

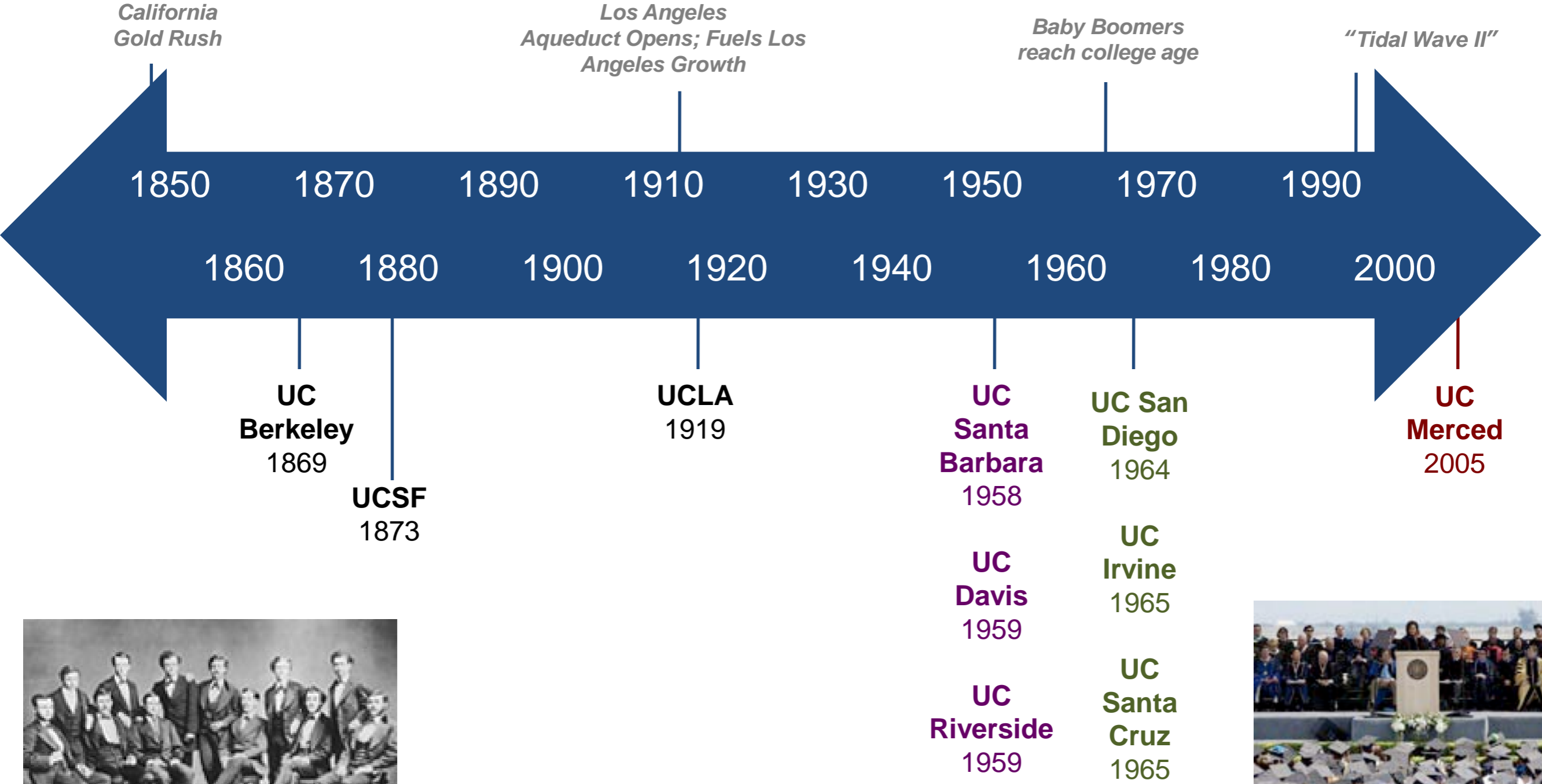
Building UC Merced

Richard Cummings

Physical Planning, Design and Construction



UC Merced is the first campus in the University of California system since 1965



First Graduating Class, UC Berkeley, 1873

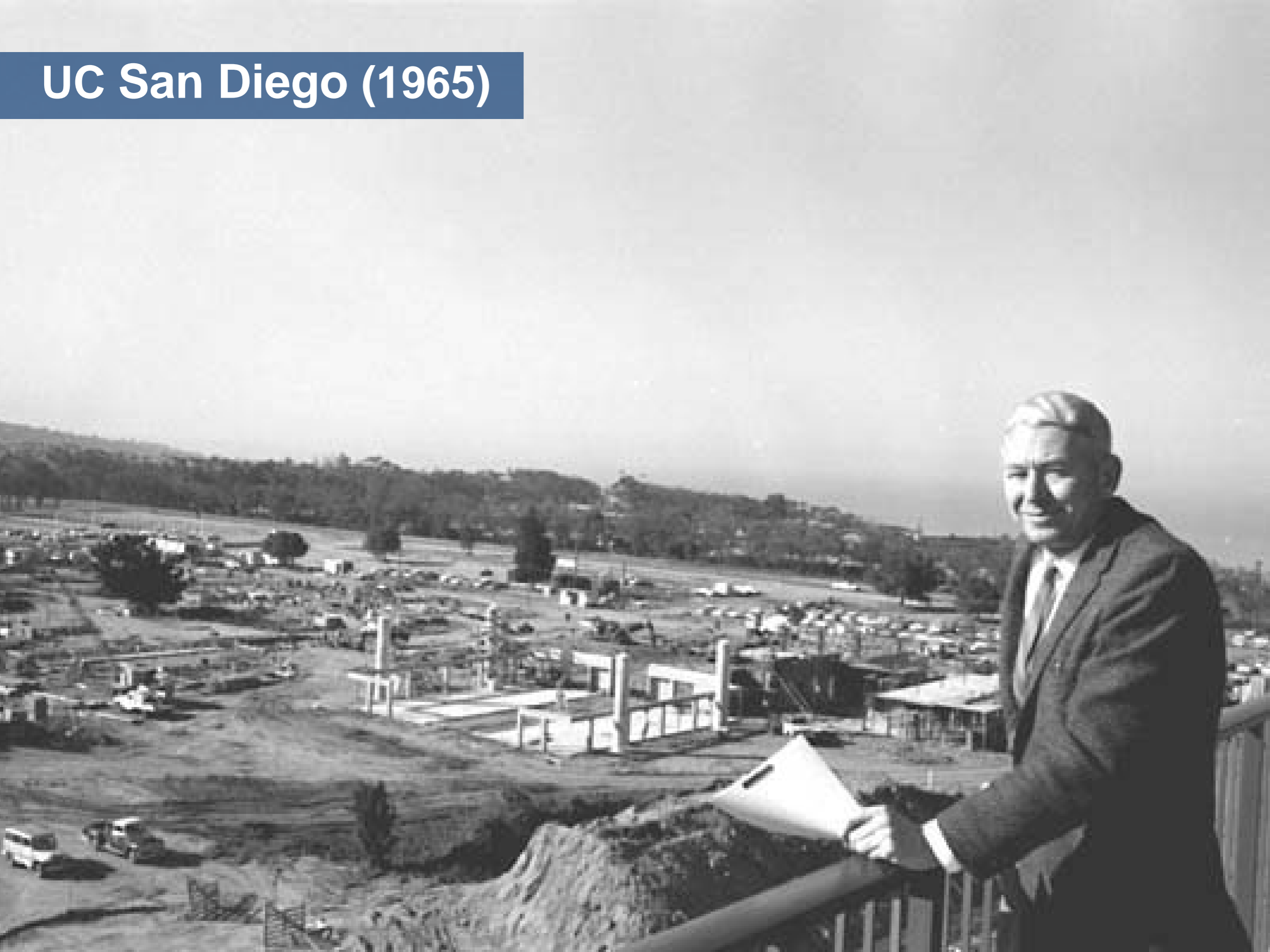


First Full Graduating Class, UC Merced, 2009

UC Irvine (1964)



UC San Diego (1965)



UC Santa Cruz (1967)



UC Merced (2009)



New Universities are being built worldwide in response to demand and growth



King Abdullah University of Science and Technology

Saudi Arabia
3,200 acres



Singapore University of Technology and Design

Republic of Singapore
57 acres

California's Population Today

36 million people

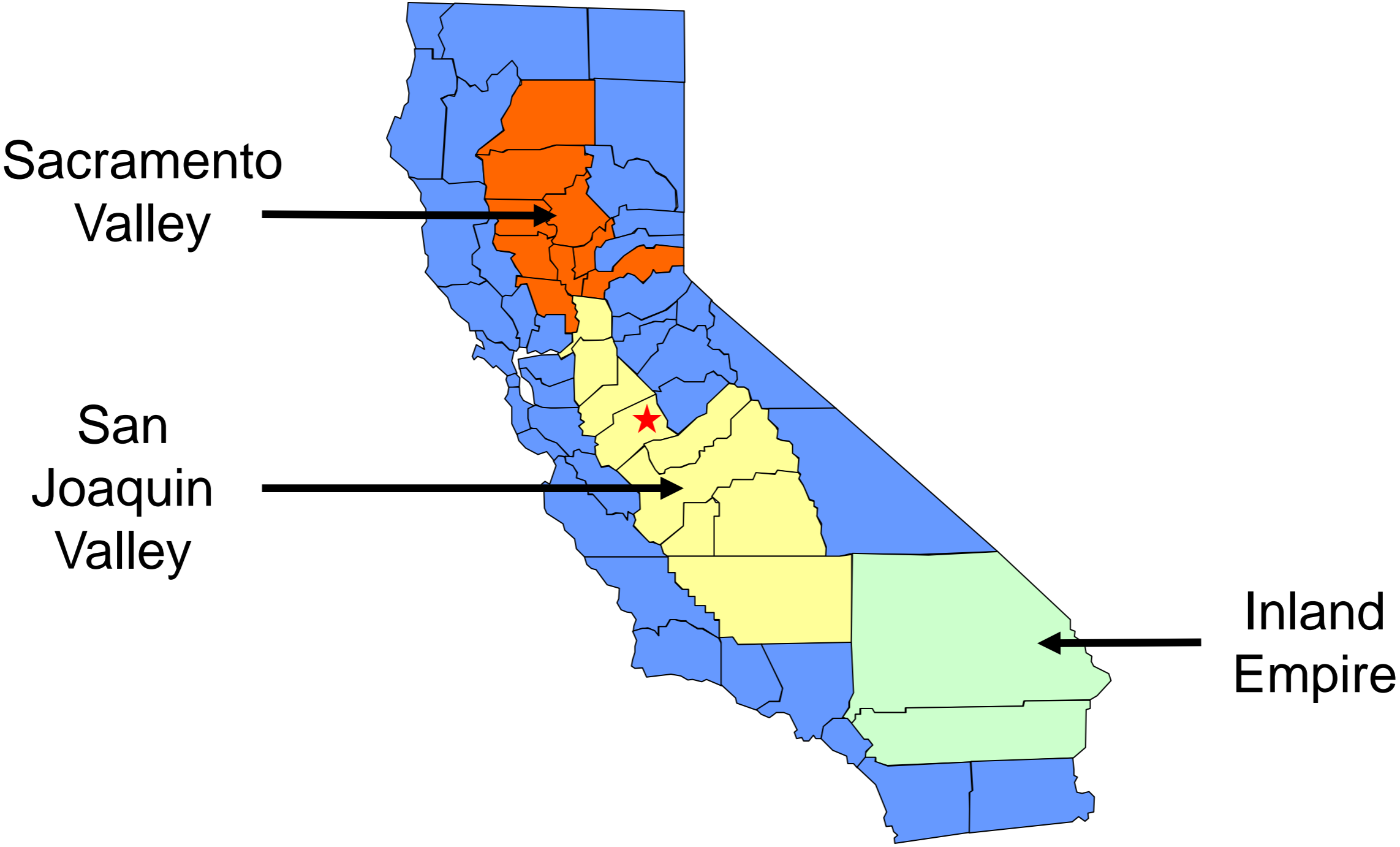


- Connecticut - 3,483,372
- Iowa - 2,944,062
- Mississippi - 2,881,281
- Arkansas - 2,725,714
- Kansas - 2,723,507
- Utah - 2,351,467
- Nevada - 2,241,154
- New Mexico - 1,874,614
- West Virginia - 1,810,354
- Nebraska - 1,739,291
- Idaho - 1,366,332
- Maine - 1,305,728
- New Hampshire - 1,287,687
- Hawaii - 1,257,608
- Rhode Island - 1,076,164
- Montana - 917,621
- Delaware - 817,491
- South Dakota - 764,309
- Alaska - 648,818
- North Dakota - 633,837
- Vermont - 619,107
- Washington, DC - 563,384
- Wyoming - 501,242

California's Population Tomorrow

10 million additional people by 2020

Largely occurring inland



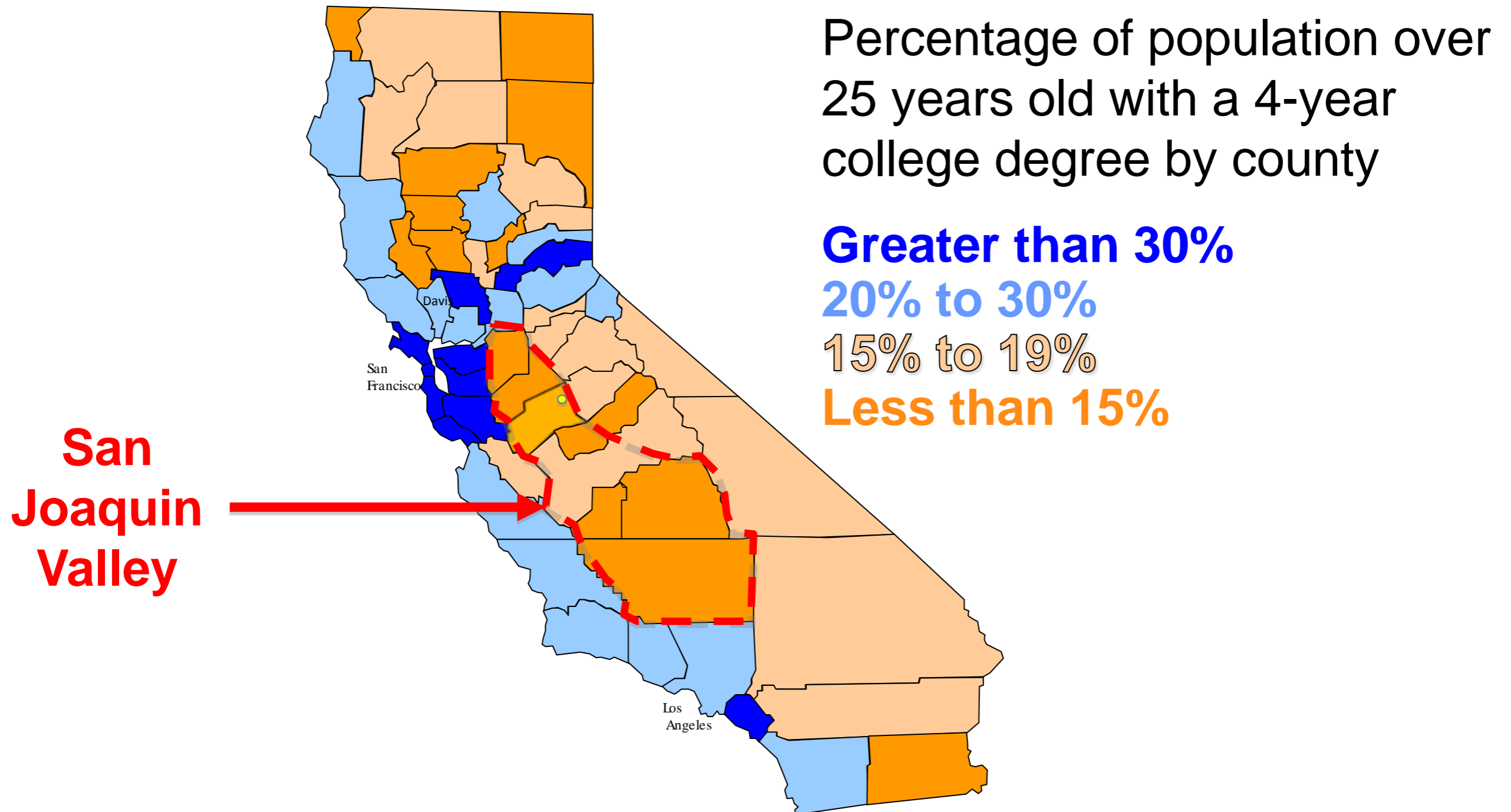
UC Merced's context: The San Joaquin Valley

California's fastest growing region

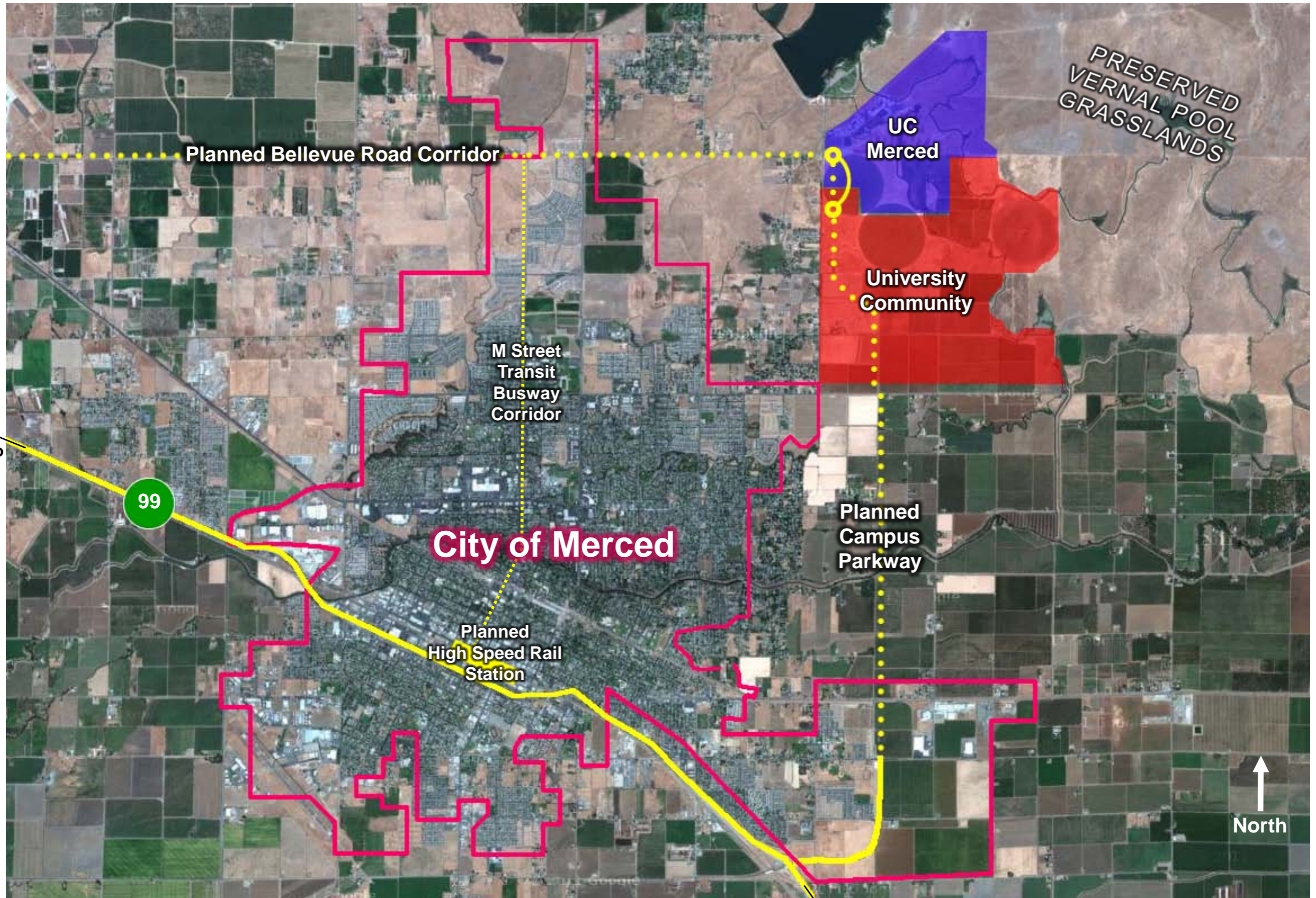
- Eight county region
- 4 million people today
- 9.2 million people by 2040
- Growth driven by birth rates and immigration



Less than 15% of San Joaquin Valley adults hold a 4-year college degree



UC Merced's Local Context



Sources: Google Maps, County of Merced, California High Speed Rail Authority

Fresno
57 miles

1 mile

**UC Merced began construction in 2002
and opened in 2005**



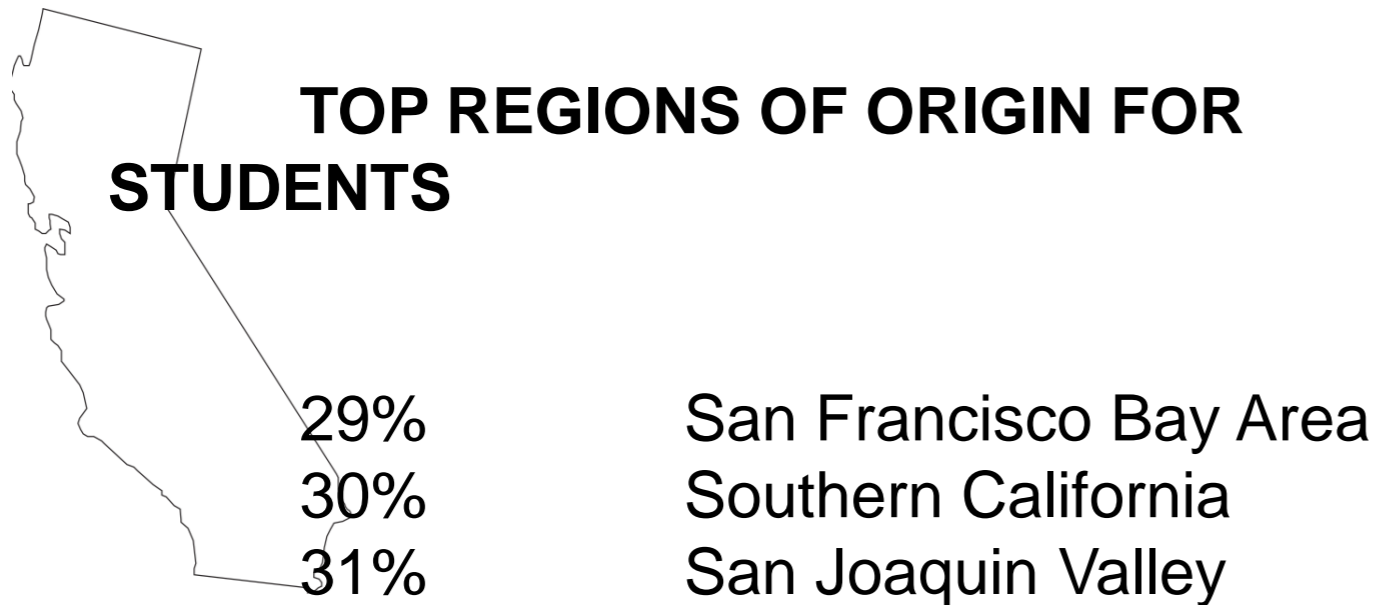
UC Merced Student Demographics

5,200 Students
in Fall 2011

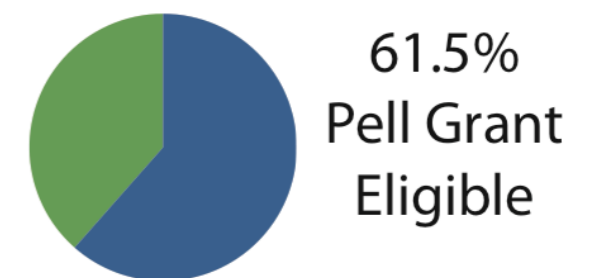
FIRST GENERATION FRESHMAN



TOP REGIONS OF ORIGIN FOR STUDENTS

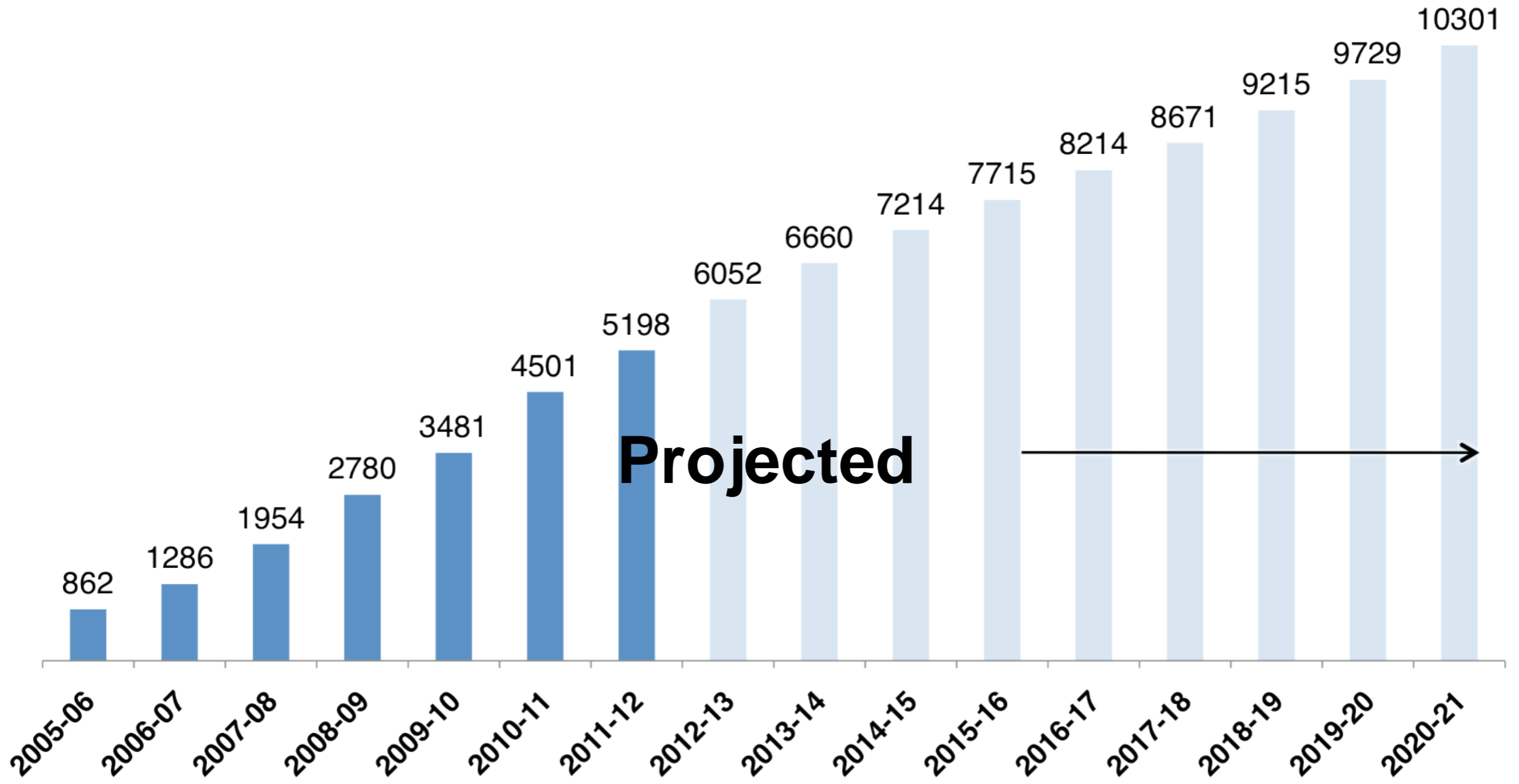


PELL GRANT ELIGIBLE FRESHMAN



UC Merced Tomorrow

10,000 Students FTE by 2020



Projected

Sources: UC Merced Institutional Planning and Analysis, Fall 2010 Figures, <http://ipa.ucmerced.edu>
UCM Capital Planning and Space Management



**First Lady Michelle Obama Commencement Address
to UC Merced's first full graduating class (2009)**

“There are few things more rewarding than to watch young people realize they have the power to make their dreams come true.”

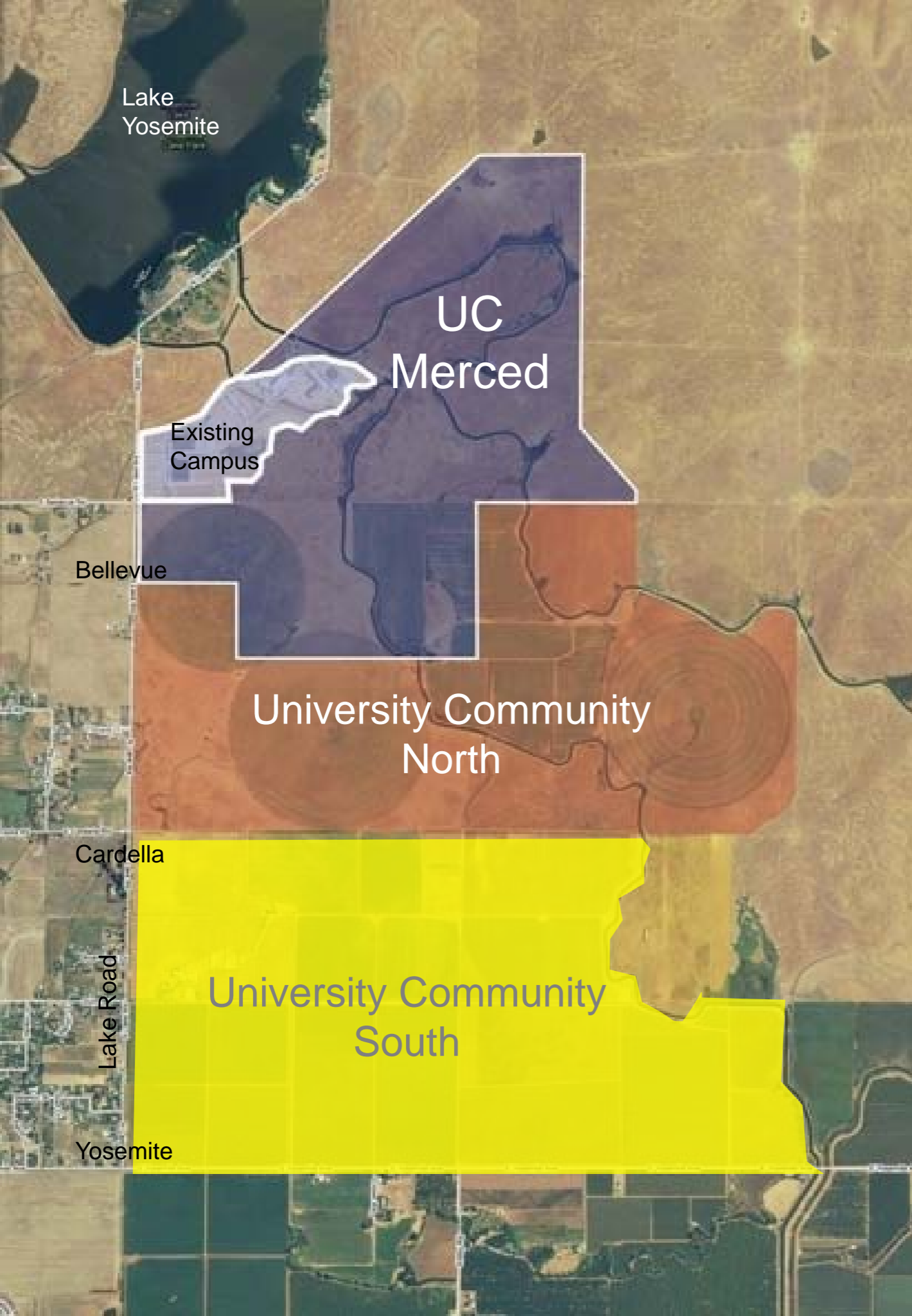
Staff and Faculty Projections through 2020



Campus Today

Buildings clustered on 104 acre portion of site





A 21st century opportunity

UC Merced Campus

815 acres

Existing campus footprint: 104 acres

“University Community North”

839 acres

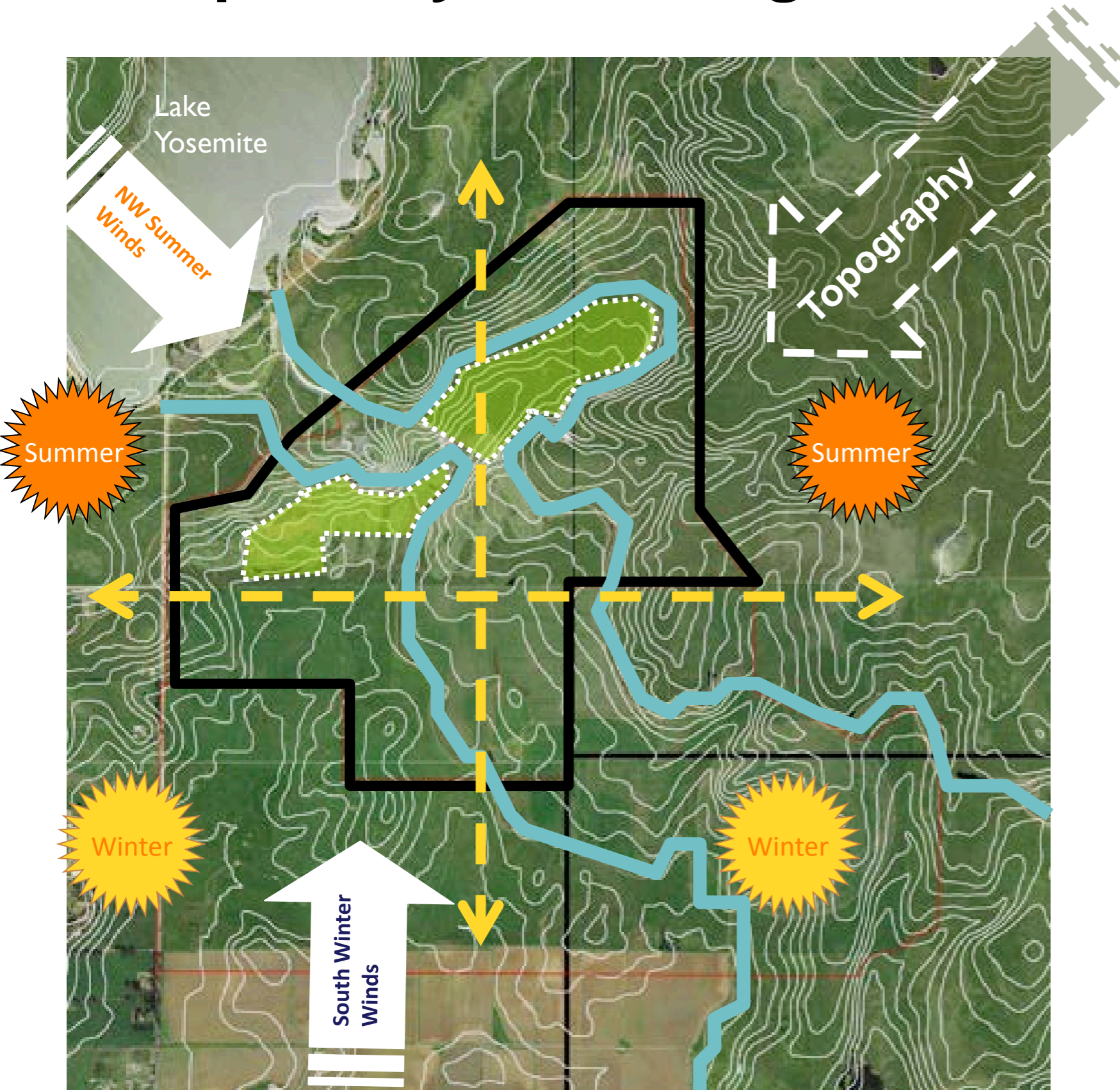
University Community Land Company, LLC
(UC Regents and Virginia Smith Trust)

“University Community South”

1,118 acres

LWH Farms, Inc.

Campus Physical Design Determinants



Natural topography running NE to SW

Summer breezes off Lake Yosemite

Two canals define development zones

Two topographic "Bowls" capture storm water flow

320 days of sun

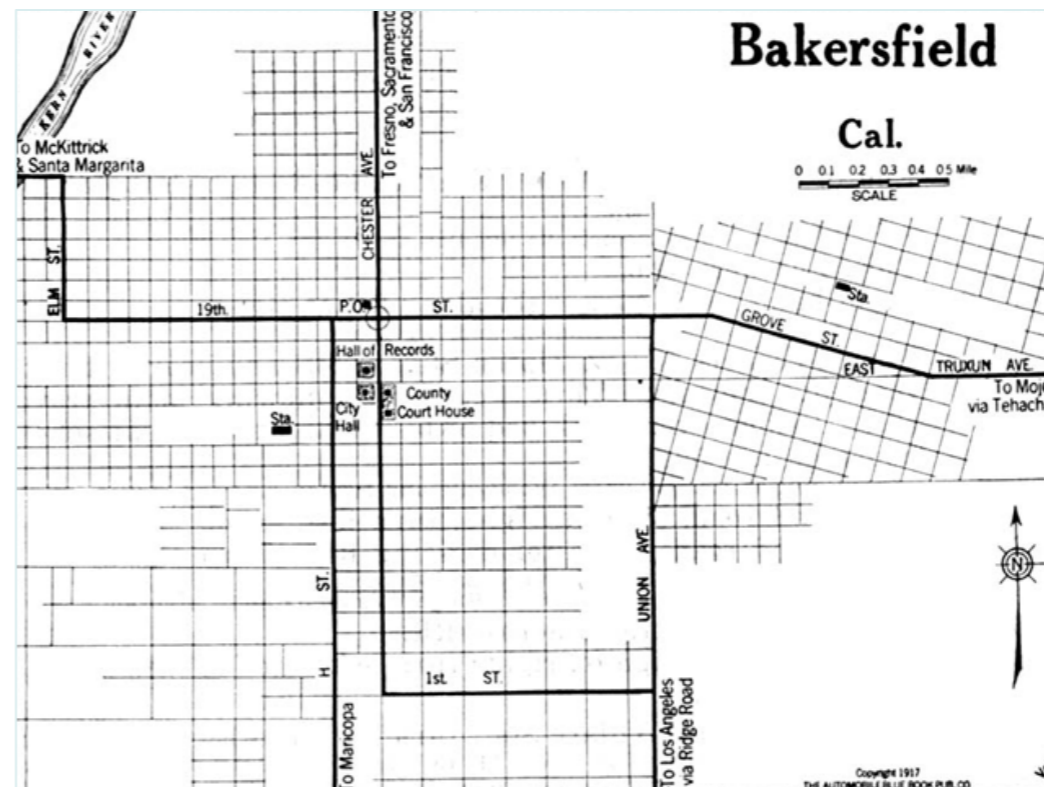
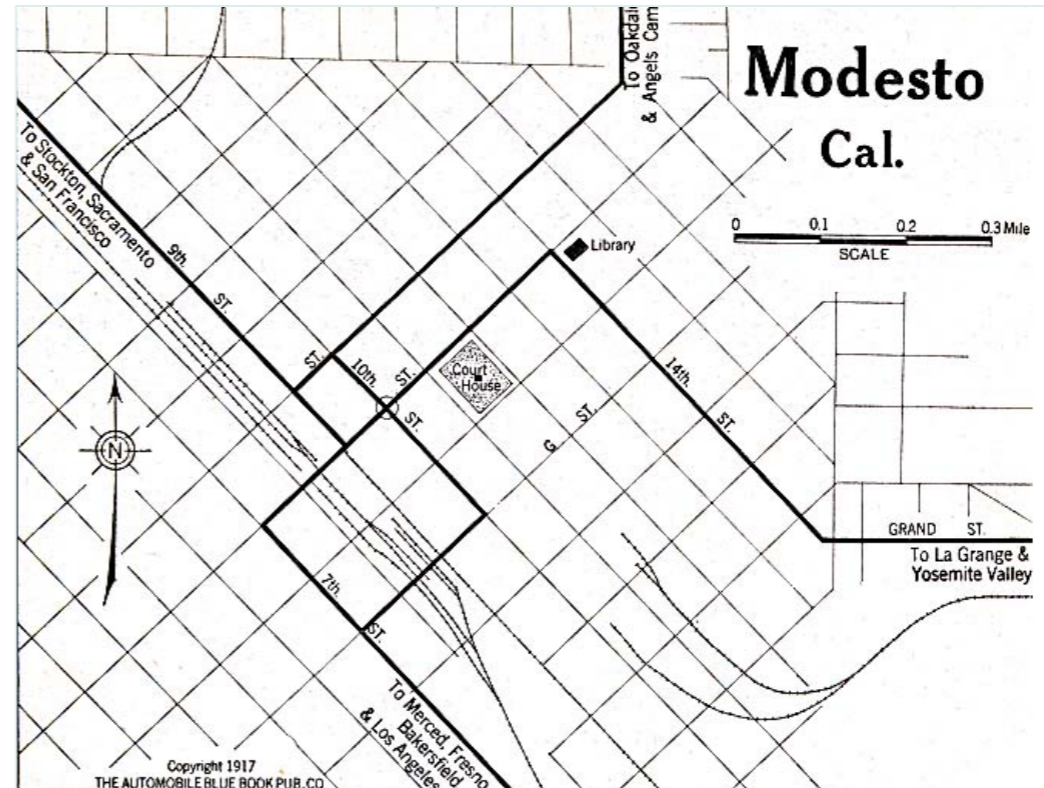
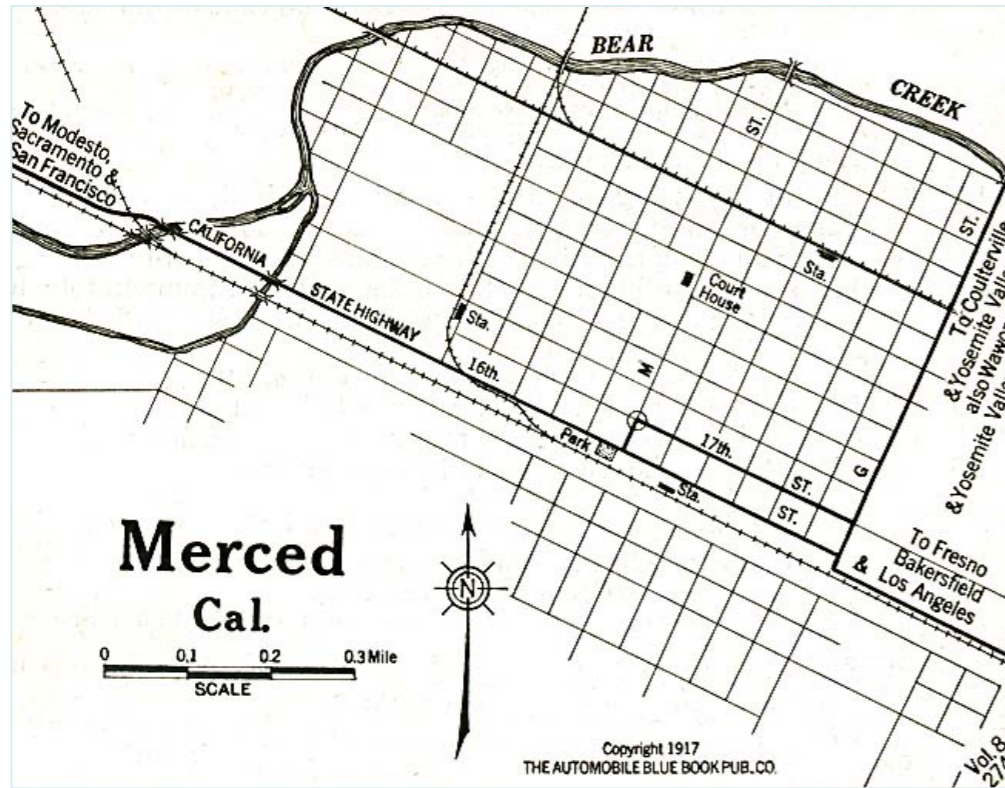
The Valley's landscape is largely linear and horizontal



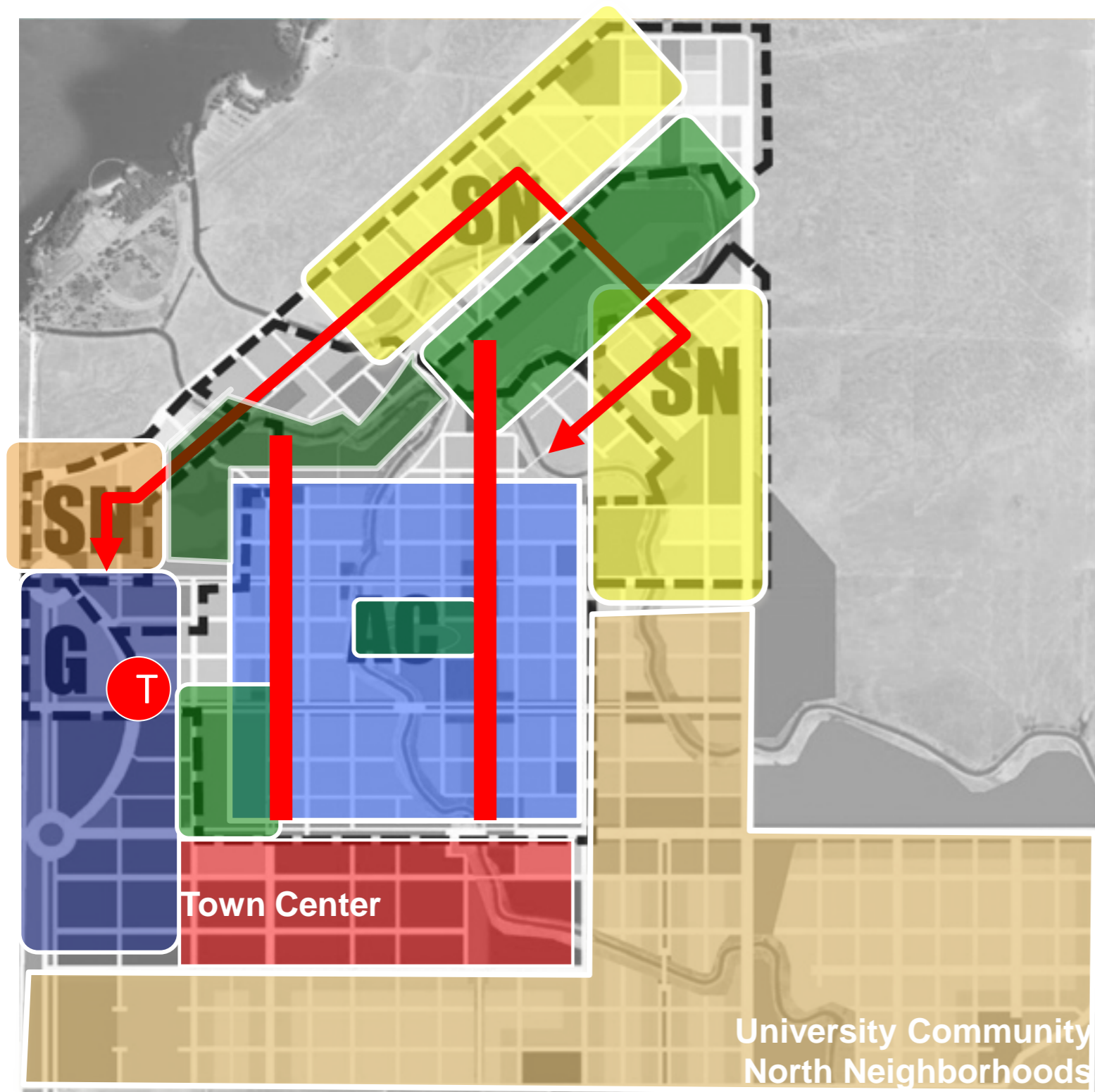
The color of the Valley's landscape reflects changing seasons



Orthogonal Street Grids

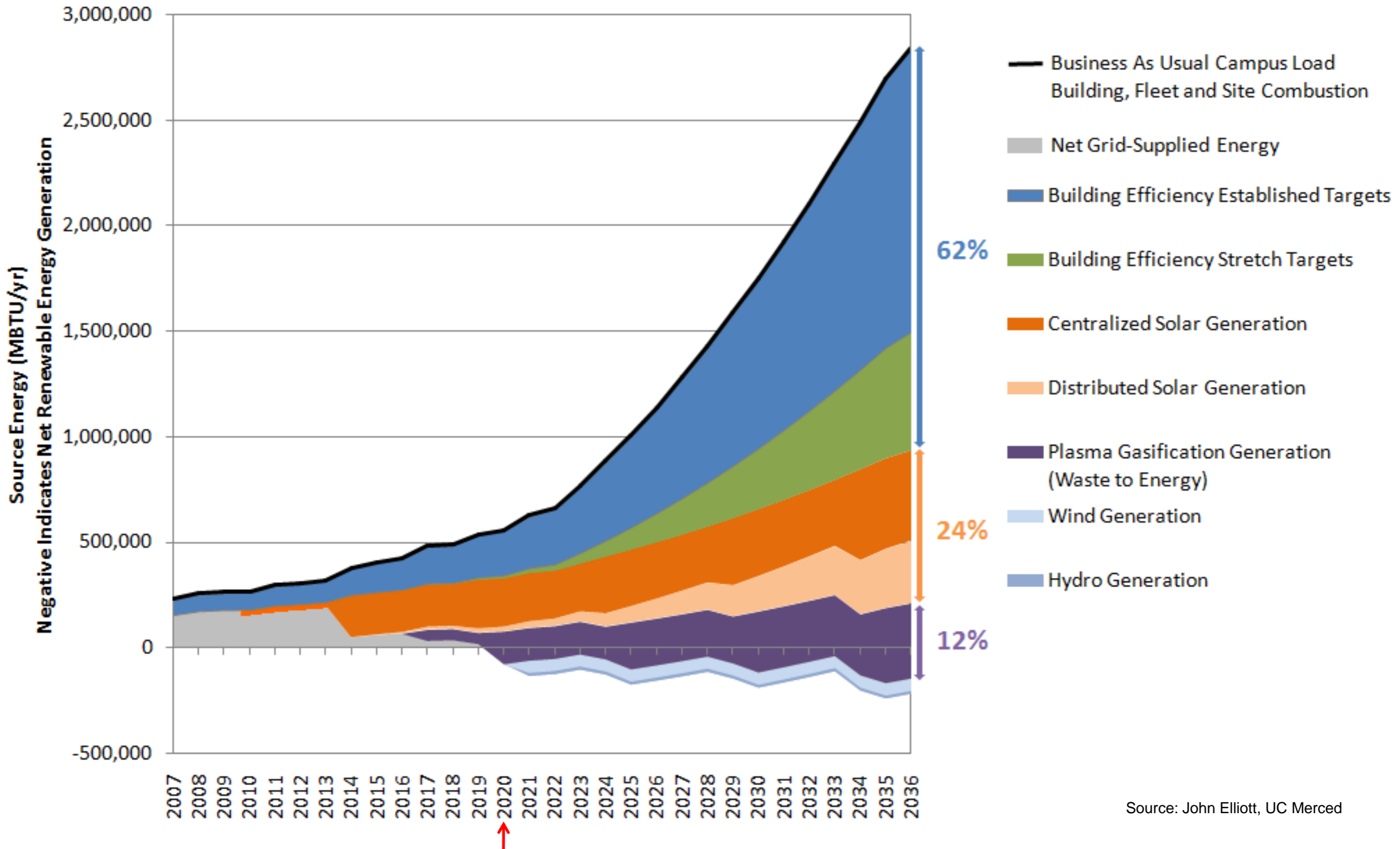


A unique and sustainable campus and community



- Compact, car-free Academic Core served by transit
- 10 minute walking radius in the Academic Core
- Student Neighborhoods wrap campus perimeter
- Two mixed use “Main Streets” feature housing within academic core and connect to University Community North
- Open space and recreation embedded throughout
- “Gateway District” provides venue for research and development

UC Merced's Zero Net Energy Strategy



Source: John Elliott, UC Merced

Architectural Expression and Materials: Glass, concrete, stucco and steel



Facades that respond to solar and wind orientation



Inspired by simple forms derived from the region's architecturally underappreciated buildings

Architectural Regionalism:

Integrates the climate, landscape and culture unique to a place



An aesthetic grounded in the Central Valley:
Simple forms, straightforward and functional

Social Sciences and Management

Familiar, Simple Forms

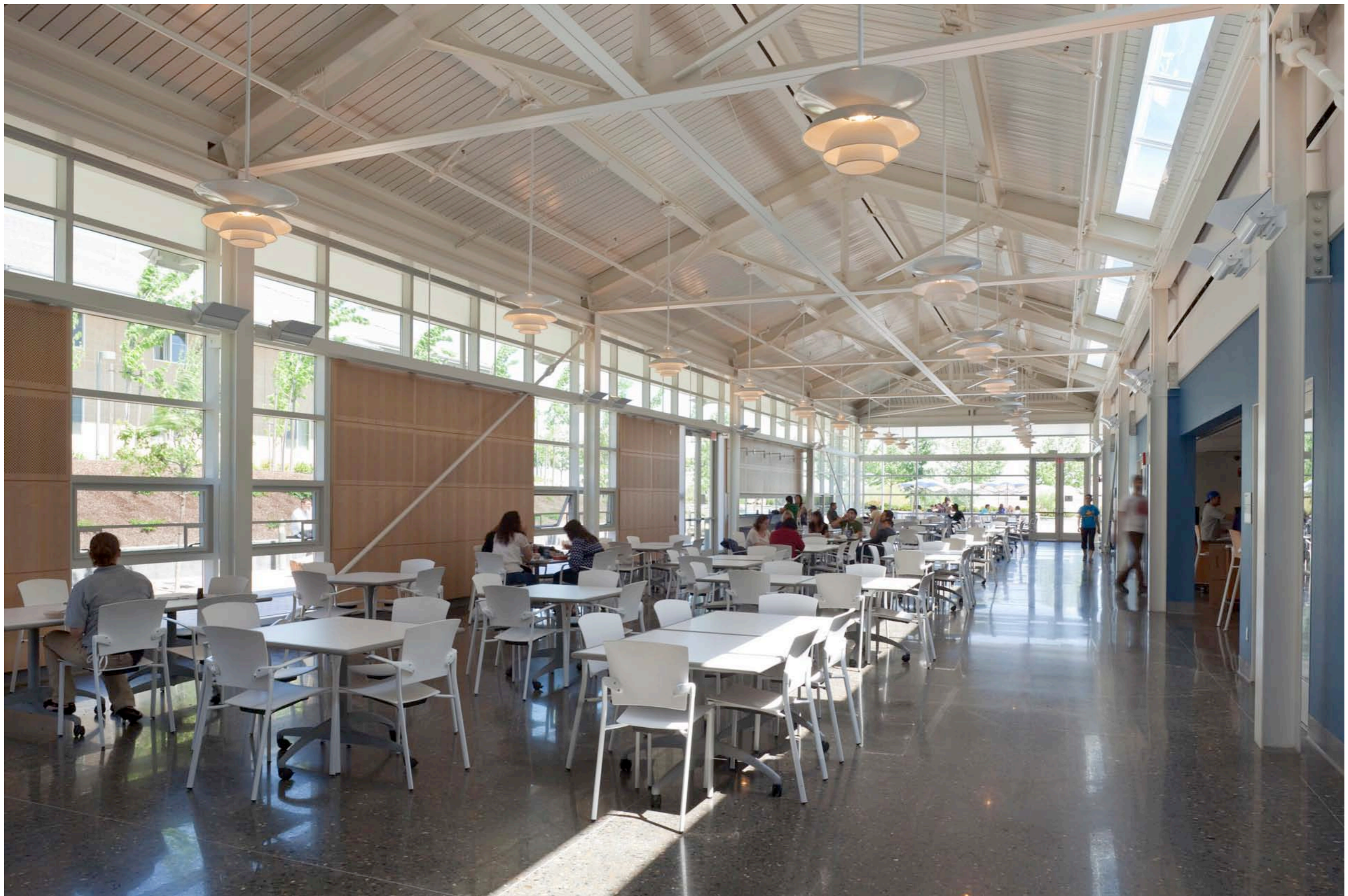


Social Sciences and Management





**Fruit Packing Shed
Kern County, 1926**



UC Merced Dining Expansion

The Summits Residence Hall

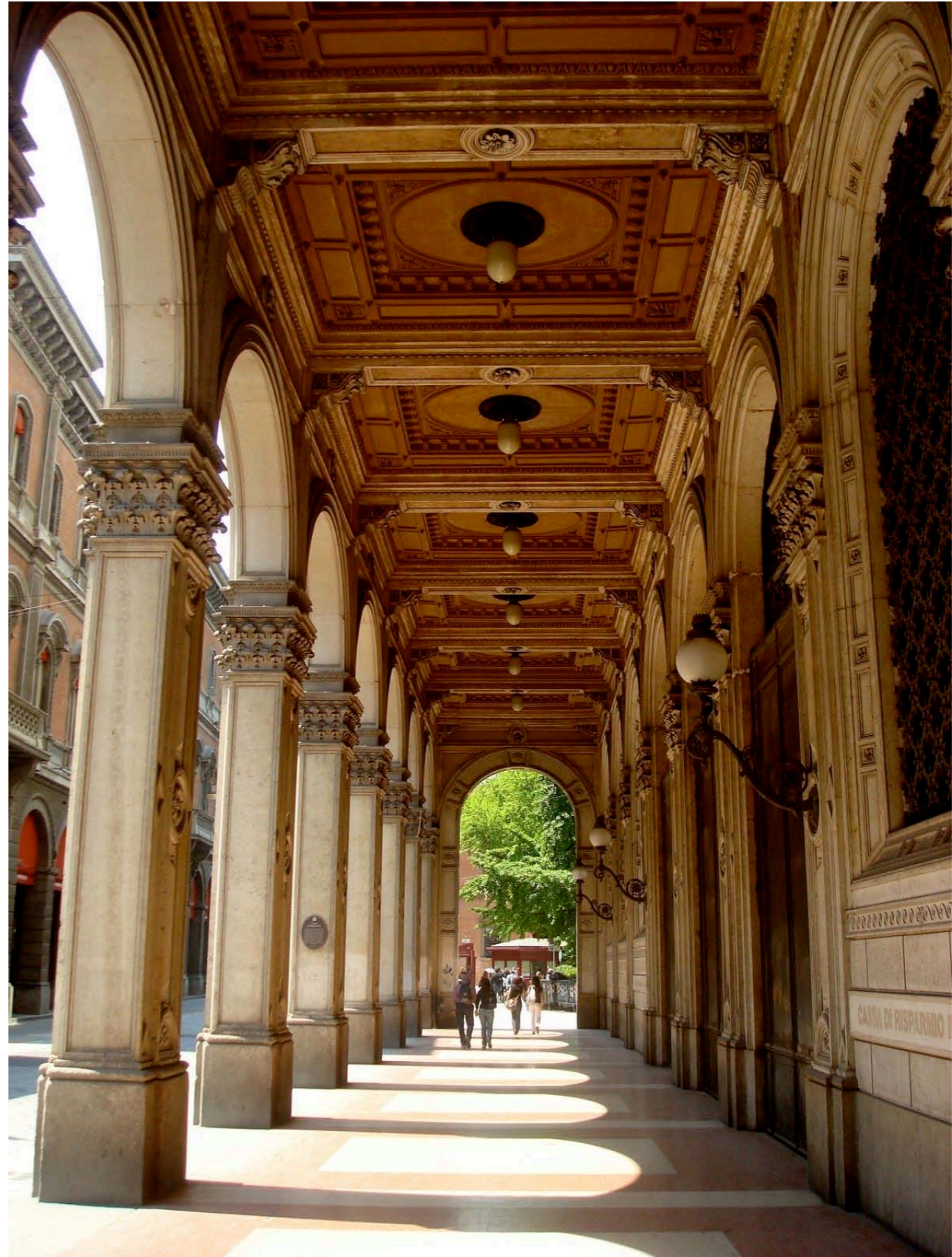
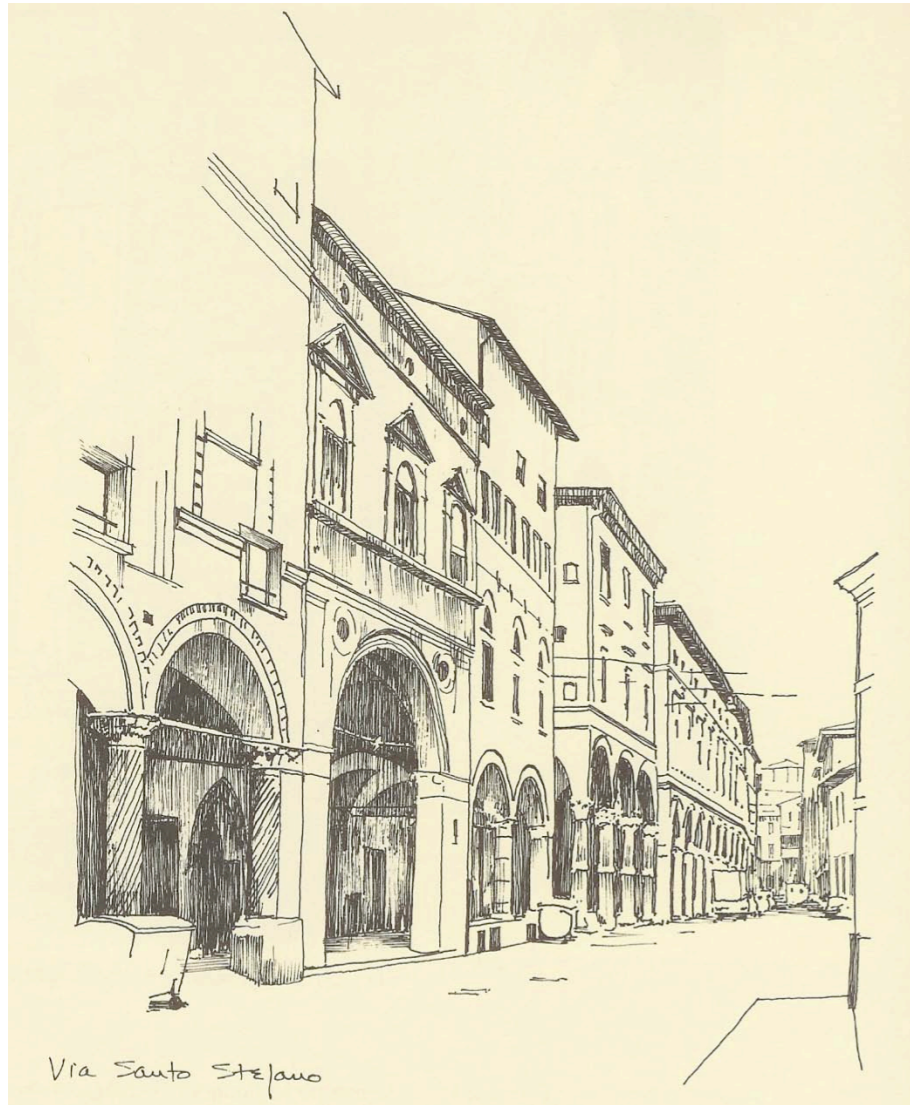
Strong Massing, Metal Siding, Functional Utility



Influences



Bologna, Italy



Arcades designed help create pedestrian culture



Arcades and porticos along pedestrian corridors



Lanterns help signify multiple key entries and creates nighttime identity



Public uses at ground level activate public spaces

Hardwiring a pedestrian-oriented culture

Café is a model for future buildings that create street life at corners



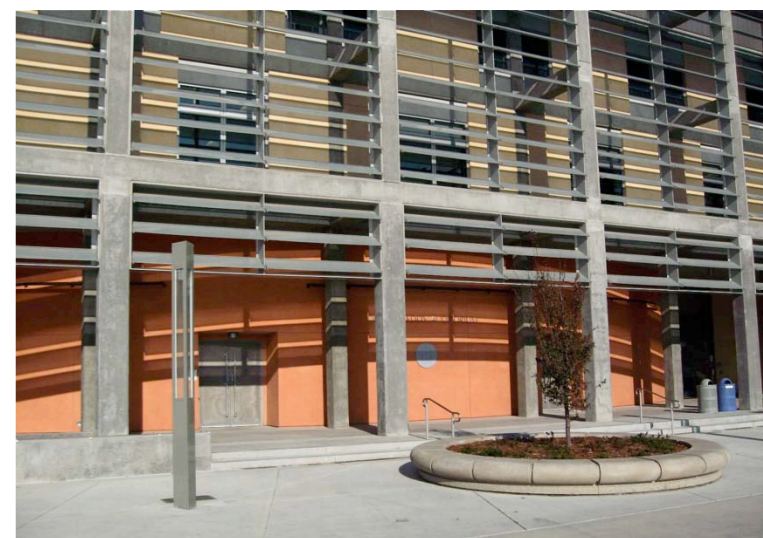
Roof forms will be the “Fifth Façade”



- Mechanical systems integrated with building form will generate a skyline for the campus
- Flat roofs required by design guidelines will support solar collection



Color Palette draws from the Central Valley landscape



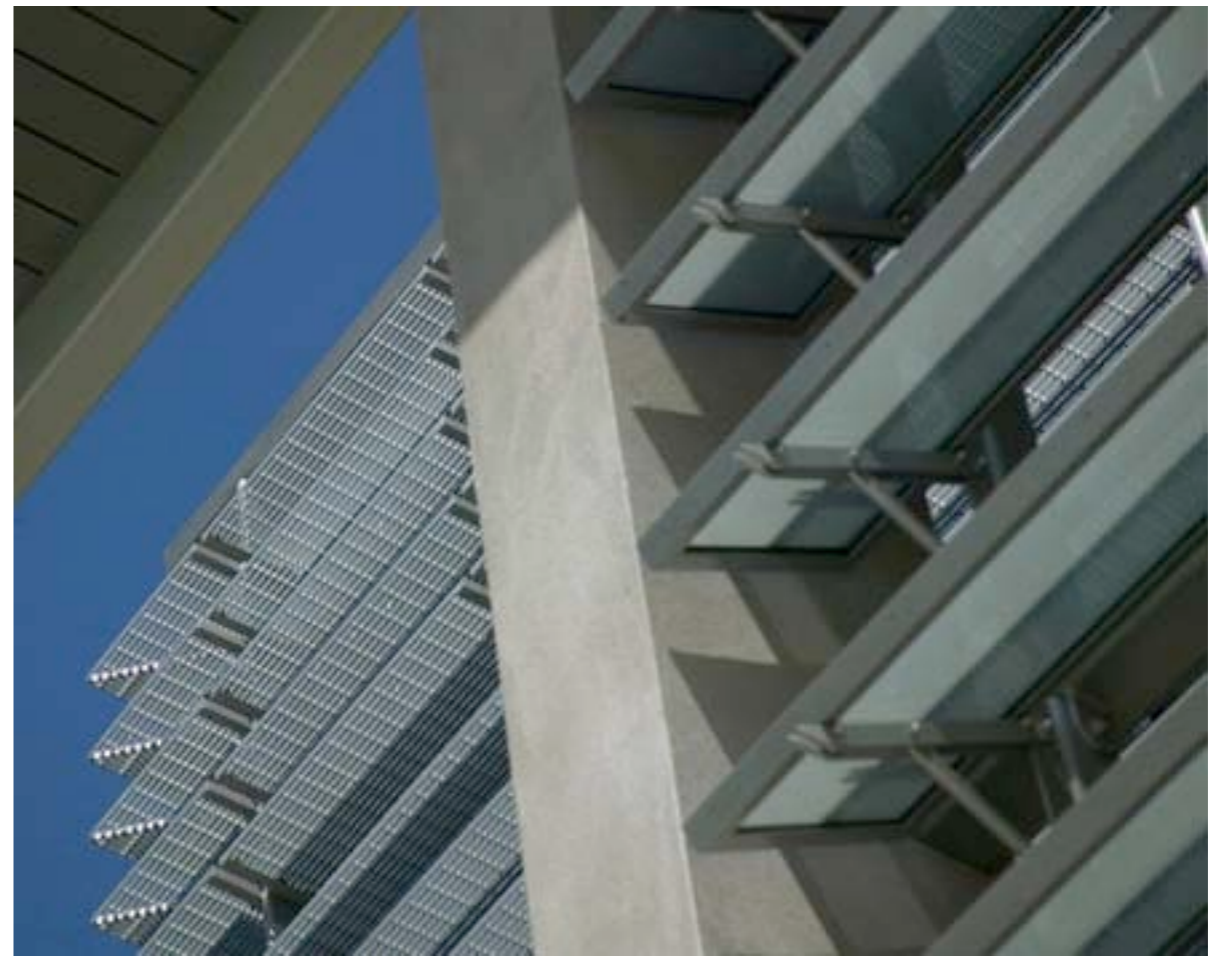
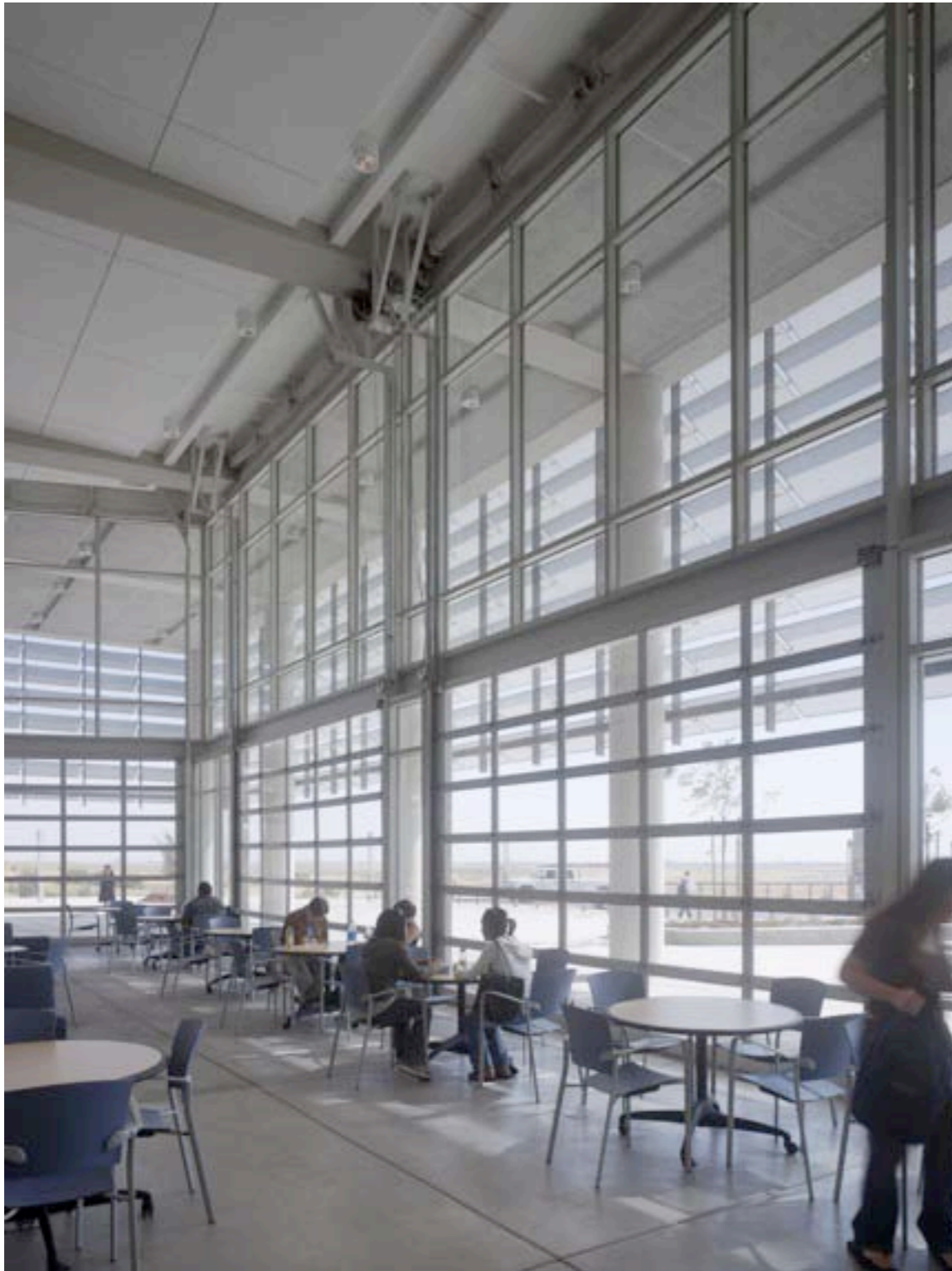
Places for Interaction: Providing indoor and outdoor options



Connecting pathways and places



Architectural choices act as teaching tool



Walls are permeable for natural light and ventilation

Interior Vertical Pathways



Daylighting systems illuminate public pathways at night

Visible Infrastructure



Landscape typologies derived from region

Urban Streetscape



Orchards



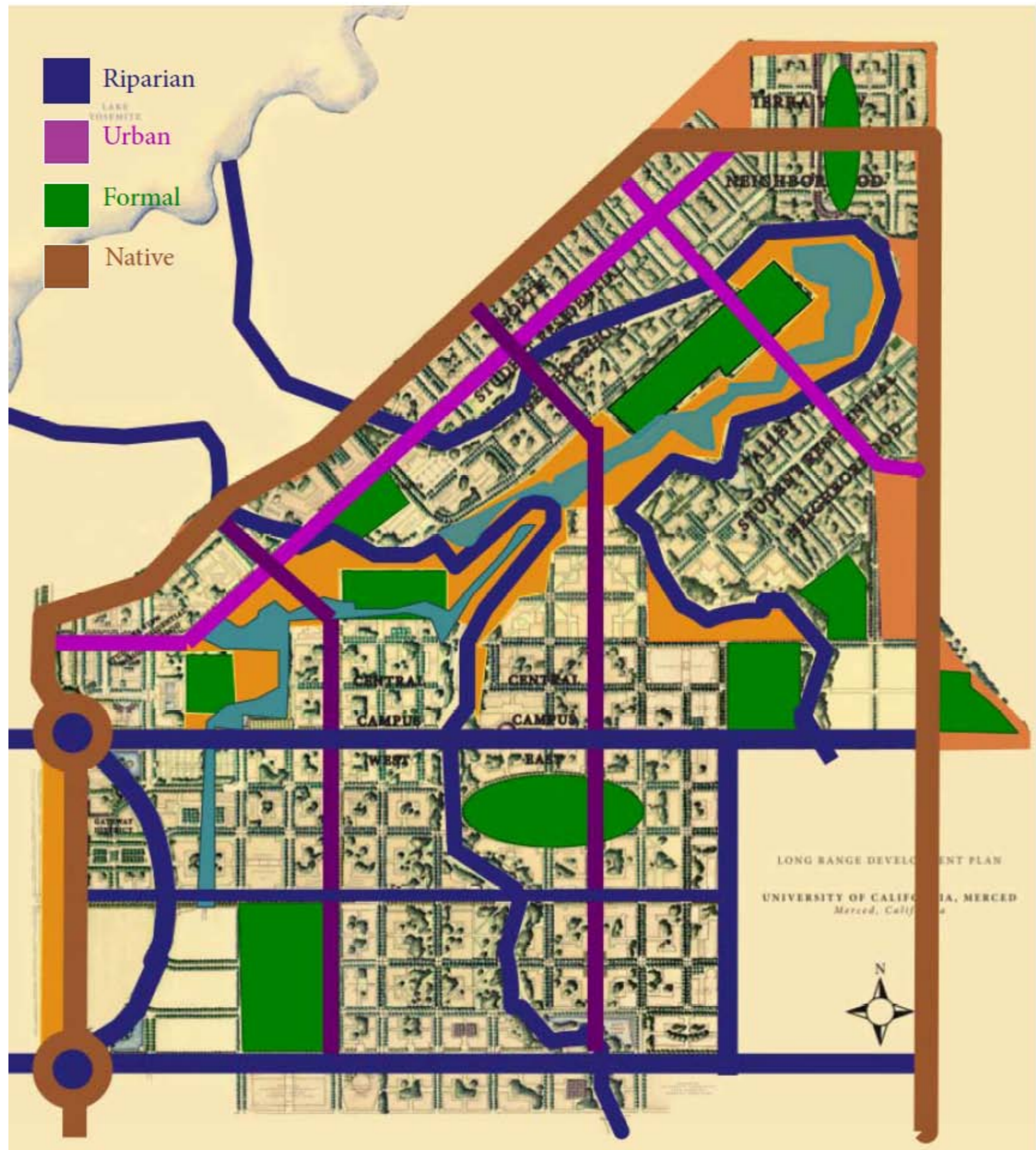
Riparian



Native Grasslands

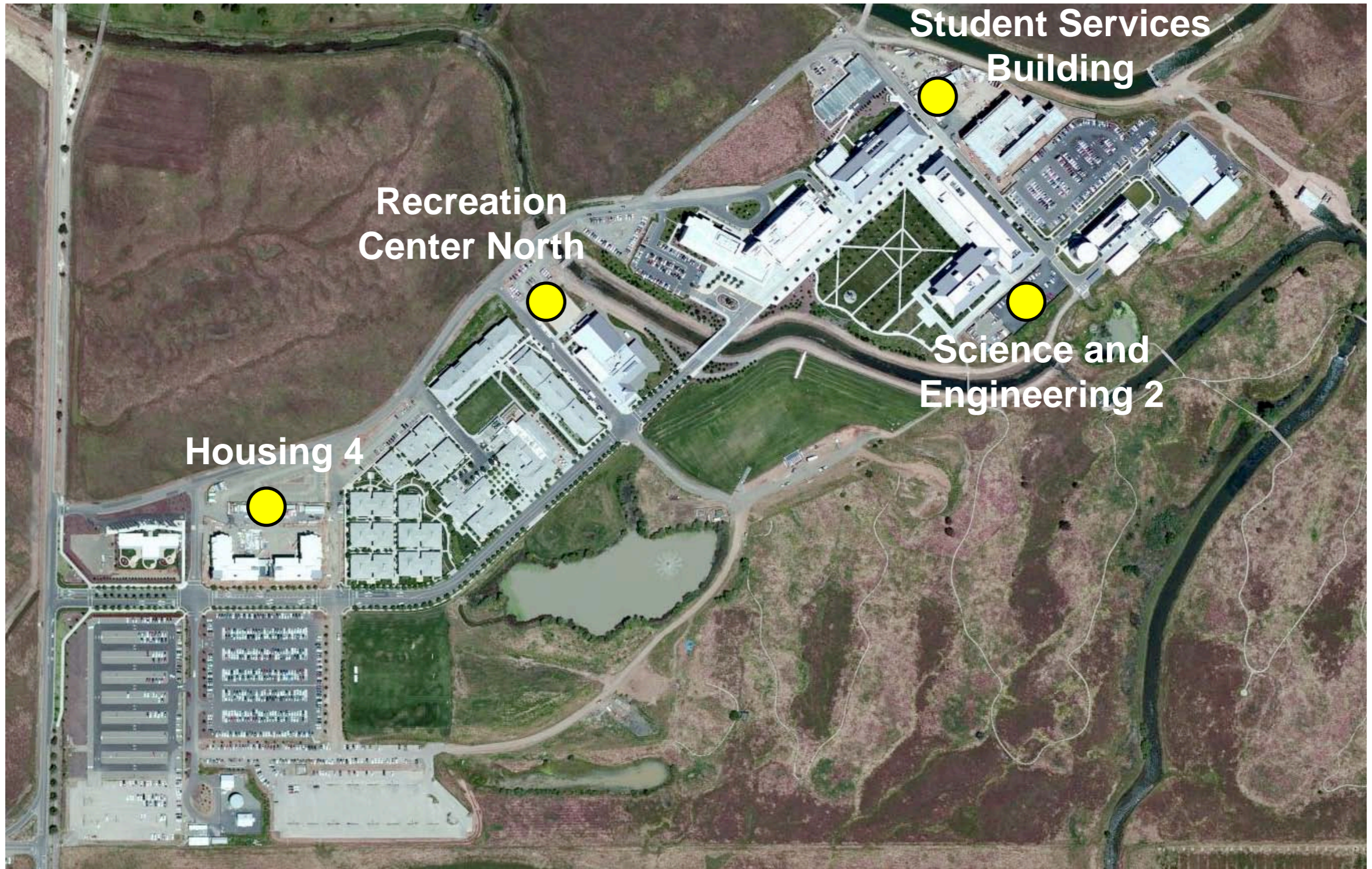


Landscape Typology Arrangement



Overview of Major Project sites: 2012-2015

New Academic and residential space



The goal for UC Merced 2014: Four new buildings and new infrastructure



Housing 4: \$50 million
500 new beds by August 2013



Rec Center North: \$10 million
19,000 GSF, August and November 2012



Science and Engineering 2: \$88 million
102,000 GSF by 2014



Student Services Building: \$19 million
1-story portion: Fall 2013
3-story portion: January 2014

Housing 4: Opens Fall 2013

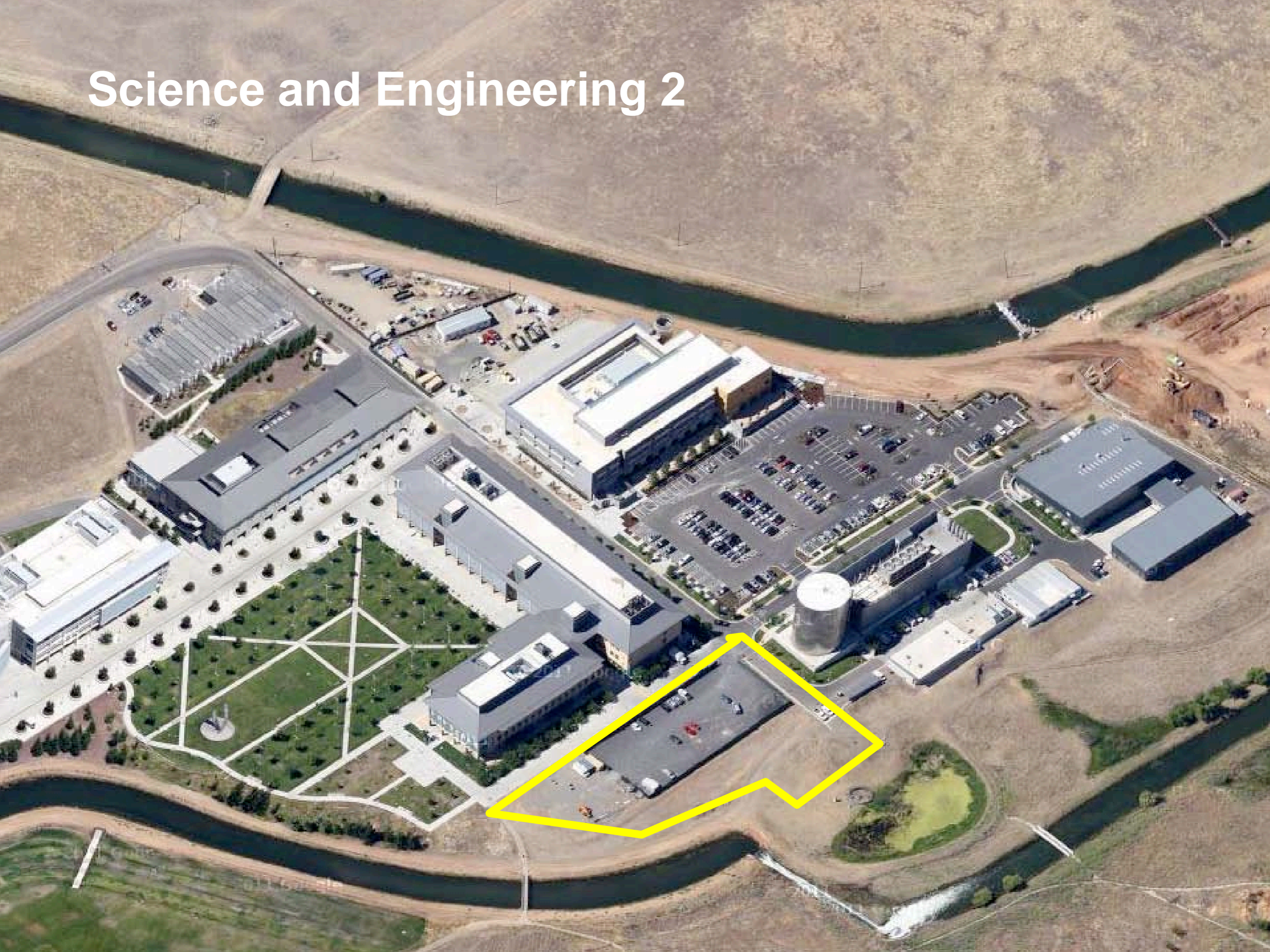


Housing 4

View from Cathedral and Tenaya Halls



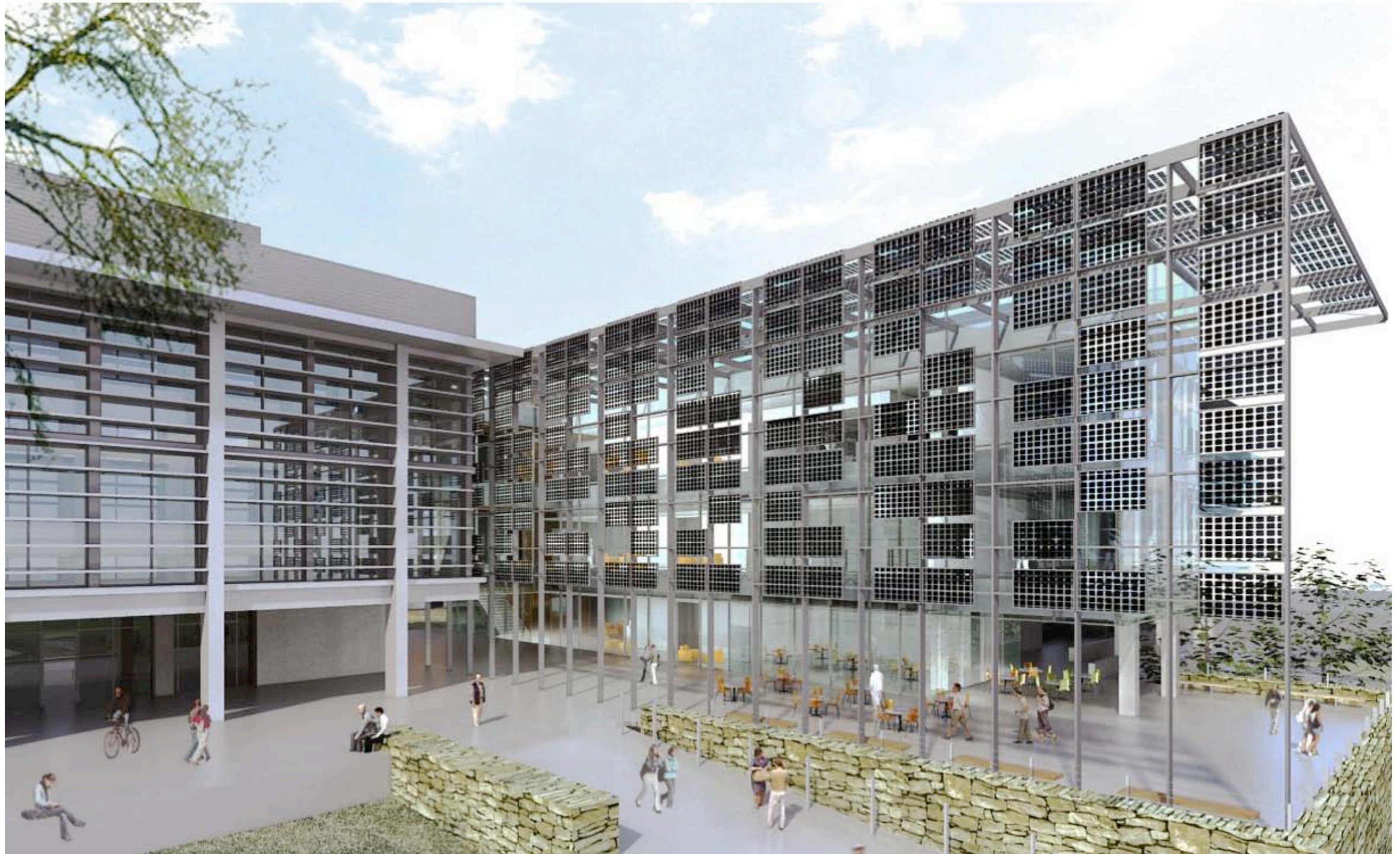
Science and Engineering 2



Science and Engineering 2: Complete in 2014

LEED Platinum Target

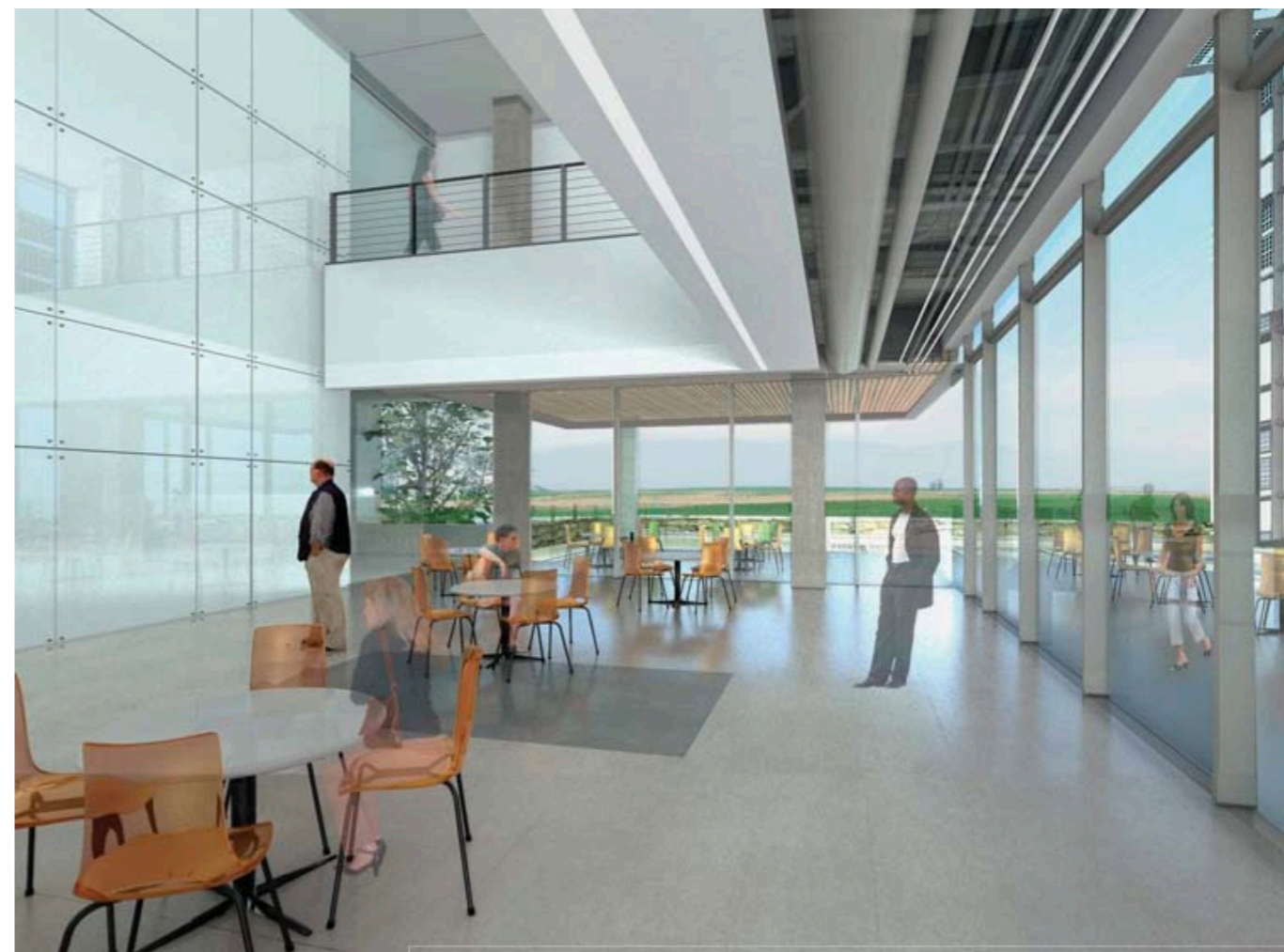
Photovoltaic Shade Structure







Corner Balcony _looking northeast

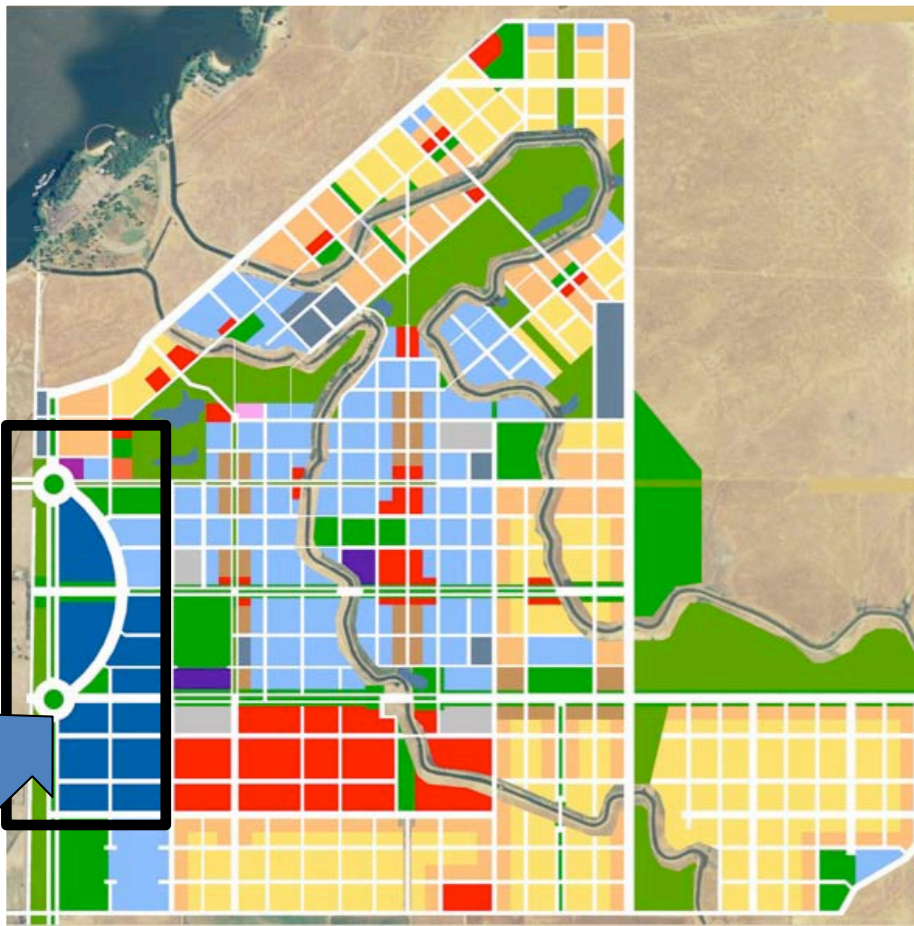


**View from
inside and
courtyard**



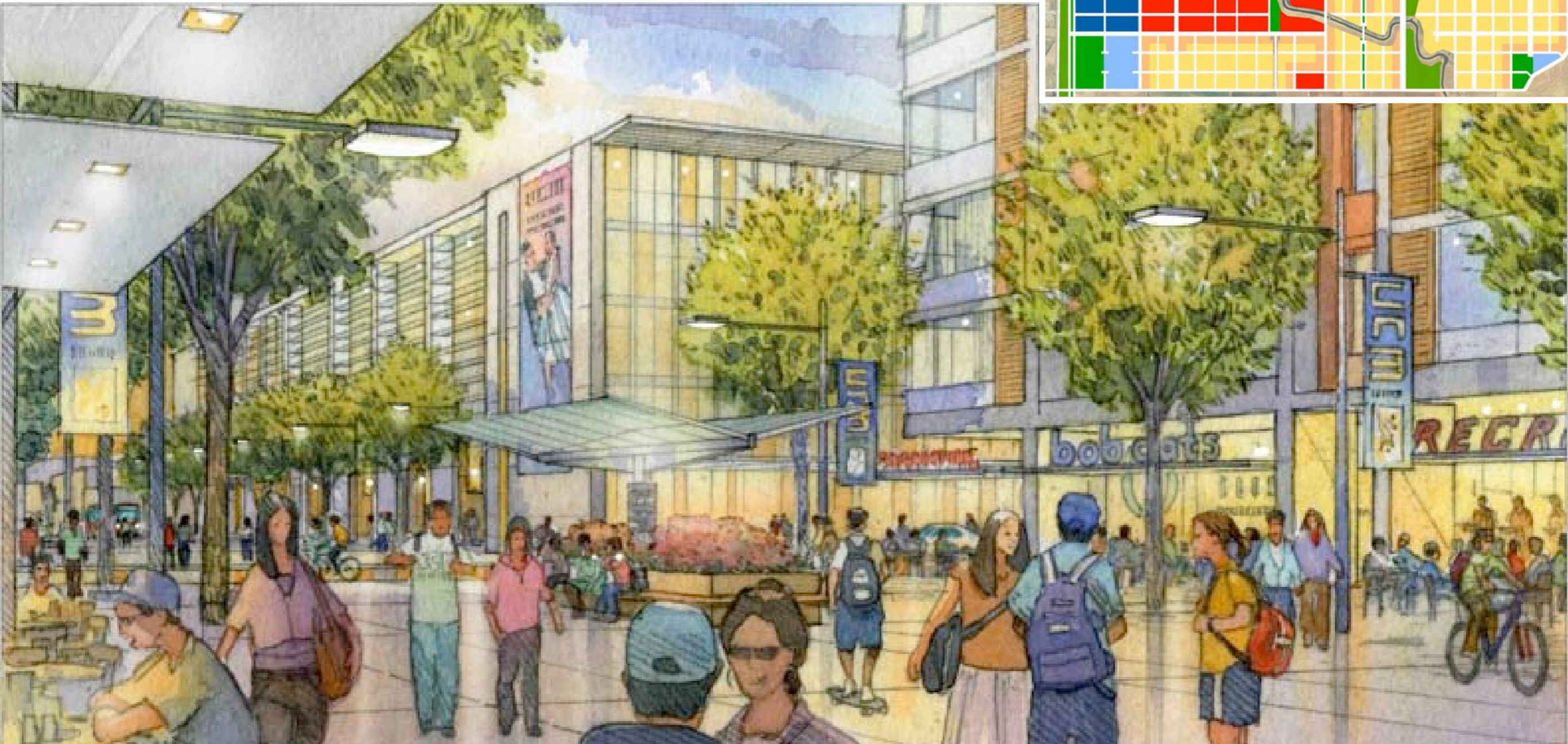
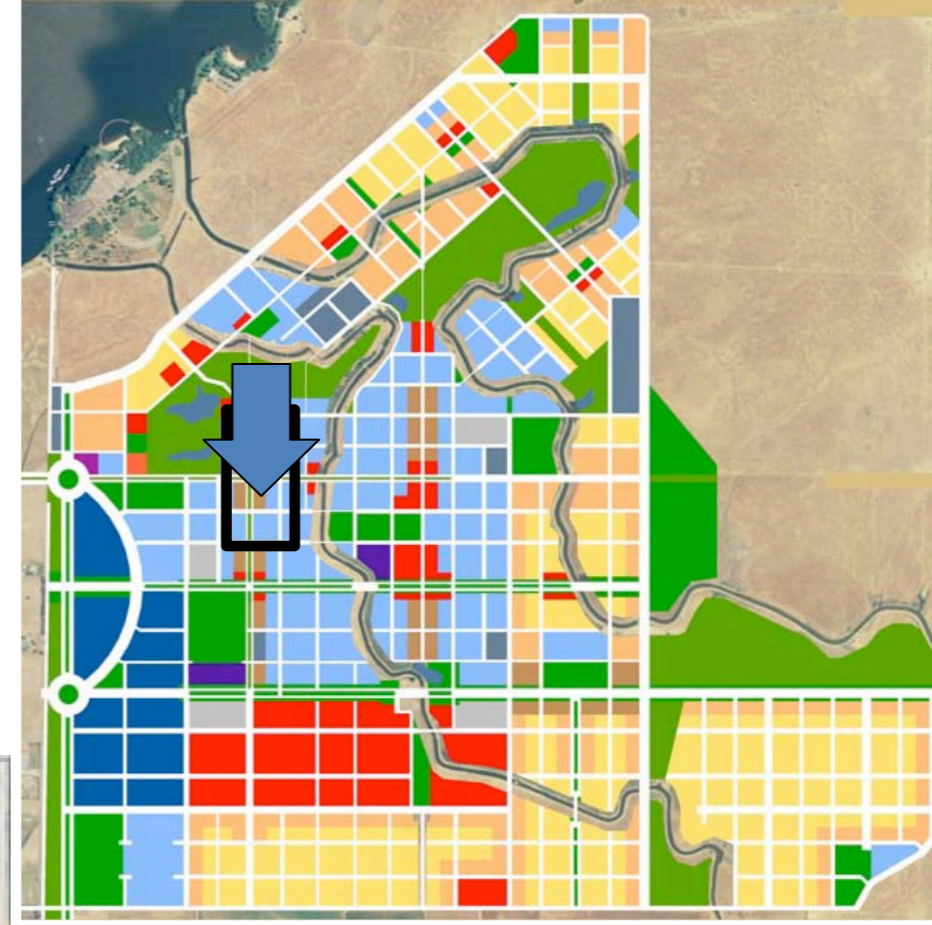
The Gateway District

The campus research and development park



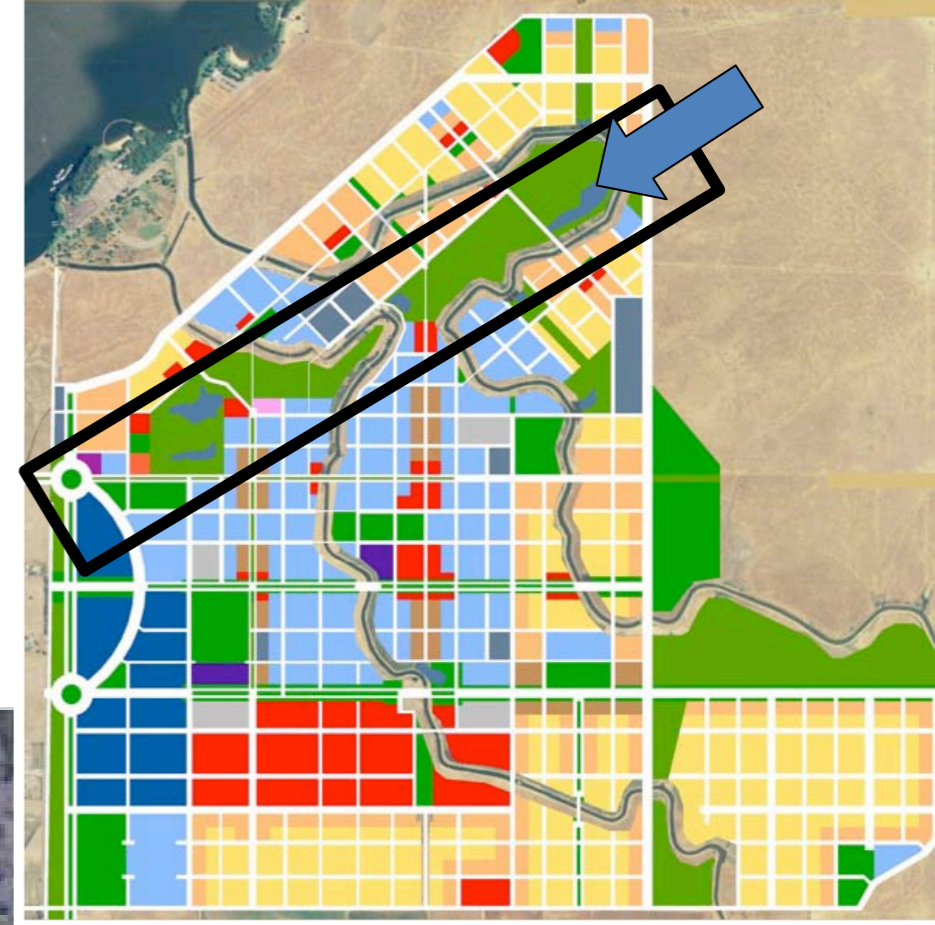
Main Street 2.0

One of two mixed use linear streets penetrating the Academic Core



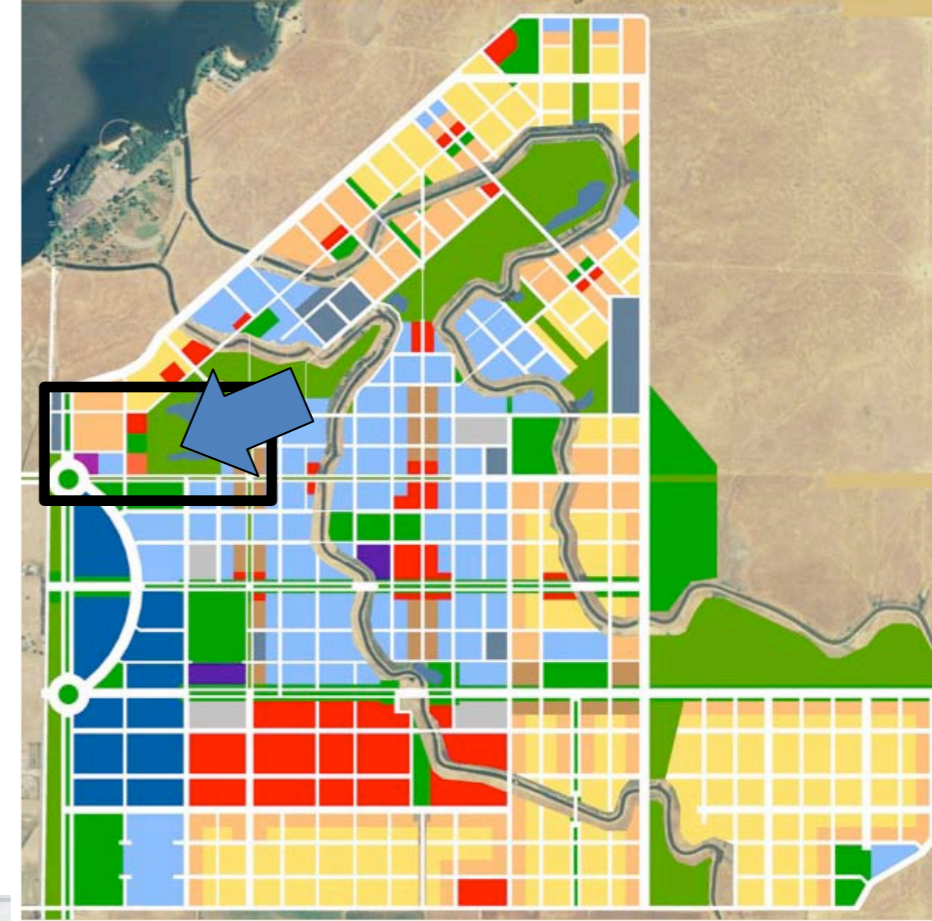
The North Bowl

Acts as open space and visible stormwater management system



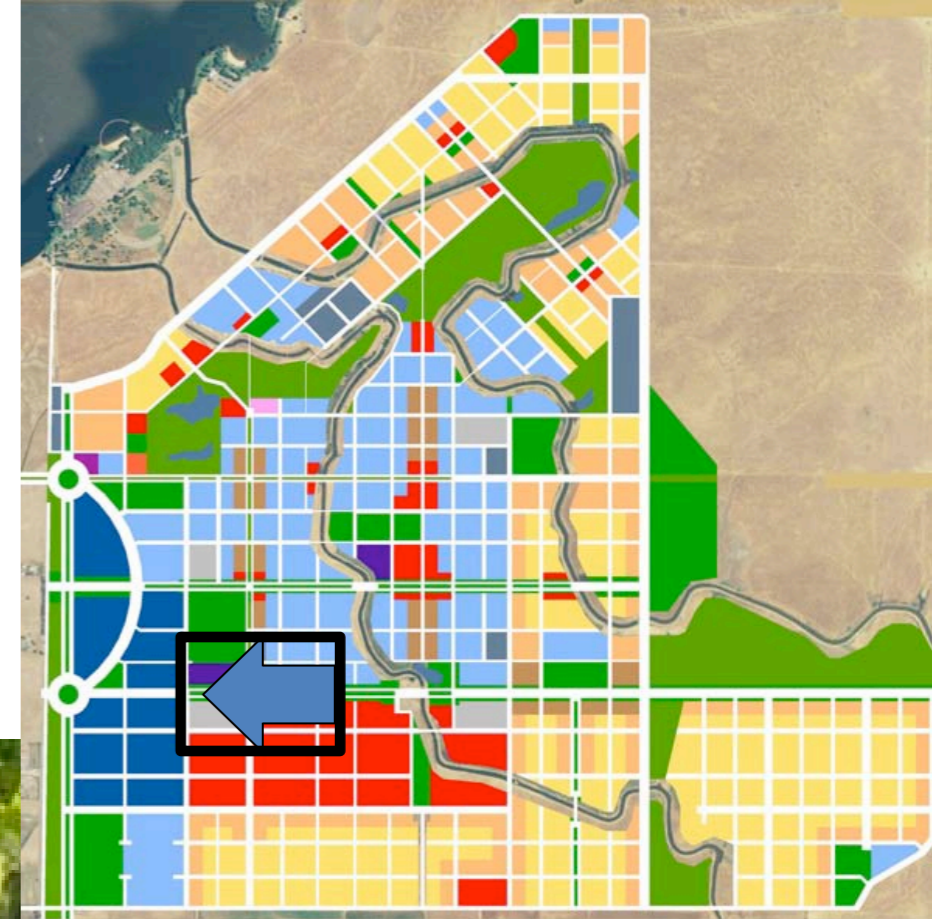
The South Bowl

An open space focus for adjacent buildings that feature daylighting



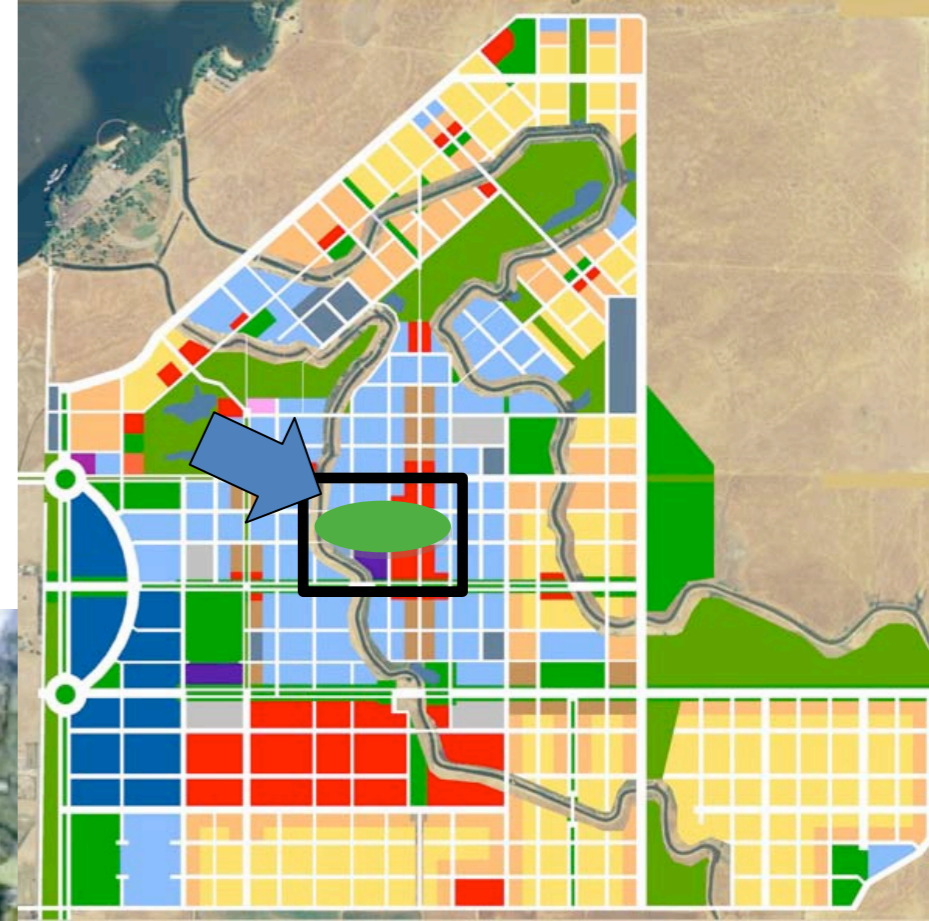
The Town and Gown District

The interface of the campus
and community



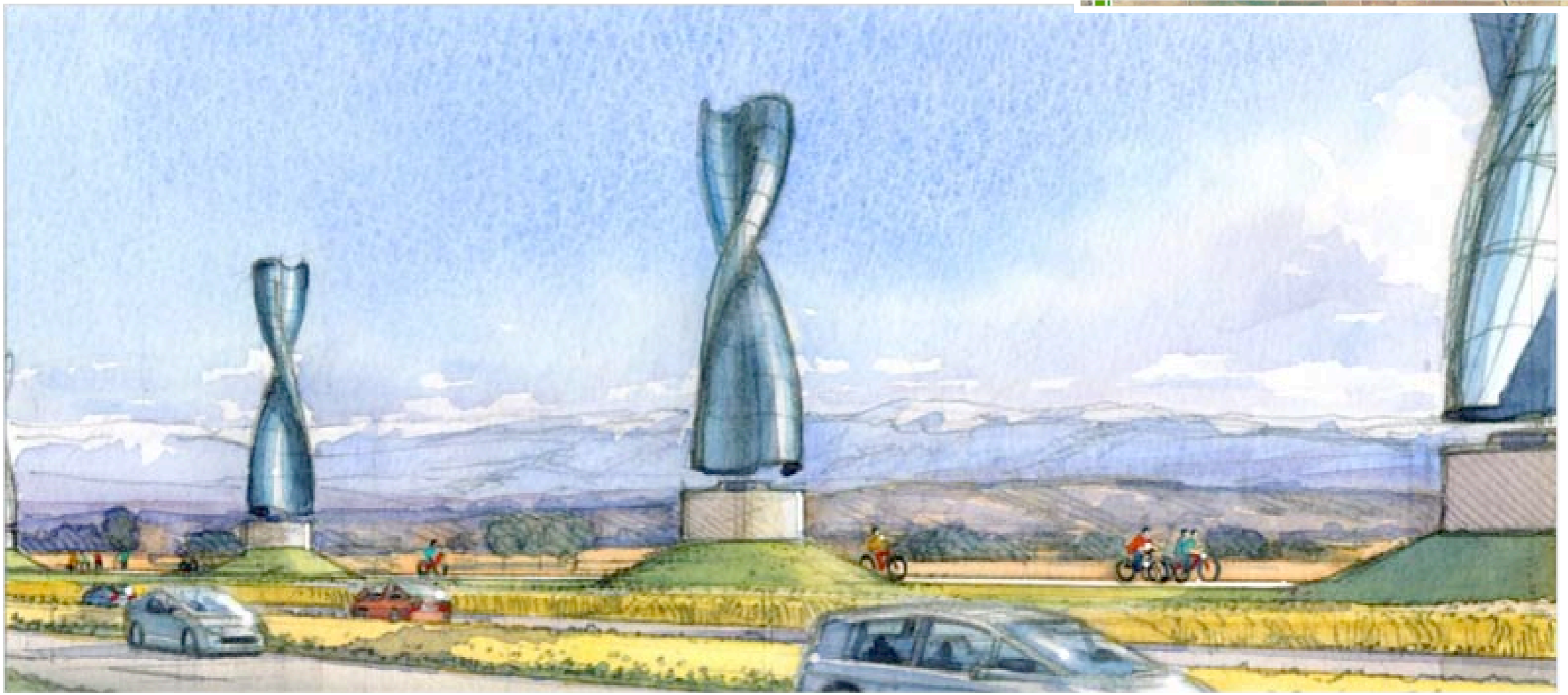
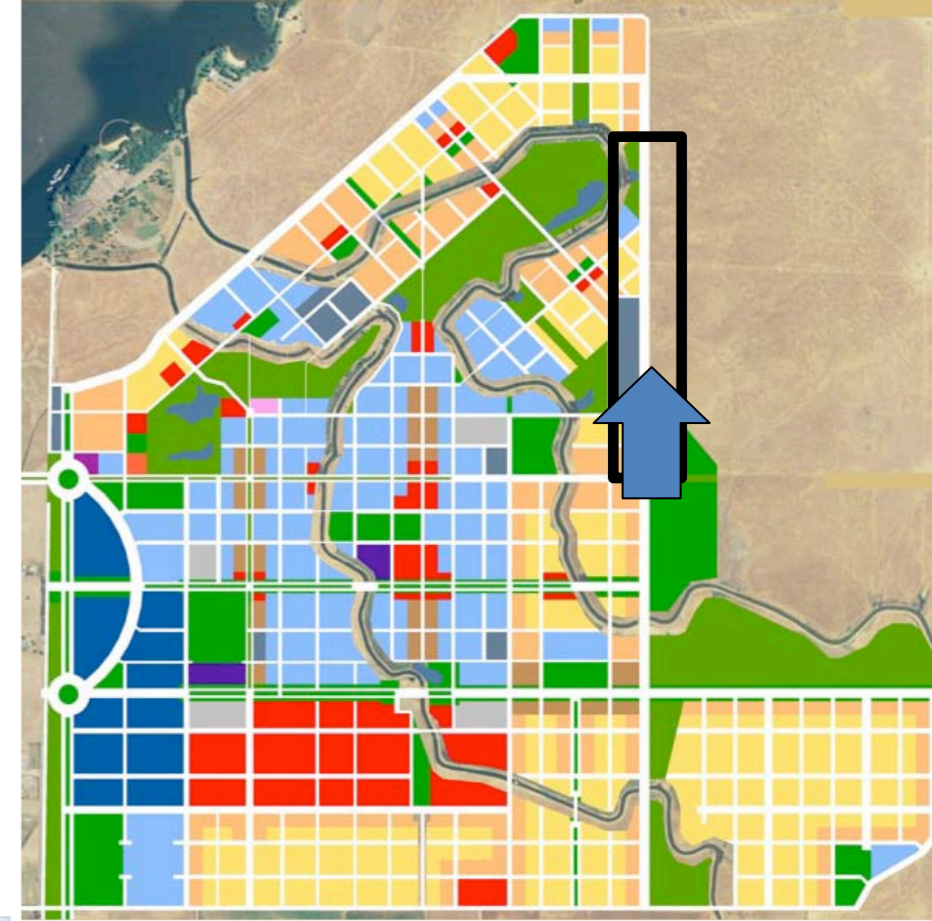
The Grand Ellipse

The ceremonial heart of the campus at full buildout



The Perimeter Loop Road

Provides a distinct renewable focused edge between the built environment and adjacent grasslands



UC Merced and University Community North



PPDC Construction Website

<http://ppdc.ucmerced.edu>

UCMERCED

Apply
Visit
Info

HOME

View Edit Track

ABOUT US
FOR DESIGN PROFESSIONALS AND CONTRACTORS
FIND A PROJECT
INITIATE A PROJECT
LONG RANGE DEVELOPMENT PLAN
DESIGN STANDARDS
SUSTAINABILITY COMMITTEES
ENVIRONMENTAL REVIEW
NEWS AND EVENTS
CONSTRUCTION UPDATES
PPDC INTRANET

Working to build the Greenest Campus in America.

Physical Planning, Design and Construction is a team of architects, planners and construction professionals that delivers sustainable, high-quality and cost effective buildings and places to support UC Merced's teaching, research and public service mission.

Latest News

- Science and Engineering 2 building scheduled for 2014
- Campus Master Plan wins national design award from Society of College and University Planning

Construction Updates

- January 2012 construction updates
- Recreation Center North breaks ground: Ready for Fall 2012

Design Updates

- Housing 4 on track for Fall 2013 opening

- Construction Updates
- Project Images and details

Conclusion

10,000 students by 2020

25,000 student plan

Phased Development

Emphasis on energy efficiency

