost) but correct species trees could grow to a mature scale in
a relatively short period of time. These gateway and connectivity corridors could
also be emphasized with a unified installation of energy-efficient lighting at both an
automotive and a pedestrian/bicycle scale (i.e. thematic pole/luminaire – or retrofit
of existing) – manifesting a theme of innovation put to visible and sustainable use.
Ultimately, should the two proposed Innovation Clusters described below take hold,
the boulevard corridor treatments mentioned as well as strengthened multi-modal
service and facilities between them would be key to “connecting the dots” and a
critical basis for the Research and Enterprise Diamond.

Innovation Clusters: Though the Diamond’s core assets of the FGCU campus and
the Southwest Florida International Airport are well-recognized, how they create
opportunities for “talent, innovation and interaction” is critical and not immediately
obvious. Recent sociology, business administration, and urban planning research
is indicating that business and technological innovation are increasingly supported
by denser clusterings of talented workers and firms, overlappings and adjacencies
of allied work, research, educational and production activities, a high proximity
of meeting places and services, and convenient and frequent access and mobility.
These elements overlap with work-life preferences of younger generation “millennial”
workers, in terms of desirable place character as well as supportive lifestyle (i.e. walk-to
eating and socializing places during and after work, 18 or 24 hour activity cycle district
settings, greater work-life mix, preferences for transit, biking and walking in addition
to driving, etc.). Another key to the success of innovation-driven places is anchorage
– which is ready-made by institutional presence and proximity.

The response to these are shown in the Potential Development Pattern as relatively
compact, walkable and transit-served Innovation Cluster areas (or subdistricts)
indicated in dark violet, immediately adjacent to or within the Airport or the FGCU
campus. In both cases these subdistricts form “front doors” to those institutional
campuses so they interact directly and intimately with them, are open to their visitors,
workers and collaborators, and are co-identified with them. They are also conceived in recognition that the key to the collaborative aspect of innovation’s many participants and contributors is easy and effortless access, particularly from students, trainees, and younger researchers and workers – so proximity to transit, bicycling and walking is essential. That the airport and the FGCU campus are already major points of origin and destination adds a substantial basis to support and strengthen transit service.

The airport’s master plan already emphasizes an airport-oriented business park use around its entrance. However, the typically single use, auto-oriented traditional business park format of recent decades is not one that creates a variety of business spaces scales and price points, mixes uses, and promotes transit-connected pedestrian activity along a development pattern of smaller walkable blocks and streets – features that are making revitalized urban workplace districts highly attractive to innovative firms and workers. More detail on appealing planning and urban design features of these types that may be applied to business park formats are outlined in the “Innovation Focus Places” section. In addition, the immediate proximity of JetBlue Park and its potential future entertainment and retail venues (especially if connected through a direct and walkable/bikeable “workplace main street” alignment) street would strengthen the draw of an airport-adjacent innovation cluster.

Similarly, university and college campuses have historically (and often by charter) kept workplace uses (offices, commercial research and development, etc.) outside and distant from their academic precincts. But the many of America’s most productive districts of innovation today are those situated immediately outside of (and sometimes partly inside of) today’s research universities, where collaborations between faculty, students, researchers, entrepreneurs, suppliers, and firms drives innovation. The relation between East Cambridge, MA and the Massachusetts Institute of Technology is a case in point, as is that of Stanford Research Park with Stanford University. In many cases, immediate proximity is a key to overcoming constrained time opportunities and cost of access (commuting) for part-time collaborations from students, researchers and faculty with business enterprises. To that end, since most lands adjacent to the FGCU campus may be previously constrained by residential/recreational uses (e.g., Stable Area uses such as the Miromar Lakes residential and golf course uses) or Natural Preserve designations, the university and the region may want to consider envisioning and locating a compact Innovation Cluster workplace district within the campus but located at its “front door” along:

- FGCU Boulevard
- Adjacent frontage segments of Ben Hill Griffin Parkway
- Within walkable internal workplace district streets

An Innovation Cluster setting here would enjoy close physical access to researchers, staff and students; existing and more easily expandable regional and campus transit resources; already established during and after work dining, recreation and learning opportunities; and the creation of facilities and enhanced opportunities for dispersion and commercialization of university-driven innovation (that may also take advantage of and need lower cost R&D/production facilities and sites within the Diamond, as well as provide the incubation space for eventual larger business entities to take root in the Diamond).
Connectivity & Innovation
The following section discusses the Innovation Focus Places and Multi-modal Corridor that the SDAT identified for Lee County in support of the RED.

Innovation Focus Places

Lee County's potential Innovation Focus Places fall into one of three categories: 1) Existing: Those that currently exist and contain all or most of the necessary characteristics; 2) Nascent: Those that have some of the necessary characteristics and have the potential to become an Innovation Focus Place through redevelopment and other design improvements; 3) New: Those that can be developed from scratch at an identified site or area.
In Lee County, the SDAT Team identified the following Innovation Focus Places:

1) Existing

- **Downtown Ft. Myers.** Downtown is the “crown jewel” of walkable places in the Ft.Myers/Lee County region. It was developed in a pedestrian friendly pattern that was typical for its era, and in recent years has undergone significant revitalization through property improvements and public investment in streetscape and waterfront and civic space infrastructure improvements. There are numerous restaurants, nightclubs, and residences all in a compact area of medium to high density residential development. This area also contains a significant cluster of office, commercial, and retail establishments. It is easy to get around on foot on the wide sidewalks and relatively narrow, slower speed streets. The development pattern is also supportive of transit service.

- **Florida Gulf Coast University (FGCU).** The FGCU campus is a major destination and while it is isolated from other uses, most of the campus itself is pedestrian friendly with academic buildings connected by pathways, plazas, and quads.

- **Bell Tower Shops.** Bell Tower Shops is a privately owned "lifestyle center" consisting of retail and restaurant establishments with an outdoor pedestrian mall. There is also a 20 screen movie theater immediately adjacent to the center. While it is essentially a shopping center accessible primarily by private automobile surrounded by large parking lots, it is a major destination with a good pedestrian environment within its core.

- **Gulf Coast Town Center.** This is a newer shopping center that has been arranged around several pedestrian friendly “greens” linked by a “main street” type parking arrangement, framed by large format retail stores. GCTC is a popular destination with students from nearby FGCU.

To help reinforce and expand the attractiveness and long term success of these places, Lee County should establish policies that encourage affordable multi-family residential development at moderate to higher densities, as well as other compatible uses adjacent to these destinations. This could include incentives for residential infill development on the surface parking at the two shopping centers. These policies should include design standards that result in appropriate densities and pedestrian friendly environments that support walkability. As FGCU expands, it should strive to create a more dynamic mixed use environment on the developable land around its core campus in order to reduce the isolation and automobile dependency to and from the campus which currently exists.

2) Nascent

- **Lee Memorial and Gulf Coast Hospitals.** These are two major healthcare institutions in the region which collectively employ several thousand highly skilled workers. While neither of these institutions have designs which are particularly pedestrian friendly, they are major employment concentrations that should be included as nodes along a multi-modal corridor.

- **Major retail cluster around intersection of Daniels Parkway and US 41 (Tamiami Trail).** These shopping centers include Cypress Trace in the northwest quadrant, Costco in the southwest quadrant, and Super Target in the southeast quadrant. While these centers are not particularly pedestrian friendly or mixed use, they represent a significant concentration of retail jobs and a major retail destination. These retail centers should become candidate sites for future pedestrian friendly redevelopment efforts or reconfiguration as market conditions warrant. Good examples for how these transformations are being done throughout the country
are presented in the book, “Retrofitting Suburbia” by Ellen Dunham Jones and June Williamson. Lee County should enact policies which incentivize this type of redevelopment, particularly to integrating moderate density workforce housing into the site, thus creating walkable, mixed use destinations.

3) New

- **Skyplex.** The proposed Skyplex development is a proposed development area that is being marketed as a conventional office park. The SDAT team suggests that the owners consider taking a more progressive approach that will establish Skyplex as a dynamic mixed use environment. This would involve integrating a network of pedestrian-friendly streets, civic spaces, and a range of mutually supporting uses together rather than creating isolated automobile-oriented office building sites.

- **“East/West” development area.** This is a large undeveloped area that is mostly within the RED zone north of Alico Road and straddling I-75. Urban design and architectural standards should be created to ensure that any development that occurs in this area is pedestrian-friendly and transit supportive.

- **Treeline Blvd corridor.** This consists of large tracts of undeveloped land along Treeline Boulevard between Daniels Parkway and Alico Road, much of which is also in the RED zone. Again, urban design and architectural standards should be created for this area that ensures that future development be pedestrian friendly and transit supportive.

**Multi-Modal Corridor**

The existing and potential Innovation Focus Places that have been identified must be connected to each other by a Multi-Modal Corridor like a string of pearls as previously described. When mapping the location of Innovation Focus Places, a linear corridor comprised of several major roadways in the Lee County clearly emerges. The corridor begins in downtown Ft. Myers and extends south along Tamiami Trail (US 41), extends east along Daniels Parkway, then south along Treeline Avenue to FGCU. This route touches or comes very close to all of the Innovation Focus Places. In addition to the Innovation Focus Places, there is also a high concentration of retail establishments along Tamiami Trail between downtown Ft. Myers and Daniels Parkway, as well as a significant cluster of hotels and restaurants along Daniels Parkway near the I-75 interchange. The SDAT team suggests that Lee County focus efforts on retrofitting this route as a multi-modal corridor in order to support the development of Innovation Focus Places and the RED zone.

In order to accomplish a multi-modal retrofit, a number of steps can be taken including the following:

1) **Incorporate high quality bus service and facilities along the corridor.** Transit must be completely rethought and rebranded as a premium service connecting the Innovation Focus Places together. Justification for funding this service and associated infrastructure improvements must be considered a high priority for funding as an economic development goal to support the RED zone initiative. This may be thought of as bus rapid transit or premium “select bus” service. Creating a dedicated transit lane and use of transit signal priority technology, to the extent feasible, would provide significant benefits in making the service popular, especially among “choice riders” who are seeking out less car-dependent lifestyle choices. Observations from the SDAT team indicated that there may be adequate right of way to create dedicated bus lanes by making use of a combination of existing right turn only lanes, shoulders, and unpaved land between the edge of the road and buildings or parking lots. The transit vehicles themselves must be attractive modern vehicles with a distinctive, upscale look. They must have frequent headways, and make use of advanced technologies for real time arrival and information for customers. Passenger waiting facilities at major stops must also be upgraded to include attractive shelters, lighting, security cameras, and real time information. The locations of the stops must not feel isolated or adjacent to high speed traffic. The waiting areas must also be well integrated and connected with adjacent development. Orlando’s Lynx bus system provides an excellent model for high quality transit facilities along suburban corridors. Their award winning design
manual, The Central Florida Mobility Design Manual, provides planning and design guidance for a range of facility types. It can be downloaded for free at: teachamerica.com/tih/PDF/lynxdocs_mobility_manual.pdf. Future expansions to this enhanced service could include creation of a premium network to Ft. Myers Beach, Cape Coral, Lehigh Acres, and Estero.

2) Incorporating high quality bicycling facilities along the corridor. Along this multi-modal corridor dedicated bicycle facilities could be designed to attract many more cyclists than currently use existing facilities. While Lee County has implemented some bike lanes and sidepaths along major roadways, they are not well utilized. This is likely due to the design of most major roadways which do not create a hospitable environment for cyclists. Sanibel provides a good model for a well-designed network of bicycle facilities in a suburban environment. The multi-use paths provide cyclists with a pleasant, safe environment, and as such, they are well utilized by cyclists of all ages and abilities. While Lee County has ambitious plans for adding bicycle facilities, the SDAT team suggests that they be modified to prioritize the proposed multi-modal corridor and that they be designed to be separated facilities such as multi-use paths or cycle tracks along these major roads where speed limits are above 25 mph. We also suggest that they be designed with appropriate signage and best practice design features which minimize car-bicycle conflicts at intersections and driveways.

3) Establish “complete street” policies and urban design standards for development along the corridor.

To support the transformation of the identified roadways into a truly multi-modal corridor the roadway and adjacent areas must have the appropriate design characteristics. Complete Streets is a term that has become popular in recent years, but has also been co-opted to mean almost anything to the point of being almost meaningless. Merely painting a bike lane or installing a sidewalk does not necessarily constitute a “complete street” if the roadway design still feels dangerous or inhospitable to pedestrians, bicyclists, and transit patrons. In order to make the sections of Tamiami Trail, Daniels Parkway, and Treeline Boulevard into true complete streets and part of the multi-modal corridor the SDAT team suggest that Lee County and FDOT consider adopting special design standards for the sections of these roadways within the proposed corridor (particularly at Innovation Focus Places) including:

- Planting fast growing street trees that provide ample shade at close intervals in order to create a continuous canopy.
- Reduction in speed limits to 35 mph.
- Reduction in travel lane widths to 10’.
- Installing hi visibility crosswalks and pedestrian refuges at intersections and mid-block intervals of no more than 600’.
- Ensure complete sidewalk networks with at least 4’ separation from travel lanes.
- Create direct and convenient access to adjacent buildings from sidewalks, crosswalks, and bus stops.
- High quality streetscape features, particularly within Innovation Focus Places to include distinctive landscaping and hardscaping, lighting, and street furniture.
In addition, Lee County should consider establishing urban design and architectural standards that require new buildings to be built with frontages close to street/sidewalk, with minimum percentages of clear window glazing and doorway openings at street level, while placing parking lots behind buildings away from sidewalks. This will increase visibility, safety, and security for pedestrians, transit patrons, and cyclists. Lee County should also consider establishing land use policies that encourage mixed use and pedestrian friendly redevelopment along the multi-modal corridor, especially development that introduces moderate to high density, affordable residential development. This will help reinforce the market for transit service and place more households in close proximity to the multi-modal facilities, and provide convenient access to the Innovation Focus Places. Additionally, while buildings on the FGCU campus are not required to submit zoning/DO/building permits for county review, SDAT would encourage changes to the state and FGCU campus master plan to allow for implementation of urban design standards.
Implementation
POLICY AND CAPITAL IMPROVEMENTS

Successful revitalization, or district development change, is often said to stand on three legs – first, the engine of private investment; second, supportive policies and regulations; and third, catalytic capital investments that “break the ice” and help create a new physical setting (as well as shift attitudes) for investment. In districts where a vision has been discussed but few facts on the ground have emerged (often for many years), individual property owners, investors, and businesses are often not able or willing to take on the risk of exemplifying that vision. To meet this challenge, whether acting in public-private partnerships or moving forward to enable desired kinds of investment, the key Public Agency roles (played by governments and/or anchor institutions) include:

1. Lead (or support) the vision.

2. Provide a reliable policy context for investment at different scales.

3. Ensure the emergence of critical physical elements.

As well providing education and encouragement, Lee County’s leadership role should include:

1.1 Ensure that the Research and Enterprise Diamond Vision is strongly articulated in future updates of the Lee Plan. The current Lee Plan (September 2013 update) contains the County’s year 2035 vision and policies. The Plan and the zoning ordinance condition future development change in the Research and Enterprise Diamond area. The Airport and FGCU campus master plans must also achieve consistency with the Lee Plan. There are 22 Planning Communities descriptions (November 2011) that summarize the visions, and those for the Gateway/Airport (#10), Daniels Parkway (#11), San Carlos (#13) and Estero (#21) address the Diamond area. Together these generally “allow” the Research and Enterprise Diamond’s suggested uses, development patterns, place character and mobility features (particularly for the two conceptual Innovation Clusters targeted in the “Non-Aviation” area of #11 Gateway/Airport and within the FGCU campus entrance in #13 San Carlos). However, they do not yet provide targeted direction or synergistic support. By synergistic, we mean that many “pieces of the elephant” - the individual parts of the Research and Enterprise Diamond vision - are present in the current plan (such as complete streets, support for economic development, and building on existing assets such as the airport and FGCU) but their mutually supportive nature for innovation-driven districts is not described, their relevance to the preferences of the next generation of workers, entrepreneurs and firms is not identified, and the programs and regulations are not coordinated. To enable the Research and Enterprise Diamond concepts to move to the next level of reality and success, the recommendations should be incorporated and described in updates to Lee Plan visions and policies.

1.2 Promote the Research and Enterprise Diamond Vision in Airport and FGCU master plan efforts. This report has identified two highest-potential opportunity sites for Innovation Clusters as being strategically positioned at the “front doors” on airport and FGCU campus lands. Though these out-of-the-box suggestions to reshape well-founded airport and FGCU campus policies are bold, they are in keeping with what recent research and emerging built examples of innovation clusters demonstrate: that such districts are compact; their use mixes, development increments, ground floor uses and a robust public realm reinforce multimodal access, walkable character, convenience, and 18-hour activity cycles; that hosting a range of sizes and price levels of district workplaces houses and synergizes the business ecosystem of firms, suppliers, meeting spaces, incubators/accelerators, and training/education facilities at different stages in their life cycles; and that these elements together serve to attract, train and retain talented workers and firms, in turn creating greater value for their “anchor” institutions. Further dialogue, support and potential policy implementation of these concepts in the institutional master plans will be essential, as they provide the detailed vision and serve as both gatekeepers and blueprints for development.

To provide a more reliable policy context:

2.1 Where new development formats are critical, revise development regulations to provide greater investment reliability for both investors and neighbors. Conventional land use and zoning regulations of the last half-century have emphasized:

1. Very Restrictive Use Control (Use Separation)
2. Very Specific Density & FAR Control
3. Not Enough Building Scale, Type, Form, & Character Control

Our post-war “assembly-line” planning and development paradigm was based on uniform household and firm types, large single-use areas, inexpensive energy, and uncongested highway connectivity. It succeeded in facilitating rapid and reproducible development, particularly outside of existing city centers. But today’s more mature metropolitan areas, changing generational preferences, and sustainability goals are shifting requirements and market preferences towards more varied work-life choices and real estate products that are next to or more convenient to each other. Our old regulatory practices make it hard to envision and predict physical outcomes that will achieve this – resulting in uncertainty for both investors and neighbors.

Examples of district or form-based regulations that have been successfully implemented within the last decade (in municipalities in Florida as well as many states) have shown a way to strengthen investment reliability. In contrast to conventional zoning, features of form-based regulations include:

- A Code focused on physical outcomes, where regulations and robust graphics...
shape physical characteristics of buildings for compatibility, such as orientation, volume, relationship to the street, and articulation.

- Greater flexibility for adjacent uses that are compatible with each other (e.g. housing, workplaces, services)
- Less emphasis on regulating FAR and density, and more on performance characteristics (physical characteristics mentioned above, and trips, parking, etc.) – which helps encourage market innovation.
- Promotion of characteristics that strengthen a “Sense of Place,” in that they are based on the place hierarchy of the pieces of city (neighborhoods, subdistricts) whose in-common physical and performance characteristics of development tell you where you are, relative to the center or the edge. This helps guide how the developments work, not just their style.
- These features provide greater investment security by ensuring that new or renovated buildings will be located near others of similar type.

The Lee County Land Development Code’s Compact Communities Regulations is a precedent and potential template for further implementation of a form-based regulations approach. Given the compact and limited locations of the suggested Innovation Clusters, such efforts could be relatively precise and focused.

Where desired district change has not occurred in a long time (or ever) and is difficult to imagine:

3.1 The right kind of capital improvement project(s) that put in place the first pieces of the vision is often needed to “break the ice,” change people’s thinking, and re-set the image. Rather than the public agency or institution acting like one of the many property owners, the role that only the public agency and no other property owner can fulfill is its shaping of the connective tissue of a place or district – its streets, public realm, and infrastructure. The right kind of physical “network” improvement – especially where “how the vision could happen here” is still unclear - can powerfully leverage private investment many times beyond the cost of the public improvement. The measures outlined in this report include both “network” and “focal” elements (see Connectivity and Innovation Focus sections).

3.1.1 The network elements are typically district-wide or corridor-long, engaging connectivity and place aspects at a larger scale. These include:

- Transit links for highest-priority destinations
- Multi-modal street improvements
- Boulevard streetscape trees/ lighting
- High-speed internet infrastructure (for example, dark fiber activation, a good candidate for public-private partnership implementation)

3.1.2 In addition, for specific locations and focal place types such as Innovation Clusters, targeted capital improvements can serve as “seed crystals” for new types of activity and image of local district identity. For example, a special and short-length streetscape to create a “business main street” setting, or a “business community plaza” that serves as a lively everyday gathering place (with food truck docks and “parklets,” surrounded by ground floor shops and entrances) as well as well as serving as special events location for media events, conferences, etc. are types of features that help create the sense of a center, establish address value, contribute to real estate “imageability,” and provide settings for activities desired by both sought-after workers and firms. The provision of the “extended” public realm could be based in the form-based regulations for incremental provision by private investment.
LESSONS FROM THE DESIGN ASSISTANCE PROCESS

The team was asked to provide some comparable cases that might offer lessons for Lee County, and the preceding report contains numerous examples of design interventions, policy models, and other best practices that can be applied to many components of the community revitalization process. However, the team felt it would also be instructive to offer a couple case studies from the design assistance experience which can help inform the design of an implementation process for Lee County. Each case reinforces the preceding framework described for Lee County, as each community has overcome challenges with scarce public resources by engaging the whole community in the process of revitalization and development successfully.

Port Angeles, Washington (pop. 17,000)

Building Community Pride through a Public Revitalization Process

Port Angeles, Washington provides an example of how to inspire pride in change by creating a truly public revitalization process. Their success has been built around involving everyone in the process. In 2009, Port Angeles hosted an SDAT to focus on downtown revitalization and waterfront development. Port Angeles had suffered declining fortunes as the result of mill closures and reduced productivity from natural resource industries. The three-day charrette process created enormous civic energy to pursue a vision for the city’s future. “Just two weeks after the SDAT presented more than 30 recommendations, the Port Angeles Forward committee unanimously agreed to recommend 10 of those items for immediate action,” said Nathan West, the City’s Director of Community and Economic Development. “Public investment and commitment inspired private investment, and, less than a month later, the community joined together in an effort to revamp the entire downtown, starting with a physical face-lift. Community members donated paint and equipment, and residents picked up their paintbrushes to start the transformation.”

During the first summer of implementation, over 43 buildings in the downtown received substantial upgrades, including new paint and other improvements. This effort led to a formal façade improvement program that extended the initiative exponentially. The city dedicated $118,000 in community development block grants (CDBG) for the effort, which catalyzed over $265,000 in private investment. The city also moved forward with substantial public investment in its waterfront, which had a dramatic impact in inspiring new partnerships and private investment. Three years later, the city had over $75 million in planned and completed investments and had turned the corner by producing huge civic momentum across the community. In June 2012, Port Angeles was recognized with a state design award for its waterfront master plan, designed by LMN Architects. The city will break ground on construction in the fall.

As West concluded, “The City of Port Angeles SDAT experience was far more than just a planning exercise. This opportunity for our community was a catalyst for action, implementation and improvement. Three years after the SDAT team arrived, the progress and excitement continue. A primary outcome has been that the process awakened community pride and inspired a “together we can” attitude. Today the inspiration remains and the elements and recommendations of the program continue to be the driver for publicly endorsed capital projects and investments in our community. More importantly this sustainable approach has tapped into the core values and priorities of our citizens to ensure a better and more balanced future for our City.”
Newport, Vermont (pop. 5,000)
The Power of Leveraged Actions

In 2009, Newport, Vermont brought a Regional and Urban Design Assistance Team (R/UDAT) to town to help build a revitalization strategy. Patricia Sears, the Executive Director of the Newport Renaissance Corporation, described the town’s dilemma a few years ago: “We were the last city in Vermont to achieve downtown designation from the state. We had some of the highest unemployment in the state. We decided we were done being last. We decided, ‘we are going to be first.’” Newport hosted the first R/UDAT in state history. Hundreds of residents and stakeholders participated in the process. As Mayor Paul Monette said, “it wasn’t the usual political process. Everyone was heard during the R/UDAT.”

Within two years of the project, the R/UDAT had built so much momentum that the town had over $250 million in new and pending investment, including 2,000 new jobs in a town of just 5,000 – an incredible achievement in the midst of a severe national recession. Like Port Angeles, Newport was able to achieve success through broad partnership and involvement. It also leveraged small actions to build momentum for larger investments. For example, the R/UDAT team included a recommendation to create a community garden downtown, something that has been suggested for Springfield as well. Newport created a community garden with over 32 organizational partners. They took advantage of existing capacity – a downtown parking lot that was donated – and not only created a garden, but programmed it to have a transformational impact.

Out of the community garden, the “Grow a Neighborhood” program was created, teaching neighborhood residents about urban agriculture, providing space for family plots, and engaging local restaurants in a farm to table initiative. Six new restaurants opened in the downtown during the first two years of implementation. Newport also took advantage of widespread community participation in the R/UDAT to engage citizens in code changes, designing a participatory process to create the first form-based code in the state. New investments include boutique hotels, a tasting center featuring regional agriculture, and a waterfront resort. The city also created the state’s first foreign trade zone, attracting a Korean biotechnology firm and other businesses.

The City has undergone a fundamental shift in its thinking since the R/UDAT process. In 2009, the public dialogue was dominated by nostalgia about the city’s past. As one resident exclaimed, “I’ve seen Newport come, and I’ve seen it go.” Two years later, the R/UDAT team conducted a follow up visit to assess progress in the community. As the Mayor stated, “I attribute our success to the successful R/UDAT in 2009 followed by the great public/private partnerships which have developed.” The sense of change reaches all levels of the community. A citizen described the civic “attitude adjustment” that had occurred: “When you have people working together, things can happen and do happen. That’s the most important change that has occurred – a change in attitude. All of a sudden, nothing is impossible.” Today, communities across New England are visiting Newport to learn the ‘secrets’ of its success.
THE LEE COUNTY CONTEXT

The design assistance program has a 47-year history of working with hundreds of communities across the United States. As the above cases illustrate, success is not dependent upon public resources. It is dependent on vision, broad partnerships, and broader participation from all sectors of the community.

Context is everything. Certainly, this initiative must be realistic. Government cannot do this alone. This work will take a generational commitment, involving all sectors of the community. However, the team found that Lee County has enormous potential capacity that is currently underutilized, and by unlocking the community’s full potential, we believe the community can enjoy enormous success. The future path must be defined by its citizens. Lee County must build its own authentic process that reflects local traditions and culture. It must own its future.
SDAT NATIONAL TEAM

Colie Hough-Beck, ASLA – Team Leader
Colie Hough-Beck is a Principal at HBB Landscape Architecture in Seattle. Colie brings continuous landscape architecture, planning, grant writing, and urban design experience to her clients. Her extensive experience with governmental agencies, private organizations, and public institutions has resulted in projects that are responsive to community expectations. Her professional approach encourages the creative exploration of project challenges in multiple contexts, from challenging adaptive reuse of industrial waterfronts to downtown enhancement projects. It has also contributed significantly to several planning and design awards. Colie is well known for providing planning, design, and quality control services that exceed client expectations. Colie is a member of the City of Seattle Planning Commission and serves as Co-Chair on the Planning Commission’s Land Use and Transportation Committee.

Gregory Tung
As co-founding Principal of Freedman Tung + Sasaki, Gregory Tung draws on his extremely wide range of architectural and urban design expertise to formulate urban design strategies and plans that enhance city identity and draw investment to our project areas. The lion’s share of special features that distinguish the firm’s portfolio of built work were designed by Mr. Tung. He is a national leader in creating innovative designs for streets & boulevards, landmarks and custom-designed street furniture, as well as in the development of state-of-the art architectural design standards. His district and corridor revitalization plans combine sensitive infill development master planning with catalytic capital improvement designs. Mr. Tung is also well known for his innovative community participation processes, and insightful workshop seminars that add an education component to the public participation process. As designer, theoretician and author, Gregory Tung is a frequent speaker at urban design, architecture, and city planning conferences, particularly on thorny topics involving the retrofitting of the suburban city.

Chris Mefford
Chris Mefford is President of Community Attributes. The foundation of Chris Mefford’s experience lies in working with jurisdictions, businesses and developers, providing market research; feasibility analyses; economic and financial analysis; and policy analysis, including land use and transportation policies. He brings 17 years of consulting, project management and analysis experience with economic, land use and transportation patterns. Based in Seattle, he brings in-depth expertise with the Puget Sound regional economy. He speaks to audiences often on regional economy and community development considerations.

Mr. Mefford brings professional skills and expertise in regional economic development; financial feasibility analysis; strategic planning; socio-economic and demographic analysis; geographic information systems (GIS) modeling and mapping; land use planning and transportation planning. Mr. Mefford’s prior engagements include leading teams for local and national consulting firms, and serving as a regional economist for the Puget Sound Regional Council.

Ellen Sollod
Ellen Sollod is an artist and art planner working in the public realm for nearly 20 years. Conceptualizing urban spaces as places for people, she creates site-specific and site-integrated art for parks, plazas, educational facilities, streetscapes, and urban infrastructure. Putting the idea of “place” first, Sollod has helped craft design strategies that establish a unique community identity. Sensitivity to the environment, attention to human scale, and incorporating meaning and metaphor are important considerations in her work. On large scale infrastructure projects, her design input results in
projects that establish and reflect community character and identity.

Working as a member of design teams, she has collaborated with architects, landscape architects, lighting designers and engineers to create award-winning public projects, including the Bellingham Arts District, Olympia Gateway Corridor, Burien Town Square Park, the Mercer Corridor in Seattle, and the Brightwater Waste Water Treatment Plant. Sollod has created art master plans and design guidelines for major infrastructure projects. She was a lead artist on the Brightwater Treatment Plant and a member of the team developing the Diridon Station Area Master Plan in San Jose, CA, the Port Angeles Waterfront Art Plan, and Kent Valley Loop Trail. Her approach to urbanism through the incorporation of art and innovative design is informed a M.A. in Urban Studies from the University of Maryland and a B.A. in art history from the University of North Carolina.

Terry DeWitt, AIA, ASAI

Terry DeWitt is a retired architect in Memphis, Tennessee. Before his retirement he was principal at Hnedak Bobo Group in Memphis. He established his Architectural Rendering practice in 2003. He brings 25 years of product design experience in the metal building industry and 20 years as an architect as well as being an accomplished illustrator and artist. Terry is a 1982 graduate of the University of Memphis Architectural Technology program and studied at the Universities of Illinois and Kansas. He is a long time member of AIA and ASAI. Terry brings experience working as the project manager for the renovation and redesign of the Memphis Main Street Mall and other large and small projects which included research, planning, meeting with civic groups, retailers, and communication with multiple disciplines during design and construction. Terry has used his illustration experience in design charrettes and planning studies including working with architectural firms in Florida in the communities of Sarasota and Cape Coral, as well as a planning study in Lebanon, Tennessee. Terry has been an active participant in AIA since 1978 serving as President of the Memphis Chapter of AIA in 1992 and President of AIA Tennessee in 1999.

Stuart Sirota, AICP

Stuart Sirota is the founding principal of TND Planning Group, a consulting practice focused on sustainable community design, traditional town planning, and transportation planning for livable communities. With 26 years of experience, Stuart has been responsible for a broad range of planning work that emphasizes compact, mixed-use, walkable neighborhood design for smart growth, downtown revitalization, regionally and locally integrated land use and transportation planning, transit-oriented and pedestrian/bicycle planning, and form-based coding. Stuart has been recognized for his collaborative approach to planning that brings together human scale urban design, transportation, land use, preservation, and ecology. He is also experienced in charrette facilitation and holds full certification from the National Charrette Institute.

AIA STAFF:

Erin Simmons

Erin Simmons is the Director of Design Assistance at the Center for Communities by Design at the American Institute of Architects in Washington, DC. Her primary role at the AIA is to provide process expertise, facilitation and support for the Center's Sustainable Design Assistance Team (SDAT) and Regional and Urban Design Assistance Team (R/UDAT) programs. In this capacity, she works with AIA components, members, partner organizations and community members to provide technical design assistance to communities across the country. Through its design assistance programs, the AIA has worked in 200 communities across 47 states. In 2010, the Center was named Organization of the Year by the International Association for Public Participation (IAP2) for its impact on communities and contributions to the field. Erin is a leading practitioner of the design assistance process. Her portfolio includes work in over 60 communities across the United States. A frequent lecturer on the subject of creating livable communities and sustainability, Erin contributed to the recent publication “Assessing Sustainability: A guide for Local Governments”. Prior to joining the AIA, Erin worked as historic preservationist and architectural historian for an environmental and engineering firm in Georgia, where she practiced preservation planning, created historic district design guidelines and zoning ordinances, conducted historic resource
surveys, and wrote property nominations for the National Register of Historic Places. She holds a Bachelor of Arts degree in History from Florida State University and a Master’s degree in Historic Preservation from the University of Georgia.

**Joel Mills**

Joel Mills is Director of the American Institute for Architects’ Center for Communities by Design. The Center is a leading provider of pro bono technical assistance and participatory planning for community sustainability. Its processes have been modeled successfully in the United States and across Europe. The Center has been the recipient of a numerous awards recognizing its impact. In 2010, the Center was named Organization of the Year by the International Association for Public Participation (IAP2) for its impact on communities and contributions to the field. In 2013, the Center received a Power of A Award from the Center for Association Leadership, and a Facilitation Impact Award, given by the International Association of Facilitators.

Joel’s 20-year career has been focused on strengthening civic capacity and civic institutions around the world. This work has helped millions of people participate in democratic processes, visioning efforts, and community planning initiatives. In the United States, Joel has worked with over 100 communities, leading participatory initiatives and collaborative processes that have facilitated community-generated strategies on a host of issues. During the past five years, this work has catalyzed over $1 billion in new investment. His past work has been featured in over 1,000 media stories, including ABC World News Tonight, Nightline, CNN, The Next American City, Smart City Radio, The National Civic Review, Ecostructure Magazine, The Washington Post, and dozens of other sources. He has served on numerous expert working groups, boards, juries, and panels focused on civic discourse and participation, sustainability, and design. He has also spoken at dozens of national and international conferences and events, including the World Eco-City Summit, the Global Democracy Conference, the National Conference on Citizenship, and many others.