



## FES STRATEGIC PLAN

### Goal 1

#### Promote the Engineering Profession

##### Objective 1

###### Encourage Engineering as a Career

- It is no longer a secret. America is lagging behind in the global race to produce technological graduates. Innovation has been the key to the rise of every great civilization. America is no exception, but we are in danger of losing our edge. America's schools are not emphasizing coursework in mathematics and science that is the foundation of all technological learning. In addition, our schools are not stimulating those students who are proficient in math and science to consider engineering as a career choice, or they are engaging students too late in the process. As a result, engineering graduates are in short supply. Minorities, and women, are particularly under-represented. It is up to us to do something to reverse this trend. The active participation of practicing engineers in our schools cannot help but raise the visibility of our profession, increase the number of students entering the engineering field and provide much needed support to our education system.

To achieve this objective we will: Develop a grassroots workforce, train and equip them to promote involvement of practicing engineers with students in grades K-12 and beyond. Identify and evaluate existing student involvement programs. Promote and support the programs that are deemed to be most effective in producing future engineers. Establish a system of communication to link volunteers with school programs. Emphasize efforts to reach minority students. Use metrics to evaluate our progress and fine-tune our efforts.

##### Objective 2

###### Enhance the Stature of Engineer, Particularly Professional Engineers

- Engineers affect all aspects of society and impact the quality of life they enjoy. In spite of this contribution, society is not aware of our accomplishments and abilities. Instead, engineers are stereotyped by the public and are relegated to a technical role which restricts our ability to benefit society in a broader capacity.

Society will benefit from a greater understanding and appreciation of our abilities. Further, FES holds that society is best served by engineers who are licensed and accountable to the public.

The strategies under this objective should identify the causes of stereotyping engineers and emphasize how licensure enhances the image of the engineer. The strategy should further evaluate the effectiveness of existing FES programs and efforts and develop appropriate outreach strategies and actions to affect measurable gains in stature. Metrics should be developed to document and track progress and reported annually to the membership.

### **Objective 3**

#### **Encourage Community Involvement**

- A major contributing factor to the lack of involvement of engineers in civic and community positions of leadership is the non-participation of engineers in community organizations and activities. As a result, people in general have little understanding of what engineers do, how they contribute to society, what kind of people they are, and the value of engaging them in public dialogues affecting the welfare of society.

In support of this objective, a strategy is needed which: (1) clearly articulates the needs and benefits of community service by engineers, (2) identifies opportunities and ways in which engineers can become involved in community and charitable organizations and activities, (3) develops and implements a plan to inform and engage our membership in community service, (4) develops and applies metrics to track membership involvement in community service, and (5) effectively communicates and publicly recognizes members who have become active in such organizations and activities.

### **Objective 4**

#### **Promote Engineering Licensure and Ethics**

- Professional engineers are accountable to society to practice in a manner that preserves the public health, safety and welfare. We are held to this high standard of performance by both registration law and an ethical code. The Florida Board of Professional Engineers (FBPE) regulates all professional engineers in Florida and our adherence to the registration law. While the Florida Engineering Society examines ethical violations of its members, the FES holds that society is best served by engineers who are licensed and accountable to the public, and, therefore, encourages all engineers practicing in Florida to become licensed.

In order to increase licensure of engineers, we should evaluate the effectiveness of current FES efforts relating to licensure and develop a plan of activities that

incorporates both the currently effective efforts and new initiatives. These efforts and initiatives should enhance the practice of currently licensed engineers and their relationship with the FBPE as well as encourage currently unlicensed engineers to seek licensure. Similarly, we should evaluate current efforts relating to ethics and assure that we continue to meet the needs of FES and the profession in this regard. Metrics should be developed to assess the increase in the number of licensed engineers as compared with the total number of engineers in Florida.

## **Goal 2**

### **Participate in Public Policy at All Levels**

#### **Objective 1**

##### **Promote Public Involvement by Engineers**

- There is no doubt that engineers and their efforts critically impact every community in Florida. The heart of every city and county beats because of the infrastructure designed, built and maintained by engineers. However, engineers are grossly underrepresented within the groups that establish and implement public policy. Engineers have a unique and effective process for engaging challenges and these talents should be offered to help move our society forward.

Strategies under this objective should clearly identify opportunities for engineers to participate in the public process and aggressively encourage participation. Such opportunities would include volunteer organizations, appointed advisory boards, policy review boards, agency boards and the like. The leadership of the society should accept the responsibility to identify individual engineers suited for these opportunities and provide support to expedite their participation. The strategies should also establish a long term program to identify individual engineers who are capable and interested in seeking public office or high level appointed public positions.

#### **Objective 2**

##### **Strengthen Legislative Activities**

- Every year, legislation is introduced that impacts engineers, either directly or indirectly. Proposed legislation may affect our livelihood, the manner in which we perform our work, and public health, safety and welfare. We must remain vigilant in our efforts to monitor, propose, support or oppose legislation based on its impact to our profession and the health, safety and welfare of the public. While this effort would be difficult for the individual engineer to accomplish alone, FES is well suited to undertake this task. FES directly lobbies legislators

regarding specific legislation and supports the campaigns of political candidates who are willing to champion the interests of the professional engineer.

We FES should maintain and enhance its current fundraising and lobbying efforts to increase our visibility and our ability to influence legislation. We should examine the level of success of our current methods of fundraising, set goals to increase our effectiveness, and benchmark our efforts with those of other professions. We should maintain our lobbying teams and increase our efforts at the grassroots level. We should examine and improve our current process of establishing our annual legislative agenda.

### **Objective 3**

#### **Influence Rulemaking**

- Similar to legislation, rulemaking by state agencies impacts engineers, both directly and indirectly, and may affect the public health, safety and welfare. Rulemaking by the Florida Board of Professional Engineers (FBPE) directly concerns the activities of the Professional Engineer. Rulemaking by state agencies such as the Florida Department of Transportation, the Florida Department of Environmental Protection and the Water Management Districts impacts the health, safety and welfare of the public and may affect the manner in which engineers perform their work.
- FES has created the Board-level position of FBPE Liaison to monitor and influence the FBPE and to foster a closer working relationship between FES and the FBPE. FES also monitors rulemaking and assigns proposed rules to the appropriate FES committee to monitor and influence the process through participation on Technical Advisory Committees, Policy Advisory Committees and Citizens Advisory Committees. FES indirectly influences rulemaking by making recommendations for filling vacancies on state boards and commissions. FES should continue to support and expand these activities and identify additional methods to influence rulemaking.

### **Objective 4**

#### **Strengthen Relationships with Public Entities**

- Creating, developing and strengthening relationships with public entities are critical to the engineering profession. Every year, public agencies seek to pass legislation, develop rules and policies that directly impact the work engineers perform for the public and private sectors. Unintended consequences of new legislation, new rulemaking and new policies can have a negative effect on solutions that engineers will propose to clients. Strong relationships would allow public entities to draw on engineering expertise from a wide variety of sources

within FES, helping public entities make informed and correct changes to laws, rules and policies. While closely aligned with Objective 3, this objective should focus on encouraging stronger relationships with public entities.

The FES should seek to create, develop and strengthen relationships with public entities. New initiatives should develop strategies that allow the FES to become industry experts and invited to comment on agency legislative changes, rule changes and policy changes prior to submittal for approval. The FES should also strengthen its outreach efforts to public sector engineers who are often left out of private sector associations due to the nature of public service. Strategies should be developed to increase the number of public sector engineers involved with the FES. Metrics should be developed to benchmark and track the effectiveness of these new initiatives.

### **Goal 3**

#### **Provide Outstanding Service to Members**

##### **Objective 1**

###### **Improve the Professional Development Program**

- FES members, in order to stay current with technological advancements, expand their professional and business skills and comply with FBPE rules, participate in life-long learning opportunities. The FES promotes such continuing education activities and provides the members with an extensive menu of professional development opportunities. These opportunities consist primarily of traditional in-person seminars, but also include web based and published CD courses. The professional development program has become widespread and accounts for a large portion of the society's revenues. However, the unparalleled expansion of the program has had a significant impact on the FES resources as the surge of the program has not been supported by a corresponding growth in member participation on the Professional Development committee.

The strategies under this objective should include an evaluation of the delivery methods of the program and an assessment of the relative success of each. They should also consider improving the program topics and expanding learning opportunities. The FES leadership should develop new ways to engage members in the PD planning process and seek interested members to significantly expand the Professional Development committee. The committee and FES leadership should review existing metrics that measure the level of participation and the approval rating of the PD programs.

##### **Objective 2**

###### **Strengthen FES Structure and Governance**

- The structure of an organization should represent its intended function and goals and should be updated periodically to enhance its effectiveness and to

correspond to an ever changing environment. Therefore, the FES structure should be examined, and modified as necessary, to reflect the goals and objectives of this strategic plan in order to address our needs, unique demographics, geographic challenges, and varying levels of participation of our members.

The strategies under this objective should include evaluating effectiveness of existing committees, practice sections, regions and chapters and assess their success against their intended goal. Consideration should be given to subjecting all committees to a sunset review and to the use of Task Forces to address specific issues. This also includes an in-depth evaluation of our practice sections and their relevance in light of recent history of activities (or lack of) and this new strategic plan. We should also consider alternative chapter designations such as virtual chapters, etc. It is our intent to have this objective completed by January 2008 with an implementation goal of August 2008.

### **Objective 3**

#### **Strengthen Communication and Interaction among Members**

- Most members of the Florida Engineering Society will readily confess that their initial involvement with the organization came as a result of being asked to participate by a colleague, supervisor or friend. Further, those who continue to participate do so largely because of the fellowship with and interaction among fellow engineers and society members. The ability of the FES to thrive in the future will depend on the capacity of the leadership to communicate with members and to create an environment that encourages interaction among members.

The strategies under this objective should include a review of current communication methods and development of a comprehensive communication plan that employs the best of printed and web based communication and maintains the role of face-to-face meeting opportunities to enhancing communication and interaction. The strategies should also take a focused look at the current chapter structure and its effectiveness in creating meaningful interaction. It should also consider forward thinking opportunities such as virtual chapters, discussion boards, chat rooms and other similar “net uses” that are readily understood and employed by the new (and future) generation of engineers.

### **Objective 4**

#### **Engage Young Engineers**

- Equally important as engineering education and the lack of engineering students in the future, is the critical need, for the strength of the FES in the future, to engage and attract young engineers to its membership. As the number of

graduating engineers drops, it will have a direct impact on the membership levels of the FES in the future.

The strategies under this initiative should include developing a comprehensive plan to attract and engage young engineers to membership in FES. Consideration should be given to understanding what the needs of young professionals today are from a professional, social, and economic perspective. Once needs are known, initiatives should be developed to meet as many of those needs as possible by the FES. Initiatives should also be developed to involve young engineers in the FES and help them meet career aspirations. Developing initiatives and strategies to allow young engineers to become leaders or technical experts in their fields is critical to the future of the FES. Metrics should be developed to track the effectiveness of the engagement program including the satisfaction of young engineers.

As of 9.05.07