

Greenway College



How you can help build the school that engineers
OUR SUSTAINABLE FUTURE

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The Other Green

The lack of money is the root of all evil.

—Mark Twain¹

So far, this book has set forth a vision for Greenway College that we feel is practical, timely, and uniquely important to this country's technological and educational future. Greenway College, when brought to life, will take a leading role in green technologies, sustainable engineering, zero waste, and the modernization of scientific and engineering educational methods.

But a vision only becomes reality when it is shared by a critical mass of people: we cannot make Greenway real without the support of many donors, large and small. We hope, of course, that you, dear reader, will be one of those donors—hence this book! Imagine how it will feel, someday, to see Greenway come to life: to walk the sidewalks of a finished, working campus, some brisk September day a few years hence, talking with the first cohort of students, faculty, and staff, all sparking with eagerness to help engineer our sustainable future.

Before giving, you would probably like to know how your money will be used to make Greenway real. This chapter,

¹ Mark Twain, *More Maxims of Mark*, ed. Merle Johnson (New York: privately printed, 1927), accessed February 29, 2012, <ftp://arcade.demon.co.uk/data/085000/087050/087096>.

therefore, outlines the fiscal foundations of the college. It is not a formal prospectus, but is our present best projection of what it will take to get Greenway on its feet and keep it there. The ultimate details may vary slightly, but not the overall scope and shape of what we propose. Greenway must, and shall, engineer its own financial security as rigorously as its students and teachers would engineer anything else.

The Basic Goals

Our fundraising goal to start Greenway College is **\$170 million**, including \$120 million for initial construction and \$50 million for an initial endowment. This initial budget is less than of a medium-large theme park: Circus World, Florida, and Six Flags Great Adventure, New Jersey, each cost \$210 million (in 2007 dollars).² Endowment fundraising of an additional \$125 million—total fundraising goal of **\$295 million**—would fully fund yearly operation of the college.

Defined phases of work will begin as soon as fundraising subthresholds are reached:

- Prior to the \$1 million level, initial open donations will fund design and fundraising.
- At \$1 million, one to three detailed competitive design plans (complete with proposed location) will be developed and posted for public viewing and response on the Greenway College website.
- At \$10 million, the site-purchase process will commence.

² Kelly T. Kaak, “Theme Park Development Costs: Initial Investment Cost Per First Year Attendee—Historic Benchmarking Study,” Rosen College of Hospitality Management University of Central Florida (paper presented at 16th Graduate Students Research Conference, 2011, Houston, Texas, 2011), accessed February 29, 2012, http://scholarworks.umass.edu/gradconf_hospitality/2011/Presentation/100/.

- At \$80 million in validated initial construction funding, designs and bids will be finalized and construction of the college will commence.

As a fundraising challenge and incentive, we propose that Greenway College will be *fully operational and will welcome its first students* within three years of achieving \$170 million in total donor funding (including a minimum of \$100 million in construction funds).

Ways to Give

Some donors will be glad to fund start-up costs, but others may wish to donate only if and when the financial security of Greenway College has been established. Some may wish their money to go straight to endowment rather than construction, and some the reverse. Since the donor is always right, we propose four donor options, three for construction (including real estate, legal, and other costs) and one for endowment.

1. *Open donation (construction)*. Available immediately to the Board of Greenway College for any purpose related to the design, funding, and founding of the college.
2. *Escrow donation (construction)*. Deposited to a neutral bank in an interest-bearing money market account. No funds to be drawn until \$80 million in validated initial construction funds have been received. At any time before official start of college construction, these funds (plus interest) can be withdrawn by the donor with no penalty.
3. *Targeted donation (construction)*. Donations earmarked for specific purposes named by donors (e.g., construction of a memorial room or structure), also deposited in a neutral bank until use. Donors may be

involved in naming or design of structures targeted by major donations and can withdraw funds at any time prior to the start of construction.

4. *Endowment donation.* The endowment will provide funding for college operations based solely on compounded interest. Donations are deposited in a neutral bank until the first class of students is being recruited and can be withdrawn at any time prior to recruiting of the first class.

Incentives!

Like many colleges and universities, Greenway will offer acknowledgement incentives to donors based on giving level.

A Founders' Garden will be situated near the center of the campus (see figure 7.1 for one possible realization). It will include a Founders' Wall displaying donation plaques, with a message (e.g., name) from all donors above \$100 and a founding declaration, which reads in draft as follows:

We the founders of Greenway College hereby establish this institution to promote sustainability and environmental responsibility, while developing and forwarding technologies that support such ends and, at the same time, provide shelter, work, and an education for our students, faculty, and staff; this place should be a home for these people, our extended family, that is both comfortable and just, and furthers for these people the best opportunities for obtaining knowledge, liberty, and happiness in a safe and equitable environment. We endeavor to inspire those who pass through this garden and read this message to strive to create a better world that is sustainable; clean; filled with freedom, liberty, and happiness for all; and better in all ways than when you first passed through it.



Fig. 7.1. Artist's rendition of preliminary concept for Founders' Garden and Founders' Wall.

As is common in college fundraising, large donors will have the option to name certain rooms, buildings, facilities, and natural areas. Depending on donor generosity and interests, naming may apply to a commemorative plaque, laboratory or classroom, or an entire building or park. Some donors may wish to fund a wind turbine, a solar array, or other piece of crucial equipment (first come, first served!).

Endowment Fractions

Compound interest from an endowment of \$175 million would support all operating costs and salaries for twenty-five faculty, thirty-five staff members, and up to 175 students. With lower endowments, student tuition will fund operations. Donors may give any amount to the endowment, small or large, but in one scenario we propose to pool (or divide) donations into 175 increments of \$1 million—one per student. Each student would be associated with a specific donor increment and may act in an apprentice-type relationship with that donor or donor group. Donors may include companies, organizations, and individuals that can both act as a mentor to the student and benefit from the student's

experience at Greenway College. In these cases, students will report monthly to donors, may work on collaborative projects, and may work at summer internships for the donor company.

The \$1 million increments can be made by one company or individual, or can consist of a group of donors, either known to one another or completely unknown. All endowment donor groups will be acknowledged in the opening hall of the main building, and founding endowment will be acknowledged in the Founder's Garden with the construction donors. The link of the donor to each \$1 million endowment fraction is good for twenty years.

Endowment donors or donor groups may take advantage of the following three opportunities: admissions input, update reports from students, and student hiring.

1. Donors may choose to contribute to admissions criteria and to narrowing the applicant pool for a given endowment fraction. This decentralization should make the admission process more personal and diverse (although donors' admission criteria must not discriminate based on race, religion, or the like). A donor who wishes to participate in admissions must select from the applicant pool five to twenty students of roughly comparable ability. From that list, Greenway College will make a final selection. Prospective students must meet general Greenway admission requirements, including one year of experience beyond high school, and a minimum level of achievement in high school and on the SATs, but donors will have significant input into determining the qualifications of the student they are supporting. The college will reserve—though, we hope, rarely exercise—the right to reject any candidate, in order to guard against nepotism and discrimination.

2. Donors may choose to receive monthly and yearly progress updates from the student linked to each endowment fraction. Monthly one-page reports will be a required part of the student portfolio, serving both as an update for the donor group and a progress report by and for the student.
3. Donors may employ students in the summer, after their first, second, and third years. Internships must be related to science and engineering and comply with terms of fairness specified by Greenway College.

Our admissions and endowment model is set up to encourage a sense of responsibility in both student and donor. Students should assume that it is their responsibility to their donor group to perform well at the college, as donors are essentially providing \$200,000 to the student's education (not including tuition, meals, and housing) over the four years at Greenway. Second, in cases where donors have a specific emphasis, students can find a sense of purpose and a unifying direction to their education. In many instances, students will be apprenticing with the donor group—learning skills and studying subject matter that the donor feels important. In some instances, the student may eventually be hired upon graduation to fill a related role within a donor company.

Upon graduation, the student has no fixed requirement to work for the donor company if offered employment. As a matter of stated policy, however, Greenway College literature to the student will suggest that students should strongly consider two years of employment at their donor organization if offered a comparable position to other employment offers garnered by the student.

This system will include provisions for cases where students wish to buy out of working for their donor, or where donors are dissatisfied with student performance.

Please Inquire

We have tried to keep this financial chapter as brief as possible, but many more details must be settled before an enterprise as complex as Greenway College can be funded and launched. Readers who want more details about how money will be handled, tracked, and spent are urged to contact the author for direct answers to their questions.

Conclusion

The need for a sustainable economy has never been clearer, nor public support for such technologies broader. Despite the ups and downs inevitable in any innovating market sector, renewable energy is now often the least expensive form of new generation. Energy-storage technologies are swiftly approaching their own day in the sun (so to speak), with inevitably transformative effects on grids and energy supplies. Zero-waste methods are proving their feasibility and worth in case after case; they are, we now know, both practicable and economic. Tens of thousands of net zero-energy buildings, from single-family dwellings to the massive offices and laboratories of the National Renewable Energy Laboratory in Colorado, have proved that net zero-energy buildings can be workable and affordable.

Throughout the industrialized world, the ways we produce, use, and reuse materials and energy are changing. They are changing because technologically, it is *time* for them to change; because it is cheaper for them to change than to stagnate; and because even the proudest, most successful civilization that cannot or will not *learn* is too much like a luxury car speeding toward the edge of a cliff.

Yet we have only begun. Our ingenuity has barely scratched the manifold challenges of sustainability. Implementations and knowledge centers are still scattered, regulations and incentives are too often still perverse, and many

technologies are still imperfect, clunky, expensive, or needlessly complex. Greenway can help change all that, and you can help Greenway. There are lifetimes of work to do, and the sooner we begin them, the better.

The time is right for Greenway College.

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