



## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. HOUSE PRINCIPLES ANALYSIS:

This bill does not appear to implicate any of the House Principles.

#### B. EFFECT OF PROPOSED CHANGES:

##### **Present Situation**

In early 2004, President Bush and the National Aeronautics and Space Administration (NASA) announced a new "Vision for Space Exploration" that will send humans beyond Earth orbit for the first time since 1972. Consequently, the Space Shuttle program is scheduled to end in 2010 and the next phase of human space flight, called Constellation, will likely launch after 2015. During this five year period, NASA is soliciting private companies to provide crew and cargo services for the International Space Station through its Commercial Orbital Transportation Services (COTS) program. The prevailing belief is that Florida is facing a potential reduction to our position as the premier location for space exploration and a potential loss of a highly skilled workforce that has been associated with the shuttle program.

In 2006, the legislature created Space Florida within Chapter 331, Florida Statutes, as the successor organization to the Florida Space Authority, the Florida Space Research Institute and the Florida Aerospace Finance Corporation. Space Florida is responsible for fostering the growth and development of a sustainable and world-leading aerospace industry in this state. Some actions in Space Florida's strategic plan include:

- To broaden the State's presence in the space industry beyond launch activity to include the R&D, design, manufacturing, assembly, testing, launch, and servicing of space vehicles; and
- Expand and focus use of the Space Life Sciences Laboratory by providing unparalleled research facilities to be used by the world's brightest scientists to solve high priority space-related problems.

In 2001, the Florida Space Authority broke ground on what was originally called the Space Experiment Research and Processing Laboratory (SERPL), which has since been renamed the Space Life Sciences Lab (SLS Lab). Now owned by Space Florida, the SLS Lab is a world-class laboratory with all the capability and systems necessary to host International Space Station experiment processing as well as associated biological and life sciences research.

##### *Centers of Excellence*

A Center of Excellence is defined as an organization of personnel, facilities, and equipment established for the purpose of investing in programs that attract world class scholars and building Centers of Excellence as an important means of increasing technology-based business in this state; requiring co-investment as a means of leveraging state dollars; aligning research and development efforts with established, statewide economic development strategies, including an emphasis on identified economic clusters; facilitating value-added job creation through continuous improvement in university research, as well as entrepreneurship and capital development programs; and establishing Florida as a leading state for entrepreneurship and innovation, with continued commitment to university Centers of Excellence and an expanding base of research and development.

In 2002, the legislature passed the Technology Development Act, which resulted in three centers of excellence that were awarded through the Florida Research Consortium, including the Center of Excellence in Regenerative Health Biotechnology at the University of Florida (\$10 million), the Florida Photonics Center of Excellence at the University of Central Florida (\$10 million), and the Center of Excellence in Biomedical and Marine Biotechnology (\$10 million).

Additionally, the 2006 legislature passed the 21st Century Technology, Research, and Scholarship Enhancement Act which created 6 centers of excellence, that were awarded through the Board of Governors, including the Center of Excellence in Advanced Materials at Florida State University (\$4 million), the Florida Center of Excellence for Biomolecular Identification and Targeted Therapeutics at the University of South Florida (\$8 million), the Center of Excellence in Ocean Energy Technology at Florida Atlantic University (\$5 million), the FISE Energy Technology Incubator at the University of Florida (\$4.5 million), the Center of Excellence in Laser Technology at the University of Central Florida (\$4.5 million), and the Center for Nano-Bio Sensors at the University of Florida (\$4 million).

Under the 21<sup>st</sup> Century Technology, Research, and Scholarship Enhancement Act, there were two proposals associated with space and aerospace submitted to the Board of Governors. The Joint Institute for Space Exploration Research consortium included Embry-Riddle Aeronautical University, the Florida Institute of Technology, and Florida State University. The other team was led by the University of Central Florida in partnership with the University of Florida.

### **Effect of Proposed Change**

HB 1055 creates a multi-university Space Technology and Research Diversification Initiative (STRDI) within the Governor's Office of Tourism, Trade and Economic Development (OTTED). The initiative will be a university based program to develop high-impact space research and applied technology programs that will advance the state's interests in space industry expansion and diversification. The research will be led by a consortium of universities, with a main campus located in Brevard, Volusia, or Orange County and will be centrally administered at the Space Life Sciences Laboratory. The areas of focus will be as follows:

- Spaceflight biomedical countermeasures to address problems with sustained human spaceflight;
- Commercial space transportation programs and microgravity research as part of the Hawking Center program;
- Spaceport and range technologies and commercialization, including Earth, Moon, and Mars spaceports;
- Space and upper atmosphere science research; and
- The recruitment of out-of-state, world class space researchers to Florida universities.

The bill also requires Space Florida to support the development and operation of the STRDI, including advisory support, access to the Space Life Sciences Laboratory, and providing grant funding for projects that support the state's objectives for space industry expansion and diversification.

#### **C. SECTION DIRECTORY:**

**Section 1:** Provides the short title as "Space Technology Research and Diversification Initiative Act."

**Section 2:** Provides legislative findings.

**Section 3:** Amends s. 331.3051, F.S. relating to the duties of Space Florida.

**Section 4:** Creates s. 331.365 relating to the Space Technology and Research Diversification Initiative within the Office of Tourism, Trade and Economic Development.

**Section 5:** Allows for an effective date of July 1, 2008.

## **II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

#### **A. FISCAL IMPACT ON STATE GOVERNMENT:**

1. Revenues:

None.

2. Expenditures: See Fiscal Comments.

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

There is no direct economic impact on the private sector.

D. FISCAL COMMENTS:

HB 1055 creates an initiative that would require funding in order to implement. Currently, the bill does not include any appropriation of state funds; however, the initiative would be able to obtain outside funding either through private or public sector non-state support.

### III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

This bill does not require counties or municipalities to spend funds or take action requiring the expenditure of funds. This bill does not reduce the percentage of state tax shared with counties or municipalities. This bill does not reduce the authority that municipalities have to raise revenue.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

N/A

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

D. STATEMENT OF THE SPONSOR

No statement submitted.

### IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES

On April 8, 2008, three amendments were adopted by the Economic Expansion and Infrastructure Council and the bill was reported favorably as a council substitute. The first and third amendments removed the reference to the Joint Institute for Space Exploration Research and the Spaceport Research and Technology Institute. The second amendment changed the the responsibility of the collaborative universities from performing all research to leading research being performed by removing the word "performed" and replacing it with "led."