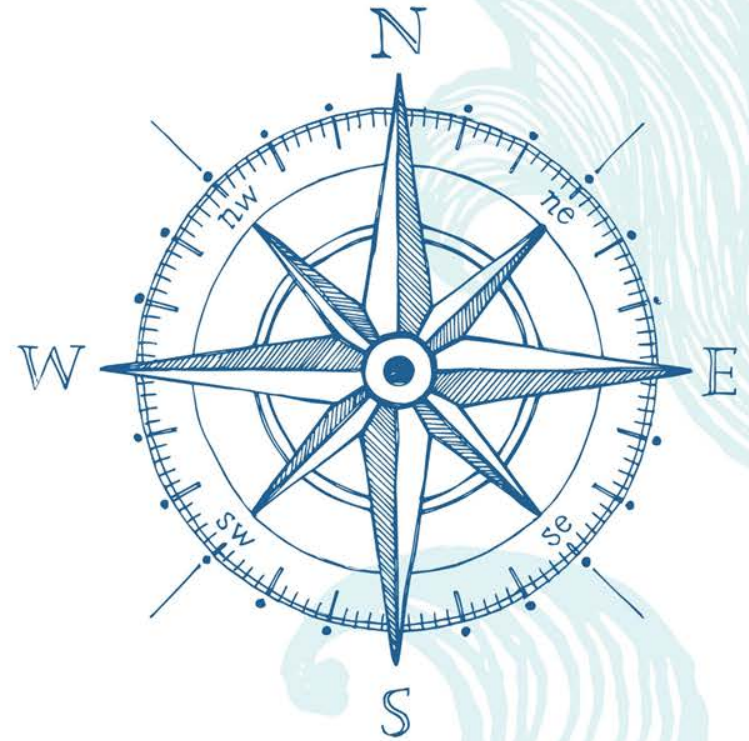


Should I Stay or Should I Go? Evaluating the Replacement/ Renovation Clash



Learning Outcomes



- Recognize and use acceptable evaluation tools available for decision-making.
- Analyze the costs and benefits associated with renovation and relocation and be able to use that analysis to present viable options to campus decision-makers.
- Evaluate programming data and understand how to best use that data to make objective choices between renovation and new construction.
- Employ best practices relating to the development and use of surge space during renovation and relocation.



Meet & Greet



Which is the Renovation?



New building – Wichita State University



New building – College of Lake County



Renovated airplane hangar – University of Minnesota



New building – Cal State Long Beach

What is the space efficiency (ASF/GSF) increase for new construction vs renovation?

A. 0-2%

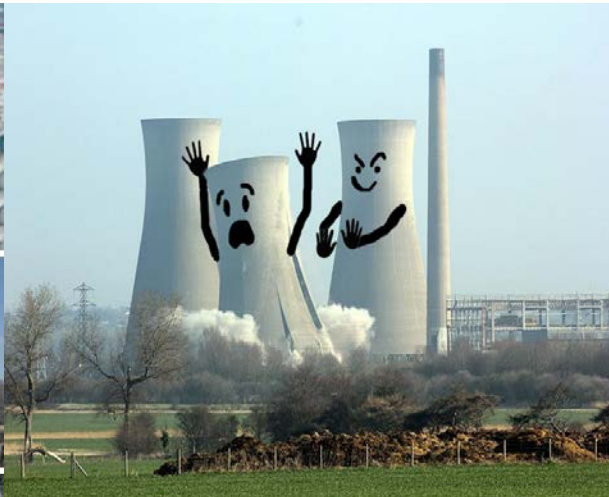
B. 2%-4%

C. 4%-8%

D. 8%-16%

**What is the expected cost savings
to gut and renovate a building vs tear down and build new?**

- A. 10%
- B. 25%
- C. 50%
- D. It depends...



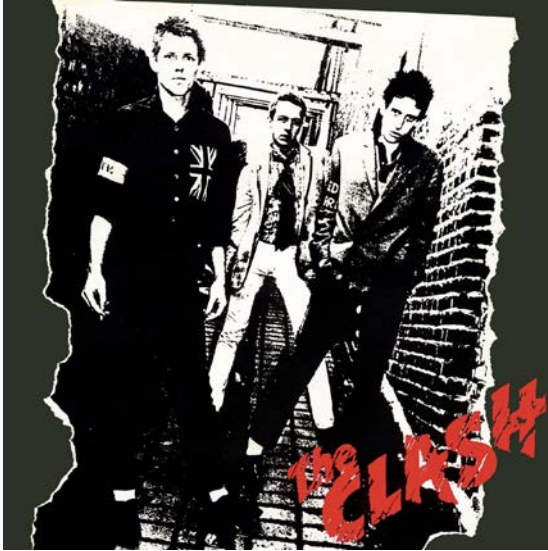
Limiting carbon emissions

How much more CO₂ is emitted
from a building replacement than a renovation?

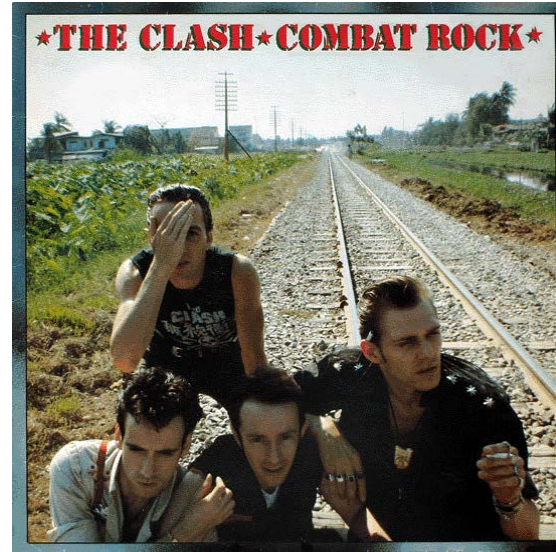
- A. 50%
- B. 100%
- C. 500%
- D. 800%

Which Clash album contained the song “Should I Stay or Should I Go?”

A.



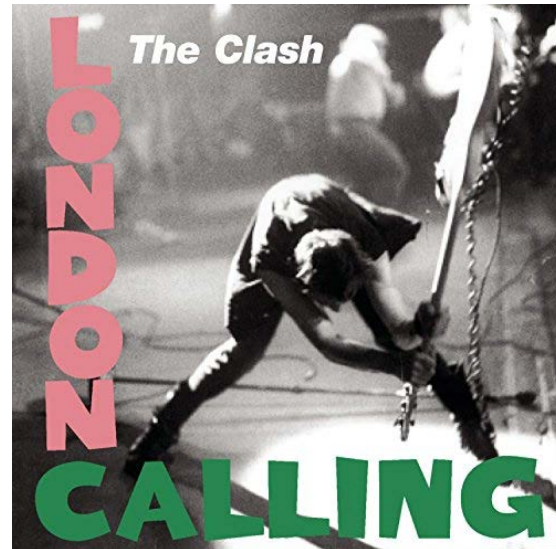
B.



C.



D.



**What is the most critical factor to achieve
in your academic renovation / replacement project?**

A. Cost

B. Budget

C. Schedule

D. Program

E. Sustainability

What is currently the fastest escalating component of a construction project?

A. FF&E

B. Structural

C. Technology

E. MEP

What is most likely trouble in a renovation project?

- A. ADA Compliance**
- B. Hazardous Materials**
- C. As-builts not correct**
- D. Seismic Issues**
- E. Utility Interconnections**
- F. All of the above**

Match the before and after images.



Which is the Renovation?



New building – Wichita State University



New building – College of Lake County



Renovated airplane hangar – University of Minnesota



New building – Cal State Long Beach

Answer: C

What is the space efficiency (ASF/GSF) increase for new construction vs renovation?

A. 0-2%

B. 2%-4%

C. 4%-8%

D. 8%-16%

Answer: A

**What is the expected cost savings
to gut and renovate a building vs tear down and build new?**

- A. 10%
- B. 25%
- C. 50%
- D. It depends...



Answer: D

Limiting carbon emissions

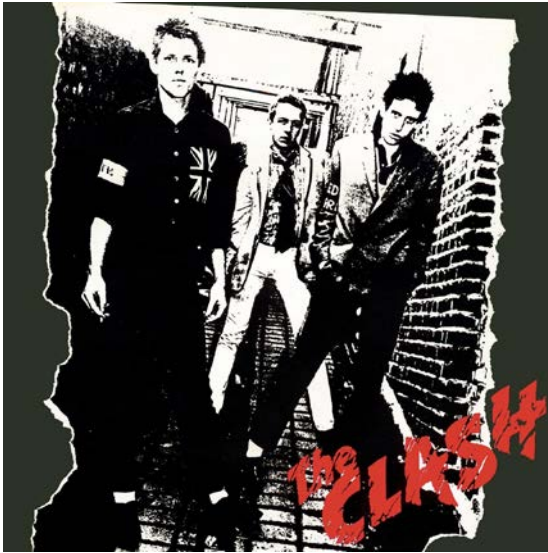
How much more CO₂ is emitted
from a building replacement than a renovation?

- A. 50%
- B. 100%
- C. 500%
- D. 800%

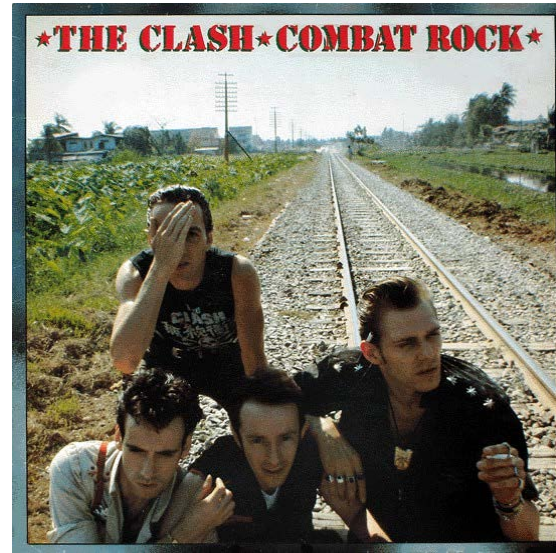
Answer: D

Which Clash album contained the song “Should I Stay or Should I Go?”

A.



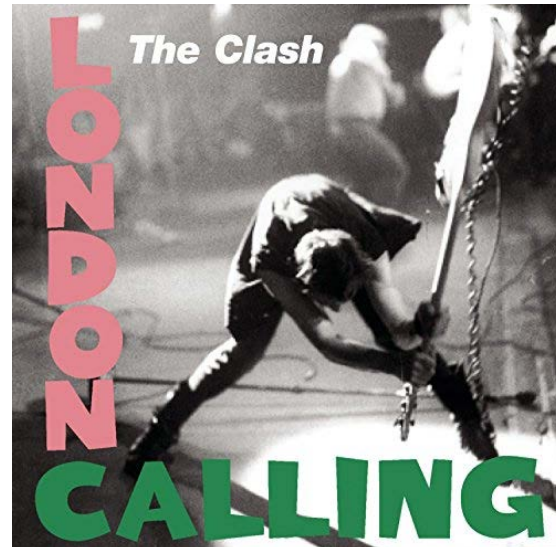
B.



C.



D.



Answer: B

**What is the most critical factor to achieve
in your academic renovation / replacement project?**

A. Cost

B. Budget

C. Schedule

D. Program

E. Sustainability

Answer: D

What is currently the fastest escalating component of a construction project?

A. FF&E

B. Structural

C. Technology

E. MEP

Answer: B

What is most likely trouble in a renovation project?

- A. ADA Compliance**
- B. Hazardous Materials**
- C. As-builts not correct**
- D. Seismic Issues**
- E. Utility Interconnections**
- F. All of the above**

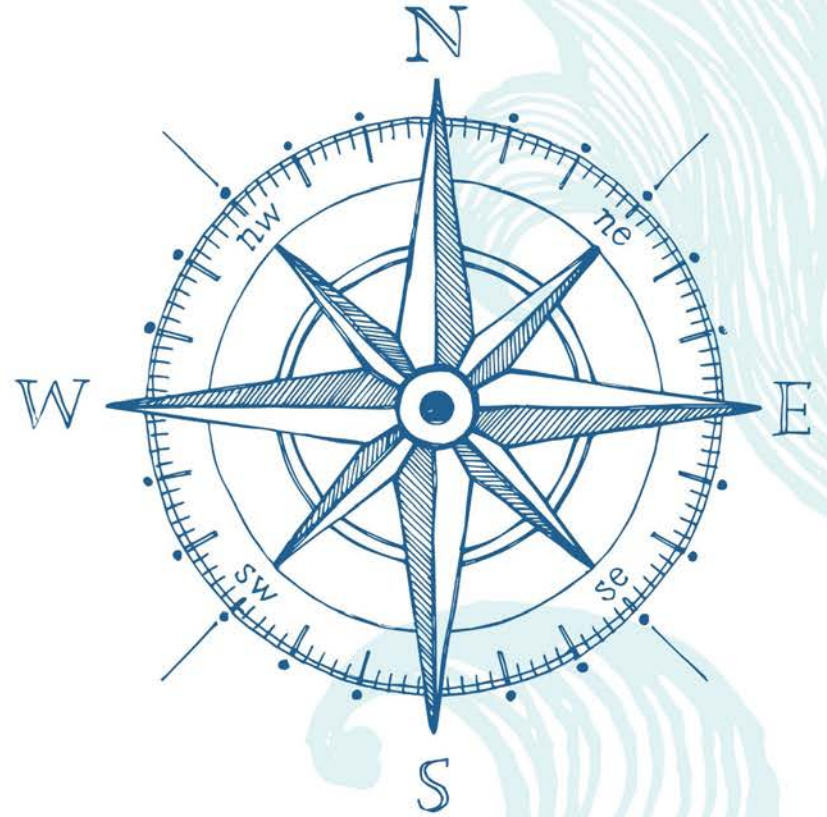
Answer: F

Match the before and after images.



Answer: A-3, B-1, C-2

context



A black and white photograph of construction workers on a site. In the foreground, four men wearing hard hats and work clothes are looking towards the camera. The background shows a complex structure of steel beams and scaffolding, suggesting a large-scale construction project.

CSU Facilities

- **Mid-Century Building Boom:** Majority of CSU Campuses were founded 1947-1965

Los Angeles, Sacramento, Long Beach, Fullerton, East Bay, Stanislaus, San Fernando Valley, Sonoma, San Bernardino, Dominguez Hills, and Bakersfield

- **Renovation is in Your DNA:** Entire campuses repurpose existing facilities

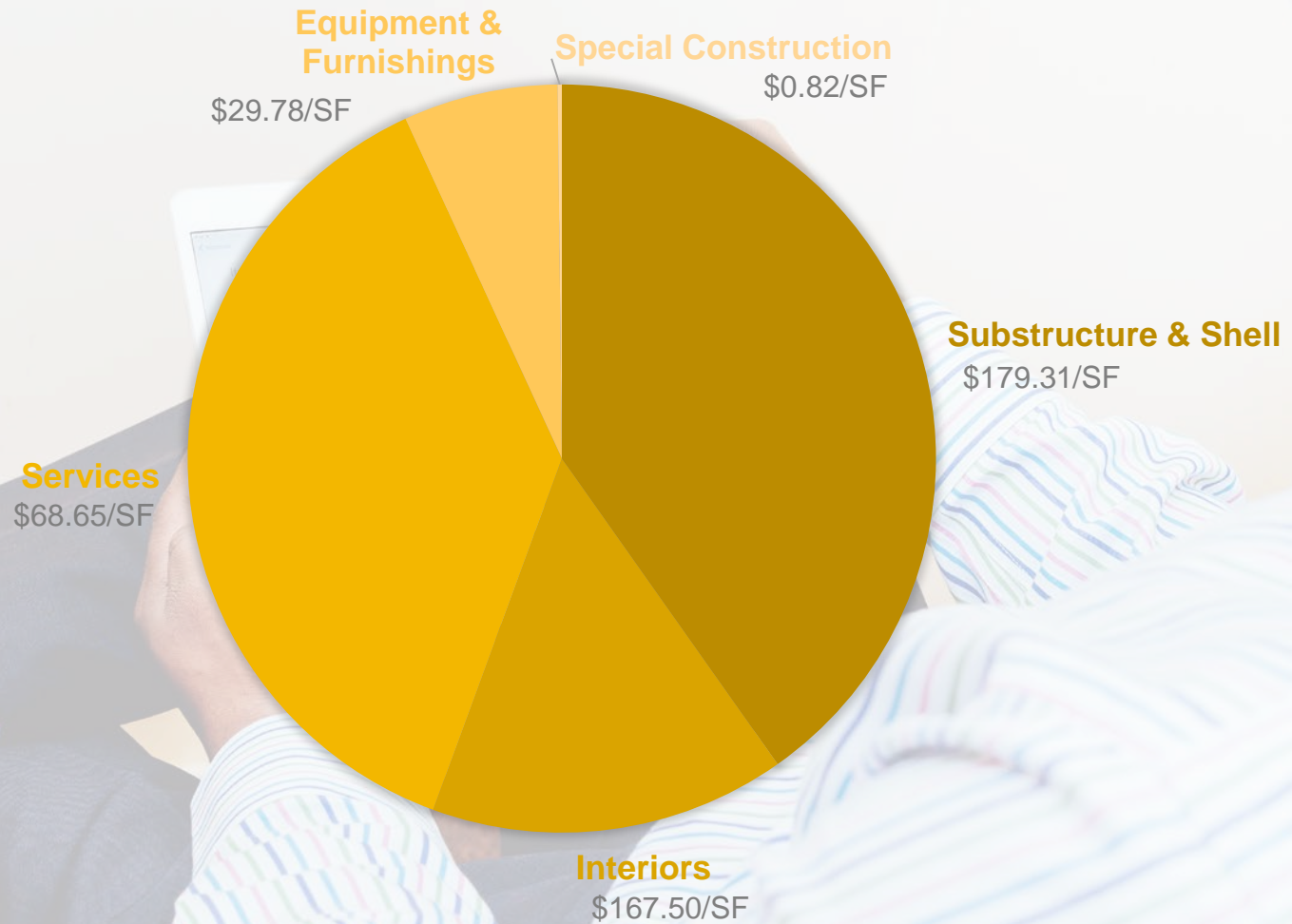
Monterey Bay & Channel Islands



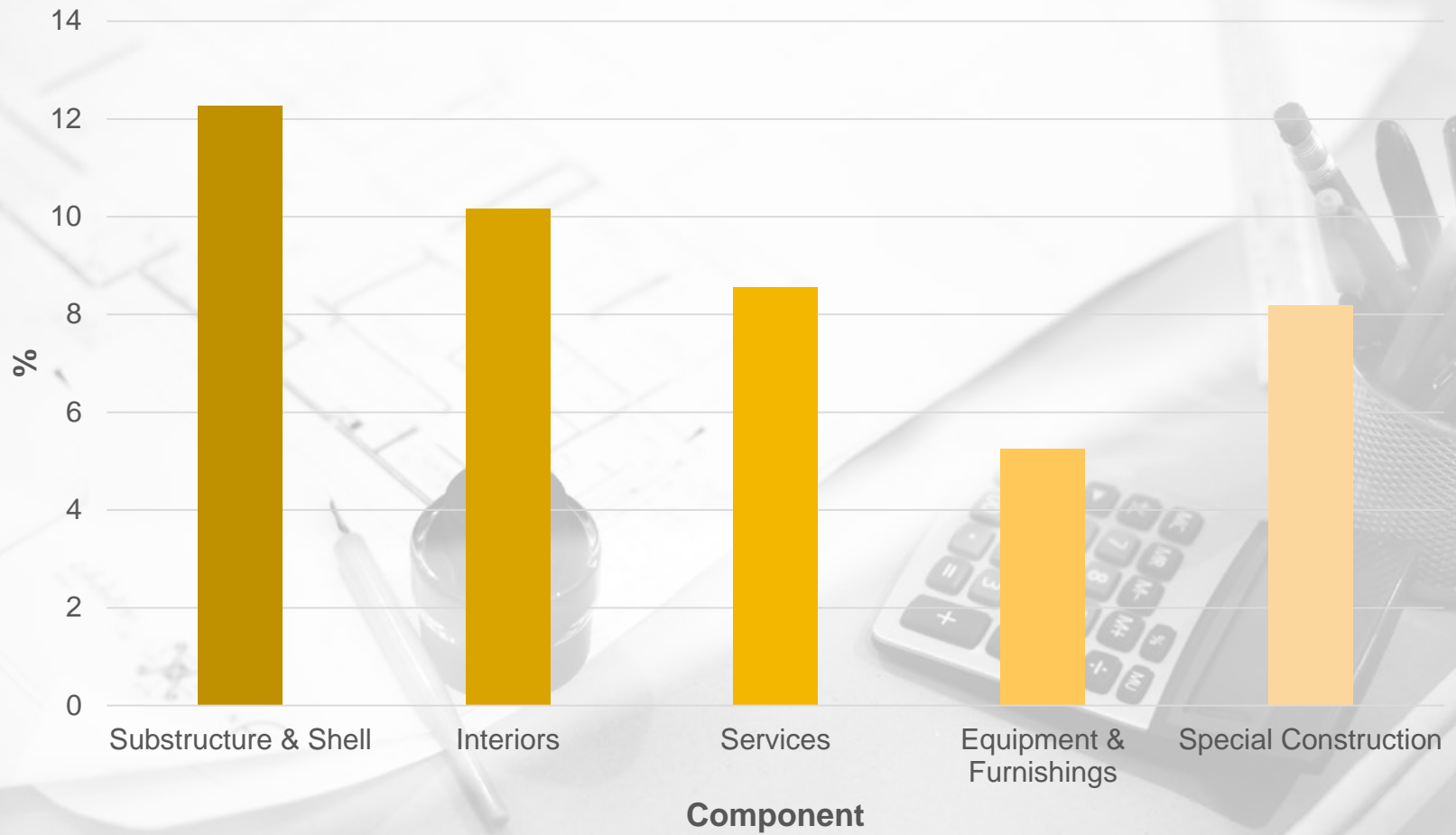
Cost Context

- Construction costs at their peak
- Exterior enclosure and structure are escalating fastest
- Renovation may be better return on investment

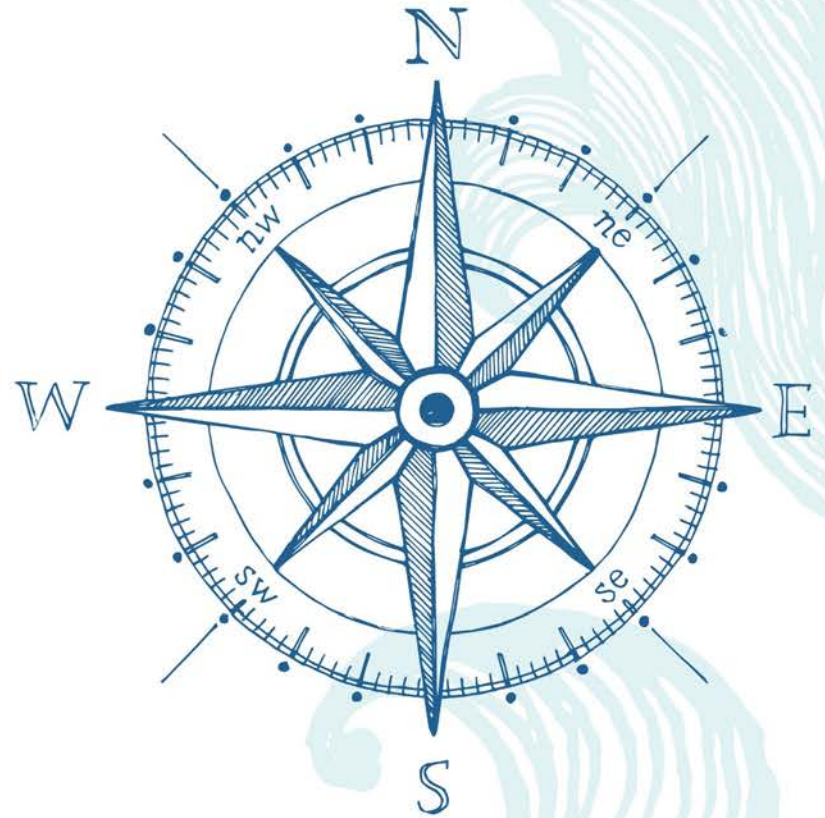
Average Component Cost



Cost Escalations 2017-2018



Student Success Center





Campus Character







Friendship Walk

Central Quad



Peterson Hall 2





CALIFORNIA STATE UNIVERSITY LONG BEACH



A New Presence





HAWKEYE
909-574-3819





Orientation



Overcoming Challenges

- 1950s As-Builts
- Lead Abatement
- Concrete Shear Walls
- Surge Space

Accessible





Existing Conditions

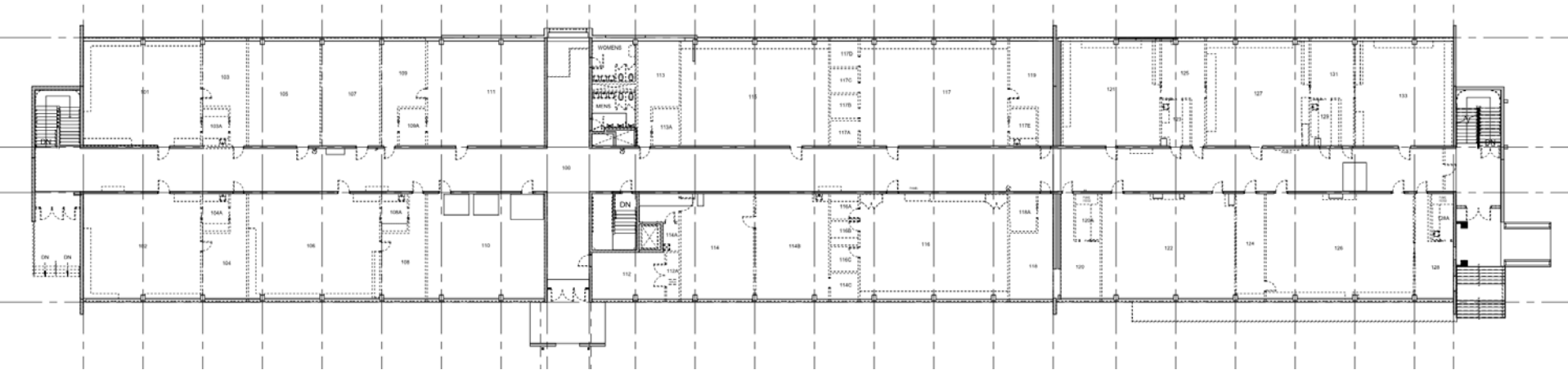


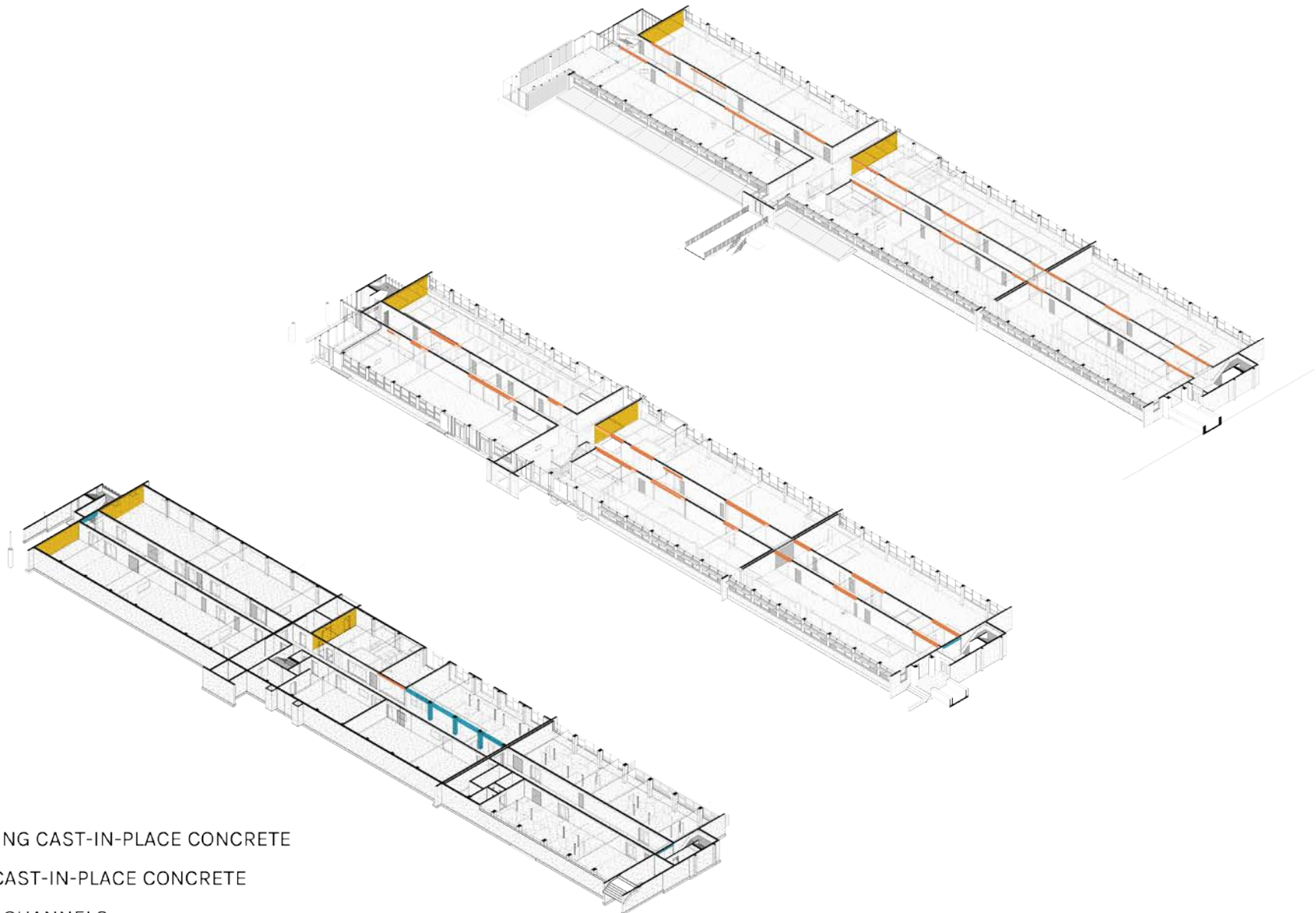
Abatement










Rigid Floor Plan





-  EXISTING CAST-IN-PLACE CONCRETE
-  NEW CAST-IN-PLACE CONCRETE
-  STEEL CHANNELS
-  SHOTCRETE OVER EXISTING CAST-IN-PLACE CONCRETE
-  FIBER MESH

Fluid Floor Plan



Progress





Peterson Hall 2





Accessible



Dynamic & Active

Murphy Access Center

THANK YOU TO OUR DONORS FOR THEIR GENEROUS SUPPORT

give

LIFE Project

gro

share

succeed

tickle

Inspired to achieve success

Donna Wilson 2015

Mike Peterson 2016

Thomas Smith 2016

MAC Wall of Fame

As a single footstep will not make a path on the earth, so a single thought will not make a pathway in the mind. To make a new physical path, we walk; to gain a new mental path, we walk - vigorous and active. To make a deep mental path, we must think - constantly over them.

—Henry David Thoreau

Success Stories

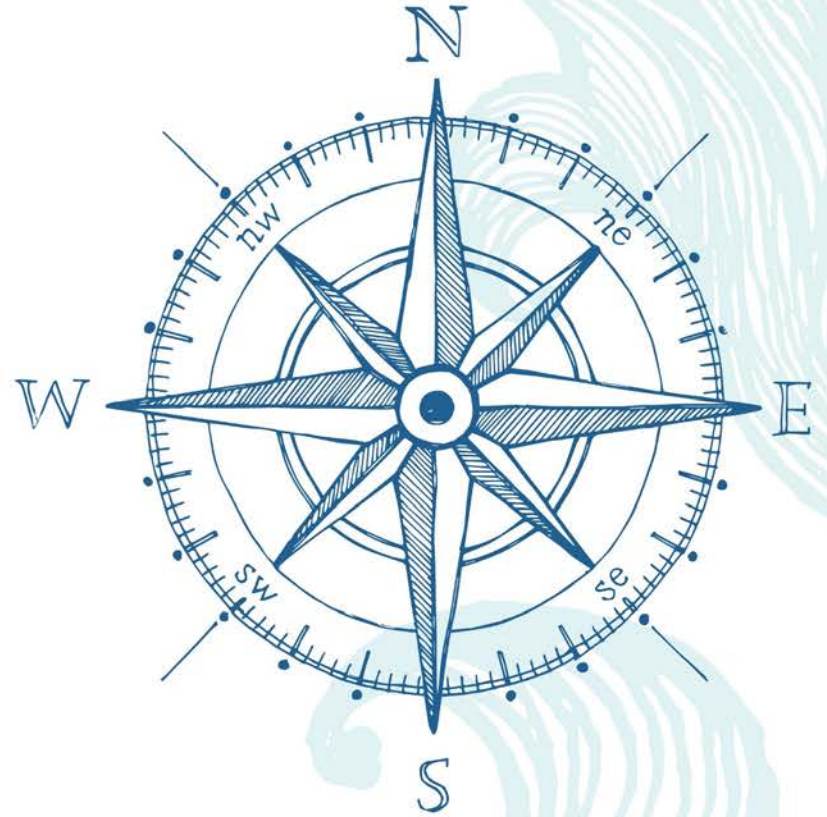
touch to begin

Surge Space



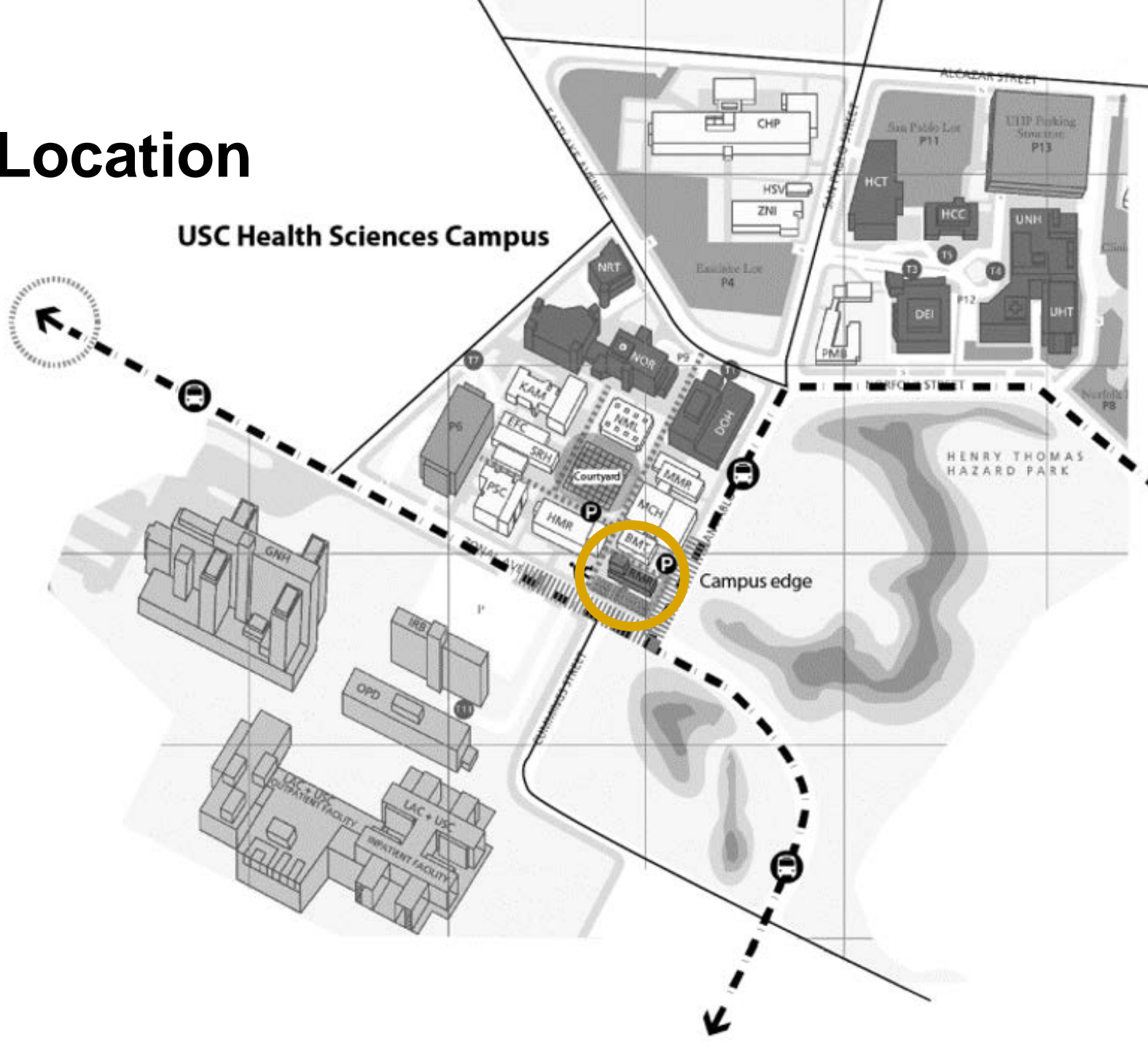
USC

Case Study

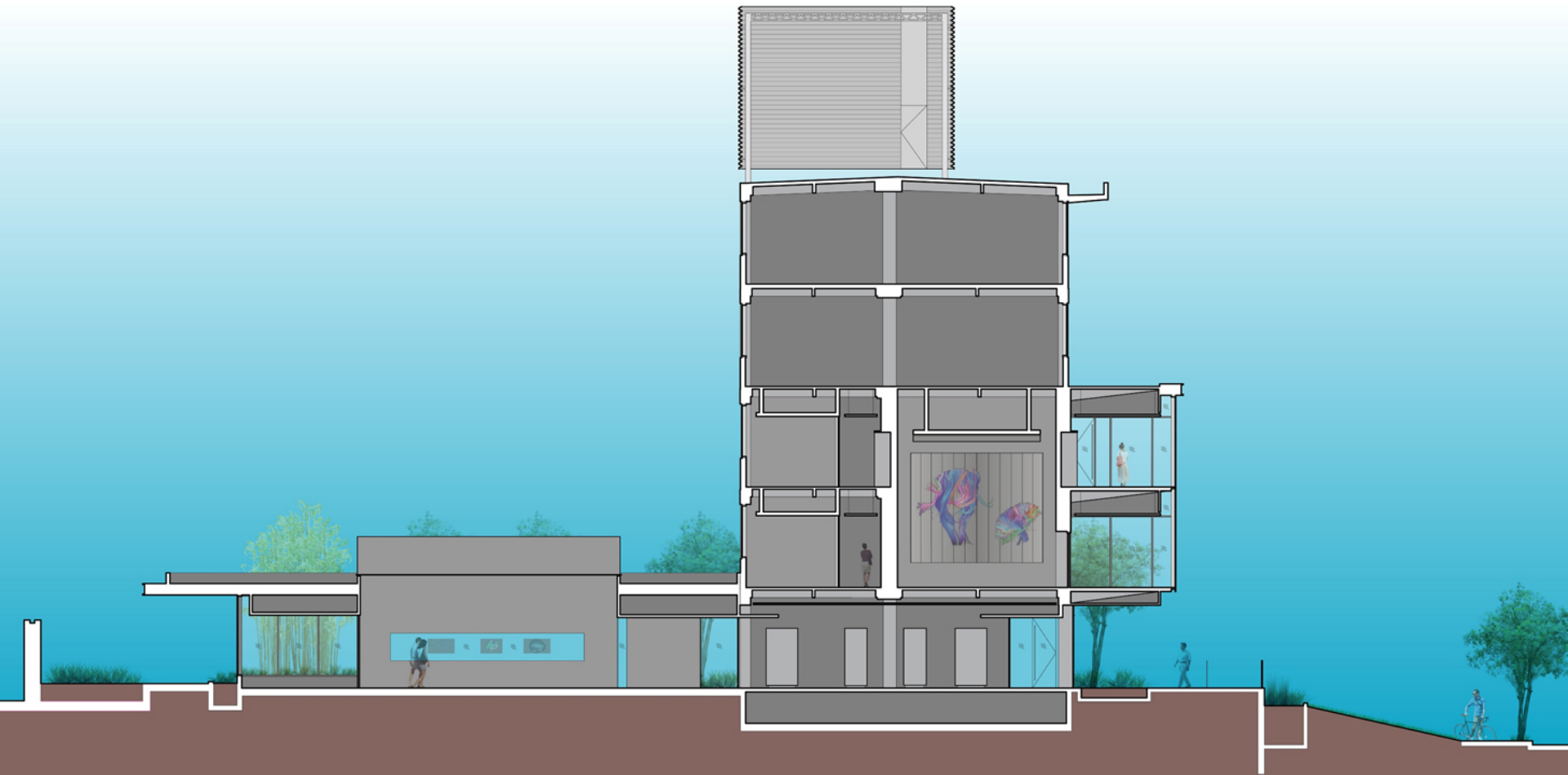




Key Location



Shell Space





New Gateway



USC
Mark & Mary Stevens Hall

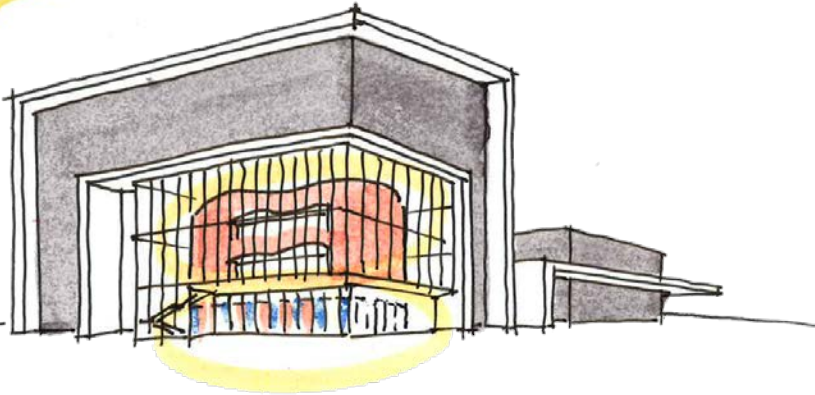
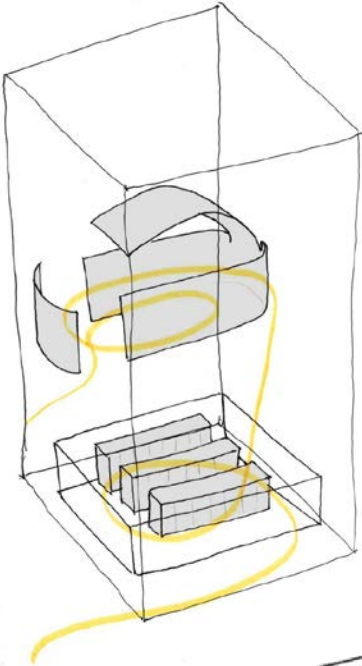


Overcoming Challenges

- Introverted Building
- New Tech, Old Shell



Introverted to Extroverted





STEVENS HALL

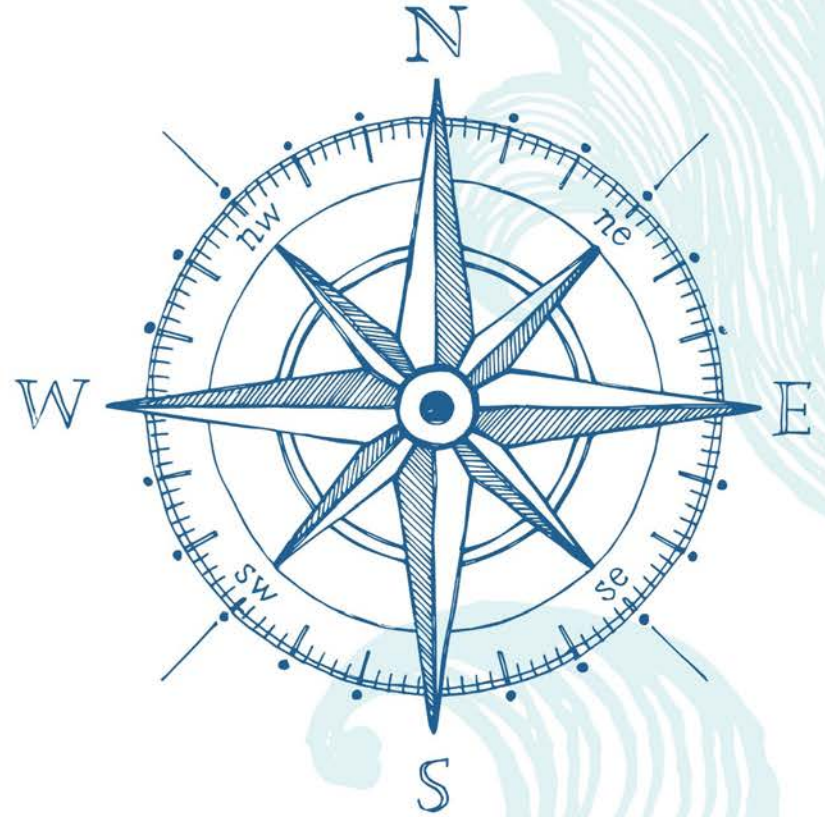
2025



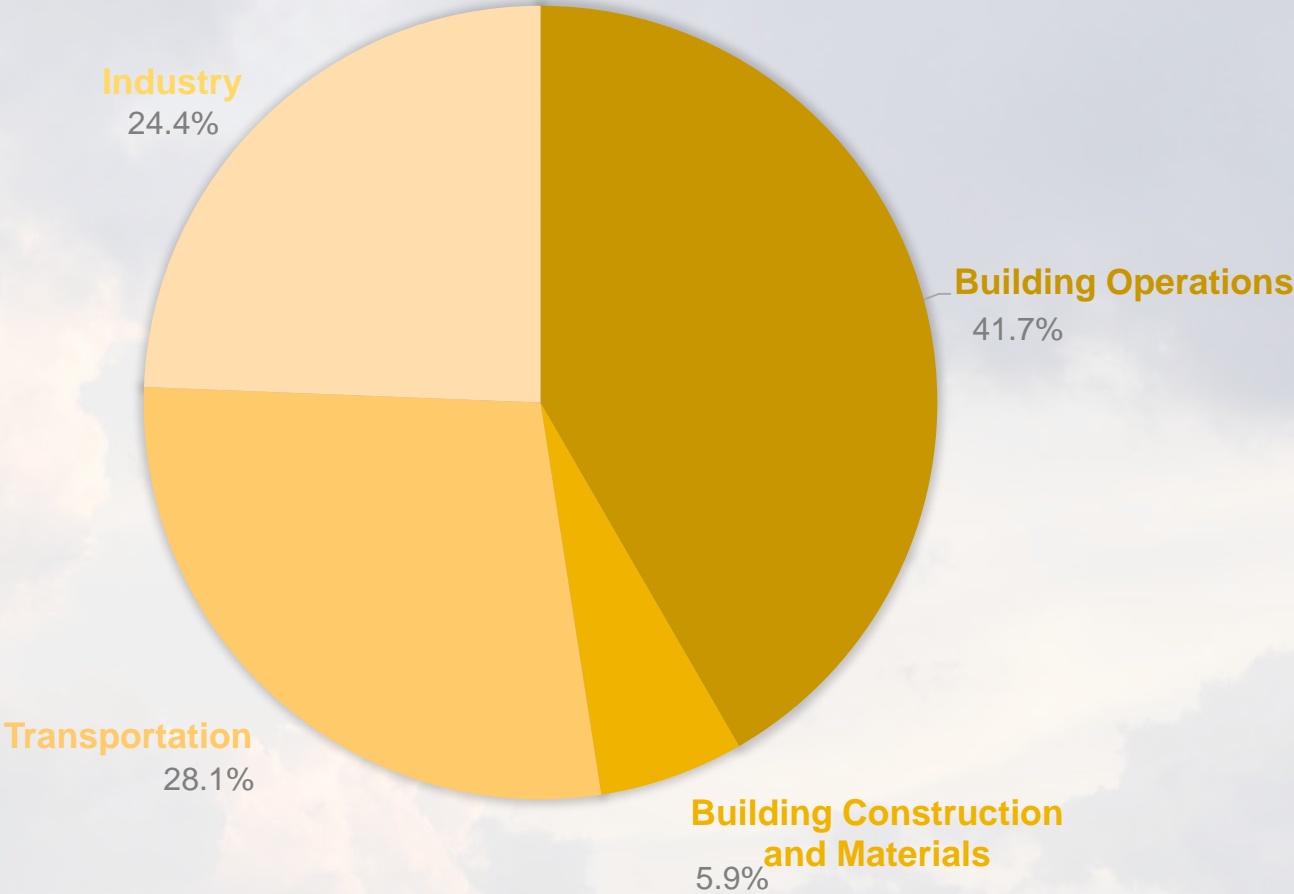
New Technology



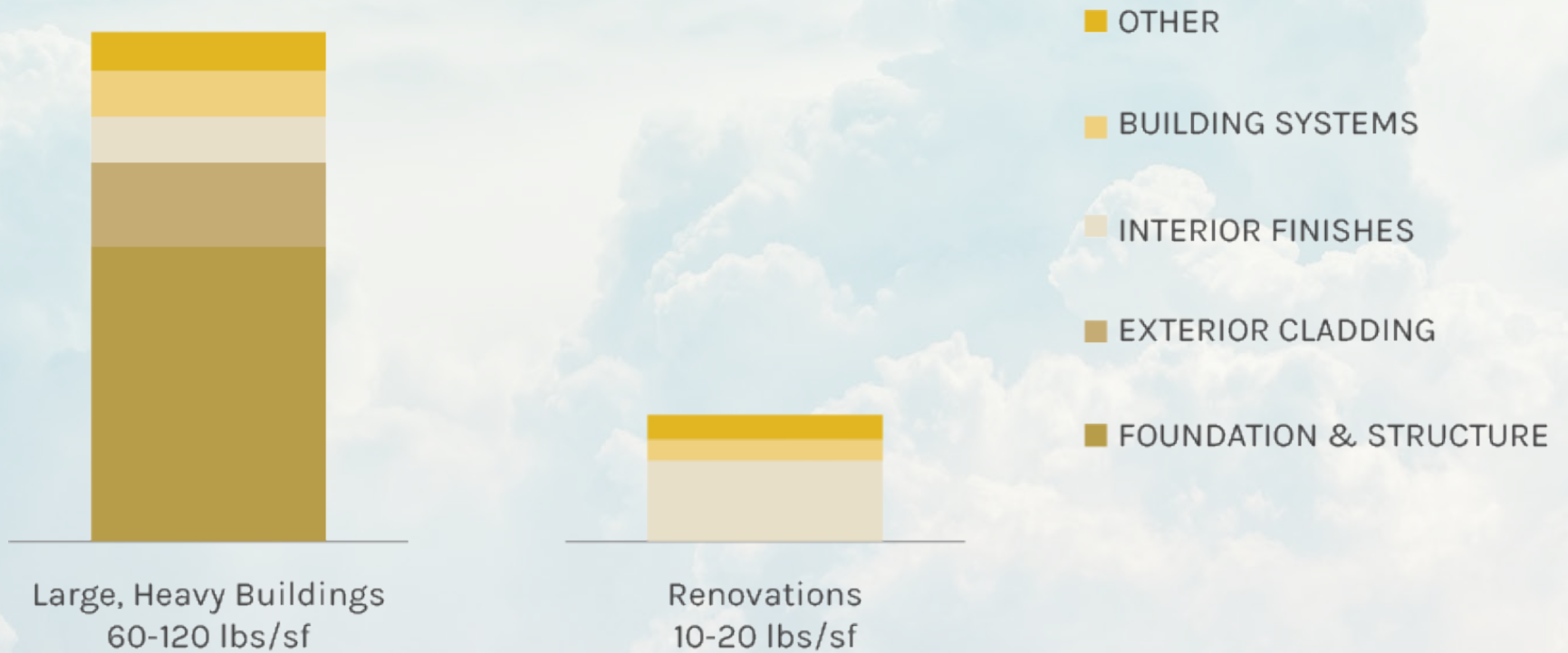
Inherently Sustainable



Energy Use by Sector



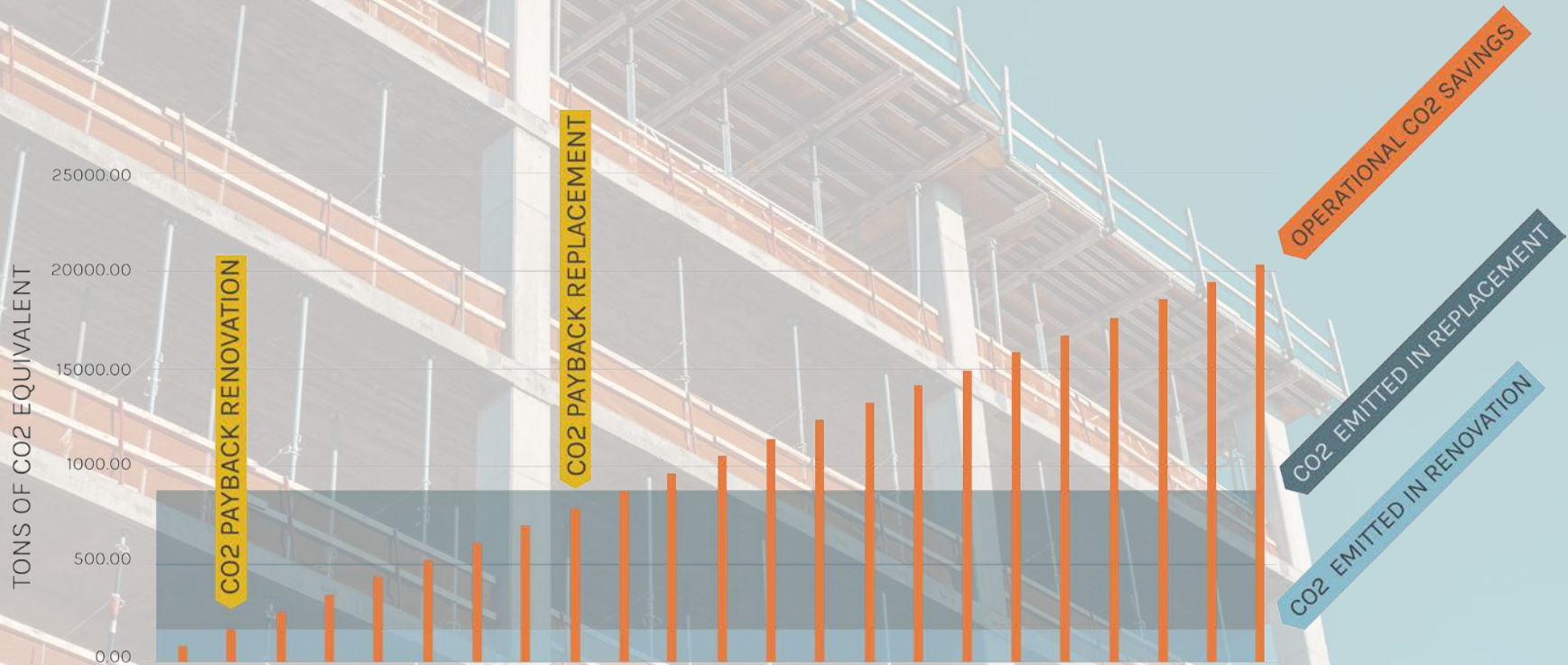
Carbon Emissions



CARBON EMISSIONS BY BUILDING TYPE AND BUILDING ELEMENT

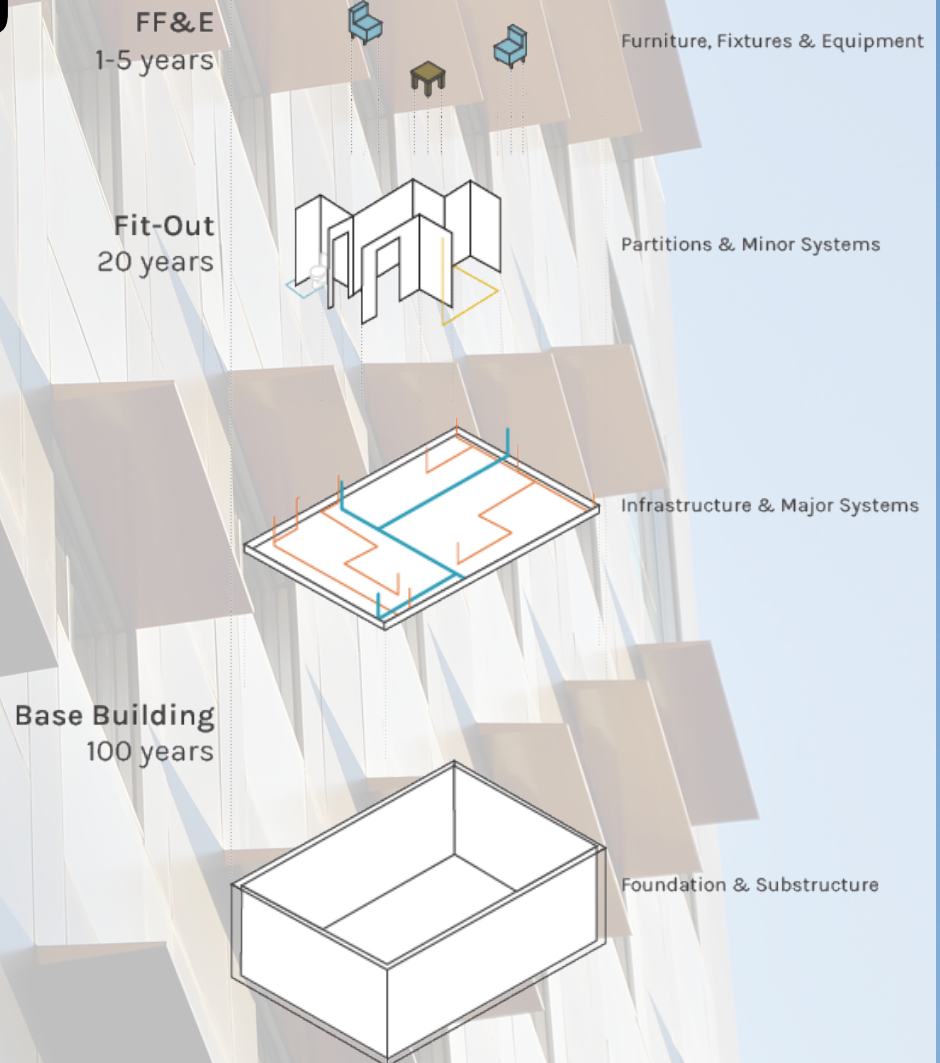
Embodied Carbon

Renovation activities expend 50-75% less embodied energy than new construction.



Adaptable Building

- Floor-to-Floor Heights
- Structural Capacity
- MEP Infrastructure
- Vertical Circulation
- Systemized Building Façade
- Should Flexibility be Required?





Questions?

