

An aerial photograph of a valley. In the foreground, a town with a mix of residential and commercial buildings is visible, along with a winding road and a small pond. The middle ground shows rolling hills and fields. In the background, a range of mountains with significant snow cover stretches across the horizon under a clear blue sky.

UC Merced Integrated Planning to Expand a Campus

Dan Feitelberg, Vice Chancellor for Planning and Budget
Abigail Rider, Assistant Vice Chancellor, Real Estate
Veronica Mendez, Assistant Vice Chancellor, Planning and Budget
Richard Cummings, Principal Planner
Irwin Band, Principal Planner
Gary Lowe, Principal Analyst

UC Budget and Planning Retreat
Wednesday, September 24, 2014
UCLA Lake Arrowhead Conference Center

University of California, Merced

Newest campus in UC System



University of California, Berkeley
First Graduating Class, 1873



University of California, Merced
First Graduating Class, 2009

Berkeley
UNIVERSITY OF CALIFORNIA

1869

UCSF

1873

UCLA

1919

UCSB

1944

UC DAVIS
UNIVERSITY OF CALIFORNIA

1959

UC RIVERSIDE
UNIVERSITY OF CALIFORNIA

1959

UC San Diego

1964

UC IRVINE

1965

UNIVERSITY OF CALIFORNIA
SANTA CRUZ

1965

UC MERCED

2005

Context

The San Joaquin Valley

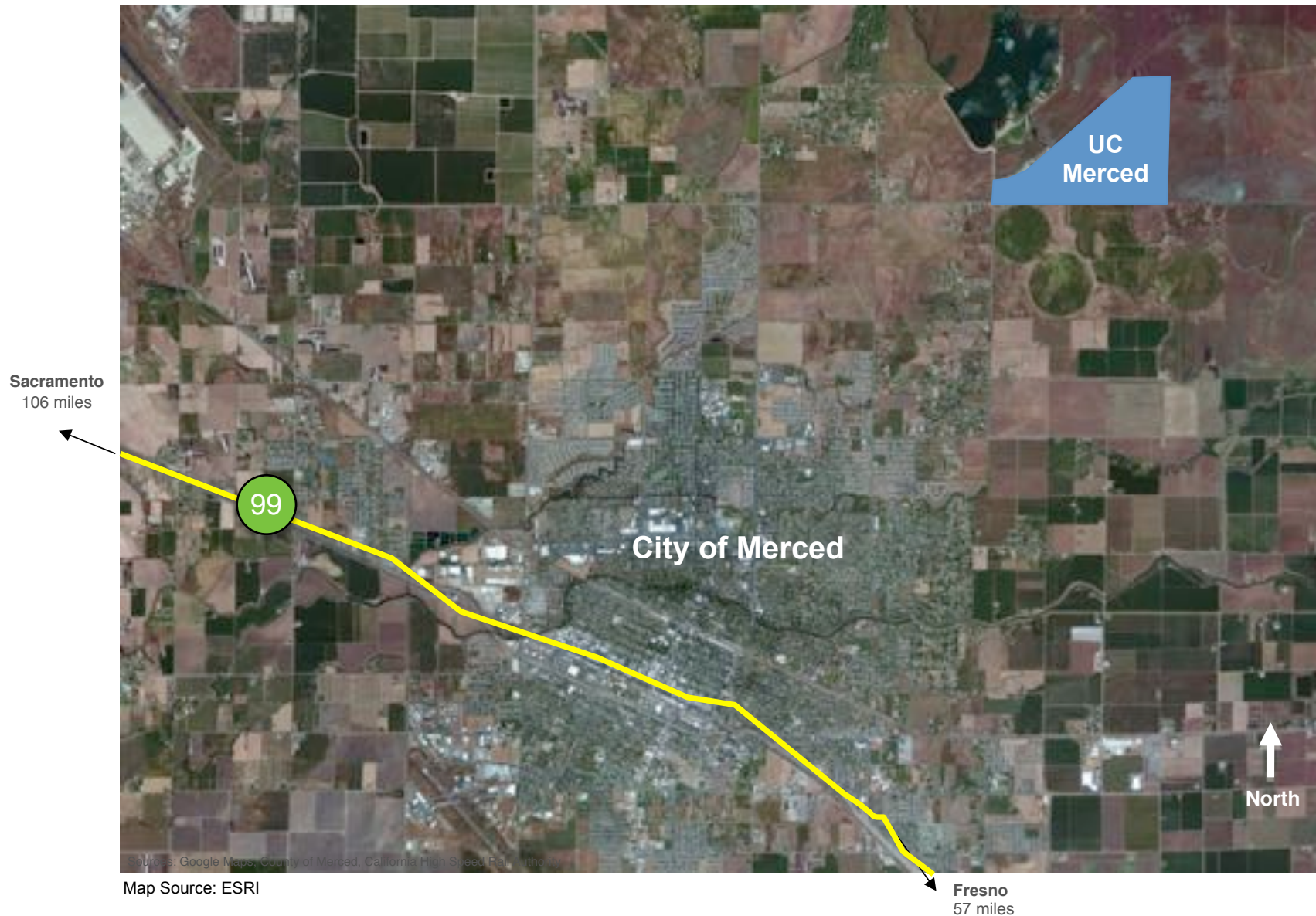
- **4 million people today**
9% of California's Population
- **9.4 million people by 2050**
19% of California's population
- Driven by birth rates and immigration
- California's fastest growing region

Source: Demographic Research Unit, California Department of Finance. State and County Population Projections by County, by Race/Ethnicity and by Major Age Groups, 2010-2060.



Regional Vicinity

Five miles from Downtown Merced

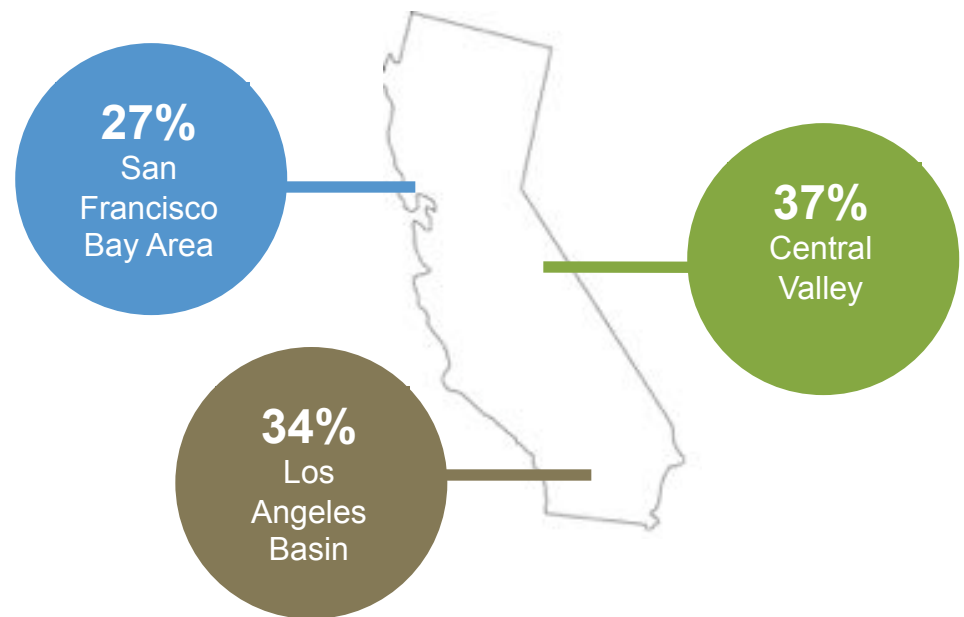


University of California, Merced

A Higher Education Success Story

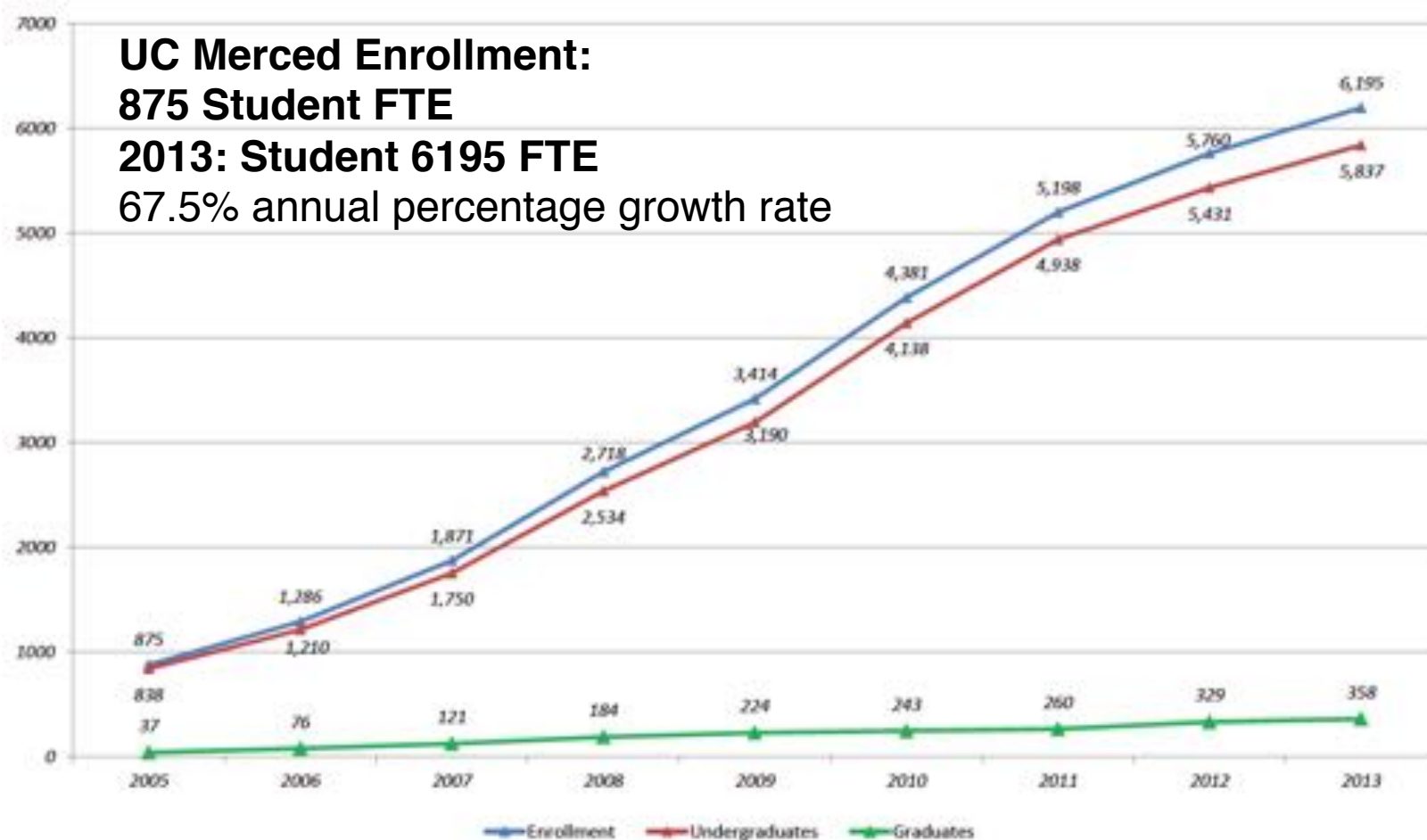
62% of undergraduates are the first in their families to attend a four-year university

Top Regions of Origin for UC Merced Undergraduates



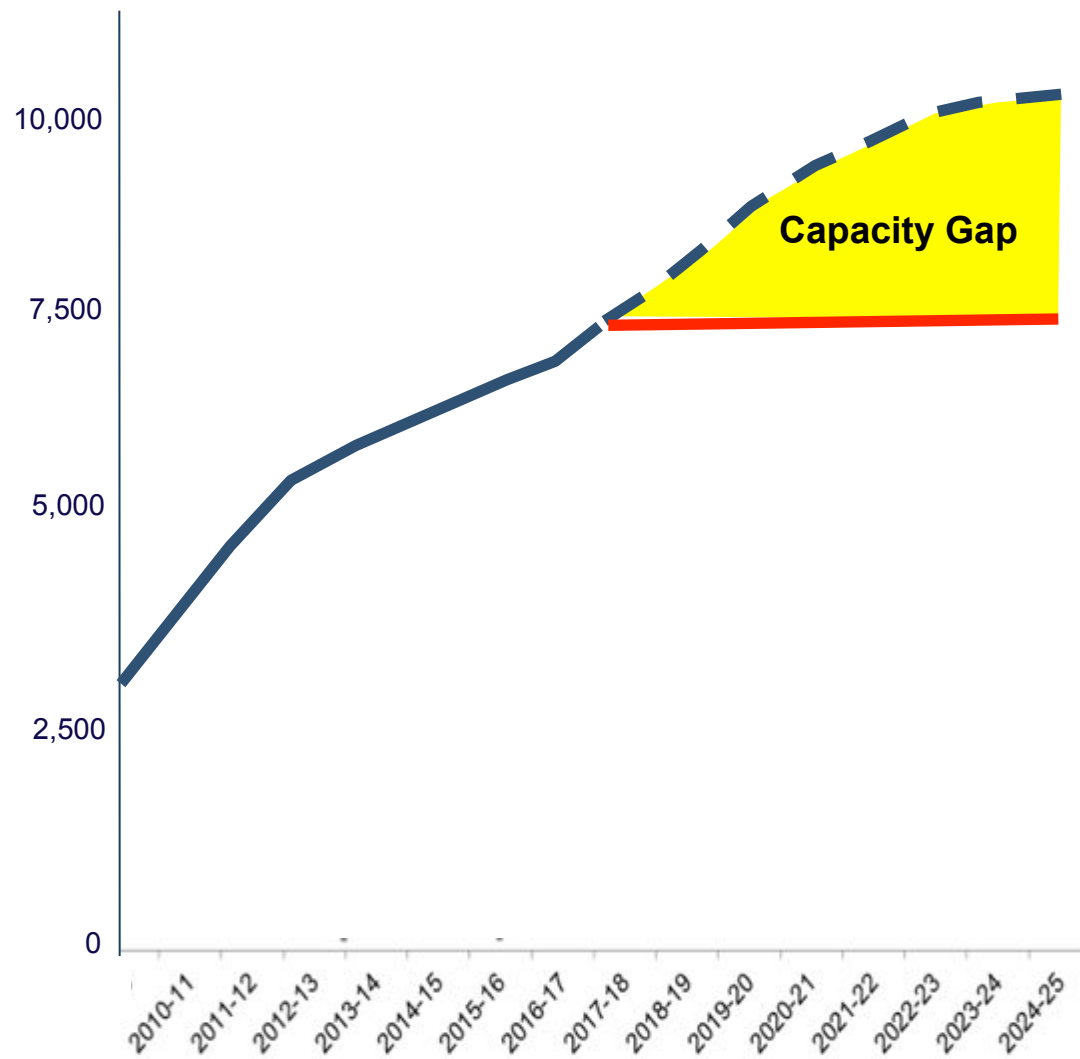
UC Merced is the fastest growing campus

UC Merced's role is to provide the system with the space, curriculum and faculty necessary to meet the system's obligation to provide affordable access to every eligible Californian



The Enrollment Challenge

Strong Demand, Limited Space



Source: UC Merced Long Range Enrollment Plan



Purpose of the 2020 Project

Ensuring Access and Affordability for the System



17,400
Applications
received for 1,600
undergraduate spots
for 2014-15 year

UC Merced's Growth Challenge

Academic Success of First Generation Students is tied to on-campus housing



Move in day, 2013

- More than 60% of UC Merced undergraduates are first generation students
- First-generation students have a higher probability of graduating if they live on campus, at a minimum, in the first year

Current Situation

- Students are tripled in double rooms
- Only 29% of undergraduates live on campus

Goal

Increase on-campus housing to at least house first-year undergraduates

UC Merced's Growth Challenge

Infrastructure from first phase is at its limits



The campus needs to expand horizontally and vertically

UC Merced's Growth Challenge

Parking is at capacity



Parking lots occupy developable land

To build another building in the first phase footprint, campus would have to sacrifice existing (insufficient) parking facilities

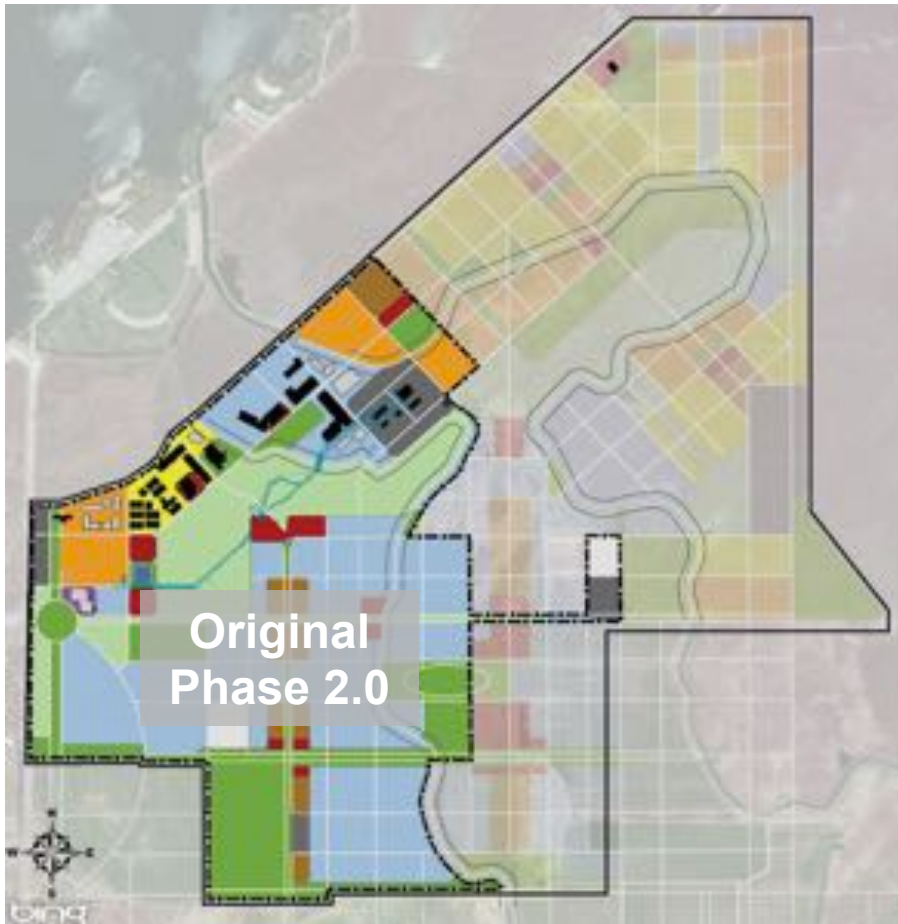


Parking is inadequate

Students are illegally parking across the street from the campus on private land and crossing a major county road to reach campus

Planning for UC Merced's growth

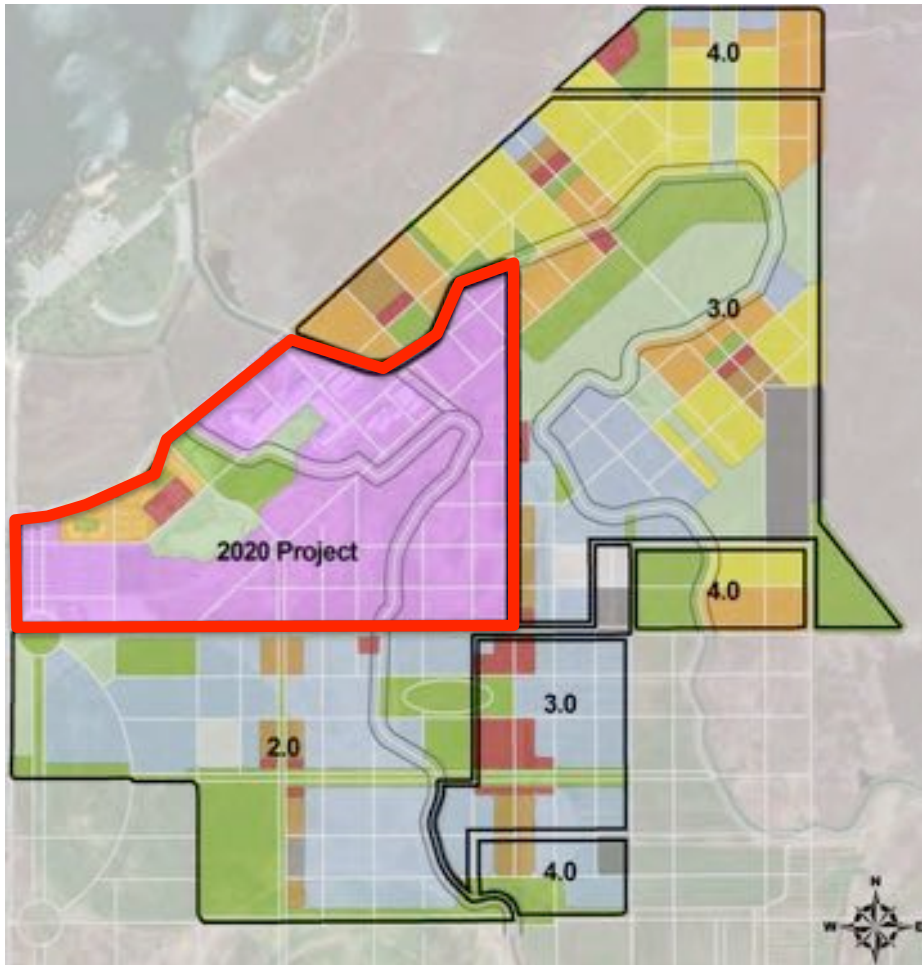
2009 Long Range Development Plan



- UC Merced's original Long Range Development Plan ("LRDP") envisioned phased growth
- Original Phase 2: 10,000 students on a 355 acre site

Planning for UC Merced's growth

2013 Long Range Development Amendment

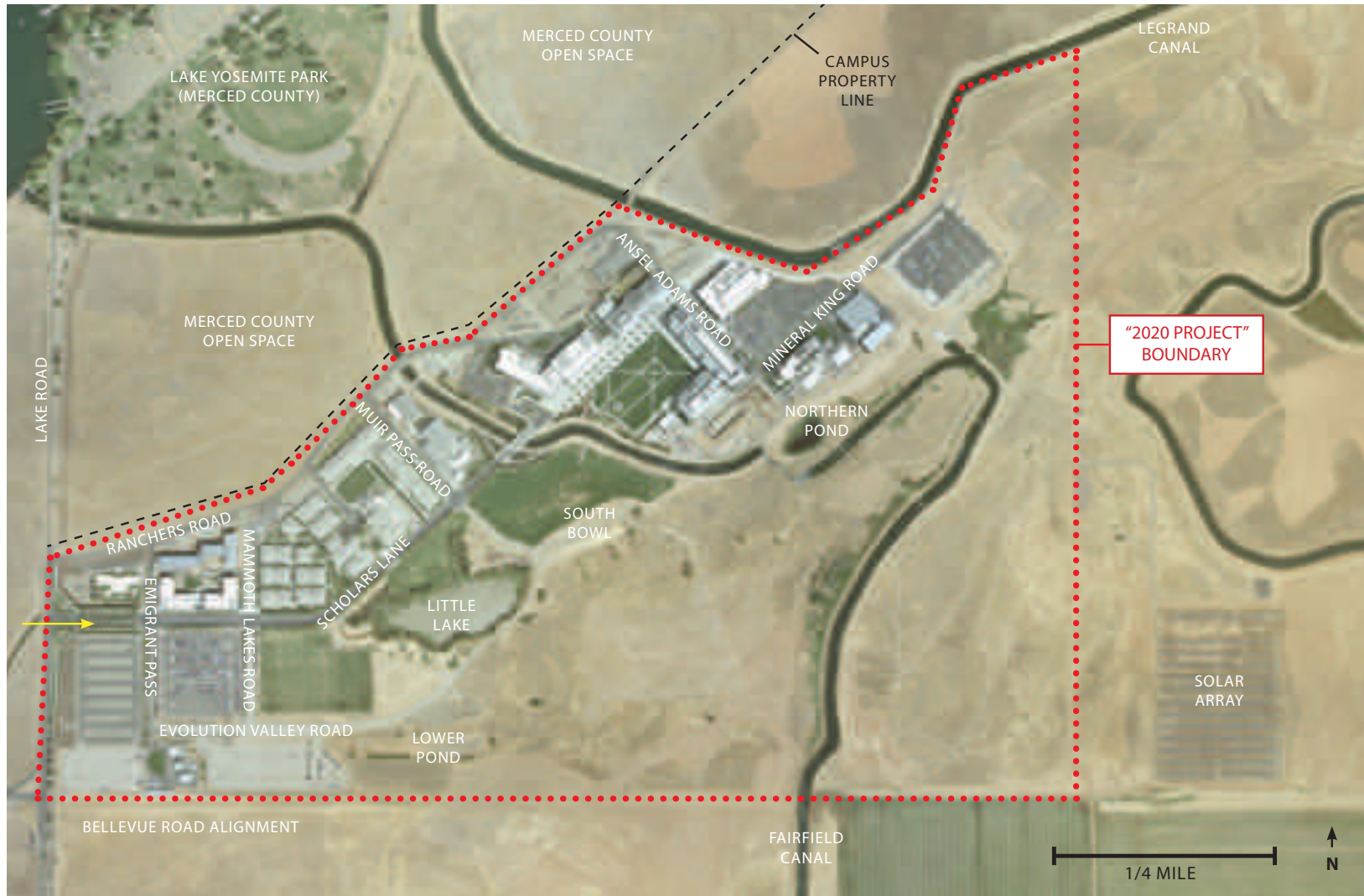


- Financial crisis caused California to terminate capital support to UC

Updated Goals

- Reduced developed area for next phase of campus based on new economic reality
- Recruit faculty with strong research credentials to provide an excellent education to UC Merced students and cement UC Merced's standing as a UC research university

2013 LRDP Amendment defined the site 219 acres, Owned by Regents and EIR approved

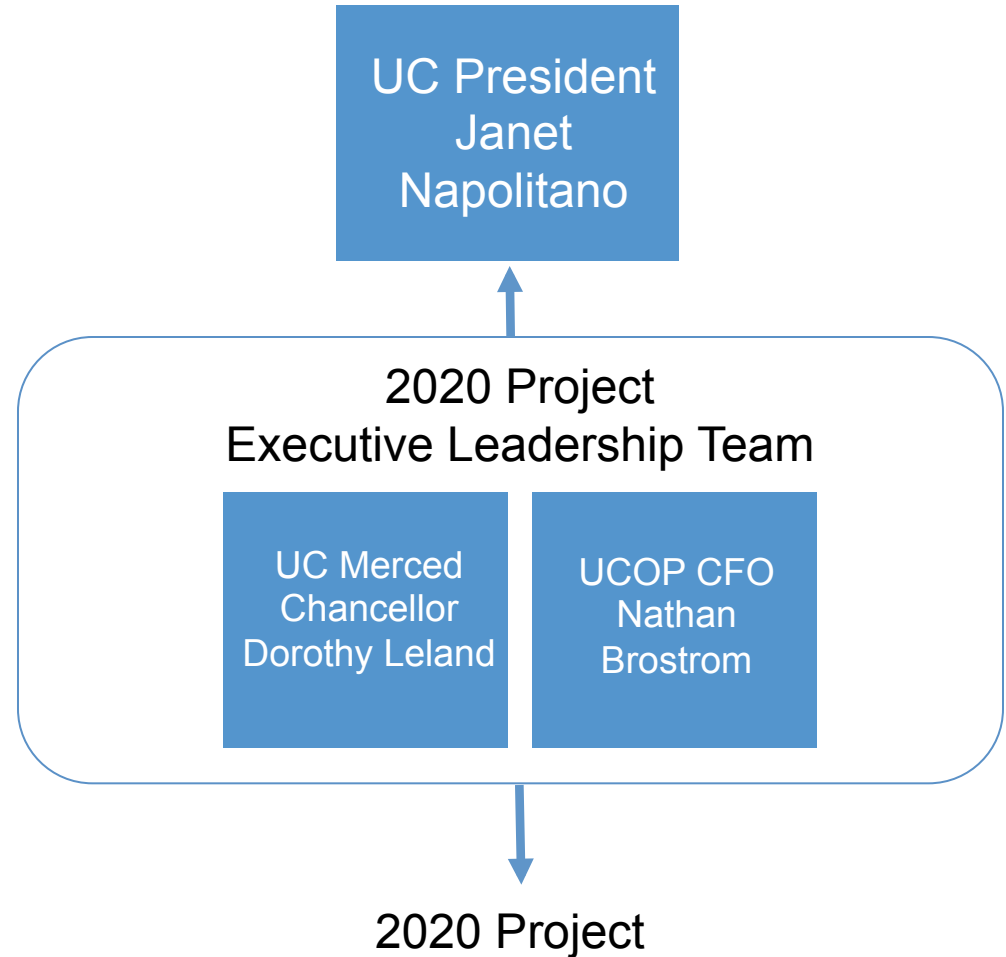


2020 Project Launched in 2013

A thoughtful, system supported initiative

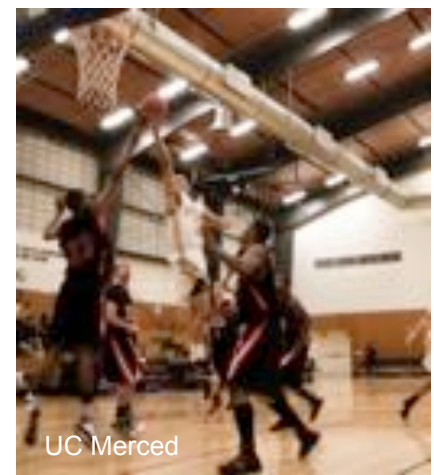
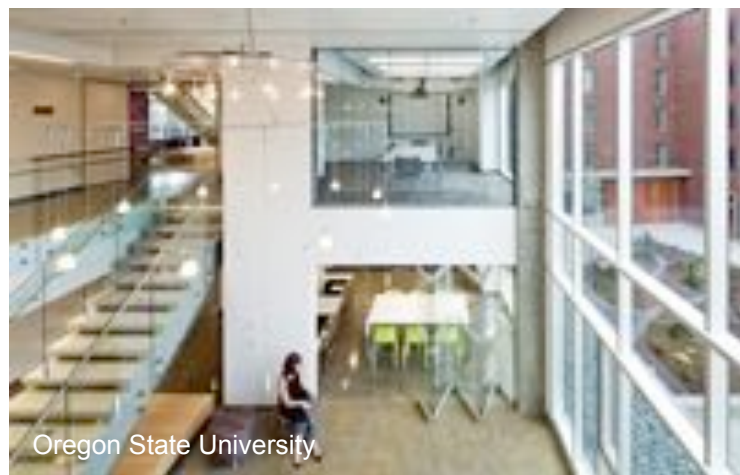


Expert Panel provided recommendations in 2012

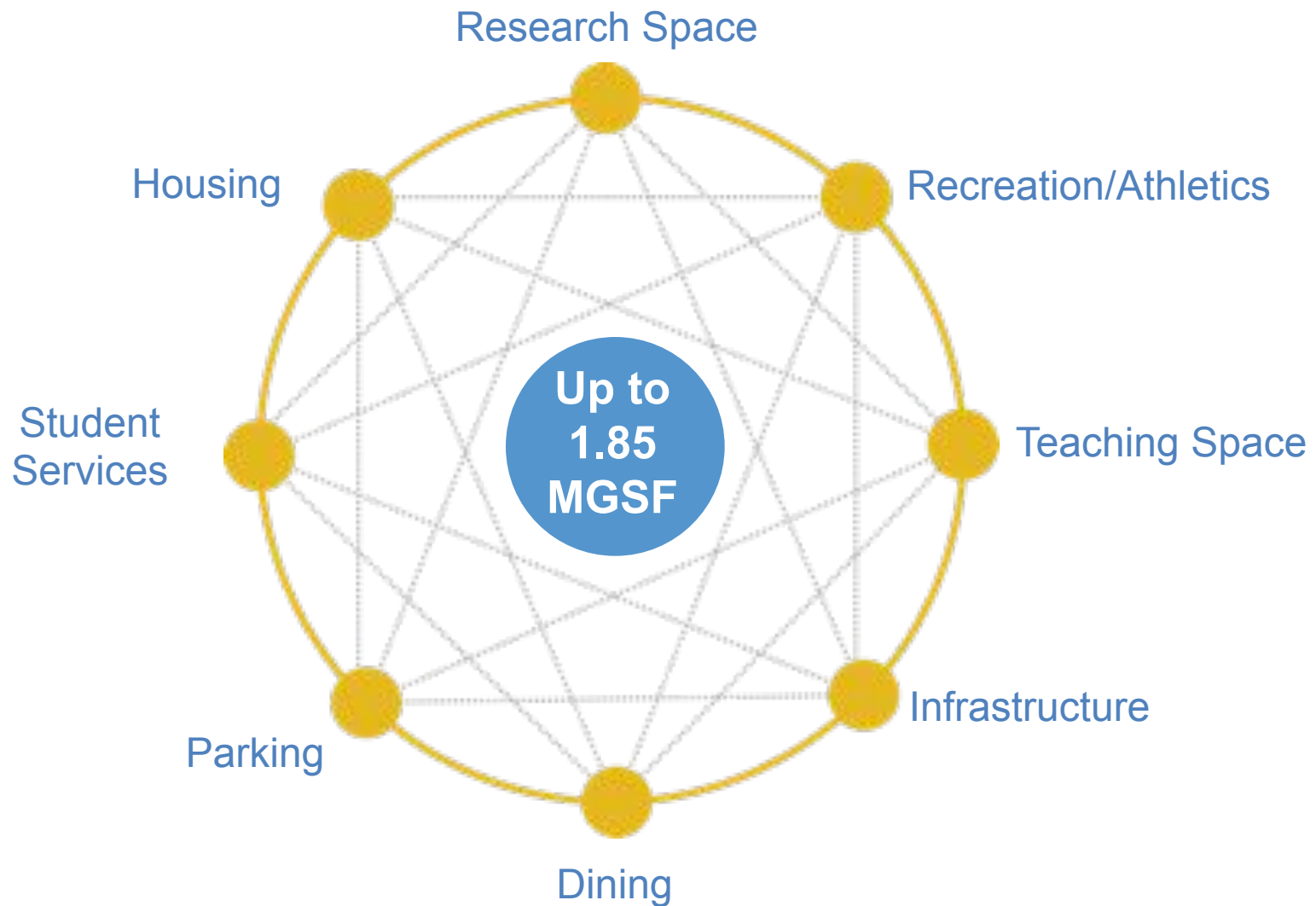


2020 Project Core Objective

A mixed-use, collaborative and sustainable campus to accommodate 10,000 students



2020 Project Program is under development Mixed Use and Aligned with Enrollment Plan



Enrollment Planning and the 2020 Project



Long Range Enrollment Plan (LREP)

A tool to project faculty, student and administrative growth

| Year | Undergraduate FTE | Graduate FTE |
|---------|-------------------|--------------|
| 2013-14 | 5726 | 375 |
| 2014-15 | 5659 | 475 |
| 2015-16 | 5877 | 568 |
| 2016-17 | 6291 | 659 |
| 2017-18 | 6733 | 747 |
| 2018-19 | 7356 | 847 |
| 2019-20 | 8071 | 937 |
| 2020-21 | 8662 | 1034 |

Challenges during Process

Stakeholder Coordination

Getting everyone at the table during summer timeframe

Competing Goals

- (e.g. Chancellor's 10% Goal for Graduate Students vs. UCOP Target of 12%)

Enrollment Projection Uncertainty

LREP Process occurred during earliest stages of 2020 Project

Space Planning and Program

CPEC used as a proxy

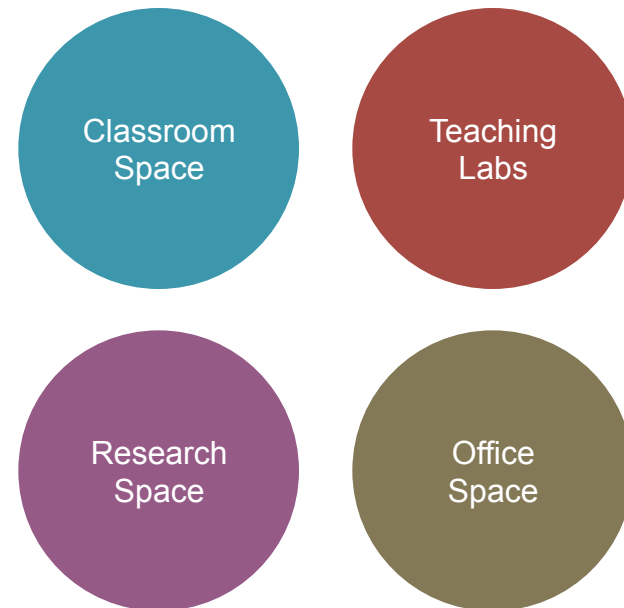


CPEC

CPEC was used as a proxy to develop an overall space requirement

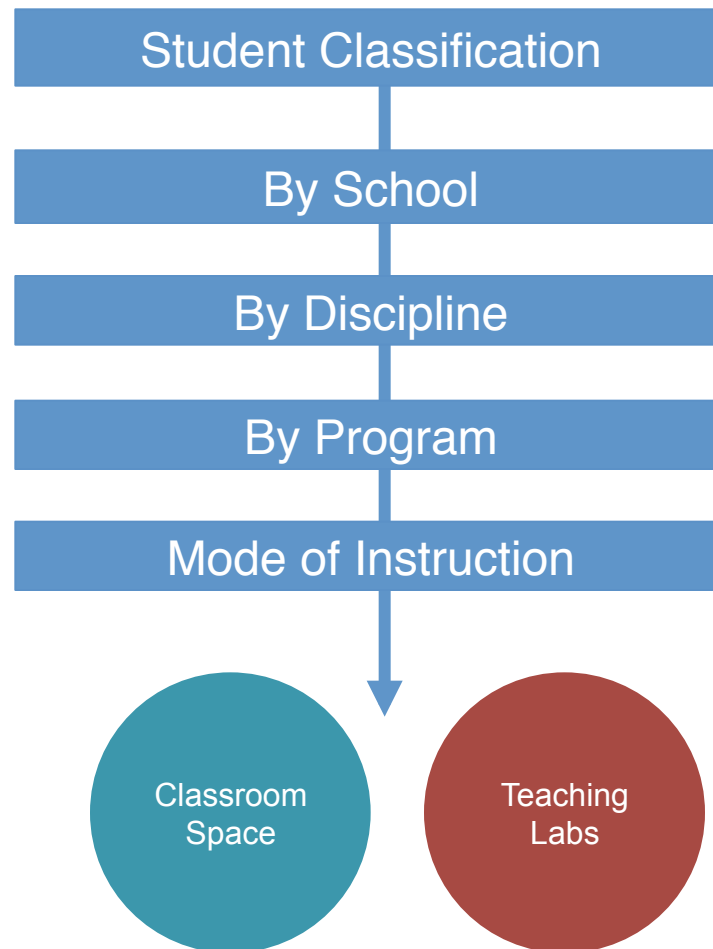
- **But**, CPEC is more than 25 years old, and does not necessarily reflect current actual space allocations on UC campuses
- Laboratories and mixed use space have evolved greatly since CPEC was created

Categories of Space



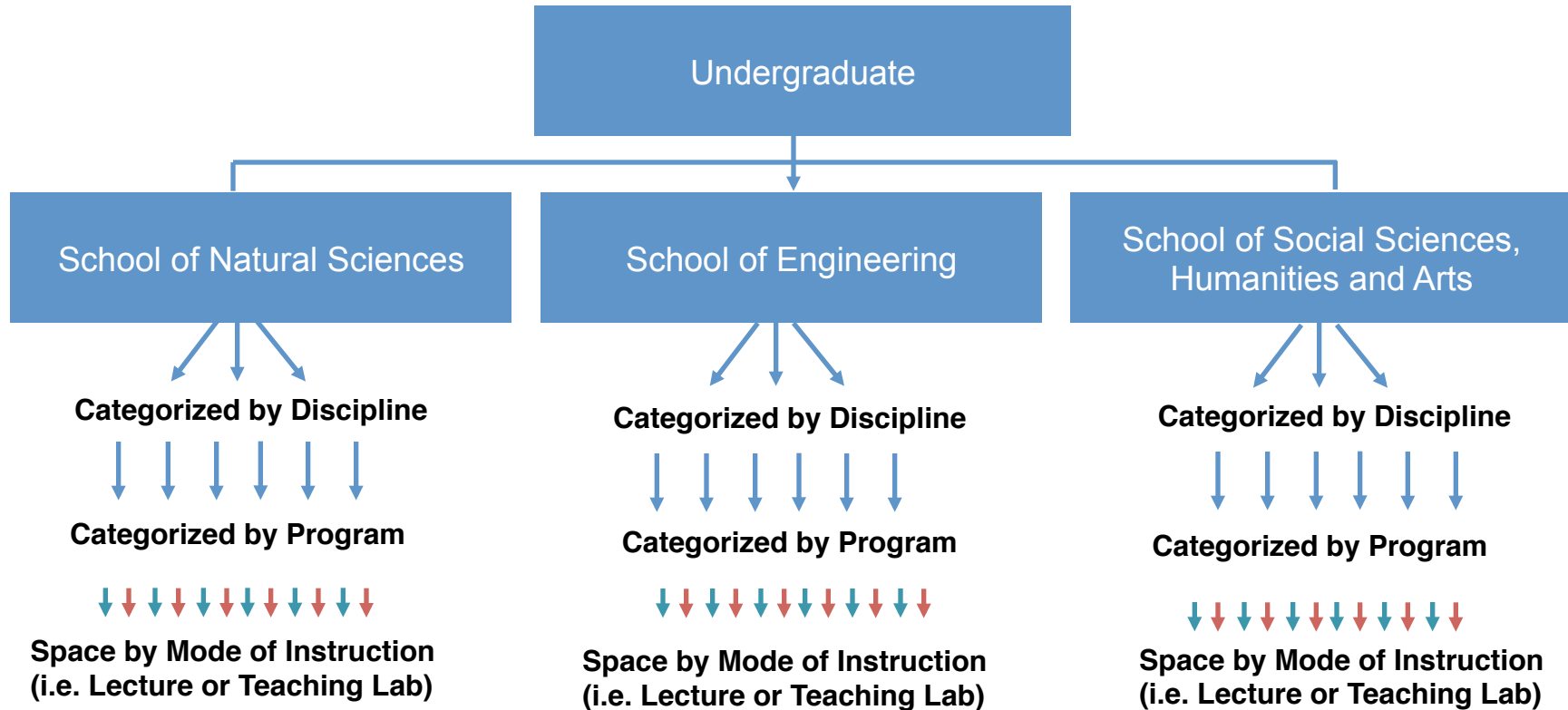
Overview of our Process

Classroom Space and Teaching Labs



Space Planning and Program

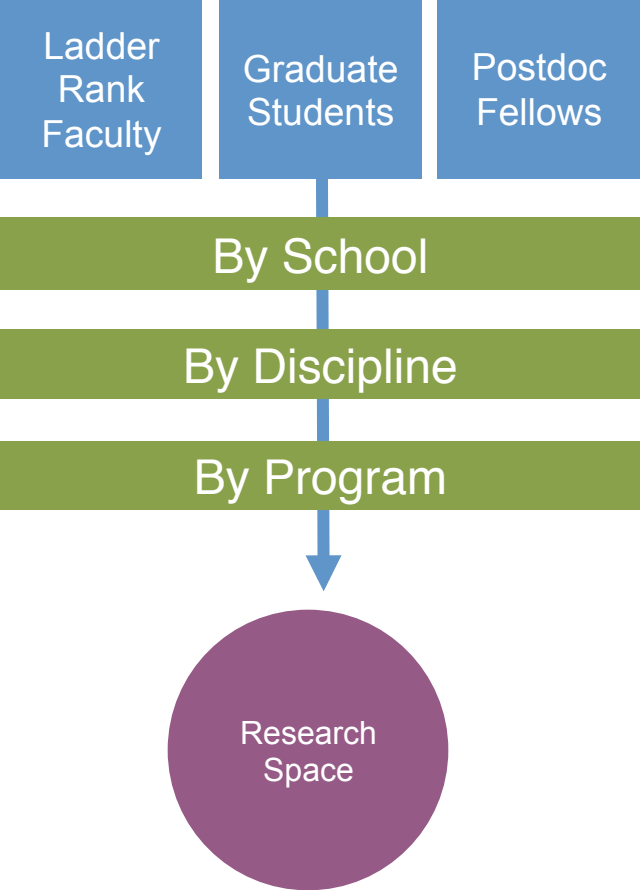
An undergraduate example: Classroom and Teaching Labs



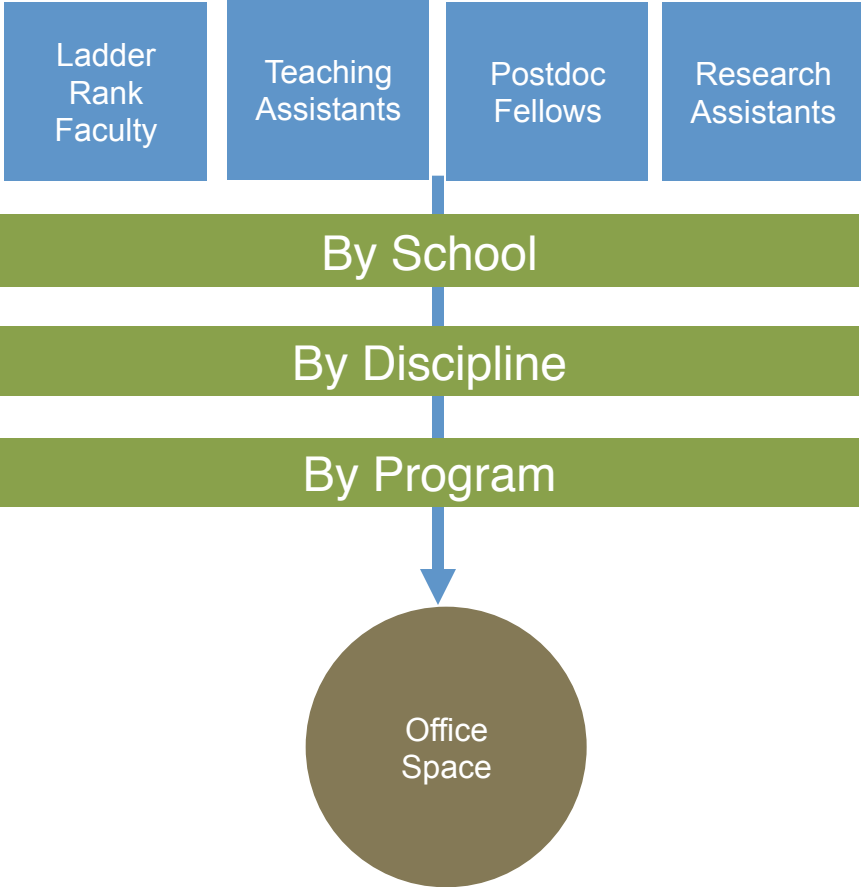
Space Planning and Program

Research Space and Office Space

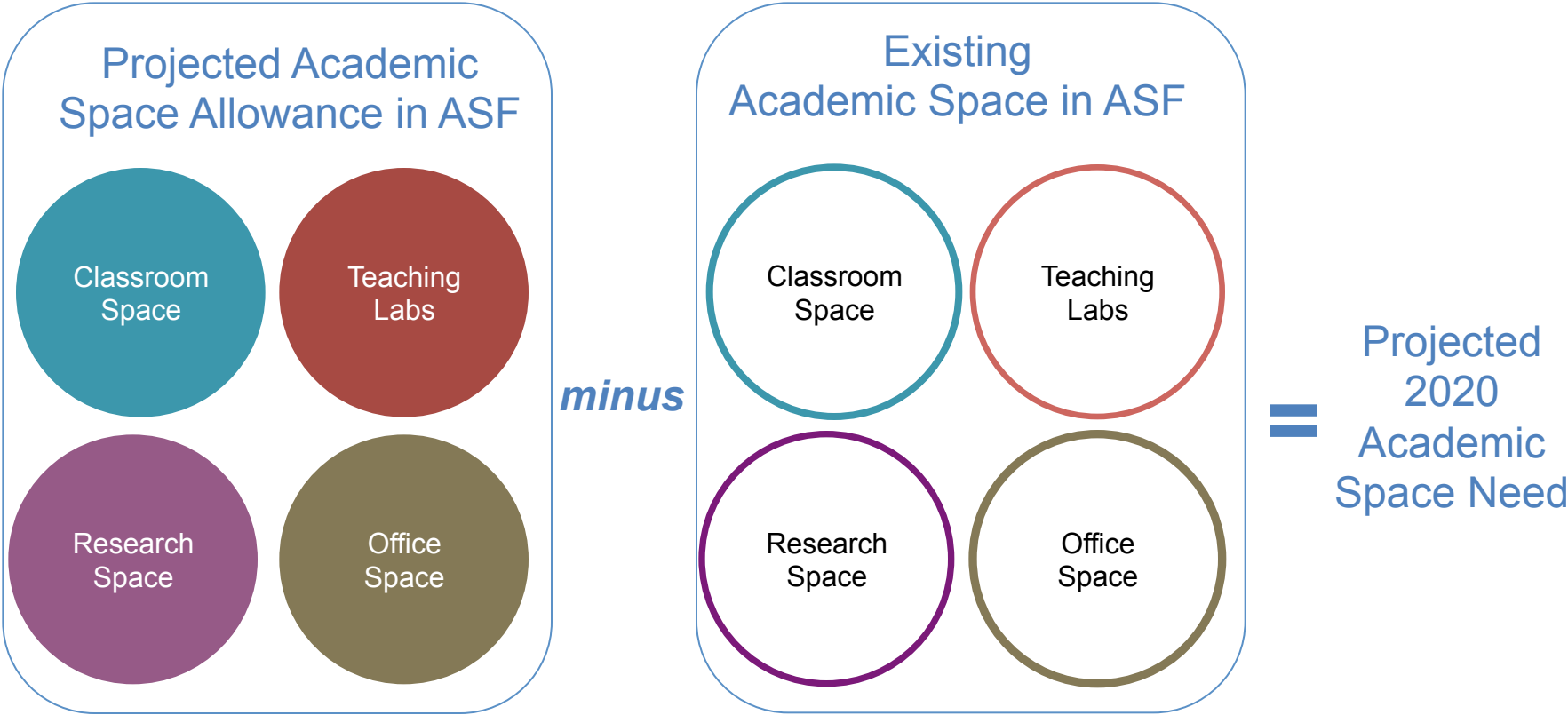
Research Space



Office Space



Space Planning and Program Summary



Space based on Stakeholder Requests

2020 Project Program still being refined

| Category | GSF Estimate as of April 2014 |
|--------------------------|-------------------------------|
| Academic Space | 802,000 |
| Housing and Dining | 639,500 |
| Academic Support | 242,000 |
| Recreation and Athletics | 160,000 |
| TOTAL | 1,843,500 GSF |



The Challenge

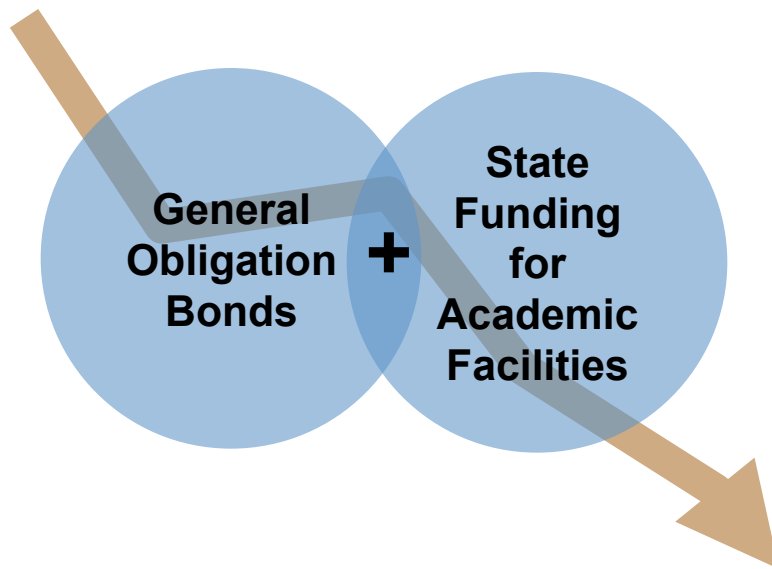
How to fund UC Merced's growth



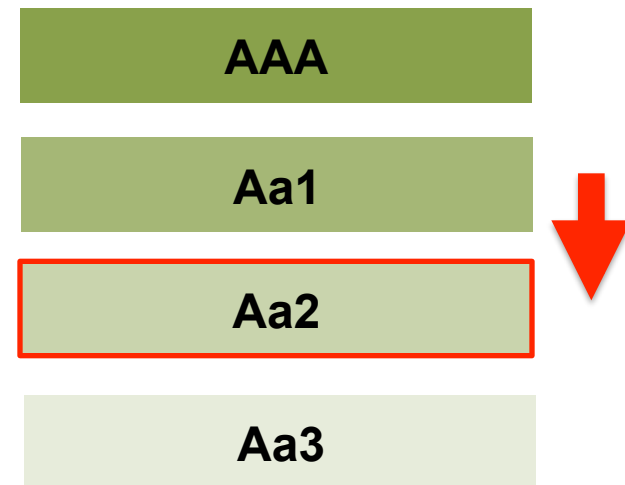
The Funding Challenge

Decline in State Support and Bond Ratings

The traditional funding method of general obligation bonds plus state funds is almost completely eliminated



The UC system's general revenue bond rating was recently downgraded from Aa1 to Aa2



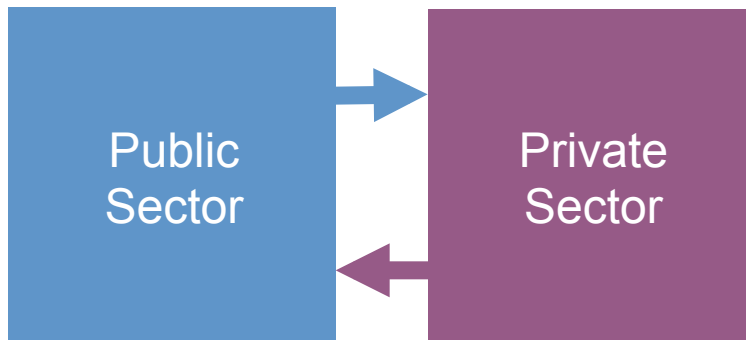
A large increase in debt could put further pressure on UC's bond rating

The 2020 Project and the Public-Private Partnership Structure



Post-2008 Public Sector Capacity to issue bonds for large infrastructure projects severely curtailed

As a result, the Public Sector is partnering with multinational private sector developers for these projects



Potential Partnership Benefits

Private Sector Efficiency and Innovation

Large Developers can bring equity and credit capacity to the transaction

Large Developers Can bring world-class experts to the project

Public-Private Partnership Pioneers

Transportation Infrastructure

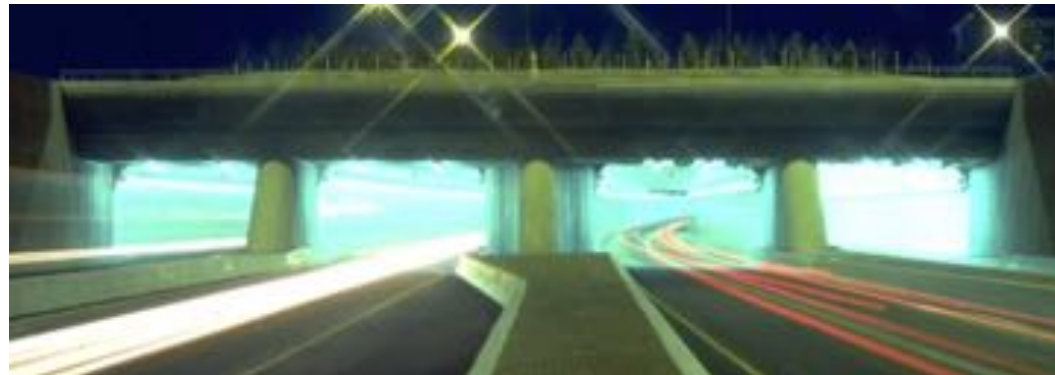


Goethels Bridge Replacement
New York/New Jersey
Opens 2018



Presidio Parkway
San Francisco, California
Opens 2016

Elizabeth River Tunnels
Portsmouth, Virginia
Opens 2016



The newest application of P3

Social Infrastructure

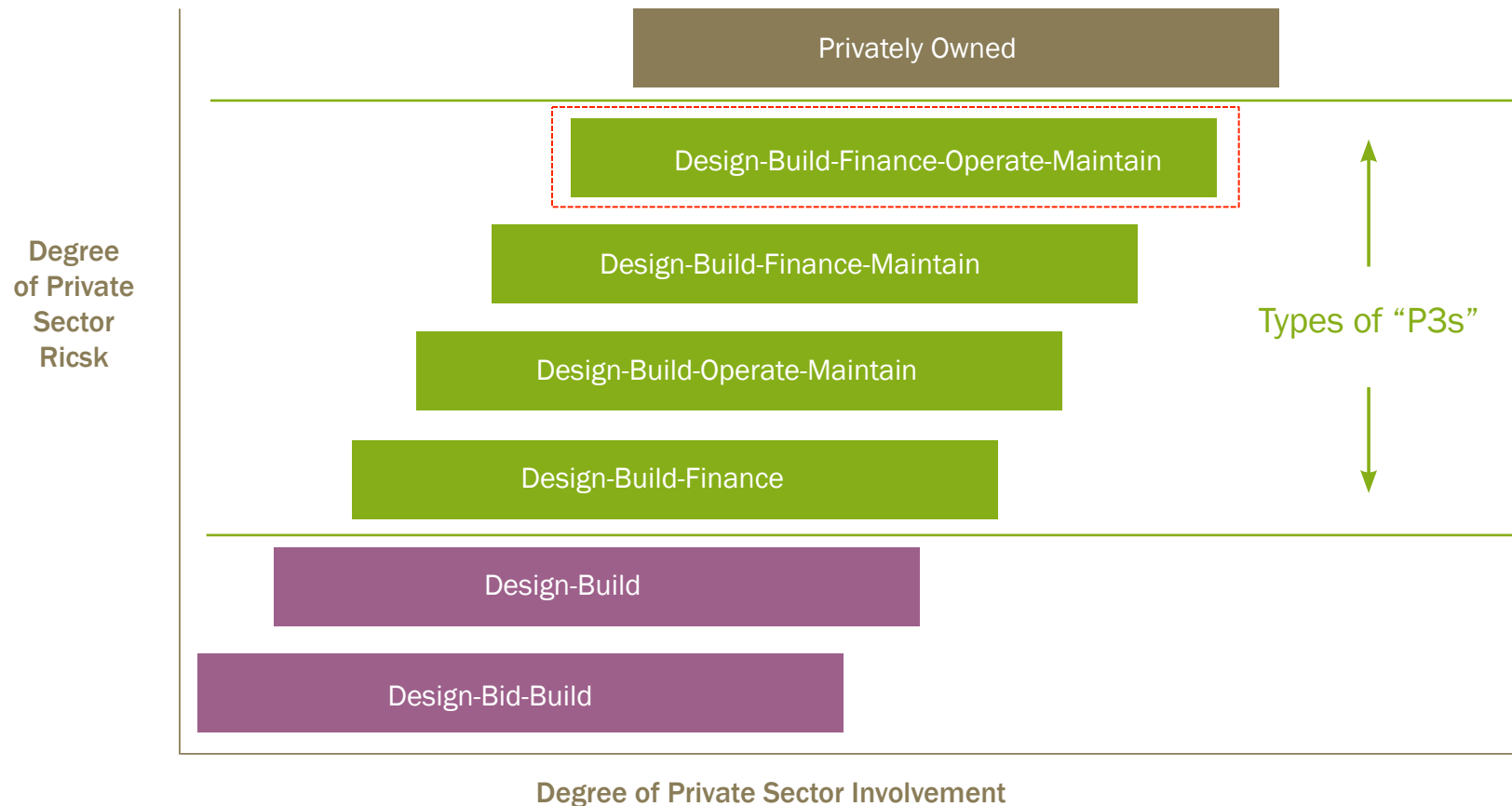


**George Deukmejian
Courthouse**
Long Beach, California
Opened 2013



Public-Private Partnerships

Multiple types exist



Potential Structure

Design, Build, Finance Operate, Maintain ("DBFOM") Contract



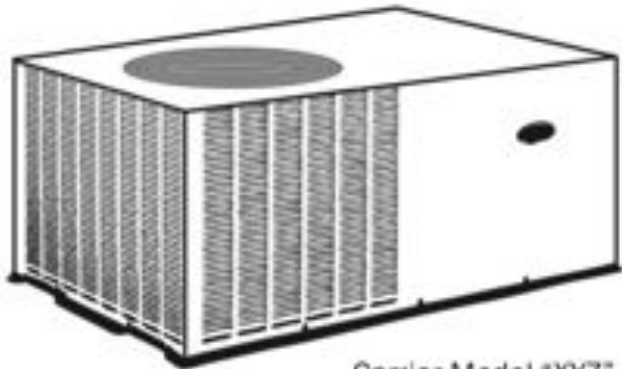
- Long term relationship between University and private sector partner
- Based on agreed upon performance standards
- Tied to "availability" and "milestone" payments
- Buildings are solely owned by University at end of contract term

Traditional Structure vs. P3 Structure

P3 uses a Performance Based Contract

Inputs in a Traditional Procurement

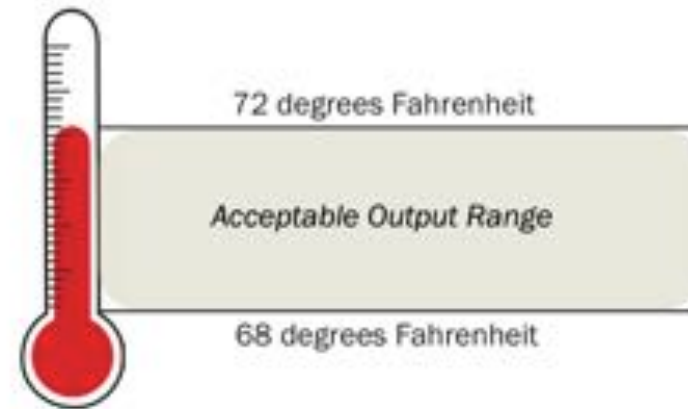
"Cooling to the building must be provided by Carrier Model "XYZ" heat pump with a cooling capacity of "ZZ" tons."



Carrier Model "XYZ"

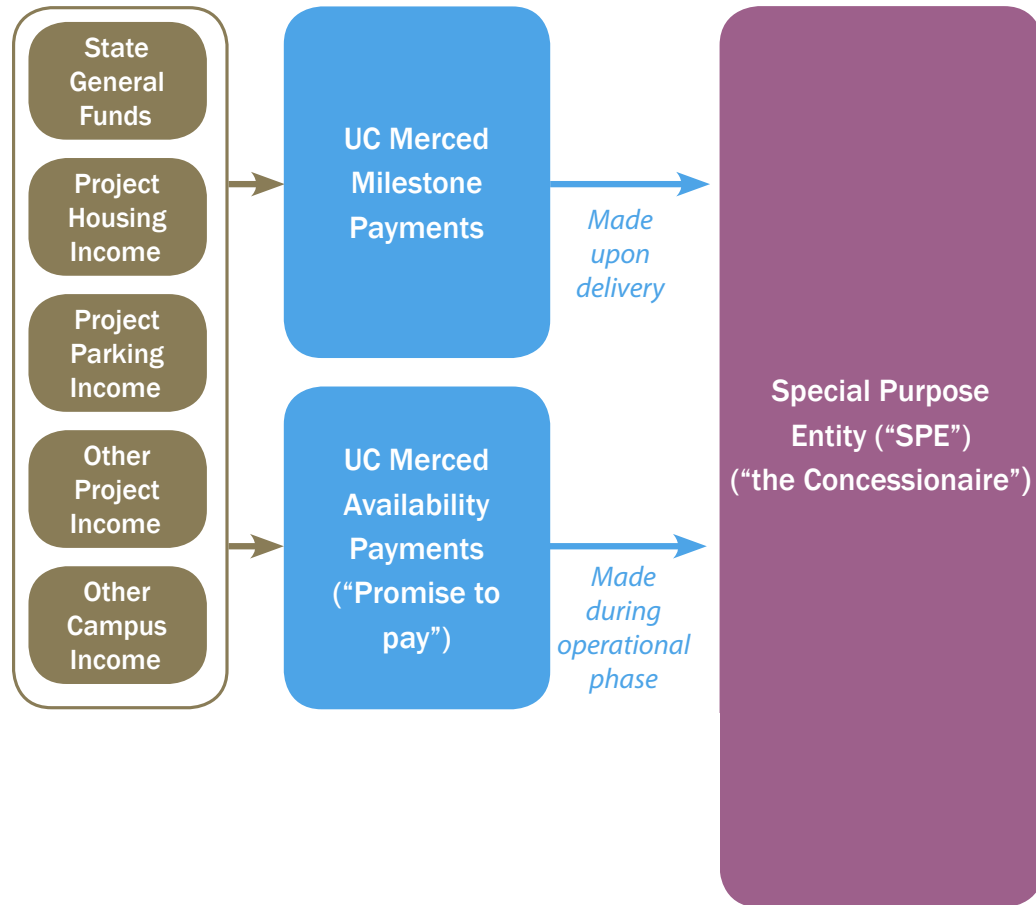
Outputs in a Public-Private Partnership Procurement

"The temperature of the occupied portions of the building shall not be lower than 68 degrees Fahrenheit and not higher than 72 degrees Fahrenheit, 97% of the time that the building is open to occupants."



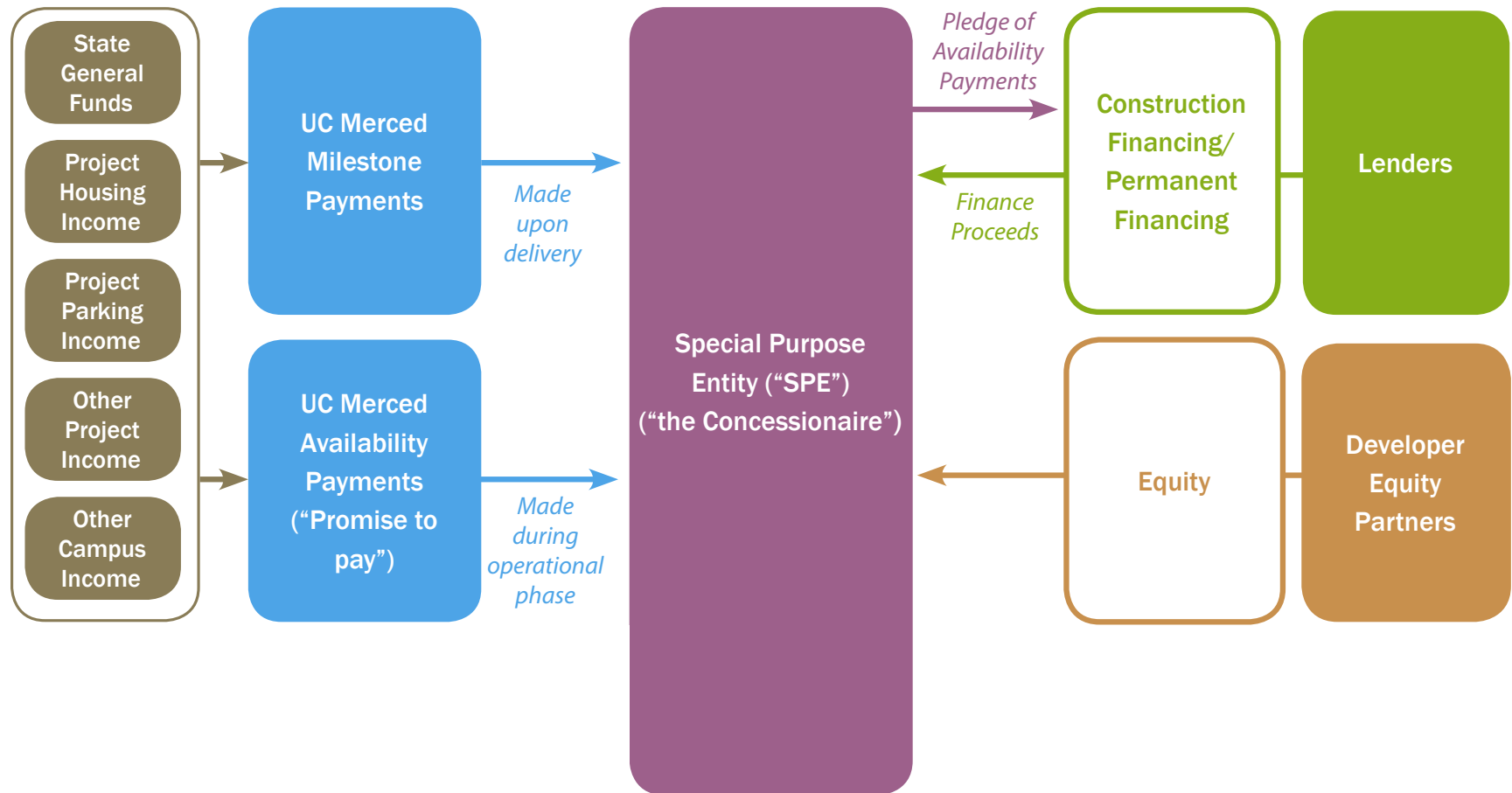
P3 Availability Payment Structure

Step 1: UC Promises to Pay



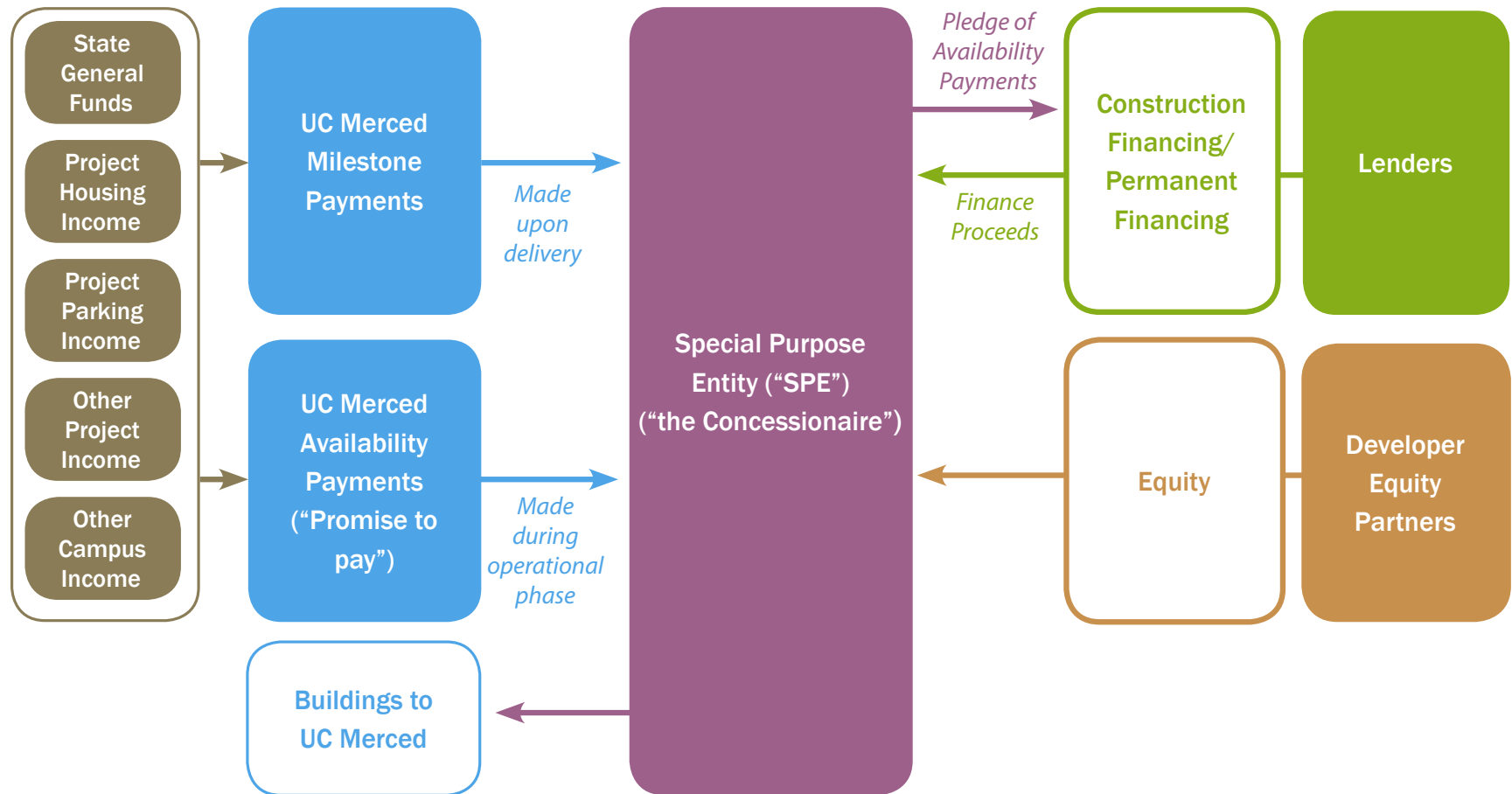
P3 Availability Payment Structure

Step 2: SPE uses promise to secure financing



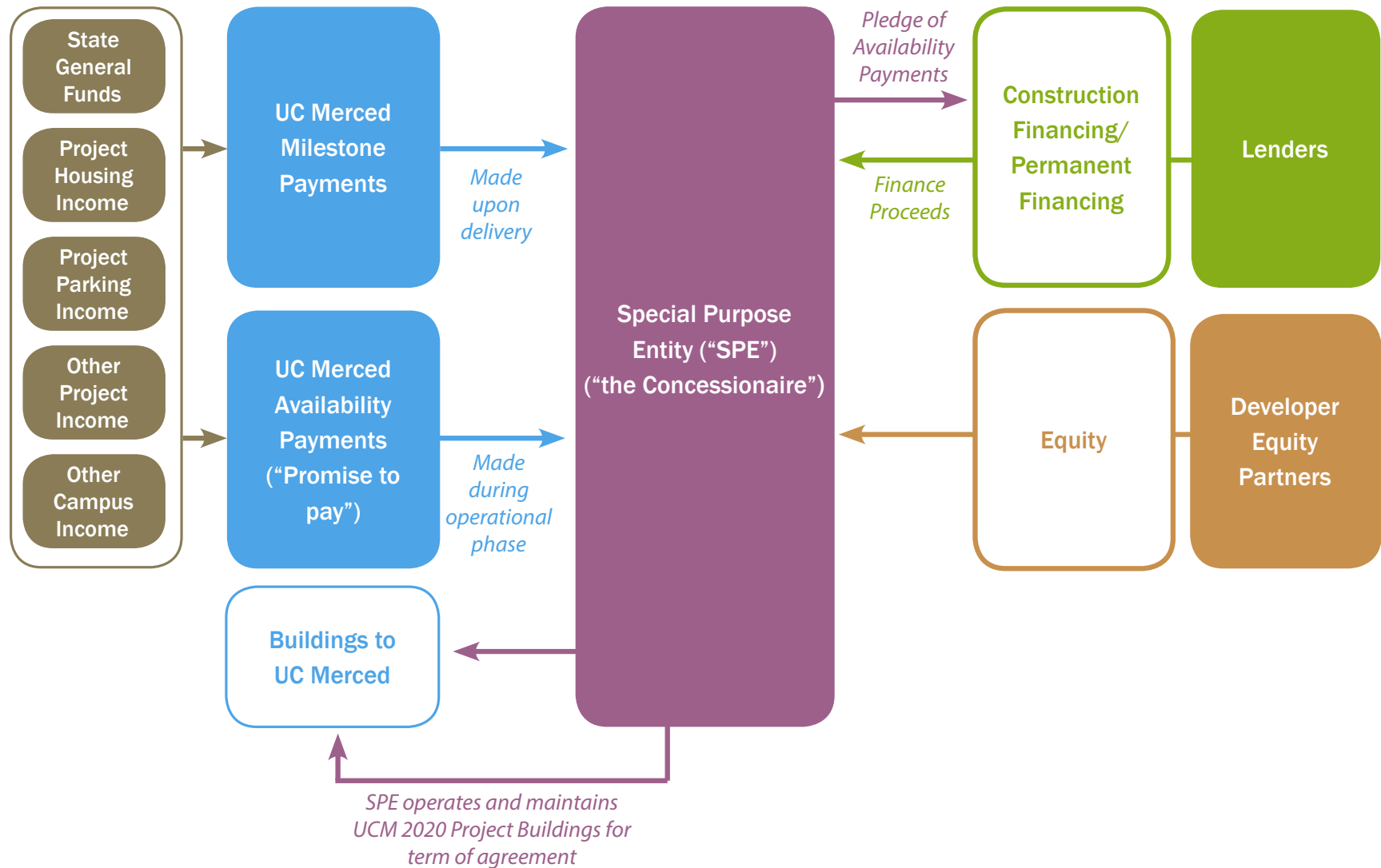
P3 Availability Payment Structure

Step 3: SPE Delivers Buildings to UC



P3 Availability Payment Structure

Step 4: SPE operates and maintains buildings



Who's involved

2020 Project Advisory Team



— Real Estate



— Infrastructure



— Design and Program



— Legal



— Financial Advisor

The Process

Request For Qualifications followed by Request for Proposals



National and international marketing effort conducted to identify teams with expertise in:

- Finance
- Master Planning
- Architecture
- Construction Management

Proposers Selected
Fourth Quarter
2014

Chosen by
Chancellor
and UCOP
CFO based
on review of
proposals

A multi-asset model for large scale public university development

Keys to Success

1. Nurture Institutional Support

- Work with **campus stakeholders** to develop program
- **Collaborate** with UCOP
- Hire **experienced advisors**

2. Identify a Capable Partner

- **Track record** of delivering resilient, high quality facilities
- A record of developing **creative financial structures** for complex, public projects
- **Financial and operational depth** to develop and deliver complex, public projects
- Experience developing **collaborative, mixed-use residential and academic environments**

The background of the slide is a photograph of a building, likely a university building, seen through a field of tall, thin reeds or grasses. The building is out of focus, and the sky is a clear, light blue. The reeds are in the foreground, some in sharp focus and some blurred, creating a sense of depth.

<http://2020project.ucmerced.edu>

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UCMERCED

UC Merced's Second Phase

The 2020 Project

Building
California's
Next Great
Public **Research**
University

