



2013 MASTER PLAN REPORT

COLGATE UNIVERSITY

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UNIVERSITY**

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INTRODUCTION



EXECUTIVE SUMMARY

The Colgate University master plan outlines a campus development path for the initial decades of Colgate's next century. These strategies are essential to Colgate's future competitiveness, both in terms of its peer institutions, and the as yet undefined, but certain, impacts of technology-enhanced teaching and learning. Within this context, Colgate's residential educational model promotes a significant value proposition—it is recognized as one of the most beautiful campuses in North America—and its idyllic pastoral setting is home to a community of scholarship indicative of the best liberal arts traditions.

The university starts from an advantageous position. But change is required if it is to continue its tradition of excellence, and is essential for reputational growth. This change must build on successful past initiatives, and it must not threaten the core character of the hilltop campus. Indeed, this character will be enhanced through the proposed master plan initiatives, while supporting the forward-thinking goals of an institution beginning its third century.

The master plan is based on three principles, crafted in support of Colgate's goals of sustained excellence and strengthened competitiveness. **The three principles are: develop a compact campus, enhance campus systems, and promote community.** These principles provide a framework against which specific implementation proposals, and new unforeseen opportunities, can be evaluated and incorporated into the fabric of the master plan. The principles promote dynamic change, while also ensuring the integrity of a long-term vision.

A compact campus has many advantages that are central to the academic mission: the closer faculty and students are to one another, the higher the frequency of their interactions, and therefore the better the chance of collaboration, invention, and learning. This is particularly true for those serendipitous meetings that allow for new connections to be forged across the university in ways that support modern scholarship, but are hard to promulgate deliberately. A compact campus has significant other benefits: it supports a pedestrian environment minimizing vehicular-pedestrian conflicts, and it minimizes the need for infrastructure investment. One of the chief advantages to a residential education is the vitality generated by a community of scholars. An environment that combines personal interaction within a broader backdrop of exciting, engaged, and energized campus life maximizes potential learning outcomes. This environment is much more easily achieved within a compact campus than in one that is dispersed. While Colgate's hilly topography can create constraints, the master plan addresses these geographic challenges by creating a more compact campus.

Campus systems improvements focus on two themes: the first concerns mobility, safety, parking, and the transformation of the hilltop campus to a pedestrian environment. The second explores ecological systems and campus hydrology, seeking to improve the handling of storm water, positively affecting water quality in Payne Creek, and to the extent possible, mitigating the impacts of increased flooding driven by changes in climate and upstream land use. Campus mobility issues are addressed by replacing the current pattern of small fragmented parking lots located within the academic core, with larger peripheral (but still convenient) reservoirs. A major new roadway on the new Hamilton Street property, located in the southeastern corner of the hill, will change Oak Drive significantly. These changes are intended to mitigate significant safety concerns. The hydrology initiative decouples Payne Creek from Taylor Lake, along with a reconfiguration of the lake that will better enable it to accept storm-water runoff while preserving its aesthetic appeal.

Fostering a robust campus community emerged as a key planning element during the master planning process. Student life activities currently occur at a range of scales, in multiple locations. This diffuse nature is not necessarily negative, but at Colgate, it often prevents the attainment of a critical mass of activity that provides opportunities and incentives for students to remain connected to the academic core throughout the day. Existing residential facilities have undergone significant dispersal over the last three decades, with half of the

university's students now living west of Broad Street. The apartments on College Street require new investment from a competitiveness standpoint—but investment is problematic as the buildings are continually threatened by flooding, and are distant from the academic core. Many students living in the townhouses on the southern extremities of Broad Street feel isolated. The master plan therefore calls for the long-term relocation of approximately 1,100 campus beds. This represents a significant undertaking, but the reabsorption of this residential population on the hill (along with some densification of the Broad Street corridor currently dominated by fraternity and sorority housing) is critical to establishing Colgate's position as a leader in undergraduate education. While student social life will always include nonacademic activities, the opportunity to reintegrate and reinforce residential life with academic life is essential to Colgate's competitive future. In essence, the challenges of the decades ahead will require Colgate to “double down” on its core mission as a residential liberal arts university, while simultaneously engaging new forms of learning and knowledge creation.

This residential plan requires an equally bold idea for Colgate campus life. The key concept is the creation of a new campus corridor connecting a renovated and expanded O'Connor Campus Center (Coop) to a re-imagined Frank Dining Hall. This corridor intersects a new direct pedestrian path to the Case Library, connecting three primary campus life venues. The corridor also intersects several of the proposed new residential buildings between the Coop and Frank Dining Hall, and then continues to better link the athletics complex to the hilltop campus. The new facilities along this corridor could offer active 24/7 uses, such as dining, social space, study space, academic centers, and student organizational space. These areas will be accessible to all, removing any barriers imposed by grade changes, and will transform the campus environment.

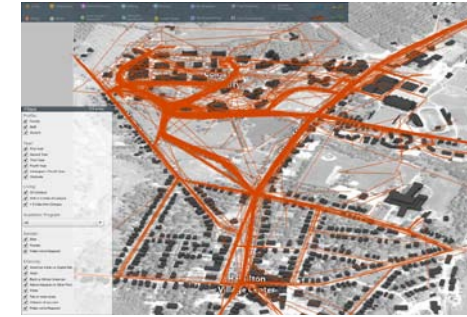
The proposals suggested here result from an exhaustive 18-month planning process anchored in a rigorous analysis phase that closely examined existing campus conditions, space use, systems, mobility and other characteristics that define the Colgate environment. The principles evolved as a direct response to the most critical issues identified. Academic space needs, for example, center more on issues of quality than quantity, and the master plan therefore recommends a renovation strategy for academic space, rather than a (significant) new building program.

While the master plan is ambitious in its vision, the realities of likely funding and scheduling of projects were key considerations throughout the planning process. The proposed campus development and its associated timeline are consistent with historical capital spending rates. The plan details phasing strategies, with a near-term emphasis on new residential life facilities on the hill, proposed changes to campus circulation, hydrology improvements, and renovation and enlargement of the Coop and Frank Dining Hall. While individual plan elements are itemized for this prioritization and scheduling effort, their interrelationships are of the utmost importance. It is only together that they achieve a campus for Colgate's third century vision, and ensure the university's future success.

The Planning Process

A master plan is a structure for planning change over time, connecting information and ideals to implementation. It touches the full spectrum of the university's activity: academics, student life, residential life, athletics, open space, circulation and parking, and sustainability. Stakeholders representing these concerns collaborated extensively in the planning process.

The planning process consisted of interactive work sessions with campus stakeholders, including faculty, staff, students, trustees and administrators, and community leaders and members. As such, the plan represents the thoughtful work of hundreds of members of the campus community. The development of the master plan included four phases of work:



STAGE ONE: DISCOVERY AND ANALYSIS

September 2012 – February 2013

During Stage One the team investigated existing conditions at Colgate University, conducted interviews with stakeholders and gathered data via interactive tools like the myCampus* and adjacency surveys. A committee that included faculty, staff, students, and university leadership led the planning process.

**myCampus is an online interactive survey customized for Colgate that allows users to define their engagement with the campus environment and community.*



STAGE TWO: CONCEPT ALTERNATIVES

March – June 2013

Stage Two of the work considered several different options for long-term campus development, including alternatives for land use, building use, circulation and parking, and open space. The process included an assessment of the concept alternatives with the master plan committee and review from the Board of Trustees.



STAGE THREE: REVISION OF CONCEPT ALTERNATIVES DUE TO NEW PARCEL ACQUISITION

July – October 2013

As Stage Two was coming to a close, Colgate University acquired a significant land parcel on Hamilton Street, adjacent to the campus. The team investigated new opportunities presented by this acquisition as it related to all aspects of the master plan.

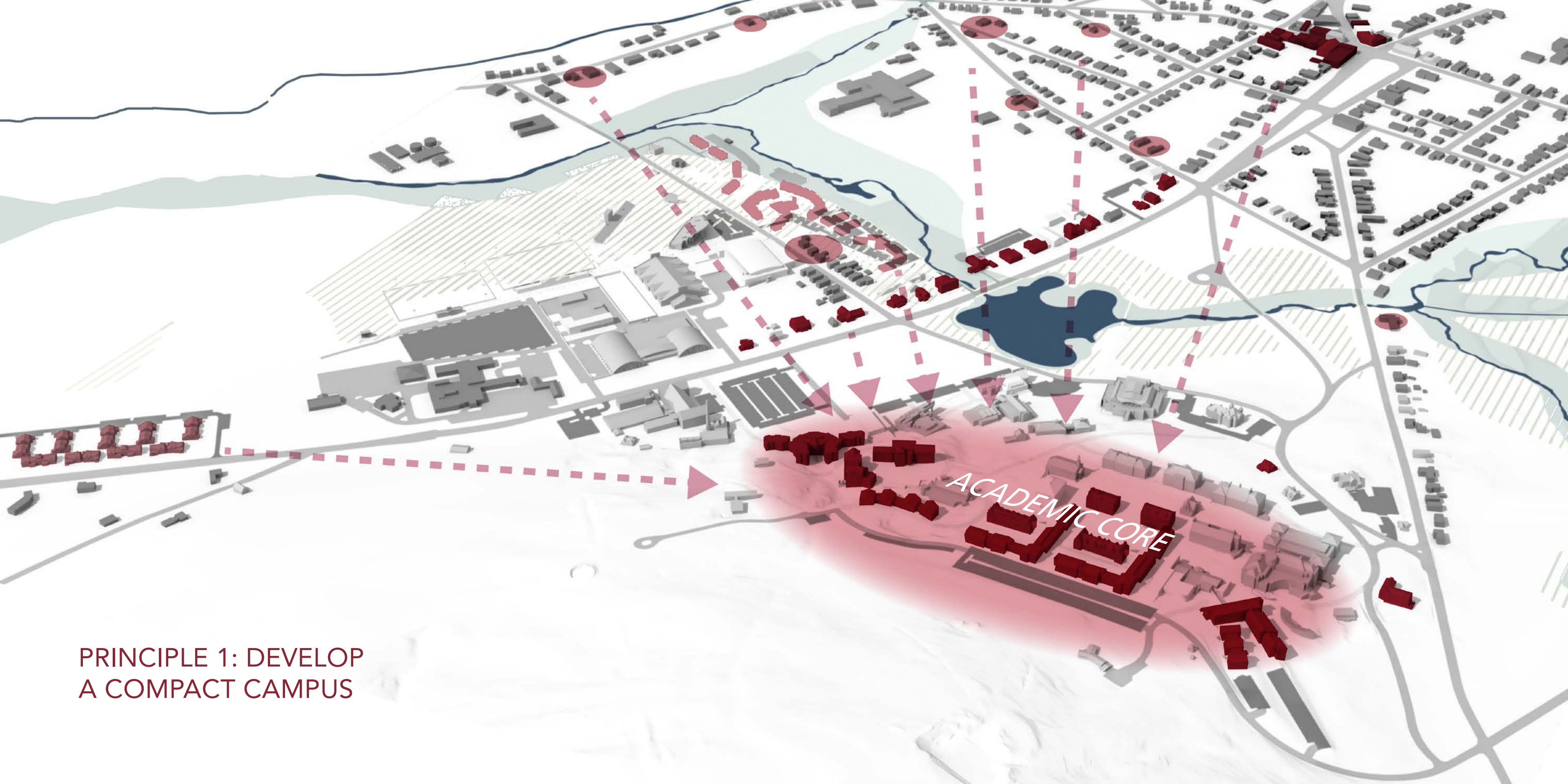


STAGE FOUR: MASTER PLAN SYNTHESIS

November 2013 – January 2014

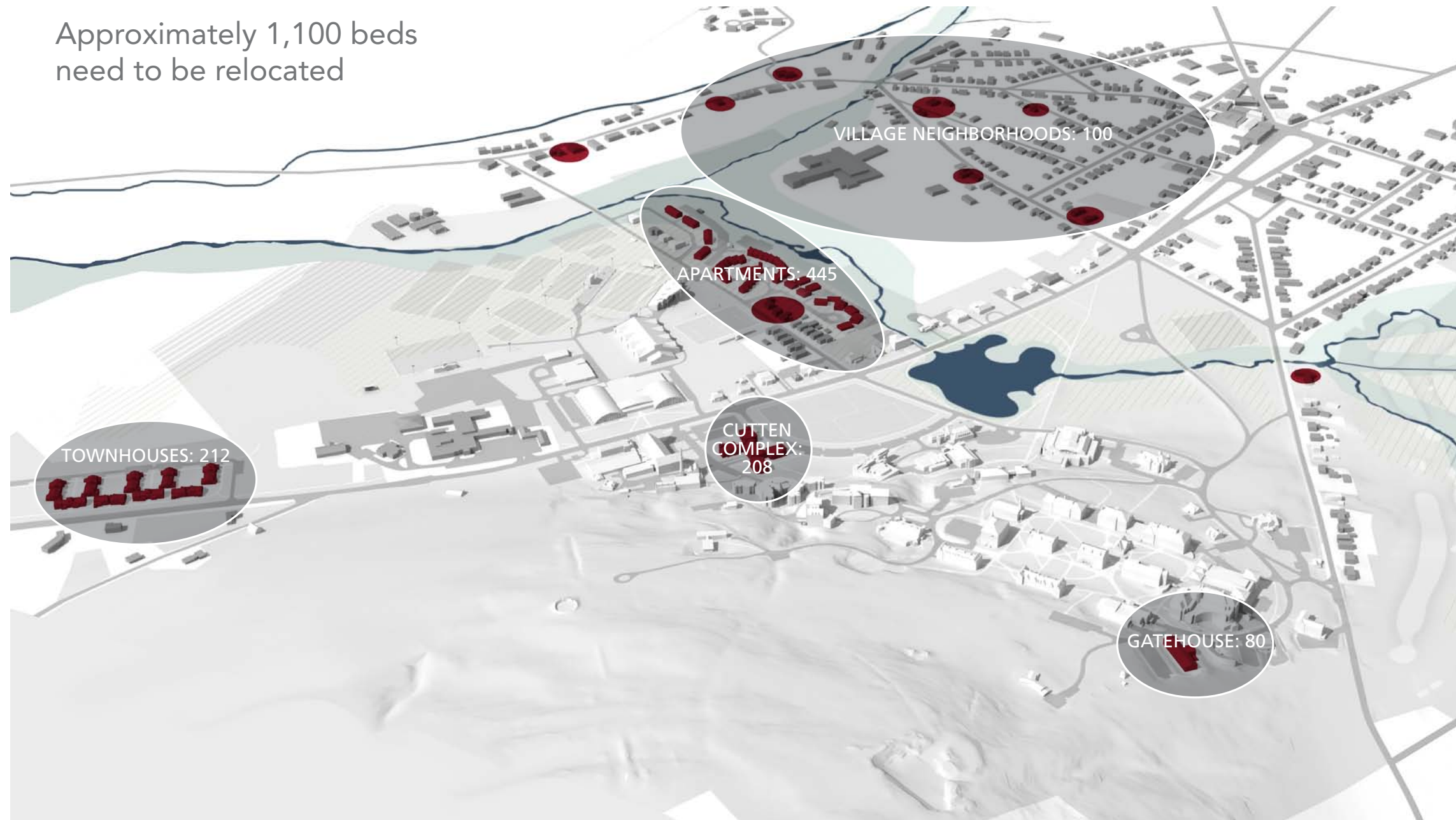
Stage Four focused on the detailed development and documentation of the planning process into a draft master plan and then a final master plan. The final master plan records the findings of the planning process, outlines the phasing of the master plan over time, and provides a vision for growth, reuse, and revitalization of the entire campus.





PRINCIPLE 1: DEVELOP
A COMPACT CAMPUS

Approximately 1,100 beds need to be relocated



Residential Vision

Colgate student residences are dispersed, with about one-half of all students living on the west side of Broad Street, distant from the academic core. Many live in housing that is remote (212 beds in the townhouses) or located within the flood plain (445 beds in the apartments on College Street).

The Village of Hamilton is a popular option with seniors. A total of 250 students live in the village core and village neighborhoods. The village core presence is beneficial because it supports village retail and character; the neighborhood presence is problematic because it is disruptive and uses valuable housing stock that is needed for faculty and staff. The master plan recommends concentrating 150 off-campus students in the village core, and removing the student presence from the village neighborhoods north of Kendrick Avenue.

The current housing on the hill needs significant investment. Gatehouse, with 80 beds, must be replaced. The Cutten Complex, with 208 beds, needs significant infrastructure-related repairs, but these may not be cost effective given the building's structure. Both Gatehouse and Cutten are therefore recommended for replacement, with the beds replaced in new locations on the hill.

In the plan proposed here, approximately 1,100 beds will be relocated to sites near the academic core of the campus.



THE MASTER PLAN'S RESIDENTIAL LIFE VISION HAS SEVERAL KEY COMPONENTS:

- Reinforce existing residential communities on the hill
- Diversify the university's housing portfolio and in so doing promote mixed class-year living opportunities
- Better connect first-year and sophomore students to the academic core
- Provide juniors and seniors with choices: live on the hill near the academic core, on Broad Street, or for seniors, off-campus in the village core

The housing inventory has abundant dormitory-style rooms. These rooms are primarily located in East Hall, West Hall, Andrews Hall, Stillman Hall, Curtis Hall, and Drake Hall. Some of these buildings also have a small number of semi-suites (suites without a common room). Bryan Complex, on the other hand, offers only semi-suite-style rooms. To ensure flexibility in the long term, we propose greater diversity of room types in newly constructed residential buildings and when renovating existing buildings near the academic core.

Our recommendations concentrate first-year students and sophomores in the areas that traditionally have offered dormitory-style living, while introducing semi-suites, suites, and apartments for juniors and seniors. Senior housing should be located on the periphery of the hill, to afford the independence and privacy these students desire. The townhouses should be repurposed in the long term.

- 1) New Upper Campus Residential
- 2) Coop Renovation & Expansion
- 3) New Chapel House Road Residential
- 4) New Performing Arts Center & Dana Renovation
- 5) Whitnall Field
- 6) Athletics Complex
- 7) Taylor Lake & Payne Creek
- 8) New Broad Street Housing
- 9) New Center for Art & Culture
- P) Parking Reservoir



The Hill

Colgate University prides itself on the excellence of its academic programs. Relocating beds closer to the academic core will strengthen the university's academic mission as a residential liberal arts university. To this end, we propose development in three areas of the hill.

The first area encompasses the first-year quad, adjacent to the academic quad. The 433 beds in East Hall, West Hall, Andrews Hall, and Stillman Hall (these buildings will undergo renovations) have traditionally housed underclassmen. The approximately 550 to 600 new beds recommended for this area will bring semi-suite and suite style accommodations into the mix. The student population will consist of first-year students, sophomores and juniors.

The second area of development centers on the eastern edge of the hill. The new housing, with approximately 220 beds, will be in an area extending from the current Gatehouse site onto the new Hamilton Street property, which is located southeast of Gatehouse and ALANA Cultural Center (ALANA). The residents here will be juniors and seniors who choose to live on campus, conveniently proximate to the academic core and the envisioned student life spine between Frank Dining Hall and the Coop.

The third area is the western side of the hill, where Bryan Complex, Curtis Hall, and Drake Hall are located. The current housing inventory has 639 beds in this area. The room types favor first- and second-year students. A number of juniors will live among these students. The master plan proposes adding a total of approximately 110 beds for juniors and seniors in a new residential building located on the hill near Frank Dining Hall.

The three areas of development on the hill described above will relocate approximately 920 new beds close to the academic core, bringing the total number of beds here to approximately 2,030. The combination of existing housing, and new housing with an appropriate range of room types, will position the university to readily adopt a range of student living-learning models by appropriately diversifying the housing types in its inventory.



Broad Street

Broad Street has traditionally housed juniors and seniors. The university owns 17 houses on Broad Street: nine theme, three sorority and five fraternity houses. The master plan proposes strategic infill for the Broad Street corridor. New buildings will be residential in scale, and similar to the existing housing stock. In total, approximately 180 beds will be added to Broad Street, with density focused on either side of Payne Creek. Houses will be clustered around communal greens. The proximity of this location to the hill, and the parking reservoir planned where the College Street apartments stand today, is an important factor. When the infill is complete, Broad Street will accommodate 670 beds in Colgate-owned buildings in this area.

The Village of Hamilton

As students move through their years at Colgate, they look for increased independence. The village core provides some of this opportunity for seniors. However, the village also represents an important location for faculty and staff housing needs. With little opportunity to live close to their workplace, many faculty and staff live in surrounding communities.

Under the master plan, 100 of the present 250 seniors living off campus will be relocated to Broad Street and/or the hill campus. The master plan further recommends concentrating the student population living in the village in the village core. Moving the Advancement Office back onto campus, potentially into a renovated James C. Colgate, and converting their current offices at 10 Utica to apartments, the village core will accommodate approximately 150 students. The goal is to increase opportunities for faculty and staff housing to support and enhance the village economy. At the same time, it will enhance and diversify the opportunities for civic engagement among seniors living on Broad Street and in the village core.

- Annex
- Theme House
- Fraternity or Sorority
- New Construction
- Colgate-Owned Property
- Colgate-Owned Property, Existing Rental Housing
- Colgate-Owned Property, Convert to Rental Housing
- Non-Colgate-Owned Property
- Non-Colgate-Owned Property, Existing Rental Housing

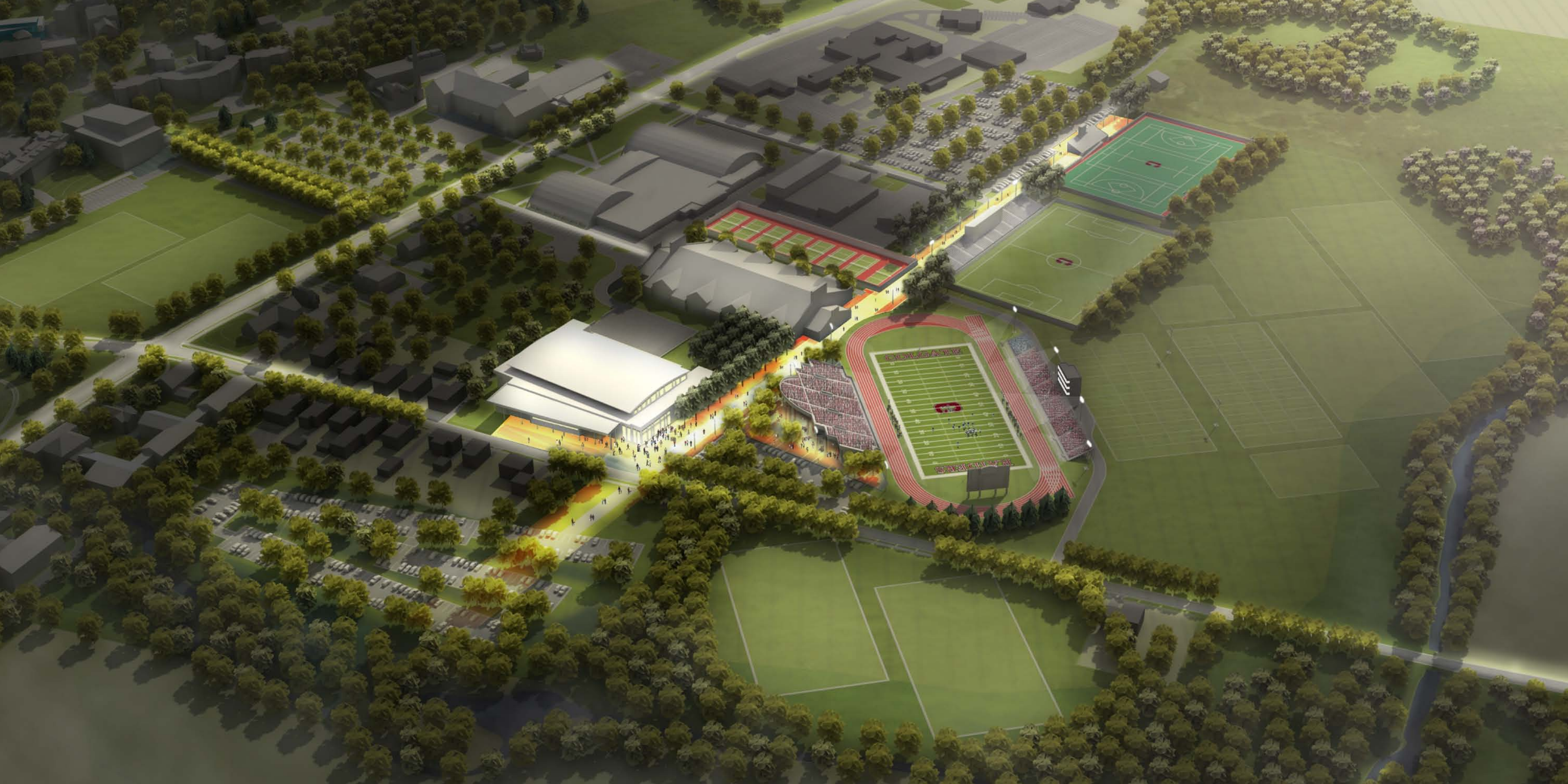


Athletics and Facilities

Changes are planned in the athletics complex located in the southwestern corner of the intersection of Broad Street and College Street. A new athletics facility will be built on the current location of the Van Doren Field. This new facility will hold a hockey rink as well as soccer and lacrosse locker rooms and coach's offices. The soccer field will be relocated between the Andy Kerr Stadium and Tyler's Field. The alignment of these three fields creates a path connecting all major athletics facilities and their associated parking ("Game Day Promenade"), bringing order and identity to this area of campus.

The parking around the facilities building will be reconfigured in order to increase capacity and to bring needed clarity to the area. Expansion of the facilities building is recommended, as well, to address significant space needs in that area.

- 1) New Athletics Facility
- 2) "Game Day Promenade"
- 3) New Soccer Field
- 4) Practice Fields
- 5) New Flood Plain Recreation Fields
- 6) Whitnall Field
- 7) Expanded Facilities Building and Fenced Grounds
- 8) Service Court
- P) Parking Reservoir





Arts

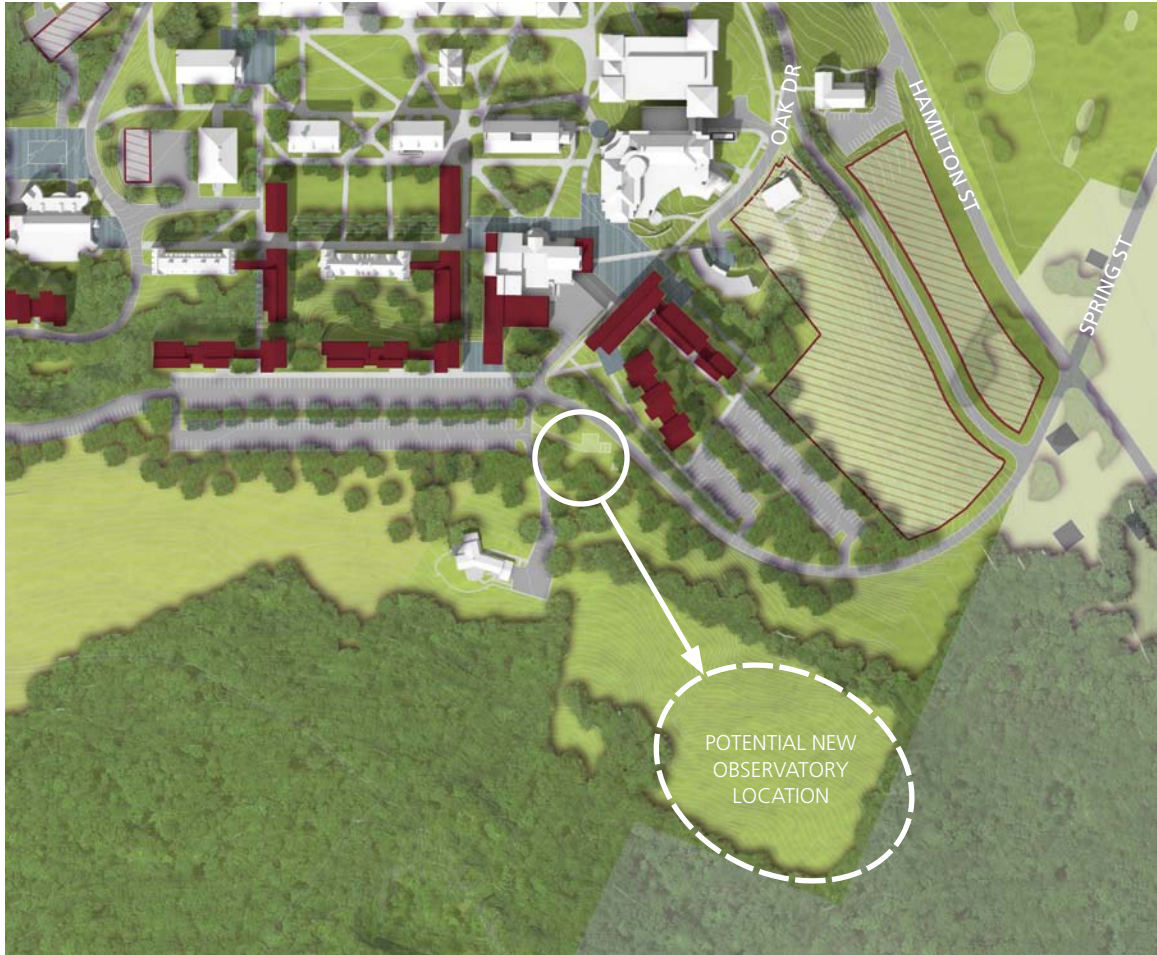
The Dana Arts Center currently houses the departments of music and theater, the Picker Art Gallery, and Brehmer Theater. Although located in an iconic building by architect Paul Rudolf, the 50-year-old theater is out of date and does not have the capacity to hold audiences larger than 336 people. Faculty and students have expressed a need for a new performing arts center as a regional draw for world-class performances. The master plan proposes locating this building south of the Dana Arts Center, next to the campus life path extending from the Coop to Frank Dining Hall. A parking lot is planned for the Cutten Complex site when Cutten is demolished. This will be used for event parking.

Memorial Chapel is another important venue for campus and community events. While the master plan proposes to close Alumni Road to everyday use, vehicular access to the chapel and various neighboring parking lots will be allowed for chapel events.

- 1) New Performing Arts Center
- 2) Dana Arts Center
- 3) Memorial Chapel
- 4) Enhanced Path from Hill Campus to Athletics Complex
- P) Parking Reservoir

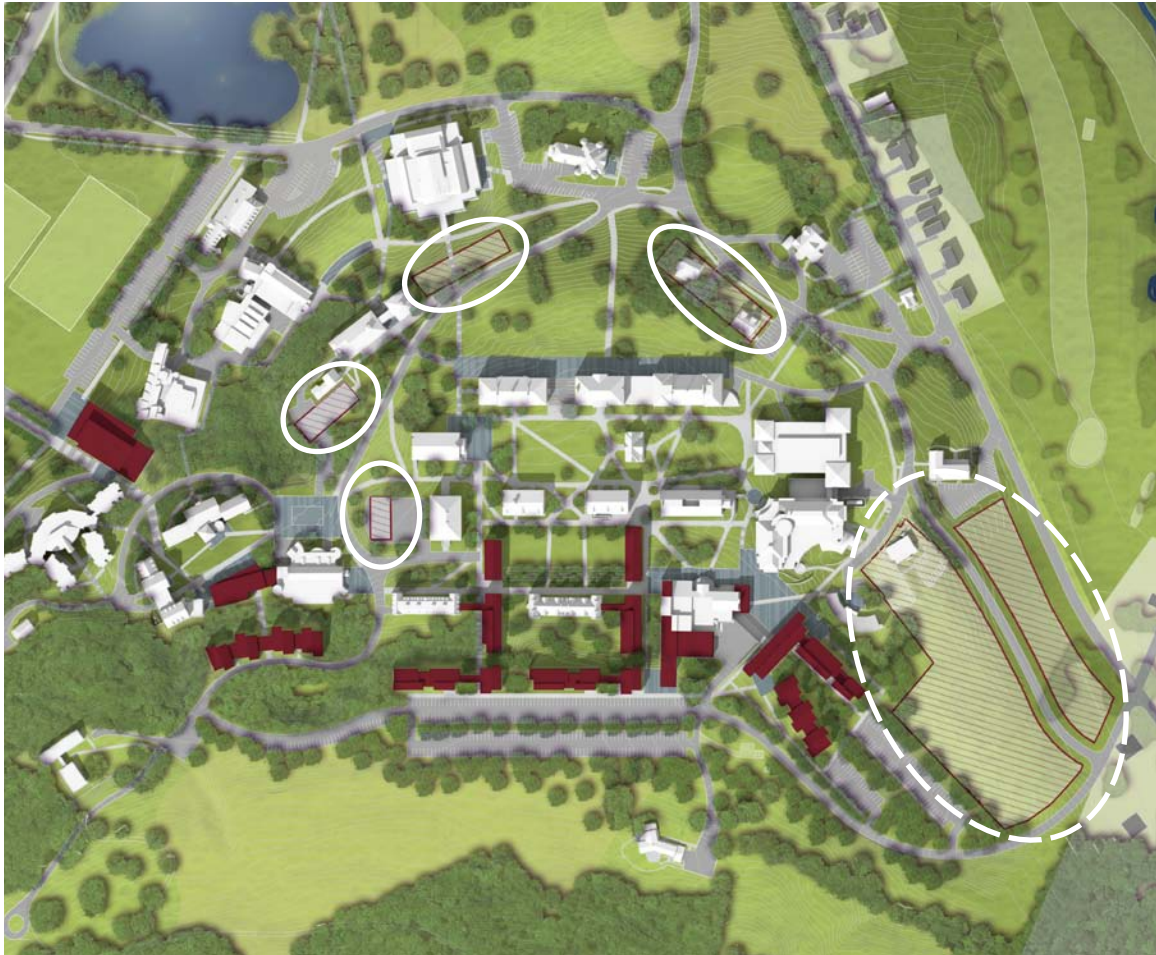
Observatory

The additional light sources created by the new housing planned on the upper quad and Gatehouse sites will create light pollution that is untenable for the astronomical observatory in its current location. A location for a new facility has been tentatively selected in the uppermost section of the new Hamilton Street property (the exact location requires further study).



Long-Term Academic Flexibility

While no major expansion in academic facilities is included in the master plan, the plan must ensure long-term options are not foreclosed. To this end, the plan identifies four potential sites for future expansion, which are located proximate to the academic core, in line with the guiding principles. The acquisition of the new Hamilton Street property creates additional capacity for academic or other expansion in the future.





HYDROLOGY

PERIPHERAL CIRCULATION

PEDESTRIAN ZONE

PRINCIPLE 2: ENHANCE
CAMPUS SYSTEMS



Hydrology

Payne Creek and Taylor Lake are focal points from the Oak Drive entry to Colgate's campus. Taylor Lake is connected to Payne Creek, and the creek flows southwest out to the Chenango Canal. These water bodies receive significant rainwater runoff from campus and absorb fertilizers and sediment from upstream. A dam at Broad Street slows the flow and impounds water to regulate Taylor Lake's water level.

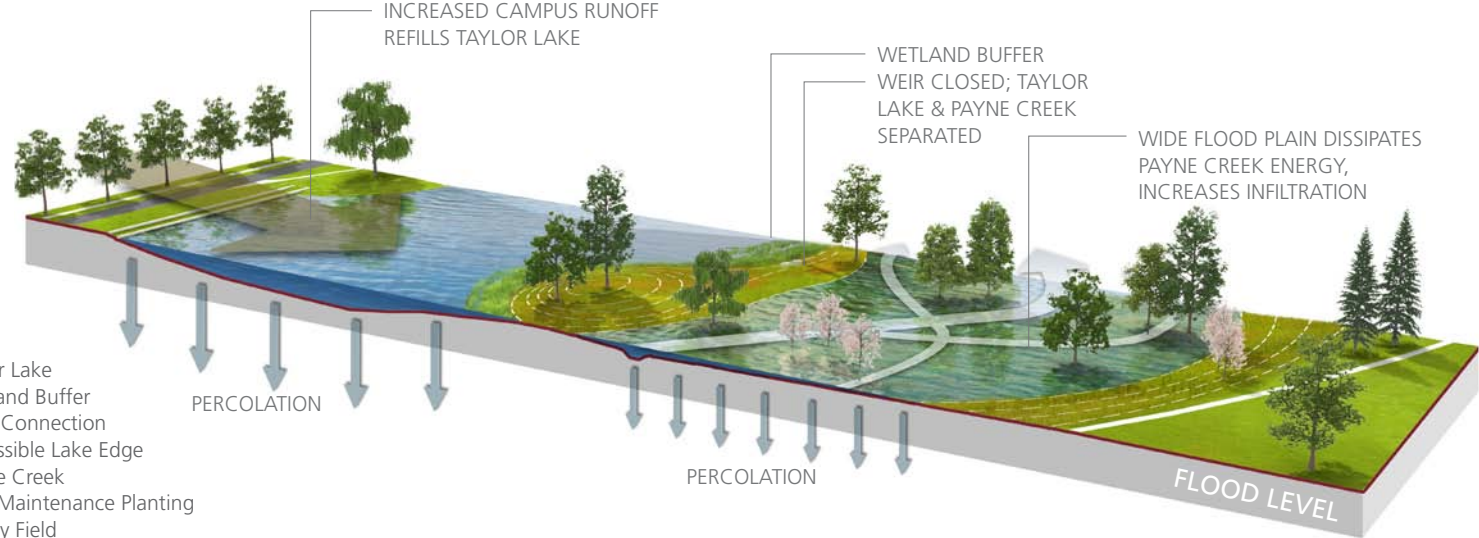
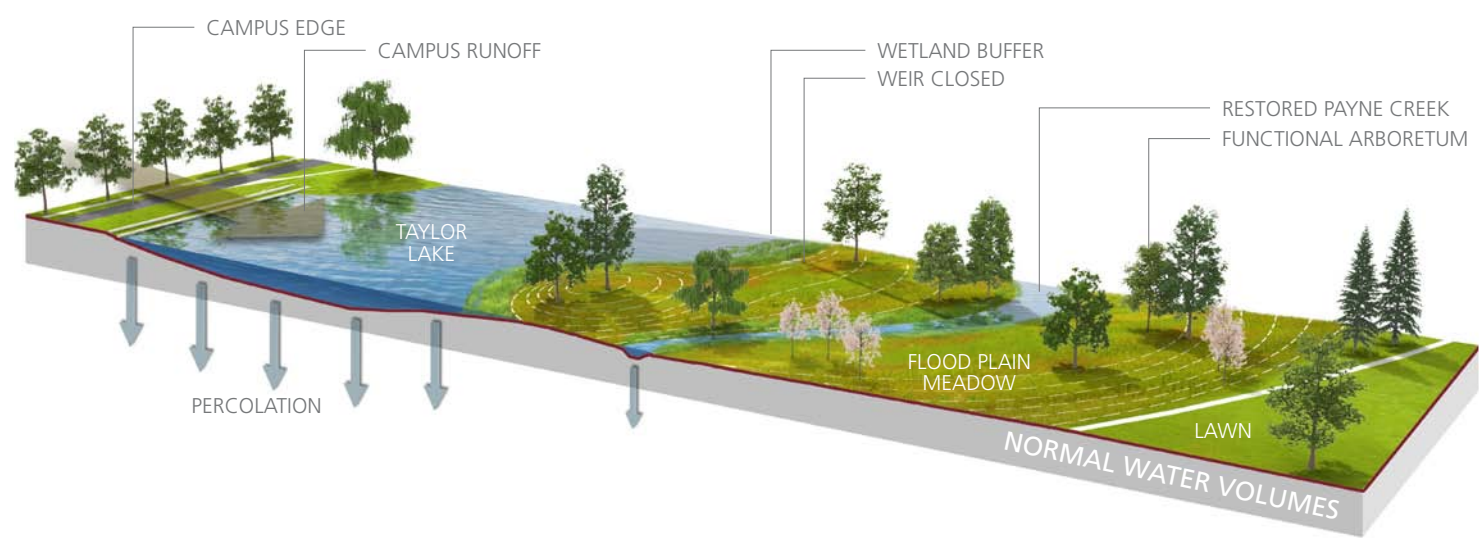
Bridges and culverts on Payne Creek create pinch points at several locations. In heavy rain events, the additional water flowing downhill can quickly overwhelm these control structures and back up, causing flooding. A recent flood in Payne Creek inundated Willow Path, Taylor Lake, and parts of the athletics fields, and affected most of the apartments on College Street. Predicted impacts of near-term climate change suggest increased high-precipitation storm events, making flood plain inundation more likely in the future. Therefore, significant reinvestment in housing within the flood plain is a poor long-term decision.

- Maintained Lawn or Athletics Field
- Seven Oaks Golf Course
- Pinch Point
- Flood-Prone Area
- FEMA Flood Plain
- Meadow
- Native Northern Hardwood Forest



The master plan recommends separating Taylor Lake and Payne Creek to address issues of water quality and flooding. The amount of storm-water runoff from campus is sufficient to fill Taylor Lake at least twice on an average annual basis. Taylor Lake can be reshaped and deepened, to collect and allow sediment to settle, naturally managing the storm-water runoff from the hill. The two distinct water bodies will be connected with a weir system. In the event of a coming storm, the lake can be drawn down in a controlled fashion, helping to mitigate (although not prevent) incidents of flooding. The dam at Broad Street will be removed to increase the gradient of the creek, improving aeration and water quality. Combined with increased shade along the upstream segments of the creek as it crosses campus, improved aeration and water quality will better support the native fish population.

Mown edges along the creek and lake allow more sediment to be washed into the water. A healthy natural edge with taller, more appropriate vegetation would act as a filter and reduce the sediment load. Allowing the new Taylor Lake to act as a major infiltration locus will be beneficial, as will the restoration of a wetland buffer between the new lake and the creek. In addition, a new edge to the lake along College Street will allow students to sit and enjoy the lake. The opposite side of the lake will act as a buffer and filter between the lake and the creek.



- 1) Taylor Lake
- 2) Wetland Buffer
- 3) Weir Connection
- 4) Accessible Lake Edge
- 5) Payne Creek
- 6) Low Maintenance Planting
- 7) Rugby Field
- 8) Recreation Field
- 9) Seven Oaks Golf Course



Plant Communities

The master plan significantly extends the conception of the campus arboretum, which today consists of ornamental tree plantings along the creek banks. While the flowering trees have aesthetic appeal, the current arboretum idea is not ecologically sound. We therefore propose expanding the concept to consider the entire campus as an arboretum. This could be accomplished through three primary strategies.

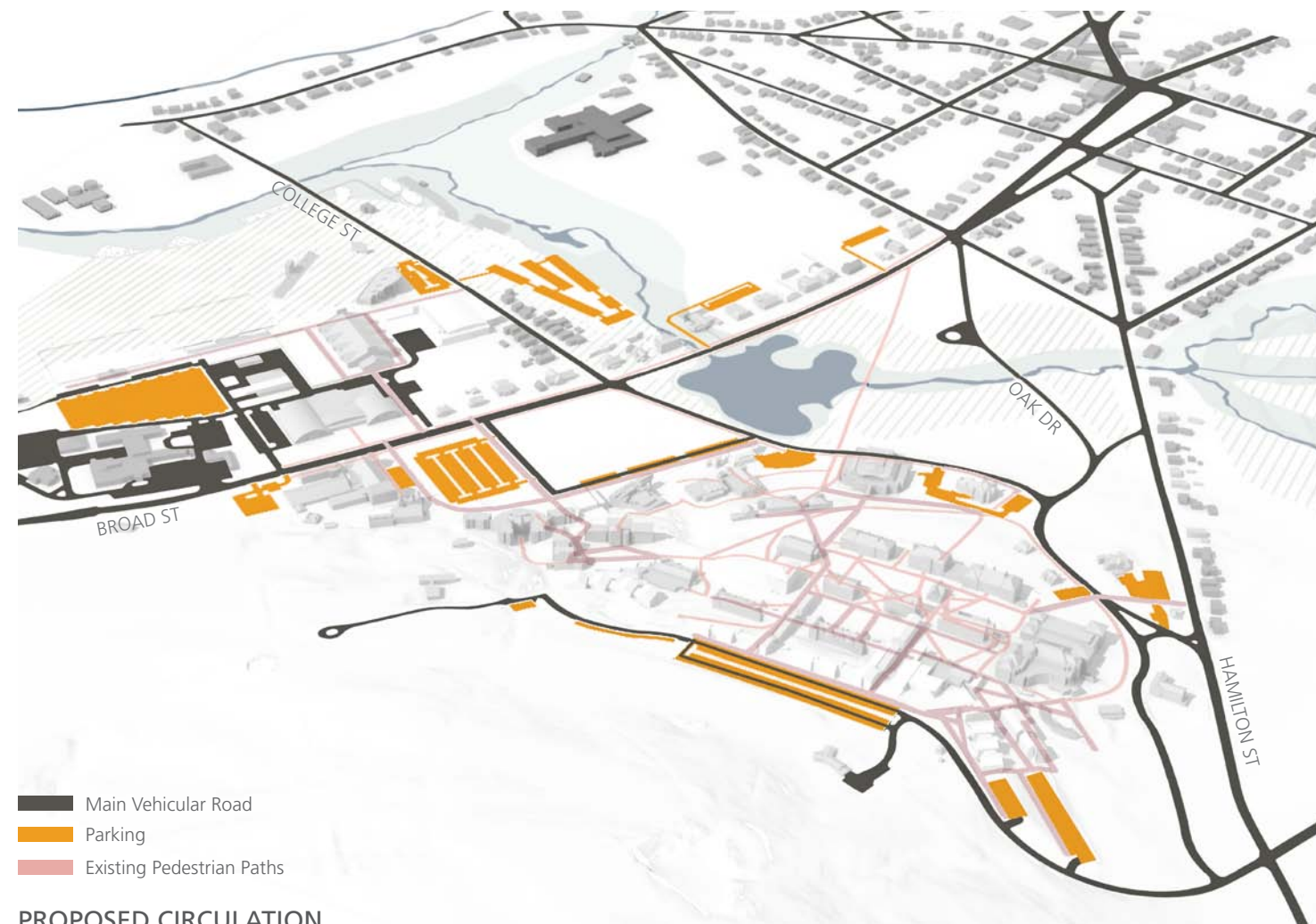
First, the campus could reduce mowing in designated areas within the great triangle at the base of the hill. This will add aesthetic appeal as well as operational efficiency. Second, we propose the restoration of a wetland buffer on the northern edge of the new Taylor Lake, and additional low-maintenance planting to provide shade for Payne Creek. This buffer will significantly improve water quality in the creek. Third, the master plan proposes to continue extending reforestation efforts on the old golf course and the ski hill. This will improve on-site water retention for the hill.

- 1) Native Northern Hardwood Forest
- 2) Meadow at Old Golf Course
- 3) Manicured Lawn in Campus Core
- 4) Maintained Athletics / Recreation Fields
- 5) Wetland at Taylor Lake
- 6) Restored Canopy Along Payne Creek
- 7) Naturalized Creek Corridor
- 8) Willow Path
- 9) Existing Arboretum Location
- 10) Oak Drive
- 11) Low-Maintenance Ground Plane
- 12) Seven Oaks Golf Course

Mobility

The master plan will produce significant improvements to the street and pedestrian network of the hill. Currently, the system of roads and dispersed parking lots creates vehicular congestion on the hill. Many pedestrian paths intersect with these roads, creating hazardous conflict points along Alumni Road, Academic Drive, and major portions of the existing Oak Drive. In the master plan, these roads will be restricted to service, life safety, shuttle service, and accessibility access only. Although they will be closed to everyday traffic, they should remain as streets and receive a new material palette to emphasize their primarily pedestrian nature.

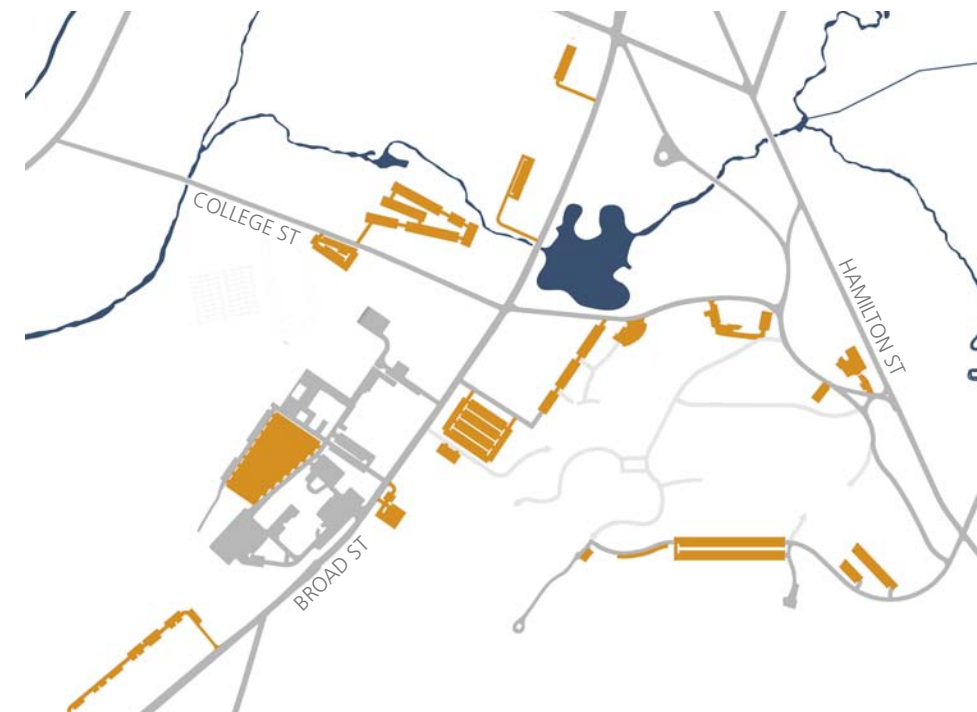
To ensure that the campus vehicular traffic is contained within the campus limits, an extension of Oak Drive will cross the new Hamilton Street property parallel to Hamilton Street, connecting with a new entry street at the intersection of Spring Street and Hamilton Street. This will enable Colgate to knit the new property into the campus fabric. This new access road will also allow Oak Drive to be closed to vehicular traffic between the Human Resources building and the Coop, thereby providing better access to the ALANA Cultural Center.



36 PROPOSED CIRCULATION



EXISTING PARKING



PROPOSED PARKING

When Alumni Road, Academic Drive, and parts of the existing Oak Drive are removed from everyday use, all small interior parking lots will not be available for day-to-day parking (the lots by Alumni Hall, Persson Hall, and on Academic Drive will remain available for events at the chapel). University parking will be reconfigured in four major reservoirs.

The first parking lot at the top of the hill will be restricted to faculty and staff (the 286 proposed spaces represent a 10 percent increase over existing available parking in the fragmented lots). A second companion lot consisting of two parking “trays” behind the proposed residential facility on the current Gatehouse site will provide parking for seniors living on the hill. The possible removal of the Cutten Complex would allow for the creation of another parking reservoir; this one containing 266 spaces. These will be primarily oriented toward students, although there will be significant visitor parking, and the lot will need to be managed for events when the new performing arts facility is built. Following the removal of the College Street apartments, a third parking reservoir will be created in the flood plain. This will be parking for students, and will contain 300 spaces. Finally, the existing first-year student lot in the athletics complex can be reconfigured (without requiring additional land area), and its capacity significantly enhanced to 536 spaces.



█ Shuttle Route
○ Shuttle Stop

PROPOSED SHUTTLE ROUTE AND PICKUP LOCATIONS

The proposed parking scheme will require enhancements to the campus shuttle system. Routes should be restructured to better serve distinct areas, with increased frequency and 10-minute headways. Formal bus stops are needed at three tiers on the hill: lower, middle, and upper.

Finally, provision of accessible entrances to many buildings from the academic quad must be continued. The master plan assumes the creation of these accessible entrances, honoring the best practices of universal design.

Sustainability

Through physical and strategic planning, this master plan contributes to new sustainability initiatives, and extends those efforts already underway.

LAND USE AND FOREST MANAGEMENT

Reduced mow areas and meadow restoration: There are many areas throughout campus that are mowed regularly. There are approximately 30 acres of campus grounds that could be enrolled into a “reduced mow” concept. These would include parts of the old golf course, portions of the cross country trails and ski hill, and in the area south of the townhouses. By having the grounds managers identify appropriate areas to reduce mowing frequency, there is a reduction in labor hours, fuel costs, and carbon emissions. The university has already begun this program with less frequent mowing on the old golf course and ski hill. Trails should still be maintained through these areas.

Sustainable forest management: The master plan supports Colgate’s long-term sustainable forestry management plan that:

- enhances its academic mission through research and teaching;
- provides aesthetic value and ongoing recreational opportunities;
- provides revenue through timber and biomass energy production;
- provides essential ecosystem services such as clean air, water, and healthy soils;
- increases carbon storage and sequestration;
- protects the diversity and health of the plants and animals that inhabit the forested lands.

The structure of decision making about land use for the contiguous campus, adjacent properties in the Village of Hamilton, and outlying parcels owned by Colgate should be reviewed as the university looks to sustain and improve its physical resources. Currently, the Committee on Planning and Physical Resources and the Open Lands and Forests Stewardship Committee act to advise senior leadership on issues pertinent to the charges of those groups. A more integrated approach to all lands management is recommended.

Enhance environmental stewardship at Seven Oaks golf course: Seven Oaks golf course at Colgate strives to incorporate environmental stewardship and practices into course management. Seven Oaks currently purchases fully treated potable water from the Village of Hamilton municipal system for all its water needs including course irrigation. Colgate is investigating the feasibility of capturing runoff from drainage ditches into a new pond and using the captured storm water for irrigation of fairways and greens. Water from the proposed irrigation pond will help reduce or eliminate the need to utilize water from the Village of Hamilton and potentially save over one million gallons of village water annually.

ENERGY AND BUILDINGS

Colgate’s 160 buildings encompass over 2.3 million square feet of floor space. Providing energy and water to its buildings costs the university about \$4.5 million annually and is responsible for roughly 50 percent of the university’s greenhouse gas emissions. For these reasons, how the university constructs, renovates, and operates its buildings has significant impacts on its energy use, budget, and ecological and carbon footprints and, therefore, must be an essential component of Colgate’s long-term master planning.

Central heating plant: Colgate’s central steam plant heats 37 main campus buildings and provides the heat source for laundry equipment, domestic water heating, dining hall food preparation, laboratory, library, and ice rink humidity control, and building humidification. In 2013, Colgate underwent a major heating plant upgrade that began the process of replacing fuel oil #6

with natural gas. Due to higher efficiency, lower operating costs and maintenance, reduced energy costs, and lower carbon emissions, the master plan supports this upgrade. However, natural gas is a fossil fuel and puts the university at risk of escalating energy costs in future years. Therefore, university planners should remain vigilant for new opportunities to increase the university’s use of renewable energy.

Renewable energy: Other small-scale sustainable energy initiatives were discussed during the planning process, including increased use of photovoltaic, wind-based, and geothermal power. The master plan supports initiatives of this kind, with a preference for functionality and practicality over demonstration.

Green buildings and energy conservation measures (ECMs): Minimizing the amount of energy each new or renovated building requires through high-performance design will help Colgate manage future energy costs and greenhouse gas emissions. Efficient space use and enhanced space management is critical in minimizing needed new construction. Ensuring sustainable building practices in campus projects—including LEED Certification for all applicable construction—is generally more cost effective and easier to achieve during the initial design and construction than via future retrofit.

FOOD AND DINING

Colgate strives to improve the many dimensions that constitute a sustainable food program. Central New York is dairy and farming country and the university continues to explore ever-increasing opportunities to support local farmers while serving locally produced, organically grown food on campus. Buying local not only supports the local economy but also strengthens Colgate’s relationships with its neighbors, reduces emissions associated with transporting large quantities of food from long distances, and helps ensure that food is fresh and produced responsibly. The master plan supports opportunities to increase the amount of local and sustainable food served on campus and the Colgate community should consider food source and quality wherever relevant.

ALTERNATIVE TRANSPORTATION

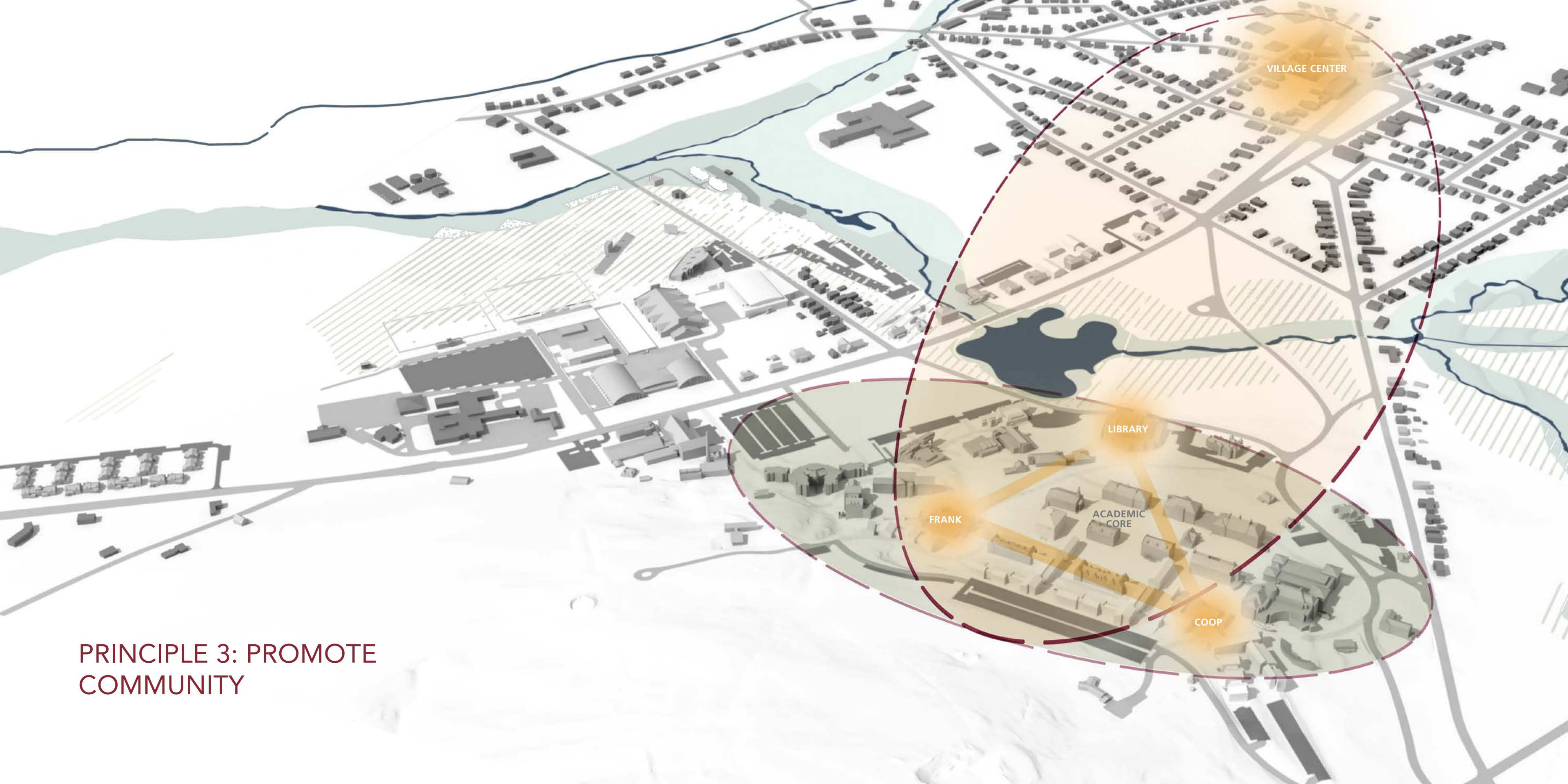
Commuters are responsible for about 10 percent of Colgate’s greenhouse gas emissions, and for the currently unpleasant driving, parking, and pedestrian experience on campus. The master plan actively pursues opportunities for a better campus shuttle system, a more pedestrian- and bicycle-friendly community, and increased infrastructure for electric vehicles on campus. See the section on Circulation Systems on Campus for details.

WASTE MINIMIZATION

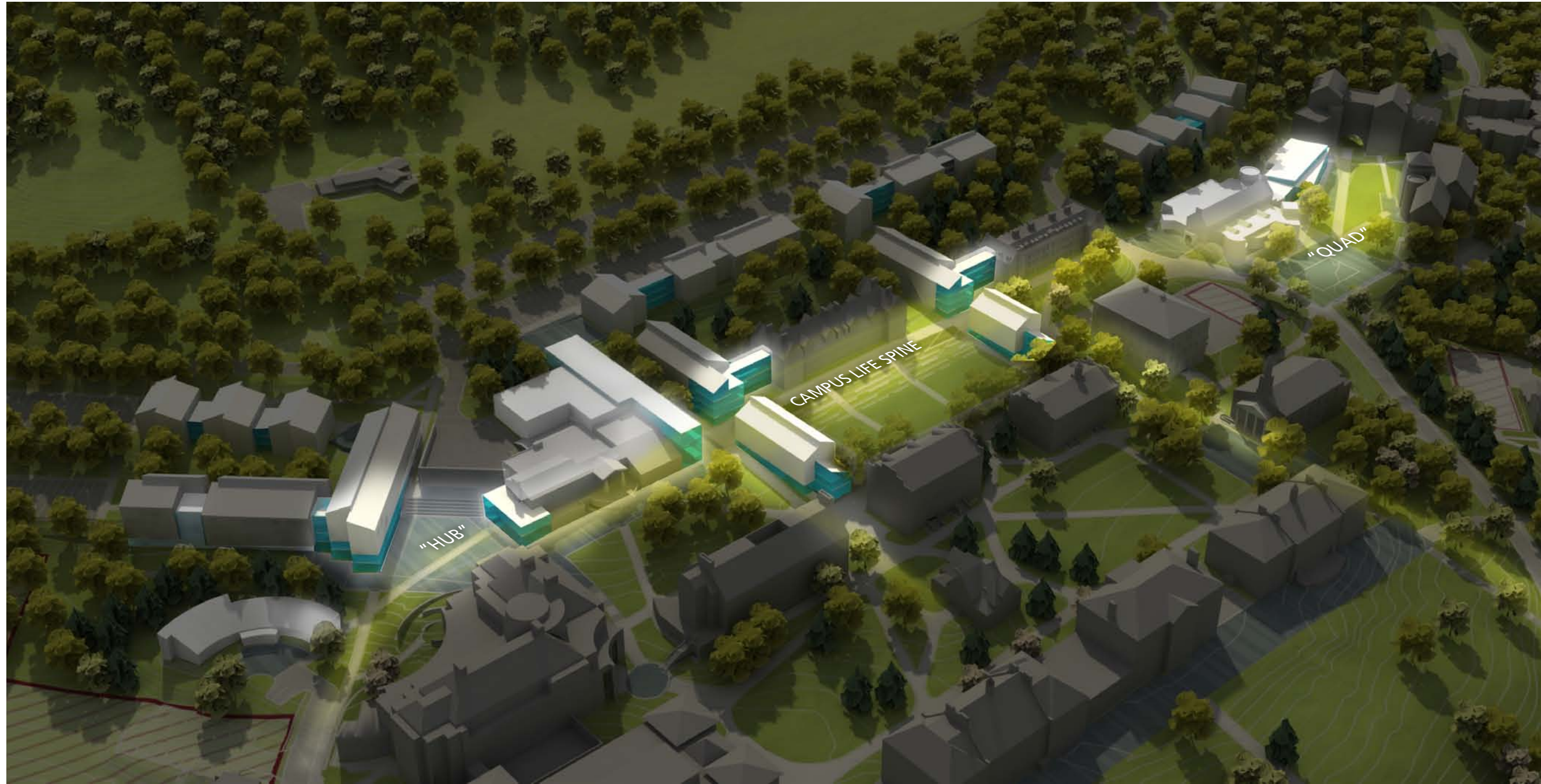
A number of initiatives and programs can be implemented to reduce the overall amount of waste Colgate sends to the landfill. University planners should encourage opportunities to reduce, reuse, and recycle in all infrastructure decisions. For example, thousands of one-time use disposable containers are purchased and thrown out each year at the Coop because the university did not plan for alternative practices. Consideration of waste management when designing or renovating buildings would have a very positive impact on the overall success of the campus waste management program.

WATER CONSERVATION AND EFFICIENCY

Water is precious, and it is also taken for granted. Altogether, the Colgate community consumes over 75 million gallons of water each year. Water conservation and efficiency should be considered in every major decision at the university. Opportunities include water reclamation and reuse of gray water for nonpotable purposes, water-efficient technologies, increased use of retention ponds, and others.



PRINCIPLE 3: PROMOTE
COMMUNITY



CAMPUS LIFE SPINE

For Colgate to be successful, the hill campus must be a vital, engaging place. Students should remain connected to their academic experience throughout the day, and have a range of spaces—for socializing, for organizations, for studying—in which to do this. These spaces should be highly visible, attractive, and engaging. The goal is to establish a critical mass of activity on the hill. The reality of today's campus is that half of the student population lives off the hill, and student life functions are fragmented and at the edges. Developing a compact campus, with residential life back on the hill, is critical.

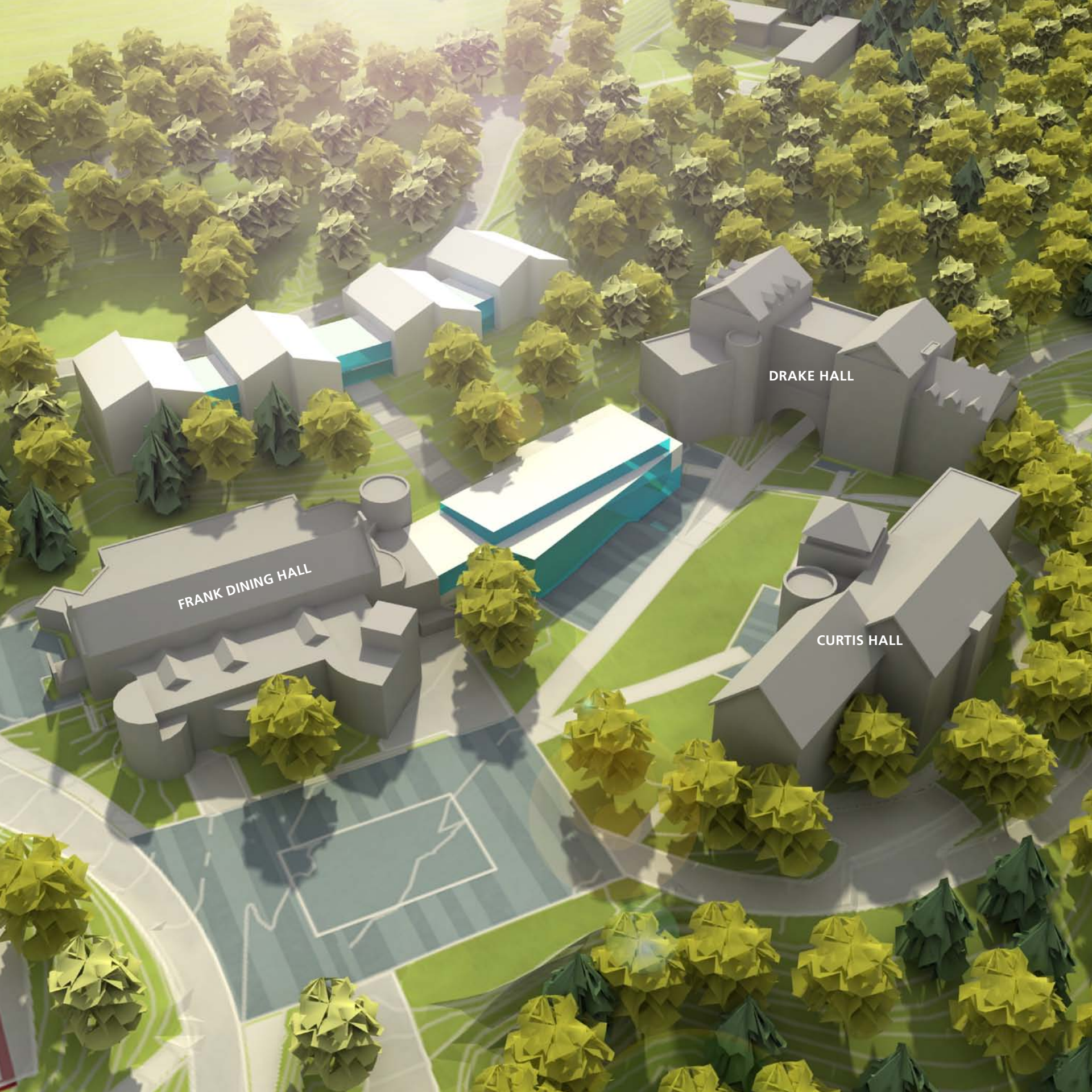
The master plan proposes the creation of a major new campus life corridor crossing through the upper quad residential district, anchored by major improvements to both Frank Dining Hall and the Coop. This corridor will also link to Case Library. Triangulating campus life activities between Case Library and a re-imagined and re-envisioned Coop and Frank Dining Hall will support a shift in the campus's center of gravity, refocusing life on the academic core.



THE "HUB"

The eastern edge of campus will be enlivened through the creation of a major new campus open space flanked by a re-envisioned Coop, new student housing on the Gatehouse site, ALANA, and the Robert H. N. Ho Science Center. This will become a "Hub," the nexus between these buildings. Today the area is a major congestion point. The plan completely eliminates vehicular traffic in this area, redirecting service for the Coop to the south along the new entry road on the Hamilton Street property. The Coop's dining facilities will be expanded to accommodate the increase in the number of students living on the hill, and new lounge, study, and flex spaces will greatly enhance student activity throughout the day and night. The ground floor of the new student housing on the Gatehouse site could offer much-needed opportunities for student organizations and a café. ALANA will continue its extremely successful cultural programming. These indoor spaces will be reinforced through the outdoor "Hub." Activated by the surrounding campus life spaces, it will be home to outdoor performances, classes, casual happenstances, or simply provide an opportunity to enjoy the beautiful views.

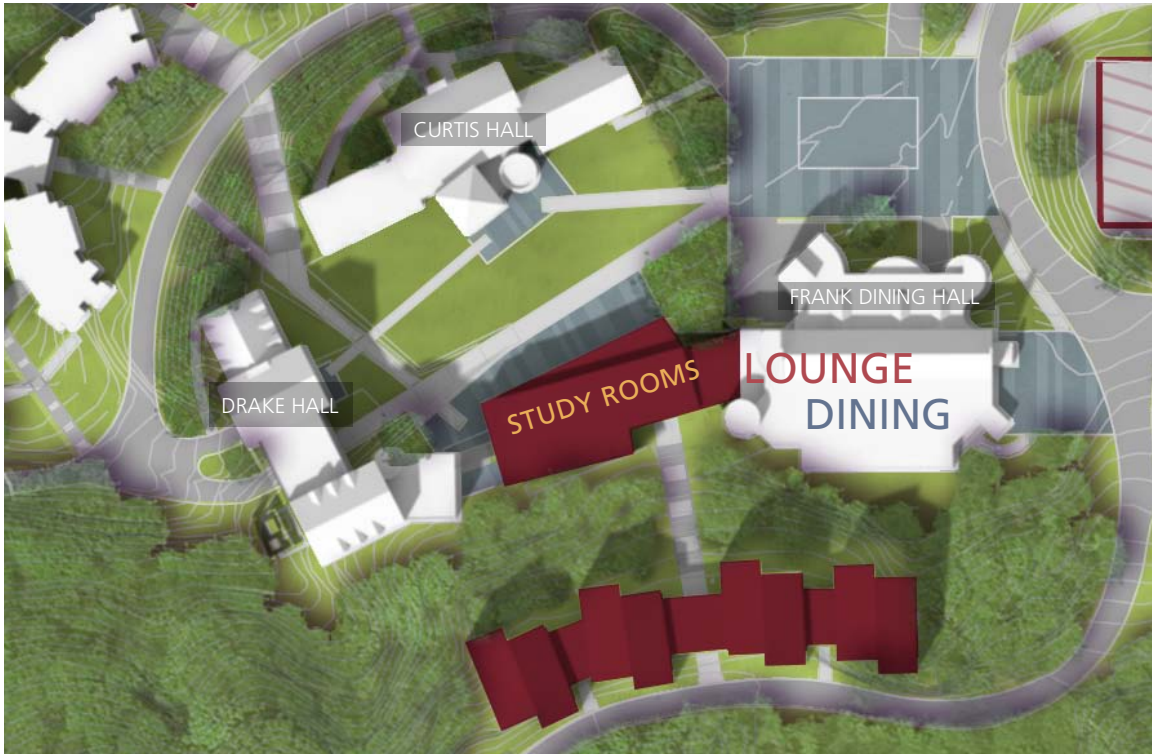




THE "QUAD"

Frank Dining Hall is currently a dining hall in the most traditional sense. It is open during certain hours when students have the opportunity to grab food on the go, or have a sit-down meal. Outside of these times, it is closed for general access. The master plan proposes a reinvention of Frank Dining Hall with renovations of existing facilities and an expansion, including new lounge and study areas to complement the dining function.

The new Frank Dining Hall will provide students with much needed 24/7 engagement and study space in the western edge of the campus. In addition, it will activate Curtis Circle and help the students living in its surrounding buildings form a cohesive community bringing to life the residential education aspirations that will set Colgate University apart from its peers as a campus for its third century.







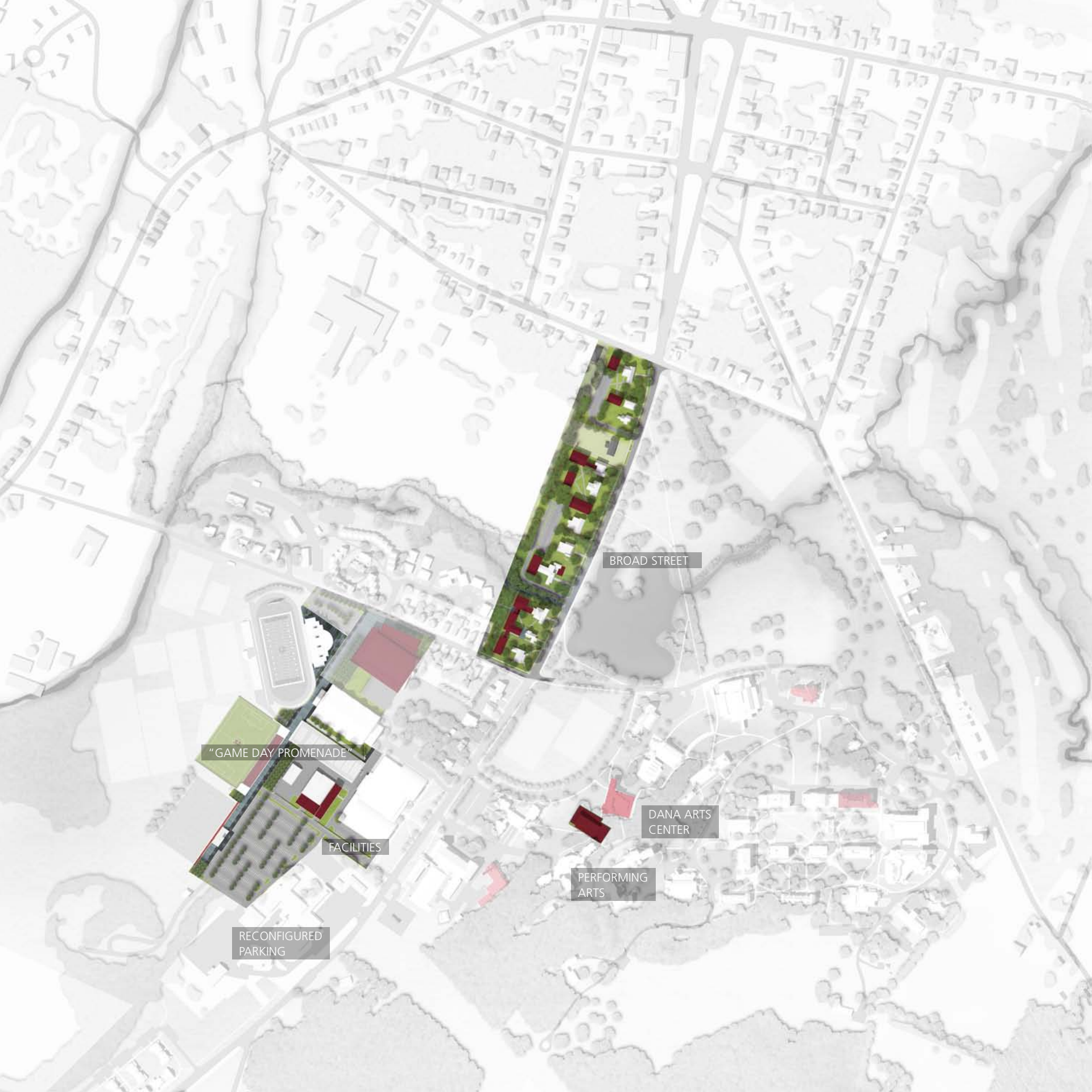
Implementation

The implementation of the master plan is path-dependent, and will require more than proper phasing. Its execution will require the establishment of oversight and management processes capable of coordinating the master plan's long-term objectives with ongoing, recurring, and short-schedule capital projects. Presently, capital projects, even major undertakings such as the Ho Science Center, may be treated as separate jurisdictions/processes. The master plan must be integrated with scheduled capital expenditures, just as capital expenditures seemingly unconnected to the master plan should be reviewed for conformance with its objectives. We provide planning level cost estimates. Further study will provide refined costs.

Committed Projects

- Admission Office renovation*
- Heating Plant renovation*
- McGregor Hall renovation, 2nd and 3rd floors (one per year)
- New athletics facility, new soccer field
- Center for Art and Culture

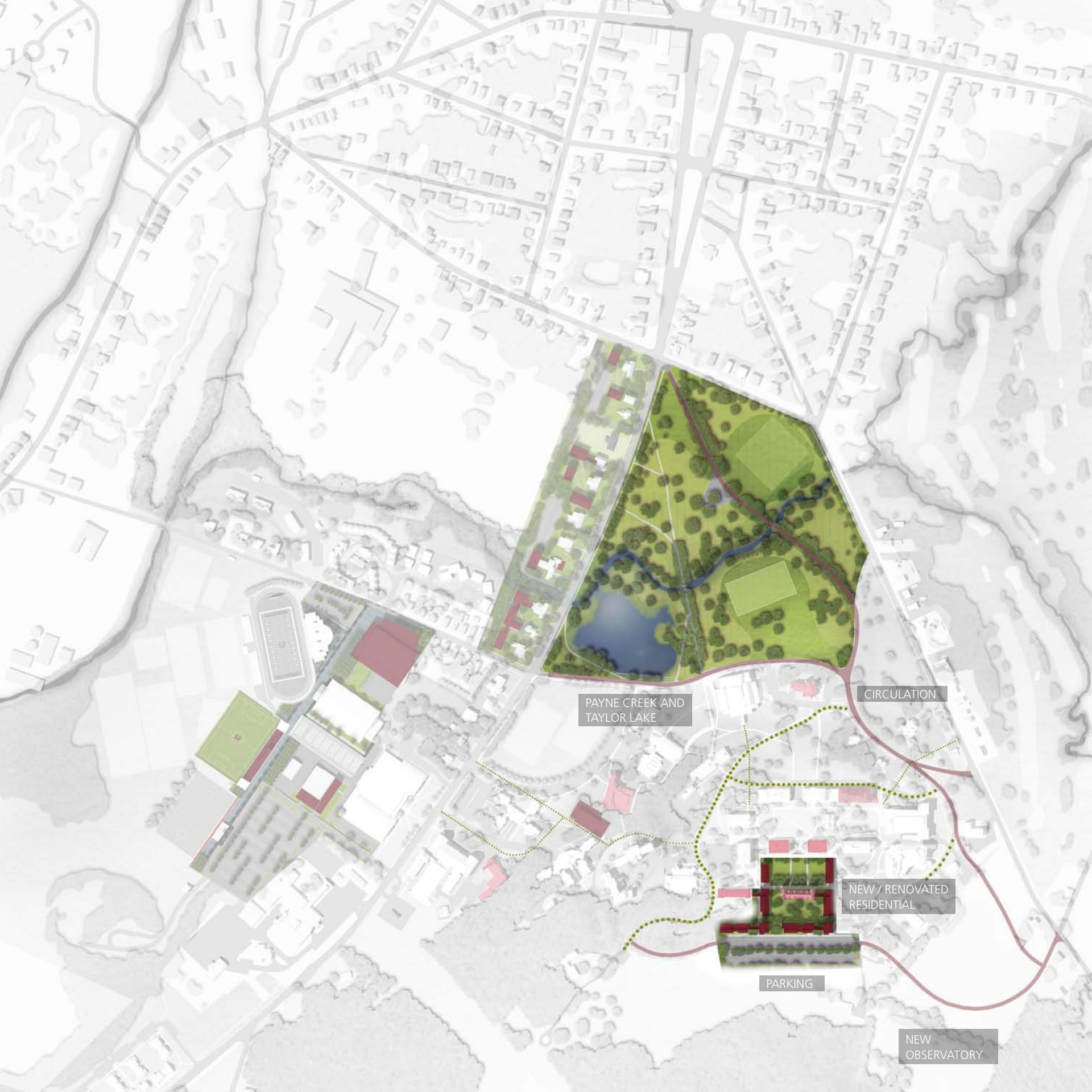
* underway January 2014



Independent Opportunities

The independent opportunities are those projects that can begin as soon as funding is secured and are not restricted by any dependencies.

- Broad Street new housing additions (180 beds) and parking: \$19.6 M
- Facilities addition: \$3.3 M
- New performing arts center: \$15 M
- Dana Arts Center renovation: \$19.7 M
- "Game Day Promenade" and reconfigured parking: \$3.3 M



PHASING

The master plan organizes the phasing of the planned initiatives in specific timeframes. Phases 1 through 3 include projects that may have specific dependencies, and thus cannot happen in an arbitrary order.

Phase 1 (0–5 Years): \$153.6 M

Phase 1 focuses on development of the campus core and on enhancing campus systems. The first major component is building new residence halls in the first-year quad, which in turn will enable the demolition of Gatehouse. Major investment in pedestrianizing the hill and concentrating the fragmented parking lots into larger peripheral parking reservoirs are planned along with improvements to hydrology. While Phase 1 is presented as a single idea, it will likely need to contain distinct subphases. To this end, the new residential construction can be split into projects.

DEVELOP A COMPACT CAMPUS:

- New residential construction will be built on the upper campus in two roughly equal subphases, containing a total of approximately 550–600 beds: \$75 M *
- Upper campus existing housing renovations (East, West, Andrews, and Stillman): \$45.3 M
- Upper quad landscape restoration and ADA-compliant buildings within campus core: \$3.3 M
- Gatehouse demolition: \$0.1 M
- Broad Street existing housing renovation: \$9.8 M
- Drake, Curtis, Bryan Complex renovation to launch RLC 1 in 2014: \$2.4 M

ENHANCE CAMPUS SYSTEMS – PARKING AND CIRCULATION:

- Academic Drive and Alumni Road; new parking on hill top: \$4.3 M *
- Access road from Oak Drive and the new Hamilton Street property: \$4.3 M *
- Enhanced paths to athletics facilities and new path to Case Library: \$2.6 M

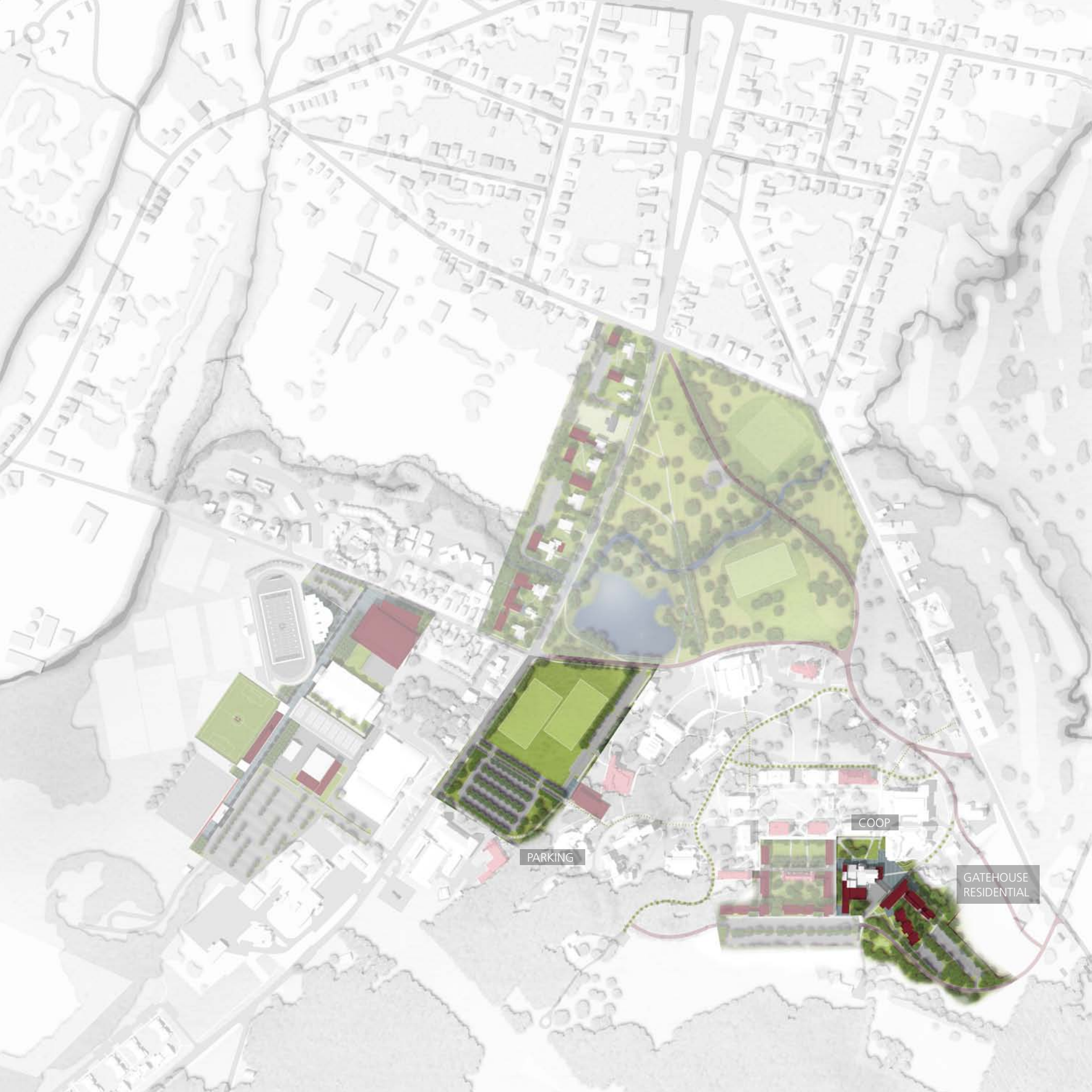
ENHANCE CAMPUS SYSTEMS – HYDROLOGY:

- Taylor Lake and Payne Creek: \$3.9 M

PROMOTE COMMUNITY:

- New observatory: \$2.6 M

* The total of these projects is \$83.5 million and agrees to the amounts reported in the Strategic Framing document.



Phase 2 (6–10 Years): \$57.4 M

Phase 2 focuses on the development of the eastern edge of the hill. Work on expanding the Coop needs to take place in order to accommodate an increase in the number of students residing in the vicinity. The Gatehouse site is now available for new housing and parking construction. The Cutten bed capacity is now replaced in the first-year quad. Cutten can now be demolished (assuming it is not needed for swing-space purposes during the renovation of other existing residence halls).

DEVELOP A COMPACT CAMPUS:

- 230 new beds in Gatehouse site new construction: \$31 M

ENHANCE CAMPUS SYSTEMS – PARKING AND CIRCULATION:

- Parking located on the new Hamilton Street property: \$1 M
- Cutten demolition, enhance parking and reconfigured Lally Lane: \$4 M
- Coop renovation and expansion: \$21.4 M



Phase 3 (11–15 Years): \$51.7 M

The last phase concentrates on the western edge of the hill where renovation and expansion of Frank Dining Hall is planned. New senior housing behind Frank Dining Hall, James C. Colgate building renovation and 10 Utica Street conversion are scheduled during this time. Lastly, the apartments on College Street can be taken down.

DEVELOP A COMPACT CAMPUS:

- 110 new beds in Chapel House Road new construction: \$16.1 M
- James C. Colgate renovation: \$8.3 M

ENHANCE CAMPUS SYSTEMS:

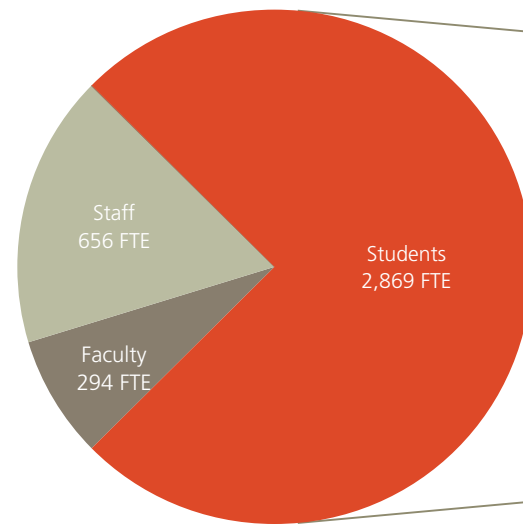
- Remaining College Street housing demolition, convert to parking and fields: \$4.7 M

PROMOTE COMMUNITY:

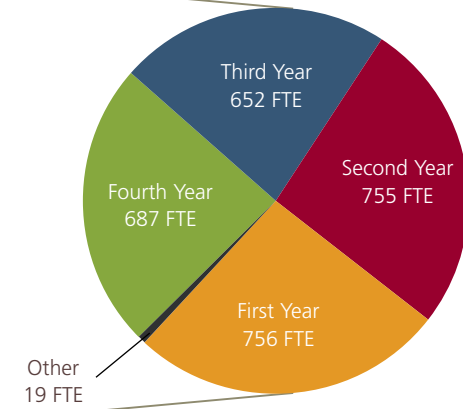
- Frank Dining Hall renovation and expansion: \$20 M
- 10 Utica Street conversion to housing: \$2.6 M



TOTAL CAMPUS POPULATION



STUDENT BODY



*Fall 2012 enrollment report and faculty count (FTE = full-time equivalent)

Academic and Administrative

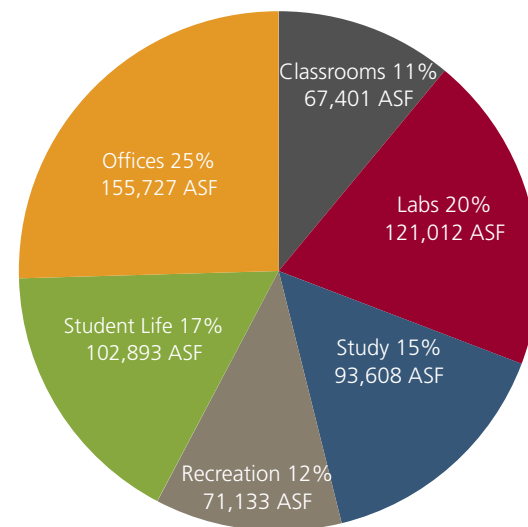
POPULATION

The campus population is primarily composed of full-time equivalent (FTE) students, although faculty and staff make up 25 percent. The student body is roughly evenly distributed throughout the traditional four years of undergraduate education, with the "other" category indicated at left including graduate and part-time high school or certificate program students.

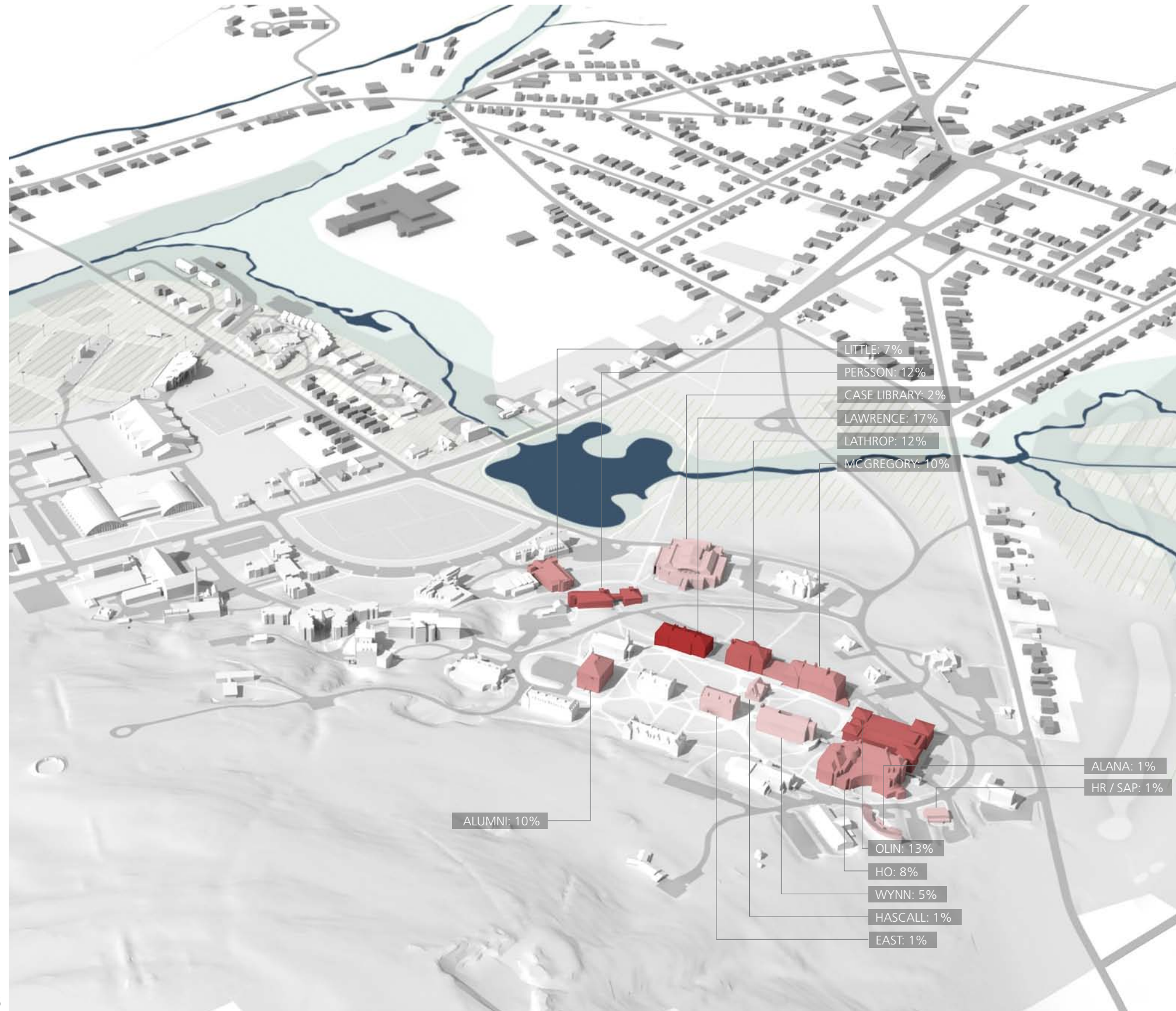
INVENTORY ASSESSMENT

The master plan is based on a rigorous understanding of existing Colgate space and its use patterns. The university did not have a current room inventory at the beginning of the master plan process. Inventory walkthroughs established a base set of common facts, allowing us to understand how many assignable square feet (ASF) space the university has, how it is assigned to departments, and how it breaks down by type.

SPACE ALLOCATION



*Sasaki inventory fall 2012 (ASF = assignable square feet)



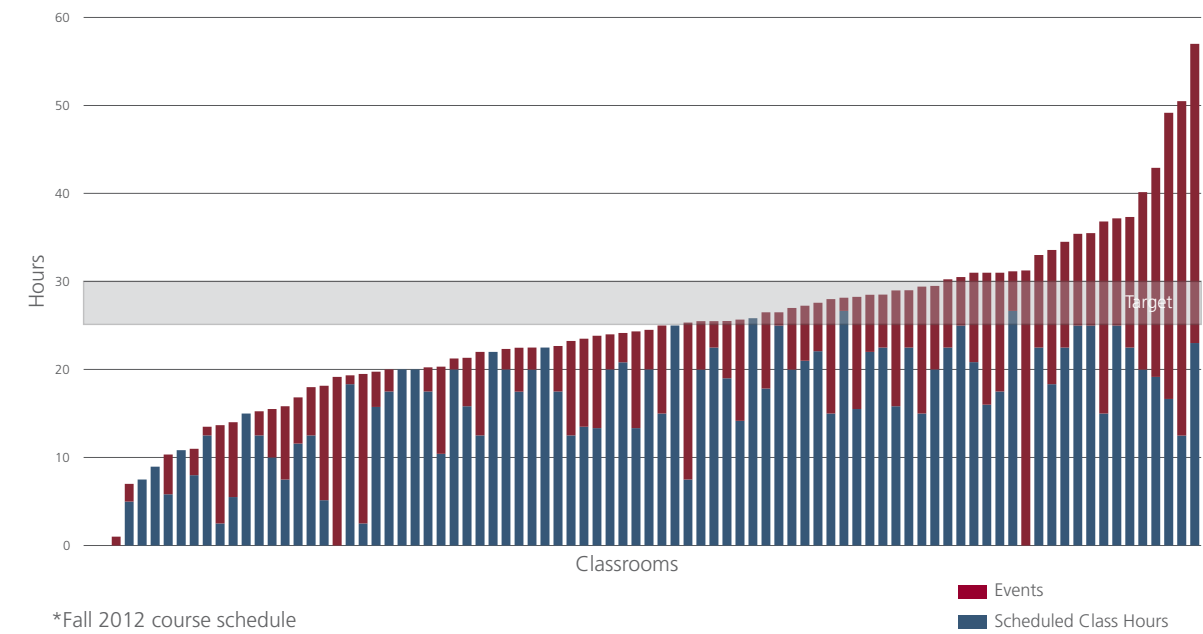
Classrooms

Colgate University uses its classroom space for instruction and other events. We explored both kinds of use and found that 51 percent of classrooms are used less than 25 hours per week, while 26 percent are in the target range of 25–30 hours per week and 23 percent are used over 30 hours per week.

Several factors contribute to this low utilization rate such as the common periods on Tuesdays and Thursdays between 11:30 a.m. and 1:10 p.m., the colloquium period on Fridays between 2:30 p.m. and 4:00 p.m., and a lost opportunity to schedule more classes in the early morning.

We conclude there is likely sufficient classroom space in terms of quantity. Concerns center more on the quality of the classrooms, causing some classrooms to be more popular than others.

SCHEDULED CLASS HOURS AND EVENTS



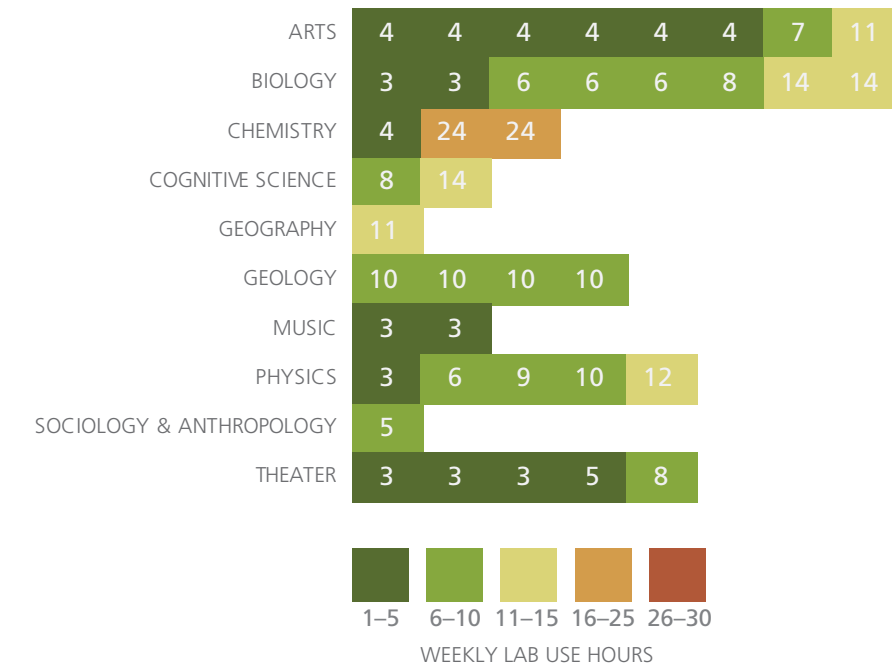


Labs and Studios

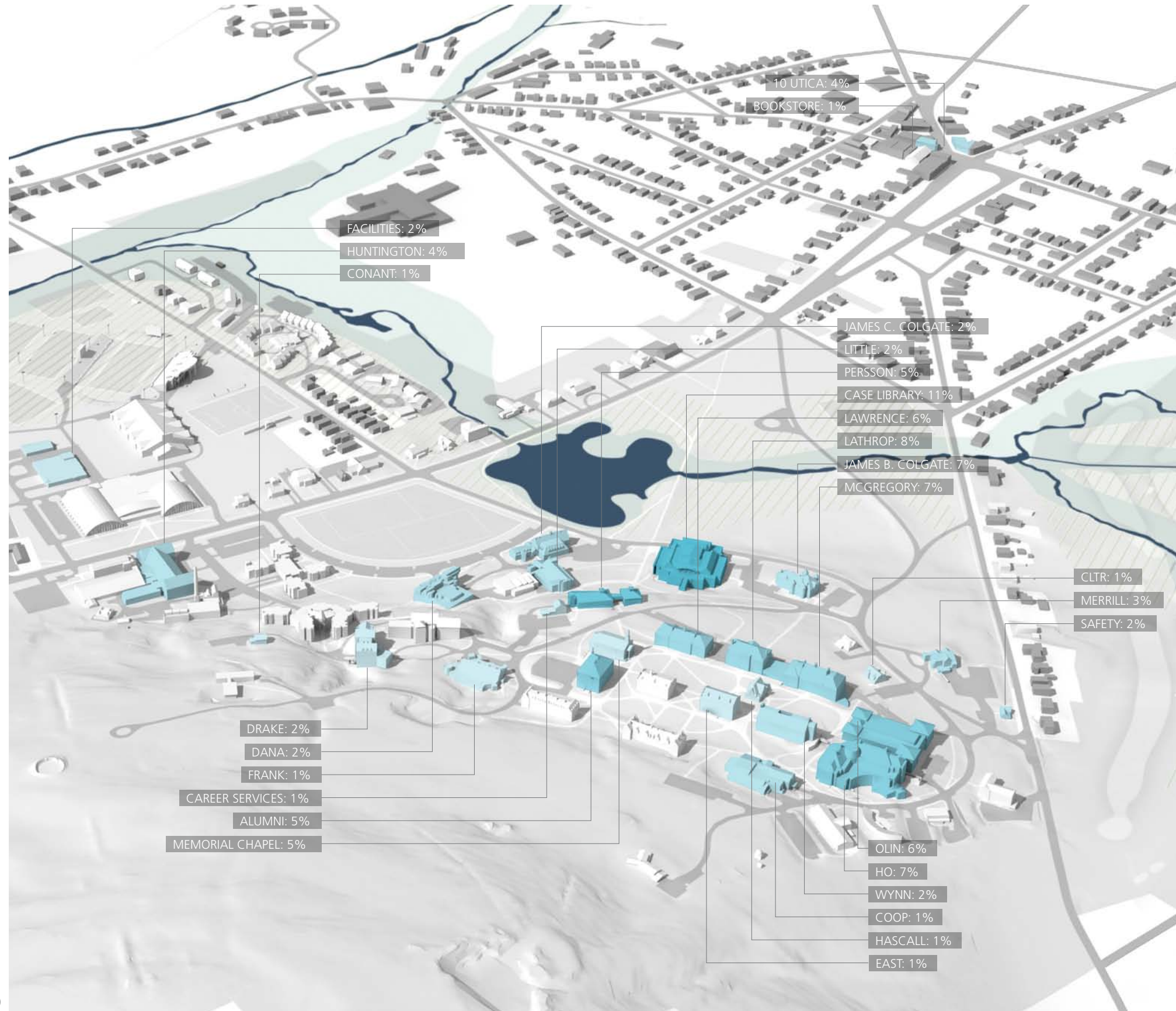
Total hours of lab and studio use are measured similarly to classrooms. However, labs generally show lower overall utilization numbers because of project work and setup time, and the dedicated nature of many laboratories. A general finding is that lab space at Colgate is sufficient for the current student population, although there is some pressure on chemistry labs. If this trend continues, there may be a specific incremental space need. In general, the analysis found a need to emphasize quality considerations over additional quantity.

In the chart below, each box represents a lab for the indicated discipline. The numbers within the boxes correspond to the number of scheduled lab hours, while the color of the boxes helps to visualize where additional pressure may exist. The chemistry labs are a good example of such a case. The chart shows three chemistry labs available for scheduled instruction. While two of these labs are scheduled for 24 hours per week each and meet the target range, the third lab is scheduled for 4 hours only. This imbalance may indicate a disparity in quality between the three labs that, if remedied, may help relieve some of the growing pressure on the chemistry labs.

SCHEDULED LAB HOURS (TARGET 18–25 HOURS/WEEK)



*Fall 2012 course schedule

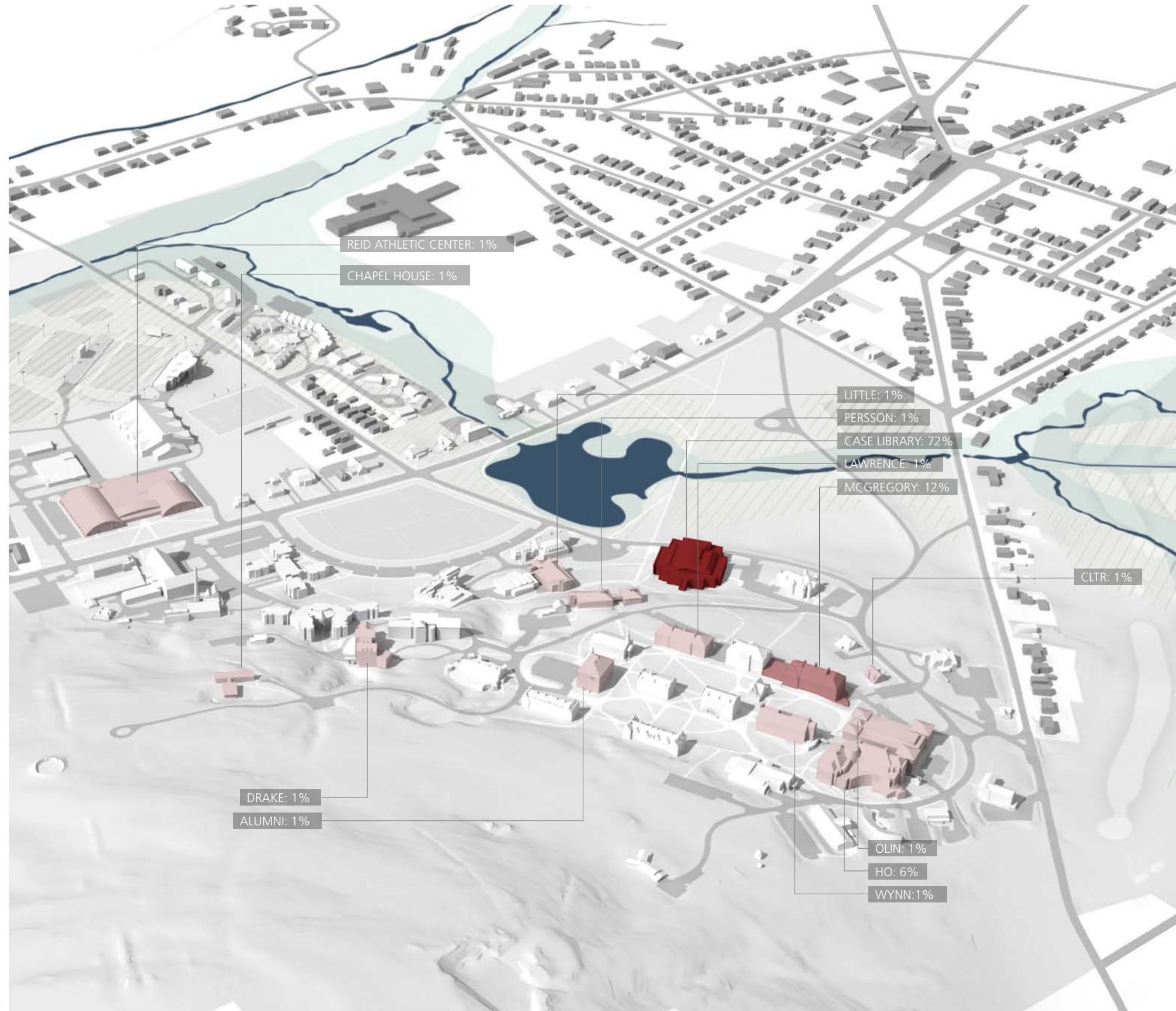


Offices

Our analysis indicates that overall, Colgate has sufficient office space for faculty and staff. However, this may not translate to the local scale where departments experiencing program growth may find themselves in buildings that pose constraints.

Faculty and staff indicated during stakeholder interviews, as well as through the myCampus comments, that the campus lacks shared social spaces. More equitably distributed social spaces coupled with more integrated office spaces may lead to a more effective working environment.

*Sasaki inventory fall 2012



Study Spaces

The Case Library contains 74 percent of the study space on campus. Students noted a lack of accessible study space outside of the library available during extended hours. The library also functions as a major campus social hub. As a result, during the midterms and finals weeks, the library becomes over crowded. Small amounts of additional study space are available in McGregory (13 percent) and Ho Science Center (5 percent). Comments entered by students in the myCampus survey suggest the study space in the Ho Science Center is excellent and the addition of similar spaces would positively impact the campus.



Student Life

The student life function at Colgate University is highly dispersed across the campus. Dining facilities are located in Frank Dining Hall, the Coop, and the Edge Café. Student organizations are divided between the Coop and James C. Colgate. Cultural programming at the ALANA and the recreational facilities at the Trudy Fitness Center are very popular among students. Case Library has become a hub for socializing. All seven of these facilities are located at the periphery of the campus, and none achieve a much-needed critical mass. Consolidating and connecting these student life functions will create energy on the hill, and better integrate students' academic and social experiences.



First-year students perceive "the hill" as being concentrated on the main campus.



Fourth-year students perceive "the hill" as much larger, encompassing athletics/recreation and Broad Street.

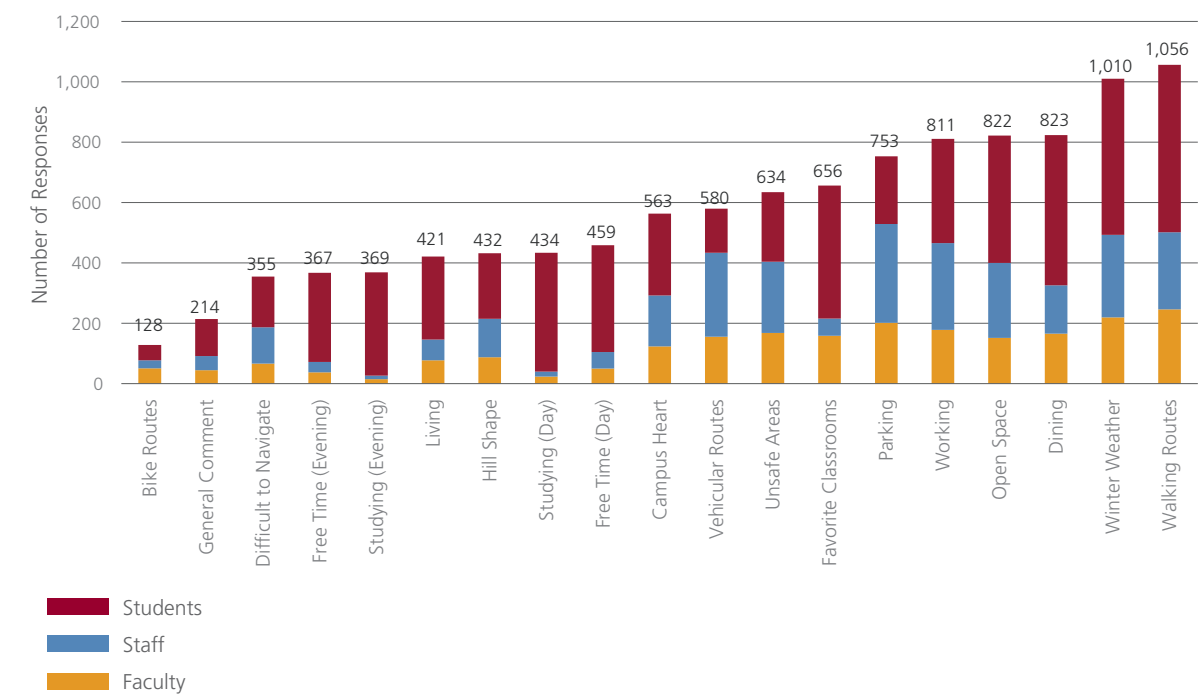
myCampus

We received significant student, faculty, and staff input through our online myCampus survey. The data on the following diagrams is a composite of their responses.

This tool generated feedback on how the campus is used today in terms of where faculty, staff, and students live, study and dine, which areas they find the most challenging to navigate, and the pedestrian routes they most use. The chart below shows which survey items received the most responses.

One of our most interesting findings revealed how students' perception of "the hill" expanded over their four years at Colgate. This perceived expansion dilutes the strength of the academic core as the center of campus.

MYCAMPUS SURVEY: ICONS PLACED





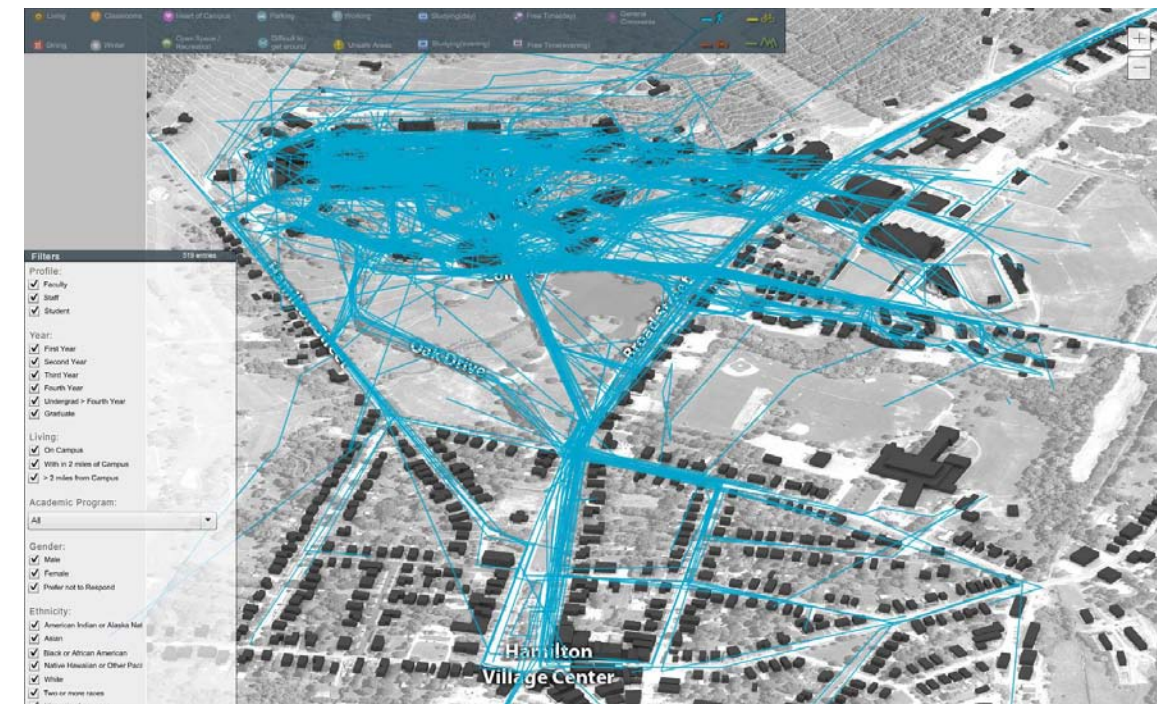
Most respondents see the hill as the heart of campus.



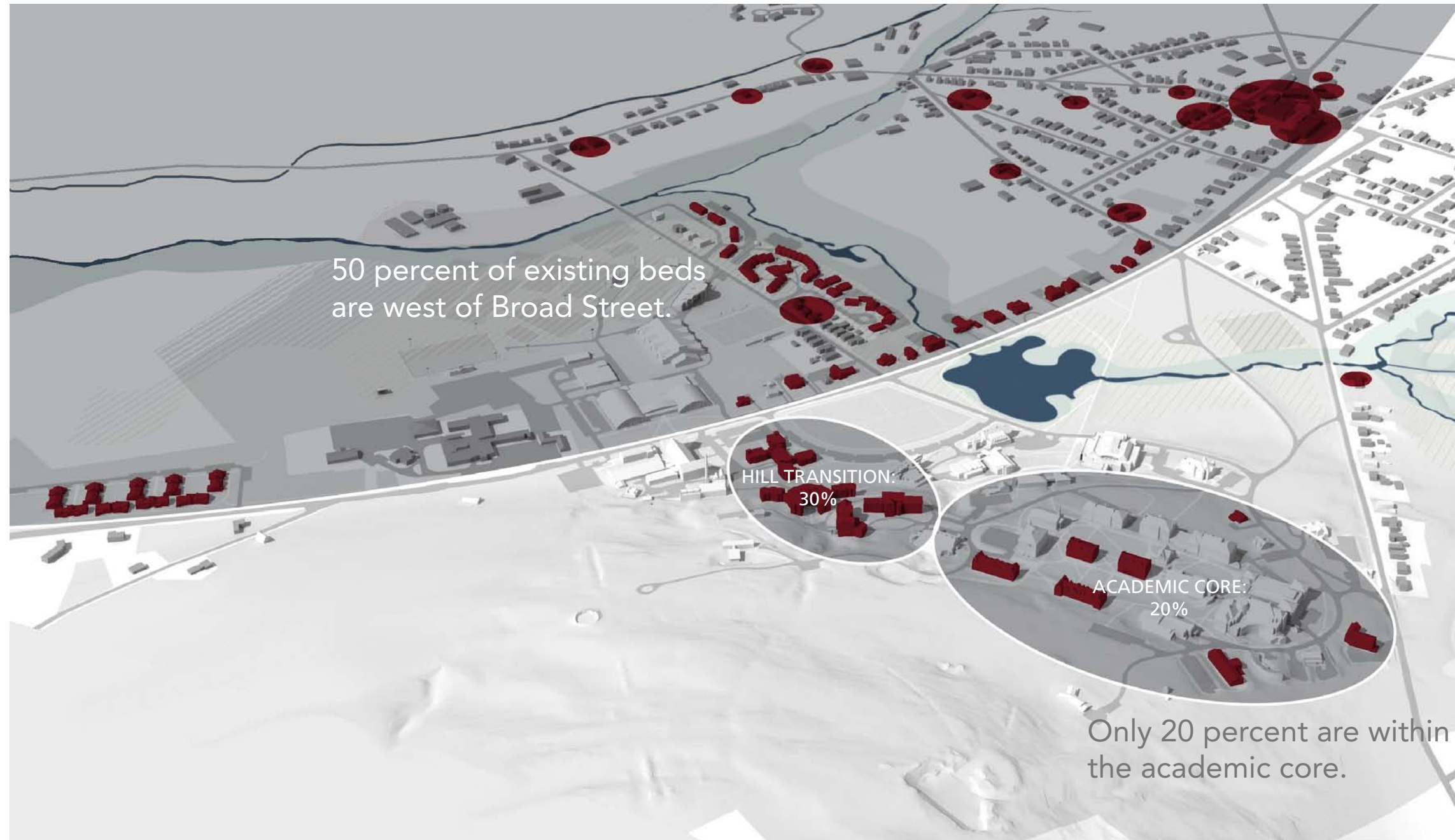
Parking is distributed across campus and off campus.



Many respondents reported dining at home or in the Village of Hamilton.



Pedestrian routes are mainly on campus with a significant concentration on Broad Street as well.



Residential Life

A strong residential life experience is integral to the university's core academic mission. As a premier undergraduate liberal arts university, Colgate must assure a thriving living-learning environment. The major findings of our analysis focused on the dispersal of student residences west of Broad Street, and the impact of dispersion on the integrated living-learning experience that is central to Colgate's value proposition. The university must strengthen existing residential communities on the hill by developing new residential facilities closer to the academic core.

The current residential life program at Colgate University provides an array of options for students. Choices include theme housing, fraternities and sororities, traditional residence halls, apartments, and living off campus in the Village of Hamilton. First- and second-year students live primarily on the hill, with a portfolio including residence halls such as East and West Halls, which were among the very first campus buildings. Although these buildings are deeply rooted in the history of Colgate, their condition and the limited variety of room types does not encourage independent living on the hill for juniors and seniors. The university built apartments on College Street and townhouses south of campus to offer a range of housing options for juniors and seniors.

This master plan envisions a student residential experience transformed through re-imagining, renovating, and rebuilding residential living spaces, and through the enhanced academic and social communities that will emerge as a consequence. The plan includes developing residences that support mixed-class living, creating more space for socializing and study, increasing facilities and space for student life, and reinforcing a sense of connectivity in residential communities that promote the living-learning ideal. To realize this vision, the lack of study space in residence halls must be addressed, and new opportunities for students to socialize in the central campus area must be developed.



Class outdoors on Academic Quad



Memorial Chapel



Dana Arts Center

Campus Life

Colgate is home to over 150 student organizations. Students can choose to join clubs from 14 different categories or start a new one. However, due to the limited number of gathering spaces, students need to be creative about where these organizations can convene and organize events.

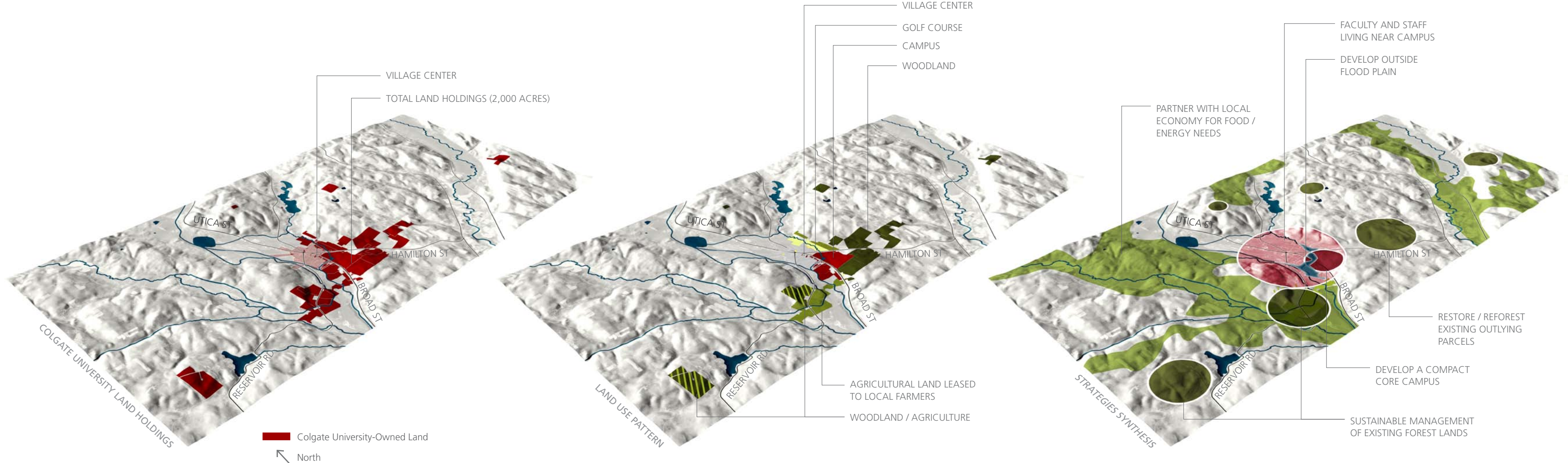
Clifford Gallery in Little Hall, Longyear Museum of Anthropology in Alumni Hall, Linsley Geology Museum in Ho Science Center, and Picker Art Gallery in Dana Arts Center provide a range of valuable resources to the campus community and the general public. However, Alumni Hall and Dana Arts Center are in need of renovation to make them accessible.

The Brehmer Theater, with 336 seats, hosts Colgate's major theater productions while Memorial Chapel, with a seating capacity of 750, welcomes musical groups, visiting lecturers, and regular services. These well-attended events suggest the campus would benefit from a performing arts facility with a larger seating capacity.

Reid Athletic Center was built over a half century ago. Since then, the campus population has doubled, but more importantly, the university became co-ed and increased the need for additional athletics facilities. The 25 varsity teams have now outgrown the building. Other recreational facilities include Trudy Fitness Center, Lineberry Natatorium, Sanford Field House, and Huntington Gymnasium. All sports and recreational facilities are concentrated on Broad Street, south of College Street, and are highly popular among students.

NATURAL SYSTEMS & SUSTAINABILITY

Colgate's campus is located on the valley floor and hill slopes in the Village of Hamilton, with beautiful views of the forests, farms, and valleys of rural Madison County in central New York. The university was recognized as the most beautiful campus in the country in the 2010 edition of the *Princeton Review*. Altogether, Colgate owns roughly 2,000 acres of land. Colgate's built environment spans 515 acres and includes 160 buildings and over 2,200 inventoried trees. The Seven Oaks golf course lies northeast of campus and provides a venue for the university and the community, and is an important alumni amenity. The course is maintained by the university and was named a best campus golf course in September 2013 by *Golfweek* magazine.





View from Persson Hall Toward Taylor Lake



View up the Hill



Old Golf Course

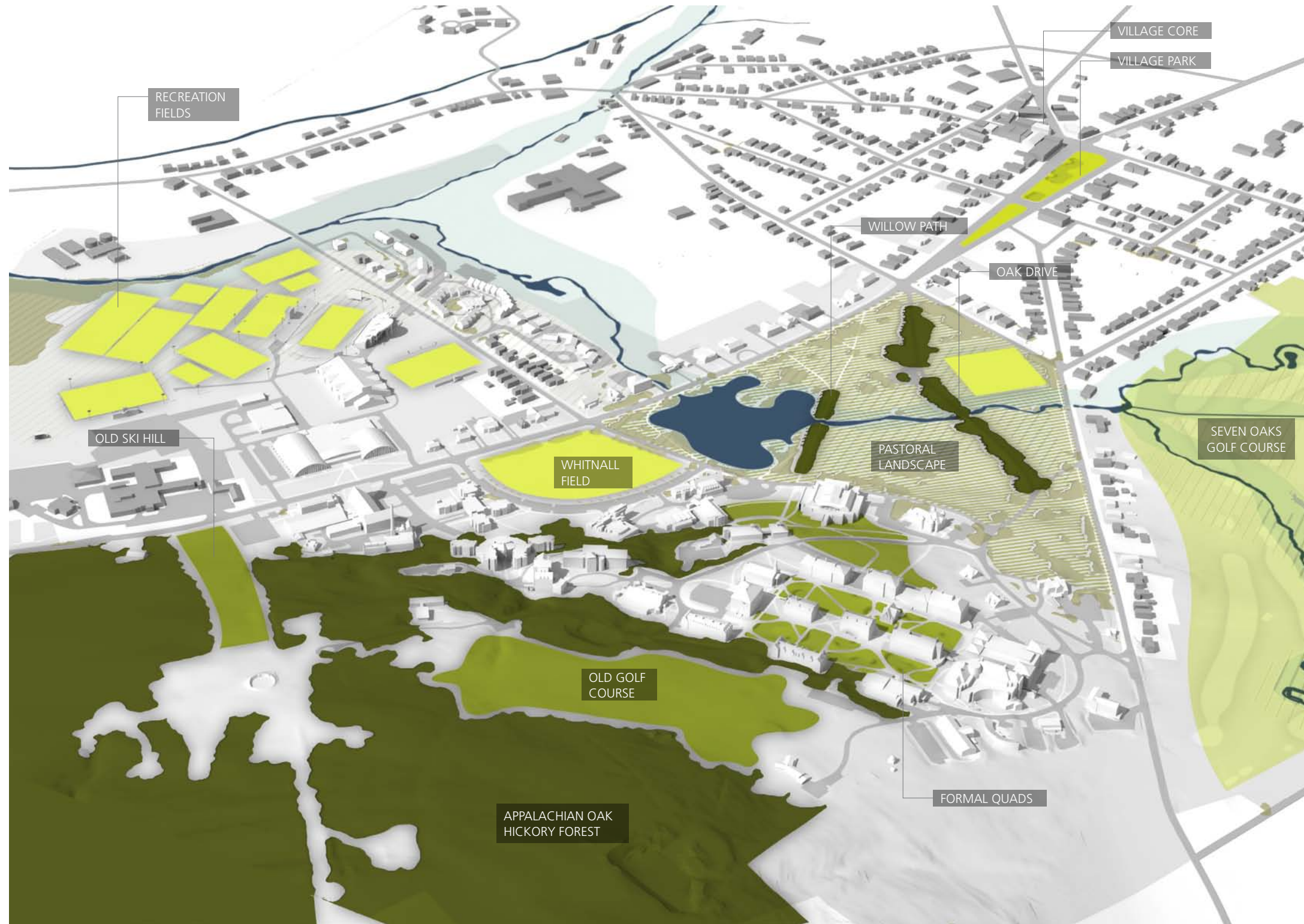
Historically, the university maintained a ski hill near the southern edge of campus that is no longer in active use. Near the top of the hill is the “Old Golf Course,” a sloping meadow maintained for casual use. These open areas, 240 feet above Taylor Lake, offer superb views of the historic stone buildings of the campus and the valleys and hills beyond.

The upland slope of campus is covered by native northern hardwood forest, and the lower-lying areas are classified as flood plain forest. If left to regenerate, the majority of campus would eventually be covered in hardwood trees.

The lower area of campus is park-like, with broad lawns and specimen trees forming the foreground to views up the slope to main campus. The entry to campus, with Taylor Lake, Willow Path, and beautiful specimen trees, amplifies the character of the formal arboretum along the creek.

Altogether, approximately 1,100 acres of Colgate’s 2,000 acres of landholdings are sustainably managed forests, most of which are adjacent to or within close proximity to the main campus. Approximately 400 acres are leased for crop and dairy production.

The landscape, hydrology, vegetation, and land use around campus combine to create a visually engaging place, which can be enhanced by strategic improvements.



Sustainability

Sustainability has emerged as an important strategic framework used to build organizational strength and reduce short- and long-term operating costs while enhancing environmental stewardship. These issues are reshaping the way Colgate conceptualizes its place in the larger system of global resources and risks. Trends like global climate change underscore the wider implications of Colgate's local operational inputs and outputs. This interdependency also links economic and environmental factors. Mitigating the effects of climate change, and adapting to a "new normal" with regard to weather variability, must be fully integrated into all planning processes. Over the long term, the viability of the institution will in some ways be linked to its resilience in the face of sustainability-driven challenges. In addition, sustainability questions require thorough research and analysis, providing opportunities for students and faculty to serve Colgate's educational mission, while preparing students for life and work after graduation. Finally, Colgate's role as a leader in this area increases its attractiveness to students and donors, and serves as a model for other institutions.

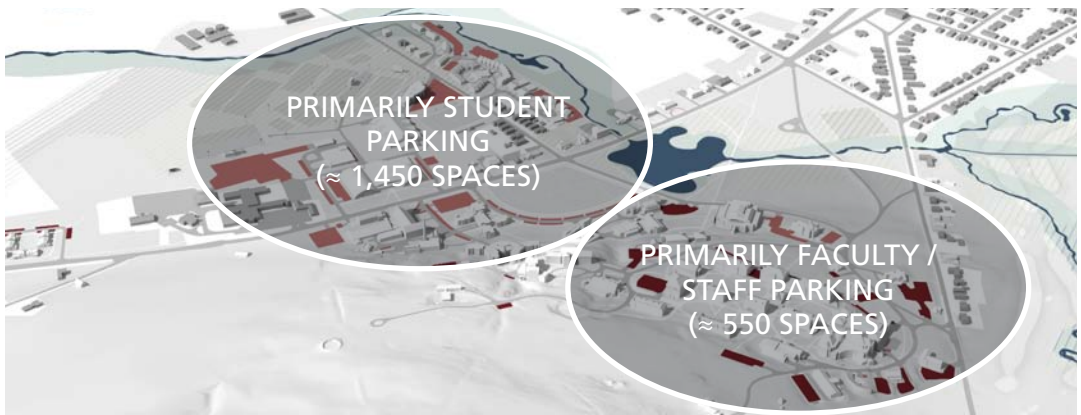
The university's most significant commitment to sustainability occurred in September 2011. President Jeffrey Herbst and Colgate's senior administration approved the Sustainability and Climate Action Plan that committed Colgate to carbon neutrality by 2019. Since then, the university has made significant progress in advancing sustainability on campus.

Connections to the Village

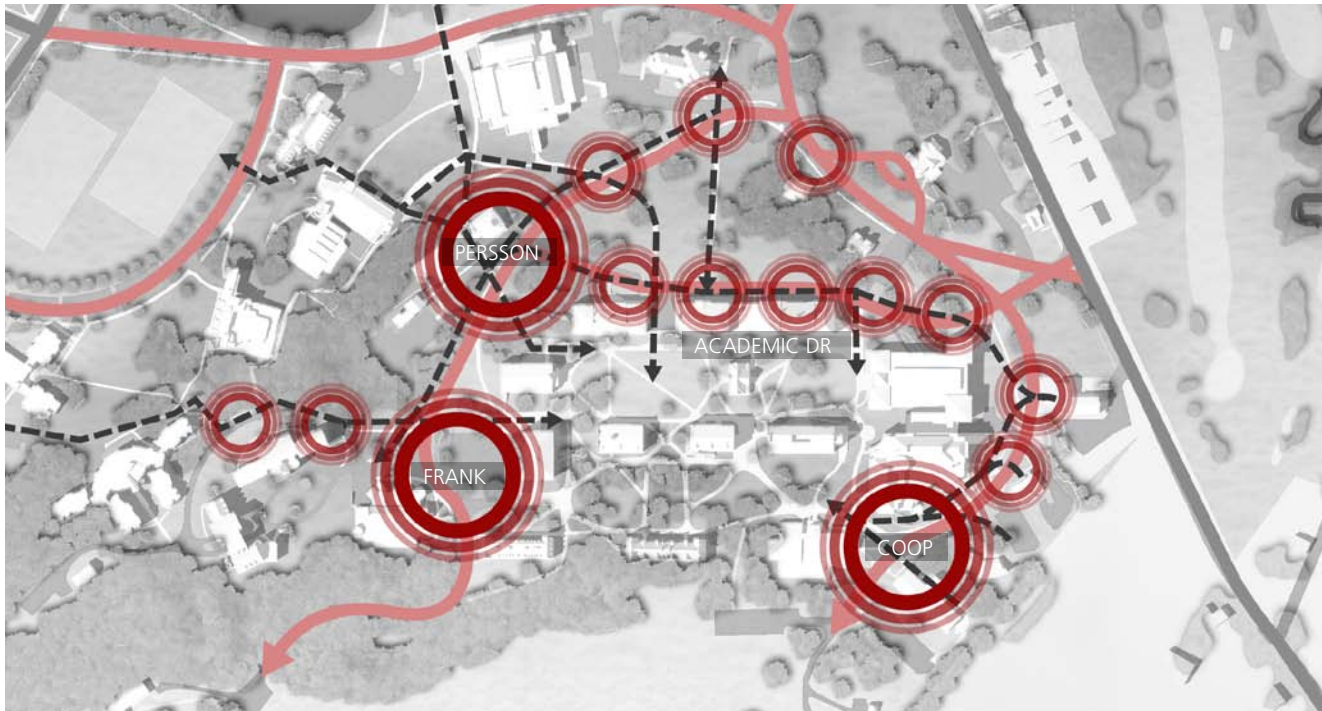
The Village of Hamilton is small and rural, with an active retail village core along Broad, Utica, Madison, and Lebanon streets. The campus community is a significant portion of the village. Hamilton's village green is in the center of Broad Street, and contains a small park. The two green islands connect to the main entry on Oak Drive, linking the Village of Hamilton to Colgate's campus.

Circulation Systems on Campus

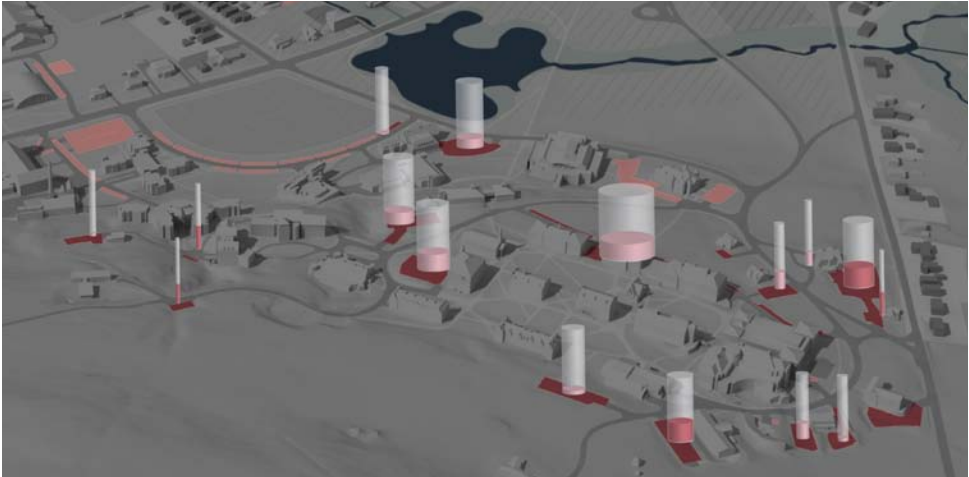
The existing vehicular circulation is characterized by a system of roads leading from the gateways of the campus to the top of the hill. The system converges into two roads at the base of the hill: Oak Drive and Alumni Road. Both Oak Drive and Alumni Road ascend and terminate at the top of the hill, creating congestion points where vehicles must turn back down the hill. These end points also coincide with building service areas as well as shuttle drop-off sites, creating bottlenecks and safety hazards.



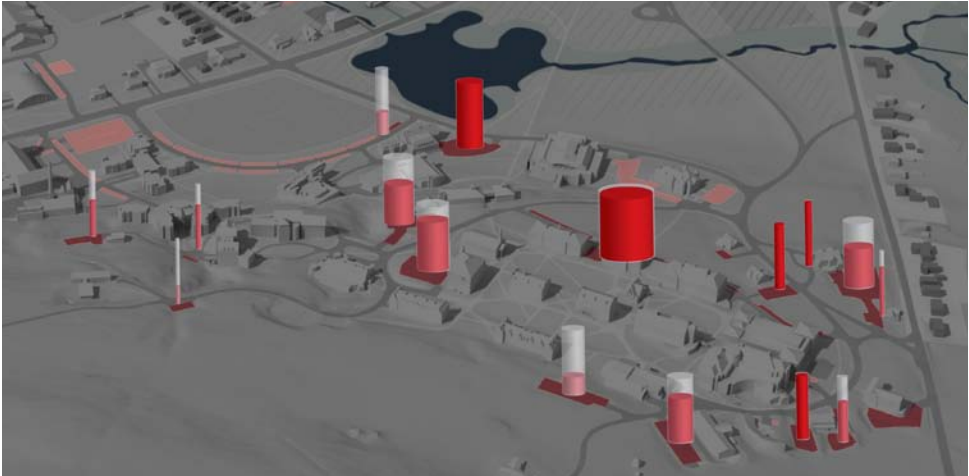
Existing Parking Count and Primary User Analysis



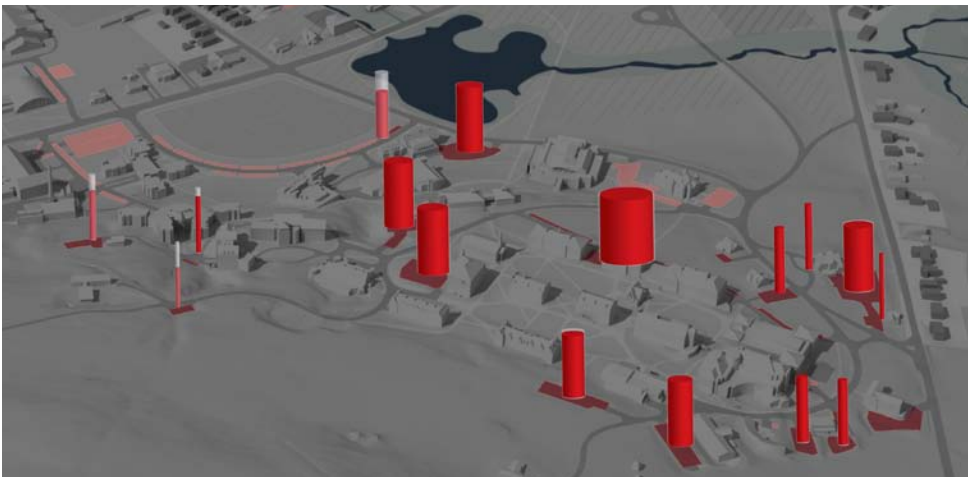
Vehicular / Pedestrian Conflict Points On Campus



Parking Lot Capacity: 7:00 a.m.



Parking Lot Capacity: 8:30 a.m.

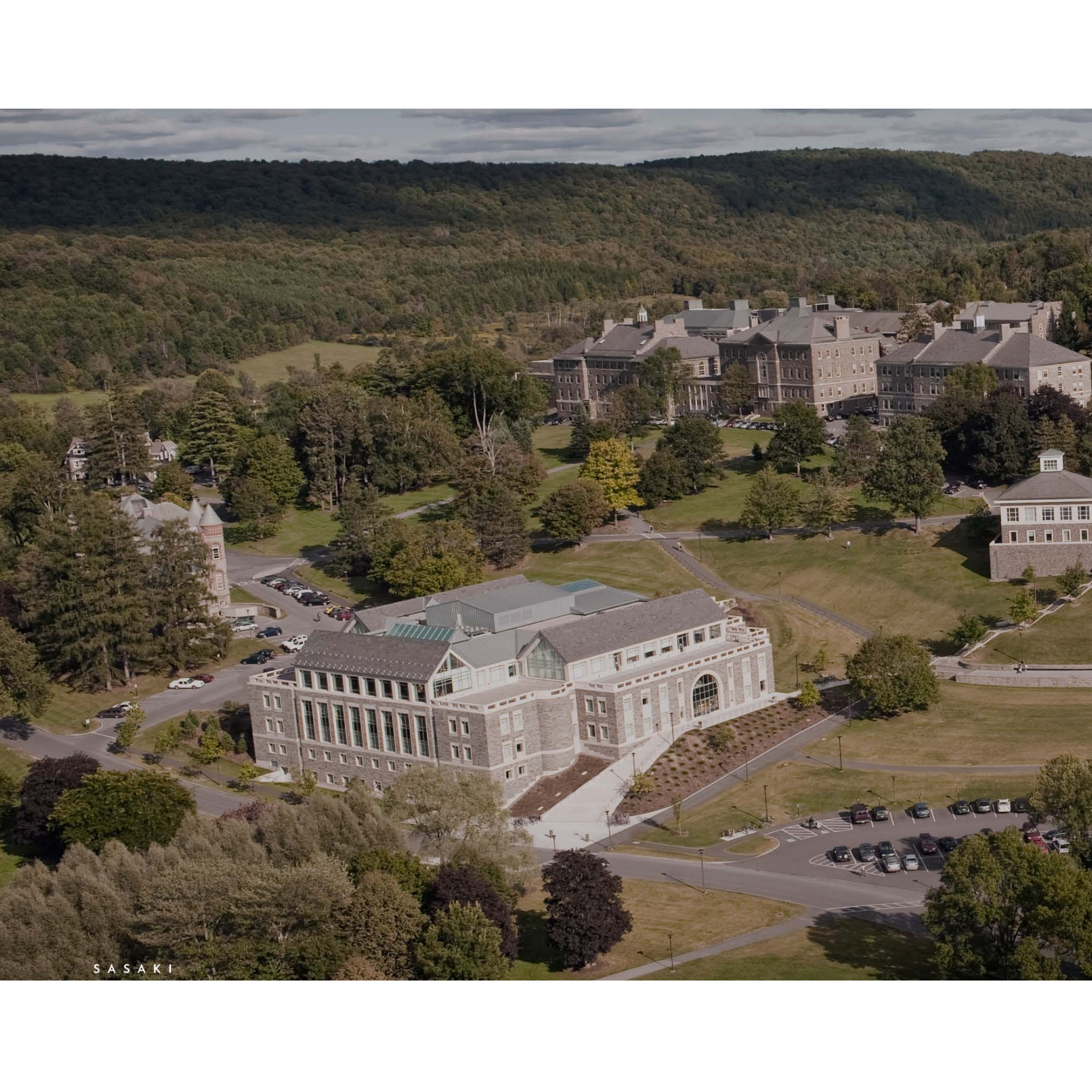


Parking Lot Capacity: 10:45 a.m.

Further complicating campus vehicular circulation is the dispersion of parking across the hill. There are 16 lots of varying sizes located off Oak Drive, Alumni Road, College Street, and Academic Drive. The largest parking area stretches along Academic Drive, with 85 parking spots. As students, faculty, and staff are searching for parking, they often have to drive to multiple locations to locate a spot.

We conducted a parking occupancy study. By 10 a.m., campus parking is essentially full, with peak occupancy of 98.5 percent occurring at 10:45 a.m. This pattern typically continues through 3:00 p.m. Generally speaking, parking supply should offer a 10 percent buffer to minimize intra-parking lot trips as vehicles attempt to find an open space.

The academic core is characterized by a network of pedestrian paths that enable students, faculty, and staff to navigate up and down the hill. These paths often intersect with roads, thus creating dangerous vehicular-pedestrian conflict points. One major crossing is at the intersection of Alumni Road and the path from the Memorial Chapel to Persson Hall.



S A S A K I