

Acquisition of Real Property

SUMMARY

Oregon State University has the opportunity to profoundly shape the future of OSU-Cascades and the university's impact in Central Oregon by expanding the primary footprint of the campus. OSU proposes the development of a 128-acre campus, incorporating the current 10-acre campus, the adjacent 46-acre pumice mine owned by OSU-Cascades, and the 72-acre Deschutes County Demolition Landfill (landfill). Developing a 128-acre campus comes with challenges and opportunities, and the capacity to fulfill:

- The State of Oregon's educational, environmental, and economic goals;
- OSU's Strategic Plan 3.0 goals; and
- OSU-Cascades' goals to serve the educational, economic and cultural needs of a growing, but largely rural region.

The proposed 128-acre campus will allow OSU-Cascades to grow to an enrollment of 5,000 students and serve many of the higher education needs of the region and state. The proposed campus will provide:

- Teaching and research facilities for high quality academic degree programs;
- Educational assets, such as a natural learning laboratory for students and co-location of industry or public research partners;
- The opportunity to develop a public-private innovation district;
- Housing for up to 40% of the students and middle market housing for faculty and staff;
- On-campus opportunities for health and wellness, recreation and athletic facilities;
- On-site energy facilities (contributing to a net zero campus energy goal);
- Development oversight of a neighboring property that otherwise might be developed for another purpose and present future conflicts with campus operations;
- Construction of less expensive surface parking instead of structured parking; and
- Repurposing material from the landfill to be used in reclaiming the pumice mine.

BENEFITS

1. Educational and experiential benefits

The development of the 128-acre campus would provide student experiential learning opportunities that "foster intellectual, professional and personal development to prepare OSU graduates for life and careers in a global society" (SP3.0 Goal 1). These transformational experiences include educational benefits from the development of this larger campus as a natural learning laboratory and personal development through expanded athletic and recreation activities.

The 128-acre campus option would provide a natural laboratory for many of our majors. For example, Natural Resources students could study the restoration of a brownfield site, and impacts on plant and animal communities. Energy Systems Engineering students could study alternative energy possibilities, including solar, biomass, geothermal, and methane gas.

Business students could be involved in the innovation district, partnering with entrepreneurs and start-ups. Kinesiology students could use the expanded recreational facilities to study health and wellness. Students studying early childhood development could participate in a childcare/early learning facility that wouldn't be possible on the 56-acre campus.

2. Innovation district

The 128-acre option would enable the development of an innovation district, integrating university academic programs with industry. This supports Goals 1 and 3 of OSU's strategic plan by providing "opportunities for industry partnerships and commercialization that showcase the quality of our students, faculty, and facilities while promoting economic development and growth in Oregon and beyond." The Brookings Institute defined innovation districts as "geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators. They are also physically compact, transit-accessible, and technically-wired, and offer mixed-use housing, office and retail" (www.brookings.edu/wp-content/uploads/2016/07/InnovationDistricts1.pdf). These innovation districts attract companies in the knowledge economy that want to be near other companies, universities, and research labs to share ideas and spur innovation.

An innovation district would leverage the fast-growing and entrepreneurial economy of Central Oregon with a dynamic university. It could be developed in a public-private partnership to share costs and revenues. At this conceptual stage, estimating the revenue potential is difficult, but initial calculations suggest that there could be a master lease potential of \$1M-2.2M per year.

3. Repurposing fill

OSU-Cascades originally estimated \$9M for reclamation of the pumice mine as a stand-alone project, assuming that we would need to import significant amounts of fill from external sources. That would require over 30,000 truckloads of material, with associated social costs on traffic, noise, and road wear. However, OSU-Cascades' engineering consulting team, led by Maul Foster Alongi, has developed a strategy to remove waste from parts of the landfill, resulting in unencumbered buildable land. The waste would be screened and blended with clean fill sources to create structural backfill for the pumice mine. The originally estimated \$9M could be used to not only fill and grade the pumice mine but also remediate three acres of the landfill. The use of fill material from the landfill would allow OSU-Cascades to avoid the importation of material. The reduction in CO₂ emissions from eliminating 30,000 truckloads is equivalent to taking 651 cars off the road for a full year or preserving 24.5 acres of forests from conversion to cropland.

4. Additional housing and control over neighboring land uses

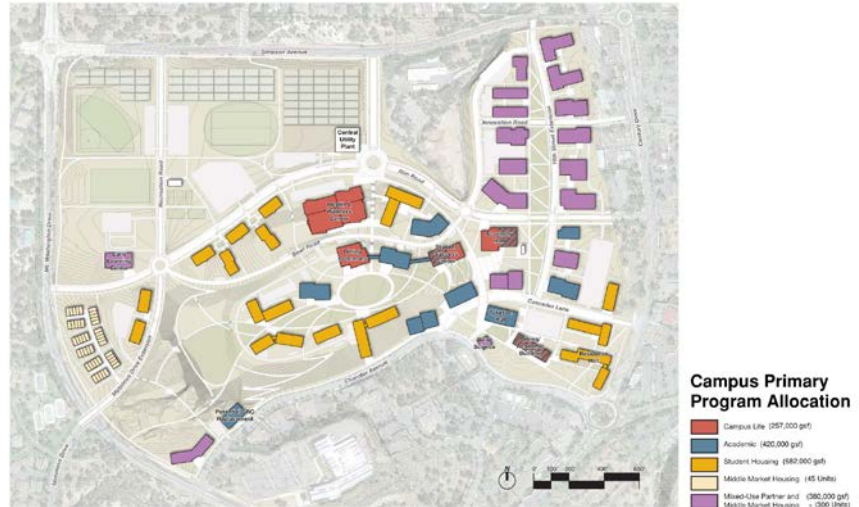
The acquisition of the demolition landfill and subsequent management of this property would enable OSU-Cascades to better manage neighbor relations. While OSU-Cascades puts substantial energy and resources into building strong relationships with the community, town and gown tensions have been experienced in the past. Concerns about student rentals and parking in neighborhoods are well-known issues when residential areas adjoin university campuses. If OSU-Cascades develops this land – and accommodates student and faculty-related uses, such as workforce housing, parking, retail/service amenities and innovation partnerships – it will help to support positive community relations. The ability to design adequate buffers between residential communities and permeability with the commercial district would allow OSU-Cascades to minimize the negative impact of development on the surrounding community and integrate more closely into Bend's Central Westside.

PROCESS AND DUE DILIGENCE

Multiple technical experts have contributed to the analysis of the 128-acre campus, including external consultants, OSU leaders and an advisory committee of local professionals. Engineering, legal, land use, design, economic and development experts were engaged throughout the due diligence process. Our due diligence process included a thorough review of land use and campus design options, remediation options, economic benefit of the proposed land use, a business case and legal strategies.

Campus Design

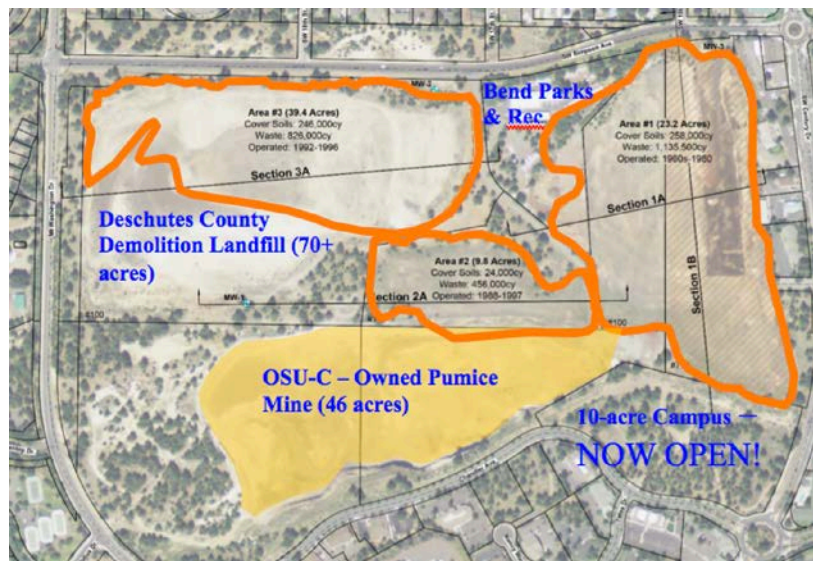
The first step was to develop a land use scenario. OSU-Cascades contracted with Page/SERA to develop a long-range development plan (LRDP). The LRDP is to ensure that future development occurs within the context of a cohesive vision for the OSU-Cascades campus. The LRDP included a space needs assessment, land use organization, infrastructure requirements, and circulation systems for the site.



At the most detail level the LRDP includes a proposed fill and grade strategy for the pumice mine and landfill, parking requirements and mobility/accessibility plans for the site that were required to develop the business plan for the potential landfill acquisition.

Remediation Plan

OSU-Cascades contracted with environmental consultant, Maul Foster Alongi (MFA) to assess environmental and life safety risk associated with the site and develop remediation strategies. The landfill operated under an Oregon Department of Environmental Quality (DEQ) Solid Waste Permit from 1972 to 1996 to dispose of construction and demolition waste, industrial waste, wood waste, brush and tires. This was placed in three cells within the landfill. Cell 2 and Cell 3 were closed in 1997. Cell 1 closure certification from DEQ has not been received because a portion of the waste is undergoing pyrolysis. The landfill is closed to the public and sits as a large unutilized space in the heart of west Bend.



The pyrolysis (decomposition of organic material by heating without oxygen) in portions of Cell 1, comprising the eastern portion of the property, is creating higher than normal temperatures and land subsidence (settlement). The Oregon DEQ has indicated that full remediation of this cell would be required prior to active use of land and remediation scenarios have been developed with this approach. The waste in Cells 2 and 3 could be left in place; however, development over waste would require structural ground reinforcement to stabilize structure and utility foundations from differential settlement and seismic impacts. Development over existing waste would also require long-term monitoring for methane gas and maintenance of differential settlement.

MFA analyzed numerous landfill remediation scenarios, including waste removal, hauling of waste offsite to another facility, sorting and screening on-site, recycling materials, relocating waste to an expanded Cell 3 on-site and recovering useable materials for potential beneficial reuse. Based on these analyses, DEQ requirements, and OSU-Cascades' goals, MFA developed a strategy that removes waste completely from Cells 1 and 2, resulting in unencumbered buildable land in those areas. The waste removed from these areas is proposed to be sorted and screened to maximize reuse of material on-site, integrating the landfill remediation with the pumice mine reclamation.

Studies of the site suggest that the majority of materials in the landfill include soil and fines (small particles), but woody debris, metal, tires and small amounts of other miscellaneous material are also present. Screened fines can be blended with clean soil sourced on-site (from cover soil and excavated native material) and reused as backfill material on the site. Excess screened fines can be used as landfill cover soil, green space fill, topsoil for landscape areas or relocated to Area 3. Metals can be recycled. Unusable material could be re-landfilled in Area 3 on-site and a small amount of material would be removed from the site (tires, etc.). The reuse of the screened fines and soil on-site as backfill provides enough material for a balanced fill strategy, minimizing the amount of fill materials to be trucked to the site. The estimated cost of landfill remediation and pumice mine reclamation, including contingencies, is \$48.7 million.

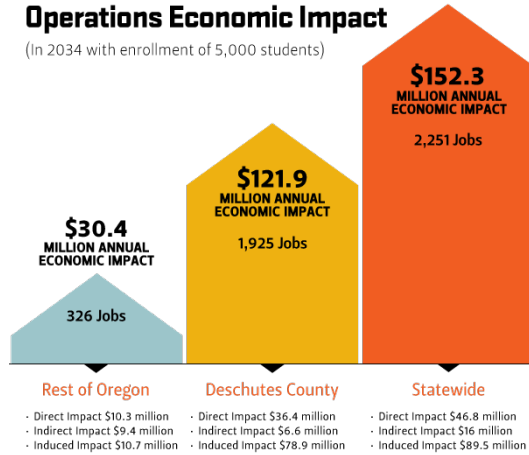
The site is currently stable, with no groundwater contamination and no hazardous chemicals found through numerous field tests conducted by environmental experts contracted by Deschutes County prior to the OSU-Cascades engineering due diligence project. These conditions are reflected in the on-going management of the landfill by the County, and with DEQ oversight; the site is stable and does not pose excessive risk with basic safety measures taken, e.g. access restrictions. It is anticipated that similar protocols will be followed prior to site development.

Economic Analysis

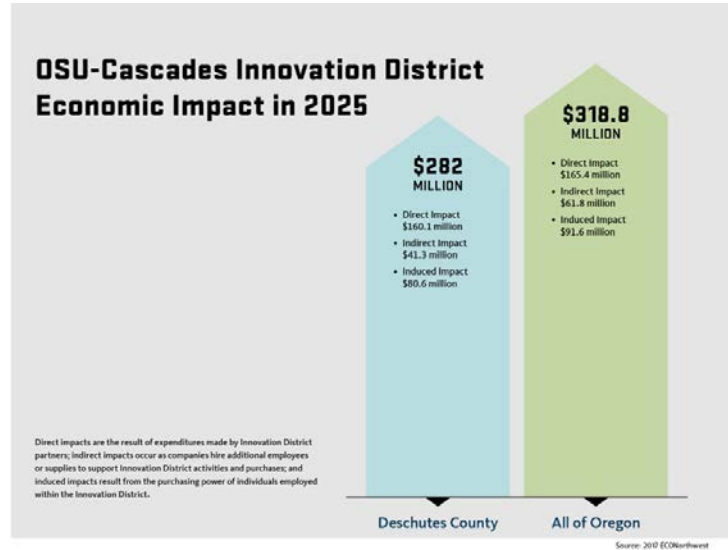
The significance of higher education in Central Oregon reaches beyond the opportunity for education attainment and research contributions. The economic impact of a 5,000 student campus in Deschutes County is estimated to be \$121.9M per year. The incremental impact of an innovation district co-located with the university is estimated at more than \$280M in 2025 (assuming full build-out) for Deschutes County.

OSU-Cascades Continuing Campus Operations Economic Impact

(In 2034 with enrollment of 5,000 students)



OSU-Cascades Innovation District Economic Impact in 2025



Business Plan

The business plan compared the incremental cost to develop the 128-acre versus the development of a 56-acre campus. Two key elements were considered in the analysis, the combined cost of reclamation of the pumice mine and remediation of the landfill and the cost of parking. The cost to reclaim the pumice mine independently is estimated at \$9M. Whereas the cost to concurrently reclaim the pumice mine and remediate the landfill is \$48.7M. In addition, there is a potential savings associated with the additional land from the 128-acre campus, which allows the substitution of surface parking for structured parking. According to the Bend Development Code, a 5,000-student campus would require 900 to 1,000 parking stalls. If OSU-Cascades were to develop only the 56-acres currently owned (10-acres and the 46-acre pumice mine), OSU would need to accommodate at least 540 stalls using structured parking. This would total \$29.2M at a per-space cost of \$54,000. Alternatively, the 540 parking stalls could be built as surface lots within the 128-acre campus at a cost of \$5,400 per stall or a total expense of \$2.9M.

In summary, the landfill site will cost an additional \$13.4M to develop.

Option	56-acre	128-acre	Difference
Reclamation/remediation	\$9.0M	\$48.7M	
Parking	\$29.2M structured	\$2.9M surface	
Total	\$38.2M	\$51.6M	\$13.4M

CONCLUSION

Development of the full 128 acres would:

- Best serve Oregon's educational attainment goals;
- Provide an opportunity to develop an innovation district with a statewide economic impact;
- Align with the university's strategic plan to provide students a transformational educational experience through enhanced educational and engagement opportunities;
- Enable on-campus solar energy and infrastructure to support OSU-Cascades' net neutrality goals;
- Support additional community partnerships, such as early learning/child care, recreation, arts and culture;
- Expand on-campus housing for both students and staff; and
- Remediate a currently unused brownfield site and transform it for beneficial university purposes.

Given the benefits associated with the 128-acre campus option, the university proceeded in negotiations for the purchase of the Deschutes County demolition landfill.