



Buildings and Grounds Committee

September 23, 2021

Agenda

- Remarks by the Chair
- Consent Agenda: Schematic Design of the UVA Hotel and Conference Center
- Action Items
 - Concept, Site, and Design Guidelines: Institute of Democracy
 - Naming: Institute of Democracy as Karsh Institute of Democracy
 - Naming: McIntire Academic Facility as Shumway Hall
 - Addition to the Major Capital Plan: UVA Encompass Rehabilitation Hospital Renovation and Expansion
- Committee Discussion
 - Major Capital Projects Cost Review/Assessment
 - Remarks by the Senior Vice President for Operations and State Government Relations

Consent Agenda



Schematic design: UVA Hotel and Conference Center

- Revised schematic design includes addition of rooftop food & beverage amenity



PREVIOUS VIEW OF THE HOTEL ENTRY LOOKING NORTHWEST

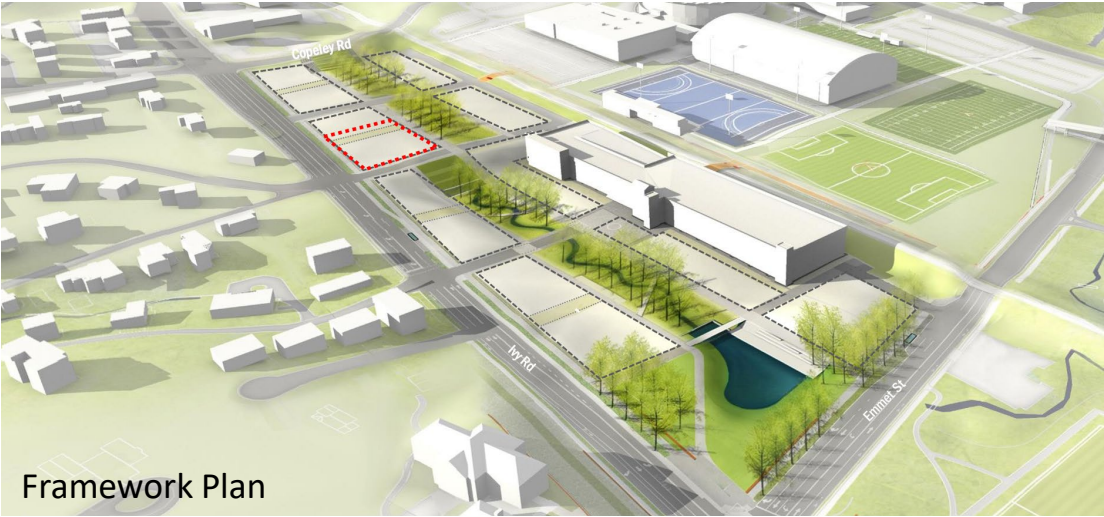


PROPOSED VIEW OF THE HOTEL ENTRY LOOKING NORTHWEST

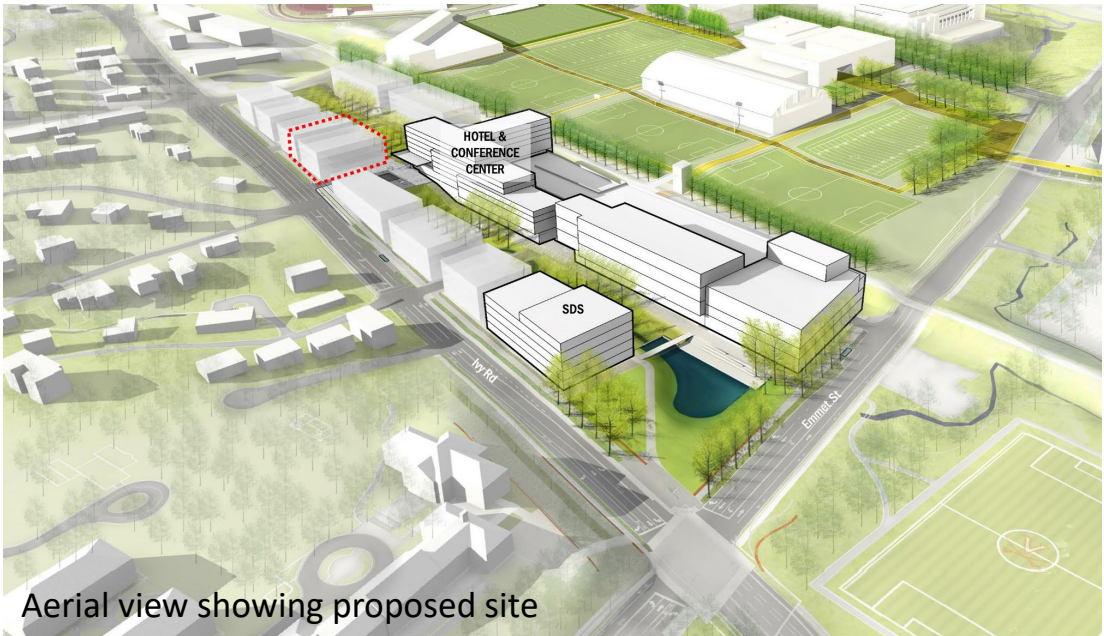
Concept, Site, & Design Guidelines: Institute of Democracy



Concept, Site, and Design Guidelines: Institute of Democracy



Framework Plan



Aerial view showing proposed site

- September 2016 – The Ivy Corridor Landscape Framework Plan was approved by the BOV.
- February 2019 – The Emmet Ivy Task Force recommended the creation of 3 nexuses for Creativity and Experimental Arts, Discovery, and Democracy, within which this facility would fit.
- June 2021 – UVA announced plans to invest in the study, teaching and promotion of democracy through the creation of the Karsh Institute of Democracy.
- The proposed site is appropriate for the Institute of Democracy’s program and allows site visibility and aesthetic character as appropriate for the intended use and for the neighborhood.



Perspective view looking northwest towards proposed site

Namings



Karsh Institute of Democracy

- Honors alumni Bruce and Martha Karsh, long-time supporters of UVA and lead donors for the Institute of Democracy
- Established Karsh Center for Law and Democracy; endowed Law School's premier scholarship program and multiple law professorships



Shumway Hall

- Name new McIntire Academic Facility as Shumway Hall
- Honors contributions of alum Chris W. Shumway, long-time supporter of UVA and the McIntire School of Commerce, and lead donor of the *Next Century Building Fund*
- Generous supporter of the Back to the Lawn Campaign and faculty support initiatives, including establishment of a professorship



Addition to the Major Capital Plan



UVA Encompass Rehabilitation Hospital

- Renovate and expand UVA Encompass Rehabilitation Hospital at Fontaine Research Park
 - Upgrade ~50,000 SF existing space
 - Construct 16,400 SF addition
 - Increase capacity from 50 beds in semi-private rooms to 60 beds in private rooms
- Initial estimated project cost: \$25M-\$35M (funded by the joint venture: 50% UVA Health, 50% Encompass Health)



Major Capital Projects Cost Review/Assessment



University of Virginia

Capital Project Cost Review & Assessment

September 23, 2021



Agenda

Topic

Summary of Findings

UVA Capital Program Overview

How does UVA Compare to Others?

Recommendations

Questions

Summary of Findings

- UVA's costs are in line with other institutions and industry norms
 - Key drivers include project scope (program, building size), design processes and standards, and market conditions
- UVA's governance model has many positive elements and is staffed by competent and dedicated professionals
- However, there are several opportunities to improve the program

Cost Savings Opportunities

- Streamline the design process
- Adjust design philosophy
- Package coordination
- Change order management
- Optimize PM staff level

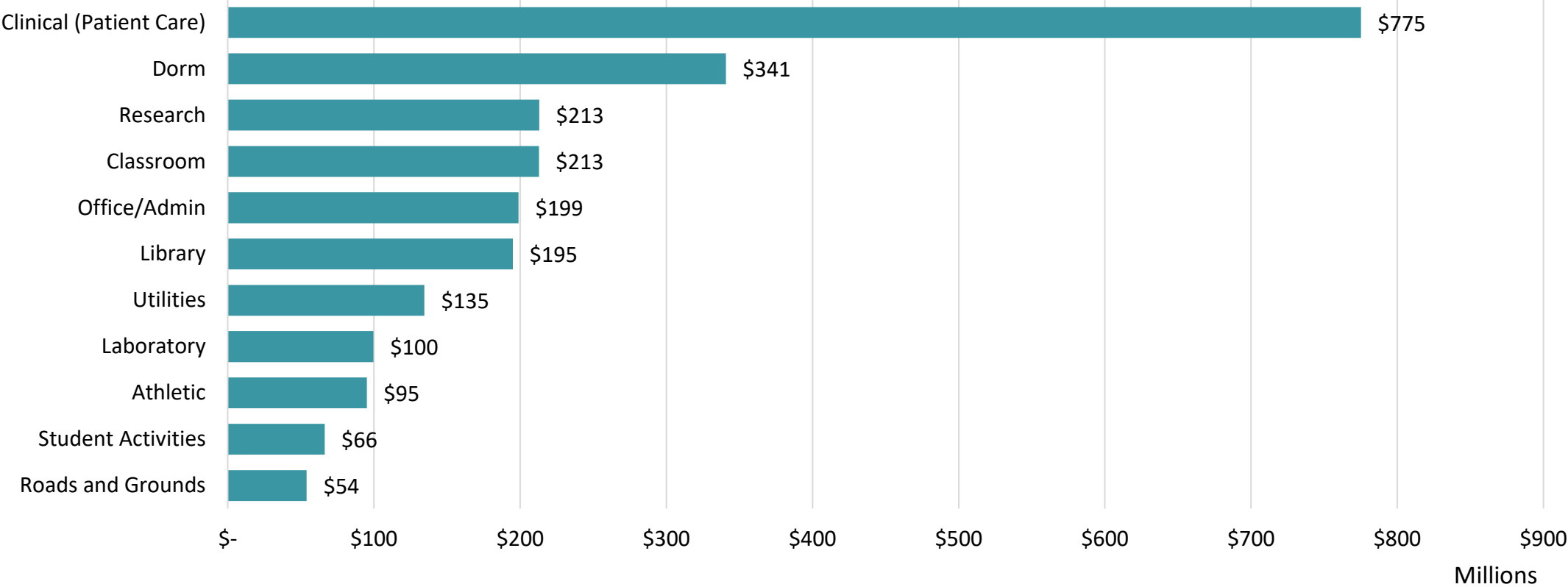
Governance Improvements

- Programming and budgeting
- Reporting
- Process standardization
- Cost, schedule and risk management

UVA Capital Program Overview

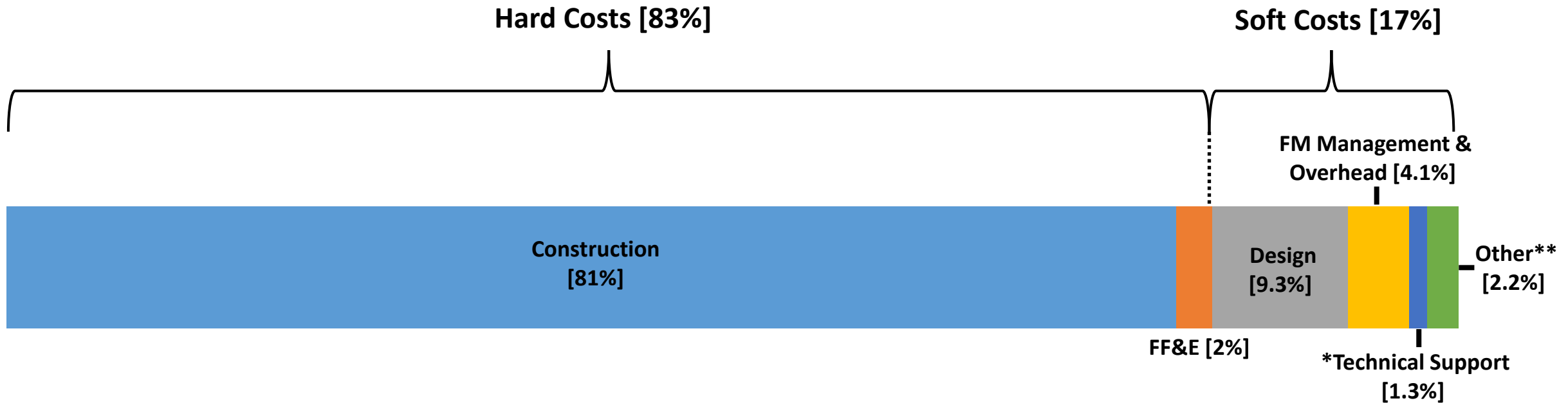
UVA Capital Program Overview

Expenditure Profile (54 major projects over the past 5 years)



UVA Capital Program Overview

Project Cost Profile (average over all projects)

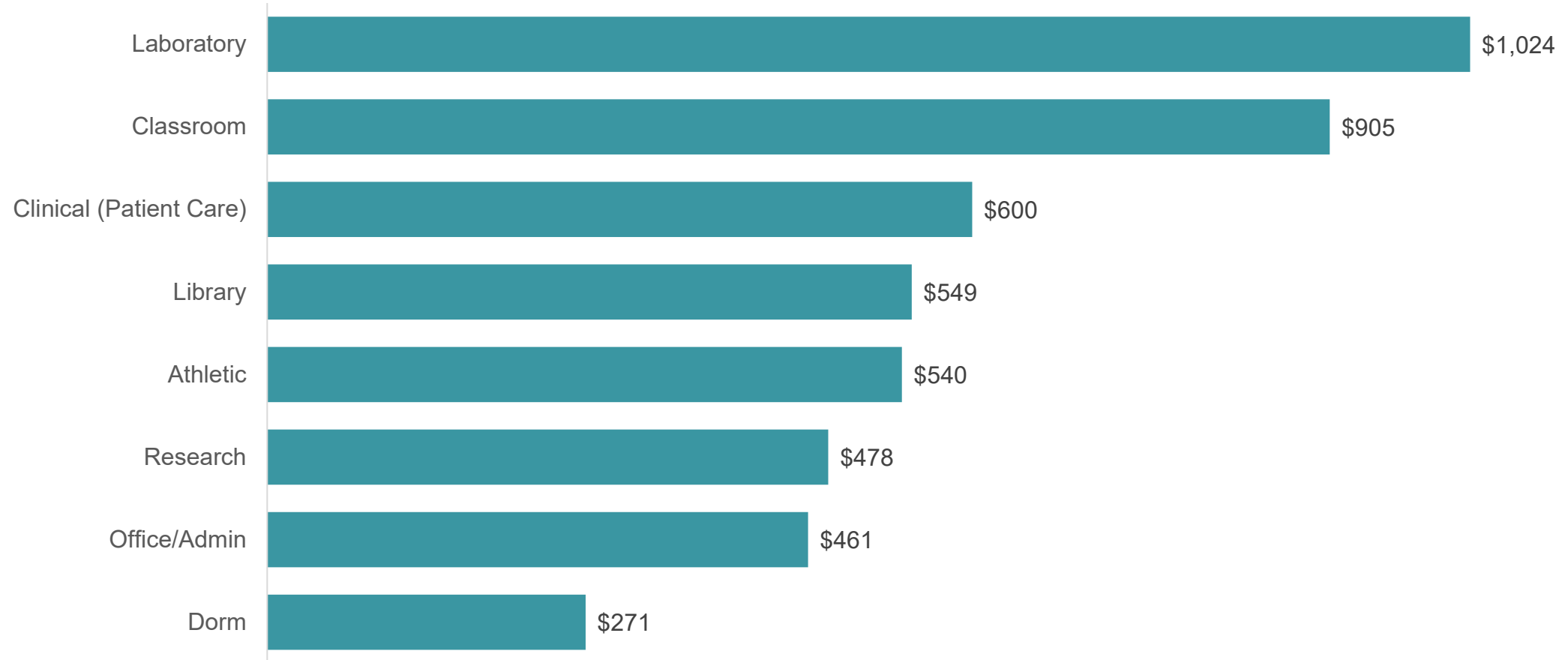


*Technical Support: UBO Review, Inspection & Testing, Commissioning etc.

**Other: UVA Trade Support, UVA Assessments etc.

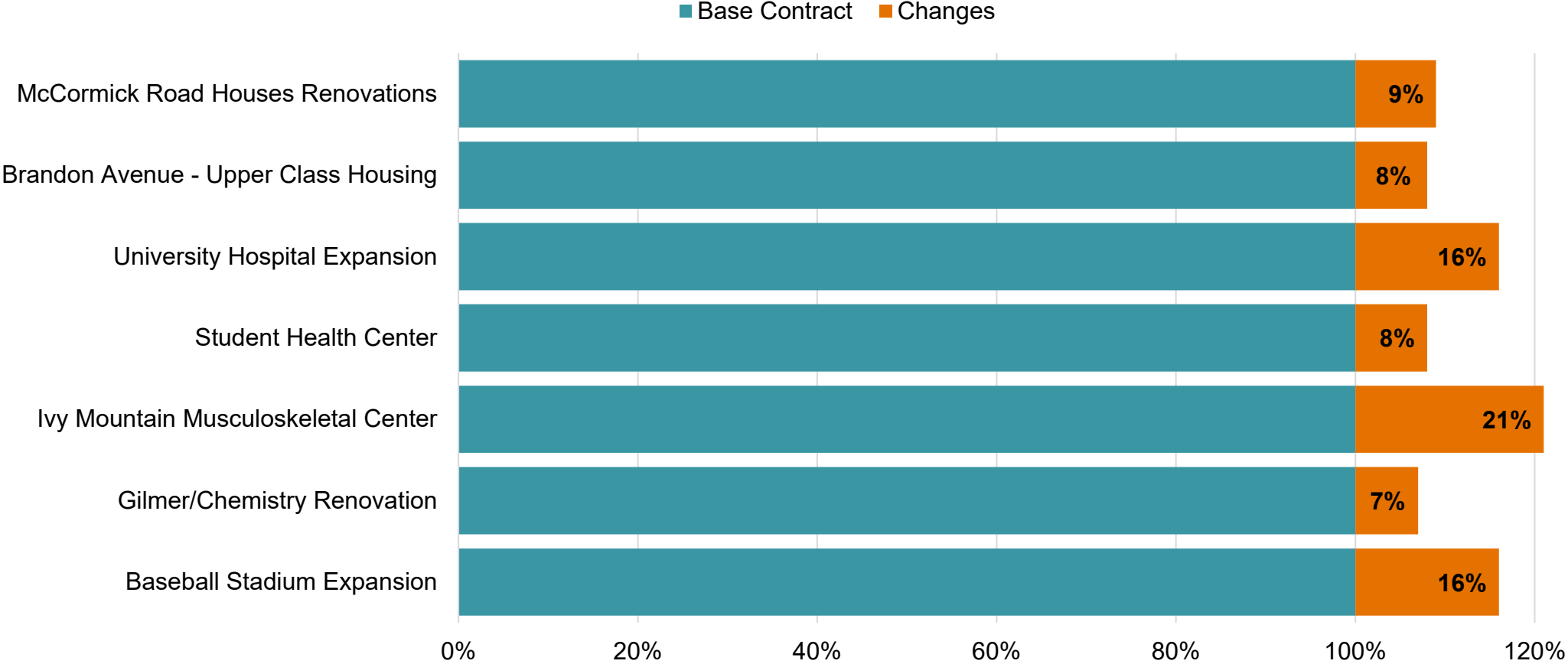
UVA Capital Program Overview

Major Projects – total cost per SF



UVA Capital Program Overview

Change Orders on Selected Projects

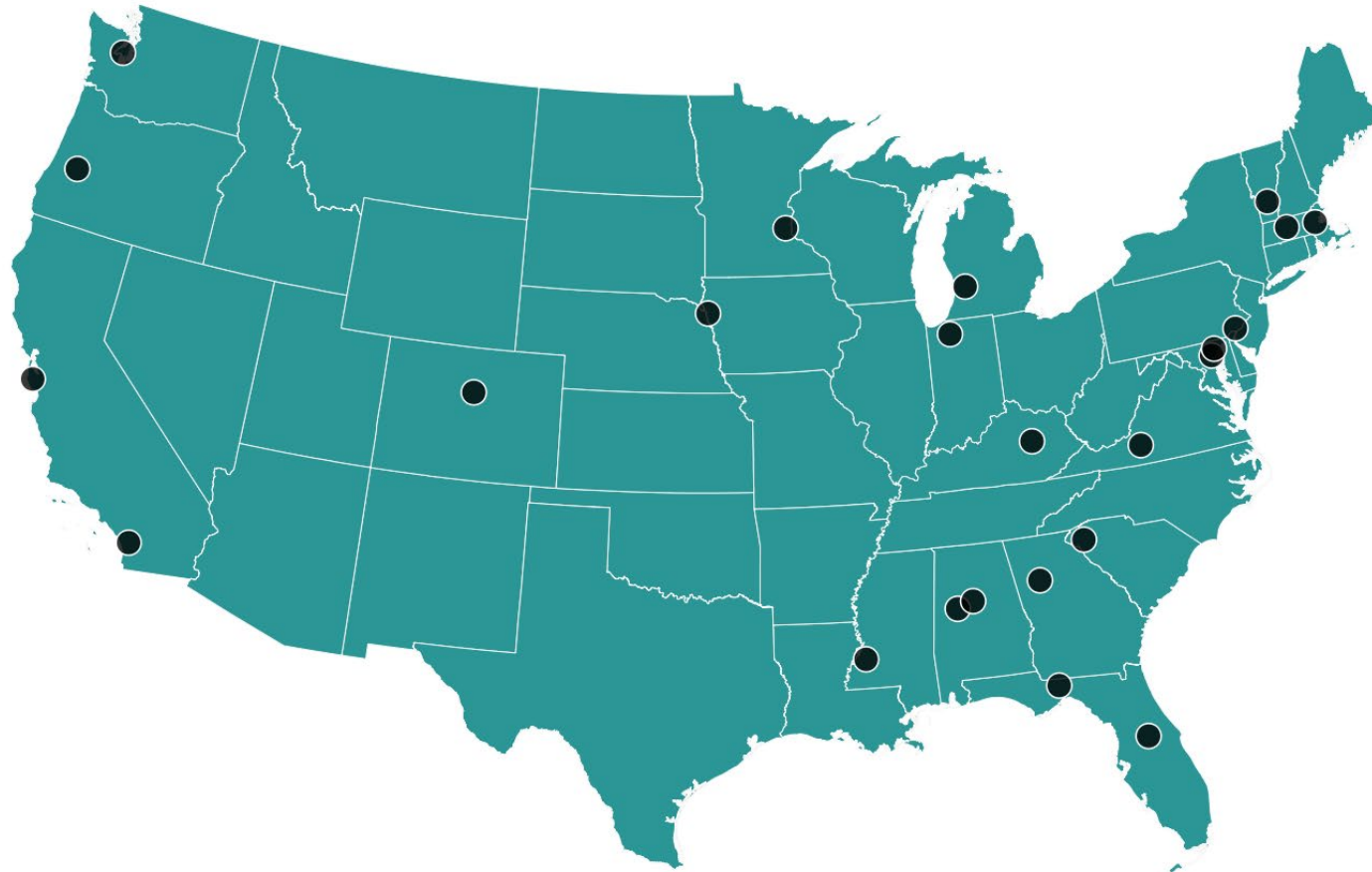


Industry Average Ranges 6% - 8%

How does UVA compare to others?

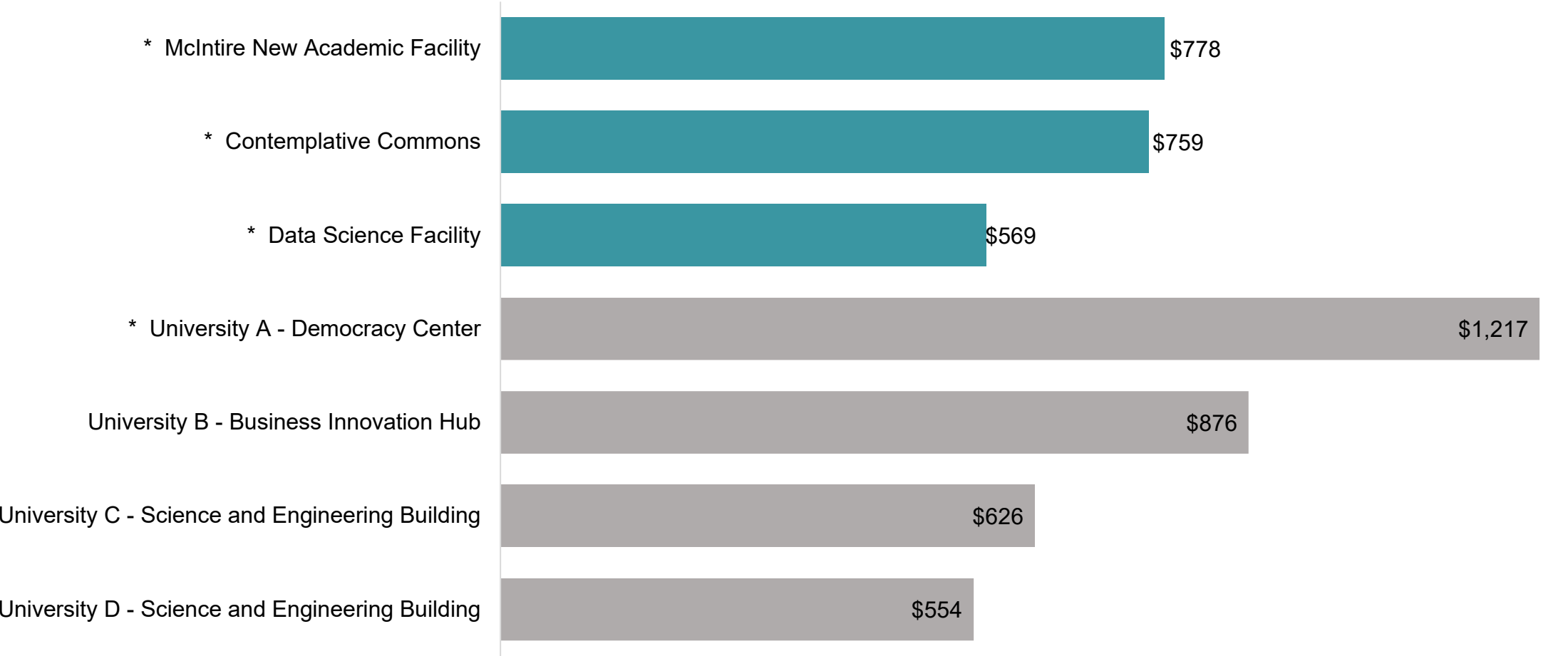
How does UVA compare to others?

Database of 25 Institutions



How does UVA compare to others?

Academic / Classroom - Construction Cost per SF

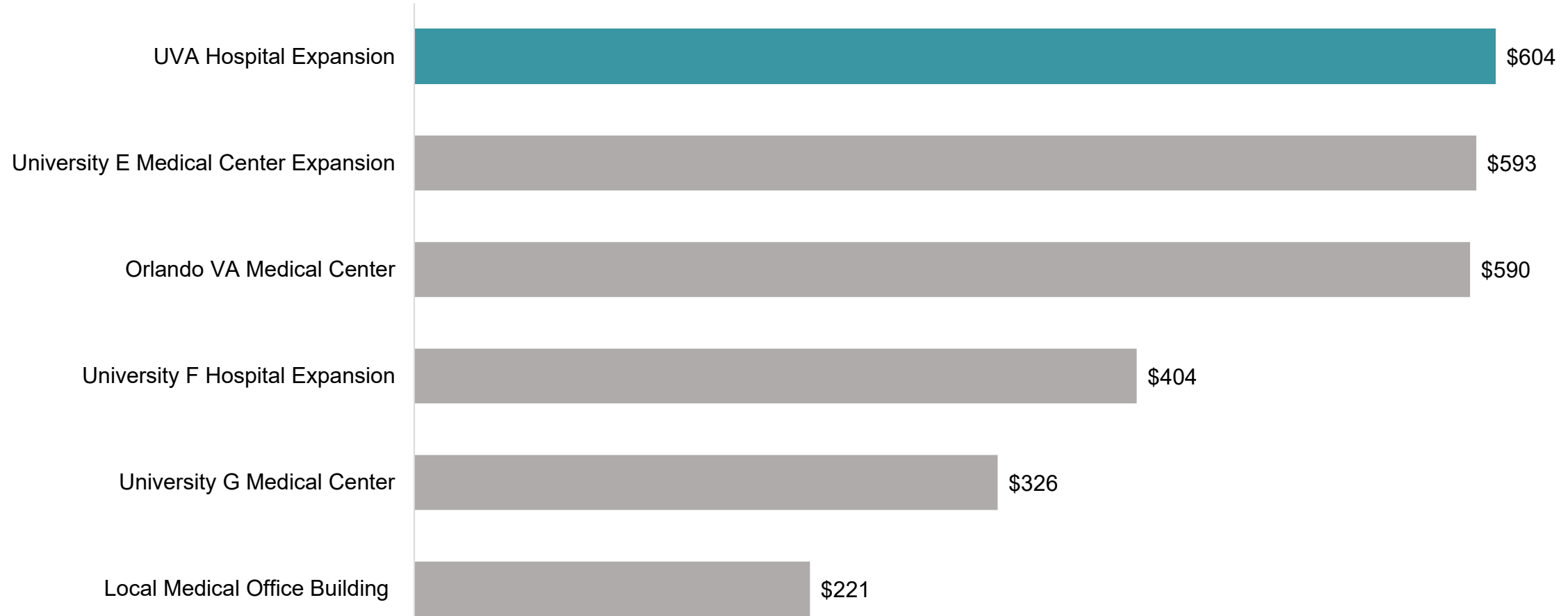


* Budgeted costs

Escalated and geographically adjusted

How does UVA compare to others?

Hospitals / Medical Centers - Construction Cost per SF

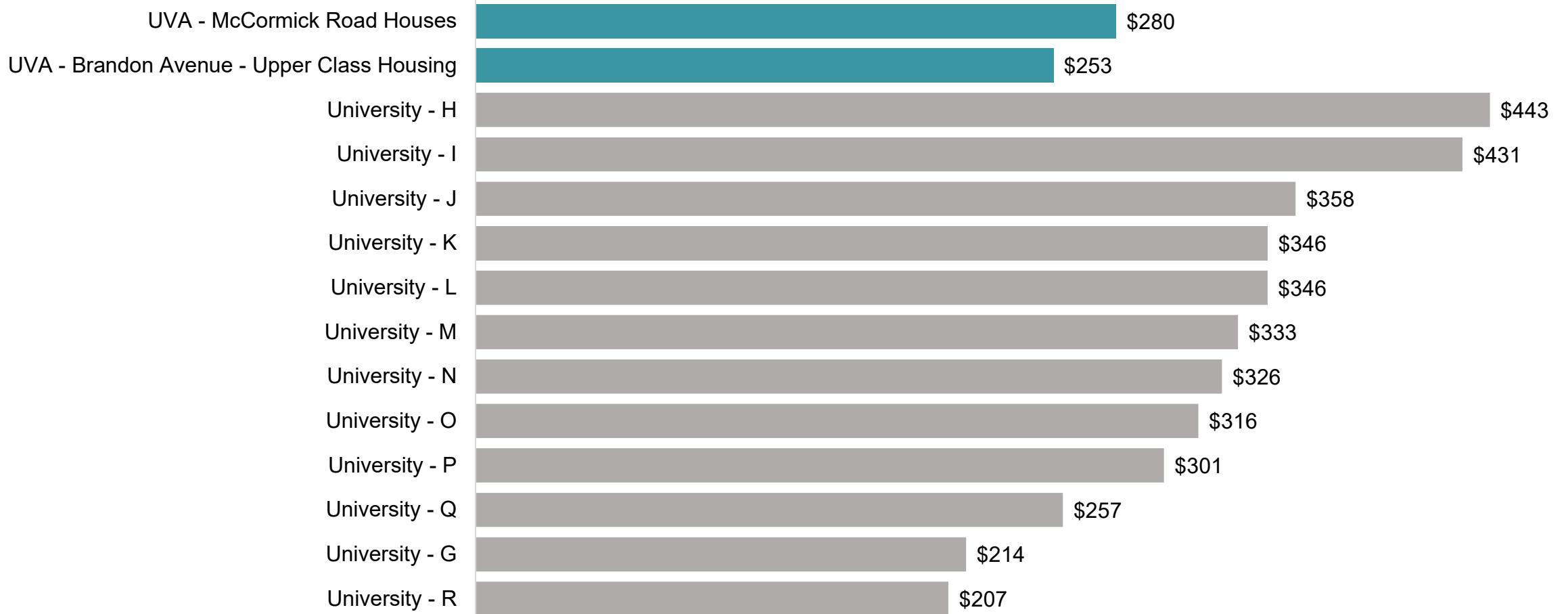


(Developer model; does not include fit-out)

Escalated and geographically adjusted

How does UVA compare to others?

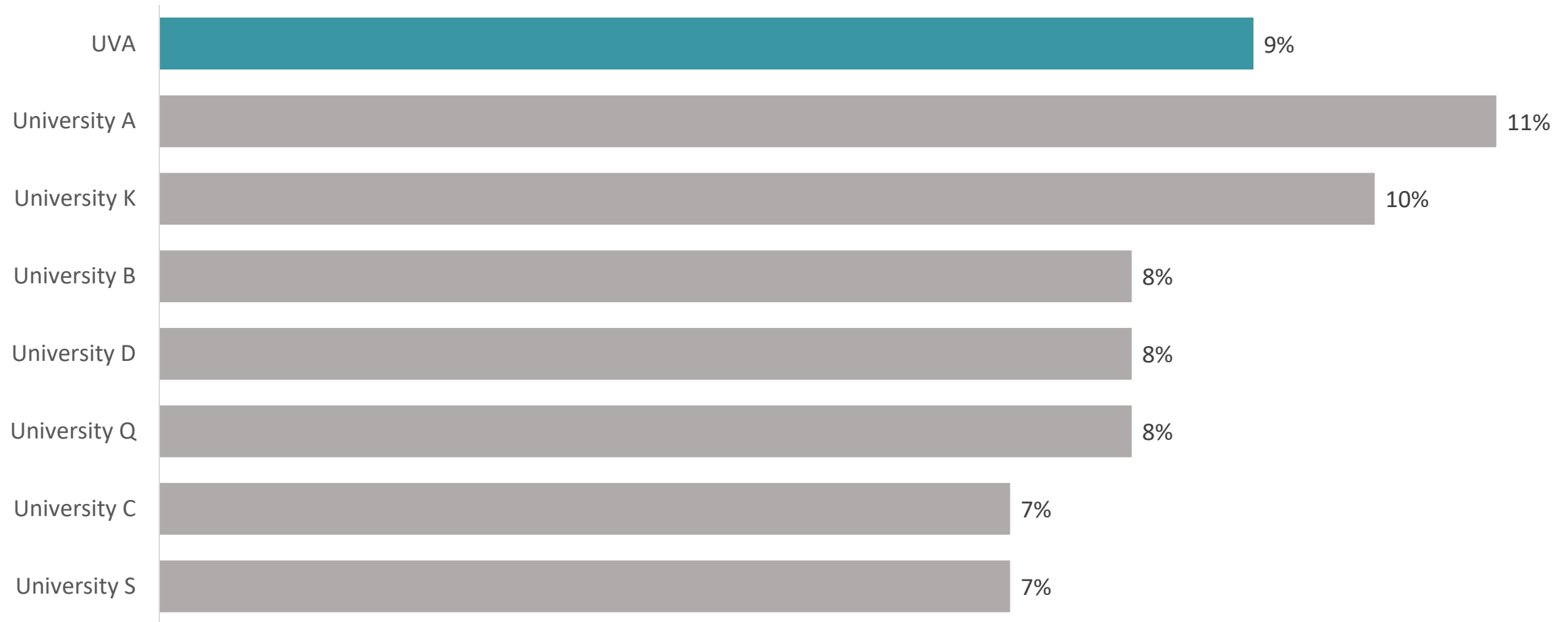
Housing - Construction Cost per SF



Escalated and geographically adjusted

How does UVA compare to others?

Design Costs as a % of Total Project Cost



How does UVA compare to others?

Project Management Fees

PM Fees	% of Total Project Cost	Cost Model (Major Projects)
UVA	4% (avg)	Billable Hour
University K	5% (avg)	Billable Hour
University Q	2% (avg)	Billable Hour
University S	2%	Partial Central Funding + Sliding Scale
University I	2.75%	Partial Central Funding + Sliding Scale
University A	5%	Flat fee
University C	5%	Flat fee

Recommendations

Recommendations

Recommendation	Potential Benefits	Implementation Challenges
<p>1 Programming and Budget Development</p> <p>Conduct a more rigorous programming and budgeting process that includes:</p> <ul style="list-style-type: none">• Aligning budget estimates with full concept designs• Adjusting for escalation and current market conditions• Assessing project-specific risks and uncertainties to establish appropriate cost contingencies	<ul style="list-style-type: none">• Improved alignment between project budget and design criteria• Improved understanding and visibility of how project risks can affect construction cost	<ul style="list-style-type: none">• A more detailed programming phase would likely require seed money• Some investment in PM training in risk analysis techniques may be needed
<p>2 Reporting</p> <ul style="list-style-type: none">• Prepare regular program-level dashboard reports.• Prepare regular project status reports.	<ul style="list-style-type: none">• Improved transparency of program/project performance, allowing for more proactive decision-making in response to potential delays, overruns, or other adverse trends• Increased accountability for performance outcomes	<p>N/A – this is an essential project management function that should be performed</p>

Recommendations

Recommendation	Potential Benefits	Implementation Challenges
<p>3 Streamline Design / Decision-Making Process</p> <ul style="list-style-type: none">• Adhere to rigorous stage-gate decision-making process to achieve early design “freeze”.• Use a Project Charter (or similar document) to memorialize stakeholder signoffs on the agreed upon program, budget, schedule, etc.	<ul style="list-style-type: none">• Opportunity for cost savings and time savings through a more efficient design process	<p>May be met with resistance from sponsors and other project stakeholders that have grown accustomed to a more consensus-driven, iterative design process</p>
<p>4 Design Philosophy</p> <ul style="list-style-type: none">• Allow for more economical design solutions based on:<ul style="list-style-type: none">– Location (buildings outside of the campus’ historic core)– Facility type/function (e.g., academic vs. housing)• Adhere to a “design-to-budget” approach	<ul style="list-style-type: none">• Cost savings	<ul style="list-style-type: none">• Potential negative perceptions regarding the relaxation of traditional standards• Potential loss of design continuity• Potential for conflicts with donor expectations
<p>5 Package Coordination</p> <p>Require designers and CMs to better coordinate early packages with the balance of design.</p>	<ul style="list-style-type: none">• Cost savings (eliminate paying a change order premium for scope gaps)	<ul style="list-style-type: none">• May entail additional time and resources (design/CM fees) during design/preconstruction phase

Recommendations

Recommendation	Potential Benefits	Implementation Challenges
<p>6 Process Standardization</p> <ul style="list-style-type: none">• Develop a comprehensive and coordinated set of project management procedures.• Develop and deliver formal training to all PM/CAM staff on project management practices.	<ul style="list-style-type: none">• Increased consistency in how projects are managed	<ul style="list-style-type: none">• Time and resources needed to develop processes and training program• Potential resistance from PM/CAMs that are accustomed to having considerable latitude in managing projects
<p>7 Change Order Management</p> <p>Develop and implement a detailed change order management process to promote consistency in the assessment of contractor change order proposals (e.g., Is it a valid change? Is the cost reasonable?)</p>	<ul style="list-style-type: none">• Potential cost savings through more effective negotiation• Increased consistency in the management of projects• Increased accountability for the cost performance of projects	<p>N/A – this is an essential project management function</p>
<p>8 Cost, Schedule & Risk Management</p> <ul style="list-style-type: none">• Monitor and report out on cost and schedule variances and trends.• Maintain a project risk register to promote open and transparent communication of factors that could compromise successful project delivery.	<ul style="list-style-type: none">• Improved cost control and forecasts at completion• Enhanced ability to proactively make decisions in response to potential project overruns or schedule delays	<p>Effective implementation of this essential project management function may require investment in PM training in cost and schedule trending, variance analysis and forecasting, and risk management</p>

Recommendations

Recommendation	Potential Benefits	Implementation Challenges
<p>9 Optimize PM Staffing Levels</p> <p>Align PM staffing levels to sponsor requests and project needs.</p>	<ul style="list-style-type: none">• Potential for some savings in internal PM fees.	<ul style="list-style-type: none">• Potential reduction in project oversight and quality assurance
<p>10 Lessons Learned</p> <p>Develop and implement a formal process for capturing and disseminating lessons learned from projects.</p>	<ul style="list-style-type: none">• Improved capture and transfer of institutional knowledge	<ul style="list-style-type: none">• Finding time at the end of projects to engage the necessary participants• Can be challenging to obtain candid feedback, particularly from sponsors and external parties (e.g., designers and CMs)• Ensuring that identification of lessons-learned is not viewed as a “blame-game” but as an opportunity to learn from past projects

Questions?



Remarks by the Senior Vice President



