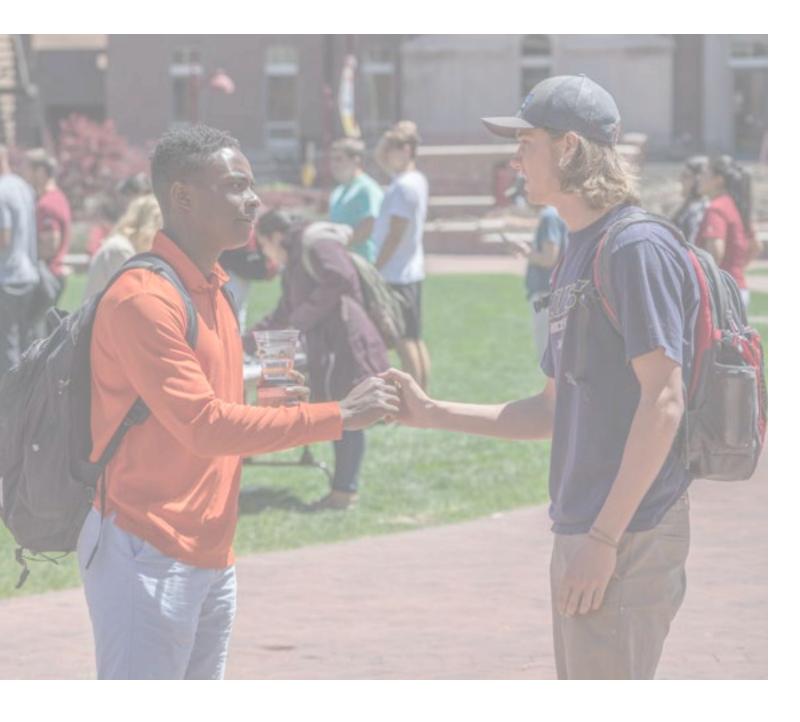


CAMPUS FRAMEWORK PLAN REFRESH

JANUARY 27, 2023



Contents



1	INTRODUCTION	2
2	EXECUTIVE SUMMARY	8
3	PLANNING METHODOLOGY & CONTEXT Heritage & Evolution 2018 Framework Context Vision & Purpose Schedule Planning Methodology Engagement Equity Walk Observations & Analysis Web Survey results	16 18 20 22 23 24 25 26 30
4	FRAMEWORK ELEMENTS Framework Overview Academics & Research Student Life Open Space & Landscape Identity & Belonging Connectivity Circulation & Mobility Arts & Culture Nutrition & Food Diversity Carbon Neutrality Lighting, Safety & Security	32 34 36 40 44 48 52 56 64 68 72 80
5	IMPLEMENTATION Building the Vision Innovation Nexus Mid Campus Projects Health & Wellness Nexus Pilot Project Opportunities Acknowledgments	84 86 88 118 124 154
6	Workshop Presentations, Notes, and Photos Equity Walk Summaries Campus Survey Results DU IMPACT 2025 Developer Consultant Recommendations (Continuum Partners) 2018 Campus Framework Plan (Ayers Saint Gross) Transportation and Mobility Reports (Fehr & Peers) Athletic Renovation Studies (Populous) Campus Lighting Study (Davis Partnership) Lighting Best Practices (AKLD) Carbon Neutrality 2030 (AEI) Approved Board Resolution	



Introduction

A MESSAGE FROM THE CHANCELLOR

Dear friends,

The next five years hold incredible potential for this institution and for the city of Denver. As University of Denver reaches to meet this potential, the Campus Framework Plan is our flexible guide for how our campus physical spaces best serve our students, faculty, staff, alumni, neighbors, friends and partners—and, by doing so, opens pathways for making a difference here in Colorado and beyond.

At DU, we offer our students a truly 4D Experience—one in which they receive an exceptional education in and outside the classroom. The physical spaces on our campus are the incubators for this holistic approach; they foster learning, exploration, creativity and a critical sense of belonging. They are also a manifestation of our values and vision for the future—how does DU's campus help us serve the public good? Do our students have what they need to thrive? How are we impacting and welcoming our neighborhood, city and state?

When we look closely at our most vibrant spaces, they are found around areas of conversion—nexus points. These spaces are where passionate people and big ideas meet, and where the right resources and functionality are available to go seamlessly from ideation to implementation. This model guides our way forward. We will explore two new nexus points with the goal of increasing learning that benefits society. And we will address challenges certainly not isolated to DU—affordable housing, sustainability and community building.

This next phase of the University of Denver's Campus Framework Plan has a smaller scope in time—the next five years—but the scope of our vision remains expansive. We believe DU provides an education that prepares students for lives of purpose. We believe our faculty produce research that expands our knowledge of ourselves and the world. And it all happens here, on campus, in our buildings and on our grounds.

Innovation

We envision a place where science, art and the public good intersect—a nexus for innovation across disciplines. We want our students, alumni, visitors and the Denver and Colorado community to see this space as their "front door to the sciences."

- Additional facilities to support faculty research
- Renovations to existing structures, preparing them for 2027 and well beyond
- An innovation hub for everything from science to art
- Housing so our graduate students can live close to their passion projects

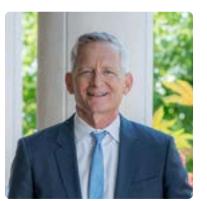
Health & Wellness

We envision an addition to DU that will help our students build critically necessary skills in one of the world's fastest growing industries. The School of Allied Health and Professional Psychology will serve as a nexus for learning in holistic health and wellness.

- Training and skill building for the wraparound support needed by primary care and specialists: physical therapy, occupational therapy, physicians' assistants, nursing, nutrition and more
- Learning and careers focused on preventative care—easing the burden on a beleaguered medical system
- Opportunities to expand partnerships with entities such as Denver Health and National Jewish Health

What we've accomplished so far

Together, we learn, celebrate, dine and connect at the beautiful Community Commons. At the Burwell Center for Career Achievement, DU students receive mentorship—from alumni, professionals and peers—as they hone skills to tell a compelling story about the value they bring to whatever they pursue. And at the Dimond Family Residential Village, first-year students find a welcoming home-base, a place to build the lifelong friendships integral to their success. We moved the needle dramatically forward in our quest for carbon neutrality by 2030 by installing over 2 MW of solar arrays on 18 buildings, which reduces our dependence on fossil fuels by 6.8%.



We secured the James C. Kennedy Mountain Campus, where all DU students, at no extra cost, expand their horizons and become immersed in the 4D Experience. This complement to our urban campus gives us the freedom to do more and think creatively about what we can do here in Denver.

And finally, we secured the highest designation from the Carnegie Classification—"R1" or Doctoral/ Very High Research University. This classification opens doors and guides our plans for growth.

Challenges Waiting to be Met

The challenges of housing, sustainability and community building are not discreet. Each impact and intersect with the others—and so do the solutions.

The pressing need for affordable and accessible housing is felt nationwide. DU will explore expanding housing options within our borders to help address access. This will also reduce traffic to and from the campus and emissions that impact the city.

As we plan for the Innovation Nexus and Health and Wellness Nexus, we are including additional solar panel deployment, non-fossil fuel sources like geothermal energy and innovative building practices and materials, as seen in our LEED Platinum award-winning Burwell Center for Career Achievement. We will harness the community's passion around sustainability by telling the story of our accomplishments and goals through creative and updated wayfinding. Everyone who visits DU, from prospective students to community partners, will clearly see our enduring commitment to sustainability.

Because we are committed to being diverse, equitable and inclusive, our physical spaces must serve all in our community, from all backgrounds. As we look forward to the next five years, we do so with community-building in mind. While there are no plans to expand the current edges of campus, there is opportunity to even more meaningfully blend our edges with our neighborhood, inviting everyone to enjoy our campus and find a vibrant community. We remain mindful and intentional about how our plans might impact the neighborhood and local businesses.

Another key part of our vision to foster community is a dedicated welcome center—a space on campus that says to all, "You have found DU!" This space will invigorate visitors but, most importantly, it will convey who we are and what we do, from the research that improves lives worldwide to the excellence of our student-athletes, to the incredible on-campus events and much more.

The past two years have taught us that our ability to adapt is an asset. This plan speaks to our boldest goals, while working to achieve them in concert with ongoing feedback and new information. We are incredibly grateful to the DU community's ongoing engagement with the plan, as well as to our partner firms, Moore Ruble Yudell and Shears Adkins and Rockmore+. I look forward to this next phase in the University's unceasing guest to be an excellent institution committed to the public good.

Jeremy Haefner

Introduction

Glossary of Terms

4D EXPERIENCE

Learning across four dimensions, the DU 4D Experience improves the lives of our students- and the communities they will one day serve.

- 1. The wonder of intellectual growth and curiosity;
- 2. The confidence to pursue purposeful lives and careers;
- 3. The joy of **wellbeing** for ourselves, others, and our planet;
- 4. The strength of character built upon individual values.

BUILDING RENOVATION **OPPORTUNITY**

CAMPUS FRAMEWORK PLAN **REFRESH**

(CFP REFRESH) **CARBON NEUTRAL**

COVERED UNENCLOSED AREA

CRITICAL ALIGNMENTS

DEI+J

Buildings recognized as valuable assets to renovate, re-purpose, create additions to and/or upgrade.

Update to the 2018 Campus Framework Plan based on the work and planning performed over the last five years and focusing on the most probable projects that the University will be undertaking over the next five years (2022-2027).

A condition of balance between emitting carbon and absorbing carbon from the atmosphere, measured across a year.

Includes covered or roofed areas of a building located outside of the enclosed structure for all stories which have floor surfaces.

Guiding alignments from one building to another, to frame open spaces and

Diversity: The mindset of meaningfully increasing representation of minoritized and therefore historically excluded people and communities in the university.

Equity: The everyday and on-going practice of evaluating whether our existing or soon to be developed policies, procedures, values, actions, and access to resources are fair in respect to our very different majority and minoritized identities, lived experiences, and human dignity.

Inclusion: The cultural values and practices we embrace and celebrate to create a climate of belonging.

Justice: The everyday and on-going practice dismantling systems and structures that create inequality/inequity, and replacing them with systems that promote fairness, and the creation of opportunity for diverse groups of people to thrive

FLEXIBILITY

The ability of a capital asset to adapt to its uses - presently and over time - to accommodate a variety of anticipated and unanticipated needs.

GATEWAYS/ **THRESHOLDS** Points of arrival on campus that identify the institution.

GEOTHERMAL ENERGY

Transfer of heat energy between the ground and the air by means of a fluid that circulates in pipes enabling heating and cooling. Geothermal heat pumps can be very efficient and leverage a renewable energy resource.

HERITAGE BUILDINGS & LANDSCAPES

Prominent buildings or landscapes with special historical, architectural, cultural, or ecological value

HIGH-PERFORMANCE BUILDING

High-performance design buildings use an integrated approach to achieve a holistic and performance-driven design. The goal is for these designs to deliver excellence in environmental, economic and occupant experiences.

EQUITY WALK

An exercise to experience the virtual and/or physical campus from another's different and diverse perspective, to promote equity-minded planning.

LEED Leadership in Energy & Environmental Design, a third-party certification program

and nationally accepted organization for the design, operation and construction of high-performance green buildings and districts. USGBC LEED recognizes different levels of building sustainability performance through its rating

categories of certified, silver, gold and platinum.

LEVERAGE Strategic investment in existing capital assets to advance a new project.

MOBILITY Network of multi-modal means of transportation, including pedestrian, cycling, vehicular, ride-sharing, bus, DU shuttle, light rail, and other means of movement.

NET ZERO Negation of greenhouse gases produced by human activity, achieved by reducing

emissions and implementing methods of absorbing carbon dioxide from the

atmosphere.

OPEN SPACE FRAMEWORK

The network of open spaces, malls and walks on campus, including pedestrian/

bicycle paths.

OPPORTUNITY SITE A discrete area found to be under-serving the campus relative to its potential as a

future site.

PERMEABLE BUILDING

A building that facilitates pedestrian movement through its ground floor.

PILOT PROJECT A low capital, high value project to initiate master plan implementation at a

tangible scale.

FRAMEWORK PLAN Guidance regarding the future growth of the campus, intended to be adaptable

and flexible over time.

PUBLIC REALM Pathways, open spaces, courtyards, public and pedestrian-oriented areas, and

associated infrastructure.

SAFE SPACE A place or environment that aspires to be free of bias and discrimination, where

everyone, of all backgrounds, is welcome, belongs, and can freely express

themselves

SITE DEVELOPMENT

AREA

Area outside of the building footprint within the construction limit of work, including all areas that will be redeveloped.

SOLAR THERMAL HEAT PUMPS

A heat pump that integrates thermal solar panels to produce hot water that is then used in the building or part of a district energy system. This is a highly

efficient and cost effective system.

STORMWATER Precipitation that infiltrates into the soil, evaporates, or drains to nearby water

bodies.

STRATEGIC INITIATIVES High-level recommendations which support achievement of the study's essential

elements.

SYNERGY The ability of a combination of capital asset investments to generate greater

benefits as a group than the sum of the benefits accrued to each project

individually.

TEST FIT Exploration of how a site may best accommodate desired sample program uses

within a site context at a given time.

TRANSPARENT Quality of building facade revealing internal activity within to activate the public

realm including adjacent streets, paths, and open spaces.

UNIVERSAL DESIGN The design of an environment so that it can be accessed and used to the greatest

extent possible by all people who wish to use it.



Executive Summary

The Campus Framework Plan Refresh (CFP Refresh) supports the evolution of the University of Denver campus, building on its strengths and preparing it for local, regional, and global leadership. It respects the rich planning and architectural legacy of DU while anticipating the physical, environmental, cultural, academic, and fiscal needs of a 21st century university.

The CFP Refresh takes the 2018 Campus Framework Plan (CFP) as its starting point. It incorporates the important projects completed since 2018 and focuses on initiatives that will realize the powerful and bold vision of DU's Five Strategic Imperatives. While the next 1-5 years are the primary focus, the Refresh does propose projects for years 5-10 and beyond. The Five Strategic Imperatives serve as the touchstones for all components of the CFP Refresh.

The Five Strategic Imperatives

1. Ensure a bold, enduring future for the next generation through our financial, reputational, and operational practices.

Economic, environmental, technological, and demographic changes will all present opportunities and challenges to higher education in coming years. DU's leadership will be strengthened by meeting these opportunities holistically.

- Resilience will be critical to successful leadership and longevity.
- The initiatives in the CFP Refresh are conceived with flexibility of implementation as a critical principle.
- Planning for "hybrid" modes of learning, post-Covid, will increase resilience.
- Low and moderate cost initiatives with high impact are proposed, wherever possible.
- Energy use, water conservation and operational costs are opportunities for sustainable environmental and fiscal planning.
- Adaptability and flexibility in buildings and openspace utilization will support evolving pedagogies and learning modes.

2. Create a Unique global, holistic 4D Experience:

- » Advancing intellectual growth
- » Exploring Character
- » Promoting Well Being
- » Pursuing Careers and Lives of Purpose

The University's 4D Experience is a game changing vision that will be supported by the holistic integration of planning initiatives across the entire campus.

- The recent campus additions of the Community Commons, The Dimond Family Residential Village, and the Burwell Center for Career Achievement have strengthened the student experience at DU.
- Expanding the impact of these, with a new Health and Wellness Nexus to the north and Innovation Nexus to the south, will provide opportunities for cross disciplinary interaction and programs.
- Strengthening connections across campus will support holistic development of experiences for all students, faculty, staff, alumni, and visitors.

3. Cultivate an exceptionally diverse, inclusive, equitable, and welcoming community

The principles of inclusive design apply across all scales of campus buildings and open spaces. They should inform every dimension of campus life.

- Campus edges should be inviting and permeable.
- Buildings should have active and transparent ground levels to communicate the energy and diversity of campus life and learning.
- Printed and digital graphic communication should be accessible, multi-lingual where appropriate, and celebrate the diversity of the campus.
- Artistic and cultural expression should be diverse and invite participation, recognition, and celebration.
- Diversity of scales and character of places for living and learning should provide choice for a diverse community.
- Creating informal spaces that complement formal spaces should provide a greater range of places to feel comfortable and to belong.
- "Universal Design" principles applied across campus should support a welcoming and equitable community.



Executive Summary

4. Define a model of a global, engaged research university.

DU's leadership as a global R-1 Research University must be supported by major initiatives for an Innovation Nexus and Health and Wellness Nexus.

- Each nexus will create dynamic new hubs for interaction, cross-fertilization, and community engagement.
- Each will be mixed-use, incorporating research, housing and community serving facilities.
- As lively mixed-use, pedestrian oriented hubs, they will provide dynamic living and learning environments that complement the heritage spaces of the campus.
- New research facilities will be designed for flexibility and adaptability to respond to the dynamic nature of university research and teaching.
- Increased porosity and connections to the community will foster local, regional, and global engagement.
- · Impact will increase through partnerships.

5. Ensure academic excellence with a signature portfolio of academic programs and a relentless pursuit of quality.

Recruiting and retaining world class talent amongst faculty, students, and staff. A vibrant and continuously revitalizing campus will support this goal.

- A dynamic and diverse campus environment will strengthen community and encourage collaboration.
- Flexible state of the art research and teaching spaces will enable individuals to optimize their work and heighten their impact.
- A cross-fertilization of the disciplines of arts and sciences will energize new initiatives and push academic boundaries.
- Greater campus connectivity will increase collaboration and innovation in academic programming.

Each Imperative is translated into both planning principles and specific initiatives.

Building on the **Five Strategic Imperatives**, the **Eight Planning Principles** provide guidance to the campus for enhancing and expressing DU's values within the campus environment.

The **Ten Framework Elements** describe systemic and campus wide components that connect the campus and can be flexibly implemented for high impact.

Preservation and Renewal Projects provide opportunities to leverage and renew existing campus assets into forward looking places for dynamic academic and campus life.

Pilot Projects identify low cost, high impact opportunities that can be launched and evaluated to meet evolving campus goals.

The **Innovation** and the **Health and Wellness Nexuses** are transformative mixed-use districts that will serve ambitious, research, campus life and community engagement goals.

Eight Planning Principles

During the planning process, eight key principles have been identified to ensure that the intent and spirit of the Five Strategic Imperatives manifest into initiatives across the campus. Together these principles propose a vision of a welcoming, healthy, creative and diverse community; a community that is engaged and dedicated to the public good.

In section 3, these eight planning principles are explored:

- Create Belonging & Identity
- Prioritize Health & Wellness
- Spark Creativity & Innovation
- Enhance Diversity of Use & Activation
- Provide Flexibility & Adaptability
- Incorporate Fiscal Responsibility & Feasibility
- Strengthen Environmental Stewardship
- Shape Space for the "Public Good"

Ten Framework Elements

The Framework Elements are individual components that when combined, form a holistic plan. These elements are applied across the whole DU campus. They are typically relatively low cost but high impact. They help to connect and energize the campus and can be implemented flexibly over time. They prioritize Diversity, Equity, Inclusion, and Justice (DEI+J) and place them at the center of each component. The Framework Elements are complementary to the more district oriented, mixed-use initiatives of the Health and Wellness Nexus and the Innovation Nexus.



Executive Summary

In section 4, these ten framework elements are expanded upon:

- Academics & Research
- Student Life
- Open Space & Landscape
- Identity & Belonging
- Connectivity
- Circulation & Mobility
- Arts & Culture
- Nutrition & Food Diversity
- Carbon Neutrality
- Lighting, Safety & Security

A Collaborative Planning Process

The CFP Refresh planning process has been a highly collaborative effort, involving broad representation from faculty, staff, students, alumni, campus leadership, Board of Trustee members, and neighborhood organizations. Early and continuing outreach engaged neighbors, community leaders and City of Denver staff. Over the months of this study, a consensus was achieved across the full range of voices and constituents. This is a living document, meant to provide a vision for DU's local, regional, and global leadership. It is a flexible road-map for implementation with particular focus on the next five years.

Innovation Nexus

The Innovation Nexus will be balanced by a new front door for innovation through the STEM Horizons building and a building that houses an Innovation Hub. As a lively multi-use area, the nexus will support next generation research, teaching, and engagement. Located just west of the Newman Center for the Performing Arts, it will encourage the intersection of science and art, welcoming students, faculty, staff, alumni, and visitors. It will serve partnerships with regional and global leaders and generate innovation across disciplines. The Innovation Hub will support creative interdisciplinary research and entrepreneurship, while providing a forum for community engagement. Housing for graduate students and visiting scholars will create a welcoming 24/7 campus neighborhood. New facilities will be augmented by renovations to create state-of-the-art, technology-enhanced research and learning spaces. All facilities will be planned for flexibility, adaptability, and low energy utilization to ensure resilience for decades to come. These improvements and the

synergies they create will ensure the increased leadership and influence of DU's R-1 status. This will be a neighborhood where people of all ages and interests can have serendipitous interactions. It will be a forum for dialogue, experimentation, discovery, and artistic expression; a safe space where everyone feels welcome and belongs. It will be a magnet for visitors and colleagues from Denver, the region and the world.

Health and Wellness Nexus

The Health and Wellness Nexus will be anchored by a new School of Allied Health and Professional Psychology at the north-east corner of the campus. This will be a vibrant mixed-use neighborhood and important invitation to campus. Synergies across disciplines will make this a multi-disciplinary hub. The School of Allied Health and Professional Psychology will be complemented by the expansion of the Graduate School of Professional Psychology as well as a wide array of existing and updated athletics and wellness facilities. Together these will support campus wide needs as well as clinical services for the community. A new Welcome Center at the corner of University and Buchtel Blvds. will anchor this district and invite visitors to explore the resources and life of the campus. Housing will serve the expanded needs of 3rd and 4th year undergraduates as well as graduate students. A series of pedestrian oriented linked greens and a plaza will serve a wide array of informal and community activities. The open space network will create strong connections to the middle of campus. Carefully curated retail, food and beverage will provide much needed resources for all members of the DU community and its neighbors. The vibrant life and varied facilities of this village like neighborhood will complement the rich array of campus heritage spaces. It will greatly enhance the 4D experience and create a diversity of opportunities where everyone is welcome.



View north from E. Wesley Ave. at Piazza Connessione with Engineering & Computer Science beyond and the Ricketson Law Building tower in the distance



View to the southwest from the corner of S. University Blvd. and Buchtel Blvd. with the Welcome Center and Housing on the left



Heritage and Evolution

The University of Denver has a long and successful legacy of sophisticated campus planning and architecture.

Its network of open spaces presents a verdant experience of places that serve a wide range of events and activities from serendipitous meeting to cultural and academic programs.

Buildings are designed and constructed with authentic materials and robust detailing for long term durability and sustainability. Building locations are planned to shape positively open spaces and do not float in the landscape. Together, they define courtyards, quads, pathways, and streets. This creates a coherent and memorable experience of the campus as a carefully designed place and destination within its community.

Elements that Unite

A set of carefully considered design directions has, over time, enhanced the clarity and identity of the campus. This includes:

- A rich material palette of regionally sourced stone and brick.
- The selective use of copper to signal iconic campus buildings and buildings that serve the whole campus community (i.e., the Community Commons, the Burwell Center, and the Ricketson Law Building).
- A sequence of vertical expressions that visually orient and link the campus (i.e., the Ritchie Center's Williams Tower, the Ricketson Law Building's Clock Tower, and the Engineering and Computer Science Building's Dome).
- An activated profile of roofscapes that together create a unique district (i.e., the roof and rooftop terraces of the Community Commons, shaped cornices on buildings such as the Anderson Academic Commons).
- Flowing brick paving of main campus pathways.
- Landscapes designed to be climate appropriate and to enhance active and quiet campus experiences.
- Consistent use of color and materials for campus lighting, lawn furniture and signage; as an ensemble, these enhance the campus identity.
- Commitment throughout buildings and landscape to sustainable design.

 Commitment to a high level of craftsmanship and the integration of artistic expression, contributing to the rich experience of the built environment. (i.e., the carved "Rose" integrated into the facade of the Newman Center for the Performing Arts, patterned brick or stone on many buildings, rich and inventive detailing of Mary Reed Building)

The commitment to integrated planning and design has served the campus well.

DU regularly receives high ranking for its campus environment, facilities and for its location in Denver, a region that benefits from vibrant urbanism as well as natural beauty.

All these campus commitments and traditions have benefited DU in its recruitment and retention of the best talent across faculty, staff and student populations.

This CFP Refresh recommends preserving and respecting DU's great legacy while augmenting and complementing it with new initiatives proposed for the next five years.

Given the goals to create a more welcoming environment for a more diverse population, the Refresh recommends Framework Implementation Strategies and strategies that will positively complement the existing campus.

Implementation Strategies

- Create place-making that celebrates diversity of all people.
- Develop sustainable practices to support a netzero-carbon campus.
- Create active edges at the street levels of new buildings.
- Design for adaptability and resilience (i.e., space planning of buildings and landscapes should support future flexibility of uses).
- Express the identity of the campus with elements of the heritage material palette.
- Create more opportunities for informal campus spaces that will serve a more culturally diverse community (i.e., public and student art, rotating installations, pop-up exhibitions, music, performances, food trucks, and pilot projects can provide high-impact at low cost in support of a more culturally varied, cross-disciplinary student and community experience).

- Support opportunities for more indoor-outdoor connectivity. Biophilic design improves health.
 (i.e., outdoor terraces, event spaces, and cafes can expand the breadth campus experience and serve as magnets for community engagement).
- Celebrate the energy and activity within academic buildings with increased transparency.
- Encourage porosity and invitation at the campus edges.
- Link pathways and open spaces to create an inviting, safe and clear network of pedestrian experiences.
- Use landscape to better define a welcoming perimeter and entries into the campus
- Encourage mixed-use buildings that can activate and serve the campus.
- Design buildings and open spaces that are in dialogue with their campus and community context (i.e., the whole should always be greater than the sum of the parts. Contemporary expression can co-exist harmoniously with the more traditional expressions when they are in conversation).

While the primary focus of the CFP Refresh is on initiatives for the next 1-5 years on DU's urban campus, there are important opportunities for synergy across the historic campus and the new mountain campus. Both locations place renewed importance on building community while advancing diversity, equity, and inclusion. They share the university's commitment to environmental stewardship. They support a renewed emphasis on holistic health and wellness. Both present opportunities for new frontiers in research, cross-disciplinary collaboration and for the deep engagement of faculty, students, staff, and community partners.

As new, expanded, and improved facilities are being planned and developed for the DU campus, opportunities for curricular, cultural and research complementarities with the mountain campus should be explored and tested. Pilot programs across both sites will allow for experimentation and learning in support of the University's mission.

The James C. Kennedy Mountain Campus at the University of Denver: Toward a transformational 4-D Experience for the entire DU Community

Chancellor Haefner said it best:

"This invigorating mountain environment, paired with DU's bustling, urban campus will truly distinguish the University. The experiences we will all have- but most especially our students- at the Kennedy Mountain Campus will strengthen connections to DU, as well as instill a conservation mindset and lifelong appreciation of and respect for the natural world."



DU James C. Kennedy Mountain Campus

Campus Framework Plan 2018 Context



Campus Framework Plan 2018

The 2018 plan supported three concurrent student-serving projects to address core goals of student retention, community building, and fostering lives and careers of purpose and meaning. The mutually supportive design of these impactful buildings resonate across the campus and prove the value of integrated planning across multiple projects. They contribute to the need to look carefully at what comes next.



Completed Projects

Since the development of the 2018 Campus Framework Plan, three major buildings were designed and constructed on campus, including Dimond Family Residential Village, Community Commons, and the Burwell Center for Career Advancement.



Campus Framework Plan Refresh

The CFP Refresh is an update to the 2018 Campus Framework Plan that builds upon the established and implemented priorities. Impacts from the Covid-19 pandemic, vision and priority of the 4D Experience, and recent opening of three new major buildings on campus have changed the landscape at University of Denver, requiring a reassessment and realignment of the 2018 framework plan.

Objectives of the CFP Refresh:

- Incorporate recently completed buildings: Burwell Center for Career Achievement, Community Commons, Dimond Family Residential Village
- Investigate and propose a "Health & Wellness Nexus" update focused on academic, mixed-use, welcome center, and green spaces to improve the front door supported by housing needs
- Incorporate and further develop the recently completed planning efforts for the Innovation Nexus
- Coordinate with Denver's Comprehensive Plan 2040 that sets the direction for zoning, parks, recreation, and mobility for the next 20 years
- Coordinate and incorporate other campus initiatives:
 - » DU IMPACT 2025
 - » Concurrent Campus Energy Master Plan (by AEI)
 - » Recent Athletics & Recreation Master Plan and Ritchie Wellness Center Expansion conceptual designs (by Populous)
 - » Welcome Center Study (by Ayers Saint Gross & BORA)
 - » Internal Bikeway Report (by Fehr & Peers)
 - » Site Lighting Study (by Davis Partnership Architects)
 - » Consider additional public good locations that celebrate heritage and community to complement the Holocaust Memorial Social Action Site, the Peace Pole & Evans Chapel and Dan's Garden.

The CFP Refresh provides tangible, implementable guidance for campus facilities development and improvements for the near future. Focus is on the next five years and is referred to as Phase 1 within this document. Future development and improvements were studied as part of the refresh to understand long range vision.

Vision & Purpose

DU's Five Strategic Imperatives show deep responses to major trends and challenges in higher education, building on the comprehensive and creative foundation of DU IMPACT 2025. Recognizing the commitment that has guided the Imperatives and 4D Experience, the Refresh is an action-oriented, highly implementable framework. The 2018 Campus Framework Plan is itself an action plan, relative to the Five Strategic Imperatives and other impactful commitments. The Refresh expands the types and scales of improvements and interventions, including shorter term actions to achieve early results, including:

- Low cost/high impact interventions such as signage and branding clarifications and art installations
- Options for varied use and programming of landscape and open space such as outdoor classroom/study spaces and exercise/wellness paths
- Improvements for more sustainable operations such as expanding educational signage and identifying geothermal field locations
- Continuing partnerships, and programs with regional business and innovation partners

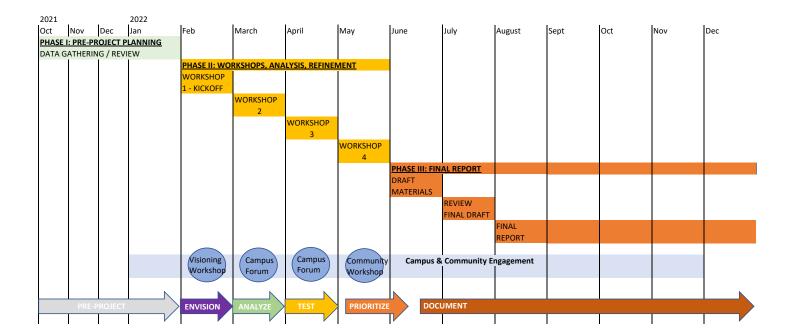


Planning Methodology & Context

Schedule

The CFP Refresh is a twelve month process, beginning with Pre-Project Planning gathering data and meeting with campus leadership to establish project opportunities and goals. Four monthly Workshops were conducted with key stakeholders including the Coordinating Committee, Advisory Council, and Executive Committee members. Through

an iterative process of envisioning, analyzing, testing, and prioritizing, a preferred test-fit was created that will guide DU to develop two nexuses in the next five years and beyond. The Refresh culminates with the creation of the CFP Refresh report and presentation to the DU Board of Trustees.



Planning Methodology





- Review & Integrate
 Existing Documents
 Collect & Analyze
 Data
- Evaluate Existing
 Conditions
 Assessment
 Identify Key Trends

TEST PA POP A

- Identify
 Opportuniity Sites
 Explore Multiple
 Concepts
- Assemble & Consider Metrics for Data-driven Decision Process

PRIORITIZE

- Define Master Plan Framework
 Establish Basis of Design and Project
- Identify Funding
 Streams
 Prioritize Projects

DOCUMENT Document Master Plan Framework & Priorities Coordinate Technical Disciplines Assemble & Issue Draft and Final

Reports

Phase 1: Envision

The initial phase of work included an early immersion with DU campus leadership and key stakeholders to understand and manifest DU's vision, goals, and aspirations for the project.

Phase 2: Gather & Analyze

Information relevant to future planning decisions, including the implementation of the 2018 Campus Framework Plan, the current state of physical infrastructure, and identification of key planning ideas to support DU's vision and goals, was studied and translated into tools used to guide the decision-making process.

Phase 3: Test Scenarios

Next, a series of focus-group work sessions looked iteratively at a range of measures, from pure ideas to detailed planning strategies with measurable guidelines and principles. The team tested these against a matrix of key concerns, including, physical, environmental, pedagogic, social, cultural, and economic outcomes. Preferred options were developed and illustrated using an array of tools including, physical models and 3D renderings.

Phase 4: Prioritize

The elements and criteria identified through the CFP Refresh process were further refined and developed. CFP Refresh key principles, supporting data, technical basis of design, and cost information were used as logical, data-driven decision making to inform and prioritize the planning framework. We continued to engage campus leaders and key stakeholders through presentations and on-going communication.

Phase 5: Document

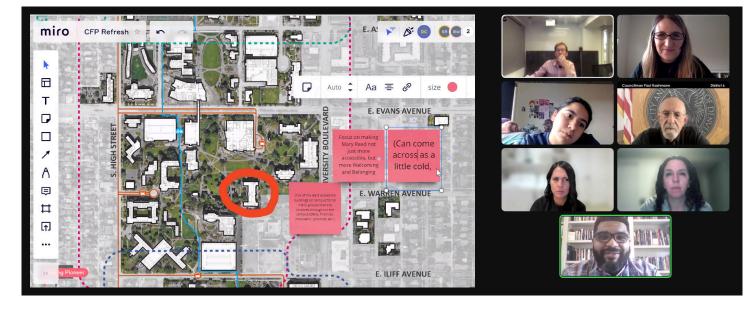
This phase integrated project vision, program, and conceptual building and site development, phasing, and technical design and systems criteria into draft documents. The final CFP Refresh report was assembled as a summary and concise road map for the University. Engagement and reviews by various campus groups continued through the phase to inform and refine the document.

Planning Methodology & Context

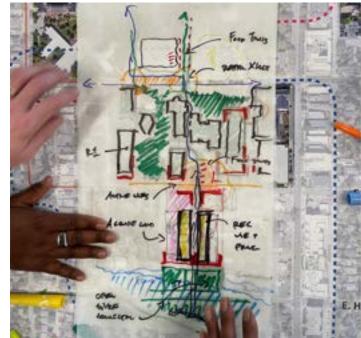
Engagement

The Refresh's planning methodology investigated inclusive and interdisciplinary approaches to long-range campus and strategic planning. Outreach, tactics and platforms engaged broader constituencies to inform the planning, both within the university and its broader neighborhood and community. The recognition of cultural, social, economic, and political forces that most influence student access and equity were considered and integrated.

DU has prioritized an inclusive, equitable student and campus environment, and the CFP Refresh process emphasized strategic outreach and engagement to support those priorities. An Advisory Council, comprised of a diverse group within the DU and Denver community, steered the refresh goals and process. Through a series of four 2-day workshops, the Advisory Council and planning team tested and explored various scenarios in which they together shaped the updated framework plan.







Equity Walk Observations & Analysis

Our team facilitated an inclusive Equity Walk across the campus to solicit unique and diverse perspectives. A group of 18 participants, including a mix of Advisory Council members, faculty, staff, and student representatives, traversed the campus through the lens of a DU "Portrait", by taking on the identities of persons within the DU community who represent a broad demographic. By stepping out of their viewpoints, participants were able to experience the campus in a new way, one that was eye-opening and shaped the framework initiatives. The insight of seeing the campus through different perspectives raised awareness to the inequities and challenges DU community members face, revealing some of the most urgent needs, such as specific areas requiring accessibility improvements and general lack of wayfinding and branding around DU.



Student #1

- Ethnicity: Multi-Ethnic
- Gender: Non-Binary
- Socio-Economic: Middle
- Religion: Christian

PORTRAIT

- Fourth vear student
- Lives in a nearby Fraternity house
- Loves to go snowboarding on the weekends
- Captain of the Alpine Club

Student #2

- Ethnicity: Hispanic
- Gender: Female
- · Socio-Economic: Low
- Religion: Atheist
- First generation 3rd vear student
- English is her second language
- Commutes to campus from about 5 miles away

Student #3

- Ethnicity: Indigenous
- Gender: Female
- Socio-Economic: Middle
- · Religion: Spiritual
- Member of the Chevenne Tribe
- First year student
- Interested in health & wellness
- Runs 1-2 marathons per
 On campus many
- Enjoys cooking and hosting dinner parties

Student #4

- · Ethnicity: White
- Gender: Female
- Socio-Economic: Low
- · Religion: Orthodox Jew
- · Graduate student with a family (husband & 1 young child)
- Pregnant
- · Shares a car with partner
- evenings

Student #5

- Ethnicity: Black
- · Gender: Male
- Socio-Economic: Low
- · Religion: Christian
- First vear student
- From Chicago Lives on campus
- A neurodiverse learner

Staff

- Ethnicity: International
- Gender: Trans
 - Socio-Economic: Middle
 - Religion: Atheist
 - University Staff: Research Analyst
 - · Young professional
 - · Lives in downtown; commutes to campus on Light Rail
 - · Interested in socializing with DU community

Professor

- Ethnicity: Asian
- · Gender: Male
- Socio-Economic: Middle
- Religion: Agnostic
- · Humanities Professor
- Single
- Hosts extended Office Hours for collaboration
- Speaks 4 languages
- Foodie of many different types
- Enjoys travel and outdoors

Neighbors

- · Ethnicity: White
- Gender: Male & Female
- · Socio-Economic: High
- · Religion: Baptist
- Retired couple w physical mobility limitations
- · Concerned about Univ. traffic and noise
- · Enjoy attending campus events & performances

Safe, walkable campus

- Access to weekend transportation
- Seeking internships and advising for future career choices
- Quiet places to study
- Access to financial aid services
- Multi-language signage
- To see themselves represented
- Affordable food options
- Affordable housing options on campus
- Access to wellness & rec center
- Quiet place of respite
- To see herself represented
- Center • Seeing the campus as a "Living Laboratory"
- Access to public transportation and ride share
- Affordable food options • An accessible Welcome • Access to lactation rooms

· Safe, well-lit pathways

Ability to avoid use of electronics on Sabbath

Access to tutoring and library resources daily and off-hours

- Testing accommodations
- Places that make him feel "at home"
- Quiet and small group study spaces
- Groups and spaces for socializina
- Gender-neutral restrooms Access to counseling
- services · Access to health and wellness
- Convenient and safe public transportation

- Quiet meeting areas
- Access to event space
- Public art
- Access to entertainment and sporting events
- Affordable housing
- · Parking or valet near performance and sports facilities
- · Accessible routes
- Clear wayfinding signage
- Well-lit pathways

Equity Walk Observations & Analysis

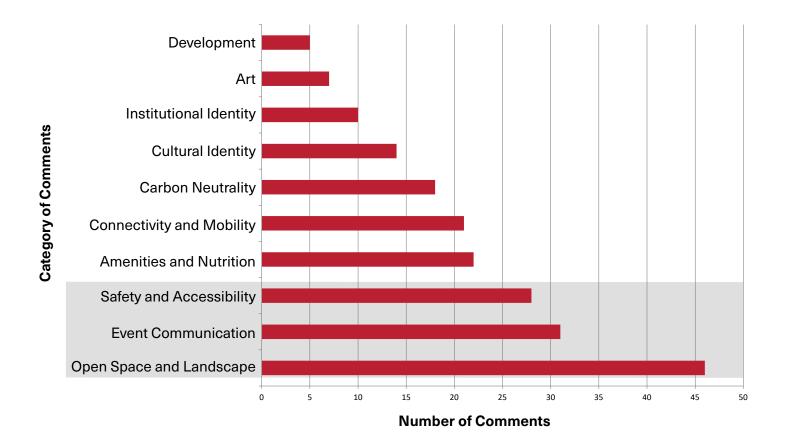
Equity Walk goals included:

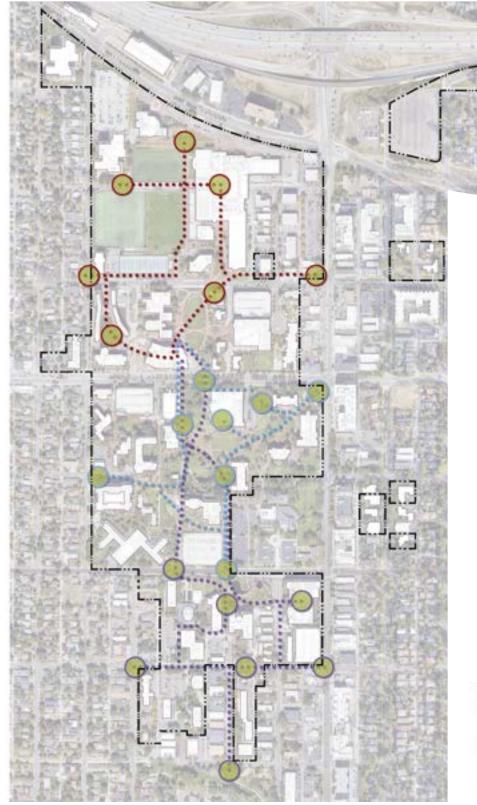
- Experience the campus environment through another's perspective
- Bring to light campus highlights and challenges (i.e., accessibility, wayfinding, sense of belonging)
- Identify areas and components for recommended improvements
- Analyze and document findings with notes and photos to inform future campus initiatives

At the conclusion of the Walk, the participants had a debrief to review and document observations. All the notes and comments were compiled and analyzed. The observations and findings were then incorporated into and throughout the framework elements, and each were scrutinized through the lens of DEI+J and the Equity Walk findings. A summary of the categories of comments and findings are illustrated in the following graph. The majority of the findings were regarding safety and accessibility, event communication, and open space and landscape.



Recording Equity Walk Findings on DU Campus





Legend

North Campus Equity Walk

... Mid Campus Equity Walk

South Campus Equity Walk

DU Equity Walk Route Diagram

Web Survey Results

OUTREACH STRATEGY

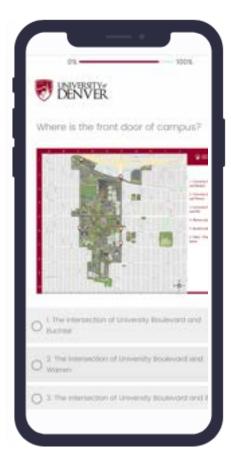
A digital survey was sent to the campus community on March as an addendum to the project outreach efforts to solicit broader feedback. The survey included questions about how the physical campus is currently used as well as preferences for existing facilities and amenities.

DATA ANALYSIS

Data analysis with visualizations were co-created to ensure an understanding of the survey feedback from a wide audience. The intent was to simplify a cohesive message that enabled the team to ask better questions and solicit feedback from stakeholders as part of the process.

CAMPUS SURVEY RESULTS

Preference and ranking questions led to invaluable insights that were categorized by affiliation (students, faculty, staff, etc.). This revealed patterns in preferences along with open response answers to tell a rich story of opportunities and issues in and around campus.

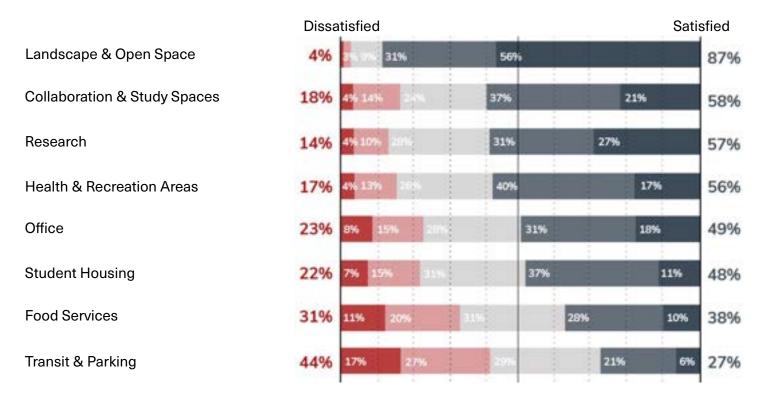


More campus events that are open to everyone

Representation on campus with artwork from a variety of backgrounds and abilities

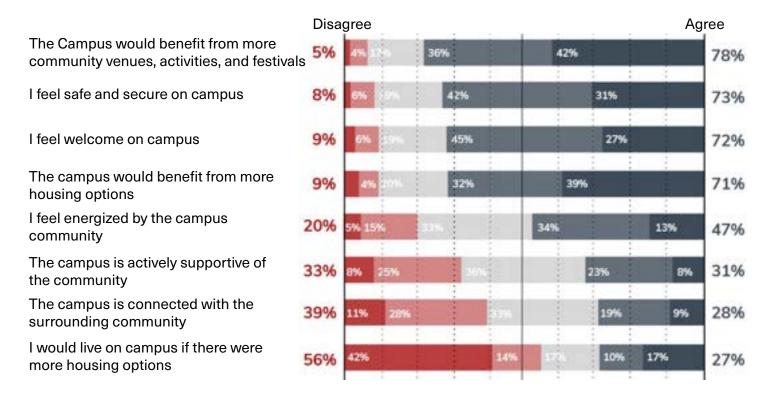
Graduate housing is non-existent.
Graduate students are often excluded from plans

- » 826 Responses
- » 82% Completion Rate
- » 63% Responses within the first 24-hours
- » 70% Responses within the first 72-hours
- » 13 Minute Average Completion Time



Recurring commentary suggested ways to connect with the surrounding community through cultural venues, activities, and festivals. There will need to be a balance between what people like about the existing landscape and open spaces, which were often described as serene, peaceful, and relaxing, with more welcoming and diverse activities on campus.

Considerations for strategic locations for campus activation were incorporated in the CFP Refresh, in order to maintain what people enjoy about the campus, while also meeting clear desires for more programming representative of the larger campus community and student body.



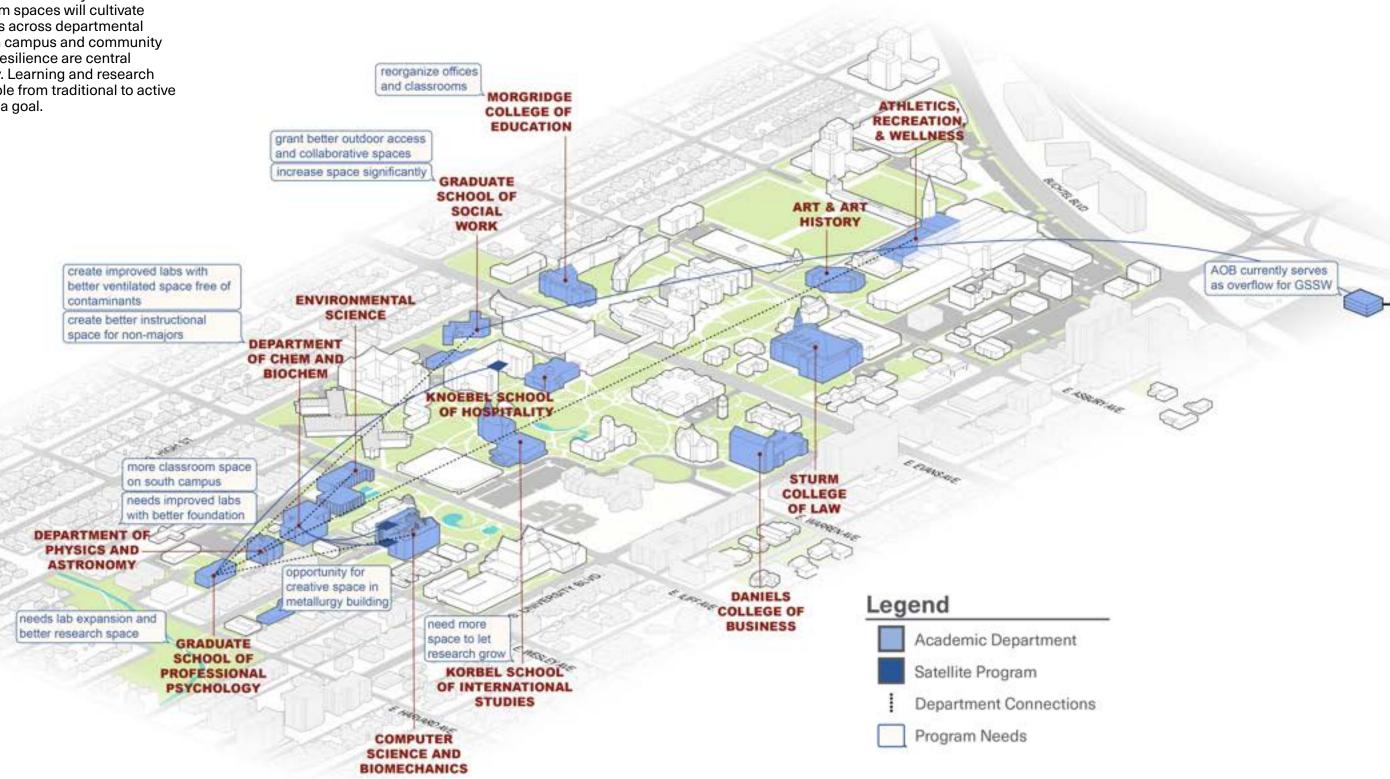




Academics & Research

A key strategy of the CFP Refresh is to integrate academic and research space into the everyday experience of campus and community life. Mixed-use buildings and public realm spaces will cultivate serendipitous encounters across departmental boundaries and between campus and community interests. Flexibility and resilience are central attributes of every facility. Learning and research spaces that are convertible from traditional to active learning laboratories are a goal.

Create Visible and Vibrant Work Settings



Academics & Research

- Create spaces that support integrated teams with wide-ranging backgrounds and expertise.
- Create visible ground floor research space that is transparent to the community.
- Prioritize strategic renovations like the Mary Reed Building and Sturm Hall, to bring staff and faculty together in visible, vibrant, and interdisciplinary work settings.
- Integrate clinical and research spaces at the ground level as part of a mixed-use neighborhood strategy for future development of the Innovation and Health & Wellness Nexuses.
- Leverage key opportunities to address departmental needs for growth by adaptively reusing and or expanding existing buildings through strategic renovations.

ADAPTIVE REUSE

Creative reuse valuable campus building assets to provide economic advantages, rapid turn-around, preservation of historic fabric and reduced carbon footprint.



MLK Renovation - Lower Sproul Plaza, UC Berkeley, CA: Strategic renovation and addition provide for affordable implementation.

TRANSPARENCY

Activate public realm-facing ground level spaces with views into the building's activity during the day and night, in such places as building entrances, classrooms, research labs, cafes, and maker-spaces.



Maker-Space, Jubel Hall, Washington University in St. Louis, MO: Large windows allow passersby to see into ground level active maker-space.

RESEARCH ON DISPLAY

Placing research being done by Principle Investigators and other educators in public view. Stimulate student interest in fields they were previously unfamiliar with and encourage potential diversification amongst disciplines.

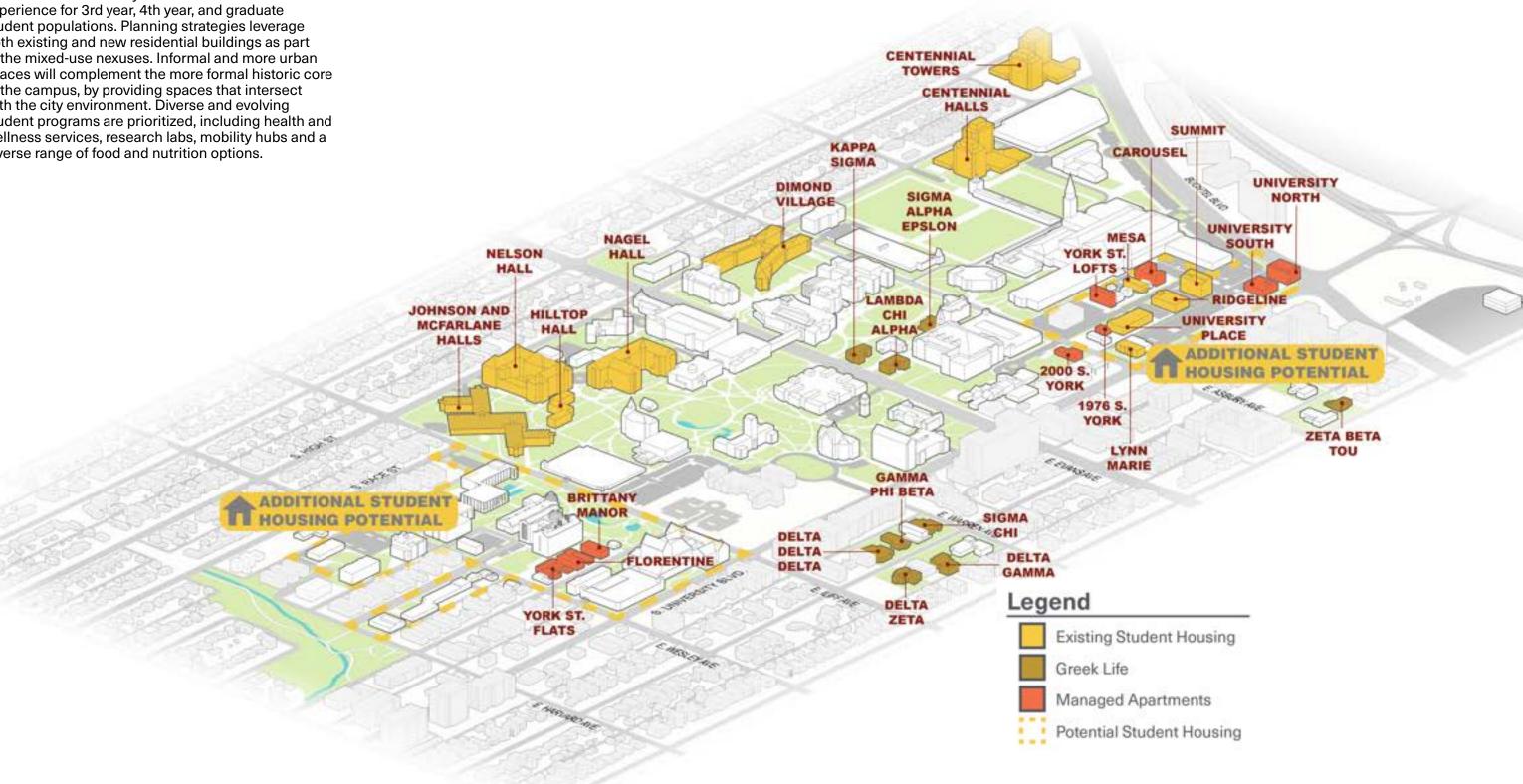


Jubel Hall Research Lab, Washington University in St. Louis, MO: Engineering research on display along the building's primary circulation.

Student Life

The development of the Innovation and Health & Wellness Nexuses offer a unique opportunity to broaden and diversify the student residential experience for 3rd year, 4th year, and graduate student populations. Planning strategies leverage both existing and new residential buildings as part of the mixed-use nexuses. Informal and more urban spaces will complement the more formal historic core of the campus, by providing spaces that intersect with the city environment. Diverse and evolving student programs are prioritized, including health and wellness services, research labs, mobility hubs and a diverse range of food and nutrition options.

Environments that Support Education and Community Engagement



Student Life

- Support diverse student needs and expression through interdisciplinary, mixed-use, residential neighborhoods.
- Create passive and active spaces for educational and civic engagement.
- Develop more 3rd year, 4th year, and graduate student housing units to address the need.
- Integrate visible sustainability measures with exhibits that demonstrate campus goals and values.
- Facilitate collaboration through local partnerships.
- Incorporate art and signage that represent the diverse cultural backgrounds of students to provide a better sense of belonging.
- Create active ground level spaces that contribute to the vibrancy of the area.
- Enhance public good spaces that cultivate impromptu gatherings as well as places for social and cultural events.
- Enhance campus lighting to provide spaces that are safe, welcoming, and reinforce 24/7 student life.

ACTIVE MIXED-USE

Building entrances and ground level programs should open up to the public realm, supporting diverse student and community needs. Spaces should be able to accommodate both small and large scale events. Mixed-use neighborhoods integrate mobility and public transit options that invite participation from across the campus and from the community.



Pearl St., Denver CO: Active street uses engage both student and greater Denver community.

STUDENT HOUSING

Characteristics of residential experiences should vary depending on where the student is in their educational journey. Addressing the specific needs of the students it serves. Such as the Dimond Family Residential Village serves the needs of first year and first-time students.



DU Dimond Family Residential Village: Student residential neighborhoods cater to a variety of students needs based on educational development.

LIVING LABORATORY

Visible sustainability measures support civic engagement and student life. The academic mission of the University should manifest itself with student engagement on display throughout campus. The inclusion of ground level research space should be integrated into the fabric of the planned Innovation and Health & Wellness Nexuses.

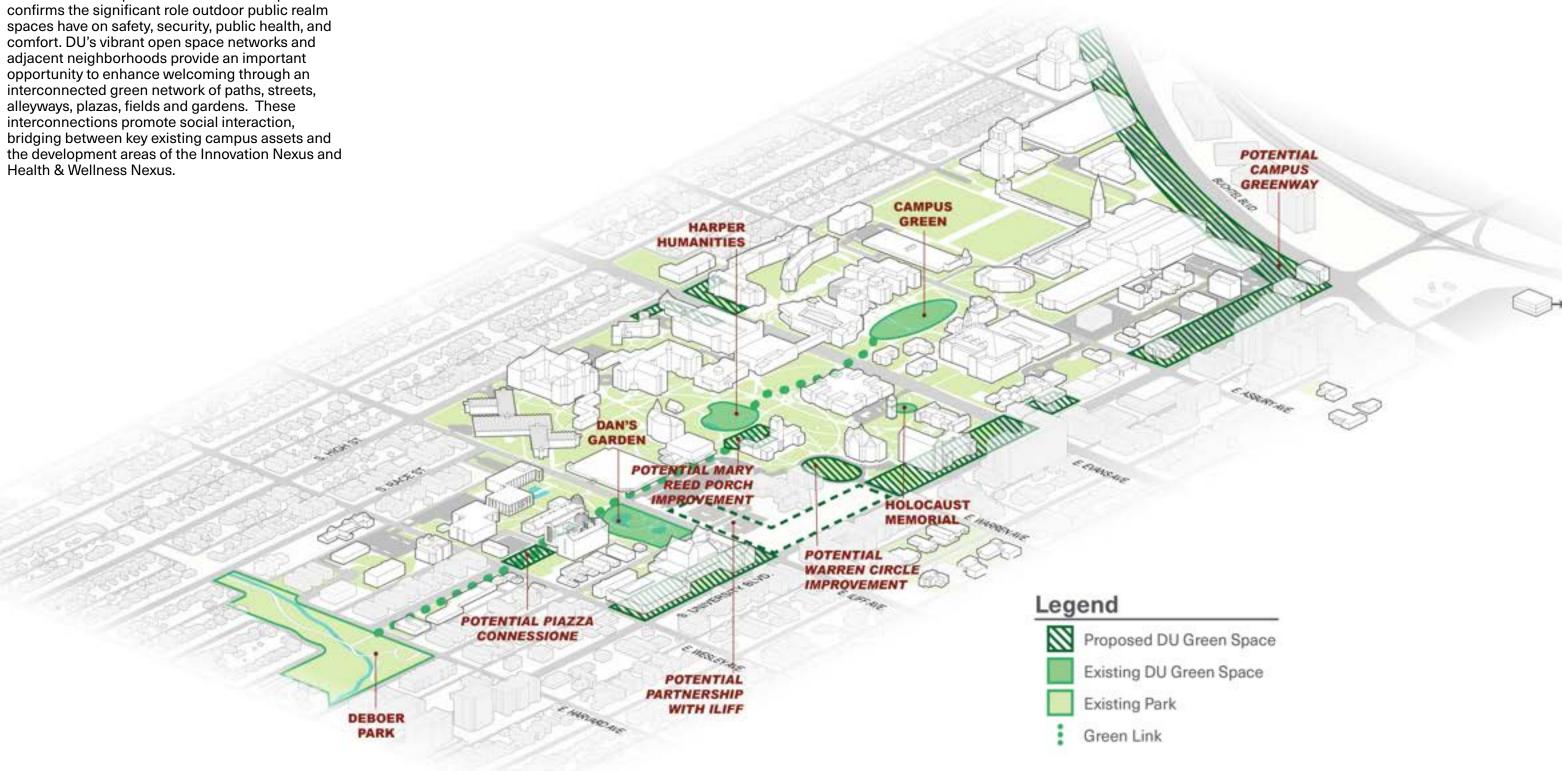


DU Bridge Community Garden: On-campus demonstration programs integrate student life and learning.

Open Space & Landscape

Open space is critical to foster intellectual exchange across the confluence of academic endeavors - a key tenet of the 4D experience. The Covid-19 pandemic

Expanding Use and Programming in Support of the 4D Experience



Open Space & Landscape

OPEN SPACE & LANDSCAPE

- Define open spaces through buildings which actively engage the public realm.
- Maximize use of outdoor environments that invite participation at multiple scales.
- Provide furnishings, Wi-Fi and shade- all low cost investments- to support outdoor learning, collaboration and build a sense of community.
- Integrate a Campus Greenbelt- a welcoming and identifiable edge at the seam between campus and community, along University and Buchtel Blvd.
- · Create spaces that support goals for wellness and sustainability.
- Display digital and physical signage and graphics that celebrate the richness and diversity of DU's contributions in academics, research and athletics.
- Integrate contemplative spaces to increase the diversity and the richness of campus culture and strengthen public good spaces.
- Enhance campus lighting to provide safer, more welcoming spaces in the evenings and nights to encourage 24/7 campus life.

SOCIAL DISCOURSE SPACE

Public spaces should be designed to cultivate dialogue, diverse expression, and civic engagement. As such, the public realm should be visible and welcoming, particularly at the campus perimeter where campus and community interests intersect. Infrastructure to support practice and performance, such as access to audio/video equipment and lighting should be integrated into the planning and design.



DU Campus: Flexible open space enable student activism and dialogue.

FLEXIBLE SEATING

Provide seating and lounging options to support a wide variety of needs at multiple scales. Students and visitors have choice in selecting hammocks and Adirondack chairs, which foster outdoor gathering. A choice of micro climates, whether it be full winter sun, dappled fall shade or intimate interior porch, provides an environment for performing, socializing, meeting or studying.



DU Campus: Flexible seating options foster student gathering.

WIRED OUTDOOR CLASSROOM

Leverage opportunities for programmable open spaces with integrated infrastructure that can support outdoor learning. Access to power, shade and ergonomically designed gathering spaces help expand planned and impromptu community collaboration space, a key objective of the 4D Experience. Particular attention should be paid to environmental acoustics and climate, to ensure that user comfort is addressed during planning and design. Low walls and tables buffered from the streets can provide additional classroom support or flexible gathering spaces, such as the Newman Center for the Performing Arts.



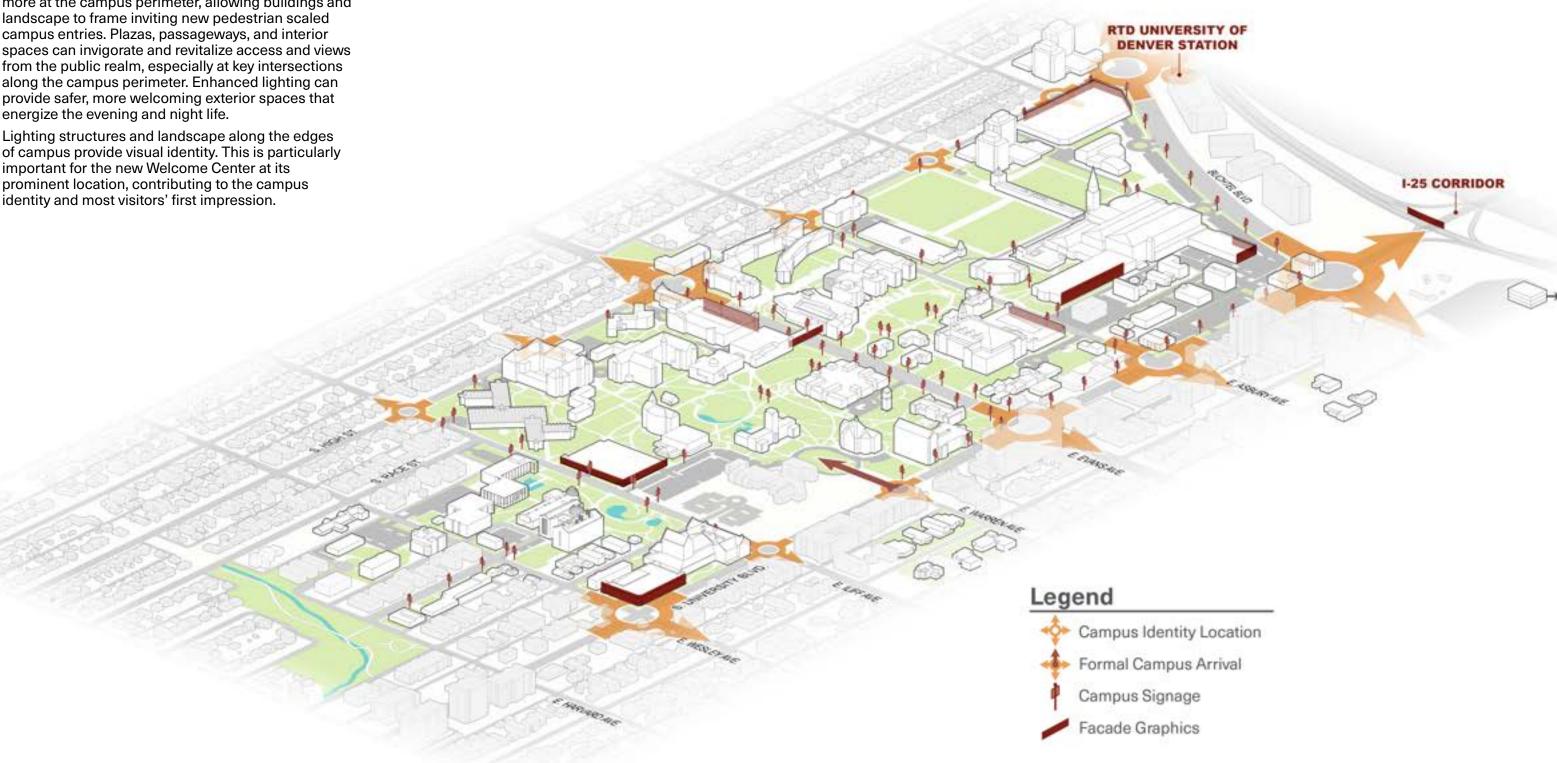
Pomona College, Claremont CA: Outdoor classrooms supported by technology expand flexibility.

Identity & Belonging

Visibility is a key dimension for extending a sense of welcoming, and enhancing both navigation and social interaction. An opportunity exists for DU to open up more at the campus perimeter, allowing buildings and landscape to frame inviting new pedestrian scaled campus entries. Plazas, passageways, and interior spaces can invigorate and revitalize access and views from the public realm, especially at key intersections along the campus perimeter. Enhanced lighting can provide safer, more welcoming exterior spaces that energize the evening and night life.

important for the new Welcome Center at its prominent location, contributing to the campus identity and most visitors' first impression.

Connecting to Community through a Welcoming Identity



Identity & Belonging

IDENTITY & BELONGING

- Accentuate graphic and wayfinding identity with DU's recently launched branding.
- Invite visitors to enter campus, especially at its edges and intersections with the surrounding community.
- Open interior building spaces to view, especially from adjacent outdoor areas at the ground floor.
- Use renovation and expansion as an opportunity to put campus and community on display.
- Create a welcoming environment, where programs and resources ensure a fair and equitable experience for campus and community.
- Display signage and graphics that celebrate the richness of community and use multiple languages, including Cheyenne, Arapaho, and Ute languages when possible and appropriate.
- Enhance student identity via art which addresses place-making that can speak to people of diverse backgrounds.



CAMPUS EDGE IDENTITY

There is the opportunity for improved DU signage at primary campus entry locations. Strengthening of the "Campus Greenbelt" along University Blvd. with a more continuous tree canopy will enhance DU's identity along this significant corridor.



University Blvd. and Daniel L. Ritchie Way (previously Warren Ave.): Existing limestone block sign is inadequate for this important campus entry.

CHANGEABLE GRAPHICS

Use signage and graphics to celebrate the richness and diversity of DU's contributions in academics, research, and athletics. Incorporate the new DU logo and branding program campuswide.



DU Changable banners on light poles.

FACADE GRAPHICS

Identify options for integrating building scale super-graphics that are visible from the campus perimeter, especially at the intersection of University Blvd. and Buchtel Blvd. and at the parking structure that serves the Newman Center for the Performing Arts.



Boston Parking Garage Art Installation: Facade graphics that promote DU's identity as well as visual interest.

Connectivity

Linking Campus Heritage to the Future

Street Connection

A key component of the CFP Refresh is to leverage DU's existing campus assets to create a more connected and equitable campus environment. Buildings, streets, alleyways, pathways, bike lanes, plazas and commons create a new network of connections within DU's Campus and beyond to the surrounding community. Legend GREENWA Vehicular Connection Pedestrian Connection Bike Path Proposed Green Space

Connectivity

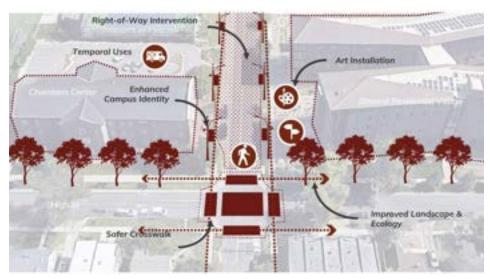
CONNECTIVITY

The recent development of the Community Commons, the Dimond Family Residential Village and the Burwell Center for Career Achievement, along with the open spaces between, dramatically transformed the sense of welcome, vibrancy, and diversity at the heart of the campus. The CFP Refresh builds upon the dramatic advances made at the Campus by expanding connections to the Health & Wellness Nexus and to the Innovation Nexus. Key campus assets are linked across multiple nexus points.

- Enhance community connections through strong mixed-use linkages.
- Support and foster multi-disciplinary projects through a network of vibrant districts for wellness, athletics, innovation, arts, and science.
- Cultivate learning spaces that are convertible from traditional to active learning laboratories as pedagogy requires.
- Connect campus and City physically through new mobility initiatives.
- Heighten the likelihood for informal interaction between arts and sciences that lead to collaborative and innovative outcomes.

CAMPUS CONNECTION

Create a sense of welcoming by softening campus edges and intersections with the surrounding community.



Intersection of High St. and Asbury St.: Enhancements promote connectivity with community and DU campus identity.

COMMUNITY CONNECTION

Strengthen DU's collaborative engagement with the greater Denver metropolitan community, including with the City of Denver locally and with the larger globe.



Downtown Denver, 2012 Presidential Debate: DU's civic engagement has regional and global impact.

DENVER GREENWAY

Strong linkages at the southern and northern edge of campus are envisioned to enhance connections to adjacent regional recreational assets; DeBoer Park and the 14 acre Prairie Park, beyond, as well as the Historic Buchtel Blvd. Trail.

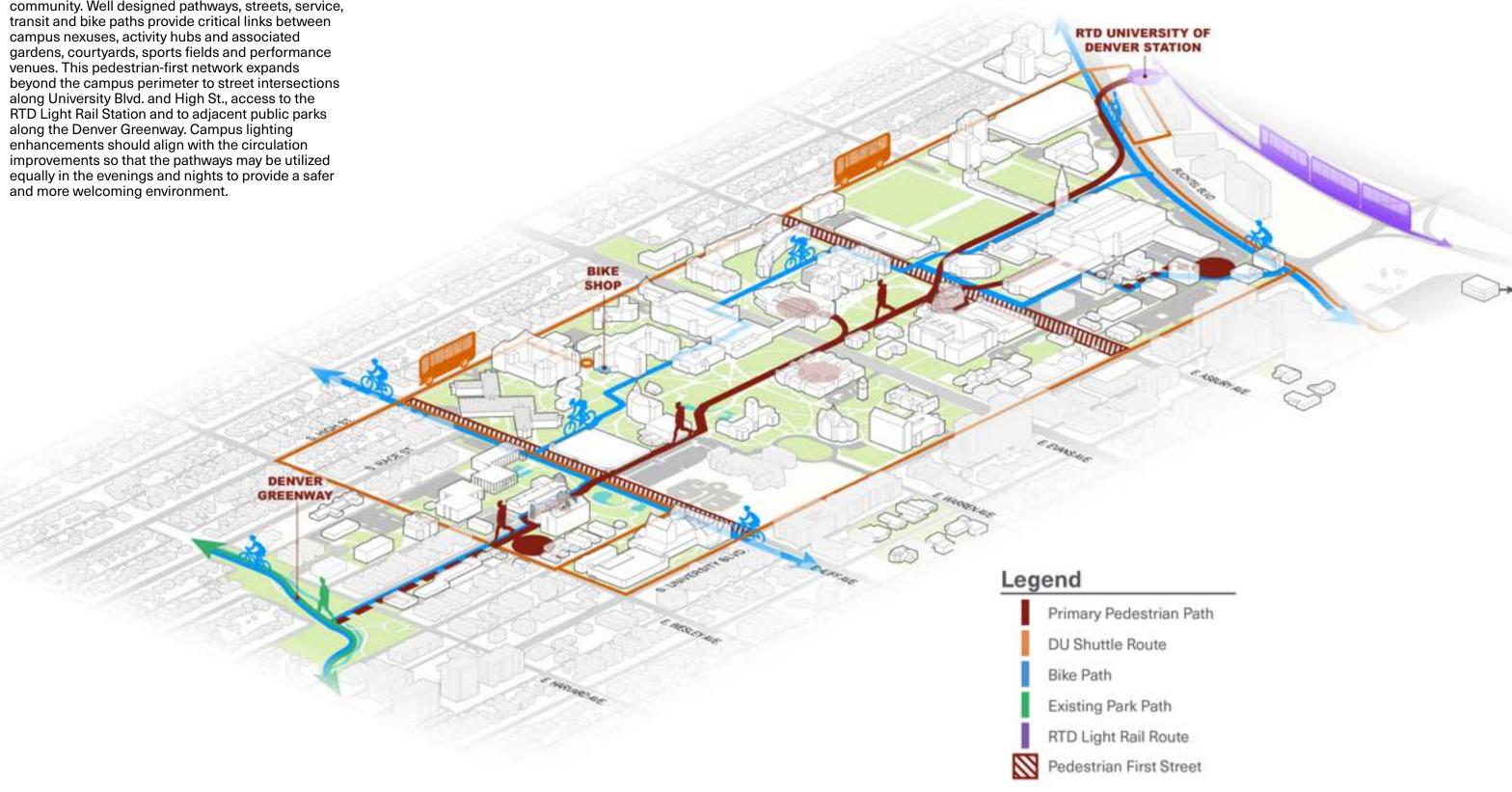


Cherry Creek bike trail: Intentional and highlighted connections to trails and greenways provide additional routes in the greater Denver area.

Circulation & Mobility

Improvements in circulation and mobility not only enhance the wayfinding experience, but also encourage person-to-person interaction that builds community. Well designed pathways, streets, service,

Give Priority to Pedestrian and Alternate Means of Transportation



Circulation & Mobility

- Activate streets and pedestrian paths by lining with active and inviting uses and programs such as building entrances, plazas, terraces, and cafes, to engage the community.
- Integrate clear wayfinding, lighting and institutional signage strategies at intersections that enhance campus identity – as welcoming and diverse. Avoid purely symbolic and traditional gateways as they can easily be perceived as exclusionary.
- Create a network of shaded walkways: shade trees should be added where possible to increase pedestrian comfort and frame views to the regional landscape and iconic campus buildings.
- Widen existing and proposed walkways to a minimum of 12 feet at busy routes to safely accommodate increased pedestrian and bicycle traffic.

BICYCLE PATHS

Bike routes must extend into the Innovation and Health & Wellness Nexuses, establishing clear connections between existing and future campus assets and enhance health and wellness for the campus community.

Bike lanes shall intersect with key public realm amenities such as cafes, plazas, recreational areas and student serving resources, creating active and diverse mobility corridors connecting the north and south ends of the campus.



DU Campus: Bike paths connect the campus to the greater Denver community.

PEDESTRIAN-FIRST STREETS

A key vision of the CFP Refresh and the 2018 CFP is to ensure that streets, intersections, and alleyways are part of a larger network of welcoming open spaces that enhance diversity of use. To this end, streets must acknowledge the pedestrian as a primary user. Buchtel and University Blvds. are enhanced to create a new Campus Green Belt, enhancing institutional identity to reflect diverse community, and framing pedestrian-scaled and active campus gateways at the perimeter.



Dartmouth College, Hanover NH: Prioritizing a pedestrian-friendly environment while co-existing with vehicles.

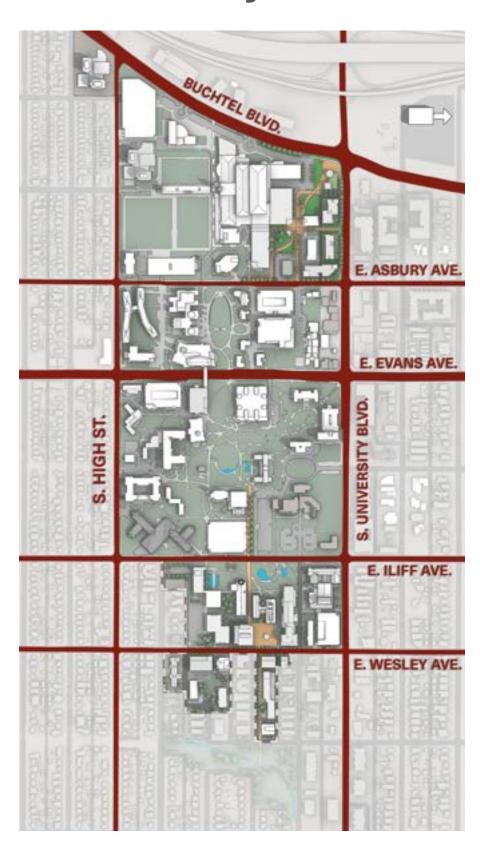
DU SHUTTLE

Integrating a range of mobility options, including expansion of the DU shuttle routes to the north and south ends of the campus, is critical to sustaining campus growth and providing enhanced and equitable access to campus assets. Extending the shuttle routes will better connect the Innovation and Health & Wellness Nexuses to the City of Denver transit network, in particular, the University of Denver light rail station.



DU Campus: The Campus Shuttle service provides greater access to the entirety of campus and beyond.

Circulation & Mobility



E. Iliff, E. Asbury, and E. Wesley Aves.

Pedestrian first streets are proposed for E. Iliff, E. Asbury, and E. Wesley Aves. To achieve a pedestrian first street environment, some changes to the roadways should occur. Recommendations include de-emphasizing vehicle throughput, travel time, and storage/parking along the roadway. Slower vehicle speeds and improvements to pedestrian crossings to help achieve yield compliance at desired crossing lines will benefit pedestrian safety. Urban design treatments will also make the roadways feel more pedestrian friendly. The University should work with the City & County of Denver towards a permitting strategy that would allow the University to close the roadways for special events.

As part of the north-south internal campus bikeway, a buffered bike lane is proposed for these avenues to provide a valuable connection. The proposed cross section includes a 6-foot bike lane, 2-foot buffer, and 10-foot travel lane on both sides of the roadway. This cross section does not require relocation of the existing centerlines. These improvements will need to be coordinated with the City.

S. High St.

A bicycle lane was evaluated for implementation on S. High St. However, there is not enough space in the existing curb-to-curb width to install a bicycle lane per City & County of Denver Standards. A neighborhood bikeway was investigated, but traffic volumes are high and would require significant diversion that is likely not feasible. If a bicycle lane is desired in the future, the University and the City should work together to move the curb to accommodate a bicycle lane. This street has also been identified as a priority to operate the campus shuttle, which connects the RTD Light Rail Station to stops throughout campus.

Buchtel Blvd.

Buchtel Blvd. forms a barrier between RTD's University of Denver Station and campus destinations. Many DU students also live in the apartment buildings north of Buchtel Blvd. A protected bike lane was installed along Buchtel Blvd. from S. Corona St. to the Ritchie Center north entry. The protected bike lane is planned to extend east to S. Colorado Blvd. and is currently scheduled to be constructed in 2025.

E. Evans Ave.

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

Over 15,000 people cross E. Evans Ave. on a daily basis between Franklin St. and University Blvd. In peak times between classes, the number of people crossing E. Evans Ave. is higher than the number of vehicles on Evans Ave. Pedestrian crossing improvements on Evans Ave. were implemented at the Anderson Academic Commons crossing and at Race St. to improve pedestrian and bicyclist safety.

As the campus evolves, the University should work with the City to explore additional crossings of Evans Ave. to further enhance pedestrian and bicyclist accessibility, comfort, and safety.

Circulation & Mobility



DU Campus: Bike use is a popular mode of transportation for DU students, and as part of the carbon neutrality goals, the expected increase in use should be accommodated.

North-South Internal Campus Bikeway

A north-south internal campus bikeway will improve mobility options on the University of Denver campus and will connect the north end of campus at Buchtel Blvd. and RTD's University of Denver Station to the south end of campus at E. Harvard Ave. and DeBoer Park. It is intended that the bikeway be designed in a way to activate space throughout campus. This connection will increasingly be important to ensure

that the new Innovation Nexus is connected to the remainder of campus. The alignment provides access to the proposed east/west connections at E. Iliff Ave. and Buchtel Blvd. It is recommended that an additional east/west connection be explored to connect the Health & Wellness Nexus to the internal campus bikeway.

Shuttle Service

The existing shuttle service connects several locations on campus to RTD's University of Denver Station. The shuttle routes operate along S. High St. with other stops along E. Asbury Ave, Nelson and Nagel Halls, E. Iliff Ave, S. Race St., and E. Wesley Ave (route picture below). It is recommended that the shuttles serve both the Health & Wellness Nexus and the Innovation Nexus in the future. This can be achieved by modifying existing routes to cover these areas.

The University currently operates an app-based, on-demand service that serves various off-campus stops such as grocery stores and frequented areas with restaurants. Alternative shuttle operation options. Alternative future operation options should include microtransit, electric, and autonomous shuttles.



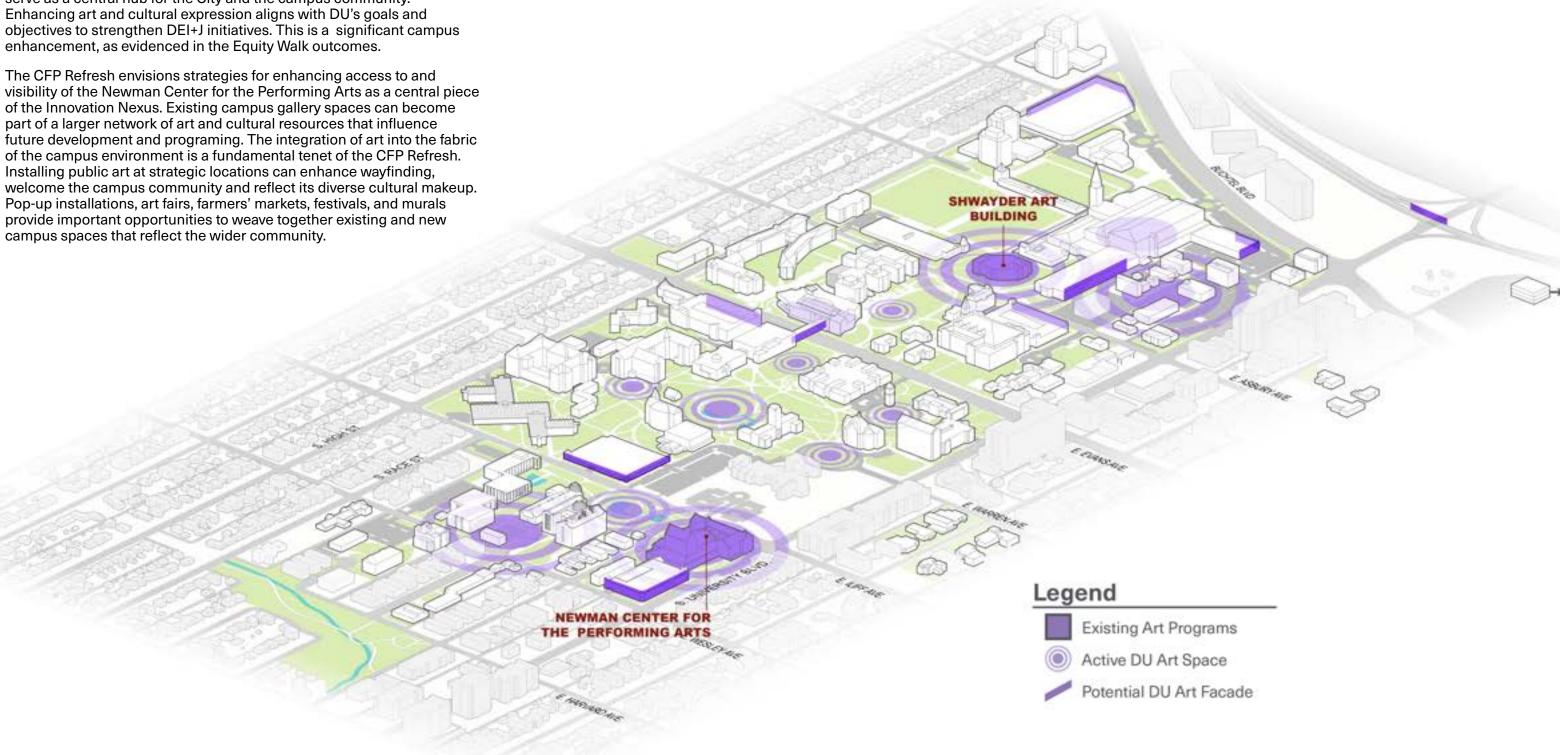
Current Shuttle Route

Arts & Culture

Campus arts and culture express the intellectual inquiry, exploration, and creativity found at DU, and adds a dimension of place-making that speaks to people of all backgrounds. DU's art and cultural resources serve as a central hub for the City and the campus community. Enhancing art and cultural expression aligns with DU's goals and objectives to strengthen DEI+J initiatives. This is a significant campus enhancement, as evidenced in the Equity Walk outcomes.

visibility of the Newman Center for the Performing Arts as a central piece of the Innovation Nexus. Existing campus gallery spaces can become part of a larger network of art and cultural resources that influence future development and programing. The integration of art into the fabric of the campus environment is a fundamental tenet of the CFP Refresh. Installing public art at strategic locations can enhance wayfinding, welcome the campus community and reflect its diverse cultural makeup. Pop-up installations, art fairs, farmers' markets, festivals, and murals provide important opportunities to weave together existing and new campus spaces that reflect the wider community.

Enhancing Campus-Community Connections through Culture



Arts & Culture

- Integrate pre-function and post-function outdoor event spaces adjacent to the Newman Center for the Performing Arts, as part of the planned Innovation Nexus.
- Prioritize locations for art including campus focal points and gathering areas, especially those seen from public streets.
- Relate new campus art to associated academic programs to enhance and highlight the learning experience.
- Integrate art and murals into their immediate surroundings to enhance campus and community synergies.
- Design streets and alleyways to accommodate art fairs and cultural festivals.

OUTDOOR PERFORMANCE

Concerts, theatre, art exhibitions, pop-up installations, festivals and other outdoor arts and performance allow for cultural expression in various locations throughout campus. Open spaces designed for gathering in the Health & Wellness and Innovation Nexuses shall offer the backdrop for outdoor performance.



BANDALOOP is an aerial dance company combining dance with rock climbing technology, sport, ritual, and environmental awareness.

CULTURAL EXPRESSION

Streets and alleyways should be designed to accommodate mural painting, art fairs and cultural festivals. The strategic placement of public art, especially at the campus perimeter, can enhance wayfinding, welcome the campus community and reflect its diverse cultural makeup.



RiNo Art District, Denver, CO: Creative outlet spaces encourage cultural expression.

FARMER'S MARKET

A select number of streets and alleyways should be designed to accommodate farmers' markets and festival streets. Locations should consider service access and traffic mitigation impacts.

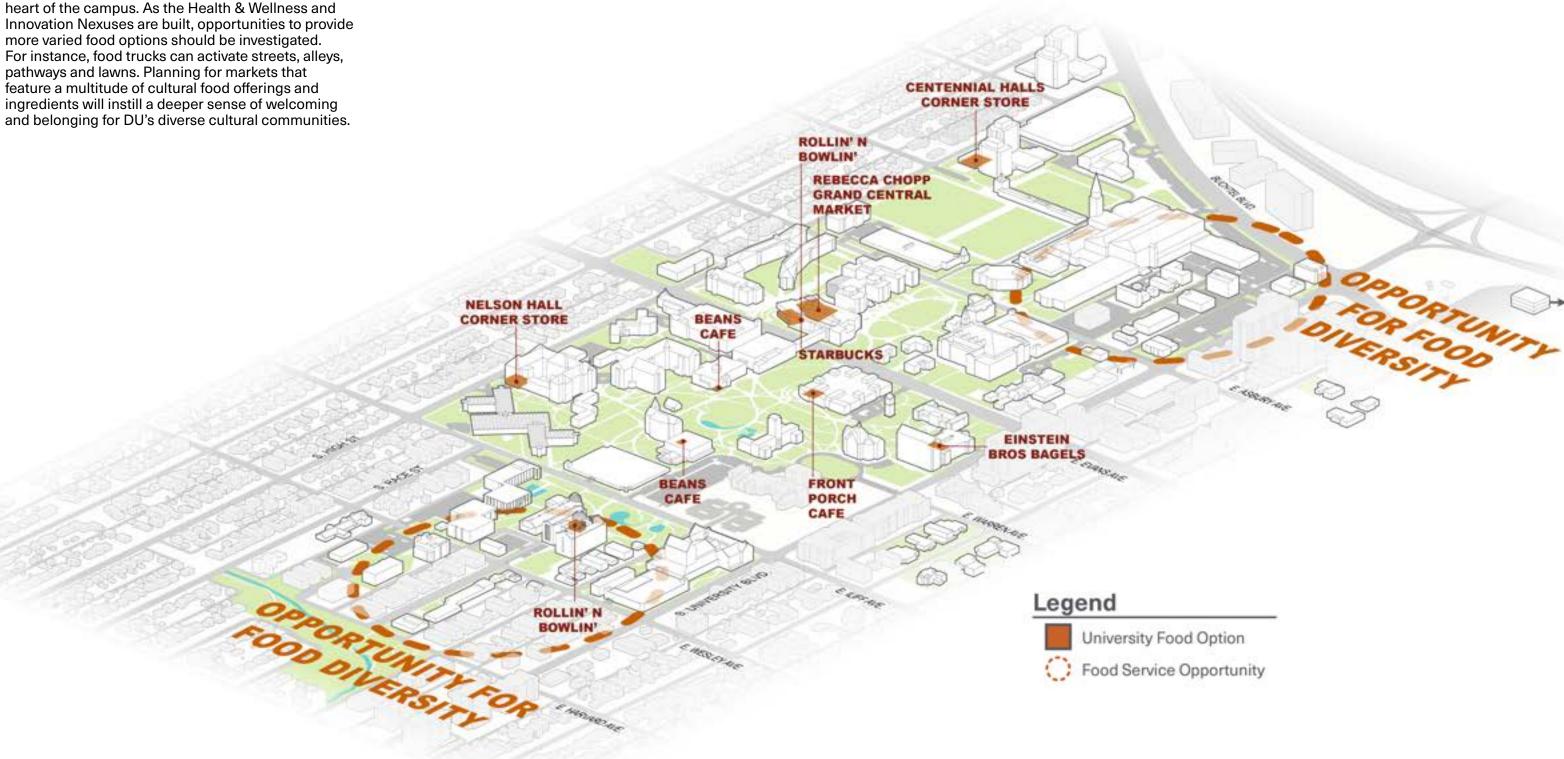


Pearl St. Farmers Market, Denver, CO: Festivals often promote community and cultural diversity.

Nutrition & Food Diversity

The Rebecca Chopp Grand Central Market was intentionally designed to encourage community building through centralizing food service in the heart of the campus. As the Health & Wellness and

Integrating Food Diversity to Celebrate Cultural Expression and to Build Community



Nutrition & Food Diversity

- Orient food venues to the public realm; streets, quads and alleyways.
- Make food options visible and easily accessible.
- Expand culturally diverse food options.
- Modify streets, alleyways, and open spaces to accommodate food trucks and associated infrastructure requirements.
- Consider opportunities to close streets for campus and community events, including farmers markets.
- Consider accommodations for generous south facing outdoor seating to optimize thermal comfort such as Beans Cafe.
- Focus on nutritional diversity that leads to improved health.

DENVER DAIRY BLOCK

An activated urban alley offers prime restaurant and retail store frontage within a network of interior and exterior pedestrian connections. This local precedent offers relevant lessons for the development, by the University, of pedestrian-oriented, mixed-use neighborhoods, as envisioned at the Innovation and Health & Wellness Nexuses.



Denver Dairy Block, Denver, CO: Intimately-scaled, pedestrian-centric spaces with retail activate a 24/7 neighborhood.

CAFES

Cafes have the ability to provide food options while activating the areas they occupy. Tables and chairs should spill out into plazas and streets can add life to the public realm.



San Francisco, CA: Coffee houses offer another option for community connections.

FOOD TRUCKS

As a campus public realm activator, food trucks can bring important diversity of choices into the heart of the campus, activating streets, plazas and open spaces. Expanding locations for food trucks allow community restaurant owners and DU alums, who own businesses, to have a presence on campus, helping to further the mix of campus and city influences.



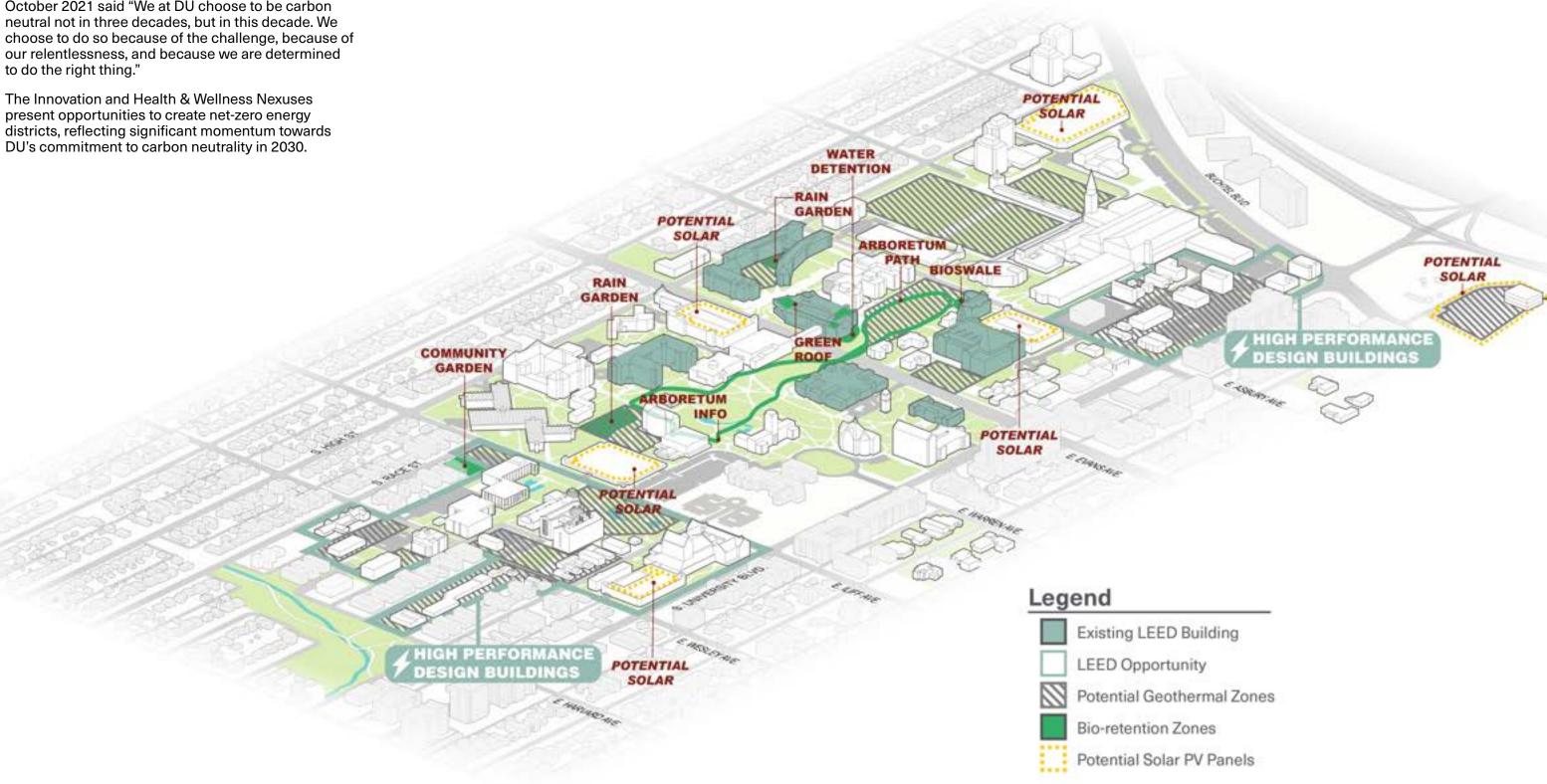
DU Campus: Food trucks can quickly transform and activate a space, gathering students and community together.

Carbon Neutrality

DU is a leader in environmental stewardship. The CFP Refresh's consideration of campus energy use is inspired by Chancellor Jeremy Haefner who, on October 2021 said "We at DU choose to be carbon neutral not in three decades, but in this decade. We our relentlessness, and because we are determined to do the right thing."

present opportunities to create net-zero energy DU's commitment to carbon neutrality in 2030.

The Carbon Neutrality Challenge Demands Relentless Determination



72 | UNIVERSITY OF DENVER CFP REFRESH | 73

Carbon Neutrality

- Design high-efficiency buildings that conserve energy and water and have limited embodied carbon. Use these buildings as opportunities for building occupants to learn of the environmental benefits of high performance design.
- Leverage key opportunities to adaptively reuse existing buildings through strategic renovation, versus new construction.
- Integrate opportunities for renewable energy resources, such as geothermal and solar.
- Expand existing multi-modal mobility links (shuttle, bikes etc.) to the Innovation and Health & Wellness Nexuses and the RTD University of Denver Station.
- Expand stormwater treatment (bio swales and rain gardens) as an integral and visible part of the street and public realm infrastructure and design.

OUTDOOR AMENITIES

A diverse blend of residential, academic and research programs activate streets, alleyways, plazas and elevated terraces, making the DU campus community more visible and inviting by creating a sense of belonging and identity for all DU students. Public realm infrastructure, such as lighting, access to power and shade, support an environment that encourages social interaction and co-curricular activities at multiple scales, across all seasons. These outdoor campus activator spaces occur at multiple levels; ground plane, elevated terrace and rooftop.



University of Denver, CO: Solar Trees can provide power for small devices to support outdoor studying and collaboration.

STORMWATER MANAGEMENT

The DU campus has increasingly prioritized storm water management as a key component of a visible campus infrastructure network that strengthens DU's ethos in environmental stewardship. Considering the significant topographic variation that occurs across campus, the CFP Refresh highlights ways in which these existing systems can extend into the Innovation and Health & Wellness Nexuses, as an important and visible green infrastructure.



DU Campus: Community Commons rain garden with bioswale.

LIVING & LEARNING

The mixed-use strategies for the Innovation and Health & Wellness Nexuses create a wide range of opportunities to expand upon DU's established reputation in integrating Living Learning curricula. Research, housing and community assets are blended into dynamic and vibrant urban settings where academic and co-curricular experiences intersect with campus and community, shaping space for the "Public Good".



DU Bridge Community Garden: Demonstration projects on display promote dissemination of information and spark interest.

74 | UNIVERSITY OF DENVER — CFP REFRESH | 75

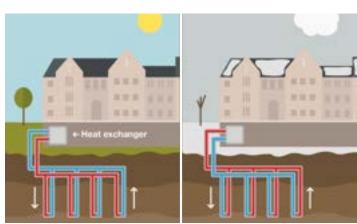
Carbon Neutrality

Evidence of DU's determination to reduce its greenhouse gas emissions is found in the University's 2020 emissions record. At that time, DU had reduced its greenhouse gas emissions by 28% from its 2006 baseline (Main Campus Emissions Report.) DU realized this success by:

- · Acting on its culture of sustainability
- Making significant investment in solar PV
- Completing more than 100 energy saving measure projects
- Receiving power from an electricity utility which is shifting away from fossil fuels as a primary energy source

DU has experience delivering high performance design buildings, including five buildings that are LEED Gold or higher. These include the Ricketson Law Building which was the first LEED Gold building in Colorado and the Burwell Center for Career Achievement, a LEED Platinum and an all-electric building design. Energy savings measures of these buildings can be replicated or surpassed in the buildings shown in the CFP Refresh Plan.

The University is experienced installing energy savings measures at campus buildings. Past efforts can be enhanced, including using air source heat pumps (variable refrigerant flow) as featured energy savings measures. Central energy supply systems are a valuable complement to creating high performance or net-zero energy buildings. DU has central chilling serving 25% of the main campus. This system can be modified or replaced to reduce campus greenhouse gas emissions and/or new district scale systems can be installed. Balancing the need for chilled water and heating invite the opportunity for combined heating and cooling system enhancements using low-grade heat sources. The University is currently considering leveraging this opportunity through a potential combination of capturing and recycling sewer heat and building exhaust heat in combination with installing geothermal and solar thermal heat pumps.



Geothermal Diagram - Excess heat is pumped to the cooler ground during warmer months and a reverse process in the winter, as shown.



Photovoltaic Panels on Burwell Center for Career Achievement.



Potential Next Generation Heating and Cooling System

Potential Geothermal Zones Potential Solar PV and Thermal Panels Potential District Plant Site

Distribution System Layout

76 | UNIVERSITY OF DENVER — CFP REFRESH | 77

Carbon Neutrality

Combating Climate Change

Guidance in the design of campus buildings will augment the Chancellor's commitment, and requirements of state, city, and county agencies to combat climate change. Climate change is impacting the region. Climate scientist models anticipate that the city will experience approximately 25 days per year with a temperature of 100° Fahrenheit as compared to the current record of six days per year at that temperature. Extreme cold and winter weather, drought, hail, inferior air quality, lightening, tornadoes and wildfires will continue to plague the region. As DU plans for these changes, its concerns is both for buildings – ensuring comfort of building occupants and building functionality - and use of the outdoor environment.

State, City, and County Requirements

Achieving carbon neutrality is DU's next big step. DU's efforts will build upon and surpass state and local initiatives to reduce building energy usage. Together, these initiatives drive the campus to design new buildings illustrated in the CFP Refresh as high performance and/or net zero energy buildings and make significant investments in reducing the energy use and emissions of existing buildings.

State HB19-1260 requires local jurisdictions to adopt one of the three most recent versions of the International Energy Conservation Code. Also passed in 2019, HB19-1261, the Climate Action Plan to Reduce Pollution, established state goals to reduce statewide greenhouse gas pollution from 2005 levels by 26% by 2025, 50% by 2030 and 90% by 2050. In 2021, the state's HB21-1286 Energy Performance for Buildings requires all buildings greater than 50,000 SF to benchmark their annual energy usage. DU plans to satisfy the program's intention and 2030 standard through an alternative compliance path that has yet to be established.

The City and County of Denver's building performance requirements work towards net-zero emissions by 2040. Decarbonization of new buildings will occur through adoption of increasingly stringent energy codes. The City and County of Denver's stated intention is to establish interim standards and ensure that the 2027 building code requires new buildings to be all electric and net zero energy. Energize Denver is the City and County of Denver vehicle for improving energy performance in existing buildings. It was launched in 2022 and applies to all commercial and multifamily buildings greater or equal to 5,000 SF. Impact to DU includes the requirement for existing buildings greater than 25,000 SF, of which DU has 38, to perform to specific energy use intensity standards.



Student Academic Exploration on the DU Campus.

Lighting, Safety & Security

Safety and Equity with Lighting

Architectural lighting has a critical role on how the DU community perceives the campus externally and internally. Lighting has the potential to contribute to making the campus environment feel distinctive, comfortable and a safe place to be in. Consistent with campus priorities campus lighting will support these touchstone principles.

The safety and wellbeing of students and the broader DU community is of the utmost importance. Campus Safety and the Denver Police Department work together to provide and continually assess the safety and security of the campus. Adequate lighting, high-definition cameras, and emergency call boxes are some of the physical measures that increase safety and security. By locating and monitoring these devices throughout campus, including at hightrafficked and key campus/building entry points, the campus will be a safer environment at all hours of the day.

Lighting has the ability to provide visual interest and activate outdoor spaces. The appropriate illumination levels can support active and passive uses, inviting people onto campus, making them feel welcome, and causing them to stay.

Improving safety across campus will requre the evaluation and provision of appropriate illumination levels along campus edges, pedestrian paths, bikeways, outdoor gathering spaces, and event spaces. Elimination of high contrast and glare in the nighttime environment is key to providing a safe and equitable campus environment. OUTDOOR SPORTS VENUE LIGHTING **CAMPUS GREENS EVENT LIGHTING** CAMPUS Welcoming and Belonging **GREENS EVENT** LIGHTING UNIVERSITY OF **DENVER CAMPUS** SAFETY ARCHITECTURAL LIGHTING Legend Campus Access CAMPUS TO Campus Perimeter Lighting **GREENS EVENT** LIGHTING Pedestrian/Bike Lighting Activity Space Lighting **Emergency Phones** Campus Safety and Security

80 | UNIVERSITY OF DENVER CFP REFRESH | 81

Lighting, Safety & Security

- Utilize Lighting Best Practices, as defined in the Referenced Reports, so that they are integrated into the design of each building and Nexus neighborhood.
- Implement appropriate lighting zones and activity levels for each Nexus.
- Integrate lighting compatible with the rest of campus.
- Support the unique architectural expression of each building within the context of the campus, especially the Ritchie School of Engineering and Computer Science, Olin Hall, the Newman Center for the Performing Arts, and the Ritchie Center for Sports and Wellness.
- Leverage opportunities for activation and student engagement through illumination of or projections onto strategic facades.
- Consider proximity to residences for potential impact to the lighting strategies, including interior lighting visible through glazing.
- Activate exterior spaces by interior lighting as viewed through transparent portions of the facade.
- Support the impression of welcome and DU's identity.

VISUAL COMFORT, EXPERIENCE & SAFETY

Considerations include uniformity of light levels, color temperature, glare reduction, and use of vertical illumination to align with the lighting zone and activity level. Remember that everyone's eyes are different, and perception of lighting at night is highly context-specific.

LIGHTING ZONES & ACTIVITY LEVELS

Use of Lighting Zones LZ0-LZ4 combined with Lighting Activity Levels of low, medium and high go together to provide recommended lighting target levels. Light levels will vary with decreased activity levels or after curfew.



Arch Grounds, St. Louis, MO: Lighting uniformity and low-contrast is key to visual comfort.

WAYFINDING

Use the orienting effect of illumination after dark to support both internal campus wayfinding, but also for creating a sense of arrival at key entry points.

ENGAGEMENT

Engage in lighting conversations early and often for every project to determine how lighting (exterior and interior) can best be integrated into the project and overall campus lighting strategy.





No object lighting

No clear exit because of dark shadow Path lighting not uniform

City Garden, St. Louis, MO: Lighting of key elements aides wavfinding and adds visual interest.

CAMPUS COHESION

Consistency of certain lighting applications, such as DU pedestrian poles and/or use of facade lighting, should be considered in the context of each project.

SUSTAINABILITY AND CARBON NEUTRALITY

Consider accelerating the replacement of light sources to LED, focusing lighting down to reduce light trespass and pollution, using solar powered sources, and implementing additional controls that allow unoccupied dimming, after hour reduction, and energy savings.



DU Campus: Lighting contributes to the character of this place.



Building the Vision

CFP Refresh Implementation Plan

The implementation plan builds upon the ten framework elements described in section 4. The potential projects illustrated in this section are testfits and suitable to be initialized within the next five years. A few projects are interdependent and require sequential phasing.

Campus Framework Plan Priorities: Connecting the Campus

The Health and Wellness Nexus, the Innovation Nexus, and the Mid Campus Projects have the potential to improve connections across a campus network that contribute to a more equitable and interconnected community in the ways students, faculty, staff and visitors engage with each other. The north-south connections of these Nexuses with the current campus Nexuses:

- Academic Nexus Anderson Academic
- Achievement
- Wellness
- Performing Arts Nexus Newman Center for the Performing Arts

The Vision

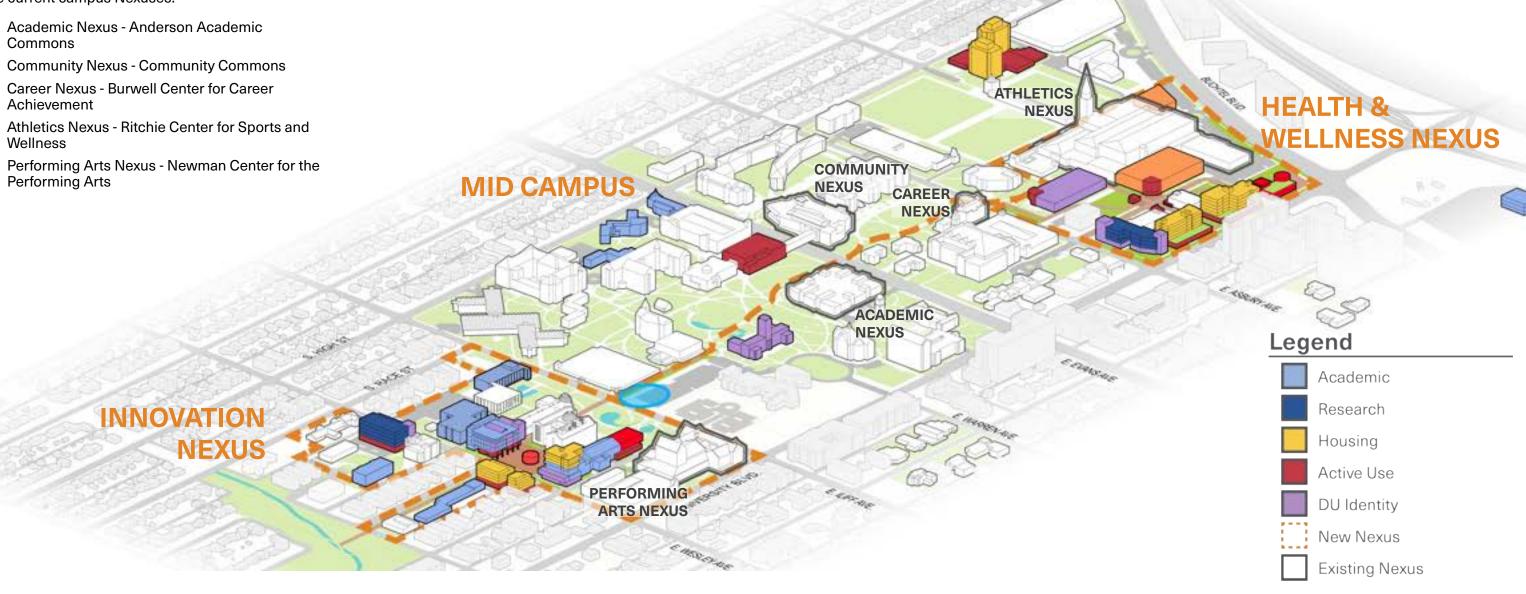
- Innovation Nexus
- Mid Campus Projects
- Health & Wellness Nexus
- **Pilot Project Opportunities**

These are key to the creation of a cohesive campus community. The character of the campus at every scale, within programmed spaces, places of movement and interaction, and outdoor gathering spaces presents opportunities for a positive, inclusive experience. Opening interior spaces to view, especially to adjacent outdoor areas at the ground floor, puts activity on display, enhances interdisciplinary engagements, and strengthens connections to the community.

Implementation Strategies

- Create place-making that celebrates diversity of all people
- Develop sustainable practices to support a carbon neutral campus
- Create active edges at the street levels of new
- Design for adaptability and resilience
- Express the identity of the campus with elements of the heritage material palette
- Create more opportunities for informal campus spaces that will serve a more culturally diverse community
- Support opportunities for more indoor-outdoor connectivity and utilizing biophilic design to improve health

- Celebrate the energy and activity within academic buildings with increased transparency
- Encourage porosity and invitation at the campus
- Link pathways and open spaces to create an inviting, safe and clear network of pedestrian experiences
- Use landscape to better define a welcoming perimeter and entries into the campus
- Encourage mixed-use buildings that can activate and serve the campus and community
- Design buildings and open spaces that are in dialogue with their campus and community context



86 | UNIVERSITY OF DENVER CFP REFRESH | 87



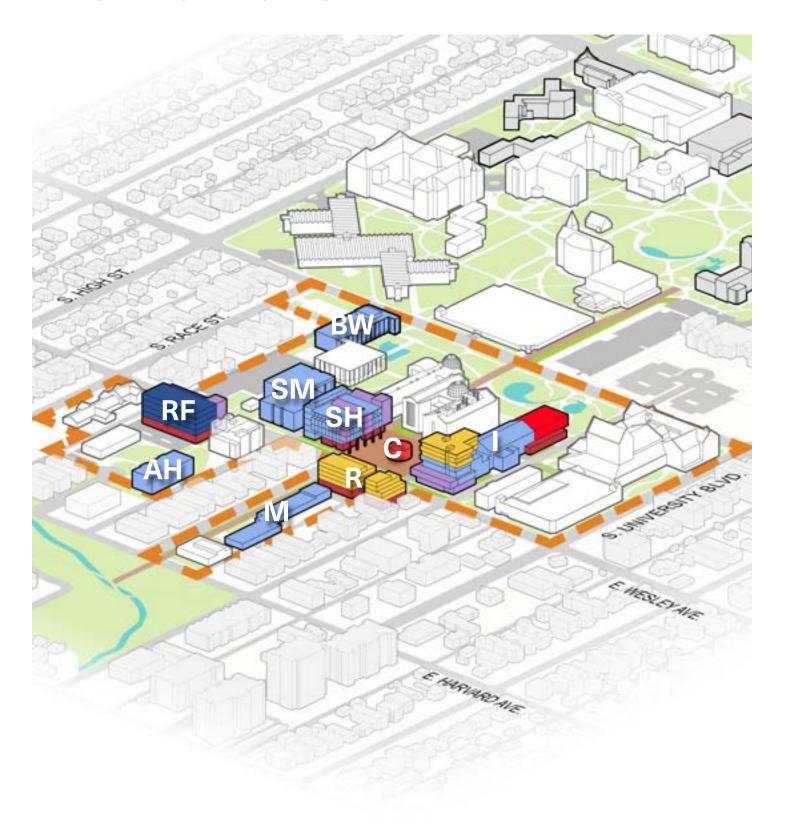
Innovation Nexus

The future will be defined by those who innovate, create and make. That future is being shaped now at the University of Denver as we recognize the long-term sustainability and value of higher education rooted in interdisciplinary learning and collaboration. DU's Innovation Nexus will cultivate an innovative mindset, and its

success will manifest through collaborations and innovations. The Innovation Nexus – located at the nexus of science, engineering, and performing arts – creates an idea space where all people, disciplines, and ideas can unite. By forging these connections today, the University of Denver will amplify its impact on the world of tomorrow. The vision for the Innovation Nexus begins with a new STEM Horizons facility followed by the renovations of the Seeley G. Mudd building and the boettcher West science facility. Equally important is continued investment in an Innovation Hub and Event Center that by design encourages interactions across a broad range of educational, artistic, and research endeavors. STEM HORIZONS SH **INNOVATION HUB & EVENT CENTER SEELEY G. MUDD RENOVATION** BOETTCHER WEST RENOVATION BIM COMMUNITY SPACE **AMMI HYDE RENOVATION METALLURGY BUILDING RENOVATION RESIDENTIAL/MIXED-USE** RESEARCH FACILITY RE

90 | UNIVERSITY OF DENVER CFP REFRESH | 91

Innovation Nexus





STEM HORIZONS

STEM Horizons will be the new front door for natural sciences at the University of Denver. Featuring new research facilities that will serve DU's R1 status, teaching laboratories, offices and collaboration spaces, this new facility will be located located at the heart of the Innovation Nexus and will be the front porch for Innovation at DU.



INNOVATION HUB & EVENT CENTER

The Innovation Hub mirrors the objectives of the Innovation Nexus - it is a multidisciplinary, mixed-use building, located at the intersections of the arts and sciences, as well as the campus and community.



SEELEY G. MUDD RENOVATION

The renovation of the Seeley G. Mudd Building will provide new research laboratory spaces for the college of Natural Sciences and Mathematics (NSM) in an this existing facility. This approach reduces the carbon footprint of NSM and research at DU, while providing state-of-the-art R1 research spaces for the R1 Principle Investigators (PI) in NSM.



BOETTCHER WEST RENOVATION

Renovating Boettcher West will create new space for Allied Heath and Professional Psychology in the Innovation Nexus.



COMMUNITY SPACE

A Community Space at the heart of the Innovation Nexus will create a link between both the University and its larger community, and throughout arts, sciences and innovation. This space will be multi-disciplinary, engaging all students, faculty, and community members.



AMMI HYDE RENOVATION

The renovation of the Ammi Hyde Building has an opportunity for renovation and reuse of this serviceable building within the Innovation Nexus over time as the School of Allied Health & Professional Psychology in the Health & Wellness Nexus is built out.



METALLURGY BUILDING RENOVATION

Metallurgy North and South is an excellent example of a built asset with the potential to create dynamic creative space. It is possible to conceive a project that would provide a spaces for students to work through the messy stages of creation such as a solar decathlon entry, endangered animal habitat preservation, or spaces for artistic expression.



RESIDENTIAL/MIXED USE

Residential units serving the school's graduates, faculty, and larger community may be developed to ensure there is activation throughout the Innovation Nexus at all times of day and all seasons of the year. As a mixeduse and multi-disciplinary neighborhood, the Innovation Nexus will include activators on the street, such as ground-level retail, food and beverage, and other commercial programs.



RESEARCH FACILITY

A new Research Facility is anticipated in the Innovation Nexus, as research continues to grow in this area of campus. This facility will build on the success of STEM Horizons, and will support the University's objective to expand research in science and engineering.

Innovation Nexus

The Innovation Nexus will create a new interdisciplinary community for science, technology, engineering, art, mathematics, and research.

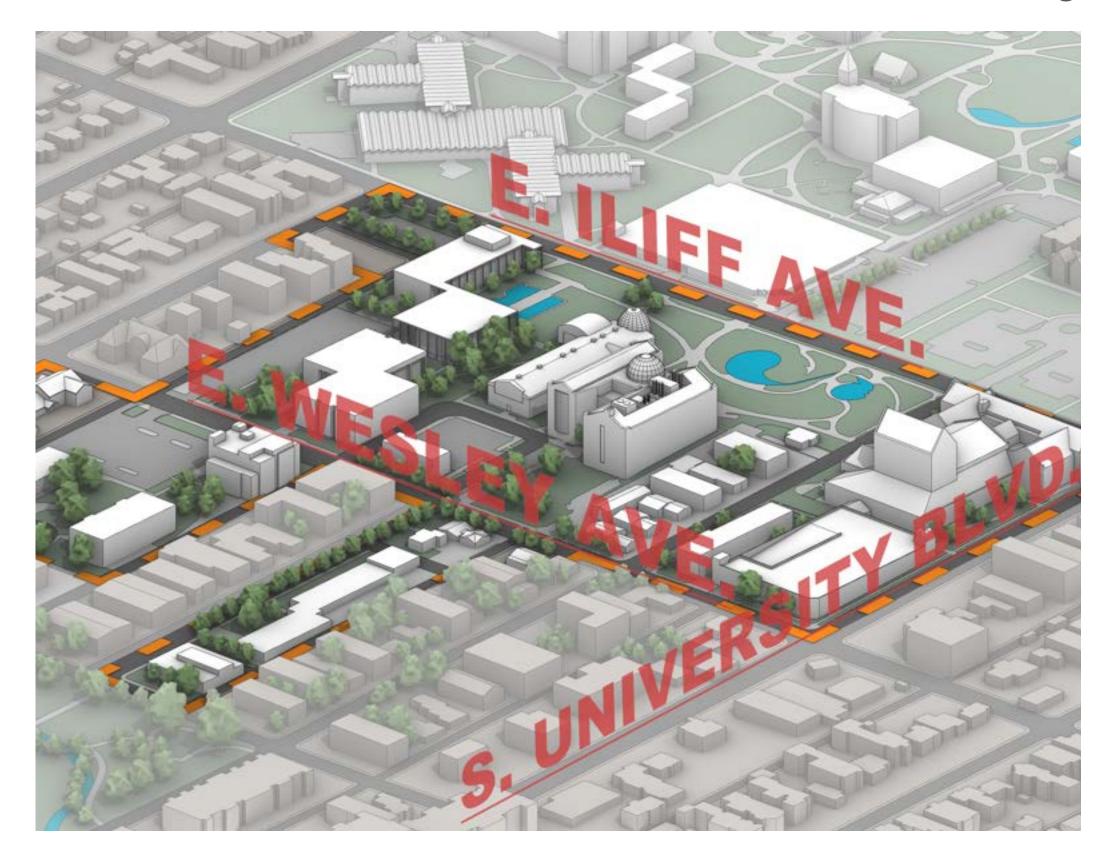
Unlike areas of the University Park campus that were purchased from Rufus "Potato" Clark in the late 1880's, all of the land in the Innovation Nexus that is currently owned by the University of Denver has been acquired over time, resulting in a fabric of University land that weaves into the surrounding residential neighborhoods. While a non-contiguous land ownership can be seen as a detriment, it can provide exceptional opportunities to augment the campus fabric with a truly dynamic and community-focused front door for science and innovation.

The vision for this neighborhood includes improved north-south connectivity along existing paths that extend north to the Academic Nexus and beyond, as well as to the south and the parks along Harvard Gulch. Creating welcoming paths for both bikes and pedestrians promotes access to a portion of campus not frequently traveled. East Wesley Ave. extends the southern campus threshold creating a vital mixed-use street and neighborhood enabling the connection to DeBoer Park.

Leveraging existing programs in Olin Hall, Ritchie School of Engineering and Computer Science, Newman Center for the Performing Arts and other neighboring facilities the proposed projects will be transformational to create a vibrant mixed-use community. Envisioning 24/7 activity for students, faculty, researchers, staff, and visitors- academics, research, housing, prototyping, performance, art, and food to mention a few examples. The proposed Piazza Connessione is a focal gathering node activated by surrounding energy emanating from STEM Horizons, the Innovation Hub, Newman Center, proposed food options, and neighboring housing.

Work in the Innovation Nexus provides the opportunity for the university to expand the ways it achieves carbon neutrality through additional solar panels and exploration of geothermal thermal use. Because the final rendering shows solar panels structures on the Newman Center, as well as the H&W nexus, making additional linkages to the sustainability section makes sense.

Existing



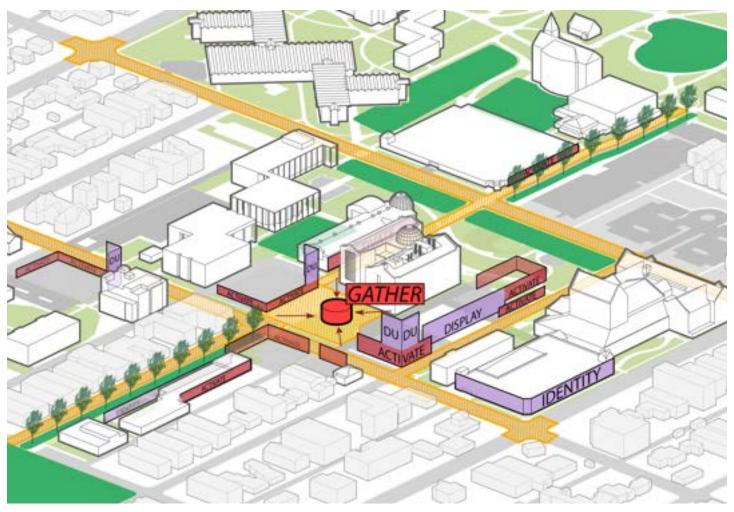
Innovation Nexus





Framework diagram illustrating connection strategies at the Innovation Nexus

- Create active edges
- Encourage porosity
- Link pathways and open spaces



Framework diagram illustrating implementation and identity strategies at the Innovation Nexus

- Use landscape to better define a welcoming perimeter
- Activate the ground floor with mixed uses
- Support more indoor-outdoor connectivity
- Support pop-up art installations and creative spaces
- · Celebrate diversity

96 | UNIVERSITY OF DENVER — CFP REFRESH | 97

Innovation Nexus

Phase I (Year 1-5)

Phase I Implementation Sequence:

- 1. STEM Horizons Building
 - Removal of Wesley Hall
 - Installation of Piazza Connessione, landscape, and pathways
- 2. Community Space Building
- 3. Innovation Hub and Event Center, Phase I
 - Removal of Newman Bungalow
 - Installation of site and street improvements including festival lighting
 - Seeley G. Mudd Building Renovation
- 4. Boettcher West Building Renovation
 - Building assessment to determine future viability and feasibility
- 5. S. Gaylord St. landscape improvementsSupporting potential Kennedy Mountain Campus Base Camp departure point
 - Connects Innovation Nexus to Mid Campus
- 6. Installation of wayfinding, banners, lighting landscape, and pedestrian walkways

PHASE I

STEM HORIZONS 100,000 GSF

INNOVATION HUB & EVENT CENTER 80,000 GSF

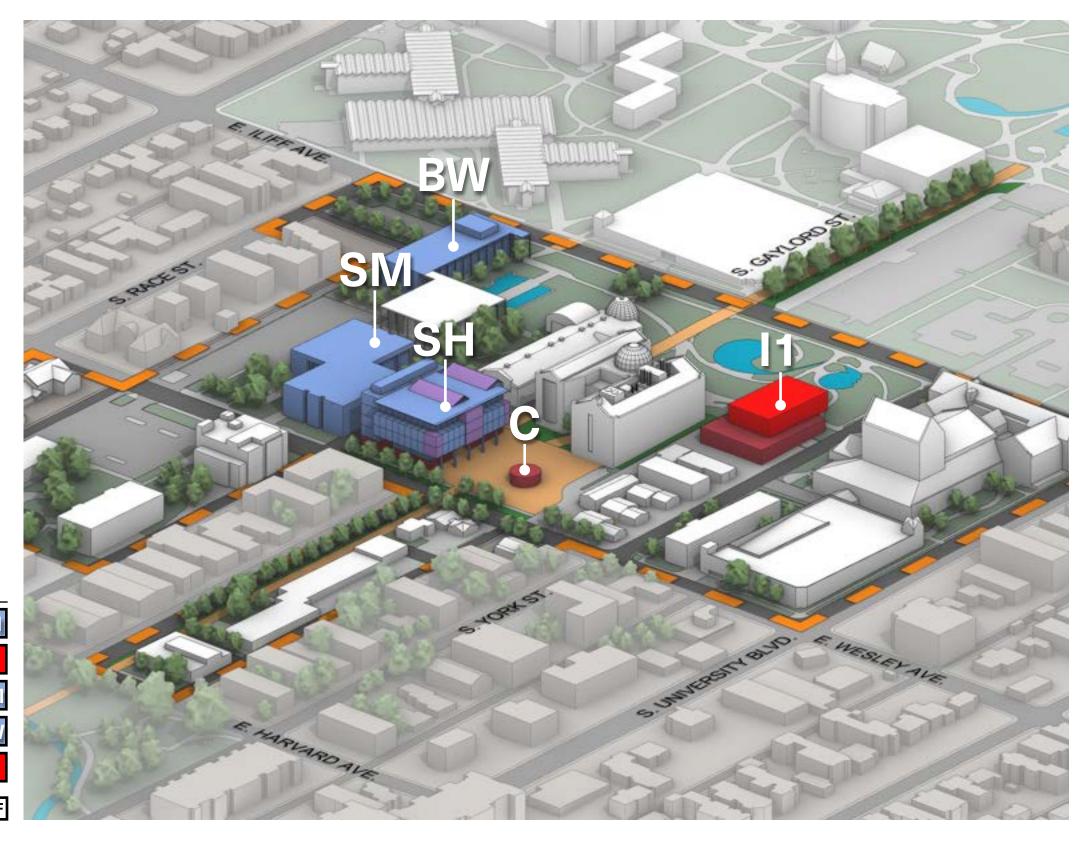
> **SEELEY G. MUDD RENOVATION** 65,000 GSF

BOETTCHER WEST RENOVATION

35,000 GSF

COMMUNITY SPACE 3,000 GSF

INNOVATION PHASE I: 283,000 GSF



98 | UNIVERSITY OF DENVER CFP REFRESH | 99

Innovation Nexus

Phase II (Year 5-10)

Phase II Implementation Sequence:

- 1. Innovation Hub and Event Center, Phase II
 - Removal of Rose Cottage
- 2. Ammi Hyde Building Renovation
 - Building assessment to determine future viability and options for reprogramming
- 3. Metallurgy Building Renovation
 - Building assessment to determine future viability and feasibility

PHASE I

STEM HORIZONS

100,000 GSF

INNOVATION HUB & EVENT CENTER

80,000 GSF

SEELEY G. MUDD RENOVATION 65,000 GSF

BOETTCHER WEST RENOVATION

35,000 GSF

COMMUNITY SPACE 3,000 GSF

PHASE II

INNOVATION HUB & EVENT CENTER

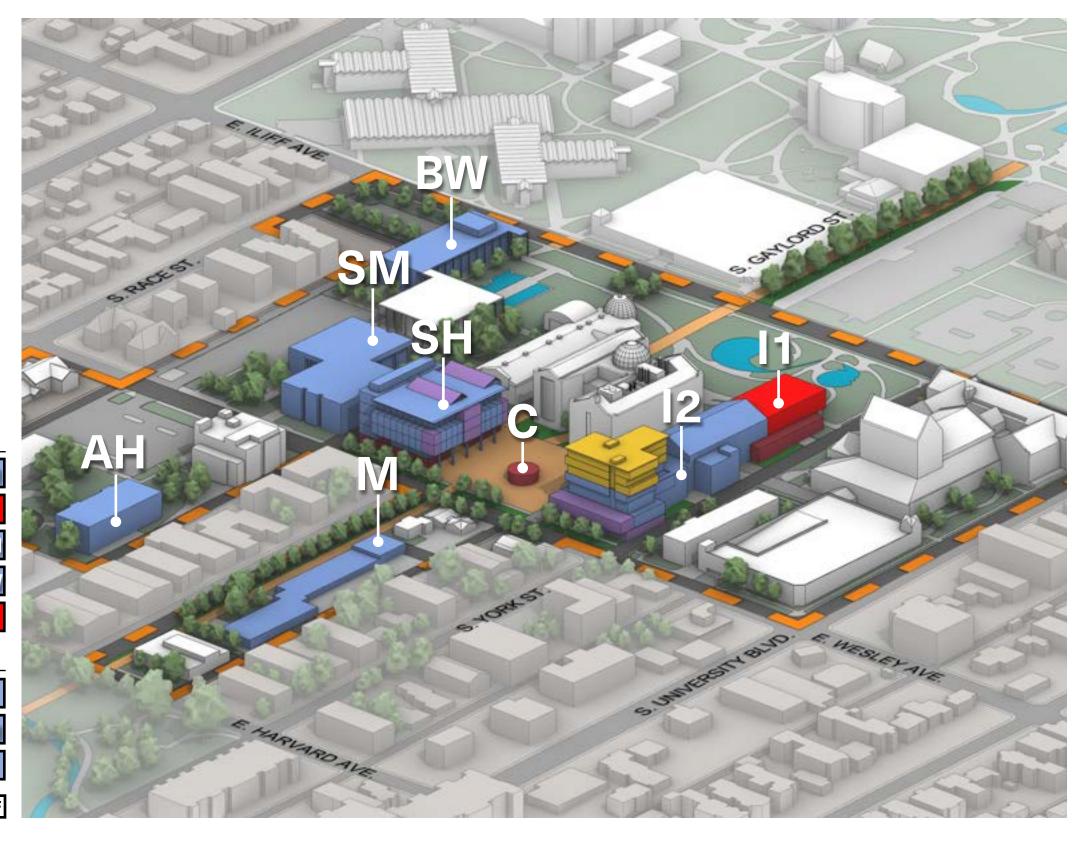
60,000 GSF

AMMI HYDE RENOVATION 25,000 GSF

METALLURGY BUILDING RENOVATION

17,000 GSF

INNOVATION PHASE I+II: 385,000 GSF



Innovation Nexus

Phase III (Year 10+)

Phase III Implementation Sequence:

- 1. Research Facility
 - Removal of surface parking lot
- 2. Residential/Mixed-Use BuildingRemoval of Academic Office Annex and **Custodial Bungalow**

PHASE I

STEM HORIZONS 100,000 GSF

INNOVATION HUB & EVENT CENTER 80,000 GSF

> **SEELEY G. MUDD RENOVATION** 65,000 GSF

BOETTCHER WEST RENOVATION 35,000 GSF

COMMUNITY SPACE 3,000 GSF

PHASE II

INNOVATION HUB & EVENT CENTER

60,000 GSF

AMMI HYDE RENOVATION 25,000 GSF

METALLURGY BUILDING RENOVATION 17,000 GSF

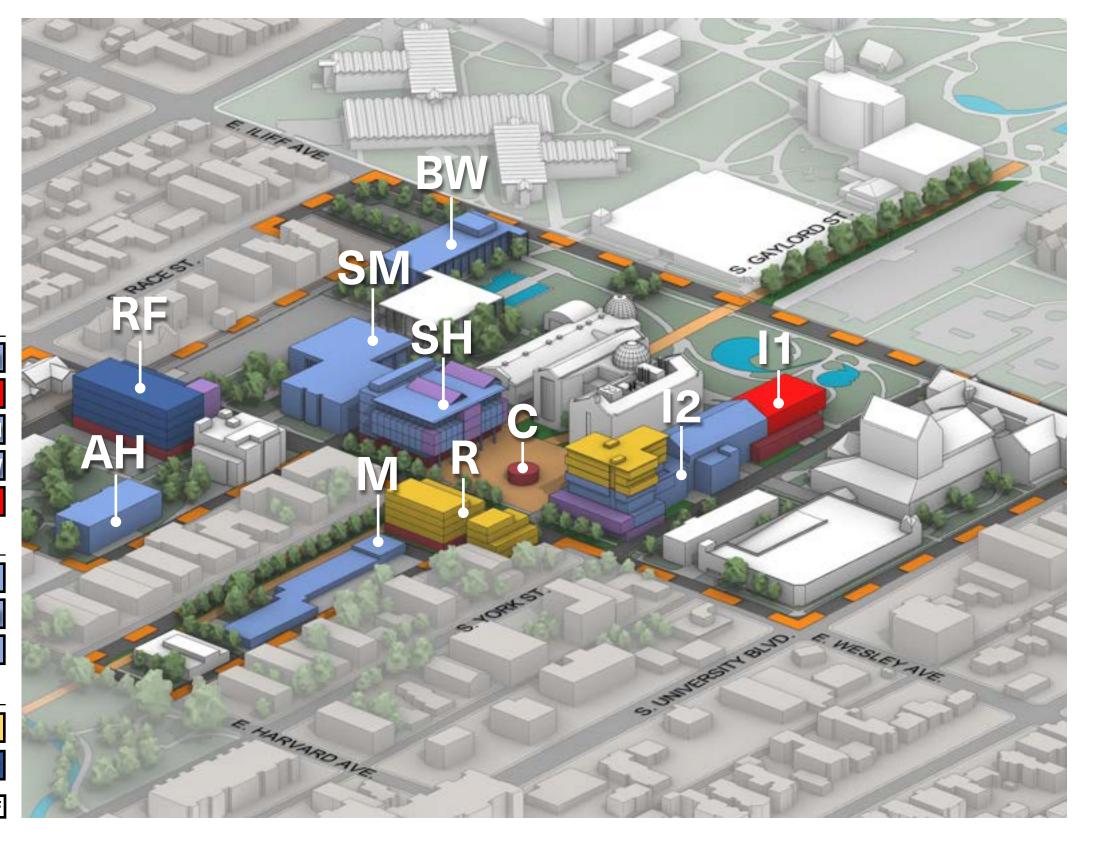
PHASE III

RESIDENTIAL/MIXED-USE

60,000 GSF

RESEARCH FACILITY 75,000 GSF

INNOVATION TOTAL: 520,000 GSF



102 | UNIVERSITY OF DENVER--CFP REFRESH | 103











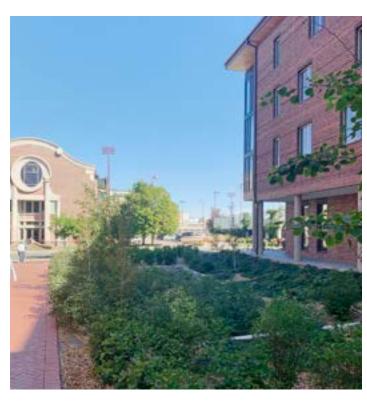
Innovation Nexus



DU Campus: rain garden west of Sie Complex







Civil Grading and Drainage Concept

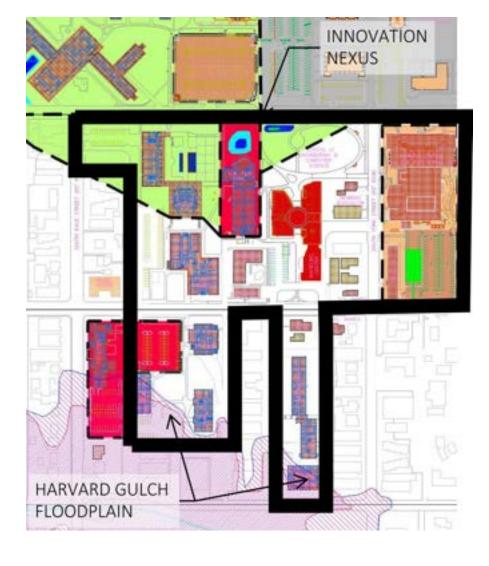
Grading

Grading design to support the Innovation Nexus Vision will work to blend new facilities into the south campus landscape while meeting code regulations and drainage criteria.

Drainage

The Innovation Nexus is within the Harvard Gulch drainage basin (139 acres which includes the DU campus and residential property south of E. Evans Avenue) and is ultimately tributary to the South Platte River. The Innovation Nexus development will establish a proposed drainage strategy in conformance with the existing drainage patterns, conveying stormwater in the roadways or storm drainage infrastructure. All runoff will be directed to the existing 15" storm line within S. York St. or new storm mains that ultimately discharge to Harvard Gulch. There are portions of the Innovation Nexus within the 100 and 500 year floodplain of Harvard Gulch, which has only a 10-year conveyance capacity. This floodplain impacts properties within a block of Harvard Gulch. Finished floor elevations for future

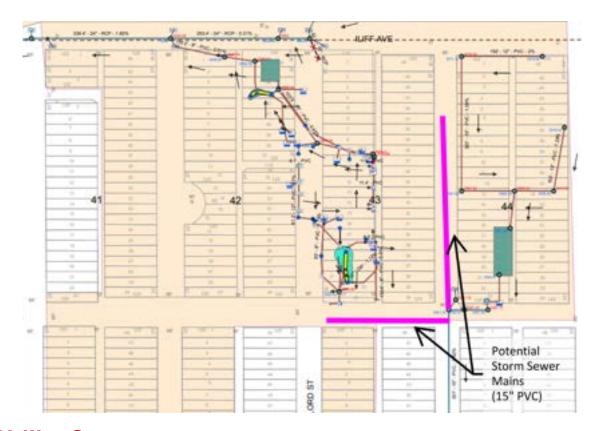
facilities will be designed per current criteria for protection of the structures. Additionally, drainage paths will be required to guide floodwaters around and away from proposed structures. The overall development approach will be to maintain flood conveyance within the public Right-Of-Way with adjacent structures elevated per the above criteria, by placement of fill. The Innovation Nexus is in a portion of campus with limited detention and water quality treatment and is outside the limits of any Master Drainage Study. New developments will look to build on drainage strategies implemented with the Newman Center and will incorporate sustainable detention and water quality measures into site design. Detention and water quality for the new building sites and site work may be able to be accommodated within the green spaces in a Master Drainage approach for efficiency. The Vision for this area also lends itself to the opportunity for surface features such as water quality ponds and rain gardens in conjunction with underground detention to provide necessary stormwater treatment and



storage. Underground detention allows for usable open spaces to remain while providing the necessary storage. DU has established high sustainability goals and water quality precedence on campus and drainage measures implemented within the Innovation Nexus area will improve water quality for all stormwater leaving the site and protect Harvard Gulch and downstream properties.

Area Flooded in 100-year Flood
Area Flooded in 10-year Flood
Area Flooded for Water Quality
Harvard Gulch 100-year Floodplain
Harvard Gulch 500-year Floodplain
Off-site Basin Draining to Campus
Pond, No Det/WQ Provided
WQ & Det req'd, None Provided
Det and WQ Provided
WQ Only Provided, No Det Provided
On-site Basin in Study, no Det/WQ
Provided
Det ONLY Provided, No WQ Provided
Det and WQ Provided, No Det Req'd
Study not Found

Innovation Nexus



Civil Utility Concept

Sanitary Sewer

Within the Innovation Nexus, there is good availability of existing sanitary sewer mains running south in the alleyways between S. Race St. and S. University Blvd. The alley mains are 8" in size, typical of Denver alleys. The alley mains combine within S. Harvard Ave. in a 30" RCP line directed west. The mains are considered public and are operated and maintained by the City and County of Denver Wastewater division. Overall, the current plan respects the existing Right-of-Ways, which allows for existing utilities to remain in place without relocation. New facilities will likely tie to the alley mains with new sanitary sewer services. All new sanitary lines will be PVC and have slopes ranging from 0.50 to 2.0 percent and velocities ranging from 2 to 10 feet per second. Sewer flow monitoring and a peak flow study for the new facilities within the Innovation Nexus will need to be performed to determine if the existing downstream 8" alley lines and 30" main has adequate capacity to serve the intended development. As the new facilities are replacing existing buildings in a developed area, there is a partial tradeoff in flows so it is possible that the existing sewer lines are sized appropriately to serve the development. Results of the study will determine

the length and size of the upsizing, if necessary.

Water

The existing site is well served by Denver Water mains and fire hydrants within public streets. Confirmation that the mains have capacity to serve the new buildings will be necessary through coordination with Denver Water. No water main relocations are anticipated based on the current site plan but new fire hydrants may need to be added. The new facilities will be served by new independent water services tying to the existing mains. All new water main materials and installation practices will meet or exceed Denver Water standards and specifications. Water main materials include PVC (C-900) and Ductile Iron Pipe for all installations. The indoor facilities will be fully sprinkled as required by code. Each new facility will submit independently for a Denver Water plan review for new services.

Storm Sewer

The Innovation Nexus is relatively bare of storm sewer infrastructure and it appears that drainage is



routed overland and within the streets. There is one existing 15" line within S. York St. that routes runoff south towards Harvard Gulch. Additionally, there is one existing 24" main within Iliff that collects drainage from University water quality and detention facilities and routes runoff west. The storm sewer mains within right-of-way are considered public and are operated and maintained by the City and County of Denver Wastewater division. New storm sewer services will be necessary to serve the new facility roof drains and detention and water quality systems. A new 15" storm sewer main is anticipated within E. Wesley St. and S. York St. to serve the Innovation Nexus. All storm sewer pipe will be reinforced concrete pipe for pipe sizes larger than 12-inches and PVC for pipe sizes smaller than 12-inches. A foundation drain for the new buildings may be required based on the site specific geotechnical recommendations.

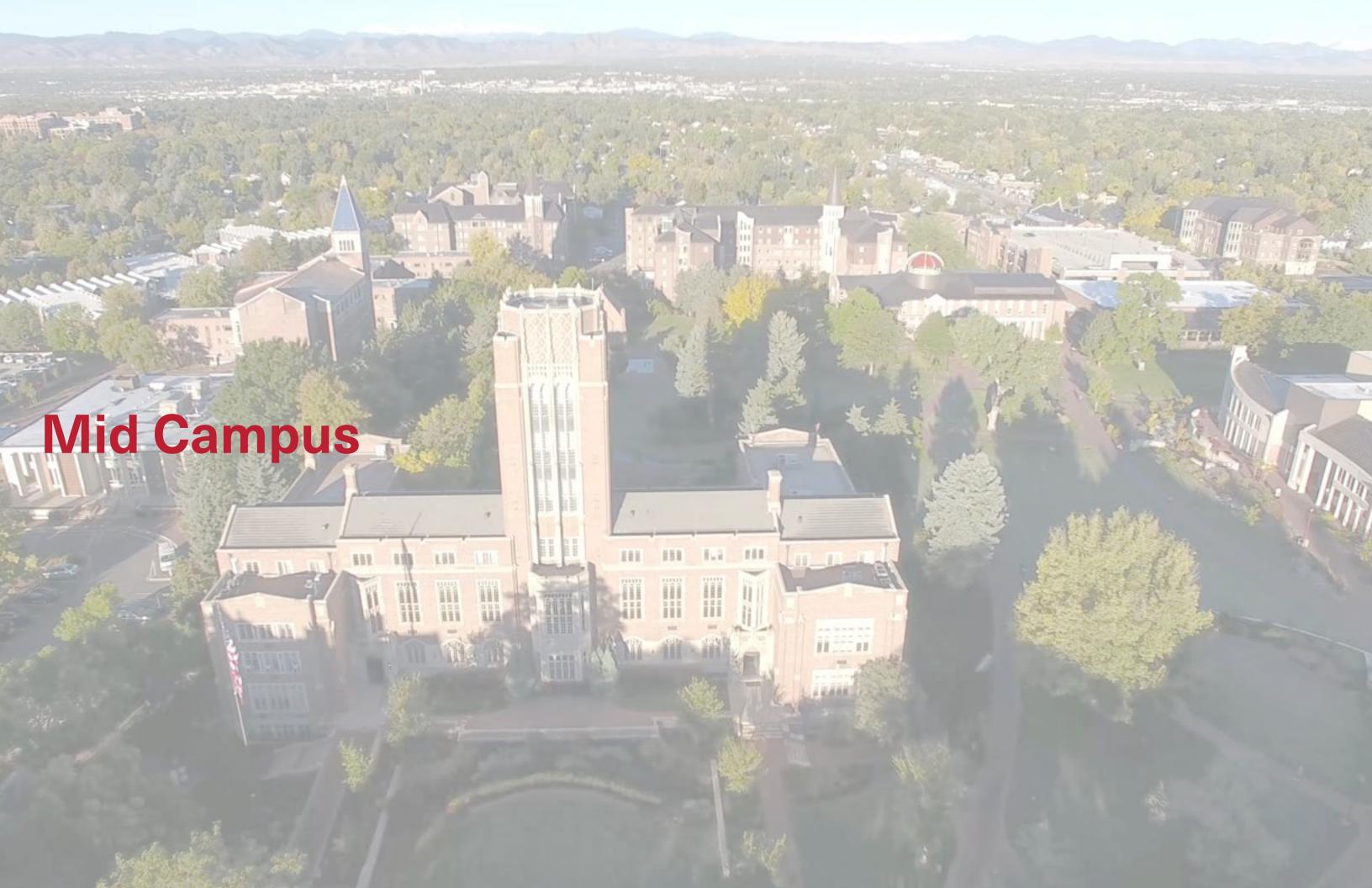
Dry Utilities

There are numerous gas and electric utilities within the Innovation Nexus. Gas and electric services are anticipated to be provided by Xcel Energy.

Mobility

Initial Requirements

The Innovation Nexus is planned to extend the southern section of the campus between E. Iliff Ave. and E. Harvard Ave. and between S. Race St. and S. York St. It was determined that there would initially be adequate parking in surrounding lots to accommodate the start of construction of this area. Combined, based on analysis of parking demand data, Lots H1, H2, and 304 have 230 available parking spaces throughout the day to absorb increased demand initially created by the Innovation Nexus. As the specific building program for the Innovation Nexus evolves, or as other development in the area comes online, the University should re-evaluate whether parking supply is adequate. The north-south internal campus bikeway is also proposed in this area and will provide a valuable connection to the existing campus to the north.



Mid Campus Projects

In addition to the proposed projects for the Innovation Nexus and Health & Wellness Nexus, there are key potential projects across the campus that will make significant contributions to support the range of campus needs now and in the foreseeable future. Renovation of these valuable existing assets are not only fiscally prudent but also a sustainable response by reducing carbon footprint. The University seeks to use its resources efficiently and to take advantage of time savings by repurposing and reprogramming facilities. The opportunity to electrify these renovation projects will further reduce carbon emissions and support a carbon neutral campus. **KENNEDY MOUNTAIN CAMPUS BASE CAMP** KMC DRISCOLL SOUTH RENOVATION DS INFORMATION TECHNOLOGY SERVICES REPROGRAM FRONTIER HALL RENOVATION MARY REED BUILDING RENOVATION **CENTENNIAL HALLS RENOVATION** ADMINISTRATIVE OFFICE BUILDING REPROGRAM CRAIG HALL ADDITION AND RENOVATION SW

Mid Campus Projects





KENNEDY MOUNTAIN CAMPUS BASE CAMP

Until the Health & Wellness Nexus reaches a critical stage in its build-out, the plan identifies a place of convergence along the east wall of the Cherrington Parking Structure to create a place on campus where students embark for their KMC experience. This location is along a key campus pedestrian route as well as the tour route for prospective students.



DRISCOLL SOUTH RENOVATION

This central space in the heart of the campus presents an exceptional renovation opportunity to showcase creative research and student expression. The CFP Refresh advocates that the University consider relocating the campus book store to the Health & Wellness Nexus as part of the activation of the ground floor of either one of the residential projects or the Welcome Center.



INFORMATION TECHNOLOGY SERVICES REPROGRAM

The IT building is one example of an existing facility that will see a reduction in enclosed office need and therefore serves as an opportunity to be reprogrammed to serve other programmatic needs such as those identified in serving the growing research endeavors.



FRONTIER HALL RENOVATION

Frontier Hall's renovation will further support the exceptional research in the PhD Program of the Department of Psychology and will improve and support this significant component of the University's R-1 level research.



MARY REED BUILDING RENOVATION

Mary Reed Building is an important legacy facility for the DU campus: a gem waiting for a refresh and renewal. This building is a prime candidate for creative and adaptive reuse opportunities that serve the whole campus. The building should be studied for a range of engaging uses such as cross-disciplinary study and teaching, a forum for events and exhibitions, as well as student and community serving programs. A mix of uses will bring more vitality to this key, central building that should extend well into the evening.



CENTENNIAL HALLS RENOVATION

A sequential tower by tower renovation of the vintage mid-sixties Centennial Halls will contribute to improving the University's goal of increasing student retention. This is possible now that additional first-year student capacity has been provided by the Dimond Family Residential Village.



ADMINISTRATIVE OFFICE BUILDING REPROGRAM

The inherent flexibility of the open office plan supports the potential for the space within the building to be reprogrammed to serve clinical, research, and related support needs. The AOB has seen less intense use attributed to the increase in remote work options available to staff.



CRAIG HALL ADDITION AND RENOVATION

The Graduate School of Social Work is a leader in funded research for DU and this success has driven a pressing need for additional space. An addition to the south of the building is one clear option to foster long-term growth and success in this critical academic area of campus activity.



Health & Wellness Nexus

The health and wellness of our society has been redefined over the past few years. Global pandemics and emerging fields in Allied Health will influence how we perceive and achieve health and wellness in our future. The University of Denver's Health & Wellness Nexus is located at the intersection of athletics and wellness and campus and community. The Health & Wellness Nexus will feature a new Allied Health academic program and facilities that will complement the other adjacent health and wellness services. The Nexus will also include updated athletics including Gymnastics and E-sports, wellness facilities, and mixed-use residential developments supporting new and improved programs at the University. A series of retail, food, and beverage programs are envisioned to activate a network of green spaces. This neighborhood and key arrival point for the University of Denver will be anchored by a new Welcome Center at the intersection of S. University and Buchtel Blvds. The Welcome Center will be a first point-of-contact for prospective students and families, and will host events and activities that will bring life and vibrancy to the neighborhood. WELCOME CENTER **RESIDENTIAL / MIXED USE RESIDENTIAL / MIXED USE SCHOOL OF ALLIED HEALTH &** PROFESSIONAL PSYCHOLOGY **HAMILTON EXPANSION GYMNASTICS, E-SPORTS, +** HEALTH & WELLNESS CENTER HIM

Health & Wellness Nexus





WELCOME CENTER

The DU Welcome Center will be the front door for visitors and prospective students to the DU Campus. Located on the highly visible corner, it will be a beacon for the University and the beginning of a pedestrian path leading to the middle of campus. Rooftop terraces will provide event spaces with views of the Rockies on the horizon.



RESIDENTIAL/MIXED USE

Residential units and mixed uses will contribute to an active 24/7 neighborhood, by providing needed housing for the DU community. A rich mix of active ground floor uses may include an international foods market, convenience store, pharmacy, bookstore, and restaurants. Some student facing programs can also be located here. Parking is to be provided.



SCHOOL OF ALLIED HEALTH & PROFESSIONAL PSYCHOLOGY

The School of Allied Health & Professional Psychology building will serve to educate the next generation of health care professionals who will be trained to provide state-of-the-art care delivery. Clinical research facilities will support DU's R1 status. Its corner location will provide prominent identity for the campus and the Health & Wellness Nexus.



HAMILTON EXPANSION

The expansion of the Hamilton Gymnasium will provide facilities to support a new basketball practice court, locker rooms, sports medicine, and student success center.



GYMNASTICS, ESPORTS, +

A facility for Gymnastics, E-Sports, and recreation programs is located in the core of the Health & Wellness Nexus. The Women's Gymnastics program will have facilities commensurate with their championship status. In addition, new spaces to support intramural and club sports will replace those currently in the Gates Field House.



HEALTH & WELLNESS CENTER

The Health & Wellness Center is at the threshold of the Health & Wellness Nexus and the rest of campus. It will become a campus focal point where recreation, fitness, holistic health, and wellness support come together. Adaptive reuse of the Gates Field House is consistent with the University's goals to minimize its carbon footprint.

Health & Wellness Nexus

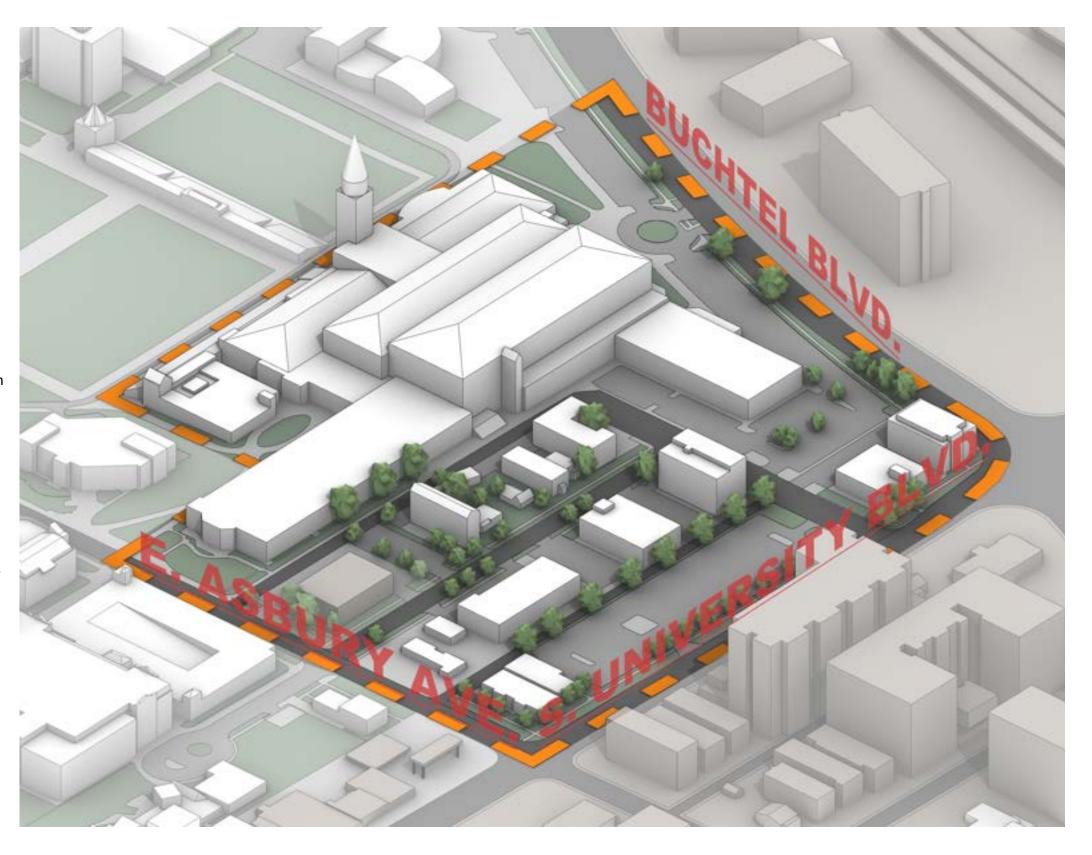
Existing

The Health & Wellness Nexus will be the home for the new School of Allied Health & Professional Psychology, the Welcome Center, and expansion of facilities supporting health and fitness. Supported by diverse programs and services enables this portion of campus to fulfill its potential of becoming a vibrant DU gateway. As a front door for the University, this neighborhood will be accessible and welcoming to all. The rich mix of uses will engage students, faculty, researchers, staff, and visitors in this 24/7 neighborhood.

The Welcome Center located on the highly visible corner of S. University and Buchtel Blvds. will become one of the key University of Denver identity locations. Linked green spaces provide pedestrian connections to the adjacent Campus Green. Connections to regional mobility and campus networks are augmented by the proximity to the existing University of Denver Station as well as by proposed expansion of the existing bike path and DU shuttle routes. DU identity and pedestrian comfort will be enhances by the proposed Campus Greenway along Buchtel and S. University Blvds.

The framework for the Health & Wellness Nexus and future potential program in the neighborhood have been explored and tested with the University of Denver community, a development consultant, and design team partners. This diverse group of perspectives has helped validate an approach that serves the University's mission and vision, while providing a feasible and flexible path for future development. The plan strengthen the connection between the University and its surrounding community by physically and culturally weaving them together. Utilizing existing infrastructure and street network allows the University to strategically deploy its resources and provide discrete and developable parcels that can serve both the University of Denver and the broader public good.

The University and the Health & Wellness Nexus will continue to evolve to serve its broader community, which acknowledges evolving programs for Health & Wellness, Allied Health & Professional Psychology, and housing among others. The programs indicated throughout the Campus Framework Plan should be considered potential projects and programs. The implementation of this framework plan requires flexibility and will occur over time.



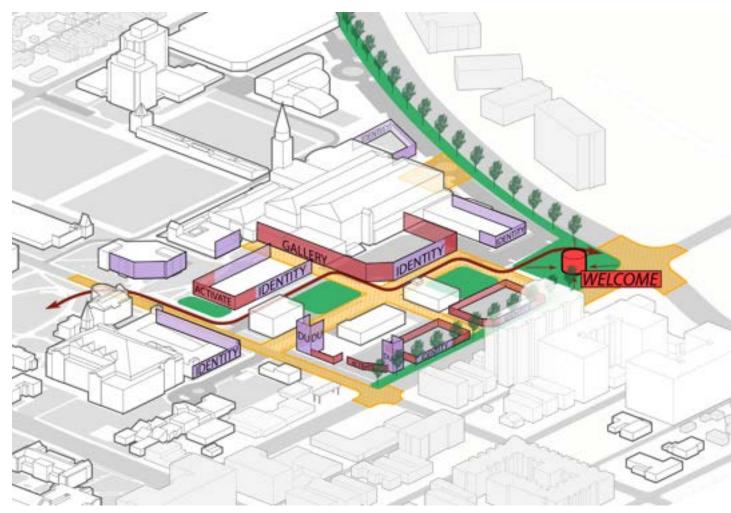
Health & Wellness Nexus

Vision



Framework diagram illustrating connection strategies at the Health & Wellness Nexus

- Create active edges
- Encourage porosity
- Link pathways and open spaces



Framework diagram illustrating implementation and identity strategies at the Health & Wellness Nexus

- Use landscape to better define a welcoming perimeter
- Activate the ground floor with mixed-uses
- Support more indoor-outdoor connectivity
- Celebrate diversity

Health & Wellness Nexus

Phase I Implementation Sequence:

- 1. School of Allied Health and Professional Psychology Building, Phase I
 - Removal of Health & Counseling Center and Lynn Marie **Apartments**
 - Installation of S. University Blvd. "Green Belt," alley improvements, wayfinding, banners, lighting, landscape, and pedestrian walkways
- 2. Welcome Center
 - Removal of University Apartments North and South
 - Installation of S. University Blvd. "Green Belt," wayfinding, banners, lighting, landscape, and pedestrian path leading to Mid Campus
- 3. Residential Building 1 (Undergraduate/Mixed-use)
 - Removal of existing surface parking lot
 - Pedestrian path from Ritchie Center to S. University Blvd., plaza at S. York St., alley improvements and garden spaces
- 4. Ritchie Center Arcade
 - Installation of new arcade to connect pedestrian path from Ritchie Center south entry to S. University Blvd.
- 5. Residential Building 2 (Graduate/ Mixed-use)
 - Removal of existing surface parking lot
 - Installation of S. University Blvd. "Green Belt," alley improvements, wayfinding, banners, lighting, landscape, and garden spaces
 - Removal of York St. Lofts and Summit Apartments

Residential Program Summary:

Podium + 5-8 stories Ground-floor activation including:

- 3,000gsf Retail/Food
- 3,000gsf University Program
- 3,000gsf Amenity Space Shared parking
- 1 level below grade
- 1 space / unit (200 total)

Residential Undergraduate 190 beds / 90 units

Residential Graduate 240 beds / 115 units

*250 beds removed in test-fits shown: results add a net of 180 beds.

PHASE I

WELCOME CENTER 25,000 GSF

RESIDENTIAL / MIXED USE 70,000 GSF

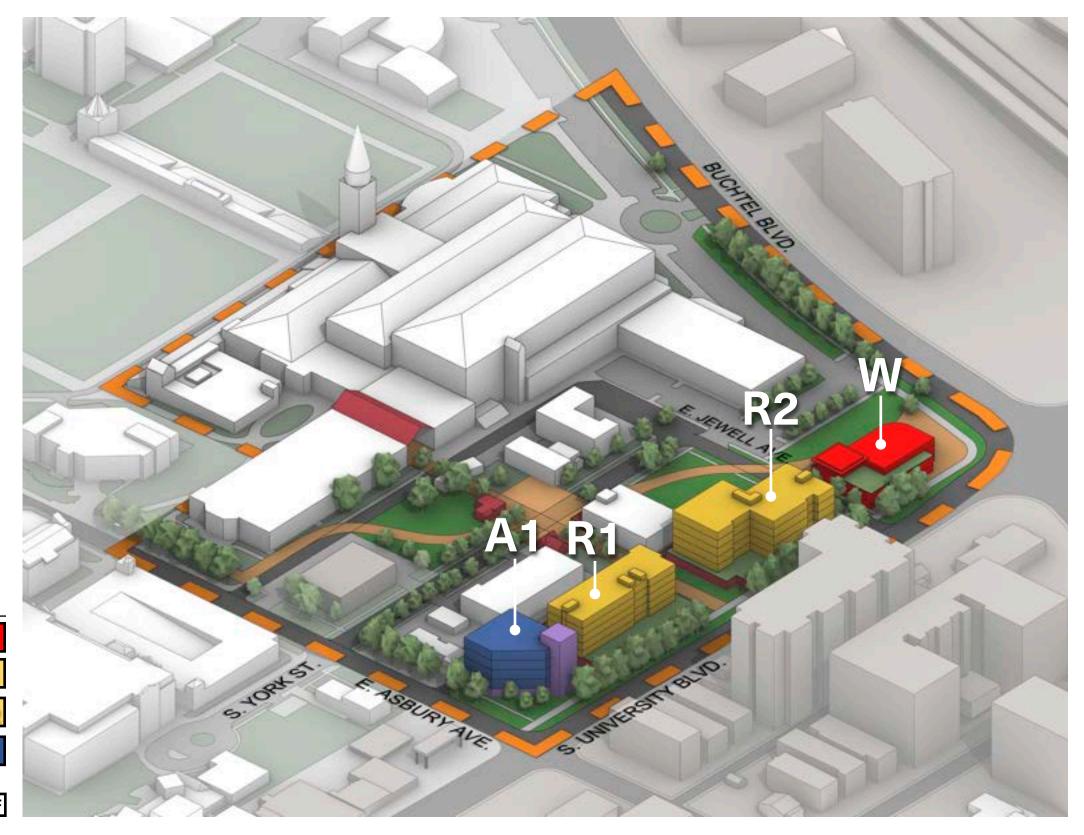
RESIDENTIAL / MIXED USE 115,000 GSF

SCHOOL OF ALLIED HEALTH & | PROFESSIONAL PSYCHOLOGY A1

40,000 GSF

H&W PHASE I:

250,000 GSF





Health & Wellness Nexus

Phase II (Year 5-10)

Phase II Implementation Sequence:

- 1. Hamilton Expansion, Sports Therapy, and Academic Success Building
 - Removal of existing parking lot
 - Program includes sports therapy, academic success and additional spaces to support men's and women's basketball
 - · Installation of landscape, wayfinding, and site improvements
- 2. Gymnastics, E-sports + BuildingRemoval of Mesa and Carousel Apartments
 - Installation of landscape, wayfinding, and site improvements
 - Renovation of Gates Field House dependent upon this project going first

PHASE I

WELCOME CENTER | 25,000 GSF

RESIDENTIAL / MIXED USE 70,000 GSF

RESIDENTIAL / MIXED USE

115,000 GSF SCHOOL OF ALLIED HEALTH & PROFESSIONAL PSYCHOLOGY

40,000 GSF

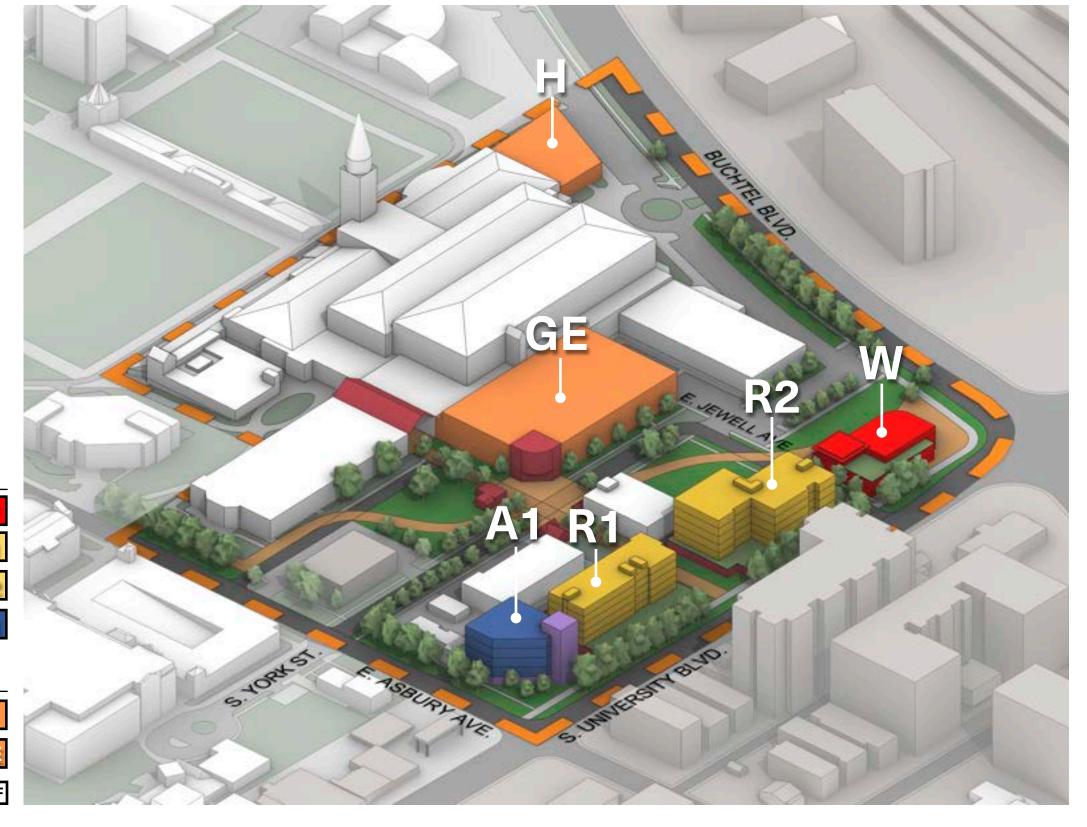
PHASE II

HAMILTON EXPANSION

40,000 GSF

GYMNASTICS, E-SPORTS, + 65,000 GSF

H&W PHASE I+II: 355,000 GSF



136 | UNIVERSITY OF DENVER--CFP REFRESH | 137

Health & Wellness Nexus

Phase III (Phase 10+)

Phase III Implementation Sequence:

- 1. School of Allied Health and Professional Psychology Building, Phase III
 - Removal 1986 S. York St.
 - Installation of alley improvements, wayfinding, landscape, and site improvements
- 2. Renovation of Gates Field House
 - · Installation of wayfinding, landscape, and site improvements
 - Programmed for Health & Wellness Center
- 3. Future opportunity sites include Ridgeline and University Place Apartments

PHASE I

WELCOME CENTER 25,000 GSF

RESIDENTIAL / MIXED USE

70,000 GSF

RESIDENTIAL / MIXED USE 115,000 GSF

SCHOOL OF ALLIED HEALTH & PROFESSIONAL PSYCHOLOGY 40.000 GSF

PHASE II

HAMILTON EXPANSION

40,000 GSF

GYMNASTICS, E-SPORTS, + 65,000 GSF

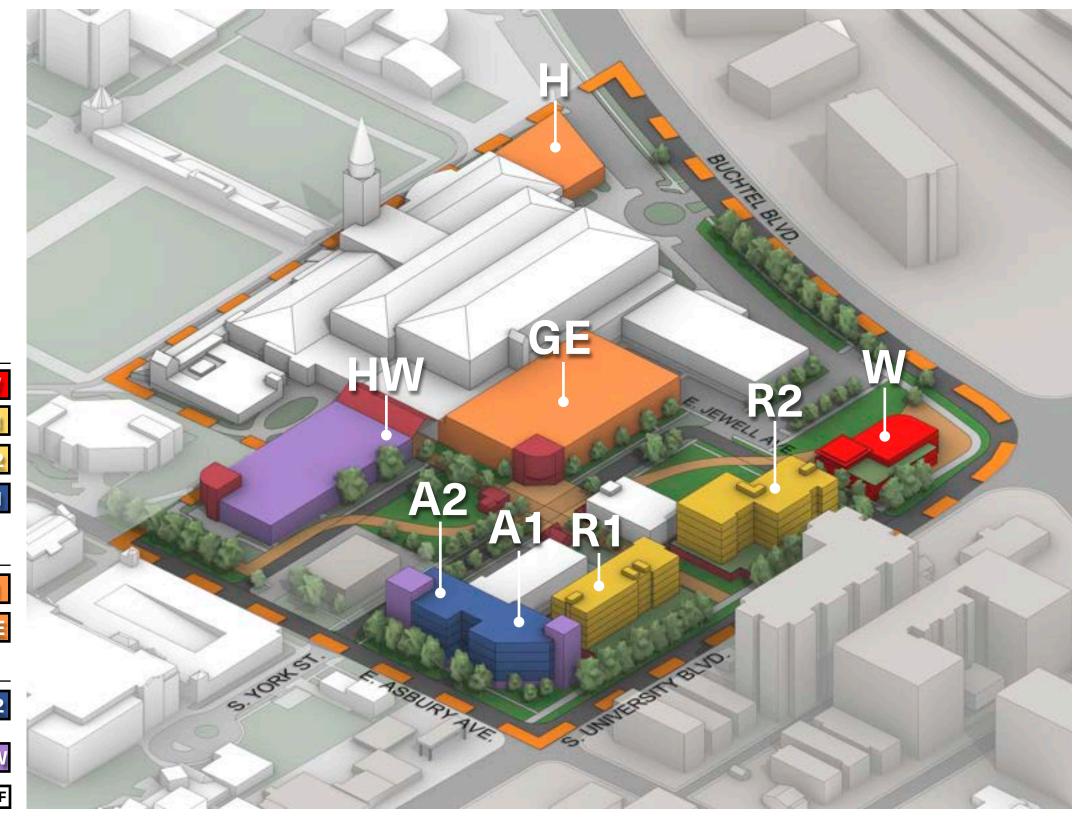
PHASE III

SCHOOL OF ALLIED HEALTH & PROFESSIONAL PSYCHOLOGY

45.000 GSF

HEALTH & WELLNESS CENTER
50,000 GSF 50,000 GSF

H&W TOTAL: 450,000 GSF



138 | UNIVERSITY OF DENVER--CFP REFRESH | 139



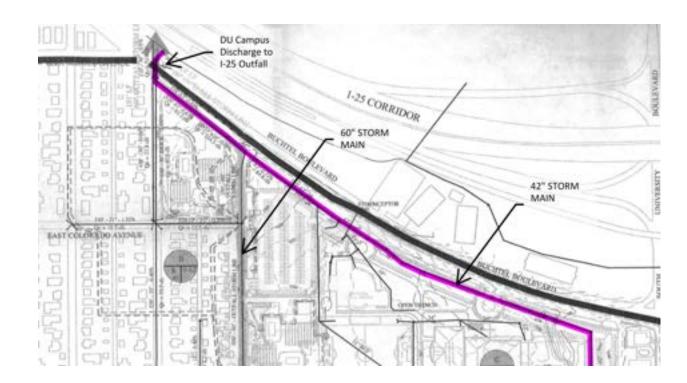








Health & Wellness Nexus





Drainage

The Health and Wellness Nexus development will establish a proposed drainage strategy in conformance with the existing drainage patterns, conveying stormwater in roadways or storm sewer infrastructure. All runoff will be directed to the existing storm line within Buchtel that ultimately discharges to the I-25 Outfall and ultimately the South Platte River. The existing downstream storm sewer is assumed to be able to accommodate the development proposed, provided on-site or regional stormwater detention is incorporated. The Health and Wellness Nexus is an area of campus with no detention or water quality treatment and therefore all new developments will look to incorporate sustainable detention and water quality measures into site design. Detention and water quality for the new building sites and site work may be able to be accommodated within the green spaces in a Master Drainage approach for efficiency. The Vision lends itself to the opportunity for surface features such as water quality ponds and rain gardens in conjunction with underground detention to provide necessary stormwater treatment and storage. Underground

detention allows for usable open spaces to remain while providing the necessary storage. DU has established high sustainability goals and water quality precedence on campus and drainage measures implemented with the Health and Wellness Nexus vision will improve water quality for all stormwater leaving the site and protect downstream properties.

Grading

Grading design to support the Health and Wellness Vision will work to blend new facilities into the campus landscape while meeting code regulations and drainage criteria.



DU Campus: Burwell Center for Career Achievement rain garden



DU Campus: Community Commons roof garden

Civil Utility Concept

Sanitary Sewer

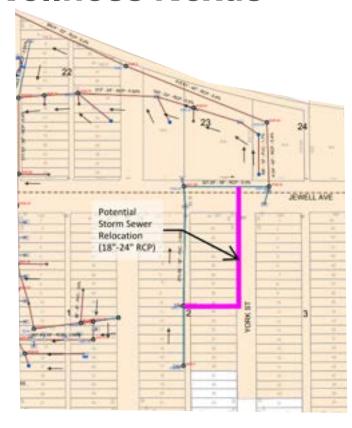
Within the Health and Wellness Nexus, there are existing sanitary sewer mains running north in the alleyways on both the west and east sides of S. York Street. The alley mains combine at Buchtel Blvd. east of the Richie Arena site in a 10" main and route flows west within Buchtel Blvd. The mains are considered public and are operated and maintained by the City and County of Denver Wastewater division. Overall, the current plan respects the existing Right-of-Ways, which allows for existing utilities to remain in place without relocation but the current contemplated gymnastics and e-sports building could trigger minor sanitary sewer relocation. Approximately 800LF of 8" sanitary sewer would need to be realigned to the east into S. York St. to allow for the proposed gymnastics and e-sports building. All new sanitary lines will be PVC and have slopes ranging from 0.50 to 2.0 percent and velocities ranging from 2 to 10 feet per second. Sewer flow monitoring and a peak flow study for the new facilities within the Health and Wellness Nexus will need to be performed to determine if the existing downstream 10" main has adequate capacity to serve the intended development. Flow monitoring results provided

by the City and County of Denver from March 2020 indicate that the main within Buchtel Blvd. downstream of the Richie Center is at approximatley 30% full. As the new facilities are replacing existing buildings, there is a partial tradeoff in flows so it is possible that the existing sewer lines are sized appropriately to serve the development. Results of the study will determine the length and size of the upsizing, if necessary.

Water

The existing site is well served by Denver Water mains and fire hydrants within S. York St., E. Jewell Ave. and S. University Blvd. Confirmation that the mains have capacity to serve the new buildings will be necessary through coordination with Denver Water. No water main relocations are anticipated based on the current site plan but new fire hydrants may need to be added. All new water main materials and installation practices will meet or exceed Denver Water standards and specifications. Water main materials include PVC (C-900) and Ductile Iron Pipe for all installations. The indoor facilities will be fully sprinkled as required by code. Each new facility will submit independently for a Denver Water plan review for new services.

Health & Wellness Nexus



Mobility

Storm Sewer

Existing minor storm sewer lines are located within the Health and Wellness Nexus and range from 8" to 42" in size. The storm sewer mains within rightof-way are considered public and are operated and maintained by the City and County of Denver Wastewater division. Drainage is routed north in minor storm lines then west along Buchtel Blvd. in a 42" main. New storm sewer services will be necessary to serve the new facility roof drains and detention and water quality systems. Approximately 900LF of the existing 18" storm line running within the alley west of S. York St. will need to be relocated for the proposed gymnastics and e-sports building. All storm sewer pipe will be reinforced concrete pipe for pipe sizes larger than 12-inches and PVC for pipe sizes smaller than 12-inches. A foundation drain for the new buildings may be required based on the site specific geotechnical recommendations.

Dry Utilities

There are numerous gas and electric utilities within the Health and Wellness Nexus. A small portion of the existing gas line may need to be relocated for the gymnastics and e-sports building. Gas and electric services are anticipated to be provided by Xcel Energy.

Initial Requrements

The proposed Health & Wellness Nexus is planned for the 6-acre site in the northeast of campus bound by Buchtel Blvd., S. University Blvd., and E. Asbury Ave. The area is proposed to create new residential units, classroom space, and a new welcome center. It was determined that there would initially be adequate parking in surrounding lots to accommodate the start of construction of this area that would impact Lot U and Lot W.

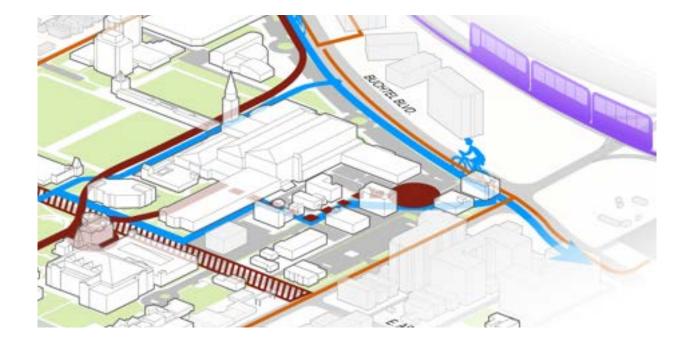
Specifically, the Health & Wellness site is building 400 new residential units. There are currently 200 residential units on the site, so there are 200 net new units, supported by 160 parking spaces on-site. Lot 108, Lot L, and Lot T. Combined, based on analysis of parking demand data, Lots 108, L, and T have over 600 available parking spaces throughout the day to absorb increased demand initially created by the Health & Wellness Nexus. However, there may need to be adjustments to the permit structure in nearby lots to accommodate parking demand currently served by Lot U and Low W. As the specific building program for the Health & Wellness site evolves, or as other development in the area comes online, the

University should re-evaluate whether parking supply is adequate.

The welcome center will be located at the southwest corner of S. University Blvd. and Buchtel Blvd. Parking for the welcome center would be shared with the parking lots east of the Ritchie Center. Consideration should be given to allowing access to these lots from both Buchtel Blvd., where access is currently drawn, as well as E. Jewell Ave. which is currently restricted by a gate, for ease of access by people visiting campus for the first time. Close proximity of parking to the welcome center and straightforward access for visitors are important for creating a high-quality visitor experience and eschewing the need for costly services to provide easy access to the welcome center.

The Health & Wellness Nexus will have right-in/right-out access from S. University Blvd. Those entering the area from the south or leaving the site to travel north will need to access the area from the S. University Blvd. and E. Asbury Ave. intersection. Further analysis should be completed on the segment

of E. Asbury Ave. between S. York St. and S. University Blvd. to better understand traffic operations and vehicle queuing. The university should also consider acquiring the portions of S. York St. and E. Jewell Ave. from the City & County of Denver to have flexibility to design and manage the street to meet University needs.





Pilot Project Opportunities

Low Capital | High Impact Pilot Projects

A key strategic campus planning opportunity on the DU campus is identifying project initiatives that have low capital investment and high transformational value. These are projects that can be executed early in the development process as tests, and typically do not have significant impacts, if any, on existing buildings, site systems or infrastructure. The importance of pilot projects is that they bring visible and near-term value to the campus community relatively quick and inexpensive compared to large capital projects. They also provide early evidence of how effective certain initiatives are compared to others.

Recent small-scale projects that have been completed or are in the planning stages that foster engagement and belonging and showcase innovation, and creativity:

- 1. The Corner Stores located in Centennial Halls and Nelson Hall are cashier-less markets featuring a selection of ready-made fresh foods, home goods, and personal needs. These Eat>Now stores powered by Aifi use state of the art technology and are the first of their kind on a university campus.
- 2. Nagel Hall's previous servery was transformed into a Physiology Lab as part of a partnership between DU and the National Jewish Health. It provides a clinic that serves patients throughout the southern part of Denver while also providing internship opportunities for DU students.
- 3. Outdoor stage on the south patio of Nagel Hall, was developed in collaboration with DU Planning Board (DUPB), to supports student-focused performances such as music, open mic nights, poetry slam fests, etc.
- 4. A pilot e-sport venue in Centennial Halls is in the planning stages.



DU Charity Events



DU Pop-up Exhibits



Student "Mess-up" Space



DUPB Mainstage Performance Space



DU Corner Store



Festival and Farmer's Markets



DU Solar Trees



Civic Discourse Space



Banner Programs

156 | UNIVERSITY OF DENVER-CFP REFRESH | 157

Acknowledgments

The Campus Framework Plan Refresh (CFP Refresh) envisions a bold and enduring future for the University of Denver. It builds on the academic, physical, and cultural strengths of the university, to prepare the campus for even greater leadership at the local, regional, and global levels. It is designed to foster greater connectivity with DU's neighbors and to increase the sense of welcoming and belonging in a more diverse community. It supports student and campus life, both within and beyond the classroom. The Refresh envisions a dynamic new Health and Wellness Nexus focusing on a holistic approach to research and learning, and an Innovation nexus where science, art and the public good intersect.

The 4D experience is fundamental to all planning decisions. Greater opportunities for on-campus housing and expanded diversity of social and cultural amenities, will enhance the campus experience and serve the community at large. New and expanded research facilities will continue to elevate DU's R-1 strengths. Pilot projects will allow for low-cost high-impact campus improvements that support a diverse and global population.

The CFP Refresh is a living document which provides a flexible road map for implementation. It grows out of a highly collaborative process with the deep engagement of a broad range of the DU community, its neighbors, and regional leaders. We wish to express our appreciation to all participants for their many contributions. In addition, we would like to acknowledge the critical participation of the following:

CFP REFRESH COORDINATING COMMITTEE

Stephanie O'Malley (co-chair), Associate Vice Chancellor, Government Relations and Community Affairs

Fatima Rezaie, Project Manager, Government Relations and Community Affairs

Mark Rodgers (co-chair), Director, Capital Planning & University Architect

CFP REFRESH EXECUTIVE COMMITTEE

Todd Adams, Vice Chancellor, Student Affairs

Leslie Brunelli, Senior Vice Chancellor, Business and Financial Affairs

Mary Clark, Provost and Executive Vice Chancellor

Karlton Creech, Former Vice Chancellor, Athletics, Recreation and Ritchie Center Operations

Jeremy Haefner, Chancellor

Nancy Nicely, Senior Vice Chancellor & Chief of Staff

Val Otten, Senior Vice Chancellor, Advancement

Todd Rinehart, Vice Chancellor, Enrollment

Allan Wilson, Associate Vice Chancellor, Department of Facilities Management & Planning

CFP REFRESH ADVISORY COUNCIL

Aisha Ahmad-Post, Executive Director, Robert and Judi Newman Center for the Performing Arts

Shana Alston, Executive Director, Housing & Residential Education, Student Affairs & Inclusive Excellence

David Corsun, Director, Fritz Knoebel School of Hospitality Management

Derek DuBose, Associate Vice Chancellor, Admission and Director of Admission

Rhonda Gonzales, Dean, College of Arts, Humanities and Social Sciences

Stu Halsall, Associate Vice Chancellor, James C. Kennedy Mountain Campus, Wellness, & Recreation

Chad King, Former Executive Director, Center for Sustainability

Paul Kashmann, Councilman, Denver City Council, District 6

Andrei Kutateladze, Dean, College of Natural Sciences and Mathematics

Corinne Lengsfeld, Senior Vice Provost, Research and Graduate Education

Mo Lotif, Director, Strategy & Communications, Student Affairs & Inclusive Excellence

Shemar Magee, Undergraduate Student Representative

Dulcinea Martinez, Undergraduate Student Representative

Yolanda Ortiz, Graduate Student Representative

Sarah Pessin, Professor, Departments of Philosophy & Judaic Studies and President, Faculty Senate

Michelle Sabick, Dean, Daniel Felix Ritchie School of Engineering and Computer Science

Rachel Stonecypher, Former Director, Capital Projects and Planning, Department of Facilities Management and Planning

Noelle Strom, Grant and Contract Administrator, Office of Research and Sponsored Programs and Vice President, Staff Advisory Council

Chris Whitt, Vice Chancellor, Diversity, Equity and Inclusion

CFP REFRESH PLANNING DESIGN TEAM

Lead Campus Planner: Moore Ruble Yudell Architects & Planners (MRY)

Buzz Yudell, FAIA, Partner Neal Matsuno, FAIA, Principal Mario Violich, FAIA, Principal Carissa Oyedele, AIA, Associate Principal Gabriel Strzepek Jeff Badger

Associate / Local Planner: Shears Adkins Rockmore (SAR+)

Andy Rockmore, AlA, Principal Daniel Craig, AlA, Senior Associate Rafael Murillo, AICP Ali Menke, AlA, Senior Associate

Sustainability and Energy: Affiliated Engineers, Inc.

Willa Small Kuh, Director of Planning Blythe Vogt, Principal Nick Smith

Mobility and Transportation: Fehr & Peers

Charles Alexander, Principal Nikki Riemer Ivana Medina

Civil Engineering: Martin / Martin Consulting Engineers

Andre Schlappe, Principal Melyssa C. Hartzell, Associate

Lighting Design: AKLD Lighting Design, Ltd.Lisa Bartlett, Lighting Director Mountain West

