

Springfield Technical Community College
Addendum to the
Campus Master Plan.



2019

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Endorsed by the STCC Board of Trustees on May 20, 2019.

Executive Summary

In September 2017, Springfield Technical Community College (STCC) rejuvenated a campus planning process to ensure adoption and endorsement of a formal campus master plan. STCC hired Paulien and Associates to contribute two critical elements: how the current campus was being utilized, and what the regional/economic landscape looked like for careers and employment. Current planning efforts spanned from September 2017 through January 2019 and were also informed by campus master planning that resulted in the 2015 STCC draft plan; the 2015 plan was developed by the Division of Capital Asset Management and Maintenance (DCAMM) in partnership with Goody Clancy. The 2015 plan served to update the 2007 campus master plan and efforts took place between 2013 and 2015. Although informative, this plan was never formally adopted by the college.

An effort was made to relaunch master planning given a number of significant changes, including the hiring of a new President in 2016, renovation and completion of the Ira H. Rubenzahl Student Learning Commons (Building 19) in 2018, and significant enrollment and budget

challenges. The goal was to produce and formally endorse an addendum to the campus master plan to guide STCC's way forward. The college recognizes the need to provide for the continued excellence of its programs by updating aging and historic buildings on campus and also exploring possibilities off campus. At over 1 million square feet, STCC has by far the largest infrastructure of any Massachusetts community college, and many buildings date to the 1800s when they were part of the Springfield Armory, now a national historic site. The function and layout of many campus buildings do not reflect the needs of today's students, and in particular, lack space to accommodate today's technology and equipment. The 2015 campus master plan, combined with this 2019 update, addresses many of these issues and several large and comprehensive objectives, connected to mission and programs, are now clearly identified.

These objectives include:

- Relocate the programs and offices in Building 20 and plan for the building's future
- Continue to co-locate student-serving offices on the north side of the campus
- Affiliate manufacturing-oriented programs

In order to make the most informed plans, the planning process included data from a number of sources. These sources include: quantitative and qualitative feedback from employees and students, current classroom utilization data, parking utilization data, and an environmental scan of the labor market and educational and demographic trends. Results from this data collection and analysis demonstrated an emphasis on:

- Co-locating affiliated programs
- Creating and improving laboratory spaces for programs with nonexistent or outdated ones
- Exploring opportunities to better serve the local labor market through increased online, hybrid and evening offerings and certificates of highest employability
- Ensuring occupied facilities are safe, reliable, and put to their highest and best use

A preliminary phasing plan can be found beginning on page 20.

Introduction

About STCC

Springfield Technical Community College (STCC) is a public, urban, two-year community college located in Springfield, MA. The College serves an annual enrollment of over 7,000 day, evening, and weekend students. The College is now a federally-designated Hispanic-Serving Institution, meaning more than 25% of the study body identifies as Hispanic.

The College offers 95 degrees, certificates, and degree options in high-demand fields such as mechanical engineering technologies and nursing. As the only technical community college in Massachusetts, STCC is home to a wide number of unique degree programs that provide Hampden County, the Pioneer Valley, and Western Massachusetts with an important source of well-prepared students and employees.

STCC, with its two middle names of *technical* and *community*, embraces the uniqueness of its location, campus, and offerings through providing degrees and certificates leading

to high-wage jobs, support for the local business community through the Workforce Development Center, and engagement with culturally diverse art and artists through the Diversity Series and the Carberry Gallery. The College is privileged to serve the greater-Springfield community and continues to evolve and change in order to serve effectively, efficiently, and be responsive to the needs of students and the regional workforce.

About this Addendum to the Master Plan

Since the site's founding as a US Armory, the layout, purpose, and ownership of the current STCC campus has changed many times. This Master Plan is an update to the 2015 Campus Master Plan drafted by Goody Clancy and developed with the assistance of the state Division of Capital Asset Management and Maintenance (DCAMM). This addendum, the latest in a chain of visions for the land, identifies the College's current and future needs in order to ensure the College's facilities and space are put to their highest and best use in service to programs that define the College and its missions.

Mission Statement

Springfield Technical Community College supports students as they transform their lives.

Vision

Springfield Technical Community College will be a dynamic, multi-cultural learning community where students grow in character, intellect and self-confidence.

Introduction

The 2015 Master Plan

In 2015, Goody Clancy released a Campus Master Plan which called for consolidating the campus' staff, space, and activities north of the parade ground. This plan, commissioned by DCAMM (Division of Capital Asset Management and Maintenance - the state agency which owns and controls STCC's physical assets), utilized a comprehensive approach to assessing the current state of STCC's campus and provided a thoughtful, thorough guide to future campus development. However, this plan was never formally finalized and adopted by STCC. This addendum to that master plan seeks to renew the context in which the College is conducting its facilities strategic planning and reshape priorities based on current and projected building conditions and campus community input. Additionally, this addendum is intentional, strategic, and holistic in engaging shared governance bodies, the Board of Trustees, and the broader campus and community in the construction, approval, and implementation of this plan.

Why update now?

STCC has undergone many dramatic changes since the 2015 report was completed, in terms of both academic programming and facilities. The College also marked a significant milestone, its 50th anniversary (2017), which provided an opportunity to reflect on both the history and future of STCC. These changes include:

Improvements Completed

- The renovation and opening of Building 19 and the consolidation of student services on the north side of campus
- An increase in the number of courses being offered online
- New science programs (health and biomedical engineering technology), and the establishment of a comprehensive program review system

Challenges Faced

- A decline in student enrollment, made more problematic by an improving economy and a shrinking local pool of potential students
- A number of expensive emergency repairs, including repeat flooding in Building 20 and masonry on Building 17
- A significant change in funding allocation from DCAMM, combining emergency funding and reparative/deferred maintenance funding

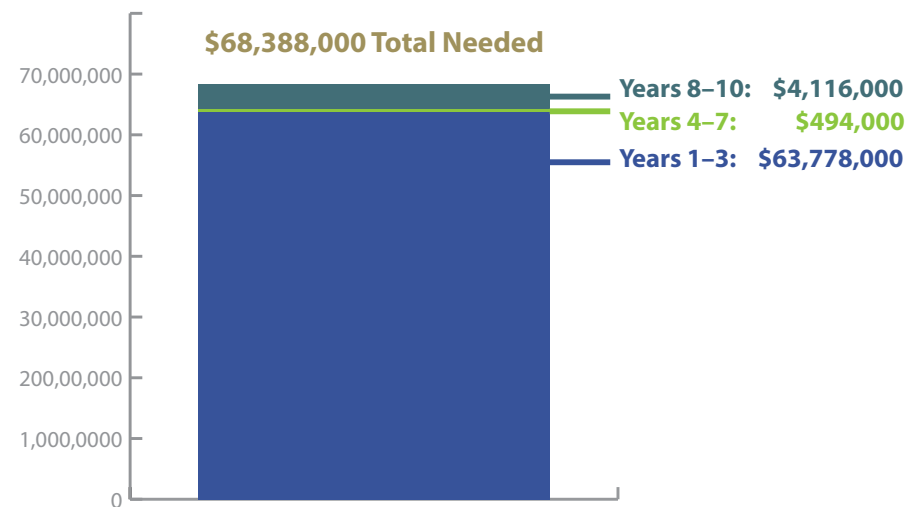
\$2.1 million has been spent on emergency repairs to Building 20 from 2015 to the present.

Prominently, Building 20, home to STCC's allied health programs, the SIMS Medical Center, and the cosmetology and robotics programs, has continued its rapid spiral of decline. Since the DCAMM-commissioned master plan in 2015, STCC and DCAMM have spent \$2.1 million on emergency repairs to the building. These include mitigating the effects of infrastructure failures and conducting a study to remove the stairwells (which are separating from the building) that lead to the uninhabitable top floors.

STCC must make difficult decisions on the location and manner in which it will continue to provide these important programs and services. As a National Historic Landmark, the College is charged with meeting the needs of both its programs and the historic buildings it occupies. Building 20's deteriorating interior is just one example of the challenges the campus faces in delivering 21st-century education in 19th- and 20th-century buildings.

It is with these significant shifts in STCC's circumstances that this addendum to the Master Plan was conceived and delivered. The changing landscape - academically, physically, and politically - created an urgency to return to the 2015 plan produced by Goody Clancy and review it with fresh eyes and new context while retaining its structure, framework, and ultimate goal of consolidating campus north of the parade ground.

Building 20 Needs Over the Next 10 Years



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Introduction

Methodology

As President Cook, Cabinet (including Vice Presidents and Assistant Vice Presidents), and the Facilities staff began the process of updating the 2015 Master Plan, they deliberately built in a number of process points during which both experts and faculty and staff could provide input on the future of the physical assets of campus. This Addendum to the Master Plan is inclusionary, constructed with a wide range of diverse voices and views, and strives to combine these streams of input into one set of goals the

campus community can coalesce around as STCC moves into its next half century of operation.

Plans and Reports Informing this Master Plan

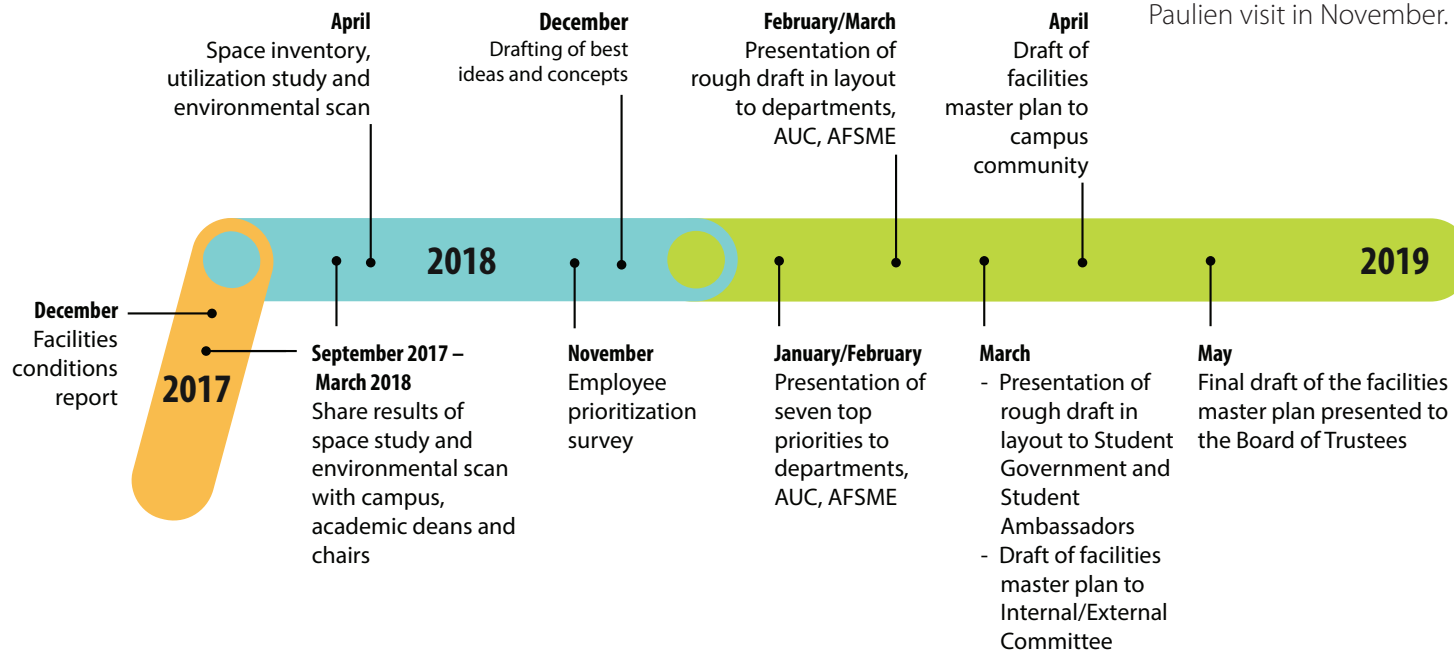
- Goody Clancy 2015 Study
- Paulien and Associates Usage Study
- Paulien Environmental Scan
- Sightlines Capital Needs Report
- Parking Study from Vanasse Hangen Brustlin, Inc. (VHB)
- Faculty/Professional Staff Survey

Campus Feedback Informing this Master Plan *September 2017*

Academic deans were invited to review the data produced by the Paulien utilization study and environmental scan; deans assessed these reports for accuracy and gave additional detail and descriptions that would help Paulien have a complete picture of the campus' current usage and future needs.

October 2017

The deans provided their feedback and additional comments to the Acting Vice President of Academic Affairs in preparation for the next Paulien visit in November.



November 2017

Campus-wide forums were held November 14-16 in order to provide faculty and staff with the classroom/campus utilization data, as well as Paulien's environmental scan recommendations. Deans and department chairs attended a forum designed to allow them to react to the environmental scan findings and begin conversation on both campus usage and future opportunities for academic growth.

December 2017

Senior members of administration conducted semi-structured interviews with department and program chairs to capture input on the Paulien studies presented in November. Questions posed to respondents included: "What opportunities do you see for STCC?" and "What suggestions do you have for when and where we talk about next steps with building usage and program opportunities?" Interviews ranged from 20 minutes to an hour and provided qualitative data to be aggregated into topics and themes.

January and February 2018

The Acting Vice President of Academic Affairs, together with the deans, spent these months on analyzing the feedback from December and sorting it into three overarching areas: benefits, challenges, and priorities.

March 2018

On March 9th, the Cabinet, academic deans, and department chairs met to review the themes resulting from the December interviews and consider possible ways to increase classroom and campus usage. Discussion was framed both by ongoing emergencies and considerations impacting the growth and accreditation of a number of academic programs. Overall, participants converged on the following five overall priorities:

- Increase marketing/recruitment efforts
- Explore offering more early morning, afternoon, evening, weekend, hybrid and online classes
- Better plan and identify opportunities for similar/affiliated programs to be co-located
- Invest in computer replacement and upgrades
- Create a communication plan, and discuss what is and isn't workable for programs

April 2019

The open feedback window for students, faculty, and staff was from April 10 to April 24, 2019. The plan was endorsed by the STCC Board of Trustees on May 20, 2019.

November 2018 Employee Prioritization

- No clear consensus from faculty/staff on priorities.
- There is some common understanding of the Building 20 issues, and conditions look to be in place to support an off-campus move.
- Next set of priorities will require leadership from administration and will carry heavy contingencies based on enrollment, budget, and DCAMM support.

STCC Today

Overview

STCC occupies land which has had local, regional, and national significance since its siting as the location for the first American Armory during the Revolutionary War. Many of the buildings currently in existence on the STCC campus were constructed by the US Army during the land's use as an armory. These circumstances create unique challenges in maintaining and occupying these buildings, but also provide the heavy-duty structure and support necessary for technical programs with large equipment.

The following is a list of the buildings maintained by STCC and their date of construction, gross square footage, and deferred maintenance needs.

Building Data and Deferred Maintenance (DM) Needs Over the Next 10 Years

Building Name	Year Built	Gross Square Feet (GSF)	10 year DM Needs \$Million
Building 2	1987	178,000	\$28.5
Building 5/6	1880	11,700	
Building 7	1833	2,800	\$0.8
Building 8	1836	4,100	\$0.8
Building 9	1836	4,100	\$0.9
Building 10	1836	5,700	
Building 11	1807/1863	14,600	\$0.4
Building 12	1880	3,300	\$1.8
Building 13	1973	56,500	\$14.2
Building 14	1830	27,500	\$6.9
Building 15	1836	31,900	\$13.2
Building 16	1817	74,000	\$38.2
Building 17	1974	197,600	\$41.9
Building 19	1863	101,200	
Building 20	1941/1972	187,300	\$68.4
Building 21	1940	4,800	\$0.7
Building 25	1942	24,400	\$6
Building 27	1863	61,100	\$35.8
Building 28	1919	48,600	\$15.4
Building 29	NA	840	NA
Building 31	NA	175	NA
Building 32	1941	24,400	\$8.5
Building 35	1940	8,000	\$1.6
TOTAL		1,072,615 SF	\$316 Million

Building name, Gross Square Footage and Year Built data from "STCC Facilities: Campus Buildings Data" provided by DCAMM. Source 15 July 1991 Deferred Maintenance Report by Chrissman & Solomon Architects. Deferred Maintenance Data © 2017 Sightlines, LLC. All Rights Reserved.

Historic Resources

The 35 acres housing the STCC campus are managed as a historic resource as a result of the campus' designation on the National Register of Historic Places in 1974. STCC, the Commonwealth, and the National Park Service jointly manage the physical assets of the site as governed by a Memorandum of Understanding. The parties renewed this memorandum in 2018. The level of involvement of either the Massachusetts State Historic Preservation Office or the National Park Service is determined by what level of historic importance the building or space has been accorded under the MOU; these historic preservation levels determine what amount and kind of repair and renovation STCC is able to do. See pages 10-11 of the 2015 Master Plan for more information.

Who owns STCC?

STCC's main campus at 1 Armory Square is owned by the Commonwealth of Massachusetts and managed by DCAMM. As a state institution, STCC cannot own land, either the land it sits on or land it wants to use for other academic purposes. Two other entities own land STCC uses:

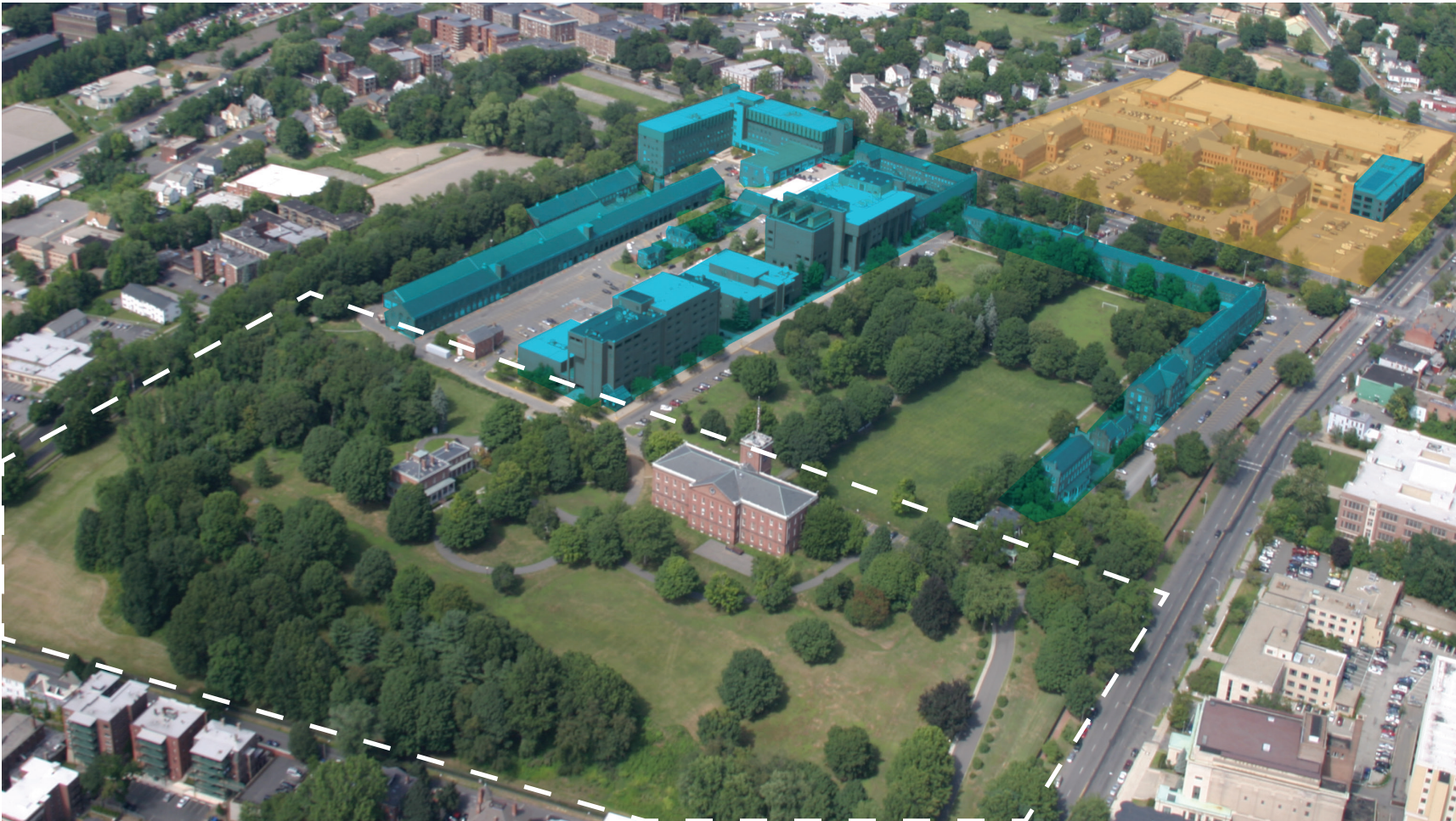
STCC Foundation:

The STCC Foundation, as a legally-separate 501(c)3, has the ability to purchase land and buildings. The Foundation owns the external parking lots used for student parking and licenses them back to the College for its benefit.

STCC Assistance Corporation:

The STCC Technology Park (Tech Park) was also once part of the Springfield Armory, but it served business use once the Armory closed. In 1996, the STCC Assistance Corporation was formed by a special act of state legislature to purchase the land in order to help the College grow. STCC's Mechanical Engineering Technologies laboratories are currently housed in the Tech Park. The College pays a per square footage cost via a license agreement. The Assistance Corporation is governed by its own Board of Directors, of which the STCC College President is one. Financials are presented on the College's financial statements as a discrete component unit.

STCC Today



STCC academic and administrative buildings



STCC Technology Park

— — — — National Park Service grounds and buildings

Condition of Campus Buildings

Updated Assessment

In order to update the complete inventory of building condition on campus, Sightlines conducted a study throughout 2017 and presented the results to STCC leadership in December of 2017. Experts from Sightlines walked through each of the buildings on campus in order to estimate the types, urgency, and dollar amount of repairs needed for each to remain in service. Once conditions were analyzed, the company worked with STCC Facilities leadership to prioritize the large and growing deferred maintenance backlog. Notably, due to the number and cost of repairs needed on campus, STCC has become a leader in prioritizing and addressing capital needs.

The analysis identified a number of key issues that inform the uniquely challenging process of master planning at STCC, including the fact that most of the space the campus occupies was not built to be classrooms. This limits the amount of new space that can be brought online due to extensive necessary renovation to convert Armory space.

Core Result:

STCC has a capital asset maintenance need of \$316 million over the next ten years.

Key Findings:

- Sightlines suggests an annual spending target of \$6.2 million vs. the STCC annual investment of \$3.1 million.
- 67% (\$211.8 million) of the maintenance and repair needs identified by Sightlines are DCAMM Priority 1, or Currently Critical, meaning they should be completed in the next one to three years to maintain use of space and prevent critical failures. 38% of all the needs identified are reliability and safety issues.
- Building 20 has the highest total dollar amount need over the next 10 years.

Comparison to other Massachusetts Community Colleges

A core added value of this study was the ability to compare STCC's capital asset management profile against the other community colleges in the Commonwealth. Overall, STCC has higher need and lower funding available than the other colleges in the system.

- STCC average annual investment: \$3.1 million
- Peer average annual investment: \$6.7 million
- STCC capital needs currently in "poor" or "fail" state: 73%
- Peer capital needs currently in "poor" or "fail" state: 56%

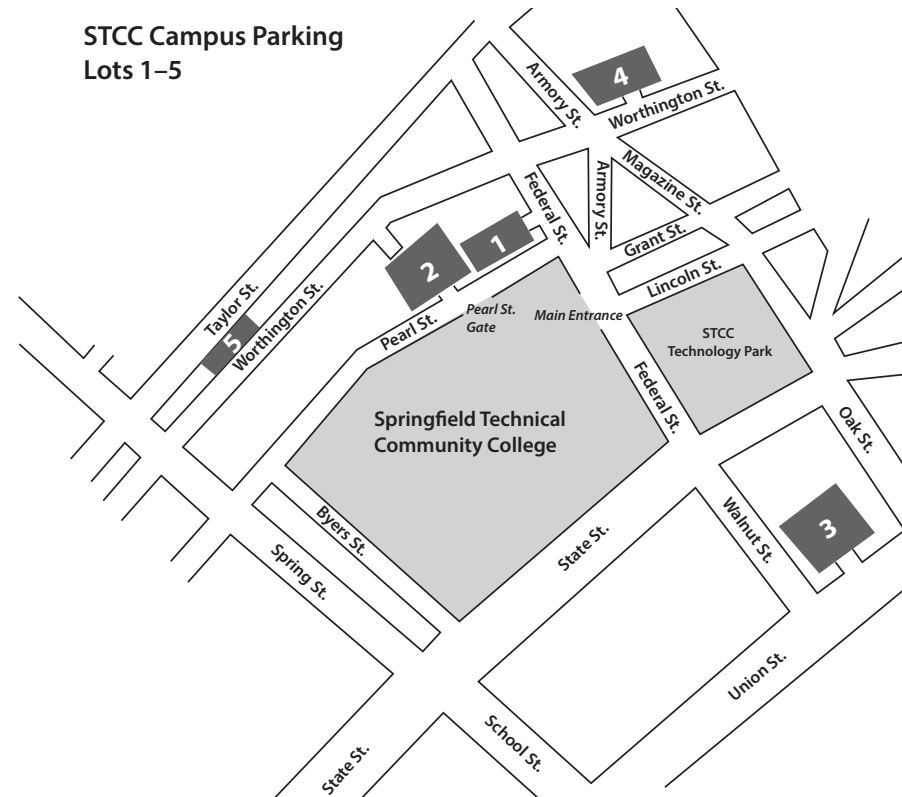
Condition of Campus Buildings

Parking and Circulation

Parking on STCC's historic campus is a perennial challenge, one which the College has worked diligently to mitigate. As recently as 2014, the College spent upwards of \$1 million per year on parking and related expenses like shuttles. Since the last Master Plan, the College has reduced the number and frequency of shuttles, changed the entrance and exit flow of campus, purchased two more lots through the STCC Foundation, and came to an agreement with the National Park Service to demolish a rifle range and construct additional on site parking. STCC continues to seek parking solutions for students and employees, including the potential for an app to allow commuters to locate empty spots on campus with ease.

In Fall of 2018, VHB conducted a parking study to capture STCC's current student parking supply, the number of slots minimally and optimally necessary to serve student demand, and to evaluate a number of options produced by STCC. The study found that, at peak weekday times, STCC students use 1,023 parking spaces.

With the addition of Lot 5 to the inventory, and the removal of the remote Lot 4 from parking inventory, STCC student parking would be 91% full at peak times, which is higher than the recommended 85% full at peak times. Lot 4 may be used in the future for overflow if needed.



Funding Challenges

In the next ten years, STCC will need to spend \$316 million in order to keep its currently occupied physical spaces functioning.

To keep pace with necessary repairs, maintenance, and reinvestment over the next ten years, STCC would need to invest \$31.6 million per year. For context, that is more than half the College's current total annual budget and nearly seven times the annual average amount spent in the last ten years. The status quo is not sustainable, particularly in the context of declining enrollment.

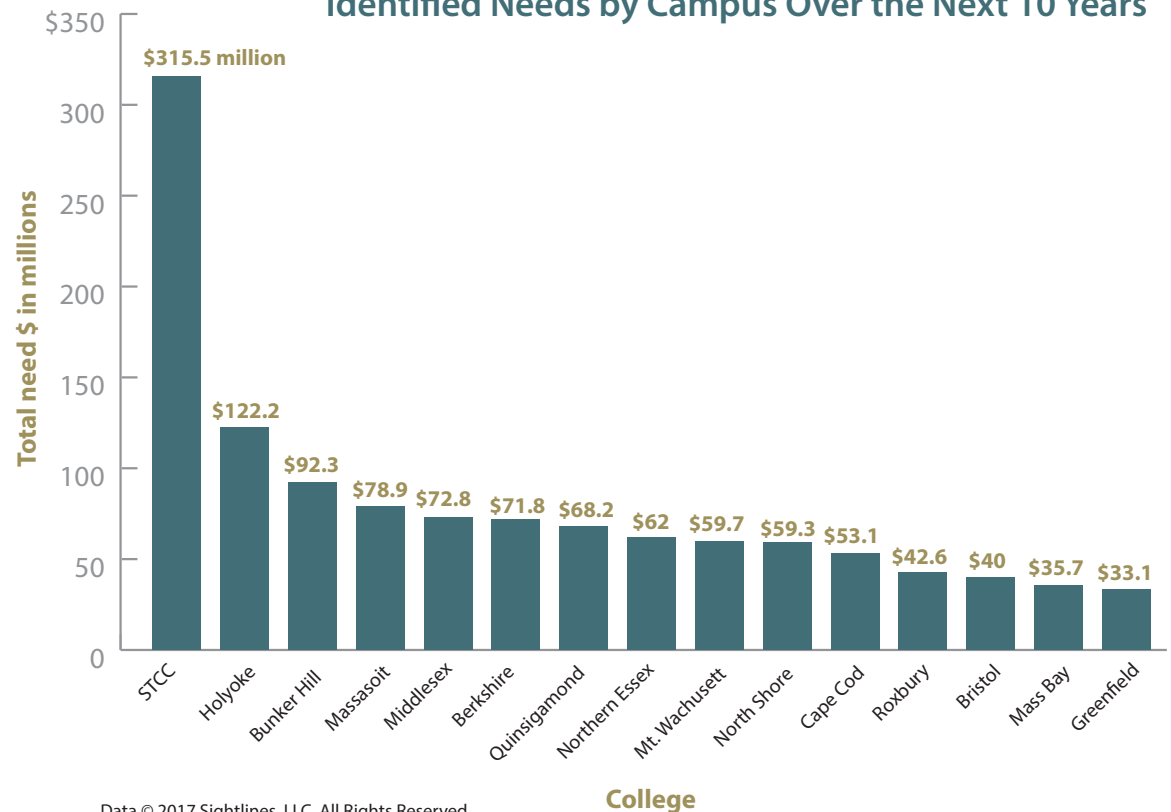
In addition, the process to request emergency or project money from the state has changed. As campus systems have failed in the last few years, such as the central HVAC plant, the radiators in Building 20, and the electrical system, STCC has been able to request emergency funding from DCAMM. In 2018, DCAMM announced a revised process where each campus will receive one pool of money over 5 years.

STCC is scheduled to receive only \$12 million from the state over the next 5 years.

With such a disparity in need and funding sources, it is clear STCC must continue to reinvision the campus and its space. This is in

order to not only continue to provide quality programming and ensure the highest and best use of its space, but to also minimize the impact of aging facilities on its budget and ensure the highest and best use of taxpayer and student dollars.

Identified Needs by Campus Over the Next 10 Years



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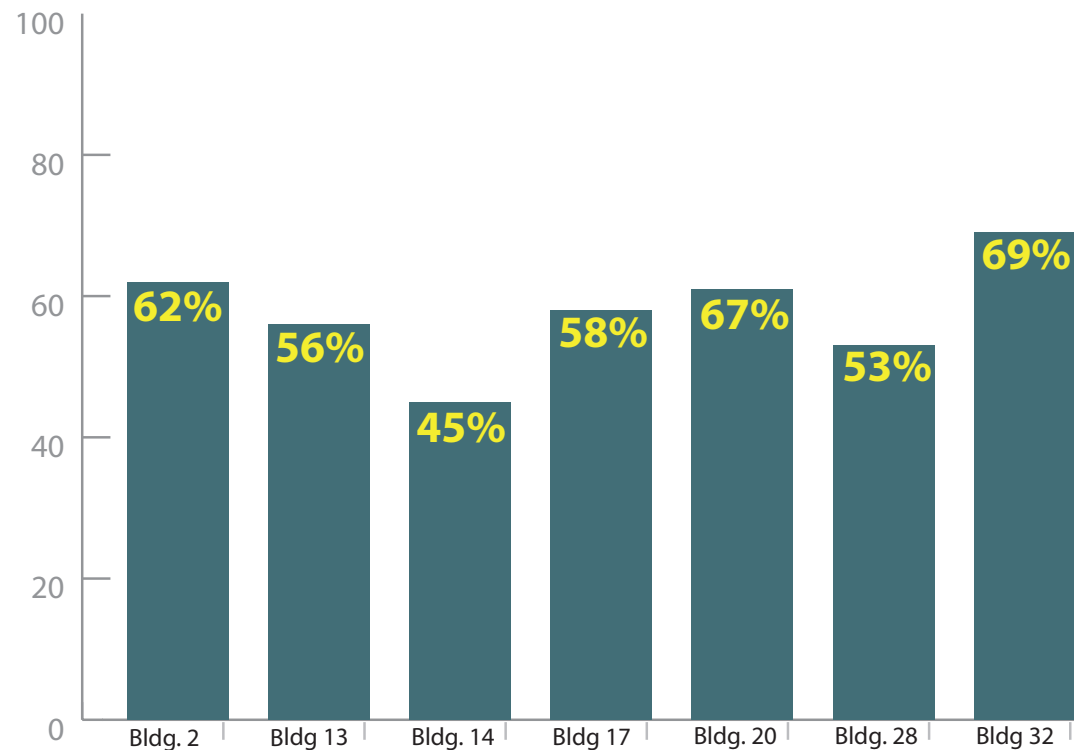
Campus Space Utilization & Needs

As part of the process of updating the Master Plan, STCC engaged Paulien and Associates (Paulien) to complete a Space Utilization study, which was finished in April 2018. This study examined both current patterns of space usage and the projected need for different types of campus space in the near future. The firm reviewed usage data from the Fall 2016 semester, combined with staffing data, headcount data, and input from deans and department chairs in order to come up with metrics for occupancy and utilization rates.

Utilization

In order to determine if STCC's classroom and laboratory space is being put to its best and highest use, Paulien calculated the following usage metrics based on class enrollment, weekly contact hours, and available seats in each classroom. Input was sought from Academic Affairs staff to ensure all rooms were measured as either a classroom or laboratory and in the usage averages were coded appropriately. On an hourly basis, community college classrooms are typically in use 30-35 hours per week, while STCC's average is 21 hours per week. Average classroom building use across all academic buildings is 59%.

Utilization by Building



The study noted that the utilization of classrooms is not evenly distributed throughout the day and week. Classrooms are much more likely to be utilized between 9am and 1pm, with peak classroom usage at 9am on Tuesdays (90% in use).

Scheduled Classroom Use by Day and Time (Fall 2016)

Time of day	Monday		Tuesday		Wednesday		Thursday		Friday		Average	
	Rooms in use	% in use	Rooms in use	% in use	Rooms in use	% in use	Rooms in use	% in use	Rooms in use	% in use	Rooms in use	% in use
8:00am	32	36%	38	42%	32	36%	38	42%	29	32%	34	38%
9:00am	72	80%	81	90%	68	76%	80	89%	63	70%	73	81%
10:00am	73	81%	78	87%	68	76%	78	87%	65	72%	72	80%
11:00am	61	68%	78	87%	54	60%	77	86%	51	57%	64	71%
12:00pm	59	66%	78	87%	53	59%	78	87%	51	57%	64	71%
1:00pm	19	21%	43	48%	18	20%	43	48%	13	14%	27	30%
2:00pm	20	22%	13	14%	19	21%	14	16%	14	16%	16	18%
3:00pm	7	8%	8	9%	6	7%	7	8%	2	2%	6	7%
4:00pm	3	3%	3	3%	6	7%	4	4%	0	0%	3	4%
5:00pm	7	8%	10	11%	11	12%	11	12%	1	1%	8	9%

Total classrooms = 90
Darker color indicates a large percentage of rooms are scheduled.

Campus Space Utilization & Needs

Paulien also assessed the usage of campus laboratory spaces, acknowledging that usage patterns of these are typically lower than classrooms and may have special circumstances (like a highly technical arrangement that limits the type of classes that can use the space). In the community college sector, laboratories are typically used 20-24 hours per week; STCC's average is 18. Additionally, many programs indicated laboratories are also used during non-scheduled times for open labs.

Teaching Laboratory Utilization Analysis by Building – Summary

Building Name	No. of Rooms	Average Room Size	Average AFS per Station	Average Section Size	Weekly Seat Hours	Average Weekly Room Hours	Hours in Student Station Occupancy
Building 2 Scibelli Hall	20	1,103	51	14	14.9	21	71%
Building 111 (Tech Park)	5	1,128	84	10	15.3	25	59%
Building 14 (Graphic Arts)	1	888	28	11	5.6	18	32%
Building 15 (Garvey Hall)	15	3,974	43	10	8.3	19	44%
Building 17 (Putnam Hall)	29	1,037	50	12	9.6	16	61%
Building 20 (Health Services)	22	1,163	57	12	10.9	18	64%
Building 25 (Automotive)	1	608	34	17	19.5	21	93%
Building 28 (Arts)	6	964	48	17	8.5	12	76%
Building 32 (Heat & Power)	1	4,600	192	10	9.7	23	42%
Building 35 (Civil Engineering)	2	1,436	72	7	2.0	6	34%
TOTAL for all Buildings	90	1,122	55	13	11.1	18	64%

Space Needs

Unlike the previous Master Plan's assumption of continued growth, the Paulien study anticipates that STCC's enrollment will decline to a headcount of 4,914 by the target year of 2023. However, the College has already experienced this decline in enrollment in fiscal year 2019. This results in the latest space study showing a surplus of space across nearly all categories, instead of the space deficit hypothesized in the last Master Plan. See the chart at right for space need projections for each category of space.

Campuswide Space Needs Analysis Springfield Technical Community College - Main Campus

Space Category	2016 Student Headcount = 5,622 Staff headcount = 988				Target Year 2023 Student Headcount = 4,914 Staff Headcount = 988			
	Existing ASF	Guideline ASF	Surplus (Deficit)	Percentage Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)	Percentage Surplus/ (Deficit)
Academic Space								
Classroom & Service	82,340	54,851	27,489	33%	82,340	46,346	35,994	44%
Teaching Laboratories & Service	132,719	120,017	12,702	10%	132,719	99,385	33,334	25%
Open Laboratories & Service	41,603	39,354	2,249	5%	39,202	34,398	4,804	12%
PE, Recreation & Athletics	14,415	16,866	(2,451)	(17%)	14,415	14,742	(327)	(2%)
Academic Space Subtotal	271,077	231,087	39,990	15%	268,676	194,871	73,805	27%
Academic Support Space								
Offices and Service	127,234	96,710	30,524	24%	137,565	96,710	40,855	30%
Library	14,720	22,255	(7,535)	(51%)	21,160	18,483	2,677	13%
Assembly & Exhibit	8,635	16,000	(7,365)	(85%)	8,635	16,000	(7,365)	(85%)
Physical Plant	39,175	39,354	(179)	0%	39,019	34,398	4,621	12%
Other Department Space	15,587	18,099	(2,512)	(16%)	15,909	15,820	89	1%
Academic Support Space Subtotal	205,351	192,419	12,932	6%	222,288	181,411	40,877	18%
Other								
Student Center	19,674	33,732	(14,058)	(71%)	20,455	29,484	(9,029)	(44%)
Other Subtotal	19,674	33,732	(14,058)	(71%)	20,455	29,484	(9,029)	(44%)
Campus Total	496,102	457,238	38,864	8%	511,419	405,766	105,653	21%
Inactive /Conversion Space	46,774				88,289			
Outside Organizations	3,114				3,114			

The space needs analysis is quantitative only and does not take into account the quality of space to serve the campus mission. The space needs analysis for each major space category is summarized in this table.

ASF = Assignable Square Feet

Campus Space Utilization & Needs

Space Surplus: Academic Space

Paulien found that STCC currently has 33% more classroom space than it currently needs and will have 44% more classroom space than it needs in 2023 if the enrollment decrease projections hold. The formula used to determine how many square feet of classroom an institution does not take into account when classes are held, only how many students, how much square footage they need, and how many hours they need that square footage. The utilization study found that although the classrooms in the academic buildings are nearly all being used in the mornings, they are nearly empty in the afternoon. Paulien reported that classrooms are scheduled an average of 21 hours per week, which is less than the community college average of 30 to 35 hours per week.

Space Deficit: Student Center

The completion of the Ira Rubenzahl Student Learning Commons represents a key achievement from the 2015 Master Plan. It was identified in the plan that the college had a significant shortfall of student space (library, study, lounge, recreation, dining and gathering space) and student service functions were spread across campus. This analysis and

documentation in the campus master plan was critical to receiving the funding to renovate Building 19 into the Student Learning Commons.

In addition to the renovation of Building 19, Wi-Fi lounges were added to every academic building further closing the gap of student space needs.

Environmental Scan Recommendations

The findings of the scan both reaffirm the College's own research and underscore the importance, timeliness, and accuracy of STCC's recent efforts to integrate and align its programs with local industry needs. Examples of partnerships and programs developed in connection with, and response to, the local environment include:

- STCC and Holyoke Community College (TWO), leading the Massachusetts Casino Career Training Institute in advance of MGM Springfield's opening
- Developing and running the Professional Brewing Certificate
- Offering the Associate in Science in Business Administration 100% online

As a technical college, STCC is engaged in a continuous improvement process with its industry partners to ensure the College's offerings are providing state-of-the-art education in the region's most in-demand sectors. Mass Hire's 2018 WIOA Work Plan notes that eight of the thirteen most in-demand sub-baccalaureate occupations in Hampden County are offered at STCC. Each capital project detailed later in this master plan addendum is necessary in order to maintain rigorous, accredited, supportive, and updated programming which meets the needs of both students and employers throughout the Pioneer Valley and beyond.

Addendum to the Master Plan Framework

Core Themes

After consultation with experts in asset management, space utilization, parking and circulation, and the campus community, several core themes emerged to guide the plan that follows.

- 1 Programmatic opportunity**

As mentioned in the last Campus Master Plan, this process provides an opportunity to assess the College's programmatic offerings and consider possibilities to improve or enhance them. Affiliating similar programs and refurbishing, repairing, or replacing dysfunctional space will make STCC's academic offerings stronger. In addition, updating the Master Plan now allows the College to consider the increasing importance of hybrid and online class and program offerings and their impact on space allocation.
- 2 Renewed focus**

Taking a comprehensive approach to reviewing all of the College's offerings, academic and non-academic, allows each program and department a chance to present their needs and consider how they and the work they do fit in with the broader campus and community.
- 3 Plan for emergencies**

The most valuable aspect of the master planning process, aside from gathering as a community to review current and future direction, is the ability to assess the state of campus physical assets in order to plan for emergencies. Having a better, up-to-date awareness of issues in the buildings and critical systems will allow Facilities and Administration to prioritize issues by seriousness, cost, and impact on continued operations. This is becoming critical to the continued safe and stable functioning of the College as DCAMM no longer allows for separate emergency repair funding.
- 4 Invest in growth**

As STCC's allocation from the state remains flat and enrollment declines, STCC must continue to explore alternative revenue streams, including training incumbent workers and fundraising from alumni and the community. Investing in the infrastructure to support robust programs bringing in sorely needed funding will help support STCC's traditional academic offerings.

Addendum to the Master Plan Framework

Major Capital Projects

After reviewing all the data and reports that comprised the planning process, and in consultation with faculty, staff, external constituents, and with Trustees, the following are the most critical projects to address during the next seven years. These projects will carefully steward the campus' physical and fiscal resources in a manner which will position the College to provide exceptional education for its next half century.

Major Capital Projects Phase 1 (Highest) – Complete by 2021

Building 20 Relocation

Issue:

Building 20, which houses Nursing, Allied Health, Cosmetology and Robotics was built in two parts; the lower floors were built in 1941 and the top two floors were constructed in 1972. The top two floors have been unoccupied for a number of years, as they were abated of asbestos and the College was unable to finish the space for occupancy. The lower three floors have experienced a variety of catastrophic systems failures in the last five years, destroying hundreds of thousands of dollars in expensive health technology and forcing class cancellation and office relocation every year. The abandonment of Building 20 is predicated upon the significant cumulative repair costs over the last 5 years totaling \$2.1 million and \$2.7 over the last 10 years. The building's book value is \$68 million, while the short-term required repairs would cost \$65 million and another \$3 million is recommended over seven to ten years. Because of the exorbitant repair and/or refurbishment costs to Building 20 compounded with what would require identifying 55,000 sf of swing space (and the accompanying costs of moving multiple health programs), make permanent

relocation the only possible solution. STCC cannot continue to occupy this building, and the time pressure is mounting as systems continue to fail and impact academics on a greater scale with each new emergency.

Solution:

The College's allied health and nursing programs have strict space requirements set forth both by accrediting bodies and academic and laboratory necessity. Additionally, the College's SIMS Medical Center, the largest of its kind in the Northeast, has unique space and utility needs in order to continue to provide quality training to students and the region's healthcare employees. These needs limit the options available on STCC's campus for relocation, so the College intends to pursue an off-campus relocation to a space purpose-built for these programs. This will minimize disruption to academic programs by requiring only one move, instead of a move out of the space for renovation and back into the space, and incorporating the necessities mandated by accrediting bodies during initial build out. Vacating Building 20 would include on-campus relocation of cosmetology and electrical/robotics programs.



Major Capital Projects Phase 2 (Critical) – Complete by 2021

Backfill vacated spaces that resulted from the Student Learning Commons/Building 19 project (2019–2021)

Guiding decisions will be consolidation and a key focus on student and teaching/learning-supported services; choices are also guided by an intentional move northward. Specifically:

Building 7 (2,800 square feet) is slated to become the new location for the Center for Access Services

Building 8 (4,100 square feet) is slated to become the location for all Early College programming, which would include the Gateway to College partnership

Building 9 (4,100 square feet) is slated to become the Center for Online and Digital Learning, and would include a centralized Help Desk training location for faculty and students

Building 27 (61,000 square feet) will consolidate all Adult Basic Education and Workforce Development programs into the 1st floor. The 2nd floor will be “warm mothballed”

Building 17 now has vacancies that include the former Student Government/Student Activities offices. Feasibility for converting to academic/teaching-learning space is being conducted. The former 911 Call Center is also undergoing feasibility for conversion to academic/teaching-learning space.

Proceed with enabling moves that allow for the backfill of vacated spaces. (2019 - 2020)

Building 15 Campus Police will relocate to this building.

Building 16 Facilities will relocate to this building.

Addendum to the Master Plan Framework

Major Capital Projects Phase 3 (Leading)–Complete by 2025

Pursue strategic industry partnerships to aid program growth while also addressing campus/facilities challenges (2019–2023)

- The Automotive program is representative with a potential move off-campus. The program can add an evening offering, while possibly addressing space issues and deferred maintenance that exists in Building 25.
- The Landscape Design and Management Technology program is another example. The greenhouse connected to Building 35 is in need of repair and/or upgrading. In tandem to a greenhouse project, the program can add a Horticulture Certificate as well as hydroponics.

Develop specifics for the next signature infrastructure/facilities projects that dovetail with goals outlined in 2014/2015 Campus Master Plan (2021–2025)

- The HVAC/Energy Systems program already has a building/facilities proposal developed that provides a comprehensive upgrade to Building 32 (24,400 square feet).
- Manufacturing synergies, including the co-locating of affiliated programs that include Mechanical Engineering Technology,

Photonics/Optics, and Electronics/Robotics would be prioritized for an on-campus location.

- Another example of need is the Fire Science degree program which has 50 student majors but lacks many of the features necessary to support that size of enrollment and produce future program growth. The program currently has no laboratory space at all in which to demonstrate physical aspects of the curriculum, such as arson investigation. Dedicating and fitting-out a laboratory space for Fire Science is needed to support quality academic programming and encourage future expansion of this sizeable program.
- Building 35, civil engineering upper, is also in need of rehabilitation.

Work with Alumni and STCC Foundation to rehabilitate Building 10 (by 2025)

Built in 1833, historic Building 10 (5,700 square feet) will be the only structure in the north of campus that is vacant and in need of renovation. Pending funding, this building could become “Alumni House” in partnership with the STCC Foundation.

Major Capital Projects Phase 4 (Long-Term) – Complete by 2029

Academic Affairs initiated a 5 year program review cycle in 2018. This is not only a best practice in higher education but also serves to prepare the College for the self-study required as part of the process for renewed accreditation from the New England Commission of Higher Education (NECHE). The initial results of the one year program review indicate that the students and faculty would be better served by creating disciplinary and interdisciplinary clusters (where none exist). Consequently, in finalizing the Addendum to the Master Plan, where best to locate these clusters will need to be identified and included. One example:

Co-locate Engineering Technologies

The Engineering Technologies programs (Mechanical, Photonics, and Electrical/Robotics) are currently located in three different buildings (STCC Tech Park, Building 17, and Building 20 respectively). These programs share courses, faculty, equipment, and students; locating them next to each other would provide significant efficiencies in terms of student and staff time, access to services and equipment, and greater integration of curriculum.



Other Major Capital Projects

Community feedback and ideas generated from this update process demonstrated a clear need for STCC to continue to invest in, and improve upon, all of its programs and offices. This Master Plan update strives to prioritize the campus' needs according to safety and impact on students and employers, but this does not exclude the potential for addressing other priorities during the timeframe of this plan. As resources become available, through the state, grants, or private donations, or as partnerships and workforce needs appear, STCC will stay nimble and responsive in meeting the needs of its community.

Facilities Initiative

In addition to preparing and completing major capital projects such as construction, renovation, and relocation, STCC will also move forward on becoming a Smoke-Free Campus. This initiative will help STCC achieve its mission of supporting students while they transform their lives, using a combination of policy, physical infrastructure, and communication.

Smoke-Free Campus

Currently, STCC is the only community college campus in Massachusetts which allows smoking on its premises. Holyoke Community College banned smoking in 2012 and Berkshire Community College followed suit in 2013. Banning smoking on College grounds would improve campus air quality and protect students, staff, and visitors from secondhand smoke. The College will explore implementing a smoke-free campus by the end of 2021.

STCC will work closely with the
Division of Capital Asset Management and Maintenance,
Massachusetts State Historic Preservation Office,
National Park Service,
and all college partners
to build a campus master plan that will continue to support
students as they transform their lives.

Appendix

Chapter 1

Introduction

About STCC

Springfield Technical Community College (STCC) is a 7,000-student two-year public institution located at the edge of downtown Springfield on the historic Springfield Armory site. The only technical community college in Massachusetts, STCC was founded in 1964 as Springfield Technical Institute. Today, the College offers its diverse student population more than 100 associate degree and certificate options, and is an important regional resource for workforce training programs. STCC prides itself on being one of the largest and most comprehensive community colleges in New England. With a mission of leadership in technology and instructional innovation, STCC trains students in health sciences, business, engineering, the liberal arts, and a wealth of other fields. The College is important to the economic vitality of Springfield, the Pioneer Valley region, and western Massachusetts.

STCC is located on the Springfield Armory National Historic Site. The Springfield Armory was the nation's first, established in 1794, and for nearly two centuries, until it ceased operations in 1964, the Armory was a center for research, development and manufacture of small arms. It was the longest operating government armory or weapons factory in the country, with links to George Washington and the earliest days of the United States.¹ Since moving to the Armory campus in 1967, STCC has occupied most of the site's historic structures, which have been used for academic, student service, and campus life functions. Today, the Armory Site is also home to a National Park Service museum and a police officer training facility.

¹ Kaufman, Ned. *Conflicting Goals for a National Park: The Historic Arsenal at Springfield, 1968—2008*. U.S. Department of the Interior National Park Service, Northeast Region History Program. July 2010.

STCC Mission Statement

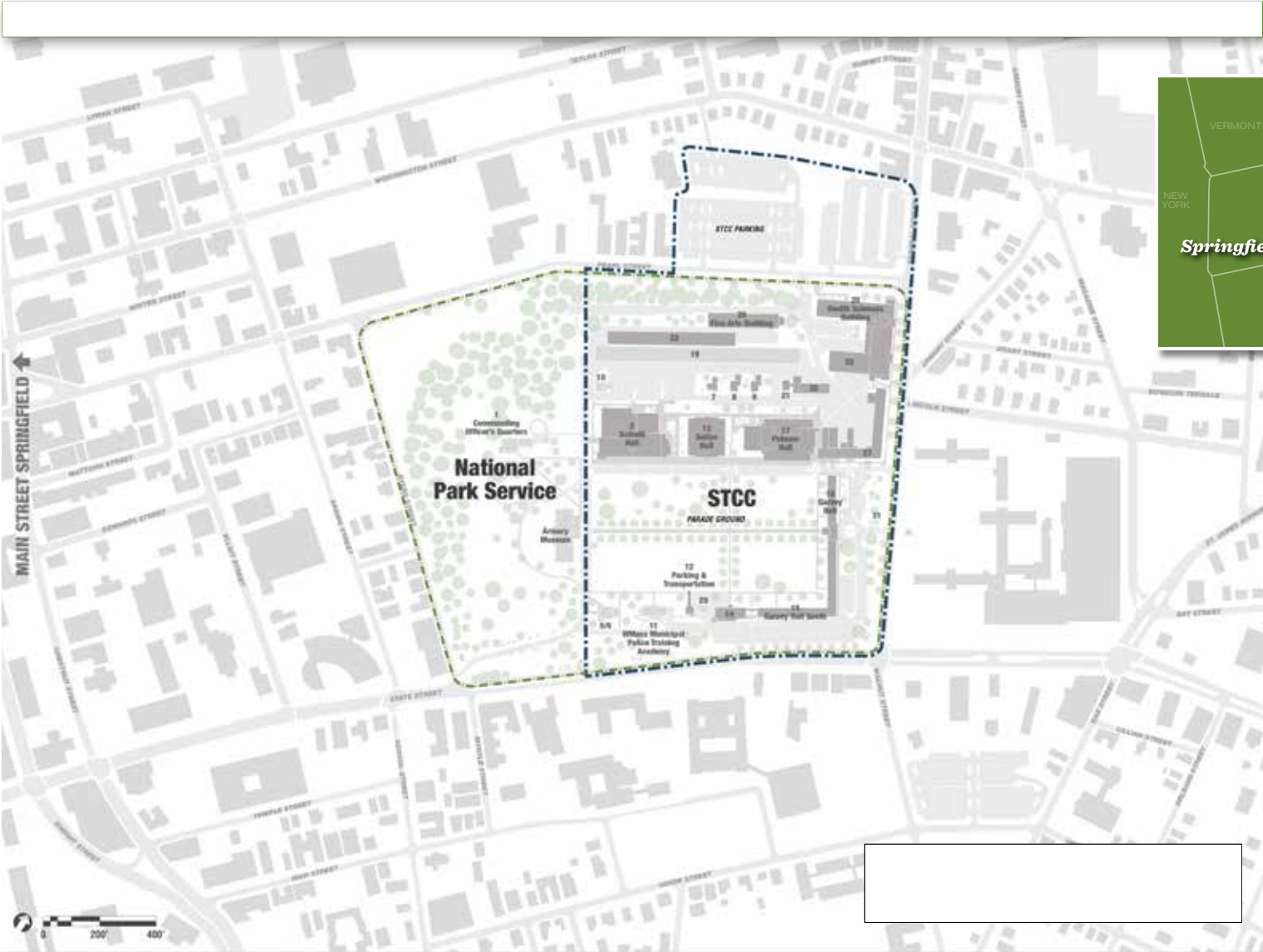
Springfield Technical Community College, a leader in technology and instructional innovation, transforms lives through educational opportunities that promote personal and professional success.

Vision

Springfield Technical Community College will be a dynamic, multi-cultural learning community where students grow in character, intellect and self-confidence.

Core Values

- **DEDICATION:** We believe that with pride and determination among our faculty, staff and students we can create a community of truly inspired individuals.
- **INTEGRITY:** We are committed to fostering an environment that promotes truth and the development of individual character.
- **RESPECT:** We nurture mutual respect among faculty, staff and students. With respect, we embrace differences to create an inclusive environment for all.
- **COMMUNITY:** As a community within the community at large, we improve lives and strengthen the region through accessible and affordable higher education.
- **STUDENT-CENTERED:** We encourage our students to be the best that they can be. We provide a diverse educational experience that promotes personal and professional growth.
- **CARING & COMMITMENT:** As a community of dedicated faculty and staff who care about student success, we produce graduates who will contribute to the well-being of the region and to the Commonwealth.



About this Plan

This report serves as an update to STCC's 2007 campus master plan. It documents major site, space, and facility needs confronting the College today; provides a framework for consolidating the campus within a more compact and more easily managed footprint; and identifies future capital investments. Overall, the master plan provides a phased strategy for strengthening the STCC campus as a more easily maintained, navigable, campus-like place.

Revisiting the 2007 Master Plan

While many of the goals and initiatives identified in the 2007 plan remain relevant today, this master plan update was prompted by a desire to reassess future capital projects in light of STCC needs and anticipated enrollment.

The 2014 campus master plan update revisits the College's capital priorities and identifies future steps in advancing three core tenets of the 2007 plan:

- Consolidating STCC functions north of the Armory's historic Parade Ground for a more compact and efficient footprint, with STCC buildings south of the Parade Ground repurposed for other state functions

- Addressing deferred maintenance issues across STCC's remaining historic and mid-century buildings
- Establishing a more cohesive and welcoming campus environment

Through the 2014 campus master plan update, DCAMM and STCC established a "roadmap" for what campus investments should happen next.

Capital Improvements since 2007

Since 2007, a range of investments have resulted in an improved campus environment. Those investments include:

- Upgrade of classroom technology and furnishing in academic buildings
- Decentralization of the STCC power plant
- Stabilization of Building 19, including roof replacement, in preparation for reuse of the building
- Window replacements in several historic buildings
- Installation of new electrical service for several historic buildings
- Creation of wifi lounges on the first floor of academic buildings, to provide student gathering and study space



Master Plan Process

In 2013, the Goody Clancy-led planning team was asked by the Commonwealth of Massachusetts Division of Capital Asset Management and Maintenance (DCAMM) and STCC to update the 2007 master plan in response to current needs. The master plan update incorporated:

- **An assessment of current site and building conditions** focused on identification and documentation of building and system deficiencies across twenty buildings
- **A space needs assessment** identifying current and anticipated space needs across each STCC department and function
- **Development of master plan options** exploring options for how STCC functions could be consolidated in buildings north of the Parade Ground
- **Development of a master plan framework and capital plan** outlining priorities for renewing campus buildings, reducing STCC's footprint, and strengthening the campus environment

In addition, the campus master plan update was informed by several recent and parallel planning processes, including:

- Development of a DCAMM initiated **ADA Strategic Compliance Report** identifying critical physical, operational and communication barriers campus-wide and setting priorities
- Development of an STCC-initiated **Campus MEP/FP Infrastructure Master Plan** identifying building system deficiencies in Buildings 2, 13, 17, 20, 25, 28, and 32, and deficiencies related to underground site utilities
- Additional studies and assessments related to emergency power systems, air quality, vertical cracks, structural concerns, and water penetration.

The master plan was shaped through a series of on-campus meetings involving the consultant team, DCAMM, and an STCC steering group including President Ira Rubenzahl, his leadership team, facilities staff, and other College stakeholders. Master plan findings and outcomes are described in the sections that follow.

Chapter 2

The STCC Campus Today

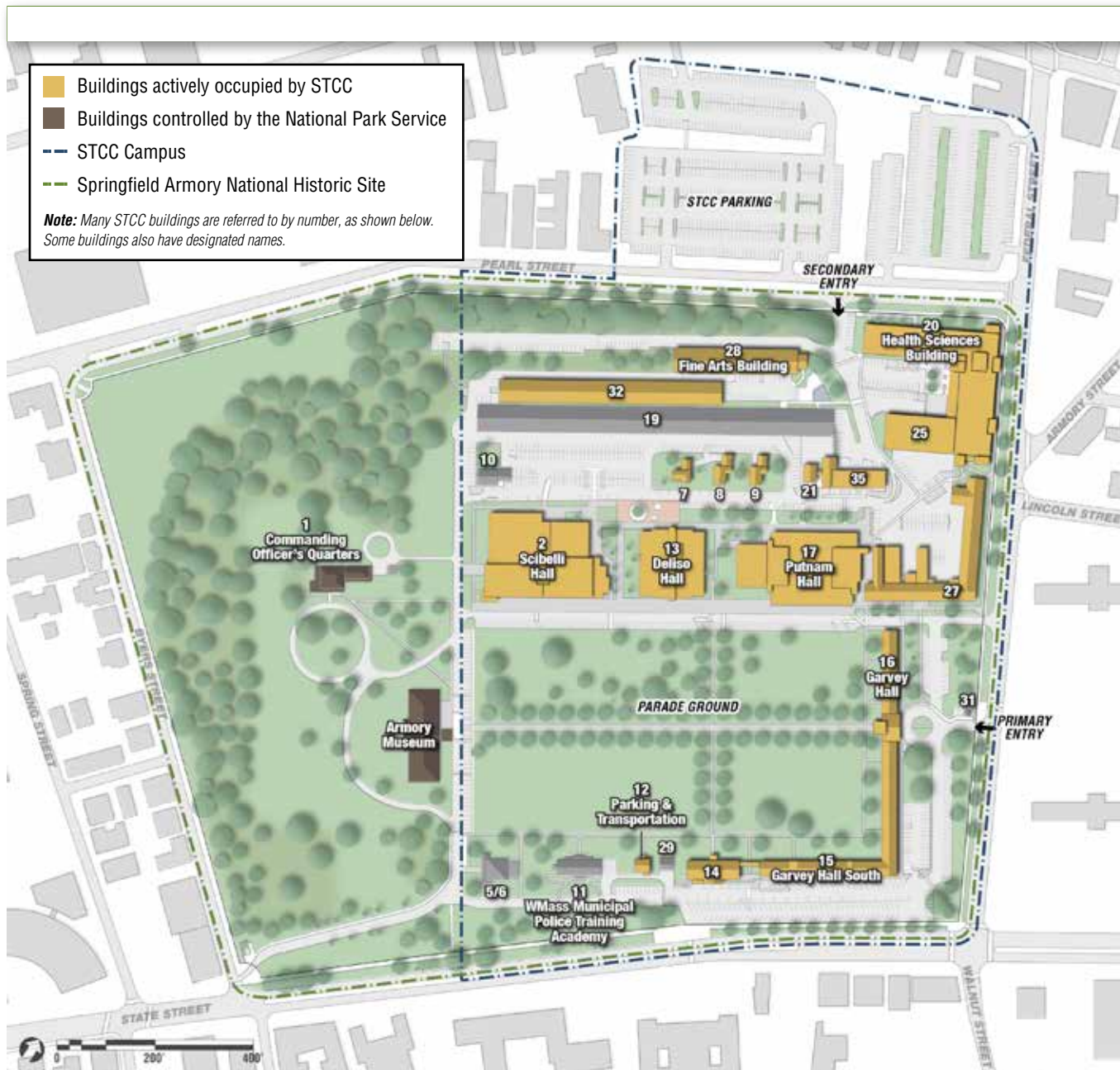
Overview

STCC's unique campus occupies approximately 35 acres within the 55-acre Springfield Armory National Historic site. STCC's building inventory includes a historically rich collection of buildings dating from as early as 1830, as well as several large purpose-built academic buildings dating from 1970s and 1980s. In total, the College actively occupies 17 of the 23 Armory Site

buildings, including most of the structures lining the Parade Ground—the defining open space of the Armory Site.¹ STCC's historic structures add to the character of the campus but pose operational and maintenance challenges.

¹ This total is exclusive of Building 19, a former Armory storehouse that will soon undergo renovation as Learning Commons and Student Hub.





Historic Resources

The Springfield Armory site—bounded by State, Byers, Pearl and Federal Streets, and enclosed by a historic iron fence—was designated as a National Historic site by Congress in 1974. Both buildings and landscapes on the site are recognized by the United States Department of the Interior as historic resources, and have been the subject of numerous studies and assessments by the National Park Service. Former Armory structures lining the Parade Ground are regarded as having the greatest historic significance. Today, the 35 acres occupied by STCC are owned by the Commonwealth of Massachusetts and subject to preservation controls managed by the National Park Service. Responsibility for the Springfield Armory site, its buildings, and its landscapes is therefore shared by the National Park Service, the Commonwealth of Massachusetts, and STCC. Management is guided by a Memorandum of Agreement. Although the MOA expired in 2004, all parties continue to be guided by this agreement.

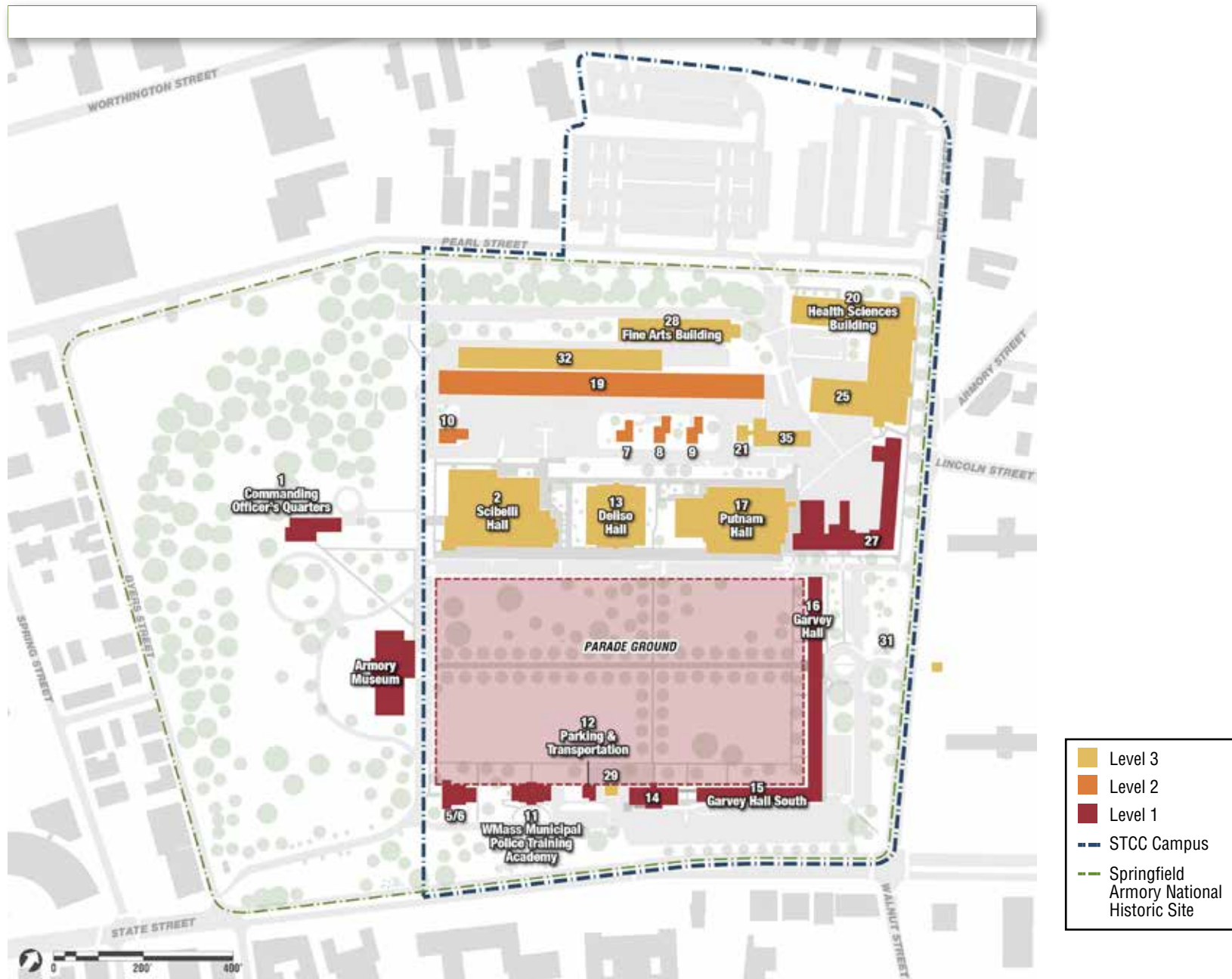
The MOA identifies the 35 acres occupied by STCC as a Preservation Control Area, and commits all parties to “preserve the appearance of the exterior of the historic structures and of the historic Springfield Armory Green.” To advance that aim, all construction, alterations and repair projects within the Preservation Control Area are subject to review and “concurrence” by the Massachusetts State Historic Preservation Office, with guidance provided to the College by the National Park Service. The MOA outlines varying levels of protection for the site’s buildings, with historic structures lining the Parade Ground afforded the most stringent protections. Levels of protection are as follows:

- **Level 1:** Building treatment under this category will be limited to preservation maintenance as defined by the Secretary of the Interior. Every effort will be made to stabilize and maintain the historic exterior appearance of those buildings within this category; NPS will provide advice and consultation on suitable

materials and methods of repair and maintenance. Changes necessary for the adaptive use of these buildings will not affect their exterior appearance. Preservation extends to all facades of the buildings concerned. Buildings included in Level 1 are: 5 and 6, 11, 12, 14, 15, 16, and the remnant of 27. The entire Green is also included in this category. It shall be the policy of the Board [of Higher Education] to maintain the present appearance of the Green. Specifically, this is interpreted as requiring the replacement of plantings as they die, not necessarily in kind, but in general type; that is, deciduous for deciduous and evergreen for evergreen. NPS will provide advice and consultation.

- **Level 2:** Building treatment under this category will allow limited exterior alterations but changes should not affect the overall appearance of the structure in terms of size, mass, and spatial arrangement. Changes necessitated by adaptive use may affect the exterior of these structures to a limited degree. Buildings included in this category include all remaining buildings on the National Register of Historic Places Nomination Form (December 2, 1994); specifically, Buildings 7, 8, 9, 10, 19.
- **Level 3:** Building treatment under this category would permit more extensive exterior modifications as indicated by the adaptive use of the structure. Such alterations will, however, recognize the integrity of the historic scene. Buildings included in this category include all buildings in the Preservation Control Area not specifically listed in the National Register of Historic Places Nomination Form.

Given the historic nature of the site, alterations to buildings and grounds should be respectful of historic integrity, consistent with the Commonwealth and the College’s responsibilities as stewards of the site, and pursued in consultation with the National Park Service and the Massachusetts State Historic Preservation Office, where appropriate.



Condition of Campus Buildings

In summer of 2013, Goody Clancy conducted a Condition Assessment addressing buildings and site utilities at Springfield Technical Community College. The Condition Assessment was led by Goody Clancy and supported by RFS Engineering and the cost estimators at VJ Associates.

The intent of the Condition Assessment was to:

- Provide a snapshot of current conditions related to buildings and site utilities
- Identify key deficiencies
- Identify the priority level and estimated cost for addressing identified deficiencies
- Suggest strategies for correcting deficiencies that maximize long-term value for STCC and DCAMM

The Condition Assessment included review of existing documentation, multiple days of on-site assessment by the Goody Clancy team, and documentation of findings. The following deliverables were prepared for STCC and DCAMM as part of this phase of the master plan work.

- **Document Inventory:** Development of a detailed list of campus and building documentation—including floor plans, spreadsheets, and prior studies—that the Goody Clancy team received, reviewed and organized.

- **STCC Base Plans:** Development of base plans for STCC buildings. Plans were assembled, refined and standardized from a variety of sources.
- **Photo Inventory:** Provision of approximately 2,500 digital photos documenting observed deficiencies and selected existing conditions. The photos illustrate key issues related to buildings and systems, and can serve as an ongoing resource for STCC and DCAMM.
- **Photo Hyperlinked Plans:** Photos documenting current conditions and deficiencies within each STCC building have been linked to that building's base plan. The photo hyperlinked plans identify the location where the photo was taken and the direction of the photo. Hyperlinked plans are provided both for interior and exterior conditions.
- **DCAMM Spreadsheets (CAMIS Forms):** To provide additional documentation of Condition Assessment findings, the Goody Clancy team used DCAMM's CAMIS forms—comprehensive spreadsheets that track the deficiencies and observed assessments from the building Condition Assessment tasks down to the UNIFORMAT Level 4 Building System Class. Deficiency spreadsheets prepared for each building identify and describe the observed deficiency; designate a priority level for addressing each deficiency (levels 1-4, with level 1 deficiencies being the most urgent); and provide a preliminary estimated cost for correcting the deficiency. Similar spreadsheets were prepared for site utilities.

- **Summary Findings—Technical Memo and Executive Summary:** Goody Clancy prepared a technical memo and executive summary summarizing Condition Assessment findings. The memo addresses fitness for use, architectural condition, condition of systems, and key deficiencies for each STCC building. The memo is provided as Appendix A.

Key Findings

Key findings related to the Condition Assessment include the following:

- **Addressing STCC’s deferred maintenance needs is essential to the College’s ability to effectively operate its academic programs.** Aging buildings with extensive deferred maintenance needs and unreliable systems provide poor learning and working environments. Without upgrade of aging facilities the College will continue to occupy—particularly Buildings 27 and 28—STCC will struggle to fulfill its higher education and economic development role within the community, state and region. Facility upgrades should support full accessibility, improve energy performance, and fulfill the Commonwealth’s stewardship commitments for the National Historic Site facilities under its care. As improvements are undertaken, DCAMM and the College should:
 - > Correct the deficiencies associated with moving storm water away from exterior wall and foundations of all of buildings where this is an issue, especially the historic buildings with downspouts. Truly solving rain water related issues will go a long way toward preservation of historically significant buildings.
 - > Seek to address deficiencies appearing on multiple buildings at once, to benefit from economies of scale. For instance, remedying the deficiencies associated with the flashing, trim, gutters, and downspouts of all of the steep roofed buildings at one time.
- > Correct accessibility issues on a campus wide, all-building basis.
- **STCC’s older buildings require envelope maintenance, renovation, and upgrade or replacement of building systems.** Most of STCC’s historic buildings, largely constructed between 1836 and 1880 to support Armory operations, have a significant backlog of deferred maintenance. Many are in need of new roofs and windows, electrical and HVAC upgrades or replacements, and several—including Building 16—are experiencing water infiltration due to deficiencies associated with the flashing, trim, gutters, and downspouts. Because these buildings were designed long ago for different uses than they support today, they also pose challenges related to layout, accessibility and energy efficiency.
 - > **Buildings 14, 15, 16, 27, 28 and 32¹** will all require significant investment to support continued use by the College or other Commonwealth functions. While some portions of these buildings’ interiors have been updated—most notably, areas of **Building 16** that serve central administration—areas that have not yet been updated are typically in poor condition. Condition of building systems ranges from good to very poor. Building exteriors are generally in fair condition with some elements in poor condition. **Buildings 28 and 32** are in particular need of attention, with need for exterior repairs, resolution of storm water drainage issues, interiors upgrades, and upgrade or replacement of mechanical, electrical and plumbing systems. The electrical distribution system in Building 28 is in particularly poor condition.
 - > *With comprehensive renovation and systems upgrades, the historic Armory buildings can serve as distinctive, effective*

¹ Building 32 was constructed in 1941, but like the other buildings addressed in this section, is a long, narrow structure designed to support Armory functions. As is noted above, Building 32 faces deferred maintenance issues similar to those impacting the 19th century buildings within this complex.

facilities that meet the needs of the programs within them.

For instance, **Building 11** is now in excellent condition following renovation for the Western Massachusetts Police Academy. Long-vacant **Building 19** will be transformed into a campus gem—a much-needed Learning Commons and Student Hub, complete with a “one-stop” student services center that incorporates STCC’s Admissions office. With investment, other historic buildings could undergo similar transformations.

- > *Former residential buildings constructed between 1836 and 1880 pose particular challenges given small footprints, inefficient layouts, and the difficulty of providing for accessibility.* Ranging in size from 2,800 to 11,700 GSF, these structures include STCC-occupied **Buildings 7, 8, 9 and 12** as well as currently vacant Buildings 5/6 and 10. In total, Buildings 7, 8, 9 and 12 provide just 14,300 GSF; each of these buildings is in need of some repair and system upgrades.

- **While most of the 20th century buildings that serve as STCC’s primary academic facilities are in relatively good condition, the future of Building 20 remains a question.** Overall, STCC’s 20th century facilities are serviceable buildings generally well-suited to their current use. While each building requires repairs, targeted efforts by the College have visibly improved these facilities. Creation of a wifi lounge on the ground floor of each building—along with incremental improvements to the small dining areas in Buildings 20 and 2—has added to STCC’s supply of much-needed student gathering and study space. Upgrade of classroom technology and furnishing has made a marked improvement on STCC’s instructional space. Continuing these efforts—and addressing both deferred and urgent maintenance needs—will be critical.

- > **Buildings 2, 13, and 17**—large academic buildings housing many of STCC’s classrooms and labs—are in relatively good shape, though each building requires some repairs and systems upgrades, and the College and DCAMM continue to monitor recently emerged vertical cracks. **Buildings 2, 13, and 17** appeared to be in relatively good condition at the time of the Condition Assessment but vertical cracks have since been observed and are now being monitored. **Building 13** also has water penetration issues that should be quickly addressed. The newest of these facilities, Building 2, is now over 25 years old. Ongoing maintenance to address condition issues and support evolving pedagogy will be important.

- > **The future of Building 20 will be a topic of further study by STCC and DCAMM.**

Building 20, the Health Sciences Building, was constructed in 1941, with the top two floors (the 4th and 5th) added in 1972. It is STCC’s largest building at over 185,000 GSF. However, the top two floors of Building 20 remain unoccupied; completion of asbestos remediation would be necessary for reuse of these floors. A current DCAMM study is addressing water infiltration through the foundation along Pearl Street, repair of Stair Four, which serves the fourth and fifth floors, and the potential completion the fourth and fifth floors hazmat remediation. Citing concerns about the condition and usability of all levels of Building 20, the College has explored options for relocation of all Health Science programs to leased space within an off-site medical facility. DCAMM and STCC will initiate a comprehensive study to investigate options for the future of Building 20 and the programs within it.

BUILDING NAME	GROSS SQUARE FEET (GSF)	YEAR BUILT
Building 2	178,000	1987
Building 5/6	11,700	1880
Building 7	2,800	1833
Building 8	4,100	1836
Building 9	4,100	1836
Building 10**	5,700	1833
Building 11	14,600	1807/1863
Building 12	3,300	1880
Building 13*	55,281	1973
Building 14*	16,900	1830
Building 15**	31,900	1836
Building 16**	74,000	1817
Building 17	197,600	1974
Building 19	101,200	1863
Building 20	187,300	1941/1972
Building 21	4,800	1940
Building 25	24,400	1942
Building 27	61,100	1863
Building 28	48,600	1919
Building 29	840	N/A
Building 31	175	N/A
Building 32	24,400	1941
Building 35	8,000	1940
TOTALS	1,060,796	

Data from "STCC Facilities: Campus Buildings Data" provided by DCAMM. Source: 15 July 1991 Deferred Maintenance Report by Crissman & Solomon Architects.

*CAMIS data lists Building 13 at 56,500 GSF and Building 14 at 27,500 GSF.

**CAMIS data lists construction year for Building 5/6 as 1870; Building 10 as 1819; Building 15 as 1824; Building 16 as 1819; Building 29 as 1919; and Building 31 as 1937.

Circulation and Parking

Circulation

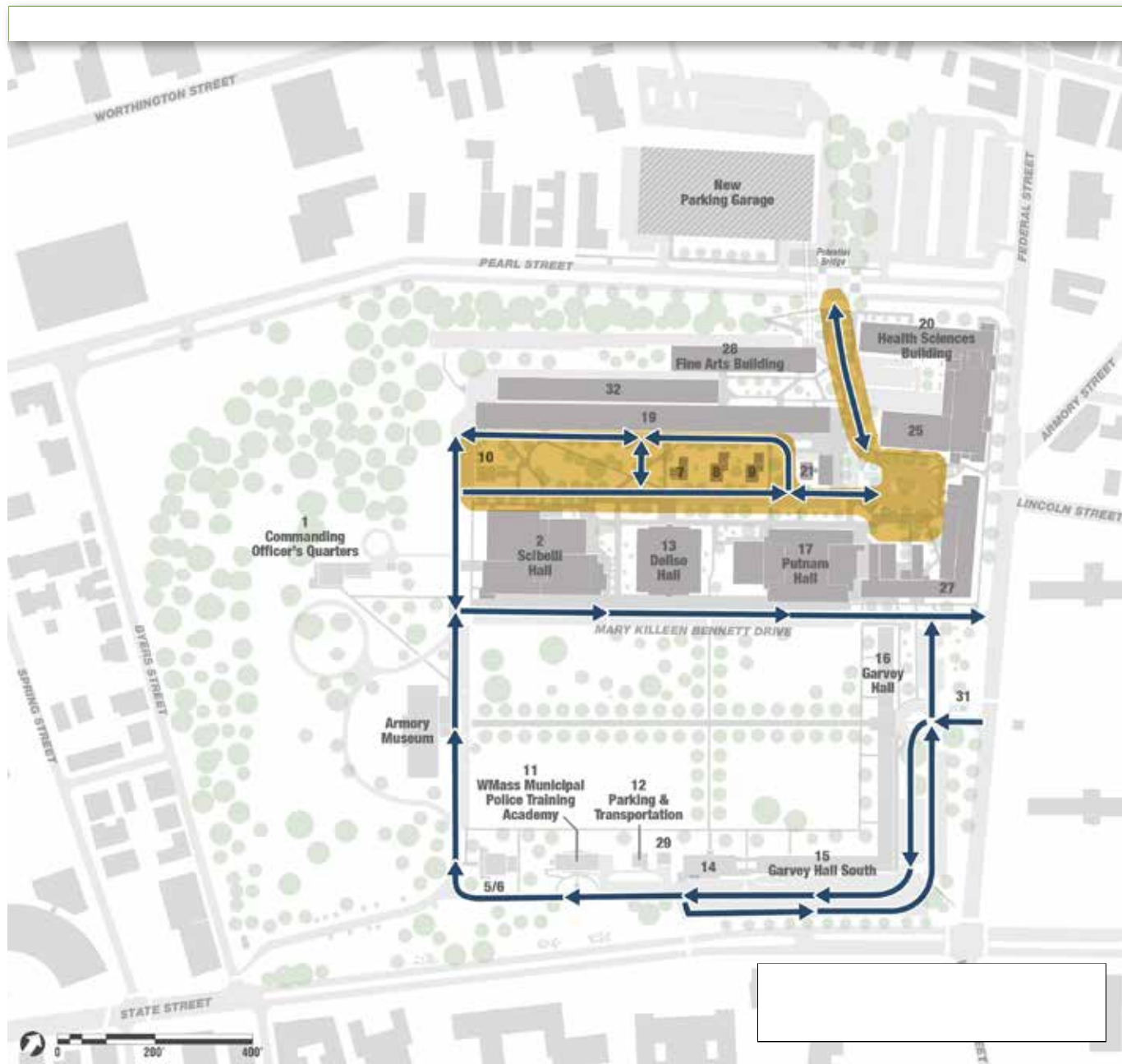
Vehicular circulation on the Armory site is circuitous, as entries and internal streets are primarily one-way routes. Recently, STCC modified the roadway along the southeast end of Building 16 and along Buildings 14 and 15 to allow two-way circulation. Continuing to enable two-way vehicular travel where possible would help simplify navigation for drivers, and reduce unnecessary vehicular flows.

Particularly in areas north of the Parade Ground, dedicated pedestrian routes (e.g., sidewalks and off-street paths) are largely missing, placing pedestrians in the flow of vehicular travel. Improved pedestrian facilities are needed at the Pearl Street entry, along the internal road leading from Pearl Street up into the Armory site, and south of the future Learning Commons and Student Hub in Building 19, where pedestrian traffic will soon intensify. Improved

pedestrian links to the rear of Building 27 would also be beneficial.

In addition, improvements are needed to address accessibility barriers identified by the ADA Strategic Compliance Report. Priority projects identified within the assessment include:

- Creating an access route from Pearl Street up the slope to the north side of the buildings facing the Parade Ground, with connections to buildings along the route
- Reducing the hazardous mingling of pedestrian and vehicular routes
- Improving wayfinding through site and directional signage



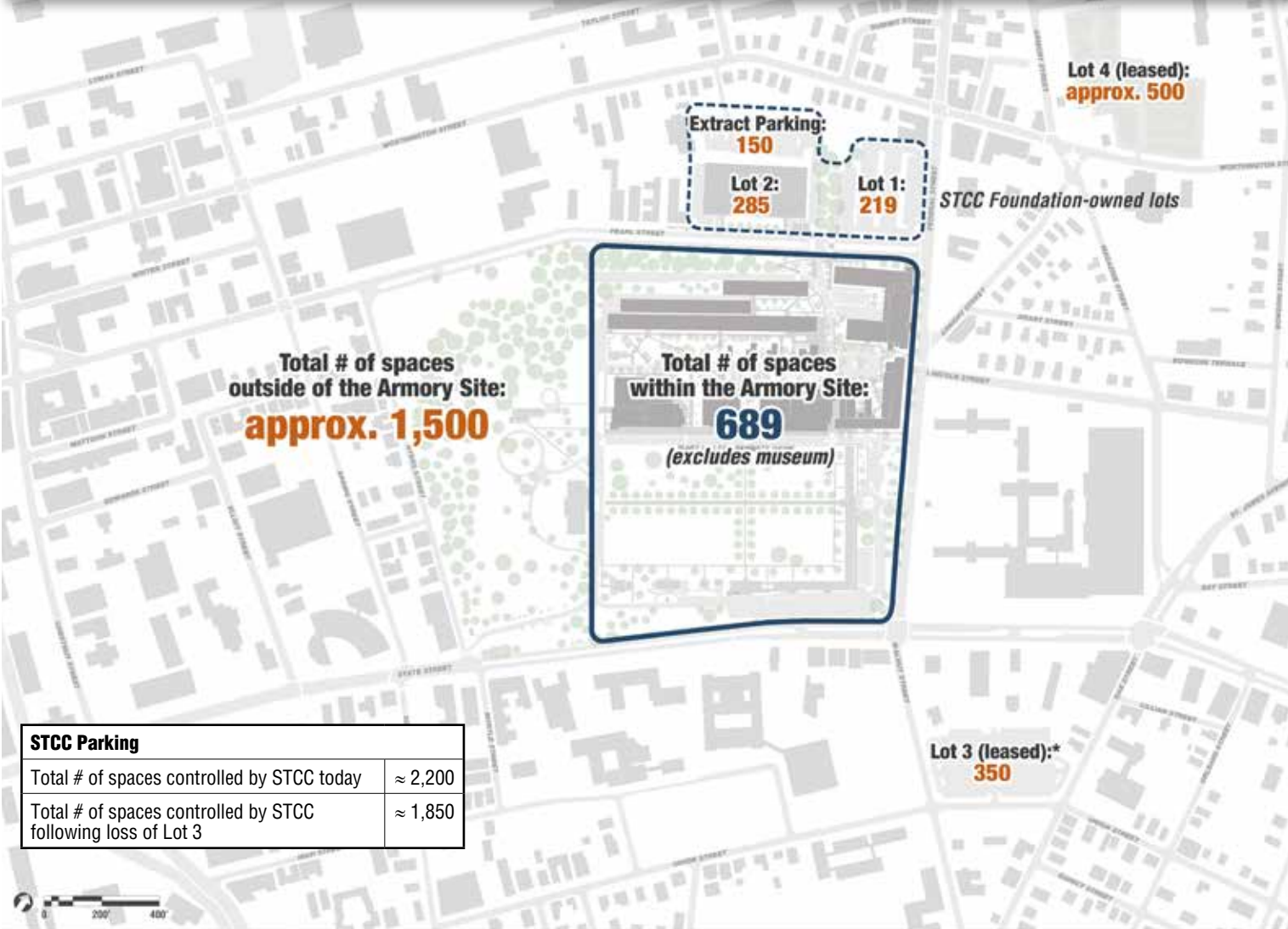
Parking

Today, STCC controls approximately 2,200 parking spaces. Approximately 700 are located within the Armory site. Particularly in areas north of the Parade Ground, parking and access roads dominate the campus environment, making for a relatively unfriendly experience for pedestrians. Approximately 1,500 additional spaces are located in surface lots and served by shuttles. Lots 1, 2, and the Extract Place lot are owned by STCC and located just outside the Armory Site. Lots 3 and 4 are off-site parking areas leased by the College. STCC has no guarantee that leased lots will remain under their control in the long-term—and STCC will

soon lose access to the 350 spaces in Lot 3, which is slated for development. Development of structured parking within Lots 1 and 2 would reduce reliance on leased lots and shuttles, and enable STCC to trade some of its on-campus parking for a more inviting pedestrian environment.

The College recently terminated leases on two parking lots near Taylor and Spring Streets. These lots (known as Lot 5 and Lot 6) were underutilized due to their distance from campus, and according to a recent shuttle system survey undertaken by STCC, were the most expensive to serve on a per space basis.

PARKING TODAY



**Total # of spaces
outside of the Armory Site:
approx. 1,500**

**Total # of spaces
within the Armory Site:
689
(excludes museum)**

**Extract Parking:
150**
Lot 2:
285 Lot 1:
219

**Lot 4 (leased):
approx. 500**

STCC Foundation-owned lots

**Lot 3 (leased):*
350**

STCC Parking	
Total # of spaces controlled by STCC today	≈ 2,200
Total # of spaces controlled by STCC following loss of Lot 3	≈ 1,850



* STCC will soon lose access to Lot 3, which is slated for development.

Campus Space Needs

As part of the STCC Campus Master Plan Update, the higher education space planning firm Rickes Associates conducted a college-wide space needs assessment. This assessment identified STCC’s current “footprint” (how much space the College occupies today); STCC’s current space needs (how much space the College would require to fully meet the needs of current programs and functions); and STCC’s projected space needs. Inputs to the space needs assessment included several days of interviews with STCC deans and other campus leadership, analysis of STCC’s space and scheduling data, analysis of current and projected enrollment and staffing counts, and national space planning guidelines. A full report on findings from the space needs assessment is available as Appendix B, and a summary is provided below.

Enrollment Assumptions

As of Fall 2013, STCC served approximately 6,700 students (headcount). Overall, between Fall 2003 and Fall 2013, the average annual increase in enrollment at STCC was 0.9%. If STCC continues to grow at this same rate over the next ten years, the College will serve over 7,300 students in 2023. Following consultation with the College, DCAMM and the Commonwealth’s Department of Higher Education, a future enrollment scenario of approximately 7,300 students was selected as the most reasonable basis for evaluating STCC’s future space needs.

<i>Enrollment Change</i>	
Current Conditions—Fall 2013 headcount	6,729 students
Future Scenario—Fall 2023 headcount	7,360 students

Space Surpluses and Deficits

Today, STCC occupies 511,000 ASF² of space across 17 buildings. In addition, STCC has two sizeable pools of space that are currently vacant: Building 19 (with potential for up to 57,000 ASF) and the top two floors of Building 20 (44,500 ASF).

A key finding of the space needs assessment is that, overall, STCC has more space than it needs. A second important finding is that, while STCC has more than it needs of most types of spaces, STCC has much less than it needs of certain kinds of spaces.

DEFICIT: STUDENT SPACE

Today, **STCC has a significant shortfall of “student space”—study and library space, dining space, lounge and gathering space, recreation space, and retail space, as well as assembly and exhibition space.**

As of 2012, this shortfall totaled 51,500 ASF, meaning that STCC has about the half the amount of student space needed. (Please see “Study Facilities” [7,467 ASF shortfall] and “General Use” [44,078 ASF shortfall] under “Current Need—Variance” in the chart below.) The shortfall will continue to grow as STCC grows, and is projected to total over 55,500 ASF by 2023. (Please see “Study Facilities” [7,982 ASF shortfall] and “General Use” [47,625 ASF shortfall] under “Fall 2023—Variance” in the chart below.) Compared with other community colleges and in absolute terms, the amount of student space at STCC is very low. A small deficit in student health services space has also been identified.

² Assignable square feet (ASF) measures the occupiable area within a floor or building; it excludes walls, corridors, stairwells, and restrooms, as well as non-occupiable basement and attic space.

SURPLUS: ACADEMIC AND SUPPORT SPACE

Today, **STCC has a surplus of classroom space, lab and research lab space, office space, special use space** (a category that includes such uses as athletics and physical education, media production, and greenhouses), **and a major surplus of support space** (“back of the house” spaces such as bulk storage, shipping and receiving, physical plant maintenance, and trades shop). While enrollment growth will reduce these surpluses somewhat, by 2023, the projected

surplus across these space types totals over 82,500 ASF. (Please see “Classroom Facilities,” “Laboratory Facilities,” “Research Facilities,” “Office Facilities,” “Special Use Facilities,” and “Support Facilities” under the “Variance” columns in the chart below.) Addressing the deficits and surpluses—as well as issues related to the quality of space (*e.g.*, outdated labs or classrooms) and to adjacencies (for instance, co-location of the services students need to begin their career at STCC) will be important.

CATEGORY (DESCRIPTION)	ACTUAL (4,562 FTE)	CURRENT NEED (4,562 FTE)			FALL 2023 (4,789 FTE)		
	4,562 FTE	Current Space Need (ASF)	Variance (ASF)	% Change	Projected Space Need (ASF)	Variance (ASF)	% Change
100 (Classroom Facilities)	86,950	61,025	-25,925	-30%	64,715	-22,235	-26%
200 (Laboratory Facilities)	157,967	137,264	-20,703	-13%	141,944	-16,023	-10%
250 (Research Facilities)	6,701	5,248	-1,454	-22%	5,509	-1,192	-18%
300 (Office Facilities)	109,924	100,932	-8,992	-8%	106,382	-3,542	-3%
400 (Study Facilities)	9,868	17,335	7,467	76%	17,850	7,982	81%
500 (Special Use Facilities)	27,203	20,638	-6,565	-24%	23,157	-4,046	-15%
600 (General Use)	41,232	85,310	44,078	107%	88,857	47,625	116%
700 (Support Facilities)	67,295	27,482	-39,813	-59%	31,738	-35,557	-53%
800 (Health Care Facilities)	4,087	5,199	1,112	27%	5,245	1,158	28%
Grand Total	511,227	460,433	-50,794	-10%	485,396	-25,831	-5%
Unused Space (includes Building 19 and top of 2 floors of Building 20)	104,482						
Non-Institutional	4,262						
TOTALS	619,971	460,433	-99,538	-18%	485,396	-74,575	-13%

■ Space surpluses ■ Space deficits

How much space will STCC need in the future?

An important goal of the 2014 Campus Master Plan Update is to consolidate STCC functions north of the Parade Ground to provide a more cohesive campus environment. The space needs assessment provides confirmation that there is sufficient space north of the Parade Ground to meet current and anticipated College space needs through 2023 and beyond. The assessment finds that:

- As noted above, STCC currently occupies 511,000 ASF³ of space in 17 buildings.

³ Assignable square feet (ASF) measures the occupiable area within a floor or building; it excludes walls, corridors, stairwells, and restrooms, as well as non-occupiable basement and attic space.

- STCC has a current need for 460,000 ASF and by 2023, a need for 485,000 ASF.
- Vacating buildings south of the Parade Ground (Buildings 12, 14, 15, and 16) would reduce the total amount of STCC occupied space by 63,000 ASF. STCC would then occupy 448,000 ASF of space across 13 buildings—37,000 ASF less than the college is projected to need by 2023.
- **The need for additional space will met through renovation of Building 19, which can provide up to 57,000 ASF** of much-needed student space in the Learning Commons and Student Hub project that is already moving forward. Reuse of the now-vacant space on the top two floors of Building 20 (which includes 44,000 ASF) provides additional flexibility to accommodate future growth beyond what’s anticipated today.

Current Space Occupancy: <i>ASF in use by STCC</i>	Revised Space Occupancy <i>(Buildings 12, 14, 15 & 16 vacated)</i>	2023 Projected Space Need <i>(as per Rickes Associates Space Needs Assessment)</i>	Additional Space Needed by 2023 <i>(as per Rickes Associates Space Needs Assessment)</i>
511,000 ASF	448,000 ASF	485,000 ASF	37,000 ASF

Chapter 3

Master Plan Framework

Overview

This plan builds on the framework established within the 2007 Campus Master Plan: strengthening the STCC campus as an attractive, cohesive place with well-maintained, technology-enabled modern and historic buildings that fully meet the College’s academic and support needs. Clustering STCC functions in the area north of the Parade Ground, and providing for comprehensive upgrade and reuse of historic buildings the College will continue to occupy, are key elements of that vision. Other important elements of that vision relate to the experience beyond STCC’s buildings, and the need for a welcoming, walkable and accessible campus environment.

Consolidate the STCC campus footprint

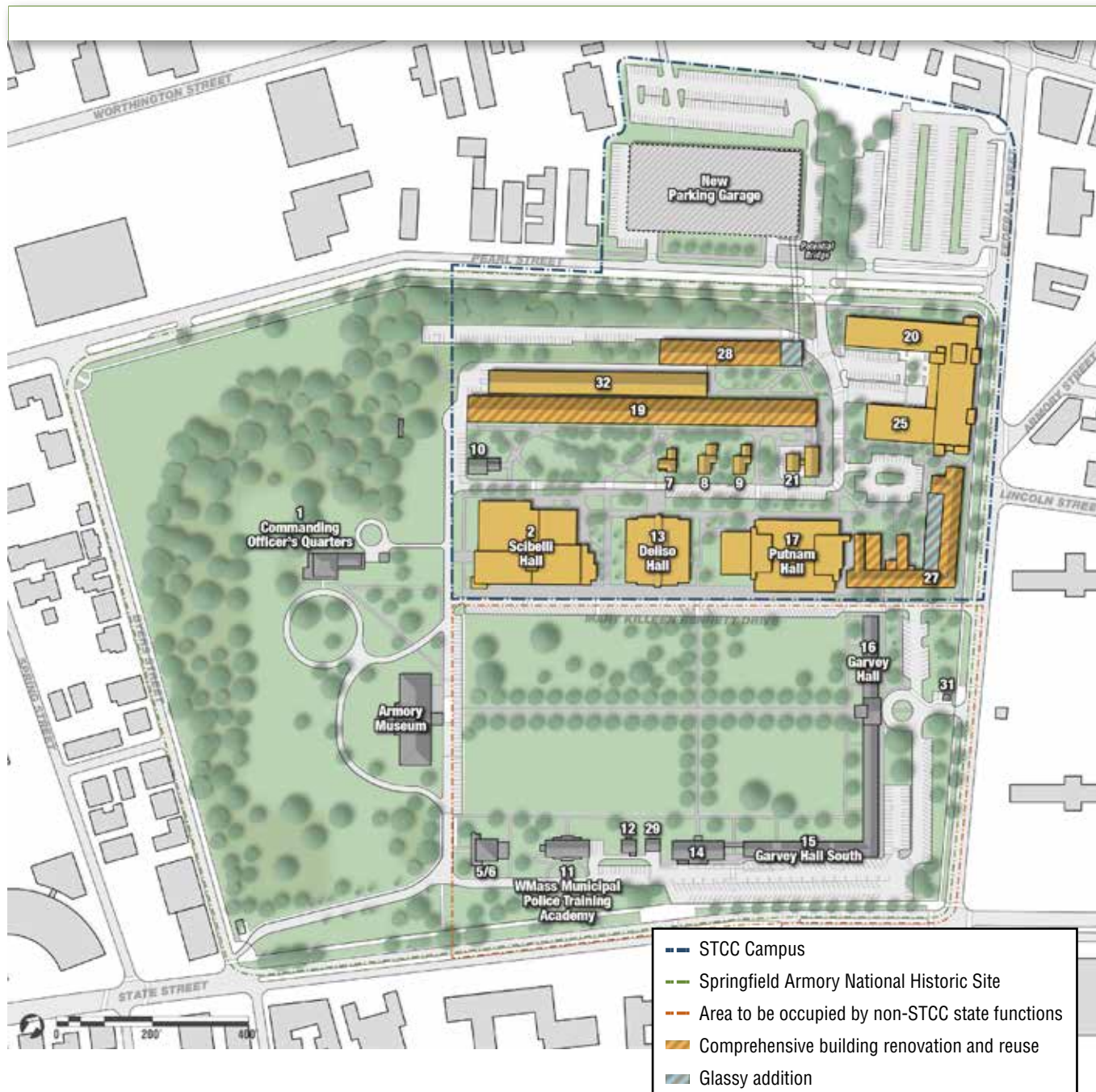
With consolidation of STCC functions in buildings north of the Parade Ground, STCC will be a more cohesive, compact and easily navigated campus, with a footprint that better matches its needs. Today, STCC maintains and occupies more space than is necessary to meet current or anticipated space needs, with operations dispersed across 35 acres within the Armory site. Consolidation within an approximately 20 acre footprint will provide enhanced efficiencies for students, faculty, and staff. It will facilitate clustering of student resources and services, improve adjacencies between academic programs, place administration within easy reach of students and employees, and provide a critical mass of co-located activity that will strengthen STCC as a lively and efficient campus.

As STCC advances a phased consolidation of its functions to the north of the Parade Ground, DCAMM will repurpose Buildings 12, 14, 15, and 16 for other state functions, reducing the College’s maintenance and operations burden, and enabling the Commonwealth to address non-STCC space needs.

A key first step in advancing STCC consolidation will be **renovation of Building 19 as a Learning Commons and Student Hub**, an initiative already underway. Student resources and services now scattered across eight campus buildings will be co-located in one building, adjacent to STCC’s primary academic facilities. Next steps will relocate STCC’s Fine Arts and Graphic Arts programs to Building 27, and central administration offices to Building 28, placing all STCC functions north of the Parade Ground and within easy reach for students—moves that will require **comprehensive renovation and reuse of Buildings 27 and 28**. The result will be a more compact and efficient STCC campus with a Learning Commons and Student Hub at its center.

Advance a robust deferred maintenance program

Addressing STCC’s large backlog of deferred maintenance projects—and moving quickly to address new issues as they emerge—is of the highest priority. A robust program of investments is essential to advance maintenance, repair and upgrade where needed across STCC’s inventory of buildings.



Consolidate the STCC campus footprint

- Focus STCC activities north of the Parade Ground.
- Repurpose Buildings 5, 6, 11, 12, 14, 15, 16, and 29, for non-STCC uses.

Advance a robust deferred maintenance program

- Focus on Buildings 2, 7, 8, 9, 13, 17, 19, 20, 21, 25, 27, 28, and 32; address existing needs, and new needs as they emerge

Create a new focus for the re-configured STCC campus

- Create a new Campus Green between Building 19 (new Learning Commons) and other major academic buildings (Buildings 2, 13, 17); relocate existing surface parking (in phases if necessary).

Resolve accessibility challenges to provide enhanced access for all campus users

- Create accessible routes between all areas of campus including parking.
- Address identified accessibility issues in campus buildings.

Renovate and repurpose three key buildings to meet programmatic needs

- Building 19: Transform into a new Learning Commons and Student Hub (Step 1)
- Building 27: Renovate/repurpose for Fine and Graphic Arts departments (Step 2)
- Building 28: Renovate/repurpose as administration building (Step 3)

Consolidate campus parking in a new Pearl Street garage to provide improved access for students, faculty, and staff

- Once a new parking structure is developed, abandon leases on remote surface parking lots and eliminate shuttle services to reduce operational costs.

The College strives to keep its facilities in good condition but upkeep of STCC’s historic and mid-twentieth century buildings has proved an ongoing and costly challenge, with needs typically far greater than the resources available. With assistance from DCAMM, STCC will address aging HVAC and MEP systems, poor energy performance, water infiltration and envelope issues, failing windows, and a range of other deficiencies that have plagued the College’s facilities. Attention to these issues will enable STCC and the Commonwealth to better serve students, and to better preserve the Armory site’s historic assets.

Create a new focus for the reconfigured STCC campus

A **Campus Green** at the center of this newly compact campus will transform an area now used for parking into a new heart of the consolidated STCC campus—a usable open space that knits together STCC’s new Building 19 Learning Commons and Student Hub with some of the College’s largest academic facilities. An **improved campus gateway at Pearl Street** and **improved circulation routes up to Building 19 and beyond** will further support STCC’s new hub, and provide a safe, inviting arrival experience for the reconfigured campus.

Today, the area north of the Parade Ground feels in many ways like the “back” of the campus: while most STCC facilities are located here, many buildings are lined by parking and access roads, basic pedestrian amenities like sidewalks are often missing, and little open space is provided. In partnership with the National Park Service, STCC and DCAMM will undertake a series of essential and transformative improvements that will strengthen STCC as an inviting, walkable, and connected place.

Creation of the new Campus Green will be a critical step. Consolidation of STCC functions north of the Parade Ground will provide a more compact campus—but the center of this reoriented campus, beside the new Learning Commons and Student Hub, is currently occupied by a large parking lot. The space between Building 19 and three of the College’s largest academic facilities (Buildings 2, 13 and 17) will soon become an important campus crossroads and focal point, and the character and design of the area must evolve in response to this new circumstance. Transitioning the parking area just south of the new Learning Commons and Student Hub into a significant Campus Green—a central campus open space instead of a central parking lot—is an essential step to strengthen STCC as a cohesive campus environment. Development of the Campus Green could happen all at once, or if necessary, establishment of this important space could happen in phases.

Other critical improvements will focus on establishing clear, safe, accessible walking routes to the Building 19 Learning Commons and Student Hub—and what will soon be the center of the campus. Today, the Pearl Street entrance is a modest break in the historic fence that accommodates 2-way vehicular traffic and pedestrian flows. STCC, DCAMM and the National Park Service will partner to improve the campus gateway at Pearl Street to provide a safe, welcoming route for pedestrians and a clear “front door” to the newly configured STCC campus. Also in partnership with the National Park Service, STCC and DCAMM will revamp the road leading from Pearl Street up into the campus to provide a better experience for drivers, pedestrians, and people of all mobility levels. While the walk from Pearl Street up the slope toward Building 19 and the Parade Ground now places pedestrians in the flow of vehicular traffic, improvements will provide sidewalks, trees, and

other pedestrian amenities, and routes to buildings will be served by paths that provide clear routes through parking areas. Together, these improvements will transform what can feel today like a collection of free-standing buildings into an environment that looks and functions like a safe, inviting college campus—a welcoming place for STCC students, employees, and visitors.

Resolve accessibility challenges to provide enhanced access for all campus users

Significantly improving campus accessibility is of the highest priority. In the coming years, STCC and DCAMM will focus on improving universal access to campus programs and facilities, and on addressing Priority Projects identified within the 2014 ADA Strategic Compliance Assessment—many of which will overlap with initiatives described above. Priority Projects include:

- Construct access routes from the Pearl Street entrance up to the North side of the Building 2–27 Corridor with connections to buildings along the route.
- Reduce hazardous mingling of pedestrian and vehicular routes.

- Upgrade Scibelli Theater (Building 2) providing access both for general audiences attending performances and for students pursuing theater major including: wheelchair and companion seating, access from auditorium to stage, access from stage to dressing rooms, access to controls room, and upgrade of theater restrooms for full accessibility.
- Upgrade or replace all non-compliant lifts and ramps with compliant and usable access elements.
- Relocate programs and services located in inaccessible buildings to an accessible location.
- Improve wayfinding by upgrading site identification and directional signage and installing a system of building identification that resolves confusion created by non-sequential building numbering system.

Establishment of a fully accessible route between STCC’s Pearl Street entrance and the buildings lining the Parade Ground—described in the pages that follow as “Access STCC”—will be particularly important.

STEP 1: Renovate Building 19 for Learning Commons & Student Hub	STEP 2: Renovate Building 27 for Fine & Graphic Arts; Address building deficiencies	STEP 3: Renovate Building 28 for Central Admin; Address building deficiencies	ON-GOING: Identify & address needs related to Building 20. Address building deficiencies.
<i>(approx. 57,000 ASF)</i>	<i>(18,500–23,000 ASF needed; 30,000 ASF available)</i>	<i>(17,500 ASF needed; 23,000 ASF available)</i>	<i>Top two floors provide space for future growth</i>
Building 27 occupants move to Building 19	All art programs co-locate in Building 27; Building 28 and art spaces in buildings south of Parade Ground are vacated	Central Admin functions relocate to Building 28 from south of Parade Ground	

Renovate and repurpose three key buildings to meet programmatic needs

A cornerstone of the master plan update is comprehensive renovation and repurposing of several key campus buildings that will play an important role in STCC's future. As noted above:

- **Building 19** will be transformed into a new Learning Commons and Student Hub, housing STCC's student intake services (including the Admissions office), academic support resources, a new learning commons that will replace the College's under-sized library, and much needed student activity, meeting, and lounge space. Soon, all the offices students must access when enrolling at STCC—and all the services that provide support to students once enrolled—will be housed in a single, centrally located building. A programming study for this initiative is now underway.
- **Building 27**, now home to STCC's library and a range of academic support services, will be vacated by moves to Building 19 and will then undergo comprehensive renovation to provide a new, consolidated home for STCC's Fine and Graphic Arts programs, now dispersed across three buildings. Renovation will include full upgrade or replacement of building systems, exterior repairs, and comprehensive upgrade of the building's interior to meet departmental needs. A glassy addition at the rear of the building will provide improved accessibility, allow for program areas with larger floorplates, and establish a more visible and welcoming connection to the rest of the reconfigured campus. The addition could also serve as a "winter garden," accommodating green house functions that now occur at Building 21.
- **Building 28**, now home to STCC's Fine Arts department, will be vacated when the Graphic Arts department relocates to Building 27. Building 28 will then undergo comprehensive renovation and will be repurposed as an administration build-

ing. Renovation will include full upgrade or replacement of building systems, exterior repairs, and comprehensive upgrade of the building's interior. A glassy addition / elevator replacement component of this project will help mitigate accessibility issues related to the slope up from Pearl Street, and provide a highly visible campus arrival point for people of all mobility levels. This initiative will enable STCC to relocate remaining administrative functions in Buildings 15 and 16, and complete its consolidation north of the Parade Ground.

As full renovation of these buildings must advance sequentially, it is important to note that Buildings 27 and 28 will need attention in the near-term to address current deficiencies. In addition, continued study of Building 20, STCC's Health Science Building, will enable DCAMM and STCC to appropriately address any identified issues.

Consolidate campus parking in a new Pearl Street garage to provide improved access for students, faculty, and staff

Structured parking on Pearl Street will significantly expand the supply of parking just outside the gates of the newly compact STCC campus. Today, STCC relies on satellite parking lots, totaling approximately 1,500 spaces. Over 800 of those spaces are in relatively remote lots that are leased by the campus and served by shuttles. This parking supply is vulnerable, with loss of these spaces to development or ownership changes an ongoing College concern. Development of up to 1,200 spaces of structured parking on the STCC-owned lots along Pearl Street (Lots 1, 2 and Extract Place) will consolidate STCC's parking supply on STCC property, in a location just steps from the newly consolidated campus and the Pearl Street gateway. Elimination of shuttle service and ter-

mination of parking lot lease agreements would free resources to help cover debt service costs on the garage.

Key initiatives to advance this framework are described in the pages that follow.

Major Capital Projects

In support of the master plan framework, eight major capital projects have been identified. Some represent a single large initiative, while others are clusters of smaller projects. The major capital projects have been grouped into two categories: Building Renovation and Reuse Initiatives, and Other Critical Campus Improvement Initiatives.

Building Renovation and Reuse Initiatives

STCC's Building Renovation and Reuse Initiatives—projects that will fundamentally transform the use of a building while also providing for comprehensive upgrade of building exterior, interior and systems¹—are as follows:

- **Major Capital Project #1: Renovate Building 19 for new Learning Commons and Student Hub**
- **Major Capital Project #2: Conduct Building 20 future use study and then address needed investments**
- **Major Capital Project #3: Renovate Building 27 for Fine & Graphic Arts Programs**
- **Major Capital Project #4: Renovate Building 28 for Central Administration**

¹ In the case of Building 20, improvements will proceed based on the results of the study. The study may conclude that only limited improvements are needed; that comprehensive renovation and reuse is required; that the building should be demolished and replaced; and/or that the top floors of Building 20, now vacant, should be removed.

Major Capital Project #1, which focuses on transformation of Building 19 into a new Learning Commons and Student Hub, is STCC's highest priority project, and is already underway via a programming study. Major Capital Project #2 recognizes the need for a detailed study to determine the optimal future use of Building 20—and then for needed improvements identified by the study to be undertaken. Major Capital Projects #3 and #4 provide for comprehensive renovation and reuse of Buildings 27 and 28—projects that will address building and programmatic needs, and will be the final steps in consolidating STCC functions in a more compact footprint north of the Parade Ground.

Other Critical Campus Improvement Initiatives

The remaining major capital projects focus on essential site, safety and accessibility improvements, as well as the significant maintenance needs of STCC's unique building inventory. These projects are as follows:

- **Major Capital Project #5: Improve campus-wide accessibility and strengthen the campus environment by improving the Pearl Street entrance and access road, upgrading Scibelli Theater, replacing non-compliant lifts and ramps, ensuring accessible locations for campus programs and services, and improving wayfinding**
- **Major Capital Project #6: Advance a robust program of deferred maintenance**

- **Major Capital Project #7: Create a new Campus Green beside the new Learning Commons and Student Hub**
- **Major Capital Project #8: Add structured parking on Pearl Street**

Major Capital Projects #5 and #6, focused on improved campus accessibility and addressing STCC's large backlog of maintenance and upgrade needs, represent critical near-term priorities. Major Capital Project #7, creation of a new Campus Green, is an essential step in supporting the new Learning Commons and Student Hub and could be phased over time. Major Capital Project #8 establishes structured parking immediately adjacent to the campus, enabling STCC to end its reliance on remote leased lots served by shuttles.

Additional information on each Major Capital Project is provided below and in the pages that follow.

Major Capital Project #1: Renovate Building 19 for New Learning Commons and Student Hub

Program: Create a new library / learning commons accompanied by a student services and academic support “one-stop” (including the STCC Admission office) and places for student study and activities in now-vacant Building 19. *Programming study now underway.*

Physical improvements: Comprehensive renovation, including installation of new building systems. Repair of new gutter and downspout system, which in many places, particularly along the east elevation, does not work properly.

Overview of initiative: Reuse of Building 19 as a Learning Commons and Student Hub has long been a College goal. Completion of this project will have a transformative impact on both the campus environment and the student experience, consolidating resources that are now dispersed across campus; providing the student space STCC lacks; and breathing new life into a long-vacant structure at the heart of STCC.

Built between 1847 and 1850 and expanded to its current size in 1863, Building 19 (“the Long Storehouse”) is approximately 100,000 GSF on two floors inclusive of a large attic and small partial basement. The ground floor includes an open air passage that currently links two parking areas. The National Park Service Cultural Landscapes Inventory (2004) notes that Building 19 “is perhaps the finest example of cavalry caserne [casern] style architecture in the United States today.” The building is characterized by the National Park Service as a building of Architectural Interest and as a Contributing Structure within the historic site.

STCC leadership envisions Building 19 as a consolidated Learning Commons and Student Hub that co-locates essential student re-

sources and services, along with student amenity space. Through this project, STCC is hoping to:

- **Establish a learning commons** that combines a library with the College’s academic support services and resources
- **Consolidate student administrative/intake services**, now dispersed across the campus
- **Provide social spaces for students**—places for students to study, “hang out” and participate in college activities and events
- **Reduce significant campus-wide space shortfalls related to both library and general use space** (a space category that includes dining space, lounge and gathering space, recreation space, and retail space, as well as assembly and exhibition space) identified in the space needs assessment prepared by Rickes Associates.

Based on STCC goals and the space needs assessment, which provided a high-level estimate of current and future space needs for the campus as a whole, the master plan team developed several reuse concepts for Building 19.

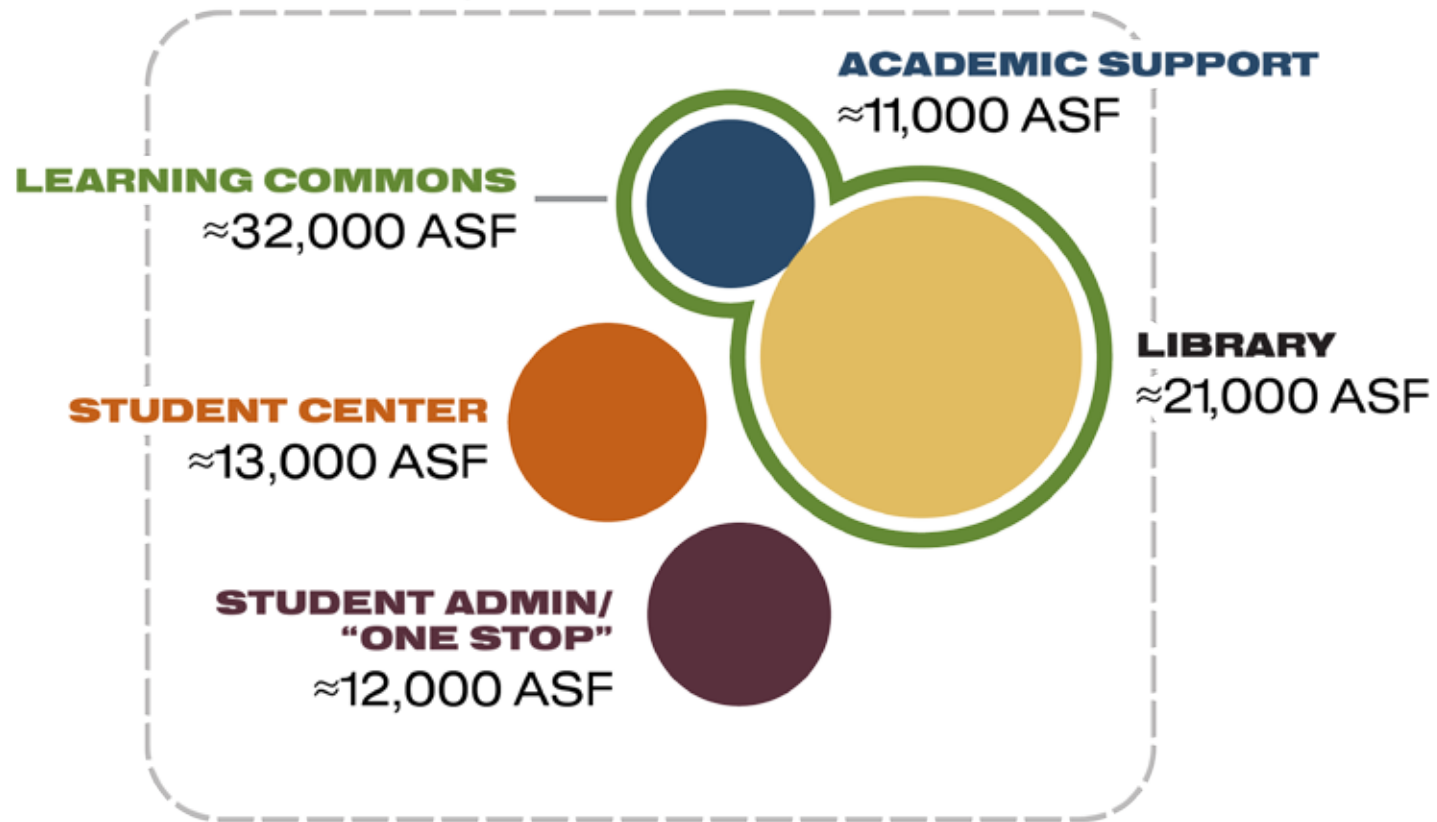
The concept strongly preferred by College leadership was the one that incorporated all of the elements identified above. This concept, which provides a broad framework for future use of the building, is as follows:

Likely “ingredients” and for this concept are:

- Learning Commons, including:
 - > Library
 - > Academic Support Services (*e.g.*, Advising, Student Success Center, Disabilities Services, ESL, Writing Center, Student Testing)

The All-Purpose Hub
LEARNING COMMONS + STUDENT CENTER + ONE-STOP

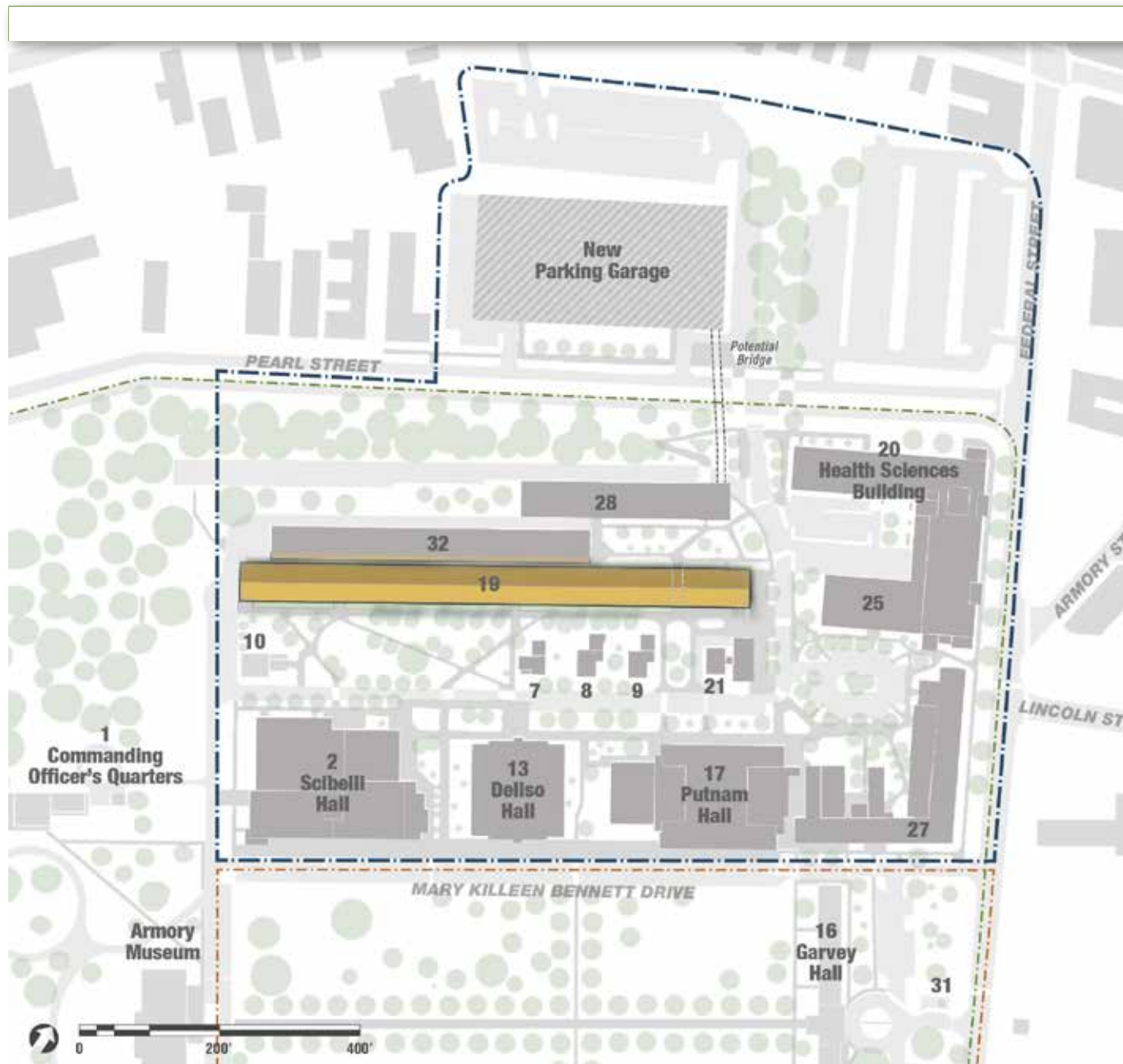
57,000 ASF TOTAL



- Student Administrative/Intake Services “One-Stop,” including:
 - > Admissions
 - > Financial Aid
 - > Student Accounts
 - > Registrar
- Student Center, including such uses as:
 - > Combined lounge + grab-and-go small-scale dining operation
 - > Bookstore
 - > Student activities office
 - > Meeting/event space
 - > Rec/game room

Other potential program elements include Campus Police, the Parking Office, and Distance Learning.

This building reuse concept provides a basis for more detailed programming, which is now taking place via a programming study. Renovation of Building 19 into a Learning Commons and Student Hub remains STCC’s highest priority capital initiative.



Major Capital Project #2:

Conduct Building 20 future use study and then address needed investments

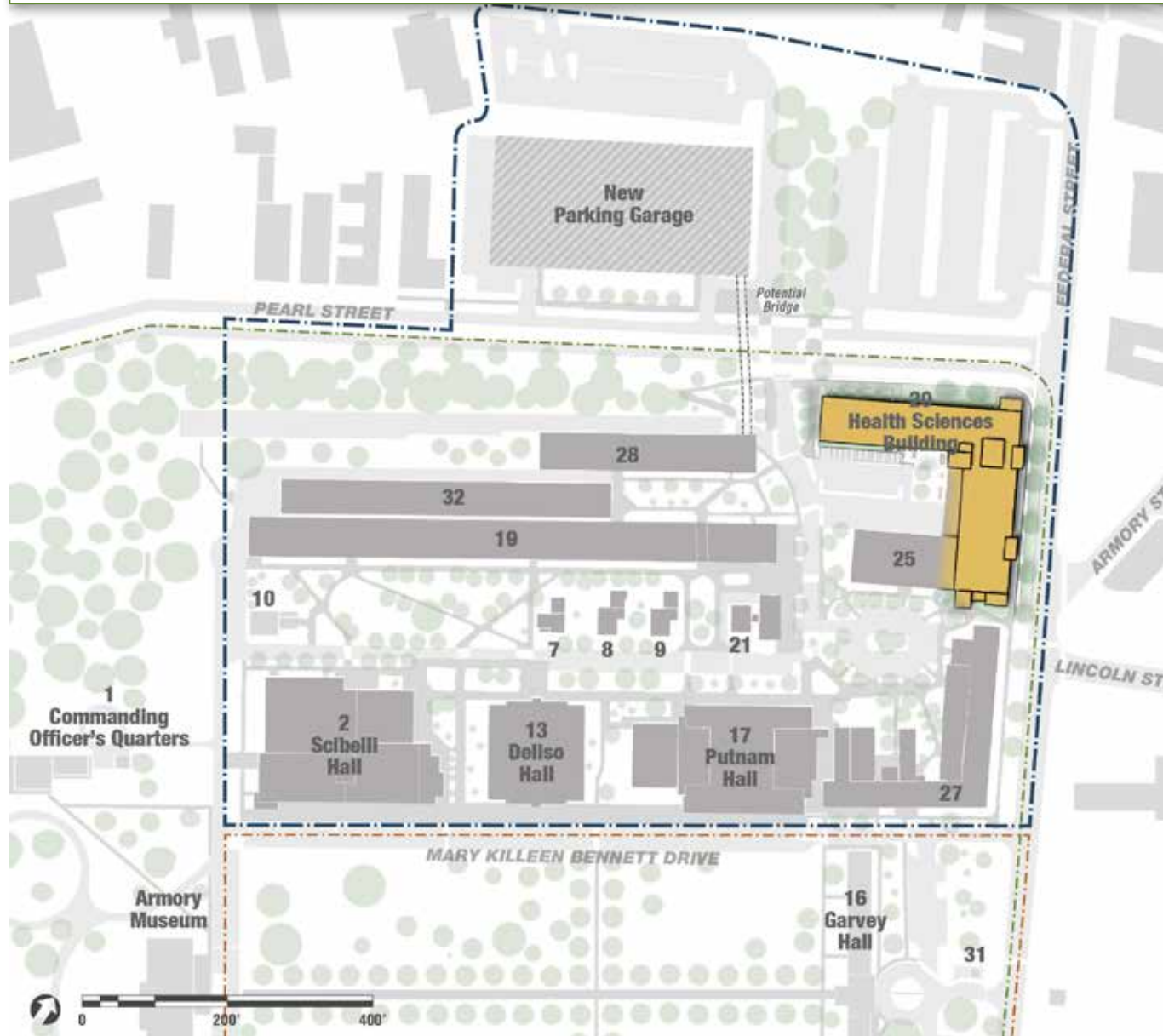
Overview of initiative: A study will soon be undertaken by DCAMM and STCC to determine the optimal future use of Building 20 and outline associated next steps.

Building 20, the Health Sciences Building, was constructed in 1941, with the top two floors (the 4th and 5th) added in 1972. It is STCC's largest building at over 185,000 GSF. However, the top two floors of Building 20 remain unoccupied; completion of asbestos remediation would be necessary for reuse of these floors. A current DCAMM study is addressing water infiltration through the foundation along Pearl Street, repair of Stair Four, which serves

the fourth and fifth floors, and the potential completion of the fourth and fifth floors hazmat remediation. Citing concerns about the condition and usability of all levels of Building 20, the College has explored options for relocation of all Health Science programs to leased space within an off-site medical facility. DCAMM and STCC will initiate a comprehensive study to investigate options for the future of Building 20 and the programs within it.

Investments will then proceed based on the results of the study. Possible outcomes of the study include the following: that only limited improvements are needed; that comprehensive renovation and reuse is required; that the building should be demolished and replaced; and/or that the top floors of Building 20, now vacant, should be removed.

MAJOR CAPITAL PROJECT #2: Conduct Building 20 future use study and then address needed investments



Major Capital Project #3: Renovate Building 27 for Fine & Graphic Arts Programs

Program: Consolidate Graphic Arts (now located in Buildings 14 and 15) and Fine Arts (now located in Building 28) in Building 27 (now home to STCC’s library and academic support services), following creation of the new Learning Commons and Student Hub in Building 19 and full renovation of Building 27. *18,500–23,000 ASF needed; 30,000 ASF available. Construct glassy entry addition on northwest side of building. 7,500 GSF assumed.*

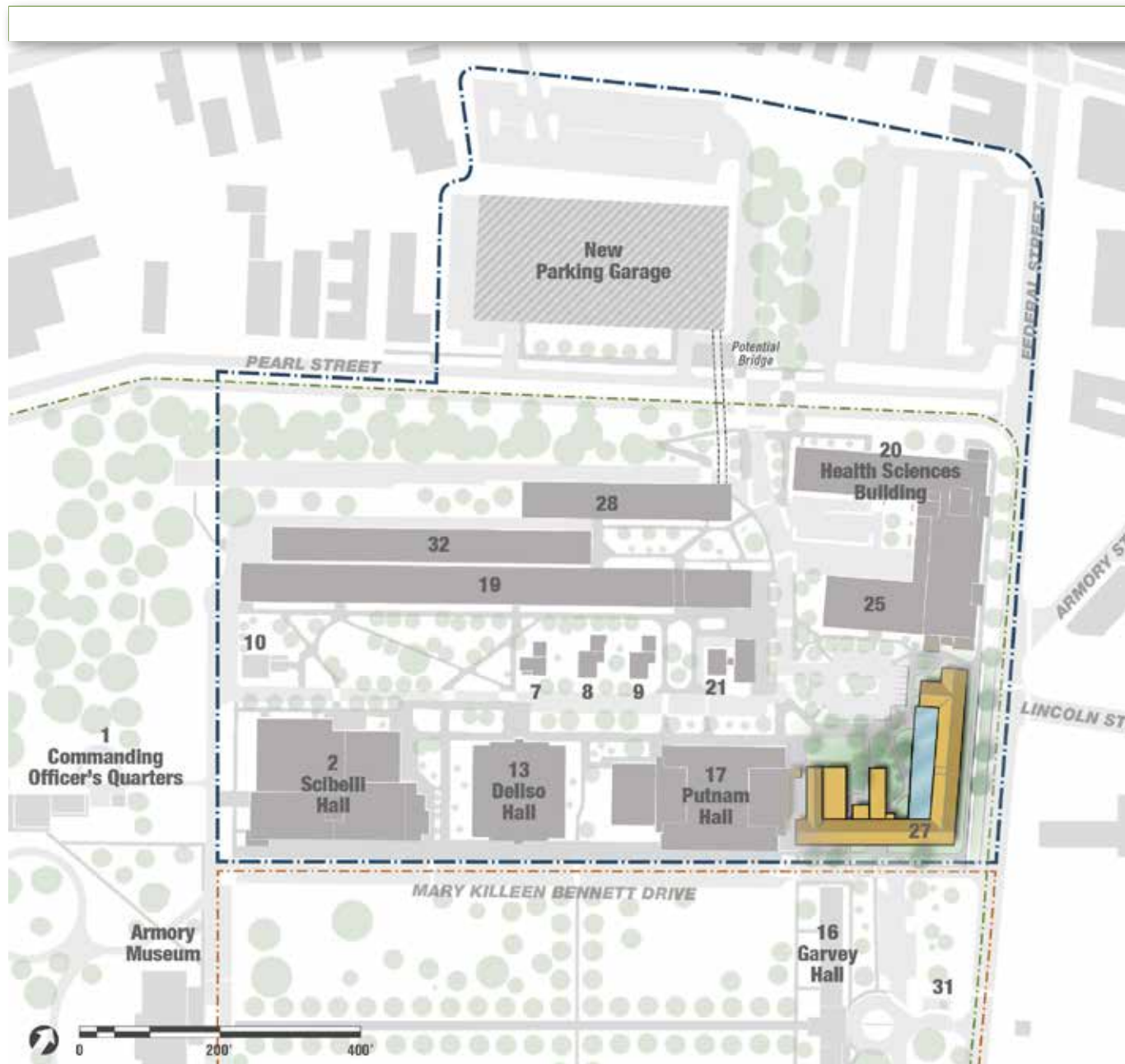
Physical Improvements: Comprehensive renovation addressing exterior repairs, building systems, fixtures and finishes; a substantial glassy addition at rear of building will provide improved accessibility, allow for program areas with larger floorplates, and establish a more visible and welcoming connection to the rest of the reconfigured campus. In advance of comprehensive renovation, address stormwater drainage from roof; replace failed sash in the new windows, where needed; and prevent additional water infiltration.

Overview of initiative: With comprehensive renovation and systems upgrades, Building 27 will provide a new and consolidated arts facility, equipped with the modern studio and classroom spaces that will help these programs thrive.

Today, STCC’s arts programs are dispersed across three buildings, with Graphic Arts in Buildings 14 and 15, and Fine Arts in Building 28. Building 27 is now occupied by the Library and a range of academic support services—all of which are slated to relocate to now-vacant Building 19 as part of the Learning Commons and Student Hub project.

Once Building 27 is vacated, aside from facilities shops, print shop, and other support functions in the basement, renovation of the top two floors can begin. Anticipated project scope includes full upgrade of building systems, renovation of the interior to meet the needs of STCC’s arts programs—including instructional, studio and office spaces—and full ADA compliance. To provide a welcoming and accessible entrance on the north edge of the building—now devoted to service, loading and parking activities—and to provide larger floorplate spaces within this narrow building, a substantial and glassy new entry addition will be provided. Conceived as a three-story glass atrium space or “winter garden,” the addition could also serve to replace the greenhouse now beside Building 21. Paths and landscaping will strengthen connections to other buildings.

This initiative focuses needed investment in one of the Armory site’s most historic buildings, further consolidates STCC functions north of the Parade Ground, and frees much of Buildings 14 and 15 for other state uses.



Major Capital Project #4: Renovate Building 28 for Central Administration

Program: Consolidate central administrative functions (now located in Buildings 15 and 16) in Building 28 (now home to Fine Arts) following relocation of arts programs to Building 27 and full renovation of Building 28. Program might also include Campus Police (now in Building 9) and Parking Office (now in Building 12) if not incorporated into the Building 19 Learning Commons and Student Hub project. *17,500 ASF needed, without police or parking; 23,000 ASF available.* Construct glassy new stair/lobby/elevator addition to replace poor performing elevator area/entry on east end of building. *7,500 GSF (2,500 GSF per floor) assumed.*

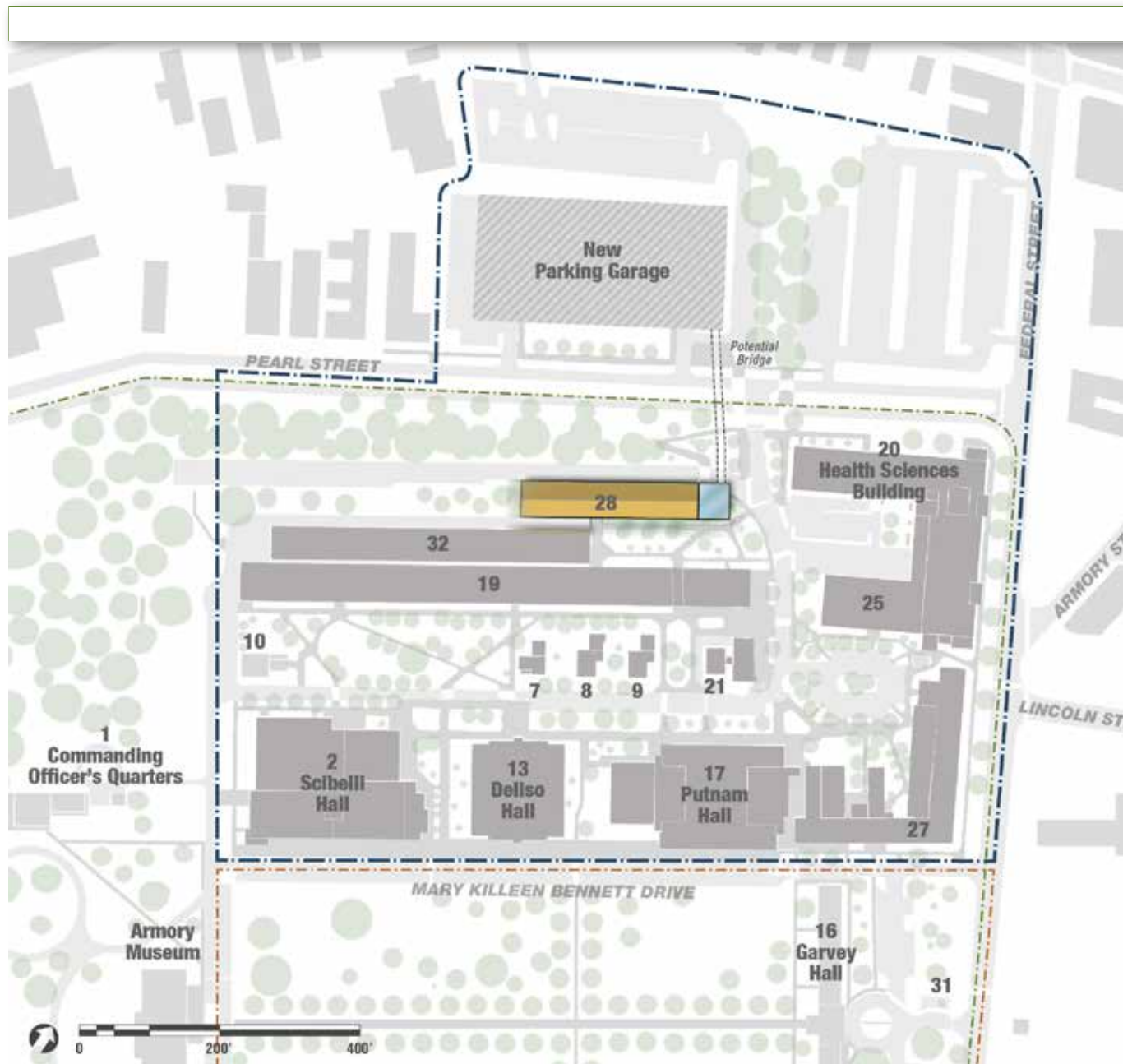
Physical Improvements: Comprehensive renovation addressing exterior repairs, building systems, fixtures and finishes. The project should include a glassy addition / elevator replacement component to help mitigate accessibility issues related to the slope up from Pearl Street, and provide a highly visible campus arrival point for people of all mobility levels. In advance of comprehensive renovation, address stormwater drainage from roof; address exterior water damage; address thermal bridging issues; repair electrical system as needed until building renovation moves for-

ward; and monitor and address structural issues (*e.g.*, fix exterior concrete stairs and concrete wall/roof at the rear of the building).

Overview of initiative: With comprehensive renovation and systems upgrades, Building 28 will provide a new home for STCC's central administrative functions, placing STCC's president, his team, and other key administrators at STCC's new front door—right at the Pearl Street entry, and beside the new Building 19 Learning Commons and Student Hub.

Today, Building 28 is occupied by STCC's Fine Arts program, and is in poor condition. Following relocation of STCC's arts programs to a renovated Building 27, Building 28 will be vacant and ready for full renovation as an administration building. Anticipated project scope includes full upgrade of building systems, renovation of the interior to meet the needs of STCC's administrative functions, and full ADA compliance.

This project brings new investment to one of STCC's neediest buildings, improves accessibility into the campus, frees Buildings 15 and 16 for non-STCC uses—and will be the final step in consolidating campus functions north of the Parade Ground.



Major Capital Project #5:

Improve campus-wide accessibility and strengthen the campus environment by improving the Pearl Street entrance and access road, upgrading Scibelli Theater, replacing noncompliant lifts and ramps, ensuring accessible locations for campus programs and services, and improving wayfinding

Physical improvements: Address issues identified within the ADA Strategic Compliance Assessment, with an emphasis on Priority Projects.

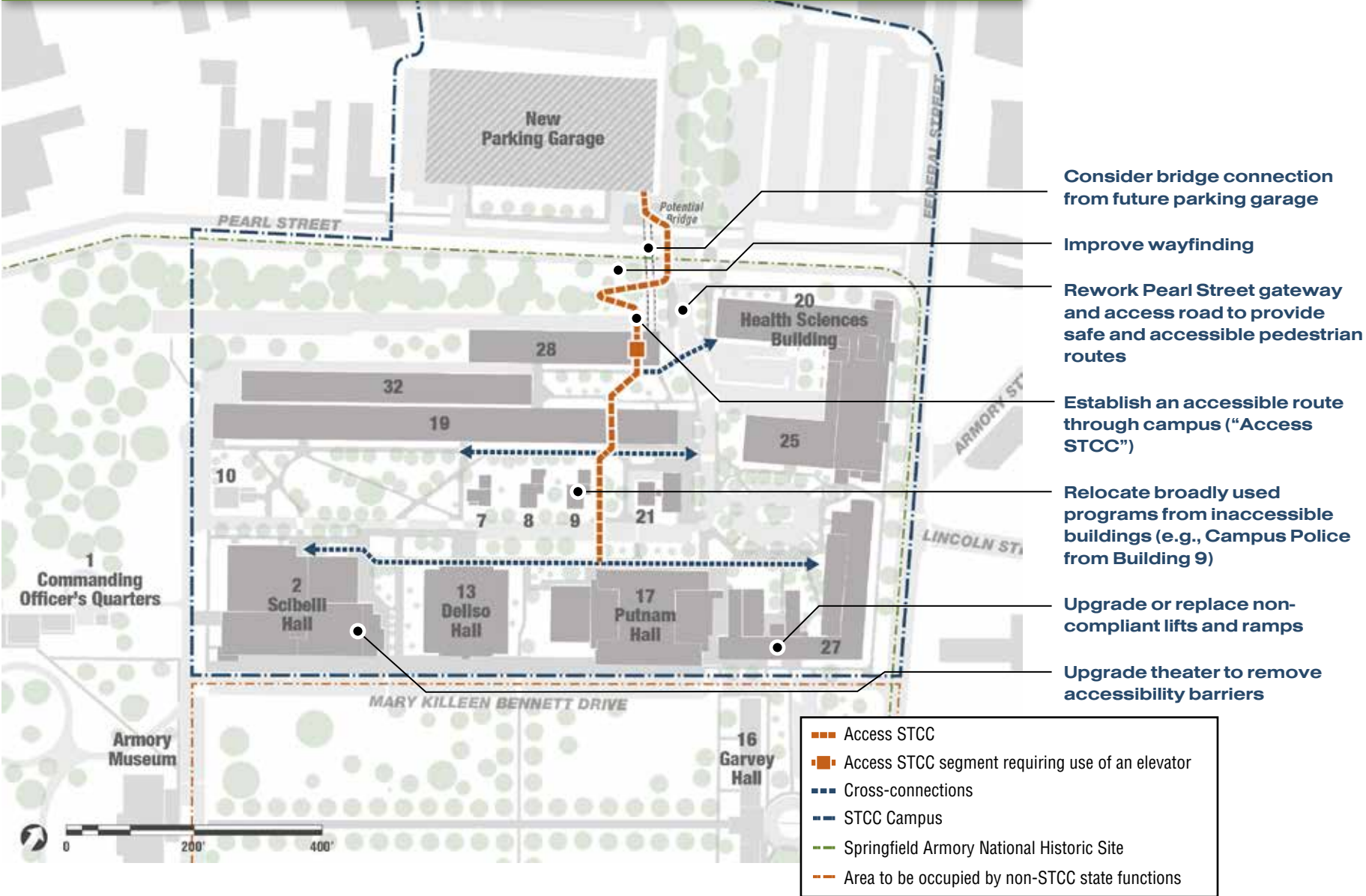
Overview of initiative: Providing universal access to STCC programs, facilities and grounds remains an important College and DCAMM goal. Significantly improving campus accessibility is of the highest priority. In the coming years, STCC will focus on overall campus accessibility and on addressing Priority Projects identified within the ADA Strategic Compliance Assessment. Through these initiatives, STCC will strengthen itself as an accessible place—and will dramatically improve the outdoor campus environment for all.

Initiatives addressing each of the Priority Projects are as follows:

- **Part A: Fill missing links in what the master plan calls “Access STCC”—an accessible route between the campus’ Pearl Street entrance and the buildings lining the Parade Ground.** Today, steep slopes and other accessibility barriers make travel into the heart of the campus from the Pearl Street entry a significant challenge for those with mobility impairments. With an accessible and well-marked route, STCC will become a more welcoming and navigable place for all. Many pieces of this route are already in place. Filling gaps, however, will be critical. Important links include:

- > *Pearl Street Parking areas to the campus’ Pearl Street Gate:* Attention to curb cuts, paved surfaces and well-marked crossings will ensure a barrier-free route to the edge of the core campus. With long-term structured parking on Lots 1 and 2, a bridge connection between an upper level of the structure and Building 28 would also be possible.
- > *Pearl Street Gate to Building 28:* **A new accessible path that navigates the slope between Pearl Street and Building 28 will be needed.** The lawn along STCC’s Pearl Street edge, just north of Building 28, provides sufficient length and depth for such a path. Once one has reached the northeast end of Building 28, one can make use of the accessible entrance to the elevator lobby, and travel up to the courtyard level. With comprehensive renovation and reuse of Building 28 as an Administration Building, a glassy new elevator addition would be provided, offering a highly visible, accessible and welcoming route into STCC’s facilities. Note: This segment of Access STCC will be developed through Part B of this Major Capital Project.
- > *Building 28 to Buildings 32 and 19:* Using the accessible exit on the southeast side of Building 28, leading from the elevator lobby to the courtyard, one can reach Buildings 32 and Building 19. **Improvements to the east entrance of Building 32 are needed to address uneven surfaces and ¾” level change.** Renovations to Building 19 and improvements to the courtyard shared by Buildings 19, 28, and 32 should eliminate any accessibility barriers associated with travel between these buildings.
- > *Beyond Building 19:* **Renovation of Building 19 should facilitate accessible travel through this building and onward to Buildings 2, 13, 17 and 27. Design of the new Campus Green just south of Building 19 will be an important step in establishing safe, accessible routes to these buildings.** Attention to paved surfaces, slopes and curb cuts along the north and south sides of these buildings, where accessibility barriers have been identified, will also be important.

MAJOR CAPITAL PROJECT #5: Improve campus-wide accessibility and strengthen the campus environment by improving the Pearl Street entrance and access road, upgrading Scibelli Theater, replacing noncompliant lifts and ramps, ensuring accessible locations for campus programs and services, and improving wayfinding



- > *Cross-connections:* Ensuring accessible routes to Buildings 20 and 25 is also critical. Circulation improvements along the road extending from Pearl Street into the heart of the campus, described below, should eliminate accessibility barriers posed by slopes, uneven surfaces, etc.

- **Part B: Upgrade the Pearl Street campus entry and the road up into the campus to improve conditions for pedestrians and vehicles.**

Improving pedestrian access at the Pearl Street campus entry and improving the road that extends from Pearl Street into the heart of the campus will significantly improve conditions for pedestrians and vehicles, and for people of all mobility levels. Currently, the narrow gateway at the Pearl Street entrance accommodates two-way vehicular traffic and pedestrians, creating a pinch-point that places pedestrians directly in the path of vehicles turning in and out of the campus. Currently, no sidewalks are provided in this area. The road extending from this entrance up toward Building 19 is also a challenge for pedestrians and vehicles. Painted markings on the asphalt are intended to show pedestrian zones, but are not accompanied by sidewalks or other pedestrian amenities. In short, the route into the campus from Pearl Street provides an uncomfortable environment for both pedestrians and drivers, and for people of all mobility levels. With consolidation of the campus north of the Parade Ground and completion of the Building 19 Learning Commons and Student Hub, the need for a more functional arrival experience and circulation route from Pearl Street will become all the more important. The strategy for addressing this area is as follows:

- > **Partner with the National Park Service to improve pedestrian access at the Pearl Street entrance.** Options for improving access at this entry include widening the gateway, or creating pedestrian entries beside one or both pillars. Precedent for the latter approach can be found today at the main entry to the Armory site along Federal Street, where a dedicated pedestrian gateway is provided beside the vehicular gateway



Google Streetview; view from Pearl Street of narrow entry shared by two-way vehicular traffic and pedestrians



Google Streetview; pedestrian gateway provided at main entrance to Armory site on Federal Street provides a potential model for improved pedestrian access at the Pearl Street gate.

once used by carriages. Special paving could also be used to designate this area as an important arrival point, and to signal to drivers that slower speeds are expected. Design of all improvements should be respectful of the site's history and retain the historic fencing while providing a safe and welcoming gateway into the campus and the Armory site. Truly partnering with the National Park Service on this initiative will be critical to its success.

- > **Provide a new accessible path that navigates the slope between Pearl Street and Building 28.** Described under Part A of this Major Capitol Project.
- > **Add sidewalks along both sides of the campus road leading to Building 27; provide crosswalks to enable safe, easy travel between buildings.** While the topography of the campus poses accessibility challenges, where possible, paths and

cross-connections between buildings on either side of the road should be ADA compliant. Relocation of parking spaces that impede pedestrian travel (e.g., along the west side of Building 20) will enable creation of a more welcoming, walkable environment where pedestrians need not feel they're walking through the middle of a street.

- > **Provide paths and campus open spaces that lead to building entries.** Today, traveling between STCC buildings often requires walking through parking lots and roads. The addition of sidewalks and strategically placed green space will provide a more walkable, accessible environment that reduces conflict between pedestrian and vehicular flows. Relocation of some parking alongside campus buildings will be needed. The new structure proposed for Lots 1 and 2 provides a likely location. Creation of the New Campus Green south of Building 19 will be a major step in advancing this initiative, and is described in the pages that follow.
- > **As suggested in the 2005 master plan, demolish Building 35.** Constructed in 1940, this building is of relatively low historic value (described as a Level III structure in the guiding MOA). Removal would strengthen connections between campus facilities, providing a more easily navigable environment for both people and vehicles. Relocation of Civil Engineering/Landscape labs located within the building (e.g., consolidating the Civil Engineering Department within Building 17) could offer programmatic benefits for a department that is currently dispersed.
- **Part C: Upgrade Scibelli Theater (Building 2) to provide full access for both attendees and performers.** Upgrade of Scibelli Theater, a resource for the campus and the broader community, is a high priority. Accessibility improvements will include the addition of wheelchair and companion seating, upgrade of theater-proximate restrooms, and provision of ADA compliant routes between the auditorium and the stage, the stage and dressing rooms, and the controls room.
- **Part D: Upgrade or replace all non-compliant lifts and ramps with compliant and usable access elements.** The ADA Strategic Compliance Assessment identifies barriers at numerous building entrances. Addressing these issues will be a priority, with all non-compliant lifts and ramps upgraded or replaced. Priorities will include:
 - > *Building 20:* Provision of compliant hand and guard rails for ramp; provision of compliant hardware for lift and sufficient maneuver space at gates
 - > *Building 21/35:* Repair or replacement of ramp to address deteriorated wood surface and slope in excess of 10.9%
 - > *Building 27:* Provision of compliant hand and guard rails for ramp
- **Part E: Relocate programs and services in inaccessible locations (e.g., relocate Campus Police from Building 9 and the Parking and Transportation Office from Building 12).** For services that see regular in-person use by the full campus community, an accessible location is essential. Today, Building 12 houses Parking & Transportation, and Building 9 houses the Campus Police. Both of these functions may be part of the Building 19 project, and soon clustered along with other campus services and resources within a fully accessible new Learning Commons and Student Hub. If not, relocation to a renovated Building 28 as part of the future Central Administration cluster would provide an alternative approach to placing these functions in a more accessible location.
- **Part F: Improve wayfinding by upgrading site identification and directional signage.** STCC has been working with the National Park Service on a signage program that will improve campus navigability for all. Large-scale signage at the Pearl Street entrance and potentially on the campus edge facing the Parade Ground, complete with information on accessible routes, will help make the STCC campus a more welcoming place.

Major Capital Project #6:

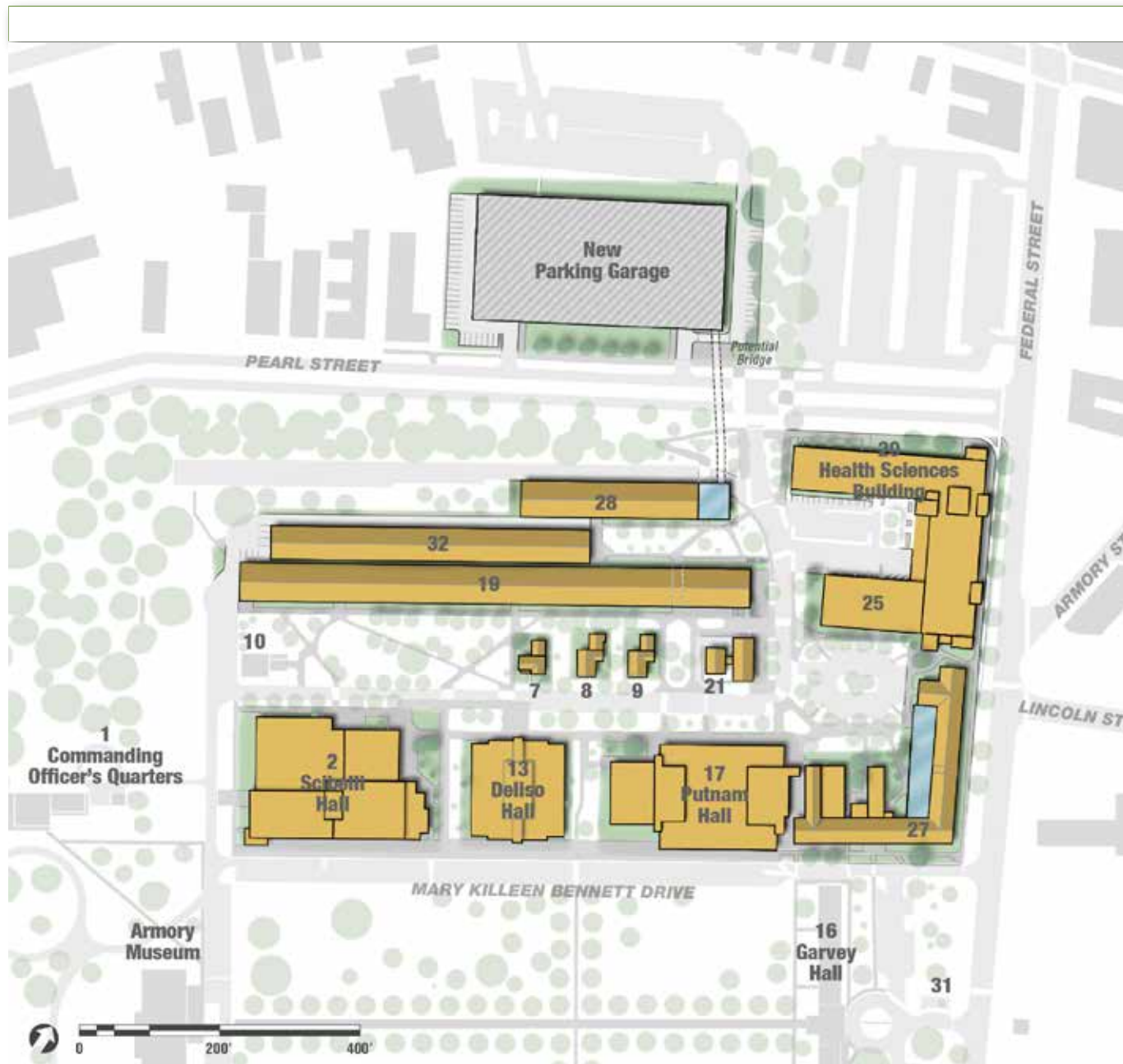
Advance a robust deferred maintenance program.

Physical improvements: Pursue maintenance, repair, and upgrade of buildings and infrastructure across the STCC campus.

Overview of initiative: Repair and upkeep of STCC buildings is of the highest priority, and is essential to the usability—and in some cases the longevity—of these facilities. This initiative represents a series of maintenance, repair and upgrade projects that are needed to support operations across STCC’s inventory of buildings. It will enable STCC to address its large backlog of deferred maintenance projects, and to move quickly to address new issues as they emerge.

While the College strives to keep its buildings in good condition, upkeep of the College’s historic and mid-twentieth century buildings has proved an ongoing and costly burden, with needs typically far greater than the resources available. With assistance from DCAMM, STCC can address aging HVAC and MEP systems, poor energy performance, water infiltration and envelope issues, failing windows, and a range of other deficiencies that have plagued the College’s facilities. Addressing accessibility barriers identified in the ADA Strategic Compliance Report will be particularly important.

Attention to these issues will enable STCC and the Commonwealth to better serve students, and to better preserve the Armory site’s historic assets



Major Capital Project #7:

Create a new Campus Green beside the new Learning Commons and Student Hub

Overview of initiative: Creation of the new Campus Green will be a critical step, transforming a parking lot at the heart of the STCC campus into a usable open space that knits together STCC’s new Building 19 Learning Commons and Student Hub with some of the College’s largest academic facilities.

Consolidation of STCC functions north of the Parade Ground will provide a more compact campus—but the center of this reoriented campus, beside the new Learning Commons and Student Hub, is currently occupied by a large parking lot. The space between Building 19 and three of the College’s largest academic facilities (Buildings 2, 13 and 17) will soon become an important campus crossroads and focal point. Transitioning the parking area just south of the new Learning Commons and Student Hub into a significant Campus Green is an essential step that will strengthen STCC as a cohesive campus environment.

Just as the Parade Ground serves as the central open space for the Armory campus as a whole, the new Campus Green will serve as

the central open space for the newly consolidated STCC campus, linking Buildings 2, 13, 17, 7, 8, 9, 10 and 21/35 to the long-awaited Learning Commons and Campus Hub in Building 19. The Campus Green will transform a portion of the campus that’s now considered a “back” and must be navigated via parking lots into a bustling open space, activated the flow of people from one STCC destination to another. Transformation of this space is needed to support the College’s new Learning Commons, as well as to safely accommodate pedestrian traffic flows.

The Campus Green will provide an outdoor place for students to gather; will introduce more pervious surfaces; will return this portion of the Armory site to a more park-like landscape; and will be an integral step in transforming what feels today like a collection of free-standing buildings into an environment that looks and feels like an inviting college campus.

Development of the Campus Green could happen all at once, or if necessary, establishment of this important space could happen in phases.

MAJOR CAPITAL PROJECT #7: Create a new Campus Green beside the new Learning Commons and Student Hub



Major Capital Project #8:

Add structured parking on Pearl Street

Program: Replace Lots 1 and 2 with structured parking. *800–1,200 spaces*

Overview of initiative: A new parking garage or ramp on Pearl Street would provide a significant pool of parking immediately adjacent to the core campus. Today, STCC relies on seven satellite parking lots, totaling approximately 1,500 of the campus' 2,200 parking spaces. Over 800 of those spaces are in relatively remote lots that are leased by the campus and served by shuttles. This parking supply is vulnerable, with loss of these spaces to development or ownership changes an ongoing College concern. For instance, STCC expects to soon lose access to the 350 spaces in Lot 3, a site now slated for development.

Development of up to 1,200 spaces of structured parking on the STCC-owned lots along Pearl Street (Lots 1, 2 and Extract Place) will consolidate STCC's parking supply on STCC property, in a location just steps from the newly consolidated campus and the Pearl Street gateway. A structure will also reduce or even eliminate STCC's reliance on both leased lots and the shuttle system—both significant expenses—and these funds could be reallocated to pay debt service on the new structure.

Structured parking could also help improve campus accessibility, with potential for a bridge connecting an upper level of the structure to high ground within the campus core—for instance, via a glassy elevator structure located at Building 28.

Funding strategies for structured parking should be further explored in partnership with the Massachusetts State College Building Authority (MSCBA).

