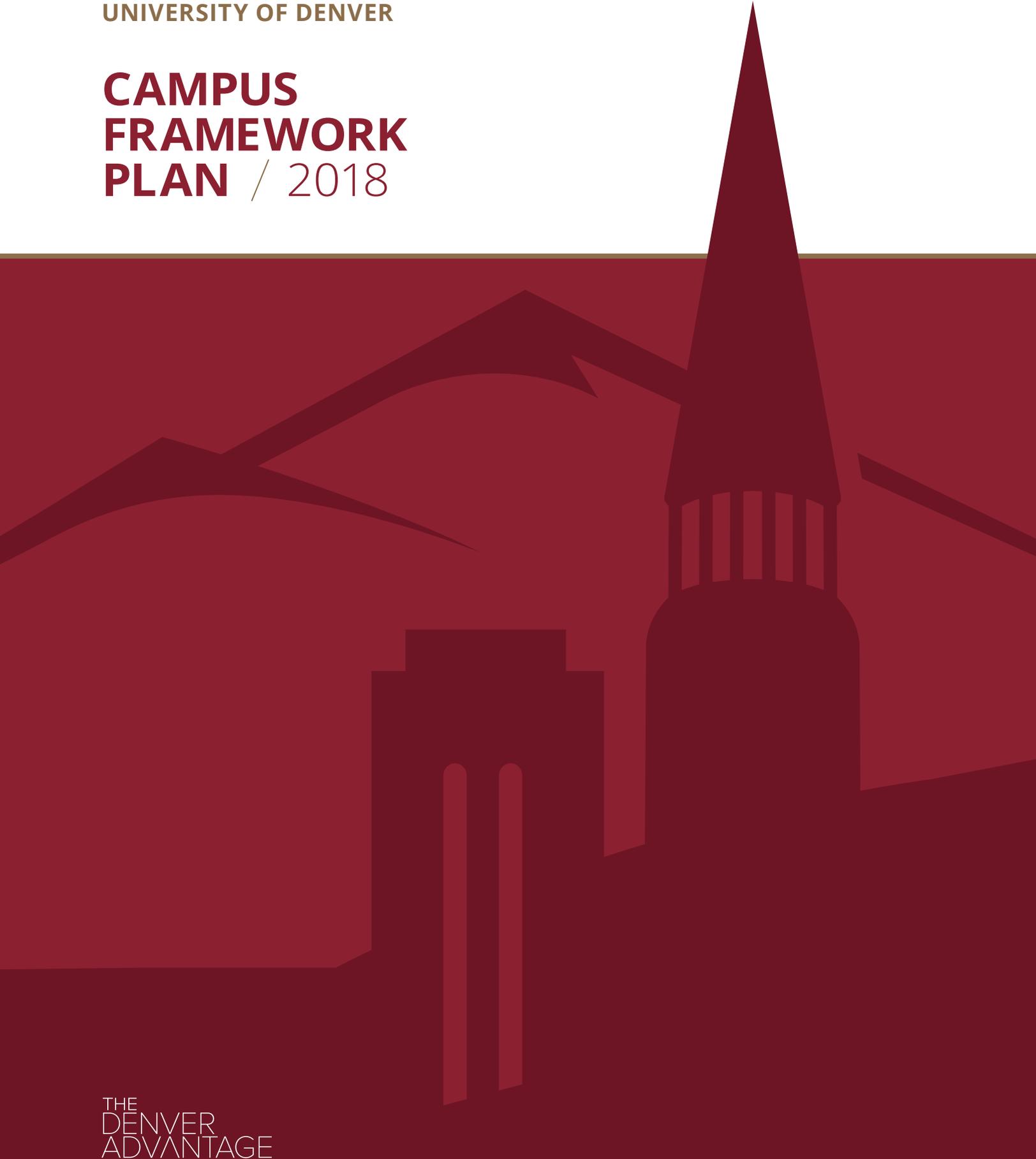


UNIVERSITY OF DENVER

CAMPUS FRAMEWORK PLAN / 2018



THE
DENVER
ADVANTAGE

A Introduction	01
B Executive Summary	03
C Planning Context	13
1 Process: Design.....	15
2 Process: Space Needs Summary.....	16
3 Process: Building Portfolio.....	20
4 Process: Market Assessment Analysis.....	21
D Campus Framework Plan	25
1 Signage & Wayfinding.....	26
2 Landscape Proposals.....	30
3 Great Streets.....	34
4 Mobility Recommendations.....	46
5 Sustainability Summary.....	48
6 Campus-Wide Framework Plan.....	53
7 North Campus.....	54
8 Central Campus.....	58
9 South Campus.....	60
10 Phasing Approach.....	64
Acknowledgments	69

01 Campus Framework Plan.....	06	32 University Boulevard—Proposed Street Section.....	39
02 View of “6-Acre” Site From University Blvd.....	08	33 Asbury Avenue—Locator Map.....	40
03 A Defined and Porous Campus.....	10	34 Asbury Avenue—Proposed Plan.....	40
04 Better Connect the Campus.....	10	35 Asbury Avenue—Existing Street Section.....	41
05 Consolidate Undergraduate Housing.....	10	36 Asbury Avenue—Proposed Street Section.....	41
06 Support Academic Programs.....	10	37 Iliff Avenue—Locator Map.....	42
07 Define a STEM Quadrangle.....	11	38 Iliff Avenue—Proposed Plan.....	42
08 Redevelop the “6-Acres”.....	11	39 Iliff Avenue—Existing Street Section.....	43
09 Activate Campus.....	11	40 Iliff Avenue—Proposed Street Section.....	43
10 A Sustainable Campus.....	11	41 Evans Avenue—Locator Map.....	44
11 Classroom Weekly Seat Hours.....	17	42 Evans Avenue—Proposed Plan.....	44
12 Recommended Space Needs.....	19	43 Evans Avenue—Existing Street Section.....	45
13 Building Assessment Categories.....	20	44 Evans Avenue—Proposed Street Section.....	45
14 Student Population Housing Analyses.....	22	45 Shuttle Route and Bike Facilities.....	46
15 Demand & ADR Growth University Park Hotel Comps.....	23	46 Existing Limits of Irrigation.....	49
16 RTD Bridge Gateway.....	26	47 Proposed Limits of Irrigation.....	49
17 Signage and Wayfinding Family Portfolio.....	28	48 Mobility Hierarchy Diagram.....	51
18 Key Linear Pathways.....	30	49 Campus Framework Plan—By Category.....	52
19 Proposed Gaylord Street Pedestrian Walk.....	31	50 Detailed Plan of North Campus.....	55
20 Pedestrian Gateway at University and Evans Blvd.....	31	51 View of Campus Proposals, Looking Southwest.....	56
21 Campus Activators.....	32	52 Detailed Plan of Central Campus.....	59
22 Hammocks as Campus Activator.....	32	53 Detailed Plan of South Campus.....	61
23 Adirondack Chairs as Campus Activator.....	33	54 View of South Campus, Looking Northwest.....	62
24 Buchtel Boulevard—Locator Map.....	34	55 Current Projects.....	65
25 Buchtel Boulevard—Existing Street Section.....	35	56 Phase 1A: 1–5 Years.....	65
26 Buchtel Boulevard—Proposed Street Section.....	35	57 Phase 1B: 1–5 Years.....	66
27 High Street—Locator Map.....	36	58 Phase 2A: 5–10 Years.....	66
28 High Street—Existing Street Section.....	37	59 Phase 2B: 5–10 Years.....	67
29 High Street—Proposed Street Section.....	37	60 Phase 3A: 10–15 Years.....	67
30 University Boulevard—Locator Map.....	38	61 Phase 3B: 10–15 Years.....	68
31 University Boulevard—Existing Street Section.....	39	62 Future Opportunities.....	68

DEAR FRIENDS

In an era when demographics, technology and the nature of higher education itself are in transition, the University of Denver is guided by a bold vision we call DU IMPACT 2025.

At the heart of all that we do is the student experience. To educate students holistically and prepare them for the diverse organizations and communities they will lead, we are focused on creating spaces where people can establish a sense of belonging and build community, no matter their background and interests.

This is the Denver Advantage: a campus designed to fuel the collaborations and relationships that are proven to help students succeed, now and throughout their lives. Three new buildings—a Community Commons that brings all of us together; a first-year residence hall that builds a sense of community from day one; and a Pioneer Career Achievement Center that connects students to our 140,000 plus global alumni body—are already under construction. The Campus Framework Plan is the next manifestation of the Denver Advantage.

Ayers Saint Gross, a nationally-renowned planning and architectural firm, was asked the question: How do we best develop the campus over the next two decades, given the goals of DU IMPACT 2025, the existing condition of the core campus, the City of Denver's zoning and planning requirements and the current realities of the metro real estate market.

We worked with them to create a plan based on the assumption that DU would neither increase on-campus enrollment, nor expand past the boundaries of I-25 to the north and Harvard Gulch to the south. They created a model that would become increasingly sustainable and allow for the transformation of existing properties as transportation changes over time. They thought with our community about ways to make the existing campus more welcoming and exciting for an increasingly diverse population.

With input and feedback from over 1,000 participants, this plan incorporates the findings of an array of experts in sustainability, mobility, space analytics, graphic design and real estate economics, as well as the needs and aspirations of our community. The plan aims to create a vibrant college town right in the heart of our rapidly growing, dynamic metro area.

We want to see our beautiful 125-acre campus become more active and outdoor oriented. We want to see retail, hospitality and restaurant options more abundant, our bikeways and pedestrian activities safer and more robust. We want signage to be more welcoming and our parking more visitor friendly. We want to provide creative spaces to inspire our faculty. We want our future development to be more sustainable and we want to find ways to make more affordable housing options available to our students, faculty and staff. We want DU to be a resource that welcomes and serves people all across the region.

The Framework sets our course. It tells us what we *could* do on the land we have. It remains for the DU family and our broader community to determine what we *should* do. Each initiative being proposed will require its own due diligence and its own fiscal analysis before being implemented.

The University of Denver began as a small community of scholars in the Rocky Mountain West and transformed itself into a global institution. We look forward to the next phase in our University's evolution.

Sincerely,
Rebecca Chopp, *Chancellor*





The University of Denver has a long history of successful campus planning and design. Since 1995, DU has constructed or renovated approximately 75% of its facilities. While these impressive efforts have guided the development of the beautiful campus enjoyed today, we know that there is more to be done to ensure that DU's needs continue to be met over time.

We developed The Denver Advantage Campus Framework Plan to support an evolution of the campus through time, while keeping core University values at the forefront. It celebrates the curvilinear design of the original campus plan in the 1890s. It highlights the legacy buildings created over the past 130 years. It continues with the design themes developed by former Chancellor Dan Ritchie, former University Architect Cab Childress and his successor, Mark Rodgers.

The plan was undertaken at a unique time in DU's history, responding to the University's recently completed strategic plan, DU IMPACT 2025. It responds to new challenges, providing a comprehensive roadmap to create a more student centered and dynamic campus. The Framework vision incorporates both near- and long-term solutions. The needs of current and future students, academic program evolution, stronger bonds with alumni, and sustainability goals have been addressed by the plan. It develops welcoming entry points and creates a series of open spaces and connections across campus. By redeveloping the land on the north edge of campus, it allows for the creation of a mix of uses including housing, work space, retail, restaurants and outdoor amenities to create a great college town in the heart of the city.

This vision was developed with significant input from the DU family, from neighbors, and from the broader Denver community.

SECTION B

EXECUTIVE

SUMMARY



These issues—gathered during the assessment phase of work—reflect comments from the University of Denver stakeholders and community, as well as physical observations from campus visits. These findings informed the plan development.

Campus should be welcoming for everyone.

The importance of creating a more diverse and welcoming campus becomes increasingly clear. More people, from different communities, will be visiting and using the University in new ways. Today, there are few clear entry points to campus, and signage is confusing. Welcoming and clear gateways, well-defined wayfinding and signage, better lighting and easier to understand parking access would improve the existing campus.

Create spaces where a poet and a coder could meet spontaneously.

A clear desire for faculty and student interdisciplinary collaborative space exists. Campus facilities currently have great disparity between new and old. Campus buildings and grounds would benefit from more inviting spaces to allow for community use.

Campus should feel like it is part of Denver and the Rocky Mountain West.

DU's location must be celebrated with clear references to the region in building material choices, continuing to establish long views to the mountains and city, and creating seamless connections to the city and to adjacent neighborhoods. DU should also embrace the inside/outside Colorado lifestyle, making more dramatic use of its park-like campus for outdoor dining and recreational activities.

A vibrant college town ought to be part of the DU experience.

Many students, faculty and staff leave campus for entertainment, dining and shopping. The surrounding neighborhoods have limited options within walking distance. There is a desire to bring a college town environment to the campus edges. Sections along Evans Avenue and University Boulevard provide opportunities for redevelopment to grow into a vibrant mixed-use district.



FIGURE 01: CAMPUS FRAMEWORK PLAN

The Campus Framework Plan applies the intentions and goals articulated in DU IMPACT 2025 to the physical environment of the University's 125-acre campus.

Six projects are already underway. While some have a much longer time horizon, others at this point, are simply aspirational. The ultimate goal is the same: To create a campus that celebrates all that a great and diverse city has to offer, yet provides the warmth and neighborliness that are found in the best college towns. That's the Denver Advantage.

The Framework incorporates many exciting initiatives that are currently in design and under construction. The Administrative Office Building (1) opened in May 2018, and the Denver Tennis Park (2) is expected to open in October 2018. The Mary Reed building (3) is being refurbished and an Exhibit Hall is being created for the first floor.

The three buildings currently under construction were seen as key initiatives to improve the University's ability to function as a student-centered research university. The first-year residence hall (4) addresses current undergraduate housing demands while also creating a strong community-based experience for first-year students in a central campus location. Expanded central dining, collaboration and meeting spaces will be provided within the Community Commons (5). The Pioneer Career Achievement Center (6) will provide ample space and a visible location for comprehensive career development programming while connecting students to a global network of more than 140,000 alums.

To better connect the campus, we identified a combination of open space initiatives. Streetscape improvements (7) have been developed for University Boulevard, High Street, Iliff Avenue, Evans Avenue, Asbury Avenue and Buchtel Boulevard. A family of campus gateways welcome visitors to campus (8). The transformation of the driving lane and surface parking along Gaylord Street into a pedestrian mall (9) seamlessly links the southern campus. The ultimate

removal and relocation of Lots H1 and H2 to a new parking structure (10a) provides the opportunity to create a large, uninterrupted landscape quadrangle (10) to accommodate campus-wide outdoor events and recreation.

A comprehensive solution for undergraduate housing provides quality housing and a nurturing community on campus. Undergraduate housing clusters first and second-year residence halls close to the campus center and adjacent to one another. New residence halls (11, 12) and the renovation of Centennial Hall (13) completes the first and second-year housing options. As a student progresses through their years at DU, more independent living options are provided closer to the campus periphery.

A campus-wide space audit and assessment of four academic units identified needs and deficits. The findings of this study informed the plan proposals for new and renovated space for academics. The Sturm Hall renovation and addition (14) meets the needs of Arts, Humanities and Social Sciences. The Graduate School of Professional Psychology and Graduate School of Social Work have facilities identified to meet their on-going needs (15, 16). Buildings to support Natural Sciences and Mathematics are proposed in the STEM Quadrangle (17). These facilities will both replace existing facilities that are inadequate as well as provide growth opportunities for the programs for the years to come. The renovation and addition to Driscoll South (18) provides additional classroom space for campus. A Sports Performance Facility (19) is located in an addition to the Ritchie Center.

Fundamental to the Campus Framework Plan is the development of the 6-acre site on the edge of campus to create a great college town (20). The college town is envisioned as a vibrant mix of retail, hotel (20a), office, innovation, Welcome Center, Campus Bookstore, and both affordable and market rate housing. Market assessment findings support the quality and type of facilities proposed for the 6-acre site and other college town development.

The University of Denver RTD light rail station (21) provides a public-private partnership opportunity for redevelopment of housing, collaborative and clinical workspace and retail.

A GREAT COLLEGE TOWN IN THE HEART OF THE CITY

The Campus Framework Plan is organized around a series of design objectives:

- Developing a welcoming, open space network
- Establishing clear connections across campus
- Enhancing the undergraduate residential life experience and graduate student needs
- Accommodating future growth to support academic programs over time
- Redeveloping strategic campus edges into a vibrant college town
- Defining a science quadrangle
- Activating campus with landscape interventions

FIGURE 02: VIEW OF "6-ACRE" SITE FROM UNIVERSITY BLVD.



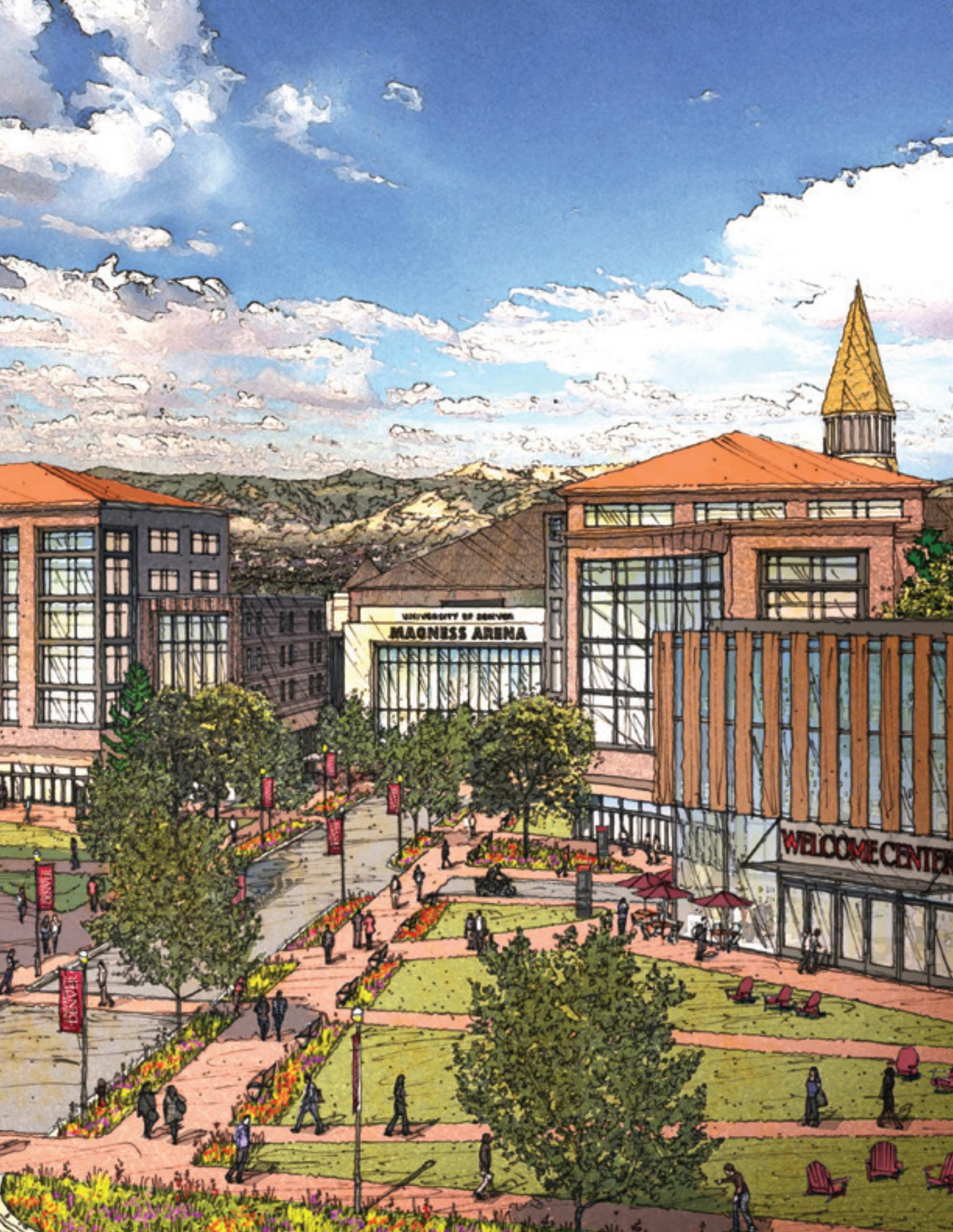




FIGURE 03

A DEFINED AND POROUS CAMPUS

The campus is currently inwardly focused with the most beautiful and accessible places located deep in the center. In the future, campus will expand its rich open space network to its edges, establishing a more welcoming, defined, and porous campus.

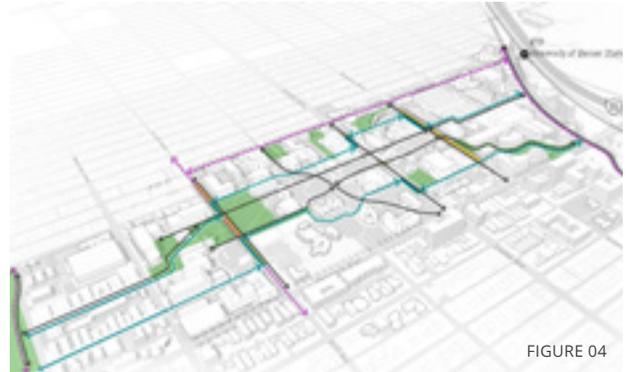


FIGURE 04

BETTER CONNECT THE CAMPUS

Major walkways establish clear connections, seamless navigation, and improved wayfinding. Bike routes and bike lanes will better connect campus to the existing City of Denver network and the University of Denver light rail station.

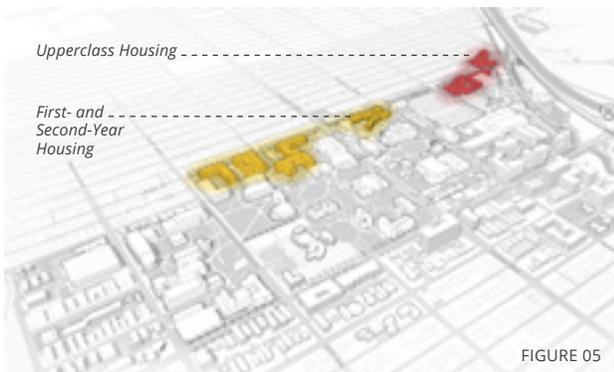


FIGURE 05

CONSOLIDATE UNDERGRADUATE HOUSING

First- and second-year housing communities will be centrally located to help establish strong residential experiences for undergraduate students from the moment they arrive on campus. These communities will be located within close proximity to central dining in the Community Commons.

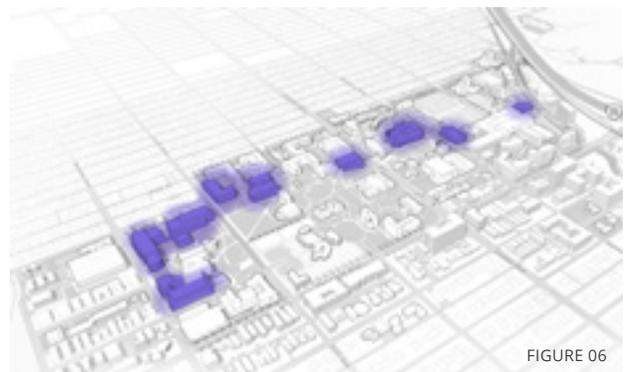


FIGURE 06

SUPPORT ACADEMIC PROGRAMS

Multiple locations for future academic growth have been identified. These footprints meet the needs of both existing academic programs as well as provide place-holder locations for future unanticipated needs.

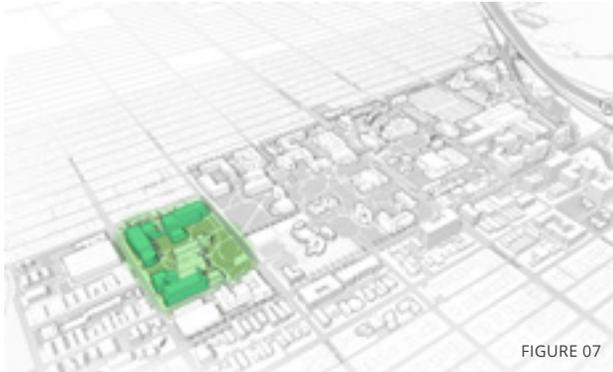


FIGURE 07

DEFINE A STEM QUADRANGLE

Opportunities for new science and engineering facilities will ensure programs can thrive with modern amenities. Positioning these buildings within close proximity helps establish common spaces that will support interdisciplinary collaboration.



FIGURE 08

REDEVELOP THE "6 ACRES"

A vibrant college town development provides a combination of retail, hotel, office space, innovation space, market rate housing for the greater community, and affordable graduate/faculty/staff housing at the campus edge. A new entry experience for first time visitors to campus, including a welcome center, is envisioned.

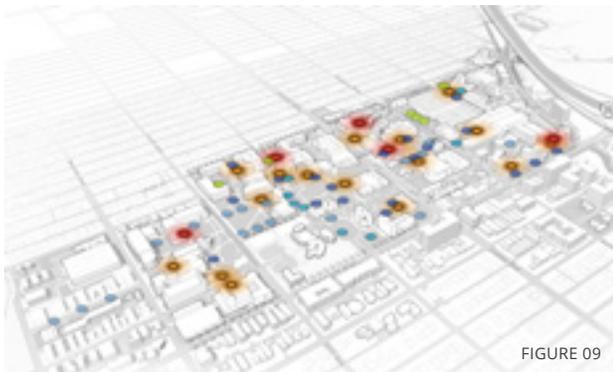


FIGURE 09

ACTIVATE CAMPUS

Landscape interventions help activate campus by providing fun and unique meeting places outside. Examples include shaded seating, outdoor cafés, festive lighting, hammock groves, outdoor firepits and more recreational amenities such as basketball courts.



FIGURE 10

A SUSTAINABLE CAMPUS

Sustainable strategies were fundamental in the plan development, including the ongoing study and implementation of on-site solar opportunities, the establishment of a reduced irrigation zone and greater use of xeriscape, and the addition of an on-demand campus shuttle and dockless bicycles to help reduce independent trips in vehicles.

SECTION C

PLANNING

CONTEXT



The planning process took place over the course of a 15-month period, beginning in March 2017 and culminating with a final plan presentation in June 2018.

To facilitate the process, an Advisory Council was formed. This inclusive committee met regularly throughout the process and was responsible for setting the overall direction of the plan. At strategic points in the collaborative process, the planning team also met with faculty, staff, administrators, students and the Board of Trustees who provided firsthand experience and guidance to help evaluate plan proposals. The design team worked closely with these groups to develop a plan that addresses sustainability, fiscal soundness and equity issues. It reflects a recognition of the Native American history of the land as well as a respect for the architectural tradition at DU and establishes a common vision for the future. The planning process was organized around the following phases of work:

DEFINE AND ASSESS

The Define and Assess phase measured the quantitative and qualitative aspects of the campus, providing an overall picture of the University and insight toward the development of a conceptual approach for the Plan. Findings from this phase of work can be found in the Executive Summary.

TEST

To study the campus in greater detail and to test ideas, multiple design alternatives were presented within a set of themes including: the economics of the edges, housing and student life; mobility and sustainability; wayfinding and placemaking; and core campus teaching and research. Each of these themes was the basis of one of five workshops on campus where design alternatives were shared. Members of the Advisory Panel and the campus community were encouraged to review the design suggestions with attention given to building massing and density, pedestrian connections, outdoor gathering spaces, service and vehicular connections, sustainability and mobility.

SYNTHESIZE

Upon selection of the preferred design alternative, the final plan was formed. This plan is a refinement of the ideas generated in the test phase, and it illustrates the building and open-space transformations. The final plan provides a vision of the campus at final build-out and a series of incremental steps showing how the plan can be implemented over time. Projects are identified for phased implementation. The Campus Framework Plan supplements the University's strategic plan, DU Impact 2025, to guide the future developments and initiatives for the campus.

C.2 PROCESS: SPACE NEEDS SUMMARY

Space utilization and equitability are topics of considerable importance at the University of Denver. As the University strives to increase its presence as a national research institution and adopt better systems for managing spatial assets, issues with existing space use and governance continue to grow.

In that context, the consultant team was charged with performing several space planning services in support of their Campus Framework planning initiative:

- Field Audit—a room-by-room examination to confirm space use, seat count and net assignable square feet (NASF);
- Utilization Study—an analysis of instructional use (classrooms and class laboratories);
- Space Needs Assessment—a review of four primary academic units (Arts, Humanities and Social Sciences, Graduate School of Professional Psychology, Graduate School of Social Work, and Natural Sciences and Mathematics).

FIELD AUDIT

The space planning team performed a field audit in Fall 2017. With very few exceptions, every room on the campus was visited and validated for space use, student seat count, and NASF. Existing building maps and room data spreadsheets were combined from multiple sources in preparation for the audit.

While a field audit is principally an empirical validation exercise, the planning team was asked to observe and comment on the general viability of academic spaces. The University exhibits dramatic inconsistencies in the quality of space. The Ritchie School of Engineering is equipped with state-of-the-art research and academic laboratories, active-learning classrooms and maker spaces. Furnishings are modern, flexible, and appropriately support learning functions. Technology throughout the building is highly interactive and demonstrates support of multidisciplinary studies.

In contrast, Mass Communications and Metallurgy are woefully inadequate buildings for learning. Furnishings in the Mass Communications building are outdated and highly inflexible. Classrooms that do have mobile tables and chairs lack adequate space for active learning, making movement virtually impossible. The Metallurgy building is severely outdated with limited access to daylight and many rooms are so poorly located that they are only used for furniture storage. Research spaces in the new Engineering building are well appointed; research spaces in Seeley G. Mudd science building are sub-par and preclude most any form of sharing equipment and ideas. The southernmost areas of the University campus exhibit the greatest lack of equitability.

Upon completion of the field audit, the consultant team delivered to DU an Excel workbook with this room data. The value of this room inventory comes from establishing systems and policy to maintain its currency, accuracy and viability as a single, shared resource, institution-wide.

UTILIZATION STUDY

Our team merged the newly created room inventory with course data to analyze instructional spaces at DU. This analysis produced a report, similar to one the Registrar’s office compiles, albeit more detailed. Data points from this study evolved into metrics informing the space needs assessment.

Overall weekly seat hours for classrooms are 19.4 which is below the Colorado Department of Higher Education (CDHE) guideline of 20.1. This is a combined measurement of the weekly hours a room is scheduled and the number of seats filled during that time.

Class labs varied widely: Arts, Humanities and Social Sciences class labs have average weekly seat hours of 8.1 while Natural Sciences and Mathematics have average weekly seat hours of 18.3. This reflects the diverse scheduling needs of differing disciplines, experiential setup and teardown, and the need for non-scheduled hours for ad-hoc student use.

Classroom Weekly Seat Hours

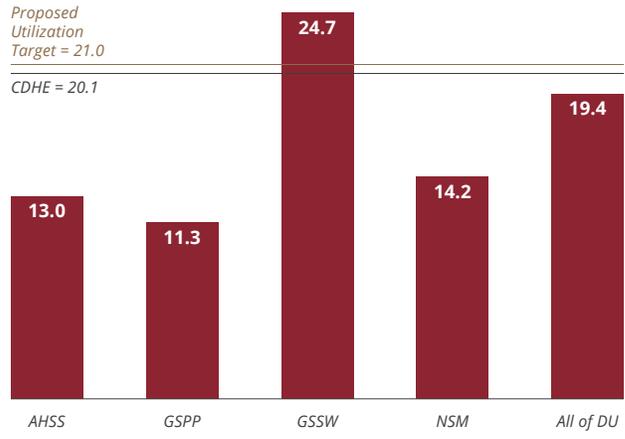


FIGURE 11: CLASSROOM WEEKLY SEAT HOURS

- CDHE Colorado Department of Higher Education
- AHSS Arts, Humanities and Social Sciences
- GSP Graduate School of Professional Psychology
- GSSW Graduate School of Social Work
- NSM Natural Sciences and Mathematics

SPACE NEEDS ASSESSMENT

Results of the utilization study, coupled with DU-supplied employee, research, and enrollment data became the foundation for a space needs assessment of the four primary units within this study. Data presented in this section is rounded to the nearest hundreds. Detailed data can be found at www.thesamiapp.com. This assessment quantified the amount of space within the units (377,300 NASF) and how much space is recommended for this baseline year (470,200 NASF). The outcomes informed the Campus Framework Plan by suggesting foundational decisions on space allocation:

Arts, Humanities and Social Sciences (AHSS).

Arts, Humanities and Social Sciences is the largest academic unit on campus, totaling over 186,400 NASF, excluding classrooms (see Classroom Demand below in Shared Spaces). Through a series of stakeholder sessions it was determined that AHSS needs an additional 29,700 NASF. This need includes the new Media, Film and Journalism Studies program, and student maker-space for informal access to machinery, computers/software, and other technologies.

Graduate School of Professional Psychology (GSPP).

The Graduate School of Professional Psychology requires additional academic office space to accommodate student interaction, private conversation, and computational research needs in addition to more study and academic support space. The School has an existing 11,000 NASF and would benefit from an additional 7,500 NASF. Aged buildings are not affording a level of private connection critical to the study of Psychology.

Graduate School of Social Work (GSSW). The Graduate School of Social Work needs additional office space as these rooms are used for collaborative learning, private faculty/student discussion, computational research, and materials resource repositories. The School also needs study and academic support spaces. Total need is 40,700 NASF, nearly double the existing 22,700 NASF.

Natural Sciences and Mathematics (NSM). The Division of Natural Sciences and Mathematics currently has 116,700 NASF, and through analysis and stakeholder discussion, it was determined that quality is the critical issue. An excess of ~3,200 NASF was found in class lab space, seemingly provided in lieu of quality and innovative laboratory layouts. Research labs have not adopted flexible module layouts, precluding principal investigators from sharing space, equipment, ideas, service/support areas, materials and more.

Shared Spaces. Classroom Demand studies acknowledged that classrooms are not discipline-specific and are sharable between units. Ayer Saint Gross evaluated current scheduling practices and determined that setting classroom metrics to 30 weekly room hours, 70% seat fill rate and 25 NASF per student seat would require 100 classrooms. Presently Registrar and existing departmental classrooms total 106 rooms. The classroom demand found a surplus of small classrooms—seating between 21 and 30 students, and a need for a single classroom that seats between 101 and 120 students. While the number of proposed classrooms is less than the existing inventory, the NASF of each proposed classroom is greater in order to support active learning. This translates to a proposed need for an additional 19,000 NASF of shared classroom space which would be under the purview of the Registrar.

Black Boxes—There is an overall need for black box space. These are highly flexible rooms with innovative A/V and projection technologies and diverse seating options. The need totals 22,000 NASF.

The Ayers Saint Gross data visualization tool—SAMI™
—is a cloud-based digital representation of this study.
Follow this link to view the results of these assessments.

www.thesamiapp.com

Username: Planning Team

Password: crimsongoldDU17

Recommended Space Needs

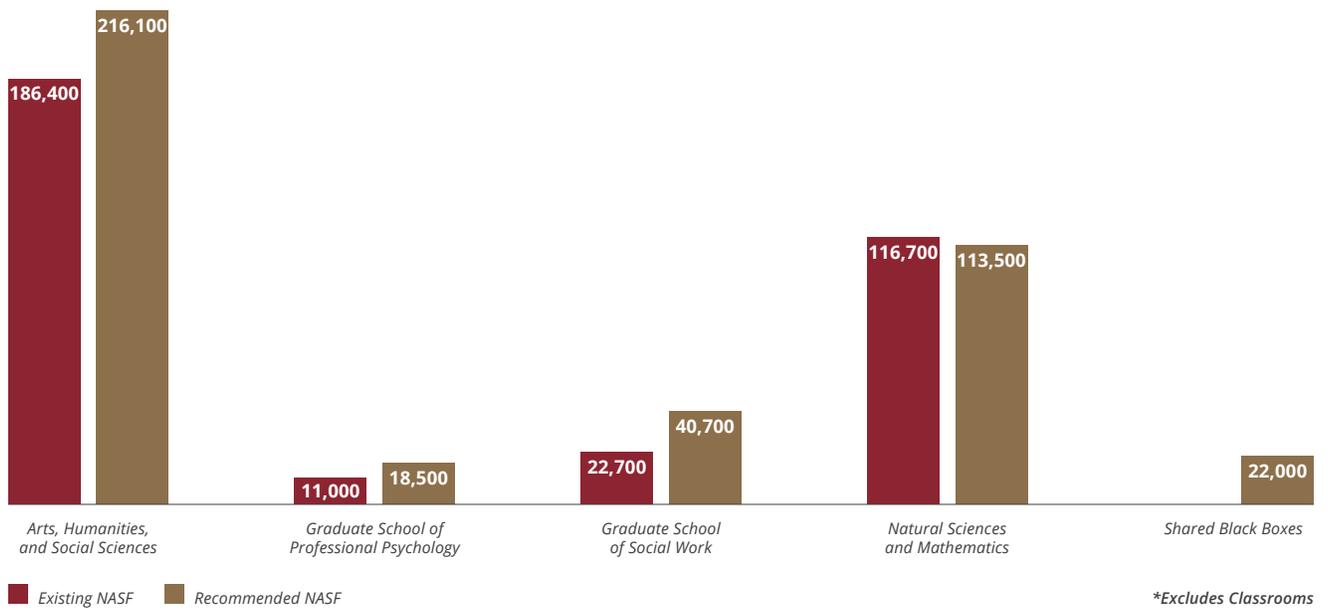


FIGURE 12: RECOMMENDED SPACE NEEDS

C.3 PROCESS: BUILDING PORTFOLIO

To strategically approach investments in facilities, the University developed the Integrated Facilities Plan (IFP) in 2007 to manage deferred maintenance needs. The IFP considers several factors including condition, each building's value to the campus legacy, condition and adaptability to meet modern needs.

To contribute to the educational mission of DU, each facility must be able to serve its function, have a sound envelope, contribute in a positive way to the overall campus aesthetic and offer a density that is appropriate for its location. The IFP qualified existing facilities in the categories of Millennium, Legacy, Beneficial and Transitional Buildings.

- Millennium buildings are well-constructed facilities, built since 1994 to a multi-century standard.
- Legacy buildings have strong historical heritage for the University and warrant preservation.
- Beneficial buildings do not have historical heritage for the University, but continue to serve University needs.
- Transitional buildings have been identified as poor-quality assets where further investment is not warranted.

The Campus Framework Plan links this IFP with current campus needs to identify an approach for planned renovations, new construction and select demolition as appropriate.

The Campus Framework Plan acknowledges that the way students will learn and faculty will conduct research will change over time due to technology and other influences. This will require key renovations and investments in existing facilities.

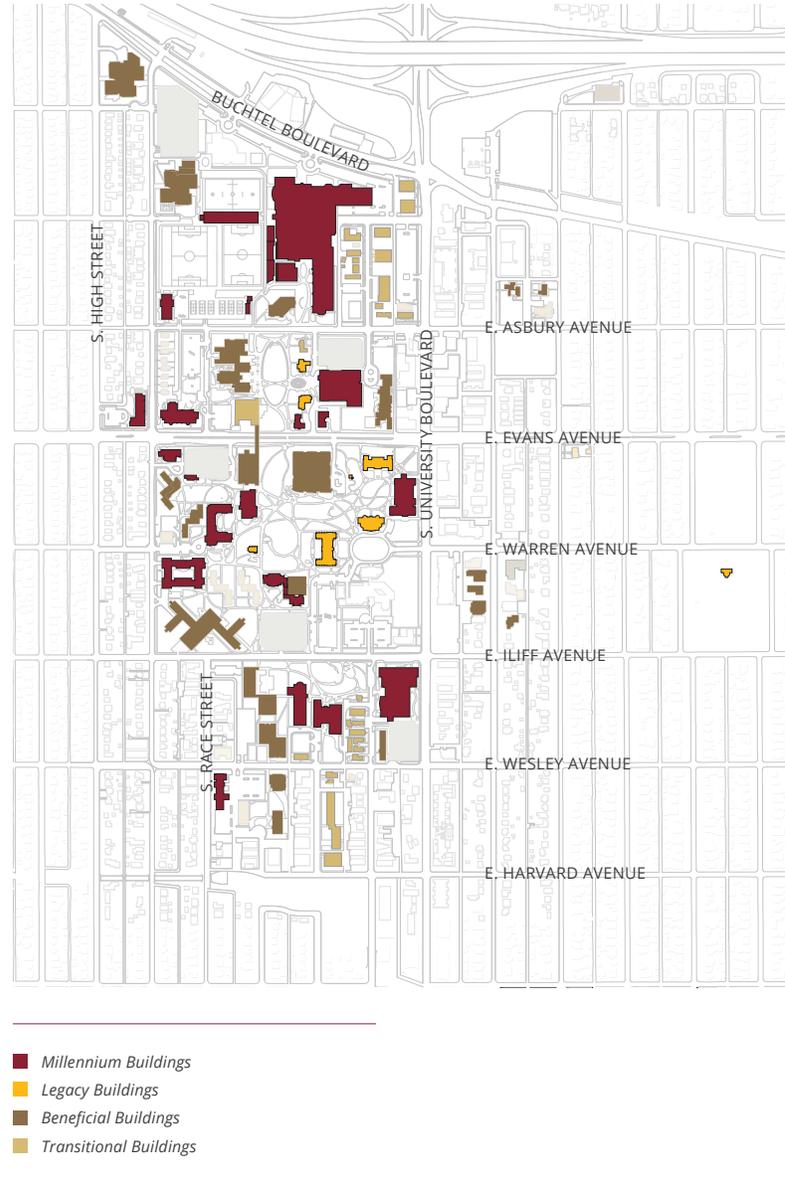


FIGURE 13: BUILDING PORTFOLIO CATEGORIES

A Market Assessment was undertaken to assess opportunities to use DU's real estate assets to improve its competitiveness, increase campus vibrancy and neighborhood connections and create a great college town at DU.

A series of goals for the college town development helped guide the focus of this assessment.

- Housing: Improve housing options for faculty, staff, graduate students and upperclass undergraduate students.
- Retail: Establish true commercial corridor(s) with distinctive retail and restaurants with convenient access to parking.
- Innovation: Establish a physical node for the entrepreneurship and innovation ecosystem.
- Hospitality: Provide a resource for visitors and students that catalyzes development.
- Welcome Center: Provide a clear entry point for prospective students and their families as well as for new visitors to campus.



DURING THE MARKET ASSESSMENT WORKSHOP, OPTIONS WERE STUDIED USING A WORKING MODEL. THIS ALLOWED PARTICIPANTS TO BETTER VISUALIZE THE PROPOSALS ON SITE.

Student Population Housing Analyses: Summary Table	ON-CAMPUS: RESIDENCE HALL (furnished, includes utilities, spare amenities)		OFF-CAMPUS: MARKET RATE (indistinguishable from units in Denver market)	
	Source: Brailsford and Dunleavy		Source: HR&A Advisors	
BEDS/UNITS POPULATION	Beds Dec. 2016 Report	Beds 2017 Update	Units Low	Units High
UNDERGRADUATE	663	Demand met by planned Residence Hall	35	50
GRADUATE	603	473	40	50
DEMAND MEASURED	B&D estimated "latent demand" or currently unmet demand for student housing units that do not currently exist.		While derived from HR&A's annual demand estimates, Undergraduate and Graduate demand represent one-time demand given turnover rates for those populations.	
NOTES	<ol style="list-style-type: none"> 1. For graduate student off-campus market-rate demand, 50 units (high estimate) or 130 potential beds (using a conversion ratio of 2.6 beds per unit) have been subtracted from the B&D December 2016 estimate of on-campus (residence hall) beds, resulting in December 2017 demand of 473 beds. 2. B&D used a combined qualitative-quantitative methodology to determine potential demand for on-campus (residence hall) housing. Qualitative methods included surveys that assessed student preference. 3. HR&A assessed potential demand for off-campus market-rate housing using standard market preference analyses; HR&A did not conduct survey data among graduate/undergraduate students regarding location preference for off-campus market-rate housing versus on-campus (residence hall) housing. This type of analysis may be helpful as a next step for discussions related to off-campus student housing. 4. Please note that 85% of market units are occupied by current students. 			

FIGURE 15: DEMAND & ADR GROWTH UNIVERSITY PARK HOTEL COMPS

HOUSING DEMAND

The Market Assessment included a detailed housing market demand study, which informed the program definition of a preferred development scenario. The study investigated public, faculty, staff, graduate, and undergraduate student demand for new construction of off-campus market-rate housing near DU. It also tested the feasibility of potential development based on the depth of the regional market, review of associated product types, and consideration of potential subsidy.

The market potential indicates

- 85% of annual demand is for apartments, mostly for young professionals seeking 2-bedroom units.
- 375-665 new market rate apartments are expected to be demanded over the next five years, in addition to those units already in the current pipeline for development.
- In the next 15 years, 2,500-3,650 is the potential demand for new market rate apartments.

The DU Faculty and Staff demand includes

- 60-75 faculty and staff market rate units are in demand over the next five years. 185-270 faculty and staff market rate units are in demand over the next 15 years.

- 85% of faculty and staff demand is for rental apartments.
- Stick built and some subsidy drives additional demand for 20-25 more rental apartments over five years.
- 65-80 additional faculty and staff households may choose to live near campus if further subsidies are provided that make housing units more affordable.

ON-CAMPUS STUDENT HOUSING

Parallel to the study of market-rate housing demand, an assessment of on-campus housing was also completed. This work resulted in the proposal to relocate all first- and second-year housing to a central location on campus. This central location will help support a strong sense of community. Third- and fourth-year housing is suggested to be relocated at the campus perimeter locations along High Street and Buchtel Boulevard.

RETAIL DEMAND

Vibrant retail enhances the DU experience and can help attract and bolster reputation among prospective faculty, students, and residents. Retail rents near DU are competitive with destination centers in the city. There is an opportunity to incorporate a wider variety of

Demand & Average Daily Rate (ADR) Growth: University Park Hotel Comps

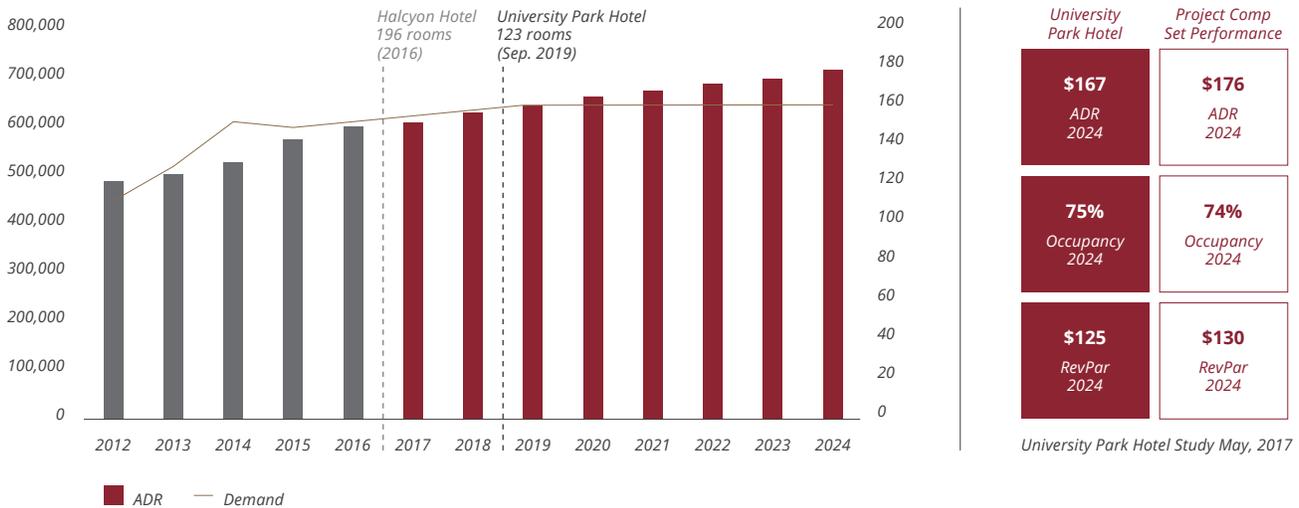


FIGURE 15: DEMAND & ADR GROWTH UNIVERSITY PARK HOTEL COMPS

establishments, including more full-service restaurants, distinctive products and neighborhood services. The following areas of retail potential were identified:

- 65,000 square feet (SF) of Comparison Retail (clothing and accessories, general merchandise)
- 35,000 SF of Convenience Retail (health, miscellaneous)
- 35,000 SF of Full-service Restaurant and Local Food and Beverage

A recommendation of this analysis is to continue to study establishing a Business Improvement District (BID) or market district for this area to help support the development of a cohesive and vibrant college town atmosphere.

INNOVATION DEMAND

There is a burgeoning market for co-working and innovation spaces, particularly outside Denver’s Central Business District. DU can leverage current academic position and proximity to downtown Denver to expand innovation space. The space could serve as a meeting place to assemble students, alumni, corporate partners,

and community members. The space should feature DU student and faculty companies and products. Development opportunities include:

- Creating 20,000–30,000 SF of innovation and shared working space.
- Locating uses on the ground floor to have desired community-building impact.
- Developing DU administrative and clinical space.

HOSPITALITY DEMAND

Despite attracting large crowds for major sporting and entertainment events, there are no hotels existing or planned immediately in the vicinity of DU’s campus. DU’s previously-commissioned University Park Hotel study estimates market potential for a hotel near DU as ADR growth is projected to continue even if demand stabilizes. Together, potential University ownership, access to transit, a potential nexus with the school of hospitality, and the potential retail and residential development adjacency suggest DU can support a hotel on site.

SECTION D

CAMPUS

FRAMEWORK PLAN

D.1 SIGNAGE & WAYFINDING

The objective of the signage and wayfinding guidelines is not only to provide much-needed wayfinding clarity on campus. It is crucial to develop a system that is welcoming to all individuals from the University of Denver's diverse, urban setting.

The proposed signage system reinforces this sentiment, speaking to the growing Latino/a community with the inclusion of both Spanish and English. Banners and gateway pylons include the message "welcome" in multiple languages and identification signs offer an added level of information, guiding pedestrians to accessible entrances.

The signage and wayfinding guidelines deliver a methodology for implementing future signage at the University of Denver. It includes general recommendations for an integrated system approach to vehicular and pedestrian directional signage as well as entrance markers to strengthen the identity and physical environment of the urban campus.

METHODOLOGY

Wayfinding begins before a visitor arrives at a destination, and signage is only one tool in the wayfinding continuum of experiences and information that guide people to points of interest. Web sites, print collateral, apps, event advertising, and personal conversations are other examples of wayfinding tools that help guide audiences before they arrive.

Signage is primarily intended for first-time or infrequent visitors, and is divided into two hierarchies: vehicular signage and pedestrian signage. Vehicular signage guides to parking and key destinations, while pedestrian signage provides orientation and guidance to destinations when traveling on foot.

Due to legibility constraints, signs cannot and should not list every possible destination. This would result in confusion and illegibility, especially for first-time visitors looking for the highest level of information only. Therefore, a hierarchy of destinations is applied to the University of Denver's wayfinding program, based on the importance and frequency of visitors, new students and the community. The system of signs and messages reinforces the institutional brand while delivering clear and simple navigational guidance.

OBSERVATIONS AND RECOMMENDATIONS

To better understand the current signage and wayfinding strategies on campus, the design team analyzed the campus setting, circulation patterns and sign types. The qualitative and quantitative information gathered during this phase is summarized into the following key observations and recommendations.

Gateways. There are few existing gateway signs. A major goal of this effort is to identify opportunities for a branded presence within an urban setting. How do visitors know when they've arrived on campus? A proposed illuminated pylon, located at the University of Denver RTD station, serves as a beacon from I-25, as does a sign spanning the RTD bridge on University Blvd. Additionally, appropriately scaled pylons at primary and secondary edges are proposed.



FIGURE 16: RTD BRIDGE GATEWAY

Vehicular Signs. Pole-mounted vehicular signs exist along the edges of campus, but are under-scaled and over-messaged. The recommendation is to increase the type size and provide information to parking and key destinations.

Parking Signs. Existing lot signs are inconsistent in scale and message. A consistent pylon sign is proposed for all lots and garages. Parking lot identification signs for major lots and garages will house an electronic screen to accommodate changeable lot information for events including the potential to also display the number of available spaces. This plan also recommends developing an updated parking lot naming convention to help with wayfinding and arrivals to campus.

Pedestrian Directional Signs. Pedestrian directional signs are sparse on campus. The recommendation is to add this sign type to key decision-making points on campus. At the pedestrian level, design gestures of the sign family become more tangible. The signs are designed with three parallel panels mounted atop the base and Mount Evans, seen at the top of the sign, becomes a cut-through element with a small snow ledge.

Building Identification Signs. While building identification signs do exist and are implemented well across campus, it is the recommendation of the committee to replace all existing signs for consistency. This sign type takes cues from the pedestrian directional signs in material and form and will be placed near the primary entrance of each building. In most cases, buildings will receive two identification signs. Existing etched lettering on and near buildings is to remain as part of the overall aesthetic of the campus.

Map Kiosks. Map kiosks are designed with an enclosure to house an electronic screen. This allows students to access multiple layers of information, such as ADA Routes, message translations and departments within buildings. Serving as an orientation tool, proposed map kiosks are located near parking and in key locations in the heart of campus.

Banners. As a reinforcement of the University brand, a system of banners is proposed down major streets.

Design. Signage is one of the first things a visitor sees when arriving on campus. It is an important opportunity to introduce and reinforce the University of Denver brand. Signage incorporating the University's Graphic Standards creates a sense of place for students, visitors, faculty and staff. The University of Denver's existing Graphic Standards are extended to meet the legibility demands of signage while retaining the look and feel of the brand. The full logo is represented on vehicular signage as a visitor's first impression. Elements of the University shield are extruded as imagery on the back of the sign panels. At a pedestrian scale, the shield is used as a primary brand element. Sign colors and finishes are designed to feel appropriately contemporary. The proposed signs are a charcoal color, bold enough to notice, but not too bold to deter from the environment in which they are located. The materials and finishes deliver both daytime and evening legibility. White sign messages are designed to have the highest contrast relationship to the background panel. Crimson is the University's primary brand color and plays a big role in the institution's graphic identity. Elegant accents of this brand color reinforce the brand aesthetic.

SEQUENCING

For implementation of the signage family across campus, sequencing by sign type is recommended as there is an economy of scale when fabricating like sign structures. Pylons at Evans Avenue and Buchtel and University are priority locations for entrance signs. Vehicular directional signs and parking identification signs should be implemented in tandem for cohesive messaging. Map kiosks and pedestrian directional signs should be considered next priority as these existing sign types are sparse on campus. And lastly, freestanding building identification signs should replace the existing system for consistency across campus.



Lightrail Station Pylon



University & Buchtel Pylon



Evans Pylon



Typical Banner

A conceptual design for signage and gateways has been shown for illustrative purposes. The final design will include a refined layout incorporating multiple languages and updated typefaces.

FIGURE 17: SIGNAGE AND WAYFINDING FAMILY



D.2 LANDSCAPE PROPOSALS

A series of landscape proposals work to establish a consistent approach to the campus open space. These proposals respond to both comments heard during our Define and Assess listening sessions and our team's observations while on site. A few overarching approaches to the pathway alignments, plantings and campus activation helped define the detail proposals.

PATHWAY ALIGNMENTS & SIMPLIFIED GROUND PLANE PLANTINGS

Establish key linear pathways that allow for seamless navigation and improved wayfinding. Simplify ground plane plantings to reinforce open quadrangles with long views.

To help with navigation of campus, a few linear pathways and sidewalk connections that connect key destinations are suggested, as shown in figure 18.

The development of the Gaylord Street Pedestrian Mall, figure 19, connects central to southern campus. Currently part of the metered parking on Gaylord Street (Lot 301), the pedestrian mall reclaims surface parking for pedestrian use and safety. This major connection provides a pleasant and safe pedestrian experience, lined with shade trees, a low seat wall, flexible furniture, and even the potential for pedestrian gates anchoring each end of the experience.

Simplify ground plane plantings to establish longer, uninterrupted views across select campus open spaces. An example of this simplified planting approach is the recent removal of overgrown shrubs within the Harper Humanities Garden immediately west of the Mary Reed Building. The removal of these shrubs allows long views across the space and has the added benefit of helping with navigation. An additional opportunity for simplified plantings is the planned update to the pedestrian gateway at the Intersection of Evans and University, figure 20. The walkway is currently bound closely with shrubs on either side and interrupted with plantings in the middle of the pathway. The plan proposal recommends setting back plantings away from the pathway and eliminating the planting strip within the path itself.



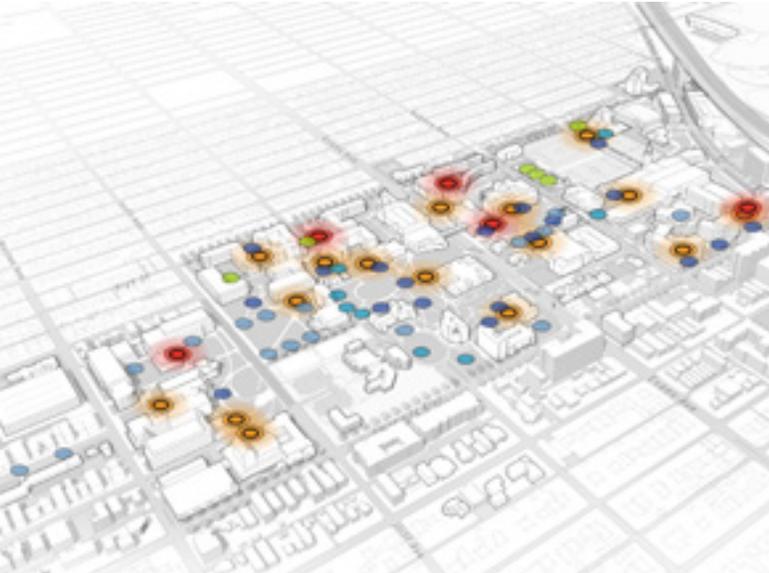
FIGURE 18: KEY LINEAR PATHWAYS



FIGURE 19: PROPOSED GAYLORD STREET PEDESTRIAN WALKWAY



FIGURE 20: PEDESTRIAN GATEWAY AT UNIVERSITY AND EVANS BOULEVARDS



-
- *Outdoor Classrooms*
 - *String/Café Lights*
 - *Hammocks*
 - *Café Seating Tables and Chairs*
 - *Bench Seating*
 - *Basketball Courts*
-

FIGURE 21: CAMPUS ACTIVATORS

CAMPUS ACTIVATORS

Invest in movable seating and campus activators that encourage social interaction, extend outdoor activity across the seasons, allow for outdoor learning and add vibrancy with light, color, and shade.

The addition of flexible furniture and landscape elements at key locations across campus provide opportunities to meet and enjoy the open space of campus. Selectively adding these elements close to food, major building entries and gathering spaces allows for casual conversations and everyday experiences to be taken outdoors. A combination of moveable furniture, string lights, firepits, hammock groves, basketball courts, and shade structures all work together to create these nodes across campus. Many potential locations for these elements have been identified and are shown in figure 21.



FIGURE 22: HAMMOCKS AS CAMPUS ACTIVATOR



FIGURE 23: ADIRONDACK CHAIRS AS CAMPUS ACTIVATOR

Several City and County of Denver owned and operated streets traverse the University of Denver campus. Through the development of the Campus Framework Plan, the University and City collaborated to develop candidate conceptual designs for each of these streets.

While further planning and design is necessary for many of these streets, these concepts represent the University's long-term aspirations for each corridor.

Great Streets are a key component of the open space network of the Campus Framework Plan. They are safe streets for all users and all mobility types. These streets provide a strong sense of place and contribute to the campus and university neighborhood identity. Great Streets are sustainable, integrate best management practices, and align to the city's Vision Zero goals. Festival streets are established where appropriate to provide safe and pleasant experiences for pedestrians. These streets achieve safety and placemaking, clearly defining these streets as a contributing factor to the DU open space network.

Improved pedestrian and bicycle safety is a key component of Great Streets. The separation of pedestrian pathways and bike lanes and bikeways helps eliminate potential conflicts. Updated pathways and bikeways were identified to support this goal. Bike connections link to the larger Denver bicycle networks as identified in Denver Moves: Bicycles and integrate with city connections along Buchtel Boulevard, Asbury Avenue, Iliff Avenue, and High Street.

Streetscape improvements have been identified for High Street, Asbury Avenue, Iliff Avenue, University Boulevard, Buchtel Boulevard and Evans Avenue.

BUCHTEL BOULEVARD

Buchtel Boulevard forms a barrier between RTD's University of Denver Station and campus destinations to the south. Many DU students also live in the apartment buildings north of Buchtel Boulevard. The University recently participated in the Multi-station Plan & Mobility Study (2017) which identified a preferred concept for Buchtel Boulevard that includes a landscaped median where right-of-way width allows, one travel lane in each direction, on-street parking, a two-way cycle track on the south side of Buchtel Boulevard and a wide sidewalk on both sides of the street. Clear Illustrations and plans for Buchtel were completed by the City as part of their next steps study. Some of these improvements are a continuation of plans approved in the Denver 2017 General Obligation (GO) Bond project. However, it is important to note that only the section of Buchtel Boulevard between University Boulevard and east to Colorado Boulevard is funded as part of the GO Bond. As a result, continued planning with city staff and City Council is required to plan and fund improvements on the sections of Buchtel Boulevard west of University Boulevard through multi-year Capital Improvement Plan (CIP) funding.

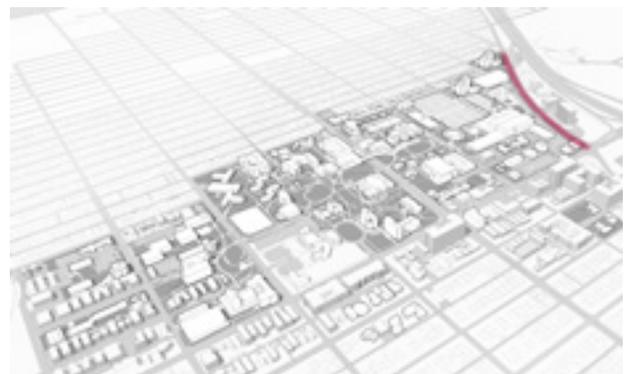


FIGURE 24: BUCHTEL BOULEVARD—LOCATOR MAP



FIGURE 25: BUCHEL BOULEVARD—EXISTING STREET SECTION, LOOKING EAST



FIGURE 26: BUCHEL BOULEVARD—PROPOSED STREET SECTION, LOOKING EAST

HIGH STREET

Proposals on High Street include the removal of the on-street parking and the addition of bike lanes heading both north and south within the street. This can all be accomplished within the current curb-to-curb dimension. Consistent treatment of street plantings, the integration of green street strategies identified in the City and County of Denver Ultra-Urban Green Infrastructure Guidelines and light banners work together to help define High Street as a key connector street for DU.

High Street is the first continuous north-south street west of University Boulevard. Its continuity, in addition to the generally high levels of pedestrian activity and lack of dedicated bikeways within campus, make it an ideal route for north-south bicycling. The proposal for High Street is to remove on-street parking and to install bike lanes. This proposal creates a more user-friendly bikeway than what is proposed by Denver Moves: Bicycles. Bike lanes may continue to be appropriate even as a dedicated bikeway is provided within campus, approximately along Race Street.

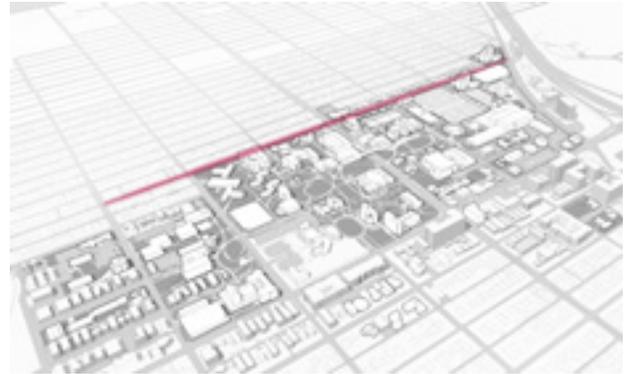


FIGURE 27: HIGH STREET—LOCATOR MAP



FIGURE 28: HIGH STREET—EXISTING STREET SECTION, LOOKING NORTH



FIGURE 29: HIGH STREET—PROPOSED STREET SECTION, LOOKING NORTH

UNIVERSITY BOULEVARD

University Boulevard is re-envisioned as a vibrant retail street adjacent to the college town development on the 6-acre site. Maintaining the existing travel lanes, University Boulevard proposals occur in the right-of-way. Consistent street tree plantings, green streets that support the City and County of Denver Ultra-Urban Green Infrastructure Guidelines and lights with DU-branded banners help shape the experience. The most defining elements of University Boulevard is the addition of a café zone adjacent to active retail space where restaurants and shops can provide outdoor seating and display areas. Together, these solutions work to establish a vibrant experience for University Boulevard.



FIGURE 30: UNIVERSITY BOULEVARD—LOCATOR MAP

ASBURY AVENUE

Asbury Avenue is proposed as a festival street. Designed to be able to accept daily traffic, but also be closed to traffic at daily scheduled times or for special events, the Asbury Avenue proposal builds upon recent pedestrian safety investments by the University.

Asbury Avenue separates many of the University's athletics and recreation facilities from the primarily academic destinations to the south. Pedestrians constitute most of the users on Asbury Avenue between High Street and University Boulevard; on a typical weekday 10,160 pedestrians cross Asbury Avenue while only 4,700 vehicles travel along Asbury Avenue. Within the University's boundaries, approximately half of the people driving on Asbury Avenue (51 percent) are bound for University parking facilities while the other half (49 percent) are through trips.

The proposed concept for Asbury Avenue is a regular closure street that could be closed at daily scheduled times or for special events. Within the street closure gates, the street will be highly pedestrianized by removing vehicular traffic, raising the roadbed and eliminating the curb, encouraging pedestrians crossing in the recently-improved



FIGURE 33: ASBURY AVENUE—LOCATOR MAP

wide crosswalks. Street closure gates would still allow for bicycle access, ensuring overall system-wide connectivity for people biking with the neighborhood bikeway proposed by Denver Moves: Bicycles. East of York Street, Asbury Avenue can be activated into a lively, commercial street with pedestrian-oriented land uses.

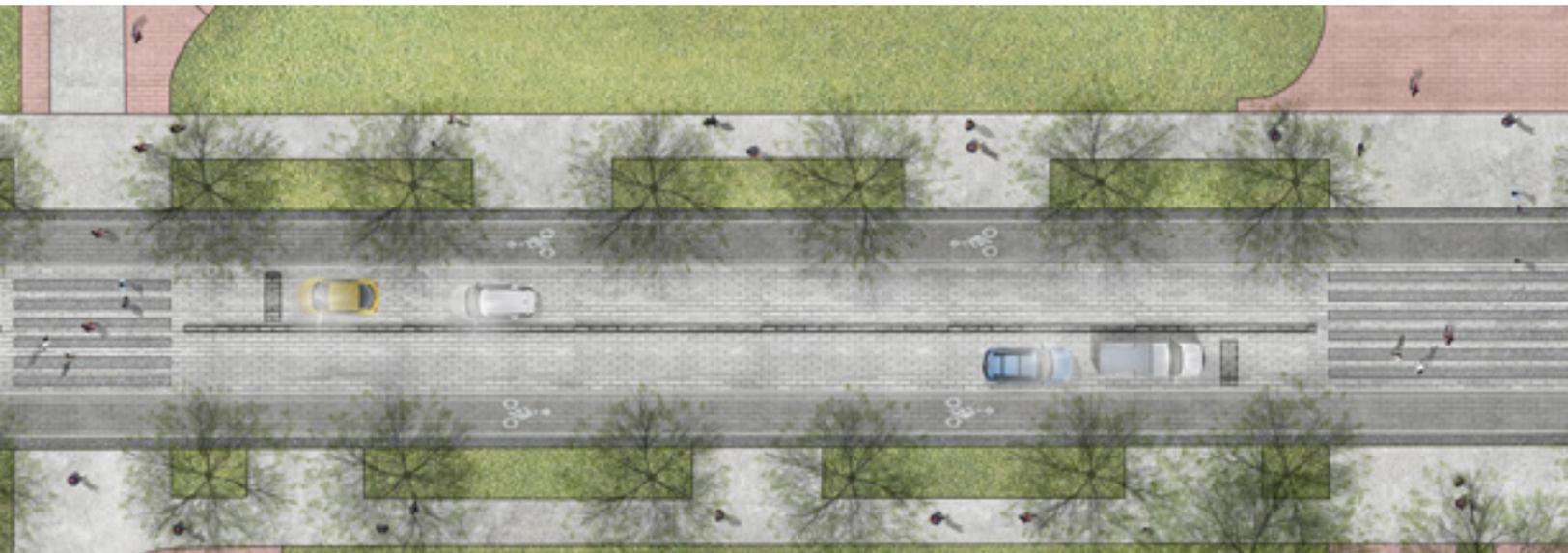


FIGURE 34: ASBURY AVENUE PROPOSED PLAN



FIGURE 35: ASBURY AVENUE—EXISTING STREET SECTION, LOOKING EAST



FIGURE 36: ASBURY AVENUE—PROPOSED STREET SECTION, LOOKING EAST

ILIFF AVENUE

A second festival street is proposed for Iliff Avenue. Like Asbury Avenue, Iliff Avenue is designed to be able to accept daily traffic, but be closed for special events. The plan suggest a special treatment of the pavement within the roadbed. A differentiator between Iliff Avenue and Asbury Avenue is the inclusion of bike lanes within the street consistent with the proposed bike lanes from Denver Moves: Bicycles.

Many newer or future destinations, such as the Ritchie School of Engineering and Computer Science, are south of Iliff Avenue. Pedestrians constitute most users on Iliff Avenue. On a typical weekday 6,100 pedestrians cross Iliff Avenue while 4,900 vehicles travel along Iliff Avenue.

The proposed concept for Iliff Avenue is a regular closure street that could be closed at regularly scheduled times or for special events. Within the gates, a pedestrianized street with wide crossings would facilitate high levels of pedestrian activity during these special events.



FIGURE 37: ILIFF AVENUE—LOCATOR MAP

North-South Bikeways

Many of the proposals for corridors through or adjacent to campus will improve access to campus for bicyclists. Additionally, the University will enhance options for bicyclists by establishing continuous north-south separated paths approximately along Race Street and York Street.



FIGURE 38: ILIFF AVENUE PROPOSED PLAN



FIGURE 39: ILIFF AVENUE—EXISTING STREET SECTION, LOOKING EAST



FIGURE 40: ILIFF AVENUE—PROPOSED STREET SECTION, LOOKING EAST

EVANS AVENUE

Evans Avenue bisects the campus, with significant campus destinations on both sides. It is also a busy arterial street, carrying high traffic volumes through campus (29,000 vehicles per day). These traffic volumes and the speed at which they travel create safety concerns for students, faculty, staff and visitors and impact campus quality of life.

Including crossings on the Driscoll Bridge, over 15,600 people cross Evans Avenue on a daily basis between Franklin Street and University Boulevard. In peak times between classes, the number of people crossing Evans Avenue is higher than the number of vehicles on Evans Avenue. Additionally, the rate of pedestrians crossing against the signal is high, 61 percent daily, indicating a need to consider both physical and operational improvements to improve convenience and safety for all street users.

Significant improvements aimed foremost at pedestrian safety have been identified for Evans Avenue. A new “Z” crossing is proposed at the current pedestrian crossing at Evans Avenue. This crossing is preferred as it forces pedestrians to look at incoming traffic before crossing the street. Two additional pedestrian crossings are identified for Evans Avenue between High Street and University Boulevard. The perception of narrowing the roadway is

accomplished with the addition of a contracting gutter pan at the curb’s edge and the narrowing of the traffic lanes. Aesthetic improvements are envisioned for Evans Avenue including consistent street trees and plantings, light pole banners and the addition of median pylons marking the edges of campus.

The proposed concept for Evans Avenue generally aims to calm traffic on Evans Avenue and to provide increased crossing opportunities. Traffic calming will be achieved with lane narrowing, turn lane removals or reductions and coordinated traffic signals. New crossings will be located to reduce the typical distance between crossings from 650 feet to 370 feet.

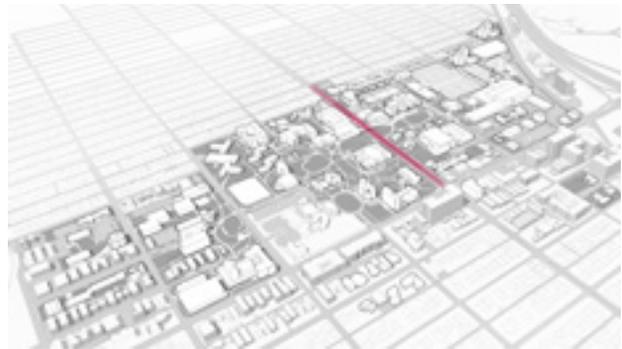


FIGURE 41: EVANS AVENUE—LOCATOR MAP

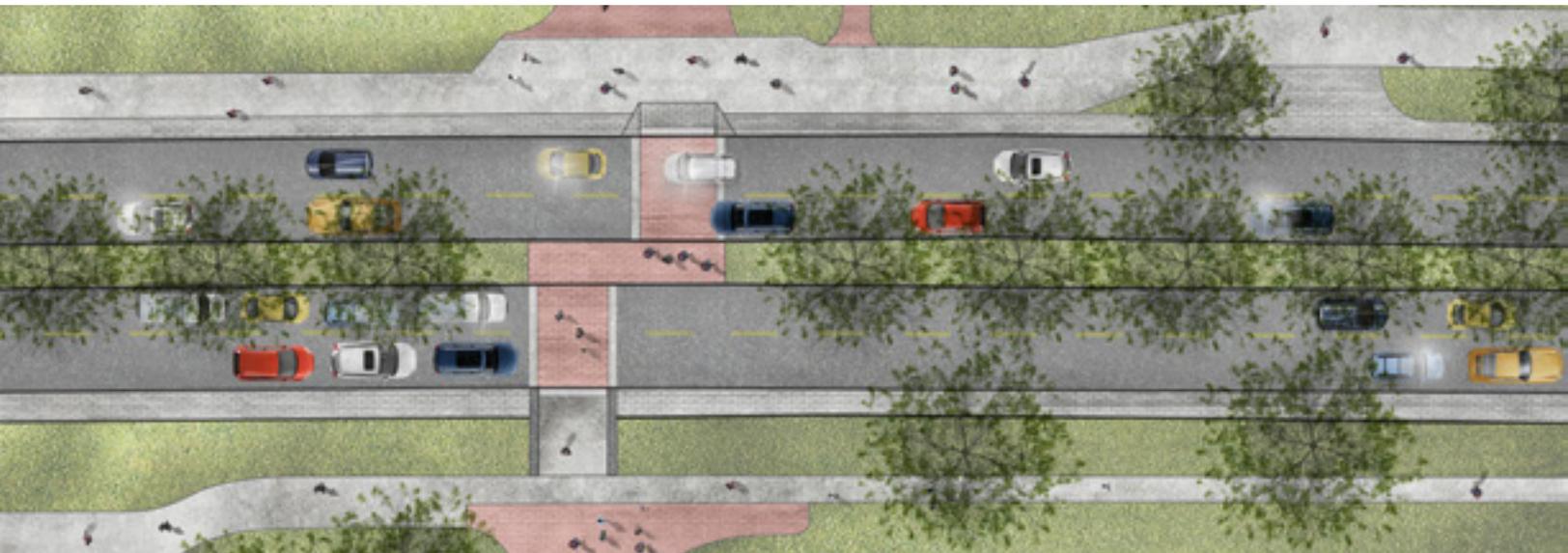


FIGURE 42: EVANS AVENUE PROPOSED PLAN, CROSSING AT UNIVERSITY GREEN

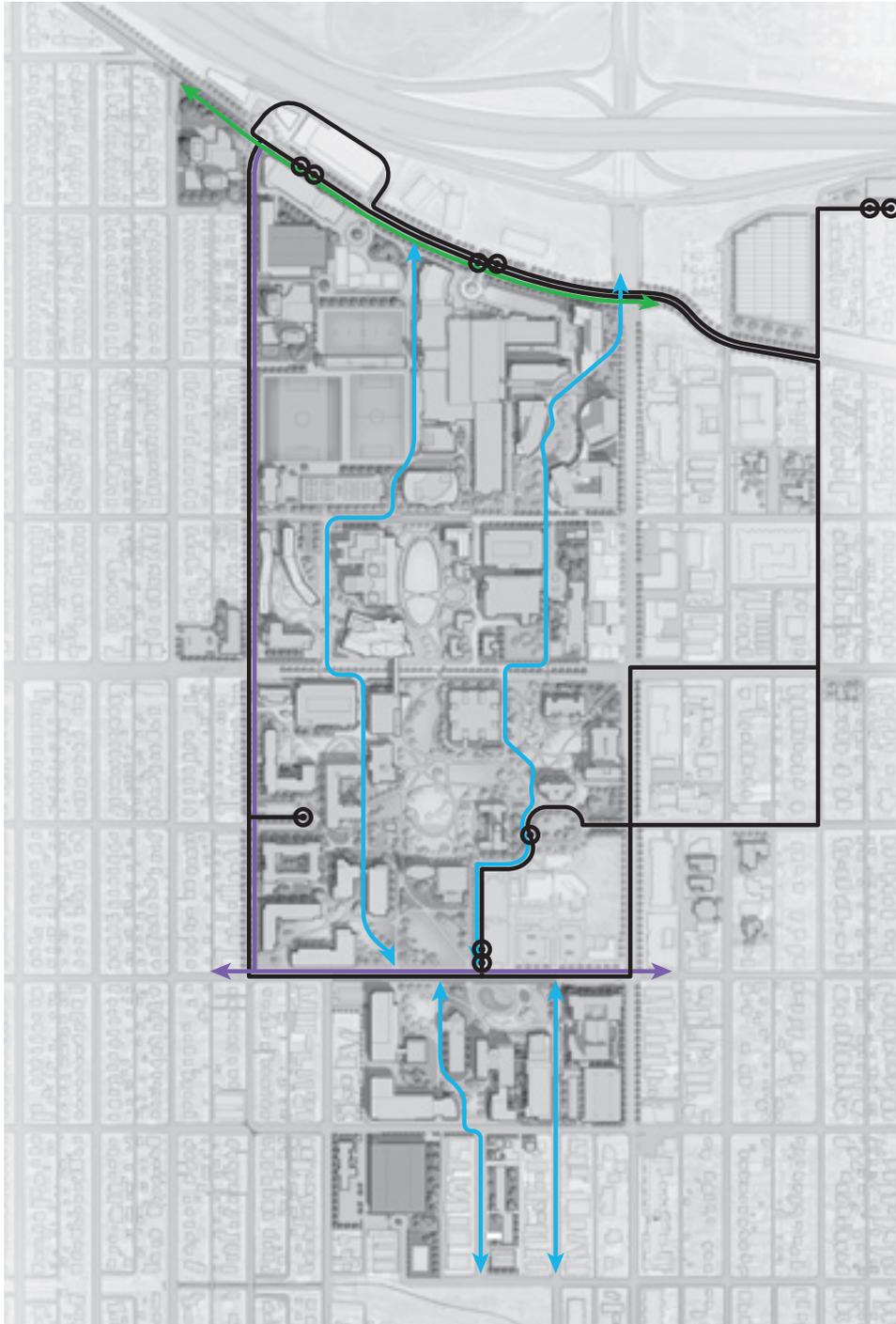


FIGURE 43: EVANS AVENUE—EXISTING STREET SECTION, LOOKING EAST



FIGURE 44: EVANS AVENUE—PROPOSED STREET SECTION, LOOKING EAST

D.4 MOBILITY RECOMMENDATIONS



- Shuttle Stop
- Shuttle Route
- Cycle Track
- Bike Lanes
- Bike Route

FIGURE 45: PROPOSED SHUTTLE AND BIKE FACILITIES

The University will strive to provide an array of mobility options.

These mobility recommendations will improve the campus' sustainability by reducing Greenhouse Gases (GHG) and air pollutant emissions, create reliable and resilient transportation options, reduce transportation-related costs and space requirements, and increase mobility options for the surrounding community. Many aspects of the Campus Framework Plan come from the University's *Campus Transportation Framework Plan* (2016).

PARKING

The paradigm for parking is evolving rapidly as autonomous vehicle technology improves and ride-hailing services expand. Although experts' opinions differ on timeline, many agree that parking demand will decrease as people are dropped off in autonomous, hailed vehicles rather than driving themselves and parking in a privately owned car. To strategically prepare for this paradigm shift, the University will maximize usage of its existing parking assets through better naming of lots, signage, and technology. Although new parking facilities will still be necessary in the near-term as the campus evolves, decisions for new parking will be scrutinized to maximize its long-term benefit to the University and to ensure that it is adaptable and complementary to nearby uses. Lastly, investments in alternative motorized transportation options, walking, bicycling, transportation demand management, and housing will minimize both near-term investments in parking and the overall amount of space on campus occupied by parking.

In the near term, the Campus Framework Plan proposes new parking facility nomenclature to make parking on campus simpler and more intuitive. Such naming will increase the ease of wayfinding and, when paired with consideration of parking permit changes, dynamic parking pricing and cohort parking restrictions, will create right-sized parking infrastructure that meets campus needs.

ALTERNATIVE MOTORIZED TRANSPORTATION

Alternative motorized transportation, such as transit, ride share, car share and electric vehicles, is a critical component of the University's mobility strategy. Each of these options, as well as shared mobility options such as bike share, will provide connectivity through a Mobility Hub at RTD's University of Denver Station. These options will build upon existing RTD light rail and bus service to create a variety of options for both the University and surrounding community.

In July 2018, the University launched a shuttle service that connects University of Denver RTD Station to campus and the surrounding community. This shuttle service is a fixed route campus circulator that improves access to key destinations on campus. It uses app-based technology for boarding and drop-off and to track the shuttle.

In the future, the University will work to increase alternative motorized transportation options by designating preferential parking and by inviting new vendors on campus. Additionally, as the use of Transportation Network Companies (TNCs), such as Uber and Lyft, increases, the University will work to establish safe and efficient pick-up and drop-off locations both for daily use and for special events. In most cases, these can look like on-street parking but with sort pick-up and drop-off time restrictions (two to five minutes). These locations will be identified through future building and street construction projects.

BIKESHARE AND BICYCLIST SUPPORT FACILITIES

In May of 2018, the University launched a pilot dockless bikeshare system. This system allows users to pick-up bikes from 20 designated zones on campus and ride them to other on-campus destinations or destinations in the surrounding community. After its May 2018 initial launch of 200 bikes for use by DU faculty, staff, and students, the system was already generating thousands of rides per day.

Support facilities for people biking will be expanded on campus and at the Mobility Hub at University of Denver Station. The Mobility Hub will be a key location for bikeshare, will provide short- and long-term parking facilities, and may also incorporate a staffed facility to provide information and repairs. The Community Commons project will provide shower access to people biking from longer distances.

Sustainability is the capacity to meet today’s environmental, economic and social concerns without inhibiting the ability of future generations to do the same.

DU has made significant strides in campus sustainability including a 36% reduction in greenhouse gas emissions between 2006 and 2017, a 30% reduction in water consumption between 2005 and 2014, and significant investments in supporting more sustainable means of transportation to, from and within campus. These efforts and more have earned the University of Denver a Silver rating from the American Association of Sustainability in Higher Education (AASHE) using the Sustainability Tracking and Rating System (STARS). DU is home to the Chester M. Alter Arboretum with about 2,100 trees representing more than 295 species and varieties, as well as dozens of shrub species that provide the landscape with year-round interest.

DU is a signatory to the Second Nature Climate Neutrality Commitment (formerly the American College and University Presidents’ Climate Commitment) and aims to achieve carbon neutrality by 2050. To meet this commitment, sustainability has not only been integrated into this Campus Framework Plan, but also DU IMPACT 2025 as Strategic Initiative 3. Financial support for sustainability initiatives on campus is provided via a revolving green fund established by the Board of Trustees in June 2017.

Because sustainability cuts across multiple elements of the Campus Framework Plan, opportunities are organized below within the other topics of this document—landscape proposals, great streets and mobility, and campus development.

LANDSCAPE PROPOSALS

The Denver metro area is a semi-arid, high plains ecoregion whose weather is significantly impacted by the Front Range of the Rocky Mountains. DU’s existing landscape features many plantings with high irrigation demand which conflicts with the institution’s semi-arid climate, increases DU’s environmental impact, and increases irrigation expenses. To improve DU’s conservation of water, current procedures to irrigate significant areas of campus will be amended to limit irrigation to heritage green spaces, key Alter Arboretum specimen trees, natural play fields, and portions of activated green spaces. Careful attention will be paid to fostering shaded areas to reduce heat-island effects. Xeriscaping and drought-resistant, adaptive landscaping will be introduced in more locations across campus to reduce irrigation’s expense and demand for water.

Xeriscaping is a landscape style that requires little to no irrigation and may include decorative rock beds and drought-resistant plantings. Many drought-resistant plants that are adapted to DU’s semi-arid climate need minimal water, some only during plant establishment. Transitioning non-heritage green spaces to xeriscaping and native plantings will simultaneously yield environmental benefits and further this plan’s objective to celebrate DU’s unique location in Denver and the Rocky Mountain West. Accelerating the shift started over the last few years from design dominated by irrigated lawns to one of xeriscape inspired design as showcased in the landscape approach to the south of the Sie Complex will result in a different approach to landscape maintenance which should be considered by the University as new areas of campus are converted to xeriscape.

In November 2017, voters in the City and County of Denver approved an ordinance requiring buildings of 25,000 square feet to dedicate a percentage of a building’s roof area to vegetative space. As the University develops projects proposed by this Campus Framework Plan, projects will need to comply with the ordinance. This new legislation is an opportunity to visibly construct sustainability on campus. Green roofs will support air quality, elongate the life cycle of roofing assemblies, reduce building energy consumption, manage stormwater, and create habitat in DU’s urban landscape.



FIGURE 46: EXISTING LIMITS OF IRRIGATION IN DROUGHT CONDITIONS



FIGURE 47: PROPOSED LIMITS OF IRRIGATION

Changing irrigation operations on campus to minimize environmental impact need not wait for the complete build-out of this Campus Framework Plan. This diagram illustrates irrigation priorities on today’s campus and supports reducing DU’s environmental impact now. As plan build-out advances, this diagram should be updated to reflect the changing composition of campus lands and align with the irrigation priorities articulated in the Plan.

GREAT STREETS AND MOBILITY

Great Streets integrate best management practices for stormwater management and safely accommodate the mobility needs of all users. The planting strips and tree pits indicated in nearly all streetscape improvements identified in the Campus Framework Plan should be built to support storm-water management in addition to providing aesthetic and habitat benefit. Plantings for streetscapes should aim to minimize irrigation demand through drought-resistant native plantings and xeriscaping.

When considering sustainable mobility along the Great Streets at DU there are two scales to consider: how faculty, staff, and students commute to campus, and how faculty, staff and students travel within campus and adjacent destinations. In general, mobility strategies on campus aim to maximize the safety and convenience of pedestrian, bicycle and transit systems for both kinds of mobility while reducing dependence on single occupancy vehicles as the former have lesser environmental impact than driving.

Initiatives within this plan to increase the availability of market-rate and affordable housing within close proximity to DU will in turn increase the probability that faculty, staff and students will walk, bicycle or use transit to commute to campus. Moving DU commuters out of their vehicles and into more sustainable, active modes of transportation is supported by improved pedestrian and bicycle safety measures described in the Mobility section. These same measures will support on-campus mobility and make it easier for members of the DU community to navigate safely and efficiently throughout the day.

CAMPUS DEVELOPMENT

Campus development described throughout the Campus Framework Plan reinforces the University of Denver 2025 Sustainability Goals. Developing the 6-acre site to include mixed-use development and creating a more porous campus edge will increase the University's role as an anchor institution in the community and draw new economic opportunity to the neighborhood. Increased porosity along the campus edge will also create a more welcoming campus.

Efforts to better engage South Campus and create better connectivity with open space and developing new STEM facilities will result in a more equitable campus experience. Signage and wayfinding efforts will further advance equity on campus by increasing the ease with which visitors and regular campus users are welcomed to DU and navigate to their destinations.

ENERGY AND GREENHOUSE GAS EMISSIONS

This Campus Framework Plan calls for a net increase in campus's building square footage which would naturally tend to increase carbon emissions. Future renovations and new construction of buildings and infrastructure, therefore, will need to emphasize strategies that reduce or minimize greenhouse gas emissions to support DU in achieving its carbon neutrality goal.

DU should pursue an Energy and Infrastructure Master Plan that responds to the Campus Framework Plan. Such work would include assessing the condition of existing energy-generating equipment, verifying thermal distribution conditions and existing capacity, categorizing building system conditions and planned upgrades, and consider regional district energy concepts.

This Campus Framework Plan also recommends complete implementation of an energy retrofit plan that evaluates successful energy conservation measures (ECMs) and targets similar endeavors across campus. During the process of this Campus Framework Plan, DU became a named party to a Request for Proposals by Colorado State University seeking one or more contracts that could facilitate the purchase of either wind or solar power to meet up to 100% of DU's annual electricity demand. It is recommended that this work proceed and that, if possible, on-site energy generation be integrated into future campus development to make sustainability visible on campus.

MOBILITY HIERARCHY DIAGRAM

Mobility planning at the University of Denver prioritizes pedestrian and bicycle mobility above other forms of transit because such forms have lesser environmental impact. The proposals in this Campus Framework Plan are intended to shift the modeshare of the campus population toward more sustainable means of transit and away from single occupancy vehicles.

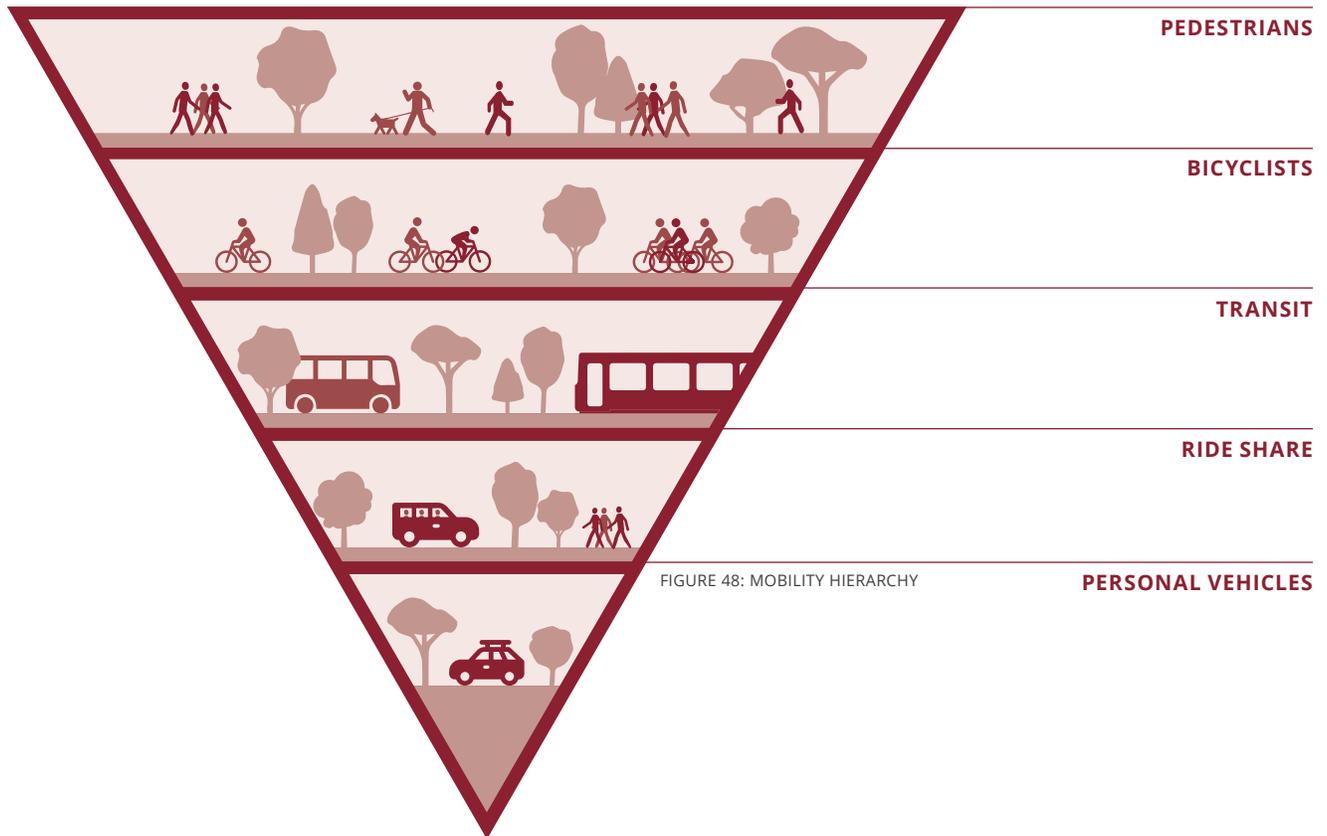
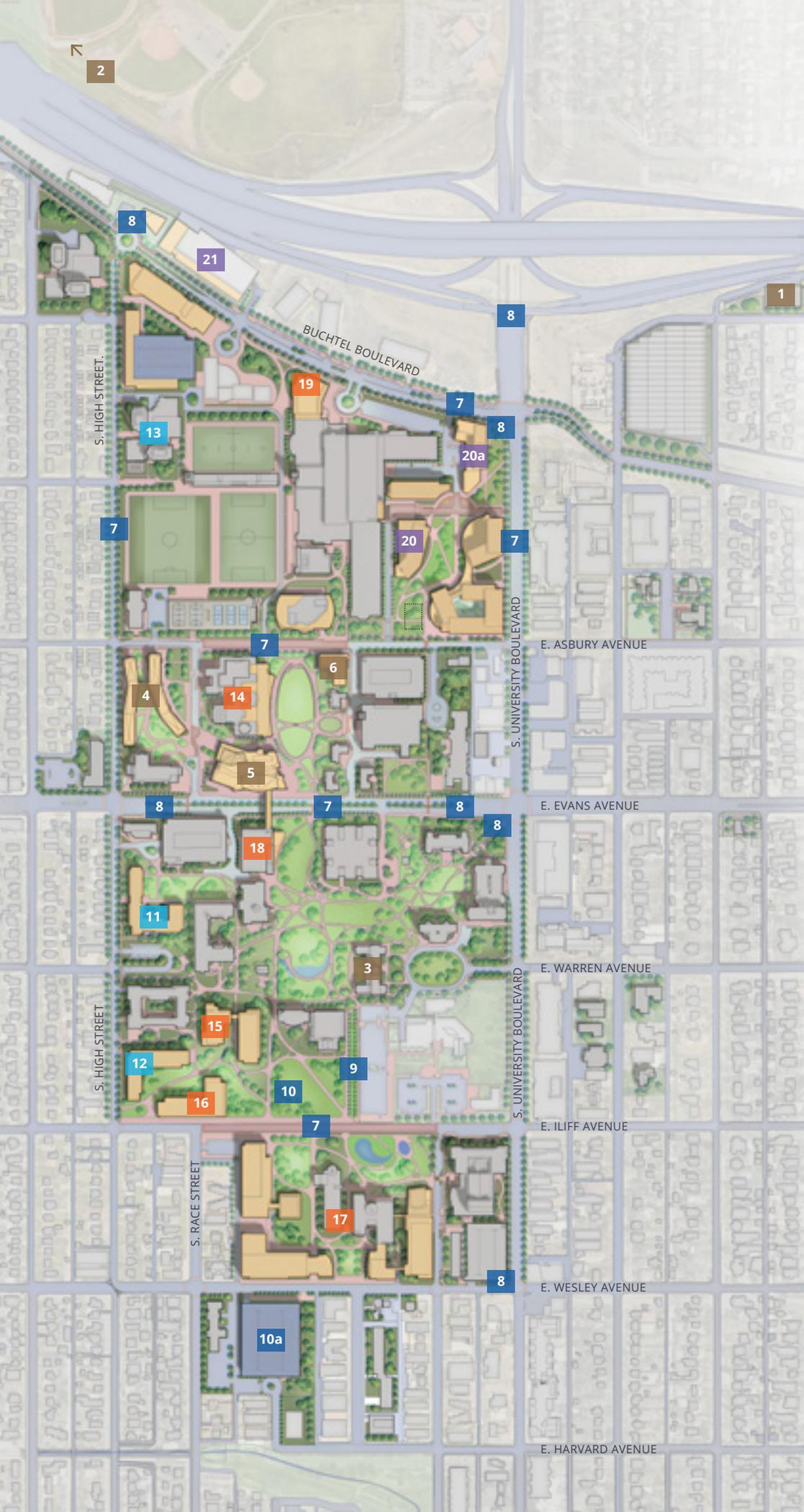


FIGURE 48: MOBILITY HIERARCHY



- Proposed Buildings
- Proposed Parking Garages
- Existing DU Buildings
- Existing Non-DU Buildings

FIGURE 49: CAMPUS FRAMEWORK PLAN-BY CATEGORY

The Campus Framework Plan provides a framework for development that supports the future academic, student life and community needs of campus.

ONGOING PROJECTS

- 1 Administrative Office Building promoting collaboration between key staff
- 2 Denver Tennis Park, a collaboration with Denver Public Schools and Denver Tennis Park, Inc
- 3 Refurbishing of the iconic Mary Reed Building
- 4 First-Year Residence Hall designed to engage students from day one
- 5 Community Commons with centralized dining facilities and student services
- 6 Pioneer Career Achievement Center for students and DU alumni

BETTER CONNECT THE CAMPUS

- 7 Streetscape Improvements including safer pedestrian crossings, better lighting, dedicated bikeways and improved mobility features for the disability community
- 8 Campus Gateways and Wayfinding including parking improvements, multi-lingual signage and better entries to the DU campus
- 9 Gaylord Street Pedestrian Mall
- 10 The South Green: By relocating the parking structure to the current Facilities lot (10a), a new green space will be created for the south campus

CONSOLIDATE UNDERGRADUATE HOUSING

- 11 Future High Street Residence Hall
- 12 Future Residence Hall improvements
- 13 Centennial Hall Renovation

SUPPORTING ACADEMIC PROGRAMS

- 14 Sturm Hall Renovation and Expansion
- 15 Graduate School of Social Work
- 16 Graduate Psychology Clinical Facility
- 17 STEM Quadrangle Development
- 18 Driscoll South Renovation
- 19 Sports Performance Facility

CREATING A GREAT COLLEGE TOWN

- 20 The "6 acres": A mixed-use redevelopment providing a hotel (20a), market rate and affordable housing, restaurant, retail, underground parking, welcome center, bookstore and other amenities for both the DU community and the surrounding neighborhoods
- 21 RTD station redevelopment: A public-private partnership to activate the plaza and create collaborative, clinical and maker-space options

The development of a great college town on the campus edge is a key initiative of the Campus Framework Plan. The proposed mixed-use development along University Boulevard will bring the destinations that the campus and greater community desire to the campus front door.

The college town development is planned to include a mixture of retail, hotel, office, innovation and graduate and market-rate housing. The hotel (20a) includes 130 guest rooms, conference and restaurant facilities and a rooftop lounge with views of the mountains. The ground level of the hotel will also provide space for a University of Denver Welcome Center (20b). Two mixed-use facilities (20c, 20d) along University Boulevard will provide market-rate housing on the upper levels, while preserving the street level for active retail and innovation office space. Here, visitors to campus and the neighborhood will be able to visit restaurants and shops, including the relocated DU bookstore. Two additional housing buildings (20e, 20f) are proposed to provide graduate, faculty and staff housing at a more accommodating price point while preserving the ground level for additional innovation office space. These facilities are served with a series of underground parking facilities.

New development along Buchtel Boulevard (21) is envisioned to continue the vibrant mixed-use corridor along the northern edge of campus. The existing parking structure at the intersection of High Street and Buchtel Boulevard will be demolished and replaced with a more efficient parking structure (21a) wrapped with student housing (21b) that will offer more independent living options on campus. Because of its proximity to the RTD station, this site offers a great location for additional retail and innovation office space (21c). The Campus Framework Plan also suggests a possible partnership opportunity to redevelop the RTD station by wrapping the existing garage (21) with new housing, retail, and clinical space. The redesign of the RTD garage will also reconfigure the bus and car drop-off, allowing the space immediately adjacent to the station to be redesigned as a green space (21d) with a covered pavilion. A new Sport Performance Facility (19) continues to add to the new and improved Buchtel Boulevard corridor.



FIGURE 50: DETAILED PLAN OF NORTH CAMPUS.

D.7 Campus Edges

FIGURE 51: VIEW OF CAMPUS PROPOSALS, LOOKING SOUTHWEST





New student life and academic facilities add to the vibrancy of the central campus.

The First-Year Residence Hall (4) will address current housing demands while also creating a strong community-based experience for first-year students in a central campus location. Expanded central dining and collaboration space will be provided within the Community Commons (5). Two new residence halls foster community building by clustering first- and second-year residences together at the center of campus (11,12). The renovation of Centennial Hall (13) is envisioned to complete this transformation. Career services will be relocated to the Pioneer Career Achievement Center (6) at a new visible location facing the Campus Green.

An addition and renovation to Sturm Hall (14) will provide space for the Arts Humanities and Social Sciences. The relocation of the DU bookstore out of Driscoll South (18) and into the college town development will allow for that vacated space, along with an addition to the facility, to be renovated into flexible classrooms. Facilities have also been identified for The Graduate School of Professional Psychology and the Graduate School of Social Work (15,16). The iconic Mary Reed Building (3) will be renovated to help this building once again realize its full potential.

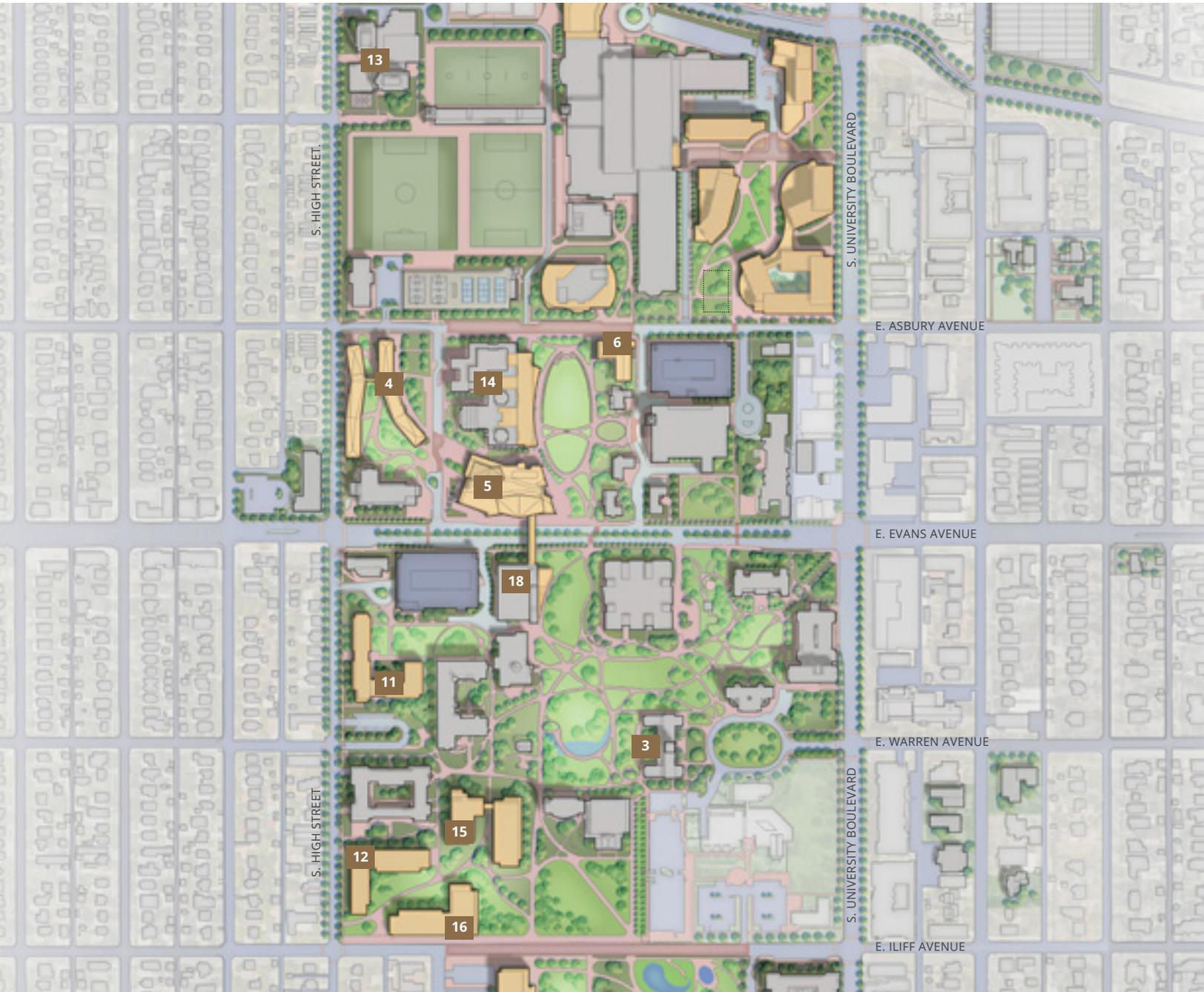


FIGURE 52: DETAILED PLAN OF CENTRAL CAMPUS

Connections to south campus will be seamless with the addition of new open spaces and modern academic facilities to support the STEM programs.

Gaylord Street and the adjacent parking are envisioned to be transformed into a new pedestrian mall (9) that links to south campus. The planned construction of a new parking garage (10a) will allow for the removal of Lots H1 and H2, providing the opportunity to create a large, uninterrupted campus quadrangle (10) to accommodate campus-wide outdoor events and recreation.

Natural Sciences and Mathematics Buildings (17a, 17b) will provide space that support modern pedagogy, research, and study. The new facilities are all centered around a new Science Quadrangle (17c) and central collaboration space (17d). A new black box theater and event space (17e) will be located adjacent to the Newman Center for Performing Arts. These facilities will replace inadequate buildings as well as provide growth opportunities for the programs for the future.



FIGURE 53: DETAILED PLAN OF SOUTH CAMPUS

D.9 South Campus

FIGURE 54: VIEW OF SOUTH CAMPUS, LOOKING NORTHWEST





The plan incorporates projects already underway and provides proposals that both address DU's immediate needs while providing a framework and sequencing for many of the longer-term initiatives and transformations.

Five projects are already underway, while some have a much longer time horizon. Others, at this point, are simply aspirational. But the ultimate goal is the same: to create a district that celebrates all that a great and diverse city has to offer while providing the warmth and neighborliness found in the best college towns. Together, these provide an approach to growth for years to come.

To support implementation, proposals were organized into current projects, three phases of development, and future opportunities.

The phasing of projects was developed by Ayers Saint Gross based on conversations with the DU community as well as taking into account the sequencing of construction required to develop new facilities.

Other than projects currently under construction, none of these proposals have been approved by the Chancellor or the Board. Each initiative being proposed will require its own due diligence and its own fiscal analysis before being implemented.

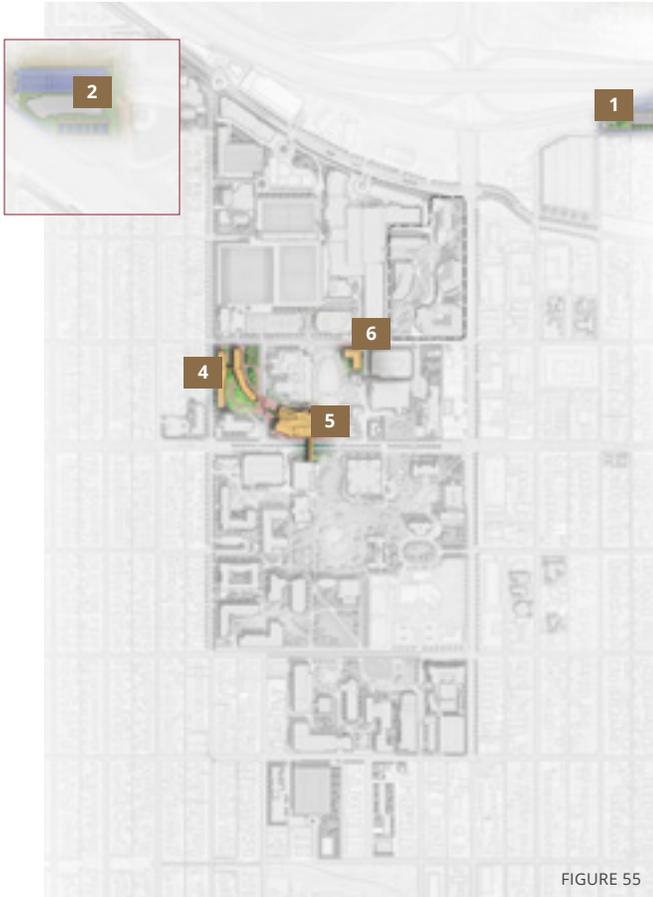


FIGURE 55

CURRENT PROJECTS

- 1 Administrative Office Building promoting collaboration between key staff (completed June 2018)
- 2 Denver Tennis Park, a collaboration with Denver Public Schools and Denver Tennis Park, Inc
- 4 First-Year Residence Hall designed to engage students from day one
- 5 Community Commons with centralized dining facilities and student services
- 6 Pioneer Career Achievement Center for students and DU alumni



FIGURE 56

PHASE 1A: 1-5 YEARS

Phase 1a identifies the first sequence of projects targeted for completion within the first five years of implementation. These projects have been selected due to their ability to be installed on a faster timeline and the high impact they can make to the campus experience in the near term.

- 7 Streetscape: Evans Street, High Street, Asbury Avenue, Iliff Avenue
- 8 Campus Gateways and Signage
 - RTD Bridge Gateway
 - On-site Solar Opportunities
 - Campus Activators: outdoor dining, hammocks, fire places, art work, food trucks etc.
 - Demolish Aspen Hall and Hilltop Hall

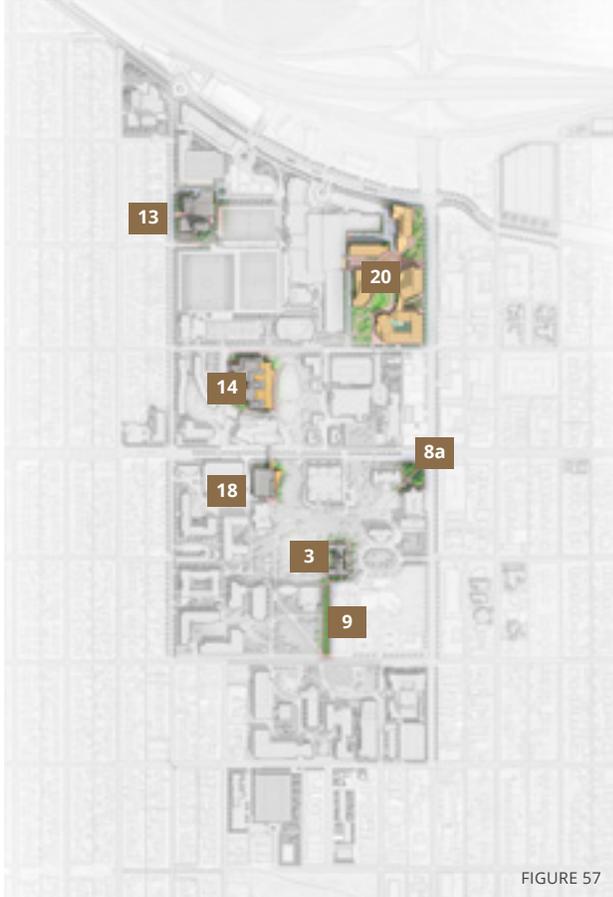


FIGURE 57

PHASE 1B: 1-5 YEARS

Phase 1b projects are also targeted to be completed within the first five years of implementation. These projects span the development of the 6-acre site to building renovations. Some of these projects are enabling projects that allow for future phases of work, including select demolition.

- 3 Mary Reed Renovation
- 8 Gateway at University Boulevard and Evans Avenue (a)
- 9 Gaylord Street: North/South Walkway
- 13 Centennial Hall Renovation
- 14 Sturm Hall Renovation and Expansion
- 18 Driscoll South Renovation and Expansion
- 20 6-acre Site Development



FIGURE 58

PHASE 2A: 5-10 YEARS

Phase 2a identifies projects targeted to be completed within years five to 10 of implementation. These projects span academic, housing and support facilities. Phase 2a also includes some enabling projects that allow for future phases of work, including select demolition.

- 10 South Parking Garage Phase 1 Construction (a)
- 15 Central Campus Academic Facility Construction
- 17 Sciences-Phase 1 Construction (e)
- 21 High Street and Buchtel Boulevard—Undergraduate Housing Construction (a and b)

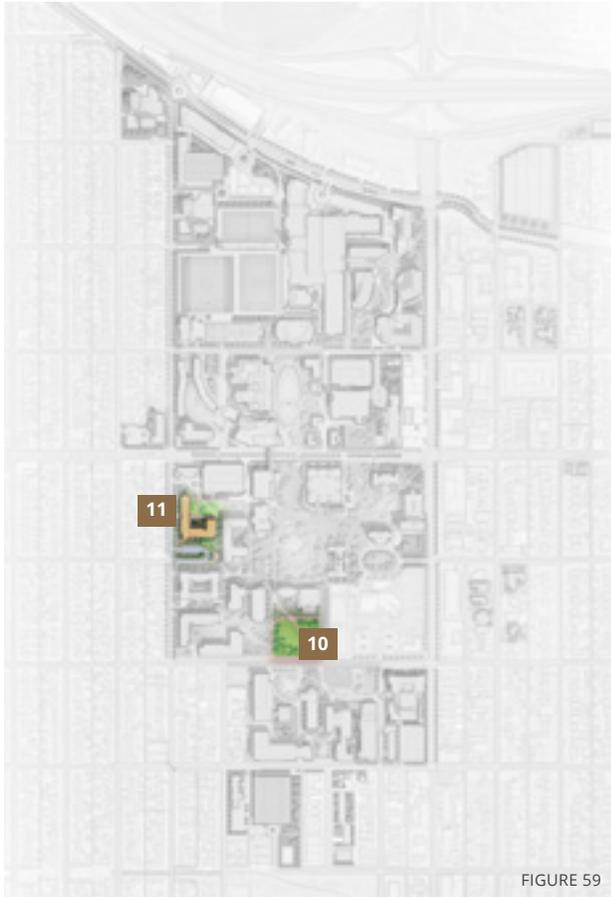


FIGURE 59

PHASE 2B: 5-10 YEARS

Phase 2b projects are similarly targeted to be completed between years 5 to 10 of implementation. Additional academic, housing, and open space improvements are included within this phase of work.

- 10** Demolition of Parking Garage/New Quadrangle
- 11** High Street Residence Hall Construction



FIGURE 60

PHASE 3A: 10-15 YEARS

Phase 3a identifies projects targeted to be completed within years 10 to 15 of implementation. These projects span mixed use, academic, clinic and housing.

- 12** JMAC Replacement Construction—
Undergraduate Housing
- 16** Graduate Psychology Clinics Construction
- 17** Sciences-Phase 2 Construction (a, b, and d)



FIGURE 61

PHASE 3B: 10-15 YEARS

Phase 3b projects are similarly targeted to be completed between years 10 to 15 of implementation.

10 South Parking Garage Phase 2 Construction (a)



FIGURE 62

FUTURE OPPORTUNITIES

A number of projects identified in the Campus Framework Plan are not linked to a timetable, but provide a vision and opportunities for the future.

- RTD Station Redevelopment
- Shwayder Art Building Expansion
- East University Developments
- Tennis Pavilion Replacement
- Greek Life Residences
- Sports Performance Facility
- Campus Green

ACKNOWLEDGMENTS

The University of Denver Campus Framework Plan explores ways in which our campus can evolve—it is a glimpse into what the years ahead may bring as we strengthen the Denver Advantage, which, at its core, is about our student experience.

Higher education—and the experience we offer students at DU—is changing. The Campus Framework Plan anticipates those changes, while helping to realize the University’s strategic vision. We know DU’s needs will continue to evolve, and the Campus Framework Plan ensures we can meet those needs in a way that honors our history and builds our future. To learn more about our vision for a great college town in the heart of the city and how you can stay involved, visit: du.edu/Denver-advantage

Developing the University of Denver Campus Framework Plan required the support and commitment of a broad cross section of the campus community. The planning team wishes to thank all the faculty, staff, student and Board of Trustee participants in the process for their contributions. Additionally, we would like to acknowledge the following for their involvement:

Campus Framework Plan Executive Committee

Paul Chan, *Vice Chancellor for Legal Affairs and General Counsel*
Rebecca Chopp, *Chancellor*
David Greenberg, *Vice Chancellor, Institutional Partnerships*
Gregg Kvistad, *Provost and Executive Vice Chancellor*
Liliana Rodriguez, *Vice Chancellor, Campus Life and Inclusive Excellence*
Craig Woody, *Vice Chancellor, Business and Financial Affairs*

Campus Framework Plan Advisory Council

David Corsun, *Director, Fritz Knoebel School of Hospitality Management*
David Greenberg, *Vice Chancellor, Institutional Partnerships*
Kendra Ingram, *Executive Director, Robert and Judi Newman Center for the Performing Arts*
Barbara Jackson, *Director, Franklin L. Burns School of Real Estate and Construction Management*
Marty Katz, *University Chief Innovation Officer and Senior Advisor for Academic Innovation and Design and Executive Director, Project X-ITE*
Valerie Kerns, *Senior Aide, Denver City Council, District 6*
Chad King, *Sustainability Director, Center for Sustainability*
Joelle Martinez, *Executive Director, Latino Leadership Institute*
Laleh Mehran, *Professor, Emergent Digital Practices*
Mark Rodgers, *University Architect*
Liliana Rodriguez, *Vice Chancellor, Campus Life and Inclusive Excellence*
James Rosner, *Associate Vice Chancellor, Department of Facilities Management & Planning*
Allan Wilson, *Director, Real Estate and Auxiliaries, Department of Facilities Management & Planning*

Campus Framework Plan Coordinating Committee

David Greenberg, *Vice Chancellor, Institutional Partnerships*
Fatima Rezaie, *Administrative Liaison, Institutional Partnerships*
Mark Rodgers, *University Architect*
James Rosner, *Associate Vice Chancellor, Department of Facilities Management & Planning*
Michelle Stachnik, *Administrative Assistant, Department of Facilities Management & Planning*
Theresa Ahrens, *Director of Communications, Division of Marketing and Communications*

Special Thanks to Chancellor Emeritus Dan Ritchie



1040 Hull Street #100
Baltimore, Maryland 21230
www.asg-architects.com

THE
DENVER
ADVANTAGE