



State-Funded Capital Facilities Request: Engineering Building

VAL PETERSON, VP FOR FINANCE AND
ADMINISTRATION

UTAH VALLEY UNIVERSITY

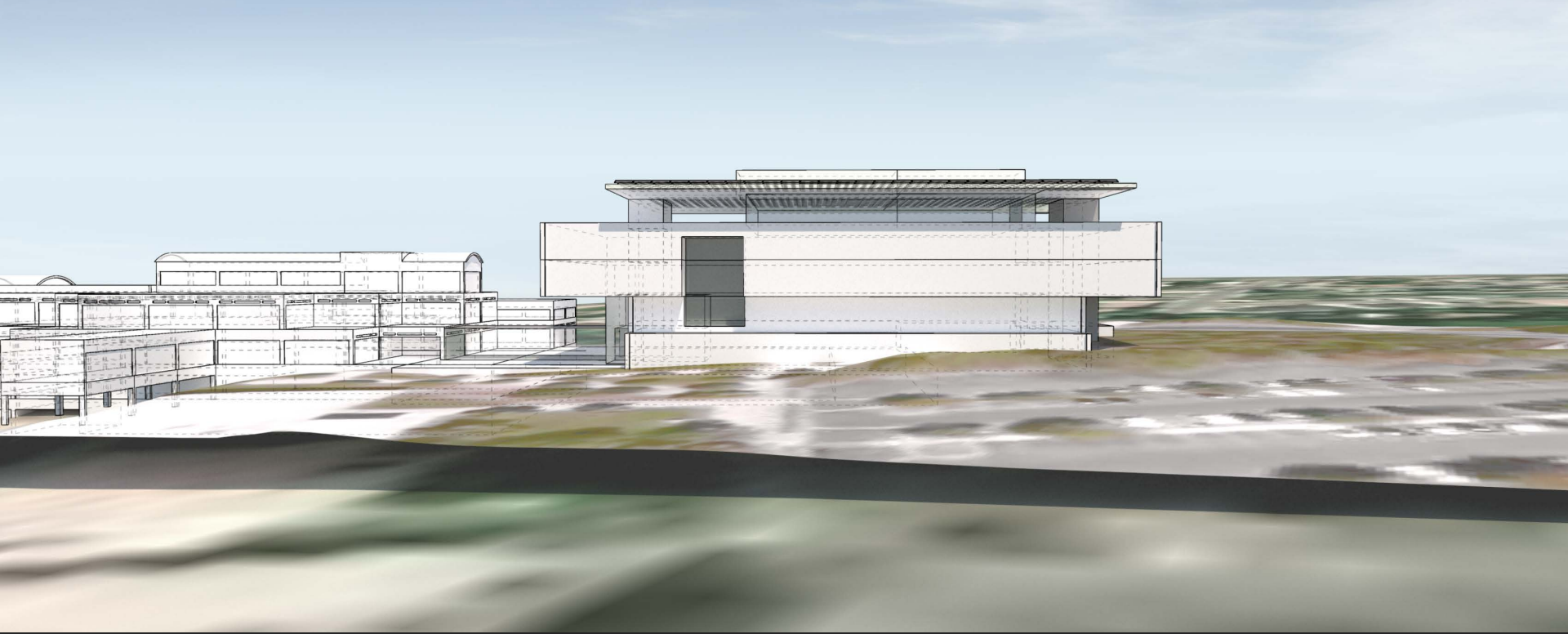


THANK YOU!

UVU's New Business Building

- Design Process: November of 2018
- Bidding: October of 2019
- Ground Breaking: November 11, 2019
 - Remaining \$25m fully raised
- Completion: January of 2022





The Engineering Building at UVU

More than a Smart
Building: An Experience

Building Details:

\$88 million Estimated Cost



UVU Engineering Feasibility Study Program Spaces

<u>Space Type</u>	<u>Count</u>	<u>Total Sq. Footage</u>
Labs	31	65,950
Classrooms	12	13,389
Study Areas	21	4,660
Administrative	12	6,920
Conference Room	5	2,050
Offices	91	11,120
Other	7	9,490
Gross Square Footage		162,500

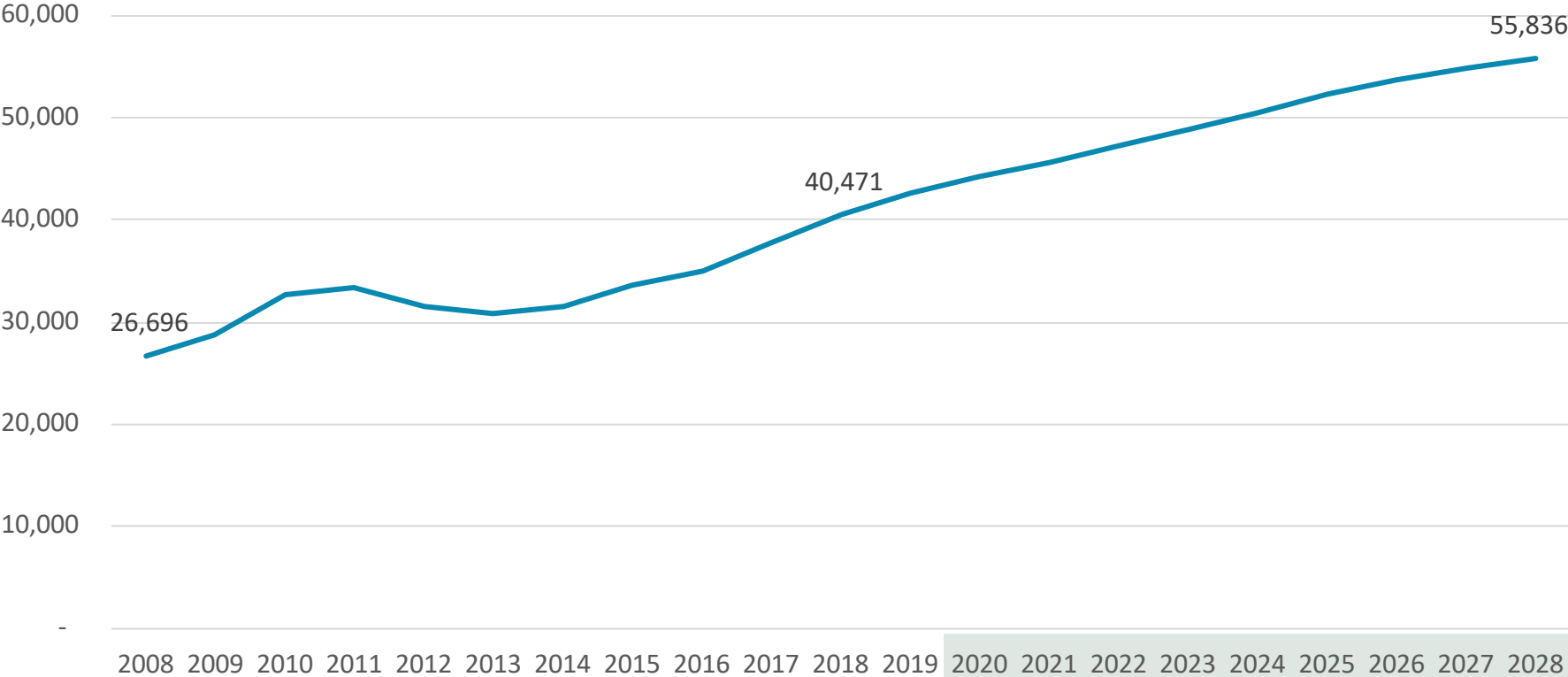


Why Now?

Capacity



UVU'S ENROLLMENT: A HOME FOR ALL STUDENTS IN UTAH VALLEY

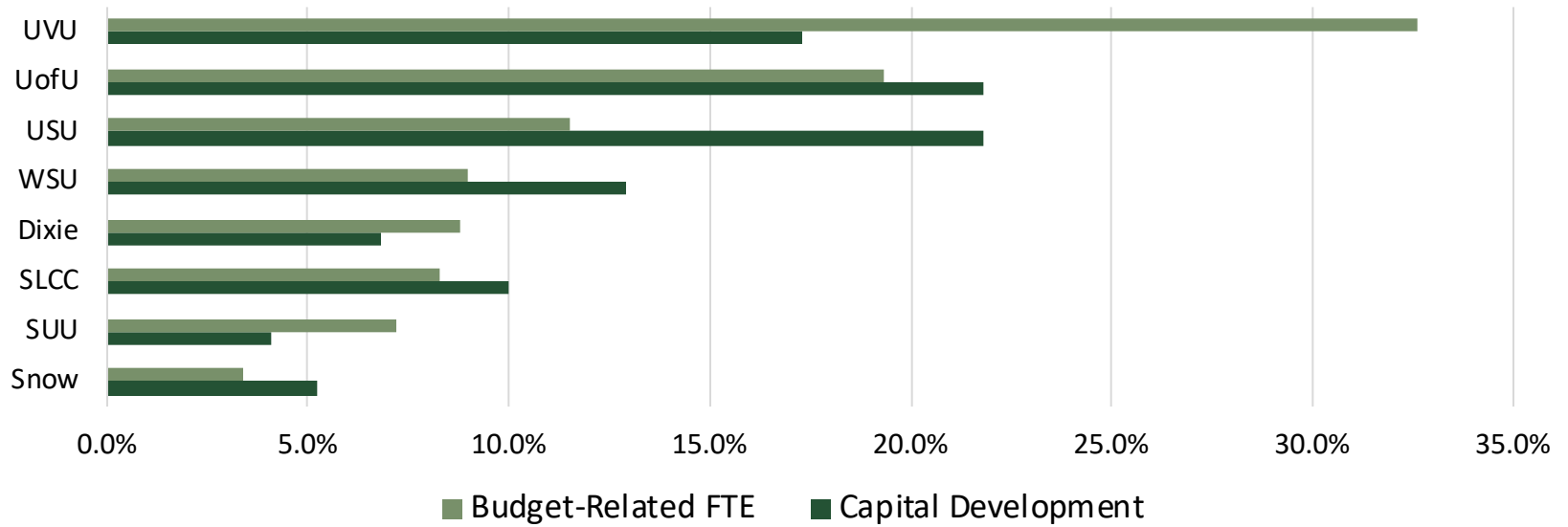


COLLEGE OF ENGINEERING & TECHNOLOGY

- The Computer Science Building was built in 2001
 - **UVU fall 2001** headcount: **19,913**
 - **UVU fall 2018** headcount: **39,941**
 - CET fall 2018 headcount: **4,874**
- Space is the number one impediment to growth to address the needs of industry and government agencies in Utah
 - Existing Computer Science building assignable square footage: 52,946 sq. ft.
 - Increased space will facilitate additional offerings in software development, web development, and computer system courses

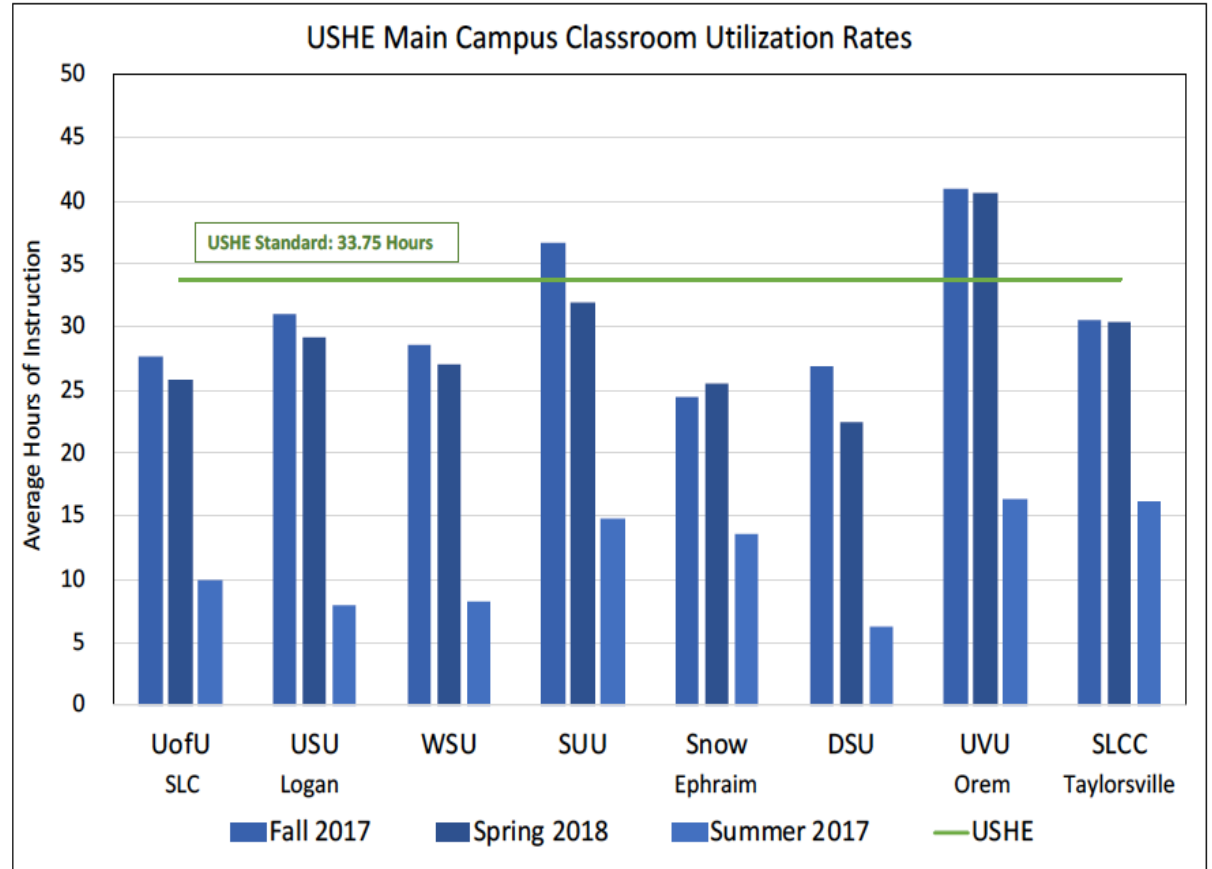
COMPARISON OF BUDGET-RELATED FTE GROWTH AND NEW CAPITAL DEVELOPMENT DOLLARS

% of USHE Total Change Since FY95



SPACE UTILIZATION

UVU has the highest classroom utilization rate in all three academic semesters.

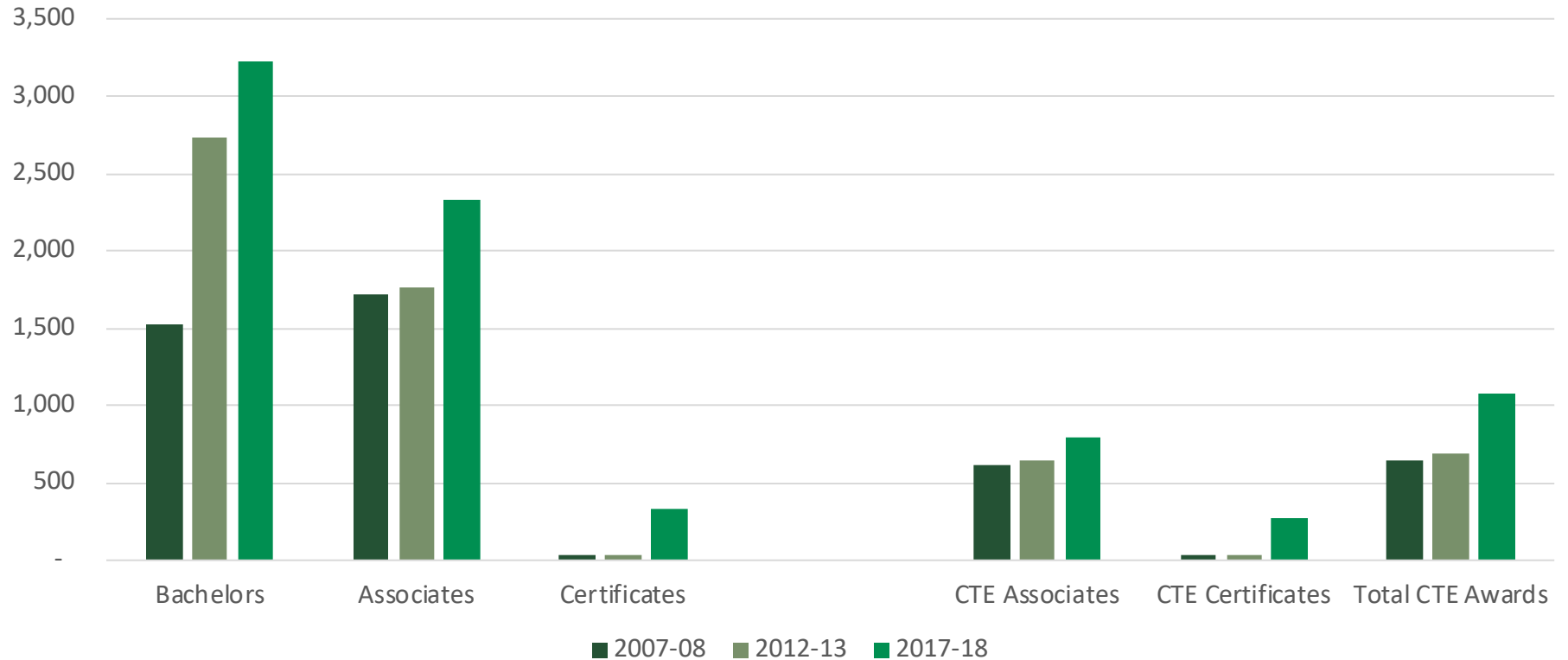




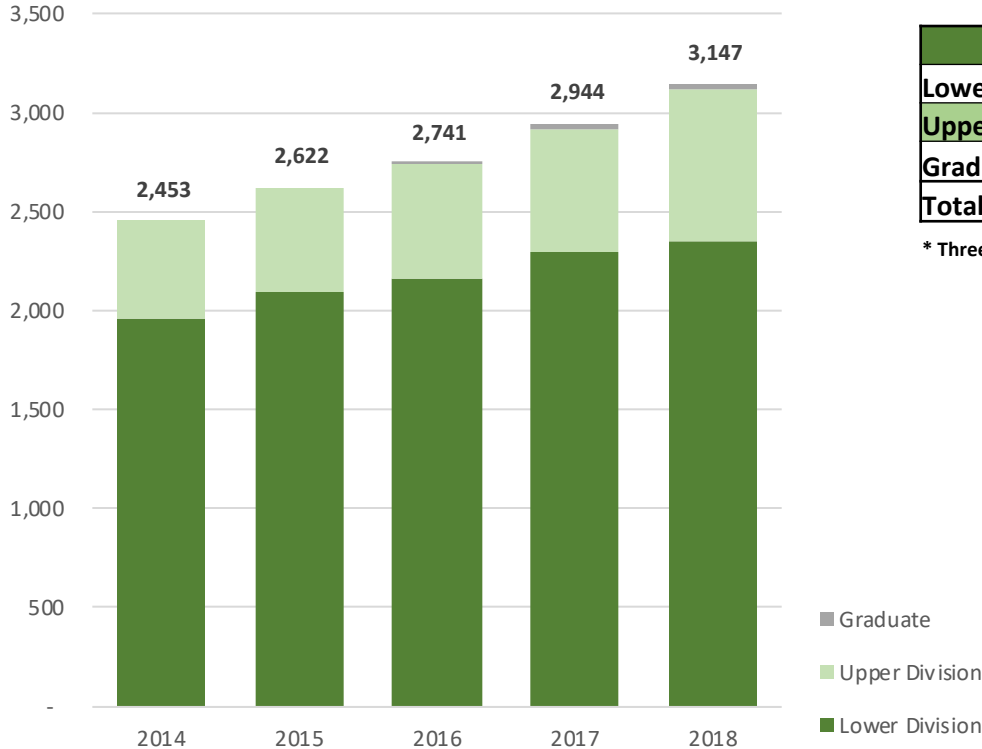
Completion



UVU CHANGE IN AWARDS GRANTED



COLLEGE OF ENGINEERING & TECHNOLOGY: FALL FTE



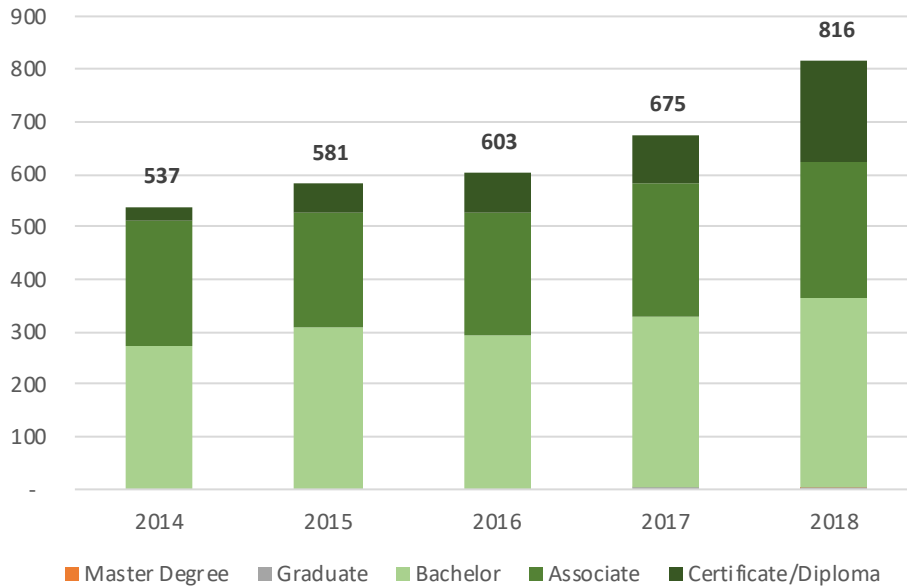
	2014	2015	2016	2017	2018	5 yr. Growth
Lower Division	1,956	2,095	2,158	2,292	2,355	20%
Upper Division	497	527	576	629	760	53%
Graduate	-	-	7	23	32	* 357%
Total	2,453	2,622	2,741	2,944	3,147	28%

* Three year growth

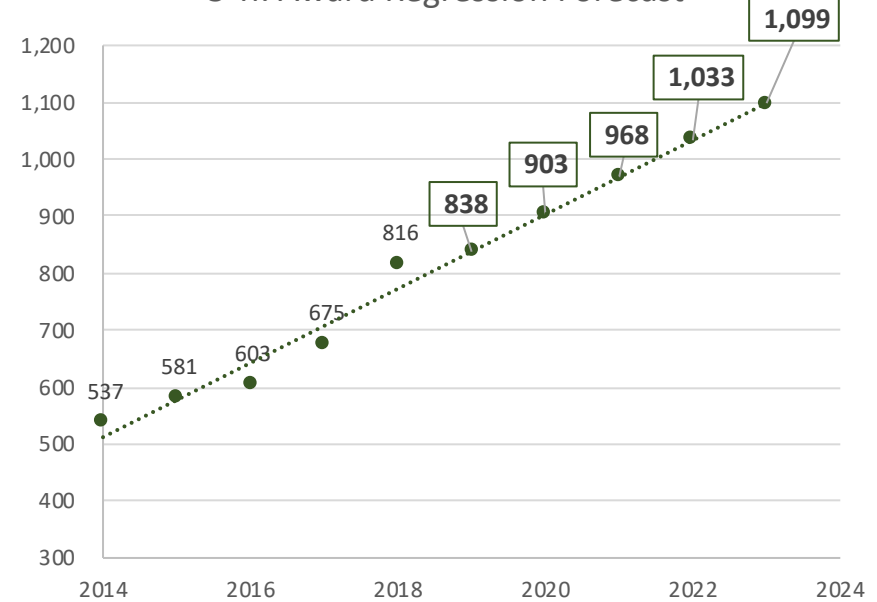
The largest sector of growth for the college is upper division, which grew from **497 FTE to 760 FTE (53%)** in the last five years.

COLLEGE OF ENGINEERING & TECHNOLOGY: DEGREES AWARDED

5 Yr. Award History



5 Yr. Award Regression Forecast



COLLEGE OF ENGINEERING & TECHNOLOGY: GRADUATES

Graduate Change from 2016

Institution	2016 (Base Year)			2018 (Latest Year)				Delta 2016-2018			
	CS	Eng	Total	CS	Eng	Total	% of Grads	Degrees	% Change	% of Total	Rank
UU	384	720	1,104	549	804	1,353	41.21%	249	22.55%	72.17%	1
UVU	244	128	372	292	189	481	14.65%	109	29.30%	31.59%	2
USU	203	397	600	241	430	671	20.44%	71	11.83%	20.58%	3
DSU	40	1	41	41	-	41	1.25%	0	0.00%	0.00%	4
SUU	28	39	67	32	29	61	1.86%	-6	-8.96%	-1.74%	5
WSU	238	200	438	250	181	431	13.13%	-7	-1.60%	-2.03%	6
Snow	18	35	53	4	30	34	1.04%	-19	-35.85%	-5.51%	7
SLCC	157	106	263	144	67	211	6.43%	-52	-19.77%	-15.07%	8
Total	1,312	1,626	2,938	1,553	1,730	3,283	100.00%	345	-2.49%	100.00%	

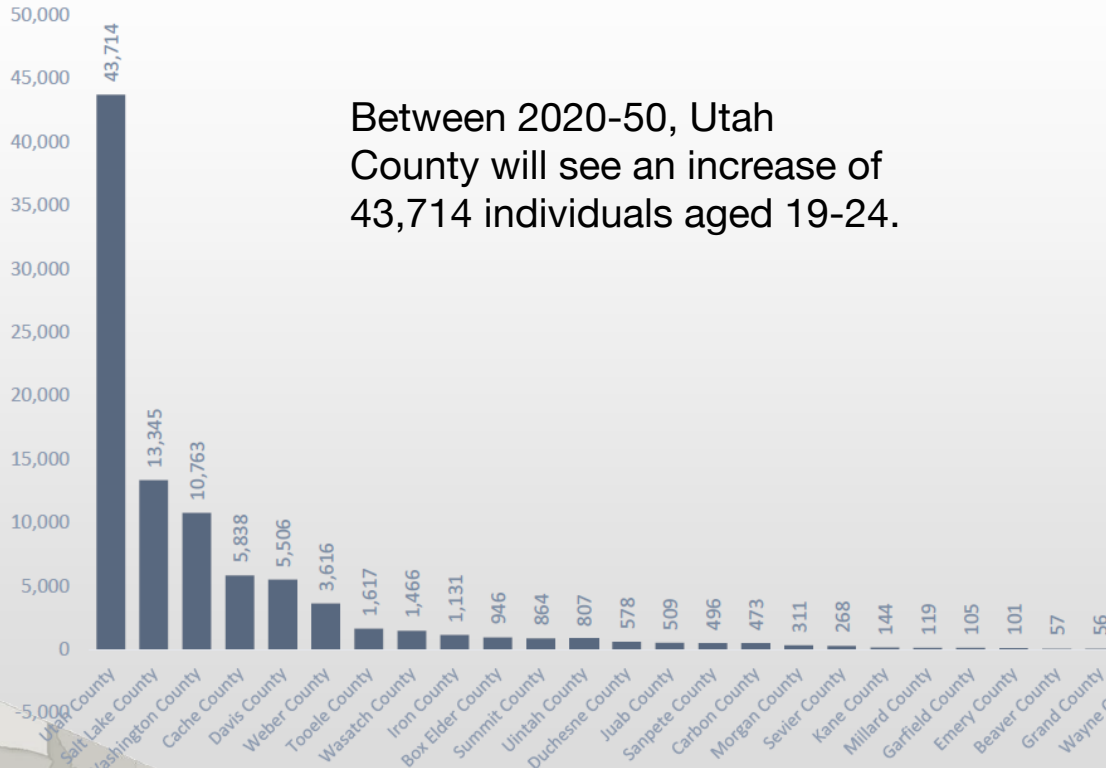
During 2016-2018, UVU increased its number of graduates in computer science and engineering by 109. This increase in the number of graduates places UVU second to the University of Utah; and in terms of percentage increase (29.3%), UVU leads all USHE institutions.

Data provided by Mr. Blair Carruth (USHE)

WORKFORCE

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mirror_mod.use_x = False
mirror_mod.use_y = True
mirror_mod.use_z = False
elif operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True
# At the end -add back the deselected mirror modifier object
mirror_ob.select= 1
modifier_ob.select=1
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob)) # modifier ob is the active ob
mirror_ob.select = 0
bpy.context.selected_objects[0]
bpy.context.scene.objects.active = 0
```

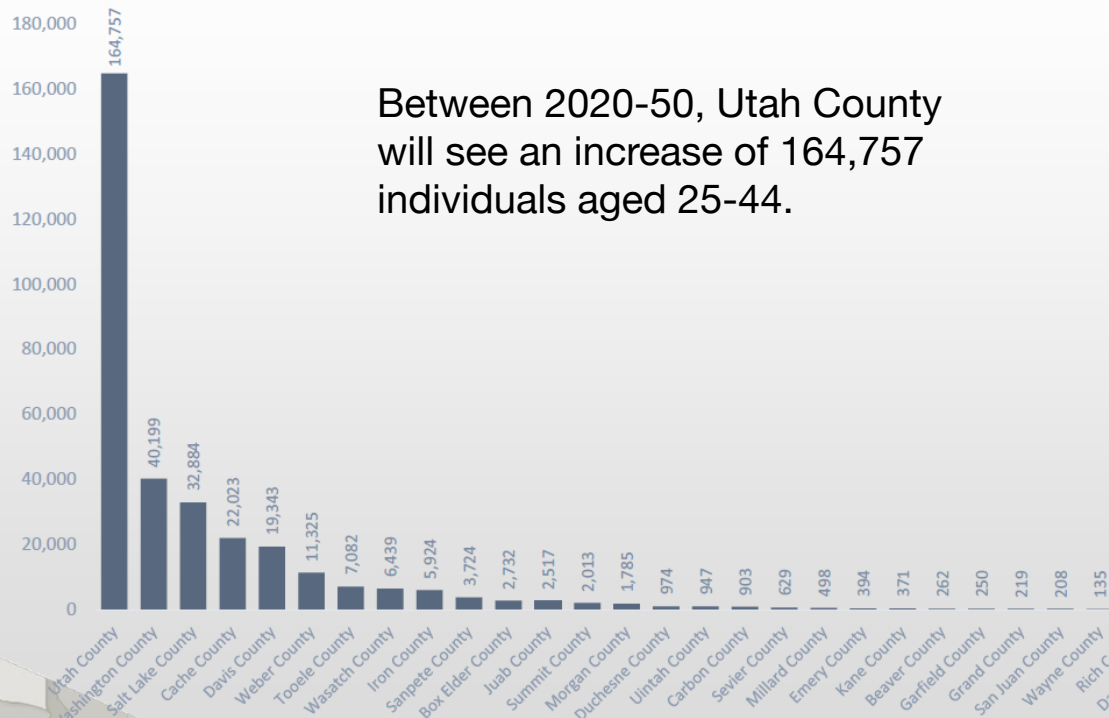




Utah's Growth

DIFFERENCE IN POPULATION AGED 19-24 BY COUNTY, 2020-2050

Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections



Utah's Growth

DIFFERENCE IN POPULATION AGED
25-44 BY COUNTY, 2020-2050

Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections

UTAH BOASTS A HIGHLY COMPETITIVE JOB MARKET

- **No. 2** in the nation for job growth
- **6% job growth** between March 2017 and March 2018 (natl. Ave. is **1.6%**)
- **No. 6 in the nation** for the percentage increase in average weekly wages, up **9%**
- **Tech industry** growing at 3.6%, more than **double** the national average



GROWTH'S IMPACT ON STATE & REGIONAL NEEDS

Occupations Requiring a Bachelor's Degree

Provo-Orem Metro

	Annual Openings	Current Employment	1 yr Projected Employment	1 yr Projected New Jobs
Computer and mathematical occupations	460	5,741	9,343	3,602
Engineers and engineering technicians occupations	120	2,189	2,901	712
Grand Total	580	7,930	12,244	4,314

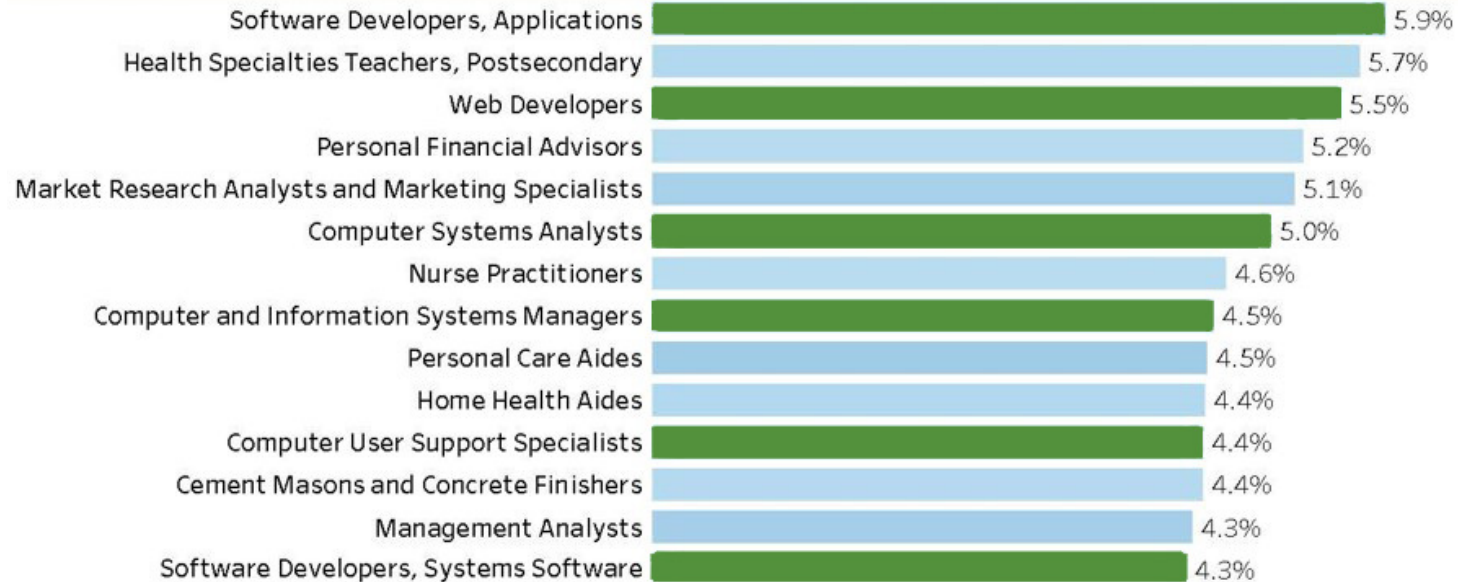
Statewide

	Annual Openings	Current Employment	1 yr Projected Employment	1 yr Projected New Jobs
Computer and mathematical occupations	1,720	29,110	42,215	13,105
Engineers and engineering technicians occupations	880	16,220	20,845	4,625
Grand Total	2,600	45,330	63,060	17,730

GROWTH'S IMPACT ON STATE & REGIONAL NEEDS

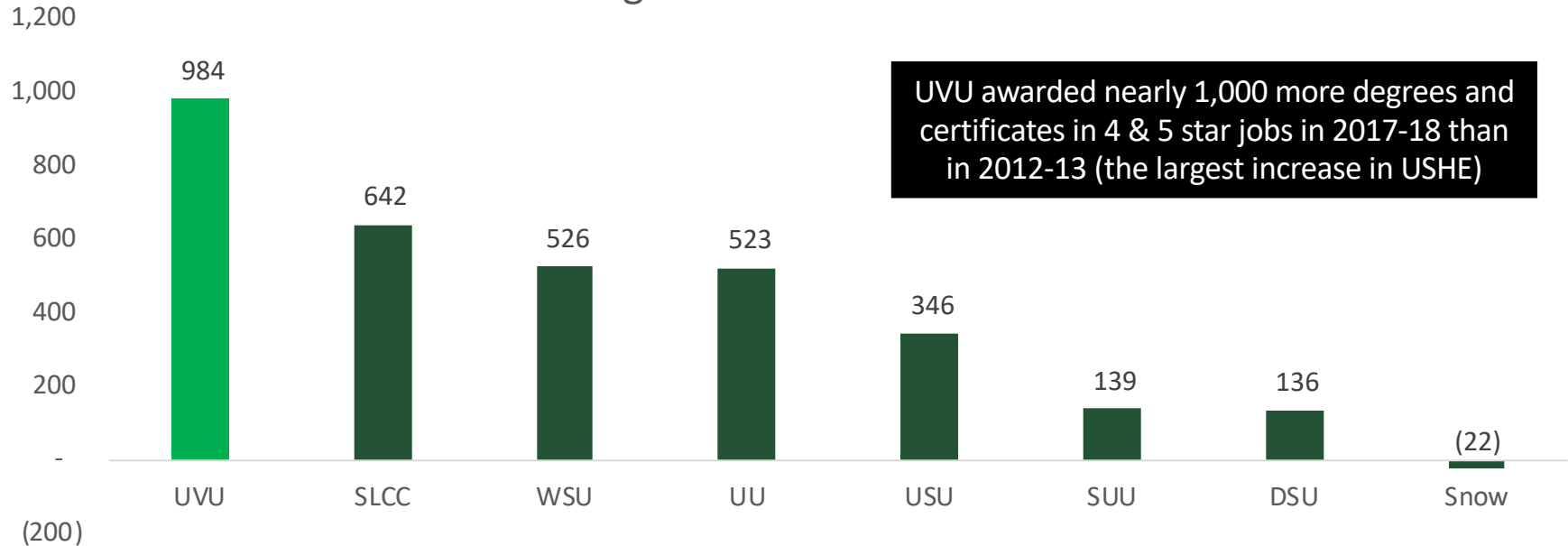
Fastest Growth Rate

Annual Average Percent Change of Occupations with at least 1,000 openings between 2014 and 2024



UVU IS PRODUCING MORE GRADUATES FOR 4 & 5 STAR JOBS

Degrees & Certificates Awarded in High Market-Demand Programs
Change from 2012-13 to 2017-18

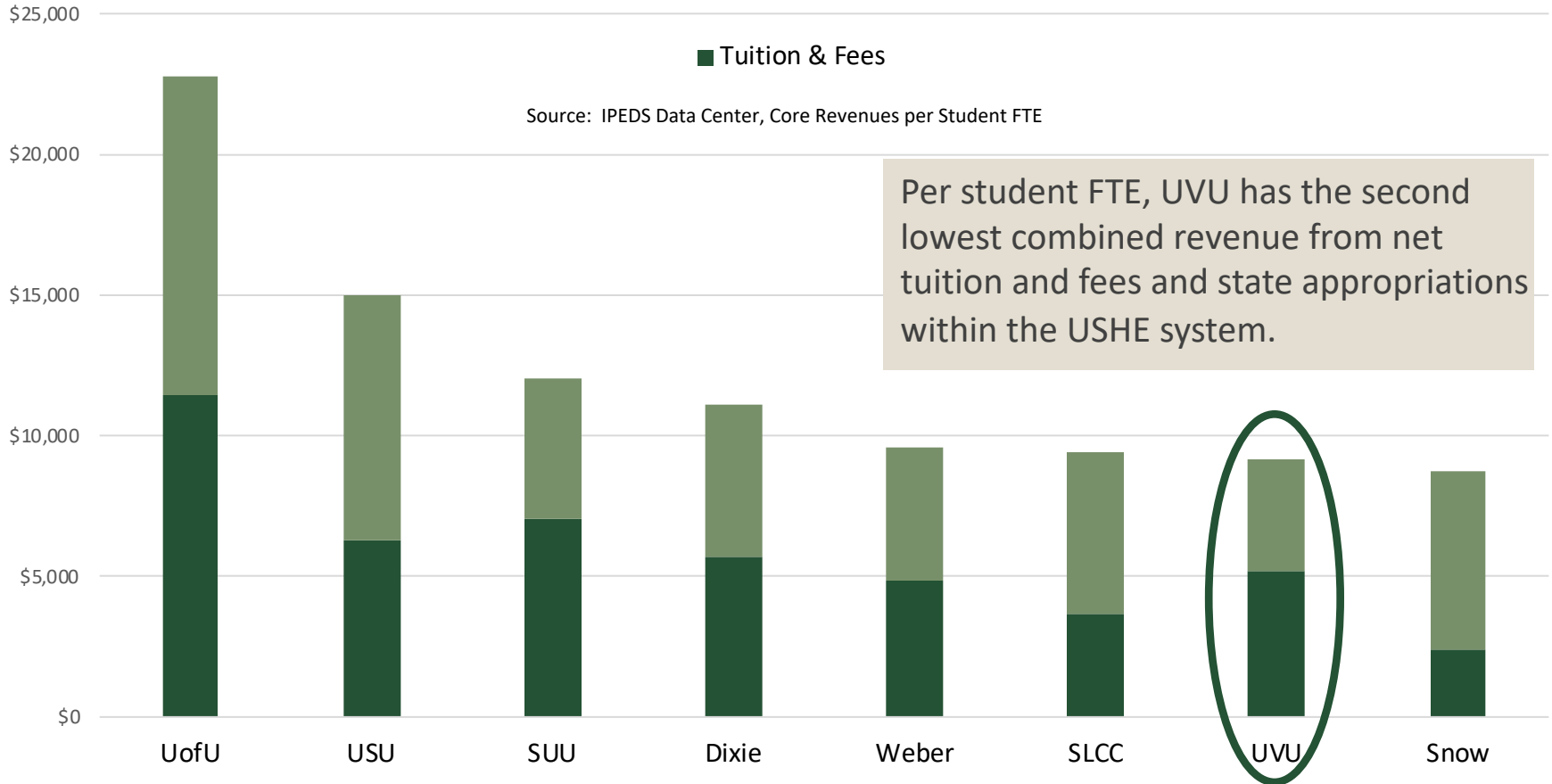




AFFORDABILITY



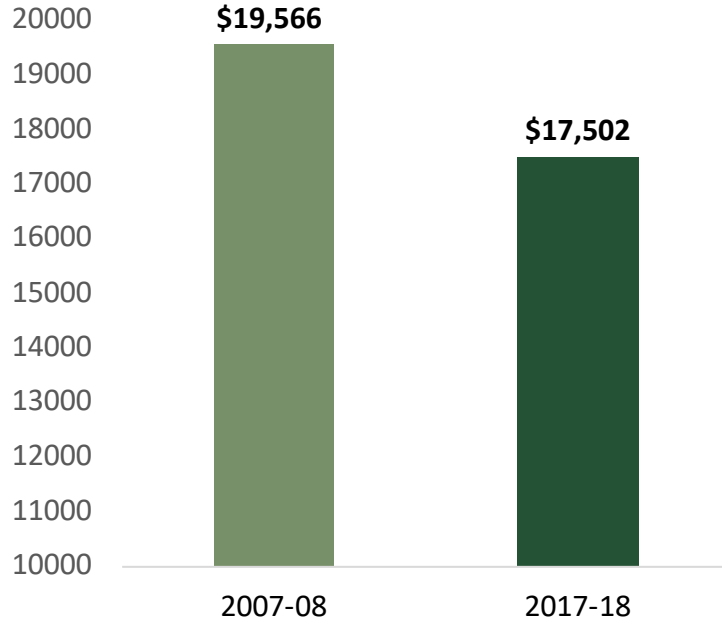
2017-18 TUITION AND FEES PER STUDENT FTE



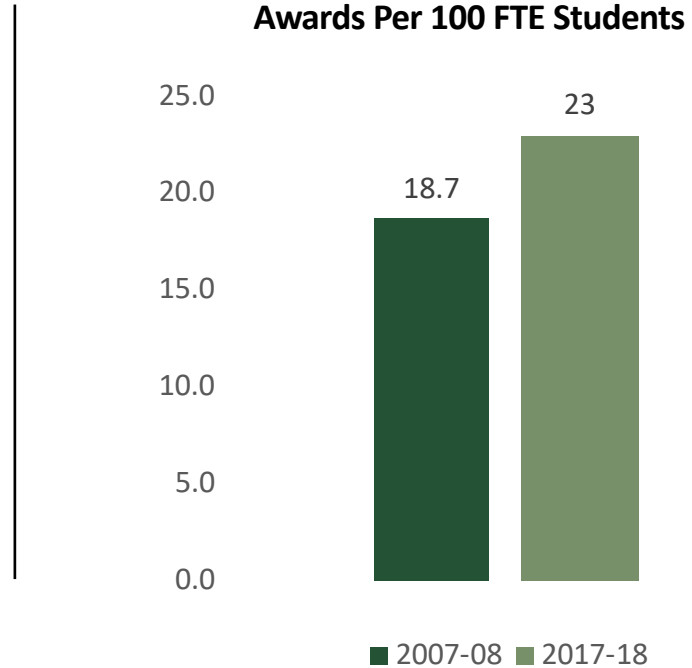
EFFICIENT STEWARDSHIP OF FUNDS

- UVU spent **10.5%** less per award granted in '17-18 than in 2007-08 while awarding many more four-year degrees
- UVU has a **23%** increase in awards per 100 FTE since '07-08.

Average Tax Funds Expended Per Award Granted



Awards Per 100 FTE Students



COST EFFICIENCY AND ROI

At a ratio of 5.3, UVU has the highest return on investment (ROI) for students within USHE based on the median earnings of students who received federal financial aid at 10 years after entering UVU.

(USDOE College Scorecard 2018)

ECONOMIC IMPACT OF 2017-18 UVU GRADUATES

	Graduates	Annual Earnings Above a High School Diploma	Total Annual Increase
Associate's Degrees	2,336	\$13,120	\$30,648,320
Bachelor's Degrees	3,224	\$26,269	\$84,691,256
Master's Degrees	193	\$49,131	\$9,482,283
Total Annual Earnings Difference			\$124,821,859

A new engineering building at UVU will help accomplish the following:

✔ Completion

The College of Engineering and Technology has increased the total number of awards given from **537 in 2014 to 816 in 2018**, equaling a **52 percent increase**. The largest percentage of enrollment growth is occurring in upper division courses. The **53 percent growth in upper division** courses demonstrates that the college is more efficiently moving students towards completion.

✔ Capacity

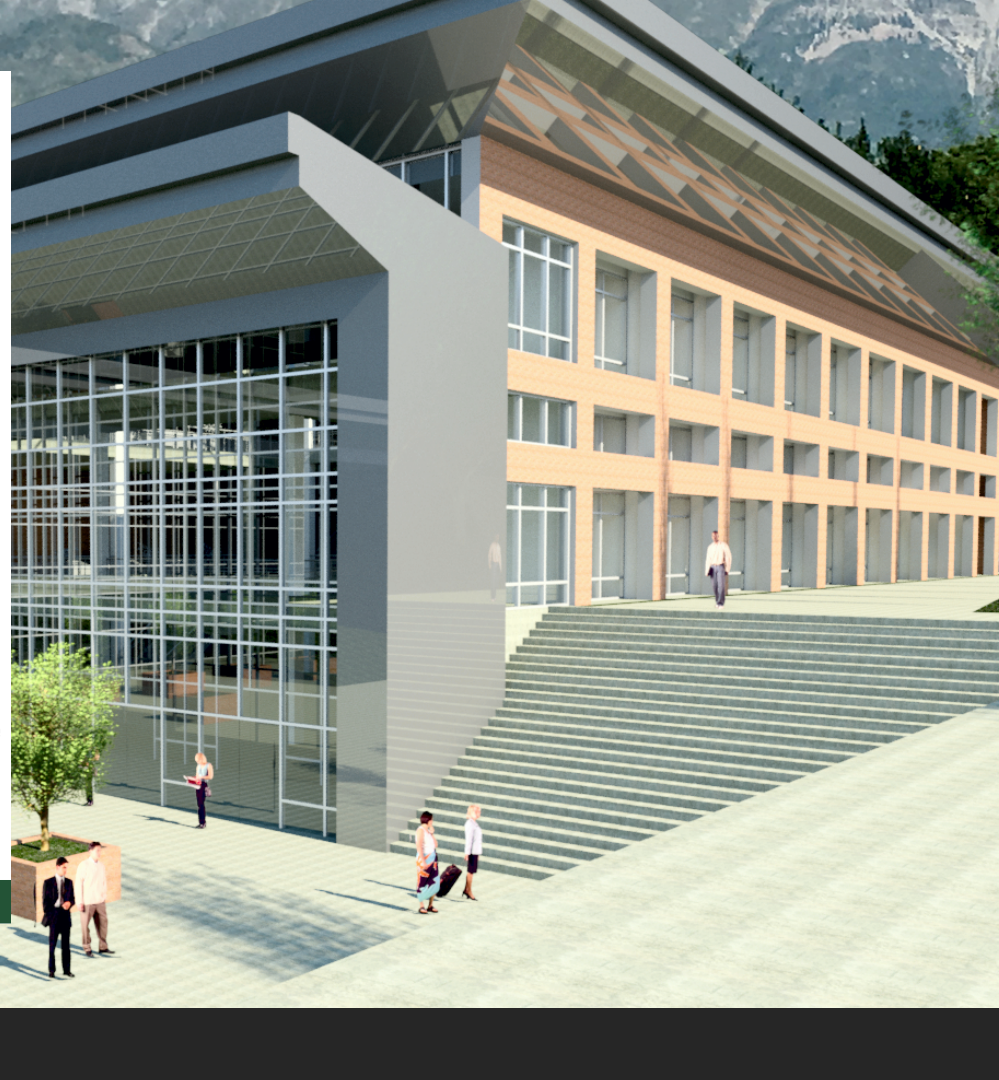
The utilization of the space in the computer science building will be improved by allocating more space for **software development, web development, and computer system courses**.

✔ Affordability

The new building will allow UVU to assist in filling the demand for trained engineers and technology specialists at **UVU's return on investment** for Utah which is **\$8.04 for every \$1** invested by the state.

✔ Workforce

According to the Utah Department of Workforce Services, there are **2,600** annual openings requiring a bachelor's degree in engineers and engineering technician occupations and computer and mathematical occupations. These fields are projected to experience a **39 percent** statewide annual increase, while UVU's service region is projected to have a **54 percent** annual increase. Additional space will provide the resources needed to efficiently educate the growing student population and fill the needs of the state and service region.



THANK
YOU!

