DALTON STATE COLLEGE

CAPITAL PRIORITIZATION STUDY | 2016

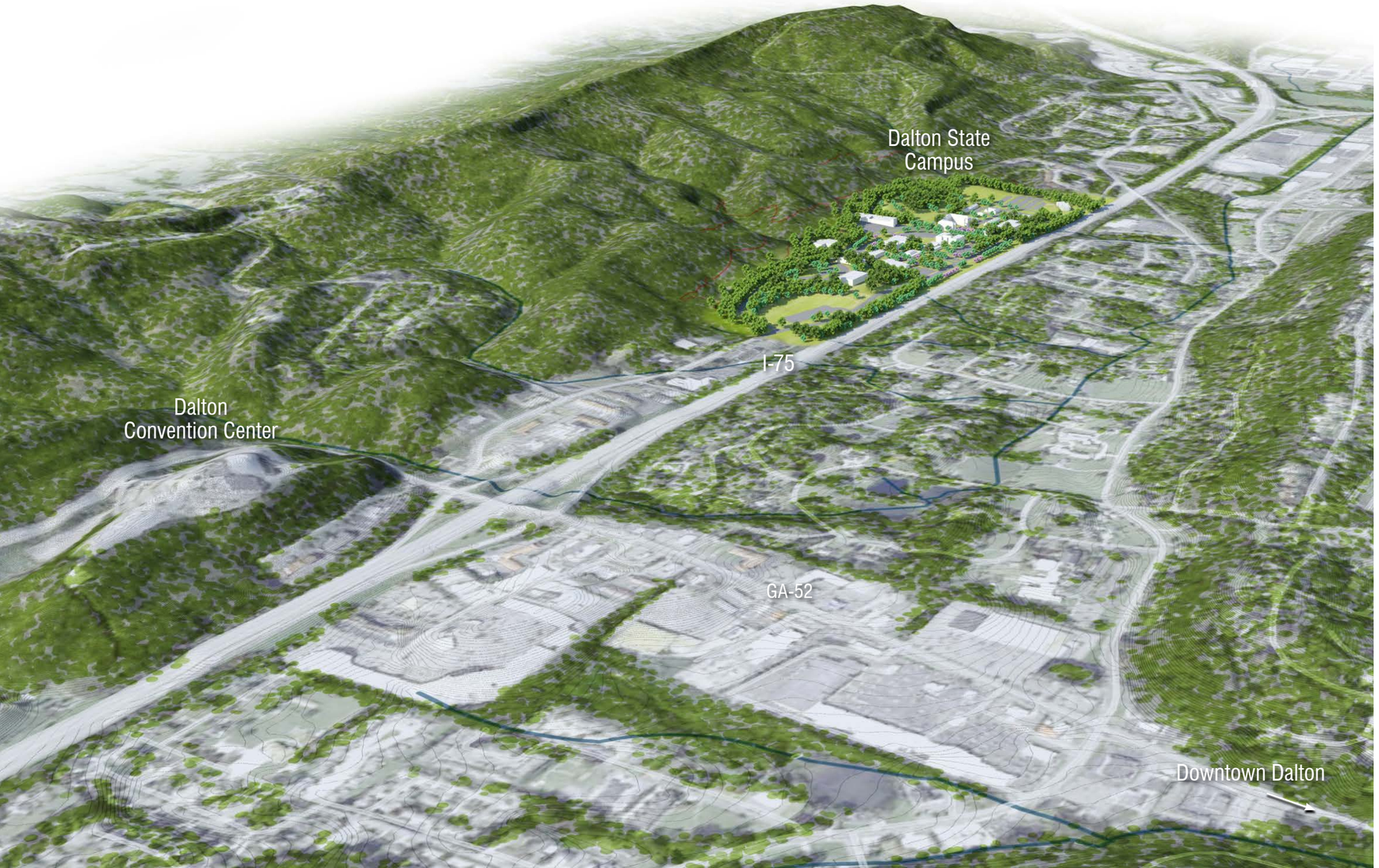
CONTENTS

INTRODUCTION

EXECUTIVE SUMMARY

The goal of the plan is to help Dalton State become a destination college in a climate of constrained resources. The key ideas in support of this goal are:

- The creation of an **open space framework** that organizes all future campus development, activates the campus, and connects its various zones. The two lynchpins of this strategy are the creation of a major pedestrian north-south connective spine and the formation of a significant central campus green that provides a new gateway experience from I-75 and links the campus to its mountain context.
- The identification of **campus zones** which should guide future programmatic choices. Academic uses should be concentrated in the campus' core central zone. Residential and recreational uses should be balanced between its north and south zones.
- **Parking, circulation, and wayfinding** are all targeted for significant improvement. Wayfinding should be standardized and should provide a sense of identity. The first priority for new signage should be on the spine. Existing surface parking should be made more efficient and the construction of additional parking decks should be avoided. Pedestrian-vehicle conflicts must be minimized, and where unavoidable, mitigated through careful selection of surface materials.
- For the foreseeable future, the campus should address its needs without adding significant square footage. The plan therefore proposes a sensible, prudent, and prioritized **renovation strategy**. The building interventions should focus on creating major entries on the spine (with as much transparency as practical) and increasing available student social spaces.
- Additional **residential and recreational** facilities are needed, and the plan provides for 700 additional beds, four additional fields, and a renovation of the Bandy Gymnasium.
- The college plays an important role in its community. While one of the central messages of the plan is that consolidation of campus facilities is critical to the vitality necessary to become a destination campus, the plan recommends a small storefront presence for the college in Dalton's **downtown**.



PLANNING CONTEXT

Dalton State College provides broad access to high-quality education for the citizens of northwest Georgia and beyond, offering targeted bachelor's degrees, a full complement of associate degrees and career certificate programs, and many public service offerings. This year, the college embarked on the creation of a capital investment strategy for the next five to ten years, collaborating with DumontJanks to develop this new phase of planning for its physical campus, with specific execution strategies that are both achievable and transformational. Dalton aspires to become a first-choice destination college.

This study required an analysis of all previous planning work, the development of potential project scenarios with planning-level design configuration and square footages, the prioritization of these projects, the computation of planning level cost-estimates for the projects, and the coordination of current development capacity estimates with Board of Regents funding projections to establish a likely capital budget. The synthesis of this work produced the near to long-term capital investment strategy outlined in this report.

PHYSICAL SETTING

The northern Georgia landscape, defined in Dalton by the Southern Sandstone Ridges ecoregion, provides a stunning setting for the college. Uniquely positioned between the foothills of the Blue Ridge Mountains and Interstate-75, Dalton's linear campus is terraced into the adjacent mountainside, with buildings organized in a north-south orientation. Three major stream tributaries flow through the campus, and campus hiking trails traverse the heavily forested oak-hickory-pine mountainside. This plan capitalizes on Dalton's striking natural assets, restoring the landscape wherever possible and highlighting the scattered forest remnants throughout campus.

The college is located on a highly visible site, about three miles from downtown Dalton and easily accessible from I-75. Parking occupies the entire frontage along I-75, with multiple parking lots at the base of the ridge on the west side of campus and an unpaved lot at the southern athletic fields.

The campus boundary measures about three quarters of a mile from north to south (a fifteen minute walk) and about one sixth of a mile from east to west. Dalton's compact size allows for the concentration of activity in the academic core. Buildings are mostly one or two stories in height, with the recently completed Peeples and Mashburn Halls going to three and four stories, respectively. The building portfolio is well-maintained, within the constraints of available funding.

PREVIOUS MASTER PLAN

The college's last master plan was completed in 2011, when significantly more growth was expected, and before the university system's increased emphasis on renewal and improved utilization of existing spaces. Given flat enrollments and current fiscal realities, certain aspects of the previous plan – especially those involving significant expansion or new construction to accommodate the expected growth – are now less relevant. In addition, the college has moved forward with the development of new housing and with additional transportation studies that must now be incorporated into its physical planning.

That said, the former master plan provides many sensible ideas for future campus development. It emphasizes the need for improvements to the campus' student life facilities, including the library, student center, and gymnasium, all as part of an envisioned more holistic residential experience; and presents a strong underlying organization of the physical plan with the introduction of a pedestrian spine.

RECENT AND PLANNED PROJECTS

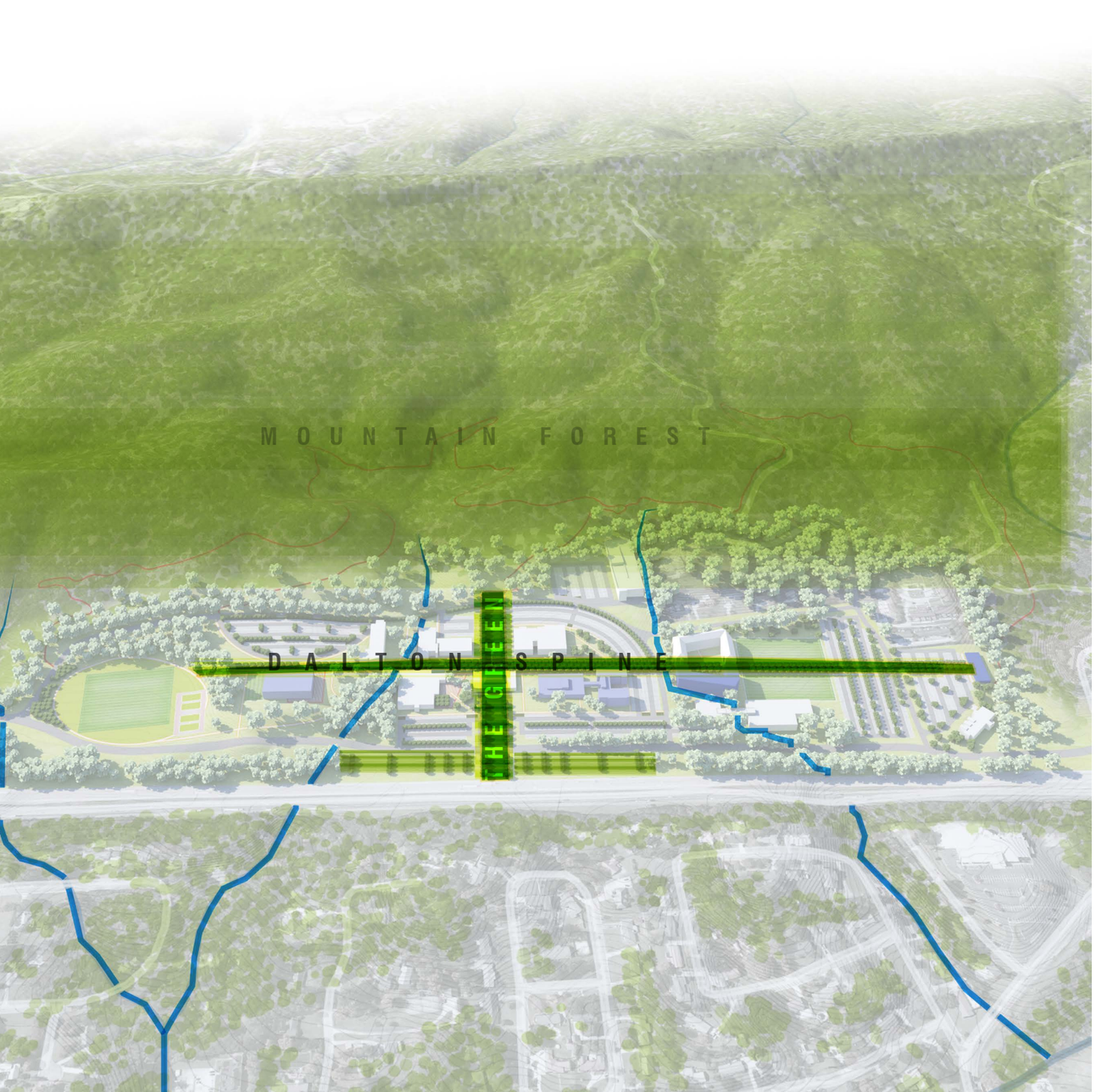
There have been several new construction and renovation projects since the 2011 master plan. Peeples Hall, a 58,000 square foot science building, was constructed in 2014. The Health Professionals Building, formerly the Technical Education Building, underwent a complete renovation later that same year, with portions of the project still underway: the Health Simulation Lab is currently being completed and renovations for the Student Health Clinic will begin upon approval from the Board of Regents.

Two projects are set for completion in Fall 2016: the Pope Student Center renovation, which will expand dining, study, and lounge space by 30,000 square feet, and Mashburn Hall, the first phase of new residential construction, which will more than double on-campus residential capacity with the addition of 365 new beds. As of February 2016, half of these beds are already booked. This is a first for the college, and may prove a strong indicator for future residential demand.

Three important projects are currently in planning: renovations to Sequoya Hall, expansion and renovations to Memorial Hall, and Phase 2 construction of the new housing complex, adjacent to Mashburn Hall.

These projects are an important component of our near-term program and will be discussed in further detail in the near-term choreography chapter.

PROPOSED MASTER PLAN UPDATES



OPEN SPACE FRAMEWORK

DALTON SPINE

The organizing idea for campus is a bold north-south pedestrian walk that provides a framework for the existing campus structure and future development. The Dalton spine stretches 3,000 linear feet. It is a bold connective corridor that links the northern and southern districts to the academic core.

The spine is defined by a grand tree canopy, shaping the pedestrian space below but also unifying the accompanying campus architecture. Two parallel walks will frame an open lawn area that the trees, seating, and signage elements will sit within. Every major building, parking area, recreation field, and other walkways will connect to the spine, which will become the hub of activity on campus.

At the northern-most edge of campus, the spine will connect to significant parking and the Brown Center, creating a welcoming experience. From this district, the spine bisects new parking lots, proposed recreation fields, and the new housing complex, before extending across George Rice Drive and into the academic core. All buildings in the core touch the spine and will have a primary entrance along it in the long-term future. In the immediate future, Roberts Library, Memorial Hall, and Sequoya Hall will be given new faces that directly attach to the spine. In the south, it will extend past Roberts Library, cross a stream, pass Peeples Hall to the improved Bandy Gymnasium and a reconfigured parking lot, before descending the hill through a grand set of stairs, into a green bowl of recreation fields in the southern hillside.


CAMPUS MAP
DALTON
STATE
RENDERING LOCATION

THE GREEN

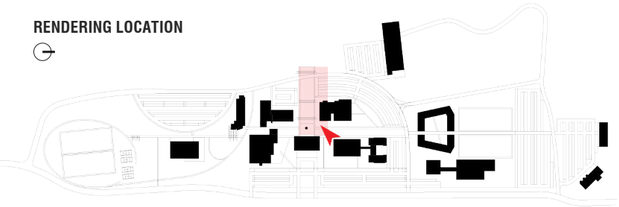
The spine's primary purpose is to connect and activate. As a necessary complement, the green will provide the campus with a center and with much-needed community space. The green will be the geographic and symbolic heart of campus, used for socializing, studying, and quiet contemplation, as well as for hosting major collegiate events, such as graduation, orientation, conferences, and career fairs.

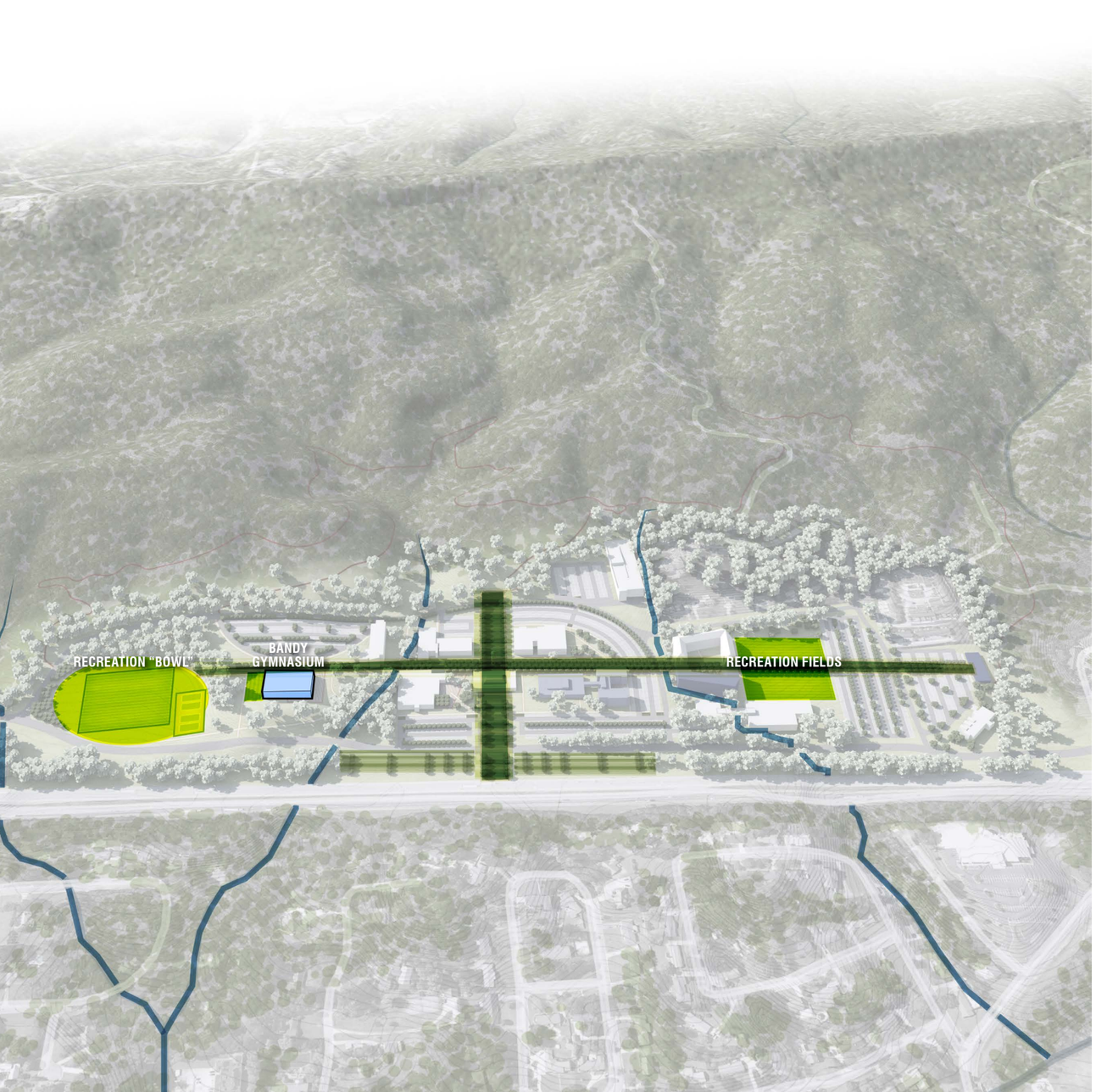
The broad, folding lawn will surround Westcott Hall. It will be approximately 100 feet wide and 1,000 feet long. The southern section of the green will provide a much-needed new entry experience for the campus off of I-75. From this frontage, the green will intersect the spine, climb past the Bell Tower, and connect the campus to the mountain's base. The green will be framed on each side by a row of trees that define the space and bring cohesion to the surrounding buildings.

In the northern section of the green, a broad set of stairs, which will double as amphitheater seating at the Bell Tower, will connect to a unified space that includes the spine, the existing plaza, and the current upper level lawn. This northern section will be approximately 100 feet wide and 315 feet long, enough space to easily host over 5,000 seated or 10,000 standing guests at major events on campus.

In the southern section of the green, as one approaches campus from I-75, perpendicular rows of trees will create a visual arrival sequence and provide a magnificent view up the green to Westcott Hall, and to the mountain forest beyond.

RENDERING LOCATION



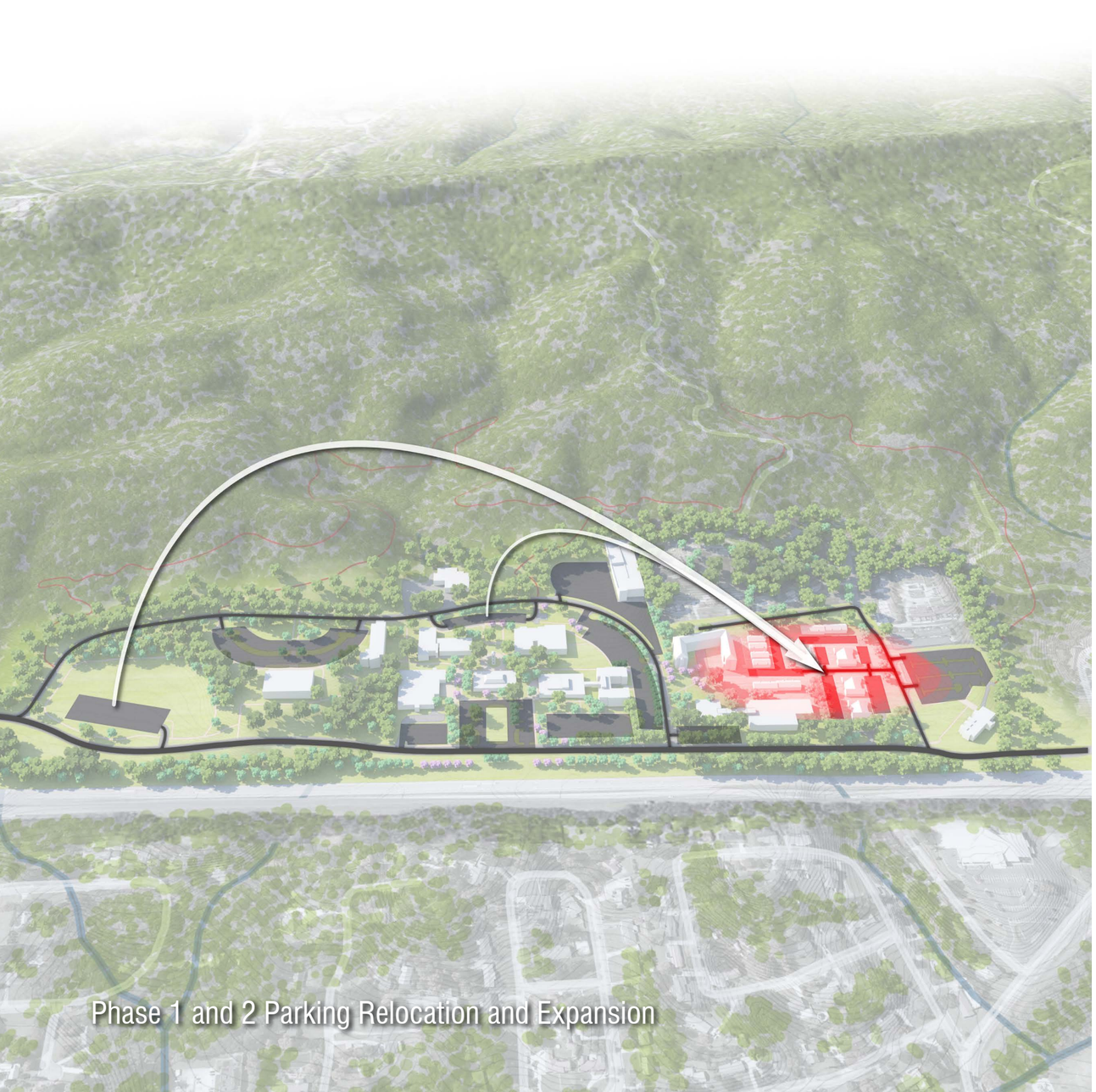


RECREATION AND ATHLETICS SPACE

As the campus becomes increasingly student-oriented, demand for campus recreation facilities will increase. In the new north residential district, growth will be complemented by two large recreational fields directly adjacent to the new housing and connected to the spine. Here, we envision a shared programming effort between recreation and athletic needs, as 15% of the student population currently participates in intramural sports. In the south, the Bandy Gymnasium renovation will enrich student access to health and wellness facilities by providing a significant increase in fitness space and a full athletic field will replace the existing gravel lot.

CAMPUS ZONES

The campus has three distinct geographical zones: the central academic core, a north district, and a south district. Academic buildings (all except the Brown Center) are located within the core's 10-minute walking circle. Uses in this district must be for academic and supporting non-residential student life. The School of Education should ultimately return to this zone. The northern district combines academic, residential, and recreation uses. The southern district is a recreation zone, with potential for long-term residential development.



VEHICULAR CIRCULATION, PARKING, AND WAYFINDING

The campus has done well to contain most parking to the edges, keeping the academic core an open pedestrian environment. Growth in the academic core will create future pressures on parking supply, as new buildings or valuable open space replace the current surface lots.

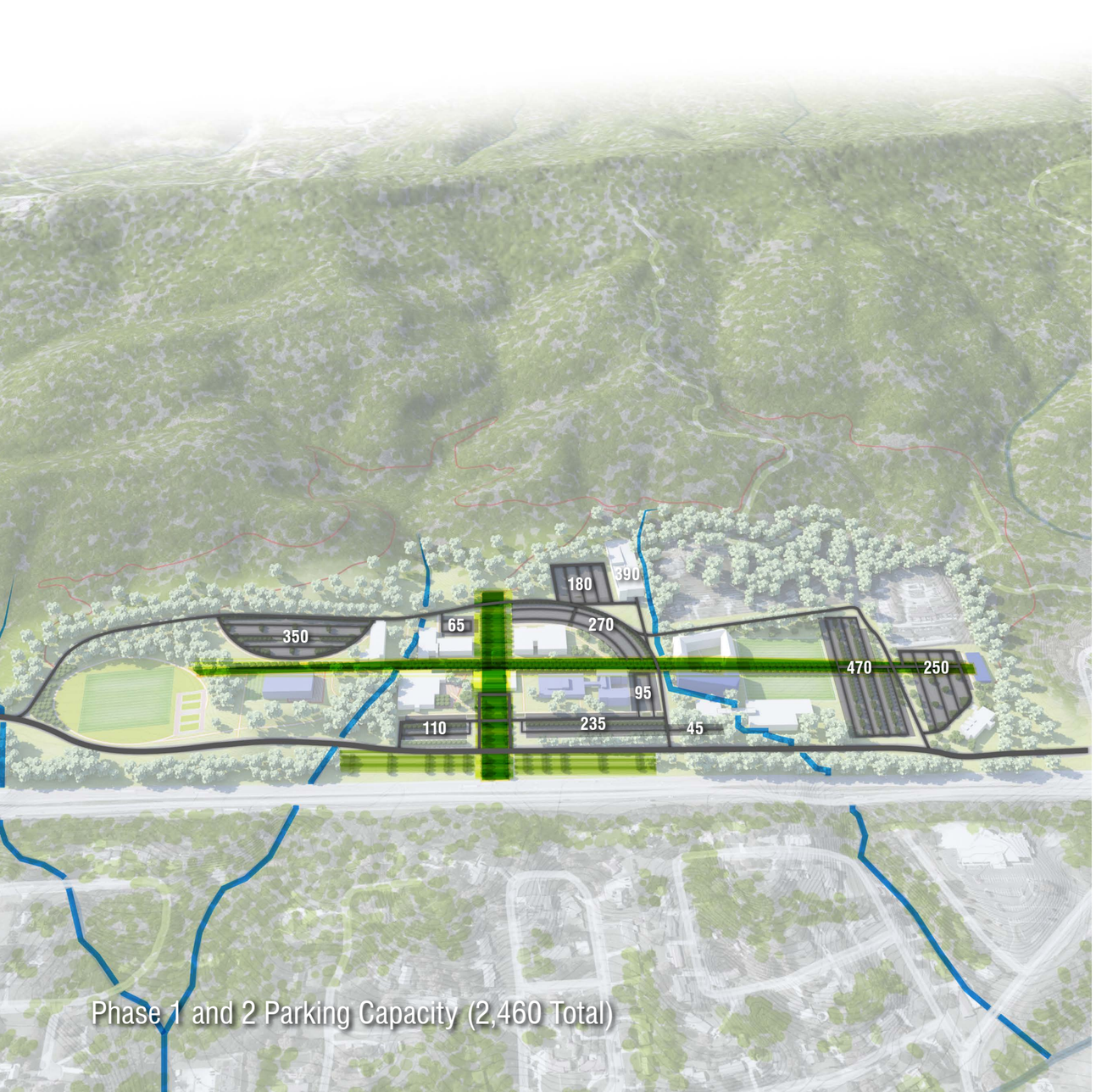
PHASE 1

Immediate parking strategies are threefold: maximize the efficiency of surface parking with minimal increase in paved area, increase surface parking capacity in the north, and eliminate pedestrian conflicts wherever possible, especially at the Dalton spine intersection with George Rice Drive.

The plan indicates greater parking efficiencies in the existing lots can be had by simple re-organization and re-striping. This also allows us to reorient pedestrian travel ways and islands within the lots to better align with existing building entries. This mantra for greater efficiency in the existing lots allows some strategic removal of existing surface lots for immediate conversion to valuable campus open space and student recreation space.

In the north campus district, we are able to gain parking capacity once the existing poor quality residential buildings are removed. We can reorient and enlarge the existing lots and add far greater capacity in that area. This will allow us to remove the existing gravel parking area in the south district and replace it with much needed additional recreation space. We recommend expansion of the surface lot directly west of the Brown Center adding parking capacity and creating a direct drop off lane to Brown's entry.

Lastly in this initial phase, we recommend a critical resolution of pedestrian clarity and vehicular conflicts via reconfiguration, improved lighting, and clear signage. Most urgent is the pedestrian crossing at George Rice and the Dalton spine. In the long term, this conflict will be ideally resolved with the completion of the campus loop drive and the termination of George Rice before the Dalton spine intersection.



Phase 1 and 2 Parking Capacity (2,460 Total)

Currently, this is the main circulation path on campus and most direct vehicular route to the existing parking garage. We recommend a raised pedestrian table, improved lighting, and clear signage, all of which indicate that pedestrians have the right of way at this important campus intersection.

We also recommend in this phase that the campus institute a clear wayfinding, identity, and lighting strategy, making the campus clearly understood by visitors and guests and enabling 24/7 vitality and safety to all campus constituents. This should concentrate initially on key campus iconic “places” and building identity such as the Dalton spine and green. The key visitor parking lots should also be targeted for this initial identity implementation.

PHASE 2

The next phase will focus on increasing parking capacity in the north district as we remove lots in the academic core for program, building, or open space growth. This entire north district parking consolidation and expansion will be connected to the core via the spine. This phase will also seek to complete the campus loop drive in the north via future property acquisition. The completion of the campus perimeter loop will further reduce pedestrian vehicular conflict points.

PHASE 3

In the long-term, if the campus experiences substantial enrollment growth and adds significant building square footage, a new parking strategy will be required. In general, the plan recommends against additional structured parking in the foreseeable future, prioritizing instead on the enhancement of academic or student life facilities.

Therefore, our first recommended priority at this point in campus growth will be a remote parking/ campus shuttle. This could include increased remote shuttling from the Dalton Trade Center and Convention site. Ideally, given that most of the campus parking portfolio will reside in the north and academic districts by this time, the future balance of parking could be improved by adding parking capacity in the south district. Current land resources for surface parking in the south campus district are restricted by need for recreation field space and steep topographic conditions. If an eventual on-campus garage is needed for campus growth, it should be strategically and sensitively placed in the south district.

NEAR-TERM CHOREOGRAPHY

Existing Conditions

Near-Term Plan

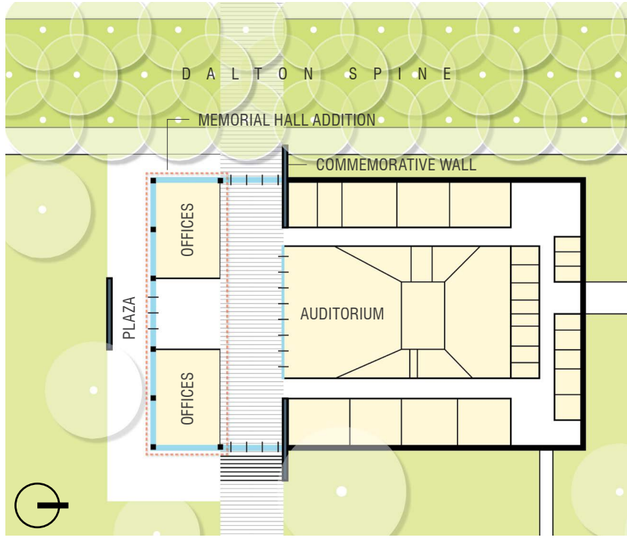
EXISTING

RENOVATION

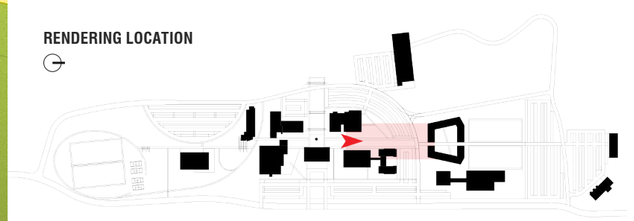
NEW CONSTRUCTION

MEMORIAL HALL

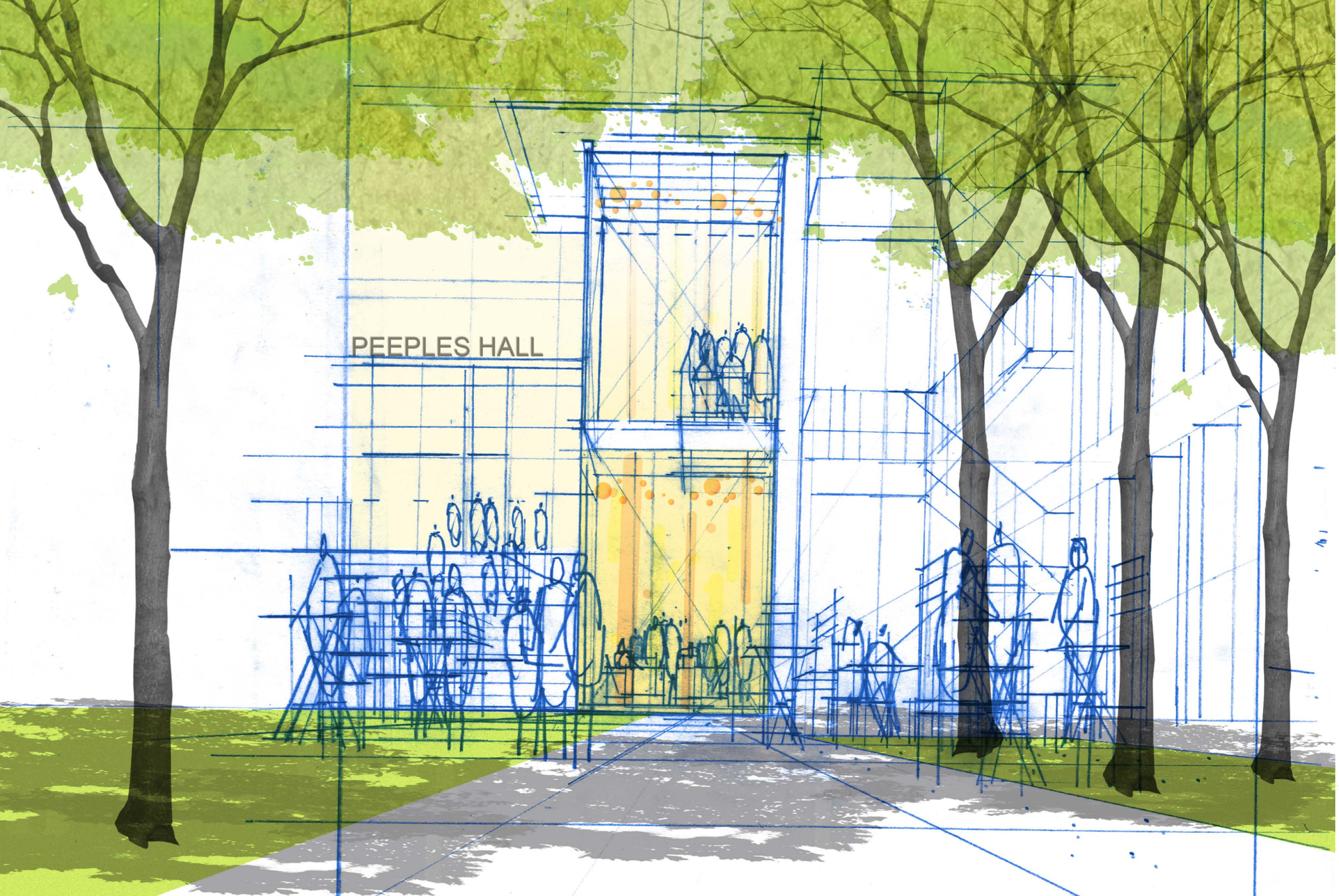
Memorial Hall was recently approved for a $10 million expansion and renovation. The first goal is to provide program space, but the addition should also create a new public face on the south of the building, offering a southwest entry off the spine and a southeast entry geared toward the public.



RENDERING LOCATION




COLLEGE
OF
BUSINESS



SEQUOYA HALL

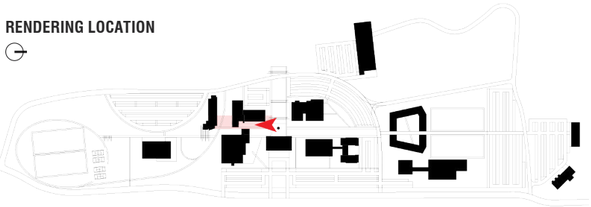
Sequoya Hall is currently on the small capital funding list, slated for a $3 million renovation.

One component of this update should be the addition a major student social space. This space must tie into the spine, with a transparent face that provides a welcome setting for students to interact with their peers or professors. The classrooms in the buildings southeast corner provide the best opportunity for this reorientation.

Sequoya is not suited to long-term wet lab use. The renovation should therefore downcycle the building to general academic use. The college should consolidate science laboratory activity in Peeples Hall.

Discussion on Sequoya's lab and classroom utilization in support of these ideas is provided in Appendix A.

RENDERING LOCATION



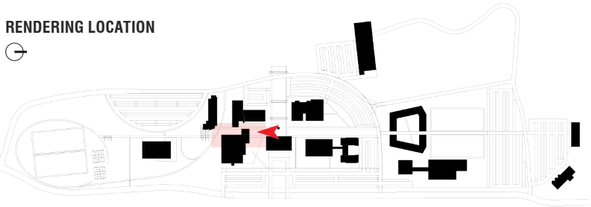
Existing Conditions at Sequoya Hall

Future Renovation at Sequoya Hall

ROBERTS LIBRARY

Roberts Library, last renovated and expanded in 2002, needs a refresh oriented towards increasing student collaboration space. Like Memorial Hall, the library will have both a public entry and a spine entrance. The existing first floor entrance and lobby will remain as the public face, and a new glass entrance on the second floor will open to the spine. This addition should be linked to an interior renovation and rethinking of the front desk control point (moving it between these two entries or to the student-oriented spine entrance).

RENDERING LOCATION

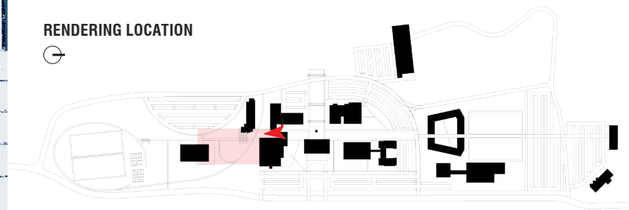


BANDY GYMNASIUM

Though the Bandy Gymnasium was partially renovated in 2010 and 2014, the swimming pool, which takes up one-third of the gym's square footage, is currently unusable. The first goal of this project is to reclaim this space by converting it into an active student wellness and fitness space.

The current pool area has a small mezzanine level that would be ideal for cardio machines. The mezzanine floor should not be extended so as to preserve the open feeling of the main space. The northern building face should be transparent, with multiple doors that open to the paved terrace outside. This will allow for outdoor calisthenics and yoga immediately adjacent to the building in good weather.

RENDERING LOCATION



PHASE 2 HOUSING

Phase 2 of the new residential complex will be a sister building to Phase 1's Mashburn Hall and complete the zone with an addition of 250 beds.

This second phase should provide a major student space for the north district. Ideally, the entry foyer will be built on the spine, on the southern edge of the building, with adjacent study and social space stacked on each floor. This southern face would be a transparent gateway to the building, pulling students in from the spine.

PLANT OPERATIONS

The creation of the green requires the relocation of plant operations.

There are two options. The first is the northern edge of campus. This site would allow staff to be the 'guardians' of the spine and would provide easy access to campus. The relocation's proposed site would be north of the Brown Center parking lot and include an enclosed working court. The second option is to move Plant Operations off-campus. The college has explored purchasing a one-story office building with a large parking lot just south of campus (705 College Drive). This could be a good potential solution.

LONG-TERM VISION

RESIDENTIAL AND ACADEMIC EXPANSION

While no significant new square footage is proposed in this plan, we did ensure that long-term flexibility is uncompromised, so that should long-term expansion become desirable, Dalton is well-positioned. In this regard, academic consolidation should remain within the central core. We provide the capacity for an additional 465,000 gross square feet, split between academic and residential.

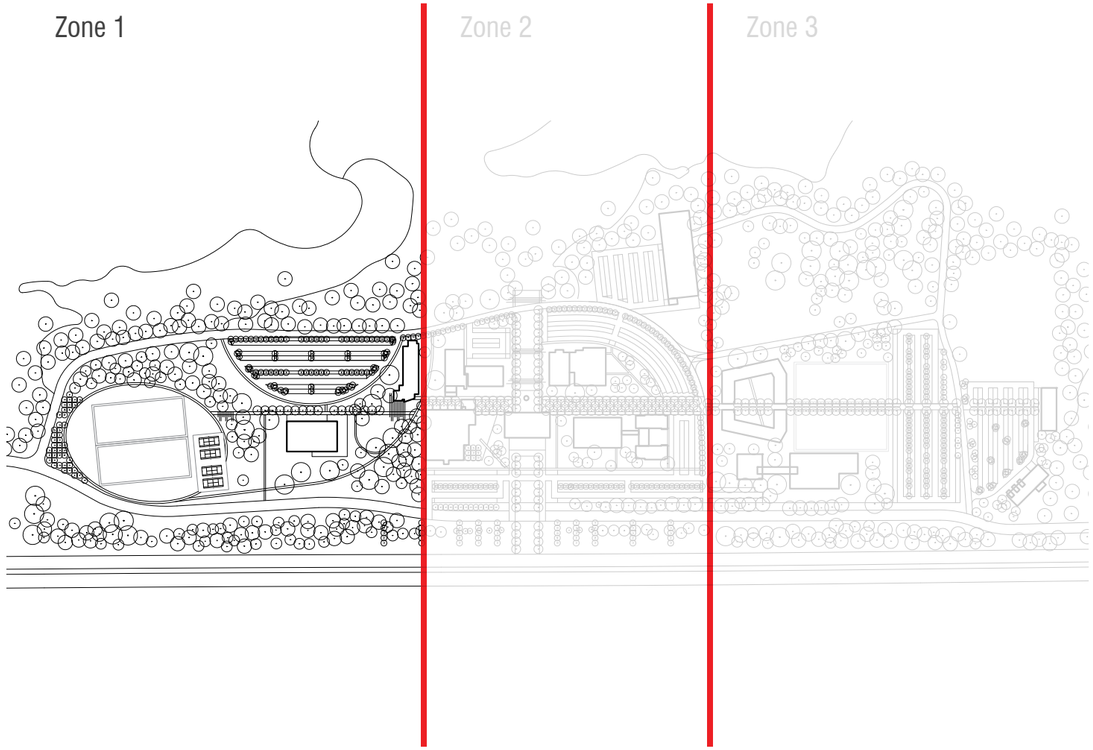
Dalton's long-term residential growth should balance populations between the north and south districts, providing 24/7 at both anchors of the spine. To this end, a new residential complex with 450 beds could be built on the southern end of the spine. Three wings of this complex create a southern courtyard, taking advantage of the southern sun and overlooking the athletic fields down below.

PARKING CAPACITY

The proposed build-out removes 550 spaces from the campus. At this point, the alternative transportation strategies described earlier (Phase 3 in Vehicular Circulation, Parking, and Wayfinding) would be required. Appendix C provides detailed supply and demand counts from Dalton's 2014 Parking Master Plan.

APPENDICES

ZONE 1 COST ESTIMATE



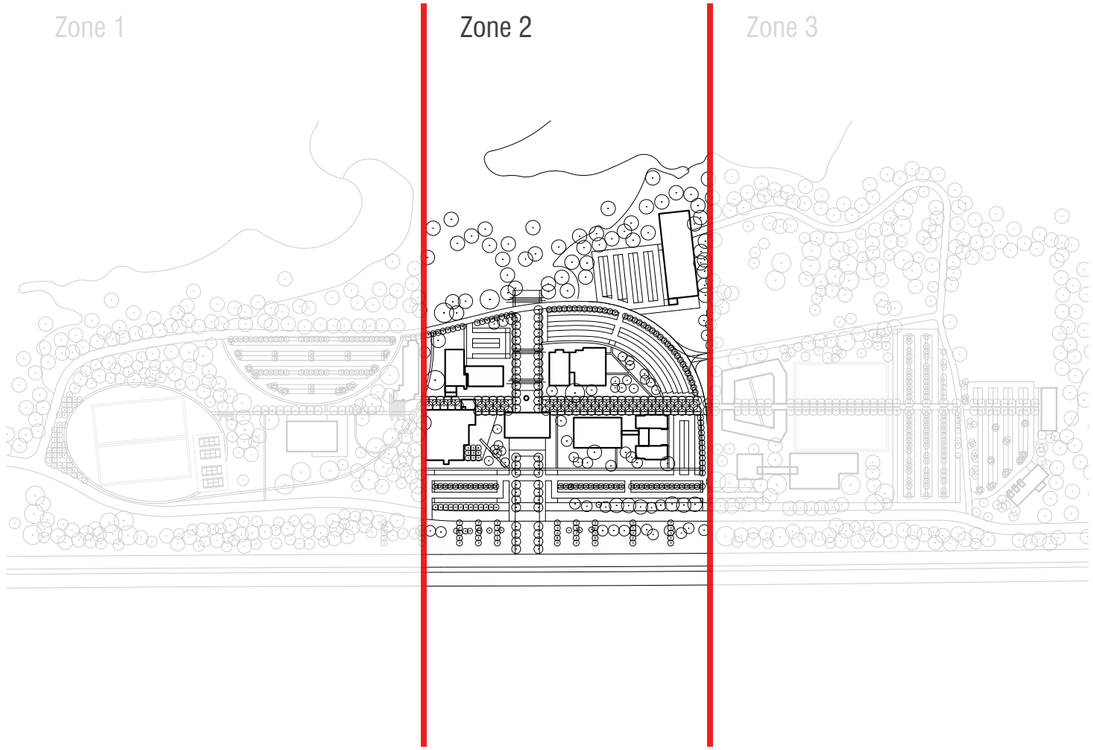
Statement of Estimated Probable Construction Cost
Dalton State College Master Plan

DumontJanks
June 24, 2016

	Item	Quantity	Unit	Unit Cost	Subtotal	Remarks
ZONE 1						
A	**Demolition / Preparation**					
	Mobilization	1	EA	$20,000.00	$20,000	
	Site Removals	300,000	SF	$0.50	$150,000	
	Site Preparation & Protection	120,000	SF	$0.75	$90,000	
	Earthwork	1	LS	$75,000.00	$75,000	
	Tree Demo & Protection	1	LS	$20,000.00	$20,000	
				TOTAL	**$355,000**	
B	**Landscape**					
	Plaza	14,000	SF	$50.00	$700,000	Bandy Gymnasium - includes furnishings
	Sodded Lawn	110,000	SF	$1.00	$110,000	6" in disturbed areas where sod is proposed
	Athletic Field	120,000	SF	$3.00	$360,000	Includes irrigation and soil
	Sports Field Lighting	1	LS	$100,000.00	$100,000	Optional
	Concrete Walk	32,000	SF	$12.00	$384,000	Assumes 8ft wide walk, includes gravel base
	Dalton Spine	7,000	SF	$20.00	$140,000	
	Parking	142,000	SF	$6.00	$852,000	Includes parking striping
	Pedestrian Lighting	24	EA	$3,000.00	$72,000	
	Parking Lighting	14	EA	$2,800.00	$39,200	
	Trees	60	EA	$500.00	$30,000	
	Groundcover/Swales	20,000	SF	$4.00	$80,000	#2 size pots
				TOTAL	**$2,867,200**	
C	**Infrastructure**					
	Drainage	1	LS	$250,000.00	$250,000	
	Site Electrical	1	LS	$100,000.00	$100,000	
				TOTAL	**$350,000**	
	Overall Total				**$3,572,200**	
D	**Fee and Contingencies**					
	+20% Est. Construction Contingency				$714,440	
	+10% Design Contingency				$428,664	
	TOTAL PROJECT COST				**$4,715,304**	

Notes:
1) Estimate does not include utility demolition, layout or installation
2) Estimate does not include rock excavation and/or contaminated soils
3) Estimate does not include University project costs and soft fees

ZONE 2 COST ESTIMATE



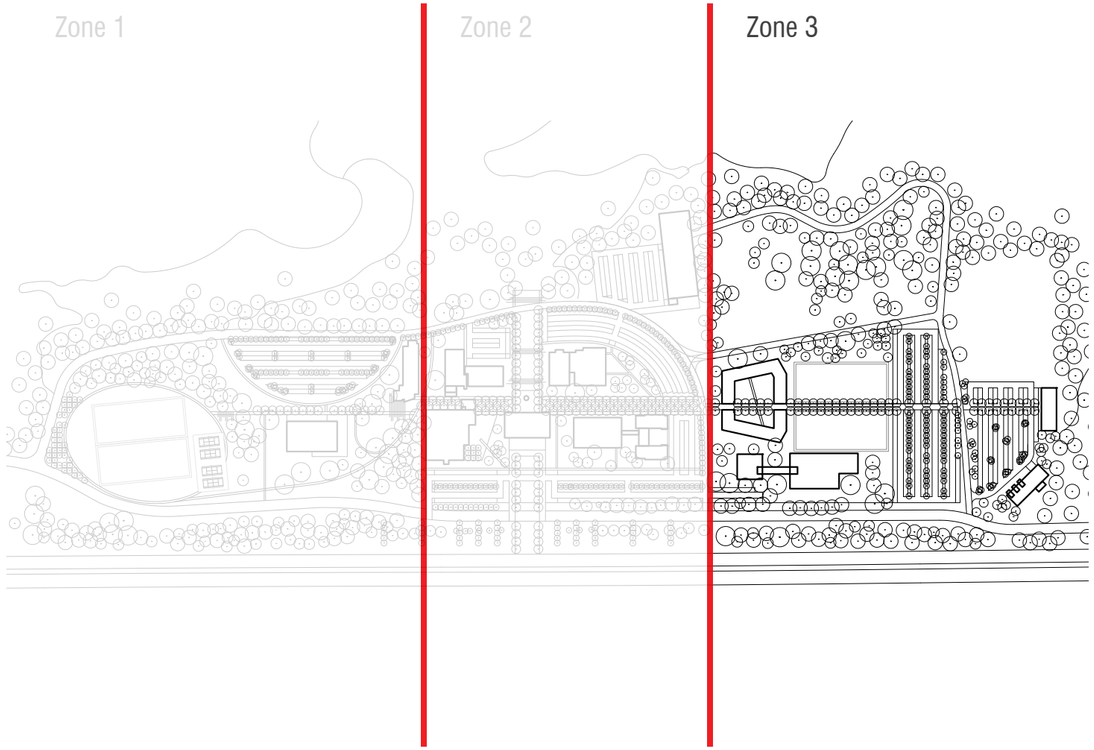
Statement of Estimated Probable Construction Cost
Dalton State College Master Plan

DumontJanks
June 24, 2016

	Item	Quantity	Unit	Unit Cost	Subtotal	Remarks
ZONE 2						
A	**Demolition / Preparation**					
	Mobilization	1	EA	$20,000.00	$20,000	
	Site Removals	300,000	SF	$0.50	$150,000	
	Site Preparation & Protection	140,000	SF	$0.75	$105,000	
	Earthwork	1	LS	$75,000.00	$75,000	
	Tree Demo & Protection	1	LS	$25,000.00	$25,000	
				TOTAL	**$375,000**	
B	**Landscape**					
	Plaza	15,000	SF	$50.00	$750,000	At Roberts Library
	Plaza	16,000	SF	$60.00	$960,000	At Clock Tower
	Lawn	130,000	SF	$1.00	$130,000	6" in disturbed areas where sod is proposed
	Concrete Walk	4,500	SF	$12.00	$54,000	Assumes 8ft wide walk, includes gravel base
	Trees	350	EA	$500.00	$175,000	
	Dalton Spine	15,000	SF	$25.00	$375,000	
	Parking	240,000	SF	$6.00	$1,440,000	Includes parking striping
	Parking Renovation	70,000	SF	$1.00	$70,000	
	Pedestrian Lighting	50	EA	$3,000.00	$150,000	
	Parking Lighting	30	EA	$2,800.00	$84,000	
	Groundcover/Swales	30,000	SF	$4.00	$120,000	#2 size pots
	Roads	30,000	SF	$8.00	$240,000	
				TOTAL	**$4,548,000**	
C	**Infrastructure**					
	Drainage	1	LS	$300,000.00	$300,000	
	Site Electrical	1	LS	$100,000.00	$100,000	
				TOTAL	**$400,000**	
	Overall Total				**$5,323,000**	
D	**Fee and Contingencies**					
	+20% Est. Construction Contingency				$1,064,600	
	+10% Design Contingency				$638,760	
	TOTAL PROJECT COST				**$7,026,360**	

Notes:
1) Estimate does not include utility demolition, layout or installation
2) Estimate does not include rock excavation and/or contaminated soils
3) Estimate does not include University project costs and soft fees

ZONE 3 COST ESTIMATE



Statement of Estimated Probable Construction Cost
Dalton State College Master Plan

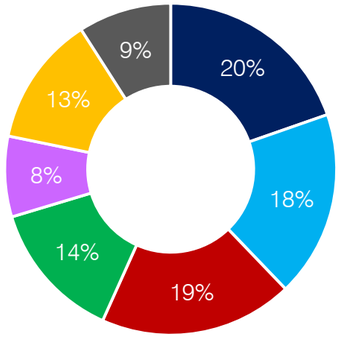
DumontJanks
June 24, 2016

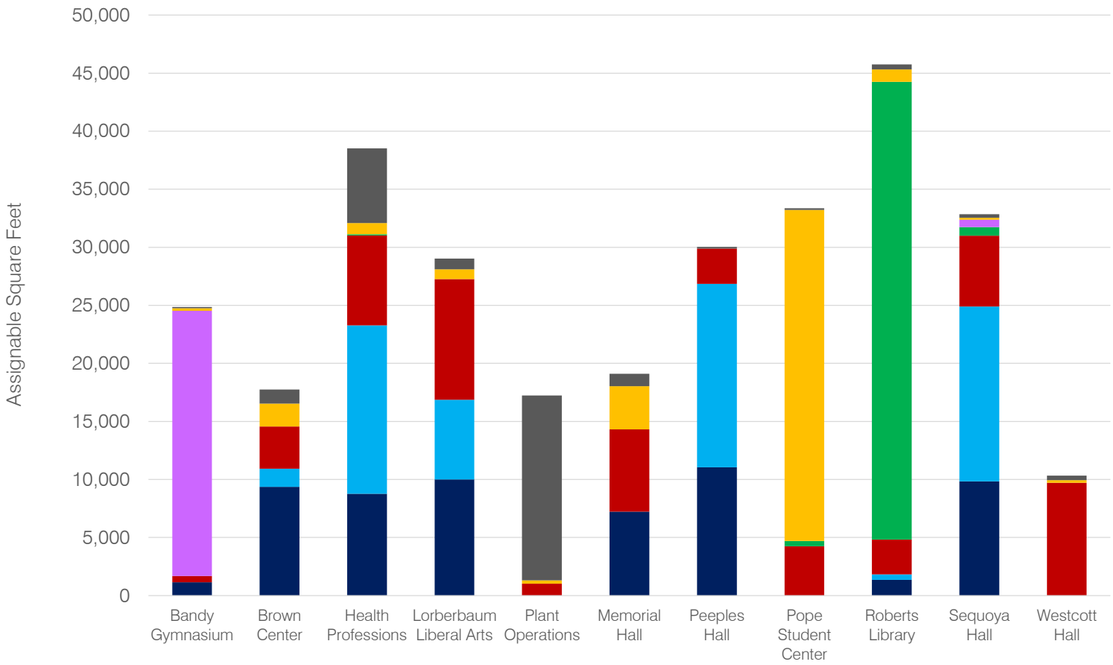
	Item	Quantity	Unit	Unit Cost	Subtotal	Remarks
ZONE 3						
A	**Demolition / Preparation**					
	Mobilization	1	EA	$20,000.00	$20,000	
	Site Removals	250,000	SF	$0.50	$125,000	
	Site Preparation & Protection	50,000	SF	$0.75	$37,500	
	Earthwork	1	LS	$75,000.00	$75,000	
	Tree Demo & Protection	1	LS	$16,000.00	$16,000	
				TOTAL	**$273,500**	
B	**Landscape**					
	Lawn	50,000	SF	$1.00	$50,000	6" in disturbed areas where sod is proposed
	Athletic Fields	125,000	SF	$3.00	$375,000	Includes irrigation and soil
	Concrete Walk	5,000	SF	$12.00	$60,000	Assumes 8ft wide walk, includes gravel base
	Trees	230	EA	$500.00	$115,000	
	Dalton Spine	18,000	SF	$25.00	$450,000	
	Parking	260,000	SF	$6.00	$1,560,000	Includes parking striping
	Pedestrian Lighting	50	EA	$3,000.00	$150,000	
	Parking Lighting	30	EA	$2,800.00	$84,000	
	Groundcover/Swales	50,000	SF	$4.00	$200,000	#2 size pots
				TOTAL	**$3,044,000**	
C	**Infrastructure**					
	Drainage	1	LS	$200,000.00	$200,000	
	Site Electrical	1	LS	$75,000.00	$75,000	
				TOTAL	**$275,000**	
	Overall Total				**$3,592,500**	
D	**Fee and Contingencies**					
	+20% Est. Construction Contingency				$718,500	
	+10% Design Contingency				$431,100	
	TOTAL PROJECT COST				**$4,742,100**	

Notes:
1) Estimate does not include utility demolition, layout or installation
2) Estimate does not include rock excavation and/or contaminated soils
3) Estimate does not include University project costs and soft fees

Total Non-Residential Assignable Space by Type

298,841 ASF





TOTAL SPACE

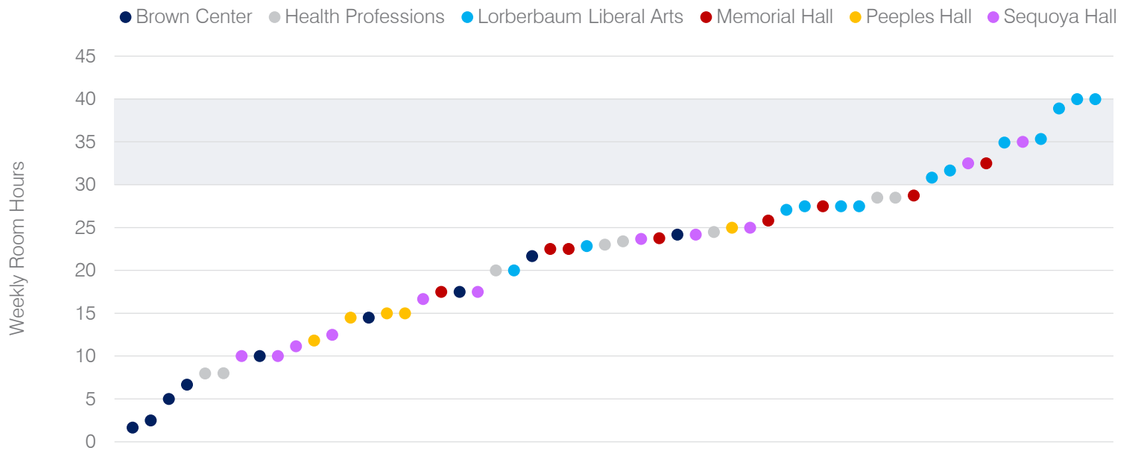
We undertook a cursory space utilization study, targeted at focusing ideas for the renovation of Sequoya Hall. Our investigation included data from all college-owned non-residential buildings on campus (space in the Gilmer County Center, Wood Valley Apartments, Mashburn Hall, and the parking garage was not included. Space under renovation, including portions of the Pope Student Center and Health Professionals Building, was included with its current use.

Postsecondary Education Facilities Inventory and Classification Manual (FICM) codes are used to capture room use, with lower-level FICM codes rolled up into larger categories. For example, the office/conference category includes office support spaces like copy and break rooms; laboratory space includes instructional, open, and research labs; general use includes assembly, exhibition, dining, lounge, and merchandizing spaces; and special use includes athletics and demonstration spaces.

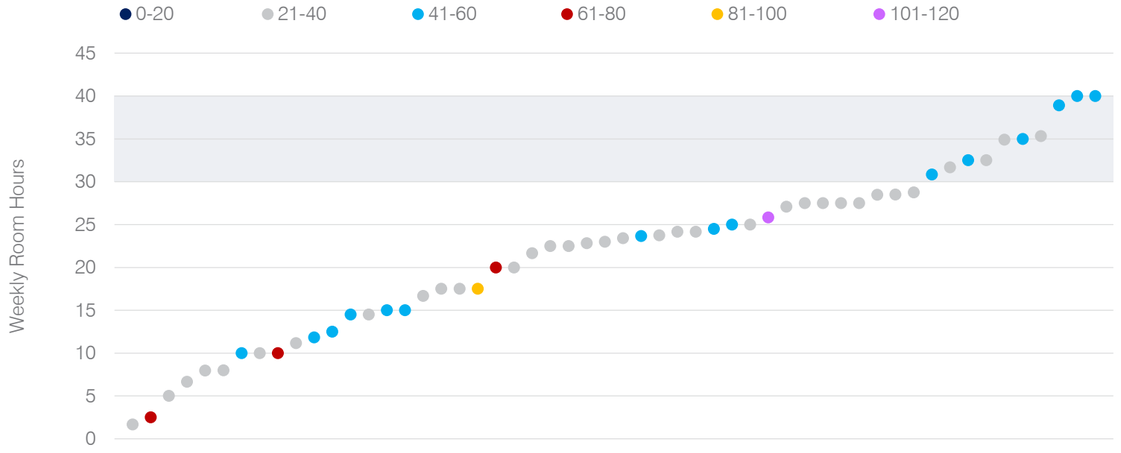
During the 2015-2016 academic year, Dalton's non-residential space inventory includes 298,841 assignable square feet. Of this, 19.7% is in classrooms and associated support spaces. These are well distributed across all academic buildings. The office and conference category has 18.9% (a somewhat low percentage of non-residential space compared to our national dataset). Laboratories comprise 18.2%, of which 88.6% is categorized as instructional, 10.5% as open, and 0.8% as research. Study, general use, and special use space make up 13.6%, 12.7%, and 7.9% of Dalton's total, respectively.

The analytics confirmed what we heard from students - community space is limited on Dalton's campus. At Dalton, study space is located almost exclusively within Roberts Library and general use space (including lounge, dining, and assembly space) within the Pope Student Center. According to the space inventory, over 90% of general use space outside of the Student Center is not student-oriented.

Classroom Use by Building



Classroom Use by Room Size



INSTRUCTIONAL SPACE

CLASSROOM UTILIZATION

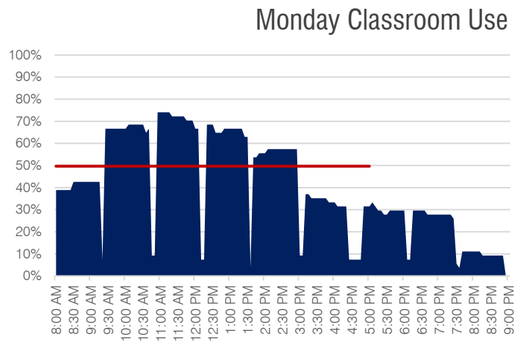
There are several ways to investigate classroom utilization. First, we can examine how many hours per week individual classrooms are scheduled, using the Fall 2015 course schedule. Each dot on the graph represents an individual classroom, illustrating the number of hours each room is scheduled per week. The term weekly room hours (WRH) denotes the hours in a week a classroom is used for scheduled instruction.

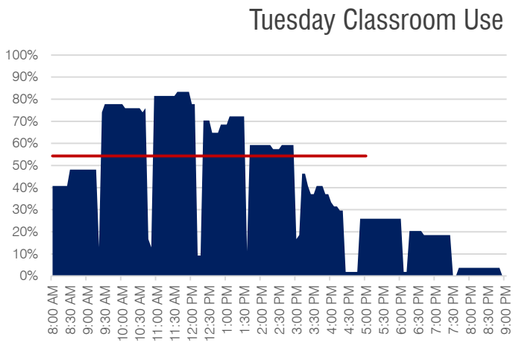
The system has set a utilization goal of 40 WRH. At Dalton, 22% of classrooms exceed 30 WRH, while only 7% are scheduled for 40 or more WRH. A significant 42% of classrooms are scheduled for 20 WRH or less.

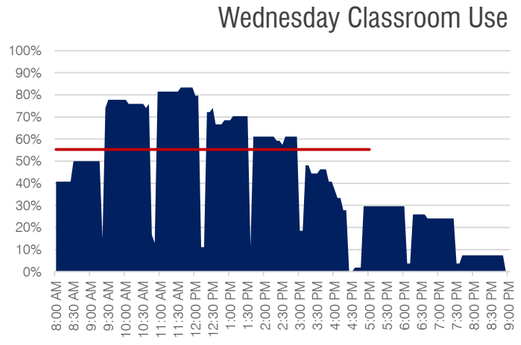
Lorberbaum Liberal Arts has the most highly utilized classrooms, while the Brown Center and Peeples Hall have the least. For Memorial, Sequoya, and Health Professionals, individual classroom use is distributed evenly across the range.

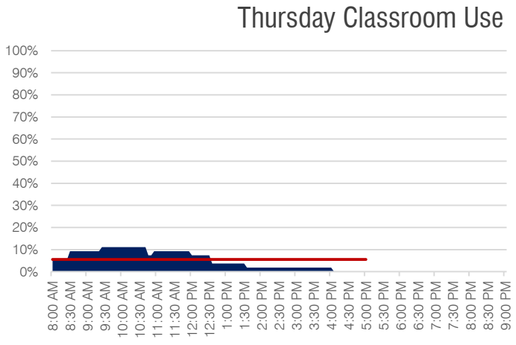
Rooms with a 21 to 40 person capacity comprise the majority of Dalton's classroom pool and, as the classroom metric will later illustrate, very few classes have enrollments greater than 40 students.

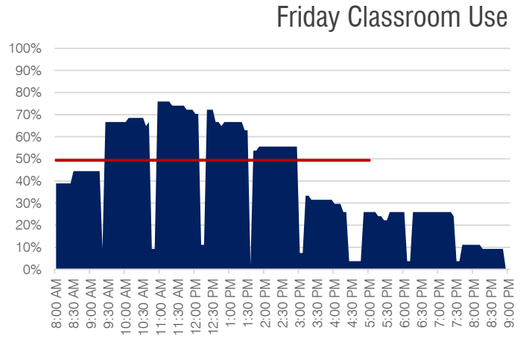
In general, the college has more classrooms than are needed to support its current instructional load. The idea of transforming some of Sequoya's classrooms into student spaces therefore has merit, although the nature of specific classroom typologies will need to be considered during the renovation.









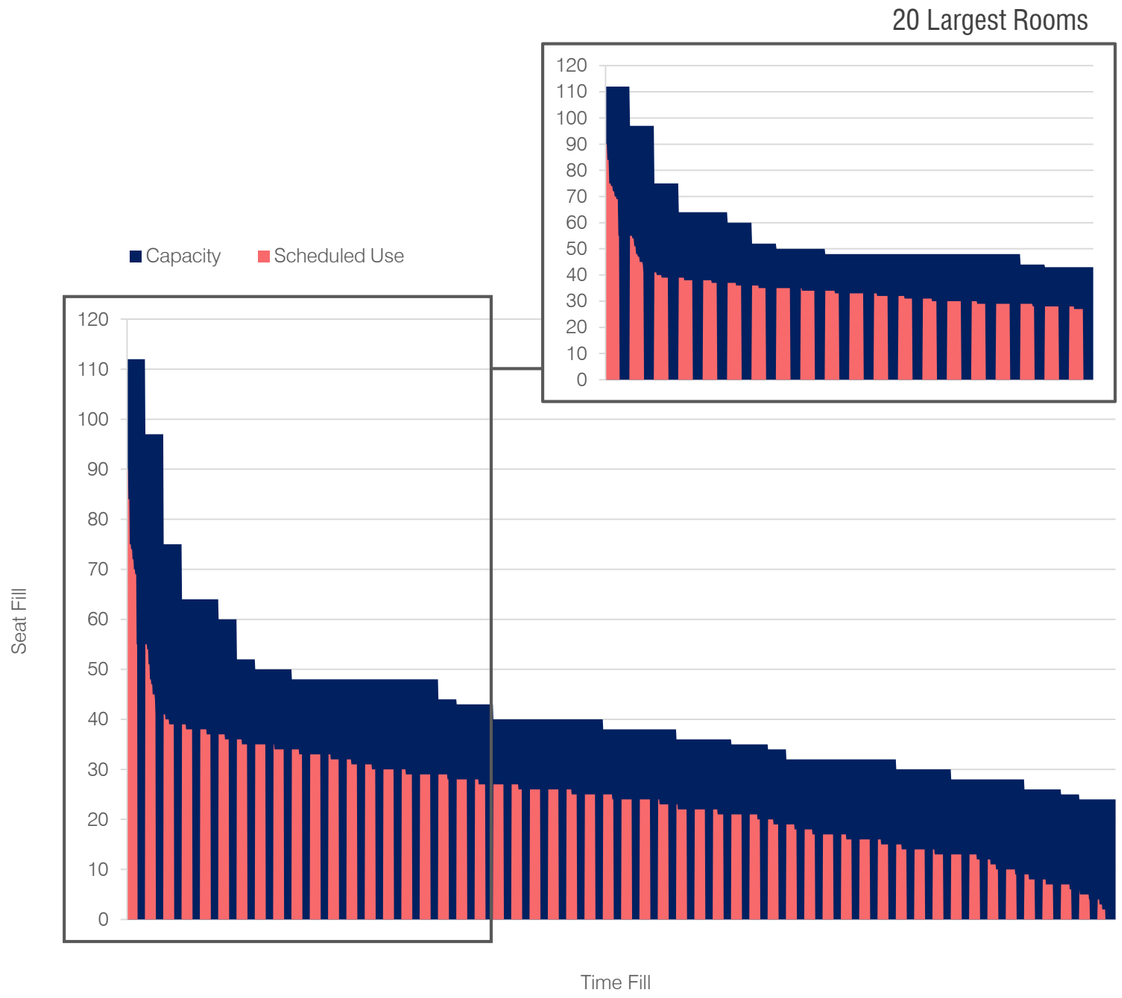


Daily Average, 8:00 AM to 5:00 PM

HISTOGRAMS

We also use histograms to measure total hourly activity in classrooms for each day of the week. Classroom activity is illustrated by time along the x-axis and percentage of all classrooms scheduled on the y-axis. The graphs to the left show that Dalton's classroom use is highest between 9:30 AM and 3:00 PM, Mondays through Thursdays, with extremely low utilization on Fridays.

Opportunities exist for greater utilization at 8:00 AM, afternoons after 3:00 PM, and on Fridays. But note that, even during current "peak" times, classrooms could be more heavily scheduled.



CLASSROOM METRIC

The figure to the left illustrates the system's new classroom metric. The blue area shows classroom supply: each classroom is represented by a blue rectangle, with height determined by the number of seats in the room and width by the number of weekly hours a room can be scheduled. The red area shows all scheduled classroom activity for Fall 2015. The number of students enrolled determines the shape's height, and the number of weekly hours a course is scheduled determines width. Courses are not necessarily placed in their actual classrooms, but are instead distributed evenly across the x-axis, arranged from largest to smallest enrollment. The graph gives a sense of how many empty seats are in a room while a class is in session (any blue area that lies above a red block) and how often rooms are vacant and available for use (any blue area that lies between red blocks).

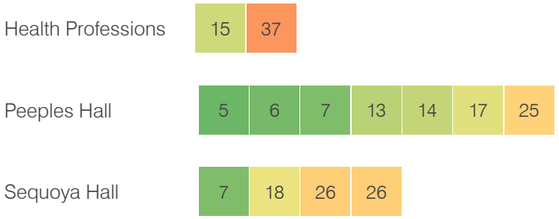
With a classroom utilization target of 40 WRH, the inventory can accommodate, on average, an additional 17 WRH per room. It is also clear that classroom capacities are much larger than the average enrollment. Despite the number of classrooms with more than 40 seats, very few classes have enrollments greater than 40. This suggests that some of the larger, underutilized classrooms might better serve as student life spaces, as discussed earlier.

For example, Sequoya 102 is one of Dalton's five classrooms with capacity greater than 60. While this room was scheduled for 17.5 WRH in Fall 2015, only two courses had enrollments greater than 60, for a total 5 WRH. In fact, of the five largest classrooms, only three were scheduled for courses with enrollments greater than 60, for a total 17.5 WRH – a mere 1% of all scheduled use. The loss of this instructional space might therefore be insignificant.

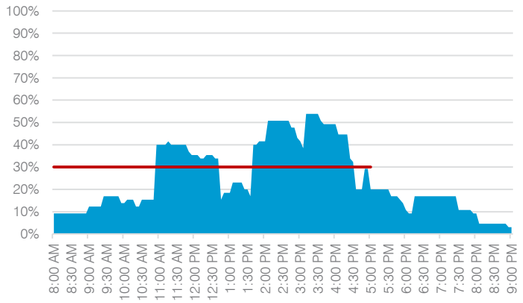
However, if larger classrooms are required, one option would be to utilize the other four large classrooms – Memorial 130 (112 seats), Brown 205 (75 seats), Health Professions 106 (64 seats), or Sequoya 236 (64 seats). Another option is to build a more flexible separation between Sequoya 236 and 227, so that the rooms can either be used as two 60-seat classrooms or one 120-seat space.

Science Lab Use

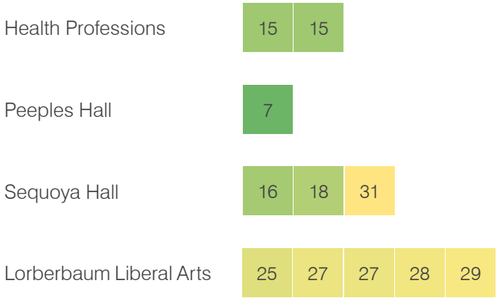
Use by Building

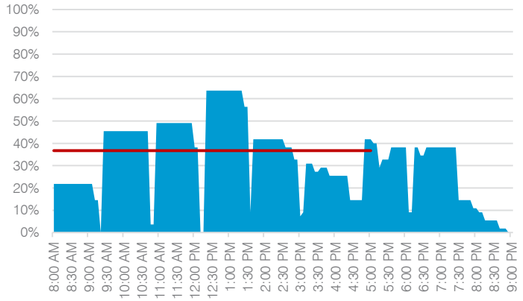


Weekly Use



Non-Science Lab Use





Underutilized — Highly Utilized

Weekly Average, 8:00 AM to 5:00 PM

20 WRH per Science Teaching Lab

20 WRH per Non-Science Teaching Lab

TEACHING LAB UTILIZATION

Unlike classrooms, which can be used almost interchangeably across departments, teaching labs are designed for department-specific use. Generally, teaching labs have lower utilization than classrooms, as they often require greater setup time and are used for project work outside of scheduled instruction. The suggested minimum target for science-intensive instructional lab use is 18 to 22 weekly room hours; other labs should have the same target as classrooms.

Dalton has 40 labs designated for instructional use, but only 24 were scheduled in Fall 2015. Two open laboratories were scheduled for 24 WRH, but are not included in the following analysis.

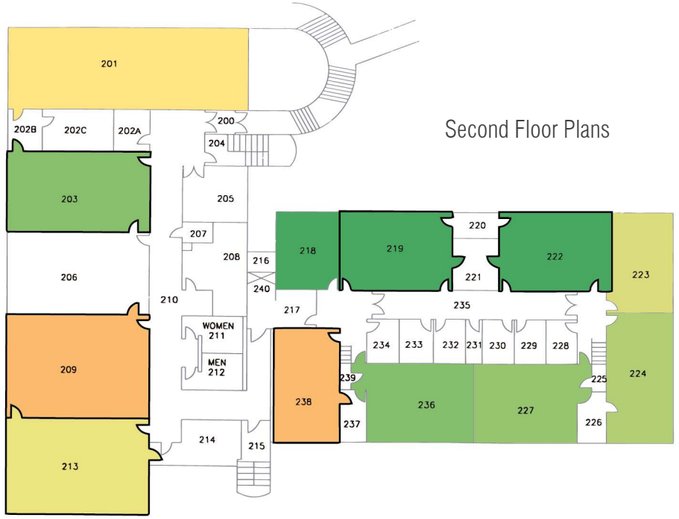
On average, 30% of the 13 science labs were scheduled between 8:00 AM and 5:00 PM weekly, compared to 37% of non-science labs. Weekly lab use peaked from 11:00 AM to 12:30 PM and 2:00 PM to 4:00 PM for natural sciences, and between 9:30 AM and 2:30 PM for non-science instruction.

The boxes to the left represent individual teaching laboratories, and the numbers within them are the weekly room hours of use per lab, with the color spectrum reflecting this relative use-intensity, from underutilized rooms in dark green to highly utilized rooms in deep red. Natural science labs in Peeples Hall appear to have relatively light use compared to those in Sequoya Hall. This suggests Peeples Hall can accommodate Sequoya's natural science sections if the Peeples' labs were suitably modified.

In Fall 2015, 57% of Sequoya's wet lab sections had enrollments larger than Peeple's maximum capacity of 24 students. Pedagogically, large enrollments - even for freshman and sophomore intro courses - are not ideal. Generally, the movement has been to smaller class sizes. The college should work with the Natural Science department, to determine whether professors are able to accommodate additional smaller lab sections.

First Floor Plans

Second Floor Plans



Sequoya Repurposing

Sequoya's instructional spaces are colored by utilization. Underutilized classrooms and non-science teaching labs are those scheduled for under 30 WRH, while the threshold for science-intensive teaching labs is 20 WRH. This is why Peeples 213 and 224 are colored differently, despite both being scheduled for 18 hours.

- Non-Instructional Space
- Classroom / Non-Science Teaching Lab
- Science Teaching Lab

Classrooms

103	236	140	226	115	102	223	135	136	130	131
10	10	12	13	17	18	24	25	25	33	35

Non-Science Teaching Labs

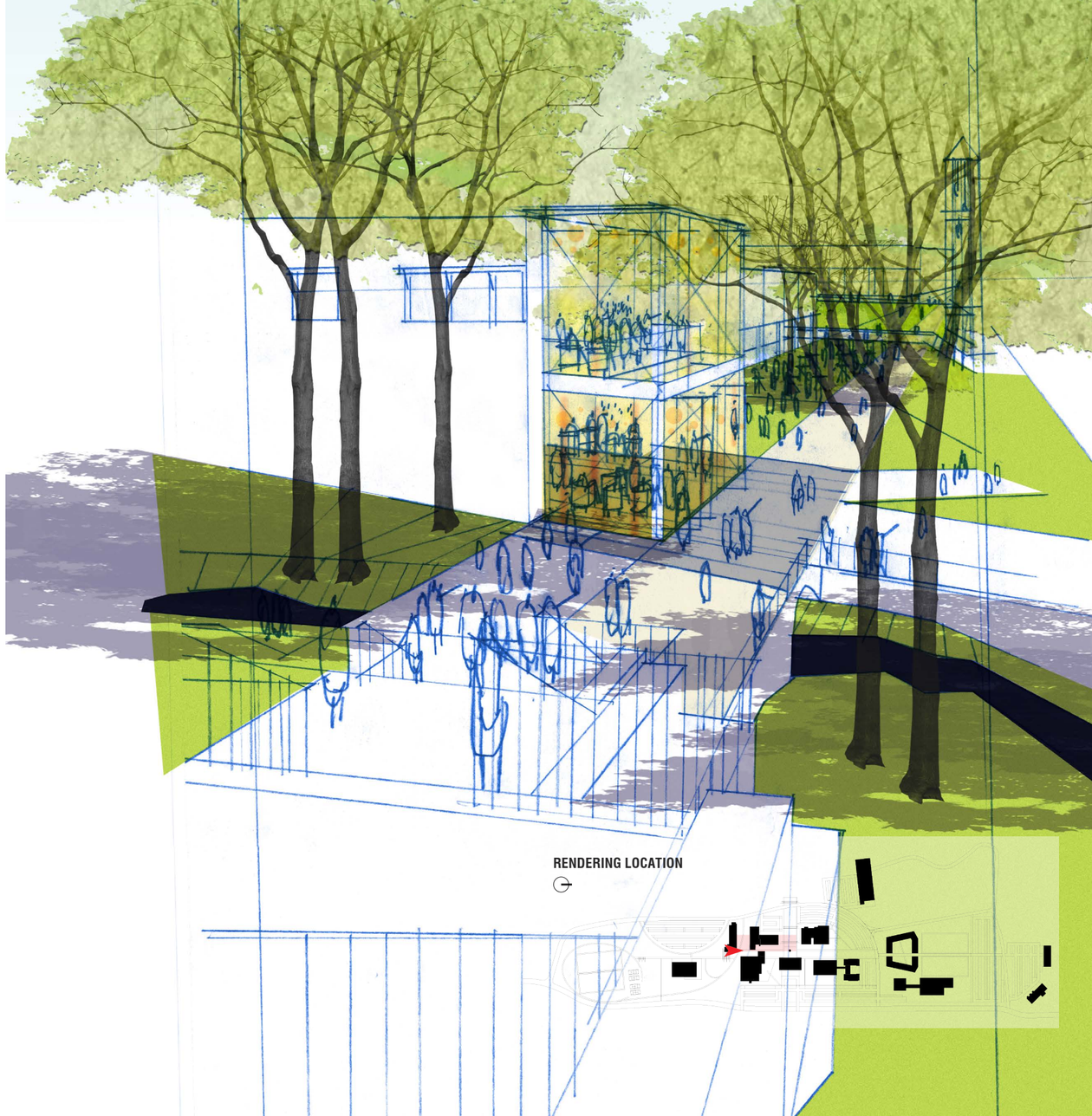
218	155	114	224	201
0	8	16	18	31

Science Teaching Labs

219	222	203	213	209	238
0	0	7	18	26	26

Classroom / Non-Science Lab 30

Science Lab 20



Parking Master Plan

Dalton State

Dalton, Georgia

Final Report
January 6, 2014

Project ATL13119.00

TimHaahs
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2014 PARKING PLAN EXCERPTS

CURRENT PARKING CONDITIONS

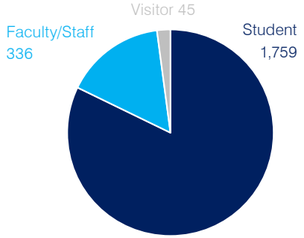
The figures listed in this section are representative of Fall 2013 conditions. Typically, the fall semester has the highest enrollment for the year. Therefore, sampling the parking conditions after the first few weeks of the semester provides an excellent snapshot of "typical busy conditions."

CURRENT PARKING SUPPLY

The parking supply is the total number of available parking spaces located in the campus study area. The supply consists of numerous surface lots and a parking structure. The core campus parking supply contains 2,140 spaces, excluding the spaces currently leased at the Northwest Georgia Trade and Conference Center (NGTCC). The entire parking supply was documented and is summarized in the following tables and graphs.

Core Campus Parking Supply

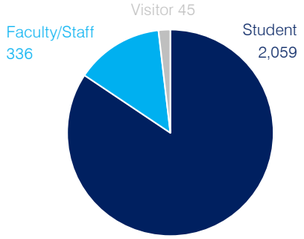
User Group	Supply	Percentage
Student	1,759	82%
Faculty/Staff	336	16%
Visitor	45	2%
Total	**2,140**	**100%**



Total Parking Supply (Core & NGTCC)

User Group	Supply	Percentage
Student	2,059	84%
Faculty/Staff	336	14%
Visitor	45	2%
Total	**2,440**	**100%**

Source: Timothy Haahs & Associates, 2013



We have summarized the parking supply by user group to differentiate between student, faculty/staff, and visitor parking areas. Dalton State uses a permit classification system to internally differentiate their parking supply. Based on our field collection for the core campus parking facilities, 82 percent of the parking supply is open to students, 16 percent is dedicated to faculty and staff, and the remaining 2 percent to visitors. It is important to note that the remote parking area at the NGTCC can accommodate an additional 300 vehicles when actively leased by Dalton State. When those spaces are leased, the parking supply is increased by 14% for a total of 2,440 spaces.

PARKING DEMAND RATIOS

As part of this analysis we have developed parking demand ratios for each of the various user groups. These ratios allow us to project out the future parking demand based on student enrollment growth.

In order to project the future parking demand at Dalton State, it is helpful to determine the parking demand ratios specific for this campus. To calculate the ratios, we compare headcount against the peak hour parking demand specific for each user group. The following section outlines our methodology for calculating each user demand ratio.

Students – We observed 1,851 vehicles present in spaces designated for Students during data collection (including vehicles parked at the NGTCC). Approximately 5,000 students were enrolled for the Fall 2013 semester. The parking demand ratio for students is estimated at 0.37 spaces per student.

Faculty and Staff – We were provided with the following data: 230 faculty and 234 staff employees. The observed on-campus peak parking demand for faculty/staff was estimated at 312 vehicles. We assumed 102 of those vehicles belonged to faculty members and the remaining 210 vehicles belonged to staff employees. The faculty and staff parking demand ratio is therefore estimated at 0.44 spaces per faculty member and 0.90 spaces per staff employee. This demand ratio is commensurate to other institutions we have studied.

Visitor Parking – As it is difficult to determine the total number of visitors who come to campus, it is acceptable to estimate the visitor parking demand ratio as compared to the size or enrollment for a campus. During the peak hour, we observed approximately 40 visitor vehicles parked on campus. When comparing demand against the 5,000 student enrollment the visitor demand ratio is estimated at 0.008 visitor spaces per student.

2013 Parking Conditions

User Group	Parking Demand	Headcount	Ratios
Student	1,851	5,000	0.37
Faculty	102	230	0.44
Staff	210	234	0.90
Visitor	40	5,000	0.01
Total	**2,203**		

Source: Dalton State and Timothy Haahs & Associates, 2013

According to the data provided, for every 100 new students enrolled approximately 37 additional parking spaces will be needed. Likewise, for every 100 new faculty or staff headcount, approximately 44 and 90 additional parking spaces will be needed, respectively. Please note, these demand ratios are partially based on data provided by the University. However, all of the ratios are within the normal range for this type of institution.

FUTURE PARKING CONDITIONS

There are three primary variables which will impact the future parking conditions. The first variable includes changes to the campus population (students, faculty and staff). The second variable encompasses additional changes to the parking demand from new construction and projects. Finally, the third variable is new projects which may further amplify the first two variables by changing the parking supply and displacing existing parking areas.

FUTURE PARKING DEMAND

According to Dalton State administration, the student population is expected to grow to 5,500 students over the next 5 years. Based on the planned student population growth we estimate an **increase in student demand of approximately 185 spaces**. Likewise, the faculty and staff population is expected to increase to 250 each by 2018 which results in an overall **increase of faculty/staff parking demand of 23 spaces**. Finally, we anticipate the visitor parking demand will also experience an increase of 4 spaces over the next 5 years. Table 5 outlines the calculations for determining the future parking demand using the campus ratios and the future statistics.

2013 Parking Conditions

User Group	Parking Demand	Headcount	Ratios
Student	1,851	5,000	0.37
Faculty	102	230	0.44
Staff	210	234	0.90
Visitor	40	5,000	0.01
Total	**2,203**		

Source: Dalton State and Timothy Haahs & Associates, 2013

2018 Parking Conditions

User Group	Parking Demand	Headcount	Ratios
Student	2,036	5,500	0.37
Faculty	111	250	0.44
Staff	224	250	0.90
Visitor	44	5,500	0.01
Total	**2,415**		

FUTURE PARKING ADEQUACY

The future parking adequacy can be determined by comparing the future effective parking supply against the future parking demand. Based on the enrollment and headcount projections provided, we anticipate a 385- space parking shortage in 2018 within the core campus and not including the 300 leased spaces at the NGTCC. **Even with the parking facilities at the NGTCC, we estimate a campus-wide shortage of approximately 115 spaces in 2018.** The five (5) year adequacy projections are shown in the table below.

Core Campus Parking Facilities

User Group	Effective Supply	2018 Demand	2018 Adequacy
Student	1,673	2,036	(363)
Faculty/Staff	319	335	(16)
Visitor	38	44	(6)
Total	**2,030**	**2,415**	**(385)**

Source: Dalton State and Timothy Haahs & Associates, 2013

Core Campus & NGTCC Parking Facilities

User Group	Effective Supply	2018 Demand	2018 Adequacy
Student	1943	2,036	(93)
Faculty/Staff	319	335	(16)
Visitor	38	44	(6)
Total	**2,300**	**2,415**	**(115)**

In order to address the anticipated 5-year deficit, we recommend either a long-term lease with the NGTCC which includes up to a minimum of 500 guaranteed spaces or consideration of the addition of at least 500 net spaces over the next 2-3 years in addition to continuing the use of at least 300 spaces at the NGTCC in the interim. Please note, the above figures include the 100 spaces currently used for construction which will be opened in February 2014 (90 effective spaces). They do not include any changes to the existing parking supply as listed in the Dalton State College 2025 Master Plan dated March 2011 by Sasaki. The impact from the proposed campus improvements are summarized in the next section* of this report.

* Note: This section is not included in the DumontJanks report.

WORKSHOPS AND MEETINGS

Our team held on-campus meetings to discuss the parking study. In attendance were the parking committee and other staff members. No students or student groups chose to participate in the workshop. The following key items were discussed during the workshop and in subsequent e-mails (for those who were unable to participate):

- Carpools should be encouraged.
- The faculty lot along College Drive just north of the Westcott parking area is difficult to enter/exit as faculty must exit at the same location where all students exit (on George Rice to exit onto College Drive – north intersection). Consider opening the gates to allow faculty to exit directly onto College Drive.
- Can Dalton State offer more Hybrid and Online courses?
- Since faculty and staff have not been given a raise in 5 years, any kind of parking fee would be strongly resisted. We recommend the consideration of implementing a (nominal) fee once salary adjustments are resumed in order to off-set the cost of anticipated future parking facilities and distribute the cost between all users versus students alone.
- There is a perception that there is not a parking problem and there are a sufficient number of parking spaces available.
- Most agree that the circulation around campus does not work well; however, it does provide an inherent traffic calming effect.
- Dalton's enrollment has decreased by 1,000 students since the peak which has had an impact on funding, parking, morale, etc. Enrollment growth for the fall has been flat, which is better than a decline. The geographic area has been hit hard during the recession, especially the carpet industry.

Employee Comments:

- I know where I can always find a place to park during peak hours.
- I may come back from lunch and have a tougher time finding a space. Sometimes students will park in staff parking areas.
- If you arrive by 8/8:30 you can always find a parking space.
- Parking is not too different between the fall and spring semester.
- The Westcott Lot does not work well with respect to circulation.
- Public Safety is doing a good job directing traffic flow at the main intersection. Without them, it would be a real problem.
- The parking lot on the athletic field is both good and bad. It provides overflow parking but uses up valuable green space. It is also used for contractor parking with the 100 spaces set aside for those working on the new science building. The parking lot is used during the first few weeks of school.
- It seems like some of the students struggle with the parallel parking along George Rice Drive.

- Safety of the parking along George Rice is an issue. Two-way traffic flow and kids walking in and out of cars while not paying attention is unsafe. Would this road work better as a one-way or if all parking was eliminated? Does the width of the road actually provide traffic calming in its current configuration?
- Students will drive around looking for a place to park even though spaces exist down George Rice. It isn't a far walk due to the size of the campus.
- There always seems to be parking at the end of the ring road.
- Designated lots would be nice. UT has lots designated by status and UGA has assigned parking areas. Is Dalton a candidate for designated or premium lots?
- Where would kids park for Women's Volleyball in the gym? Events would be held after school so more parking should be available.
- Provide options for parking. Everyone pays a mandated fee but offer premium spaces closer to campus, no additional charge for using the Trade Center. Resident students need to keep their car parked in the residence area and walk to campus. This is being enforced today by Public Safety.
- Paid parking for proximate parking.
- Sequoia is the current Science Building and these folks will be going to the new Science Building so there won't be any new demand created from the new building, just a redistribution of current demand.
- 6 faculty spaces for the gym and no visitor spaces. Volleyball games will be after hours which will help as parking areas will be available for attendees.
- There isn't a drop off area for visitors by the Rock and Westcott Building.
- The siting and development of a proposed 300-bed student housing project will have a critical impact on parking, especially if it is built on campus. The student housing project is in the very early stages, but it is part of a bundled project for several schools needing student housing throughout the system. For Dalton, it may mean that a garage is part of their project to accommodate both student housing needs and other parking needs.

Parking Committee:

- Does the parking on both sides of George Rice actually slow traffic?
- Plan to redo George Rice to add more sidewalk space to help pedestrian flow.
- What about striping George Rice to delineate the lanes?
- Does it make any sense to park on College Drive? Area next to the tennis courts (grassy area) east side of college. This should be studied further.
- Walking distance map – show West Georgia to compare with Dalton State.
- Encourage the use of bicycling and add bike racks.

Near-Term Plan

- EXISTING
- RENOVATION
- NEW CONSTRUCTION

DUMONTJANKS