**ARCHITECTURAL COMMISSION**
**June 17th, 2016**

**PROJECT SUMMARY:** **Population Health Education Facility – T-Wing Addition/Renovation Predesign**

**PROJECT NUMBER:** **205296**

**PROJECT MANAGER:** **Lyndsey Cameron, Office of the University Architect**

**ACTION:** Information Update

**OBJECTIVE (GOAL):** Build a centrally located Population Health Education Facility that utilizes the unique adjacencies of research, academic and clinical programs to educate and train future health and health care professionals to support the public goal of affordable, accessible and high quality 21st Century health care.

## PROJECT DESCRIPTION:

The University of Washington is requesting $10,000,000 in design funding in the 2017-2019 biennium for a new Population Health Education Facility** (formerly known as the Health Science Education Phase I – T-Wing Addition/Renovation). In the 2015-17 biennium the State Legislature appropriated, and the Board of Regents approved, the expenditure of $623,000 in the UW Capital Budget to complete the predesign for Phase I, a new Health Sciences Education facility/addition, of a proposed multi-phased renovation of T-Wing. This predesign document serves as the basis to confirm the program, scope, and the project budget for the design and construction funding request over the 2017-19 and 2019-21 biennia. The total project cost for the Population Health Education Facility is $94,000,000 and includes design and construction funding.

*** The name "Population Health Education Facility" was adopted by the University for this project because it more accurately reflects evolving team-based cross disciplinary pedagogies the Health Sciences schools are adopting to achieve the Triple Aim of Population Health: Improving the Care of individuals, the health of populations and reducing per-capita costs.*

***Parking is not part of the funding ask for this project*

**Background**

Throughout the extended region, the UW is creating the next generation of health and health care professionals, treating thousands of patients across the health science areas of Dentistry, Social Work, Pharmacy, Public Health, Nursing and Medicine. Its students are the leaders, innovators, and change-makers who will shape the health of the world. This new facility has emerged as a top priority for the UW as part of a commitment to create a shared vision of service to the people served locally and globally. It will meet the growing demands of education space for the health science schools and create space for interdisciplinary innovation and collaboration to help transform learning for tomorrow's health professional.

Inter-professional education (IPE) is one effort spearheaded by the UW Board of Health Science Deans and supported by the Health Science Administration. It is one method of education designed to integrate teaching and learning across the six schools to transform the curriculum, reimagine classroom facilities and reshape pedagogical approached to health sciences training, education and research. IPE brings all health science students together to learn in teams, much like the real world, and is an important component of all health science training. The space provided in this building will be flexible to support the new and evolving pedagogies and will establish an academic heart in the UW Health Sciences complex that will serve the six schools of Health Sciences as well as other UW academic partners/collaborators in the Colleges of Engineering, Environment and Arts & Sciences.

Educating our future health care providers Cross-disciplinary, team-based learning of our health care providers is at the heart of the Population Health initiative which aims to improve the experience of care, the health of human population, and reducing per-capita costs. As the centerpiece, all six health science schools (Dentistry,

Medicine, Nursing, Pharmacy, Public Health and Social Work) will be at the forefront of the evolution for healthcare together, through a new model that integrates mental health with physical health to provide basic care rather than referral to practitioners.

**PROJECT FORECASTED COST:** $ 94,000,000M

**SCHEDULE:** See attached

**PREVIOUS ARCHITECTURAL COMMISSION ACTION:** None

**ATTACHMENT:**

- 1 Page Promo
- 3-5 Page Narrative

# Population Health Education Facility

T-Wing Addition/Renovation Predesign

EDUCATING TEAMS OF HEALTH SCIENCE STUDENTS TO BECOME LEADERS IN A NEW MODEL OF HEALTH CARE: POPULATION HEALTH.

The Triple Aim of Population Health:
Improving the care of individuals, the health of populations and reducing per-capita costs.

## PROJECT OVERVIEW

- Design a **120,000 gsf** education facility to support **flexible, active and team-based learning** that will adapt to the evolving pedagogical and technological needs of the Health Sciences as mandated by Medicine, Nursing, Pharmacy and Dentistry accreditation boards.
- Centrally locate the education facility in the south campus to utilize the unique adjacencies of top **ranked research, academic and clinical programs.**
- Position UW to maintain and surpass the outstanding performance of our Health Science schools by **attracting, developing and retaining the best health and healthcare professionals to serve the State of Washington.**

## FUNDING REQUEST

**THE UW REQUESTS $10M STATE FUNDING FOR THE DESIGN PHASE**

The total estimated project cost, including design and construction, is estimated to be $94 million.

## FAST FACTS

- 90% of the Health Science education space is located in the Magnuson Health Sciences Teaching Center (T-Wing), a facility built in 1972.
- Although the T-Wing will continue to supplement traditional lab work and lecture courses, the predesign Project Team and the University leadership determined that a new facility, not a renovation of T-Wing, would best serve the educational needs of the Health Science Schools for the following reasons:
  - Existing structural and mechanical systems in T-Wing cannot support open, flexible spaces and new technologies required of evolving team- based pedagogies.
  - A majority of existing educational space in T-Wing surpasses recommended utilization goals with no space available to decant classrooms identified for renovation.
  - Existing educational space must continue to operate without disruption.
  - Current space is not right-sized to accomodate projected increases in existing and new course offerings.

# THE UW

# POPULATION HEALTH EDUCATION FACILITY

T-Wing Addition/Renovation Predesign

EDUCATING TEAMS OF HEALTH SCIENCE STUDENTS TO BECOME LEADERS IN A NEW MODEL OF HEALTH CARE: POPULATION HEALTH.

The Triple Aim of Population Health:
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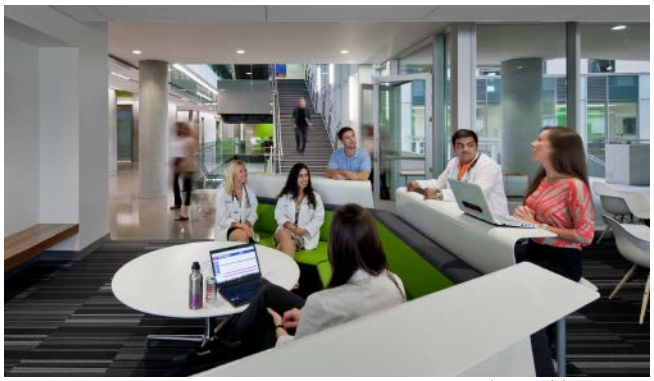
UNIVERSITY *of* WASHINGTON
PLANNING & MANAGEMENT

# PROJECT GOALS AND OBJECTIVES

**GOAL** Create a Population Heatlh Education facility with **flexible spaces**, modern technologies and a broad array of environments that adapt to the changing pedagogical needs of the Health Sciences and enable active and **team-based learning**.

**OBJECTIVES**

- Create a student **hub** for the Health Science schools that fosters interaction, **collaboration** and creativity.
- Build a centrally located Population Health Education Facility utilizing the unique adjacencies of research, academic and clinical programs to train future health professionals in support of affordable, accessible and high quality 21st Century health care.



Team-based learning

Hub

Foster Creativity

Flexible Spaces

- Steer financial feasibility and direct the implementation to position the Health Sciences campus to achieve its future vision for redevelopment.
- Maintain and surpass the outstanding performance of UW's Health Science schools by attracting and retaining the best health and health care professionals to serve the State of Washington.

Future Vision

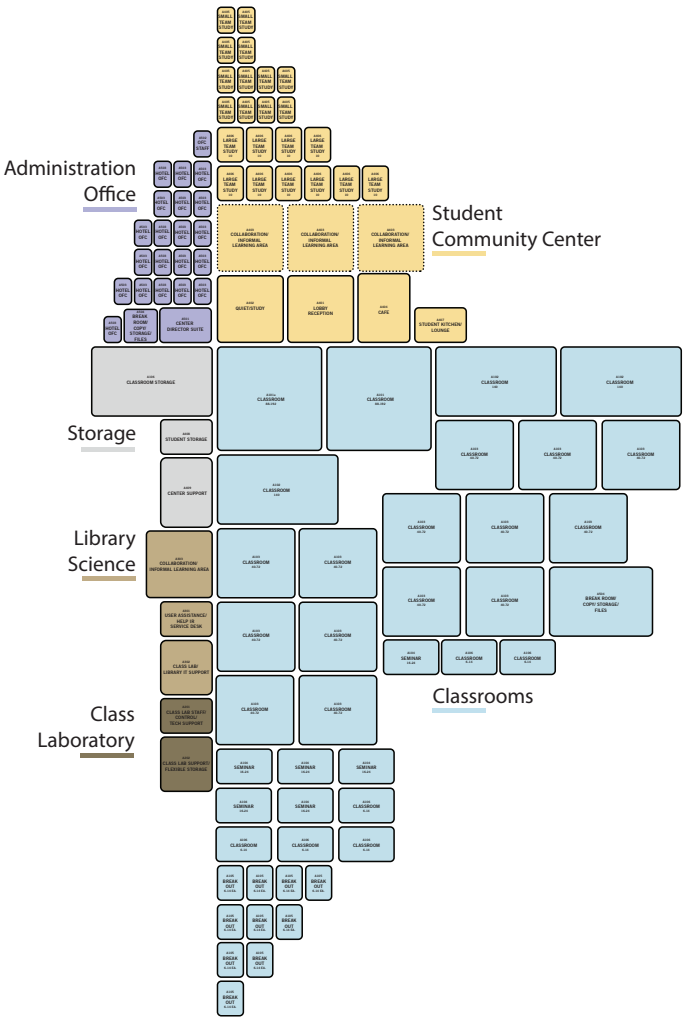
# PROGRAM COMPONENTS

The delivery of healthcare has evolved to provide holistic care in a team-based environment. Medical education now increasingly involves cross-disciplinary learning experiences for students to practice hands-on skills in risk-free environment, focusing on communication skills, problem solving, and roles and responsibilities. The program goals for the new building are satisfied by the incorporation of:

**Interdisciplinary and Collaborative Space:** Informal student spaces, shared by the six Health Science schools, will allow for collaborative learning, group projects and personal study. These common spaces will be zoned for both quiet and more active social space. A series of small group learning, large group learning, and faculty hoteling desking spaces will be clustered adjacent to classrooms on each building level.

**Instructional Space:** A variety of classroom sizes will create flexible spaces that can adapt from active learning environments to didactic learning environments, as well as spaces that can be configured for skills training or hands-on learning.

- 50 seat classrooms accommodate the majority of current inter-professional team-based courses.
- 72–120 seat classrooms accommodate active learning courses and can flex for large skills training events.
- A 192 seat lecture space on the ground level adjacent to the entrance lobby can accomodate large department classes, demonstrations, poster sessions and school events.
- A tiered classroom, with 2 rows of fixed tables per tier, for 192 seats is also located on the ground level adjacent to the entrance lobby to facilitate group learning for department classes.
- Seminar rooms for 24 students accomodate large group learning and small IPE courses.
- Break out rooms adjacent to larger classrooms for 10-20 students in small group work and problem-based learning sessions.




**Amenity and Event Space:**

- A reference desk and two dedicated research resource stations are adjacent to ground level informal collaboration spaces to meet accreditation requirements.
- A coffee/café and dining area is desired to supplement the minimal food service offering on the South Campus, located adjacent to the lobby and large meeting rooms to support student needs and community events.
- A student lounge and storage space for student-managed outreach clinics will be located adjacent to classroom space.

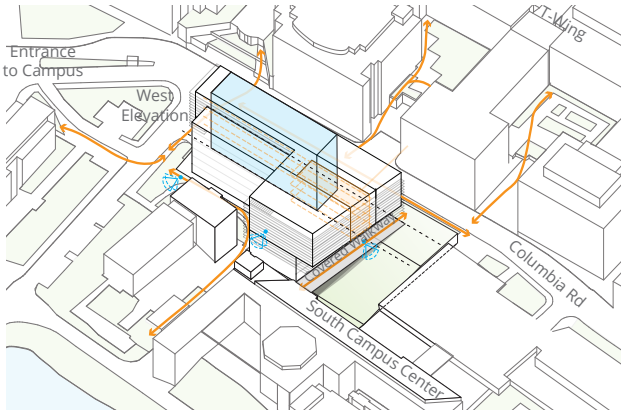
**Support Space:**

- Office space for faculty administration of the Health Science Inter-professional Initiative and other evolving pedagogies and IT support.
- Storage space, required for furnishings, equipment, and consumables, will be dispersed throughout the building and adjacent to classrooms to support the flexible configurations of classrooms.

# THE SITE

The Population Health Education Facility's prime central location on the UW's south campus will utilize the unique adjacencies of top ranked research, academic and clinical programs. It will be the catalyst for future growth in the area and enhance adjacent buildings, green spaces and major pedestrian connections to upper campus and the water front.

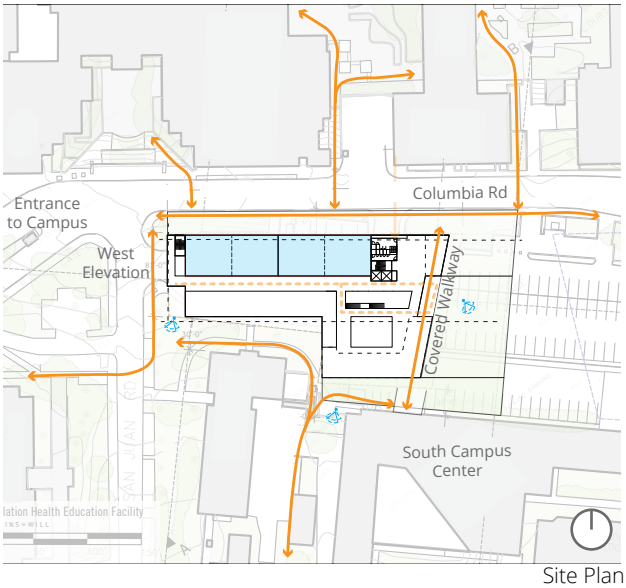
Aerial View of South Campus looking Northeast




Legend

Circulation (Exterior)
Circulation (Interior)
Views

Axonometric




Site Plan

- The **west elevation** of the new facility has the ability to enhance and positively impact the character of the **entrance to the Health Sciences campus.**
- **Columbia Road,** to the north of the new facility, has over the years become the service access to south campus. There is a tremendous opportunity to remake the aesthetic and character of this street while at the same time making it safer.
- The new building will create a **covered pedestrian walkway** between the Magnusson Health Science Building and the South Campus Center (SCC). It will also help to improve wayfinding to the waterfront through and around the SCC.
- This **central location** between the T-Wing traditional lecture space and the new inter-professional classroom in the South Campus Center creates a critical mass of learning space in the heart of the Health Sciences campus.

# BENCHMARKING AND COST CONTROL COMPONENTS

A benchmark study was conducted that identified project costs of eight comparable active learning classroom buildings around the country. The four projects listed below were considered most relevant because of their similar program elements, gross square footage and recent construction dates.

**Best Benchmarking Representation for this project:**

| INSTITUTE | IMAGE | YEAR COMPL | TOTAL PROJECT COST | TOTAL GSF | PROJECT UNIT COST / GSF* |
|---|---|---|---|---|---|
| | | | | | Escalated to second quarter 2020 @ 4% (2) year |
| **Digital Classroom Building**<br>Washington State University<br>(Perkins + Will) | | 2017 | 67M | 82,951 | $814 |
| **Teaching and Learning Center for Health Sciences**<br>University of California Los Angeles<br>(Skidmore, Owings & Merrill LLP) | | 2016 | 93M | 110,000 | $1,111 |
| **Austin Hall, College of Business**<br>Oregon State University (Hacker Architects)<br>GCCM* Project costs have 9.6% added to account for WSST in Oregon | | 2014 | 50M | 100,000 | $750 |
| **Student and Teaching Services Building**<br>University of Minnesota<br>(KPF Architects) | | 2011 | 72.5M | 121,714 | $763 |
| **AVERAGE PROJECT COST/GSF**<br>**ESCALATED TO SECOND QUARTER 2020 @4% (2) year (CURRENT DOLLARS IN SEATTLE)** | | | | | **$859** |

**Project Cost Control:** To ensure that the budget and scope align at the outset, and no overruns are incurred, the University committed to employing a number of tools - some unique to public sector delivery and others emulating private sector development. These tools are:

Progressive Design-Build Delivery Method: Only recently available for public projects in the State of Washington, this method allows the University to select the most qualified design-build team at the outset of the project and work with them to refine scope and budget and efficiently design and construct the building. This method allows substantial involvement with the team and emulates private sector development practices. Further, it provides great flexibility for procurement- for example, there can be competitive bidding of trade contractor and general contractor work on an open book basis, but the University can make decisions on award based on best value rather than low bid. The University is in progress on its second progressive design-build project and believes it is a powerful tool for achieving cost control, schedule reduction, and overall project value.

Project Governance: The University will use a rigorous decision-making structure to ensure that 'scope creep' does not occur and that costs are controlled. There are three levels to this structure: a Project Committee which will work directly with the design-build team; an Executive Committee which meets monthly to review progress and ensure that the project scope and budget remain aligned; and a Responsible Party who will resolve any issues the Project or Executive Committees are unable to agree on. This hierarchy of authority eliminates any question of 'who gets to decide?' and gives clear and timely direction for the team to execute. Both the project and executive committees will have representation from Capital Planning and Development, the Health Sciences Schools and Administration, the Office of Planning and management and other campus entities as necessary. In addition to the decision-making structure, a Project Agreement will act as an internal 'contract' for the project and clearly identify scope (and exclusions), schedule, priorities, risks, and risk mitigation strategies.

# BENCHMARKING AND COST CONTROL COMPONENTS

Target Value Design: The benchmark projects noted herein are the basis of a cost model which will guide the design and development of the building from the beginning. The cost model will feature targets for each component of the building and the team will be directed to design to those costs rather than to do a design and then estimate what it costs. The integration of the design team with trade contractors will provide real-time cost information as the design progresses, and we will work with the team to rigorously monitor costs and make adjustments as needed to ensure the target values are maintained for each component. Savings on any individual target may be applied to other target values or moved to contingency, as determined by the project leadership.

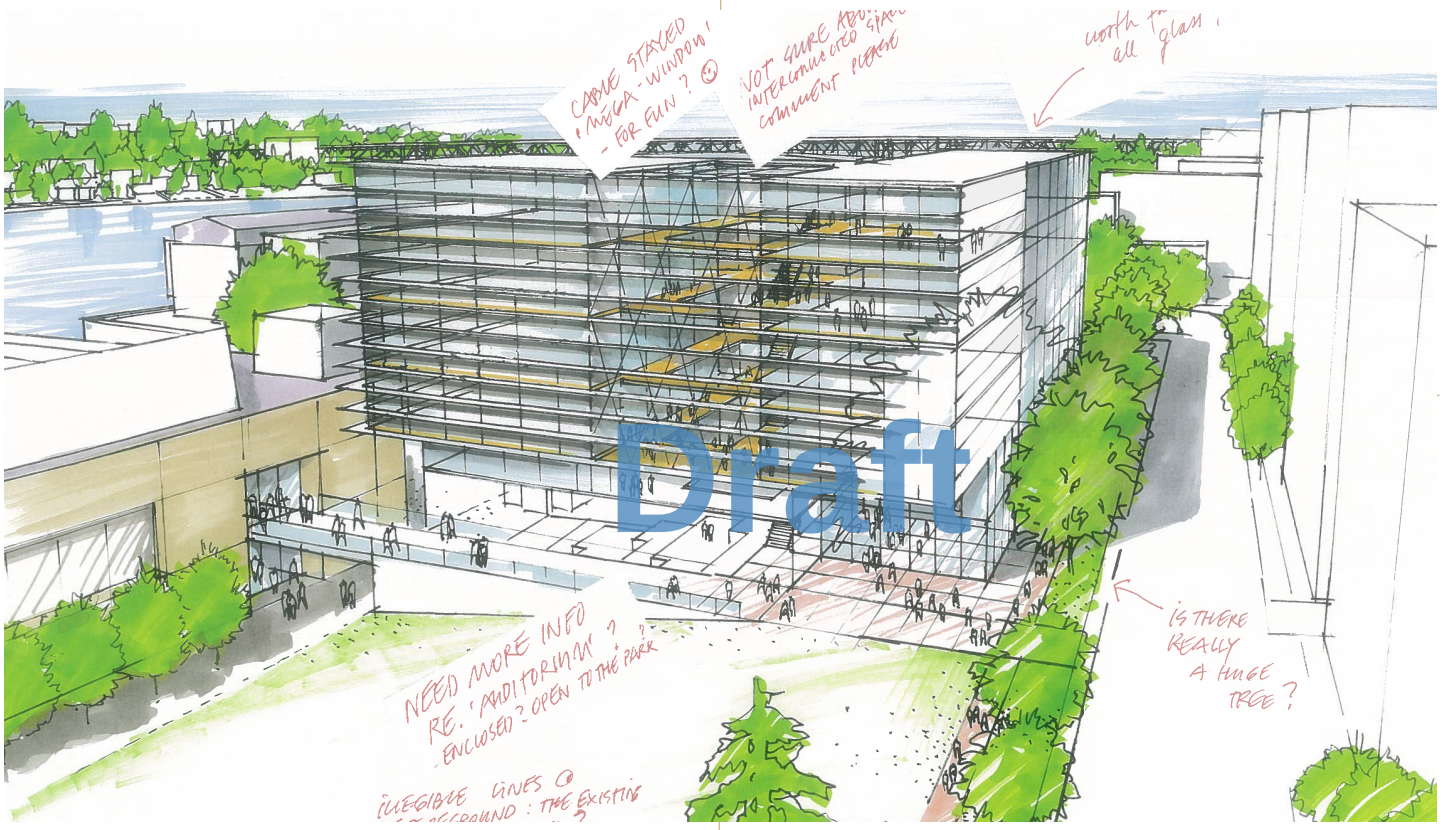
Lean Design and Construction: The delivery method allows the team to move away from the traditional '100% Construction Documents' approach to one where the design team does enough work to establish design intent and then the trade contractors complete the design only to the extent they need to for fabrication and construction. It also allows the design effort to be tailored to the construction schedule so that what will be built first is designed first, and so on, rather than all documents being completed at the same time. This will allow the core and shell construction to be well underway while interior build-out is still in design, and this leads to significant schedule compression and associated cost savings.

Separation of Shell and Core from Tenant Improvements: While the design process for conventional higher education projects features concurrent development of the building shell and core with the tenant improvements, it is common in a 'developer model' for the shell and core to be designed without knowing who the tenants will be and the shell and core construction started prior to full design of the tenant improvements. This project will utilize that approach as a cost (and schedule) benefit, as it shortens the project duration and creates clear constraints to which the tenant improvements must conform. This leads to space that is more flexible/ less purpose-built and is a proven model for holding down costs.

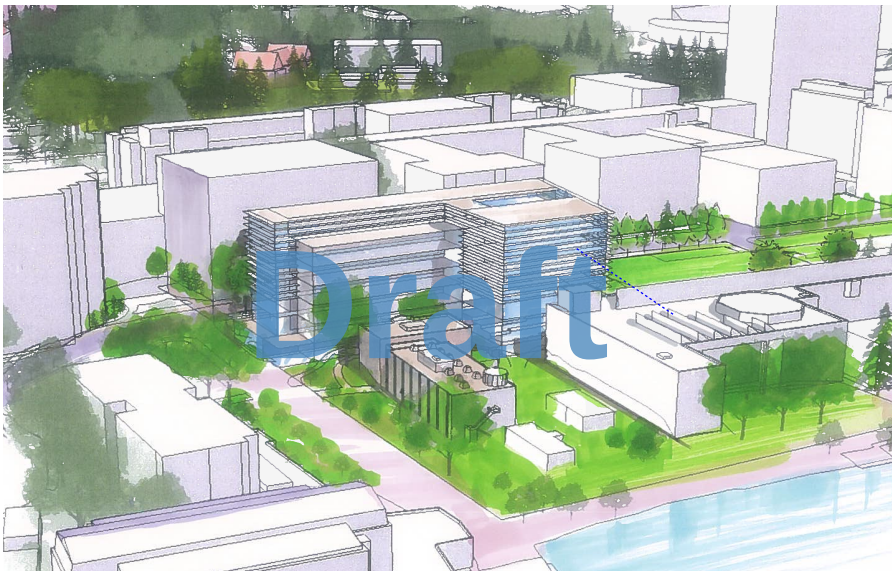
Building on a long history of successful project delivery, the University is committed to leveraging the best practices of leading private sector to deliver cost certainty on this project.

| | PRESUMED AREA | COST PER SF | TOTAL |
|---|---|---|---|
| **Site Costs** | 13,000 | $70 | $910,000 |
| **Core and Shell** | 120,000 | $525 | $63,000,000 |
| **Tenant Improvements** | 120,000 | $250 | $30,000,000 |
| | | **TOTAL** | $94,000,000 |
| | | **PROJECT COST/GSF** | **$783** |
| **Note: Costs are escalated to a presumed midpoint of construction of April 2020 and include all hard and soft costs** | | | |

# PERSPECTIVE




Aerial view looking west of the Population Health Education Facility.
(Artists conception)




Aerial view looking northeast.
(Artists conception)