FACILITIES COMPREHENSIVE / MASTER PLAN

08.09.2016

COMMUNITY COLLEGE

Linn-Benton

FFA

Architecture + Interiors
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Above: Design team and FMPAC members discussing at the ceremonial entrance to the Albany Campus.
INTRODUCTION

Linn-Benton Community College (LBCC) was established in 1966 as a two-year public college. LBCC’s 104 acre Albany campus is located just ten miles east of Corvallis, home to Oregon State University. LBCC has satellite campuses in Corvallis (the Benton Center) and in Lebanon and Sweet Home (the East Linn Centers). The LBCC Horse Center houses the Equine Management program just 1.5 miles north of the Albany Campus. A new Advanced Transportation Technology Center was opened in Lebanon in 2014, and is less than three miles from the Lebanon Center. Students can access academic support in the Learning Centers at each campus and in the Library on the main campus in Albany. The college has a campus bookstore, a small theater, a student run coffee house, and a gym and recreation area for student use.

LBCC is a comprehensive community college. Students attend LBCC for many reasons: to earn an associates degree or a transfer degree to a four-year college program; to obtain employment training or to improve existing employment skills; or to enrich their lives through continuing education. Over 19,000 students take at least one credit and/or non-credit class each year. Over 4,000 students attend LBCC full time, making it the sixth largest community college in Oregon.

In 2013 the college undertook a facility needs assessment that identified a need for more career technical education opportunities, as well as more transfer courses in support of the school’s Degree Partnership Program with Oregon State University. This initiated a campus construction campaign that resulted in the development of a $34 million bond which voters approved in November of 2014. Several projects have been completed including an expanded culinary classroom with demonstration kitchen, and construction has begun on the Health Occupations Center and the expansion of the Advanced Transportation Technology Center. The current construction program will add more than 84,000 square feet of additional instructional space and will renovate more than 150,000 square feet of existing space.

With such a recent expansion of space this master plan focuses on the utilization of existing space at the campus, instructional, and administrative levels.

CURRENT CAMPUS PROJECTS

Current campus construction includes a seismic rehabilitation project underway at Takena Hall and the expansion of the welding program taking place in Industrial A and C buildings. A new non-destructive testing program will take place in Industrial building A starting in September 2016.

Additional Seismic Rehabilitation grants are being submitted at the end of September 2016. Phase 2 of the main campus work is planned to begin summer of 2017. Work being planned include developing the space in Takena and Red Cedar Halls that will be vacated when all the healthcare programs move to the new Health Occupations Center in Lebanon. A major expansion project is planned for the Machine Tool, Mechatronics and Welding programs in Industrial A, B, and C buildings as the Heavy Equipment / Diesel and automotive programs will have moved to Lebanon. A donation from the business community and the City of Albany will allow the purchase of additional equipment to expand many of the CTE programs including, mechatronics, machine tool, welding fabrication and pipe welding programs. The details of how these programs will be expanded and how spaces will be utilized is currently under discussion with the design team.

FACILITY MASTER PLAN PURPOSE

This Facilities Master Plan will include updating the existing 2002 LBCC campus facilities master plan to assure short and long-range planning of college and facilities in accordance with accreditation requirements put forth by the Northwest Commission on Colleges and Universities (NWCCU). This Facilities Master Plan will guide current and future plans for the 10-year period specified by the NWCCU for accreditation.

This effort will be used as a preliminary step in developing projects for capital budget expenditures or revenue bond requests, evaluating and improving space utilization, identifying and removing obsolete spaces, prioritizing repair and replacement needs, acquiring or selling real estate, and any other information as required for accreditation.

In collaboration with the Facilities Master Plan Advisory Committee, the design team defined and recommended incremental plans to leverage, modernize, and optimize campus spaces and existing and future facilities. This effort also makes considerations for sustainable design, health and wellness of occupants, and the for safety and security.

Members of the Advisory Committee acknowledged that a significant factor in the success of this document is a constant review of the core tenets and the recommended strategies. In that way this master plan is viewed as a living document to discussed and amended over the next several years.
LBCC MISSION AND CORE THEMES

As part of the “Year Three Self-Study Report” from September of 2013, the college reestablished its mission and established a series of Core Themes as guiding principles. The statements are listed below and became the basis of the architectural goals outlined in the master plan.

MISSION:
• To engage in an education that enables all of us to participate in, contribute to, and benefit from the cultural richness and economic vitality of our communities.

CORE THEME 01 EDUCATIONAL ATTAINMENT
• Students will transition successfully to college.
• Students will successfully complete developmental coursework.
• Students will complete the general education requirements of their program.
• Transfer students will complete WR 121 and the college-level math requirements.
• Students will complete large mass credits early in their educational career.
• Students will be retained from term to term.
• Academic success will be demographically representative of our district.
• A majority of eligible residents of Linn and Benton Counties will hold post-secondary credentials.

CORE THEME 02 CULTURAL RICHNESS
• Students will display high level of civic engagement.
• Students will improve their ability to interact with values, opinions, and/or beliefs different than their own as a result of their experiences at LBCC.
• Students completing the designated cultural literacy/human relations courses will demonstrate attainment of cultural literacy outcomes.
• Individuals will feel welcome and included at LBCC.
• LBCC employees will improve their ability to interact with values, opinions, and/or beliefs different than their own as a result of their experience at LBCC.
• LBCC employees completing training will demonstrate attainment for cultural literacy outcomes.
• LBCC student will interact with an increasing number of students from diverse backgrounds.

CORE THEME 03 ECONOMIC VITALITY
• Graduates will meet industry standards by demonstrating mastery of technical skills and program learning outcomes.
• Graduates of Career Technical Education (CTE) programs will be employed in their field of study.
• Graduates of transfer programs will be enrolled in four-year institutions.
• Programs will respond to the changing needs of the industry and community.
• CTE graduates will have higher salaries, and the region will see a strong return on investment.
PROCESS

This Facilities Master Plan effort is the result of 19 weeks of working closely with LBCC Leadership and Facilities Master Plan Advisory Committee to understand, analyze, envision, and prioritize the improvements of the overall facilities of the institution. The design team and FMPAC participated in four interactive workshops and toured the facilities in Albany Main Campus, Advanced Transportation Technology Center in Lebanon, Benton Center in Corvallis, and Lebanon Center.

WORKSHOP 01 - GOALS

The purpose of this workshop was to introduce the campus planning team, establish a schedule and process for the team to follow, and confirm the goals of the college.

College President Greg Hamann tasked the design team and the Facilities Master Plan Advisory Committee (FMPAC) to consider not only the Northwest Commission on Colleges and Universities (NWCCU) accreditation requirements, but the diverse students it serves, cultural richness of the community, and campus aesthetic considerations to guide the master planning process.

The design team reviewed the specific requirements of the accreditation process. This established the parameters of the study to focus on physical facilities, not academic programs. The physical environment was to be accessible, safe, and of sufficient quality and quantity to support the institutions mission. The team confirmed the mission from the “Year Three Self-Study Report” and discussed each of the Core Theme objectives and their impact on the existing campuses.

WORKSHOP 02 - DEFINE THE LENS

Before beginning tours it was important for the design team to make sure that all stakeholders and campus planners were using the same set of criteria to evaluate the existing spaces.

To do this the design team reviewed the Core Theme objectives and translated them into a series of Architectural Goals. These goals gave everyone the same lens through which to view the existing facilities. These goal statements were reinforced with a discussion of the trends within higher education environments.

TOUR 01 - ALBANY CAMPUS

The design team and members of the FMPAC toured the Albany campus beginning at the ceremonial front door. The group moved through the campus evaluating and discussing issues from a campus level to an individual space level.

Each member of the group was given a facility map with which to make comments and observations and areas of focus to concentrate any comments they might have. These areas of focus were:

- Campus Space
- Teaching Space
- Technical Teaching Space
- Administrative Space
- In-Between Space
- Infrastructure

Any comments were collected by the design team at the end of the tour and were incorporated into the facility analysis.

WORKSHOP 03 - ANALYSIS

Following the tours the group met again to discuss the existing conditions relative to the architectural goals. The design team reviewed each of the campuses and identified opportunities for improvement. The presentation included images from the tours and precedent imagery that illustrated general recommendations for each opportunity.

The design team met with the FMPAC on two more occasions, once to present a draft of the findings and the second time to present the final document.

Above: Design team and FMPAC members discussing classroom trends during a tour of the Albany Campus.
KICK OFF
03.01.16 - MEETING 1
  • OUTLINE EXPECTATIONS
  • DESCRIBE THE PROCESS
  • REVIEW ACCREDITATION REQUIREMENTS
  • REVIEW GOALS
  • EXTERNAL INFLUENCES

DEFINE THE LENS

TOUR MAIN CAMPUS
04.01.16 - TOUR 1
  • WHAT WE HEARD
  • REVIEW TOUR CRITERIA
  • TOUR MAIN CAMPUS

ANALYSIS
05.24.16 - MEETING 3
  • WHAT WE HEARD
  • REVIEW TOURS
  • IDENTIFY OPPORTUNITIES
  • IDENTIFY CHALLENGES
  • IDENTIFY SOLUTIONS

RECOMMENDATIONS
06.22.16 - MEETING 4
  • REVIEW OPPORTUNITIES + CHALLENGES + SOLUTIONS
  • REVIEW DRAFT NARRATIVES + GRAPHIC ILLUSTRATIONS
  • REVIEW DRAFT OF MASTER PLAN RECOMMENDATIONS

FINAL REPORT
07.28.16 - MEETING 5
  • PRESENT FINAL FACILITIES COMPREHENSIVE / MASTER PLAN RECOMMENDATIONS

Above: Schedule Process Graphic
ARCHITECTURAL GOALS

As mentioned in the Process section, it was important for the design team to create a shared language for members of the FMPAC to review and critique LBCC’s existing space.

In order to do this, the design team began with the evaluation of the college’s Core Theme objectives as outlined in the “Year Three Self Study Report.” The Core Themes of Educational Attainment, Cultural Richness, and Economic Vitality, each have a subset of objectives that range from ensuring students transition to college to improving faculty and students ability to discuss issues of diversity.

To effectively translate these themes, the design team went through an exercise that mapped these objectives to the specific architectural goals. This mapping exercise can be seen in the appendix as part of the presentation of Workshop 02.

The most obvious architectural goal was to create strong learning environments, and nearly all the objectives related to the Core Theme of Educational Attainment were matched to this goal.

Studies have shown that strong relationships with faculty and peers encourage struggling students to seek help. Faculty are more aware when a student needs assistance. As such many of the same Educational Attainment goals were mapped to a goal of creating stronger relationships within the college. In addition, LBCC has a strong commitment to the surrounding communities and encourages student to display a high level of civic engagement. These objectives required this goal to expand to include the community as part of important networks to be fostered.

Many of the objectives tied to Cultural Richness focused on creating an environment that was not only inclusive, but allowed for open expression and reception of multiple viewpoints. Throughout the objectives it was important for all members of LBCC, both faculty and students, to have strong cultural literacy.

Vocational programs are a large part of LBCC’s history, and many of the objectives tie these programs back to the economic vitality of the region. Increasing enrollment in these programs requires technical spaces that are high quality and function as an advertisement to potential students.

Within the Core Themes, there are objectives that encourage the college to be responsive to the changing needs of regional employers. To do so requires spaces that can be easily reconfigured. Flexibility should exist for short term reconfigurations and long term renovations.

Sustainability was not a specific goal relative to the Core Theme objectives but was discussed within the group as something that was important at an aspirational level as well as a practical level. Discussion was mostly focused on practical solutions that improved the efficiency and operations of the existing physical resources.

Once these Architectural Goals were established the design team then reviewed trends in the design of these types of spaces.

CREATE GREAT LEARNING SPACES THAT SUPPORT EDUCATIONAL ENRICHMENT

The nature of learning spaces has changed dramatically with the introduction of technology and increased understanding of how students learn most effectively. New spaces should place focus on the student/teacher relationship and the ability to learn in both group and individual settings.

CREATE SPACES THAT STRENGTHEN EDUCATIONAL SUPPORT NETWORKS BETWEEN FACULTY/PEERS/COMMUNITY

Strong relationships have been shown to aid in educational achievement and follow through. Personal networks are often built outside the classroom, and space must be designed to encourage chance interactions that can lead to supportive relationships.
CREATE SPACES THAT ENCOURAGE CONNECTION AND EXPRESSIONS OF DIVERSITY

It was recognized that the physical environment may have only limited ability to encourage diversity. Where possible, spaces should support the discussion and the opportunity for a form of expression or impression that allow diverse groups to feel at home.

CREATE SPACES THAT RAISE THE PROFILE OF TECHNICAL EDUCATION PROGRAMS

Technical or vocational spaces are often considered secondary programs with lesser quality space. Given the importance of these programs to LBCC, technical spaces should be upgraded to be brighter and more open with strong connections to the rest of the LBCC community.

CREATE SPACES THAT CAN ADAPT TO CHANGING NEEDS

Educational programs and administrative positions are in a constant state of fluctuation. It’s important to define spaces that can accommodate multiple functions and the ability to change configuration with minimal cost and waste.

SUSTAINABILITY

Given the parameters set on the master plan, the topic of sustainability was limited to a focus on increasing operational and performance efficiency as well as strategies to improve the health and wellness of existing spaces.

Kawartha Trades and Technology Centre - Fleming College

Mural

Kathlyn Joy Gilliam Collegiate Academy - Dallas

Open office environment
CAMPUS BUILDINGS

AC Activities Center
CC Calapooia Center
F Forum
IA Industrial A
IB Industrial B
IC Industrial C
LM Luckiamute Center
MH Madrone Hall
MKH McKenzie Hall
NSH North Santiam Hall
PCDC Periwinkle Child Development Center
SC Service Center
SSH South Santiam Hall
RCH Red Cedar Hall
SU Student Union
T Takena Hall/Albany Community Education
WH Willamette Hall
WOH White Oak Hall
OPPORTUNITIES
- Create a Sense of Arrival on Campus
- Redefine Transit Hub
- Create a Friendly Campus Edge
- Redefine the Courtyard
- Create In-Between Spaces
- Showcase Unique College Programs
- Transform the Forum Into the Heart of the Campus

VIEW CORRIDORS
The sense of arrival and approach to the campus will influence what type of impressions the students, visitors, and staff will have on LBCC. All the elements that define the edges of the campus should be considered in redefining the image and the character of LBCC. Landscaping, clear wayfinding, open and welcoming buildings, warm natural materials, lighting, and art installations are elements that can be incorporated to the overall campus incremental improvements.
CIRCULATION

The existing network of circulation on campus is very well defined. The energy and vitality of the school can be greatly improved by providing informal gathering areas along this network of in-between spaces. Pedestrian movement can be strengthened by adding additional paths that support the tendency of people to diagonally move in open spaces to shorten their travel. Better definition and/or separation of vehicular, mass transit, and pedestrian circulations can also create a safer campus environment.

CONNECTIVITY

The existing campus planning framework is organized around the central campus courtyard, yet it has very limited appeal and therefore needs to be redefined. There are great opportunities to enhance the visual and physical connections of all the buildings and the circulations around the courtyard. These connections will increase the utilization of the courtyard and create more vibrant and active outdoor learning spaces for the campus.

GREEN SPACE

Green spaces surround all the campus buildings on the perimeter. There are great opportunities to weave green spaces between existing buildings, within the redefined central courtyard, and future buildings. They can be utilized as part of the daily campus learning experience. These spaces can become outdoor informal learning and working spaces.
SENSE OF ARRIVAL
SENSE OF ARRIVAL

When people arrive to LBCC’s Albany campus, they should intuitively know that they are on an LBCC campus. For prospective students, faculty, and visitors, the sense of arrival and approach has an enormous impact on their first impressions of the institution. For people that travel to the campus for work or classes, it sets the tone for what their daily experience will be. It is paramount that these experiences are energizing, inspiring, and reflect both LBCC’s brand and values.

The ceremonial approach to the campus occurs from the northeast via SW Ellingson road. This creates a challenge because this edge also serves as the back of house to many of the campus functions. Despite being the symbolic entrance to the campus, visitors are greeted with views of loading docks, garbage collection areas, and parking lots.

While the planned “front door” of LBCC’s Albany Campus lies at the northeast entrance, most current students and faculty arrive via the south parking lot. This creates a breakdown in the sense of arrival on campus as the south parking lot was never intended to be the face of campus. As most people’s first point of interaction with LBCC, it is important that the sense of arrival be addressed.

The current building construction on LBCC’s Albany campus is monolithic concrete. Monolithic concrete at the current scale is imposing to pedestrians as they approach the buildings. The buildings feel massive, heavy, hard, cold, and aren’t complementary to the human scale. This fails to create an inspirational learning environment that reinforces LBCC’s core values. The current sense of approach needs to shift from approaching hard imposing objects, to that of a warm supporting campus.
CEREMONIAL ENTRANCE

While the planned ceremonial entrance from the northwest has not evolved as the campus “front door,” it can still make a large impact on the campus. Updating the ceremonial entrance to be used for high-profile visitors, prospective students, and dignitaries would be impactful.

Updating the entrance should focus on strengthening its connection to the Forum. The Forum’s connection to the campus would be undeniable, and people arriving on campus from the ceremonial entrance will find themselves at the foot of this imposing structure. Enhanced pedestrian flow from the loading zone by re-orienting the approach will guide people through the center of the Forum, creating the opportunity to view the campus beyond.

Activating the entrance to the Forum would go a long way to enhancing its effect on visitors. Developing the exterior courtyard to not only act as a ceremonial approach, but also to facilitate seating and interaction, would help make the entrance more engaging and energetic. This would also allow people who are waiting for transportation to and from this entrance to have a place to gather.

The current landscaping and lighting should be updated to create an engaging entrance. The parking island can become a feature, and trees and plantings could be designed to provide a gateway to campus and provide shade and cooling for parked cars.

Parking striping and crosswalks can be expressed through integration with the landscape and contrasting materials as opposed to paint. The use of pavers, concrete, and green space can transform the parking lot itself into a graphical artistic display that presents itself as the ceremonial entrance as opposed to being just another parking lot.

NORTH ENTRANCE

The ceremonial entry is limited in size and parking capacity, and as a result, many people who are arriving on the north side of the Albany campus will do so through a parking lot to the west. People arriving from this area will effectively enter the campus from the north entrance. The north edge of campus houses many of the specialized trade buildings and storage areas that service these functions.

Updating the northwest entry should focus on screening undesirable views and creating more pedestrian friendly connections. Despite being large, the current parking lot only offers a single crosswalk to enter campus. This is inconvenient and creates a potentially dangerous mix of cars and pedestrians crossing in unsafe locations.

Additional connections need to be made from the parking lot to campus. Signage and speed tables alerting drivers to the presence of pedestrians will slow down traffic and enhance the safety of pedestrians on the site. Current sidewalks from the northwest parking lot direct pedestrians to parking lots and industrial storage areas. These should be reconfigured to allow pedestrians to move safely from the northwest parking lot to the main campus buildings. This can be accomplished through the use of dedicated walking paths that separate pedestrians from vehicles and storage areas.

Pedestrians approaching from the northwest parking lot are greeted by views of loading docks, parking lots, garbage bins, and industrial storage. This creates an unwelcoming edge for many people who arrive on campus.

Above: Photographs of existing conditions
The south approach to LBCC’s Albany campus acts as the functional front door to campus. The first impression is from the parking lot. Though it is the acting front door of campus, the south entry is not treated as such, and therefore should reflect more prominence.

Current crosswalks zig-zag through the parking lot and are off-axis from logical building approaches. Creating dedicated pedestrian walkways that are strategically aligned to the buildings will help frame views and create a more impactful experience as people approach campus. Using contrasting materials and buffering with surrounding hardscape will soften the campus approach.

The landscape needs to be updated along the south entrance. Trees need to be consistently trimmed, and plants at the end of their lifecycle need to be replaced. Vegetation planted at the edge of buildings needs to be consistently arranged and maintained. Trees can be chosen and strategically planted so that they create edges and outdoor rooms, as opposed to current use just acting as a buffer.

Current walkways to Takena Hall offer opportunities to create an active exterior space. Using a variety of furniture types and occupiable landscape elements will allow people to engage the courtyard beyond just moving through it.

The existing building construction creates a character that is heavy, hard, and unwelcoming. Using light materials to penetrate the opaque facades would provide views into the buildings and make them feel lighter. Providing visual connections to the interior of buildings creates intrigue and aids in drawing people into the space as opposed to the current design which acts as a barrier. Creating transparency at building entrances will help to identify building entries.
Whether intended or not, signage, light fixtures, screening, and other elements installed on campus contribute to the campus brand. While these elements are required to create a functional campus, they also offer opportunities to showcase LBCC’s brand and special programs.

Upon arriving on campus, it is important to clearly communicate to people that they have arrived on an LBCC campus. To accomplish a brand approach, priorities are set with design elements established, and these are used consistently throughout the entire campus.

Constructed elements such as screens and site furniture can be designed and constructed by the AutoCAD, CNC routing, and welding programs. These programs can be used to design and construct site walls, site lighting, signage, hand-railings, bike-racks, and other required furnishings. Leveraging the unique talents of the students and faculty to design and create these elements will help create a consistent language for the campus. It also reinforces the brand by creating a compelling story about who LBCC is and their core values.

When arriving on campus, people should be able to quickly orient themselves and clearly identify destinations and points of circulation. This is accomplished through various means of wayfinding.

Signage should be clear, legible, and consistent throughout LBCC’s campuses. This will not only reinforce LBCC’s brand, but clarify how people should move through the campus. Pathways and landscaping should also be strategically implemented to promote clear wayfinding throughout the campus. Catering to through creating a hierarchy leads people through campus.

Lighting can also be used to amplify the campus brand and identity. If used in a consistent manner, strategically placed lighting can identify entrances, highlight campus features, increase campus safety, and enhance wayfinding.

Lighting must be used consistently throughout a campus to help establish a hierarchy that can be used to draw attention to certain features and lead people through spaces. Correct use of lighting can draw attention to features, as well as screen less desirable areas.

Thoughtful landscaping can help enhance the sense of arrival on campus. Selecting plants that can thrive with an appropriate complementary scale, and using them in a consistent manner helps create a common language that will make the campus read as a whole.

Landscaping elements can provide a cohesive campus. Like plant selection and implementation, grooming and upkeep methods must have a consistent language across the campus. A good proactive measure is to create a plan to address the life-cycle of campus plantings.

Landscaping can be used to conceal less desirable portions of a campus such as screen loading docks and trash bins. This can be accomplished using earth berms, shrubs, tall grasses, and trees.

Landscaping can also be used to guide people through the campus. Utilizing strategic plantings, tree rows, designed pathways, and slicing through earth berms can create a physical and visual connection that will help to orient people, and enhance the approach to building entries and gathering places throughout the campus.

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BUILDING AESTHETICS

The first recommendation to address the issues of heavy, opaque materials is to increase the penetrations at the perimeter of the campus buildings. Openings can be strategically punched in the brick and concrete facades to allow the installation of storefront glazing systems. In addition, the precast concrete panels that create datum and act as guardrails at the second floor can be modified to be more transparent or removed entirely.

Strategically penetrating the facade and replacing heavy precast elements would make the buildings feel much lighter. People approaching from the exterior would no longer be welcomed by large heavy walls, but rather by the functions and activities taking place within. Likewise, the interior of the campus facilities would be drastically transformed. Increasing the amount of glazing would allow more views and daylight into interior spaces. Employees and students would have views to the exterior, to the activity on campus, and to nature beyond. Replacing precast concrete railings with a transparent material will allow the exterior walkways to feel more open and inviting.

The second recommendation is for concrete and brick to be cleaned to remove accumulated grime and restore them to their original appearance. In addition, through various treatments, the precast concrete bands can be treated through different surface preparations like staining and sandblasting. The surface treatment could incorporate graphic elements to aid in branding or wayfinding. An alternate approach to the concrete would be to paint these areas, though this would present long-term maintenance issues.

Imprinting can occur through the application of murals in select areas. Employees and students can lend their voice to the campus brand either through products created in classes, or through art competitions which could influence signage, wayfinding, or murals. Additionally, more temporary imprinting can be facilitated through chalkboard or whiteboard paint.

The existing glazing system is also an impediment to creating buildings that feel light. Despite being a window with visibility from the interior, dark tinted glazing reflects the surrounding environment and appears opaque from the exterior. While most typical facades read as solid (walls) vs. void (windows), the glazing on the Albany campus reads as entirely solid because of the lack of visibility to the interior.

It is recommended that existing glazing systems be replaced with a mixture of transparent and translucent glass. Transparent glazing would allow uninterrupted vision both into and out of existing buildings. In doing this, the scale of the existing facades would be broken up, and the buildings would feel less heavy and imposing. Clear glass could be used to selectively allow views into buildings to help display the activity within.

In sensitive areas, or areas where increased security is desired, translucent glazing can be installed. Translucent glazing allows natural daylight to interior spaces while limiting visual exposure.

Daylighting must be controlled for optimal results. West, south, and east facades with large amounts of glazing should be protected by some sort of screening. Ideally, screens would be external to the building, allowing more heat to stay on the outside. Screens can be constructed of various metals, such as aluminum and steel. Screens can be designed with different patterns, colors, and profiles, which could be embraced as a branding opportunity. Perforations can create patterns that are encoded with the college brand. The materials and language created by window screening can have an influence on architectural and landscape installations elsewhere on the campus. For instance, site and building lights could be created of perforated metal which could be designed and/or fabricated by LBCC students. The materials, patterns, and colors can also be used in the many screens that will appear around campus. Garbage cans, industrial storage, mechanical equipment, and loading docks are all examples of elements that should be screened. Each one of these conditions offers an opportunity to tie into the large architectural vocabulary.

People have been shown to have a positive response to environments that incorporate a biophilic approach in their design. The presence of plants, organic patterns, textures, and materials elicits a natural connection within people that is referred to as the “biophilic response.” This response is intuitive to humans and is important to our physical and mental well-being. Biophilic responses help reduce stress, boost energy, enhance concentration, and help people to increase awareness and focus. Through the use of innovative strategies throughout the campus, LBCC can capitalize on these innate emotional responses to nature.
Left: Inspirational Images of potential new materials.
Create daylight and openness in stairwell
Provide appropriate lighting for safety, efficiency, and wayfinding
Branding opportunity for the identity of campus in a festive character
Increase glazing and transparency
Screen unsightly service area
Variety of informal gathering options along circulation pathways
Thoughtful use of appropriate plantings
Redefine building entries with welcoming sheltered front door

Above: Photograph of existing condition and inspiration sketch illustrating building aesthetics
Warm, vibrant, and natural materials
Create a transparent Forum exterior for a more welcoming appearance
Expand skylight area to bring warmth and visual clarity
Branding opportunity for the identity of campus in a festive character
Minimize and lighten existing architectural elements
Clarity of orientation and identification of destinations
Accommodate variety of informal gathering options
Thoughtful use of appropriate plantings
Intuitive sense of place, welcoming “front door”
Transform key edges “education on display”

Above: Photograph of existing condition and inspiration sketch illustrating building aesthetics
REDEFINE TRANSIT HUB
REDEFINE TRANSIT HUB
LBCC is studying expanded capacity with regional transportation providers, because the current bus drop-off and pick up zone does not accommodate sufficient buses at once. If LBCC is to increase their capacity for transit-oriented visitors, it will need to plan for a dedicated transit hub.

The current transit hub at LBCC is missing key components that are inhibiting it from becoming a highly functional space. The existing bus drop off is identified only from a small sign at the edge of a sidewalk. The drop-off location is not easily recognizable and is easily missed. Additionally, there is no weather protection for transit riders as they board, de-board, and wait for buses. The lack of weather protection forces students to gather inside of Takena Hall to wait for buses. This conflicts with the building programming as it is not designed to support this use, and it breaks the important visual connection between riders and drivers by forcing waiting riders inside of a building instead of allowing them to queue next to the bus drop off.

The current limit of not being able to serve sufficient busses at a time also creates a dangerous mix of cars, buses, and pedestrians. The pedestrian flow from the parking lot across two lanes of traffic used by buses and cars is poorly identified, and there are no mechanisms employed to help slow down traffic.

WAITING SPACE
It is imperative to create a dedicated waiting space for passengers that utilize mass transportation to and from campus. Waiting spaces should be easily identifiable, intuitive, safe, and protected from the weather.

Waiting spaces also provide opportunities for spontaneous interaction. Students and employees that utilize the bus system will have ample opportunity to engage in conversation and share information. Consequently, it is important to support these chance interactions by providing a variety of seating options to support these impromptu conversations.

WEATHER
Protecting riders from exposure to the weather is an important function for a transit hub. Riders can potentially wait long periods of time for a bus to arrive at a stop, and they should not be exposed to the elements the entire time. Adequate shade, wind, temperature, and precipitation protection should be provided from collectors that are being installed on the site.

Canopies can create cover from the rain. Site walls and screens can help break the wind, and infrared heaters can economically provide warmth in instances of extreme cold. It is important that weather protection be provided at the point of drop off and pickup as riders need to be present to communicate to the driver that they are in need of a ride. Separating weather protection from the bus stop limits the visibility of both the bus as well as the riders, resulting in missed buses and potentially hazardous situations.

SAFETY
The intersection of pedestrians and vehicles naturally creates hazardous conditions. These hazards are compounded due to the wide range of hours and lighting conditions in which the hub will be used. Students arrive and leave from campus at all hours of the day, often times in the dark. Providing adequate lighting is a way to enhance rider safety. Providing lighting not only enhances the visibility of riders while they wait during early morning or night time hours, but they also make the riders more visible to bus drivers, reducing the risk that they get overlooked by a moving vehicle.

The current traffic flow only allows one bus to drop passengers off at a time. Expanding the lanes to allow for more than one bus to service passengers while allowing for unobstructed car flow will create a more streamlined traffic flow. More clearly identifying pedestrian crosswalks, and the addition of a speed table to slow down traffic, would increase rider safety. Providing visual control of the waiting area is another way to enhance rider safety. Visual control means more people are able to observe passengers at the hub, which reduces the likelihood of crimes occurring.

BRANDING
With the high volume of people that move through it on a daily basis, and its prominent location on campus, a future transit hub offers a prime opportunity for amplifying LBCC’s brand and to advertise to current and potential students. The location of the current bus stop is in close proximity to the largest parking lot on campus. As a result, most of the students and faculty will walk past the transit hub every day. Additionally, buses that serve LBCC will have Canopies can create cover from the rain. Site walls and screens can help break the wind, and infrared heaters can economically provide warmth in instances of extreme cold. It is important that weather protection be provided at the point of drop off and pickup as riders need to be present to communicate to the driver that they are in need of a ride. Separating weather protection from the bus stop limits the visibility of both the bus as well as the riders, resulting in missed buses and potentially hazardous situations.

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passengers who are not current students. This offers great potential to advertise to them as well.

LBCC’s brand can be reflected through the design and construction of the transit hub. As the first point of contact for many people on campus, any wayfinding and signage that it incorporates can influence the rest of the campus. The construction of the collectors themselves could be done with help from LBCC’s specialty programs. Metal screens, canopies, signage, and seating could be designed and constructed by the students. This will advertise the technology and craft that is present on the campus.

Innovative use of lighting can help capitalize on the incorporated branding opportunities. In addition to helping provide a safe space for transit riders, it can also illuminate signs, structures, and furniture at night.

COLLECTORS
Collectors can serve as a visual cue to identify dedicated waiting spaces and riders support as they wait for their bus. Collectors should be easily recognizable and readily visible to both bus drivers and riders. Drivers need to be able to easily identify where to drop off and pick up riders in an environment where cars and pedestrians are mixing in potentially unsafe conditions.

Top: Diagram of potential transit hub elements
Left: Section through transit hub showing program elements
REDEFINE THE COURTYARD
REDEFINE THE COURTYARD

The courtyard sits at the center of LBCC’s Albany campus and provides a prime opportunity to create an active vibrant space at the heart of the campus. While its central location creates many opportunities for interaction between students, the current courtyard design is keeping the courtyard from reaching its full potential.

Accessibility is limited by virtue of the courtyard being sunken into the ground. Human beings are attracted by visual connections to human activity, and as a result they typically shy away from recessed exterior spaces. Not only do recessed spaces create barriers for people with disabilities, they also create a psychological barrier for visitors to the space. Limiting visual connections and recessing the courtyard creates a sense of seclusion and being unsafe.

The current homogeneous furniture with fixed seating creates barriers to visitors creating ownership of their space. People expect to be able to adapt a space to their needs. Providing immobile furniture at a single scale does not support their needs. Providing immobile furniture at a single scale creates barriers for people with disabilities, they also create a psychological barrier for visitors to use the courtyard and creates times when the space will be void of activity.

The current homogeneous furniture with fixed seating creates barriers for visitors creating ownership of their space. People expect to be able to adapt a space to their needs. Providing immobile furniture at a single scale utilizes a “one size fits all” approach and doesn’t support current technology and varying modes of work.

The current courtyard design is composed of hard, unwelcoming surfaces that create both visual and physical barriers at its edges. With its close proximity to surrounding buildings, the courtyard offers unrealized potential for the buildings, classroom, and office spaces to engage with the exterior space.

LANDSCAPING

With its access to natural sunlight and the elements, LBCC’s courtyard offers a prime opportunity to capitalize on the benefits of biophilic design. The presence of plants, organic patterns, textures, and materials elicits a natural connection within people that is referred to as the “biophilic response.” This response is intuitive to humans and is important to our physical and mental well being. Biophilic responses help reduce stress, boost energy, enhance concentration, and help people to increase awareness and focus. Since the courtyard is an exterior space, it is natural that it should incorporate design elements that enhance the performance of people that use it.

Adding specific landscape elements will also help soften the courtyard’s hard edges. Trees, grass, and indigenous shrubs would serve to contrast the use of concrete and brick. Carefully selected trees and foliage will create a lower canopy and reduce the weight of the space to a human scale.

Landscape elements can also be used to partition the courtyard and act as screening elements and create more intimate spaces. Trees and tall grasses will help cool the courtyard down in the summer by providing shading and evaporative cooling.

WEATHER

To truly be the heart of the campus, the courtyard needs to be active year-round. To accomplish this, LBCC needs to provide shelter from the elements. During the summer, tensile structures can be drawn strategically across the courtyard to shade occupants from the sun. Thoughtful planning of trees species and locations can create shade for the courtyard. Rain can be mitigated by tree canopy overhangs and structures.

CONNECT EDGES

Improving the physical and visual connections between the courtyard and surrounding buildings will help create activity and energy within the space. Allowing physical connections between buildings and the courtyard allow interior spaces to be expanded to the exterior. Classrooms or offices could utilize folding or sliding doors to allow classes to flow out into the space. Providing physical access between the offices and administration spaces will allow employees to move outside to work, conduct meetings, or take a break.

Visual connections to the courtyard are just as important as physical ones. Allowing students and employees sight-lines to plants, daylight, and external activity is stimulating and will elicit a natural biophilic response. Studies show that students and workers with direct access to daylight and natural views are more engaged in their work and lessons, have more energy, are healthier, and take less sick days.

DIVERSITY OF SPACE AND SCALE

Successful public spaces provide a diversity of space options for visitors to utilize. The conditions under which people will utilize the courtyard vary widely, and the design of the courtyard needs to reflect that. Providing opportunities for large groups to congregate in the courtyard is important, as is providing adequate support for small groups within the space. This is accomplished through thoughtful use of furnishings.
and the creating of spaces. Large immobile pieces of furniture can support functions for large groups that are visible from all points in the courtyard. Allowing large groups space to work in while putting them on display adds to the energy and vibrancy for the space.

Providing opportunities for smaller groups to claim ownership over a space can be provided by smaller seating groups. Mobility and modularity in furniture will enable small groups to set up a work space as they require and allow them to scale as needed. Tables of 2-4 can be pulled together to accommodate groups of 6-8. Movable furniture creates a sense of empowerment and comfort.

While creating a space that stimulates energy and vibrancy is important to an active courtyard, it also needs to provide quieter more intimate spaces for people that need it. Landscaping and furniture can be used to create smaller, more secluded areas where single users or small groups can work in a quieter atmosphere.

ACCESSIBILITY

Enhancing accessibility to the courtyard is imperative to making it an active center. All approaches to the courtyard must be fully accessible by anyone, regardless of physical limitations. Barriers to entry and movement through the space can be accomplished by raising it to be at consistent grade, similar to the first finish floor of campus facilities. This would remove any psychological barriers to being in a sunken courtyard and allow access by all people. The more people that are in the courtyard, the more active it will be.

LIGHTING AND SECURITY

Fostering a strong sense of safety is a key component to creating a successful public space. People need to feel that their person and property are safe if they are going to feel empowered to use the space. This is accomplished through visual oversight to the courtyard. Increasing visibility to the area not only allows the campus to capitalize on the sense of energy and community, but it also allows more people to observe courtyard visitors. More observers means more eyes on the space to hold people accountable.

This approach needs to expand to include low-light and late hours. People occupy the campus at all hours of the day, so providing quality lighting will help make the courtyard safer for people passing through it in the evening.
Raising the courtyard to a consistent grade will make it accessible to all people.

Landscape elements can delineate space and be used to create a biophilic response.

Softening the edges of the courtyard will allow the surrounding spaces to more easily access the courtyard.

A wide range of seating options will support numerous postures and modes of work.

Appropriate lighting and visual connections to the courtyard will enhance the security of the space.

Portions of the courtyard must be protected from the elements to promote year-round use.

Left: Diagram of potential courtyard design.
Increase glazing and transparency
Reduce amount of concrete for transparency and connectivity
Improve physical and visual connections to courtyard
Reduce concrete hardscape and soften the courtyard edges
Raise courtyard elevation for universal accessibility
Create a variety of scales and options for informal gathering

Above: Photograph of existing condition and inspiration sketch of the courtyard
CREATE IN-BETWEEN SPACES
STRENGTHEN IN-BETWEEN SPACES

The existing layout for LBCC’s Albany campus offers many opportunities to capitalize on programming “in-between” spaces. The campus is currently composed of over 15 buildings, nearly one third of which are connected by a single large canopy. The current building construction is of monolithic concrete, and the resulting spaces that are created between these buildings are utilized for circulation and little else.

The canopy itself is used to provide circulation between various buildings on the south edge of campus. While the canopy offers protection from the weather, it is also an obstacle to creating occupiable spaces. Natural light is nearly entirely blocked by the canopy, creating dark cavernous spaces beneath. The proportions and materiality of the canopy make it feel incredibly heavy and dominating to the human scale.

Despite the lack of daylight and the hard imposing forms of the buildings themselves, there are many opportunities to address the in-between spaces on the Albany campus.

DAYLIGHT

The benefits of properly daylighting spaces are well documented. Students that learn in an environment that takes advantage of natural light are more engaged, productive, and healthy. Daylighting boosts their learning and battles myopia. Likewise, employees that work in an environment that takes advantage of natural light are more engaged, productive, and healthy.

With the presence of tall imposing buildings on campus providing access to daylight is a priority, especially beneath the canopy. Selectively penetrating the canopy and walkways beneath with light portals would help light the dark cavernous spaces beneath. Light portals would also provide views to the sky, allowing the covered spaces to retain a connection to nature. Students and faculty would then be able to feel like they are outside while still being sheltered from the elements.

SAFETY

Fostering a strong sense of safety is a key component to creating successful in-between spaces. People need to feel that their person and property are safe if they are going to feel empowered to use the space. This is accomplished through visual oversight to the spaces and appropriate lighting. Increasing visibility to the in-between spaces not only allows the campus to capitalize on the sense of energy and community, but it also allows more people to observe the occurrence of spontaneous interactions. More observers means more eyes on the space to hold people accountable.

This approach needs to expand to include low-light and late hours. People occupy the campus at all hours of the day, so providing quality lighting will help make the in-between spaces safer to occupy. With better lighting people will be more likely to stay on campus later, increasing its activity and sense of community.

SPONTANEOUS INTERACTION

As large groups of people move through the campus between classes, a prime opportunity to design in-between spaces that promote spontaneous interaction is presented. These types of interactions are an invaluable asset to organizational cultures. The ability for conversations between peers to occur through happenstance fosters a connection to the greater whole and is a highly effective means of sharing information.

For spontaneous interactions to occur on a regular basis, spaces need to be designed to support them. Key areas for interactions need to be identified, and spaces supporting conversation need to be readily available to people as they move through the space. Visual access over the site is also important. People need to be able to see and be seen for connections to be made.

The scale of spaces to support spontaneous interaction should vary from spaces for two people to meet, to spaces for a small group to gather. The spaces should be comfortable and protected from the elements.

CONNECTIVITY

Enhancing connections to the surrounding buildings on campus can help activate in-between spaces. Finding synergies between building programs and exterior spaces offer opportunities to extend interior spaces to the exterior. For example, the cafeteria can be opened at the perimeter of the building to allow cafeteria seating to extend to the exterior. The library can open up to allow for interior/exterior public spaces. Enclosed glazed spaces can be added for office use to increase square footage and allow interior spaces to connect to the exterior while still offering weather protection.

Adding windows and penetrations to allow building access to in-between spaces helps to soften the edges of the buildings. Perforating building walls and adding glazing creates opportunities for visual connections between interior and exterior spaces and helps reduce the perception of building mass. Solid walls become transparent, adding to the visual security of the in-between spaces.

Above: Photographs of existing conditions
CHOICE IN POSTURE
Spaces that allow for spontaneous interaction need to be supported with a variety of furniture. Often times when striking up a conversation with a peer, the need to share information arises. Furniture can help facilitate this by offering “landing pads” for people to gather around and utilize technology. Tables with charging stations can allow people to pull a laptop or a phone to speak to a specific project or website. Short conversations can be serviced by providing places for people to stand and converse, while seating is optimal for conversations that are being longer. Benches, tables with movable chairs, and landscape elements that double as furniture can support these interactions.

IMPRINTING
Imprinting can help soften the hard edges of the architectural character, while amplifying the sense of community and brand. Providing space for diversity and cultural expression will allow students to explore their identity within the college and put it on display. Imprinting can be accomplished through inviting the student body to have a voice in how their campus be branded through art contests, guest artists, and voting for installations.

WAYFINDING
People should be able to quickly orient themselves and clearly identify destinations and points of circulation. This is accomplished through different means of wayfinding. One such tool for wayfinding is signage. Signage should be clear, legible, and consistent throughout LBCC’s campuses. This will not only reinforce LBCC’s brand, but clarify how people should move through the campuses.

Signage and means of wayfinding can be designed, fabricated, and constructed from LBCC’s unique programs. These wayfinding opportunities can also serve as advertisements for LBCC’s special programs. The talents and knowledge of the college’s drafters, CNC routers, and welders can be leveraged to help design, construct, and install elements that will not only reflect LBCC’s brand, but also showcase their acquired talents.
Natural light from solar tubes and windows contribute to employee happiness and productivity.

Offering choices of posture fosters employee engagement and increases overall wellness.

Designing active zones will increase the chances of spontaneous interaction.

Adding glazing to perimeter walls reduces the sense of mass and creates visual connections to the building.

Left: Diagram of in-between spaces
Balance existing concrete and masonry with warm natural materials
Increase access to daylight area to bring warmth and visual clarity
Maximize transparency and minimize opaque massive walls
Provide appropriate ambient and task lighting
Promote physical, visual, and operational connectivity
Variety of informal learning spaces
Balance openness and transparency with safety screening

Above: Photograph of existing condition and inspirational sketch of in-between spaces
SHOWCASE UNIQUE PROGRAMS
SHOWCASE UNIQUE PROGRAMS

LBCC provides many specialized programs that make it unique among community colleges in Oregon. Drafting, CNC routing, welding, and other tech programs provide a quality life-changing education to students that they cannot get anywhere else. By taking a few simple steps, LBCC can capitalize on the success of their technical programs by putting them on display as an advertisement for the college’s programs.

The current placement of maker spaces on the north side of campus relegates them to the “back of house.” The majority of classes and activities happen from the courtyard and south. As a result, traditional students and faculty do not get an opportunity to interact with these maker programs.

The spaces themselves don’t do a good job of creating an inspirational, engaging learning environment. The buildings are dark, with little access to daylight or views to the exterior. The areas surrounding the learning spaces are dedicated to service functions such as loading, parking, and materials storage.

The maker programs at LBCC are a large part of its identity and brand. The current placement and spaces for these programs represent a large missed opportunity to advertise for LBCC and reflect its values.

CONNECTIVITY AND VISIBILITY

Improving the physical and visual connections between the tech programs and the surrounding campus will foster engagement with students and faculty on campus.

By putting technical programs on visual display, prospective students will have the opportunity to connect with these programs, even though they are not a part of them. This can stimulate interest and intrigue, drawing students to the courses and increasing the knowledge of their existence on campus. The unique programs will benefit from an increased awareness of their presence. External students, employees, and faculty members will be more likely to engage them for their expertise. Additionally, word of mouth will help spread information about them beyond the immediate campus.

DAYLIGHTING

The current maker spaces on Albany’s campus exist in large impenetrable buildings, and the result is that the spaces are not welcoming or inspirational. Filling the spaces with daylight through the addition of windows, skylights, or solar-tubes will help transform the spaces from dark and cavernous to bright and welcoming. Creating a welcoming space will have a net-positive effect on the students who spend long hours in the shops and create a more appealing space for prospective students.

BRAND

Technical programs are a large part of the college’s identity. Whether it be the tech spaces in Albany, the ceramics program in Benton Center, or the Advanced Transportation Technology center in Sweet Home, these hands-on programs very much speak to LBCC’s brand. As discussed previously, these programs can and should be integrated around the campus.

Constructed elements such as screens and site furniture can be designed and constructed by the AutoCAD, CNC routing, and welding programs. These programs can be used to design and construct site walls, site lighting, signage, hand-railings, bike-racks, and other required furnishings. Leveraging the unique talents of the students and faculty to design and create these elements will help create a consistent language for the campus. It also reinforces the brand by creating a compelling story about who LBCC is and their core values.
Creating a visual connection between the classroom creates a display out of LBCC’s unique programs.

The maker culture reflects the brand of LBCC.

Natural light from solar tubes and windows contribute to student engagement and performance.

Left: Diagram of campus solution
TRANSFORM THE FORUM
TRANSFORM THE FORUM

The Forum occupies a unique spot on LBCC’s Albany campus and offers the opportunity to create a truly transformative space. Located on the east side of campus, the Forum is the first thing that visitors see when using the underutilized, yet symbolically important ceremonial campus entry. It is also located immediately next to the central courtyard and cafeteria. As a result, the Forum is a very important building on campus that needs to be addressed.

The Forum is currently constructed of brick and concrete. Like other buildings on campus it is heavy, hard, dark, and unwelcoming. Though the area around it is open, light fails to penetrate the Forum and glare from artificial lighting is prominent. In addition to being dark and foreboding, the Forum is constructed of entirely opaque materials. Despite the fact that the Forum is located directly between the courtyard and ceremonial entry, visibility to and from these prominent areas is nearly entirely obstructed by the Forum. This misses an incredible opportunity to visually connect two extremely important spaces on campus.

Despite its prominent position on campus, the Forum is underutilized. With its central location and unique layout, the Forum has great potential to be transformed into the heart of the campus.

DAYLIGHT

The benefits of properly daylighting spaces are well documented. Students that learn in an environment that takes advantage of natural light are more engaged, productive, and healthy. Daylighting boosts their learning. Likewise, employees that work in an environment that takes advantage of natural light are more engaged, productive, and healthy.

With the presence of tall imposing buildings, providing access to daylight to the exterior spaces is a priority, especially beneath the existing waffle slab canopy. The Forum is especially deep compared to some of the other buildings on campus, and the open nature of the walkways that surround it create exceptionally bad instances of glare. Students and employees walking through the space have painful transitions from dark spaces to natural light. Selectively penetrating the canopy and walkways beneath with light portals will help light the dark, cavernous spaces. Light portals will also provide views to the sky, allowing the covered spaces to retain a connection to nature. Internally, skylights and light shelves can be used to light the assembly space.

CONNECTIVITY

As large groups of people move through the campus between classes there is a prime opportunity to design in-between spaces that promote spontaneous interaction. These interactions are an invaluable asset to organizational cultures. The ability for conversations between peers to occur through happenstance fosters a connection to the greater whole and is a highly effective means of sharing information. With its central location, the Forum offers a prime opportunity to create a campus-wide connectivity hub.

Creating active spaces is key to promoting a vital academic environment. Active spaces create compelling reasons for people to congregate in an area. Creating a space that is unique on campus is one way to attract students, and empowering them to use it, will allow them to feel an ownership of the space. It will become a space that is dedicated to supporting them and their peers. The Forum will become a place to not only do their work, but to meet other students and faculty, relax with friends, or simply spend time between classes.

In addition to being a tool that is integral to the success of students and faculty at LBCC, the Forum can also become a place for the whole campus to gather for functions. In addition, large lectures and performances can take place periodically. Any large meetings required to communicate with students could occur in the Forum, either live or through the use of technology. Important news and information could be regularly displayed there. The Forum can become a place that people seek out to connect with the larger LBCC community.
people to the Forum. With its size, location, and unique volume, the Forum can offer a unique user experience. The volume can be programmed so that many smaller uses can occur simultaneously in the space. Large groups can gather, while small groups or single users can stake out their own corner to do their work.

Programming the Forum to be accessible to all students throughout the day will help encourage its use. While allowing larger functions to take over parts of the Forum occasionally, dedicating the majority of the Forum to be used by anybody on a reliable basis is important. Doing so positions the Forum as a tool that can be leveraged by all students and faculty. If they know they can reliably drop in at any time, it will become a regular tool in their regular activities on campus. The more people who habitually use the space, the more active it is, and the more people it attracts.

FLEXIBILITY

For the Forum to successfully fill the role of becoming the vibrant heart of campus, the space will need to be incredibly flexible. It will have to support small groups, large groups, and possibly campus-wide functions. This can be accomplished through careful programming and design.

LBCC can capitalize on the unique bowl shape of the forum to create an engaging assembly space. The bleachers and steps can be wrapped in a material such as wood to create a sense of warmth, transforming the bowl into tiered seating. Groups of all sizes would be able to use this seating system and still be able to see the entire space. A wide array of furniture assemblies of all different sizes can be programmed in the space for people to use. Flexible seating spaces, small nooks that allow varying degrees of privacy, and large built-in furniture pieces that anyone can use will help activate the space.

The bowl could utilize sliding partitions to break the large volumes down into smaller spaces to be used by medium-sized groups. If larger assemblies are needed, the perimeter for the Forum could be penetrated with sliding walls that allow the bowls and internal spaces to open up to the exterior, allowing the assembly space to extend beyond the forum.

VISIBILITY

Embracing visibility is critical to the successful transformation of the Forum into the heart of campus. The forum is currently opaque construction which inhibits its ability to showcase its program and create an active space.

People gather in public spaces to see and be seen. The ability to work while having visual access to a space filled with other people fosters a sense of community and
belonging. Creating a space that allows people to observe others creates natural connections between the people in the space and allows them to feed off of the communal energy. This creates a positive environment that people are more likely to revisit.

The positive effects of people watching aren’t limited to people sitting within the space. Creating transparency at the Forum perimeter that allows the observation of people moving past the building allows them to contribute to the overall energy and atmosphere of the Forum. Putting people, energy, and movement on display will help activate the space.

Adding transparency at the perimeter of the Forum will advertise the internal programming to the exterior. People arriving on campus, or walking by to class will be able to see an active live space and will be more likely to see it out in the future for themselves. The transparency will also contribute to the overall site lines on campus. Creating selective view corridors though the space will allow people arriving on campus to see through the Forum and into the campus courtyard, drawing them into the campus.
Balance existing concrete and masonry with warm natural materials
Provide opportunities for flexibility of use
Increase utilization of space
Promote physical, visual, and operational connectivity
Increase access to daylight area to bring warmth and visual clarity

Above: Photo of existing condition and inspiration sketch of the forum
BENTON CENTER CAMPUS
OVERVIEW

LBCC had been conducting evening adult education classes in Corvallis High School classrooms since 1967, having taken over the program from CHS. Under LBCC President Raymond J. Needham, the Benton Center was opened in Corvallis in December 1971. In September 1977, the Benton Center moved to new headquarters in the former Washington Elementary School in Corvallis, originally built in 1923. The new space accommodated labs for ceramics. Math and business technology became the core programs offered, in addition to ongoing adult basic education and parent education. The school’s gym became home to the center’s fitness classes. LBCC’s first microcomputer lab was established at the Benton Center in the early 1980s. The $19.1 million bond measure that voters passed in November 2000 allowed planning to begin on a $5 million renovation of the Benton Center. The Corvallis Planning Commission approved architectural plans for the renovation in October 2002, with the actual work taking place in 2003-04. The project included increased space for student services, as well as faculty offices, seven new classrooms, and an improved entrance for the center.
CIRCULATION AND CONNECTIVITY

The existing Benton Center and the future academic classroom building are physically separated by parking lots and properties owned by others. Connectivity between the two facilities will need to be coordinated between LBCC, the design team, and the other property owners. The pedestrian paths connecting the two facilities will need to be delineated through the parking lots for clarity. Lighting, visibility, color, or texture on the pedestrian paths should be implemented for safety and security.

SENSE OF ARRIVAL

LBCC Benton Center’s presence on NW 9th Street is currently non-existent. With the addition of the property on NW 9th Street and Reiman Avenue, the Benton Center will have a stronger street presence and have opportunities to redefine its brand and identity to the community. Appropriate branding, signage/wayfinding, and landscaping can help frame and locate the new facility and the existing Benton Center. The arrival sequence to the existing and the new facility need to be architecturally choreographed to communicate an open, safe, and welcoming campus.
EXPAND THE CERAMICS PROGRAM

The Benton Center ceramic studio has been a thriving and growing program for the students and the Corvallis community for decades. With the design and planning of the newly acquired future classroom building and the renovation of some existing spaces at the Benton Center building, locating an area for the ceramic studio expansion should be incorporated. The outdoor plaza to the north of the ceramic studio is the natural location for expansion. Depending on the size of space needed for expansion, it is recommended to maintain some outdoor gathering area to maintain the existing inside-outside class opportunities.
Agencies – DHS and Employment Resources. Currently, all access and control points to enter the building occur in the main two-story lobby. Due to the sensitive nature of the programs the public agencies offer, the safety, security, and privacy of the staff and public should be considered. The entry control points or adjacencies should be assessed to meet the safety, security, and privacy of all users.

OVERVIEW

The Lebanon Center was first established in Lebanon Union High School in 1972. The East Linn Workforce Development Center houses the LBCC Lebanon Center and offices for the Oregon Employment Department, DHS Community Human Services, and the Community Services Consortium in a 44,000 square foot building.

ADJACENCY, SAFETY, SECURITY, AND PRIVACY

Agencies – DHS and Employment Resources. Currently, all access and control points to enter the building occur in the main two-story lobby. Due to the sensitive nature of the programs the public agencies offer, the safety, security, and privacy of the staff and public should be considered. The entry control points or adjacencies should be assessed to meet the safety, security, and privacy of all users.

SENSE OF ARRIVAL

LBCC Lebanon Center has great street presence on the Industrial Way. The building entry is very well defined with a two-story architectural entry. Branding and identity for the college can be strengthened by adding more branding campaign materials and signage.

MAIN LOBBY AND IN-BETWEEN SPACES

The two story main lobby and the student’s informal in-between spaces are very well utilized. These spaces have great access to natural light and visual connection to nature. The acoustical properties of all the surfaces should be improved while maintaining the open and collaborative nature of these spaces.
CURRENT PROJECTS

Construction on the LBCC Health Occupations Center is currently underway on the Lebanon campus. This 42,000 square foot building is located next to major healthcare providers and provide opportunities for collaboration and resource sharing and will bring all LBCC healthcare programs into one learning space.

The building is anticipated to be open in 2017 and allow relocation of the Vet Tech program to the East Linn campus, creating extra space in Takena and Red Cedar Halls on the Albany campus.
OVERVIEW

The LBCC Advanced Transportation Technology Center, future Innovation Center and Heavy Equipment/Diesel Center are state-of-the-art facilities located in Lebanon, Oregon. In partnership with the City of Lebanon and local and national industry, LBCC’s ATTC is focused on leading edge, energy efficient, alternative energy transportation skills. The center will train students to the highest industry standards to meet the workforce needs for technicians to install, maintain, and repair both traditional and new propulsion systems.

SENSE OF ARRIVAL

The LBCC Advanced Transportation Technology Center (ATTC) and future Innovation and Heavy Equipment/Diesel Centers have strong street visibility and presence. The state-of-the-art-training equipment and tools can be showcased more on the building exteriors.

STUDENT AMENITIES + CONNECTIVITY

Since students tend to stay in the facilities for long hours, providing amenities internally and outside should be considered. With the addition of the Innovation and Heavy Equipment/Diesel Center, there is an opportunity to provide some outdoor lounge or learning spaces that

CURRENT PROJECTS

The Innovation Center and the Heavy equipment Center are currently under construction with completion scheduled for late September of 2016. When completed, the Heavy Equipment / Diesel program will move to the ATTC site vacating the Industrial C building. Portions of Industrial A were vacated earlier when the Automotive program moved to the ATTC campus.
The LBCC Sweet Home Center is a purpose-built home for this extension program that serves the communities of Sweet Home, Brownsville, Cascadia, Crawfordsville, and Foster. The Center was constructed as part of the Sweet Home High School in 2003.

The design team was unable to tour the facility but discussed the buildings challenges with the FMPAC. Generally the Center needed to have a stronger presence for the community both on the exterior of the facility as well as its connection to the high school. Stronger signage and way finding and a more open presence within the school would create a more opening.
OFFICES AND WORK SPACE RECOMMENDATIONS
OFFICES AND WORK SPACES
Organizations in both public and private arenas are facing a drain on experienced staff as the baby boom generation approaches retirement age. This has been called the “Silver Tsunami,” where normal attrition rate to retirement in the public sector is approximately 15% per year, experts are anticipating that number may jump to 40% over the next few years. That means that attracting younger talent is critical for any organization and the workplace environment is a critical recruitment tool.

Employee offices at LBCC’s Albany campus are missing opportunities to maximize human capital. Many offices and workspaces are located away from the perimeter walls of buildings, resulting in spaces that don’t have access to daylight or exterior views. Studies show that employees are more engaged, healthier, and take fewer sick days when they are in an environment that is connected to nature. The current locations for many of the workspaces don’t support this.

Existing office furniture does not support the maximization of space and efficiency. Some employees have offices that consist of folding tables, missing the opportunity for integrated technology and storage solutions. Current office furniture also fails to support choices in posture, which has a positive effect on the health and well being of employees. While many of the offices are small and house more than one faculty member, the negative effects of this could be mitigated through innovative furniture solutions.

Current workspace layouts at LBCC’s Albany campus also miss opportunities to maximize spontaneous interaction. While LBCC provides a space for employees and faculty to bring lunch, it doesn’t provide amenities that support collaboration and group functions. Capitalizing on these opportunities would have a huge positive effect on the institutional culture.

NATURE
People have been shown to have a positive response to environments that incorporate a biophilic approach in their design. The presence of plants, organic patterns, textures, and materials elicits a natural connection within people that is referred to as the “biophilic response.” This response is intuitive to humans and is important to our physical and mental well being. Biophilic responses help reduce stress, boost energy, enhance concentration, and help people to increase awareness and focus. Through the use of innovative strategies throughout the space, LBCC can capitalize on these innate emotional responses to nature.

Providing direct views to the exterior is one successful strategy. In addition to the daylight that these views provide, people are also exposed to naturally occurring patterns from the natural environment.

In spaces where direct visual access to the exterior is not available, selecting materials with naturally occurring patterns is a viable approach. There are a wide range of materials that incorporate natural patterns, from wood to more recent innovations utilizing glass and resin that put natural forms on display. References to nature can also be found in the movement of people through spaces.

Other ways of creating a biophilic response are to design spaces that reflect the experiences we have in nature. For example, offering spaces that create a sense of being safe within a cocoon, as well as spaces that create a sense of the unknown and discovery. These kind of spaces help enhance the engagement employees have with their environment.

DAYLIGHT
The benefits of properly daylighting spaces are well documented. Employees that work in an environment that takes advantage of natural light are more engaged, productive, and healthy. There are many means through which to accomplish daylighting a space.

The most direct approach to daylighting is through the use of windows. Offices and administration spaces that are located at the perimeter of buildings would benefit through the use of operable windows and clerestory windows. Daylighting employee spaces that are located away from the perimeter of buildings can be provided through overhead illumination. Skylights can be used in spaces that are located on the top floor of buildings. Spaces that are located on lower levels with no direct access to daylight through roof openings can utilize light tubes to allow daylight penetration through multiple floors.

CONNECTIVITY
Increasing connectivity helps bolster collaboration and facilitates the sharing of ideas and information among employees. Designing active zones to facilitate spontaneous interaction leads to increased connectivity and collaboration between employees. Active zones can be based around amenities that offer a contrast from the rest of the environment. Kitchens and eating areas that encourage employees to visit and mingle are an example of such zones. Other examples include courtyards, gardens, areas for physical activity, and gathering spaces. Regardless of which activities take place in these zones, it is imperative that there be adequate support in the space for employee interactions to take place. Providing a diversity of spaces and choices in posture for groups of various sizes is important.

CHOICE OF POSTURE
Providing employees with a palette of posture choices will support employees engaging in different modes of work and adds to the overall health of employees. Offering an array of posture opportunities, such as soft-seating, reclined seating, group benching, and standing encourages employees to move about their workspaces and engage their environment as their tasks require. They
Throughout the course of a day employee tasks can range from performing individual work to working in large groups. To ensure that an organization is providing the appropriate support for employees, a workplace should offer a diverse range of work spaces.

A variety of individual work spaces should be provided for employees to use. These spaces can be both formal (dedicated to specific users) or informal (temporarily owned on a first-come first-serve basis). All individual work spaces should allow the user to control their immediate environment, but their accessibility to external users should be determined through programming. Group work spaces should range in both size and formality.

TRANSPARENCY & SECURITY

Striking a balance between transparency and security is key to a successful workplace design. Creating transparency at the edge of workspaces creates a visual connection to the campus beyond. This displays a sense of approachability and ethics to the students on campus. Creating internal transparency works to further create a sense of team for the administration and staff. Effectively putting conference rooms on display allows them to activate the space by showcasing energy and collaboration. This energy is translated to the rest of the staff and makes them more likely to engage with their peers. Creating relights into faculty offices makes them more approachable and can reinforce a dedication to integrity and ethics.

DIVERSITY OF SPACES

Throughout the course of a day employee tasks can range from performing individual work to working in large groups. To ensure that an organization is providing the appropriate support for employees, a workplace should offer a diverse range of work spaces.

In encouraging movement, employees are more likely to interact with each other and engage in collaborative tasks. Additionally, overall wellness in the office is increased as employees are no longer relegated to sitting in a desk for hours on end. They will be able to move, stand, and choose seating as necessary.

The combination of these recommendations creates an office space that provides a healthy work environment that people want to be in. It also creates space for people to choose their method and location of work to fit the type of task they're performing, while providing options for cross collaboration.
Natural light from solar tubes and windows contribute to employee happiness and productivity.

Views to the exterior create connections to nature which has a positive effect on employees.

Designing zones to enhance connectivity increases the chances of spontaneous interaction.

A diversity of spaces ranging from individual workstations, group work areas, and individual informal seating accommodate a range of tasks.

Offering choices of posture fosters employee engagement and increases overall wellness.

Creating transparency to offices makes them more approachable and displays a sense of ethics.

Above: Diagram of potential workplace environment.
Natural light from solar tubes and windows contribute to employee happiness and productivity.

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LEARNING SPACES

Current LBCC learning spaces on the Albany campus are missing key high-impact features that would help support the learning process. Many classrooms are located away from the perimeter walls of buildings, resulting in spaces that do not have access to daylight or exterior views. Studies show that students are more engaged, healthier, and learn better when they are in an environment that is connected to nature.

Every student and educator is unique, as is each class. Taking a “one-size fits all” approach to learning spaces can result in missed opportunities to set faculty and students up for success. It is recommended that LBCC provide flexible learning spaces capable of being transformed for the needs of students. Current classroom furniture at LBCC does not allow for the classroom to be easily reconfigured for the needs of the class. Static furniture is limiting to educators who may want to convert classrooms from a traditional front-facing layout to more collaborative layouts.

As technology continues to advance at a rapid pace and further impact the learning environment, it is recommended that LBCC position their facilities to further impact the learning environment, it is recommended that LBCC position their facilities to support emerging technologies in the classroom. Current and future students expect to have constant access to a wide array of technological tools. Learning spaces should be easily reconfigured for the needs of the class. Static furniture is limiting to educators who may want to convert classrooms from a traditional front-facing layout to more collaborative layouts.

DAYLIGHT

The benefits of properly daylighting spaces are well documented. Students that learn in an environment that takes advantage of natural light are more engaged, productive, and healthy. Daylighting can boost their learning potential and battle myopia. There are many means through which to accomplish daylighting a space.

The most direct approach to daylighting is through the use of windows. Classroom spaces that are located at the perimeter of buildings would benefit through the use of operable windows and clerestory windows.

Daylighting classrooms that are located away from the perimeter of buildings can be provided through overhead illumination. Skylights can be used in spaces that are located on the top floor of buildings. Spaces that are located on lower levels with no direct access to daylight through roof openings can utilize light tubes to allow daylight penetration through multiple floors.

NATURE

People have been shown to have a positive response to environments that incorporate a Biophilic approach in their design. The presence of plants, organic patterns, textures, and materials elicits a natural connection within people that is referred to as a “biophilic response”. This response is intuitive to humans, and is important to our physical and mental wellbeing. Biophilic responses help reduce stress, boost energy, enhance concentration, and help people to increase awareness and focus. Through the use of innovative strategies throughout the space, LBCC can capitalize on these innate emotional responses to nature.

Providing direct views to the exterior is one successful strategy. In addition to the daylight that these views provide, people are also exposed to naturally occurring patterns from the natural environment.

In spaces where direct visual access to the exterior is not available, selecting materials with naturally occurring patterns is a viable approach. There are a wide-range of materials that incorporate natural patterns, from wood to more recent innovations utilizing glass and resins that put natural forms on display.

DIVERSITY OF SPACES

Students represent a diverse cross section of the population. Some have yet to graduate high school, others are just entering college, and others still have decades or years of experience in the professional world and are going back to school to develop new skills. Likewise, they represent a broad array of home and family situations. Students attend a wide-range of class types at irregular times of the day. It is recommended that LBCC offer a diverse range of spaces to support the unique needs of their students.

A variety of individual work spaces should be provided for students to use. These spaces can be both formal (dedicated to specific users at specific times) or informal (temporarily owned on a first-come first-serve basis). All individual work spaces should allow the user to control their immediate environment, but their accessibility to external users should be determined through programming.

Group work spaces should also range in both size and formality. Providing informal workspaces where teams are allowed to stake ownership of spaces at a pre-determined time is important to larger working groups who are working toward a specific objective over a longer period of time.
CHOICE OF POSTURE

Just as students require a diversity of spaces, they also require a diverse palette of posture options. Throughout the day students across the campus engage in vastly different modes of work. LBCC needs to provide furniture options that support this.

Students can often times stay on campus for hours between classes. Providing a comfortable environment for them to wait and conduct school work in their downtime will help produce their productivity in the long-run. Varieties of soft-comfortable seating with places to store books and tools will help them optimize their time.

Providing shared group seating for students will enable them to expand their social circles and increase the amount of collaborative opportunities on campus. Creating opportunities for sporadic interaction is important to activating the campus.

Providing choices of posture extends from public spaces to the classroom as well. Students will spend a lot of time in classrooms, providing them with a choice between a variety of seating and standing options that allows them to choose which fits best for them. This increases productivity and engagement in the classroom.

FLEXIBILITY

Technology has had a profound effect on learning spaces. Students from the Millennial and Gen-Z generations are more “maker” oriented than past generations. As a result, they demand access to a wide array of analog and digital tools that learning spaces need to support. Flexibility, power consumption, networking, and cloud-based tools are all becoming part of the normal everyday requirements for students to meet their educational goals. Well-designed spaces can support the growth of technology in learning spaces. Group-benching can incorporate data and power hookups for students when they are in-between classes. Computers are becoming less and less relegated to specific rooms, and students are capable of leveraging them from anywhere on or off campus. Providing appropriate furniture solutions and amenities to support their computing needs can have a profound impact on their performance in the classroom.

In dedicated classrooms, technology solutions such as mobile screens, media walls, and IFTT responsive lighting aid in creating an immersive learning environment.

Providing students with flexibility within learning spaces enhances engagement and with it performance in the classroom. Allowing students to stand, sit, or adjust their classroom for group activities is setting them up for success in the long term.

Increased flexibility is also a benefit to faculty. Flexible furniture solutions and room layouts allow faculty to adjust their teaching approach to their subject matter on a daily basis. This allows them to better connect with their students and have a larger impact on them during the hours in which they are together in the classroom.

Flexibility also extends outside of dedicated classrooms. Movable partitions, sliding doors, and other design solutions can allow entire spaces to merge together, or edges to open to the exterior and classrooms to extend into courtyards, or internal gathering spaces.
Above: Diagram showing potential learning space layout
Natural light from solar tubes and windows contribute to student energy, engagement, and health.

Views to the exterior create connections to nature which have a positive effect on students.

A diversity of spaces ranging from large lecture halls, medium classes, small study rooms, and breakout spaces will support multiple student functions.

Offering choices of posture fosters student engagement and increases overall wellness.

Flexible spaces allow faculty and students to adapt the environment to their immediate needs.

Planning for the continued development of technology is important to creating a space with a long life span.

Striking a balance between transparency and security allows engagement across the campus.
SAFETY AND ACCESSIBILITY
SAFETY
In addition to the LBCC’s mission to expand learning opportunities for students, the college also has a responsibility to keep them safe while on campus. The potential threats to student safety can come from multiple directions including natural disasters and man-made scenarios.

In the realm of natural disaster threats, the issue that looms large for most in the northwest region is the earthquake potential from the Cascadia Subduction Zone. A quake in this area would be of a magnitude and duration that would severely impact most of the communities west of the Cascade range. Seismic strengthening of existing buildings is being recommended throughout the region to prepare for such an event.

It is difficult to believe that a center of learning must also have a need to be defensible, but in our culture man-made threats do exist. This is most recently illustrated by the Umpqua Community College shooting in 2015. Many of the threat mitigation or reaction strategies are more based in policy than in physical architecture. The architectural security solutions have to be applied cautiously, otherwise they run counter to an open and inclusive learning environment. The goal is to strike a balance that provides maximum student safety with a maximum sense of a welcoming learning environment.

In the event of a security threat or attack on a student, time becomes essential. The campus currently has emergency phones throughout the campus that are a direct link to Campus Public Safety. Documenting the exact location of these was not part of the scope of this master plan. It is recommended that the placement and functionality of these devices are routinely evaluated by an independent security consultant.

In addition, the college has staff that have been trained for emergency scenarios, and students are encouraged to download a smart phone app that allows them to report incidents quickly.

EARTHQUAKE
While a seismic evaluation was not part of this master plan, it is highly recommended as a next step given the age of the campus buildings and the role the college may have after an event. This should be undertaken by a structural engineer familiar with the potential threat and familiar with academic learning environments.

The goal with any seismic upgrade is to make the necessary building modifications with minimal impact to the functionality of the learning spaces and building operation.

NOTIFICATION
In the event of a security threat or attack on a student, time becomes essential. The campus currently has emergency phones throughout the campus that are a direct link to Campus Public Safety. Documenting the exact location of these was not part of the scope of this master plan. It is recommended that the placement and functionality of these devices are routinely evaluated by an independent security consultant.

In addition, the college has staff that have been trained for emergency scenarios, and students are encouraged to download a smart phone app that allows them to report incidents quickly.

ACCESSIBILITY
At the kick-off meeting for this master process, there was much discussion on the level of accessibility the college should strive for in their institutions. There was general agreement from the group that full universal design would be the target. This approach suggests that all campus facilities are designed to be inherently accessible, not just to code minimums. While this was discussed as a target, it was recognized that budgets are limited and that this mandate needed to be discussed and delivered by LBCC leadership.

The purpose of this master plan was not to provide an exhaustive review of the American with Disabilities Act deficiencies, rather the purpose was to highlight areas for improvement that could be undertaken within the next ten years to make meaningful steps toward the college’s goals. Given the age of the facilities, the accessibility challenges varied. Typically issues included stairs and handrail configurations. Larger issues specifically relative to the main campus were the positions and number of the elevators and some bathrooms that didn’t have required clearances.

SECURITY
Throughout the master plan process, any of the discussions relative to visual connection and transparency were always followed by questions of security. The most important of these questions was how secure the facility should be and what the impacts would be to the educational mission of the institution.

There were suggestions about creating a closed campus that allowed for control and security screening at each of the campus access points. There was also discussion of providing key cards for students and faculty. While no specific strategies were adopted as part of the conversation, the general feeling was that these types of measures would go too far.

Based on other recent events at Umpqua Community College and UC Davis, there are specific steps that can be taken within the architecture that can mitigate the impacts of such an attack without compromising the openness of the campus.

Levels of transparency can be modified to provide visual security. Examples of this would be motorized blinds tied to a campus-wide alert system, or translucent film. Another strategy is to provide lockable shelter locations that are well marked within each of the buildings’ primary spaces. In addition, all classroom locks should be updated to be lockable from the inside.
Motorized black out blinds could be added and tied to the campus alert system.

Solid partitions could be added to prevent views in. The downside of this approach is the loss of visual connection key to helping develop strong networks.

Translucent films could be provided up to eye level for a more permanent privacy.

Secure lockable shelter zones could be placed in significant areas of each building with clear signage identifying their purpose.