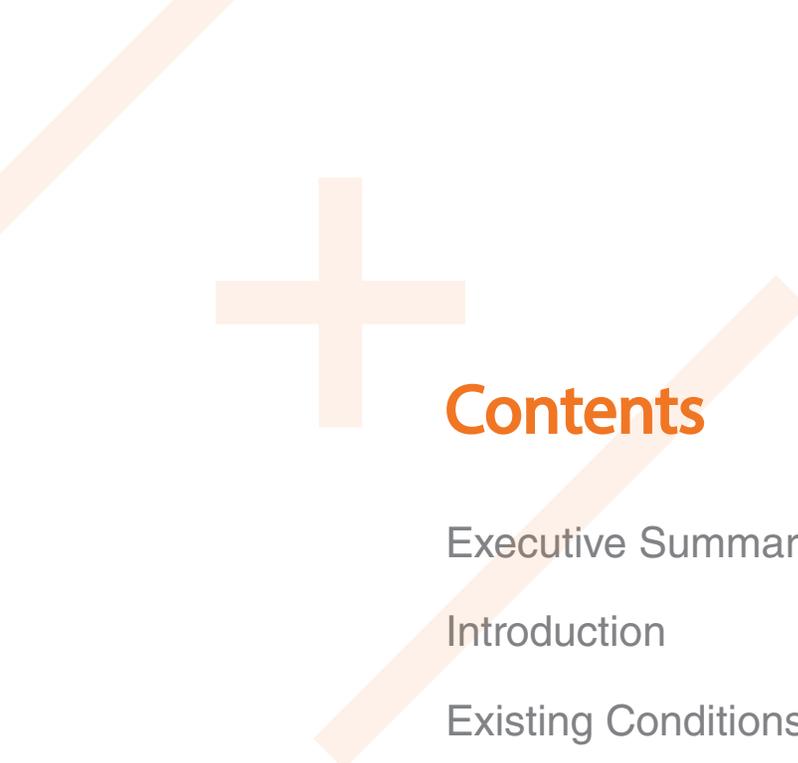


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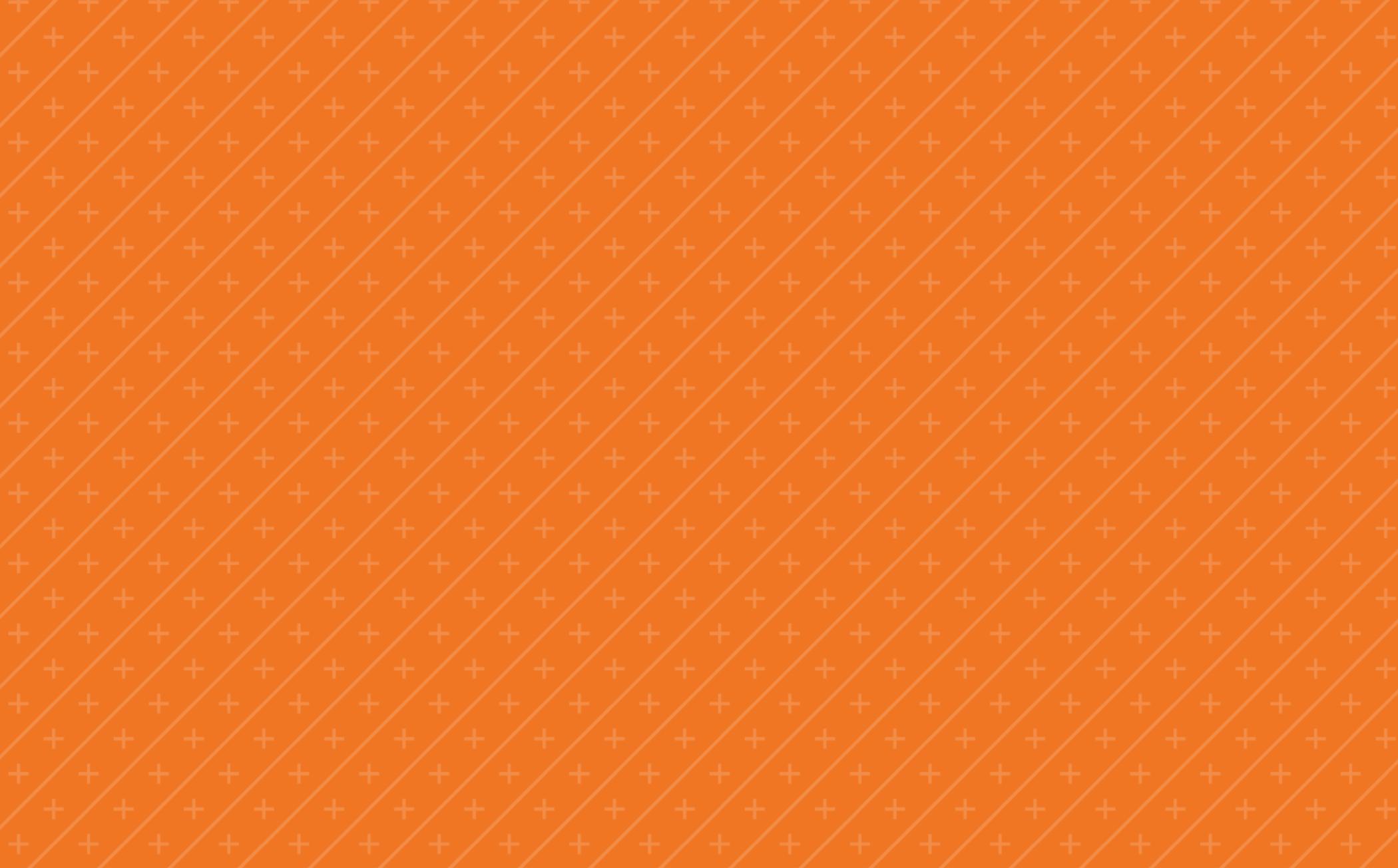
Lewis & Clark College

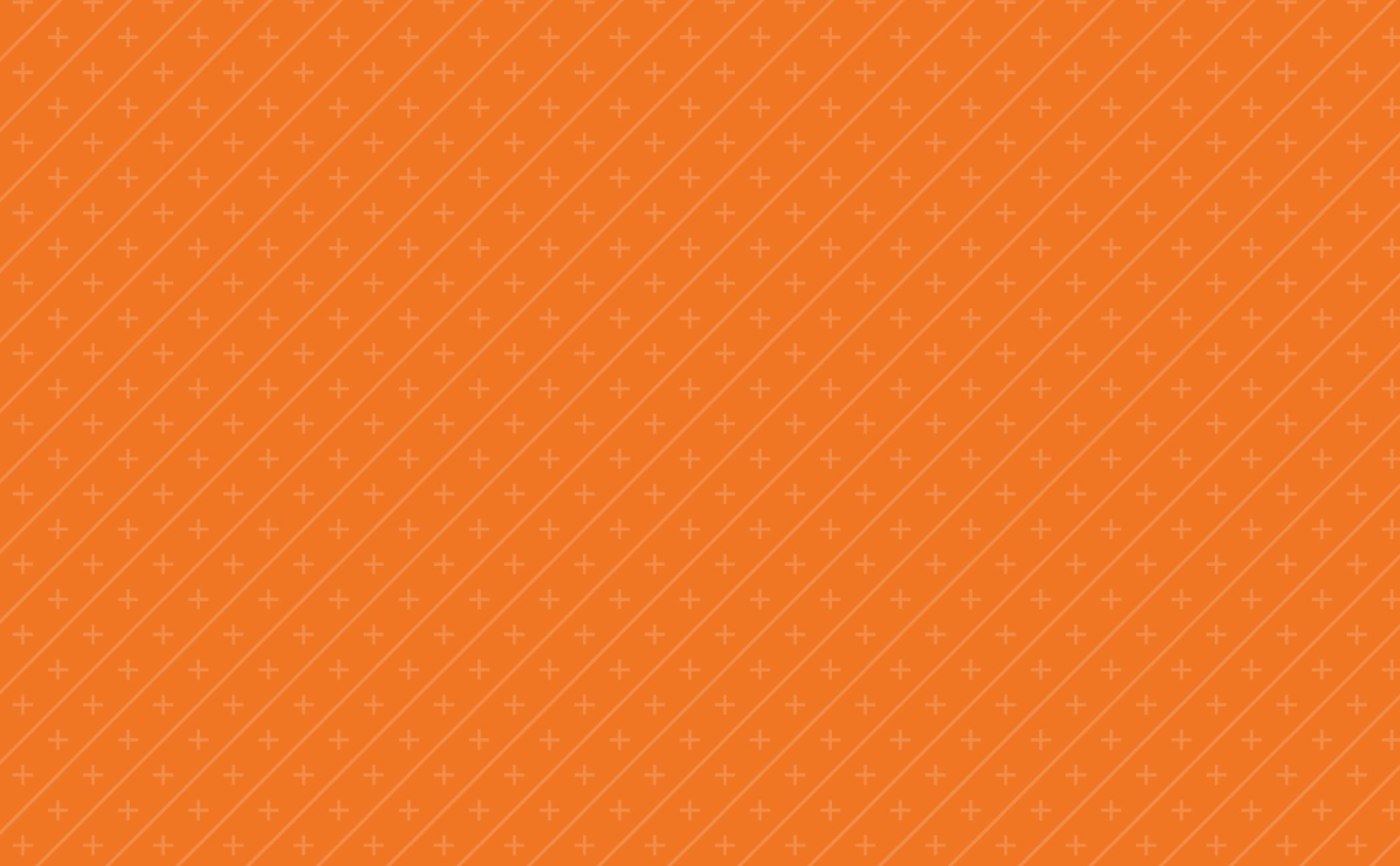
Campus Facilities Plan



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Executive Summary

Executive Summary

In the fall of 2017, Lewis & Clark College retained Sasaki to develop a Facilities Plan to cast a vision for the future of the campus. The resultant vision reflects the thoughtful engagement of numerous stakeholders including students, faculty, and staff, and provides a roadmap for the construction and maintenance of facilities for the College of Arts and Sciences (CAS), the Graduate School of Education and Counseling (the Graduate School), and the Law School. The plan guides near- and long-term investment in the campus through several strategies intentionally crafted to realize the aspirations of a liberal arts education. The plan:

- Reaffirms Lewis & Clark's history and identity through investments in the campus that enhance the residential experience, strengthen connections with the natural environment, and promote the adaptive reuse of the college's historical and contemporary buildings
- Propels Liberal Arts and Professional Education into the 21st century by prioritizing strategic investments within the academic core of the CAS campus, as well as the Graduate School and Law School campuses
- Reinforces the heart of campus with a dynamic student life and residential district, positioned around a revitalized Templeton Campus Center
- Strengthens campus community through interventions that foster inclusivity, diversity, and equity
- Stewards the campus sustainably and embeds sustainability in the long-term development of the campus



Lewis & Clark
College



In the near term, the academic core is enhanced through the renovation of the Olin Science Center to better support collaborative teaching, learning, and research, and through the strategic positioning of active ground floor functions along the academic spine. These include the Learning Commons in Watzek Library and the café on the southeast corner of J.R. Howard. The long-term plan includes a new multipurpose pavilion on the northeast corner of campus, the renovation of Evans Music Center and Fir Acres Theater to support accessibility and program needs, and improvements to athletics and recreation facilities, such as a new indoor tennis facility, fitness addition on the south side of the Pamplin Sports Center and Zehntbauer Swimming Pavilion, and reconstruction of the grandstand.

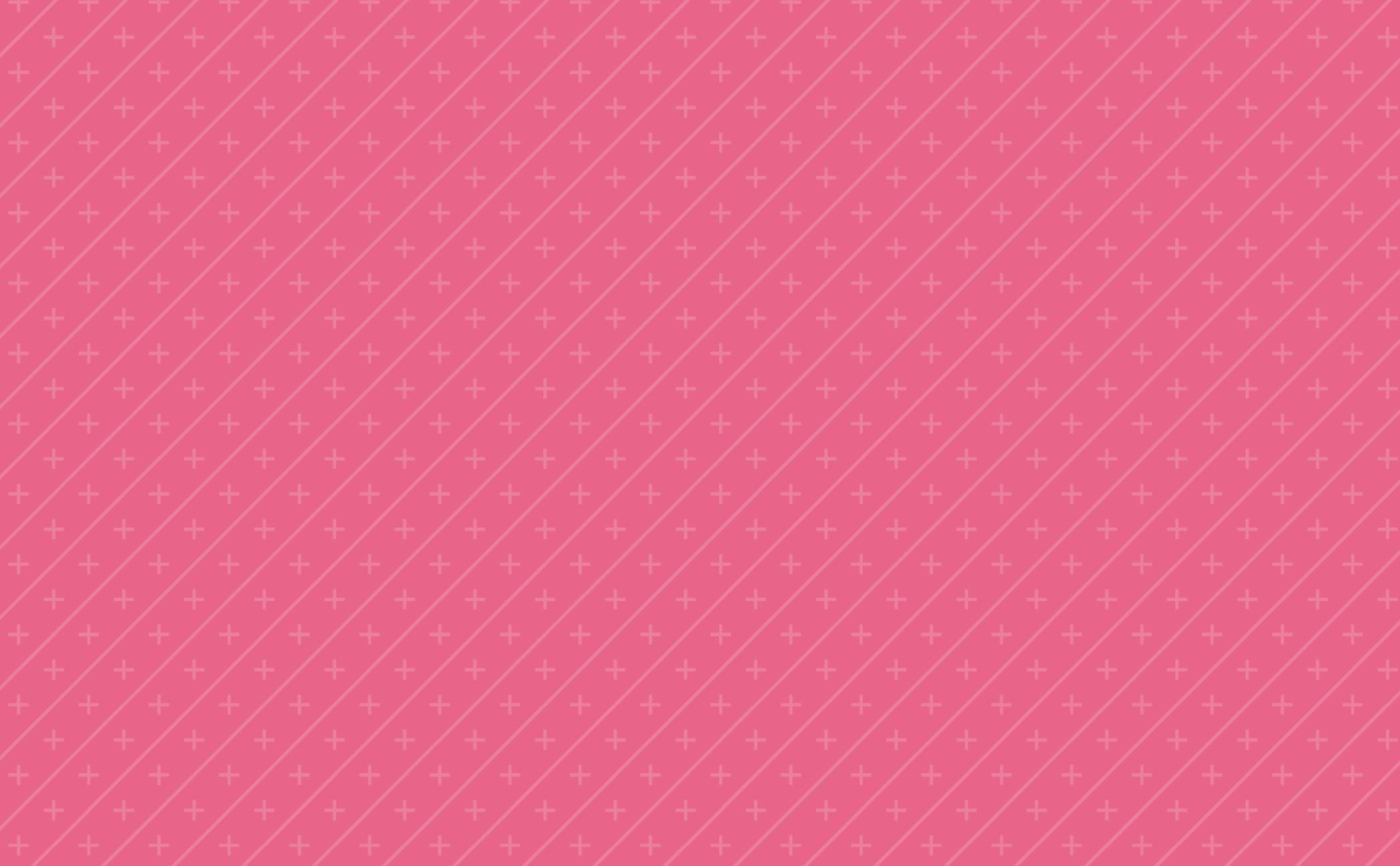
The renewal of the Community and Residential district is perhaps the most transformational element of the plan. The plan calls for the removal of Akin, Stewart, and Odell residence halls, and introduces a mixed-use district at the front door to campus. In the long-term, more than 525 students are accommodated in residential facilities above active ground-floor functions. A renovation and addition to the Templeton Campus Center, and conversion of Templeton Drive into the new Templeton Way pedestrian spine create a new memorable heart to the campus. The plan anticipates the replacement of Hartzfeld residence hall with suites and apartment units for both undergraduate and graduate students, and renovates the remaining Forest Halls, as well as Platt, Howard, and Copeland. Tamarack Lounge is renovated as a new café and community space.

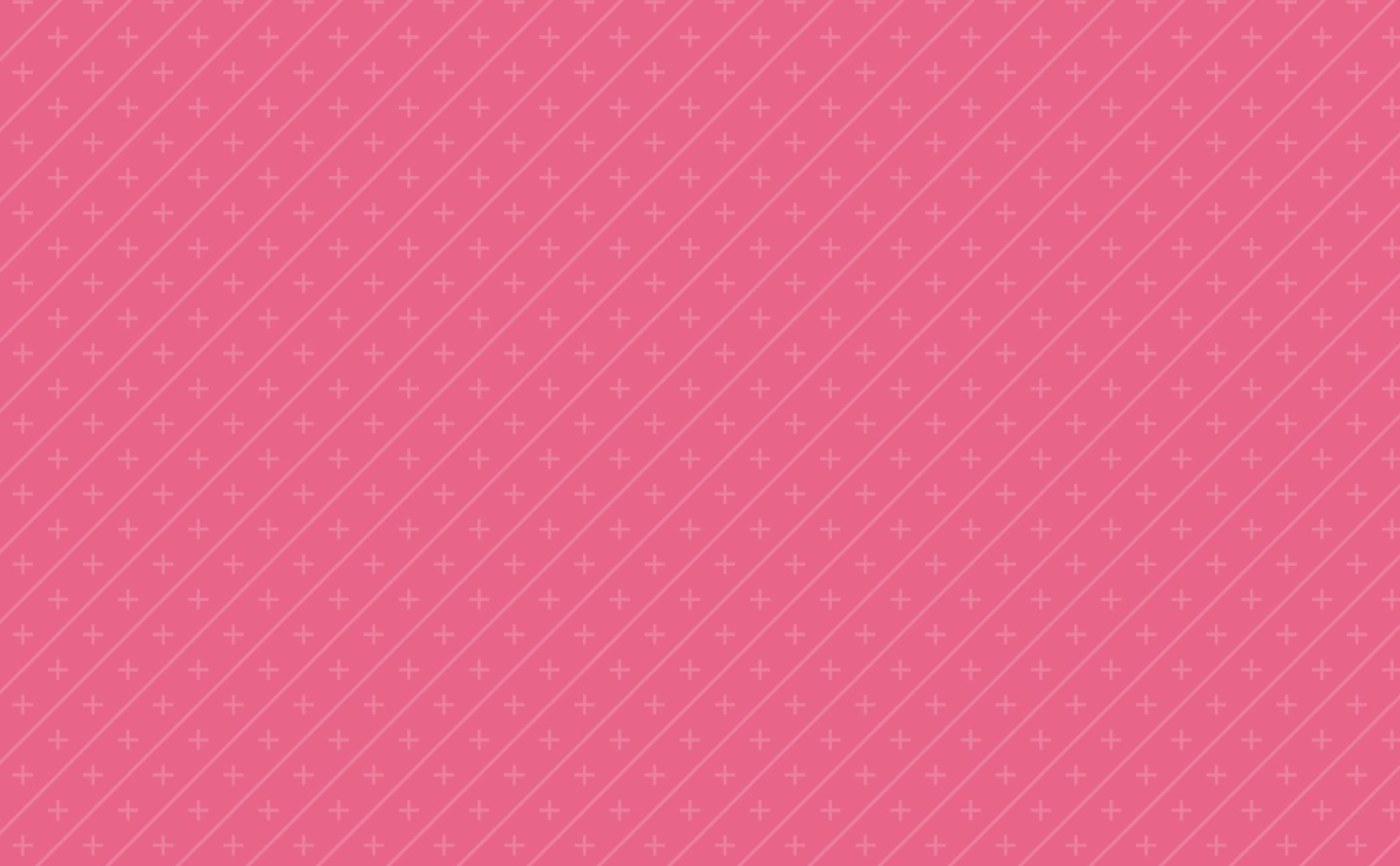
On the Graduate School campus, the Facilities Plan renovates Corbett House, the South Chapel, and South Chapel Annex for academic and administrative functions. Corbett House is also well-suited to

accommodate events functions. The plan introduces a new signature plaza within the existing Corbett House courtyard to improve the sense of arrival to the Graduate School campus, while a new 80-space surface parking lot provides needed parking capacity.

The Facilities Plan incorporates improvements to the Law School campus documented in the Law School Master Plan. The plan also introduces a new surface parking lot to the south of the Huston Sports Complex to accommodate up to 100 additional parking spaces displaced from the campus core.

The Facilities Plan includes an implementation strategy that categorizes capital projects as near-term projects (0-5 years) and long-term projects (5+ years, or as funding becomes available), and includes an associated financial strategy.





Introduction



Introduction

Purpose

Early in the planning process, the Sasaki team worked with Lewis & Clark's leadership to confirm the overall purpose of the Facilities Plan, building on the goals and scope of services outlined in the college's RFP. The following key drivers emerged through that effort:

- Develop a facilities plan that highlights both near-term recommendations and a long-term vision for the campus, including a realistic action plan for the next three to five years, and strategies for investment through ten years and beyond
- Inform future capital campaign efforts by articulating a compelling vision for the Lewis & Clark campus, and highlighting priority projects that can be funded through donor support
- Facilitate a highly inclusive planning process that generates advocacy for the facilities plan vision, enthusiasm for the big ideas reflected in the plan, support for the plan recommendations, and a shared understanding of capital improvement priorities
- Create a plan for investment in the Lewis & Clark campus and its facilities that addresses both the deferred maintenance backlog and new facility needs, with a logical implementation strategy that can be realized within the college's financial resources

Previous Studies

Before the initiation of the facilities plan effort, the college completed several studies that examined current campus conditions, and established baseline data for consideration in the plan. These studies included the following:

Facility Condition and Backlog Maintenance Survey

In 2015 Sightlines LLC completed a facility condition and backlog maintenance survey that assessed all campus facilities. The study found that nearly 70 percent of campus buildings had never had significant renovations, and that deferred maintenance was significant in several buildings. Total deferred maintenance across the campus will be over \$220 million by 2025, and several buildings—the Pamplin Sports Center and Zehntbauer Swimming Pavilion, Templeton Campus Center, Watzek Library, Copeland residence hall, and the Biology/Psychology/BoDine complex—required investments of more than \$10 million each.

Law School Campus Master Plan

In fall 2016, the Law School engaged SKL Architects to prepare a master plan study for Lewis & Clark's Law School campus. The study provided recommendations for overall building and campus improvements and the reorganization of program elements among the various Law School buildings, and included a proposed implementation sequence for identified projects. The Law School has already implemented the first phases of the plan, including a new entry plaza, and renovations of McCarty and Gantenbein.

Housing Master Plan

In June 2017, Mahlum Architects completed a housing master plan study that examined current and future student housing needs. The study outlined a strategy to de-densify over crowded residence halls, accommodate a junior residency requirement, and included an implementation sequence for the construction of new housing over time, as well as the replacement of several residence halls requiring significant maintenance.

Several additional studies informed the current facilities planning effort and provided important insights into existing campus and building conditions, as well as ideas for campus and building improvements. These studies included the following:

- Fir Acres Multi-use Pavilion Planning Study, Minarik Architects, 2017
- Lewis & Clark College Watzek Building Master Program and Space Plan, Hennebery Eddy, 2016
- Lewis & Clark College Science Predesign Study, SRG, 2013
- Templeton Renovation Study, Holst Architecture, 2013
- Lewis & Clark College Physical Education, Sports and Recreation Facilities Plan, DLR Group, 2012
- Lewis & Clark Coordinated Campus Planning Options, SRG Partnership, Inc., 2010

- Lewis & Clark Conditional Use Master Plan, Lewis & Clark, 2009
- Corbett House Feasibility Analysis, Hennebery Eddy, 2008
- Lewis & Clark College Performing Arts Study, Boora Architects, 2008
- Corbett House History, Lewis & Clark, 1976

Planning Process

The Facilities Plan process included three phases of work informed by a comprehensive engagement strategy with Lewis & Clark leadership and all members of the campus community. A Facilities Plan Steering Committee (the Steering Committee) provided direction and input on the plan as it evolved, and the college's Executive Council provided key decisions moving forward. Progress presentations were made to the Buildings & Grounds Committee of the Board of Trustees, and the full Board of Trustees at key milestones.

The following is an overview of the process and engagement strategy.

Phase 1. Discovery and Analysis

- Review of previous planning studies
- Preparation of campus base map and digital 3D model
- Two initial campus immersion work sessions involving meetings with the Steering Committee, campus community stakeholders, a learning environment audit, and site reconnaissance and building tours
- The launch of several online engagement tools, including a facilities plan website, Sasaki's MyCampus and Collaboration survey tools
- An assessment of instructional space utilization and overall space needs

- A comprehensive site analysis that examined building and land use, the landscape and open space setting, circulation and parking conditions, the student life environment, student housing needs, and athletics and recreation facility needs
- A sustainability review that assessed site utilities and infrastructure
- Creation of a planning and urban design framework that synthesized the findings of the various analysis tasks

The Sasaki team presented the findings of the Discovery and Analysis phase of work at a second work session with the Steering Committee and the Board of Trustees in November 2017, to validate the analysis findings and establish direction for subsequent phases of work.

Phase 2. Facilities Plan Scenarios

Building on the findings of the Discovery and Analysis phase, the Sasaki team prepared overall planning principles to guide campus and facility improvement strategies within the campus planning and urban design framework. Sasaki also developed scenarios for five distinct campus districts: the CAS North district, including the academic core and the athletics and recreation zone, the Community and Residential district, the Graduate School campus, and the Law School campus. Each of the district scenarios addressed the following elements:

- Program priorities
- Building and land use strategies
- Campus form
- Circulation and parking systems
- The landscape and open space structure
- Sustainable initiatives

The Sasaki team presented the scenarios at meetings in January and February 2018, that included the

Steering Committee, the Executive Council, the Building & Grounds Committee of the Board of Trustees, and the full Board of Trustees. Participants in these meetings provided feedback that established direction for the development of the draft facilities plan in Phase 3 of the planning process.

Phase 3. Documentation and Implementation

The Documentation and Implementation phase of the planning process focused on the development and documentation of the preferred plan, and the crafting of an implementation strategy for the plan recommendations. The implementation strategy outlined the phasing of priority projects for the next five years, and established rough order-of-magnitude project costs. It was informed by an analysis of financing options, which included fundraising, revenue generation, external partnerships, and the college's ongoing annual renewal expenditures. Specific tasks in this phase included the following:

- Preparation of the draft plan illustrating the key ideas and recommendations of the plan
- Development of the implementation strategy, including phasing, cost estimates, and financing options
- Preparation of the final plan and facilities plan report

The draft plan was presented to Lewis & Clark's President and the Steering Committee in July 2018. The final plan, which is documented in this report, was presented to the President, Steering Committee, Vice President for Student Life, Executive Council, and Buildings & Grounds Committee of the Board of Trustees in January 2019. The plan was presented to the full Board of Trustees for approval in May 2019.



Stakeholder Engagement

The facilities plan process included a comprehensive engagement strategy involving interviews with campus community stakeholders, and meetings and work sessions with the Steering Committee, Executive Committee, President, Buildings & Grounds Committee of the Board of Trustees, and the full Board of Trustees, as well as ten open houses with the broader campus community. The stakeholder interviews helped to identify the central issues and priorities to be considered in the plan, and engaged the following individuals:

- Acting President, David Ellis
- Dean of Graduate School, Scott Fletcher
- Dean of Enrollment, Lisa Meyer
- Director of International Students, Brian White
- Finance Focus Group (Andrea D, Katherine S, Michael W, Marietta L)
- CAS Registrar, Judy Finch
- Housing & NSO, Sandi Bottlemiller
- Graduate Admissions, Becky Haas
- CAS Chairs, Ken Clifton, Matthew Johnson
- Dean of Diversity & Inclusion, Janet Steverson
- Incoming President, Wim Wiewel
- Graduate Registrar, River Montijo
- Law Student Affairs & Registrar, Libby Davis, Seneca Gray
- Senior Director of Sustainability and Communications, Amy Dvorak
- Chair of Facilities Committee of Board of Trustees, Jim Spencer
- Executive Director of Public Affairs and Communications, Joe Becker
- Dean of Law School, Jennifer Johnson
- IT CIO, Adam Buchwald
- Alumni Relations, Andrew McPheeters
- Conference & Events, Sherron Stonecypher, Kerry Kennon, Sara Schoville
- Law School Student, Lawrence Pittman
- FS Buildings, Denise King
- Watzek Library, Mark Dahl
- Institutional Research, Mark Figueroa & Renee Orlick
- CAS Student, Terrell Mwetta
- Director of Finance and Operations, Graduate School, Gena Perrine
- Vice President for Business and Finance/Treasurer, Alan Finn
- Associate Vice President for Facilities, Michel George
- FS MEP, Scott Lege
- Grounds, Brad Ashwell
- Interim CAS Dean, Bruce Suttmeier
- Dean of Students, Anna Gonzalez
- Facilities–Law, Kurt Armstrong
- Law Faculty & Associate Dean of Faculty, John Parry
- Associate Dean and Director, Janice Weis
- Campus Living & Activities, Joe-Barry Gardner, Charlie Ahlquist, Jason Feiner, Joe Yuska
- Law Admissions, Mimi Huang & Sarah Peterson
- Food Service, Marc Marelich
- CAS Student, Sophia Canon
- Interim Law Library, Rob Truman
- Professor & Director of Strategic Initiatives, Rober Kugler

The plan also involved six campus-wide outreach sessions in November 2017, which included two sessions each at the CAS, Graduate School and Law School campuses. The sessions were open to students, faculty, and staff, and generated the following responses:

- 111 unique comments from participants in the College of Arts & Sciences sessions
- 61 unique comments from participants in the Graduate School sessions
- 79 unique comments from participants in the Law School sessions

Four additional outreach sessions were held with members of the campus community to solicit input on the plan as it evolved.

Online Engagement

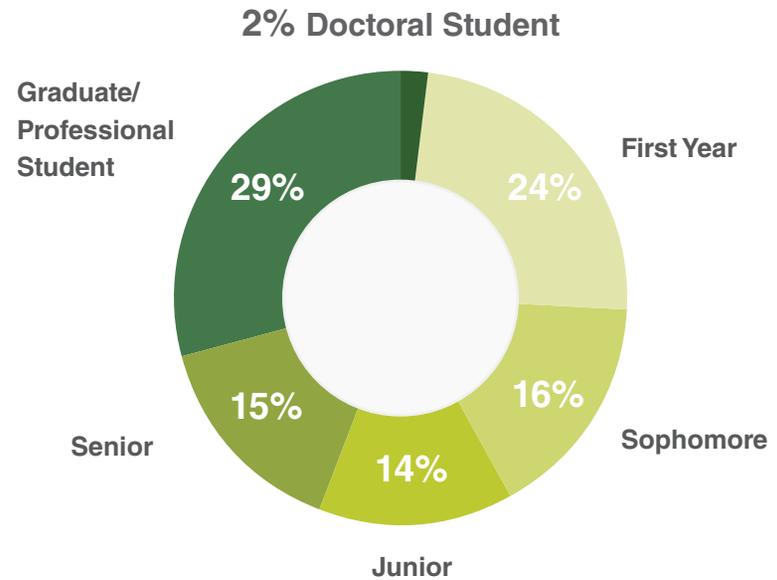
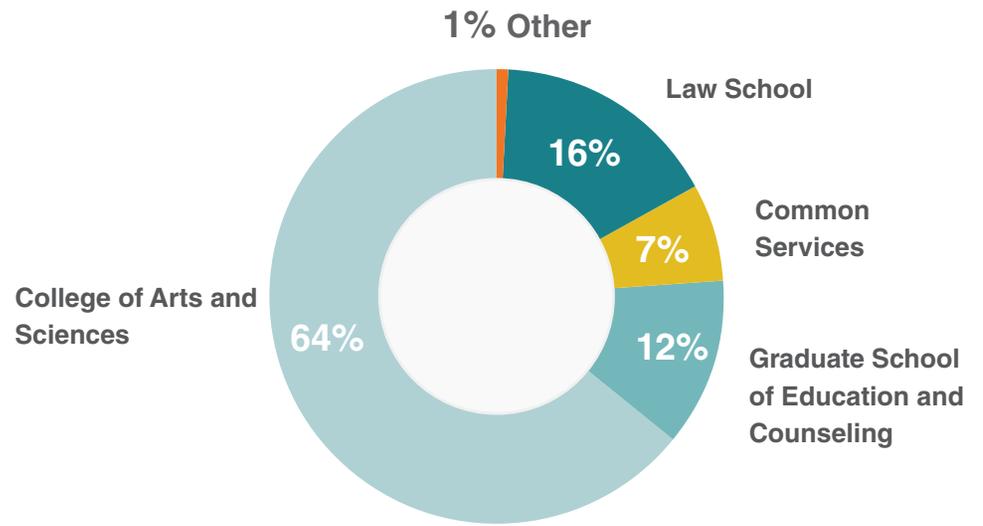
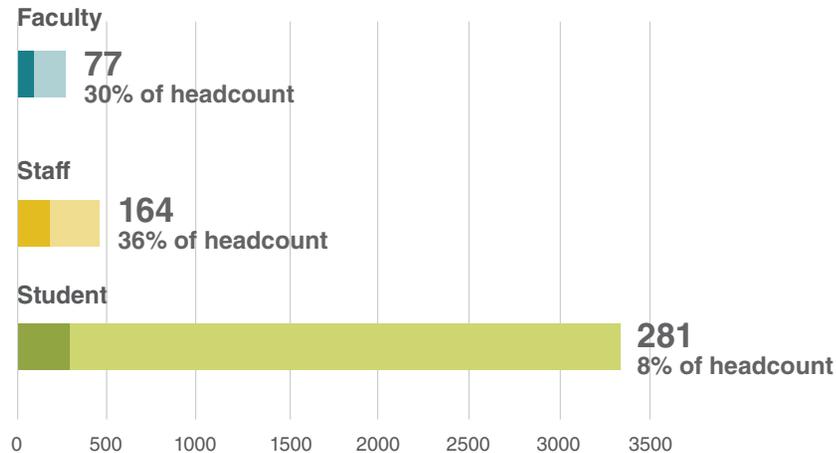
The Sasaki team also employed several online engagement tools to solicit input from the campus community. These tools included the following:

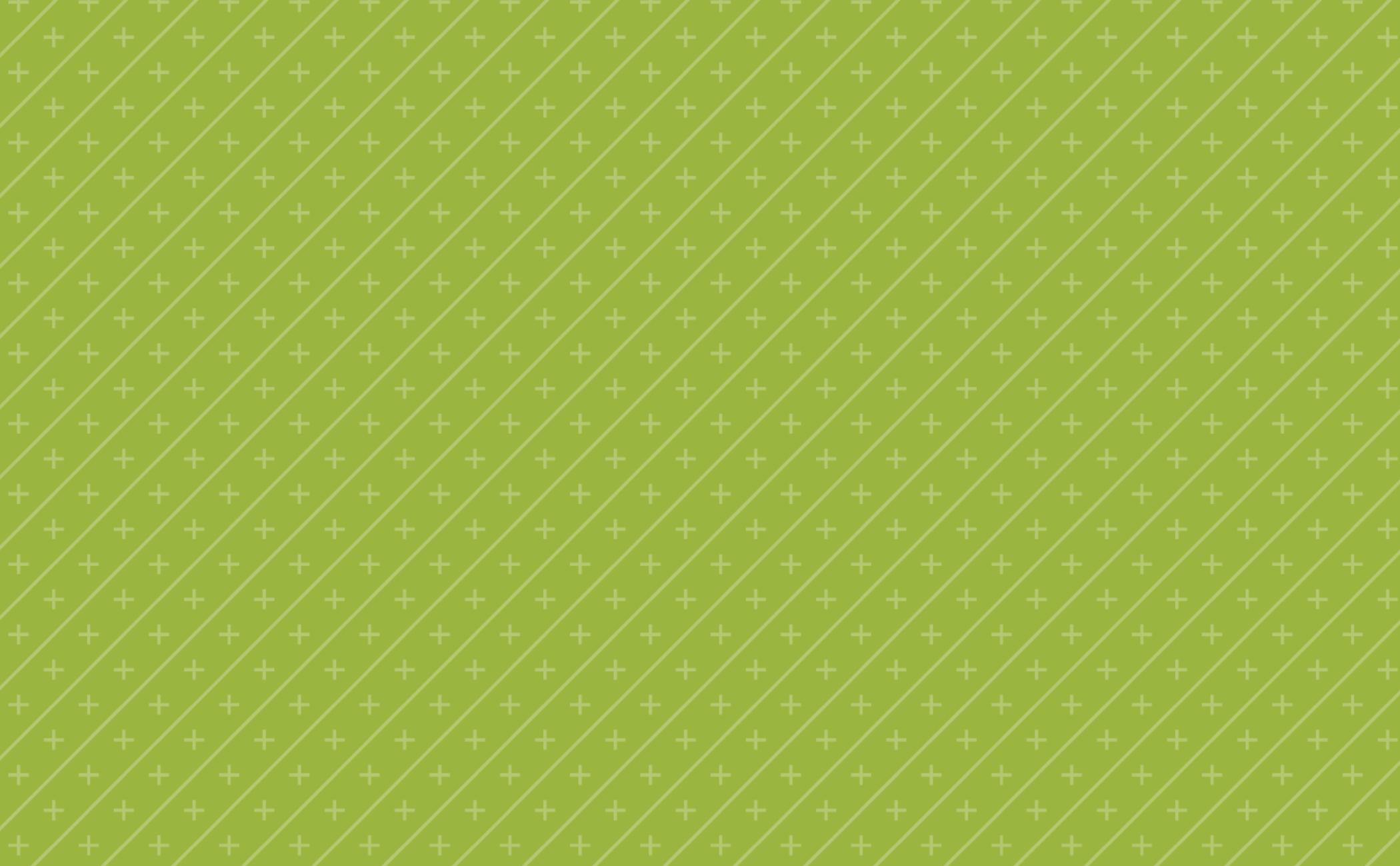
MyCampus. The MyCampus survey is an interactive online survey tool that enables students, faculty, and staff to comment on how they experience the campus, including how they navigate various mobility systems. The results of the survey were compiled to reveal patterns, and stakeholder comments provided detailed insights into a range of campus issues.

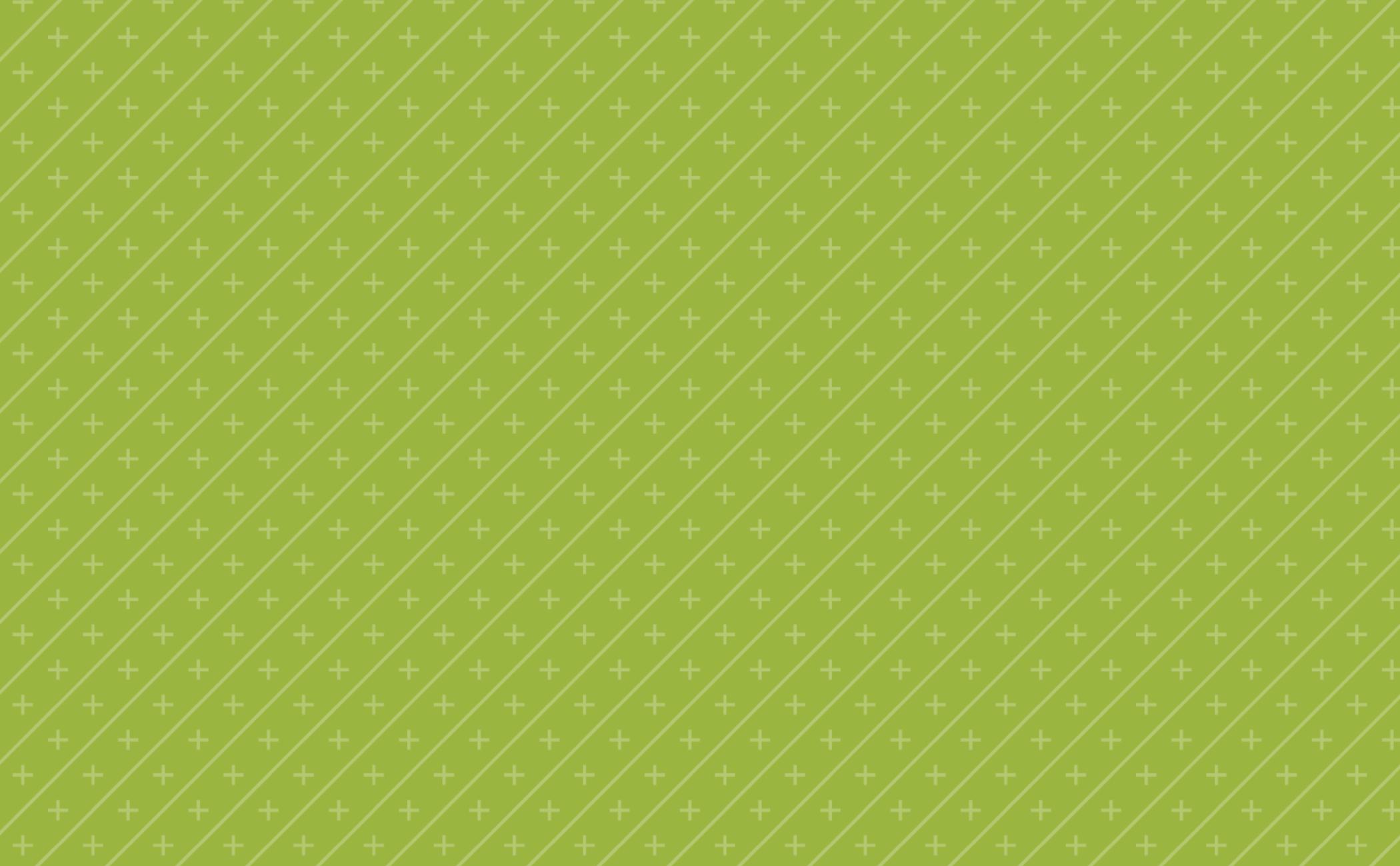
The survey generated an eight percent response rate from students, 30 percent from faculty, and 36 percent from staff. A five to ten percent response is typical for this survey.

Website. A Facilities Plan website served as a process and communication tool, as well as a forum for collecting feedback and comments during the planning process.

The findings of the survey and comments posted on the Facilities Plan website were integrated into the overall analysis of the campus, as well as the plan recommendations.







 **Existing Conditions**

Campus History

Lewis & Clark College is a private liberal arts college founded in 1867 and located on a 140-acre campus in southwest Portland, Oregon.

The college consists of the undergraduate College of Arts and Sciences, the Graduate School of Education and Counseling, and the Law School, which together occupy 1.3 million square feet of space in 59 buildings.

Lewis & Clark College was originally established as Albany Collegiate Institute, on a site in the town of Albany, 60 miles south of Portland. The college educated both men and women within a common curriculum that focused on the classics and traditional courses. Albany College remained at its original location until it acquired the new Monteith campus, a 48-acre site on the southwest edge of Albany, where three new buildings were constructed and opened in 1927.

In 1934, Albany College initiated an academic satellite program in Portland, where enrollment soon exceeded that of the main campus with the result that, in 1938,

the Board of Trustees decided to close the Albany campus and create a new four-year college in Portland. A few years after the move to Portland, Albany's trustees were successful in acquiring the 63-acre Fir Acres estate on Palatine Hill Road as a permanent site for the college, and in 1942, they changed the college's name to Lewis & Clark College.

A master plan for the Fir Acres campus was created in 1944, which was timely, as the return of veterans following WWII generated significant enrollment growth from 1946 to 1949. Nine war surplus buildings were placed on the campus to meet the needs of the growing student population during that period. Enrollment continued to grow in the post-war years, and from 1954 to 1967 the student population increased from 1,031 to 1,798. This growth was supported by a building boom that saw fourteen new buildings constructed on the campus, including new classrooms buildings, residence halls, and the Templeton Campus Center.

The Northwestern College of Law, originally established in 1884 as the first law school in the state of Oregon, merged with Lewis & Clark in 1965. In the

late 1960s, new buildings were constructed for the Law School on a site northwest of the Fir Acres campus.

Graduate programs in education were introduced at Lewis & Clark in 1970, and consolidated into the Graduate School of Education in 1984. Total undergraduate, graduate, and Law School enrollment reached 3,213 in 1981. Following national higher education trends that brought construction of cultural, student life, and science spaces to the campus, overall campus enrollment nevertheless declined somewhat to a combined total of 2,960 in 1998. Another master plan was created to guide the growth of the campus during this period, prepared by Sasaki.

In the early 2000s, the college acquired the former Corbett Estate and Convent to house the growing Graduate School program. The acquisition added 18 acres of land to the campus, and created a permanent home for the college's graduate programs. From 1998 to 2018, the college's total combined enrollment grew from 2,960 to a peak of 3,688 in 2013, before declining somewhat to a current enrollment of 3,339.



1924 to 1946



1949 to 1958



1958 to 1967



1968 to 1987



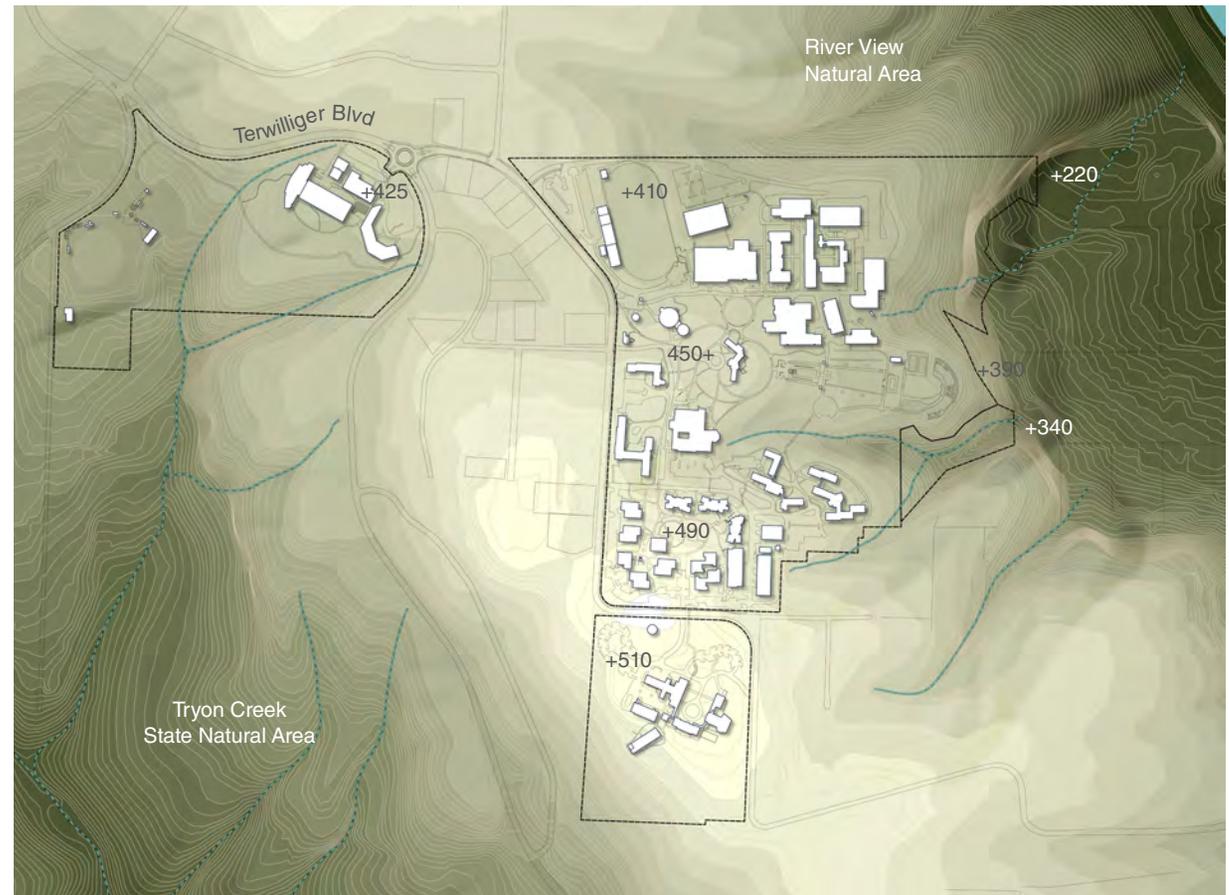
1988 to 1998



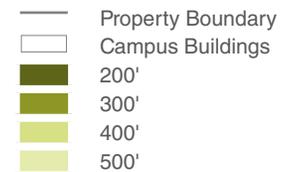
1999 to 2017

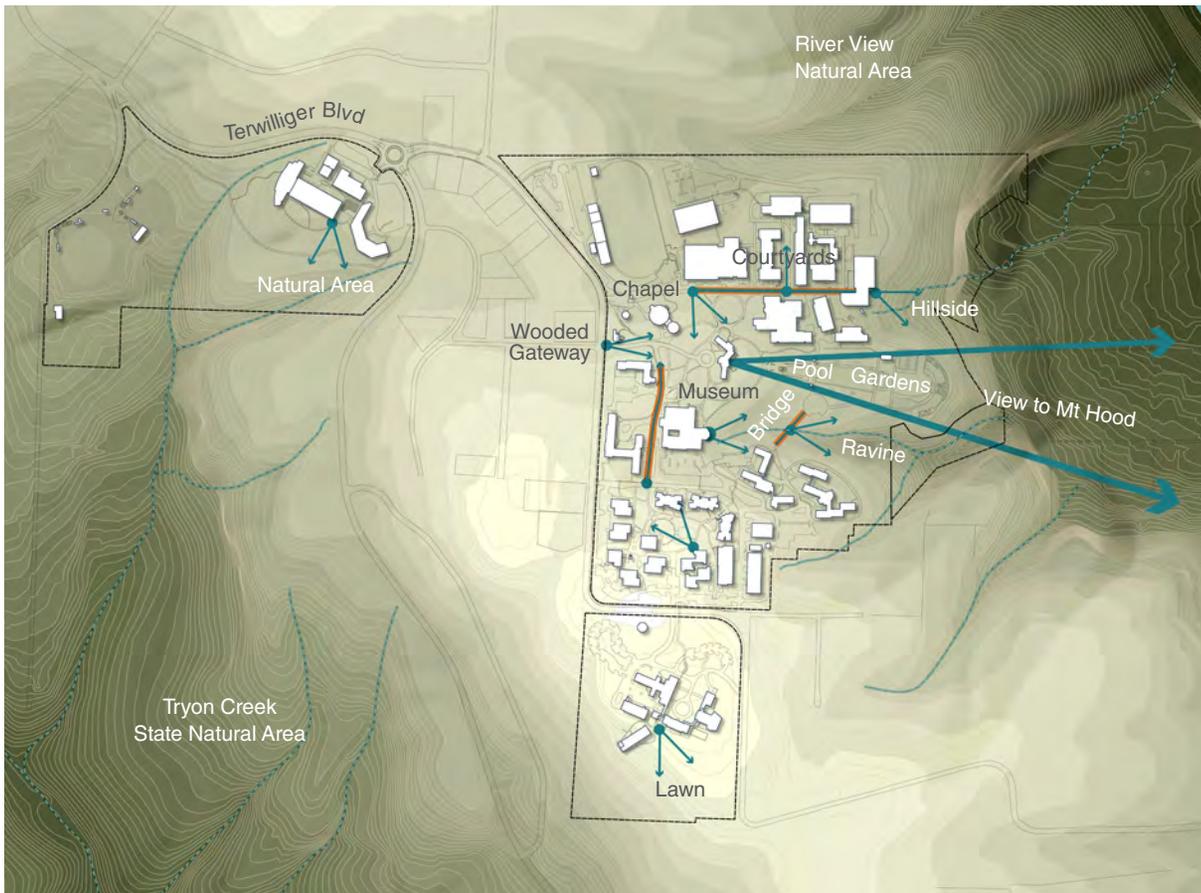
Landscape and Open Space System

A comprehensive analysis of the campus landscape and open space system examined topography, viewsheds, geology, landslide conditions, hydrology and stormwater management, pervious and impervious surfaces, and landscape typologies. The following are highlights of the analysis.



Topography





Topography

The Lewis & Clark College campus is situated on a ridge between wooded ravines, and there is a grade change of approximately 300 feet from the lowest points along the eastern edge of the campus, to the high point at Palatine Hill Road. The topography and ravine landscape contribute to the unique character of the campus, and also shape mobility systems, accessibility, drainage patterns, and its overall development potential.

Viewsheds

The gardens of the Frank Manor House estate slope away from the house towards the east, affording a grand axial view to Mount Hood. Views in other areas of the campus are framed by woodland edges, creating the experience of a park in the forest.

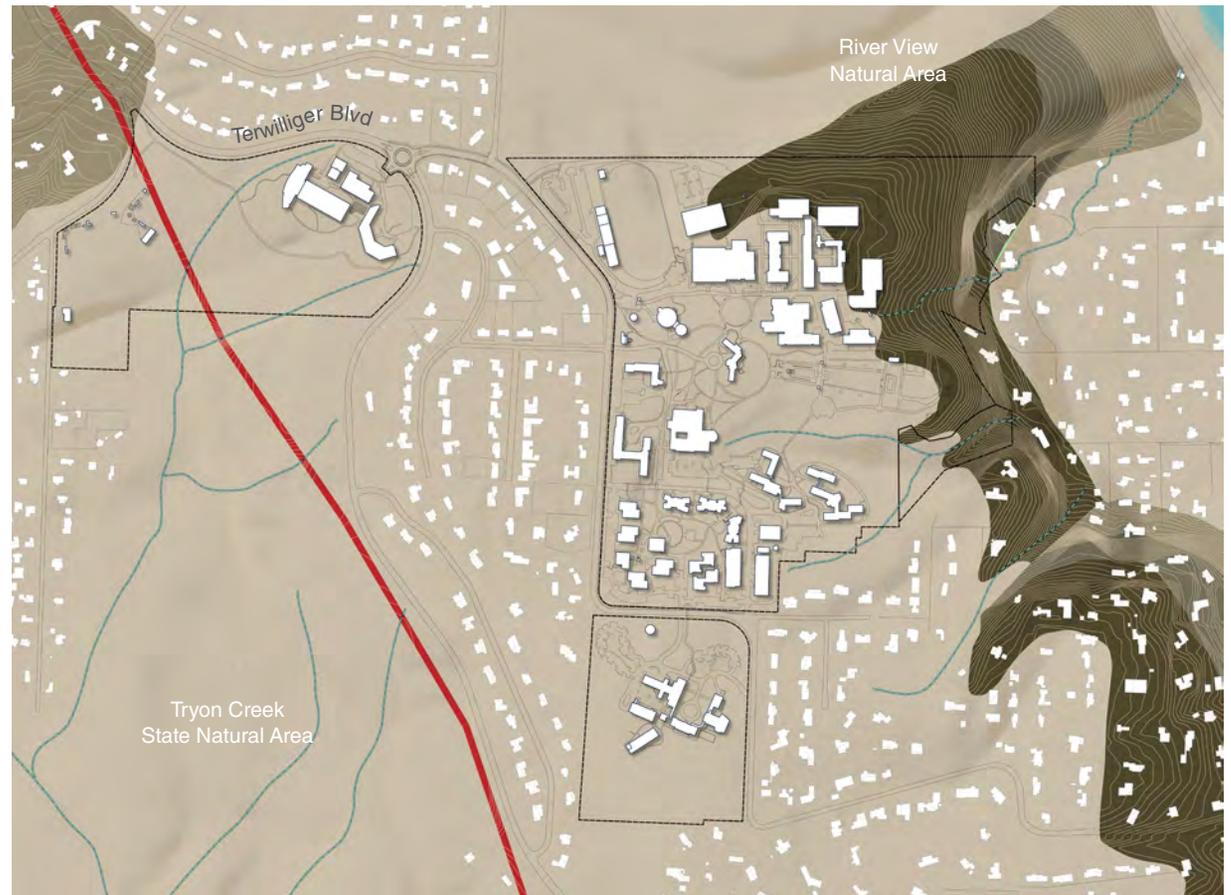
Viewsheds

- Property Boundary
- ▭ Campus Buildings
- View Corridors
- Viewsheds

Geology

The majority of the campus is built on 15 to 30 feet of silt and clay soil, which lies over basalt rock, an igneous rock formed by lava flows. Permeability is low, and the water table is approximately five to ten feet below grade in most areas.

The campus is located within the Willamette and Oatfield Fault zones, where there is a significant earthquake risk. As a result, campus buildings must be designed to meet building code requirements for Seismic Zone 3, including slope offsets.



Geology

- Property Boundary
- Campus Buildings
- Fault Line
- TWH – Basalt of Waverly Heights
- WFSH – Wanapum Basalt – Basalt of Sand Hollow
- TFG – Wanapum Basalt – Basalt of Ginko
- TGSB – Grande Ronde Basalt



Slopes

- Property Boundary
- Campus Buildings
- Landslide
- Head Scarp
- Fan
- Historically Active Landslides

Slope

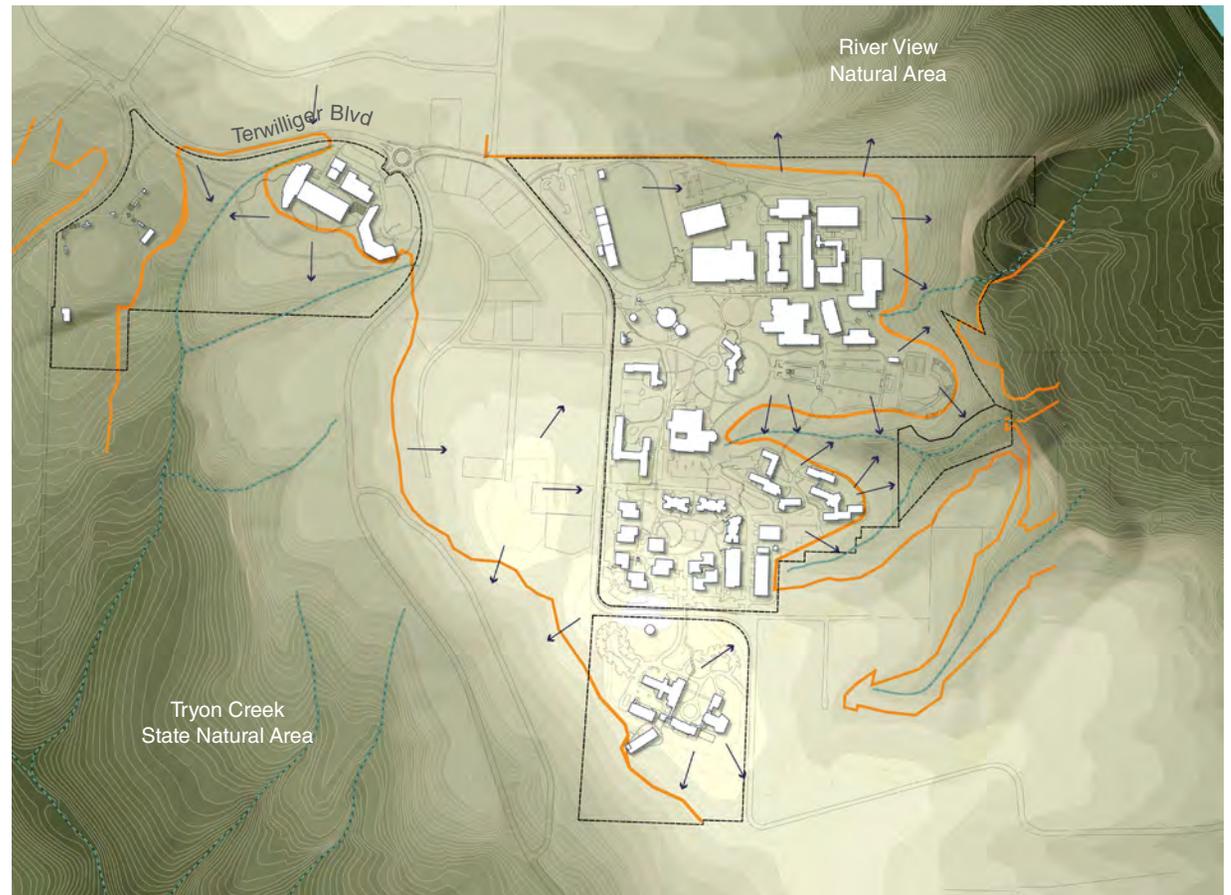
The steep slope conditions and proximity of the Willamette and Oatfield Faults create landslide risks at the perimeter of the campus. To mitigate these risks, forested ravine edges should be protected to the extent possible, and new development should be set back from ravine edges.

Fill

Significant areas of campus are built on fill, so consideration of soil stabilization needs to be accounted for in development.

Hydrology and Stormwater Management

Much of the campus was developed before Portland's adoption of the 2000 Stormwater Management Manual. A significant portion of campus stormwater drains to the Willamette and Tryon creeks, and unmitigated runoff causes erosion and loss of water quality in adjacent creeks and rivers. The college has begun to address untreated outfalls and areas within the campus in a multi-year improvement program mandated by the City of Portland.

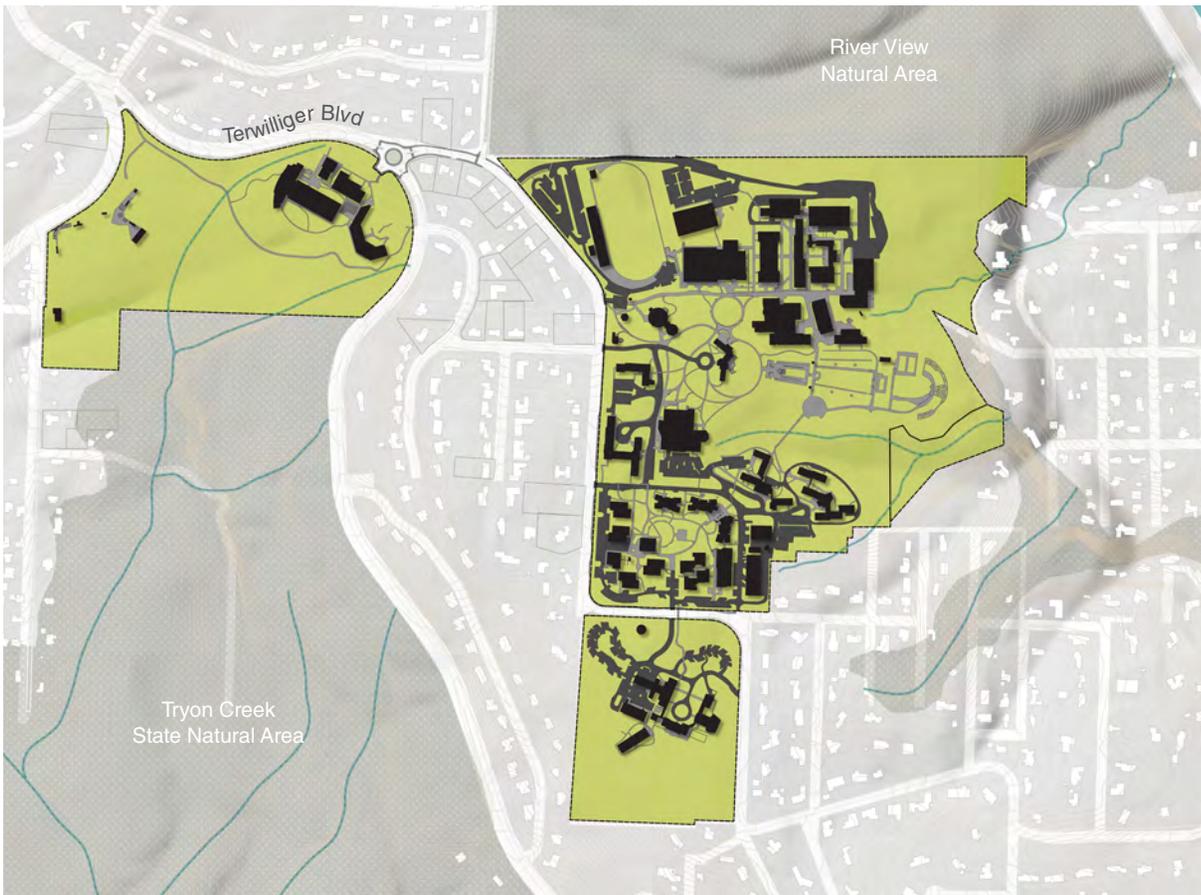


Hydrology and Stormwater Management

- Property Boundary
- Environmental Protection Zone
- Campus Buildings
- Runoff Flow Direction

Pervious and Impervious Surfaces

The City of Portland assesses stormwater fees based on overall impervious surface coverage. Currently, the campus area consists of 72 percent pervious surfaces, and 28 percent impervious surfaces. The college has been implementing Best Management Practices (BMPs) to reduce stormwater fees through Portland's Clean River Rewards program, and has identified several potential projects that will advance efforts in this area.



Pervious and Impervious Surfaces



Vegetation Types

The campus contains a mixed tree canopy with native, mixed-culture and restored, and unrestored forest. Native forests support greater biodiversity, and the college has initiated efforts to remove invasive species on all campuses.

Landscape and Open Space Structure

The Lewis & Clark campus landscape and open space system is composed of several elements that define the overall structure, character, and function of the campus. These elements include estate grounds, campus park environment, courts and quads, outdoor gathering spaces, campus gardens, recreation and athletic fields, and wooded edges, and are described below.

Estate Grounds

The campus was built around the M. Lloyd Frank estate's Beaux Arts style grounds, which are oriented towards the Mount Hood axis. The formal gardens include fountains, reflecting pools, and ornamental garden beds. Recent efforts have worked to restore the gardens while substituting lower-maintenance planting choices that reflect the original planting scheme.

Campus Park

Naturalistic parkland, composed of open lawns framed by informal plantings of trees and shrubs, provides space for informal gathering and recreation, and works with topography to facilitate pedestrian movements.

Courts and Quads

Orthogonal courtyards defined by buildings on three or more sides provide outdoor space for adjacent facilities, and shape the character of academic building clusters.



Vegetation Types

- Property Boundary
- Ecozone Boundary
- Campus Buildings
- Native Forest
- Mixed Culture/Restored Forest
- Unrestored Forest



Landscape and Open Space Structure

| | |
|--|--------------|
| ■ | Lawn |
| ■ | Courtyard |
| ■ | Plaza |
| ■ | Sports Field |

Outdoor Gathering Spaces

Paved plazas, terraces, and amphitheaters offer spaces for outdoor gathering, as well as views of the iconic campus landscape. An extensive ivy removal program has been implemented across campus and will require ongoing maintenance.

Campus Gardens

Historic estate gardens contribute to the unique sense of place of the campus. Newer gardens include a vegetable garden in the Forest Halls complex.

Athletics and Recreation Fields

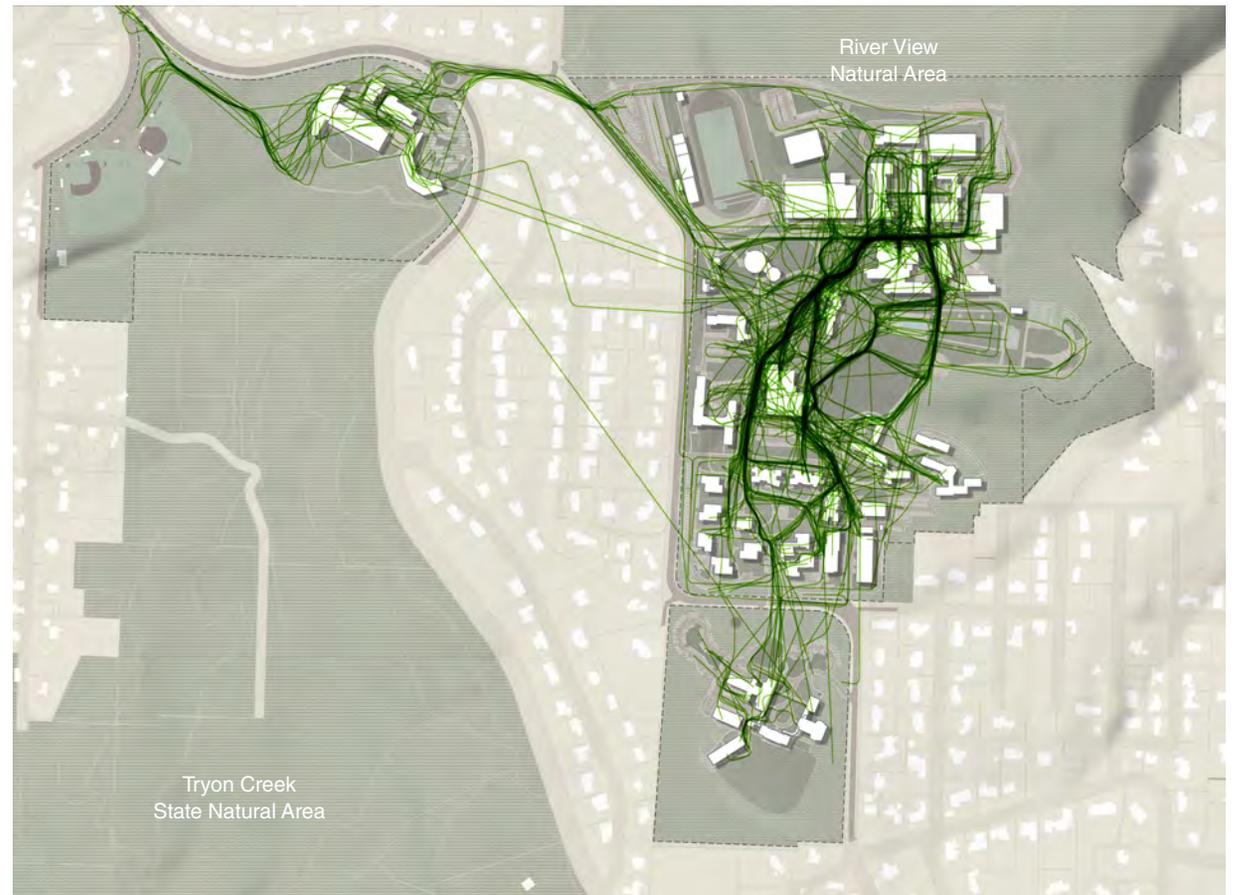
With significant topographic change across the campus, there are few sufficiently large flat areas to accommodate outdoor athletics and recreation fields. Existing fields consist of Wilson Field at Griswold Stadium, located to the west of the CAS campus academic core, and the Huston Sports Complex to the west of the Law School campus along Boones Ferry Road.

Wooded Frame

The wooded ravines that surround the campus provide a forested setting for campus life, and connect the campus to the Pacific Northwest landscape visually, and with biking, jogging, and walking trails. A pedestrian bridge connects residential and academic districts within the CAS campus across a wooded ravine, creating a unique experience for pedestrians.

Mobility and Parking Systems

The analysis of campus mobility systems examined pedestrian paths and ADA routes, bicycle routes, campus shuttle routes, gateways, vehicular routes, and parking areas. The following are highlights of the analysis.



MyCampus Survey Pedestrian Routes

- Property Boundary
- Campus Buildings
- Walking Route

Pedestrian Network

The campus contains a comprehensive pedestrian circulation system that provides connectivity within the CAS, Graduate School, and Law School campus areas. Academic uses on each campus are concentrated within a five-minute walk. However, connections between campuses could be strengthened with improved cross-campus routes. Given the distance between the Law School and CAS campuses, and the city road, improving the connection will be challenging.

Templeton Drive forms part of a key pedestrian route that connects academic and residential areas within the CAS campus but is currently dominated by cars and parking. Huddleson Lane is another key pedestrian route, but does not contain pedestrian sidewalks.



Pedestrian Network

- Primary Pedestrian Way
- Secondary Pedestrian Way
- Pedestrian Conflicts
- 5 Minute Walking

ADA Movement

While the Lewis & Clark campus is generally accessible, with ADA routes and entrances serving most primary campus destinations, challenges continue to exist, primarily in the Community and Residential district where there is significant topography, and ADA access to the Templeton Campus Center requires improvement.



ADA Movement

- Accessible
- Usable
- Parking
- Accessible Building Entrances

Bicycle Network

The campus is served by a bicycle route along Palatine Hill Road—a portion of which contains a dedicated bicycle lane; however, the location of the campus at the top of a hill makes cycling a challenge, particularly when traveling to the city. Local vehicle traffic is also a challenge for cyclists. A regional recreational pathway located west of Terwilliger Boulevard within the Tryon Creek State Natural Area provides regional access to the campus. The college has a program with River View for access to the city via the Greenwood Hills Cemetery and Willamette bicycle trail.

The college offers the Zagster bike-share program and the student-operated bike co-op space. Bike rack and storage facilities are located across the campus to support bicycle mobility.

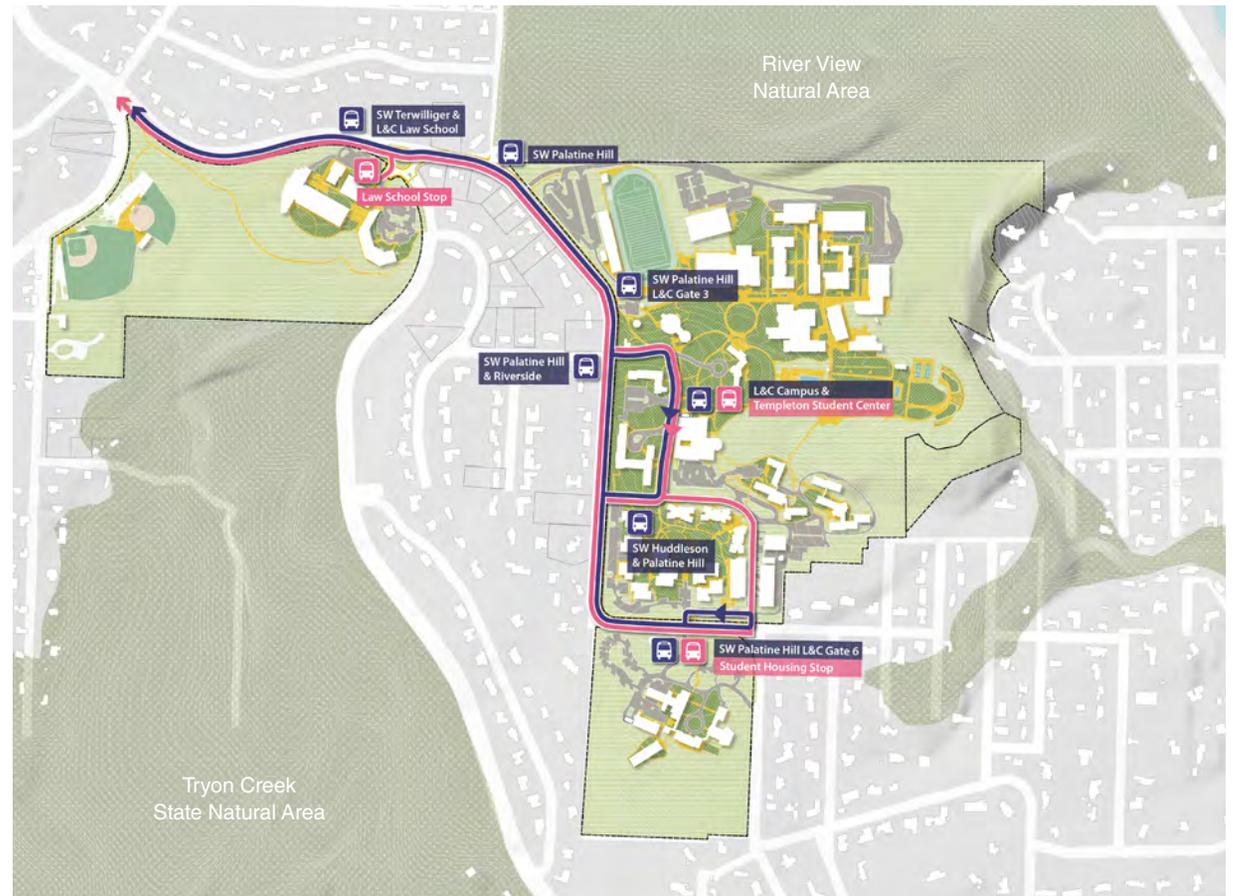


Bicycle Network

- Bike Racks
- Bike Facility
- Shared Vehicular Road
- Bike Lane
- Shared Pathway
- Multi-Use Pathway
- - - Difficult Connection

Transit Network

Lewis & Clark provides the Pioneer Express shuttle service, which connects the campus with downtown Portland 15 times per day. Also, Portland's TriMet transit route serves Burlingame Transit Center and the broader Portland transit system. Currently, less than 10 percent of employees use transit to access the campus.



Transit Network

— Campus Shuttle Routes
— TriMet Bus Route No. 39

Vehicular Network

Gateways

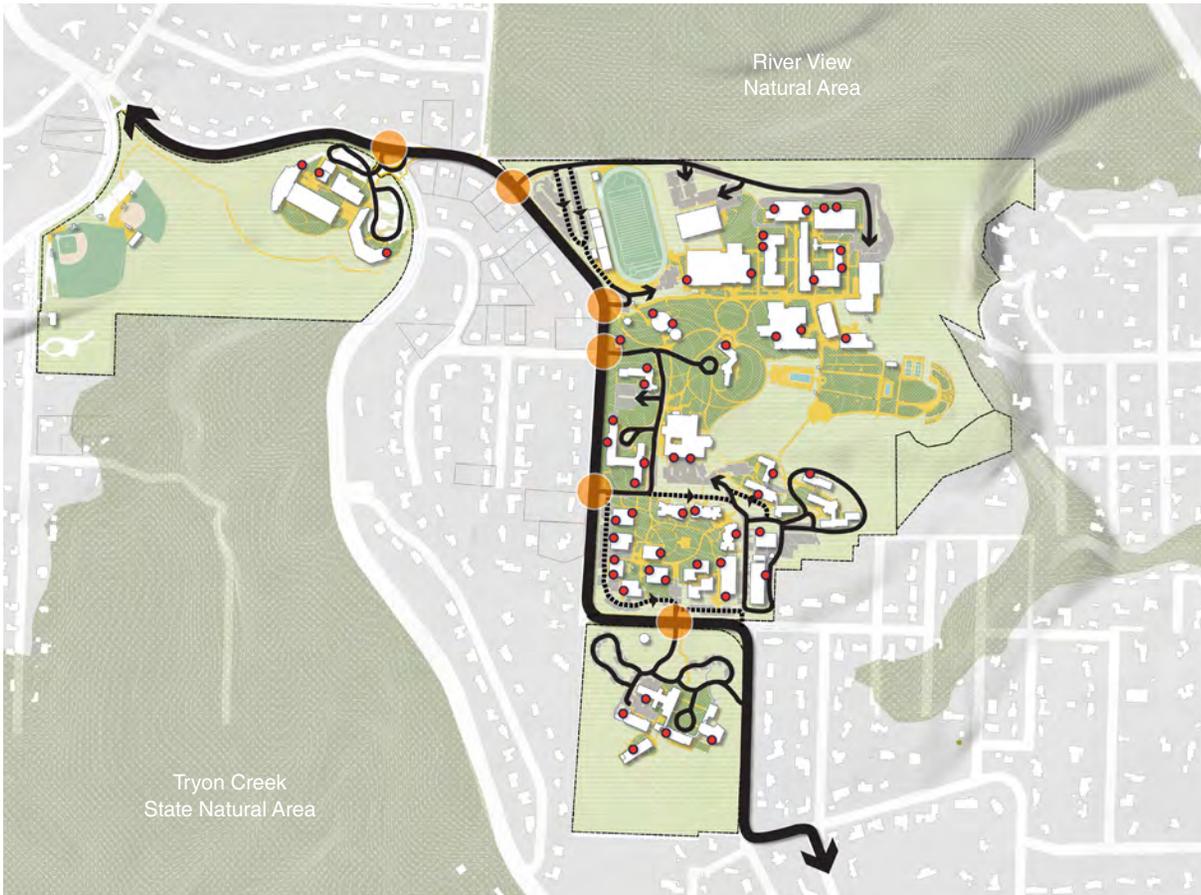
Existing campus gateway entrances are not well-defined, and do not create a strong sense of arrival to the campus. A total of seven gateways are located along Terwilliger Boulevard and Palatine Hill Road. Visitors to the campus are directed to Entry Gates 1, 3 and 7, which serve the Law School, CAS, and Graduate School campuses respectively.

Vehicular Routes

Primary vehicular routes serving the campus include Terwilliger Boulevard and Palatine Hill Road, and internal roads and driveways provide access to key campus destinations. The college's efforts to remove vehicular circulation and parking from the campus core have been well received; however, there are several areas where vehicular and pedestrian routes are combined. On-street parking and small parking lots located along Templeton Drive and Huddleson Lane draw traffic into the campus core, and detract from the quality of the pedestrian environment in these areas.

Service and Loading

Service and loading facilities are integrated with all campus buildings, with access from adjacent driving aisles or parking areas. Service areas that are currently located on key pedestrian corridors or within public view should be relocated or screened when significant building additions or renovations occur. Service for Templeton, Akin, Stewart, and Odell are examples.



Vehicular Routes and Service Locations

- Arterial Roads
- Campus Roads
- One-way Roads
- Gateways
- Service Entry

Parking Supply

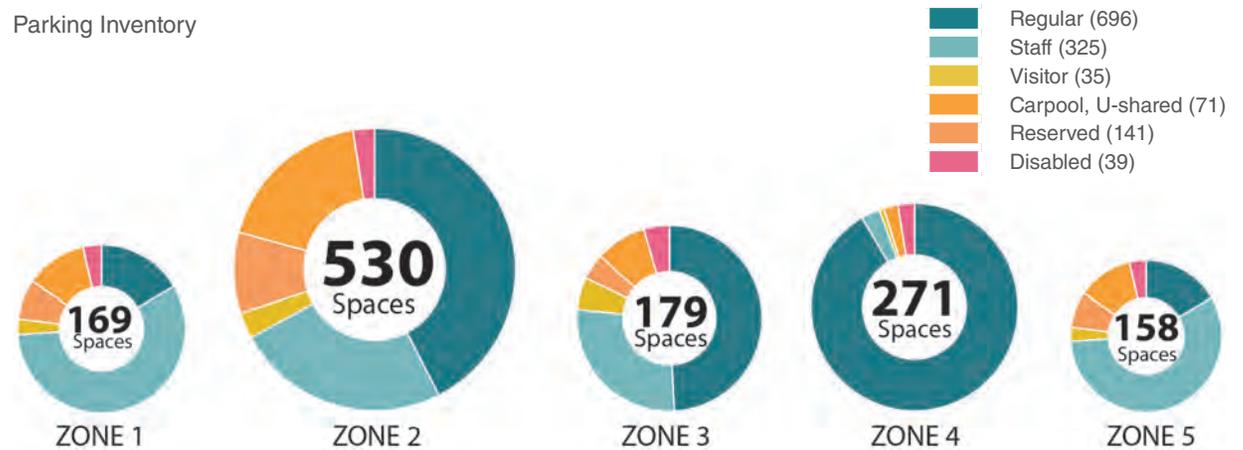
Lewis & Clark College records 1,307 parking spaces within its parking inventory, organized into five zones as follows:

- Zone 1: 169 spaces
- Zone 2: 530 spaces
- Zone 3: 179 spaces
- Zone 4: 271 spaces
- Zone 5: 158 spaces

Approximately 75 percent of parking spaces are located on the CAS campus, many of which are located proximate to residence halls. Parking is accommodated on surface parking lots, including a number of smaller parking lots in the campus core. Of the 1,307 parking spaces, approximately 53 percent, or 696 spaces, are classified as `regular` spaces, while 325 spaces are designated as `staff` spaces. Space for parking 70 cars is leased from St. Marc's Church.



Parking Inventory



Parking Occupancy

Parking counts were taken at 10 a.m., 1 p.m., and 4 p.m. during the fall of 2017 as a means to gauge parking occupancy levels. Effective capacity is considered to be 90 percent occupied. Parking counts reveal that by 10 a.m. most campus lots are over their effective capacity. By mid-day all lots on the CAS campus are over the effective capacity. However, by 4 p.m., occupancy levels on the CAS campus decline to 79 percent. It should be noted that a number of programs and courses on the Graduate School campus start later in the day, when most proximate parking lots are full.



Parking Occupancy at 10 a.m.



Parking Occupancy at 1 p.m.



Parking Occupancy at 4 p.m.

- 70%-80% Occupied
- 80%-90% Occupied
- 90%-100% Occupied

Parking Need

Within the campus core, peak-period parking occupancy exceeds 90 percent, which indicates congested conditions in which parking convenience is severely compromised. These conditions suggest there is an overall shortage of at least 50 spaces campus-wide. Additionally, in 2014 (the last complete year reported) there were a total of 32 neighborhood complaints related to parking, particularly on Hood, Riverside, Comus, and Ridge. The creation of 10 to 20 new on-campus spaces, coupled with continued enforcement and transportation demand management (TDM) measures, would help induce Lewis & Clark drivers to refrain from parking in the neighborhoods. In total, it suggests there is a current need for approximately 100 to 150 parking spaces.

Parking needs can be met, and existing deficits erased, through new parking facilities and a coordinated TDM strategy that includes the following:

- Sophomore parking restrictions will remove approximately 60-70 cars from campus
- Continued and enhanced TDM measures are recommended in the 2015 Transportation Management Plan Update. Some have been implemented to some degree, but can be developed, e.g.:
 - » Guaranteed ride home
 - » Compressed work week
 - » Telecommuting
 - » Flex-time
 - » Reserved parking, incentives, and support for carpools/vanpools
- Class schedule revisions to spread classroom utilization across the week

Additional parking may be required to support changes in enrollment or the proportion of students living on campus, and the accommodation of any parking lots displaced by other campus development.

Transportation Demand Management

Lewis & Clark College is subject to a 1998 Transportation Demand Management (TDM) plan that commits the college to several measures to mitigate traffic and parking impacts. These measures include the following:

- Biannual updates to the TDM plan to manage private vehicle trip generation
- A formula that establishes a cap on the number of on-campus parking spaces based on campus enrollment: with current enrollment, a total of 1,520 parking spaces are permitted, compared to the existing total of 1,316 car and motorcycle spaces
- A cap of 158 spaces on the Graduate School campus
- A cap of 28 spaces at the Huston Sports Complex until improvements to this area are approved

While transit commuting alternatives are limited, the college has adopted several TDM strategies to reduce single occupancy vehicle trips, and encourage alternative modes of travel:

- Implementing the TDM plan parking cap, which limits overall parking supply
- Restricting freshmen parking
- Implementing improvements to pedestrian and cycling facilities
- Creating additional student housing beds to increase the proportion of students living on campus
- Encouraging faculty and staff to live within walking and cycling distance of the campus
- Offering flexible or compressed workweek policies for some staff
- Promoting alternative transit and transportation options
- Providing shuttle service to downtown Portland, and offering subsidized TriMet transit passes

Land and Building Use

The Lewis & Clark College campus consists of the following four distinct areas:

CAS North District

This area consists of the academic core of the CAS campus, and the adjacent sports and recreation precinct, which contains the Pamplin Sports Center and Zehntbauer Swimming Pavilion, the Tennis Dome, Griswold Stadium and Wilson Field.

Community and Residential District

Centrally located between the CAS North district and the Graduate School campus, the Community and Residential district contains all of the college's residence halls, as well as the Templeton Campus Center, which serves as the heart of student life at Lewis & Clark. Student life uses provide a transition between academic and residential areas, although the physical quality of Templeton Drive does not currently reflect its importance as a unifying connecting space.

Graduate School Campus

The Graduate School campus, is the most southerly portion of the overall Lewis & Clark campus, and contains facilities for the college's Graduate School, including classrooms and administrative offices, as well as the York Graduate Center and student life and community uses, including the Sequoia Outdoor Equipment Center. It is defined by the original Corbett Estate mansion and grounds, which were completed and occupied in 1929. Several additional buildings were constructed when the property was owned by the Sisters of St. Francis religious order, including a training school with classrooms and office space, and the South Chapel and South Chapel Annex. The property was purchased by Lewis & Clark in 2000 and the mansion is currently vacant. The school buildings are used for graduate school programs, and the South Chapel Annex is currently used by both colleges and the Law School. It also accommodates the college's Human Resources department.

Law School Campus and Huston Sports Complex

This area of the campus contains the Law School campus, and the college's Huston Sports Complex. The Law School is located to the west of the CAS campus at the intersection of Terwilliger Boulevard and Palater Road, and the Huston Sports Complex is located on a separate parcel further to the west at the intersection of Terwilliger and Boones Ferry Road.



Campus Organization

Building Conditions

The total floor area of existing facilities on the Lewis & Clark campus is 1.3 million gross square feet (GSF). The analysis of these assets examined building age, net asset value, deferred maintenance, and planned and future projects, as follows.

Building Age

Nearly 65 percent of buildings on the Lewis & Clark campus are more than 45 years old. Building age is generally indicative of building conditions, and the need for capital investment across the campus.

Net Asset Value (NAV) Index

Fifty-four percent of total campus square footage (689,000 GSF) falls into either the Systemic Renovation or Transitional/Gut Renovation/Demolition categories, according to the Sightlines building conditions assessment.

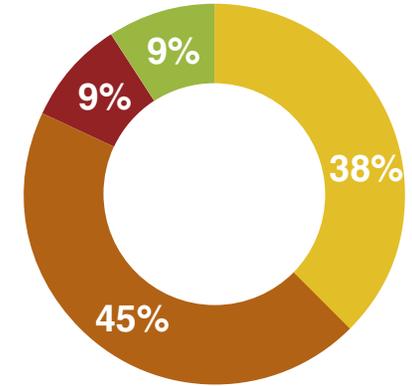
Deferred Maintenance

Total deferred maintenance across the Lewis & Clark campus will be over \$220 million by 2025, according to study. The Pamplin Sports Center and Zehntbauer Swimming Pavilion, Templeton Campus Center, Watzek Library, Biology/Psychology/BoDine complex, and Copeland Hall each have deferred maintenance needs exceeding \$10 million. Fifty-six percent of total campus square footage (711,000 GSF) has deferred maintenance costs within the \$100 to \$200 per GSF range.



Net Asset Value Index

Net Asset Value (NAV) Index



% GSF by NAV Categories

- Capital Upkeep
- Repair and Maintain
- Systemic Renovation
- Transition/Gut Renovation/Demolition



10-year Deferred Maintenance Backlog

- 0-4 million
- 4-8 million
- 8-12 million
- 12-16 million
- 16+ million

Utility Infrastructure and MEP Systems

PAE Engineers synthesized the findings of previous campus utility infrastructure studies, and analyzed current mechanical, electrical, and plumbing (MEP) systems. The studies addressed the central utility plant, stormwater, domestic water, and sanitary sewer systems, and the MEP analysis examined electrical service, telecommunications, and natural gas.



Bioswale near Edna Holmes

Central Utility Plant (CUP)

Existing steam and chilled water systems are functioning with operational difficulty and poor efficiency due to light loading. Potential options to address these conditions include installing smaller scalable pony steam and chilled water systems to provide increased efficiency, or over time, changing the centralized steam system to local hot water production by installing condensing hot water boilers in building mechanical rooms.

Utility Infrastructure Systems

Stormwater

Studies indicate failing storm drainage systems in areas of the campus. Damaged end of life systems should be repaired and replaced. Potential additional improvement strategies include the following:

- Disconnect downspouts and channel stormwater to bio-retention ponds where possible
- Consider rainwater capture for sports irrigation needs

Sanitary Sewer

Previous studies indicate that existing sanitary sewer systems are failing due to settlement and age, and require repair or replacement. Issues with plumbing systems and waste infrastructure should be addressed at both the building and campus level. Options to address these conditions include the following:

- For the Templeton Campus Center and other dining venues, plan for the renovation of waste systems and review of grease interceptor system.
- Consider using rainwater capture for non-potable uses.
- Install low flow fixtures, and consider in-building composting toilets in select buildings.

- Composting toilets or implementation of a living machine could help reduce the strain on the existing plumbing system, while also providing a sustainable approach to wastewater treatment and nutrient recapture.

Water

Water is distributed to the campus at multiple locations, with a single meter being utilized for a cluster of buildings. Water secondary lines lack documentation and have been damaged from construction activity in some areas. Actions to address previously identified lead issues appear to have resolved these concerns, based on recent testing. Backfeed loops are required to ensure continuous service in the event of watermain failure.

MEP, Telecommunications, and Gas Systems

Mechanical

The majority of HVAC systems are functioning and serviceable; however, due to overall age with systems approaching the end of usable life expectancy, systems should be replaced as part of any substantial renovation. As buildings are renovated or replaced, or new construction takes place, consideration should be given to implementing high-performance designs. New residential buildings and administration offices would be good candidates for Net Zero or Living Building Challenge certification. Depending on hood and airflow needs, science buildings could pursue other high-efficiency certification such as LEED.

Electrical

Portland General Electric (PGE) provides electrical service to the campus. The CAS campus is served with a medium voltage campus loop, as well as point of use utilization voltage. Over the past decade, buildings renovated on the loop have been transitioned

to point-of-use service. A portion of the Graduate School campus is still served with outdated single phase power. Recommendations to improve electrical infrastructure include the following:

- Original electrical infrastructure over 30 years old is at the end of its expected usable lifespan, and should be replaced
- The college should continue to change service from medium voltage to PGE point-of-use metering, which will avoid issues associated with maintaining an elevated voltage system. The campus should work with PGE to provide service from an additional sub-station to avoid service interruption
- Legacy power systems serving the Graduate School campus should be modernized with appropriate three-phase power systems.
- Service loops with inputs from different sub-stations are required to avoid service interruption in the event of line failure
- Some buildings on campus have good solar access, and are candidates for photovoltaic solar arrays to reduce overall energy consumption and carbon emissions. As buildings are renovated or newly constructed, photovoltaic-ready infrastructure should be included to allow for easy future integration

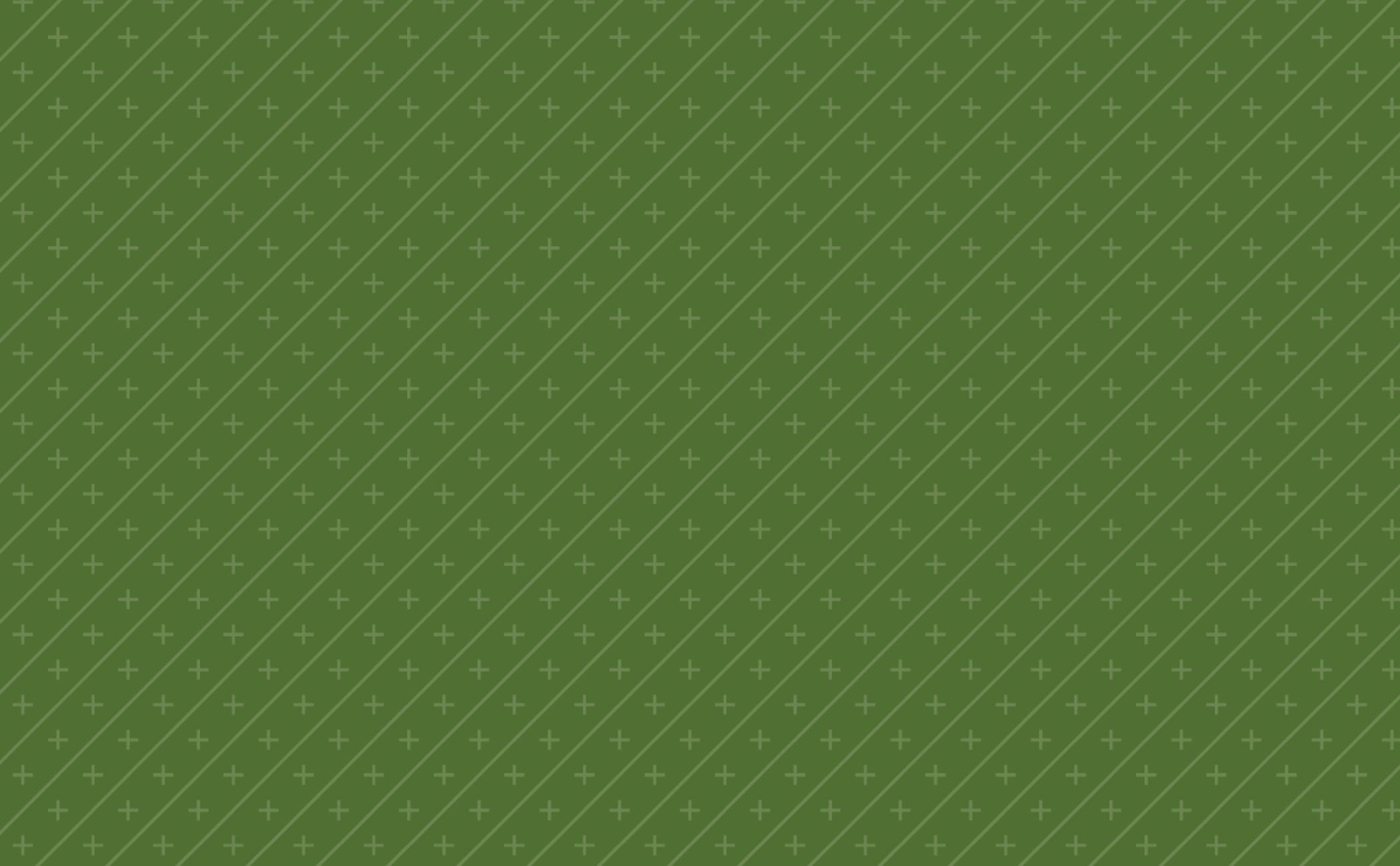
Telecommunications

Telecommunications backbone infrastructure is adequate for current use, although wireless coverage is inconsistent. High computing programs are of concern at the building level, and data center requirements are changing. Continuous system upgrades will be needed given ongoing technological change.

Natural Gas

Natural gas infrastructure serving the campus is in general adequate. Demarcation occurs at the z building level.



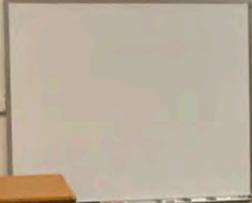


 **Program**



PERIODIC TABLE OF THE ELEMENTS
GENERIC SCIENTIFIC COMPANY

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| Na | Mg | Al | Si | P | S | Cl | Ar | K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Kr | | | | | | | | | | | |
| Rb | Sr | Y | Zr | Nb | Mo | Tc | Ru | Rh | Pd | Ag | Cd | In | Sn | Sb | Te | I | Xe | Cs | Ba | Hf | Ta | W | Re | Os | Ir | Pt | Au | Hg | Tl | Pb | Bi | Po | At | Rn | | |
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EXIT



Instructional Space Needs and Utilization

During the analysis phase of the Facilities Plan study, the consultant team assessed instructional space utilization for the College of Arts and Sciences, Graduate School and Law School, as well as offices, study space, student housing, and sports and recreation needs for Lewis & Clark College overall. The following is a summary of the analysis findings.

The purpose of the instructional space needs and utilization assessment was to gain a common understanding of existing space use through an examination of current classroom and lab space utilization, understand opportunities to retrofit and repurpose underutilized areas by right-sizing instructional space, and to determine the programmatic space needs to support the campus today and in the future. The assessment examined the space needs for the College of Arts and Sciences, the Graduate School, and the Law School.

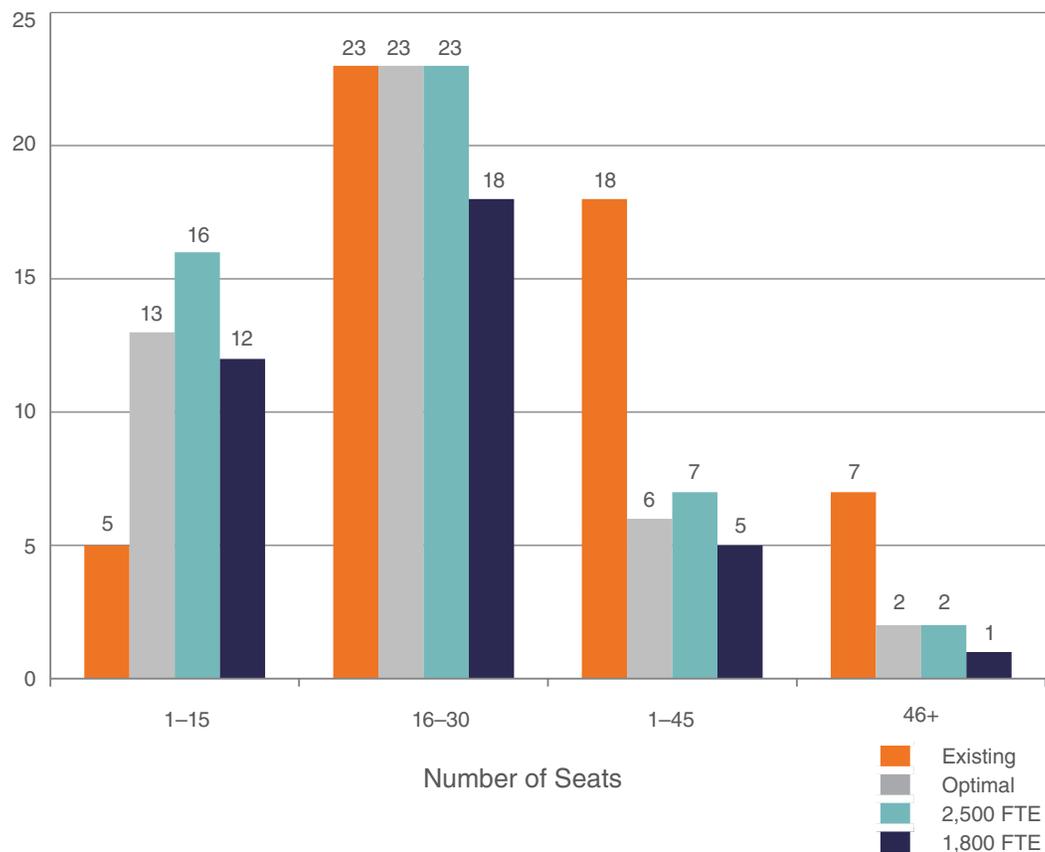
College of Arts & Sciences

Assumptions

- The utilization and right-sizing assessments were based on fall 2016 course schedule data, and a 45-hour academic week, from 8 a.m. to 5 p.m., Monday to Friday.
- The analysis included CAS, Graduate School, Law School, and events use of CAS spaces, and examined all instructional rooms located on the CAS campus (49 classrooms and 37 teaching labs).
- Space needs were tested using the following enrollment assumptions:
 - » 1,800
 - » 2,087 (2018 FTE)
 - » 2,500

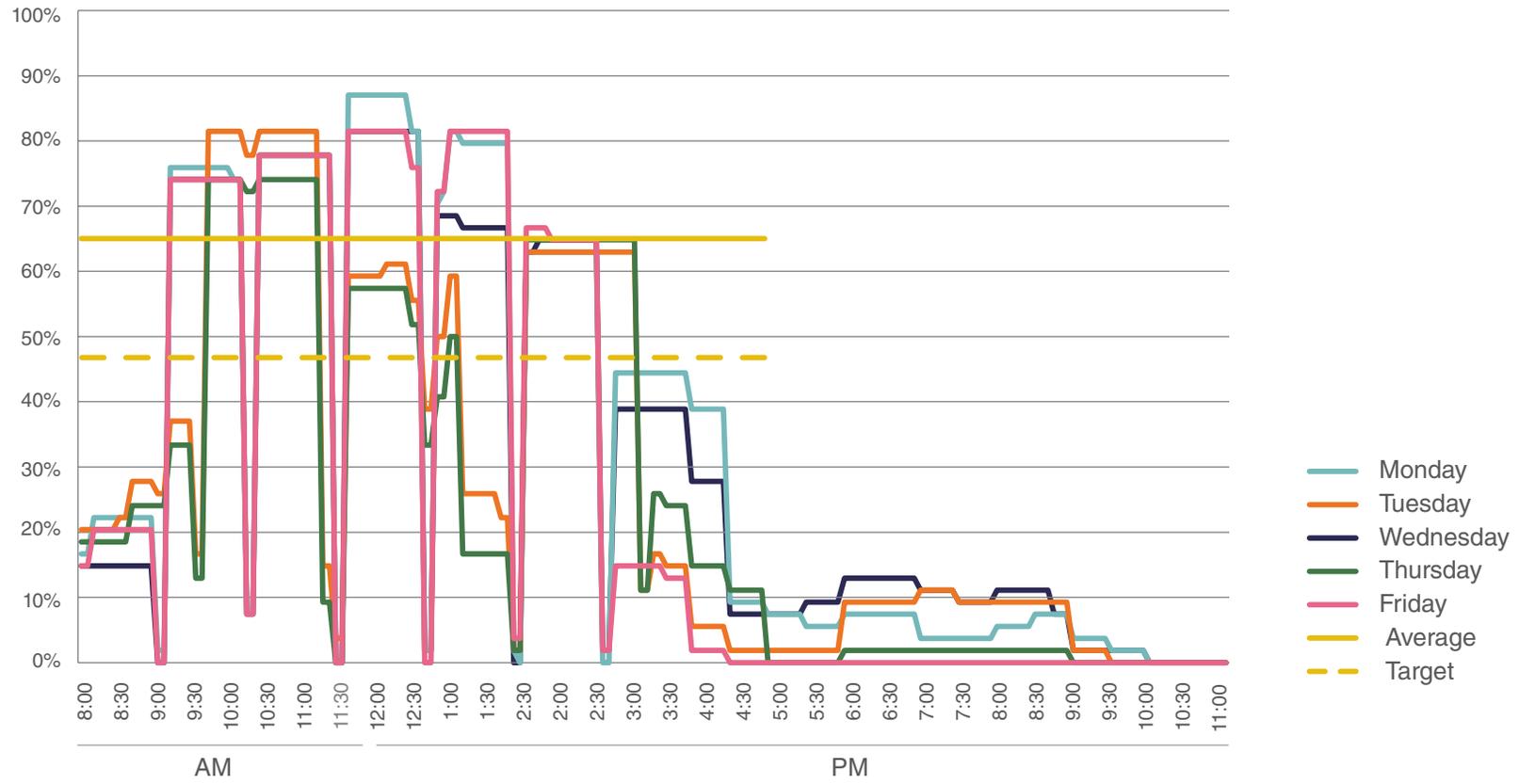
Findings

- Average weekly classroom utilization was 46 percent, which is lower than industry standards of 65 percent. In subsequent discussions with the Steering Committee, it was agreed that 50 percent was a reasonable utilization target for the college.
- Utilization during the 10:00 a.m. to 4:00 p.m. peak period generally exceeded 50 percent, and rates of 70–80 percent were recorded on Mondays, Wednesdays, and Fridays.
- Over 75 percent of departments scheduled more than 60 percent of their weekly room hours (WRH) during the peak period.
- Roughly 50 percent of classrooms achieved the target level of use when events use was included. Eleven out of 49 classrooms (22 percent) achieve the target level of room use, and J.R. Howard and Miller Hall recorded the highest levels of overall room use.



- The analysis of classroom occupancy revealed the need for additional smaller class sizes with 1–15 seats in all enrollment scenarios. Surpluses existed in the larger room categories, current and future enrollment scenarios.
- Average weekly instructional lab utilization was 14 percent, which is lower than industry standards of 25–50 percent. Approximately 50 percent of labs recorded utilization rates within the 25–50 percent range.
- Psychology, Entrepreneurship, Art, and Chemistry labs had the highest utilization rates.

Fall 2017 CAS Room Utilization %



Graduate School

Assumptions

- The utilization and right-sizing assessments were based on fall 2017 course schedule data, and a 45-hour academic week, from 8 a.m. to 5 p.m., Monday to Friday.
- The analysis included CAS, Graduate School, Law School, and events use of Graduate School spaces, and examined all instructional rooms located on the Graduate School campus (14 classrooms).
- The analysis assumed one or two new programs will be introduced in the next five years.

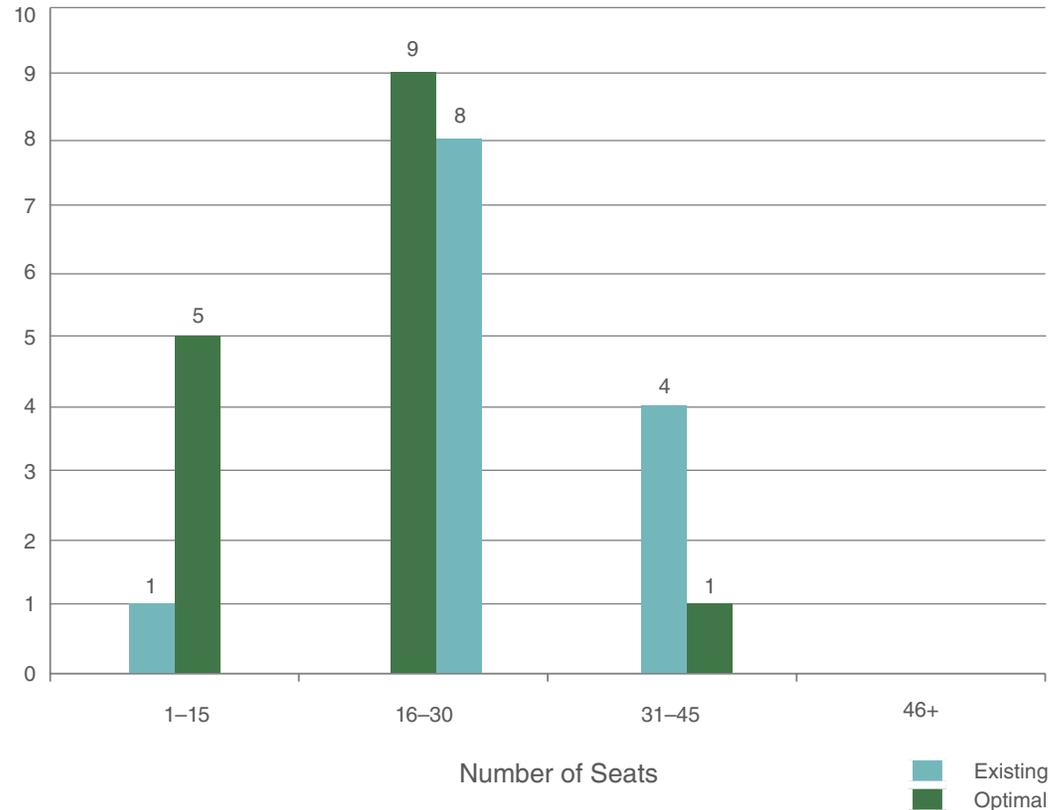
Findings

- Average weekly classroom utilization was 54 percent somewhat exceeding the 50 percent utilization target established by the Steering Committee.
- All but four departments teach more than 60 percent of WRH during the peak period.
- Fifty-seven percent of classrooms recorded utilization rates exceeding 50 percent. Higher utilization rates were associated with rooms with capacities of 16–30 seats.
- The analysis of room occupancy revealed the need for additional smaller class sizes with capacities of 1–15 seats.

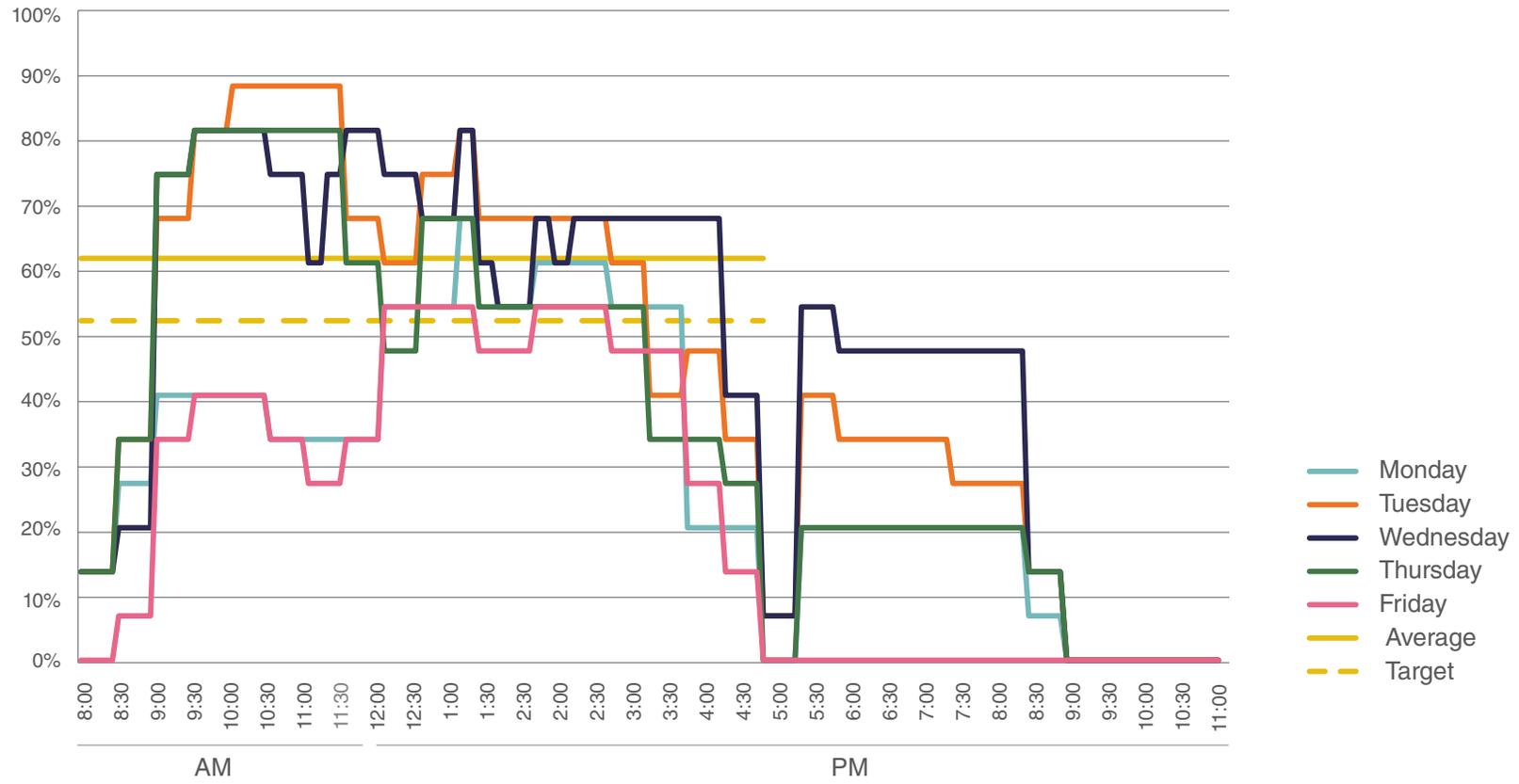
Additional Space Needs

Conversations with Graduate School stakeholders highlighted the need for the following additional spaces to support instruction on the Graduate School campus:

- Six additional classrooms
- One additional computer lab
- Six-to-eight additional offices
- At least two additional medium-size conference rooms, plus a dedicated conference room for the Dean's office
- Additional workspace for adjunct faculty
- Dedicated breakout rooms in Rogers Hall or the York Graduate Center
- Two medium-sized event or meeting spaces with capacity for approximately 30 people
- With the addition of the new Masters In Art Therapy program in September, 2019, space needs will have increased



Fall 2017 Graduate School Room Utilization %



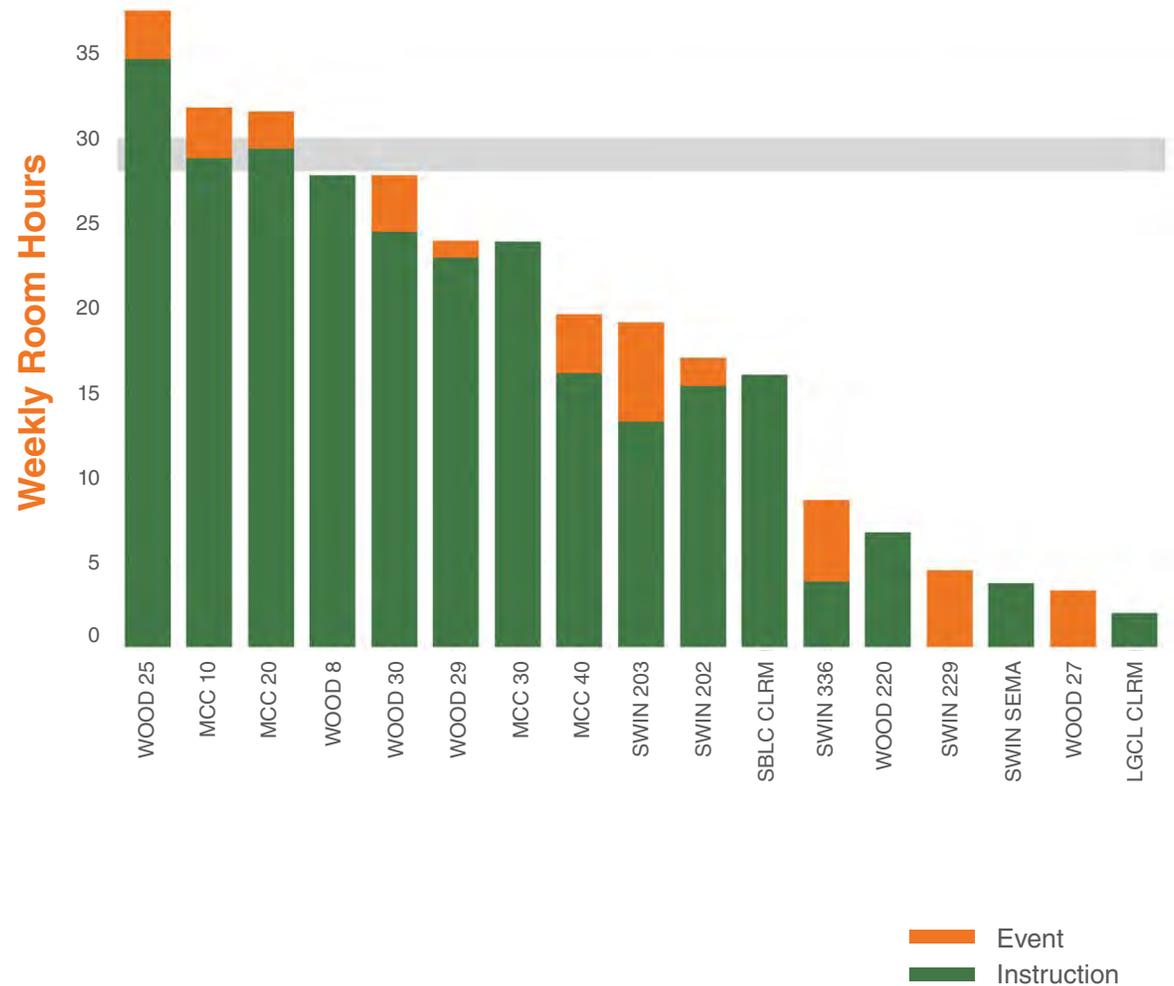
Law School

Assumptions

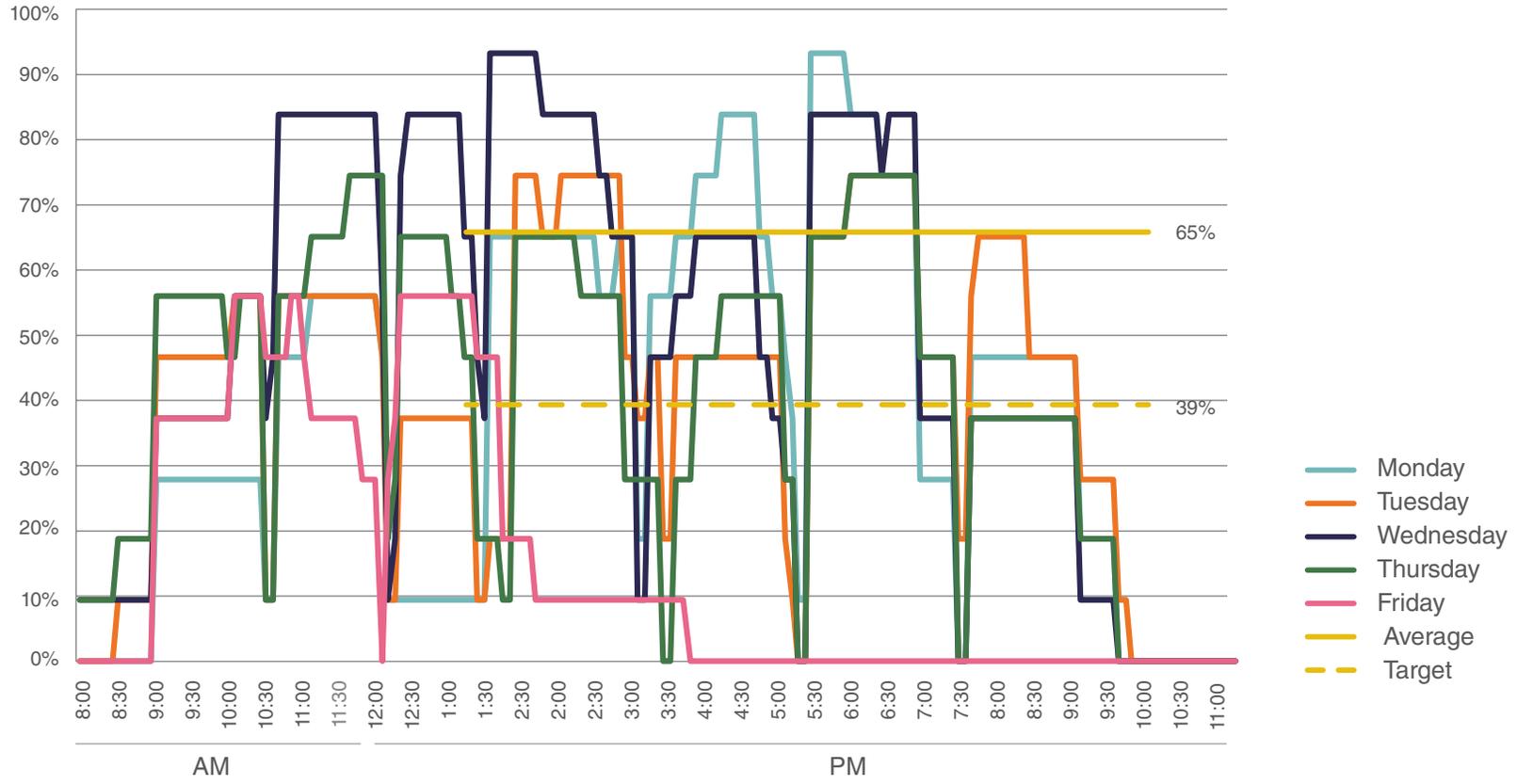
- The utilization and right-sizing assessments were based on the Fall 2017 course schedule data, and a 45-hour academic week, from 1:00 p.m. to 10:00 p.m. Monday to Friday.
- The analysis examined all instructional rooms located on the Law School Campus (17 classrooms).
- The analysis assumed steady enrollment over the next five years.

Findings

- The average weekly classroom utilization was 39 percent, which was below the 50 percent utilization target established by the Steering Committee.
- Forty-one percent of classrooms recorded utilization rates exceeding 50 percent.
- The Law School Master Plan recommends several improvements to make more efficient use of classroom space, including subdividing underutilized large classrooms to create several smaller classrooms that align with section sizes, and removing tiered seating in select rooms to create more flexible flat floor spaces.



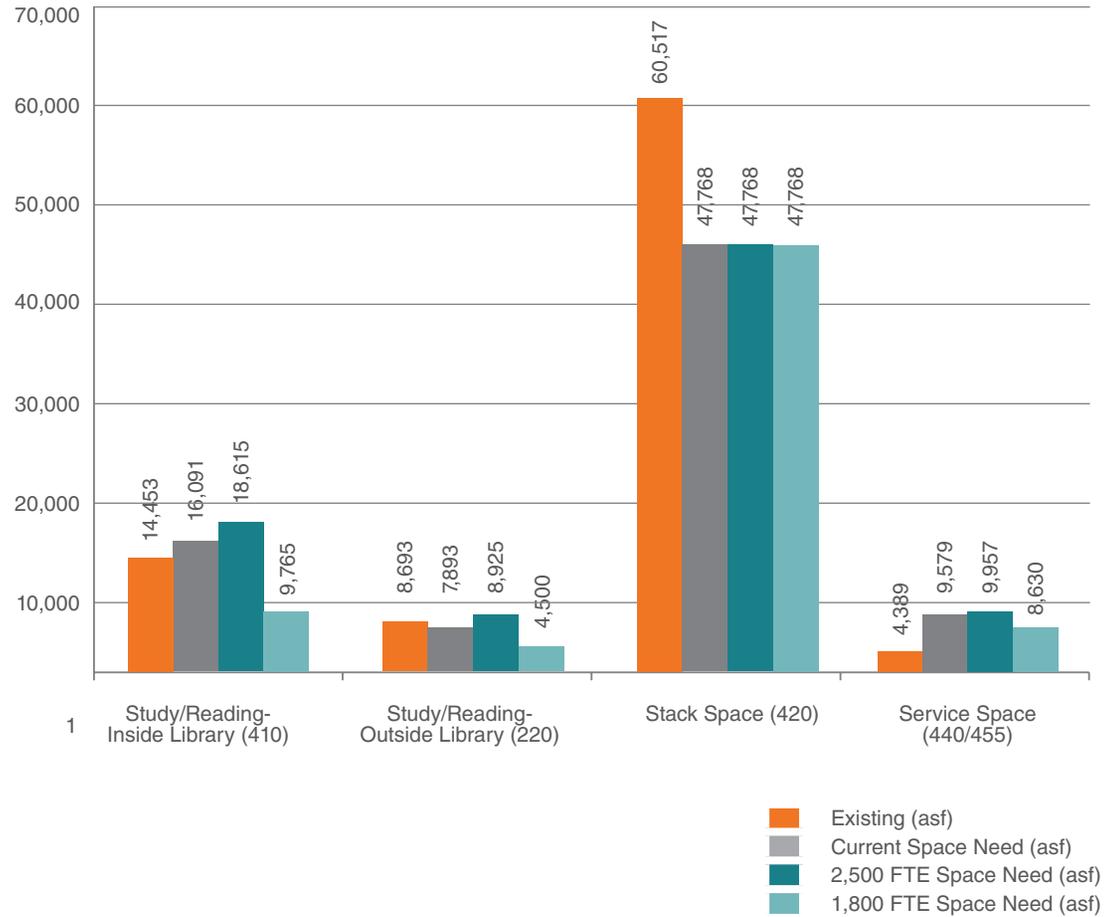
Fall 2017 Law School Room Utilization %



Campus-wide Office and Study Space Needs

The analysis of campus-wide office and study space needs revealed the following:

- The highest concentration of offices occurs in J.R. Howard and Miller Halls on the CAS campus, and Rogers Hall and the Legal Research Center on the Graduate and Law School campuses respectively.
- There is significant variation in average office sizes across the campus, which reflects different office configurations among the various campus buildings. The overall average office size is 127 assignable square feet (ASF). The optimal office count to total faculty and staff FTE is in the range of .75 to one percent.
- The analysis of library and study space needs revealed slight shortages of study space both inside and outside the library for the current enrollment and 2,500 FTE enrollment scenarios, and surpluses for the 1,800 FTE scenario. Add the sentence: As the library continues to digitize its collection, the need for stack space will decrease, and can be repurposed to meet other needs.
- The analysis further found a surplus of stack space and a shortage of support space under all three scenarios.



Student Housing

The analysis of student housing needs examined the overall demand for housing under the three enrollment scenarios. It also tested the impacts of providing additional housing in response to unmet demand, decompressing existing housing to reduce overcrowding (which reduces the existing inventory from 1,488 to 1,330 beds), and the impact of adding a junior year residency requirement. Currently first and second year students are required to live on campus. The analysis found an incremental housing need ranging from 248–406 beds for current enrollment of 2,087 FTE, 9–167 beds with an enrollment of 1,800 FTE, and 592–750 beds with an enrollment of 2,500 FTE. The overall demand and incremental need for student housing would be lower without adjusting for the junior-year residential requirement.

Housing requirements under the various scenarios are documented in the following table.

Table 1

| | 2,087 FTE (Current Enrollment) | 1,800 FTE | 2,500 FTE |
|--|---|------------------|------------------|
| Current Occupancy | 1,403 | | |
| Additional Student Demand | 185 | | |
| Junior-year Residential Requirement | 148 | | |
| Total Residential Demand | 1,736 | 1,497 | 2,080 |
| Existing Supply | 1,488 | 1,488 | 1,488 |
| Incremental Need | 248 | 9 | 592 |
| Supply with Decompression | 1,330 | 1,330 | 1,330 |
| Incremental Need with Decompression | 406 | 167 | 750 |

Athletics and Recreation

Athletics and recreation space issues and needs were synthesized from conversations with Lewis & Clark athletics and recreation program stakeholders. For athletics space, stakeholders highlighted the need for improvements to space quality and condition, and the need for additional space was identified for campus recreation facilities. Specific observations included the following:

Athletics Facility Condition Issues

- The Pamplin Sports Center and Zehntbauer Swimming Pavilion have had no significant renovation since the complex was built, and require significant backlog maintenance and upgrades.
- The Huston Sports Complex requires improvement, with, poor baseball and softball playing conditions and team and spectator support accommodations in particular.
- Locker room conditions and configuration are issues, with a lack of private shower facilities, general facilities age and poor physical condition, gender sensitivity, and inequalities among teams.
- There are concerns about the condition of Griswold Stadium, including the aging grandstand and press box, and the quality of the game day arrival experience. The need for improvements to stadium facilities was confirmed and quantified in the Sightlines building condition assessment.

Athletics and Recreation Facility Space Need

- There is a lack of field space for soccer practice, clubs, recreation, and possibly women's lacrosse and men's soccer if those sports are added.
- Space for strength training and sports medicine is limited.
- There is limited fitness and recreation space overall, and limited studios and group exercise space in particular. Gathering space for student activities, meetings, lounging, and studying would also be beneficial.
- Connections between the Pamplin Sports Center and Zehntbauer Swimming Pavilion are not well-defined.
- The tennis dome is too tight relative to the courts, is expensive to operate, and is near the end of its functional life.
- There is a lack of visible and attractive space for recreation and wellness activities including intramural and club sports.

Program Strategy

Prior to the initiation of the Facilities Plan process, Lewis & Clark engaged Sightlines to prepare a facilities condition audit of all buildings on the campus. The audit revealed several key findings:

Building Age

Nearly 65 percent of buildings on the Lewis & Clark campus are more than 45 years old. Building age is generally indicative of building conditions and the need for capital investment across the campus.

Net Asset Value (NAV) Index and Deferred Maintenance

Fifty-four percent of total campus square footage (689,000 GSF) falls into either the Systemic Renovation or Transitional/Gut Renovation/Demolition categories, according to a study performed by Sightlines. Total deferred maintenance across the Lewis & Clark campus will be over \$220 million by 2025 according to the study. The Pamplin Sports Center and Zehntbauer Swimming Pavilion, Templeton Campus Center, Watzek Library, Biology/Psychology/BoDine complex, and Copeland Hall each have deferred maintenance needs exceeding \$10 million. Fifty-six percent of total campus square footage (711,000 GSF) has deferred maintenance costs within the \$100 to \$200 per GSF range.

With a significant deferred maintenance backlog, competing requests for upgrades and improvements to academic facilities, and the desire to improve student and residential life across campus, the college recognized the need to develop a comprehensive strategy for facility renewal that integrated planned maintenance with programmatic improvements, and established priorities over time. As the college's annual capital renewal budget is \$7.0 million, of which \$5 million is projected funding for facilities backlog it was further recognized that additional funding sources would be needed to make a significant impact on the maintenance backlog. Options that were identified included donor funding, revenue generation through student housing and auxiliary operations fees, and debt financing.

Given that the space analysis did not find a need for significant new space, an early decision was to focus on renewal and deferred maintenance to the extent possible, rather than new construction. However, based on the findings of the Sightlines study, it was also decided that several buildings were not worth significant further investment, and should be demolished and replaced. These buildings included the Akin, Odell, Stewart, and Hartzfeld residence halls, and the Griswold Stadium grandstands.

To establish priorities for investment, the consultant team met with Lewis & Clark's Facilities Department leadership to review the full list of deferred maintenance projects described in the Sightlines study, and integrated those with the requested programmatic improvements highlighted through stakeholder discussions and other planning assessments. The projects were documented in a comprehensive matrix that identified estimated costs, potential funding sources, and initial phasing within one to five, six to ten, and beyond ten years. The phase periods were subsequently revised to one to five years, and beyond five years, recognizing that it would be difficult to predict priorities beyond the next several years.

Project rankings were generally established based on the overall facilities plan vision for the campus and the college's strategic plan goals to invest in the sciences, renew housing, and enhance student life. DCW Cost Management reviewed initial costs and updated based on the integration of deferred maintenance with programmatic improvements.

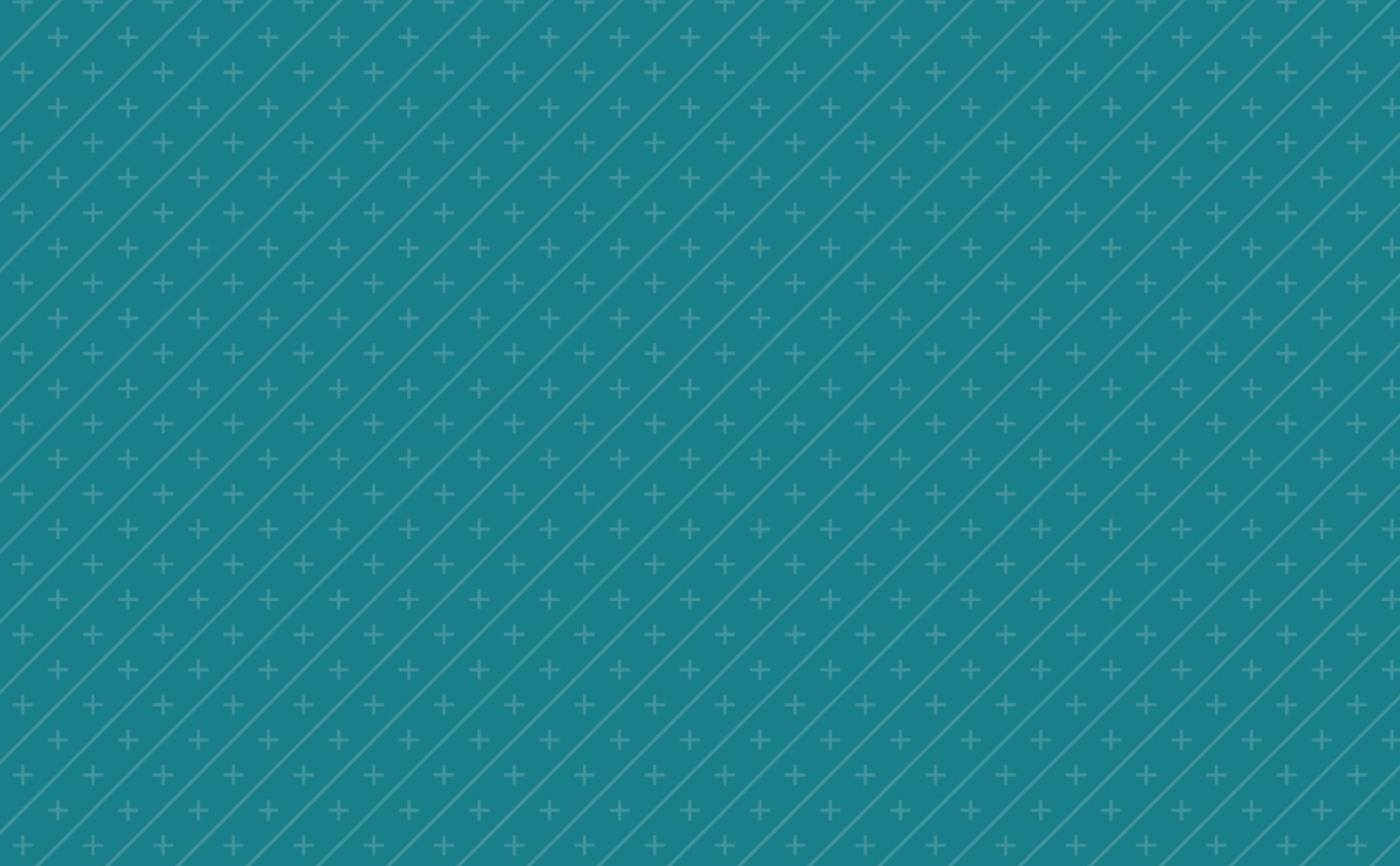
The overall campus program that emerged through these efforts is summarized in the following table. The program increases total campus GSF from 1.3 million GSF to 1.55 million GSF, and includes the renovation of 403,000 GSF, 385,000 GSF of new construction, and demolition of 138,000 GSF.

A detailed list of projects is contained in the Implementation section of this report.

Table 2

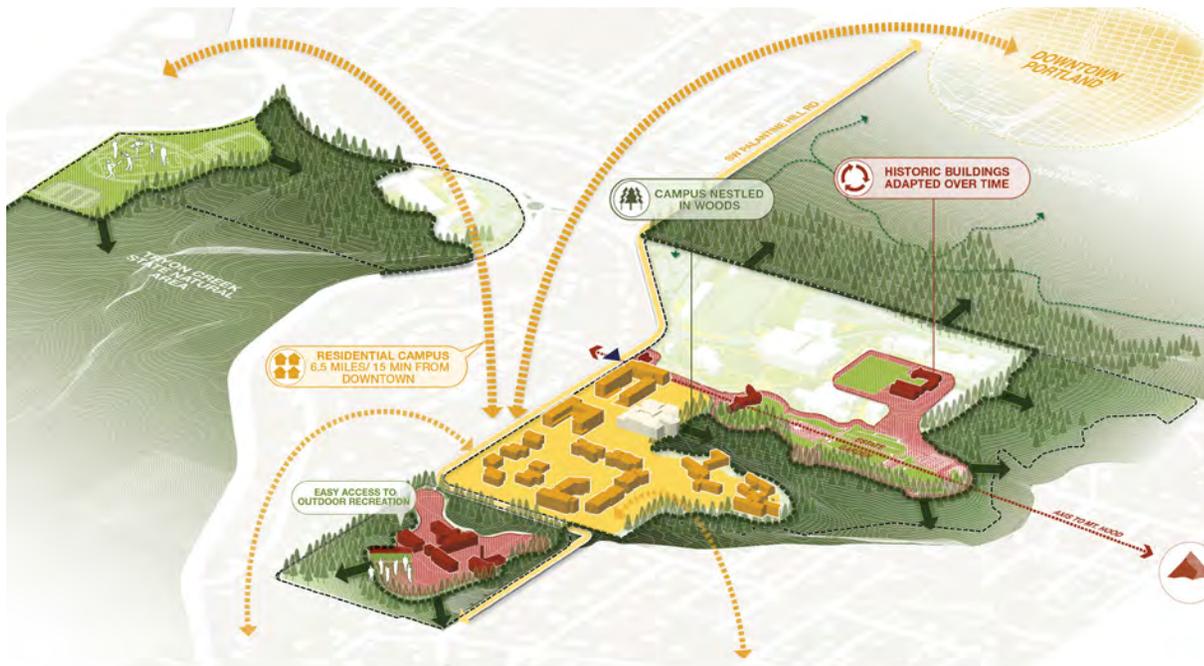
| | |
|----------------------------------|------------------|
| Total Existing GSF | 1,307,121 |
| Total GSF as Shown in Plan | 1,553,541 |
| Total Ongoing Maintenance | 765,094 |
| Total Renovation | 403,389 |
| Total New Construction | 385,058 |
| Total Demolition | 138,638 |
| Total Net Increase in GSF | +246,420 |
| Total Proposed GSF | 1,553,541 |
| Site Area | 5,979,594 |
| Proposed Floor Area Ratio (FAR) | .26 |





 **Final Plan**





Reaffirm Lewis & Clark's History and Identity

Big Ideas

The Facilities Plan for Lewis & Clark's campus is based on five big ideas that together define the long-term vision for the campus, and establish an overall framework for campus improvements and facility investments over time. While college enrollment, academic program priorities, strategies for

student and residential life, and plans for athletics and recreation may evolve, the big ideas should endure, and continue to guide capital planning decision-making in support of the college's mission. The five big ideas are described on the following pages.

Reaffirm Lewis & Clark's History and Identity

The Facilities Plan reaffirms Lewis & Clark's history and identity through investments in the campus that will enhance the residential experience, strengthen connections with the natural environment, and promote the adaptive reuse of the college's historical and contemporary buildings. Specific strategies include the following:

- Renewing the college's student housing stock to improve overall housing quality to meet current student needs and enhance opportunities for an engaged living/learning experience, and to increase recruitment and retention
- Investing in the historic buildings that are a unique part of the college's identity through strategies that preserve the historic qualities and features of the buildings, while sensitively repositioning them for productive reuse within a 21st-century campus environment
- Strengthening connections with the unique Pacific Northwest setting by providing amenities to support outdoor recreation and access to trails, protecting key views and visual connections to the landscape, and preserving and enhancing the campus natural environment

Propel Liberal Arts and Professional Education into the 21st Century

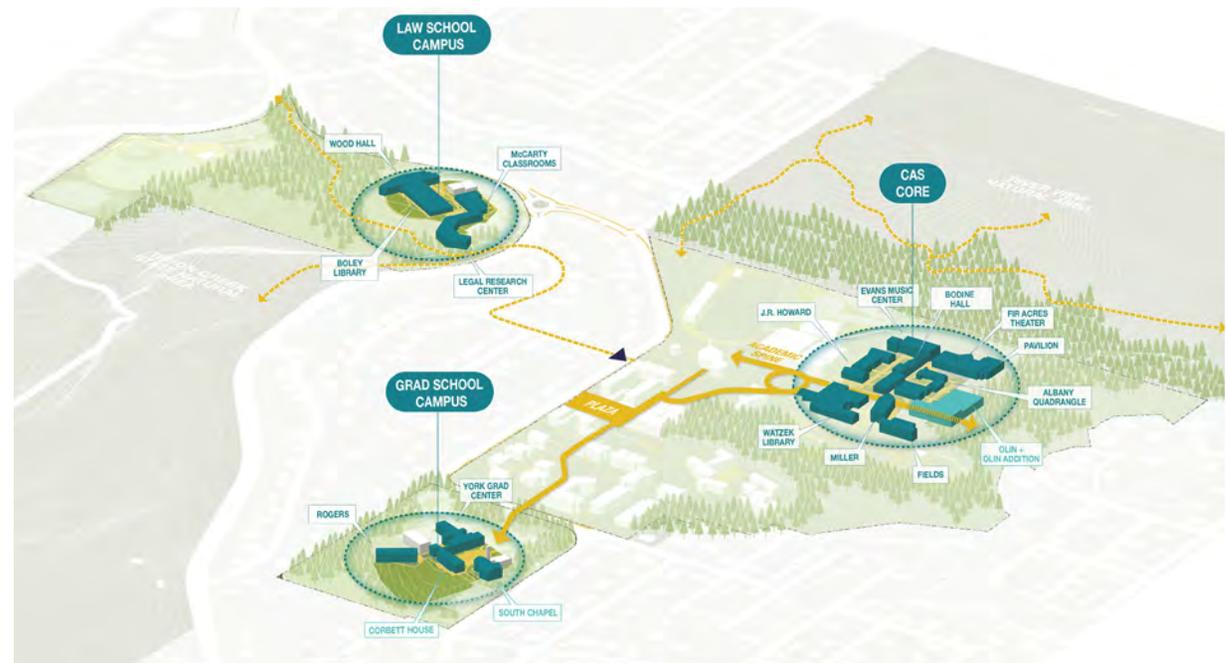
The plan propels liberal arts and professional education into the 21st century by prioritizing strategic investments within the academic core of the College of Arts and Sciences (CAS) campus, and building and site improvements on the Graduate School and Law School campuses.

On the CAS campus, the plan reinforces the academic core with building and site improvements that will activate the academic spine extending from Olin Science Center through to the Glade and Pamplin Sports Center. Capital investments will address deferred maintenance, with an immediate focus on the renovation of the Olin Science Center, and the longer term expansion of Olin to the south. Additional investments over time will include the renovation of and additions to Evans Music Center and Fir Acres Theater, a new multipurpose pavilion, and the creation of a new learning center in Watzek Library.

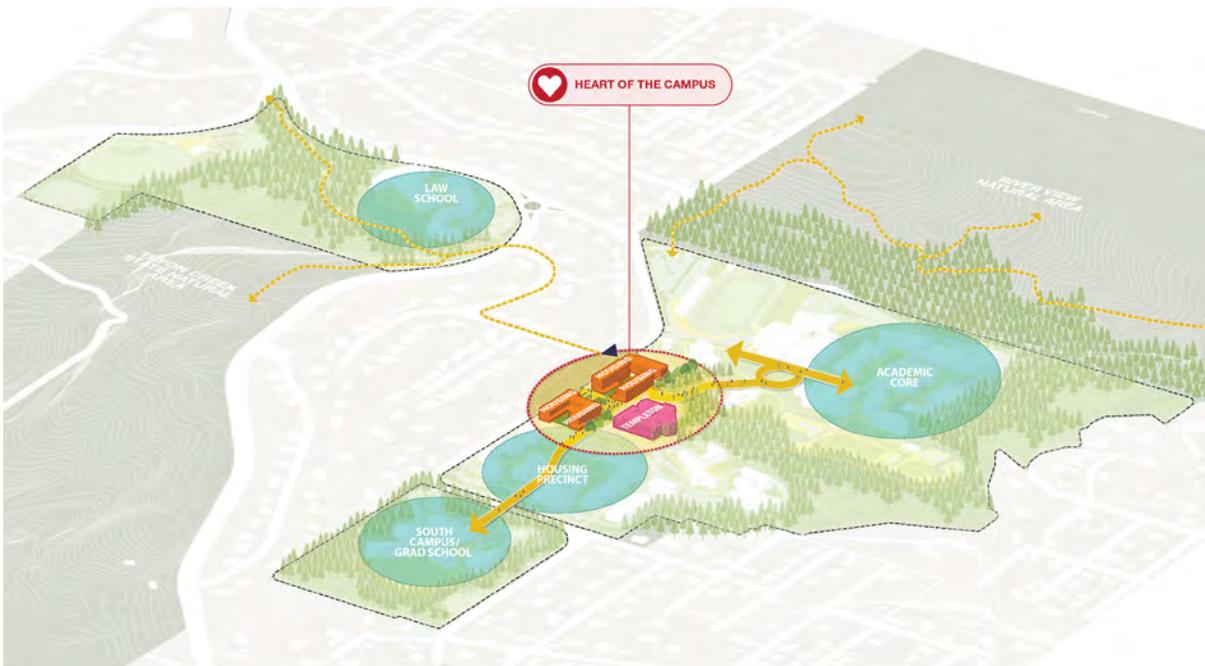
The plan provides for the renovation of the historic Corbett House, and South Chapel Annex buildings on the Graduate School campus, and their adaptive reuse in support of Graduate School programs. Program options for the buildings include improved instructional and administrative space, flexible multi-purpose space or conference facilities to support the college overall, music performance space, and swing space to facilitate the renovation of other campus buildings. Site improvements will enhance the campus arrival experience.

For the Law School campus, the plan integrates investments identified in the Law School Master Plan, including renovations to Boley Library, the Legal Research Center, and Wood Hall.

The plan emphasizes connections between the CAS, Graduate School, and Law School campuses, with a particular focus on the pedestrian corridor between the CAS and Graduate School campuses.



Propel Liberal Arts and Professional Education into the 21st century



Reinforce the Heart of Campus

Reinforce the Heart of Campus

The plan reinforces the heart of campus with a dynamic student life district, positioned around a revitalized Templeton Campus Center.

A key feature of the district is a new pedestrian corridor that replaces the Templeton Drive vehicular route. The corridor will connect with existing pedestrian pathways, extending south to the Graduate School campus, and north to the core of the CAS campus via the academic spine. Also, a new plaza will be introduced between the current sites of Akin, Stewart, and Odell residence halls, opposite the Templeton Campus Center, creating a new gathering space for performances and events at the heart of the campus. The plaza will extend to Palatine Hill Road, creating improved access and visibility into the campus.

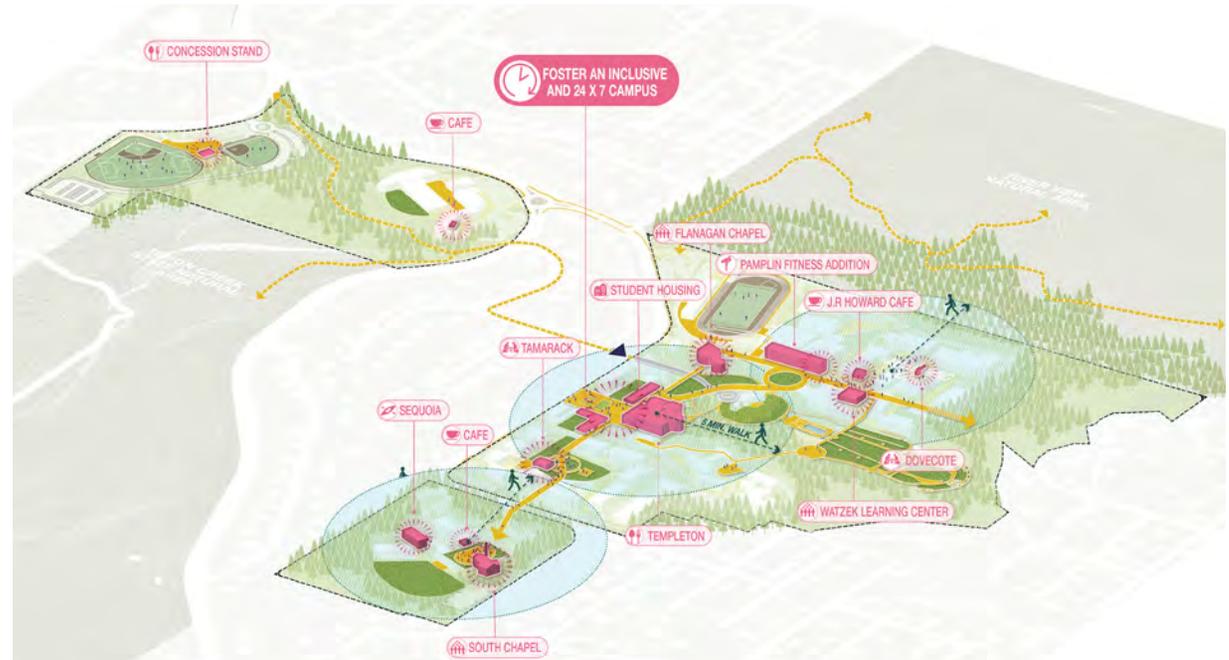
The Templeton Student Center will be renovated, and an addition along the new pedestrian corridor will enable a more comprehensive reprogramming of the building to address priority space needs, and improve accessibility. Active ground floor uses will be placed along the pedestrian corridor.

Akin, Stewart, and Odell residence halls will be replaced in the near-term as part of a broader strategy to renew student housing across the campus, and address critical deferred maintenance. The Akin replacement building will contain active ground floor uses, to further reinforce the pedestrian corridor and create vitality within the district. Potential uses include the bookstore, studio or gallery space, and student collaboration space.

Strengthen Campus Community and Foster an Inclusive Campus

Another big idea in the plan is to strengthen campus community through interventions that foster inclusion, diversity, and equity. These goals will be achieved by augmenting the network of community spaces, enhancing the public realm, and reinforcing accessibility in all areas of the campus. Specific strategies include:

- Enhancing pedestrian connections and improving pedestrian infrastructure and accessibility across the campus, with a particular focus on the academic spine and Templeton corridor
- Improving accessibility guideposts and providing maps to facilitate accessible navigation of the campus
- Creating a pedestrian-oriented campus core by eliminating through-traffic in the Templeton district, creating a bicycle dismount zone, and improving pedestrian infrastructure
- Building on the existing network of ‘third spaces’ across the campus to create a 24/7 campus environment that is welcoming to all members of the campus community ; these spaces will be positioned along key pedestrian routes both inside and outside of buildings, and will create opportunities for informal meetings and interactions across campus
- Designing buildings and campus spaces for inclusivity, with deliberate strategies to welcome students from diverse backgrounds
- Prioritizing ADA improvements as buildings are renovated, including adding interior and exterior elevators



Strengthen Campus Community



Steward Resources Sustainably

Steward Resources Sustainably

The Facilities Plan creates the opportunity to steward the campus sustainably and embed sustainability in the long-term development of the campus through the efficient use of land and building resources, the sensitive treatment of the college's unique natural setting, and landscape strategies that respond to the Pacific Northwest context.

The plan builds on the existing organization of the campus to rationalize campus mobility, open space and infrastructure systems, and create a compact campus setting that prioritizes pedestrians and removes vehicular circulation and parking from the campus core. Associated transportation demand management strategies will reduce single-occupancy vehicle trips to the campus.

A comprehensive strategy to address deferred maintenance integrates required building improvements with programmatic enhancements in support of the college's academic mission and the long-term vision for the campus. The strategy prioritizes renovation and reuse over new construction, and creates the opportunity to implement sustainable systems that reduce environmental impacts and long-term operations costs.

The plan preserves and protects existing natural features, and promotes the sustainable management of the campus landscape. Strategies include the adoption of permaculture principles, which are defined as "thinking tools that ... allow us to creatively re-design our environment and our behavior in a world of less energy and resources,"¹ and increasing pervious landscape areas over time (the campus is required to track impervious surface area to comply with City of Portland stormwater regulations).

1. permacultureprinciples.com

Campus Experience

The Facilities Plan organizes the campus within several key districts: the CAS North district, which includes the CAS campus academic core, the Pamplin Sports Center, and the Zehntbauer Swimming Pavilion; the Community and Residential District, where the college's student housing and Templeton Campus Center are located; the Graduate School campus; and the Law School campus and Huston Sports Complex. The districts

are generally defined by the concentration of academic, student life, and sports and residential uses they contain, as well as unique landscape and open space characteristics. The following is a description of each district.



Law School & Huston Sports Complex



CAS North



Community & Residential District



Graduate School Campus

CAS North District

The CAS North district consists of the academic core of the CAS campus, and the adjacent sports and recreation zone, which contains the Pamplin Sports Center and Zehntbauer Swimming Pavilion, the Tennis Dome, Griswold Stadium, and Wilson Field.

The plan reinforces the pedestrian spine that extends between the Olin Science Center and Palatine Hill Road as the key organizing element of the district. Additions and renovations to Olin and Pamplin, and renovations to Watzek Library and J.R. Howard will orient active uses towards the pedestrian spine, including a fitness facility in Pamplin, a student collaboration space and café in J.R. Howard that will replace the existing Dovecote café, a new student learning center in Watzek, and new collaborative spaces on the ground floor of a renewed Olin Science Center. The new J.R. Howard café will provide a late night dining option in the academic core that is easily accessible to students in the library nearby. Buildings will be designed with transparency and active edges to encourage interaction and productive collisions along the spine.

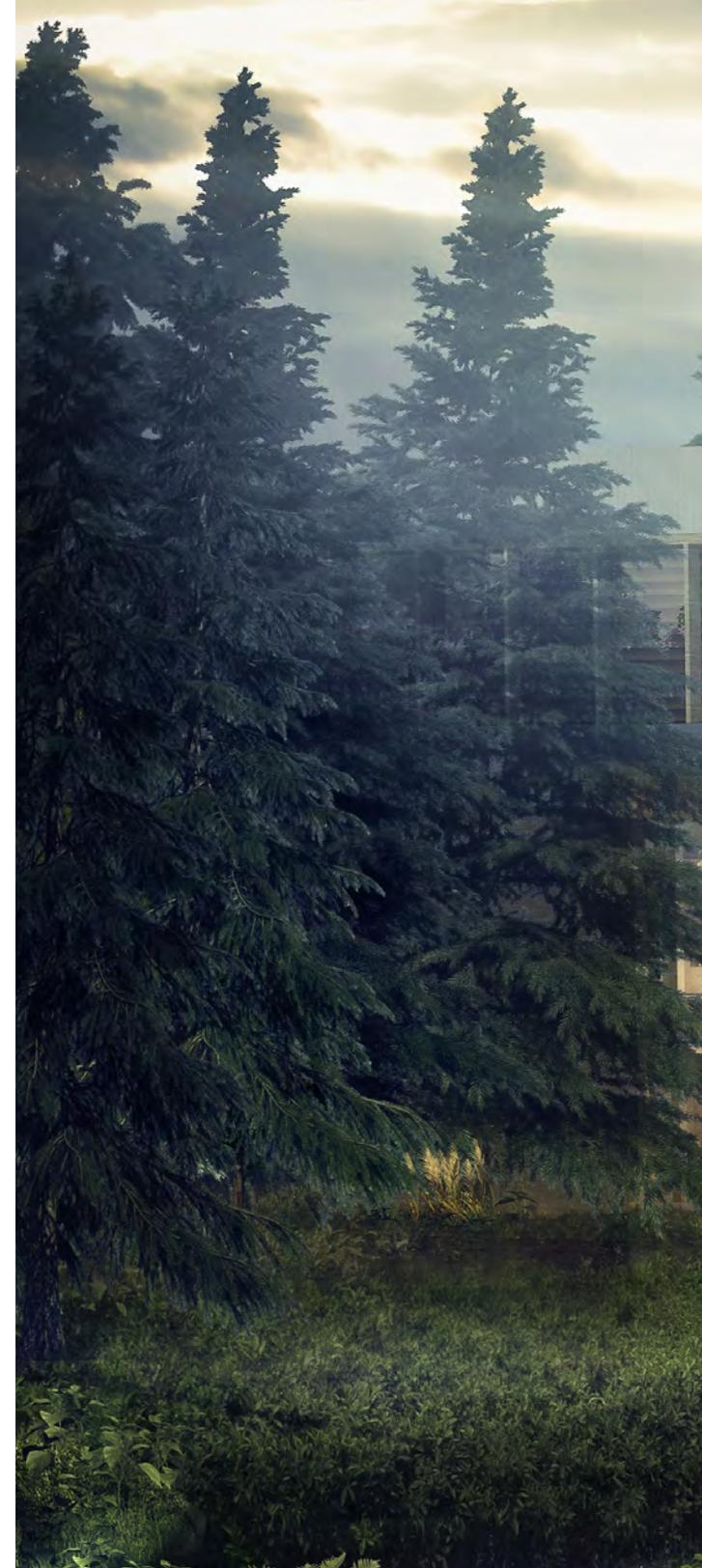
Within the academic core of the district, the plan prioritizes the renovation of the Olin Science Center to accommodate the increased demand for STEM education and related academic programs. Rather than support discipline-centric models of science education, the 30,000 gross square foot renovation advances collaborative models for teaching and learning that transcend traditional discipline lines, address critical space needs, and further develop undergraduate research programs. Many of the building's features, such as its double height volumes and views of the wooded ravine to the east, are timeless and preserved in the facilities plan. The flexible column structure creates opportunities to reposition existing program

elements, and to accommodate new space needs, including updated instructional spaces, additional offices, and informal study spaces in an efficient manner. A new transparent façade along its western edge showcases activity occurring inside the building, and extends into the adjacent plaza. Located near the northeast entry to campus, the building is well-positioned to serve as an iconic, memorable, and inviting gateway to campus.

The plan also introduces a new learning center on the ground floor of Watzek Library as another key initiative within the academic core. The learning center will be a new 21st-century space with a help desk, access to technology, and an open common area to encourage student collaboration and success. Its entrance will open directly on the pedestrian spine to reinforce activity along this route. Additional building improvements within the academic core will include an overall renovation to the Evans Music Center to address deferred maintenance, as well as an addition to provide an elevator for ADA access and new bathroom core, and deferred maintenance improvements and a new pavilion addition to Fir Acres Theater. The pavilion will add curricular space, and dance and multi-purpose space, to the building. The Dovecote café will be converted to an informal lounge and collaboration space for both student and faculty use, within the academic core. Ongoing maintenance investments in other buildings within the core will ensure they continue to meet the needs of the college's academic programs.

Within the west portion of the CAS North district, which contains the college's main athletics and recreation facilities, the plan proposes renovations and an addition to the Pamplin Sports Center and Zehntbauer Swimming Pavilion. These improvements will address

Illustrative Rendering of Olin Science Center ►





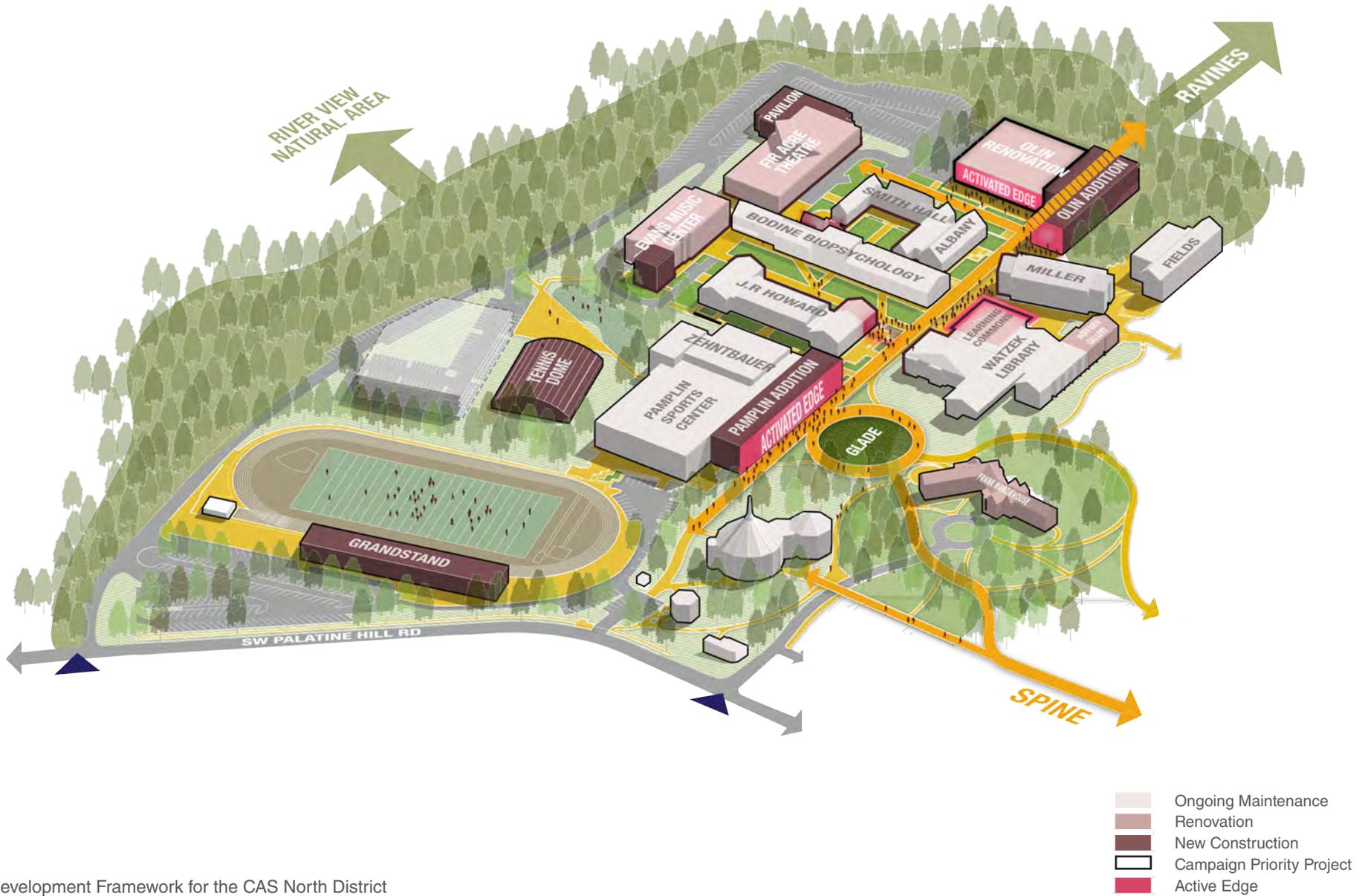
the need for more fitness and recreation space, such as studios and group exercise space, improved strength training and sports medicine space, improved locker rooms, and better connections between Pamplin and Zehntbauer. The reconstruction of the Griswold Stadium grandstand will improve safety, and a new Tennis Dome will replace the existing facility as it reaches the end of its functional life.

Landscape and site improvements proposed in the plan include enhanced pedestrian infrastructure along the spine to activate the pedestrian environment, and complement new building additions. A new plaza at the easterly termination of the spine will create a strong arrival to the renewed Olin complex. Also, a new plaza will be positioned at the entrance to the Tennis Dome to improve the organization of this area of the campus. A bicycle dismount zone through the academic core will improve pedestrian safety within this area of the campus.

The plan generally preserves existing vehicle and parking infrastructure within the CAS North district, but identifies a site for a potential future parking structure on the existing Lower Griswold surface lots east of Wilson Field, should additional parking be needed in the future.



Long-term Vision for the CAS North District



Development Framework for the CAS North District



Lewis & Clark
College



Community and Residential District

The Community and Residential district is centrally located between the CAS North district and the Graduate School campus, and contains all of the college's residence halls, as well as the Templeton Campus Center, which serves as the heart of student life at Lewis & Clark.

The renewal of the Community and Residential district is perhaps the most transformational element of the Facilities Plan. The plan calls for the removal of Akin, Stewart, and Odell and the introduction of a mixed-use district at the front door to campus. Three hundred and twenty six beds of new housing for freshmen or sophomores will be located on the Akin site, with an additional 220 beds replacing Stewart and Odell. A renovation and an addition to Templeton, and the replacement of Templeton Drive and adjacent parking with a new Templeton Way pedestrian spine will create a new memorable heart to the campus.

The spine will create a continuous corridor that concentrates pedestrian movement between the academic core in the CAS North District and the Graduate School campus and Corbett House. Templeton Way will be designed with improved pedestrian infrastructure that creates an accessible, safe, and inviting environment for pedestrians, with improved crossings at Huddleson Lane, and the north Palatine Hill Road edge of the Graduate School campus. The plan extends the bicycle dismount zone through Templeton Way to further improve pedestrian safety in this area of the campus, and introduces additional bicycle parking facilities next to the Templeton Campus Center.

In the central part of the district, between Huddleson Lane and Frank Manor Drive, replacement student housing oriented towards Templeton Way will activate the pedestrian corridor with high bay space and ground floor uses, which could include a replacement bookstore, studio or gallery space, or other student collaboration space. An addition on the west side of the Templeton Campus Center will improve access to the building and introduce new student life spaces to activate the corridor further. Other improvements will rationalize circulation, enhance ADA access, and create more inviting student spaces throughout the building.

Another feature of the plan for this area is a new signature open space and plaza framed by the replacement Akin, Stewart, and Odell residence halls. The open space will be positioned between Akin and Stewart and, Odell sites, and will terrace down from Palatine Hill Road to Templeton Way, creating a welcoming entrance and views into to this area of the campus. Bus parking will be accommodated along Palatine Hill Road, together with drop-off and pick-up for transit network companies (TNC) vehicles. New residence halls fronting on the Palatine Hill Road edge will contain transit waiting facilities, as well as elevators to facilitate ADA access to the plaza level.

On the north edge of the district, the Akin replacement building will front on Frank Manor Road, and could contain a new home for the college's Admissions Department.

South of Huddleson Lane, the plan provides for the replacement of the Hartzfeld residence hall with either traditional first year residence halls, single rooms, suites and apartment style units, and the renovation of the Forest Halls, as well as Platt and Howard. Tamarack Lounge will be renovated as a new third space with a café that provides an enlarged replacement for Maggie's, which does not meet current needs. The lounge will contain an updated student lounge, as well as a new café positioned along the pedestrian corridor at the center of this district, that will provide a second late-night dining option. With the Tamarack café and J.R. Howard café in place, the Trail Room in Templeton could be taken offline. Courtyards will be introduced as amenities next to the Hartzfeld replacement housing, and the existing Copeland residence halls, which will also be renovated over time.

Parking removed to accommodate the new plaza and pedestrian corridor will be replaced in new surface lots next to the Huston Sports Complex and on the Graduate School campus. Several underground spaces will be included within the northernmost Akin replacement building. Additional surface parking could be accommodated on the site north of Flanagan Chapel if needed in the future. The replacement of the Akin, Stewart, Odell, and Hartzfeld residence halls creates the opportunity to rationalize service within the Templeton district and Hartzfeld residential area to reduce visual and functional impacts.



Long-term Vision for the Community and Residential District

Graduate School Campus

The Graduate School campus is the most southerly portion of the overall Lewis & Clark campus, and contains facilities for the college's Graduate School of Education and Counseling, and student life and community uses, including the Sequoia Outdoor Equipment Center.

The Facilities Plan preserves all existing buildings on the Graduate School campus, and provides for their renewal to better meet the needs of the school over time. The renovation of Corbett House will facilitate its reuse for classrooms, offices, and multi-purpose and event space, and will include improved access to the terrace on the south side of the building to enhance physical and visual connections to the estate lawn and the ravine landscape beyond the estate grounds. The renovation of the South Chapel and South Chapel Annex will accommodate academic or administrative functions for the Graduate School and other users, as well as event space.

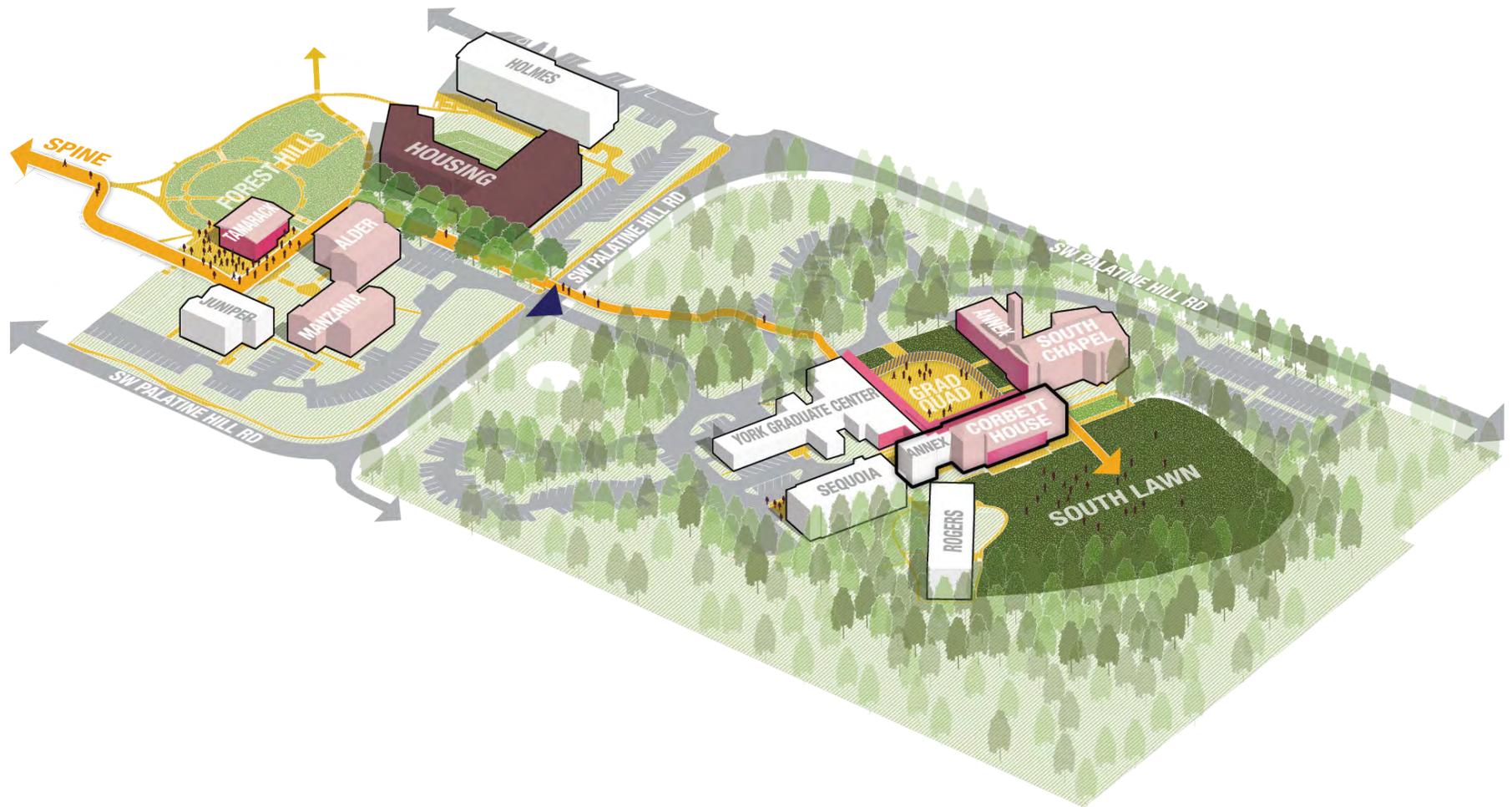
The plan introduces a new signature plaza within the existing Corbett House courtyard to improve the sense of arrival to the Graduate School campus. Renovations to buildings surrounding the plaza will create active edges to bring vitality to the plaza. The plaza will serve as the academic core of the campus, as well as the termination of the pedestrian spine that connects the Graduate School campus to the academic core of the CAS campus through the Community and Residential Hill Road. An improved pedestrian crossing over Palatine Hill Road will enhance pedestrian safety.

The plan incorporates a new surface parking lot along the southeast edge of the Graduate School campus to accommodate parking displaced from the campus core, and ongoing high demand for parking. The lot will contain up to 80 spaces.



Long-term Vision for the Graduate School Campus

Based on the Graduate School's new Master of Art Therapy program from Marylhurst College, the Graduate School is developing a separate master plan to accommodate growth on their campus. The master plan will supplement the vision outlined in the overall Facilities Plan.



Development Framework for the Graduate School Campus

- Ongoing Maintenance
- Renovation
- New Construction
- Campaign Priority Project
- Active Edge

Law School Campus and Huston Sports Complex

The Law School campus and Huston Fields area of the campus contains the Law School campus, and the college's Huston Sports Complex. The Law School is located to the west of the CAS campus at the intersection of Terwilliger Boulevard and Palatine Hill Road, and the Huston Sports Complex is located on a separate parcel further to the west at the intersection of Terwilliger and Boones Ferry Road.

The facilities plan incorporates the improvements to the Law School campus that are contained in the Law School Master Plan, including the following:

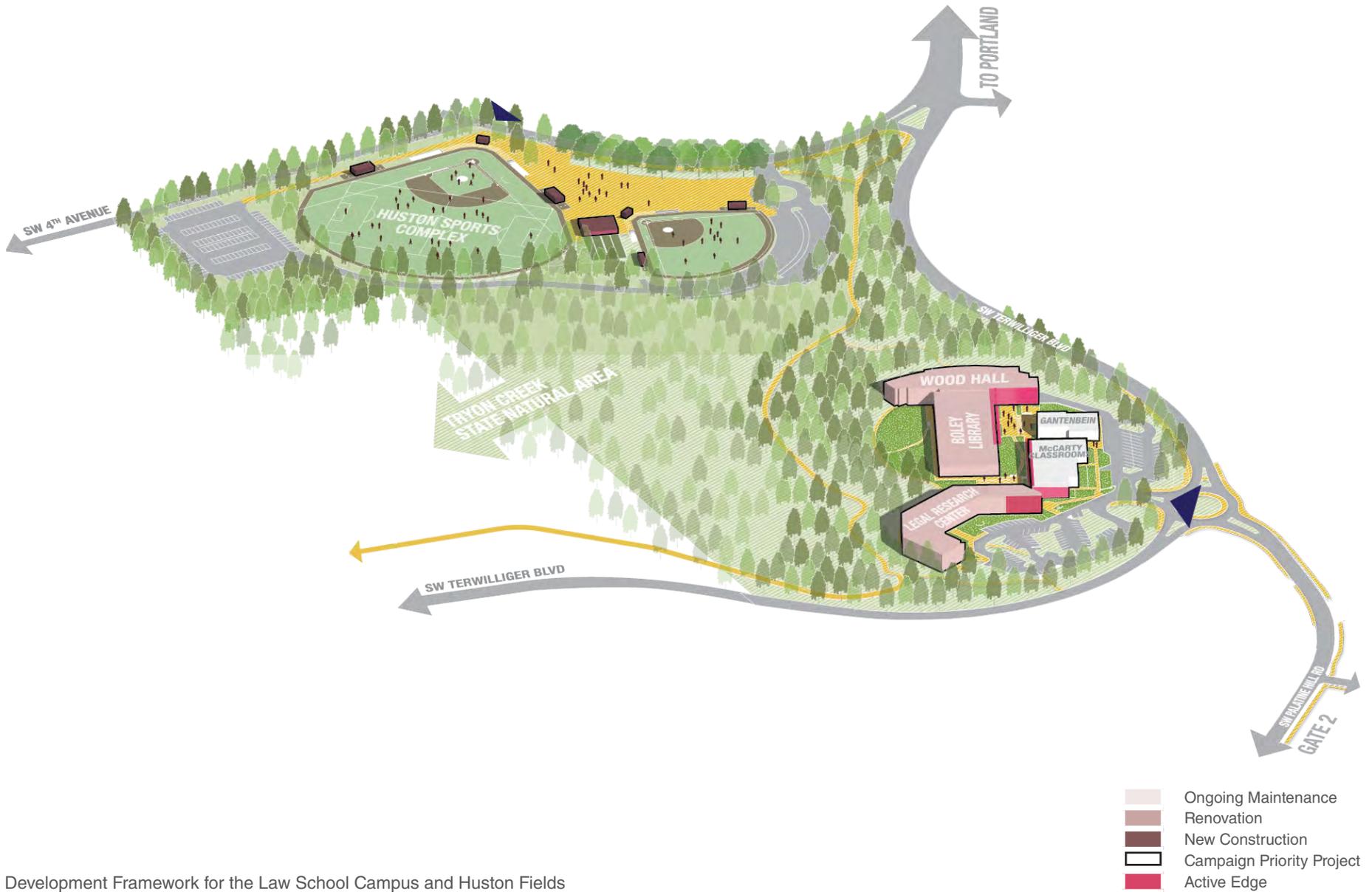
- Work on the Law School Master Plan has been started with the completion of a new entry plaza and renovations of McCarty and Gantenbein, as well as backlog maintenance projects, such as boiler and chiller replacements
- Renovations to Boley Library to repurpose underutilized space for both quiet and active student study space
- Renovations to the Legal Research Center to create more student life and study space, improve classrooms, and replace glass
- Renovations to Wood Hall to right size study space and classrooms, and incorporate the National Crime Victim Law Institute space
- Classroom upgrades in McCarty Hall, completed in 2018
- Utility, roadway, parking, and grounds improvements highlighted in the Sightlines deferred maintenance study

At the Huston Sports Complex, the plan provides for the reconfiguration of the existing fields to accommodate a soccer field overlay, and introduces a new arrival plaza and concession buildings as amenities for the fields. The new field could support the introduction of men's soccer and women's lacrosse as



Long-term Vision for the Law School and Huston Fields

new intercollegiate sports at the college. The plan also introduces a new surface parking lot to the south of the fields to accommodate up to 100 additional parking, displaced from the campus core. It is anticipated that this lot will be used by residential students for storage parking.



Development Framework for the Law School Campus and Huston Fields

Planning Systems

The Facilities Plan recommends strategies to improve the landscape and open space, mobility and parking, land and building use, and utility infrastructure systems within the context of the big ideas driving the plan, based on the planning analysis documented in this report.



Parking Garden at the Graduate School Campus

Landscape and Open Space

The key elements of the landscape and open space system include lawns, courtyards, plazas, and sports fields. The plan introduces the following improvements to the campus landscape and open space systems:

Courtyards

Courtyards will be introduced as amenities for replacement student housing on the sites of Akin, Stewart, and Odell, Hartzfeld, and Copeland residence halls.

Plazas

The plan introduces three new signature plazas in key areas of the campus, including the Templeton district as part of the redevelopment of the Akin, Stewart, and Odell residence halls, within the existing Corbett House courtyard area to enhance the sense of arrival to the Graduate School campus, and adjacent to the Huston Sports Complex to improve the function of this area. The plan also introduces smaller plazas adjacent to new buildings or building additions, including the Tennis Dome replacement, Templeton addition, and next to Howard and Platt residence halls. It also highlights the renovation of the plaza around Tamarack.

Sports Fields

The plan reconfigures fields within the Huston Sports Complex to create a new soccer and lacrosse field overlay, which could support the introduction of men's soccer and women's lacrosse as new intercollegiate sports.



Proposed Landscape and Open Space Structure



Campus Mobility Systems

The plan recommends improvements to campus pedestrian paths, bicycle infrastructure, vehicular routes, and parking in several areas of the campus.

Pedestrian Network

A key feature of the plan is a continuous pedestrian spine that links the CAS and Graduate School campuses, extending from the academic core of the CAS campus through to Corbett House. The spine will concentrate pedestrian travel through the campus, and contain improved infrastructure to enhance pedestrian safety, including improved crossings at Huddleson Lane and Palatine Hill Road. The plan introduces sidewalks along Boones Ferry Road, next to the Law School and Huston Sports Complex, enhances pedestrian routes to the Law School across Terwilliger Boulevard, and rationalizes pedestrian circulation where buildings are expanded or replaced.

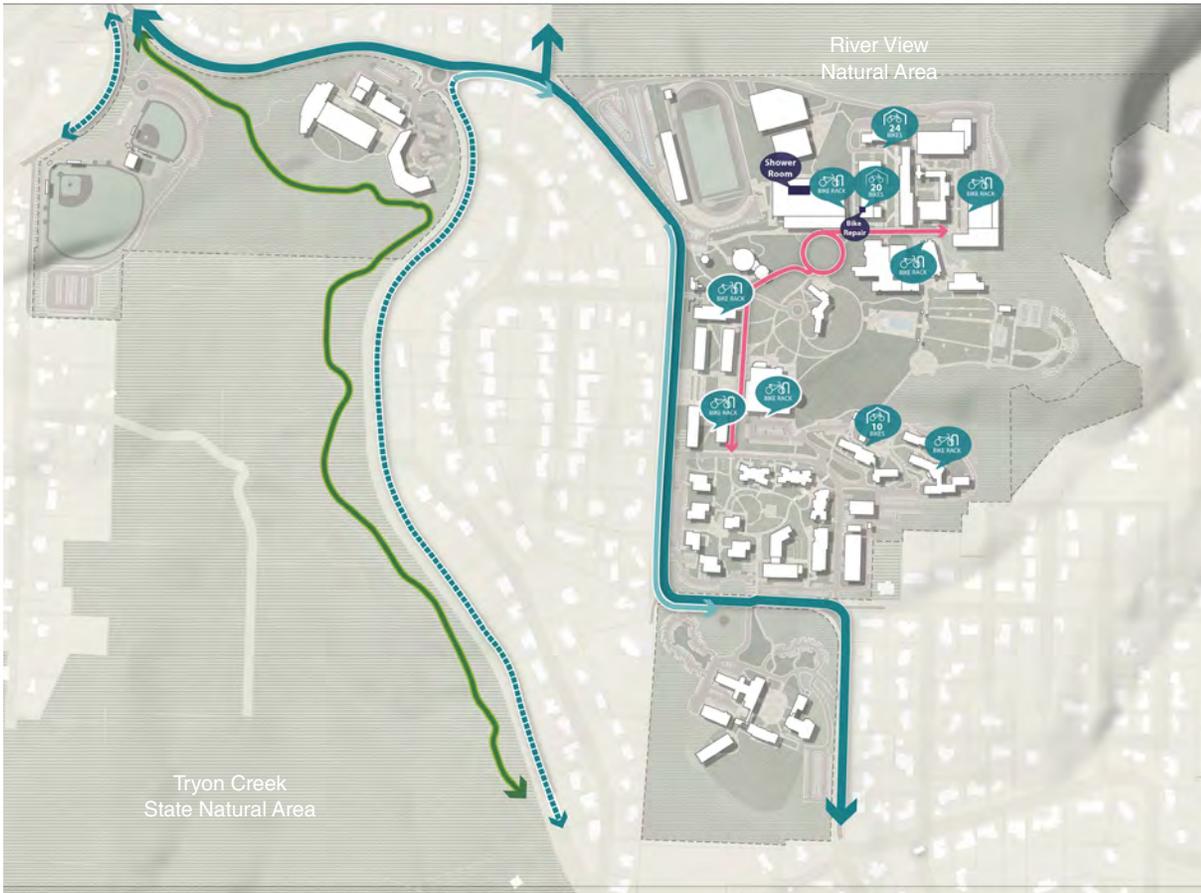
Accessibility

The plan enhances accessibility across the Lewis & Clark campus through several strategies. Significant topographical changes will be addressed through landscaping, ramps, within buildings, or adding interior or exterior elevators. The current dip across Huddleson will be flattened as pedestrian improvements are implemented in that area. Campus accessibility guideposts will also be enhanced, and maps to facilitate accessible navigation of the campus are planned. At the building scale, ADA improvements will be prioritized as buildings are renovated over time.



Proposed Pedestrian Network

- Pedestrian Connection
- Frequently Used Pedestrian Paths
- Proposed Pedestrian Spine
- Critical Crossings



Proposed Bicycle Network

- Shared Vehicular Road
- Bike Lane
- Difficult Connection
- Shared Path
- Proposed Dismount Zone

Bicycle Network

The plan relocates bicycle parking facilities in several areas of the campus to better serve existing, or planned future development, and introduces additional parking facilities next to the Templeton Campus Center. The plan also defines a bicycle dismount zone along the new pedestrian spine within the academic core and Templeton Way to improve pedestrian safety in these areas of the campus.

Vehicular Circulation

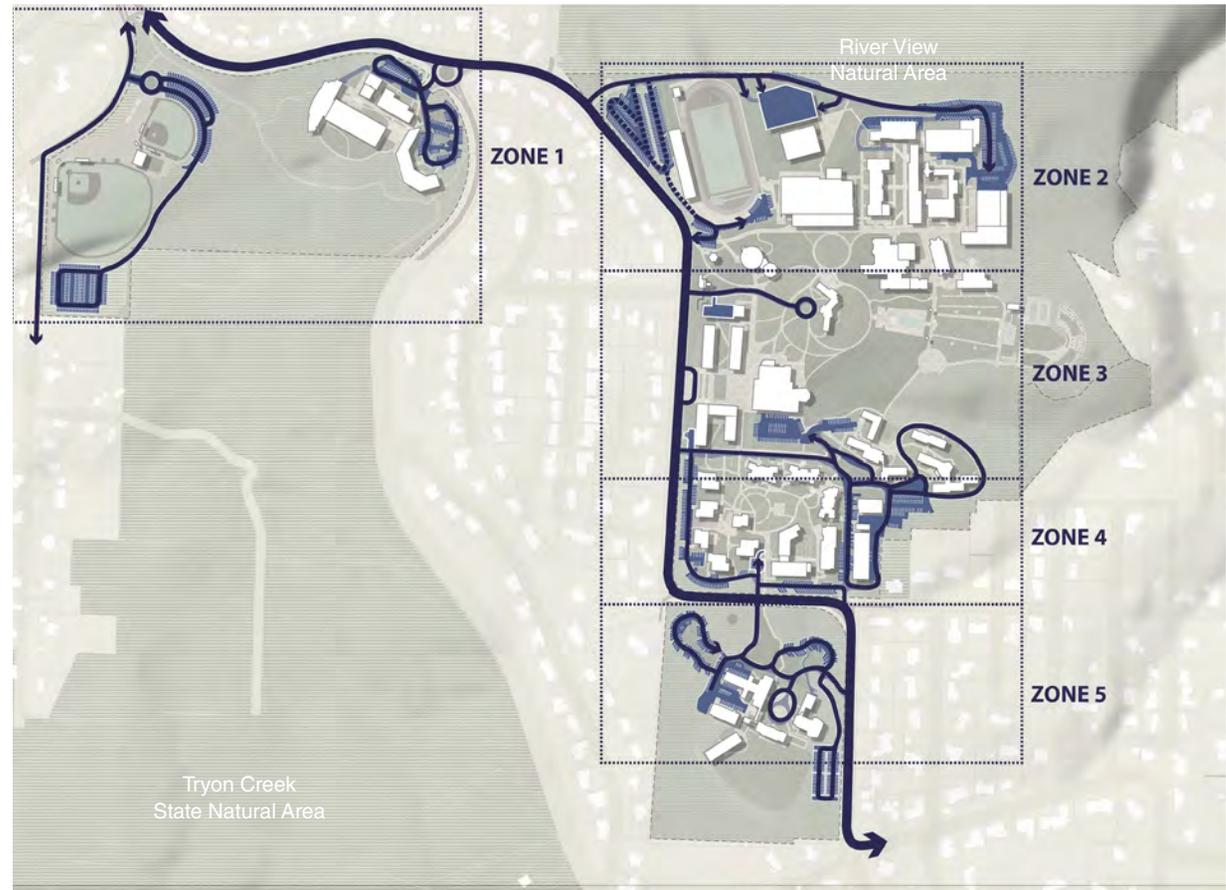
The plan generally preserves existing vehicle routes through the campus, with the exception of Templeton Drive between Huddleson Lane and Frank Manor Drive, which is removed to accommodate the new pedestrian spine and plaza within the Templeton Residential District.

Parking

Parking is also removed from the Templeton Residential District, and replaced through two new surface parking lots. In total, the plan increases the parking supply by 158 spaces, from 1,307 spaces to 1,465 spaces as follows:

- Zone 1: 341 spaces (+172 spaces)
- Zone 2: 530 spaces (+0 spaces)
- Zone 3: 85 spaces (-94 spaces)
- Zone 4: 271 spaces (+0 spaces)
- Zone 5: 238 spaces (+80 spaces)

A 100-space surface parking lot is created near Huston Fields, with another 80-space parking lot southeast of Corbett. The reconfiguration of the parking lot near the concessions at Huston Sports Complex adds another 72 parking spaces to the inventory. Twenty parking spaces will be accommodated within the Akin replacement housing for convenient visitor parking. If needed in the future, a parking structure with nearly 200 parking spaces could be constructed on Parking Lot D north of the existing Tennis Dome, and another surface lot could be accommodated east of Flanagan Chapel.



Proposed Vehicular Circulation and Parking



Proposed Service and Loading

- Vehicular Access
- Service Entry
- Service Docks

Service and Loading

Service and loading facilities will be integrated in all new and replacement buildings. The replacement of the Akin, Stewart, Odell, and Hartzfeld residence halls, and the renovation of Templeton create the opportunity to rationalize service within the Community and Residential district. To the extent possible, service and loading elements will be positioned away from key views, and to avoid conflicts with pedestrian and vehicle systems. The Templeton service area will be reconfigured to better serve the building.

Building Use

The plan preserves the general organization of land uses within the CAS North district, Community and Residential district, Graduate School campus, and Law School campus and Huston Sports Complex areas of the campus.

Within the CAS North district, academic uses will continue to be concentrated within the academic core, and sports and recreation uses will be preserved in their current locations, with planned improvements to the Pamplin Sports Center and Zehntbauer Swimming Pavilion.

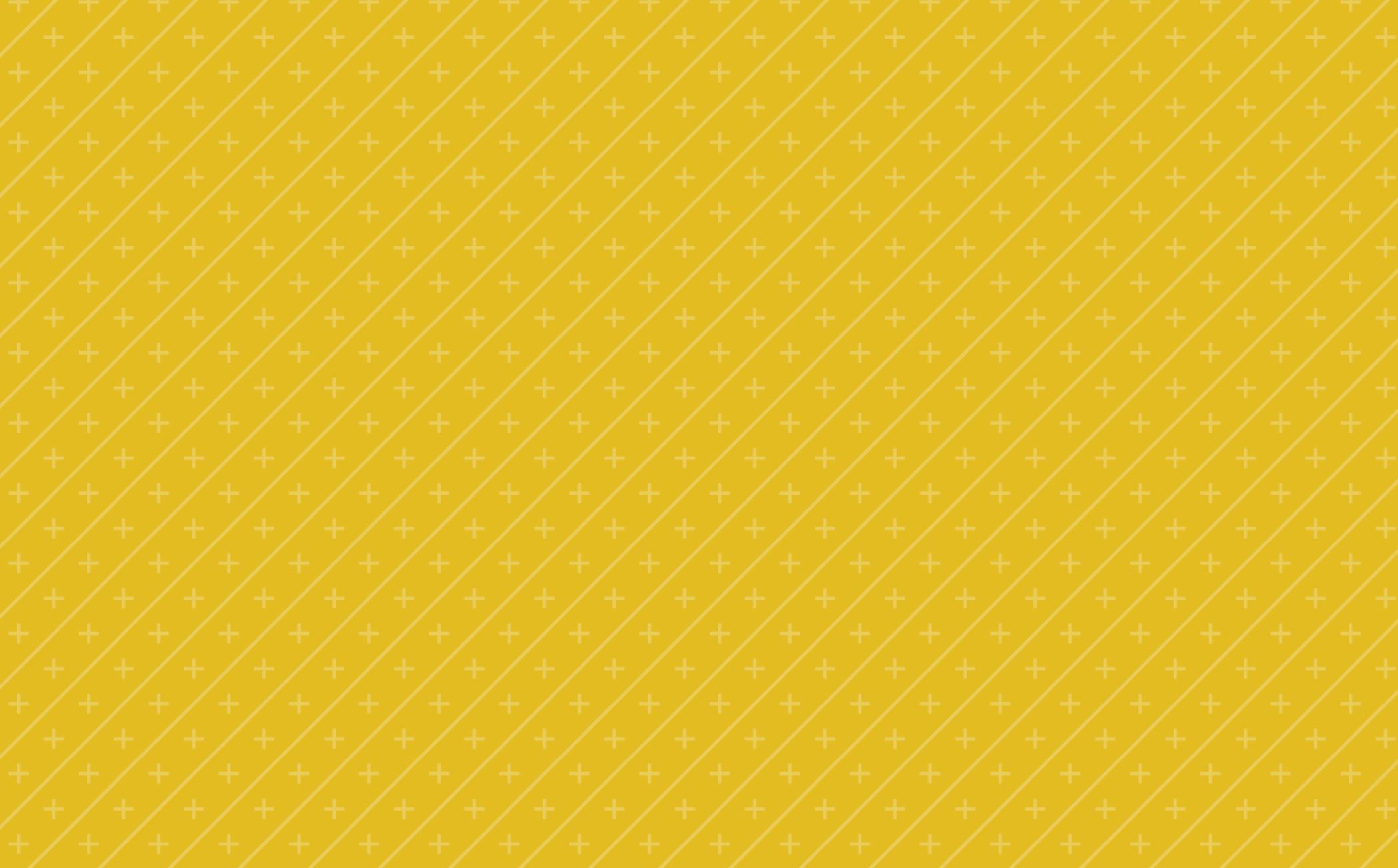
The Community and Residential district will continue to accommodate all of the college's student housing and an expanded Templeton Campus Center.

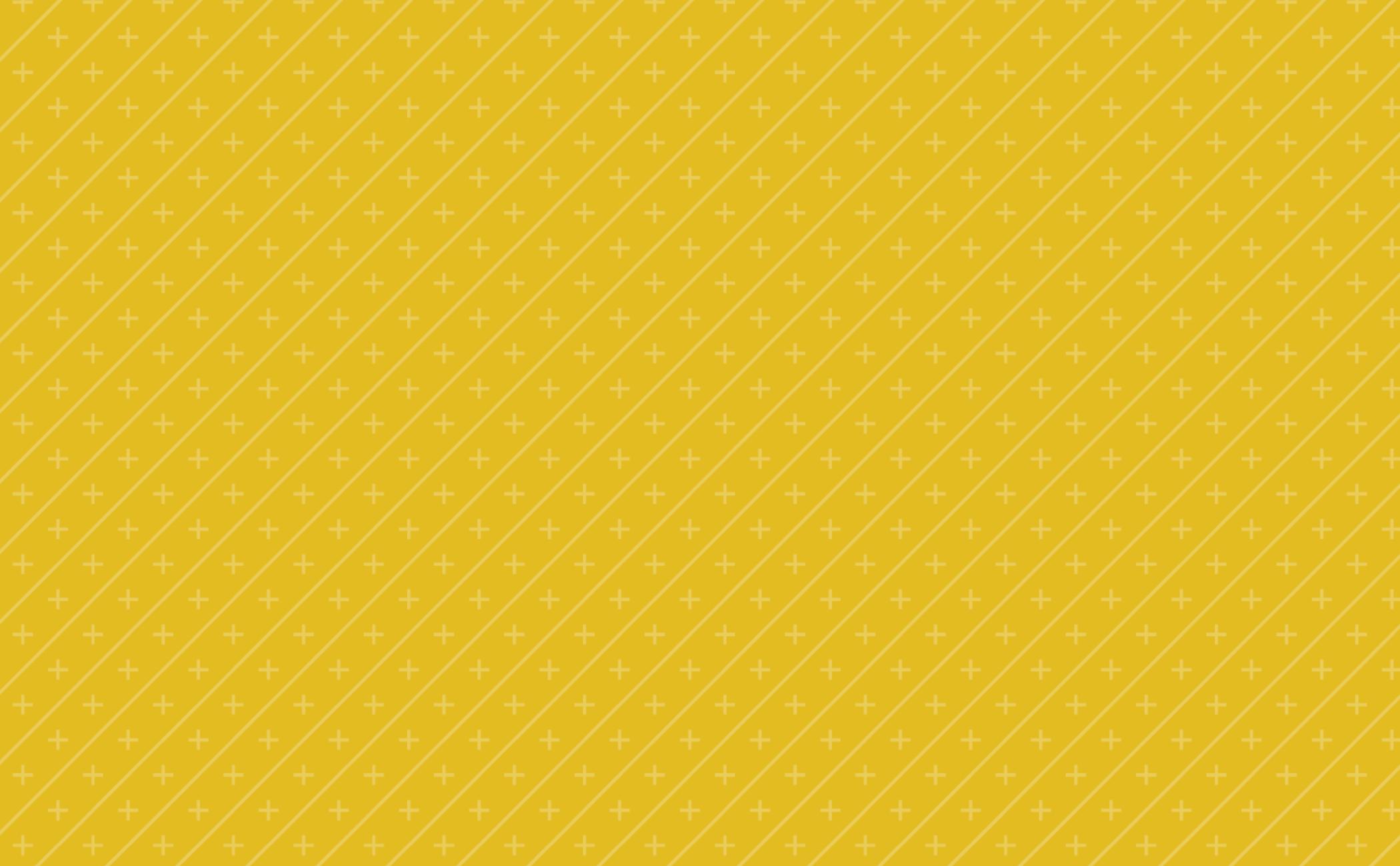
The Graduate School campus will continue to contain largely academic and administrative uses, together with some student life and community uses that serve students at the campuses. Within the Law School campus and Huston Sports Complex area, the plan provides for the implementation of the Law School master plan, together with improvements to the Huston Sports Complex.



Proposed Building Use

| | |
|---|--------------------------|
| ■ | Academic |
| ■ | Administrative |
| ■ | Residential |
| ■ | Student Life |
| ■ | Service |
| ■ | Athletics and Recreation |
| ■ | Parking |





 **Implementation**

Implementation Strategy

From the outset of the planning process, Lewis & Clark leadership was clear about the need for an implementable Facilities Plan. To that end, the RFQ for the plan highlighted the following goals and scope of services tasks:

- Ensure facilities fit with current and projected needs
- Develop systematic renovation and expansion program recommendations
- Ensure that the college's facilities continue to cost-effectively support the changing needs of a premier institution of higher education
- Create detailed five—and ten—year action plans listing the scope and schedule for various projects in the plan, as well as inflated rough order-of-magnitude (ROM) costs
- Assess current conditions, together with current and projected needs, and recommend a sequenced plan for renovation and expansion of college facilities
- With the assistance of a financial analyst, develop funding options for the plan recommendations

With these goals and tasks in mind, the consultant team met with Lewis & Clark's Facilities Department leadership to review the full list of projects described in the Sightlines deferred maintenance study, together with the building and campus improvements identified through the planning process to establish initial priorities and phasing. Project rankings were based on critical maintenance requirements, the overall facilities plan vision for the campus, and the college's strategic plan goals to invest in the sciences, renew housing, and enhance student life. Once the list was compiled, DCW Cost Management reviewed the initial cost estimates from the Sightlines study, updated the costs to integrate programmatic improvements beyond deferred maintenance, and added costs for new buildings and building additions identified in the plan.

Based on the initial project list and updated costs, the college's financial consultant, Biddison Hier, developed a financial model that examined project costs and phasing relative to the college's budget resources over time.

In November, 2018 the consultant team held a work session with Biddison Hier, the college's Vice President for Business and Finance/Treasurer, and the Associate Vice President for Facilities to review the initial project list and financial model in order to reach consensus on an overall implementation strategy. The strategy that emerged outlines year-by-year phasing for priority projects over the next five years, including funding sources. The strategy also highlights the additional projects that may be implemented beyond five years, recognizing that priorities and funding options may evolve over time. The implementation strategy is described below.

Near-term Development Strategy

Olin Science Center Renovation

The plan prioritizes the renovation of the Olin Science Center to accommodate the increased demand for STEM education and related academic programs. The 30,000 gross square foot renovation advances collaborative models for teaching and learning that transcend traditional discipline lines, address critical space needs, and further develop undergraduate research programs. Many of the building's features, such as its double-height volumes and views of the wooded ravine to the east, are timeless and will be preserved. The flexible column structure creates opportunities to reposition existing program elements, and to accommodate new space needs, including updated instructional spaces, additional offices, and informal study spaces, in an efficient manner. A new transparent façade along its western edge showcases activity occurring inside the building, and extends into the adjacent plaza.

Community and Residential District Projects

The renewal of the Community and Residential district centered around the Templeton Campus Center is another plan priority. Key building projects within the district included the renovation of the campus center, and an addition to the west side of the building, and the construction of a new residence hall for sophomores and juniors on the existing Akin residence hall site, which will create a net total of 326 beds. Site improvements will include landscaping and paving to support a pedestrian plaza and walkway to replace Templeton Drive, and a new landscaped quad on the Akin site as the first phase in the new Community and Residential district plaza. In addition, new infrastructure to activate and replace existing civil infrastructure will be provided, including new water and waste, electrical and telecommunication infrastructure. Specific projects will include:

- Templeton North Residential Beds (326 beds net)
- Templeton College Center Trailroom Renovation
- Templeton College Center Renovation
- Pedestrianization and Utility Upgrades of Templeton Way

Corbett House

The plan also prioritizes the renovation of the historic Corbett House on the Graduate School campus. The renovation will address critical building conditions, including seismic upgrades and utilities, while respecting the historic qualities of this unique campus resource. Building improvements will create contemporary spaces to support Graduate School academic and administrative functions, including classrooms, meeting spaces, and offices. The existing connecting hallway to the chapel will be removed. The planned renovation will include enhancements to the estate landscape. Specific projects associated with the Corbett House renovations and Graduate School campus include the following:

- Corbett House Renovation
- South Chapel Renovation
- South Chapel Annex Renovation

Other Near-term Projects

The following additional projects were included in the Phase 1 strategy:

- Tamarack Lounge Renovation
- JR Howard Café Renovation
- Dovecote Lounge Renovation
- Construction Two Surface Parking Lots
- Huston Fields Improvements
- Watzek Library Learning Center Renovation
- Watzek Library Ongoing Maintenance
- Watzek Library Gallery/Studio Renovation
- Hartzfeld Replacement Beds (200 beds)
- Biology/Psychology/Bodine Ongoing Maintenance
- Evans Music Center Ongoing Maintenance
- Tennis Dome Replacement
- Frank Manor Renovation

Table 3: Near-term Development Strategy Summary

| | |
|---------------------------------|-----------|
| Total Existing Campus GSF | 1,307,121 |
| Total GSF as Shown in Plan | 1,464,988 |
| Total Ongoing Maintenance | 1,050,898 |
| Total Renovation | 193,018 |
| Total New Construction | 221,072 |
| Total Demolition | 63,205 |
| Total Net Increase in GSF | +157,867 |
| Total Proposed GSF | 1,464,988 |
| Site Area | 5,979,594 |
| Proposed Floor Area Ratio (FAR) | .25 |

Long-term Development Strategy

The following additional projects were identified in the plan for implementation beyond the near-term development strategy.

Should funding for any of these projects become available, the project could be implemented within the five-year phasing period.

Table 4: Long-term Development Strategy Projects

| Project | Description |
|--|--|
| Childcare Center | Provision of new childcare center with potential partner |
| Olin Science Building Addition | Construct south addition to Olin Sciences building |
| Stewart and Odell Residence Hall Replacement | Demolish Stewart and Odell residence halls and replace with new 220 bed facility |
| Evans Music Center Renovation | Second phase of deferred maintenance upgrades |
| Fields Center Renovation | Renovate Fields Visual Arts to address deferred maintenance |
| Fir Acres Theatre Renovation | Renovate Fir Acres Theater to address deferred maintenance |
| Fir Acres Pavilion Addition | Construct an addition with multipurpose rooms and dance floors |
| Albany Quadrangle Improvements | Renovate Albany Quadrangle to address deferred maintenance |
| Miller Hall Renovation | Renovate Miller Hall to address deferred maintenance |
| Central Heating Plant Upgrades | Required upgrades to central heating plant |
| Campus Electrical Utility Upgrades | Coordinate transition of MV 12KV segments to PGE ownership |
| Overall Campus Classroom Upgrades | Renovations to retrofit and right-size classrooms |
| Pamplin and Zehntbauer Renovation | Address deferred maintenance identified in Sightlines study, including pool and locker room renovation |
| Football Field Replacement | Replace artificial turf field |
| Ponderosa Residence Hall Renovation | Major renovation to address deferred maintenance |
| Spruce Residence Hall Renovation | Major renovation to address deferred maintenance |
| Alder Residence Hall Renovation | Major renovation to address deferred maintenance |
| Manzanita Residence Hall Renovation | Major renovation to address deferred maintenance |
| Howard Residence Hall Renovation | Contingency investment as needed until full renovation |
| Platt Residence Hall Renovation | Contingency investment as needed until full renovation |
| Estate Swimming Pool and Pavilion | Address roof, cupola, building and pool systems deferred maintenance |
| Site Improvements | Utilities, roadways, parking and grounds improvements identified in Sightlines deferred maintenance report |
| Paul Boley Law Library Renovation | Renovation and study space allocation over three phases |

| Project | Description |
|-------------------------------------|---|
| Swindell LRC Renovation | Student life, study space and classroom improvements, glass replacement |
| Wood Hall Renovation | Right-sizing study spaces and classroom upgrades; incorporate NCVLI |
| Gantenbein Renovation | Plumbing, roof and upper window deferred maintenance |
| Law School Campus Site Improvements | Utility, roadway and parking and grounds improvements identified in Sightlines report |
| Rogers Hall Renovation | Upgrade electrical services, coordinate transition of MV feeders to PGE ownership |
| Sequoia Center Renovation | Renovate to address deferred maintenance |
| Infrastructure Improvements | Plan for replacement of new water and waste water infrastructure |
| Evans Music Center Renovation | Evans Music Center renovation and new addition |
| Fir Acres Theatre Renovation | Fir Acres Theater renovation and overhead enclosure |
| Grandstand Replacement | Renovate or replace existing grandstand |
| Pamplin Center Addition | Addition on the south side of the building |
| Flanagan Chapel Renovation | Roof upgrades |
| McAfee Renovation | Contingency investment as needed until demolished |
| Estate Gardens Improvements | Infrastructure deferred maintenance and Rose Garden rehab |
| Entry Plaza Improvements | Enhance Graduate Campus landscape |
| Rogers Renovation | Renovate to address deferred maintenance |
| York Renovation | Renovate to address deferred maintenance |

Table 5: Long-term Development Strategy Summary

| | |
|---------------------------------|-----------|
| Total Existing GSF | 1,307,121 |
| Total GSF as Shown in Plan | 1,553,541 |
| Total Ongoing Maintenance | 765,094 |
| Total Renovation | 403,389 |
| Total New Construction | 385,058 |
| Total Demolition | 138,638 |
| Total Net Increase in GSF | +246,420 |
| Total Proposed GSF | 1,553,541 |
| Site Area | 5,979,594 |
| Proposed Floor Area Ratio (FAR) | .26 |



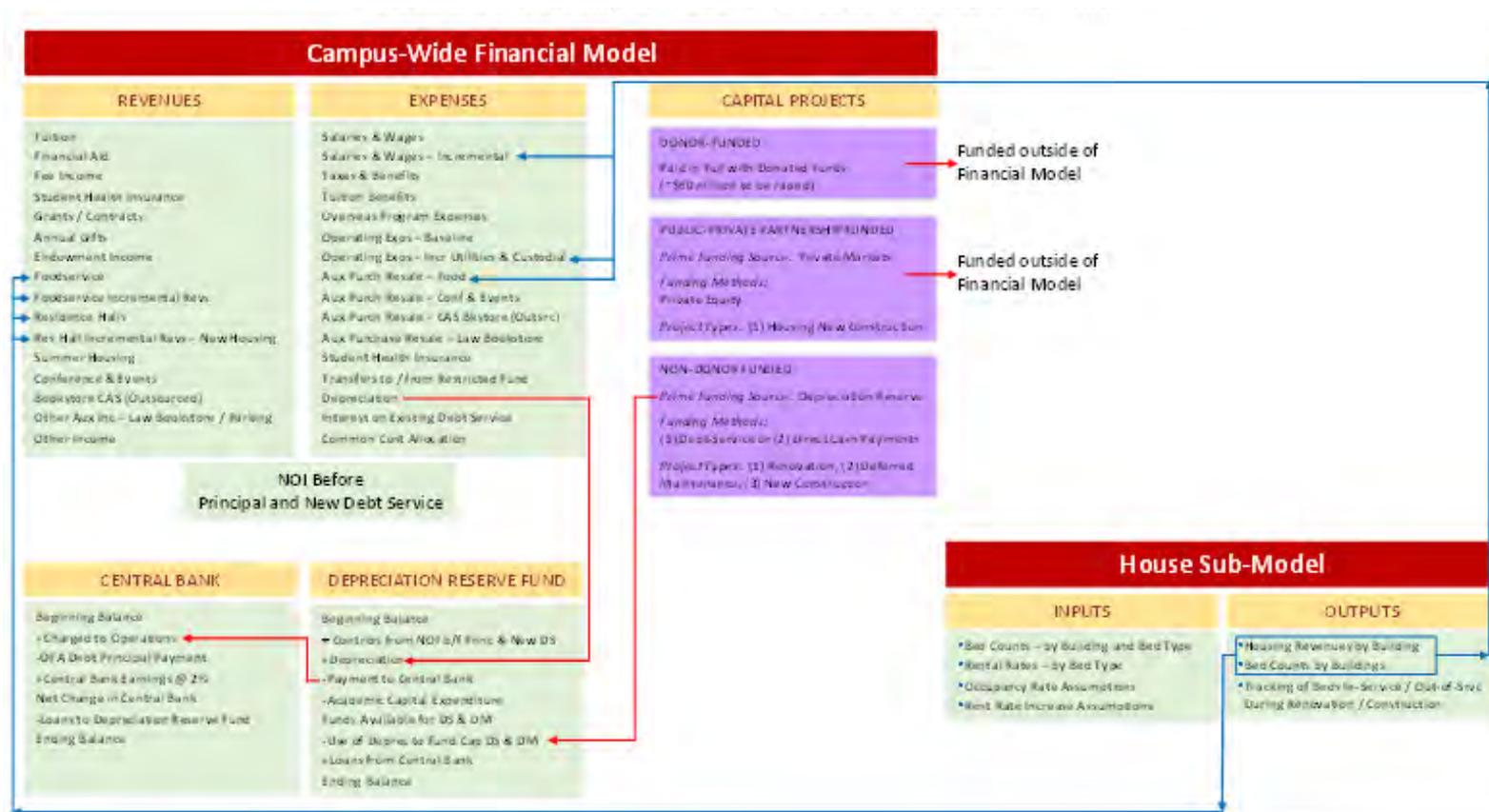
Near-term Development Strategy

- Ongoing Maintenance
- Renovation
- New Construction

Financial Strategy

The financial model for the Facilities Plan quantifies the financial requirements associated with capital projects outlined in the plan, and evaluates approaches and opportunities for the college to fund these projects. A schematic of the financial model is shown below.

Lewis & Clark Campus Master Plan Financial Model



Model Structure

The model has three main components: an operating proforma, a housing sub-model, and a capital project component. Each is described below.

Operating Proforma

The operating proforma includes all of the revenue and operating expense categories in the comprehensive budget for the college. Each individual revenue and expense line in the operating proforma is tied to one or more worksheets that compute values in the operating proforma. The model is structured so that key assumptions affecting each revenue or expense item can be easily altered. For example, in projecting tuition revenue, assumptions about enrollments, discount rates, rates of inflation, and other factors that affect tuition revenue can be altered.

Housing

Because the Facilities Plan includes changes to several housing projects, and because housing revenues and expenses can vary project-by-project because of different assumptions about bed counts, housing rates and other factors, a separate housing sub-model was created to isolate some of the financial impacts of housing. Computed in the sub-model, these impacts are then incorporated into the main financial model through the operating proforma, as follows:

- Housing projects that are taken offline for renovation show a temporary decline in revenues while renovation is in progress.
- New housing projects that are constructed by the college add revenues, operating expenses, and (where appropriate) debt service when they are brought on-line.
- In cases where the college considers the use of a public-private partnership to create new housing, revenues and expenses are not included in the housing sub-model or the main operating proforma.

- If existing projects are closed or demolished to make way for a new project, revenues and expenses associated with the existing project are eliminated from the housing sub-model and the main operating proforma.

Capital Projects

Capital projects feed into the model in different ways depending on the nature of the project and how it is funded. This is explained more fully below.

Capital Project Categorizations

Capital projects are defined in the financial model in two ways by type of construction, and by phasing priority.

By Type of Construction

The Facilities Plan includes several types of projects — from demolition to new construction. A complete list of construction types is shown below. A significant number of projects address deferred maintenance— areas where building systems have gone beyond their useful lives and investments are required to return them to good working condition.

- Demolition
- Deferred Maintenance
- Renovation
- New Construction
- Infrastructure

By Phase/Priority

Because of the magnitude of financial requirements identified as part of the facilities plan process, the capital project list was segmented into phases so that priority projects could be addressed as quickly as possible, based on funding availability. Projects are divided into two categories by priority.

These projects are proposed to begin within the next five years. Funds are either available or will be raised to complete these projects.

Future Projects: Six Years and Beyond, or Whenever Funding is Available

These projects, while important, are anticipated to be deferred until priority projects are complete. However, if funding becomes available for any project on this list (e.g., through a specific donation), the project can be undertaken once funding is secured.

Capital Funding Sources

Several different funding mechanisms will be needed to fund the range and breadth of projects included in the facilities plan. Some projects will be fully funded when undertaken—i.e., essentially paid-in-full when the project is implemented. Others will be debt-financed, with debt service paid off over the long-term (generally 30 years). Specific funding sources are described below.

Capital Campaign/Donor-funded Projects

The college intends to raise about \$60 million in donations through a capital campaign to fund a few high-profile projects in the facilities plan.

Public-Private Partnerships (P3)

The college is exploring funding options that may be available by entering into partnership arrangements with private sector entities (e.g., developers, private equity firms). Typically projects that are best candidates for P3 funding have their own revenue stream (e.g., student housing), and thus can provide a cash flow return to the private investor.

Capital Renewal Funds

The college funds a capital renewal fund each year with a cash transfer from the operating proforma in the form of depreciation expense. In 2019, the annual transfer was about \$7 million. Over time, that amount declines as assets are depreciated and increases as new assets are put in place (e.g., new construction projects).

Funding Assumptions for Projects (First Five Years)

The college has targeted approximately \$60 million in donor funding through a capital campaign. These funds are generally targeted for **high-profile new construction projects**.

Near-term deferred maintenance projects are assumed to be fully funded when undertaken, using funds from the capital renewal fund.

Revenue-generating projects (assumed for this effort to be housing-related) are proposed to be funding in either of two ways:

- **Bond Issuance and Debt-funding:** The college would issue bonds for the project, would receive project revenue,s and incur project operating and debt service expenses. Debt service would be paid from project revenues and general college revenues (through the capital renewal fund) to the extent that project revenues did not fully cover costs.
- **Public-Private Partnership (P3):** Lewis & Clark would hire a private developer to build and possibly manage the project. Under this scenario, the project is assumed to be fully off the books of the college (i.e., no revenue or expenses). At the time of this report, the primary near-term project considered for P3 funding is construction of Templeton North residential beds. (Two other projects—JR Howard Café renovation and Tamarack Lounge renovation—would also be funded externally, but are not P3

projects in the traditional sense; rather, existing vendors running operations in these spaces are anticipated to provide renovation funds.)

As the college begins to implement near-term projects, it will explore opportunities to use P3 funding, and will determine which projects, if any, will be implemented through this funding mechanism.

Individual Capital Projects by Phase

In current dollars, the total capital cost for all projects is estimated at \$382.9 million, of which \$154.0 million is for near-term projects, and \$228.9 million is for future projects.

Individual Near-term Projects

Four projects are anticipated to paid for with donor funds—the Corbett House renovation, Olin Sciences Center renovation, Templeton College Center renovation, and the associated pedestrianization of and utility upgrades along Templeton Way.

A large number of projects will be paid for with capital renewal funds. These are largely deferred maintenance and renovation projects.

Four projects are funded through debt service and/or P3 funds. As noted above, two of these projects are renovations of JR Howard Café and Tamarack Lounge—funded with vendor contributions. How the two major housing projects—construction of Templeton North residential beds and the Hartzfeld replacement bed project—will be funded is to be determined pending further exploration of the possibilities and benefits of P3 funding versus bonding and debt service. If either project ends up being funded through bond issuance, it is anticipated that funding to support payment of associated debt service would be drawn from the capital renewal fund, unless other funding sources were to be identified.

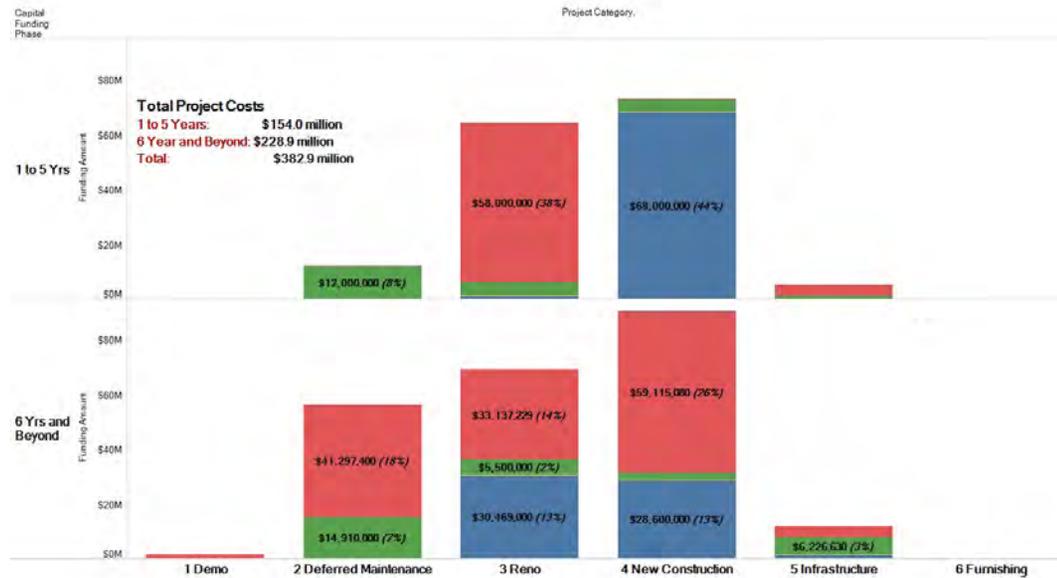
Future Projects

At the time of this report, the preponderance of financing for future projects was assumed to come through donor funds. Given the time horizon before any of these projects are likely to begin, assumptions may certainly change—in terms of funding sources, project priorities and needs, and timing. The financial model has been designed so that Lewis & Clark can continue to test assumptions about capital projects, their costs and timing, and their impact on the financial operations of the college.

Capital Projects by Funding Source and Project Type – All Projects



Capital Projects by Project Type and Funding Source – 1 to 5 years and Beyond



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