



Five-Year Strategic Plan

Approved May 2017



Executive Summary: Chicago Engineers' Foundation 2017 Strategic Plan

The Chicago Engineers' Foundation (CEF) is at an exciting stage of development. The leadership seeks to embark on the organization's first, five-year strategic plan. This plan is meant to organize its stakeholders around common goals, articulate and prioritize strategies, and secure the long-term growth and health of the organization. The multi-year strategic plan will roll out in 2017 and can be updated over the next five years as deemed appropriate by the Board of Directors.

Introduction

CEF last embarked upon a strategic planning exercise in 2011, resulting in an updated mission statement and several key strategies that have guided CEF over the last six years. Since that time, CEF has made numerous improvements in administration and process; has expanded its activities to better address its mission and vision; and has grown the interest of Chicago high school students in engineering and the Awards Program. As a result, the identified need for CEF's programming has grown. Further, the organization's stakeholders seek to make a greater impact on the lives of engineering students. The strategic plan includes opportunities to grow the organization's funding and scope in order to better address the Foundation's mission and vision, build on CEF's recent growth, and support the growing financial impact on aspiring engineers.

Goals and Objectives of the Plan

The goals of the strategic plan include encouraging students to pursue engineering, increasing the financial impact on our scholars, and increasing the long-term success of each CEF scholar. Each goal includes an array of objectives which will be prioritized by year and according to the needs of the organization. The key five year goals include:

1. Ensure the long-term sustainability of the CEF and increase the total annual budget to \$550,000.
2. Increase outreach to at least 80% of STEM related high schools.
3. Increase the incentive award to 20% of the current UIUC base tuition.
4. Increase the prominence and awareness of the CEF within ULCC and the greater Chicago community
5. Increase the long-term success of our students both through successful completion of their undergraduate program and in their careers.

Implementation

Prior to the beginning of each fiscal, the Board will approve the key goals and activities for that year as outlined in Table 4. Each year this plan will be updated based on the prior year's accomplishments, the goals for the coming year and any other changes necessitated by changes in the relevant environment. The plan will continue to cover a five-year period from the then current year.

Resource Details

The resources needed to undertake the objectives of the plan and achieve the goals include, but are not limited to, an engaged and enthusiastic Board of Directors, well-qualified staff support, volunteer involvement, participation from members of the ULCC, well-thought out external fundraising plans, and increased outreach to Chicago schools, engineering societies, and local engineering firms.

Team

The CEF Board created an ad hoc Strategic Planning Committee to address the creation and coordination of the plan. Members of the committee included Officers, Directors and the Executive Director. This team was responsible for the research and development of the plan's goals and objectives, which were created with consultation with a variety of stakeholders and partners including the Board of Directors and Advisors.



Brief History of the Chicago Engineers' Foundation

The Chicago Engineers' Foundation began as a conclusion to the Chicago Engineers Club. The initial objectives of the Foundation included the award of engineering scholarships to outstanding high school students in the Chicago area. The officers and directors of the Foundation solicited contributions from the members of the Chicago Engineers Club to fund the activities of the new Foundation. Since 1969, the number and value of the awards have increased, from ten \$100 awards to over \$110,000 in awards to over 100 students in 2016.

Strategic Plan Framework

Mission and vision

The prior mission statement for CEF, adopted May 20, 2011, states:

The Chicago Engineers' Foundation of the Union League Club (the "Foundation") develops and promotes programs that support the study of engineering and that create active interest among engineers in civic affairs for children and adults in the Chicago metropolitan area.

This mission statement, and the broader strategic planning exercise created in 2011, have guided the direction of CEF for six years, resulting in activities beyond simply funding awards. For example, the high school outreach program emerged from the 2011 efforts.

Since that time, CEF has continued to build upon distribution of awards and high school outreach, and to improve and streamline the internal workings of the Foundation. We have also begun to explore other ways in which we can "develop and promote programs that support the study of engineering". CEF also recognizes the need to be focused in its mission.

As part of this new Strategic Plan, CEF's new mission statement is:

Encourage and empower young people to become the next generation of engineers through scholarship opportunities, outreach to educational institutions, and promoting interest in engineering as a career.

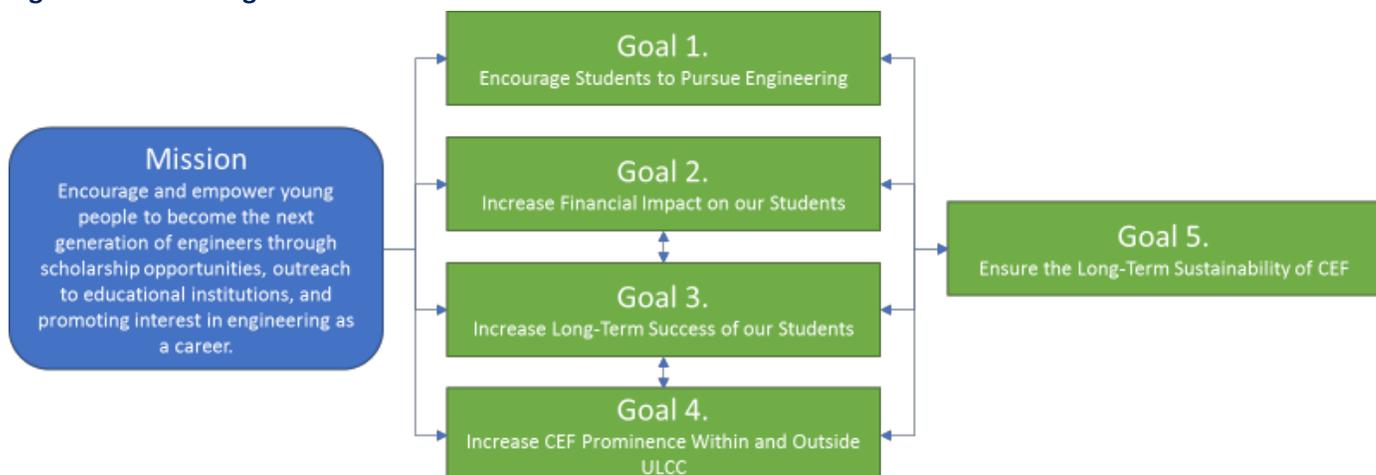
Call to Action:

We want the CEF to be the "go to" organization in Chicago for engineering scholarship and outreach.

Goals, objectives, and strategies

Figure 8 presents CEF's Strategic Framework. Below is a description of the more specific objectives associated with each goal, as well as detailed strategies associated with each objective. There is much interaction and dependence between the goals: many strategies and objectives will influence multiple goals.

Figure 8. CEF Strategic Framework





Goal 1. Encourage Students to Pursue Engineering

Objective 1.1. Continue to increase our high school outreach in Chicago, covering an even geographic distribution across the City and present at a minimum of 80% of STEM-related schools annually

- Identify the STEM-related schools for focus.
- Work with ED to streamline the school outreach process. Make it consistent, efficient, and easily repeatable each year.
- Solicit post-outreach feedback from volunteers.
- Develop an activity tool kit for volunteers that includes activities to do with the students during presentations, hand-outs, videos, and a standard presentation file.
- Identify shadowing opportunities for interested high school students

Objective 1.2. Make every high school in Chicago aware of our award annually.

- Update the high school contact list by identifying the right contacts at each school.
- Each year, send the award info to contacts, follow-up, and, if necessary, update the contact list.

Objective 1.3. Encourage interest in engineering for pre-high school students

- Host engineering career fair-type events for middle school students, teaming with ULC Boys and Girls clubs.
- Continue to sponsor and help judge the Future Cities competition.

Goal 2. Increase Financial Impact on our Students

Objective 2.1. Increase incentive award to be 20% of 2016/2017 UIUC base tuition (to be reevaluated every 5 years)

- Work with Awards Committee, Finance Committee to develop a detailed strategy and budget for increasing awards over 5 years; revise budget annually
- Strategies under Goal 4 will ensure the completion of this objective

Objective 2.2. Increase number of awards to 135 in total per year

- Strategies under Goal 4 and 2 will ensure the completion of this objective

Goal 3. Increase Long-Term Success of our Students

Objective 3.1. Facilitate internship/shadowing opportunities between our students and our sponsors

- Advertise corporate sponsorships as an opportunity to get access to our pool of students
- Host job fair at a strategic time around the holidays to maximize attendance of our students and sponsors

Objective 3.2. Initiate a mentoring program for our college students

- Create a new Mentoring Committee, working to provide current scholars with opportunities for networking, mentoring and support during their award year. A range of passive and active ideas for consideration include:
 - Send an email at the beginning of the school year with CEF contact points, to indicate we are available to provide support as needed.
 - Create a mentoring toolkit. This can include timelines, talking points, and activities, and can leverage Google Docs for tracking.
 - Assign specific mentors to students, with quarterly touchpoints and assigned responsibilities. The mentor can also remind students to apply for the award.
- Invite Board members, advisors, volunteers, and Friends of CEF to participate in mentoring activities.



Goal 4. Increase CEF Prominence Within and Outside ULCC

Objective 4.1. Form and grow active partnerships with top major stakeholders in Chicago in engineering and industry communities

- Members of executive committee get on agenda of, and attend, board or other events of at least 12 professional societies per year to advertise and promote CEF awards, volunteer opportunities, and fundraising opportunities/events
- Other board members and advisors to reach out to engineering organizations in which they participate to advertise CEF awards, volunteer opportunities, and fundraising opportunities/events

Objective 4.2. Form and grow active partnerships with top major stakeholders in Chicago in education, philanthropic and nonprofit communities

- Members of executive committee get on agenda of, and attend, board or other events of at least 4 education, philanthropic and nonprofit organizations per year to advertise and promote CEF awards, volunteer opportunities, and fundraising opportunities/events
- Other board members and advisors to reach out to education, philanthropic and nonprofit organizations in which they participate to advertise CEF awards, volunteer opportunities, and fundraising opportunities/events

Objective 4.3. Obtain 100% recognition and 90% positive impression within ULC membership

- Advertise at ULCC events and within ULCC publications.
- Get on agenda at, and physically attend, ULCC events and committee meetings.

Objective 4.4. Create more regular CEF communications internally and externally

- Prepare a documented case showing the CEF's historical and projected future programs, needs, and governance improvements to present a strong case for appeals to increasing support levels from various stakeholders, including the ULC, granting organizations, and private donors
- Newsletter
- Email blasts
- Obtain 6 external media mentions each year

Objective 4.5. Have 4-5 events each year to increase awareness and partnership opportunities with other organizations (can be lectures, presentations, and events that touch on greater diversity of engineering and technology areas and provide business networking opportunities)

- Work with ULCC public affairs committee to identify or create events for collaboration.
- Work with other engineering societies to identify events for collaboration
- Generate and distribute press releases to Chicago media outlets about activities
- Create event-specific subcommittees on the Advisory Board each year responsible for putting on one event (e.g., lecture, presentation, activity)



Goal 5. Ensure the Long-Term Sustainability of CEF

Objective 5.1. Achieve an annual sustainable budget of \$550,000

- Increase overall individual fundraising for incentive awards
 - Develop standardized materials: ask letter, follow-up letter, and talking points for Board members
 - Organize and implement a call-a-thon
 - Work with alumni to have them personally thank sponsors
- Identify other organizations that provide scholarships, or want to, and encourage them to flow through CEF
- Write grants
- Solicit corporate sponsors for awards, events, other programs (e.g., job fairs)
- Explore planned giving; set-up materials to facilitate this
- Get ULC Board to increase basic recommended check-off contribution by at least 100% (supports goal 4, objective 3)
- Increase income from fundraiser event(s) to at least \$100K
- Plan for a capital (endowment) campaign

Objective 5.2. Create a full-time Executive Director position.

- Strategies for Objective 1 will lead to achieving Objective 2; initial Objective 1 successes in years 1-2 will lead to acquiring a full-time ED in year 3, which will in turn lead to accomplishing Objective 1 by year 5.
- Obtain permanent office space at ULC for ED

Objective 5.3. Maintain strong relationship with program alumni

- Post-graduation, reach out to ensure latest contact info for alumni
- Keep alumni on regular mailing lists for newsletter, events, etc.
- Encourage alumni to join outreach volunteer list
- Host annual alumni gathering
- Invite at least 1 active alumnus per year to become Board advisor

Objective 5.4. Increase active participation by our Board, advisors, and volunteers

- Give advisors a specific role or task, e.g., coordinating an annual event (see Goal 4)

Objective 5.5. Create sense of ownership for “above minimum” donors

- Include on mailing lists
- Create a category for them, e.g., “Friends of CEF”

Objective 5.6. Maintain and update key CEF documentation and reports

- Update bylaws
- Review the strategic plan at the end of each CEF fiscal year, and report on progress and the new year’s action plan and budget
- Catalog all old documentation and reports, such as student awardee summary reports, outreach summary reports, annual report, and others.

Appendices: Exhibits and Background Material Used to Develop Goals and Objectives

CEF by the Numbers: Understanding our Trajectory and Needs

Recent trends

CEF purposely distributes the high schools they visit around the City of Chicago. There were 69 schools on CEF's list for volunteers to visit in the 2015-2016 school year (Figure 2). Of these schools, CEF has been successful in visiting between 25-30 schools per year for the past 4 years. In total Chicago has 135 private schools and 190 CPS schools (Figure 2; stars represent CPS high schools, and circles represent private high schools).

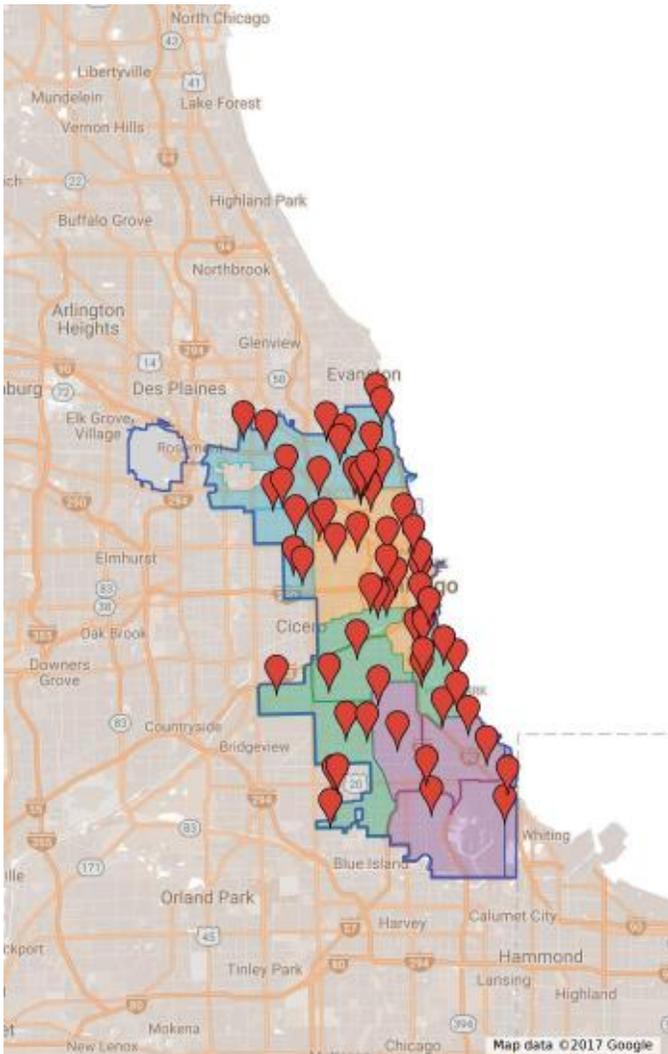


Figure 2 Chicago high schools that CEF has contact with

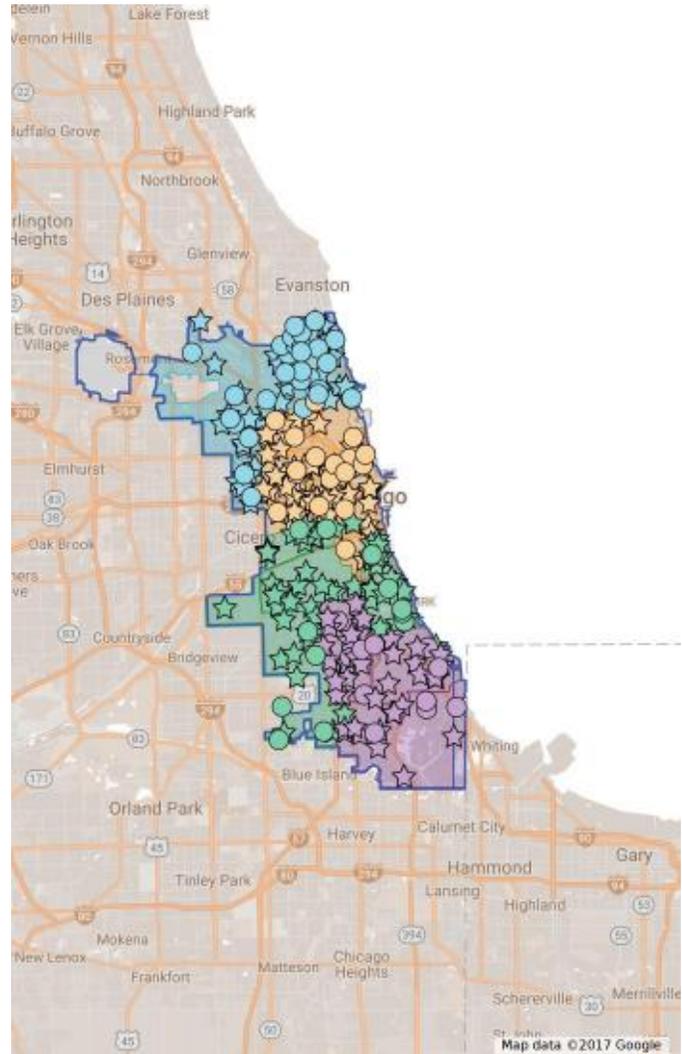


Figure 2 Public and Private High Schools in Chicago



The success of the outreach program, an increase in fundraising activities, and improvements to the application process have led to recent increases in qualified applicants: the amount of money needed has increased faster than the amount of money available (Figure 3).

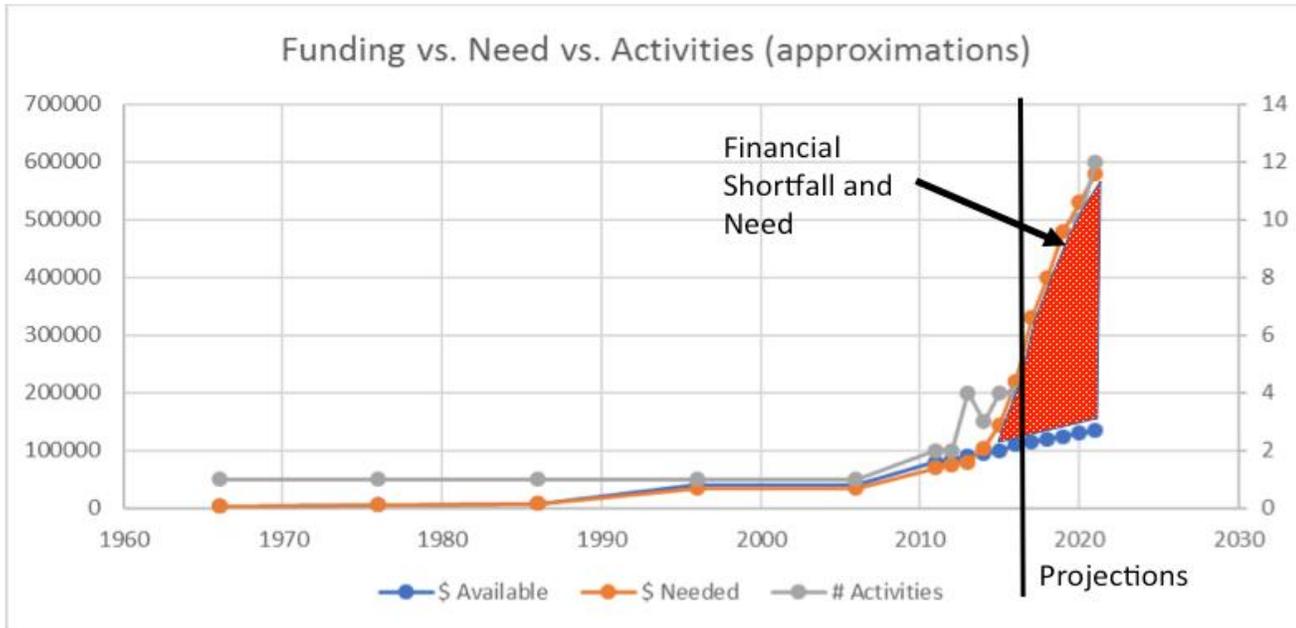


Figure 3 Funding vs. Need and Activities

The dollar amount of money needed is extrapolated based on the amount of money that would be needed to award scholarships to the increasing number of qualified applicants. As a result of increased activities, the number of applications being received has increased. This is represented in Figure 4. As CEF renews scholarships for current college students, and awards new scholarships to graduating high school seniors, CEF turns away dozens of qualified applicants from the program.

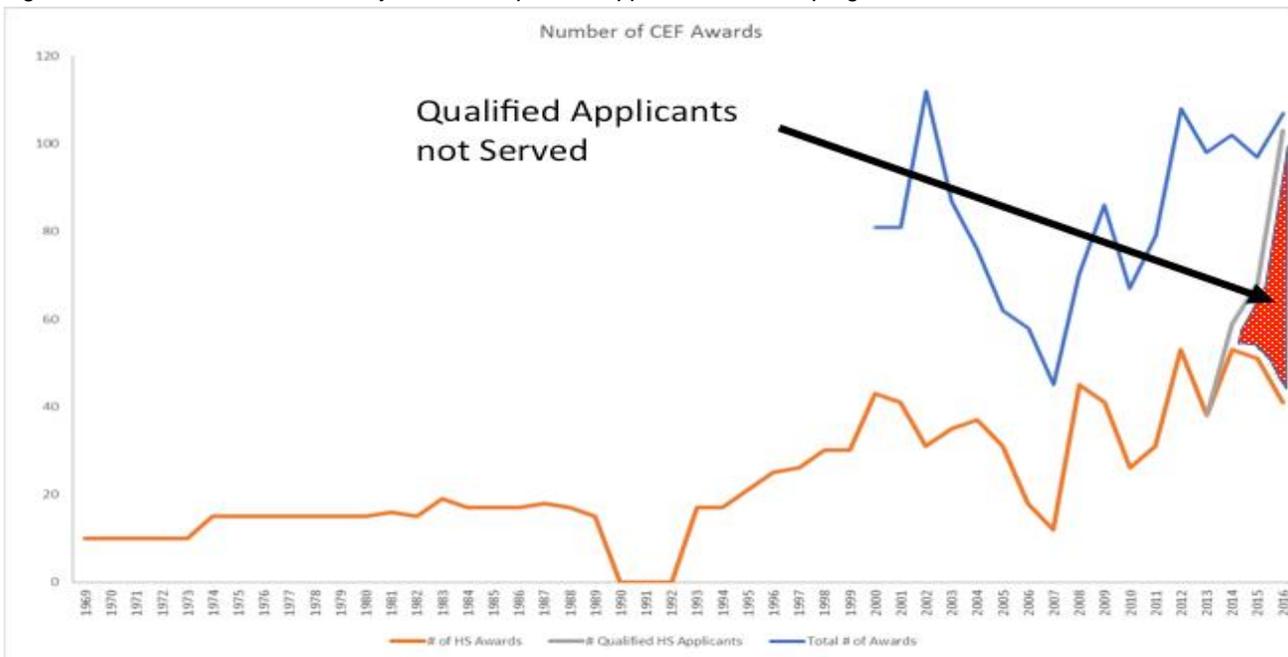


Figure 4 Number of CEF Awards



As tuition prices have increased over time, the impact the CEF awards have on a students tuition bill decreases. As shown in Figure 5, award amounts have increased over the years, but the increases have not kept pace with the increases in tuition.

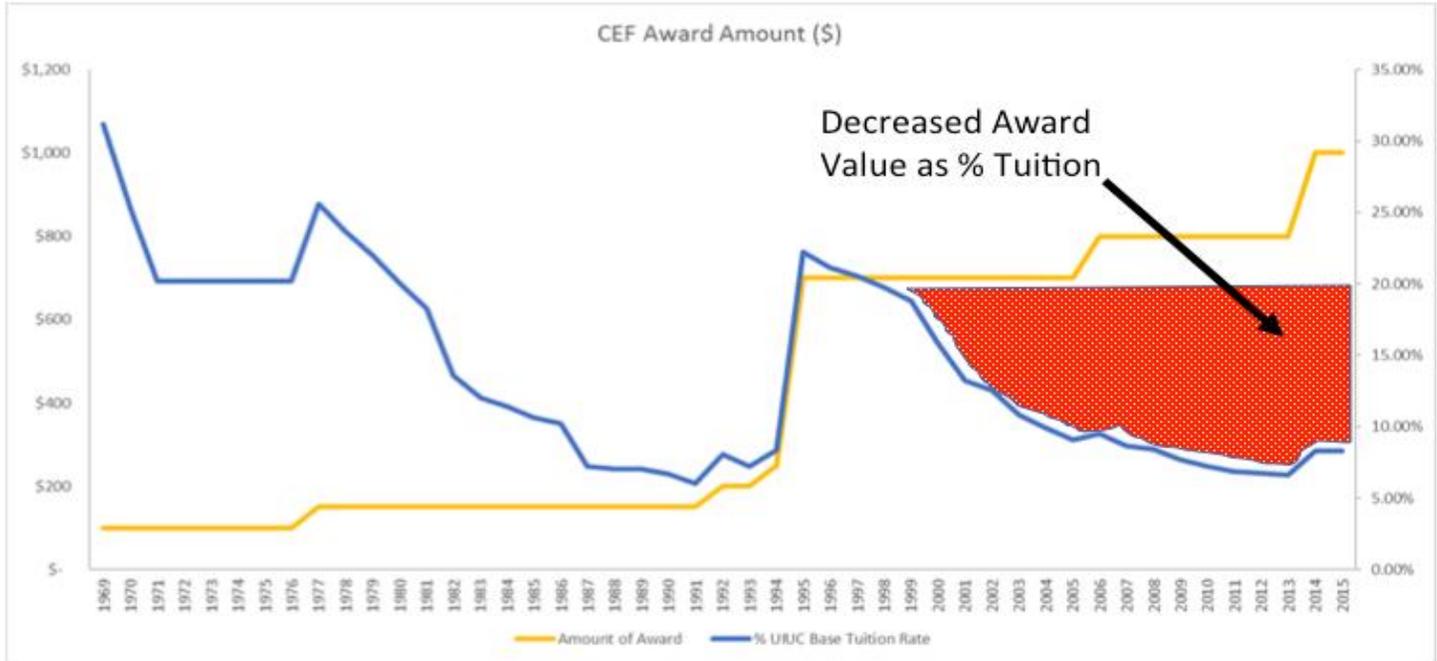


Figure 5 CEF Award Amount

Table 1 presents a snapshot of CEF’s most recent trends. The entering freshman usually make up the majority of the awards, with rather steady trend of renewal at each year of University, with a declining rate of eligibility as students progress through college.

The number of high schools that receive at least one award is similar in magnitude to the number of schools visited by the outreach program, although the numbers are not correlated. The average ACT score also speaks to the increase in qualified candidates.

CEF is very proud to provide equal opportunity to Chicago students. As a result of our balanced outreach program across the City, our award winners also reflect the diversity of Chicago. For example, the ratio of awards given to females and males is nearly 50/50.

Table 1. Historical Statistics

Revenue	2009	2010	2011	2012	2013	2014	2015	2016
Awardees (and Qualified Applicants)								
Freshman	38	40	40	40	38(38)	53(59)	38(68)	41(103)
Sophomore	29	23	24	24	28	16	17	32
Junior	14	22	16	17	14	22	11	12
Senior	7	11	19	14	6	9	22	11
Graduates	10	6	7	10	9	6	9	11
High Schools Represented					22	31	27	19
Average ACT Score					28	27	29	31
Female/Male Ratio					33/67	24/76	38/62	46/52

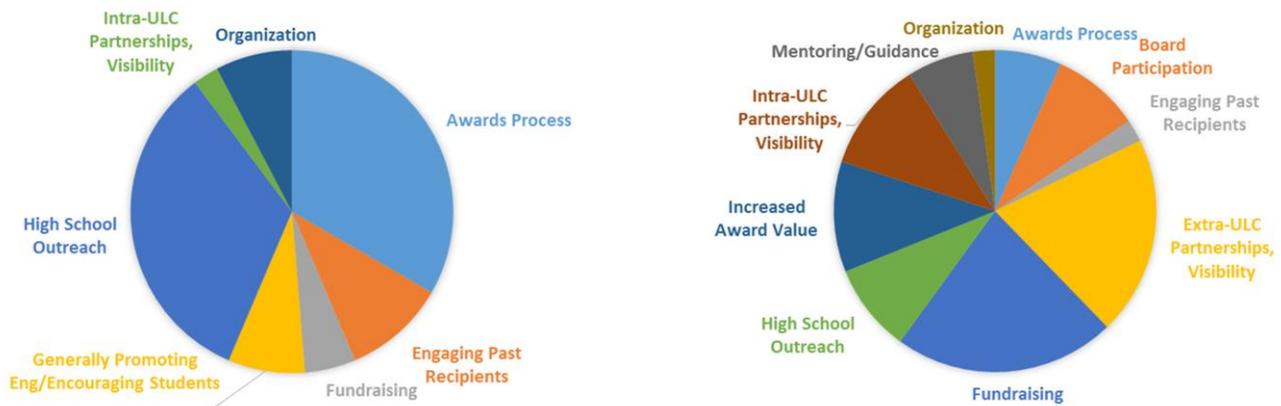


Input from our stakeholders

In December 2016, a survey of the Board of Directors and Advisors was conducted by the strategic planning committee to gather input regarding the Directors current sense of whether the Foundation is fulfilling its mission and what direction is desired for the future of the Foundation. The survey queried participants relative to what they believed the Foundation was already doing well, what areas the Foundation could improve upon, and what they believed should be some general long-term goals the Foundation should focus on.

The responses showed an overwhelmingly positive view of the current awards process, including the applicant evaluation process, the change to the on-line application software, and the awards banquet (Figure 6). In addition, the results showed very positive views of the high school outreach activities and results. The respondents believed that the Foundation was meeting its current mission and vision sufficiently.

Figure 6. Top 3 Things CEF is Doing Well (left) and Could Improve (right)



The responses also showed a strong sense that the Foundation needed to improve its visibility in the community, its fundraising activities, and the financial impact of the awards to the award recipients. The responses also showed a sense that there is room for improvement in the participation of the Board and Advisors in Foundation activities and in obtaining even better outreach to Chicago high school (and younger) students.

The survey responses on average ranked the importance of five different general goals as follows: 1) (highest priority) increase the financial value of awards given to award recipients; 2) increase the school outreach to reach even more students; 3) increase visibility and inter-organizational outreach; 4) introduce support programs to increase chances of successful graduation of current award recipients; and 5) (lowest priority) increase the number of award recipients (Figure 7).

In general, the survey revealed several general top-level themes for long-term improvement from the Directors, namely: to reach more students across the city with outreach programs, to increase the value and impact of the awards to award recipients, and to provide additional support for award recipients to successfully complete their studies and enter the engineering profession. In addition, the survey generally showed that there is a desire to grow larger financially for the long-term sustainability of the organization, to increase the Foundation's visibility and reputation in the ULC and the Chicago community, and to increase stakeholder engagement throughout the year.



Figure X. Respondents' Ranking from 1 ("Most Important") to 5

