FACILITIES AND ENVIRONMENTAL SUSTAINABILITY COMMITTEE
REPORT TO
THE BICENTENNIAL STRATEGIC PLANNING COMMISSION
January 31, 2017

Introduction

This report of the Facilities and Environmental Sustainability Committee (FESC) is divided into two parts. Part One will address a strategic plan for facilities and Part Two will focus on a vision for Trinity to become a more environmentally sustainable institution. Although the committee recognizes many clear overlaps between these two aspects of a strategic plan, there are enough differences to warrant a clear sub-division.

Overview

Founded in 1823, Trinity College moved from downtown Hartford to its current Frog Hollow location in the 1870s. The physical image of the campus generally is associated with an iconic set of Gothic buildings, typified by the Chapel and the buildings along the Long Walk. Trinity's historic campus buildings, along with the large swaths of green spaces at the center of Trinity's four quads, are integral aspects of this urban college. As Trinity approaches its 200th anniversary in 2023, the College faces many challenges to its aging physical plant. To confront these challenges, Trinity must develop a cohesive strategy that not only addresses the growing deferred maintenance needs but also establishes principles and processes for making important decisions about building projects. The long-term success of the College also compels a commitment to environmental sustainability, both on and off campus. As such, Trinity must develop a plan to educate students, faculty, and staff about the dangers of global climate change, and establish policies and practices that will set the course for a campus environment that values and embodies sustainability as a lifestyle.

SECTION ONE: FACILITIES

A Strategic Vision for Facilities

Trinity College must embrace the demands of the twenty-first century while at the same time preserving the essence of our iconic nineteenth-century campus. Any changes to the physical plant must be financially and environmentally sustainable, improve the aesthetic appeal of the campus, offer spaces that are flexible enough to accommodate future pedagogical needs and technologies, and reduce waste or redundancy. The physical plant should reflect the college community's cultural and social diversity and encourage inclusion, accessibility, and openness of mind.

The Physical Campus

Trinity's campus is situated on a hillside of 100 acres, bordered by the Summit Street ridge on the west, New Britain Avenue on the south, Broad Street on the east, and Allen Place on the north. The College's academic and residential buildings principally exist within four quadrangles – Chapel, Long Walk, Central, and Math and Sciences. There are 90 buildings on campus, and the College owns 16 other buildings and properties that are in close proximity to the campus. These buildings and the outdoor spaces surrounding them are distinctive aspects of Trinity's image as the preeminent liberal arts college in an urban setting. The College also owns an apartment in Rome Italy, which houses a study away program; rents various other spaces in other countries for similar programs; and has entered long-term leases for academic and programmatic space in downtown Hartford.

Campus Expansions: 1960-1972 and 1990-2015

The bulk of the post-World War II campus was constructed in two periods: 1960-1972 and 1990-2015. The earlier expansion between 1960 and 1972 focused on the Central (Mather) Quadrangle and the southern part of campus bordering New Britain Avenue. This spurt was a response to growth in the arts and the natural and social sciences, along with Trinity's adoption of a coeducational system in 1969. The next period of expansion began in 1990 with the construction of the Roy Nutt Mathematics, Engineering & Computer Science Center, effectively completing the Math and Sciences Quadrangle, the last of Trinity's four quads. From 1990 to 2015, construction was dispersed throughout campus and included the new Admissions building, major renovations to the Long Walk, the Library, Mather Hall and the athletics facilities; new residential buildings – Summit Street Dormitory, Crescent Street Housing; as well as several smaller construction projects. Campus construction during this time was guided, in part, by the adoption in 1997 of the Cooper, Robertson Master Plan, which set forth Trinity's building plans for a quarter century, to 2022. Earlier master plans included the Trowbridge-Livingston Master Plan, adopted in 1923, and the original William Burges Master Plan of the 1870s.

The year 2000 marked the completion of the $100-million Learning Corridor project, which was championed by the Southside Institutions Neighborhood Alliance (SINA), comprised of Trinity College, Hartford Hospital, and the Connecticut Children's Medical Center, and also supported by the City of Hartford and the State of Connecticut. Adjacent to the Trinity campus, the Learning Corridor campus houses a Montessori magnet elementary school, a magnet middle school, and two regional high school programs – the Greater Hartford Academy of the Arts and the Greater Hartford Academy of Math and Science. This was the first project that sought to integrate the Trinity campus into the urban planning of the City of Hartford. It is recognized as a national model for community revitalization.

Thus, in the twenty-five years between 1990 and 2015 Trinity evolved from an isolated entity, with a relatively stable core campus, managed in-house by a small staff, to a much larger campus complex with involvement in structures beyond the physical campus, and is now maintained by a large, third-party service provider. During this time, despite the existence of a master plan, many building projects on campus were completed without regard to that plan, and many persons in our community have regarded the way the College made decisions concerning such projects as neither transparent nor strategic.

The Current State of Trinity's Physical Plant

Most of the campus infrastructure – residential properties, administrative and academic buildings (including classrooms and laboratories), equipment and utilities systems – is aging and in need of repair. In addition to the standard repairs one would expect (e.g., replacement of roofs, pipes, and furniture), the College also faces the challenge of bringing its structures up to current building codes and accessibility requirements. Due to budget constraints, the College, over several decades, has postponed normal upkeep of certain buildings and equipment, resulting in significant "deferred maintenance." The current total deferred maintenance costs at Trinity is estimated at $135 million: $125 million for the main campus physical plant, $5 million for off-campus properties, and an additional $5 million in deferred spending on technology. (Nb, this does not include soft costs, e.g., consulting or survey fees, estimated at 30%.) The replacement value of Trinity's entire physical plant is approximately $500 million, and the College has determined that it should spend no less than $12.5 million on annual maintenance. (Nb, this does not address any deferred maintenance backlog, but merely allows the College to stay current on required maintenance.) Maintenance costs typically are paid out of the operating budget. However, in recent years, the College has budgeted approximately $5 million for annual plant upkeep and an additional $1.5 million for "strategic initiatives." Not only is this amount inadequate to cover basic deferred maintenance, in the past few years the College has diverted some of these plant upkeep funds for capital projects that were deemed "urgent" but which did not address the deferred maintenance backlog. A capital project is a project that helps maintain or improve the College infrastructure. It may include a new building, demolition, renovation or adaptive re-use of an existing building; new athletics fields or outdoor social spaces, new mechanical (e.g., heating, HVAC, access control), or technological (e.g., telephones, servers, websites, wifi) systems. Other expenditures that might constitute a capital project include significant purchases of furnishings for offices or dorms.

The College must prioritize spending on deferred maintenance projects, understanding that doing so will limit spending in other areas. Neglect of deferred maintenance not only will have a deleterious effect on the quality of campus life, but also will cause compounded growth in deferred maintenance costs. As an example, Trinity's deferred maintenance, now at approximately $135 million, was estimated at $46 million in 2001, and at $77 million in 2006. Thus, left unaddressed, Trinity's deferred maintenance will impede the College's ability to attract and retain a robust student population, thereby posing a direct threat to the long-term financial sustainability of the College.

Next Steps: A Period of Consolidation, 2016-2023

The FESC believes that a period of consolidation is necessary in the coming years, to refocus and recalibrate Trinity's goals for its physical plant as the College approaches its 200th anniversary. This means that Trinity must resist impulses to build unnecessary buildings; reduce its physical footprint wherever possible; preserve or create more open spaces; and take advantage of existing but underused infrastructure. To be sure, consolidation will require strategic discipline by the College, both in planning and execution. Such discipline, however, must be informed, and in some ways shaped, by a creative vision for the improvement of our aging physical plant, responsible budgeting, as well as careful planning for future projects. That vision must be clearly articulated and transparent to the community, with opportunities for community feedback. At the same time, Trinity also should actively seek opportunities to strengthen its commitment to the City of Hartford and the viability of our surrounding neighborhood, in the spirit exemplified by the Learning Corridor project. These ideas and principles form the

cornerstone of our facilities recommendations to the Bicentennial Strategic Planning Commission.

Goals, Strategies & Recommendations

With a renewed focus on process at Trinity, it is clear that the College would benefit from the creation of a transparent and inclusive process for establishing priorities for capital projects. As we have seen with the re-purposing of the Crescent Street building from bookstore to Liberal Arts Center for Neuroscience and the Arts, there is tremendous value in engaging the community in a broader conversation about building plans. With the goal of helping Trinity develop an appropriate planning process for capital projects, the FESC gathered information from our VP of Finance and CFO, VP of Advancement, and Aramark's principal facilities manager, to better understand how capital projects currently are planned, funded, and managed. In addition, we surveyed twenty-five peer Colleges to discern other institutional practices. Based on this information, the FESC makes the following recommendations.

1. **Establish a collaborative and transparent process for community input regarding facilities projects.**

The FESC recommends that the College establish a process for decision-making regarding facilities projects that is transparent and actively engages the campus community. This process should include the input of administrators, faculty, and students that would inform the decisions of the administration and the Board of Trustees on facilities projects. The FESC believes that such participation would best be achieved in the form of a committee whose membership would reflect broad representation of the campus community and include individuals with technical expertise in design & planning, construction, and finance. Such a committee would be chaired or at least co-chaired by a member of the President's Cabinet. The advisory committee would vet capital construction ideas and proposals; help prioritize among the myriad of deferred maintenance projects (e.g., classroom renovations, installation of solar panels or fuel cells, upgrading technology equipment, etc.); and ensure community input. Guided by similar principles to those set forth above – fiscal discipline, creativity, transparency, and strategic importance to the College – the committee would ask certain questions regarding each project:

Does the project:

1) *Contribute to the academic mission of the college?*
2) *Aid in attracting and retaining students?*
3) *Reflect our commitment to environmental sustainability?*
4) *Enhance the learning and living environment?*
5) *Support local businesses and contractors?*
6) *Advance the College's commitment to an accessible, diverse, and inclusive campus?*
7) *Promote the creation of flexible spaces that can be adapted to meet future needs?*

Such questions can be refined and serve as guidelines for reviewing and evaluating facilities projects, and asking these questions of each proposed project will ensure that the College adopts a strategic, long-term approach to decisions concerning investments in its physical plant. To receive consideration, a facilities project must be sponsored by the appropriate vice president or

committee chair with responsibility for the space or program activity in question, and only those individuals may submit proposals to the committee.

Communication to the College community at large is key to obtaining support for capital and deferred maintenance projects. Therefore, the FESC recommends that the advisory committee commission and oversee a website that would track capital and deferred maintenance projects. The website would be maintained by the new assistant vice president with responsibility for facilities, and it should provide information on past, current, and proposed construction and maintenance projects. In addition, the site would offer a simple and clear process for community members to provide input on existing and proposed facilities projects (see, e.g., Virginia Tech Facilities Website).

To promote order and continuity in the work of the advisory committee, the FESC recommends that projects be categorized as follows (projects can be in multiple categories): life safety, regulatory, accessibility, environmental, learning, living, athletics, and physical plant (infrastructure or technology). The advisory committee should develop a standard set of forms for submitting project requests, and its meetings should align with the annual budgeting process.

2. Create a strategic plan for facilities.

The FESC recommends that the College consider adopting a facilities strategic plan that not only would address deferred maintenance and capital improvements, but also establish a programmatic and aesthetic vision for the campus. The plan should reflect institutional priorities as informed by the recommendations of the Bicentennial Strategic Planning Commission. Those priorities should include a mandate for spaces on campus that are inviting, inclusive, and accessible, as well as accommodate future pedagogical and technological needs. The plan should articulate the desire for residential life spaces that promote intellectual stimulation, are aesthetically appealing to prospective and current students, and promote the creation or improvement of internal and perimeter pathways and bicycle lanes for improved circulation. The plan also would include a vision for the development and improvement of the neighborhoods surrounding Trinity, in particular the areas on New Britain Avenue and Broad Street, which should become attractive and welcoming gateways to the Trinity campus.

3. Create opportunities for dedicated fundraising for facilities projects.

The FESC recommends that the College offer creative opportunities for donors to contribute to endowments that would fund construction and renovation of classroom spaces, residence halls, the library, campus technology, and campus green spaces and landscaping. This fundraising effort would be part of a campaign of sorts, with a theme similar Smith College's "reimagining the liberal arts."

SECTION TWO: ENVIRONMENTAL SUSTAINABILITY

A Strategic Vision for Environmental Sustainability at Trinity

Environmental sustainability is central to the long-term viability of the College. Trinity must embrace sustainability as a cornerstone value so that it becomes an integral part of its institutional ethos. A sustainable campus will improve Trinity's academic and social programs as well as preserve our environment for future students, faculty, and staff.

Background and Current State

Trinity College is well positioned to make considerable strides in reducing its impact on the environment and developing a sustainability ethos that informs all aspects of the campus, from operations and governance, to residential life, the curriculum, and community relations. In fact, Trinity's 2013 *Sustainability Task Force's Progress Report* details a record of progress in a number of key areas, including the adoption of a "green building" policy, increasing recyclable content in paper products, reducing food waste and increasing composting, tracking water consumption, and promoting recycling on campus.

The impetus for these efforts was Trinity becoming a signatory to the *American College and University Presidents Climate Commitment* (*"the Commitment"*), together with over 600 other U.S. institutions of higher education. The opening paragraph of this document reads:

> *We, the undersigned presidents and chancellors of colleges and universities, believe firmly in the power, potential, and imperative of higher education's key role in shaping a sustainable society. Not only are we deeply concerned about the increasing pace and intensity of global climate change and the potential for unprecedented detrimental impacts, but we also understand that technology, infrastructure, global interconnectedness, and our greatest asset – engaged, committed, smart students – allow us to explore bold and innovative solutions and to lead in climate action and sustainable solutions.*

In keeping with *the Commitment*, Trinity developed a Climate Action Plan with the ultimate goal of climate neutrality. This plan identified several short-term projects intended to begin reducing the college's overall ecological footprint. The implementation of the plan was overseen by the now defunct position, Environmental, Health & Safety Manager and Sustainability Officer, later joined by an Aramark Environmental Sustainability Intern, as well as a newly formed Sustainability Task Force with representation from faculty, students and staff.

The departure of both key officers in 2013 proved a considerable impediment to Trinity's long-term environmental commitment. The current Environmental, Health & Safety Manager wears many hats and is unable to pay serious attention to sustainability-related matters. At present, the College lacks a structure to ensure integration of sustainability at all levels of campus life. At the same time, a recent survey conducted at Trinity reveals broad consensus across campus constituents that sustainability must be a high priority in Trinity's plan for its future.

Goals, Strategies & Recommendations

As Trinity tries to formulate its own environmental sustainability goals, it stands to benefit from studying best practices at peer institutions that have set a high bar in this regard:

"Everything we do is informed by a careful and holistic examination of how our actions impact the environment around us, both locally and around the world."
- The College of the Atlantic, ranked by Princeton Review as # 1 U.S. Green College in 2016

"Dickinson is committed to educating for a sustainable world, reducing our ecological footprint, cutting our net emissions greenhouse gases to zero, and advancing sustainability goals globally, nationally and in the communities in which we reside, work and study."
- Dickinson College

Trinity's website echoes *the Commitment*, and suggests that Trinity as well sets a high standard of environmental sustainability for itself:

> *Trinity College is committed to enhancing environmental awareness, responsibility, and sustainability throughout the College community. The principles of environmental sustainability are central to all College activities, and by integrating these principles into all aspects of its operations, planning, and policy, Trinity enhances its role as a leader in liberal arts education within the greater community.*

Upon reviewing Trinity's environmental practices, however, the FESC has found that the College is falling short of the above commitment. We therefore recommend certain structural changes that are designed to help the College make tangible progress in achieving environmental sustainability. Many, if not all, of these recommendations are currently being implemented at our peer institutions. Trinity must strive to match our peers or possibly boldly go beyond, to become a leader in environmental sustainability.

1. Promote sustainability as a cornerstone value.

The FESC recommends that Trinity promote environmental sustainability as a cornerstone value. Meaningful steps towards establishing sustainability as a cornerstone value could include:

- Joining the Association for the Advancement of Sustainability in Higher Education (AASHE) and annually partake in its Sustainability Tracking, Assessment & Rating System (STARS), a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. Many of our peer institutions are members of AASHE and recently have won performance STARS awards. For example, Tufts University in 2015 was awarded a Silver medal from the STARS program.
- Developing and maintaining a robust directory of sustainability internship and externship opportunities for students and recruit faculty sponsors to promote, guide and evaluate sustainability-related projects, under the leadership of Trinity's Career Development Office.
- Highlighting accomplishments in environmental sustainability (e.g., through the Office of Communications).
- Fostering cross-disciplinary scholarship and teaching on environmental sustainability.
- Reporting regularly to the campus community at large on progress towards the vision will facilitate the flow of information, foster ongoing community support, and instill institutional pride, as Trinity makes gains in its sustainability goals.

2. Hire a full-time employee to coordinate sustainability efforts.

The FESC recommends that Trinity hire a sustainability coordinator or director charged with executing the College's long- and short-range sustainability program. Colleges with a legitimate record of sustainable practices have, without exception, hired such a position to help devise, coordinate and integrate policies and practices in college operations, academic departments and programs, residential life, and community outreach. The first tasks for this position would include (1) conducting a thorough analysis of the campus' ecological footprint, (2) optimizing the College's energy monitoring system, and (3) conducting a campus-wide inventory of appliances and making recommendations green for their maintenance, replacement, or upgrade. Based on

feedback received from colleges polled, the sustainability coordinator or director position could be funded through the energy savings alone it is likely to yield.

3. Establish a committee to advise on environmental sustainability.

The FESC recommends that the College establish a committee consisting of administrators, faculty, and students that would advise the administration and the Board of Trustees on sustainability. Since 2007, sustainability efforts have lacked institutional support, but instead have relied upon the good will of individual faculty, students and staff, without a clear directive from the administration. The new committee would be charged with setting a strategic vision for sustainability and create a plan that would be presented to the appropriate committee(s) of the Board of Trustees. The committee would meet regularly, and its members would consist of representation from the President's cabinet, faculty, senior administration, students, as well as the new sustainability officer or director. The role of this committee would be to serve in an advisory capacity to the President's Cabinet and identify mechanisms to integrate sustainability into all aspects of campus life. This committee should begin its work by devising a detailed, long-term sustainability plan which addresses the key elements currently outlined on Trinity's sustainability website:

• *Green Building* • *Education/Curriculum* • *Community Engagement* • *Dining Services* • *Climate Action Plan/Energy* • *Transportation* • *Purchasing* • *Recycling and Solid Waste* • *Water*

4. Create opportunities for dedicated fundraising for sustainability projects.

The FESC recommends that the College set up a Green Revolving Fund to invest in on-campus energy conservation projects, such as expanding the use of solar energy or shifting to LED lighting. Similar funds have been successful at other colleges around the country to fund energy-saving programs that pay for themselves over time. (See, e.g., Harvard University Green Revolving Fund.) This fund could be seeded as part of Trinity's next capital campaign.

The FESC also recommends that Trinity consider allowing potential donors interested in making their alma mater more environmentally sustainable the opportunity to target their philanthropy as part of the annual appeal.

CONCLUSION

The FESC urges the College to improve the communications regarding campus facilities and environmental sustainability. Throughout our deliberations, we were informed by many constituents that the College could be much more transparent and consistent in communicating decisions about facilities and sustainability projects to students, faculty and staff. What many community members see as a failure of communication manifests not only in a lack of information about projects, but also in slow responses to requests for installation of equipment and for maintenance and repairs, often leading to confusion, frustration, and even anger. Such sentiments were clearly reflected in the results of an FESC survey to the College community that yielded 450 responses. At the same time, respondents also offered many constructive and innovative ideas about how to improve our physical plant and how to facilitate environmentally responsible practices. The survey results make it clear that the campus community wishes to be informed and engaged about Trinity's facilities projects and sustainability efforts. The data from

this survey should be examined closely by anyone charged with implementing the facilities and sustainability recommendations the BSPC puts forward. In particular, the survey results would be valuable to the two advisory committees recommended by the FESC.

Another consistent theme running throughout our deliberations was a call for greater accountability. Trinity has in the recent past made facilities decisions that have resulted in costly missteps or led to unfulfilled obligations. A more transparent and inclusive process that harnesses the talents and collective wisdom of our College community would promote better use of institutional resources and lead to a happier, healthy campus atmosphere.