California State Polytechnic University, Pomona
Master Plan Update

Final Plan Overview for WASC Senior College and University Commission (WSCUC)
1) Master planning process to date

2) Integration with Strategic & Academic Plans

3) Master Plan (final draft in progress)
   - Campus Wide Improvements
   - Space Analysis and Utilization
   - Plan for Renovation/Transformation of Academic Space
   - Student Life Improvement Projects
     - Student Housing + Dining
     - Student Health and Wellness Center + Childcare Center move
     - Bronco Student Center (and surrounds)
     - Athletics + Recreation

4) Next Steps
MASTER PLAN PROCESS + TIMELINE

COMMUNITY ENGAGEMENT

CPP LEADERSHIP ENGAGEMENT

PHASES-TASKS

VISIONS- GOALS

DATA GATHERING - OBSERVATIONS

ANALYSIS - SYNTHESIS

SPACE ANALYSIS + NEEDS

CONCEPTS- ALTERNATIVES

PHASE 1:

SCHOOL OF BUSINESS

PHASE 2:

SCHOOL OF GORDON RYAN SCANLAN

AREA-HUB PLANS - FACILITY STUDIES

DRAFT PLAN + PHASING + CIP

GUIDELINES + SUSTAINABILITY

FINAL DRAFT PLAN DOCUMENTS

CEQA 12-18 MQ PROCESS

BOS APPROVAL

CEQA COMMUNITY MEETING

FINAL MP ADOPTED 2021
Stakeholders & Representatives:

Chair
FP&M Staff Support
ASI and Student Government
Academic Planning & Student Success
Deans
Academic Senate Chair
Enrollment Mgmt & Services
Student Life & Housing
Dean of Students
Advancement
Campus Health & Wellbeing
ASI Executive Director
Disability Resource Center
Foundation
Police
Information Technology Operations
Institutional Risk & Emergency Mgmt
Transportation and Parking
Athletics
Facilities (Ops, Utilities, Landscape)
Campus Consulting Architect

Vice President Manning
Dan Johnson, Julie Tsang
Farris Hamza and Itzia Salinas
Sep Eskandari and Terri Gomez
Lisa Kessler and Joseph Rencis
Julie Shen
Meredith Kelley
Chris Chisler and Megan Stang
Thomas Cruz-Soto
Doug Nelson
Leticia Gutierrez-Lopez
Roosa Millar
Tracee Passeggi
Aaron Neilson
Chief Robinson
Peter Deutsch
Whitney Fields
John Lloyd and Mike Biagi
AD Swanson
George Lwin, Richard Farmer, Jesse Ochoa
HMC (Jim Wurst)
PLANNING ENGAGEMENT

28 member Master Plan Advisory Committee
5 Open Forums
7 Committee Workshops
+22 meetings with +100 Stakeholders
8 meetings w/Community Partners
(City of Pomona, Foothills Transit, Cal Trans, MetroLink, etc.)
22 Leadership Review/Work Sessions
Over 500 total Campus Participants

Upcoming:
Campus Forum for Final Draft Plan
• Focus Session: Sustainability
• Focus Sessions: Transportation, Transit Center

Final Plan for CEQA – EIR (12-18 mos)
Final Master Plan adopted by CSU 2021
Campus Context + Community Partners

City of Walnut

City of Pomona

Mt San Antonio College

Cal Poly Pomona

Corporate Center

Innovation Village

Spadra Farms

Lanterman

Diamond Bar
Integration with Strategic & Academic Plans

- 2017-2023 Strategic Plan
- 2017 Academic Master Plan
- Master Plan Themes + Planning Principles
Cal Poly Pomona Values

STUDENT LEARNING AND SUCCESS

ACADEMIC EXCELLENCE

EXPERIENTIAL LEARNING

INCLUSIVITY

COMMUNITY ENGAGEMENT

SOCIAL AND ENVIRONMENTAL RESPONSIBILITY
Deliver quality programs that promote integrative learning, discovery, and creativity.

Enhance Student Learning, Development, and Success

Prepare our students for the future of work and civic engagement

Strengthen our Economic Vitality and Impact

Advance Organizational Development and Employee Excellence
ACADEMIC PLAN ELEMENTS

- Inclusive polytechnic university
  - application of knowledge
  - professional + career readiness
  - collaborative learning
  - integrated technology
  - diverse + multi-disciplinary
  - critical thinking + problem solving
  - creativity, discovery, innovation

- Use the campus as a laboratory
- Studios, maker spaces, resources
- Flexible, shared facilities
- Resource centers
- Pilot projects

- Make places for collaboration
- Identify opportunities for engagement
- Identify partners in industry + spaces for connecting

- Nexus with Master Plan
The 2018 Cal Poly Pomona Master Plan Update will be comprehensive, broad, and intentional about furthering Cal Poly Pomona’s place in the future of the country.
Five Themes emerged from stakeholder engagement + CPP Strategic Academic plans

1. **Student Experience Above All**
   All decisions put student experience at the forefront, from physical facilities and accessibility *(including the online environment)* to Cal Poly Pomona programs and policies.

2. **Polytechnic Approach**
   The campus is a laboratory which supports teaching and learning by doing, inside and outside of the traditional educational settings.

3. **Connectivity is Key**
   Connectivity is key to orientation/wayfinding and ease of circulation for a safe, inclusive and universally accessible campus.

4. **Pedestrian Campus in a Commuter Reality**
   Campus has to be safe, accessible and convenient *(by multiple modes of transportation)*, and walkable - bikeable for all students, faculty, staff and visitors.

5. **Sustainable in All Aspects**
   Decisions must be sustainable environmentally, economically, socially and consistent with Cal Poly’s values, commitments, goals.
CIP Decision Matrix

All major projects should grow out of the campus needs and be guided by the Strategic Plan, Academic Plan & Master Plan.

Cal Poly Pomona Master Plan
Matrix for Strategic Decision-Making on Capital Investment & Funding Priorities

<table>
<thead>
<tr>
<th>Strategic Plan</th>
<th>Values</th>
<th>Categories</th>
<th>Initiative Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Success</td>
<td>Values</td>
<td>Student Learning + Success</td>
<td>1. Student Learning + Success</td>
</tr>
<tr>
<td>Academic Excellence</td>
<td>Values</td>
<td>2. Academic Excellence</td>
<td></td>
</tr>
<tr>
<td>Experiential learning</td>
<td>Values</td>
<td>3. Experiential learning</td>
<td></td>
</tr>
<tr>
<td>Inclusive</td>
<td>Values</td>
<td>4. Inclusive</td>
<td></td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Values</td>
<td>5. Community Engagement</td>
<td></td>
</tr>
<tr>
<td>Social + Environmental Responsibility</td>
<td>Values</td>
<td>6. Social + Environmental Responsibility</td>
<td></td>
</tr>
</tbody>
</table>

VALUES:
- Does this improve student experience? (safety, well-being, learning and success in retention, persistence, completion?)
- Does this advance excellence in teaching or scholarship?
- Does this support integrative, collaborative, experiential learning?
- Does this advance inclusivity goals (including affordability)?
- Is there a project partner (foundation, industry, community) or a potential to attract or expand relationships and engagement?
- Does this contribute to CIP Goals (Graduation Initiative, Climate Action Plan, etc.)?

Initiatives & Goals

1. Quality programs that promote integrative learning
2. Enhance student learning, development, + success
3. Prepare students for future of work + civic engagement
4. Strengthen economic vitality + impact
5. Advance organizational development + employee excellence

Master Plan Impact:
- Expand learning spaces
- Provide more active learning spaces
- Improve student retention, persistence, and success
- Enhance digital student experience, support services

Physical Needs:
- To drive new projects and see building conditions ratings

Academic Plan
- Application of knowledge
- Critical thinking + problem solving
- Creativity, discovery, innovation
- Diverse, multi-disciplinary perspectives
- Integration of technology
- Collaboration learning
- Community & global engagement
- Career + professional readiness

Academic Plan Action Steps
- Add/convert classrooms to online learning lab/CS, large lecture rooms
- Flex faculty or student project/ research/ exploratory space
- Improve faculty scholarship + student-faculty engagement space
- Interdisciplinary PDC workshop space
- MACE for summer sessions, space for IDEE, MER, EOP
- Online course development facility, training sandbox
- Additional instructional capacity - classroom demand study
- Grad support + research space, space to interact w/ community-industry partners

From Academic Plan Action Steps
- Performing arts facility, performing space, studio music practice rooms, rehearsal space.
Campus Wide Improvements

- Pedestrian Environment
- Pedway-Bikeway, Bike Paths
- Traffic, Transit, Parking
- Shade + Seating
- Sustainability
ELEMENTS OF A PEDESTRIAN ENVIRONMENT

Expand the Pedestrian Zone

Support Multi-modal Connectivity

Address Safety, Accessibility + Wayfinding

Create Gathering Spaces with Seating, Shade
PEDESTRIAN-VEHICLE CONFLICT AREAS

Challenges:

• I-10 entry/exit ramp brings all traffic directly into campus
• Major streets through campus
  – Kellogg Drive
  – Temple / S Campus Dr
  – University Dr
• High traffic intersections (esp at campus entrances)
• Connectivity + safety from student housing, parking or academic functions outside the campus pedestrian zone
• Internal campus streets (even with access controls)
• Lack of safe bike infrastructure (bike were historically banned)
PEDESTRIAN-VEHICLE CONFLICT AREAS

Strategies:

- Direct traffic AROUND not through the campus
- Shift vehicles + parking to campus perimeter
- Put Kellogg on a ‘road diet’, narrower w/pedestrian enhancements
- Transform University Dr for campus shuttles, bikes, pedestrians
- Make campus transit work better
- Transform internal ‘streets’ to multi-modal malls
- Dedicated bike/skateboard paths
- Better defined accessible route
- Lighting, signage, shade, seating
- Create design standards for pedestrian-oriented environment
A ‘road diet’ reduces the vehicular ‘territory’ which causes drivers to slow down, and increases the pedestrian and bike zones to enhance safety.
MP Solutions:

- Keep or relocate major student uses within the pedestrian zone
- Provide safer connectivity
  - Send thru traffic around the campus + Kellogg Dr ‘road diet’
  - Circulating campus shuttle connects academic core to parking, transit center
  - Dedicated transit lane on University Dr
  - Connect to all shuttles, FTA busses at Transit Center
  - Plan for future Metrolink stop
MP Solutions:

- Keep or relocate major student uses within the pedestrian zone
- Provide safer connectivity
  - Send thru traffic around the campus + Kellogg Dr ‘road diet’
  - Circulating campus shuttle connects academic core to parking, transit center
  - Dedicated transit lane on University Dr
  - Connect to all shuttles, FTA busses at Transit Center
- Extend + connect bike paths
High-intensity Activated crosswalk (HAWK pedestrian beacon)
Cross Campus Connections
(BEFORE)
TRANSFORMATION
Northern Arizona University Ped-Bike Path

Cross Campus Connections
(AFTER)
MP Solutions:

- Keep or relocate major student uses within the pedestrian zone
- Provide safer connectivity
  - Send thru traffic around the campus + Kellogg Dr ‘road diet’
  - Circulating campus shuttle connects academic core to parking, transit center
  - Dedicated transit lane on University Dr
  - Connect to all shuttles, FTA busses at Transit Center
  - Extend + connect bike paths
- **Transform internal campus streets into pedestrian oriented multi-modal malls**
Multi-modal Mall (Portland, OR)
Multi-modal Mall  (Washington State University, WA)
Emory University (before)
Campus Transit:
- three routes
- stops based on most requests
- buses only have one door
- intervals of 15-30 minutes between busses
- traffic slows buses especially at peak times

Greatest ridership is between south parking lots, housing, FTA bus stops and building #1

Lack of ridership makes it difficult to justify improvements, which makes it difficult to increase ridership.
Circulating Shuttle:
- one way loop
- connect parking to academic core
- larger bus w/front + side doors
- fewer stops, shorter intervals
- get the shuttle out of traffic
TRANSFORMATION
Northern Arizona University Transit Mall
UNIVERSITY DRIVE TRANSFORMATION

Existing:

- limited sidewalks
- parking
- vehicle travel- 2 way
- parking
- sidewalks (width varies)

Street Section Looking East
UNIVERSITY DRIVE TRANSFORMATION

Proposed:

- travel lanes (eliminate on-street parking except pull-outs for ADA/Med)
- 1 way transit, Share w/bikes, emergency vehicles, campus services
- widen sidewalks on south side

Street Section Looking East
Transit Center:
- Connected to parking
- On-campus shuttles
- Local/regional FTA bus stops
- Metrolink shuttles
- Auto + bike share hub
- Uber/Lyft circle

Should include:
- Safe, sheltered waiting
- Real-time tracking
- Transit information
- Purchase passes
TRANSIT CENTER (first phase)

Precedent: University of Nevada, Transit Center
Precedent: rendered view of mixed-use transit center
TRANSPORTATION – CLIMATE ACTION PLAN GOALS

1. Reduce student commuting population from 88% to 73%
2. Reduce faculty and staff commuting by 10%
3. 40% of population using alternatives to SOV’s to commute

Students:
80% Drive Alone
8.5% Carpool
4.3% Transit

2009 Data
TRANSPORTATION – CLIMATE ACTION PLAN GOALS

Strategies:

❑ **Increase efficiency/utilization of existing parking resources**
  - Study utilization + policies: *managing permits, more early/late classes, adjusting event schedules, reduce resident permits, off-campus temporary lots w/express bus*

❑ **Incentivize alternatives to parking with policies + pricing**
  - Use technology – *real-time ride-matching/sharing apps, transit route apps*
  - More housing on-campus + *policies to discourage residents bringing cars*
  - More student employment on/near campus – *Innovation Village, Lanterman*
  - Provide robust multi-modal information + hands-on experience during orientation

❑ **Increase use of alternative modes of transportation**
  - Transit Center - *improve transit convenience, safety and connectivity*
  - Foothills Transit ‘class pass’ - *free to users (cost to university after 1st year), expand hours*
  - Silver Streak – *express to downtown, work on route, verify rider demand*
  - Metrolink connections
    - *shuttles to Pomona North Station (San Bernardino rail line)*
    - *lobby for new stop on Valley Blvd (Riverside rail line)*

❑ **Replace surface parking with structures to reduce land used**
Strategies:

- Implement Demand Management Strategies
- Keep parking on campus perimeter w/shuttle loop connections
- Build Transit Center + PS #3 to replace overflow lots (Innovation Village land intended for development)
- Add ADA and visitor parking at appropriate locations
- Integrate parking with event destinations
“Sustainable development is the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”
Cal Poly Pomona Sustainability
MISSION STATEMENT

We hope to educate students, faculty, and staff about the various ways of embracing sustainability by incorporating it into the University’s planning, policies, academics, operations, student activities and community engagement.
Sustainability – Comprehensive Approach

SILO

BALANCE

REACTIVE

ENVIRONMENT

SOCIAL

ECONOMIC

INTERWOVEN
Sustainability – The Big Picture

Operational Matters

- Energy Use and Greenhouse Gas Reduction
- Campus Mobility
- Stormwater Management
- Built Environment Site Design, Water Usage

Included in the Campus Master Plan

Waste Management

Supported by the Campus Master Plan

Non-Operational Matters

- Social Sustainability
- Education, Outreach and Engagement
- Administrative Support
- Pedagogy, Research and Innovation

Reinforced by the Campus Master Plan
Space Analysis and Utilization

Preliminary Findings

- Fall 2017 showed rooms highly scheduled, but utilization still short of CSU targets
- Fall 2018 shows even higher scheduling
- CPP consistently teaches (FTEs) above the CSU calculated capacity and continues to grow
- Instructional environmental standards are not ideal for ‘hands-on’ learning
SPACE CAPACITY - UTILIZATION FINDINGS

FTE Capacity v. Actual Total FTEs Taught

<table>
<thead>
<tr>
<th>College Year Annualized Full-Time Equivalent Students (FTES)</th>
<th>6/20/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State Polytechnic University, Pomona</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) CSU FTES Capacity for Campus</td>
<td>*</td>
<td>*</td>
<td>17,993.00</td>
<td>18,292.00</td>
<td>18,292.00</td>
</tr>
<tr>
<td>2) CSU Resident FTES Target</td>
<td>17,356.00</td>
<td>17,756.00</td>
<td>18,294.00</td>
<td>18,586.00</td>
<td>18,714.00</td>
</tr>
<tr>
<td>3) Campus total FTES Goal</td>
<td>18,244.00</td>
<td>18,769.00</td>
<td>19,794.00</td>
<td>20,870.00</td>
<td>21,443.30</td>
</tr>
<tr>
<td>4) Actual total FTES Taught</td>
<td>18,825.00</td>
<td>19,897.00</td>
<td>19,730.00</td>
<td>21,376.90</td>
<td>21,872.20</td>
</tr>
</tbody>
</table>

| Percent of Capacity | 110% | 117% | 120% |

1) CSU FTES Capacity for Campus is a calculation used in the analysis of new space needs
* If necessary, older figures could be researched.
2) CSU Resident FTES Target is budget teaching expectation for California resident students
3) Campus total FTES Goal is planned teaching expectation for all students, resident plus non-resident
4) Actual total FTES Taught is final college-year outcome

Prepared by Academic Research and Resources

Actual Total FTEs Taught

Overall a 16% Increase over 5 years
## CLASSROOM SCHEDULING

### Fall 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>53% 83 Rooms</td>
<td>61% 96 Rooms</td>
<td>51% 94 Rooms</td>
<td>59% 94 Rooms</td>
<td>42% 67 Rooms</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>73% 115 Rooms</td>
<td>66% 105 Rooms</td>
<td>72% 113 Rooms</td>
<td>66% 104 Rooms</td>
<td>59% 94 Rooms</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>75% 115 Rooms</td>
<td>92% 145 Rooms</td>
<td>72% 113 Rooms</td>
<td>91% 144 Rooms</td>
<td>59% 93 Rooms</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>79% 125 Rooms</td>
<td>92% 146 Rooms</td>
<td>77% 121 Rooms</td>
<td>92% 145 Rooms</td>
<td>83% 99 Rooms</td>
</tr>
<tr>
<td>11:45 AM</td>
<td>76% 124 Rooms</td>
<td>91% 143 Rooms</td>
<td>77% 122 Rooms</td>
<td>91% 143 Rooms</td>
<td>61% 96 Rooms</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>48% 76 Rooms</td>
<td>98% 155 Rooms</td>
<td>53% 83 Rooms</td>
<td>96% 152 Rooms</td>
<td>28% 45 Rooms</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>92% 146 Rooms</td>
<td>97% 154 Rooms</td>
<td>91% 143 Rooms</td>
<td>95% 150 Rooms</td>
<td>25% 40 Rooms</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>85% 134 Rooms</td>
<td>84% 133 Rooms</td>
<td>82% 130 Rooms</td>
<td>84% 132 Rooms</td>
<td>23% 37 Rooms</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>83% 131 Rooms</td>
<td>85% 134 Rooms</td>
<td>82% 130 Rooms</td>
<td>82% 130 Rooms</td>
<td>8% 12 Rooms</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>78% 124 Rooms</td>
<td>57% 90 Rooms</td>
<td>75% 125 Rooms</td>
<td>55% 87 Rooms</td>
<td>4% 6 Rooms</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>70% 110 Rooms</td>
<td>77% 121 Rooms</td>
<td>73% 115 Rooms</td>
<td>75% 119 Rooms</td>
<td>1% 2 Rooms</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>69% 109 Rooms</td>
<td>56% 88 Rooms</td>
<td>73% 116 Rooms</td>
<td>56% 88 Rooms</td>
<td>1% 2 Rooms</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>26% 41 Rooms</td>
<td>42% 66 Rooms</td>
<td>27% 42 Rooms</td>
<td>42% 67 Rooms</td>
<td>1% 2 Rooms</td>
</tr>
</tbody>
</table>

Total classrooms = 158

### Fall 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>73% 118 Rooms</td>
<td>76% 120 Rooms</td>
<td>72% 113 Rooms</td>
<td>76% 120 Rooms</td>
<td>66% 104 Rooms</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>70% 110 Rooms</td>
<td>77% 122 Rooms</td>
<td>68% 107 Rooms</td>
<td>77% 122 Rooms</td>
<td>61% 96 Rooms</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>77% 121 Rooms</td>
<td>91% 143 Rooms</td>
<td>76% 120 Rooms</td>
<td>89% 141 Rooms</td>
<td>61% 97 Rooms</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>91% 144 Rooms</td>
<td>94% 148 Rooms</td>
<td>90% 142 Rooms</td>
<td>94% 149 Rooms</td>
<td>68% 108 Rooms</td>
</tr>
<tr>
<td>11:45 AM</td>
<td>90% 142 Rooms</td>
<td>16% 25 Rooms</td>
<td>91% 144 Rooms</td>
<td>16% 25 Rooms</td>
<td>49% 78 Rooms</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>94% 149 Rooms</td>
<td>98% 152 Rooms</td>
<td>94% 148 Rooms</td>
<td>95% 150 Rooms</td>
<td>30% 47 Rooms</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>96% 152 Rooms</td>
<td>98% 155 Rooms</td>
<td>96% 151 Rooms</td>
<td>97% 154 Rooms</td>
<td>23% 37 Rooms</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>85% 136 Rooms</td>
<td>91% 143 Rooms</td>
<td>87% 137 Rooms</td>
<td>87% 137 Rooms</td>
<td>17% 27 Rooms</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>82% 129 Rooms</td>
<td>83% 131 Rooms</td>
<td>83% 131 Rooms</td>
<td>80% 127 Rooms</td>
<td>9% 15 Rooms</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>88% 139 Rooms</td>
<td>90% 142 Rooms</td>
<td>91% 144 Rooms</td>
<td>89% 140 Rooms</td>
<td>6% 9 Rooms</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>72% 113 Rooms</td>
<td>72% 113 Rooms</td>
<td>79% 125 Rooms</td>
<td>65% 103 Rooms</td>
<td>4% 6 Rooms</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>56% 89 Rooms</td>
<td>54% 86 Rooms</td>
<td>59% 94 Rooms</td>
<td>49% 78 Rooms</td>
<td>1% 1 Rooms</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>53% 84 Rooms</td>
<td>56% 88 Rooms</td>
<td>56% 88 Rooms</td>
<td>51% 81 Rooms</td>
<td>1% 2 Rooms</td>
</tr>
</tbody>
</table>
Classroom Utilization Metrics

Alternate metrics, closer to how Cal Poly functions, were used for the classroom demand analysis.

<table>
<thead>
<tr>
<th>Utilization Target</th>
<th>CSU Targets</th>
<th>Actual</th>
<th>Alternative Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seat Fill Average</td>
<td>66%</td>
<td>76%</td>
<td>75%</td>
</tr>
<tr>
<td>WRH Target</td>
<td>53</td>
<td>39</td>
<td>47</td>
</tr>
<tr>
<td>Weekly Seat Hours Target</td>
<td>34.98</td>
<td>30.30</td>
<td>34.98</td>
</tr>
</tbody>
</table>

Cal Poly Pomona as a % of CSU Target 87%
## Classroom Demand Today: net 22 rooms too many

<table>
<thead>
<tr>
<th>Classroom Capacity</th>
<th>Existing Room Count</th>
<th>Weekly Room Hours</th>
<th>Proposed No. of Rooms</th>
<th>Overage/Need</th>
<th>Unmet Need No. of Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 and Under</td>
<td>2</td>
<td>905</td>
<td>19</td>
<td>(17)</td>
<td></td>
</tr>
<tr>
<td>25 - 30</td>
<td>15</td>
<td>120</td>
<td>3</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>31 - 40</td>
<td>43</td>
<td>1,163</td>
<td>25</td>
<td>18</td>
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<td>109</td>
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<td>31</td>
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<td><strong>136</strong></td>
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Today Cal Poly has too many 25-50 seat rooms and insufficient rooms with more than 50 seats.

The Shared Classroom Resource Building can provide some of the larger classrooms needed and surge space to facilitate classroom conversions, and to close buildings for seismic reinforcing and renovation.
Classroom Demand w/10 yr Growth: *net 24 rooms needed*

<table>
<thead>
<tr>
<th>Classroom Capacity</th>
<th>Existing Room Count</th>
<th>Weekly Room Hours</th>
<th>Proposed No. of Rooms</th>
<th>Overage/Need (Need)</th>
<th>Unmet Need No. of Rooms</th>
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<td>TOTAL</td>
<td>158</td>
<td>8,517</td>
<td>182</td>
<td>(24)</td>
<td>35</td>
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</table>

With growth projected based on long range trends, Cal Poly will still have too many 25-50 seat rooms and a need for larger classrooms.

The Shared Classroom Resource Building will support this increasing need even after the phased academic building projects are completed.
**ASF/ SEAT FOR CLASSROOM LEARNING MODALITIES**

15 = CSU Standard for Lecture rooms w/tablet-arm chairs

20 = CSU Standard for Lecture rooms w/tables + chairs

16  18  20  24  26  28  30  32  34  36+

Passive

Faculty-Directed

Student-Centered

Case-Based

Problem-Based

Collaborative

Peer Tutoring

Didactic

Heuristic

17 = Actual Cal Poly Pomona Average
LEARNING ENVIRONMENTS FOR STUDENT SUCCESS

LEARNING IN LINES

LEARNING IN CIRCLES
SPACE ACCOMMODATES VARYING APPROACHES

850 NASF / 24 STU = 35 SF/STU
15 = CSU Standard for Lecture rooms w/tablet-arm chairs
20 = CSU Standard for Lecture rooms w/tables + chairs

24 ASF = proposed standard for Active Learning Classrooms

Additional standards may be required for other integrated technology formats

16 = Actual Cal Poly Pomona Average

Learning By Doing
Master Plan Overview

Academic Facilities Conditions, Needs, Priorities

- Academic Facilities Seismic Priorities + FCI/FCNI
- Facilities Conditions (FCI)/Facilities Conditions Needs Index (FCNI)
- CIP Tracks: - Bldg 98 CLA Seismic Priority
  - Academic Core Facilities Improvement
Synthesis + Area Studies + Analysis

Academic Needs

- opportunities for hubs, shared faculty resources + instructional space
- Bldg 98 CLA - new/replacement or reinforce/upgrade
- classroom/class lab demand, capacity for growth
- need for better space (incl replacing temporaries)
- library-learning commons, student study space, student success resources
Today Academic uses form a strong core, but with a few outliers.
The neighborhood concept may have been outgrown.

Many programs are dispersed across multiple buildings with no intuitive connections.
NEIGHBORHOODS CONNECTING AROUND HUBS

Neighborhoods

Intersections:
Sponsor interdisciplinary activity + opportunities for collaboration

Hubs:
Non-siloed space resources w/ample interdisciplinary space

Can we identify opportunities for HUBS in smaller, intermediary spaces, perhaps creating ‘connecting’ spaces between existing academic buildings?
DESIGN FOR HUBS + COMMONS

Meet me in the Middle
- Interdisciplinary space
- Visible ground floor spaces
- Small study + gathering areas
- Large incubator or collaboration space
- Flexible, open areas
- Consolidated resources for faculty + students
- Can eliminate redundancies
- Can improve utilization
ACADEMIC FACILITIES NEEDS

• More instructional Space, especially labs, flex studios, and shared project space resources

• Consolidate program space within core

• Eliminate ‘temporaries’ for instructional space

• CLA – renovate or replace?

• Eng/Art Annex – renovate, or replace?

• Environmental Design and Interim Design Center – expand? consolidate? Reconsider?

• CTTi needs more space

• Solutions to eliminate ‘temporaries’ for instructional space

• More study space, incl library learning commons
SITE CONSTRAINTS

- Academic Core
- Seismic Fault + Buffer
- 98-CLA Site
Possible sites not on fault lines for new Academic Buildings

SITE CONSTRAINTS

Seismic Fault + Buffer

Academic Core

98-CLA Site

Possible sites not on fault lines for new Academic Buildings

Too far?

Too small?

Not in the Quad

Too steep?
Seismic Priority List:

**Priority 1:**
- 98 CLA
- 76 Kellogg West

**Priority 2:**
- 98 P *
- 112 Kellogg House*
- 5 Arts & Letters*
- 1' Admin
- 9 Engineering*
- 13 Art/Eng Annex*
* on 5yr repair list

also:
- 25 Drama/Theater
- 29 Arabian Horse Ctr
- 31 Poultry Unit
- 38 Sheep Unit
- 50 Ag Storage
- 111 Manor House
ISES evaluation noted that because of the very poor condition of many of the older academic buildings, individual systems upgrades are not recommended. Buildings should be vacated for a total renovation with seismic reinforcing and new energy efficient envelope.
A total renovation of these academic buildings will require adding new surge space.

In the Academic Core, existing buildings should be seismically reinforced + reused-renovated whenever feasible, because there are so few sites available for replacement new buildings.
Master Plan - Facility | Area Studies

CIP Track: Bldg 98 Seismic Priority #1

- Tower + Registration are vacated – begin planning for demolition, and site redevelopment
- Acquire surge space to relocate existing IT /Admin space (est 50-60,000 asf)
- Create new instructional surge space (est 10,000 asf) w/Shared Classroom Resources Building
- Reinforce-renovate-transform Bldg 98-CLA+P as student-centric academic showcase for project-based learning, shared by multiple programs incl industry/community partners
California State Polytechnic University, Pomona

Master Plan Study: Bldg 98 *(incl T, R, CLA, P)*

18 April 2019
Previous technical studies and analysis have shown that retaining the Tower is not feasible or safe. The configuration of the Tower and its location on the fault line poses a significant risk in the event of an earthquake, even with reinforcing. The Registration Building posed less of a safety threat, but the complex and inefficient configuration made reinforcing the structure cost prohibitive with very few benefits in terms of useful space. The Student Services Building was built as a replacement for both structures and the existing users and occupants have been moved. These structures are closed and planning is underway for the demolition project.

Demo Building 1: $2.1M, est 6 months duration
Demo Building 2 Registration: $1.4M, concurrent with above
Retaining Walls for Garden: $3.16M, 5-6 months duration
Site Development + Utilities: $4.8M, concurrent with above
Total for Demo+ Restoration: $11.47M, est 12 mo duration
APPROACH TO ATRIUM SPACE

Existing

Concept sketch for connected atriums
(not by ASG)
**CIP-BLDG 98 STRATEGIES COMPARED**

- **New building**
  - 5 yrs until 98-CLA/P is vacated, 6 yrs to completion
  - **Option 1:** 2 story, 125,000 GSF
    - $121 M Total Project Cost
  - **Option 2:** 5 story, 125,000 GSF
    - $120.4 M Total Project Cost

- **Reinforce-reconstruct exist bldg.**
  - +4 yrs until 98-CLA/P is completed + reoccupied
  - **Option 1:** 126,000 GSF
    - $104.5 M Total Project Cost*
  - **Option 2:** 168,300 GSF
    - $120.4 M Total Project Cost*

* plus the cost of any temporary facilities

**Recommendation is Option 2 keeping the CLA structure and reinforcing and renovating the building including enclosing the podium and central atrium space.**
DESIGN PRECEDENTS

enclosure

atrium
Transformation Case Study

Zachry Engineering Education Complex, Texas A&M University
New Uses for Transformed Space

- Model new space types + standards for ‘learning-by-doing’
- Classrooms, studios or labs set-up + scheduled for project-based instruction
- Maker spaces for shared use by various programs and industry partners
- Provide project and study space, various size rooms
- Consider options for flex space to accommodate project-based research space
- Instructional ‘sandbox’ for faculty development of ‘best practices’ w/apps, tech/AV, etc.
- New model for faculty work space, flexible, collaborative (+ more similar to industry)
- Atrium commons could be used for reviews/juries, student group presentation, showcasing projects, and for hosting ‘industry + university’ partnering events;
Transforming 98CLA has the power to transform the character of the center of campus.
IMPLEMENTATION: CLA SEISMIC TRACK

Recommendation:
Complete replacement + seismic reinforcing + renovation of Bldg 98 #1 seismic priority and repurpose to meet academic needs for active classrooms, labs and studios space for project based instruction and ‘learning-by-doing’

1. New shared resources + surge space is needed to accomplish the CLA work.
   Proposed:
   • Lease or buy nearby off-campus space for admin/support offices

2. Shared Classroom Bldg
   (addition to the library)
   • 4-5 floors of active learning classrooms/labs (various formats, sizes)
   • Independent of library w/some access options
   • Est 9,000 GSF/fl; 12-16 classrooms, +1000 seats
   Total: 36-40,000 GSF, $28M Project Cost

3. Bldg 98 CLA/P Transformation
   HIGH PRIORITY SEISMICALLY
   • Strip down to structure, reinforce, re-skin + renovate w/efficient systems
   • Transformation of 168,000 gsf
   Relocation/Surge Space Needed:
   • 58,300 gsf demo
   • 50-60,000 asf relocated IT/Admin
   • 8-15 classrooms 10,000 asf academic space

4. Completed CLA transformation could accommodate studio and departmental space to facilitate renovations of Bldgs #7, 9 or 13
SHARED CLASSROOM RESOURCES BUILDING

Existing Library

New Entry
(original Library entry)

Entry
Today
NEW BUILDING Entry from Olive Lane

- Large Lecture (wide-tiers)
- Limited interconnection
- Library
- Learning Commons
- Computer Labs or Technology Intensive Classrooms
SHARED CLASSROOM RESOURCES BUILDING

TYPICAL FLOOR

- est 9,000 gsf/floor
- 4-5 floors
- 36-45,000 gsf total
- 12-16 classrooms/labs
- study spaces
- est 800-1200 seats

SECTION E-W

- Olive Lane
- Entry
- Existing Library

SECTION N-S

- temp space for Academic Senate
- classrooms
- classrooms
- classrooms
- Stepped lecture hall
- computer labs
CIP Track: Academic Core Buildings

- Total renovation/upgrade of all academic buildings with high FCNI
- New Campus Center + Academic Interdisciplinary Resources Building (academic surge space)
SYNTHESIS: ACADEMIC CORE TRACK

Goal: total renovation/upgrade of all academic buildings with high FCNI

Recommendation: build new surge space to facilitate renovation/seismic reinforcing of existing academic bldgs

1. Interdisciplinary Academic Resources Bldg
   - Campus Center site
     (CC needs major upgrade)
   - 50,000 GSF for campus center
   - 2 flrs student social-study space
   - 2-3 floors of flexible academic + instructional space
   - 90,000 GSF of shared academic surge space

2. TOTAL/MAJOR RENOVATIONS:
   - #1, 2, 5, 6, 7, 8, 24
   - #9, 17 (limited spaces)
   - #13 (needs study)
STUDENT CENTER + INTERDISCIPLINARY ACADEMIC RESOURCES CENTER
SCALE ON UNIVERSITY QUAD

SECTION N-S EXTENDED

S University Dr.
4. Address academic facilities with a high FCNI that are outside the academic core.

DM Gym - targeted renovation to meet current needs
This bldg. is slated for demolition in the long range future when the BRIC needs to expand

Kellogg Gym - targeted renovation assuming more major renovation and athletics moving to the new Event Center in the future

English Language Institute consolidate with expanded CTTi and CEU space in Innovation Village Mixed-Use Space + Event Center; evaluate feasibility of re-using these buildings for temp surge space
5. Evaluate College of Agriculture
AG - Animal facilities, including Spadra West Barn to set upgrade-replacement priorities

SYNTHESIS: ACADEMIC CORE TRACK

- Major Renovations Needed
- Total Renovation Needed
- Complete Replacement Indicated
Building on the Arts Axis Study, evaluate theater renovation vs replacement with location options.

SYNTHESIS: ACADEMIC CORE TRACK

Major Renovations Needed
Total Renovation Needed
Complete Replacement Indicated
Master Plan Overview

Student Life Facilities

• Student Housing
• Bronco Student Center Expansions + Improvements + Seating/Shade Study
• Campus Health + Wellness Center and Campus Childcare Center
• Student Recreation + Athletics Facilities
STUDENT HOUSING REPLACEMENT - PHASE 1

Demolish Los Olivos Dining Hall + Greys (-500 beds)
Reduce occupancy to 80% (-160 beds)

Student Dining Hall
under construction, open Jan 2020

Student Housing Phase I
under construction, open Jan 2020
STUDENT HOUSING REPLACEMENT - PHASE II-III

Student Housing Phase I
980 beds - net added 320 beds

Student Housing Phase II
840 beds - net add 140

Student Housing Phase III
est 800-1200 beds

Student Dining Hall
STUDENT HOUSING BED COUNTS

Phase I opens 2019-20

+ 980 beds - Phase I new beds
- 500 beds - Grey Demolished
- 160 beds - Reds w/reduced occupancy
320 beds - Net Added Beds at Phase I completion

Phase II opens 2023-24

+ 840 beds - Phase II new beds
- 700 beds - Reds Demolished
140 beds - Beds Added in Phase II
+ 320 beds - Net Added Beds at Phase II completion

Completion of Phase I & II replaces ALL beds in the reds/greys and results in +460 net new beds

Phase III opens 2028-29?

+ 800-1040 beds - Phase III
+ 460 beds
+ 1260-1500 Net Added Beds at completion

Completion of All Phases potentially adds +1500 beds to on-campus housing capacity
**SYNTHESIS: NON-STATE FUNDED FCNI PRIORITIES**

**Interdisciplinary Academic Resources Bldg + Campus Center Replacement**
- first two floors incl Marketplace (food/retail)
- + student study – success space

**BSC Major Renovation + Expansions**
- major renovation, systems upgrade
- terrace expansion for student clubs, tabling
- study space expansion into Bookstore bldg. or w/addition
- exterior space landscape-hardscape improvements

**Kellogg West** is a high priority for seismic repairs and reinforcing

**Parking Structure + BSC Major Expansion**
- Parking for ADA, BSC, Kellogg, Theater, Recitals
- Expansion on upper level for large banquet room
- + more meeting-conference space
BSC PROPOSED TERRACE ADDITION

- Solar PV Shade Canopy
- New Entry
- Existing Entry
- Terrace for study, activities
- Club space for activities
- Study or Project rooms
- Storage space for tabling
PILOT PROJECT: ADD OUTDOOR STUDY/LEARN SPACE
BSC STUDENT FORUM ON SEATING + SHADE

http://polycentric.cpp.edu/2018/12/students-give-input-on-bsc-campus-seating-at-master-plan-open-forum/
SEATING NEEDED

Eng + Quad
Commons
BSC + U Park
Env Des
U Quad
Starbucks
Music
24 hr lab
Commons
SHADE NEEDED

Eng Quad

Commons

BSC + U Park

trees along walk

U Quad

Rose Garden

trees along walk

BSC + U Park

Commons

courts

bus stops
SHADE PREFERENCES

• shades a larger area
• provides solar power, lighting
• shapes a space
• plaza + landscape
• flexible for events, groups or individuals
SEATING PREFERENCES

- lawn (but not wet)
- shaded
- choices, versatile, flexible
- benches over chairs
- landscape + hardscape
- with a work surface
- solar powered outlets
SYNTHESIS: STUDENT LIFE PRIORITIES

La Cienega consider options for student life uses, including expanded club/org space

#13 Trailers for ROTC, TRIO – relocate and reuse? option for location on former res hall site w/parking and outdoor facilities (ropes and obstacle courses, trails for mountain biking and hiking, etc.

Student Recreation + Athletics
- softball (women’s Title IV)
- soccer w/track & field
- recreational fields rehab

Campus Health + Wellness Center

New Arena-Event Center, Parking + Mixed-use wrapper

Major Renovations Needed

Total Renovation Needed
Master Plan Next Steps:

- **Campus Forums**  
  - Focus Session on Sustainability Goals + Guidelines  
  *Sept-Oct?*

- **Final Plan Documents:** report, map graphic, data  
  *Fall 2019*

- **Community Listening Session**  
  *with CEQA kick-off*

- **Final Draft Plan CEQA – EIR**  
  *Fall 2019 - Spring 2021*

- **Final Master Plan to CSU Board of Trustees**  
  *adopted 2021*
Thank you!