

Board of Trustees Meeting

Wednesday, December 5, 2018 1:15 PM - 2:45 PM

Florida Polytechnic University ADMISSIONS BUILDING

4700 Research Way, Lakeland, FL 33805-8531

Dial In Number: 240-454-0887 | Access Code: 644701452

Don Wilson, Chair Dr. Jim Dewey Travis Hills Dr. Adrienne Perry Gary C. Wendt

I. Call to Order

Cliff Otto, Vice Chair Rear Admiral Philip Dur Frank Martin Dr. Louis Saco Mark Bostick
Dr. Richard Hallion
Henry McCance
Bob Stork

Don Wilson, Chair

AGENDA

II. Roll Call
 III. Public Comment
 IV. Chairman's Remarks
 V. President's Remarks
 Don Wilson, Chair
 Dr. Randy Avent

VI. <u>Faculty Presentation: Advanced Mobility Institute & SunTrax</u>

Kelda Senior, Florida
Turnpike Enterprise

Dr. Mustapha Akbas, Assistant Professor, Computer Science

VII. Fundraising Readiness Assessment Mr. Kevin Aspegren and

Carol Wick, Principal, Convergent Nonprofit

Solutions

VIII. Strategic Plan Accountability Tracking

Dr. Randy Avent

IX. Florida Polytechnic University Alignment to 2025 SUS Strategic Plan Goals

Dr. Randy Avent

Action Required

X. Committee Reports

Gary Wendt, Chair

A. Audit & Compliance Committee Report

Dr. Adrienne Perry, Chair

B. Academic & Student Affairs Committee Report

Frank T. Martin, Chair

C. Finance & Facilities Committee Report

1. Capital Projects Report to the BOG *Action Required*

2. Carryforward Report to BOG *Action Required*

Rear Admiral Philip Dur, Chair

D. Governance Committee Report

1. Creation and Operation of a BOT Executive Committee

Action Required

Don Wilson, Chair

XI. Consent Agenda

Action Required

- A. Audit & Compliance Committee
 - 1. SUS Compliance Program Checklist
 - 2. UAC Report 2019-02 Sponsored Research Activities
- B. Academic & Student Affairs Committee
 - 1. Approval of Non-Degree Academic Programs
- C. Finance & Facilities Committee
 - 1. Approval of Contracts over \$500,000
 - a. Campus-wide Custodial Services
 - b. International Student Recruitment
 - 2. Approval of new Foundation Board Directors
- D. Governance Committee
 - 1. FPU-10.002 Direct Support Organization Regulation
 - 2. Repeal of Rule 6C13-10.002 University Direct Support Organizations
 - 3. BOT Policy on Public Comment at Board of Trustees Meetings
- E. Board of Trustees Meeting
 - 1. Approval of September 5, 2018 Board of Trustees Meeting Minutes
 - 2. Approval of September 21, 2018 Board of Trustees Meeting Minutes

XII. Board of Trustees Meetings

Don Wilson, Chair

- 1. February 27, 2019
- 2. May 21-22, 2019
- 3. September 11, 2019
- 4. December 11, 2019
- 5. February 26, 2020
- 6. May 19-20, 2020
- 7. September 9, 2020
- 8. December 2, 2020

XIII. Board of Governors' Meetings

Don Wilson, Chair

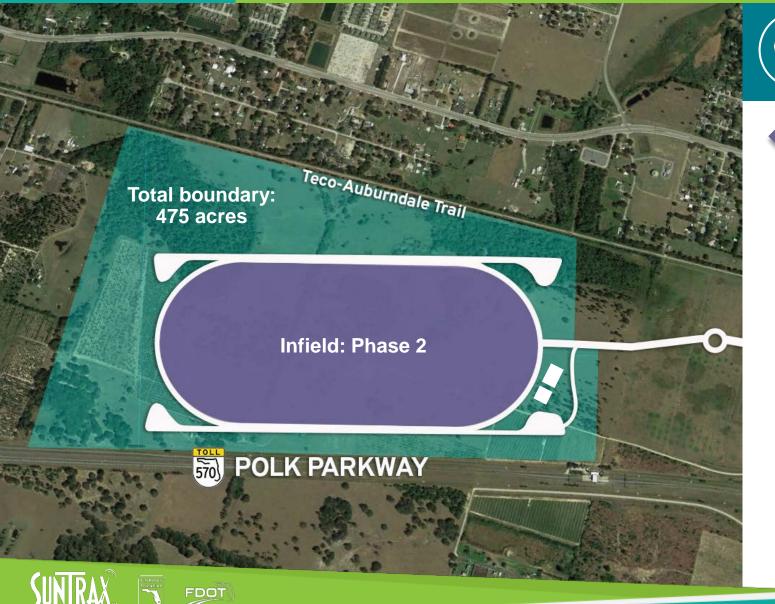
- 1. January 30-31, 2019 (Florida International University, Miami)
- 2. March 27-28, 2019 (Florida A&M University, Tallahassee)
- 3. June 11-13, 2019 (USF, Tampa)
- 4. August 28-29, 2019 (Florida Gulf Coast University, Ft. Myers)
- 5. October 2-3, 2019 Facilities Committee and Budget and Finance Committee Workshops (UCF, Orlando)
- 6. October 29-30, 2019 (University of Florida, Gainesville)

XIV. Closing Remarks and Adjournment

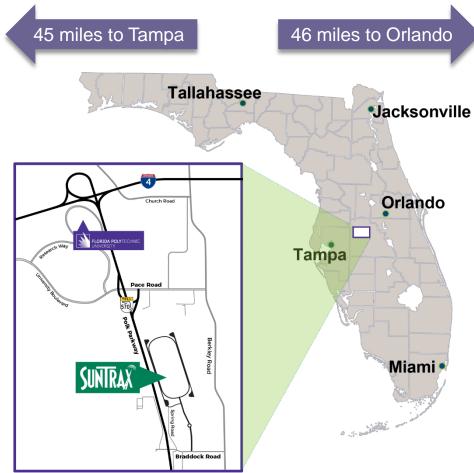
Don Wilson, Chair



SunTrax Phase 1 | Tolls Testing Facilities







SunTrax Phase 1 | Construction Progress

June 2017



November 2018

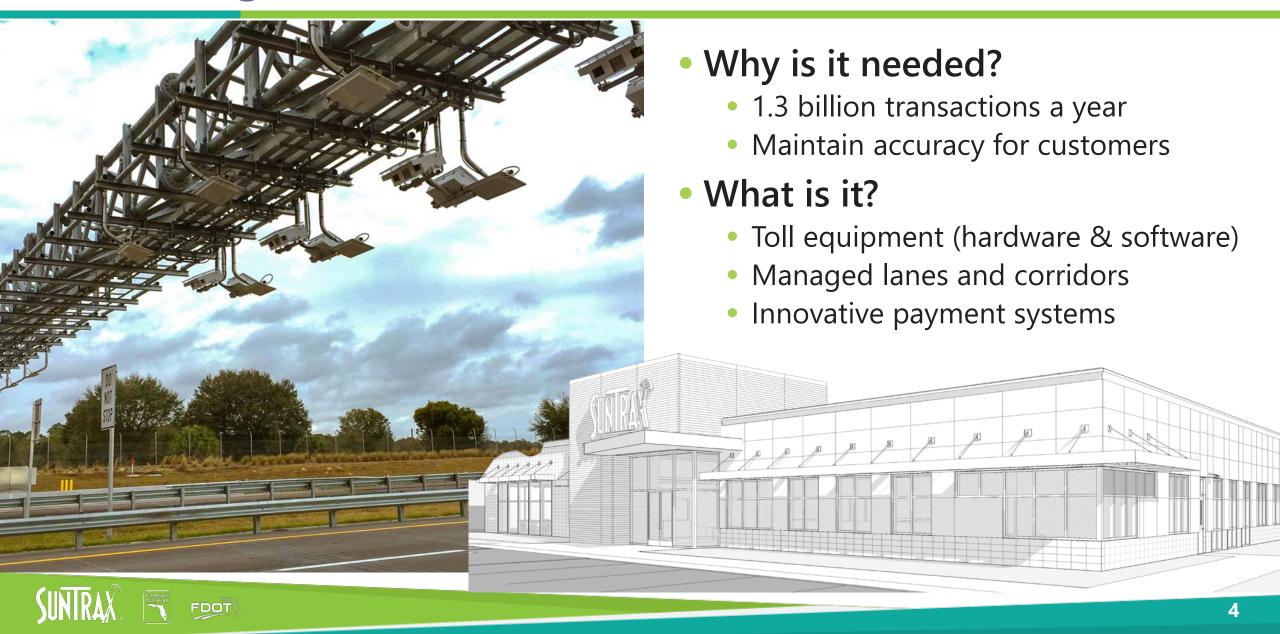






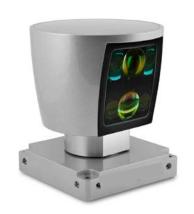


Toll Testing



Research & Industry Outreach for Phase 2

- Automakers (OEM's)
- Tier-One Suppliers
- CAV/Sensor/Camera Companies
- Tech Firms
- Freight & Logistics Companies
- Universities
- Residential/Commercial Developers
- Proving Grounds Operators
- Proving Grounds Designers











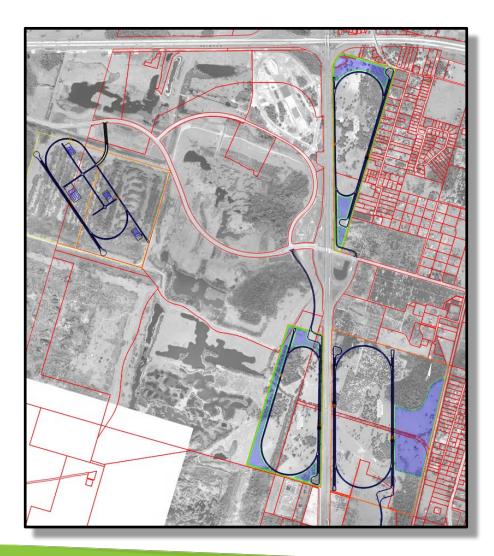
Florida Poly's Advanced Mobility Institute (AMI)

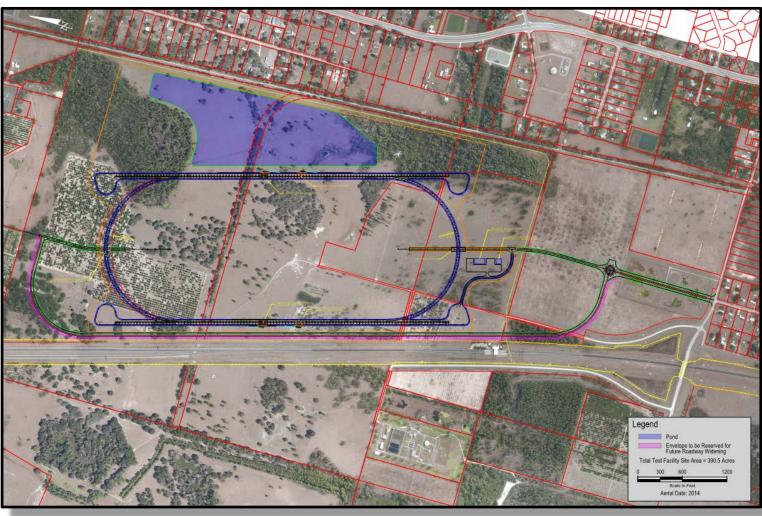
AMI will develop unique test cases to test at SunTrax, including:

- Rare, problematic scenarios
- Object recognition verification
- Weather/environment conditions
- Radio frequency noise impact
- Human/Machine communication



SunTrax Through the Years (2015)

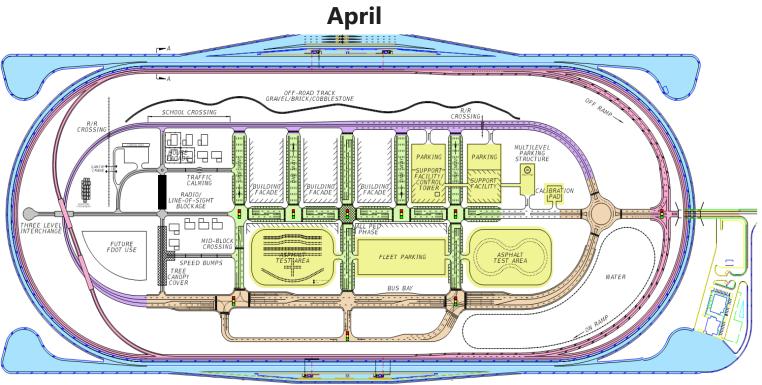








SunTrax Through the Years (2016)





October

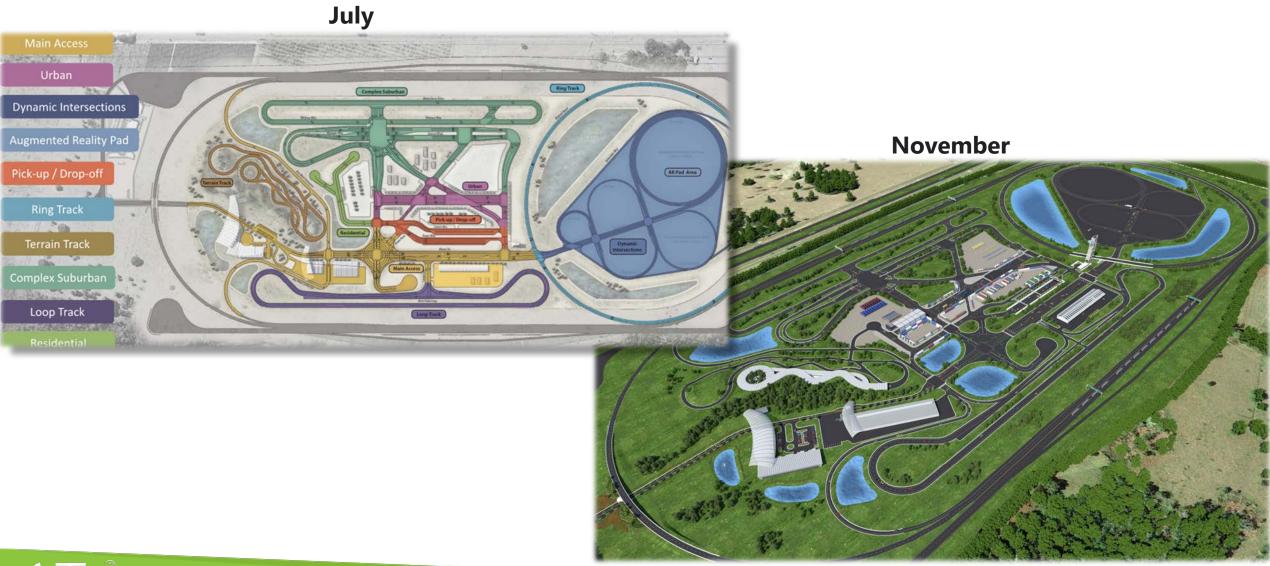








SunTrax Through the Years (2017)





SunTrax Phase 2 (Current)



Test Features

- 1 Main Entry Campus
- 2 Workshops & Warehouses
- 3 Roadway Geometry Track
- 4 Loop Tracks
- 5 High-Speed Oval
- 6 Signal Loss "Tunnel"
- 7 Urban / Suburban
- 8 Pick-Up/Drop-Off
- 9 Sensor Test Chamber
- 10 Braking & Handling
- 11 Technology Pad

Organizational Structure

Third Party Operator to Perform:

- Operation
- Maintenance
- Marketing

Suite of Services Available to Users:

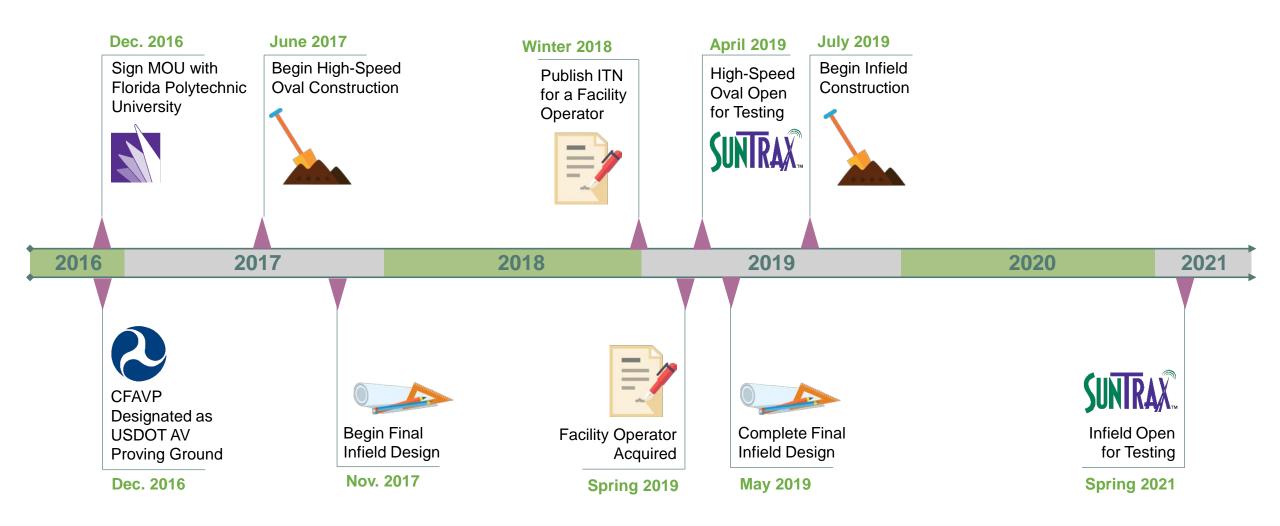
- Lease Individual or Combined Test Sectors
- Development of Test Scenarios
- Full Service Testing Performance







SunTrax Project Timeline







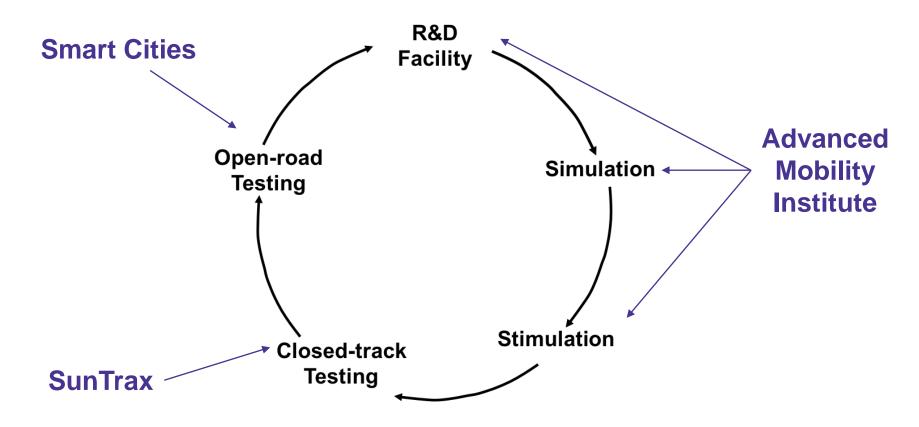


Advanced Mobility Institute (AMI) Florida Polytechnic University

Mustafa Ilhan Akbas, PhD 05 December 2018



Advanced Mobility Institute (AMI)



Florida Poly was awarded \$500K to create and fund the Advanced Mobility Institute to conduct research, development and testing of autonomous vehicles



AMI Research Themes

Electromagnetic Compatibility/Interference

- Quantification of interference issues related to active sensing
- Drs. Alsweiss, Vargas, Razdan and one student

Language of Driving

- Development of the "language of driving" for AVs.
- Drs. Sargolzaei, Sahawneh, Razdan and one student

Transportation OS

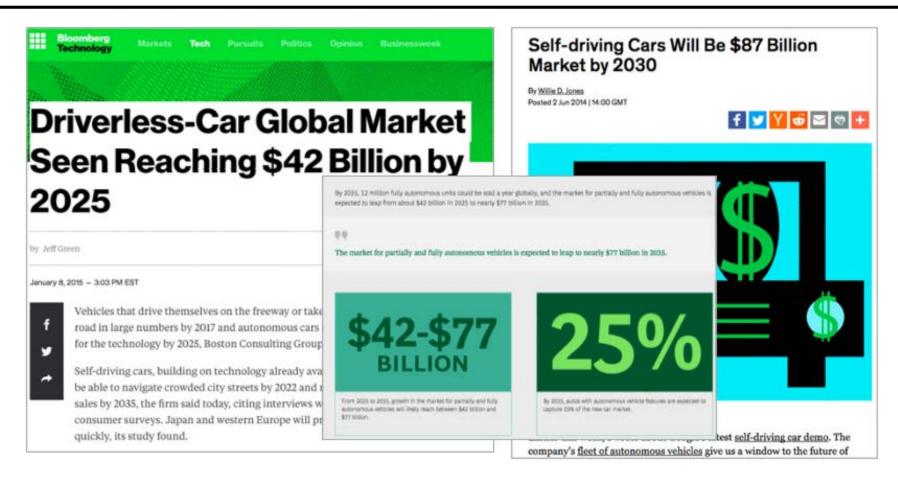
- Optimization strategies across the transportation network
- Drs. Akbas, Razdan and three students

Scenario Testing and Verification

- Data-driven process for the generation of complex scenarios
- Drs. Akbas, AlNaser, Sargolzaei, Razdan and one student



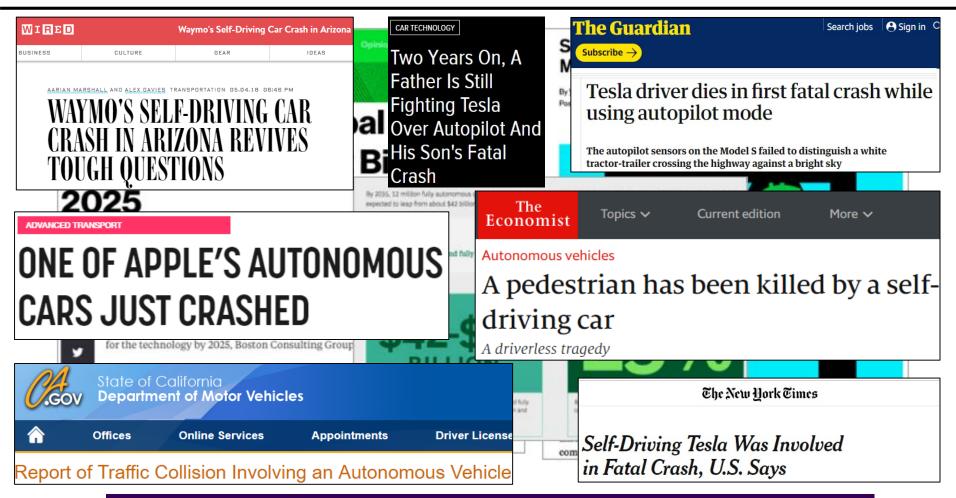
Market Estimates



Market estimates vary but several groups estimate the market over \$80 Billion in just under fifteen years



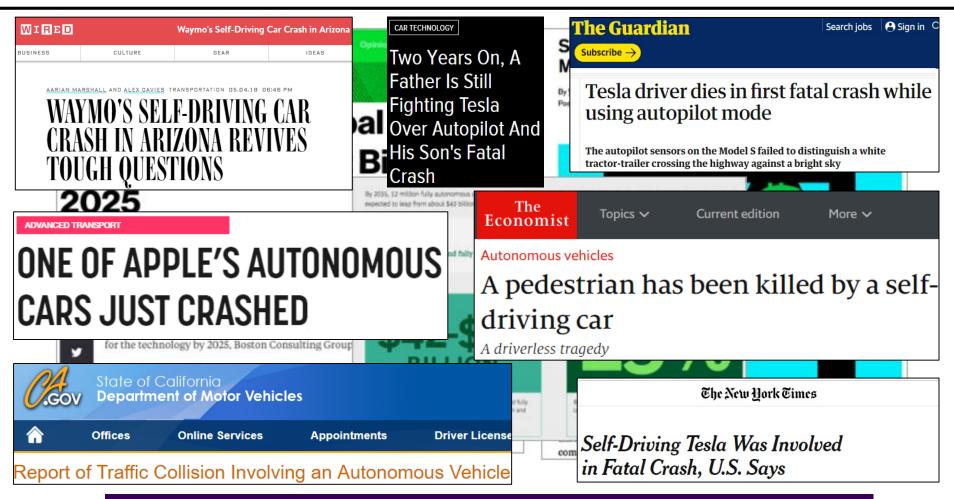
Market Estimates



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Research Goal



AMI research goal is focused on building a framework to identify complex rare scenarios for AV verification



Current Efforts in AV Verification

Real World Driving

- Low probability tests are difficult to produce
- Requires too many miles: Extremely slow and costly

Test Tracks

- Recreates various situations (intersections, highway, etc.)
- Can't be the sole solution for scenario analysis

Image Dataset Based Testing

- Datasets of images for assisted driving and AVs
- Slow and costly

All current verification efforts are slow, costly, hard to repeat and not progressive



AMI Verification Solution

Characterization

Decompose data sets from physical world into atomic blocks

Scenario generation

Build virtual models using atomic elements

Coverage analysis

Track cross-product cases

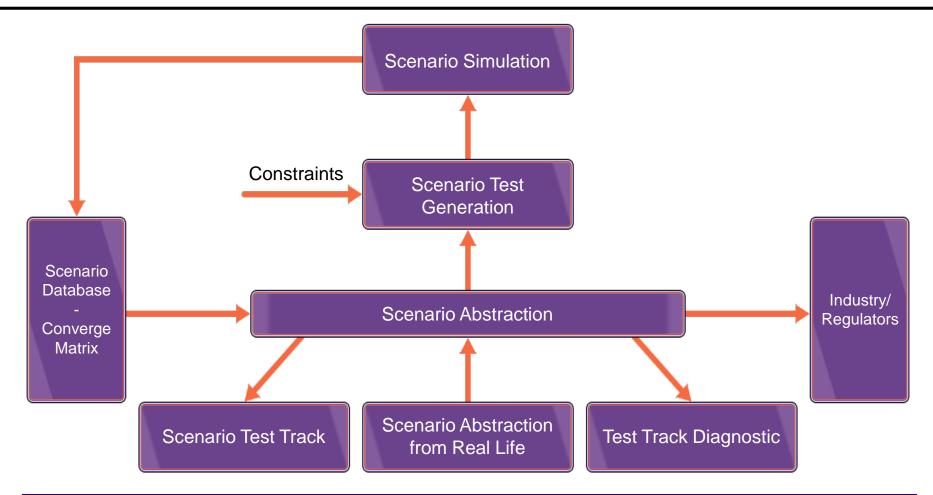
Certification

Based on coverage completion

AMI verification solution is focused on Decision Making of Autonomous Vehicles

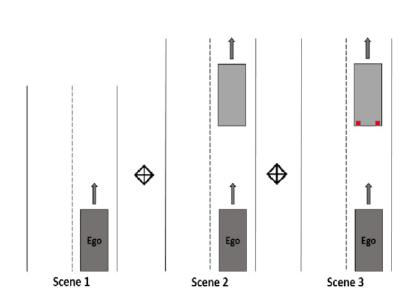


Scenario Abstraction



The framework serves as a ground truth for testing other sources of error such as environmental conditions or sensor failures

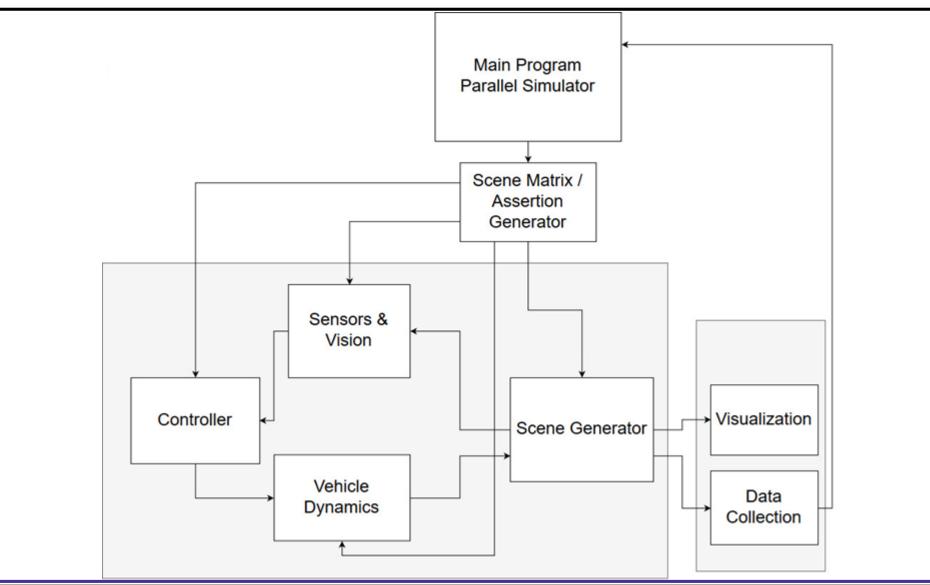
Formulation of Test Scenarios



- Developed a language of factors that define a scene
- Factors translated into parameters for formulation
- Formulation enables pseudorandom test generation



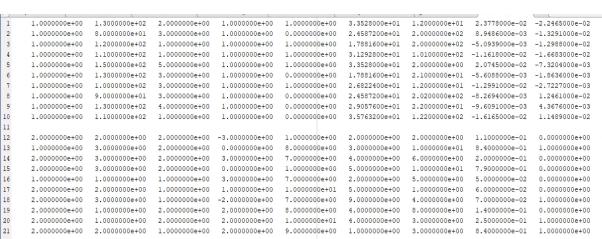
Simulation Architecture

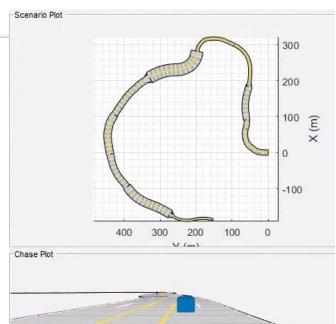




Implementation

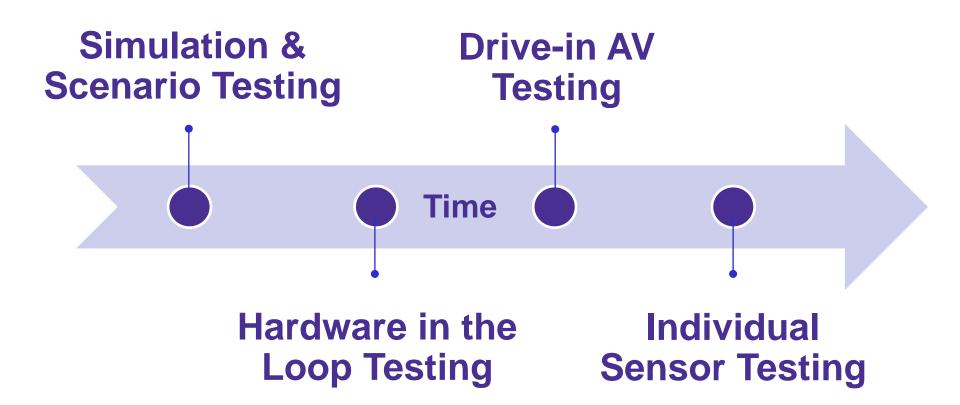
- Semantic language is used to define scenarios
- Actor, road segment and intersections are created/validated
- MATLAB ADAS toolbox is extended for implementation







AMI AV Verification Roadmap





Advanced Mobility Institute

Multidisciplinary Team on AV Research



Dr. Razdan



Dr. Akbas



Dr. Sargolzaei



Dr. Alnaser



Dr. Alsweiss



Gen. Polumbo



Dr. Sahawneh



Dr. Vargas

Florida Polytechnic University Board of Trustees December 5, 2018

Subject: Fundraising Readiness Assessment

Information Only

Information only – no action required.

Background Information

During the May 2018 Board of Trustees meeting, the Board requested a consultant be hired to determine the Foundation's campaign readiness. Convergent was hired and Kevin Aspegren and Carol Wick, Principal with Convergent Nonprofit Solutions, will report the results of the assessment.

Supporting Documentation: PowerPoint Presentation, Convergent Report

Prepared by: Kevin Aspegren, VP Advancement



Campaign Readiness Assessment Prepared For



November, 2018

CONFIDENTIAL

This Pre-Campaign Assessment intended solely for use by: Convergent Nonprofit Solutions and Florida Polytechnic University

| ASSESSMENT |

Convergent strongly believes that the fundamental elements of Asking Rights™ listed on the next few pages are fundamental when starting any major gift initiative or planning to conduct a successful fundraising campaign. Satisfaction of these elements endow an organization and its leaders with the right to ask for funds or Asking Rights™.

During the assessment performed, it was determined that Florida Polytechnic University does not have Asking Rights™ but they can increase their sustainability through major gifts and eventually conduct a successful campaign if some up from cultivation is done first. There are some opportunities to improve prior to launching a campaign and those recommendations below. Convergent is confident that by following the recommendations contained in this report, the agency can improve their chances of success, both near- and long-term. The following is a summary of the five fundamental elements of Asking Rights™ as they pertain to the agency along with high level analysis of each area and recommendations.

Compelling Need & Sense of Urgency

Effective Plan to Meet the Need Organizational
Effectiveness &
Fundraising Strength

Constituency has
Adequate Financial
Resources

Potential Campaign Leaders are Available, Interested, & Committed

I. COMPELLING NEED AND SENSE OF URGENCY

To have the right to ask for money from investors, the need should be a well-recognized community, societal, or individual need. It cannot simply be an organizational need. A compelling reason should exist to fund this program immediately.

Summary Assessment

Florida Polytechnic University has worked to create not only a strong strategic plan, but they have also developed a clear needs assessment. One of the greatest strengths of FPU is the well laid put plan that is compelling and clearly articulated.

Recommendations

FPU needs to answer the question "why do our prospective investors care?"

There are numerous universities, some even identified in the documents provided, that provide similar services. The question that needs to be clearly answered now is "Why FPU and not some other institution?" This messaging should be at the heart of all the materials produced and in the talking points of all staff. FPU talk about the smaller size, more hands on experience, but this needs to be connected to prospective employers and investors. How will the methods used to teach FPU students make them THE employees of the future? How will that benefit their companies?

II. EFFECTIVE PLAN TO MEET THE NEED

The plan should provide a practical, appropriate solution or response to the need. The plan must make logical sense based on the dollars provided in the budget.

Summary Assessment

The current plan clearly identifies the investment areas that need to be addressed. The document that has been developed does not have a clearly outlined budget for each area or outcomes for each area. It is important that investors can see not only the plan, but how much it will cost and what the impact will be. Connecting this to the overall strategic plan would make both stronger for a campaign.

Recommendations

Create a five year plan that includes the new vision for FPU that incorporates the strategic plan, capital campaign areas of need and budget. This will ensure that a potential investor can quickly see the direction and vision of FPU and see how their money will lead towards that vision. Incorporating the differentiators of FPU into the document with stories of success from the class of 2018 will make the case stronger.

It is also recommended that outcomes from jobs and placements of the first graduating class be used to extrapolate impact once the school has reached the 1244 student goal.

III. ORGANIZATIONAL EFFECTIVENESS & FUNDRAISING STRENGTH

An organization's governing board should be comprised of respected leaders; whose collective reputation can execute a successful funding campaign and effectively implement the proposed project. Board members should be enthusiastic, committed, and capable of supporting the campaign generously with their financial means, time, and other resources. The organization should have a positive reputation, a track record of success, or other attributes that will instill a sense of confidence in its ability to manage and implement the proposed project or program.

Summary Assessment

While the Foundation has had success raising funds, in order to launch a major campaign that will be the first of several phases, a major shift in strategy and focus needs to occur. The Foundation has identified prospects but has not launched a strategic effort to cultivate those prospects. The focus on a local major event is good but should not be the central effort in cultivation or fundraising. A world class university needs a fundraising strategy that extends beyond the local community. It should be equal in scope to the vision of the school.

The primary focus of the fundraising at this point should be cultivation of major donors and high profile campaign and advisory board members who can open doors to other prospects. This should be outside the local community and while Orlando is a rising tech hub, look into other communities with tech and STEM employee needs.

Recommendations

We recommend that Nonprofit develop the following:

- Grow the Foundation Board beyond Polk County. Have clear recruitment goals from other areas focusing on Tech and Tech hubs across the country. Consider adding a well-known, high profile, advisory board.
- 2. Shift the focus to cultivation of major gifts rather than trying to raise funds through special events.
- 3. Develop and implement a cultivation plan with dedicated staff and resources.

Board of Directors: A goal for any nonprofit should be to become the coveted "Board of Choice". It is imperative that a position on the board be significant achievement. This will draw the strongest fundraisers and those with the connections necessary to grow the organization. For many Boards, this is the hardest strategic move to make. The FPU board already has an impressive group but not many are known outside Polk County. Having regional, statewide or preferably nationally recognized champions will accelerate the brand recognition and credibility of the organization.

IV. CONSTITUENCY HAS ADEQUATE FINANCIAL RESOURCES

Individuals, businesses, corporations, foundations, and public entities that care about the identified needs should have the financial capacity to fund the proposed project.

Summary Assessment

One of the most significant challenges/opportunities facing FPU is to grow the universities' donor base. Currently FPU has a donor database that is less than 800 in the past 24 months. While the average gift size is around \$780, this is skewed by alumni gifts in the >\$10 range. While there are several major gifts, the prospect pool is limited in size and significantly reduces the ability to launch a successful capital campaign.

The organization has brainstormed a list of prospects but has not moved beyond to the next steps. It is time to move forward and start strong cultivation of 100-200 key prospects who can invest in FPU.

Recommendations

Given the strong strategic plan that has been developed, it is a perfect tool, when drafted as recommended above, to use to engage potential leaders and donors. This can be done through a process we call a "listening tour". In this process, similar to a feasibility study but focused on engagement and not asking for money. Meetings are held where the prospect is asked for their opinion on the vision and direction of the college as well as who the college should engage. A dedicated staff member or consultant should be identified to lead the effort. The process should take 3-6 months before a study, the first step in a campaign, is launched.

V. LEADERS HAVE BEEN IDENTIFIED

Leaders of influence and people of financial means should currently be associated with and committed to Nonprofit and the project. Alternatively, there should be strong evidence that the organization could readily recruit leaders of appropriate stature and means.

Summary Assessment

FPU needs to recruit a high-profile group to lead a major gift effort or a formal capital campaign if they are to be successful. Creation and cultivation of this group should begin immediately. Ideally, obtaining a leader from each of the target areas previously mentioned that are well known and respected within the community. It is important that those selected for the campaign leadership be free from conflicts of interest. This may mean that they serve only for four - five months on the committee, something most volunteers would appreciate.

Recommendations

The following Investor Tables outlines approximately how many investors are required to obtain a \$3 million goal over five years at a multitude of investment levels. This is just to give the organization an idea of the ranges of gift sizes and number of donors they will need to cultivate

prior to launching any kind of major capital campaign. In any fundraising endeavor, there will be hundreds of investors below the \$5,000 level but this conveys the level of investor required to make this endeavor successful.

Minimum Investment Levels Necessary to Guarantee A Campaign Goal of \$3.0 Million

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| Pledge Amount | No. of Pledges at this Level | \$ Amount this Level | No. of Pledges | Pledge Total |
|------------------|------------------------------|-------------------------------|----------------|-----------------|
| \$500,000 | 1 | \$500,000 | 1 | \$500,000 |
| \$250,000 | 2 | \$500,000 | 3 | \$1,000,000 |
| \$150,000 | 3 | \$450,000 | 6 | \$1,450,000 |
| \$100,000 | 6 | \$600,000 | 12 | \$2,050,000 |
| \$50,000 | 6 | \$300,000 | 18 | \$2,350,000 |
| \$25,000 | 8 | \$200,000 | 26 | \$2,550,000 |
| \$15,000 | 10 | \$150,000 | 36 | \$2,700,000 |
| \$10,000 | 12 | \$120,000 | 48 | \$2,820,000 |
| \$5,000 | 36 | \$180,000 | 84 | \$3,000,000 |

| CONCLUSION & NEXT STEPS |

FPU has done an excellent job of developing a plan for growth. The school has successfully graduated it's first class and is engaging new alumni. This assessment shows that the FPU should pause before launching a campaign to ensure all of the Asking Rights necessary are present. It is very important, to be successful long term, that they tap into the connections of the current investors and build the prospect base. Spending 3-6 months prospecting will allow FPU to continue to roll from campaign to campaign while cultivating new donors. Below is a recap or summary of the recommendations within this report. Within the next 90 days Nonprofit should:

1. Develop a major gifts committee with seasoned board and outside volunteers to drive the process. This should be no more than 4-5 people.

- 2. Create the 5-year vision with outcomes and a budget.
- 3. Create messaging for target groups around that vision with engagement action steps.
- 4. Identify prospects in line with the giving table to cultivate first.
- 5. Identify 10-20 foundations and businesses to target for cultivation.
- **6.** Launch cultivation plan with a dedicated staff member or consultant.

Convergent stands ready to partner with you in this endeavor and is here for questions, feedback and additional help while you undergo this process.

Florida Polytechnic University Board of Trustees Meeting Board of Trustees December 5, 2018

Subject: Strategic Plan Accountability Tracking

Proposed Action

No action required. Information only.

Background Information

President Avent will review the method for accountability tracking in achieving the University's strategic plan.

Supporting Documentation: PowerPoint presentation

Prepared by: Dr. Randy K. Avent, President

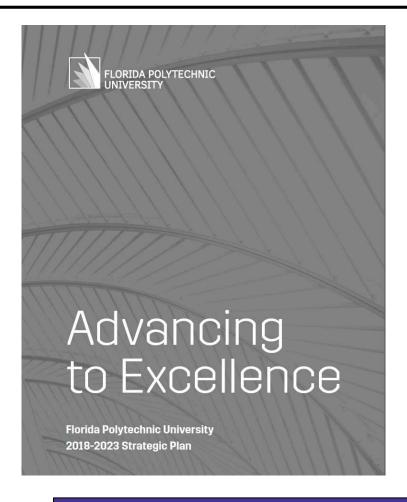


Strategic Plan Accountability Tracking

Randy K. Avent 5 December 2018



Strategic Plan



- Degree Alignment
- Student Success
- Economic Development
- Affordability & Efficiency

"Advancing to Excellence" provides the goals and objectives for Florida Poly to become a premier STEM institution



Plan Implementation

| DEGREE ALIGNMENT | Target | STUDENT SUCCESS | Target |
|--|---------|----------------------------------|----------|
| Enrollment | | Retention | |
| UG incoming class size | 380 | Retention (first-to-second year) | 72% |
| G incoming class size | 18 | 4-year graduation rate | 38% |
| Average SAT | 1290 | 6-year graduation rate | 62% |
| Average ACT | 29 | | |
| Freshman in top 10% of HS class | 18% | Jobs | |
| | | % BS graduates employed | 70% |
| Faculty | | Median wages for BS graduates | \$40,700 |
| Student-to-faculty ratio | 18:01 | % industry interns | 80% |
| % hours taught by adjuncts | <30% | | |
| | | Projects | |
| Instruction | | % industry capstone projects | TBD |
| % participation in programs | TBD | Number entrepreneurship efforts | TBD |
| Institutional effectiveness (NL) | 0% gap | Number UG research opportunities | TBD |
| AFFORDABILITY | Target | ECONOMIC DEVELOPMENT | Target |
| User Experience | | Research | |
| Noel Levitz overall experience (1,2,3) | >70% | Number proposals generated | 20 |
| | | Number proposals won | 5 |
| Spending | | Research expenditures | \$300K |
| % expenditures on instructional effort | 30% | | |
| Net tuition & fees per 120 hours | \$9,500 | Space | |
| PBF score | 70 | Instructional | 45989 |
| | | Academic support | 21135 |
| | | Instructional support | 17757 |

- "Advancing to Excellence" is a five-year plan
- Progress occurs through yearly "Operational Plans" that identify near-term (one-year) objectives
- Operational Plan is compiled and presented to BoT each spring for approval
- Progress measured with a set of performance metrics

Current operational planning approach to implementing strategic plan has challenges



Shortcomings

- Plan approved late spring after the budget cycle resulting in correlation but not causation between the two processes
- Plan "thrown" over the wall to the Trustees for approval with little strategic discussion and minimal Trustee input
- Plan compiled as a nearly complete list of departmental initiatives with little prioritization or focus – leading to departmental silos
- Plan uses metrics largely focused on traditional "financial" measures like retention, graduation rates, research grants, % graduates employed, ...



Balanced Scorecards

- Augments financial measures with three additional perspectives that provide a holistic view of the organization
 - Stakeholder relationship
 - Key internal processes
 - Learning and growth (foundational)
- Links measures to strategy and provides a process for prioritizing important initiatives that drive the budget
 - Board discussion around yearly priorities before the operational plan is built
 - Provides budgeting process tied to prioritized operational objectives
 - Provides mechanism for rewarding employee performance of strategic objectives
- Provides mechanism for ensuring a coherent and horizontal organization with thin membranes

Balanced Scorecard is essentially a dashboard created by taking a systems view of the organization

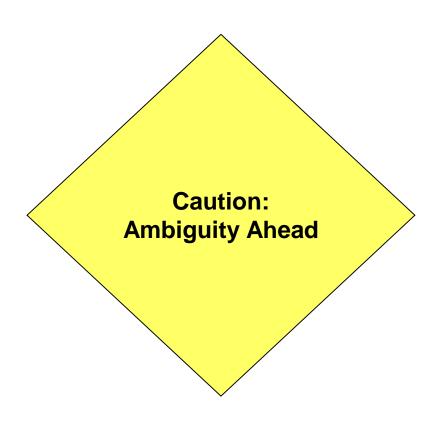


Outline

- Introduction
- Balanced Scorecard
- Perfunctory Analysis
- Summary



Transparency



Scorecard Layers

Financial strength fulfills our mission and vision

- An "effects layer" that measures financial outcomes
- Business financial measures are pecuniary, University financial measures are reputational

Stakeholder value provides our financial strength

- An "effects layer" that measures stakeholder value
- Stakeholders include industry, students and the state

Key business processes provide stakeholder value

- A "cause layer" that defines key business processes
- Bulk of the strategic plan focused on these key business processes

Foundations enable key business processes

- A "cause layer" not focused on processes
- Provides the "look, feel and actions" of the organization



Mission & Vision Statements

MISSION: To serve students and industry through excellence in education, discovery

and application of engineering & applied sciences

VISION: Florida Poly will be a premier STEM university known for producing highly

desirable graduates and new technology solutions

- Florida Poly will be a smaller, highly selective institution with well-rounded graduates (fundamentals, problem solving, professional development skills)
- Florida Poly will focus on applied research and build strong relationships with industry
- Florida Poly will remain a University dedicated to engineering, mathematical and physical sciences



Financial Layer

MISSION: To serve students and industry through excellence in education, discovery and application of engineering & applied sciences

VISION: Florida Poly will be a premier STEM university known for producing highly desirable graduates and new technology solutions

Financial strength fulfills our mission and vision

NATIONAL RANKINGS

Academic Reputation

Academic Productivity

Financial Resources

Academic Expenditures

Graduate Demand



Stakeholder Layer

NATIONAL RANKINGS

Academic Reputation

Academic Productivity

Financial Resources

Academic Expenditures

Graduate Demand

Stakeholder value provides financial strength

Sense of Place

Graduate Strength

Economic Impact

Strong ROI



Processes Layer

Sense of Place

Graduate Strength Economic Impact

Strong ROI

Key business processes that provide stakeholder value

ACADEMIC

Academic Brand
Programs of Distinction
User Experience

Technology & Pedagogy
Graduate & Research Programs
Co-curricular Campus
Enrollment Management

ADMINISTRATIVE

Facilities
Control Overhead
Extended Campus
Internal Services
Advancement



Foundation Layer

ACADEMIC

Academic Brand

Programs of Distinction

User Experience

Technology & Pedagogy

Graduate & Research Programs

Co-curricular Campus

Enrollment Management

ADMINISTRATIVE

Facilities

Control Overhead

Extended Campus

Internal Services

Advancement

Foundations enable us to execute the key business processes

The Right Students

Data-driven Decisions

Minimize Barriers

Responsible Organization

Build Meritocracy

Promote positive culture

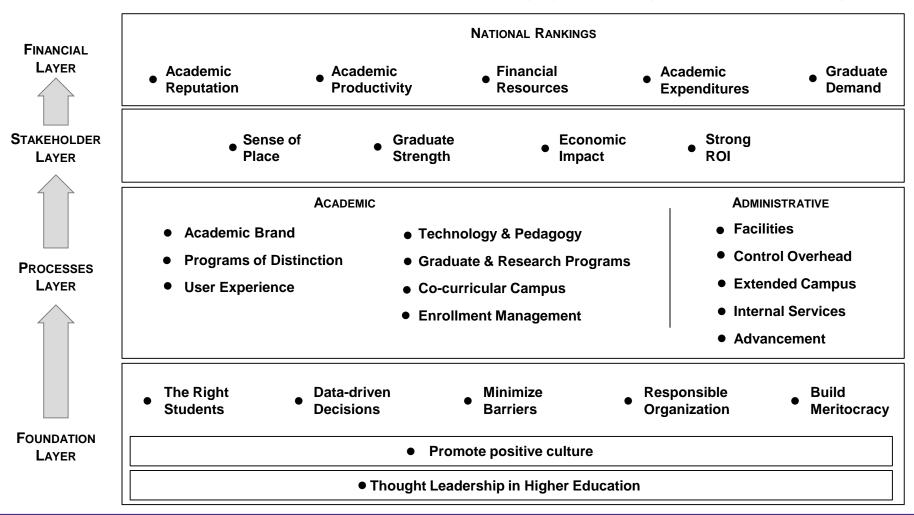
Thought Leadership in Higher Education



Florida Poly Scorecard

MISSION: To serve students and industry through excellence in education, discovery and application of engineering & applied sciences

VISION: Florida Poly will be a premier STEM university known for producing highly desirable graduates and new technology solutions





Outline

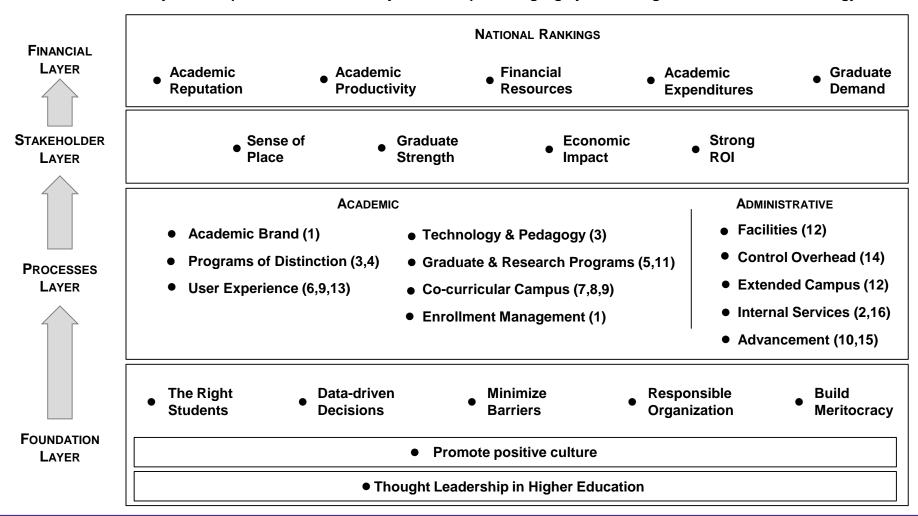
- Introduction
- Balanced Scorecard
- Perfunctory Analysis
- Summary



Strategic Plan Mapping

MISSION: To serve students and industry through excellence in education, discovery and application of engineering & applied sciences

VISION: Florida Poly will be a premier STEM university known for producing highly desirable graduates and new technology solutions

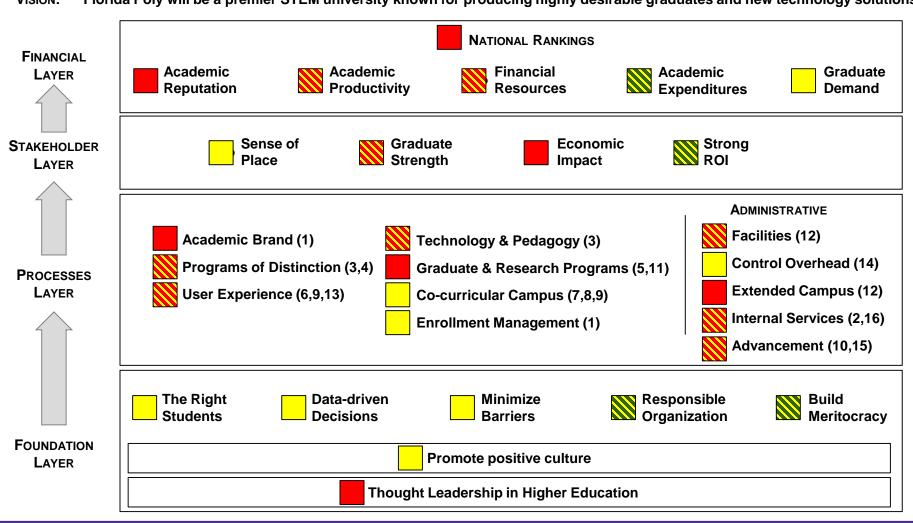




Perfunctory Analysis

MISSION: To serve students and industry through excellence in education, discovery and application of engineering & applied sciences

VISION: Florida Poly will be a premier STEM university known for producing highly desirable graduates and new technology solutions





Enrollment Management

Owner: Ben Matthew Corpus

Description:

 Provide deliberate and strategically crafted processes that build both national and international cohorts of students that fit Florida Poly's mission and aspirations to advance student achievement and obtain significantly enhanced market position.

Performance Analysis:

Florida Poly will be a small elite engineering school that excels in creating highly desirable graduates. To achieve this vision we need to improve our national rankings in popular reports like the US News Best College Rankings. These rankings depend on several factors including outcomes, social mobility, graduation and retention rates, graduation rate performance, faculty resources, expert opinion, student excellence and alumni giving. As a new institution we have made tremendous progress on many of these metrics, but can optimally increase our performance by focusing on: (1) Significantly improve our national reputation; (2) Enroll a high quality and diverse incoming FTIC class consistent with our aspirational peers; and (3) Increase the number of FTIC applications.

Performance analysis (cont'd)

- Significantly improve our national reputation
 - Expert opinion is weighted at 20% and consists of both peer assessment and high school counselor assessment. Because we have made significant progress on many of the larger metrics, and this metric is one we have not yet addressed, it should be our number one priority.
- Enroll a high quality and diverse incoming FTIC class consistent with our aspirational peers
 - Many of the additional metrics depend on student excellence. For instance, quality scores for our aspirational peers are 1400-1500 (SAT) and 32-34 (ACT). As the SAT and ACT scores increase, our financial metrics around outcomes, graduation rate, retention and expert opinion will also increase. For instance, for an increase in SAT scores from 1200-1400 our retention rate is expected to increase from 75% to 95% and our 4-year graduation rate will increase from 20% to 60%.
 - As a school devoted entirely to STEM (that historically have low graduation and retention rates) with no "retreat" majors, we will struggle to have graduation and retention rates that compete in the state's Performance Based Funding. For this reason we will also need to focus on enrolling that high quality incoming class.

Performance analysis (cont'd)

- Enroll a high quality and diverse incoming FTIC class consistent with our aspirational peers (cont'd)
 - In Florida, there are 234,882 high school graduates that took the SAT last year. Of those, there are only 1,932 graduates that want our majors and have the test scores that meet our standards. Many of those students attend out-of-state universities, which means that number is potentially as low as 300 students.
 - As we look to increase the diversity required to improve the quality of the student's education, the numbers become even more challenging. For instance, of those 1,932 high school graduates that want our majors, only 220 are female and 120 are African American. This means we have to significantly increase our recruitment efforts and pursue multiple paths to improve our diversity on campus.
- Increase the number of FTIC applications
 - As a small school devoted entirely to STEM we must have a student body that is exceptional in comparison to regional and other national universities. Student excellence is weighted at 10% and the university's acceptance rate is a dominant factor. The acceptance rate at Poly has approached 50% and that number should be significantly lower to compete with our aspirational peers and to attract new students.

Performance analysis (cont'd)

- Increase the number of FTIC applications (cont'd)
 - With a potential in-state student body of only 300, we must recruit heavily out of state where the target markets are significantly larger. For instance, in engineering alone we must investigate efforts in NY(855), NJ(703), PA(655), MA(455), Texas(1,615) and CA(2,217).
 - To improve our acceptance rate and increase student excellence, we must have 10 applications and one enrollment out of every 100 students we meet at a college fair.

Recommendations

- Significantly improve our national reputation
 - Re-brand the University as a highly selective institution of choice
 - Significantly expand and enhance Florida Poly's national reputation and academic brand to top STEM high school counselors and teachers through focused cultivation, relationship management and targeted stewardship
- Enroll a high quality and diverse incoming FTIC class consistent with our aspirational peers
 - Increase enrollments from top high school graduates through aggressive enrollment marketing, the design and development of econometric forecasting & data-informed financial aid leveraging

Recommendations (cont'd)

- Enroll a high quality and diverse incoming FTIC class consistent with our aspirational peers (cont'd)
 - Improve the campus experience for students (orientation, housing, student life, ...)
 - Improve the academic experience (affinity, connectivity, internships, placement, ...)
 - Increase transfer applications through articulation agreements to improve diversity efforts
- Increase the number of FTIC applications
 - Grow FTIC applications through micro-targeting & automated business intelligence systems
 - Develop & train staff for 21st century enrollment management strategy
 - Hit headcount goals by expanding the pie to transfer, out-of-state, international, and graduate students
 - Demonstrable overhaul of web site for content, navigation and aesthetic value for target population
 - Increase our high quality photo-journalistic assets for print & digital outreach
 - Increase our out-of-state high school visits and college fairs

Metrics

- Percent applicants with pre-calculus or calculus from top STEM high schools
- Number of UG applications from out-of-state top STEM high schools
- Number of applications from historically underrepresented groups (especially females and African Americans)
- Number of Transfer articulation agreements and MOUs with 2- and 4-year colleges
- Visits to Florida Poly recruitment events from high school prospects



Summary

- Balanced Scorecard provides a holistic method for tracking progress and having strategic discussions
 - Scorecard has 29 elements, 12 of which are processes
 - Goal is to prioritize, present and discuss each element over the next two BoT meetings
- Rollout (i.e., calendar and implementation roadmap)
 will also need to be addressed during the May BoT
 offsite
- Remaining large topics of discussion
 - Building a budget that enables this process
 - Allocation of priorities across the organization and rewarding employees for performance against those priorities

Florida Polytechnic University Board of Trustees December 5, 2018

Subject: Florida Polytechnic University Alignment to 2025 SUS Strategic Plan Goals

Proposed Committee Action

Recommend approval of the report "Florida Polytechnic University Alignment to the 2025 SUS Strategic Plan Goals" to the Board of Trustees.

Background Information

The Board of Governors requested that all State University System institutions conduct a crosswalk of their strategic plans to the 2025 State University System Strategic Plan to indicate alignment. The Board of Governors will review Florida Poly's strategic plan at its January 30-31, 2019 meeting.

Supporting Documentation: Report on the alignment of Florida Poly's strategic plan with the 2025 State University System strategic plan.

Prepared by: Rick Maxey, Assistant Vice President, Board Management and Economic Development



Florida Polytechnic University

Alignment to 2025 SUS Strategic Plan Goals

Teaching and Learning

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS |
|--|--|-----------------------------------|
| EXCELLENCE | | |
| 1) National Rankings for Universities | 1 in Top 10 Liberal Arts 1 in Top 10 Nation 1 in Top 11-25 Nation 1 in Top 25-50 Nation | N/A |
| 2) Freshmen in Top 10% of Graduating High School Class | 50% | 35% by 2024-25 (Currently 18%) |
| 3) Professional Licensure & Certification Exam Pass Rates Above Benchmarks | All Exam Pass Rates Above Benchmarks | N/A |
| 4) Percent of SUS courses bearing a "high-quality" rating in the Florida Virtual Campus online catalog | 90% | N/A |

Detailed definitions for each metric are provided in the back of the Board of Governors' Revised 2014 System Strategic Plan, available at http://www.flbog.edu/board/_doc/strategicplan/2025_System_Strategic_Plan_Amended_FINAL.pdf.

Teaching and Learning (continued)

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS |
|---|--------------------------------|--|
| EXCELLENCE | | |
| 5) Average Time to Degree (for FTIC in 120hr programs) | 4.0 | 4.5 by 2024 |
| 6) Four-Year Graduation Rates (for Full- and Part-time FTIC) PBF: ALL | 50% | 50% by 2024 |
| 7) Six-Year Graduation Rates (for Full- and Part-time FTIC) | 70% | 64% 2015-2021 (Accountability Plan) |
| 8) Percent of Bachelor's Degrees Without Excess Hours PBF: ALL | 80% | 80% 2020-21 (Accountability Plan) |
| 9) Bachelor's Degrees Awarded Annually PBF: ALL | 90,000 | 370 by 2020-21 (Accountability Plan) |
| 10) Graduate Degrees Awarded Annually | 35,000 ¹ | 12 by 2020-21 (Accountability Plan) |

Note 1:

Teaching and Learning (continued)

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS |
|---|--------------------------------|---|
| EXCELLENCE | | |
| 11) Bachelor's Degrees Awarded to African-American & Hispanic Students PBF: FAU, FGCU, FIU | 36,000 (40%) | 25 (7%) by 2020-21 (Accountability Plan) |
| 12) Number of Adult (Aged 25+) Undergraduates Enrolled PBF: UWF | 75,000 (21%) | 7 (2%) by 2023-24 (Accountability Plan) |
| 13) Percent of Undergraduate FTE in Online Courses | 40% | 2% 2020-21 (Accountability Plan) |
| 14) Number of Institutions with at least 30% of Fall Undergraduates Receiving a Pell Grant (Related to University Access Rate) PBF: ALL | All Institutions Above 30% | 29% by 2020-21 (Accountability Plan) |
| 15) Academic Progress Rate (2nd Fall Retention with GPA>=2) PBF: ALL | 90% | 79% by 2020-21 (Accountability Plan) |

Teaching and Learning (continued)

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS | |
|--|---|-------------------------------|--|
| EXCELLENCE | | | |
| 16) Bachelor's Degrees in Programs of Strategic Emphasis (Categories Include: STEM, Health, Education, Global, Gap Analysis) PBF: ALL | 45,000 (50%) (after 2012-13 revision) | 100% (Accountability Plan) | |
| 17) Bachelor's Degrees in STEM & Health (Percent of Bachelor's Total) | 30,000 (35%) (after 2012-13 revision) | 100% (Accountability Plan) | |
| 18) Graduate Degrees in Programs of Strategic Emphasis (Categories Include: STEM, Health, Education, Global, Gap Analysis) PBF: ALL (except NCF) | 18,200 (60%) (after 2012-13 revision) | 100% (Accountability Plan) | |
| 19) Graduate Degrees in STEM & Health (Percent of Graduate Total) | 15,200 (50%) (after 2012-13 revision) | 100% (Accountability Plan) | |

Scholarship, Research and Innovation (continued)

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS |
|---|---|----------------------------|
| EXCELLENCE | | |
| 20) Faculty Membership in National Academies | 75 (based on 2011) | O (Accountability Plan) |
| 21) Faculty Awards PBF: FSU, UF | 75 (based on 2011) | O (Accountability Plan) |
| 22) Percent of Undergraduate Seniors Assisting in Faculty Research Percent of Undergraduates Engaged in Research PBF: NCF | TBD Board staff will work to develop a standard definition for this metric across the System | TBD |

Scholarship, Research and Innovation (continued)

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS |
|--|--------------------------------|---|
| EXCELLENCE | | |
| 23) Total R&D Expenditures PBF: UF | \$2.29B (based on 2012-13) | \$427K by 2021 (Accountability Plan) |
| 24) % of R&D Expenditures funded from External Sources PBF: FAMU | 71% (based on 2011-12) | 81% by 2021 (Accountability Plan) |
| STRATEGIC PRIORITIES | | |
| 25) Number of Patents Awarded Annually | 410 (based on 2013) | O (Accountability Plan) |
| 26) Number of Licenses and Options Executed Annually | 270 (based on 2011-12) | O (Accountability Plan) |
| 27) Number of Start-Up Companies Created | 40 | 6 by 2021 (Accountability Plan) |

Community and Business Engagement

| PERFORMANCE INDICATORS | 2025 BOG GOALS REVISED 2014 | Florida Poly BOT GOALS |
|---|--------------------------------|--------------------------------------|
| EXCELLENCE | | |
| 28) Number of Universities with the Carnegie Foundation's Community Engagement Classification | All | By 2030 |
| STRATEGIC PRIORITIES | | |
| 29) Percentage of Baccalaureate Graduates Continuing Education or Employed PBF: ALL | 90% | 73% by 2021 (Accountability Plan) |

AGENDA ITEM: VIII.C.1.a.

Florida Polytechnic University Board of Trustees December 5, 2018

Subject: Capital Projects Report to the BOG

Proposed Committee Action

Discuss recommendations of the Finance and Facilities Committee related to the certification, signed by the President, Chief Financial Officer and General Counsel, that all capital projects were funded from legally available and authorized sources.

Background Information

BOG mandated such certification by University officers following events that occurred at UCF.

Supporting Documentation:

Certification of Funding Sources for Capital Projects

Prepared by: Mark Mroczkowski



Office of the Chancellor 325 West Gaines Street, Suite 1614 Tallahassee, FL 32399 Phone 850.245.0466 Fax 850.245.9685 www.flbog.edu

CERTIFICATION OF FUNDING SOURCES FOR CAPITAL PROJECTS

Since April 20, 2012 (date of inception) to the present, the University has constructed seven new capital projects adding more than 10,000 gross square feet of space or exceeding \$2 million in cost. For each capital project, we have reviewed University records, such as project budgets and expenditures, educational plant surveys, project programs, and project funding sources, necessary to determine that each project was constructed with funding from legally available and authorized sources.

Based upon our review, we hereby certify to the Florida Polytechnic University Board of Trustees and the Board of Governors, that each project was constructed with funds from legally available and authorized sources.

Florida Polytechnic University

Dr. Randy K. Avent/President

Mark Mroczkowski/Vice Piesident & CFO

Gina Delulio/Vice President & General Counsel

11.2.2018

¹ Pursuant to Section 1013.74(6), Florida Statutes, Florida Poly is authorized to expend reserve or carryforward balances from prior year operational and programmatic appropriations for legislatively approved fixed capital outlay projects through the 2022-23 fiscal year.

AGENDA ITEM: VIII.C.2.a.

Florida Polytechnic University Board of Trustees December 5, 2018

Subject: Carry Forward Report to the BOG

Proposed Committee Action

Discuss recommendation of the Finance and Facilities Committee related to the report to the BOG that accounts for existing carryforward funds to the Board of Trustees.

Background Information

The BOG has mandated a report for all (12) Universities that accounts for all State University System carryforward funds in a standardized format showing such funds as restricted or contracted, committed or available.

Supporting Documentation:

SUS FL Education and General 2018-19 Operating Budget Carryforward Fund Balance Composition - November 2018

Prepared by: Mark Mroczkowski

Florida Polytechnic University **Education and General** 2018-19 Operating Budget - Beginning Carryforward Fund Balance Composition November 2018 Special Unit or **University E&G** Campus (FIPR) A. Beginning E&G Carryforward Fund Balance - July 1, 2018: 412,289 97,196 Cash Investments \$ 29,903,103 \$ 7,049,536 Accounts Receivable \$ \$ -Less: Accounts Payable \$ \$ Less: Deferred Fees \$ \$ Beginning E&G Fund Balance Before Encumbrances: \$ 30,315,392 \$ 7,146,732 B. Expenditures to Date : 1,145,576 \$ C. Encumbrances to Date: \$ 1,227,625 D. E&G Carryforward Fund Balance - as of November 30, 2018: 27,942,191 7,146,732 \$ E. Restricted / Contractual Obligations 5% Statutory Reserve Requirement 1,859,672 Restricted By Appropriations \$ \$ 7,146,732 University Board of Trustee Reserve Requirement \$ _ \$ Restricted by Contractual Obligations: \$ Compliance Program Enhancements Audit Program Enhancements \$ \$ Campus Security and Safety Enhancements \$ \$ Student Services, Enrollment, and Retention Efforts \$ Student Financial Aid \$ \$ Faculty / Staff Instructional and Advising Support and Start-Up Funding Faculty Research and Public Service Support and Start-Up Funding \$ \$ \$ Library Resources \$ Infrastructure, Capital Renewal, Roofs, Renovation, Repair \$ 24,358,801 \$ Utilities \$ Information Technology (ERP, Equipment, etc.) \$ 1,723,718 **Total Restricted Funds:** \$ 27,942,191 7,146,732 Commitments Compliance, Audit, and Security Compliance Program Enhancements \$ \$ Audit Program Enhancements \$ _ \$ Campus Security and Safety Enhancements \$ -\$ **Academic and Student Affairs** Student Services, Enrollment, and Retention Efforts \$ Student Financial Aid \$ _ \$ Faculty / Staff Instructional and Advising Support and Start-Up \$ \$ Faculty Research and Public Service Support and Start-Up Funding Library Resources \$ _ \$ Facilities, Infrastructure, and Information Technology Infrastructure, Capital Renewal, Roofs, Renovation, Repair \$ \$ Utilities \$ _ \$ Information Technology (ERP, Equipment, etc.) \$ - \$ **Total Commitments:** \$ _ \$ G. Available E&G Carryforward Balance as of November 30, 2018: \$ \$ 0 Flease provide details of earmark reserve balances (specific issue name, appropriation year, amount).

<u>5% Statutory Reserve Requirement</u>: in compliance with 1011.40(2), Florida Statutes, each institution shall provide a written notification to the Board of Governors if, at any time, the unencumbered balance in the education and general fund of the university board of trustees approved operating budget goes below 5 percent. As a result, each university reserves an amount equal to 5 percent of its unencumbered balance in the education and general fund.

<u>University Board of Trustees Reserve Requirement</u>: the amount of unrestricted funds set aside by the University Board of Trustees to address critical, unforeseen, or non-discretionary items that require immediate funding, such as unanticipated or uninsured catastrophic events, unforeseen contingencies, state budget shortfalls, or university revenue shortfalls.

Restricted by Appropriations: funds appropriated by the Legislature for a specific purpose as identified by law or through legislative work papers.

<u>Compliance Program Enhancements:</u> initiatives associated with being in compliance with federal law, state law, Board of Governors Regulations or any other entity with which the University must comply.

<u>Audit Program Enhancements:</u> initiatives associated with implementing audit programs of the institution. <u>Campus Security and Safety Enhancements:</u> the support of campus security and/or safety issues, such as the recruitment of police officers, vehicles, equipment, and investments which promote security and safety at the institution. This issue may also include mental health counseling and services.

<u>Student Services, Enrollment, and Retention Efforts:</u> funds to promote student success through supporting student services programs, addressing enrollment, and assisting with retention efforts to support timely graduation.

<u>Student Financial Aid:</u> funds aimed to reduce student costs and provide the opportunity to obtain a degree in an affordable and timely fashion.

<u>Faculty/Staff Instructional and Advising Support and Start Up Funding:</u> funds identified to support instructional and advising activities, and/or start- up packages for new faculty. Start up packages are often expended over a multi-year period.

<u>Faculty Research and Public Service Support and Start Up Funding:</u> funds identified to support research and public service, and any associated start up funding. Start up packages are often expended over a multi-year period.

<u>Library Resources:</u> materials and database access required to support programs of study and research. <u>Infrastructure, Capital Renewal, Roofs, Renovation and Repair:</u> funds to support the maintenance of university infrastructures. Such costs may include the following: preventive maintenance, replacement of parts, systems or components; and other activities needed to preserve or maintain the asset.

<u>Utility Costs:</u> the support of utility costs throughout the university.

<u>Information Technology (ERP, Equipment, etc.)</u>: funds to improve operational productivity, educational improvements, and technological innovation, implementation and/or maintenance of ERP systems, and technological equipment purchases.

Florida Polytechnic University Board of Trustees

Subject: Creation and Operation of a BOT Executive Committee

Proposed Action

Discuss recommendations of the Governance Committee related to the creation and operation of a BOT Executive Committee.

Background Information

The BOT determined that it would like to create an executive committee this year to improve Board operations. The Governance Committee is making a recommendation on who should be on the executive committee and what authority the executive committee should have. Once determined, the Bylaws will be amended to reflect the creation of the Executive Committee and state what authority it has.

Supporting Documentation:

Summary of Membership and Authority of Executive Committees at Other SUS Institutions

Prepared by: Gina DeIulio, General Counsel

Summary of Membership and Authority of Executive

Committees at Other SUS Institutions

| | Committee Membership | Committee Authority | Reporting to Full Board |
|-----|--|--|-------------------------------|
| UCF | Board Chair and committee chairs | empowered to act on matter that, in the opinion of the | Actions taken by the |
| | | board chair, must be timely approved between regularly | Executive Committee shall |
| | | scheduled Board meetings | be reported to the Board at |
| | | | the next Board meeting |
| USF | The Chair and Vice-Chair of the Board | authority to act for the Board of Trustees on all matters | The Governance Committee |
| | of Trustees shall be members. In | except for the following, which shall be reserved for the full | shall meet as often as |
| | addition, three (3) trustees shall be | Board: appointing and removing the President; approving | necessary to conduct |
| | appointed by the Chair to serve on the | or discontinuing programs; board officer selection; Campus | business as the Chair and |
| | Governance committee. In addition, | Board membership; changes in institutional mission and | President shall determine, |
| | the President of the University System | purposes; changes to the operating procedures; incurring | and it shall ensure that |
| | shall be a non-voting ex-officio | of corporate indebtedness; and adoption of the annual | minutes are taken of such |
| | member | budget | meetings which will be |
| | | | distributed to all Trustees |
| | | | for information at the next |
| | | | regular meeting of the |
| | | | Trustees |
| FIU | Board Chair, Board Vice Chair and all | may exercise all powers and authority of the Board on an as | All actions taken by the |
| | Committee Chairs | needed basis between regular Board meetings for time | Governance Committee |
| | | sensitive matters, subject only to such restrictions or | pursuant to this authority |
| | | limitations as the Trustees may from time to time specify, | shall be reported at the next |
| | | except that the following matters shall be reserved to the | meeting of the full Board, or |
| | | full Board for approval (i) Board officer selection, (ii) | when deemed sufficiently |
| | | changes in the mission and purposes of the institution, (iii) | important by the Board |
| | | presidential selection and termination, (iv) amendments to | Chair and the University |
| | | the Bylaws, (v) debt issuances, (vi) sale or other disposition | President, such actions shall |
| | | of The Florida International University Board of Trustees | be reported to the Trustees |
| | | Bylaws Page 8 real property, (vii) the University's annual | within thirty (30) days after |
| | | operating and capital outlay budgets and the University's | such action is taken, or at a |
| | | Capital Improvement Program list for funding by the | meeting of the Trustees if a |
| | | Legislature, including the Public Education Capital Outlay | meeting is held within that |
| | | list, and (viii) any other matter required by law or Board of | period of time |
| | | Governors' regulation to be approved by the full Board | |

Summary of Membership and Authority of Executive

Committees at Other SUS Institutions

| | | 1 | |
|------|--|---|------------------------------|
| FAMU | Board Chair, the Chairs of the | authority of the Board to act between regular Board | The actions of the Executive |
| | Academic Affairs Committee, Audit | meetings on matters which are either ministerial or which | Committee shall be |
| | and Compliance Committee, | must be decided before the next Board meeting | reported to the Board at its |
| | Budget/Finance Committee, Student | | next regular 4 Board |
| | Affairs Committee, Facilities Planning | | meeting and shall be |
| | Committee and Direct Support | | confirmed and approved by |
| | Organization (DSO) Committee. The | | the Board, if required |
| | Corporate Secretary shall be an | | |
| | exofficio member without a vote | | |
| UWF | The chair and vice chair of the Board | | |
| | of Trustees, and the chairs of the | | |
| | standing committees of the Board, | | |
| | and the president of the university, | | |
| | who shall be ex-officio without vote, | | |
| | and the Board chair may appoint one | | |
| | additional trustee | | |