Oregon State University
CORVALLIS CAMPUS VISION
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EXECUTIVE SUMMARY
COMMITTED TO PROGRESS

In 2018 the Oregon State University adopted Strategic Plan 4.0 (SP4.0) and embraced a vision of innovation, access and leadership for its next phase. The Corvallis campus has a crucial role to play in working toward the goals of SP4.0. As OSU strives to uphold its commitments within SP4.0 and reinforce its strengths, the physical form of the campus will evolve and adapt to support those commitments. This physical form will need to integrate with a university experience defined by collaborative research and learning and a culture of inclusion and concern for environmental impact. The Corvallis Campus Vision sets a course to guide the progress of evolution and adaptation over the next 10 years. The CCV’s vision for the campus emerged from a process of assessment and understanding, listening, developing ideas and designing recommendations. Throughout the visioning process, a variety of groups and constituents across campus and in the Corvallis community shared their perspectives on the current campus and opportunities for the future. The CCV’s recommendations align with existing plans for the Corvallis campus and adhere to a set of principles and values expressed by the campus community.

The resulting vision seeks to preserve the distinctive historic character of the Corvallis campus’s physical form while supporting OSU’s mission to promote progress through exceptional teaching, learning, research, discovery, innovation and engagement.

OSU MISSION AND STRATEGIC PLAN 4.0

OSU strives to put the resources of higher education within the grasp and ambition of all people while engaging with the public, preserving natural systems and advancing social ideals. This is how OSU promotes progress, the core element in its mission.

As a land grant institution committed to teaching, research, outreach and engagement, Oregon State University promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. — OSU Mission
SP4.0 VISION AND GOALS

SP4.0’s vision is for OSU to be a leader among land grant universities in the integrated creation, sharing and application of knowledge for the betterment of humankind.

In this way, the university will continue to produce graduates, scholarship and solutions that achieve maximum positive impact on humanity’s greatest challenges.

GOALS

Preeminence in research, scholarship and innovation
Transformative education that is accessible to all learners
Significant and visible impact in Oregon and beyond
A culture of belonging, collaboration and innovation

Focused on the ways the campus’s physical environment brings OSU’s diverse groups and individuals together to meet the university’s goals, the Corvallis Campus Vision’s recommendations contribute to the SP4.0 effort to sustain a place of health and well-being where every OSU individual feels emboldened to pursue their talents and ideas to their most innovative ends.

THE CORVALLIS CAMPUS VISION: PRESERVE, ENHANCE, INSPIRE

The CCV focuses on the future of the Corvallis campus’s physical environment. Its overarching strategy is to foster connections between people by strengthening the organization of buildings, open spaces and circulation.

The CCV articulates clear direction that aligns campus adaptation and development with SP4.0’s commitment to inclusive academic excellence. More specifically, it

▷ Establishes a unified direction for physical development that connects SP4.0 to ongoing planning and design of the campus.
▷ Outlines opportunities to guide the physical realization of SP4.0.
▷ Provides a vision and framework for future university policies, plans and studies related to the physical campus using guiding principles.
▷ Ensures that future development meets individual and community needs in ways that promote safety, comfort, access and collaboration.

OSU is a welcoming and inspiring place to study, work, live, play and visit. The Corvallis campus’s distinct historic character is preserved and the physical environment is adapted for a sustainable future. The campus fosters inclusion and provides flexible spaces for learning and research.

— OSU Corvallis Campus Vision Statement
Executive Summary

The CCV bridges SP4.0 with capital improvements including renovations.

View of the Corvallis campus facing west.

Draft - July 2020
CCV GUIDING PRINCIPLES

The planning team synthesized responses gleaned from the engagement process and deepened understanding through analysis of physical conditions. From this understanding came a set of principles to guide the rest of the visioning process and the CCV recommendations. These principles cluster around several themes that reflect the ethos of social and environmental responsibility in SP4.0.

### CCV Guiding Principles

<table>
<thead>
<tr>
<th>Environment Responsibility</th>
<th>Sustainability</th>
<th>The Corvallis campus should minimize its environmental impacts and support sustainability education, research, innovation and leadership.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contiguous Natural-Resource and Agricultural Land</td>
<td>The Corvallis campus should advance the university’s legacy of natural resource and agricultural teaching and research on contiguous and accessible land.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Responsibility</th>
<th>Accessibility</th>
<th>The Corvallis campus should continually undertake universal-access improvements for diverse ages and abilities.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inclusion</td>
<td>The Corvallis campus should prioritize inviting spaces that express a welcoming and inclusive campus culture.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respect for Resources</th>
<th>Fiduciary Responsibility</th>
<th>The Corvallis campus should serve as a responsible steward of public resources, tuition dollars and philanthropic contributions.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adaptability</td>
<td>The Corvallis campus should focus on providing flexible spaces and facilities that can evolve with the needs of innovative research and learning.</td>
</tr>
</tbody>
</table>
### CCV Guiding Principles

<table>
<thead>
<tr>
<th>CAMPUS INTEGRITY</th>
<th>Connected Open Space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Corvallis campus should support the network of usable outdoor spaces that are integrated into the campus fabric and continue this pattern in expansion and redevelopment areas.</td>
</tr>
<tr>
<td>Robust Infrastructure</td>
<td>The Corvallis campus infrastructure, including buildings, open space and utilities, should be durable, resilient and of sufficient capacity and condition to support all campus activities and services.</td>
</tr>
<tr>
<td>Distinguished Character</td>
<td>The Corvallis campus should maintain the distinctive positive aspects of the campus character and ensure that all development reinforces those characteristics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNITY STRENGTH</th>
<th>Internal Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Corvallis campus should reinforce its physical framework with circulation systems that knit the campus together and promote community cohesion.</td>
</tr>
<tr>
<td>Public Connections</td>
<td>The Corvallis campus should encourage constructive interaction with the city and surrounding communities.</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>The Corvallis campus should continue to cultivate a community oriented toward campus safety and security.</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS: GUIDING PROGRESS

To guide the vision for a campus that fosters a unified experience and a strong community interface, the CCV balances recommendations for its campus-wide framework of organizing systems with recommendations for opportunity sites identified in the Central, East, South and West Areas.
CAMPUS-WIDE STRATEGIES FOR ORGANIZING SYSTEMS

The well-designed integration of the Corvallis campus’s strong organizing systems of Open Space, Circulation and Development makes it easy for people to access, navigate and use the campus to its fullest potential as a place of collaborative learning and innovation.

The CCV recommends strategies that build on the strengths of the Corvallis campus’s organizing systems while aligning the existing infrastructure with the university’s sustainability goals. It encourages:

▷ DEVELOPMENT that focuses on adaptation and renovation first and preserves the valued character of the campus.
▷ OPEN SPACE that preserves, enhances and expands important vital places, supports campus life and celebrates the land-based research of the university;
▷ CIRCULATION that broadens nonvehicular travel options and improves pedestrians’ experience; and

Development

The pattern and relationships among the Corvallis campus’s buildings are a fundamental component of its physical framework and immediately evident aspect of its character. The materials and scale of campus buildings, especially in the Central Area, maintains an elegance that is responsible for much of the campus’s physical distinction while state-of-the-art functionality supports on-site and distance-learning innovation. The placement, form and scale of the buildings in a parklike setting allow for daylight and views that invite circulation and activation of its gracious and plentiful open spaces.

The future of higher-education funding in Oregon and OSUs’ commitment to financial stewardship renders incremental adaptation the most fiscally responsible approach to development on this OSU campus. To meet the needs of the university’s educational and research mission and to uphold its commitment to sustainability, the CCV calls for the adaptation and renovation of existing buildings before replacement of buildings is considered. Its recommendations emphasize beneficial adjacencies between colleges and departments as well as the collaborative opportunities of integrating learning spaces into housing and creating residential sub-communities. The recommendations also promote the delineation and activation of site edges for greater safety and a more cohesive campus experience.

The CCV principles of Accessibility, Adaptability, Contiguous Natural-Resource and Agricultural Land, Distinguished Character, Fiduciary Responsibility, Inclusion, Internal Connectivity, Public Connections, Robust Infrastructure, Safety and Security and Sustainability guide its recommendations for preserving and enhancing the Corvallis campus’s development system.
Open Space

The Corvallis campus’s open spaces provide places for OSU’s communities to gather, celebrate, recreate and engage in education and research. The simplicity and elegance of its primary open spaces—the quadrangles—establish character and provide important organizing elements of the campus form. Other open spaces throughout campus serve different purposes and have their own distinct landscape character.

The CCV’s recommendations apply to several types of open spaces. These range from vital open spaces—including those designated for permanent protection, such as Memorial Quad and the 30th Street Mall—to connective spaces and recreation and athletics fields. The recommendations include open-space activation strategies and emphasize the importance of the campus’s robust tree canopy as a marker of OSU’s distinguished character and core strength in Earth-systems research.

The CCV principles of Accessibility, Adaptability, Connected Open Space, Distinguished Character, Inclusion, Internal Connectivity, Public Connections, Robust Infrastructure, Safety and Security and Sustainability guide its recommendations for preserving and enhancing the Corvallis campus’s open space system.
Circulation

The Corvallis campus’s circulation system is fundamental to the campus experience because it organizes access through its spaces and places and establishes important wayfinding. The simple orthogonal orientation of streets and direct routing of walkways to buildings help form an understandable, easily navigable network, allowing people to reach their destinations with confidence and a sense of safety.

Building on OSU’s Transportation Plan, the CCV calls for circulation that prioritizes the accessibility and safety of nonvehicular travel as well as reduced traffic and parking. It proposes mobility hubs located on key routes and destinations in the Central Area. In addition, its recommendations include strategies for clarifying campus edges and frontages, which will reinforce campus identity, promote wayfinding and create inviting interfaces with the surrounding community. Its streetscape recommendations support climate-neutral transportation within the fundamental structure and character of the Corvallis campus.

The CCV principles of Accessibility, Adaptability, Distinguished Character, Inclusion, Internal Connectivity, Public Connections, Robust Infrastructure, Safety and Security and Sustainability guide its recommendations for preserving and enhancing the Corvallis campus’s circulation system.
Other campus-wide systems are important contributors to campus function and help to meet campus goals. Campus-wide Utilities, Sustainability, and Safety and Security are addressed at a general level in the CCV. More specific strategies and policies are provided through Capital Planning and Development and Public Safety.

**Utilities**

Campus-wide utilities are adequate to support the adaptation, renovation and development for another 10 years, after the completion of current maintenance projects for the electrical system. Strategies for strengthening and updating existing utility infrastructure should align with OSU’s Climate Action Plan and the president’s 2019 Call for Action to Address Climate Change. The CCV principles of Adaptability, Fiduciary Responsibility, Robust Infrastructure and Sustainability guide these strategies for preserving and enhancing the Corvallis campus’s utilities infrastructure.

**Sustainability**

The CCV includes several specific strategies to support the university’s goals for reducing its carbon footprint:

- An explicit commitment to renovation and adaptation of existing buildings before constructing new.
- Comprehensive strategies for utilities, such as promoting the university’s clustered district heating and cooling approach.
- Focus on a compact campus, enhanced pedestrian opportunities and bicycle routes and the development of mobility hubs to promote reduction in the use of single-occupant vehicles to and around campus.

The CCV principles of Adaptability, Fiduciary Responsibility, Robust Infrastructure and Sustainability guide these strategies for preserving and enhancing sustainability on the Corvallis campus.
**Safety and Security**

A targeted effort to improve lighting and pedestrian routes and adding ground-floor active uses to adjacent buildings in the South and West Areas will increase their sense of safety and help to address community concerns expressed during the CCV visioning process. At the same time, the 10 principles of Crime Prevention Through Environmental Design (CPTED), a nationally recognized approach to creating safe and accessible public spaces, should continue to be promoted on the campus. These principles have already proven successful on campus in a variety of areas such as natural surveillance and territorial reinforcement of the Hawley/ Buxton/ Poling/ Cauthorn inner courtyard and reduction of hiding places through vegetation management.

*In addition to Safety and Security, the CCV principles of Inclusion and Internal Connectivity guide these strategies for preserving and enhancing safety and security on the Corvallis campus.*
OPPORTUNITY SITES AND RECOMMENDATIONS BY CAMPUS AREA

The CCV complements its recommendations for the campus-wide organizing systems with recommendations tailored to the character of the Central, East, South and West Areas. In each area, key initial opportunity sites for physical adaptation, redevelopment, enhancement and activation are identified. The configuration of each opportunity site should reinforce the open space and circulation systems in support of a cohesive campus experience and a strengthened physical framework.
Central Area

The Central Area’s characteristic buildings and grand open spaces should continue to draw the OSU’s communities together. Its existing connectivity and overall accessibility should serve as a model for other campus areas.

The CCV has identified three strategies to support adaptive development in the Central Area:

▷ An improved NW Monroe Avenue edge with an overall increase in physical and visual porosity, including more welcoming entries to buildings and better established routes into the campus
▷ Improvements to the primary east-west pedestrian connection and enhanced outdoor-use spaces in the engineering cluster
▷ Greater activation of open spaces throughout
▷ Implementation of Community Hall slope to accommodate accessible routes

East Area

The East Area should be a graceful, welcoming campus edge for the adjoining neighborhood while fostering a rich student-life environment of living, academic and extracurricular collaboration and innovation.

The CCV has identified strategies to support adaptive development in the East Area:

▷ An enhanced student-housing zone with a central open space
▷ Connectivity that reinforces campus edges and aligns with city streets
▷ An improved north connection to the lower campus quad and an east-west connection to the Central Area
▷ Potential for Education & General functions to be integrated with residential uses and enhance live-learn opportunities

The CCV principles of Accessibility, Distinguished Character, Inclusion, Internal Connectivity, Public Connections, Safety and Security and Sustainability guide the proposed enhancements in the Central Area.

The CCV principles of Distinguished Character, Inclusion, Internal Connectivity, Public Connections and Safety and Security guide the proposed enhancements in the East Area.
South Area

The South Area should continue to host important celebrations of OSU’s identity through athletic events and support active modes for all along SW Western Boulevard. Its rich student-life environments should include easy access to functions north of SW Washington Way.

The CCV has identified five strategies to support adaptive development in the South Area:

▷ Streetscape improvements and a more identifiable campus edge along SW Western Boulevard
▷ A strengthened gateway and sense of entry at SW 26th Street and SW Western Boulevard
▷ An improved student-housing zone with a communal open space
▷ The potential for integrated Education & General functions
▷ Athletics facilities and parking with convenient public access.

West Area

The West Area should continue to function as a research, learning and partnership zone, supporting OSU-specific activities as well as collaborations with other government, NGO and corporate entities. West of SW 35th Street, the university’s Natural Resource/Agricultural Research activities should be clearly identified and celebrated.

The CCV has identified four objectives for adaptive development in the West Area:

▷ Improved campus connections across SW 30th Street
▷ Marking and celebration of land-based research west of SW 35th Street
▷ Reconfiguration of Peavy Fields and adjacent buildings and pedestrian corridors
▷ Improved north-south pedestrian connections

The CCV principles of Accessibility, Distinguished Character, Inclusion, Public Connections and Safety and Security guide the proposed enhancements in the South Area.

The CCV principles of Connected Open Space, Contiguous Natural-Resource and Agricultural Land, Distinguished Character, Inclusion, Public Connections, Safety and Security and Sustainability guide the proposed enhancements in the West Area.
For more than 150 years, OSU has set both a statewide and national standard of academic excellence. The university has distinguished itself as a preeminent institution of higher education and research. It has accomplished this by engaging the people of Oregon, the nation and the world in collaboration and innovation that improves all aspects of life. OSU strives to put the resources of higher education within the grasp and ambition of all people. This is how OSU promotes economic, social, cultural and environmental progress at the core of its mission.

With the adoption of Strategic Plan 4.0 (SP4.0) in 2018, OSU has begun to envision making academic excellence broadly accessible.

**SP4.0 VISION**

- Leadership among land grant universities in the integrated creation, sharing and application of knowledge for the betterment of humankind.

**SP4.0 GOALS**

- Preeminence in research, scholarship and innovation
- Transformative education that is accessible to all learners
- Significant and visible impact in Oregon and beyond
- A culture of belonging, collaboration and innovation
Driving this vision of OSU leadership in public education is a renewed commitment to the values that have consistently shaped OSU’s ability to impact the world at all scales, ranging from the immediate community to planet-level systems.

COMMITTED TO PROGRESS

The Corvallis campus has a crucial role to play in the implementation of SP4.0’s vision of innovation, access and leadership. That role will be supported by the campus’s physical form—which in turn will continue to anchor the campus experience in adaptive spaces, sustainable structures and the world-class programs they host. The Corvallis Campus Vision (CCV) presents a direction for the physical campus that fully supports SP4.0.

Building on the strengths of the campus’s character and overall organization, the CCV is designed to guide the campus’s evolution over the next 10 years. Its overarching goal is to ensure a safe, comfortable, welcoming place for OSU’s many visitors, students, faculty, staff, residential and distance-learning communities. Its strategies and recommendations follow guiding principles clustered around themes that reflect OSU’s commitments to the environment and social progress. These principles are described in Part 3: The Vision.

As a land grant institution committed to teaching, research, outreach and engagement, Oregon State University promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. — OSU Mission
EXISTING PLANS

In the context of SP4.0, several recent plans have been completed, and others are underway. They include strategic plans for academic, administrative, student-life and athletics units, each articulating goals tailored to support SP4.0. The 2018 Transportation Plan was developed to better integrate multimodal circulation on campus. Sustainability planning and assessment reports are completed regularly and track progress on increasingly ambitious goals. Construction standards are reviewed and updated annually. The 2004 Campus Master Plan provides an important backdrop for this effort, as does the OSU Historic Preservation Plan.

Examples of existing plans, standards, assessments and recommendation:

▷ Individual plans for academic, administrative, student-life and athletics units
▷ 2004 OSU Campus Master Plan
▷ 2010 OSU Historic Preservation Plan
▷ OSU Transportation Plan
▷ OSU Design Guidelines
▷ Construction Standards
▷ Infrastructure Assessments
▷ Sustainable Transportation Strategies

The CCV aligns with these plans. Its recommendations contribute to the multipronged effort to sustain a place of health and well-being where every individual feels emboldened to pursue their talents and ideas to their most innovative end.
PURPOSE

The CCV provides a toolkit of site- and context-specific recommendations for enhancing the physical quality of the Corvallis campus. Its overarching strategy centers on strengthening connections between people through the organization of buildings, open spaces and circulation as a foundation for a sustainable, inclusive campus culture.

The CCV articulates a clear direction that aligns campus adaptation and development with SP4.0’s commitment to inclusive academic excellence. More specifically, it:

▷ establishes a unified direction for physical development that connects SP4.0 to ongoing planning and design of the campus.
▷ outlines opportunities to guide the physical realization of SP4.0.
▷ provides a vision and framework for future university policies, plans and studies related to the physical campus.
▷ ensures that future development meets individual and community needs in ways that promote safety, comfort, access and collaboration.

APPROACH

The CCV is intended to establish a unified direction for campus design and development policies and, ultimately, capital improvements. Its vision and recommendations are intended to guide university staff, leadership, and advisory groups’ approaches to new project opportunities and the evolving needs and conditions of the campus.

The CCV focuses on the future of the Corvallis campus’s physical environment. It recommends the renovation or adaptation of existing facilities before new or replacement structures are considered. It promotes a connected, cohesive campus of well-integrated open spaces and circulation. It encourages the preservation of meaningful views and places, elegant architectural language and the campus’s mature landscape. It aspires to honor OSU’s commitment to inclusion and equity with accessible, safe, active open spaces that make the Corvallis campus an energetic center of community enterprise and imagination.
Figure 1.1
The CCV provides guidance to physically implement SP4.0
THE CORVALLIS CAMPUS VISION

The CCV is the culmination of a visioning process that sought input through campus and community outreach and assessed existing conditions. The result is a vision statement and subsequent recommendations identifying opportunities for adaptation and enhancement of the campus’s character and organization.

OSU is a welcoming and inspiring place to study, work, live, play and visit. The Corvallis campus’s distinct historic character is preserved and the physical environment is adapted for a sustainable future. The campus fosters inclusion and provides flexible spaces for learning and research.

— OSU Corvallis Campus Vision Statement

Clockwise from top left: Supporting the future of learning; Benton Hall, constructed in 1887; students at the Centro Cultural César Chávez; hands-on learning.
The CCV describes a strategic framework for pursuing adaptation and development opportunities and an approach for future planning and design. The CCV report includes:

▷ an understanding of the Corvallis campus’s context and current conditions
▷ a set of guiding principles synthesized from priorities expressed by OSU and its communities
▷ a framework for preserving the campus’s physical character while supporting the campus’s evolving needs, organized around:
  – strategies for the enhancement and activation of open spaces
  – strategies for adaptive facility reuse and accessibility
  – an integrated pedestrian, bicycle and vehicular system with improved wayfinding
  – an assessment of infrastructure needs to accommodate projects sustainably for the next 10 years
  – identification of opportunity sites and potential uses.

Organized into four parts, Volume 1 first establishes the context for the vision. It reviews the process that informed the vision’s strategic framework. It assesses the important campus conditions and its physical relationship to the surrounding community. The CCV then introduces the vision, including the guiding principles that underlie the recommendations for campus adaptation and enhancement. It then details strategies for more fully integrating the Corvallis campus and presents recommendations for adaptation and enhancement. In the final section, the CCV establishes an initial set of tools to guide decision making around physical development as university and campus needs evolve with the implementation of SP4.0. Volume 2: Technical Detail provides additional information on analyses performed throughout the project.
VISIONING PROCESS

The CCV’s vision for the Corvallis campus’s future was developed through a process that began with understanding the campus and how it supports, connects and engages the people who use it. The vision emerged from an iterative process of listening and understanding, developing and vetting ideas, then documenting the vision and recommendations.

LISTENING AND UNDERSTANDING

In order to understand the strengths and challenges of the Corvallis campus, the planning team listened to the people who study, work, live, play and visit. Using a range of outreach techniques, the planning team solicited input from a broad cross-section of campus stakeholders about their needs and priorities. Concurrently, the team studied existing conditions of the campus, current policies and plans and historic development. They then synthesized this quantitative and qualitative information into a set of guiding principles developed with the CCV Steering Committee.

DEVELOPING AND DOCUMENTING IDEAS

With an understanding of the campus and an initial direction, the planning team used the guiding principles to explore and develop concepts and options for respectfully integrating physical changes into the campus. OSU representatives, campus stakeholders and community members continued to help shape the vision.
OUTREACH PROCESS

The strategies and recommendations detailed in the CCV respond to the needs and priorities shared by students, faculty, staff and Corvallis community members at large. Their feedback gave special attention to:

▷ buildings
▷ landscape
▷ transportation
▷ housing
▷ safety
▷ sustainability
▷ cultural and ecological contexts

The planning team used several strategies to understand the ways people directly affiliated with OSU and people from the surrounding area experience and value the Corvallis campus. The team designed the strategies to elicit feedback that would lead to development of a vision for the campus.

Project Website

The CCV website communicated project information throughout the process.

Online Survey

A geo-based online survey early in the effort focused on where, how and when participants spend time on campus as well as the quality of their experiences.

Focus Groups

Fifteen campus groups representing a range of interests across campus (such as historically underrepresented students, faculty, transportation, public safety, childcare and disability services) participated in focus groups.

Each set of discussions allowed for in-depth conversation about how well the campus supports of each groups concerns and goals.

Pop-Up Stations

Booths at Memorial Union, Dixon Recreation Center and the Corvallis Farmers’ Market as well as a community open house at the Corvallis-Benton County Public Library captured a broad range of perspectives.

Presentations

Periodic reporting to campus groups, OSU leadership and the Corvallis City Council provided important input during the iterative process of developing the vision.

The input elicited by this extensive outreach generated multiple concepts and culminated in the vision and recommendations documented here in the Corvallis Campus Vision. For more information on the process and findings, please refer to Volume 2: Technical Detail.
THE CORVALLIS CAMPUS

The OSU Corvallis Experience 39
The Corvallis Campus in Context 40
Campus Profile 42
Campus Character and Organizing Systems 44
The CCV’s vision and recommendations are informed by a set of guiding principles that took shape in the course of outreach and engagement with people who interact with the Corvallis campus in a great variety of ways as well as a detailed analysis of existing conditions. These principles, described in detail in Part 3: The Vision, are the bridge between OSU’s institutional strengths and values and how people will experience OSU and the Corvallis campus in the future.

In order to adapt and evolve in a manner that continues to strengthen the campus as a welcoming, safe, comfortable academic environment, it is essential to understand both the campus history and conditions as they exist today. The following pages offer a historical and institutional context for the campus, followed by a summary of its existing conditions. For further detail, please refer to Volume 2: Technical Detail.
OSU is one of just two universities in the country to achieve status as a land-, sea-, space- and sun-grant institution. It is the only such institution on the West Coast. Situated on the traditional territories of the Kalapuya people, the Corvallis campus is the site of the original farm purchased by the State Agricultural College of the state of Oregon as part of its land grant, and it is where the college relocated in 1870.

Today it is a campus of diverse uses, spanning 570 contiguous acres immediately proximate to research lands that reach to the foothills of the Coastal Range.

OSU’s formative years gave rise to multiple master plans. A 1909 plan by the Olmsted Brothers focused on creating a strong sense of arrival from downtown. It included a foundational street grid, in which buildings faced both streets and internal quadrangles.

As the campus expanded, adding varied new spaces and multiple entries, it maintained its foundational balance of buildings, circulation and open spaces.

Athletics and recreation facilities were located to the south, uniquely proximate to the educational core and housing. Land to the northwest serves OSU’s land-based research and education, supporting its mission as a land-grant institution.

A portion of the Corvallis campus has been designated as one of three National Register historic districts clustered just west of downtown; this area has always shared a strong physical relationship with the surrounding community. That physical interface with the community is along the quiet SW Madison Avenue connection to downtown, along the eateries on NW Monroe Avenue and in the residential areas to the north and along SW Western Boulevard.

The university owns significant off-campus land throughout the region, including McDonald Forest, properties on Research Way, South Farm, just south of U.S. 20. While these lands are important to OSU’s mission, the CCV focuses on the contiguous campus area located in Corvallis.
Figure 2.3
OSU Campus and Research Lands

Figure 2.4
Surrounding Influences

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More than 24,000 undergraduate students attend OSU at the Corvallis campus. Another 5,000 graduate and professional students complete the student body.

Currently, 25 percent of students are U.S. minorities and 11.5 percent are international students. White students continue to make up the majority. However, the proportion of nonwhite students has been consistently growing. It is a point of pride that OSU’s retention and graduation rates are in the top 10 percent among land-grant universities nationally and there are no achievement gaps among subgroups of learners.

As the student body changes, so the curriculum and methods of education and research are changing. Research and communications technologies enable and encourage collaboration in every academic endeavor, while distance learning is a method used more and more frequently by faculty and academic programs. OSU’s facilities and programs must continue to support the interactions that students, programs, faculty and researchers require and expect in order to excel.
OSU offers more than 200 undergraduate and 100 graduate degree programs. Its curriculum aims to be interdisciplinary and collaborative in nature, to prepare students for long-term professional success. Ranked among the “Best Global Universities” by U.S. News and World Report, the university’s 11 specialized colleges, Honors College and Graduate School attract students from around the globe.

A broad range of outstanding academic programs are offered, supported by excellent faculty in science, engineering, veterinary medicine, business, health, education and liberal arts. The agricultural sciences and forestry departments are supported by partnerships with state and federal agencies and with easy access to local farmland and natural areas.
The Corvallis campus’s physical form and character play an integral role in supporting collaboration and innovation at OSU.

The physical form achieves its dignified and welcoming nature from the interrelationship of three organizing systems: development, open space and circulation. Each system symbiotically supports the others. Together they create the campus, uniting its many uses and activities. A thorough understanding of these organizing systems underpins the CCV’s recommendations for strengthening the campus’s physical form and historic character. This section describes the current conditions within each system as well as the campus’ environmental context and city connections.

Figure 2.7
OSU Corvallis Campus, 2019
DEVELOPMENT

The pattern and relationships among the Corvallis campus’s buildings are a fundamental component of its physical framework and immediately evident aspect of its character. The campus’s historic grid pattern and structures will influence future campus development.

DEVELOPMENT PATTERNS

The Corvallis campus is composed of a mix of neoclassical and contemporary buildings, organized within a distinctive grid of streets and framed internal quadrangles. The distribution and relative size of the buildings allows daylight and a verdant landscape to permeate the campus environment.

Over the last several decades, new university buildings in a wide range of sizes have been constructed to meet program needs while carrying OSU’s development traditions forward. Through this evolution, the Corvallis campus’s welcoming nature and easy navigation have been maintained and enhanced.

Figure 2.8
Development Patterns
BUILDING DESIGN

The materials and scale of campus buildings offer an elegant permanence to the campus character. Similar features and a richness of detail create an integrated experience, especially in the Central Area.

The original buildings are typically red brick or stone, organized into defined base, middle and upper parts. Buildings constructed after 1945 departed from this neoclassical approach with modern materials, fenestration and minimized detailing. The contemporary design of the most recent buildings complement the original structures while supporting current educational needs. The buildings west of NW 35th Street support the university’s land-based research and are more utilitarian in nature.

Clockwise from top left: Gilkey Hall, Strand Agriculture Hall, Oldfield Animal Teaching Facility, Austin Hall
BUILDINGS BY AGE

Campus character varies within the Corvallis campus, influenced by the age of each area’s original buildings. The Central Area along NW Monroe Avenue, SW Campus Way and SW Jefferson Way features many of the earliest campus buildings, though this area also has a number of buildings from each decade of the university’s development. The East and South Areas consist of a number of buildings from midcentury through the 2000s. Buildings constructed in the last 10 years are distributed throughout campus.
CAMPUS STEWARDSHIP

Each building's general use and predominant users determine stewardship for its space. Educational and general academic and administrative functions (referred to as "Education and General") are concentrated in the Central and West Areas. The concentration of Education and General functions north of SW Washington Way supports an increasing focus on collaboration and interdisciplinary work. Most classroom space is located north of SW Jefferson Way and helps to support 10-minute walking time between classes.

Athletics and Student Affairs are the primary occupants of buildings south of the Central Area. University Housing and Dining Services (UHDS), including student residence halls, cluster to the west, east and south.

Research spaces are located throughout the campus, illustrating the ubiquitous nature of research activities occurring across schools, colleges and departments.

Figure 2.10
Buildings by Responsible Steward, 2019
OPEN SPACE

A network of open spaces supports OSU’s culture of sustainability, collaboration and academic and research excellence. Permanently Protected Open Spaces and Protected Significant Vegetation embody the rich history and character of OSU. These spaces are beloved by the OSU community for their open lawns, mature trees and array of flowering shrubs and will be permanently protected. Additional campus open spaces such as plazas, porches, pathways and recreational fields provide connectivity and opportunities for study, gathering and

Figure 2.11
Protected Open Spaces

- Permanently Protected Open Spaces
- Protected Significant Vegetation
Corvallis campus circulation is characterized by an integrated network of pedestrian pathways and a grid pattern of roadways providing access for bikes and vehicles. For example, a Pedestrian/Bicycle Priority Zone has been designated in the Central Area.

The OSU Transportation Plan found portions of this network to be deficient in meeting today’s multimodal circulation needs. Pedestrian pathways, while exhibiting few gaps, could be improved to meet design guidance standards. Bike lanes provide safe access along the periphery of campus, while bike lanes and contraflow bike lanes (i.e., flowing against vehicular traffic) provide areas of safe access within the campus interior. Primary thoroughfares, however, such as SW Campus Way and SW Washington Way, remain “bicycle areas of concern.”
A number of roadways in the campus interior are classified with low ratings for pavement condition, particularly SW Campus Way between SW 14th and SW 30th Streets. Roadways leading into the campus were found to be in good or fair condition. Projects have been identified to address these issues.

EDGES, GATEWAYS AND PORTALS

Edges around the Corvallis campus perimeter vary depending on land use, adjacent streets and campus development. As the campus has grown over the years, its edges have in some cases become blurred with surrounding uses. Extension of the city’s grid pattern served as the framework for the Central Area. This historic pattern influences campus development today.

Gateways and portals vary in their efficacy at assisting visitors and vehicle drivers with orientation, wayfinding and clarity as they enter the pedestrian-oriented campus.

*Related to projects certified with LEED (Leadership in Environmental and Energy Design) and the need to reserve land to obtain that rating
OSU undertook an assessment of selected campus-wide systems to begin to identify necessary improvements and establish direction for future utilities, planning and investment. Consistent with the university's commitment to conserving energy and water resources, the university is currently in the process of implementing a steam renewal project that includes recapturing and recycling heated steam condensate water. This will result in a substantial amount of water and energy savings. At the same time, the university is implementing regional district cooling as a more energy-efficient approach to controlling indoor air temperature.

Overall, the centralized steam generation and distribution system was determined to be of adequate capacity to support the current load. With campus expansion, additional support may be needed for specific areas of campus.

OSU does not currently have a campus-wide chilled-water distribution system to support air-conditioning. Cooling is provided by local systems, and there is limited chilled-water distribution in two regional locations. The university is presently considering a development plan that would interconnect local chiller loops into a larger distribution system, which could be incrementally expanded throughout the entire campus. In addition to the North District Utility Plant, two additional regional chiller plants may be constructed in the following locations:

- **West Plant**: West of SW 30th Street in the vicinity of Peavy Field/Energy Center
- **East Plant**: Near SW Washington Way and SW Benton Place near the old steam plant.

Pacific Power currently owns the primary electrical distribution system on campus. It maintains all primary service equipment, including the substations and building transformers. OSU maintains secondary conductors and conduit. In the event of an emergency, Pacific Power responds to equipment issues. After completion of several deferred maintenance projects, the electrical system is expected to provide reliable service and adequate capacity for all forecasted development for another 10 years.
SUSTAINABILITY

Incorporating sustainability practices has been an OSU priority for development activities for more than 20 years. These practices include:

▷ Designing and constructing buildings using Requirements for Sustainable Development, to help accelerate progress towards OSU’s carbon emissions reduction goals. The RSD are based on external green building rating systems, like LEED (Leadership in Energy and Environmental Design), and emphasize measures that reduce energy consumption

▷ Meeting or exceeding the State of Oregon energy codes and standards

▷ Vigorously working on reducing the university’s carbon footprint with actions that include:
  – signing the American College and University Presidents Climate Commitment (ACUPCC)
  – monitoring energy use in buildings
  – retro-commissioning buildings to make them more energy efficient

▷ Encouraging sustainable transportation uses through:
  – implementation of pedestrian paths and bike lanes throughout campus with connections to the community network of sidewalks and bike paths
  – contributions to the community's transit system, so students and faculty can ride fareless
  – installation of carpool priority parking spaces
  – installation of electric-vehicle charging stations
  – campus shuttle bus system

▷ Coordinating installation of a solar farm on the west side of campus

▷ Incorporating bioswales, particularly in parking lots

▷ Incorporating native and drought-tolerant plants throughout the campus landscape

▷ active recycling and reuse (property surplus) programs.
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PRESERVE, ENHANCE, INSPIRE

The Corvallis Campus Vision provides a framework for making design and policy decisions about the physical form of the Corvallis campus. The campus should demonstrate OSU’s leadership among peer institutions by serving as a model of sustainable growth and accessible, welcoming environments. To this end, future planning decisions should preserve and enhance the character of the physical form that supports a cohesive, inclusive campus community. In doing so, future planning decisions should seize opportunities to create places throughout the campus that inspire collaboration, innovation and learning.

OSU is a welcoming and inspiring place to study, work, live, play and visit. The Corvallis campus’s distinct historic character is preserved and the physical environment is adapted for a sustainable future. The campus fosters inclusion and provides flexible spaces for learning and research.

THE CORVALLIS CAMPUS VISION

The CCV is a comprehensive vision supported by guiding principles and recommendations to enable the education, research, community and outreach missions of OSU. The CCV establishes a clear, unified direction for the studies, plans and policies that the university will undertake in the design of its physical campus over the next decade.

Supporting the direction set out in Strategic Plan 4.0, the Corvallis Campus Vision focuses on how the physical campus can advance the Strategic Plan’s goals. It prioritizes the established physical environment and recommends consideration of renovation or adaptation of existing facilities before new or replacement structures are considered. It emphasizes open spaces where a mature tree canopy and safe, accessible movement can prevail. It also highlights opportunities to promote activity and engagement.
CCV GUIDING PRINCIPLES

Careful analysis of existing conditions and the thoughtful responses of many campus stakeholders in the outreach process guide this vision for the adaptation and enhancement of the Corvallis campus. The planning team, in close partnership with the CCV Steering Committee, synthesized their analysis and the wealth of responses into a set of principles to guide the rest of the visioning process as well as the strategies the CCV ultimately recommends. These principles cluster around several themes that reflect the ethos of social and environmental responsibility to which OSU renewed its commitment with SP4.0.

Guiding principles and themes reflect OSU’s progressive ethos
ENVIRONMENTAL RESPONSIBILITY

Sustainability
The campus should minimize its environmental impacts and support sustainability education, research, innovation and leadership.

Contiguous Natural Resource and Agricultural Land
The campus should advance the university’s legacy of natural resource and agricultural teaching and research on contiguous and accessible land.

SOCIAL RESPONSIBILITY

Accessibility
The campus should continually undertake universal-access improvements for diverse ages and abilities.

Inclusion
The campus should prioritize inviting spaces that express a welcoming and inclusive campus culture.

RESPECT FOR RESOURCES

Fiduciary Responsibility
The campus should serve as a responsible steward of public resources, tuition dollars and philanthropic contributions.

Adaptability
The campus should focus on providing flexible spaces and facilities that can evolve with the needs of innovative research and learning.

CAMPUS INTEGRITY

Connected Open Space
The campus should support the network of usable outdoor spaces that are integrated into the campus fabric and continue this pattern in expansion areas.

Robust Infrastructure
The campus infrastructure, including buildings, open space and utilities, should be durable, resilient and of sufficient capacity and condition to support all campus activities and services.

Distinguished Character
The campus should maintain the distinctive positive aspects of the campus character and ensure that all development reinforces those characteristics.

COMMUNITY STRENGTH

Internal Connectivity
The campus should reinforce its physical framework with circulation systems that knit the campus together and promote community cohesion.

Public Connections
The campus should encourage constructive interaction with the city and surrounding communities.

Safety and Security
The campus should continue to cultivate a community oriented toward campus safety and security.
4

RECOMMENDATIONS

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GUIDING PROGRESS

The Corvallis Campus should reflect OSU’s ethos of social and environmental responsibility, respect for resources, and a strengthened community inside and out, while retaining its character. In doing so, the Corvallis campus should support a consistent experience throughout while leveraging the unique qualities of specific campus areas.

At the campus-wide scale, the recommendations are intended to build on the framework of organizing systems that makes it easy for people to access, navigate and use the campus to its fullest potential as a place of collaborative learning and innovation. Strengthening the way the systems of open space, circulation and development work together while preserving the character that distinguishes the Corvallis campus, the recommendations strive to reinforce the campus’s role as a magnet for cultural and scientific exploration.

While the campus has a recognizable overall character, different areas of campus contribute to that character in distinctive ways. The CCV therefore complements its strategies for the campus’s organizing systems with site-specific recommendations. It identifies sites within the Central, East, South and West Areas as key initial opportunities for physical adaptation, redevelopment, enhancement and activation.

This balance of targeted and systems-oriented recommendations sets a course that guides progress in the form of sustainable growth and a welcoming, inclusive environment for OSU’s many communities.
CAMPUS-WIDE STRATEGIES

The Corvallis campus is defined by its physical framework of open space, circulation and development systems. It shapes individual experiences within its distinctive character based on specific programs, activities and facilities.

The CCV recommends strategies that build on the strengths of these organizing systems while aligning with the university’s goals. It encourages:

▷ DEVELOPMENT that focuses on adaptation and renovation first and preserves the valued character of the campus.

▷ OPEN SPACE that preserves, enhances and expands important vital places, supports campus life and celebrates the land-based research of the university;

▷ CIRCULATION that broadens nonvehicular travel options and improves access, wayfinding and the pedestrian experience; and

The recommended strategies, outlined by each organizing system in the following pages, strive for a cohesive, better integrated campus by targeting development edges, vital open spaces, movement corridors and points of connection and entry as well as the presence and character of the buildings.
OPEN SPACE

The Corvallis campus’s open spaces provide places for OSU’s communities to gather, celebrate, recreate and engage in education and research.

The simplicity and elegance of its primary open spaces—the quadrangles—establish character and visual quality and provide important organizing elements of the campus form. Other open spaces throughout campus serve different purposes and have their own distinct landscape character.

VITAL OPEN SPACES

Vital Open Spaces provide welcoming environments for the OSU community to gather, relax, play and study. They provide valuable indoor-outdoor connections to adjacent facilities, and they are shared by the campus community. These spaces also establish identifiable campus character and provide important green space.

The examples below demonstrate successful open space attributes that should be adapted and emulated within redevelopment and opportunity sites throughout the campus. Based on their context and program, future vital open spaces, including the type outlined on the next page should utilize the following strategies:

▷ Support groups of various sizes, include active or passive settings, provide ample seating in both sun and shade, integrated plazas, and connective walkways.

▷ Increase activation to bring vitality to the Corvallis campus and a sense of inclusivity.

▷ For vital open spaces West of NW 35th Street, complement the research context while inviting the campus community to enjoy its natural beauty.

These vital open space strategies directly support the CCV guiding principles of Connected Open Space, Accessibility, Distinguished Character, Inclusion, Internal Connectivity and Robust Infrastructure.
The following categories represent important types of vital open spaces found throughout campus.

**Housing**
Successful open spaces adjacent to residence halls provide the scale and character to help students feel at home. They offer open lawns, for group gathering and recreation, as well as quieter, more enclosed spaces. In addition to the open spaces pictured, exemplary housing open spaces include the space enclosed by Hawley, Buxton, Poling and Cauthorn Halls and spaces adjacent to Finley, Halsell and Bloss Halls and the International Living Center.

**Green Spaces**
Green spaces soften the look and feel of campus and provide welcoming places to occupy or pass through. They feature varied vegetation including the broad-canopy trees and flowering shrubs for which OSU is known.

**Plazas**
Plazas provide flexible space to host larger gatherings and campus events. They often also provide circulation routes for the busier parts of campus. In addition to the plazas pictured, Gill Coliseum is an example of a well-used and recently updated plaza on campus.

**Porches**
OSU buildings have traditionally included entry porches, which provide a welcoming transition between inside and outside. These elevated spaces play an important role in the campus open space system by providing comfortable outdoor covered areas that activate campus streets and adjacent open spaces. Their ability to attract users derives from their sense of prospect and refuge through views outward, scale and available covered seating. In addition to the porches pictured, Memorial Union’s is exemplary on campus.
PROTECTED OPEN SPACES

There are five open spaces on campus of such substantial historic quality and importance that they have been designated for permanent protection: Memorial Union Quad, Valley Library Quad, Lower Campus Quad, 30th Street Mall and People’s Park. These spaces are recognized for their identifiable forms and their historic value to OSU as well as to the larger community and their character must be retained. Activation strategies are described on page 67. These spaces are shown in Part 2: The Corvallis Campus, page 47, Figure 2.10.

The Protected Open Space directly supports the CCV guiding principles of Connected Open Space, Distinguished Character and Sustainability.

OAK CREEK

In addition, Oak Creek is protected for its environmental value. Oak Creek plays important roles for OSU and the region. It serves as a wildlife corridor and provides a riparian and wetland habitat as well as a natural corridor in campus. Areas adjacent to Oak Creek are within the floodplain and flood hazard zone and are subject to development restrictions. In the future:

▷ Retain the Oak Creek area’s strong balance of wildlife and recreational and aesthetic value.

▷ Consider future habitat restoration and trail access.

The Oak Creek strategy directly supports the CCV guiding principles of Connected Open Space, Contiguous Natural-Resource and Agricultural Land, Distinguished Character and Sustainability.
CONNECTIVE SPACES

Connective spaces are the myriad areas that link buildings, open spaces and circulation on campus. They are diverse in their use and configuration and should be considered integrated, quality environments while providing safe, comfortable and welcoming connections throughout the Corvallis campus. These spaces should:

▷ Provide clear circulation for all modes and be well lit for safety.

▷ Incorporate the signature elements of the campus’s landscape character.

▷ Provide safety buffers between people and vehicular movement and service functions.

Examples of good connective spaces include the brick mall adjacent to Waldo Hall and the walkway between Strand Agriculture Hall and the Student Experience Center.

These connective space strategies directly support the CCV guiding principles of Accessibility, Connected Open Space, Internal Connectivity and Safety and Security as well as the 2018 Transportation Plan.
RECREATION AND ATHLETICS FACILITIES

The Intercollegiate Athletics and Recreational Sports departments are responsible for memorable events that bring people together. Their role is fundamental to the health and cohesion of the Corvallis campus community.

Athletics and recreation spaces are unique on campus. They are integral to its physical form and within easy walking distance of the Central Area and on-campus housing. Recreation and athletics facilities provide a direct link to OSU’s history, identity and alumni support, represented by the long-standing presence of Goss Stadium within the Central Area and Reser Stadium and Gill Coliseum within the South Area.

These recreation and athletics facilities strategies directly support the CCV guiding principles of Accessibility, Inclusion, Internal Connectivity and Public Connections.

This valued relationship between athletics, recreation, campus housing and academic uses helps define OSU and should be upheld through adaptation and redevelopment. Recreation and athletics should be integrated with the daily use of campus by:

▷ Maintaining well-connected pathways and plazas, which include amenities such as shade, seating and food.
▷ Providing spontaneous and scheduled use of recreation fields.
▷ Maintaining views of recreation activities to strengthen OSU identity and further connect the campus community.
CAMPUS TREES

The Corvallis campus’s trees support teaching, research and campus life with their shade and character. The maturity of many of the trees gives them stature, and their canopies foster a sense of permanence and distinction. Trees also provide environmental benefit and highlight seasonal change throughout the year. In recognition of the importance of the campus’s trees, the Arbor Day Foundation and the Oregon Department of Forestry awarded OSU with Tree Campus USA status for its excellence in tree planting, care and stewardship.

Based on current conditions, OSU identified locations on the Corvallis campus where additional trees could be planted and grown to reach full maturity. These opportunity sites are well positioned in relation to the existing canopy and proposed development opportunity sites. Future projects should build on the Corvallis campus’s robust tree canopy and seek opportunities to plant trees that can add to the canopy and visual quality. Large deciduous trees should be used to continue the character of the campus. Species will be determined based on their location.

These tree canopy strategies directly support the CCV guiding principles of Connected Open Space, Distinguished Character, Sustainability and Robust Infrastructure.

Figure 4.2
Tree Canopy
OPEN SPACE ACTIVATION STRATEGIES

OSU has an invaluable network of existing open spaces. Many of these open spaces may benefit from activation strategies to improve the sense of welcoming and inclusion on campus. These strategies are of modest capital cost and are intended to be flexible in their implementation. The University will determine which of these activation strategies are most beneficial for specific open spaces. Strategies include the following:

▷ Provide areas for spending time individually and communally.

▷ Prioritize pedestrian movement.

▷ Establish shade and weather protection.

▷ Provide nearby food options.

▷ Ensure universal accessibility.

▷ Provide temporary displays and movable tables and chairs.

▷ Support places to gather and celebrate.

Places where activation strategies are implemented can be further strengthened by showcasing OSU history and celebrating its achievements as well as preserving and augmenting views. Their activation should implement sustainability best practices, see image on page 90.
The following elements will lead to greater activation within the Corvallis campus’s open spaces:

▷ Light and seating to invite people to spend more time comfortably outdoors.

▷ Temporary improvements, such as mobile food, increased event programming and seasonal furnishings such as hammocks and movable seating.

▷ Visibility and passive surveillance by pruning mature plants and increasing transparency between indoor and outdoor areas.

▷ Visual access to on-campus academic and research activities through learning-on-display techniques and other methods of connecting people to these activities.

▷ Art that is unique to OSU, its activities and its people to help make the shared environment more comfortable and welcoming.

These open space activation strategies directly support the CCV guiding principles of Accessibility, Adaptability, Inclusion and Safety and Security, Connected Open Space, Robust Infrastructure, Internal Connectivity.
CIRCULATION

The circulation system is a fundamental component of the Corvallis campus’s physical framework. The CCV builds on OSU’s Transportation Plan’s strategies by prioritizing the accessibility and safety of non-vehicular travel as well as reducing traffic and parking. The CCV proposes mobility hubs located on key routes and at destinations in the Central Area. In addition, its recommendations clarify campus edges to provide campus identity, promote wayfinding and to create inviting interfaces with the surrounding community.

MODAL PRIORITIES

Expanding the range of transportation modes can reduce the use of private vehicles, making the campus safer for pedestrians and bicyclists, reducing the need for parking and minimizing the campus’s carbon footprint. OSU modal priorities are outlined in the box to the right.

- Ensure future campus development is consistent with modal priorities within the OSU Transportation Plan and other OSU Sustainable Transportation strategies.

Modal prioritization strategies directly support the CCV guiding principles of Accessibility, Inclusion, Internal Connectivity, Safety and Security and Sustainability.

PARKING STRATEGIES

In the current climate of quickly expanding mobility options, it is difficult to determine the long-term parking demand. The CCV recommends reduced surface parking in the Central Area to support the Pedestrian-Bicycle Priority Zone. Further, parking demand should be continually managed throughout campus in order to minimize the need for expansion. A growing residential population on and near campus and a greater range of transportation options should support the long-term reduction in the need for parking.

OSU MODAL PRIORITIES:
(in order of importance)

1. Pedestrian
2. Bicycle/ Skateboard
3. Beaver Bus/ Transit
4. Service/ Delivery
5. Private Motor Vehicles
Use of structured parking minimizes the amount of land dedicated to surface parking. Costs to construct are significant and will need to be considered. Depending on parking demand and the redevelopment of existing lots on campus for other uses, two potential sites for structured parking have been identified: one in the East and one in the West Area. Optional sites in the West Area have also been identified.

The amount of development identified in the 10-Year Capital Plan may increase parking demand. Under current requirements, this amount of development requires parking much beyond the expected demand, covering a significant area of land and detracting from the desired open space character. Changes in mobility and an increase in student housing on or near campus may further reduce demand, along with sustainable transportation strategies to reduce drive-alone rates. Ultimately, a parking strategy to support the expected demand within this context will determine the real need for parking. All parking projects, whether structured or surface, should apply the following strategies:

▷ **Incorporate clear signage.**

▷ **Provide adequate lighting,**

▷ **Provide buffering and safety features.**

*These parking strategies directly support the CCV guiding principles of Adaptability, Robust Infrastructure and Sustainability, Fiduciary Responsibility, Public Connections.*

**MOBILITY HUBS**

Mobility hubs provide convenient alternatives for navigating within, to and from campus. They are designed to make a range of options available and promote easy transfer between modes. Mobility hubs should apply the following strategies:

▷ **Integrate elements that assist mobility such as: transit connections, bike parking, Beaver Bus stop, transit/shuttle stops, parcel locker pick-up, wayfinding and car-share loading.**

▷ **Site hub locations with easy pedestrian access to the core of campus.**

▷ **Provide weather protection.**

▷ **Provide seating and food or beverage options.**

*Mobility hubs directly support the CCV guiding principle of Sustainability, Inclusion, Public Connections, Robust Infrastructure and Safety and Security.*
CAMPUS EDGES AND FRONTAGES

The CCV calls for visually and physically clarifying the edges of campus to promote campus identity, improve wayfinding, and increase safety. The development of “welcome frontages” at the campus perimeter will help identify campus boundaries and cue visitors that they are entering the Corvallis campus. Welcome frontages should apply the following strategies:

▷ Provide large, consistently spaced, broad-canopied trees as well as wide, comfortable sidewalks.

▷ Incorporate signage and wayfinding elements that highlight the campus gateways and portals identified in the OSU Transportation Plan.

▷ Provide views to signature Corvallis-campus buildings and open spaces.

▷ Incorporate mobility hubs and, where possible, integrated uses that enliven important campus edges.

Major routes within campus should be upgraded to improve wayfinding and reinforce campus character, through signage, clear pathways and plantings where needed. Key frontages are internal campus routes that provide connections to building entries, gathering spaces and open spaces. Key frontages should include elements that unify diverse areas of campus, create a welcoming environment and support the comfort of campus users. Key frontages should apply the following strategies:

▷ Provide large, consistently spaced, broad canopied, as well as wide, comfortable sidewalks.

▷ Provide views to signature Corvallis-campus buildings and open spaces.

These campus edge and frontage strategies directly support the CCV guiding principles of Accessibility, Distinguished Character, Inclusion, Internal Connectivity, Public Connections and Safety and Security.
**CAMPUS STREET GRID**

The linearity and simplicity of the Corvallis campus’s streets are a fundamental organizational element of the campus. As the campus expands its modal options and the infrastructure that supports them, the traditional linear quality of pedestrian routes should not be compromised by the realignment of curbs, vehicular movements, bike parking or parking. The streetscapes should maintain their distinctive visual and physical character through four essential design strategies:

▷ **Create street-facing building entries.**

▷ **Provide evenly spaced, contiguous, broad-canopied trees and lights.**

▷ **Provide unobstructed, linear, efficient walking and biking routes.**

▷ **Create consistent building setbacks.**

As OSU meets the challenges of adopting climate-neutral transportation alternatives, retaining these essential elements will support the fundamental structure of the Corvallis campus and the activities that define its culture of education, research and innovation.

*These street grid strategies directly support the CCV guiding principles of Accessibility, Distinguished Character, Inclusion, Internal Connectivity, Public Connections and Safety and Security.*
DEVELOPMENT

The pattern and relationships among the Corvallis campus’s buildings are a fundamental component of its physical framework. In keeping with the CCV’s guiding principles, the university should first explore adaptation and renovation before adding new buildings. Renovation and adaptation of existing buildings is both the most sustainable development strategy and the most effective strategy for preserving the character of the campus. However, the university recognizes that not all buildings can be renovated for current needs. New structures should be placed in a manner that reflects and enhances existing and future circulation and access to academic resources and open space.

DEVELOPMENT PATTERNS

In recent years, state-of-the-art learning and research buildings have in some cases required larger building footprints to support effective laboratory design and adequate collaboration spaces. As noted in Part 2, many of these projects have effectively supported the pedestrian scale of the campus. This diligence should continue in order to ensure that existing campus qualities are retained into the future. As sites are identified for adaptation or growth the following considerations should be incorporated:

▷ Respond to adjacent buildings and open spaces in a way that complements the context.

▷ Support the comfortable pedestrian scale of the campus.

▷ Consider daylight, landscape and views to further support consistency and scale.

These development pattern strategies directly support the CCV guiding principles of Accessibility, Adaptability, Distinguished Character, Inclusion, Internal Connectivity, Public Connections and Robust Infrastructure.


**BUILDING DESIGN**

The materials and scale of campus buildings, especially in the Central Area, should maintain the standard of elegance responsible for much of the Corvallis campus’s physical distinction. Features, including a richness of detail, should contribute to a cohesive campus experience.

- Include features resonant with campus character with new development while embodying the excitement of an evolving campus with state-of-the-art functionality.

- West of SW 35th Street, acknowledge the functional nature of activities taking place by recalling agrarian forms and/or specific functions.

- For all development, incorporate a sense of permanence, good visibility and design cues that contribute to a cohesive OSU campus.

These building design strategies directly support the CCV guiding principles of Accessibility, Contiguous Natural-Resource and Agricultural Land, Distinguished Character, Inclusion and Robust Infrastructure.

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**BUILDING ADAPTABILITY**

Long-term use and adaptation of existing facilities is a sustainable practice championed by both OSU and the State of Oregon’s Higher Education Coordinating Commission (HECC). Assessing the physical and functional conditions of existing buildings is part of the university’s investment strategy for understanding the campus’s ability to support contemporary education and research needs.

Six buildings under consideration for full renewal were assessed as part of the Campus Vision project. The results indicate most of the buildings can be renovated and repurposed for office and administrative uses, but not as research or laboratory uses. Weniger Hall received the lowest scores for both physical and functional condition and is a strong candidate for replacement. Details of the assessment are provided in Volume 2: Technical Detail.

These building adaptability strategies directly support the CCV guiding principles of Accessibility, Adaptability, Distinguished Character, Fiduciary Responsibility, Inclusion, Robust Infrastructure and Sustainability.

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**Figure 4.6**

**Building Assessment**

<table>
<thead>
<tr>
<th>Physical</th>
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<th>SUMMARY</th>
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<td>3.0</td>
</tr>
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</tr>
<tr>
<td>Weniger Hall</td>
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<td>3.0</td>
</tr>
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<td><strong>Average</strong></td>
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<td><strong>2.9</strong></td>
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</tbody>
</table>

**Part 4      Recommendations**

**Draft - July 2020**

75
COLLABORATION OPPORTUNITIES

The demand for interdisciplinary collaboration and team-based learning is increasing across campus, triggering the need for new opportunities for interdisciplinary engagement. As project sites are identified and buildings configured:

▷ Consider beneficial adjacencies between colleges and departments.

▷ For student housing, promote collaboration that enhances learning with strategies such as housing clusters and expanded collaboration spaces.

▷ For the South Area, support athletics and recreational functions as extensions of a campus-wide collaboration based environment.

These collaboration strategies directly support the CCV guiding principles of Adaptability, Fiduciary Responsibility, Inclusion, Internal Connectivity and Robust Infrastructure.

BUILDING EDGES

As existing facilities are adapted and renovated and new facilities are developed, their edges should reinforce the campus’s organizational form and add to its vitality and character through the following strategies:

▷ Provide edges that positively interface with adjacent buildings and facilities to help delineate and animate open spaces and corridors.

▷ Create visual and physical connections between inside and out, allowing for a safe, secure awareness of the environment.

▷ Provide active ground-floor uses, site furnishings and covered seating areas.

▷ Incorporate architectural detailing, trees and vegetation which softens building facades along these edges.

These building edge strategies directly support the CCV guiding principles of Accessibility, Adaptability, Fiduciary Responsibility, Inclusion, Internal Connectivity, Robust Infrastructure, Safety and Security and Sustainability.
UTILITIES, SUSTAINABILITY & SAFETY

Other campus-wide systems are important contributors to campus function and help to meet campus goals. Campus-wide Utilities, Sustainability, and Safety and Security should be considered in their broader context.

UTILITIES

Comprehensive strategies for utilities, such as the steam renewal project underway and examination of a clustered heating and cooling approach, are important and support the comprehensive nature of the CCV. Within this context, campus-wide infrastructure will support development expected during the next 10 years. Strategies for strengthening and updating the existing utilities in the future should continue to align with OSU’s Climate Action Plan and the president’s 2019 Call for Action to Address Climate Change.

For further information on campus-wide systems and strategies, please see Volume 2: Technical Detail.

SUSTAINABILITY

The CCV includes several specific strategies supporting the university’s goals for reducing its carbon footprint:

▷ Committing to the renovation and adaptation of existing buildings before constructing new structures.

▷ Employing comprehensive strategies for utilities, such as maintaining the university’s clustered district heating and cooling approach.

▷ Creating a compact campus, through enhanced pedestrian opportunities and bicycle routes and the development of mobility hubs to promote reduction in the use of single-occupant vehicles to and around campus.

▷ Preserving existing pervious surfaces and tree canopy, to avoid increasing stormwater runoff overall.

These utility infrastructure strategies directly support the CCV guiding principles of Adaptability, Fiduciary Responsibility, Robust Infrastructure and Sustainability.
SAFETY AND SECURITY
Fortunately crime statistics show rare occurrences of personal-safety incidents on the campus. However, concerns about lighting for pedestrians, especially in the South and West Areas, arose during the outreach process. A targeted effort to improve lighting and pedestrian routes and adding ground-floor active uses to adjacent buildings in the South and West Areas should begin to address these concerns.

At the same time, the principles of Crime Prevention Through Environmental Design (CPTED), a nationally recognized approach to creating safe and accessible public spaces, should continue to be promoted on campus. These principles have already proven successful on campus in a variety of areas such as the natural surveillance and territorial reinforcement of the Hawley/Bucton/Poling/Cauthorn inner courtyard and reduction of hiding places through vegetation management. CPTED principles include:

Natural Surveillance
Promote an “eyes on the street” environment in which spaces are designed to help individuals feel they aren’t alone or surrounded by hiding spots.

Natural Access Management
Use the physical design of exterior spaces to support easy wayfinding and navigation.

Territorial Reinforcement
Incorporate elements that support a strong sense of place, such as art, campus signage and campus-specific architectural styles.

Physical Maintenance
Continue to ensure that exterior spaces are clean and well maintained.
**Order Maintenance**
Use durable, long-lasting displays of the expectations and ground rules of using a space to promote a culture of safety.

**Target Hardening**
Encourage the ability to secure and reinforce indoor and outdoor spaces throughout the campus.

**Activity Support**
Create opportunities for active, well-used spaces where people want to come together.

**Natural Imperatives**
Design environments to support physical and mental health and wellness throughout campus.

**Social Capital**
Include programs and policies that activate spaces and build trust within the campus community.

**Land Use and Community Design**
Adopt approaches to the design of spaces that ensure they are all welcoming.

*These safety and security strategies directly support the CCV guiding principles of Inclusion, Internal Connectivity and Safety and Security.*
Complementing the recommended strategies for strengthening the character and cohesion of the Corvallis campus as a whole, the CCV makes recommendations for adapting and enhancing targeted sites in the Central, East, South and West Areas of campus. The recommendations are tailored to the physical form of each area and the distinctive contribution each makes to a safe, comfortable, welcoming campus experience. These recommendations in turn help to inform the configuration of opportunity sites identified throughout campus.
OPPORTUNITY SITES

In addition to campus infrastructure and organizing systems, specific sites in various areas of campus show potential to meet the evolving needs of the university. Determining which opportunity site should be developed to meet a given need should take into account program needs as well as accessibility, inclusion, a 10-minute walk between classes, infill potential, long-term viability, and overall campus character.

The opportunity sites are not necessarily intended for immediate or even near-term development. There are more opportunities for development than the current demand requires. Some opportunity sites may not be developed at all.

The strategy behind identifying a host of sites is to allow for a range of options in locating future facilities and to afford the university the flexibility to align development with ongoing plans, unforeseen projects, and shifting needs. “Partner Opportunities” are those that offer good potential for partnership opportunities such as non-affiliated research or privately developed leased space.

Figure 4.8
Campus Opportunity Sites

- Development Site Edge
- Vital Open Space
- Opportunity Site
- Housing
- Education & General (E&G)
- Parking w/ Street-Activating Use Below
- E&G or Housing
- E&G or Parking
- Partner Opportunities
- Future Athletics Projects
- Campus Boundary
INFORMED BY OPEN SPACE AND CIRCULATION SYSTEMS

The configuration of each opportunity site should reinforce the open space and circulation systems in support of a cohesive campus and a strengthened framework. The illustrated areas are configured with the goal of facilitating access and navigation, supporting the campus as a place of collaborative learning and innovation and reinforcing the unique character that distinguishes the Corvallis campus.

DEVELOPMENT CAPACITY

A capacity analysis was performed to assess the opportunities for development and evaluate whether boundary expansion or height limits would need to be adjusted to accommodate anticipated future needs. In addition to building height limits the City of Corvallis code holds OSU to specific development standards intended to guide development and mitigate off-campus impacts. Analysis shows that there is ample opportunity to meet future needs within the campus’s current physical boundaries, but that City regulations will need to be amended to fully realize these opportunities. Development of all opportunity sites is not expected. The university should continue comprehensive assessment of needs and opportunities to ensure that the right sites and uses are identified for development whether they be for adaptation, renovation, expansion or replacement. This assessment is provided only to indicate potential capacity by focusing on sensitively scaled development, a consistent building fabric and a positive interface with the community.

<table>
<thead>
<tr>
<th>USE</th>
<th>NET NEW</th>
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<tr>
<td>Education &amp; General</td>
<td>4.2 to 5.1 million GSF</td>
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<tr>
<td>Housing</td>
<td>1,200 to 2,700 beds</td>
</tr>
<tr>
<td>Parking</td>
<td>764 to 1,290 spaces</td>
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* Total Net New assumes all opportunity sites are developed, and takes into account potential demolished/replaced facilities

** Some sites are identified with multiple uses. These sites create the ranges shown, depending on which uses are developed.
Central Area
Top: Weatherford Hall
Right: Library Quad and Valley Library
CENTRAL AREA

The Central Area is the heart of the Corvallis campus. In recognition of its importance to history and culture, much of the area has been designated a National Register Historic District. The CCV’s recommendations enhance and preserve the Central Area’s traditional framework—including its buildings, open spaces and circulation—as the campus’s historic zone.

Vision: The Central Area’s characteristic buildings and grand open spaces should continue to draw the university’s communities together. Its existing integrity, connectivity and overall accessibility should serve as a model for other campus areas.

ORGANIZING SYSTEMS AND GUIDING PRINCIPLES

As the character-defining area of campus, development, open space and circulation systems are all fundamental to the established framework in the Central Area. These three systems graciously support academic life there and together uphold the CCV’s guiding principles. The desire to promote universal access and inclusion, support adaptability, retain the existing campus integrity, increase connectivity and respect the value of university resources guides the CCV’s recommendations for the Central Area.

RECOMMENDATIONS

If developed, opportunity sites in the Central Area should emphasize their relationship to adjacent open spaces and campus edges while improving walkability and promoting communal activity. The CCV has identified three strategies to support adaptive development:

▷ Improve NW Monroe Avenue edge with an overall increase in physical and visual porosity, including more welcoming entries to buildings and more clearly defined routes into the campus.

▷ Improve the primary east-west pedestrian connection and enhanced outdoor-use spaces in the engineering cluster north of NW Campus Way and boarding NW Monroe Avenue between NW 14th Street and NW 26th Street.

▷ Create greater activation of open spaces throughout.

▷ Improve the pedestrian route along SW Benton Place, per the OSU Transportation Plan.
OPPORTUNITY SITES

In light of their designation as “historic contributing resources” by the National Register of Historic Places, many buildings and open spaces in the Central Area will be preserved. In addition to renovation opportunities such as Fairbanks Hall, primary development opportunities are located at the area’s edges. All site developments should reflect the foundational identity and pedestrian focus of the Central Area.

The OSU Transportation Plan calls for a Pedestrian / Bicycle Priority Zone in the Central Area, which limits activity that impacts pedestrian comfort and encourages the ability to connect at the human scale. For this reason, and because the Central Area is dense with academic uses, the CCV envisions the location of Education & General buildings, used primarily for academic and administrative purposes, at the area’s opportunity sites. This recommendation serves the desire for 10-minute walks between classes and bolsters the potential for collaborative learning.
ENHANCEMENT EXAMPLES

The campus edge at NW Monroe Avenue can achieve a more welcoming character.

- Varying setbacks will soften the impact of large buildings that hug the sidewalk, adding some relief as well as opportunities for informal interaction, making a more welcoming campus edge along this unique corridor.

- Activated frontages, enhanced building entries and improved pedestrian and bike routes into campus will increase safety and better connect campus to the adjacent neighborhood to the north.

- A proposed mobility hub and features such as street-oriented seating in front of Rogers Hall will help to activate the open spaces along NW Monroe Avenue, improve multimodal accessibility and reduce the use of private vehicles on campus.

These enhancements directly support the CCV guiding principles of Distinguished Character, Inclusion, Public Connections, Safety and Security and Sustainability.
Improved east-west connections through the Central Area can make circulation through the heart of the engineering area more walkable and interactive.

▷ A stronger east-west pedestrian connection and landscape improvements in the dense engineering zone north of SW Campus Way will create mid-block links to buildings between NW 14th and NW 26th Streets. More links result in pedestrian-friendly routes, more opportunities for people to navigate and interact as well as increased safety and a stronger consistency with the campus fabric.

▷ An east-west link and improved plaza just north of Goss Stadium will increase circulation and ADA accessibility to and through the site and provide space before and after games for gatherings and events.

These enhancements directly support the CCV guiding principles of Accessibility, Distinguished Character, Inclusion, Internal Connectivity and Safety and Security.
Further activation of the Central Area’s well-designed open spaces can heighten the visibility of the Corvallis campus’s academic and community strengths.

There are a number of open spaces in the Central Campus that would benefit from increased activation. Two example approaches are described here.

- Development of a flexible outdoor space and increased indoor-outdoor connection between Owen Hall and Merryfield Hall will enable the showcasing of the university’s research and help to facilitate interactions within the campus community.

- Flexible seating (hammocks, rocking chairs and cafe tables and chairs); weather protection; and more signage to communicate events will help to draw people to open spaces, where they can observe and participate in campus activity. For example, the addition of temporary displays and movable tables and chairs would engage people within the highly visited plaza at the Valley Library. This strategy should be applied throughout all campus areas, as mentioned on page 67.
DEVELOPMENT CAPACITY

In order to support and enhance the character of the Central Area and its interface with the community, the CCV recommends careful consideration of building heights and mass as sites are assessed for redevelopment.

Current zoning allows several opportunity sites in the Central Area to include structures significantly taller than their adjacent buildings. This option for greater vertical development provides important flexibility to the university. However, taller buildings may impinge on pedestrian comfort and shade valuable open spaces, which are essential characteristics of this area. Therefore, building height and proximities should be carefully assessed during the design of all new structures in the Central Area.

Figure 4.12
Central Area Sections
East Area
Top: Tebeau Hall entrance
Right: Lower Campus Quad
EAST AREA

The East Area is characterized by student living and historic open spaces. It provides an important interface with the community along its eastern edge, which will be bolstered by the presence of a new Arts and Education Complex on SW 15th Street.

Vision: The East Area should offer a sensitive, welcoming campus edge for the adjoining neighborhood while it fosters a rich student-life environment of living, academic and extracurricular collaboration and innovation.

ORGANIZING SYSTEMS AND GUIDING PRINCIPLES

The development, open space and circulation systems are all fundamental to the East Area’s framework. How they work together determines the quality of student life in the area and shapes the public’s engagement with the campus and the university.

The desire to strengthen the sense of inclusion, campus integrity, distinguished character, internal connectivity, safety and security and public connections guides the CCV’s recommendations for the East Area. Redevelopment in the area should carefully consider the scale and position of buildings in relation to the adjacent neighborhoods as well as the identity they express for the university. Open spaces should be established to serve and enrich the lives of campus residents and visitors.

RECOMMENDATIONS

If developed, opportunity sites should emphasize their relationship to adjacent open spaces and campus edges while promoting walkability and communal activity.

The CCV has identified five strategies to support adaptive development:

▷ Enhance student housing zone with a central open space (by retaining the existing space and surrounding with additional development).
▷ Provide connectivity which reinforces neighborhood edges and aligns with city streets.
▷ Provide a new mobility hub at the edge of the Pedestrian / Bicycle Priority Zone.
▷ Integrate Education & General functions with residential uses and enhance live-learn opportunities.
▷ Support SW Washington Way extension project (aligned to SW Washington Ave) with development and street activating uses on first floor of the parking structure.

Vision: The East Area should offer a sensitive, welcoming campus edge for the adjoining neighborhood while it fosters a rich student-life environment of living, academic and extracurricular collaboration and innovation.
OPPORTUNITY SITES

The CCV envisions the location of Housing, Education & General and Parking uses at the East Area’s opportunity sites. This development reflects the current concentration of student housing within the area, its proximity to the Central Area’s Education & General functions and its campus edge.
ENHANCEMENT EXAMPLES

Open spaces can strengthen student life by coordinating scale, amenities and sense of place.

▷ Elements such as porches, weather protection and windows onto common spaces will support sense of community and safe, secure movement through the area.

▷ Amenities that encourage casual gathering throughout the year will complement the formal lawns in the adjoining Central Area.

New public functions in the East Area can welcome visitors into Corvallis campus life through its eastern edge.

▷ A new parking garage along SW Washington Way will consolidate surface parking lots and offer convenient access to the new Arts and Education Complex, and support other existing uses to be located across SW 15th Street.

▷ Views into campus and signage along SW Adams Avenue will create visual connections and orient visitors to the campus and its activities.

Potential covered gathering space adjacent to a new housing building

These enhancements directly support the CCV guiding principles of Distinguished Character, Inclusion, Internal Connectivity and Safety and Security.
DEVELOPMENT CAPACITY

Current zoning allows several opportunity sites in the East Area to include structures similar in height to existing residences halls such as Wilson Hall. These heights are appropriate for their sites and will support a sense of community for the residential student neighborhood. Ample dimensions for major pedestrian circulation, such as the SW Adams Avenue connection to campus, are important for supporting pedestrian comfort and allowing for adequate daylight access.
South Area
Top: Graduation ceremony at Reser Stadium
Right: Campus entry at SW 26th Street and SW Western Boulevard
SOUTH AREA

Characterized by student-life facilities, prominent athletics functions and the SW Western Boulevard edge of campus, the South Area is an integral part of student life on the Corvallis campus. The prominence of Reser Stadium and the potential for high visibility along SW Western Boulevard make the South Area an important university interface with the community.

Vision: The South Area should continue to host important celebrations of OSU’s identity through athletic events and support active modes for all along SW Western Boulevard. Its rich student-life environments should include easy access to functions north of SW Washington Way.

ORGANIZING SYSTEMS AND GUIDING PRINCIPLES

The development, open space and circulation systems are all fundamental to the South Area framework. How they work together affects the valuable intersection of student, academic and university life in the area and the way OSU represents its culture and commitments to the public.

The desire to strengthen inclusion, campus integrity, distinguished character, internal connectivity, safety and security and public connections guides the CCV’s recommendations for the South Area. Redevelopment in the area should include streetscape improvements and gateways that are emblematic of OSU. It should establish a rich series of open spaces that support student life. The open space system should include welcoming places for campus living as well as support Education & General functions.

RECOMMENDATIONS

If developed, opportunity sites should emphasize their relationship to adjacent open spaces and campus edges while promoting walkability and communal activity.

The CCV has identified five strategies to support adaptive development:

» Create a more identifiable campus edge along SW Western Boulevard through streetscape improvements.

» Improve streetscape along 26th Street between SW Western Boulevard and SW Washington Way.

» Strengthen gateway and sense of entry at SW 26th Street and SW Western Boulevard.

» Improve student-housing zone by adding a communal open space.

» Explore the potential for integrated Education & General functions.

» Provide athletics facilities and parking with convenient public access.
OPPORTUNITY SITES

The CCV envisions the location of Housing or Education & General uses at the South Area’s opportunity sites. This development reflects the current concentration of student housing within the South Area and supports mixed-use and live/learn opportunities. Redevelopment of a site along SW 30th Street could replace underutilized buildings.

Figure 4.17
South Area Circulation and Opportunity Sites

*These are internal campus locations where a transition in facility use or restrictions are placed on certain modes
ENHANCEMENT EXAMPLE

A consistent language of signage and frontage design along SW Western Boulevard can support human comfort, welcome people to OSU and cue awareness of OSU’s presence on each side of the street.

▷ The frontages on both sides of SW Western Boulevard are particularly important for campus continuity and identity. To achieve a consistent look that can be easily perceived by people on all modes of transportation, improvements could include the addition of:

- street trees
- light poles with OSU banners
- signage that highlights adjacent uses.

▷ Such features typically also serve as traffic calming and improve safety.

This enhancement directly supports the CCV guiding principles of Distinguished Character, Inclusion, Public Connections and Safety and Security.

Proposed SW Western Boulevard improvements
DEVELOPMENT CAPACITY

Current zoning allows several opportunity sites in the South Area to include structures similar in height to existing residence halls. These heights are appropriate for their sites and will support the community-building residential-student neighborhood. The north/south corridor running east of the existing parking garage provides an important future link to the Central Area. Such areas are important for pedestrian comfort. An 80-foot corridor is recommended to support the shared use path in addition to safety measures that protect pedestrians from parking garage traffic as described in the OSU Transportation Plan. This width also provides a broad visual corridor to the north, increasing connectivity within the campus.

Figure 4.18   D - Section through Finley Site and Parking Structure 1
WEST AREA

Characterized by a wide range of research and operations functions, the West Area is integral to the university’s identity as a center of innovation and environmental and social progress. It also hosts a critical connection for the community along the multiuse trail. Some teaching facilities and a number of non-OSU entities also occupy this area.

Vision: The West Area should continue to function as a research, learning and partnership zone, supporting OSU-specific activities as well as collaborations with other government, NGO and corporate entities. West of SW 35th Street, the university’s Natural Resource/Agricultural Research activities should be clearly identified and celebrated.

ORGANIZING SYSTEMS AND GUIDING PRINCIPLES

The development, open space and circulation systems are all fundamental to the West Area’s framework, in some cases at a larger scale than in the Central Area. How they work together impacts the research, learning and collaboration that take place in the area as well as the appeal of forming partnerships with the university.

Redevelopment in the West Area should better link the West to the Central Area with well-aligned east-west corridors, a range of open spaces and a more pronounced presence along campus streets. It should also encourage access to campus via the multiuse trail. Land west of SW 35th Street that supports active university functions (research, teaching) should not be developed without thorough evaluation of current functions and how they might effectively be relocated.

RECOMMENDATIONS

If developed, opportunity sites should emphasize their relationship to adjacent open spaces and campus edges while promoting walkability and communal activity within major blocks. The CCV has identified four strategies to support adaptive development:

▷ Improve campus connections across SW 30th Street.
▷ Identify and celebrate land-based research west of SW 35th Street.
▷ Reconfigure Peavy Fields, adjacent buildings and pedestrian corridors.
▷ Improve north-south pedestrian connections.
▷ Support west area activity with food venues, coffee shops, and common spaces as development occurs.
OPPORTUNITY SITES

The CCV envisions the location of Housing, Education & General or Parking uses at the West Area's opportunity sites, which are located in current parking areas or underutilized sites. The West Area has the greatest potential of all the campus areas for construction of future parking structures. This development should reflect the current land-based research activities within the area and grow the area into a hub of activity adjacent to the reconfigured Peavy Fields.
ENHANCEMENT EXAMPLES

Identifying and celebrating the land-based research that takes place west of SW 35th Street can clarify and highlight the significance of the activities in this area of campus.

▷ Agricultural fencing and signage will increase awareness and understanding of this important area of campus.

▷ Development of buildings and structures west of SW 35th Street will clarify the types of research activities taking place there.

▷ Improved lighting, including along the multiuse trail, will increase safety and trail use.

Matching the quality and distribution of the open spaces in this area to the Central Area’s open spaces can create a more cohesive campus experience.

▷ The reconfigured Peavy Fields will extend the east-west system of open spaces that connect people through the campus to the rural landscapes and Oak Creek.

The greenhouses north of SW Campus Way can become places to celebrate and learn about university research and innovation.

▷ New signage will describe the types of activities taking place in the greenhouses.

These enhancements directly support the CCV guiding principles of Connected Open Space, Distinguished Character, Inclusion and Public Connections.

Celebrating and clearly identify the university’s Natural Resource and Agricultural Research activities west of NW 35th Street with signage, fencing and a gateway at SW Campus Way and SW 35th Street.

DEVELOPMENT CAPACITY

A number of sites in this area are identified for public/private partnerships. As an alternative, these sites also offer opportunities for structured parking if needed.
IMPLEMENTATION STRATEGIES AND TOOLS

Introduction 111
10-Year Capital Forecast 111
Design Policies 114
Site Evaluation Matrix 116
INTRODUCTION

This section consists of a range of tools and strategies that help to facilitate the implementation of the CCV. As the campus evolves, new studies will be completed, concerns will adjust and unanticipated changes will occur. The approaches outlined here consider inevitable changes in needs, plans and priorities while offering tools and strategies to ensure the CCV is supported.

10-YEAR CAPITAL FORECAST

Projects are continually underway at OSU, whether new facilities, renovations or ongoing maintenance of buildings. In particular, the Capital Forecast highlights planned and potential projects that support the academic mission of OSU over the next 10 years. The Capital Forecast is updated annually. Additionally, with the adoption of the 2018 Transportation Plan, infrastructure improvement efforts will move ahead. The Plan has projects that fall within each of these categories, highlighted here. The CCV provides guidance for these and future improvements.
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<td>Student Housing (Phase 1)</td>
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<td></td>
<td>Campus Operations Center</td>
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<td>Arts Education Complex</td>
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<td>TYPE</td>
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<td>New Facility (cont.)</td>
<td>North District Utility Plant</td>
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<td>Collaborative Innovation Complex Phase I</td>
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<td>Collaborative Innovation Complex Phase II</td>
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<td>Leadership Center</td>
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<td>Infrastructure</td>
<td>Washington Way 35th to Benton Place</td>
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<td>Railroad Corridor Improvements</td>
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<td>Demolition</td>
<td>Fairbanks Annex Demolition</td>
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<td>Navy ROTC Armory Demolition</td>
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<td></td>
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<td></td>
<td>Snell Hall Highrise Demolition / Site Restoration</td>
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<td></td>
<td>Weniger Hall</td>
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DESIGN POLICIES

The following Design Policies are the overarching vision for the design of campus systems and provide direction for other project implementation tools. The policies directly inform Design Guidelines, which in turn directly inform Construction Standards and other implementation documents. These principles apply to every campus area.

Historic development on the OSU campus has left the university with a rich heritage of aesthetically compatible buildings, open spaces, axes and views. In addition, close attention to landscape design has provided a unifying, attractive campus setting, especially within the Central Area. The major issue to be addressed in design of buildings and open space is compatibility with and enhancement of these aesthetic qualities.

▷ Design elements established over many years, including formal and informal open spaces, axes and views, should be preserved and reinforced with future development.

▷ Campus areas with greater potential for development, such as the East, South and West Areas, should include similar design elements to provide structure for each area and a cohesive language for the campus overall. (The area west of NW 35th Street, where buildings and sites that express their agricultural function should be encouraged.)

▷ Every effort should be made to unify the campus through the design and placement of buildings, open space and circulation and through effective integration of the three. All design solutions should consider the broadest possible spectrum of users and abilities in the use of spaces and support universal access.

GENERAL LAND USE

Campus land-use patterns affect relationships and activities both on and off campus.

▷ Within the campus, uses should promote interaction among members of the campus community. To achieve this, it is important to group similar types of uses within close proximity and eliminate impediments in order to encourage collaboration. A focus on 10-minute walking distances between critical functions will be important whenever possible.

▷ Campus land uses, especially those on the periphery, can affect off-campus activities, and impact on neighborhood uses should be considered and mitigated.

CIRCULATION

Circulation is a critical element in defining campus form and structure, linking buildings and open spaces and providing access to a wide range of users. A building's relationship to campus circulation is also important.

▷ Clearly identified main entrances that relate to the pedestrian circulation systems are important.

▷ Where service access and pedestrian circulation coincide, the areas should be perceived as pedestrian but not conflict with service needs.

The OSU Transportation Plan outlines overall goals and strategies for circulation on campus.
OPEN SPACE

Open space is typically defined by planting and architectural edges. Similarly, buildings are typically integrated with open space. Landscape can be used to establish campus boundaries, gateways, views and axes. Open space can take the form of typical gathering areas at the ground plane, serve to provide softness and scale to the public realm or offer more intimate access to the outdoors within the building design. Open space knits the diverse areas of the campus together. In service of this important function, open spaces and their design should:

▷ incorporate the unifying elements that are signature to OSU, namely broad-canopied trees, flowering shrubs and slow-speed, comfortable walkways.

▷ frame views, establish gateways and campus boundaries and support comfortable and welcoming circulation axes.

▷ provide softness and human scale to the shared campus environment as well as comfort through southern exposure, seating and shade.

▷ be designed with specificity to support surrounding uses.

▷ be conceived of as part of its adjacent building programs to allow functions to spill outside and become more known and accessible by everyone who shares the campus grounds.

Every building project must consider its impact on existing open space and search for opportunities to contribute to the overall open space network.

BUILDING

Buildings play an important role in defining campus form by helping to frame open spaces and circulation and housing indoor campus activities. Well-designed buildings provide richness and scale, adding to campus comfort and complementing the distinctive existing campus character. At the same time, programmatic demands have changed as has the need for a greater sense of inclusion and the activation of outdoor spaces.

Austin Hall, Student Experience Center and International Living Learning Center are good examples of newer buildings that embody the qualities envisioned for future projects. Their designs are compatible with and complement historic buildings while supporting new modes of learning and research. In addition, these buildings establish more direct relationships to the ground plane with at-grade entries and greater transparency—good precedents for supporting the CCV guiding principles of Accessibility, Inclusion and Internal Connectivity.

Future building design should:

▷ meet a high level of quality and respond to its context of built form and natural beauty.

▷ respect and advance the aesthetic qualities of the campus that are cherished and valued.

▷ complement and be compatible with the historic buildings through similar features, materials and richness in details.

▷ incorporate greater transparency at the ground floor to create a welcoming and active environment.

▷ incorporate protected areas for prospect and refuge, offering opportunities for people-watching and seclusion, to ensure that new development is comfortable for all campus users.
SITE EVALUATION MATRIX

Each identified opportunity site has certain attributes that will support future buildings and the development parameters that define the campus-wide systems. As needs become defined and projects are identified, sites need to be evaluated. The Site Evaluation Matrix is recommended for use during the site-selection process. The evaluation criteria include Program Needs, CCV Site Parameters and support of specific principles related to connectivity as described in this document. Some criteria may not apply to a given project, and others may need to be added.

The sites can be evaluated against each criterion using a 3-point or 5-point scale. The criteria can also be assigned varying weights depending upon university priorities.
### Site Evaluation Criteria

<table>
<thead>
<tr>
<th>Site Evaluation Criteria</th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
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<tr>
<td><strong>1. Supports Project’s Program Needs</strong></td>
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<td>Meets adjacency and access needs</td>
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<td>Meets square footage / configuration requirements</td>
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<td><strong>2. Supports CCV Opportunity Site Parameters as shown in the Campus Areas</strong></td>
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<td><strong>3. Offers opportunity for:</strong></td>
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<td>Proximity to Alternative Transportation Options</td>
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<td>Proximity to Active Open Spaces and Services</td>
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<td><strong>4. Supports Safety and Security</strong></td>
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<td><strong>5. Is Sensitive to Neighboring Community</strong></td>
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<td><strong>6. Overall Cost</strong></td>
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<td>First Cost</td>
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<td>Life Cycle Cost</td>
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Oregon State University

CORVALLIS CAMPUS VISION

Volume 2: Technical Detail
Oregon State University

VOLUME 2

TECHNICAL DETAIL
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<td>A90</td>
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<tr>
<td>Capacity Study</td>
<td>A99</td>
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</tbody>
</table>
EXISTING CONDITIONS

INTRODUCTION

Existing conditions of the Corvallis Campus are described in *Volume 1, Part 2*. The following includes additional material and further detail on site, building and utility analyses.

*additional Site Analysis*  
A2

*additional Campus Development analysis*  
A5

*Facility Assessment detail*  
A7

*campus-wide utilities Assessment*  
A83
ZONING

Chapter 3.36: Oregon State University (OSU) Zone in the City of Corvallis Land Development Code describes zoning and land use requirements for OSU. Permitted uses, open space requirements, allowed square footage, and development standards are all included as part of the code.

Figure F.1
Existing Height by Sector
VIEWS

Views from the campus help to connect campus users to OSU’s vibrant context. Views to the Willamette Valley and the Coast Range help to ground the campus in its environment and are emblematic of both OSU’s historic connection to the land and its place in the today’s agrarian valley. Views of seminal buildings, open spaces and activities within the campus also contribute to OSU’s special qualities and identity.

Figure F.2
Surrounding Views
NATURAL FEATURES

OSU is located within the Willamette Valley with its rich soils, flat terrain and interconnected riparian corridors. The campus natural features include these aspects providing direct links to its natural setting. The campus terrain is mildly sloping enabling easy access to the majority of facilities. A ridge within the east campus, while providing an elegant prospect, presents accessibility challenges that the university is seeking to address.

Oak Creek flows within the west campus providing a riparian corridor with habitat value and protected flood prone land. Visual and physical connections to the western research lands provide campus users with additional connections to the valley and coast range beyond.

Figure F.3
Slope Assessment
ADDITIONAL CAMPUS DEVELOPMENT ANALYSIS

HISTORIC RESOURCES

The Corvallis Campus of Oregon State University has a number of historically significant buildings and open spaces. In 2008 this significance was formally recognized with the National Historic District designation. A Historic Preservation Plan was completed in 2010 that defines procedures and requirements for work within the district. Historic Preservation Provisions for the City of Corvallis are outlined in Chapter 2.9 of the Land Development Code. Significant modifications within the historic district require City approval. OSU is proud of its heritage and embraces the significance of its buildings and open spaces within their historic context.
INTERIOR COMMON SPACE

Campus life is supported with spaces that are inviting, welcoming to all and provide places for interaction. Common Space on campus includes food venues, convenience stores and open study/collaboration/work spaces. Most food options are located in the Memorial Union or near residence halls. Some cafe options are distributed throughout campus. Currently there are very few common spaces available west of SW 30th Street. During this study, many campus users voiced the desire for additional common spaces including those that are available in the evening.
INTRODUCTION

Oregon State University regularly assesses its buildings with the goal of quantifying capacity and identifying quality of space and building condition. The main Corvallis campus contains more than 500 buildings. Most of the buildings were constructed more than 30 years ago, with an average age of 55 years. This is significant because the useful life of most major building systems (roof, electrical, mechanical) is 30 years. In addition, building codes and environmental health and safety regulations have changed significantly in the past 50 years, both of which impact new investments. This is especially true for buildings where cutting edge research needs to occur.

Long term use of existing facilities is a sustainable practice recognized by both OSU and the HECC (Higher Education Coordinating Commission), if the buildings are adequately maintained and updated. OSU has seen state funding of renewal decline over the past several decades. However, beginning in 2018, OSU committed to allocating a portion of its E&G (Education and General) funds to provide money for major capital renewal projects. The fund is
expected to reach $45M annually in 2028. Sightlines, a facilities asset analysis firm, estimates it would cost ~$650 million to fully address OSU’s deferred maintenance backlog. These estimates are similar to OSU’s internal estimates from its building condition assessment program.

Understanding the physical and functional conditions of campus buildings and infrastructure is part of the investment strategy that influences which projects are selected for inclusion in the 10-year Capital Forecast. OSU’s 10-year Capital Forecast is updated annually and includes redevelopment and new construction of campus buildings and infrastructure that supports the university’s mission and needs. Additionally, part of OSU’s strategy in investing in its current buildings, and building new only when necessary, is to reduce the amount of deferred maintenance on campus.

To this end, six buildings that are being considered for full renewal were assessed as part of the Campus Vision project. They include:

- Batchelor Hall
- Community (Benton) Hall
- Covell Hall
- Gilbert Hall
- Weniger Hall
- Withycombe Hall

The process included reviewing the latest Facility Condition Surveys to understand overall conditions of each system, meeting with OSU staff for updated information on MEP systems specifically, studying building floor plans and sections, touring each building and reviewing the university’s plans for renewal based on the 10-year Capital Forecast.

**PHYSICAL ASSESSMENT**

The Physical Condition Assessment is based on the latest Facility Condition Surveys for all systems in each of the buildings except HVAC, Electrical and Plumbing. They include:

- Structure
- Accessibility
- Exterior
- Conveyance
- Interior
- Fire & Life Safety

Systems West Engineers conducted an analysis of HVAC, Electrical and Plumbing for each of the six buildings with findings submitted in March 2019. Their report is incorporated into this section. Their analysis of Campus-Wide Infrastructure is also included.
FUNCTIONAL CONDITIONS

The functional condition assessment is based on how well each building currently performs to support college functions, or how well it is expected to support functions in the future with minor changes. The assessment is based on the review of existing documentation including building plans and sections, reviewing the university’s plans for renewal, and observations from building tours. Criteria include a building’s program fit, wayfinding, flexibility to support different uses, level of comfort (independent of the mechanical system performance such as access to daylight and ceiling heights), and image/character. The following defines each criteria:

Program Fit: A building’s ability to efficiently and effectively support its current or needed future use.

Wayfinding: Users’ likely ability to remain oriented within and outside the building.

Flexibility of Uses: A building’s ability to house a range of uses and be converted easily from one to another.

Comfort: A user’s general level of comfort in relation to the physical space. This could include floor-to-floor heights, convenient travel throughout, access to daylight restrooms for each gender and gender-inclusive restrooms on every floor, and presence of an elevator.

Image/Character: The building’s contribution to campus character and university image.

The following pages outline findings from the study for each building with a summary comparing all six at the end.

FACILITY ASSESSMENT

Bacheller Hall  Physical Conditions................A11
Functional Conditions........................................A18

Community Hall  Physical Conditions...............A21
Functional Conditions........................................A28

Covell Hall  Physical Conditions......................A31
Functional Conditions........................................A39

Gilbert Hall  Physical Conditions......................A43
Functional Conditions........................................A53

Weninger Hall  Physical Conditions....................A57
Functional Conditions........................................A66

Withycombe Hall  Physical Conditions.............A69
Functional Conditions........................................A79

Summary................................................................A81
BATCHELLER HALL

[Images of Batcheller Hall]
Primary Construction Date:
1913

Physical Description:
Three story Colonial Revival style building. Brick and decorative concrete veneer

Structural Framing:
Concrete and Wood

Construction Material:
Concrete, Structural Brick, Wood

Alterations:
No significant changes or alterations have been done

Significance:
Originally called the Mines Building. One of the most modern buildings of the era. Provided large-scale laboratories for mining operations

Status as Historic Resource in Historic District:
Contributing

Current Uses:
Classrooms, Dry research, Offices

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PHYSICAL CONDITIONS

HVAC, electrical and plumbing scores were developed as part of this study. The matrix shows a summary of physical conditions. Details are provided in the following pages. Other scores were provided by OSU.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Accessibility</th>
<th>Exterior</th>
<th>Roof</th>
<th>HVAC</th>
<th>Electrical</th>
<th>Plumbing</th>
<th>Conveyance</th>
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<th>Fire &amp; Life Safety</th>
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<td>3.0</td>
<td>2.5</td>
<td>3.0</td>
<td>2.9</td>
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Figure F.7
Physical conditions - Batcheller Hall
FIRE SUPPRESSION

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Fire Water Service: A 4-inch fire service is connected to a utility main on the south side of the building and enters the building in the basement. The water service is protected by an existing double check valve assembly located in a basement below the south building entry and is adjacent to the fire riser. A siamese-type fire department connection is mounted to the face of the south side of the building adjacent to the entrance.

▷ Fire Sprinkler System: A wet pipe fire sprinkler system provides partial sprinkler coverage for the building and appears to be an egress-only system, providing coverage of exit pathways such as corridors and room exits to the corridors. Sprinkler heads generally appear to be standard response fusible link type. Fire sprinkler piping is steel. Older sections of the sprinkler system have threaded fittings at all sizes, while newer piping has mechanical couplings for piping 2-1/2-inch and larger and threaded for smaller piping.

▷ Fire Standpipe System: A 3-inch wet standpipe with 2-1/2-inch hose connections at each floor is located in the north stairwell. The existing standpipe is similar to a Class I standpipe but does not meet current code requirements.

Notable Conditions:
The existing standpipe is not equipped with roof-level hose connections.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Fire Water Service: The existing water service size appears to be sufficient for continued egress only service; however, the service may not be adequate for an expansion of service to cover the entire building to meet current sprinkler and standpipe codes. The existing double check valve appears to be beyond its service life and replacement parts may no longer be available. City water pressure in the area of Batcheller is generally low – upsizing the existing service and/or a new fire pump may be required for upgrades to meet current codes.

▷ Fire Sprinkler System: The suitability for the existing egress system for continued use depends on the extent of renovations and building program. A full renovation will likely require converting to complete coverage of the entire building. The older standard response sprinkler heads are not compliant with current code and appear to be approaching the end of their service life. The existing sprinkler heads will likely be required to be replaced as part of a major renovation.

▷ Fire Standpipe System: Based on original drawings, the third floor of the building is approximately 34-feet above the lowest level of fire department access. Per NFPA and Oregon Fire Code, Class III standpipes will be required for the stairwells to be compliant with current code. If the extent of fire protection was changed to provide coverage for the entire building, Class I standpipes will be required instead.
PLUMBING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Storm Drainage: Storm drainage is a conventional system connecting roof drains into storm drain piping that gravity drains to the utility storm drain system. Sidewall scuppers at the roof level provide overflow drainage.

▷ Sanitary Waste and Vent: The existing sanitary waste and vent system is conventional design with atmospheric vents extending above the finished roof. The system includes pumped waste from sewage ejectors and elevator sumps, which connect to the building gravity waste piping.

▷ Potable Water Systems: The building has a 1-1/2-inch water service and does not appear to be protected by a backflow device. Potable water piping appears to be a mix of galvanized steel and copper.

▷ Plumbing Fixtures: Existing fixtures are generally commercial grade in fair condition. Restroom lavatories have manual faucets, while water closets are a mix of tank type and flush valve type. Restrooms and laboratory fixtures are generally not ADA compliant.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Storm Drainage: Roof drains and storm drain piping appear to be in good condition. Piping insulation should be added for existing sections of interior piping that are currently uninsulated.

HEATING, VENTILATING, AND AIR CONDITIONING

Existing Conditions

Following is a description of existing heating, ventilating and air-conditioning systems along with notable conditions observed during on-site field survey:

▷ Air Distribution System – Type 1: This building does not have a central air distribution system. Ventilation perimeter space is provided by operable windows; interior spaces without windows do not have ventilation air. Rooms 037 and 038 have a single zone unit with DX cooling coil that supplies air to the spaces. Room 152 has a single zone unit with steam heating coil.

▷ Space Heating: The majority of spaces that have exterior windows, such as vestibules, offices, and conference spaces use steam convectors for space heating.

▷ Space Cooling: There is no central cooling system for the building. The majority of spaces in the building are cooled by window AC or portable/standalone AC units.

▷ Air Exhaust: Exhaust air is provided
for restrooms by a ducted exhaust system with one roof-mounted exhaust fan.

▷ Building Automation Systems: The building is not connected to any of the campus building automation systems. Individual systems are controlled by stand-alone pneumatic, electric, or electronic controls.

▷ Steam and Condensate: Steam service is provided to the building from the campus steam service. The existing steam service enters the building at 60psi from underground from the south side of the building. The steam is distributed to HVAC units and radiators throughout the buildings. Condensate piping gravity drains to the basement, where it connects to a condensate return line in the utility tunnel adjacent to the building.

Notable Conditions:
Steam piping insulation contains asbestos fibers.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for new building uses.

▷ Air Distribution System: The air distribution system in the building is past its service life and should be replaced.

▷ Space Heating: The space heating capacity appears to be adequate, but steam convectors appear to be past their service life and should be replaced or refurbished.

▷ Air Ventilation: Existing HVAC systems do not appear to provide ventilation in compliance with current code. Operable windows for some spaces in the building may have adequate area to provide Code-compliant ventilation.

▷ General Exhaust: Exhaust ductwork appear to be in good condition. There are no grilles in the restrooms. Exhaust fans serving the restrooms are past their service life and should be replaced.

▷ Building Automation Systems: Existing controls are generally past their service life. Installation of a DDC control system meeting campus standards is recommended.

▷ Cooling Systems: The building lacks a central cooling system. For the building to continue being used year-round, a central cooling system is recommended and will eliminate the current use of extensive spot cooling.

▷ Steam and Condensate: The existing steam service has sufficient capacity to provide heating to the building; however, existing steam and condensate system components, including radiators, convectors, piping, steam traps, and valves are at the end of their service life. Depending on future building use, the existing radiators and convectors could be refurbished and reused, but distribution piping and equipment will need to be replaced.

POWER

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:

▷ Building Electrical Service: Batcheller Hall is served power from the main electrical room in Covell Hall at 120/208Y. See Covell Hall report for details.

▷ Sub-distribution: A 120/208Y Square D Panelboard located on the basement floor in the main stairwell. The sub-distribution
panelboards feeds power to branch panelboards throughout this building. The ampacity on this panel was not observed during this site visit.

▷ Emergency/Standby Power: No building-wide emergency/standby power system was observed in this building.

▷ Power Distribution: Panelboards serving branch circuits at 120/208Y are located throughout the building. Most Panelboards are Square D and are located in the stairwell on each floor. There are two panelboards in this building that are older than the Square D panels and manufacturers are unknown.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Building Electrical Service: Electrical systems are in generally good condition. It is recommended that a new electrical service be provided for Batcheller Hall.

▷ Emergency/Standby Power: The building does not have an emergency power system in place at this time.

▷ Power Distribution: Panelboards are in fair condition with the exception of the two older panelboards. We recommend replacing these two panelboards.

**LIGHTING**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

▷ Exterior Lighting: Exterior light fixtures are located primarily at building entrances and along campus walkways. Building-mounted fixtures have yellowed and cracked housings.

▷ Interior Lighting: The building is primarily illuminated using T8 fluorescent fixtures. The building includes surface, recessed, and pendant-mounted fixtures.

▷ Egress Lighting: Egress pathways are illuminated by way of emergency bug-eye light fixtures and bug-eye equipped exit signs.

▷ Automatic Lighting Control: Time clocks are used for control of lighting in corridor and open spaces throughout the building.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Exterior Lighting: Exterior light fixtures are in poor condition. An upgrade to LED light fixtures is recommended.

▷ Interior Lighting: The building’s interior light fixtures are in fair condition. We recommend replacing the existing light fixtures with LED fixtures with any future renovation to the building.

▷ Egress Lighting: Existing emergency bug-eye fixtures and illuminated exit signs are in fair condition. We recommend these be tested, and replaced where there are failures, with any major renovation to the building.

▷ Automatic Lighting Control: The existing time clocks controlling light fixtures in corridors and open spaces are in fair condition. We recommend replacing the existing controls and upgrading to modern digital controls including networked occupancy sensors, dimmable power packs, and daylight harvesting control devices.
COMMUNICATION

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Voice/Data: The building is supplied with internet service via a 24-strand single mode fiber optic cable system. The building is equipped with multiple Ortronics distribution frames. These distribution frames distribute network and internet services to Covell Hall as well as Batcheller.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:
▷ Voice/Data: Distribution of network data and internet services is adequate for this building. No recommendations are made at this time.

ELECTRONIC SAFETY AND SECURITY

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Access Control: Keyed access only. No building wide electronic access control was observed in this building. Limited local key card access control was observed on computer lab rooms and select other rooms.
▷ Security: No security system or intrusion detection was observed to be installed in this building.
▷ Fire Detection and Alarm: The building is equipped with an Edwards Fire Alarm Control. Fire bells were observed in corridors of the building. No strobes or horn strobes were observed during the field investigation.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:
▷ Access Control: We recommend providing a building-wide access control system with a minimum of key card access control at building entrances and entries to critical spaces within the facility.
▷ Security: We recommend providing exterior security cameras at building entries as part of any future renovations to the building.
▷ Fire Detection and Alarm: We recommend replacing the existing fire alarm control panel with an addressable panel and installing horn strobes and strobe notification devices throughout the building as part of any future renovations.

RENOVATION CONSIDERATIONS

A major building renovation that includes comprehensive modification of the building floor plan would have significant impact on MEP systems.
▷ Future Use: The building is suitable for most academic or administrative uses, excluding laboratory uses.
▷ MEP Systems: Following is a general description MEP upgrades associated with a building renovation:
▷ Fire protection system would likely be replaced with a full coverage system.
▷ Plumbing systems have generally exceeded their useful life and would be replaced.
HVAC systems have generally exceeded their useful life and would be replaced in total. Newer local systems that have been installed recently could not be effectively integrated into a modern building renovation.

Electrical and lighting systems would be replaced, and a new electrical service provided separate from the service to Covell Hall.

Communication system would be replaced. Existing communication systems could not be effectively integrated into a modern building renovation.

Fire and life-safety systems would be replaced in total.

Major Building Liabilities:
The following elements of MEP infrastructure would be problematic if incorporated into a renovation:

The existing site steam vault is a confined space and does not have adequate service clearances.

Electrical power is currently provided from Covell Hall. An independent power service should be provided for Batcheller Hall.
FUNCTIONAL CONDITIONS

▷ Floor Plan is relatively flexible however stair limits flexibility at the north end
▷ Open dimensions support both classroom space, dry research and office uses
▷ Floor-to-floor heights are limited for modern wet lab use
▷ Tall windows provide good access to daylight

Figure F.8
Cross Section through the entrance of Batcheller Hall
Batcheller Hall has a nice character that reflects the history of early OSU buildings. The building's configuration does not lend itself well to modern wet laboratories with its limited floor-plate, floor-to-floor heights, lack of services and flexibility. In addition, the small floorplates limit the number of classrooms possible; however, the building does support a mix of classrooms and offices/dry research and is a good candidate for smaller schools, departments and administrative units.

**Functional Assessment - Batcheller Hall**

<table>
<thead>
<tr>
<th>SUMMARY</th>
<th>Program Fit</th>
<th>Wayfinding</th>
<th>Flexibility</th>
<th>Comfort</th>
<th>Image/Character</th>
<th>Deferred Maint. (in Millions)</th>
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</table>

- **Program Fit**: Current uses within Batcheller Hall are well supported with 30ft clear areas for classroom space. Floor to ceiling heights however, are limited. Small floor plates in this building limit the number of classrooms possible.
- **Wayfinding**: Buildings floor plan is straightforward and supports easy wayfinding.
- **Flexibility**: Drawings not clear on structural system and grid but floor plate looks somewhat flexible. Stair limits ability to open floor completely.
- **Comfort**: Good access to daylight. Comfortable circulation. Stairs and floors creaky. Restrooms for only one gender on each floor but easy access to Covell Hall. Building includes gender inclusive restroom. Elevator access through Covell Hall.
- **Image/Character**: Major contributor to historic character of campus.
COMMUNITY HALL
Primary Construction Date:
1889

Physical Description:
Three story Italianate building. Interior materials are wood and lathe; exterior materials are brick and stucco coated.

Structural Framing:
Wood

Construction Material:
Concrete, Structural Brick

Alterations:
1896 North wing and bell tower added; 1900's added historic Quad-aced clock to tower; 1906, Added space 1st and 2nd floors; 1926: added office space; 1958 remodeled building

Significance:
Being the oldest building on campus, Community Hall has undergone many alterations since 1889 to accommodate the needs of a growing university. In 1918 when the library moved to Kidder Hall, its space in Community Hall was transformed into the Community Drama and Workshop Theater.

Status as Historic Resource in Historic District:
Contributing

Current Uses:
Classrooms, Offices, Music, Studios

Physical Conditions

HVAC, electrical and plumbing scores were developed as part of this study. The matrix shows a summary of physical conditions. Details are provided in the following pages. Other scores were provided by OSU.

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<table>
<thead>
<tr>
<th></th>
<th>Structure</th>
<th>Accessibility</th>
<th>Exterior</th>
<th>Roof</th>
<th>HVAC</th>
<th>Electrical</th>
<th>Plumbing</th>
<th>Conveyance</th>
<th>Interior</th>
<th>Fire &amp; Life Safety</th>
<th>SUMMARY</th>
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Figure F.11
Physical conditions - Community Hall
FIRE SUPPRESSION

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Fire Water Service: A 3-inch fire service is connected to a utility main on the south side of the building and enters the building in the crawlspace beneath the first floor. There does not appear to be an existing backflow device isolating the fire suppression system from the utility main. A single hose connection-type fire department connection is mounted to the face of the south side of the building.

▷ Fire Sprinkler System: A wet pipe fire sprinkler system provides partial sprinkler coverage for the stairwells, corridors and room exits to the corridors. The zone valve/riser appears to be located in the crawlspace. Fire sprinkler piping is steel with a mix of threaded fittings and mechanical couplings.

▷ Hose Stations: The building is equipped with 1-1/2-inch hose connections on each floor. The hose stations appear to be original to the building.

▷ Fire Standpipe System: The building is equipped with one 4-inch manual dry standpipe at the exterior fire escape at the west side of the building. The standpipe has simplex 2-1/2-inch hose connections at the landings and at the roof level, and a duplex fire department connection at ground level. The interior stairwells are not equipped with standpipes.

Notable Conditions:
Zone stations are not equipped with test stations or drains. Hose stations are supplied from the existing domestic water service.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Fire Water Service: The existing water service size does not appear to be sufficient for light hazard service throughout the building and will need to be upsized. The building will need a new double detector check valve. City water pressure in the area of Benton Hall is generally low; therefore, upsizing the existing service and/or a new fire pump is likely for upgrades to meet current codes.

▷ Fire Sprinkler System: The suitability for the existing egress system for continued use depends on the extent of renovations and building program. A full renovation will likely require converting to complete coverage of the entire building. The current sprinkler heads may not be compliant with current code and may be required to be replaced as part of a major renovation.

▷ Fire Standpipe System: While original drawings showing floor elevations are not available, the elevation difference between the top floor and the lowest level of fire department access exceeds Oregon Fire Code and NFPA minimum requirements for standpipes in stairwells and fire escapes. Per NFPA and Oregon Fire Code, Class III standpipes will be required for the stairwells to be compliant with current code. If the extent of fire protection was changed to provide coverage for the entire building, Class I standpipes will be required instead.
PLUMBING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Storm Drainage: Storm drainage is provided by a gutter and downspout system. Downspout piping is a mix of cast iron hub and spigot and sheet metal.

▷ Sanitary Waste and Vent: The existing sanitary waste and vent system is conventional design with atmospheric vents extending above the finished roof. Piping appears to be a mix of cast iron hub and spigot, galvanized steel, and PVC.

▷ Potable Water Systems: A 1-1/2-inch water service enters the building crawlspace from the west side of the building. Potable water piping appears to be a mix of galvanized steel, PEX, and copper. Existing insulation is labeled as including asbestos in some areas.

▷ Domestic Water Heating System: Domestic hot water is provided by an existing A.O. Smith electric storage tank water heater with a capacity of 4.5 kW. The water heater is not equipped with a recirculation loop.

▷ Plumbing Fixtures: Existing fixtures are commercial grade and are generally original to the building. Restroom lavatories have manual faucets and water closets are flush tank type. Restrooms and laboratory fixtures are generally not ADA compliant. Fixtures are generally in fair condition.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Storm Drainage: Storm drain piping appears to be in good condition and suitable for reuse.

▷ Sanitary Waste and Vent: Existing waste and vent piping is generally in fair condition. Sections of the existing piping may need to be replaced.

▷ Potable Water Systems: The existing water service size is adequate for future use, provided that flushometer fixtures are not used. A significant fraction of the existing piping is beyond its service life and will need to be replaced.

▷ Domestic Water Heating System: The existing water heater is at the end of its service life. A recirculation loop and thermostatic controls will need to be provided to decrease hot water wait times and Code-required maximum delivery temperatures.

▷ Plumbing Fixtures: Restrooms fixtures will need to be replaced where necessary to meet ADA requirements or water conservation goals.

HEATING, VENTILATING AND AIR CONDITIONING

Existing Conditions

Following is a description of existing heating, ventilating and air-conditioning systems

▷ Air Distribution System: The building does not have a central air distribution system. The third-floor recital hall room 303 and control room 304 are served by a single zone unit with DX cooling coil. The first-floor practice rooms are served by a single zone unit with DX cooling coil. Ventilation air to most of the building is provided by operable windows. Ventilation systems are described in the air handler summary table. The
following spaces are mechanically ventilated:

▷ The third-floor recital hall: FC-1.
▷ First floor practice rooms.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Area Served</th>
<th>System Type</th>
<th>Date Installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1</td>
<td>Recital Hall 303 and Control Room 304</td>
<td>Constant volume ventilation unit w/DX cooling coil</td>
<td>1992</td>
</tr>
<tr>
<td>FCU-1</td>
<td>First floor practice rooms</td>
<td>Constant volume ventilation unit w/DX cooling coil</td>
<td>2004</td>
</tr>
</tbody>
</table>

▷ Space Heating: The majority of spaces that have exterior windows, such as vestibules, offices, and laboratories, use steam convectors for space heating.
▷ Space Cooling: There is no central cooling system for the building; however, cooling is provided to some spaces as noted below.
▷ Recital Hall 303 and Control Room 304: Ducted air handler with DX cooling coil
▷ First-floor practice rooms: Ducted air handler with DX cooling coil
▷ Office space and second-floor practice hall: Portable stand-alone AC units
▷ General Exhaust: The restrooms have a ducted system with wall-mounted exhaust fan on the exterior of the building. The third-floor practice rooms have a ducted exhaust system with exhaust fans mounted in the attic with an exhaust stack going through the roof.
▷ Building Automation Systems: There is no building automation system and the single zone units are controlled by thermostats in their respective spaces.

▷ Steam and Condensate: Steam service is provided to the building from the campus steam distribution system. The steam service connection is accessible through a steam vault located outside the building. The existing steam service enters the building below grade from the west side of the building at a pressure of 60psi. Steam is distributed throughout the building to radiators and convectors. Underground steam piping and valves are in poor condition. Steam piping inside the building is generally in better condition.

▷ Condensate from steam radiators and convectors gravity drains to the main building condensate return line and connects to a gravity return, which is routed back to the campus steam plant.

Notable Conditions:
The steam vault for this building is located in a below grade masonry vault. The vault has poor access and insufficient room inside for maintenance clearances. Steam piping insulation contains asbestos fibers

**Evaluation**

Following is a discussion of suitability of existing systems for reuse and system upgrades required for new building uses.

▷ Air Distribution System: With the exception of the air handler serving the first-floor practice rooms, air distribution systems in the building are past their service life and should be replaced.
▷ Space Heating: The space heating capacity appears to be adequate, but steam radiators and convectors appear to be past their service life and should be replaced or refurbished.
Section A
Existing Conditions

▷ Air Ventilation: With the exception of the air handler serving the first-floor practice rooms, existing HVAC systems do not appear to provide ventilation in compliance with current code, although operable windows for some exterior spaces in the building may have adequate area to provide code compliant ventilation.

▷ General Exhaust: Exhaust ductwork appears to be in good condition, but restrooms do not have grilles. Exhaust fans serving the restrooms are past their service life and should be replaced.

▷ Building Automation Systems: There is no building automation system for this building. Installation of a DDC control system meeting campus standards is recommended.

▷ Cooling Systems: The building lacks a central cooling system. For the building to continue year-round use, a central cooling system is recommended and will eliminate the current use of spot cooling.

▷ Steam and Condensate: The existing steam service has sufficient capacity to provide heating to the building; however, existing steam and condensate system components, including radiators, convectors, piping, steam traps, and valves are at the end of their service life. Depending on future building use, the existing radiators and convectors could be refurbished and reused, but distribution piping and equipment will need generally need to be replaced.

▷ Steam Vault: The existing steam vault exterior to the building has poor maintenance access, and the valves and piping in the vault are in poor condition. Replacing or relocating the existing vault and below grade piping is recommended.

POWER

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Building Electrical Service: The buildings Main Distribution Panel (MDP) is a Square D I-Line 120/208Y Panelboard with a rated capacity of 600 Amps. The MDP distributes power to panelboards located throughout the building. No sub-distribution panelboards are installed in this building.

▷ Emergency/Standby Power: No building-wide emergency/standby power systems was observed in this building.

▷ Power Distribution: Panelboards serving branch circuits at 120/208Y are located throughout the building. All panelboards are Square D.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Building Electrical Service: The MDP is in good condition, is serviceable, and can remain to be used to distribute power to this building.

▷ Emergency/Standby Power: The building does not have an emergency power system in place at this time. Emergency power will not be required for the current functionality of this building.

▷ Power Distribution: Panelboards are in good condition, are serviceable, and can remain to serve this building for the foreseeable future.
LIGHTING

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:

▷ Exterior Lighting: Exterior light fixtures are located primarily at building entrances and along campus walkways. Building-mounted fixtures have yellowed and cracked housings.

▷ Interior Lighting: The building is primarily illuminated using T8 fluorescent fixtures. The building includes surface, recessed, and pendant-mounted fixtures. The majority of fixtures are equipped with parabolic reflectors.

▷ Egress Lighting: Egress pathways are illuminated by way of emergency bug-eye light fixtures and bug-eye equipped exit signs.

▷ Automatic Lighting Control: Time clocks are used for control of lighting in corridors and open spaces throughout the building. The main music auditorium has manual switch controls for all lights with limited manual, line-voltage dimming on some fixtures.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for Code compliance:

▷ Exterior Lighting: Exterior light fixtures are in poor condition. An upgrade to LED light fixtures is recommended.

▷ Interior Lighting: The building’s interior light fixtures are in fair condition. We recommend replacing the existing light fixtures with LED fixtures with any future renovation to the building.

▷ Egress Lighting: Existing emergency bug-eye fixtures and illuminated exit signs are in fair condition. We recommend these be tested and replaced where there are failures with any major renovation to the building.

▷ Automatic Lighting Control: The existing time clocks controlling light fixtures in corridors and open spaces are in fair condition. We recommend replacing the existing controls and upgrading to modern digital controls including networked occupancy sensors, dimmable power packs, and daylight harvesting control devices.

COMMUNICATION

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:

▷ Voice/Data: No incoming fiber optic internet service was observed in this building during our visit. The building has limited structured cabling and data outlets installed throughout. No distribution frames or network switches of any kind were observed in the building.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Voice/Data: We recommend installing a new fiber optic service and one main distribution frame (MDF) to distribute data services throughout the building.
ELECTRONIC SAFETY AND SECURITY

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Access Control: Keyed access only. No building-wide electronic access control was observed in this building.

▷ Security: The building has a Honeywell Security and Alarm system installed. The alarm panel is located at the main entrance.

▷ Fire Detection and Alarm: The building is equipped with a Simplex Fire Control 4010 Fire Alarm Control Panel with integral annunciator panel. Fire notification strobes and horn strobes are located throughout the building.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Access Control: We recommend providing a building-wide access control system with a minimum of key card access control at building entrances and entries to critical spaces within the facility.

▷ Security: We recommend providing exterior security cameras at building entries as part of any future renovations to the building.

▷ Fire Detection and Alarm: The building’s fire detection and alarm system is in good condition and should continue to be used.

RENOVATION CONSIDERATIONS

A major building renovation that includes comprehensive modification of the building floor plan would have significant impact on MEP systems.

Future Use: The building is suitable for most academic or administrative uses, excluding laboratory uses.

MEP Systems: Following is a general description MEP upgrades associated with a building renovation:

▷ A new fire suppression system would be required for full building coverage.

▷ Plumbing systems have generally exceeded their useful life and would be replaced.

▷ HVAC systems have generally exceeded their useful life and would be replaced. Newer local systems that have been installed recently could not be effectively integrated into a modern building renovation.

▷ The building electrical service, main distribution panel, and panelboards are suitable to serve a building renovation; however, lighting fixtures and panel circuits would be replaced to accommodate remodeled spaces.

▷ Communication system would be replaced. Existing communication systems could not be effectively integrated into a modern building renovation.

▷ Fire and life-safety systems would be replaced.

Major Building Assets: The following elements of MEP infrastructure would have substantial value that can be incorporated into a renovation:

▷ Building electrical service, main distribution, and panelboards.
FUNCTIONAL CONDITIONS

- Floor Plan is not flexible
- Stairs further limit flexibility
- Floor-to-floor heights are limited for modern wet lab use.
- Tall windows provide good access to daylight and views on the upper floors

Figure F.12
Plan - Community Hall
Community Hall has important historical significance to the OSU campus. In terms of functionality the building easily supports offices and dry research labs. Floor-to-floor heights are ample but the building’s configuration does not lend itself well to modern wet laboratories. Current uses in Community Hall are well supported but acoustically the building is challenging for music programs. It includes a gender inclusive restroom and elevator but the 2nd floor and Mezzanine have no restrooms.

**Program Fit:** Current uses are well supported by this building, although it is acoustically challenging for music programs. Floor to floor heights are ample.

**Wayfinding:** Buildings floor plan is straightforward and supports easy wayfinding.

**Flexibility:** Structural drawings not available; however, floor plate appears to show 3 structural sections.

**Comfort:** This building has good access to daylight, comfortable circulation, and the floor to floor heights are high. Building stairs and floors are creaky. Restrooms are provided for only one gender on each floor; the 2nd floor and Mezzanine floor don’t have any restrooms. This building includes gender inclusive restrooms and an elevator.

**Image/Character:** This building is a major contributor to historic character of campus.
COVELL HALL
Primary Construction Date:
1927

Physical Description:
Three story Neo-classical style with brick veneer and decorative terra cotta detail and bands.

Structural Framing:
Concrete and Wood

Construction Material:
Concrete, Structural Brick, Cast Stone

Alterations:
1980 added stair, elevator, exterior metal exit out of classroom. 2002 replaced south entrance doors.

Significance:
Originally called the Physics Building and completed in 1928, Covell Hall first housed the Physics department. Later, Engineering occupied the building and it was named for the first dean of the School of Engineering, Grant Adelbert Covell.

Status as Historic Resource in Historic District:
Contributing

Current Uses:
Classrooms, Dry research, Offices

PHYSICAL CONDITIONS

HVAC, electrical and plumbing scores were developed as part of this study. The matrix shows a summary of physical conditions. Details are provided in the following pages. Other scores were provided by OSU.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Accessibility</th>
<th>Exterior</th>
<th>Roof</th>
<th>HVAC</th>
<th>Electrical</th>
<th>Plumbing</th>
<th>Conveyance</th>
<th>Interior</th>
<th>Fire &amp; Life Safety</th>
<th>SUMMARY</th>
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<td>2.8</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Figure F.15
Physical conditions - Covell Hall
**FIRE SUPPRESSION**

*Existing Conditions*

Following is a description of existing systems, equipment, and notable conditions:

▷ **Fire Water Service:** A 4-inch fire service is connected to a utility main on the east side of the building and enters the building in a basement mechanical room and is isolated from the utility main by an existing double check valve assembly located in that room. The distribution main to the building downstream of the double check valve is reduced to 2-1/2-inches. A siamese-type fire department connection is mounted to the face of the east side of the building adjacent to the entrance.

▷ **Fire Sprinkler System:** A wet pipe fire sprinkler system provides partial sprinkler coverage for the building and appears to be an egress-only system, providing coverage of exit pathways such as corridors and room exits to the corridors. Sprinkler heads generally appear to be standard-response fusible-link type. Fire sprinkler piping is steel, with a mix of threaded fittings and mechanical couplings.

▷ **Fire Standpipe System:** A 3-inch wet standpipe with 2-1/2-inch hose connections at each floor is located in the south stairwell. The existing standpipe is similar to a Class I standpipe but does not meet current code requirements. The standpipe is equipped with roof-level siamese hose connections.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ **Fire Water Service:** The existing water service size appears to be sufficient for continued egress only service; however, the service may not be adequate for an expansion of service to cover the entire building to meet current sprinkler and standpipe codes. The existing double check valve appears to be beyond its service life and replacement parts may no longer be available. City water pressure in the area of Covell is generally low; therefore, upsizing the existing service and/or a new fire pump may be required for upgrades to meet current codes.

▷ **Fire Sprinkler System:** The suitability for the existing egress system for continued use depends on the extent of renovations and building program. A full renovation will likely require converting to complete coverage of the entire building. The older standard response sprinkler heads are not compliant with current code and appear to be approaching the end of their service life. The existing sprinkler heads will likely be required to be replaced as part of a major renovation, and piping mains will need to be upsized. The existing sprinkler penetrations through fire-rated glazing do not appear to meet current code and will need to be rectified.

▷ **Fire Standpipe System:** Based on original drawings, the fourth floor/penthouse level of the building is approximately 40-feet above the lowest level of fire department access. Per NFPA and Oregon Fire Code, Class III standpipes will be required for the stairwells to be compliant with current code. If the extent of fire protection was
changed to provide coverage for the entire building, Class I standpipes will be required instead.

PLUMBING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Storm Drainage: Storm drainage is a conventional system connecting roof drains into storm drain piping that gravity drains to the utility storm drain system. Sidewall scuppers at the roof level provide overflow drainage.

▷ Sanitary Waste and Vent: The existing sanitary waste and vent system is conventional design with atmospheric vents extending above the finished roof. The system includes pumped waste from sewage ejectors and elevator sumps, which connect to the building gravity waste piping.

▷ Potable Water Systems: The building has a 2-inch water service, which does not appear to be protected by a backflow device. Potable water piping appears to be a mix of galvanized steel and copper.

▷ Domestic Water Heating System: Domestic hot water is provided by an existing Aerco shell and tube steam heat exchanger. The heat exchanger appears to be in fair condition. A fractional horsepower recirculation pump maintains a minimum domestic hot water system temperature.

▷ Plumbing Fixtures: Existing fixtures are generally commercial grade in fair condition. Restroom fixtures have manual controls. Restrooms and laboratory fixtures are generally not ADA compliant.

▷ Compressed Air: One existing 1/4-horsepower reciprocating compressor with a 10-gallon horizontal receiver provides compressed air for both laboratory process and automatic control end uses. The compressor appears to be in fair condition. The compressed air system includes an air dryer and filters. Pressure gauges indicate that the process supply operates at 60 psi.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Storm Drainage: Roof drains and storm drain piping appear to be in good condition. Piping insulation should be added for existing sections of interior piping that are currently uninsulated.

▷ Sanitary Waste and Vent: Existing waste and vent piping is generally in good condition. Service size appears to be adequate for likely future uses.

▷ Potable Water Systems: The existing water service may be undersized for likely future uses of the building. Most of the existing piping is beyond its service life and will need to be replaced.

▷ Domestic Water Heating System: The existing Aerco steam heat exchanger and recirculation pump are both at the end of their service life. The heat exchanger may be able to be reconditioned, but the pump will need to be replaced.

▷ Plumbing Fixtures: Fixtures are generally beyond their service life. Restrooms fixtures will need to be replaced where necessary to meet ADA requirements or water conservation goals.
Compressed Air: The existing compressor and air dryer are both at the end of their service life, while piping appears to have remaining service life. If the building continues to have laboratory functions and/or pneumatic controls, replacement of both the dryer and compressor are recommended.

HEATING, VENTILATING, AND AIR-CONDITIONING

Existing Conditions

Following is a description of existing heating, ventilating and air-conditioning systems along with notable conditions observed during on site field survey:

- Air Distribution System: Largely, this building does not have a central air distribution system. Except where noted in the air handler summary table, ventilation is provided by operable windows.

<table>
<thead>
<tr>
<th>AIR HANDLER SUMMARY TABLE</th>
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<td>Unit</td>
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</tr>
<tr>
<td>Trane</td>
</tr>
<tr>
<td>Westinghouse</td>
</tr>
<tr>
<td>Trane</td>
</tr>
<tr>
<td>RTU-1</td>
</tr>
<tr>
<td>RTU-2</td>
</tr>
</tbody>
</table>

- Space Heating: The majority of spaces that have exterior windows, such as vestibules, offices, and conference space use steam convectors for space heating; however, there are spaces with individual space heating:
  - Room 017 has a Trane electric heat fan coil unit that feeds that space.
  - Rooms 201 and 201A have an RTU that provides heat for the space.
  - Rooms 202 and 203 have an RTU that provides heat for the space.

- Space Cooling: There is not a central cooling system for the building. The majority of spaces in the building are cooled by window AC or portable/standalone AC units; however, cooling is provided to some spaces as noted below:
  - Room 021: Constant volume ventilation unit w/DX cooling coil
  - Rooms 101 and 103: Constant volume ventilation unit w/DX cooling coil
  - First-Floor Office Space: Constant volume ventilation unit w/DX cooling coil
  - Rooms 201 and 201A: Constant volume ventilation unit w/DX cooling coil
  - Rooms 202 and 203: Constant volume ventilation unit w/DX cooling coil

- Air Exhaust: Rooms 319 and 319A have a ducted exhaust system with an exhaust fan and hood mounted on the roof. Restroom exhaust is connected and exhausted through the roof.

- Building Automation Systems: The building is not connected to any of the campus building automation systems. Individual systems are controlled by stand-alone pneumatic, electric, or electronic controls.

- Steam and Condensate: Steam service is provided to the building.
Section A  Existing Conditions

from the campus steam service. Steam service enters the building at the basement level from the east side at a pressure of 60 psi. Steam is distributed to a heat exchanger, convectors and radiators.

▷ Condensate piping gravity drains to the basement, where it connects to a condensate return line in the utility tunnel adjacent to the building.

Notable Conditions:
Steam piping insulation contains asbestos fibers.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for new building uses.

▷ Air Distribution System: With the exception of RTUs added in 2011, air distribution systems in the building are past their service life and should be replaced.

▷ Space Heating: The space heating capacity appears to be adequate, but steam convectors appear to be past their service life and should be refurbished or replaced.

▷ Air Ventilation: With the exception of roof top units added in 2011, existing HVAC systems do not appear to provide ventilation in compliance with current code. Operable windows for some spaces in the building may have adequate area to provide Code-compliant ventilation.

▷ Air Exhaust: Exhaust ductwork and grilles appear to be in good condition. Exhaust fans serving the restrooms are past their service life and should be replaced.

▷ Building Automation Systems: Existing controls are generally past their service life. Installation of a DDC control system meeting campus standards is recommended.

▷ Cooling Systems: The building lacks a central cooling system. For the building to continue being used year-round, a central cooling system is recommended and will eliminate the current use of spot cooling.

▷ Steam and Condensate: The existing steam service has sufficient capacity to provide heating to the building. However, existing steam and condensate system components, including radiators, convectors, piping, steam traps, and valves are at the end of their service life. Depending on future building use, the existing radiators and convectors could be refurbished and reused, but distribution piping and equipment will need to be replaced.

POWER

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:

▷ Building Electrical Service: Incoming service enters the building in the basement of Covell Hall. The utility transformer located in the main electrical room serves power at 120/208Y to the main distribution panel (MDP) located in the same room in the basement. The MDP is manufactured by Fouch Electric Manufacturing Company. The nameplate on the MDP has worn with age and the ampacity and rated voltage of the MDP could not be read. The MDP feeds power to a Main Sub-Distribution Assembly (SDP)(600A), Sub-Distribution Panel “A” (400A), a Square D panel in the south end of the MDP.
(400A), an MDP in Batcheller Hall (225A), a panelboard in Merryfield (400A), and a sub distribution panel with the name “Mines” (200A).

▷ Sub-distribution: Covell Hall contains two sub-distribution panelboards, which are located in the main electrical room in the basement of the building. The main sub-distribution is fed from the MDP with a 600A circuit breaker. The ampacity and rated voltage of this MDA was not observed.

▷ Emergency/Standby Power: No building-wide emergency/standby power system was observed in this building.

▷ Power Distribution: Panelboards serving branch circuits at 120/208Y are located throughout the building. Panelboards were manufactured by Federal Pacific Electrical Company.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Building Electrical Service: The MDP is in fair condition, is serviceable, yet has less than 15 years of useful functionality remaining. We recommend the MDP to be replaced as part of any major renovation to this facility.

▷ Emergency/Standby Power: The building does not have an emergency power system in place at this time.

▷ Power Distribution: Panelboards are in fair condition; however, failures and hazards have been reported and attributed to the manufacturer of these panels. We recommend replacing all panelboards in this building.

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**LIGHTING**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

▷ Exterior Lighting: Exterior light fixtures are located primarily at building entrances and along campus walkways. Building-mounted fixtures have yellowed and cracked housings.

▷ Interior Lighting: The building is primarily illuminated using T8 fluorescent fixtures. The building includes surface, recessed, and pendant-mounted fixtures.

▷ Egress Lighting: Egress pathways are illuminated by way of emergency bug-eye light fixtures and bug-eye equipped exit signs.

▷ Automatic Lighting Control: Time clocks are used for control of lighting in corridor and open spaces throughout the building.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Exterior Lighting: Exterior light fixtures are in poor condition. An upgrade to LED light fixtures is recommended.

▷ Interior Lighting: The building's interior light fixtures are in fair condition. We recommend replacing the existing light fixtures with LED fixtures with any future renovation to the building.

▷ Egress Lighting: Existing emergency bug-eye fixtures and illuminated exit signs are in fair condition. We recommend these be tested, and replaced where there are failures, with any major renovation to the building.
Automatic Lighting Control: The existing time clocks controlling light fixtures in corridors and open spaces are in fair condition. We recommend replacing the existing controls and upgrading to modern digital controls including networked occupancy sensors, dimmable power packs, and daylight harvesting control devices.

COMMUNICATION

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:

- Voice/Data: The building is supplied with internet service via a 24-strand single mode fiber optic cable system. Incoming data is distributed throughout the building using network switches and Corning fiber optic distribution equipment. No framed distribution racks were observed in this building.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

- Voice/Data: Existing distribution of data throughout the building has reached capacity in its current configuration. We recommend installing a main distribution frame on the main floor and intermediate distribution frames on remaining floors to increase space capacity for data distribution.

ELECTRONIC SAFETY AND SECURITY

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:

- Access Control: Keyed access only. No building-wide electronic access control was observed in this building.
- Security: The building has a Honeywell Security and Alarm system installed. The alarm panel is located at the main entrance.
- Fire Detection and Alarm: The building is equipped with a Silent Knight Fire Alarm Control Panel with integral annunciator panel. Fire notification strobes and horn strobes are located throughout the building.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

- Access Control: We recommend providing a building-wide access control system with a minimum of key card access control at building entrances and entries to critical spaces within the facility.
- Security: We recommend providing exterior security cameras at building entries as part of any future renovations to the building.
- Fire Detection and Alarm: The building’s fire detection and alarm system is in good condition and should continue to be used.

RENOVATION CONSIDERATIONS

A major building renovation that includes comprehensive modification of the building floor plan would have significant impact on MEP systems.

Future Use: The building is suitable for most academic or administrative uses, excluding laboratory uses.
MEP Systems: Following is a general description MEP upgrades associated with a building renovation:

▷ A new fire suppression system would be required for full building coverage.
▷ Plumbing systems have generally exceeded their useful life and would be replaced.
▷ HVAC systems have generally exceeded their useful life and would be replaced. Newer local systems that have been installed recently could not be effectively integrated into a modern building renovation.
▷ The building electrical would be replaced.
▷ Communication system would be replaced in total. Existing communication systems could not be effectively integrated into a modern building renovation.
▷ Fire and life-safety systems would be replaced.

Major Building Liabilities: The following elements of MEP infrastructure would be problematic if incorporated into a renovation:

▷ Currently a medium voltage utility service and transformer are in the main electrical room. The utility transformer will need to be relocated out of the building.
FUNCTIONAL CONDITIONS

▷ Floor Plan has limited flexibility: stairs break building into major sections.
▷ Sloped classrooms are tight
▷ Building width circulation limits large classroom use
▷ Floor-to-floor heights are greater than some other buildings of same age
▷ Tall windows provide good access to daylight
Covell Hall is a major contributor to the historical character of OSU campus. In terms of functionality the building easily supports offices and dry research labs. Classrooms and the tiered classrooms in particular are cramped. The building's configuration does not lend itself well to modern wet laboratories. It does not include gender inclusive restroom but it has access to Batcheller Hall and an elevator.

**Figure F.17**
*Plan - Covell Hall*

**Figure F.18**
*Functional Assessment - Covell Hall*

### Functional Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Program Fit</td>
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<td>Current uses are well supported within this building, however the tiered classrooms are cramped. Floor to ceiling heights are adequate.</td>
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<tr>
<td>Wayfinding</td>
<td>2.8</td>
<td>Buildings floor plan is relatively straightforward and generally supports wayfinding.</td>
</tr>
<tr>
<td>Flexibility</td>
<td>3.5</td>
<td>The floor plate of this building is broken up with stairs, back classroom section somewhat flexible.</td>
</tr>
<tr>
<td>Comfort</td>
<td>2.0</td>
<td>This building has some access to daylight, comfortable circulation, and its floor to floor heights are comfortable. Restrooms for only one gender are available on each floor. This building does not include gender inclusive restroom but has access to Batcheller Hall. This building is serviced by an elevator.</td>
</tr>
<tr>
<td>Image/Character</td>
<td>3.5</td>
<td>This building is a major contributor to historic character of campus.</td>
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<tr>
<td>Deferred Maint. (In Millions)</td>
<td>$9.6</td>
<td></td>
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</table>

### Comments

- **Program Fit**: Current uses are well supported within this building, however the tiered classrooms are cramped. Floor to ceiling heights are adequate.
- **Wayfinding**: Buildings floor plan is relatively straightforward and generally supports wayfinding.
- **Flexibility**: The floor plate of this building is broken up with stairs, back classroom section somewhat flexible.
- **Comfort**: This building has some access to daylight, comfortable circulation, and its floor to floor heights are comfortable. Restrooms for only one gender are available on each floor. This building does not include gender inclusive restroom but has access to Batcheller Hall. This building is serviced by an elevator.
- **Image/Character**: This building is a major contributor to historic character of campus.
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GILBERT HALL
Primary Construction Date:
1939

Physical Description:
Three-story building constructed in the Moderne-Art Deco style

Structural Framing:
Concrete, Brick, and Wood

Construction Material:
Concrete, Structural Brick, Granite

Alterations:
1939 Building Expanded. In 1980 the Gilbert Hall addition was finished. This addition is located to east of Gilbert Hall and is connected by a skyway

Significance:
Gilbert Hall (originally name the Chemistry Building) opened in 1939 and was the last building at Oregon State University designed by John Bennes. It is one of two buildings constructed on campus with assistance from the Works Progress Administration, a part of the “New Deal”. It was named for E. C. Gilbert, who started as a professor at Oregon Agricultural College (now OSU) in 1917 and was chairman of the chemistry department from 1940 to 1956.

Status as Historic Resource in Historic District:
Contributing

Current Uses:
Classrooms, Dry and Wet Labs, Offices, Conference Rooms

PHYSICAL CONDITIONS

HVAC, electrical and plumbing scores were developed as part of this study. plumbing scores were developed as part of this study. The matrix shows a summary of physical conditions. Details are provided in the following pages. Other scores were provided by OSU.

<table>
<thead>
<tr>
<th>Physical Conditions</th>
<th>Score</th>
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<tr>
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<td>Roof</td>
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<td>Interior</td>
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<td>Fire &amp; Life Safety</td>
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<td>SUMMARY</td>
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</table>

Gilbert Hall (originally name the Chemistry Building) opened in 1939 and was the last building at Oregon State University designed by John Bennes. It is one of two buildings constructed on campus with assistance from the Works Progress Administration, a part of the “New Deal”. It was named for E. C. Gilbert, who started as a professor at Oregon Agricultural College (now OSU) in 1917 and was chairman of the chemistry department from 1940 to 1956.

Status as Historic Resource in Historic District:
Contributing

Current Uses:
Classrooms, Dry and Wet Labs, Offices, Conference Rooms

Figure F.19
Physical conditions - Gilbert Hall
FIRE SUPPRESSION

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Fire Water Service: A 4-inch combined domestic water and fire service is connected to the utility main on the north side of the building and enters the building at the basement level in a mechanical room. The water service and utility supply are protected by a double check valve assembly located in the basement mechanical room. A Siamese-type fire department connection is mounted to the building exterior.

▷ Fire Sprinkler System: A wet pipe fire sprinkler system provides partial sprinkler coverage for the building and appears to be primarily an egress-only system. The system provides coverage of exit pathways, including corridors and room exits to the corridors; however, recent renovations to the main lecture hall spaces on the first and second floors have added sprinkler coverage to those spaces. The fire riser is located at the fire service entrance in the basement. Sprinkler heads generally appear to be standard-response fusible-link type, with some glass bulb quick response type noted in the lecture hall area. Fire sprinkler piping is steel with a mix of threaded and mechanical couplings.

▷ Chemical Fire Suppression System: A chemical suppression system provides protection for hazardous chemical storage rooms in the basement. This system appears to have been recently installed and in good condition.

Notable Conditions:

The building was originally equipped with hose cabinets on each floor. The hose cabinets have been removed but appear to still be connected to the domestic water system.

The building is not currently equipped with standpipes.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Fire Water Service: The existing water service serves both domestic water and fire and is likely not sufficient for coverage throughout the building. The existing double check valve appears to be an older model in fair condition and can reasonably be expected to provide at least five years of service.

▷ Fire Sprinkler System: The suitability for the existing egress system for continued use depends on the extent of renovations and building program. A full renovation will likely require converting to complete coverage of the entire building. The older standard response sprinkler heads are not compliant with current code and appear to be approaching the end of their service life. The standard response heads will likely be required to be replaced as part of a major renovation.

▷ Chemical Fire Suppression System: This existing system appears to have adequate capacity and remaining service life for reuse.

▷ Fire Standpipe System: Based on existing structural drawings, the third floor of the building is approximately 34 feet above the lowest level of fire department access. Per NFPA and Oregon Fire
Code, Class III standpipes will be required for the stairwells in the west building to be compliant with current code. If the extent of fire protection was changed to provide coverage for the entire building, Class I standpipes will be required instead.

PLUMBING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Storm Drainage: Storm drainage is a conventional system connecting roof drains into storm drain piping that gravity drains to the utility storm drain system. Sidewall scuppers at the roof level provide overflow drainage. Piping appears to be cast iron hub and spigot, sections of which appear to be insulated for condensation control.

▷ Sanitary Waste and Vent: The existing sanitary waste and vent system is conventional design with atmospheric vents extending above the finished roof. The system includes pumped waste from sewage ejectors and elevator sumps, which connect to the building gravity waste piping. Piping appears to be a mix of cast iron hub and spigot, galvanized steel, and PVC.

▷ Sewage Ejectors: A duplex sanitary lift station in the basement mechanical room provides coverage for fixtures in the basement below the level of the sewer connection.

▷ Elevator Sump Pump: Submersible sump pumps serve the sump pits for each elevator.

▷ Acid Waste and Vent: The existing acid waste and vent system is conventional design with atmospheric vents extending above the finished roof. Piping appears to be a mix of high-silicon cast iron hub and spigot, borosilicate glass, and polypropylene with electrofusion joints.

▷ Potable Water Systems: A 4-inch combined domestic water and fire service is connected to the utility main on the north side of the building and enters the building at the basement level in a mechanical room. Two sets of redundant backflow preventers isolate industrial water and building potable water from the utility supply. Redundant booster pumps supply water to the upper floors. Potable water piping appears to be a mix of galvanized steel and copper.

▷ Non-Potable Water: Non-potable water is isolated from the domestic water service by reduced pressure principle valves and is connected to makeup water for mechanical systems.

▷ Industrial/Laboratory Water: Industrial water is isolated from the domestic water service by reduced pressure principle valves and serves laboratory spaces throughout the building.

▷ Domestic Water Heating System: Domestic hot water is provided by an existing electric storage tank-type water heater with storage and heating capacity of 85 gallons and 9kW respectively. The water heater is in poor condition. A fractional horsepower recirculation pump maintains a minimum domestic hot water system temperature. The water heater and pump are located in the basement mechanical room.

▷ Plumbing Fixtures: Existing fixtures are generally commercial grade. Fixture age and conditions vary, with some being original to the
building and others recently installed. Restroom fixtures have manual faucets and flushometers. Restroom and laboratory fixtures are generally not ADA compliant. Fixtures are generally in fair condition. Laboratory emergency fixtures are typically not compliant with current standards.

▷ Natural Gas: Natural gas is delivered from the utility distribution system and serves existing laboratory gas outlets in fume hoods and at bench tops in existing laboratory spaces throughout the building. Most laboratories are not equipped with emergency gas shutoffs as required by current code.

▷ Compressed Air: An existing 7.5-horsepower screw compressor provides compressed air for laboratory process uses. A tank-mounted reciprocating compressor with a vertical receiver provides compressed air for pneumatic controls. Both compressors are paired with separate non-cycling refrigerated dryers and are equipped with filters. Both compressors and the process dryer appear to be in good condition and regularly serviced.

▷ Nitrogen: Nitrogen gas is supplied to laboratory spaces throughout the building from a central manifold in the basement.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Storm Drainage: Roof drains and storm drain piping appear to be in good condition. Piping insulation should be added for existing sections of interior piping that are currently uninsulated.

▷ Sanitary Waste and Vent: Existing waste and vent piping is generally in fair-to-good condition. The sewage ejector and elevator sump pump are beyond their service life and will need to be replaced.

▷ Acid Waste and Vent: Existing acid and vent piping generally appear to be in good condition and suitable for reuse.

▷ Potable Water Systems: The existing water service size should be adequate for likely future uses of the building but will need to be separated from the fire water service. The existing piping is beyond its service life and will need to be replaced. Booster pumps are newer and in good condition and are suitable for reuse. The larger set of backflow preventers appear to be suitable for reuse, but the pair of 2-inch backflows appear to be beyond their service life and may not have replacement parts available.

▷ Industrial/Laboratory Water: Existing piping is beyond its service life and will need to be replaced.

▷ Domestic Water Heating System: The existing domestic water heater and recirculation pump are both at the end of their service life, and do not appear to be suitable for reuse.

▷ Plumbing Fixtures: Laboratory fixtures are generally beyond their service life and should be replaced. Restroom fixtures will need to be replaced where necessary to meet ADA requirements or water conservation goals.

▷ Natural Gas: Natural gas piping is generally in good condition. Depending on future building use, the existing piping can be reused if new programming requires the use of natural gas.

▷ Compressed Air: The existing compressors and process air dryer appear to have roughly five to ten
years of service life remaining and will likely need to be rebuilt at that time. The process air dryer appears to be beyond its service life. Depending on future building use, the existing piping can be reused if new programming requires the use of compressed air for process and/or controls end-uses.

Nitrogen: The existing manifold and gas piping appear to be in good condition. Depending on future building use, the existing piping can be reused if new programming requires the use of nitrogen.

HEATING, VENTILATING AND AIR-CONDITIONING

Existing Conditions

Following is a description of existing heating, ventilating and air-conditioning systems along with notable conditions observed during on-site field survey:

Air Distribution System: The majority of the building is served by a pressurized central chase with steam reheat coils at individual floor branches. Multiple lab spaces have single zone ventilation units with DX cooling coils. The main lecture halls have single zone ventilation units using DX cooling coils with roof mounted condensing units.

Space Heating: The majority of spaces that have exterior windows, such as vestibules, offices, and laboratory spaces use steam convectors for space heating.

Space Cooling: There is no central cooling system for the building. Several offices spaces in the building are cooled by window AC or portable/standalone AC units. The main lecture halls have cooling provided by duct-mounted DX cooling coils with roof-mounted condensing units. Many lab spaces are conditioned by a single-zone ductless AC unit connected to a roof-mounted chiller.

General Exhaust: Restrooms are ducted together through a general exhaust system with a roof mounted exhaust fan.

Laboratory Exhaust: Laboratory exhaust is provided by fume hoods with individual exhaust fans mounted on the roof. Many fume hoods in the building are not being used, but their exhaust fans are still operating. Labs without fume hoods do not have exhaust.

Building Automation Systems: There are a number of separate control systems in the building. Most of the older HVAC systems in the building are controlled by an existing Johnson Controls pneumatic control system. There are also several systems with standalone electric or electronic controls. The newly renovated lecture halls condensing units and fume hood on the first and second floor as well as two of the three fans in the basement air handler are connected to the campus-wide Infinity system.

Notable Conditions: All building systems are no longer viable; however, the newly renovated lecture halls should remain.

Steam and Condensate: Steam service is provided to the building from the campus steam system. The existing steam service enters the building at the basement level from the west side at a pressure of 60 psi. Steam is distributed to convectors, radiators, HVAC units, and two steam-to-water heat exchangers.

There are four duplex condensate
pumps located throughout the building that distribute condensate back to the campus steam plant.

▷ Heating Water: There are two steam-to-water heat exchangers that are providing heating water to the building. Two lead lag pumps circulate heating water to single-zone heating units located in the classrooms and labs throughout the building.

▷ Chilled Water: There are process chillers located in laboratories throughout the building, providing process chilled water for the rooms they are serving. There is a rooftop chiller providing chilled water to AC units within the building laboratories. There is a cooling tower providing condenser water for the AC units and process chillers throughout the building.

Notable Conditions
The steam piping insulation contains asbestos fibers.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for new building uses.

▷ Air Distribution System: The air distribution system in the building is past its service life and should be replaced; however, the condensing units mounted on the roof for the new lecture hall are still viable.

▷ Space Heating: The space heating capacity appears to be adequate, but steam coils appear to be past their service life and should be replaced.

▷ Cooling Systems: The building lacks cooling capacity to serve the entire building. The current cooling system configuration and capacity is not appropriate for a laboratory building.

▷ Air Ventilation: Existing HVAC systems do not appear to provide ventilation in compliance with current code. Operable windows for some spaces in the building may have adequate area to provide code compliant ventilation.

▷ General Exhaust: Exhaust ductwork and grilles appear to be in good condition. Exhaust fans serving the restrooms are past their service life and should be replaced.

▷ Laboratory Exhaust: Laboratory exhaust is provided by fume hood with exhaust fans mounted on the roof. Labs without fume hoods do not have exhaust. There are a number of fume hoods still ducted and running but no longer in use.

▷ Building Automation Systems: Existing controls are generally past their service life. Installation of a DDC control system meeting campus standards is recommended.

▷ Steam and Condensate: The existing steam service has sufficient capacity to provide heating to the building. However, existing steam and condensate system components, including piping, steam traps, and valves, are at the end of their service life.

▷ Heating Water: The existing Thrush Co steam-to-water heat exchanger is relatively new and could be reused or repurposed. The older steam-to-water heat exchanger has exceeded its service life. The existing heating water pumps have exceeded their service life. The existing heating water piping and accessories serving the new lecture halls are new and are appropriate for reuse.

▷ Chilled Water: The existing process chillers in the building have not exceeded their service life and could be reused or repurposed.
The existing chiller on the roof has exceeded its service life and should be replaced. The cooling tower is relatively new and could be reused. The existing cooling water pump has exceeded its service life and should be replaced.

POWER

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Building Electrical Service: Power service enters the building in the basement electrical room. Exposed transformers and conductors are present in the electrical room where voltage is stepped down to 120/208Y. The building is equipped with a 3-section, 2500-Amp rated 120/208Y, 3-phase, Cutler-Hammer Pow-R-Line C Switchboard. The switchboard was installed in 2007.

▷ Sub-distribution: The main switchgear serves power to a 600-Amp, 120/208Y, 3-phase, 4-wire sub-distribution panel (SDP) located in the penthouse. SDP serves power to motor control centers MCC-1, MCC-2, MCC-3, and MCC-4. The penthouse MCC room was not observed during this site visit.

▷ Emergency/Standby Power: No building-wide emergency/standby power system was observed in this building.

▷ Power Distribution: Panelboards serving branch circuits at 120/208Y are located throughout the building. The majority of panelboards installed in this building are manufactured by Sylvania, are in good condition, have remaining capacity, and are serviceable. Select load centers and fuse boxes exist in various locations throughout the facility. These load centers and fuse boxes are in poor condition.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Building Electrical Service: The building’s electrical service and main distribution are in good-to-new condition and can remain for future use; however, with any substantial renovation and subsequent reconfiguration of the building and spaces within, replacement of existing main distribution equipment will be the most cost-effective approach.

▷ Emergency/Standby Power: The building does not have an emergency power system in place at this time. We recommend providing an emergency power source depending on the future use of this building. The current functionality of this building will not require an emergency system.

▷ Power Distribution: The majority of panelboards are in good condition and are serviceable. Most panelboards in this building can remain for future use. Renovations to this building and reconfiguration of spaces will lead to replacement of existing panelboards.

LIGHTING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Exterior Lighting: Exterior light fixtures are located primarily at building entrances and along campus walkways. Light fixtures consist primarily of HID and
fluorescent sources. Building-mounted fixtures have yellowed and cracked housings.
▷ Interior Lighting: The building is primarily illuminated using T8 fluorescent fixtures. The building includes surface, recessed, and pendant mounted fixtures with a combination of parabolic and lensed optics.
▷ Egress Lighting: Egress pathways are illuminated by way of emergency bug-eye light fixtures and bug-eye equipped exit signs.
▷ Automatic Lighting Control: Time clocks are used for control of lighting in corridor and open spaces throughout the building. Lighting control is provided using Wattstopper DLM system providing dimming and scene selection in the new auditoriums and lecture halls. No automatic controls were observed in the remaining spaces.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:
▷ Exterior Lighting: Exterior light fixtures are in poor condition. An upgrade to LED light fixtures is recommended.
▷ Interior Lighting: The building’s interior light fixtures are in fair condition. We recommend replacing all the existing light fixtures with LED fixtures with any future renovation to the building.
▷ Egress Lighting: Existing egress lighting was limited in the building. Where equipped with egress lighting, it consisted of emergency bug-eye fixtures, and illuminated exit signs are in fair condition. We recommend these be tested, and replaced where there are failures, and additional egress lighting be provided as required.
▷ Automatic Lighting Control: The existing time clocks controlling light fixtures in corridors and open spaces are in fair condition. We recommend replacing the existing controls and upgrading to modern digital control system including networked occupancy sensors, dimmable power packs, and daylight harvesting control devices.

COMMUNICATION

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Voice/Data: The building is supplied with internet service via 24-strand, single-mode fiber optic cable system with Corning fiber optic hardware. The main distribution frame (MDF) is located in the basement. Intermediate distribution frames (IDF), located on each floor, are served by both single-mode and multi-mode fiber from the basement MDF.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:
▷ Voice/Data: Distribution of network data and internet services is adequate for this building. No recommendations are made at this time.
ELECTRONIC SAFETY AND SECURITY

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Access Control: Keyed access only. No building-wide electronic access control was observed in this building.
▷ Security: No security system or intrusion detection was observed during this site visit.
▷ Fire Detection and Alarm: The building is equipped with a Gamewell Zans 200, addressable fire alarm panel and a Silent knight Annunciator. Manual pull stations exist near building entrances. No horn or horn strobe notification devices were observed during this visit.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Access Control: We recommend providing a building-wide access control system with a minimum of key card access control at building entrances and entries to critical spaces within the facility.
▷ Security: We recommend providing exterior security cameras at building entries as part of any future renovations to the building.
▷ Fire Detection and Alarm: We recommend replacing the existing fire alarm control panel with a new panel and installing horn strobes and strobe notification devices throughout the building as part of any future renovations.

RENOVATION CONSIDERATIONS

A major building renovation that includes comprehensive modification of the building floor plan would have significant impact on MEP systems.

▷ Future Use: The building is suitable for most academic or administrative uses, excluding laboratory uses.
▷ MEP Systems: Following is a general description MEP upgrades associated with a building renovation:
  ▷ A new fire suppression system will be required for full building coverage.
  ▷ Plumbing systems have generally exceeded their useful life and would be replaced.
  ▷ HVAC systems have generally exceeded their useful life and would be replaced. Newer local systems that have been installed recently could not be effectively integrated into a modern building renovation.
  ▷ The building electrical system would be replaced. Some existing main distribution equipment could be reused; however, this would represent some savings relative to the entire scope of electrical system upgrades. Lighting fixtures and panel circuits would be replaced to accommodate remodeled spaces.
  ▷ Communication system would be replaced in total. Existing communication systems could not be effectively integrated into a modern building renovation.
  ▷ Fire and life-safety systems would be replaced in total.
  ▷ Major Building Assets: The following elements of MEP infrastructure would have substantial value that can be incorporated into a renovation:
• MEP systems serving the first and second-floor auditoriums

• Building electrical primary distribution equipment.

• Major Building Liabilities:
The following elements of MEP infrastructure would be problematic if incorporated into a renovation:

• A medium voltage utility service and transformer are currently in the main electrical room. The utility transformer would need to be relocated out of the building.

• Floor-to-floor height and utility pathways are not suitable for use for laboratory occupancy.
FUNCTIONAL CONDITIONS

▷ Support of current Chemistry use is poor
▷ Floor plan/structural layout lends itself best to mix of office/classroom use
▷ Floor-to-floor heights do not support modern wet lab use
▷ Tall windows could provide good access to daylight but are currently obstructed with above-ceiling infrastructure

Figure F.20
Cross section through Gilbert Hall
Gilbert Hall is a contributing resource within the OSU National Historic District, contributing to the historic character of the campus. The building’s configuration does not lend itself well to modern wet laboratories. With low floor-to-floor heights the existing column grid is also limited for classroom uses but office uses could be supported. The building has good access to daylight without drop ceilings. It includes a gender inclusive restroom and elevator.

**Summary**

<table>
<thead>
<tr>
<th>Program Fit</th>
<th>Wayfinding</th>
<th>Flexibility</th>
<th>Comfort</th>
<th>Deferred Maint. (In Millions)</th>
</tr>
</thead>
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<td>1.0</td>
<td>3.7</td>
<td>1.0</td>
<td>3.8</td>
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</table>

**Comments**

Program Fit: Chemistry labs are not well supported within Gilbert Hall. The buildings floor to floor heights do not meet current standards for a wet lab building.

Wayfinding: Buildings floor plan is relatively clear and generally supports wayfinding.

Flexibility: This building has a narrow width which prohibits its use as wet lab building by current standards. The buildings column grid also limits classroom uses, however office uses could be supported.

Comfort: Without drop ceilings there is good access to daylight, and the buildings narrow width affords daylight from two directions with an open floor plan. The buildings corridors are narrow and long. There are restrooms for only one gender on each floor except the 1st and 3rd floor - gender inclusive restrooms are also available. This building is served by an elevator.

Image/Character: This building is a major contributor to the historic character of the campus.
WENIGER HALL
**Primary Construction Date:**
1958

**Physical Description:**
Three-Story Modern style building

**Structural Framing:**
Brick cavity wall and Wood

**Construction Material:**
Concrete, Metal Sheet, Brick Veneer

**Status as Historic Resource in Historic District:**
Not Eligible / Out of Period

**Current Uses:**
Classrooms, Dry and Wet Labs, Offices

### PHYSICAL CONDITIONS

HVAC, electrical and plumbing scores were developed as part of this study. The matrix shows a summary of physical conditions. Details are provided in the following pages. Other scores were provided by OSU.

<table>
<thead>
<tr>
<th>Physical</th>
<th>Structure</th>
<th>Accessibility</th>
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<th>Roof</th>
<th>HVAC</th>
<th>Electrical</th>
<th>Plumbing</th>
<th>Conveyance</th>
<th>Interior</th>
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<th>SUMMARY</th>
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*Figure F.23  
Physical conditions - Weniger Hall*
FIRE SUPPRESSION

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Fire Water Service: The building is not currently equipped with a fire water service or a fire sprinkler system.
▷ Hose Cabinets: The building is equipped with hose cabinets on each floor, which are connected to the potable water system. The hose cabinets have been decommissioned, but some cabinets appear to still have hose valves, and appear to still be connected to potable water service. Hose cabinets are currently being used to store fire extinguishers.
▷ Fire Standpipe System: The building is equipped with four 5-inch manual dry standpipes, one at each stairwell. The standpipes have 2-1/2-inch hose connections at landings and are supplied by quadriplex fire department connections (FDCs) at ground level. Each standpipe also has a set of 2-1/2-inch hose connections at roof level.

Notable Conditions:
The standpipes are not interconnected as required by Code. The standpipes generally do not meet Code and do not appear to meet the requirements of Class I, II, or III standpipes.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:
▷ Fire Water Service: A full renovation of the building will likely require providing complete fire suppression coverage for the building. A new 6-inch service will be required, as well as a fire pump.
▷ Fire Standpipe System: Based on existing structural drawings, the top floor of the building is approximately 55 feet above the lowest level of fire department access. Per NFPA and Oregon Fire Code, Class III standpipes will be required for the stairwells to be compliant with current code. If the extent of fire protection was changed to provide coverage for the entire building, Class I standpipes will be required instead.

PLUMBING

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Storm Drainage: Storm drainage is a conventional system connecting roof drains into storm drain piping that gravity drains to the utility storm drain system. Sidewall scuppers at the roof level provide overflow drainage. Piping appears to be cast iron hub and spigot, sections of which appear to be insulated for condensation control.
▷ Sanitary Waste and Vent: The existing sanitary waste and vent system is conventional design with atmospheric vents extending above the finished roof. The system includes pumped waste from elevator sumps, which connect to the building gravity waste piping. Piping appears to be a mix of cast iron hub and spigot, galvanized steel, and PVC.
▷ Elevator Sump Pump: Submersible sump pumps serve the sump pits for each elevator.
Acid Waste and Vent: The existing acid waste and vent system is conventional design with atmospheric vents extending above the finished roof. Piping appears to be a mix of high-silicon cast iron hub and spigot, borosilicate glass, and polypropylene with electrofusion joints.

Potable Water Systems: Reduced pressure principle backflow preventers isolate industrial water and building potable water from the utility supply. Redundant booster pumps supply water to the upper floors. Potable water piping appears to be a mix of galvanized steel and copper.

Non-Potable Water: Non-potable water is isolated from the domestic water service by reduced pressure principle valves and is connected to makeup water for mechanical systems.

Industrial/Laboratory Water: Industrial water is isolated from the domestic water service by reduced pressure principle valves and serves laboratory spaces throughout the building.

Domestic Water Heating System: Domestic hot water is provided by an existing shell and tube steam water heater. The water heater is in fair to good condition. A fractional horsepower recirculation pump maintains a minimum domestic hot water system temperature.

Plumbing Fixtures: Existing fixtures are generally commercial grade. Fixture age and condition vary, with some being original to the building and others recently installed. Restroom fixtures have manual faucets and flushometers. Restroom and laboratory fixtures generally do not meet current ADA requirements. Fixtures are generally in fair condition.

Laboratory emergency fixtures are typically not compliant with current standards. Laboratory fixtures range in age and condition from original and in poor condition to new and excellent condition.

Natural Gas: Natural gas is delivered from the utility distribution system and serves existing laboratory gas outlets in fume hoods and at bench tops in existing laboratory spaces throughout the building. Most laboratories are not equipped with emergency gas shutoffs as required by current code.

Compressed Air: An existing 25-horsepower screw compressor provides compressed air for laboratory process uses. A tank-mounted non-cycling dryer on a horizontal receiver conditions the air before it is supplied to the building at 100 psi. The compressor and dryer appear to be in fair condition.

Nitrogen: Nitrogen gas is supplied to laboratory spaces throughout the building from a central manifold in the basement.

Deionized Water: A deionized water system located in the penthouse mechanical room supplies deionized water to laboratory spaces throughout the building.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

Storm Drainage: Roof drains and storm drain piping appear to be in good condition. Piping insulation should be added for existing sections of interior piping that are currently uninsulated.

Sanitary Waste and Vent: Existing
waste and vent piping is generally in fair to good condition. The elevator sump pumps are beyond their service life and should be replaced.

▷ Acid Waste and Vent: Existing acid and vent piping generally appears to be in good condition and suitable for reuse.

▷ Potable Water Systems: The existing water service size should be adequate for likely future uses of the building. Portions of the existing piping is beyond its service life and will need to be replaced. Booster pumps have exceeded their service life and should be replaced. The backflow preventers appear to be suitable for reuse.

▷ Industrial/Laboratory Water: Portions of existing piping are beyond their service life and will need to be replaced.

▷ Domestic Water Heating System: The existing domestic water heater and recirculation pump are both at the end of their service life. The water heater may be able to be refurbished, but the pump is at the end of its service life.

▷ Plumbing Fixtures: Original laboratory fixtures are generally beyond their service life and should be replaced. Restroom fixtures will need to be replaced where necessary to meet ADA requirements or water conservation goals.

▷ Natural Gas: Natural gas piping is generally in good condition. Depending on future building use, the existing piping can be reused if new programming requires the use of natural gas.

▷ Compressed Air: The existing compressor and air dryer appear to be at the end of their service life. Depending on future building use, the existing compressed air piping can be reused if new programming requires the use of compressed air for process and/or controls end-uses.

▷ Nitrogen: The existing manifold and gas piping appear to be in good condition. Depending on future building use, the existing piping can be reused if new programming requires the use of nitrogen.

▷ Deionized Water: The existing deionized water system and piping is in good condition and suitable for reuse.

HEATING, VENTILATING, AND AIR-CONDITIONING

Existing Conditions

Following is a description of existing heating, ventilating and air-conditioning systems along with notable conditions observed during on-site field survey:

▷ Air Distribution System – [Type 1]: The majority of the building is served by a pressurized central chase with steam reheat coils at individual floor branches with cooling towers feeding units is single zone spaces. This system is long past it’s service life and should be replaced. Multiple lab spaces have single zone ventilation units with DX cooling coils. The first-floor lecture hall has a multizone ventilation unit with a DX cooling coil served by a roof-mounted condensing unit.

▷ Space Heating: The majority of spaces that have exterior windows, such as vestibules, offices, and laboratory spaces use steam convectors for space heating.

▷ Space Cooling: There is no central cooling system for the building. The majority of spaces in the building are cooled by window AC or portable/standalone AC units.
The main lecture hall has cooling provided by a multi-zone unit. Many lab spaces are conditioned by a single-zone ducted AC unit fed by roof-mounted cooling towers.

▷ General Exhaust: Restrooms are ducted together through a general exhaust system with a roof mounted exhaust fan.

▷ Laboratory Exhaust: Laboratory exhaust is provided by fume hoods with individual exhaust fans mounted on the roof. Many fume hoods in the building are not being used, but their exhaust fans are still operating. Many fume hoods in the building are not being used yet are still operable. Labs without fume hoods do not have exhaust

▷ Building Automation Systems: The building itself has a Johnson Controls pneumatic control system. There is no automation system for this building. Installation of a DDC control system meeting Campus Standards is recommended.

▷ Steam and Condensate: Steam service is provided to the building from the campus steam service. The existing steam service enters the building at 60 psi. Steam is distributed to steam-to-water heat exchangers, HVAC units, and steam convectors and radiators throughout the building. There are two steam autoclaves providing process steam for the building. There are also steam coils located within the building supply plenum that provide heating for the laboratory and office spaces. There is one duplex condensate pump in the basement that receives condensate from HVAC equipment throughout the building and pumps it back to the campus steam plant.

▷ Chilled Water: There are cooling towers on the roof that are providing cooling water for AC units throughout the building. There are chillers providing chilled water for AC units within the building.

▷ Refrigerant: There are refrigerant compressors providing refrigeration for laboratory control areas. These refrigerant compressors have mixed uses and are not all currently in use.

Notable Conditions
The steam piping insulation contains asbestos fibers.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for new building uses.

▷ Air Distribution System: The air distribution system in the building is past its service life and should be replaced.

▷ Space Heating: The space heating capacity appears to be adequate, but steam radiators and convectors appear to be past their service life and should be replaced or refurbished.

▷ Space Cooling: The space cooling capacity appears to be adequate but chilled water cooling coils appear to be past their service life and should be replaced.

▷ Air Ventilation: Existing HVAC systems do not appear to provide ventilation in compliance with current code. Operable windows for some spaces in the building may have adequate area to provide code compliant ventilation.

▷ General Exhaust: Exhaust ductwork and grilles appear to be in good condition. Exhaust fans serving the restrooms are past their service life and should be replaced.
Building Automation Systems: There is no building automation system for this building. Installation of a DDC control system meeting campus standards is recommended.

Cooling Systems: The building lacks a central cooling system. For the building to continue year-round use, a central cooling system is recommended, and will eliminate the current use of extensive spot cooling.

Steam and Condensate: The existing steam service is sufficient to provide heating to the building; however, a majority of the steam piping and valves within the building are old and should be replaced. The existing steam autoclaves in the building are relatively new and could be reused or repurposed. The existing HVAC air handler steam coils and steam convectors have exceeded their service life and should be replaced. The existing duplex condensate pump has exceeded its service life and should be replaced.

Chilled Water: The existing cooling towers on the roof of the building are relatively new and could be reused or repurposed. The existing AC units they are serving have exceeded their service life and should be replaced. The existing chillers, along with the AC units they are serving, have exceeded their service life and should be replaced.

Refrigerant: The refrigerant compressors and piping serving laboratory temperature control areas are either no longer in use or have exceeded their service life and should be removed and replaced.

POWER

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

Building Electrical Service: Power is served to the building via feeders carrying 4.16kV through the mechanical chase of the building to the penthouse level. The voltage is stepped down to 120/208Y using a 1000kVA Square D, Dry-type transformer located in the main electrical room of the penthouse. The main switchgear also located in this room has a section rating of 1800 Amps. The main switchgear serves power to sub-distribution panels located throughout the facility. The main switchgear was installed in the 1960’s.

Sub-distribution: Sub-distribution panels are located throughout the facility. Sub-distribution panels are mostly Square D panelboards that were installed in the 1960’s. Distribution between the main switch gear and sub-distribution panels is achieved by the use of open bus ducts running through the building’s open mechanical chase.

Emergency/Standby Power: Mobile generator connection points are located in panels installed on the exterior of the building in the fire escape stairwell.

Power Distribution: Panelboards serving branch circuits at 120/208Y are located throughout the building. The majority of panelboards installed in this building are manufactured by Square D, are in poor condition, have little remaining capacity, and are no longer serviceable.
**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Building Electrical Service: The building's electrical service and main distribution are in poor condition and should be replaced in total as part of any future renovation. Multiple Code violations exist as part of the current configuration.

▷ Emergency/Standby Power: The building does not have an emergency power system in place at this time. We recommend providing a new generator and emergency/standby distribution system depending on the future use of this building.

▷ Power Distribution: The majority of panelboards are in poor condition and are no longer serviceable. We recommend replacing all panelboards, feeders, and other distribution equipment in this building.

**Lighting**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

▷ Exterior Lighting: Exterior light fixtures are located primarily at building entrances and along campus walkways. Light fixtures consist primarily of HID and fluorescent sources. Building-mounted fixtures have yellowed and cracked housings.

▷ Interior Lighting: The building is primarily illuminated using T8 fluorescent fixtures. The building includes surface, recessed, and pendant-mounted fixtures with a combination of parabolic and lensed optics. Some spaces have had newer LED light fixtures installed.

▷ Egress Lighting: Egress pathways are illuminated by way of emergency bug-eye light fixtures and bug-eye equipped exit signs.

▷ Automatic Lighting Control: Time clocks are used for control of lighting in corridor and open spaces throughout the building. Lutron lighting control panels were observed in the building’s mechanical chase. Fixtures served from this lighting control panel are not known at this time.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Exterior Lighting: Exterior light fixtures are in poor condition. An upgrade to LED light fixtures is recommended.

▷ Interior Lighting: The building's interior fixtures are in fair-to-poor condition. We recommend replacing all light fixtures with new LED fixtures with any future renovations to the building.

▷ Egress Lighting: Existing emergency bug-eye fixtures and illuminated exit signs are in fair condition. We recommend these be tested and replaced where there are failures.

▷ Automatic Lighting Control: The existing time clocks controlling light fixtures in corridors and open spaces are in fair condition. We recommend replacing the existing controls and upgrading to modern digital control system including networked occupancy sensors, dimmable power packs, and daylight harvesting control devices.
COMMUNICATION

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Voice/Data: The building is supplied with internet service via 24-strand single mode fiber optic cable system with Corning fiber optic hardware. The main distribution frame (MDF) is located on the fifth floor, near the center of the building. Intermediate distribution frames (IDF), located on each floor, are served by fiber from the fifth floor MDF room. Fiber optic and copper distribution is routed throughout the open mechanical chase.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:
▷ Voice/Data: The MDF equipment is in good condition and can remain to be used as part of any future renovation. We recommend replacing existing IDF rooms with new rooms stacked under the existing MDF room; however, where major building renovations and reconfiguring occurs, alternate MDF and IDF locations should be considered.

ELECTRONIC SAFETY AND SECURITY

Existing Conditions
Following is a description of existing systems, equipment, and notable conditions:
▷ Access Control: Keyed access only. No building-wide electronic access control was observed in this building.

Evaluation
Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:
▷ Access Control: We recommend providing a building-wide access control system with a minimum of key card access control at building entrances and entries to critical spaces within the facility.
▷ Security: We recommend providing exterior security cameras at building entries as part of any future renovations to the building.
▷ Fire Detection and Alarm: We recommend replacing the existing fire alarm control panel with a new panel, as it has surpassed its useful life, and installing additional horn strobe and strobe notification devices throughout the building due to lack of coverage, as part of any future renovations.

RENOVATION CONSIDERATIONS

A major building renovation that includes comprehensive modification of the building floor plan would have significant impact on MEP systems.
▷ Future Use: The building is suitable for most academic or administrative uses including light to moderate intensity laboratory use.
 MEP Systems: Following is a general description MEP upgrades associated with a building renovation:

▷ A new fire suppression system will be required for full building coverage.
▷ Plumbing systems have generally exceeded their useful life and would be replaced.
▷ HVAC systems have generally exceeded their useful life and would be replaced. Newer local systems that have been installed recently could not be effectively integrated into a modern building renovation.
▷ Electrical and lighting systems would be replaced.
▷ Communication system would be replaced. Existing communication systems could not be effectively integrated into a modern building renovation.
▷ Fire and life-safety systems would be replaced.

Major Building Assets: The following elements of MEP infrastructure would have substantial value that can be incorporated into a renovation:

▷ The building is configured well for laboratory use. Labs are located interior to the central corridors and adjacent to the vertical utility shaft. Offices are located on the perimeter of the building.
▷ The building has a large central utility shaft that would facilitate replacement of building vertical infrastructure.

Major Building Liabilities: The following elements of MEP infrastructure would be problematic if incorporated into a renovation:

▷ Existing concrete floor slabs have post-tension cables. Penetrations in the slabs for piping, conduit, or hanger attachments would require locating tension cable. This would make a renovation challenging.
▷ The building electrical service is located in the penthouse. Medium-voltage utility service and transformer are in the main electrical room. Medium-voltage feeders are routed in the vertical utility chase. The utility transformer would need to be relocated out of the building. The main electrical room should be relocated out of the building. The main electrical room should be relocated to the ground floor and new site transformers installed on grade.
▷ A 208-volt bus duct is located in the vertical electrical chases. This is not recommended.
▷ Floor-to-floor height is not optimal for use for laboratory occupancy.
FUNCTIONAL CONDITIONS

- Support of current wet science use is poor
- Wide building width / limited daylight
- Utility core limits atrium option
- Floor-to-floor heights do not support modern wet lab use

Figure F.24
Cross section through Weniger Hall
Weniger Hall has no historic significance with respect to the OSU National Historic District’s period of significance. The overall image of the building is poor. In addition the building’s configuration does not lend itself well to modern wet laboratories with limited floor-to-floor heights and a large building width that limits access to daylight. The central utility shaft and large building width limit uses including adequate office space.

Program Fit: Wet labs are not well supported by this building. Floor to floor heights do not meet current standard for wet labs, although the central utility shaft could allow for exposed ceilings thus more floor to floor ceiling height. This building does not meet state of the art lab standards.

Wayfinding: Wayfinding is relatively clear for this building, although the double corridor can be confusing for users.

Flexibility: This building is suitable for limited uses. It is not ideal for office or classrooms given its poor access to daylight due to the width of the building.

Comfort: Access to daylight within this building can be achieved without drop ceilings, however the building corridors are dark and long. Restrooms for both genders are found on each floor. This building also includes gender inclusive restrooms and an elevator.

Image/Character: The visual condition of the exterior of this building is poor.

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**Figure F.26**
Functional Assessment - Weniger Hall

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**Figure F.25**
Plan - Weniger Hall
WITHYCOMBE HALL
Primary Construction Date:
1949

Physical Description:
Three-story building constructed in the Moderne-Art Deco style

Structural Framing:
Concrete and Wood

Construction Material:
Concrete, Structural Brick, Glass Block

Status as Historic Resource in Historic District:
Contributing

Current Uses:
Classrooms, Dry Research, Offices

PHYSICAL CONDITIONS

HVAC, electrical and plumbing scores were developed as part of this study. The matrix shows a summary of physical conditions. Details are provided in the following pages. Other scores were provided by OSU.

Physical conditions - Withycombe Hall

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<thead>
<tr>
<th>Structure</th>
<th>Accessibility</th>
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Figure F.27
Physical conditions - Withycombe Hall
FIRE SUPPRESSION

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Fire Water Service: A 4-inch fire service is connected to the utility main on the south side of the building and enters the building in the basement beneath the existing theater. The water service is protected by a double check valve assembly located in the basement at the point of entry. A Siamese-type fire department connection is mounted to the face of the south side of the building adjacent to the theater.

▷ Fire Sprinkler System: A wet pipe fire sprinkler system provides partial sprinkler coverage for the building and appears to be an egress-only system. The system provides coverage of exit pathways, including corridors and room exits to the corridors. The fire riser is located at the fire service entrance in the basement. The building appears to have a total of six zones: three zones for the west section of the building, a zone for the auditorium, a zone for the east section of the building, and a glycol zone. Zone stations are located remotely at the entrance to the area served. Sprinkler heads generally appear to be standard-response fusible-link type, with some glass bulb quick-response type noted in the lecture hall area. Fire sprinkler piping is steel. Older sections of the sprinkler system have threaded fittings at all sizes, while more recently renovated areas have mechanical couplings for piping 2-1/2-inch and larger and threaded for smaller piping.

▷ A glycol zone provides coverage for existing refrigerated constant temperature rooms in the basement below the theater.

Notable Conditions:

The inspector’s test station at the riser is not piped to drain, and there does not appear to be an existing adequately sized receptor in the vicinity of the riser. Zone stations are not equipped with test drains. The building is not currently equipped with standpipes.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Fire Water Service: The existing water service size is sufficient for light hazard or ordinary hazard group 1 service throughout the building but is not adequate to supply coverage for ordinary group 2 or high hazard occupancies. The existing double check valve appears to be a newer model in good condition and can reasonably be expected to provide at least 10 years of service.

▷ Fire Sprinkler System: The suitability for the existing egress system for continued use depends on the extent of renovations and building program. A full renovation will likely require converting to complete coverage of the entire building. The older standard response sprinkler heads are not compliant with current code and appear to be approaching the end of their service life. The standard response heads will likely be required to be replaced as part of a major renovation.

▷ The existing glycol zone will be decommissioned and removed if the constant temperature rooms it serves are demolished.

▷ Fire Standpipe System: Based on existing structural drawings, the third floor of the west section
of the building is approximately 36-feet above the lowest level of fire department access. Per NFPA and Oregon Fire Code, Class III standpipes will be required for the stairwells in the west building to be compliant with current code. If the extent of fire protection was changed to provide coverage for the entire building, Class I standpipes will be required instead.

PLUMBING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

▷ Storm Drainage: Storm drainage is a conventional system connecting roof drains into storm drain piping that gravity drains to the utility storm drain system. Sidewall scuppers at the roof level provide overflow drainage. Piping appears to be cast iron hub and spigot, sections of which appear to be insulated for condensation control.

▷ Sanitary Waste and Vent: The existing sanitary waste and vent system is conventional design with atmospheric vents extending above the finished roof. The system includes pumped waste from sewage ejectors and elevator sumps, which connect to the building gravity waste piping. Piping appears to be a mix of cast iron hub and spigot, galvanized steel, and PVC.

▷ Sewage Ejectors: A duplex sanitary lift station provides coverage for the basement of the east wing. The lift station appears to be original to the building.

▷ Elevator Sump Pump: Submersible sump pumps serve the sump pits for each elevator.

▷ Potable Water Systems: A 4-inch water service is connected to the utility main on the south side of the building and enters the building in the basement beneath the existing theater. The water service reduces to 3-inches and is protected by a reduced pressure principle valve located in the basement at the point of entry. Potable water piping appears to be a mix of galvanized steel and copper. Existing insulation is labeled as including asbestos in some areas.

▷ Non-Potable Water: Non-potable water is isolated from the domestic water service by reduced pressure principle valves and is connected to makeup water for process water and the existing decommissioned boiler. A clear separation of laboratory water and potable water was not identified. Non-potable water piping appears to be a mix of galvanized steel and copper. Existing insulation is labeled as including asbestos in some areas.

▷ Domestic Water Heating System: Domestic hot water is provided by an existing Aerco shell and tube steam heat exchanger with a capacity of 3.28 mmbtu. The heat exchanger is in fair condition. A fractional horsepower recirculation pump maintains a minimum domestic hot water system temperature during occupied hours and is controlled by a 24-hour timeclock. The water heater and pump are located in the original boiler room.

▷ Plumbing Fixtures: Existing fixtures are generally commercial grade and, aside from the renovated dairy and wine lab in the east wing, they are original to the building. Restroom fixtures have manual faucets and flushometers. Restrooms and laboratory fixtures are generally not ADA compliant. Fixtures are generally in fair condition.
condition. Laboratory emergency fixtures in all but the dairy lab are not compliant with current standards.

▷ Natural Gas: Natural gas is delivered from the utility distribution system at 2 psi and serves existing laboratory gas outlets in fume hoods and at bench tops in existing laboratory spaces in both the east and west wings. Gas was also connected to a steam boiler which originally provided heating for the building; however, the boiler has been decommissioned. Piping appears to be schedule 40 steel with threaded joints. Laboratories are not equipped with emergency gas shutoffs as required by current Code.

▷ Compressed Air: Two existing reciprocating compressors provide compressed air for both laboratory process and automatic control end-uses. Both are 3 horsepower models, one mounted on a 50-gallon horizontal receiver and one on a 40-gallon vertical receiver. Both appear to be in good condition and regularly serviced. The control air side has an air dryer and filters, while the process supply appears to only have filters. During the site visit, it was noted that the compressors were cycling frequently due to a faulty automatic drain. Pressure gauges indicate that the process supply operates at 80 psi. Compressed air piping is a mix of copper and galvanized steel.

Evaluation

Following is a discussion of suitability of existing systems for reuse, and system upgrades necessary for code compliance:

▷ Storm Drainage: Roof drains and storm drain piping appear to be in good condition. Piping insulation should be added for existing sections of interior piping that are currently uninsulated.

▷ Sanitary Waste and Vent: Existing waste and vent piping is generally in good condition. The sewage ejector is beyond its service life and will need to be replaced. The sump pump serving the elevator adjacent to the lecture hall is new and has remaining service life. The freight elevator sump pump is beyond its service life and should be replaced.

▷ Potable Water Systems: The existing water service size should be adequate for likely future uses of the building. A significant fraction of the existing piping is beyond its service life and will need to be replaced.

▷ Non-Potable Water: The existing backflow valves separating non-potable from the potable water system appear to be nearing the end of their service life and should be replaced. A portion of the existing piping is beyond its service life and will need to be replaced. If laboratory functions are included in the future use of the building, appropriate backflow devices will need to be provided to separate laboratory water from potable water.

▷ Domestic Water Heating System: The existing Aerco steam heat exchanger and recirculation pump are both at the end of their service life. The heat exchanger may be able to be reconditioned, but the pump will need to be replaced.

▷ Plumbing Fixtures: Laboratory fixtures are generally beyond their service life and should be replaced. Restroom fixtures will need to be replaced where necessary to meet ADA requirements or water conservation goals.
Natural Gas: Natural gas piping is generally in good condition. Depending on future building use, the existing piping can be reused if new programming requires the use of natural gas.

Compressed Air: The existing compressors appear to have roughly 10 years of service life remaining and will likely need to be rebuilt at that time. The air dryer appears to be beyond its service life. There will need to be new air dryers for both controls and process uses, and installation of zero-loss automatic drains are recommended.

HEATING VENTILATING & AIR-CONDITIONING

Existing Conditions

Following is a description of existing systems, equipment, and notable conditions:

Steam and Condensate: A steam service is provided to the building from the campus main steam service. The existing 6-inch steam service enters the building at the basement level from the south side at a pressure of 60 psi. The original steam boiler for the building has been decommissioned and abandoned in place. An existing masonry chimney served the boiler; however, the chimney does not appear to be seismically rated. The steam service passes through a 4-inch pressure reducing valve, which connects to an 8-inch low pressure steam header with four branches that provide steam service to different sections of the building. The steam is distributed to radiators, HVAC units, the domestic water heater, and miscellaneous process uses.

There is one duplex condensate pump system located in the basement mechanical room that receives condensate from throughout the building.

Air Distribution System: Air distribution systems are all single-zone systems, except for the ventilation unit serving the west wing, which has a single unit that supplies air to the zone and a ducted exhaust system with a roof-mounted fan. The lecture hall, adjoining rooms to the east, and the main theatre have gravity roof ventilators that provide relief air. The auxiliary theater and dairy lab have a unit that supplies and returns air through the system. The main theater has a newer air distribution system with OSA mixing air handler with steam heating coil and DX cooling coil. This unit has two DX chillers mounted on the roof supplying the cooling coil.
AIR HANDLER SUMMARY TABLE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Area Served</th>
<th>System Type</th>
<th>Date Installed</th>
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<tr>
<td>VU-1</td>
<td>West wing all levels and spaces</td>
<td>Constant volume heating and ventilation unit w/steam heat</td>
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<tr>
<td>VU-2</td>
<td>Lecture hall and coat room</td>
<td>Constant volume ventilation unit w/steam heating coil</td>
<td>1952</td>
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<tr>
<td>VU-3</td>
<td>Rooms between lecture hall and main theater</td>
<td>Constant volume ventilation unit w/steam heating coil</td>
<td>1952</td>
</tr>
<tr>
<td>VU-7</td>
<td>Basement storage and mechanical space</td>
<td>Constant volume ventilation unit w/steam heating coil</td>
<td>1952</td>
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<tr>
<td>AH-1</td>
<td>Main theater</td>
<td>Single zone ventilation unit w/steam heating &amp; DX cooling</td>
<td>2003</td>
</tr>
<tr>
<td>AH-1-CARRIER</td>
<td>Dairy lab</td>
<td>Single zone ventilation unit w/steam heating &amp; DX cooling</td>
<td>2003</td>
</tr>
<tr>
<td>RTU-1</td>
<td>Theater lobby and make-up room</td>
<td>Single zone ventilation unit w/steam heating &amp; DX cooling</td>
<td>1996</td>
</tr>
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<td>RTU-2</td>
<td>Auxiliary theater</td>
<td>Single zone ventilation unit w/steam heating &amp; DX cooling</td>
<td>1996</td>
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<tr>
<td>AC-9</td>
<td>Glass sterilization and storage</td>
<td>Single Zone ventilation unit w/DX cooling coil</td>
<td>1972</td>
</tr>
</tbody>
</table>

▷ Space Heating: The majority of spaces that have exterior windows, such as vestibules, offices, and laboratories, use steam convectors for space heating.

▷ Space Cooling: There is not a central cooling system for the building; however, cooling is provided to some spaces as noted below.

▷ Office and Lab Spaces: Window-mounted air conditioners and/or portable standalone AC units.

▷ Constant Temperature Rooms: DX unit coolers.

▷ There are 6 constant temperature rooms in the building, only three of which still appear to be operational.

▷ Computer Work Room: Ducted DX air chiller.

▷ Glass Sterilization & Storage: Ducted DX air chiller.

▷ Main Theater: Ducted air handler unit with DX cooling and steam heating.

▷ Dairy Lab: Ducted air handler unit with DX cooling.

▷ Auxiliary Theater: Ducted air handler unit with DX cooling.

▷ Theater Lobby: Ducted air handler unit with DX cooling.

▷ Air Ventilation: Ventilation air is provided to the west wing through a combination of operable windows and a heating and ventilating unit. Ventilation air is provided to the lecture hall area, main theater, auxiliary theater, and dairy lab by single zone equipment. These spaces also have roof ventilators providing relief air. Ventilation systems are described in the air handler summary table.

▷ General Exhaust: General exhaust is provided for restrooms by exhaust fans mounted on the roof. No other rooms in the building are equipped with general exhaust.

▷ Laboratory Exhaust: Laboratory exhaust is provided by fume hood with exhaust fans mounted on the roof. Labs without fume hoods do not have exhaust.

▷ Building Automation Systems: There is a mix of pneumatic and standalone controls throughout the building. The unit supplying
the main theater has a standalone control station. None of the control systems in this building appear to be tied to any of the campus central building automation systems.

▷ Process Refrigerant Components and Piping: There is an air-cooled packaged ammonia chiller in the basement that is serving DX unit coolers in constant temperature rooms in the basement.

▷ Cooling Systems: The building does not have central cooling. The west wing is passively cooled in rooms with operable windows or cooled by window-mounted air conditioners and spot coolers. Some rooms in the east wing have cooling provided by single zone units as noted in the air handler summary table.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for new building uses.

▷ Air Distribution System: With the exception of the air handlers serving the main theater and the dairy lab, air distribution systems in the building are past their service life and should be replaced.

▷ Space Heating: The space heating capacity appears to be adequate, but steam convectors appear to be past their service life and should be replaced. The steam duct heating coils are past their service life and should be replaced.

▷ Air Ventilation: With the exception of the air handlers serving the main theater and the dairy lab, existing HVAC systems do not appear to provide ventilation in compliance with current Code, although operable windows for some spaces in the west wing may have adequate area to provide code compliant ventilation.

▷ General Exhaust: Exhaust ductwork and grilles appear to be in good condition. Exhaust fans serving the restrooms are past their service life and should be replaced.

▷ Laboratory Exhaust: Fume hood exhaust fans have exceeded their service life and should be replaced.

▷ Steam and Condensate: The existing steam service is sufficient to provide heating to the building; however, the existing steam piping and valves are at the end of their service life and should be replaced back to the point of connection to the campus steam service. The existing decommissioned steam boiler should be removed. The existing masonry chimney should be reduced in height and supported as necessary to make the chimney safe in case of a seismic event.

▷ Chilled Water: The existing cooling tower has exceeded its service life and should be replaced. The existing chilled water piping is old and should be replaced.

▷ Refrigerant Components and Piping: The air-cooled packaged ammonia chiller in the basement has exceeded its service life and should be removed. A majority of the DX unit coolers that are served by the chiller are no longer in use and should be removed. If the constant temperature rooms are to remain after building renovations, then the DX unit coolers serving them should be replaced.

▷ Building Automation Systems: Pneumatic equipment and standalone electric and electronic controllers have generally exceeded their service life. These systems should be replaced with a building automation system meeting campus standards.
Cooling Systems: The building lacks a central cooling system. For the building to continue being used for research programs, a central cooling system is recommended and will eliminate the current extensive use of spot cooling.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

- **Building Electrical Service**: The main switchgear located in Basement 060B is no longer serviceable and will require replacement. Three out of five of the sub-distribution assemblies have reached the end of their serviceable life span and will require replacement.
- **Emergency/Standby Power**: The building does not have an emergency power system in place at this time.
- **Power Distribution**: Panelboards serving branch circuits at 120/208V are located throughout the building. Panelboards range in condition and age. The majority of panelboards throughout the building have reached the end of their serviceable life span and are recommended to be replaced with any major renovation to the building.

**POWER**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

- **Building Electrical Service**: The building is equipped with a four-section, Trumbull Main Switchgear with a 2000A bus rating that serves sub-distribution equipment throughout the building at 120/208V, 3 phase, 4 wire.

- **Five sub-distribution assemblies are located throughout the building and range in condition and age. Two of the five sub-distribution assemblies are newer Square D Panelboards. The remaining three are Trumbull Panelboards.**

- **Emergency/Standby Power**: No building-wide emergency/standby power systems were observed in this building. Emergency power is served from the main switchgear to panelboards marked as “Emergency Panel”.

- **Power Distribution**: Panelboards serving branch circuits at 120/208V are located throughout the building. Panelboards range in condition and age. Panelboards and other distribution gear located and serving the basement of the building are in poor condition and have reached the end of their serviceable lifespan.

**LIGHTING**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

- **Exterior Lighting**: Exterior light fixtures are located primarily at building entrances and along campus walkways. Building-mounted fixtures have yellowed and cracked housings.

- **Interior Lighting**: The building is primarily illuminated using T8 fluorescent fixtures. The condition and age of fixtures vary throughout the building.

- **Egress Lighting**: Egress pathways are illuminated by way of
emergency bug-eye light fixtures and bug-eye equipped exit signs.

▷ Automatic Lighting Control: Time clocks are used for control of lighting in corridors and open spaces throughout the building. Other spaces including offices, labs, and classrooms have limited to no automatic control.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Exterior Lighting: Exterior light fixtures are in poor condition. An upgrade to LED light fixtures is recommended.

▷ Interior Lighting: The building’s interior light fixtures are in fair condition. We recommend replacing the existing light fixtures with LED fixtures with any future renovation to the building.

▷ Egress Lighting: Existing emergency bug-eye fixtures and illuminated exit signs are in fair to poor condition and should be replaced with any major renovation to the building.

▷ Automatic Lighting Control: The existing time clocks controlling light fixtures in corridors and open spaces are in fair condition. We recommend replacing the existing controls and upgrading to modern digital controls including networked occupancy sensors, dimmable power packs, and daylight harvesting control devices.

**COMMUNICATION**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

▷ Voice/Data: The building is supplied with internet service via a 24-strand single mode fiber optic cable system. Incoming data is distributed throughout the building using network switches and Corning fiber optic distribution equipment. No framed distribution racks were observed in this building.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ Voice/Data: Existing distribution of data throughout the building has reached capacity in its current configuration. We recommend installing a main distribution frame on the main floor and intermediate distribution frames on remaining floors to increase space capacity for data distribution.

**ELECTRONIC SAFETY AND SECURITY**

**Existing Conditions**

Following is a description of existing systems, equipment, and notable conditions:

▷ Access Control: Key access only. No building-wide electronic access control was observed in this building. Electronic access control is installed in some lab and office spaces and is on an as needed basis.

▷ Security: No building-wide security system was observed to be installed in the building. CCTV security cameras are installed in some labs and are provided on an as needed basis.

▷ Fire Detection and Alarm: The building is equipped with a Simplex Fire Control 4010 Fire Alarm Control Panel with integral
annunciator panel. Fire notification strobes and horn strobes are located throughout the building.

**Evaluation**

Following is a discussion of suitability of existing systems for reuse, and system upgrades required for code compliance:

▷ **Access Control:** We recommend providing a building-wide access control system with a minimum of key card access control at building entrances and entries to critical spaces within the facility.

▷ **Security:** We recommend providing exterior security cameras at building entries as part of any future renovations to the building.

▷ **Fire Detection and Alarm:** The building’s fire detection and alarm system is in good condition and should continue to be used.

**RENOVATION CONSIDERATIONS**

A major building renovation that includes comprehensive modification of the building floor plan would have significant impact on MEP systems.

▷ **Future Use:** The building is suitable for most academic or administrative uses, excluding laboratory use except for the dairy lab areas.

▷ **MEP Systems:** Following is a general description MEP upgrades associated with a building renovation:

▷ **The existing fire suppression system could be reused.** The fire water service appears to be appropriately sized for full coverage of the building. Branch mains and sprinkler heads would be required to accommodate remodeled spaces. A standpipe system will be required for stairwells.

▷ **Plumbing systems have generally exceeded their useful life and would be replaced.**

▷ **HVAC systems have generally exceeded their useful life and would be replaced.** Newer local systems that have been installed recently could not be effectively integrated into a modern building renovation, except for the theaters as listed below.

▷ **Electrical and lighting systems would be replaced.**

▷ **Communication system would be replaced.** Existing communication systems could not be effectively integrated into a modern building renovation.

▷ **Fire and life-safety systems would be replaced.**

▷ **Major Building Assets:** The following elements of MEP infrastructure would have substantial value that can be incorporated into a renovation:

▷ **Fire water service.**

▷ **MEP system for the two theaters have been renovated and would be incorporated into a building renovation.**

▷ **The dairy lab is a large industrial workspace that could be repurposed for various laboratory uses**

▷ **Major Building Liabilities:** The following elements of MEP infrastructure would be problematic if incorporated into a renovation:

▷ **The main electrical switchgear is obsolete and water piping is installed above the panel.**

▷ **Floor-to-floor height is not optimal for use for laboratory occupancy, except the dairy lab area.**
FUNCTIONAL CONDITIONS

- The west wing is straight-forward double-loaded corridor
- The East Wing has a unique configuration from its original use as a dairy

Figure F.28
Cross section through Withycombe Hall
Withycombe Hall has supported multiple uses over the years including a dairy and now a theater in that space on the building’s east portion. While this section continues to function as a theater, it is not ideal and other uses would be limited with the wide building width and tiered floor in that section. The west wing is well configured for classrooms and office with double-loaded corridor, access to daylight and adequate floor-to-floor height.

**Figure F.29**
*Plan - Withycombe Hall*

**Figure F.30**
*Functional Assessment - Withycombe Hall*

<table>
<thead>
<tr>
<th>SUMMARY</th>
<th>Program Fit</th>
<th>Wayfinding</th>
<th>Flexibility</th>
<th>Comfort</th>
<th>Image/Character</th>
<th>Deferred Maint. (In Millions)</th>
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<td>3.5</td>
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**Program Fit:** The west wing of this building supports classrooms and offices well (3.8). The east wing of this building as a theater is not ideal but relatively functional (2.0). Avg score = 2.9

**Wayfinding:** Wayfinding for this building is very clear.

**Flexibility:** Column structure in west wing of this building limits uses to classrooms and offices. East wing uses of this building are very limited beyond theater.

**Comfort:** This building has good access to daylight which could be improved further without drop ceilings. Restrooms for both gender are located on each floor of this building except first floor. This building includes gender inclusive restroom and is serviced by an elevator.

**Image/Character:** This building’s masonry facade and fenestration fit with the character of campus.
SUMMARY

The table on the following page is a compilation of all the buildings assessment scores, including deferred maintenance costs provided by OSU.

Weniger Hall has the lowest overall scores and would be the best candidate for replacement, given its marginal condition, high level of deferred maintenance, poor performance for wet lab use and lack of flexibility / daylight to support classrooms or offices.
### OSU Corvallis Campus Vision

#### Building Assessment Scores

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<td>$15.8</td>
</tr>
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**Summary of Program Fit Comments:**
- **Batcheller Hall:** Current uses within Batcheller Hall are well supported with 30 ft clear areas for classroom space. Floor to ceiling heights however, are limited. Small floor plates in this building limit the number of classrooms possible.
- **Community (Benton) Hall:** Buildings floor plan is relatively straight-forward and supports easy wayfinding.
- **Covell Hall:** Buildings floor plan is relatively straight-forward and generally supports wayfinding.
- **Gilbert Hall:** Chemistry labs are not well supported within Gilbert Hall. The building’s floor to floor heights do not meet current standards for a wet lab building.
- **Weniger Hall:** Current uses within Weniger Hall are well supported. It has gender inclusive restrooms and an elevator.
- **Withycombe Hall:** The visual condition of the exterior of this building is poor. It is not ideal for office or classrooms given its poor access to daylight due to the width of the building.

**Wayfinding Comments:**
- **Batcheller Hall:** Buildings floor plan supports easy wayfinding.
- **Community (Benton) Hall:** Buildings floor plan supports easy wayfinding.
- **Covell Hall:** Buildings floor plan is straightforward and generally supports wayfinding.
- **Gilbert Hall:** Buildings floor plan is relatively clear and generally supports wayfinding.
- **Weniger Hall:** Wayfinding for this building is very clear.
- **Withycombe Hall:** Wayfinding for this building is very clear.

**Flexibility Comments:**
- **Batcheller Hall:** Building has a narrow width which prohibits it’s use as well building by current standards. The buildings column grid also limits classroom uses, however, office uses could be supported.
- **Community (Benton) Hall:** Without drop ceilings there is good access to daylight, and the building’s narrow floor to floor heights are comfortable. Restrooms for only one gender are located on each floor except the 1st and 3rd floor. Gender inclusive restrooms are also available. This building is served by an elevator.
- **Covell Hall:** Chemical labs are not well supported within Gilbert Hall. The building’s floor to floor heights do not meet current standards for wet labs, although the central utility shaft could allow for exposed ceilings to provide more floor to ceiling height. This building does not meet state standards for wet lab standards.
- **Gilbert Hall:** Current uses within Gilbert Hall are well supported with 30ft clear areas for classrooms and offices. Access to daylight within this building can be achieved without drop ceilings, however, the building corridors are dark and long. Restrooms for both genders are found on each floor. This building also includes gender inclusive restrooms and an elevator.
- **Weniger Hall:** The building is a major contributor to historic character of the campus.
- **Withycombe Hall:** This building is a major contributor to historic character of the campus.
CAMPUS-WIDE UTILITIES ASSESSMENT

CAMPUS STEAM GENERATION AND DISTRIBUTION SYSTEM

Steam Production
ENERGY CENTER (EC)

Steam is generated for the entire campus at the EC located at NW 36th Street and SW Jefferson Way on the west side of campus. The plant includes two conventional water-tube high pressure steam boilers and a cogeneration system consisting of a gas turbine that is coupled with a heat recovery steam generator (HRSG).

- Steam generation capacity:
  - Turbine Generator/HRSG: 110,000 lbs/hr
  - Boiler #1: 82,500 lbs/hr.
  - Boiler #2: 82,500 lbs/hr.
- The plant currently has a total installed HPS production capacity of 275,000 lbs/hr; however, the total installed production capacity is generally not used as a basis for establishing maximum plant capacity to serve campus. The maximum plant capacity generally accounts for the loss of the single largest equipment capacity element. If this assumption is used, then the maximum plant production capacity would be 165,000 lbs/hr. This is approximately equal to the current historic maximum plant load.
- SWE has received limited historical data showing campus peak steam demand. In February 2018 and January 2019, the maximum campus medium pressure steam (MPS) load reported in the EC operating log is approximately 112,000 lbs/hr. It is reported by EC staff that the historic maximum boiler plant high pressure steam load is approximately 165,000 lbs/hr; however, annual peak load is more commonly 140,000 to 150,000 lbs per hour.
- To optimize the operation of the cogeneration system a continuous steam load of 110,000 lbs per hour is desirable; however, steam loads as low as 30,000 lbs per hour can be accommodated without operating the waste heat condenser. Plant loads during summer months range between 22,000 to 32,000 lbs per hour; however, the summer plant load is generally about 30,000 lbs per hour. It could be beneficial to provide summer steam load using absorption chillers that use steam to produce chilled water.

Campus Steam and Condensate Distribution

Medium pressure steam (60 psi) is distributed throughout campus and condensate is returned to campus by a pumped condensate return system.

- Distribution piping was recently replaced from the Energy Center to SW 30th Street along SW Jefferson Way. The project included installation of two 18-inch MPS mains that serve the entire campus. The two 18-inch mains are capable of delivering in excess of 300,000 lbs/hr of MPS capacity to campus without excessive steam velocity or pressure drop.
- From the SW Jefferson Way/
SW 30th Street connection, MPS distribution piping is networked through the core of campus.

▷ Currently, the campus MPS system maintains a very uniform supply pressure throughout the entire campus distribution system. It was reported that the pressure drop across campus from the Energy Center to Kearney Hall is about 2 psi at peak load conditions. This indicates that the distribution system has significant capacity to serve new loads; however, localized upgrades will be required if development occurs on the far east side of campus.

▷ The best location for new development related to steam systems will be near Jefferson, between 30th and 35th streets.

Hot Water Distribution

OSU is considering transitioning from a steam-based central heating system to a hot water heating system. SWE has been encouraged to comment on the feasibility of developing a hot water distribution system and identify opportunities for development. Following are primary objectives for this conversion:

▷ Improve energy efficiency. Hot water boilers operate at lower supply temperatures and have higher combustion efficiency. If condensing-type boilers are provided, the increase in efficiency could be 15-20% of annual natural gas consumption.

▷ Hot water boiler plants can be operated unattended. Presently, boilers in the Energy Center are high pressure steam boilers that must be continuously attended by a qualified boiler operator.

Conversion of centralized heating system from steam to hot water is a very large and costly undertaking. Following are high-level observations regarding the feasibility of conversion to hot water:

▷ Energy Distribution: Steam is a very efficient medium for transporting energy since the building heating process includes a phase change from a vapor to a liquid. The size of distribution piping required to distribute hot water as a heating source would be significantly larger than for a steam system. Existing piping and tunnels would not be suitable for hot water energy distribution. A completely new distribution system would be required.

▷ Heating Water Plants: Having a single central heating plant for a hot water system would require a very large initial capital investment of distribution piping. It would be most feasible to construct a regional hot water boiler plant in strategic locations around campus, which would greatly reduce piping size and the associated cost of installing distribution piping throughout campus. Having a regional plant would also reduce pumping costs and enable an incremental implementation strategy where the system could be constructed in sections over an extended period of time with a much lower initial capital investment.

▷ Energy Production: Large campus distribution systems use fossil fuels, and most commonly, natural gas as an energy source. Other potential sources that do not use fossil fuels include heat pump refrigeration, geothermal, solar, and nuclear power. Of this list, only heat pump refrigeration is a practical option, and it is not feasible in the capacity required to centrally serve an entire campus; however, it may be practical in localized applications particularly for buildings with high ventilation rates such as laboratories. This type of system would often
operate with horizontal or vertical ground loops as an energy recovery/rejection source. Recently, air-source water-to-water heat pumps are being introduced into the marketplace that recover/reject heat from outside air.

Integration of Existing Buildings: Many campus buildings use steam directly as a heating source. Converting these buildings to hot water would require complete replacement of existing heating systems. A majority of campus buildings have hydronic hot water heating systems that could directly integrate with a new utility heating water system. The hot water boiler plants would have to provide 180°F supply water to be compatible with many existing buildings.

Development Considerations

The following general guidelines can be used for initial development planning.

Consideration must be given to adding a new boiler to the Energy Center if new facilities are added to the campus. Currently, the capacity of the two auxiliary boilers are approximately equal to the historic maximum plant load. If the gas turbine/HRSG was not in operation, there would be no additional capacity to serve new loads.

The steam distribution system appears to have good capacity to support campus development.

The distribution system originates from the west side of campus. Large scale development can be served from the west side with less impact on the system and associated development costs. The Peavy Field is an ideal location for adding steam loads.

A moderate amount of development can be supported on the east side of campus; however, large scale development on the east side of campus could involve significant distribution system development costs. A detailed distribution system analysis would be required to determine the level of upgrades that would result from any given development plan. Development east of SW 15th Street would be an area most likely to require larger scale distribution system upgrades if additional loads were added.

CAMPUS CHILLED WATER SYSTEMS

Existing Conditions

OSU does not currently have a campus-wide chilled water distribution system to provide cooling for campus buildings. Cooling is provided by local building chilled water systems or by local package cooling equipment, except for two locations where limited chilled water distribution exists between buildings. These two locations are described below.

North Campus Chilled Water Loop

The North Campus Chilled Water Loop (NCCWL) is an integrated chilled water distribution system serving science buildings located in the northeast portion of the campus including Nash Hall, the Agricultural and Life Science, Cordley Hall, Burt Hall, and Wilkinson Hall. Interconnection distribution piping was installed in 2003 that integrated existing building chilled water production and distribution systems.

The NCCWL integrated four building chiller plants. Following is a brief summary of these four cooling plants:

- NASH HALL
The plant was renovated in 2002, including the installation of a 600-ton centrifugal chiller. The chiller and associated components are generally considered to be in good condition. The expected useful life for centrifugal chillers and the galvanized steel cooling tower is approximately 25 years, so this equipment can be expected to provide reliable service for the next decade.

▷ CORDLEY HALL

The east half of Cordley Hall is served by a centrifugal compressor, 414-ton water-cooled chiller installed in 1991. The chiller and associated components are 27 years old and have exceeded the expected useful life. The equipment will be replaced as part of the Cordley Hall Renovation project.

▷ AGRICULTURAL AND LIFE SCIENCES BUILDING (ALS)

The Agricultural and Life Sciences Building is served by a single, 875-ton, electric centrifugal chiller that was installed in 1992. The chiller is 26 years old and has exceeded the expected useful life. OSU staff have assessed the chiller condition as “Poor” and have documented that it is not reliable. The chiller cannot be expected to provide reliable chilled water production. The unit also uses R-11 refrigerant which is classified as a CFC and has a high potential to deplete the ozone layer.

▷ BURT HALL
A 500-ton absorption chiller was originally installed to service Burt Hall and Wilkinson Hall. The chiller is no longer operational and does not contribute to the North Campus Loop capacity.

HISTORIC BUILDING COOLING LOADS

The estimated system load at 96°F outside air temperature is approximately 2,550 tons. The outside air design condition stipulated for laboratories in the OSU Construction Standards is 96°F. The load at design conditions exceeds the current capacity of all operable chillers by 660 tons, which is a 26% shortfall if all chillers are in operation. This condition closely matches observations by OSU staff that the system cannot meet building load above an outside air temperature between 82°F to 85°F. If the ALS chiller is not operable, the shortfall becomes extreme. Without the ALS chiller on-line, the system cannot meet load when outside temperatures exceed 70°F.

Kelley Engineering Center Chilled Water Loop

A chilled water distribution system extends north from the Kelley Engineering Center (KEC) along SW Park Terrace Place. This distribution system currently provides chilled water to Johnson Hall and was sized to serve all new development between KEC and NW Monroe Avenue.

KELLEY ENGINEERING CENTER

Kelley Engineering Center is served by a chilled water system that includes four chillers: two rated at 180 tons, one that produces 115 tons, and a 30-ton air-cooled chiller. The total capacity is approximately 505 tons. Three associated cooling towers are located on the roof. The system is configured and controlled to allow chilled water production to continuous loads. The actual facility load is approximately
200 tons, leaving a surplus capacity of approximately 300 tons. The KEC plant has enough capacity to serve building loads that are currently connected to the system; however, if additional loads are added, plant cooling capacity will have to be increased. It is estimated that the mechanical room in KEC could support a chilled water plant of 1,500 to 2,000 tons if existing equipment were replaced with larger units.

**JOHNSON HALL**

Johnson Hall was constructed in 2016 and is located northwest of Kelley Engineering Center. This building has a design cooling load of 200 tons.

**FUTURE BUILDINGS**

The KEC distribution system was designed to accommodate two future buildings located in the parking lots north of Kelley Engineering and Johnson Hall that will be of similar cooling load as Johnson Hall or a total of 400 tons of cooling load.

**Planned Development**

OSU is presently considering a development plan that would interconnect local chiller loops into a larger distribution system that could be incrementally expanded throughout the entire campus. It is projected that three regional chiller plants would be constructed in the following locations:

- North District Utility Plant (NDUP): West of Cordley
- West Plant: West of SW 30th Street in the vicinity of the Peavy Field/Energy Center.
- East Plant: Near SW Washington and SW Benton Place near the old steam plant.

The first phase of this development would consist of constructing the NW regional chiller plant in the vicinity of Cordley Hall that would be interconnected into the NCCWL. This work is would be constructed along with the Cordley Hall Renovation project.

**Development Considerations**

The following general guidelines can be used for initial development planning.

- Future development should include local infrastructure necessary for the development of campus chilled water infrastructure.
- Development in west campus or east campus areas should include construction of a regional chiller plant in accordance with the campus plan.
- Where existing roadways are upgraded, installation of underground chilled water distribution piping should be incorporated into the projects. Of particular importance is the installation of chilled water distribution piping along Campus Way.

**CAMPUS ELECTRICAL DISTRIBUTION SYSTEM**

**Existing Conditions**

**ELECTRICAL INFRASTRUCTURE**

Campus primary power distribution to 80% of the buildings on the north end of campus originates at the switchyard south of the Energy Center on SW 35th Street between Washington Way and Jefferson Way. The switchyard serves three substations with 20.8 KV power from three feeders routed and known as Campus Way feeder, Jefferson Street feeder and Washington Way feeder.

The substations are known by geographical name and are located as follows:
SW 35th Street substation located between SW Campus Way and Jefferson Way on SW 35th Street, north of the switchyard.

SW 26th Street substation located at south of NW Orchard Ave on SW 26th Street.

Coliseum substation located at SW 26th Street and SW Washington Way.

A failure of the Sunset feeder will interrupt power to the 80% of the campus 20kV distribution system.

Emergency power is provided to buildings where specifically required by local building generators.

**Planned Development**

OSU is presently working with Pacific Power to implement a series of identified critical electrical infrastructure issues. These projects include replacing conductors and upgrading distribution equipment and are scheduled to be complete around 2021. Upon completion of the identified maintenance projects, the system can be expected to provide reliable service and adequate capacity for the existing facility and future development for the next ten years.

**Development Considerations**

The following general guidelines can be used for initial development planning:

All new buildings should be connected to the campus 20kV where feasible. Adding additional loads to the existing 4.16kV system should be minimized to the greatest extent possible.

The campus primary system has enough capacity to serve campus development.

The campus electrical system is configured to serve development anywhere within the core of campus without significant upgrade of the campus distribution system other than building service feeders.
OUTREACH & ENGAGEMENT
ENGAGEMENT PROCESS

Several strategies were utilized to understand experiences people on OSU’s campus and within the surrounding community have in order to aid the development of this Vision.

ONLINE WEBSITE

The CCV website communicated project information throughout the process.

ONLINE SURVEY

A geobased, on-line survey early in the effort focused on questions about where campus users spend time indoors and out, doing various activities, and during different times of year, as well as which spaces people experienced positively, negatively and why. This provided an initial understanding of how the campus currently serves its diverse users, as well as opportunities for enhancement.

FOCUS GROUP SESSIONS

Focus Groups were held with various campus groups including cultural centers that support historically underrepresented groups and resource groups on areas such as student life, academics and research, and campus operations. Questions related to areas of campus that served them well or poorly and campus issues specific to their needs.

POP-UP STATIONS

Pop-Up Stations at the Memorial Union and Dixon Recreation Center provided the opportunity for additional feedback from students and people passing through. Participants answered questions about their favorite aspect of OSU, what an inclusive OSU means to them, and if they could change anything, what it would be. The same questions were brought into the community with a booth at the Corvallis Farmer’s Market and an Open House at the Corvallis-Benton County Public Library.

Over 500 people participated in the outreach process with students, faculty, staff, and community members distributed evenly.

Primary findings from Stakeholder Engagement and a description of how responses have influenced this Vision are described on the following pages.

The thoughtful responses of campus stakeholders guided the Vision for future changes to the campus. There was significant commonality in responses, shown in the graph on the following page.

CAMPUS SETTING

Participants generally expressed high appreciation for the landscape and historic buildings on campus. Several people also expressed appreciation for the location of OSU in the world overall. Some people noted that areas of campus, like the south and west, do not benefit from the same dignified campus setting as the central core and wished those areas felt more connected.

Figure F.32 Participation

- Students ~130
- Staff ~100
- Faculty ~120
- Community ~100
- Unknown ~40
BUILDINGS

Students and community members noted the welcoming atmosphere at the Library and Memorial Union. Faculty, staff, and students offered many ideas for replacing or upgrading the functionality, accessibility, and welcoming character of older buildings like Snell Hall. Both the Veterans Resource Center and cultural centers focus groups indicated that transparent ground floors with use of glass in newer construction can make some people feel uncomfortably vulnerable, while others liked the transparency offered by such solutions.

TRANSPORTATION

Many campus users noted frustration with car travel due to inconvenient, expensive, and sometimes unsafe-feeling parking facilities. Some specific comments focused on the difficulty this caused for people with disabilities. The Campus Planning Committee discussed the importance of closer proximities and increased housing within OSU's existing boundary as ways to reduce the need for a car. Community members noted being stressed by student parking in neighborhoods and their own inability to park conveniently on campus.

INCLUSION

Some participants noted that OSU can feel like a commuter campus and offered ideas for community building. Many mentioned a desire to know more about campus events and happenings. The desire for more events that celebrate the campus community and facilitate dialogue with cultural groups and others was also mentioned. Community members shared an interest in attending community-building events on campus and that they would like more meaningful involvement with OSU. The public safety and emergency management focus group noted increasing activity throughout campus and during extended hours as a way to improve safety. Stakeholders of all categories expressed a strong desire to improve access through easing financial burdens.
RESOURCE GROUP LISTENING SESSIONS

OSU Transportation Committee
OSU Campus Planning Committee
Public Safety and Emergency Management
Childcare Representatives
Veterans Resource Center
Infrastructure Working Group
Cultural Centers
Infrastructure Staff
Disability Access Services
Faculty

Figure F.34
Resource Group Listening Sessions
QUESTIONS

The following questions were posed:

ONLINE

Spaces where I prefer to...
▷ Study
▷ Relax
▷ Eat
▷ Gather with friends
▷ Exercise
▷ Spend time indoors when it's raining
▷ Spend time outside during great weather

Locations I experience positively, such as those that are...
▷ The official campus gateway
▷ Welcoming
  » indoor
  » outdoor
▷ A campus heart
▷ Iconic to OSU

Locations I experience negatively, such as those that are...
▷ Unwelcoming
  » indoor
  » outdoor
▷ Unsafe
  » during the day
  » in the evening
  » at night

Your Identity*
▷ Undergrad student, grad student, faculty, staff
▷ My preferred gender identity is
▷ My preferred racial identity is
▷ I live...(off-campus, in campus housing)

LISTENING SESSIONS

▷ What are specific issues you deal with that a physical change to the campus could address?
▷ Which areas do you experience positively? Which negatively? (red dot-green dot mapping)

POP-UPS, FARMER’S MARKET, AND OPEN HOUSE

▷ What is your favorite thing about campus?
▷ If you could wave your magic wand across campus, what change would you make?
▷ An Inclusive OSU Campus Is...

*Why do we ask these questions? Knowing a little bit about who is participating will better inform how the vision of the campus can be equitable and support spaces for everyone (one of our primary goals).
Figure F.35
Sample Input Received From Pop Up Session
SAFETY
People described feeling unsafe in areas with little pedestrian activity, poor lighting, and dense plantings that impede visibility. People of color and people who identified as female reported increased sense of being unsafe in these conditions. People who use wheelchairs or had otherwise reduced mobility reported a lack of safety on steep slopes, crossing train tracks, and narrow, busy sidewalks.

SUSTAINABILITY
A number of participants expressed general support for sustainability goals along with suggestions for how to achieve them. An important interest of this effort was to understand how the Campus Vision can help to build a culture of belonging, collaboration, and innovation. The question of where people feel welcome and connected to others was explored.

Survey respondents were asked where they spend time when they are able to choose. Questions related to where people spend time relaxing, eating, studying, and exercising, as well as about general time spent outdoors and indoors. To understand where people felt connected to one another, respondents were asked where they chose to gather with friends.

Responses related to gathering with friends focused primarily around places to eat and secondarily within the campus core and at intramural and athletics fields. Buildings in the core campus offer multiple places to gather that respondents stated they enjoy, including places to study indoors. Favorite outdoor recreation venues for gathering focused around intramurals and the multi-use path to Bald Hill.

When people were asked what they would change about the campus, responses related to increased food options, improving the character of the landscape in outer areas and historic buildings in the campus core, as well as additional recreation options.

Figure F.36
Subjective analysis of themes among stakeholder responses.
Who Responded?

- 108 Community Members
- 123 Faculty
- 150 Staff
- 126 Students
- 37 Others

Discussion Themes

- Campus Setting 28.6%
- Community 30.2%
- Dialogue 2.7%
- Food 3.3%
- Transportation 8.3%
- Building 13.3%
- Financial 10.0%
- Sustainability 1.7%

Stakeholder input guided the Corvallis Campus Vision through consistent insight into how the campus currently serves its users and how it could serve them better.
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CAPACITY STUDY

The following images represent footprints assumed in order to generate a sense of reasonable capacity, as in how much additional square footage the campus should hold while retaining the great character that currently exists. These are footprints that support the physical framework but are not meant to dictate the exact configuration for development on any site. From this assessment, recommended opportunity sites were developed.
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