

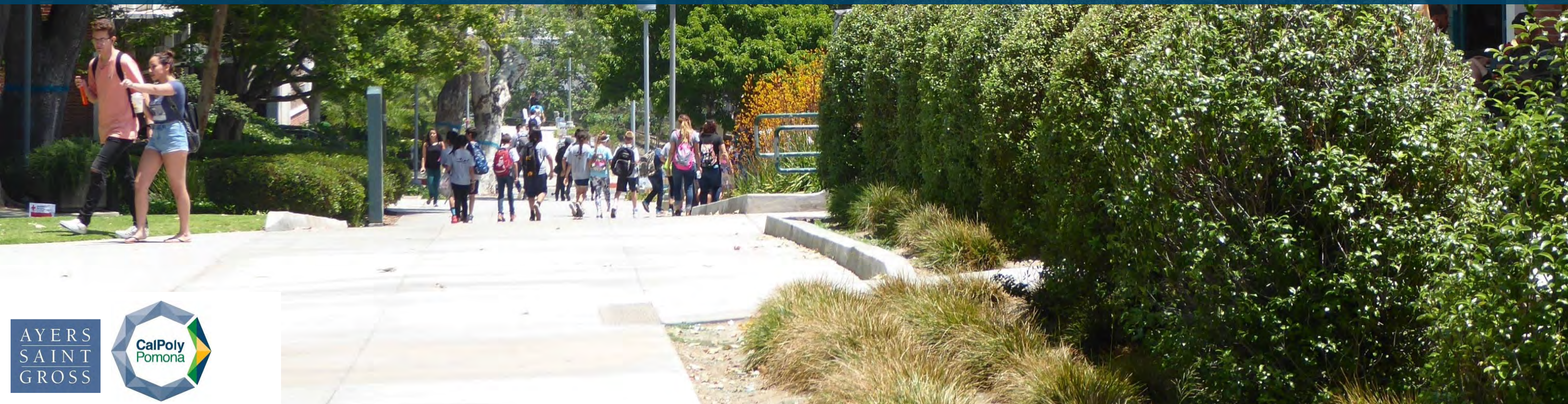


California State Polytechnic University, Pomona

Master Plan Update

University Leadership Council

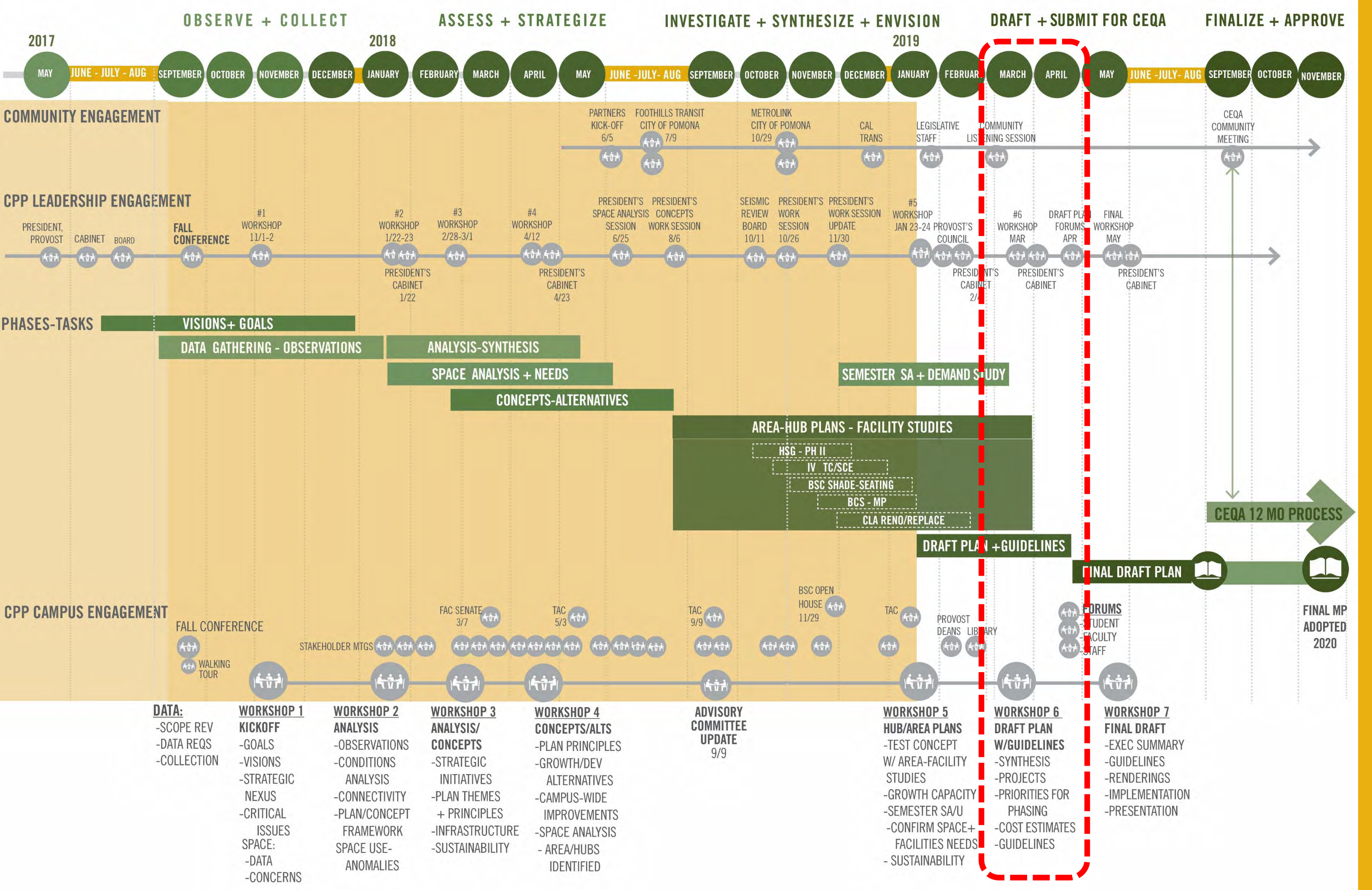
22 March 2019



AGENDA

21 March 2019

- 1) Master planning schedule + process to date
- 2) Themes
- 3) Draft Master Plan (*preliminary in progress*)
 - a. campus wide improvement concepts
 - *campus pedestrian environment*
 - *transportation, transit, parking*
 - b. specific area + facility studies (*for projects*)
 - *student housing, dining, health and wellness*
 - *Bronco Student Center (and surrounds)*
 - *Bldg 98 + academic hubs*
- 4) Next Steps



CAMPUS ENGAGEMENT

4 Open House-Forums
5 Advisory Committee Workshops
8 Community Partners Meetings
+ 20 Leadership Presentations-Work Sessions
+300 Campus + Community Participants



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.

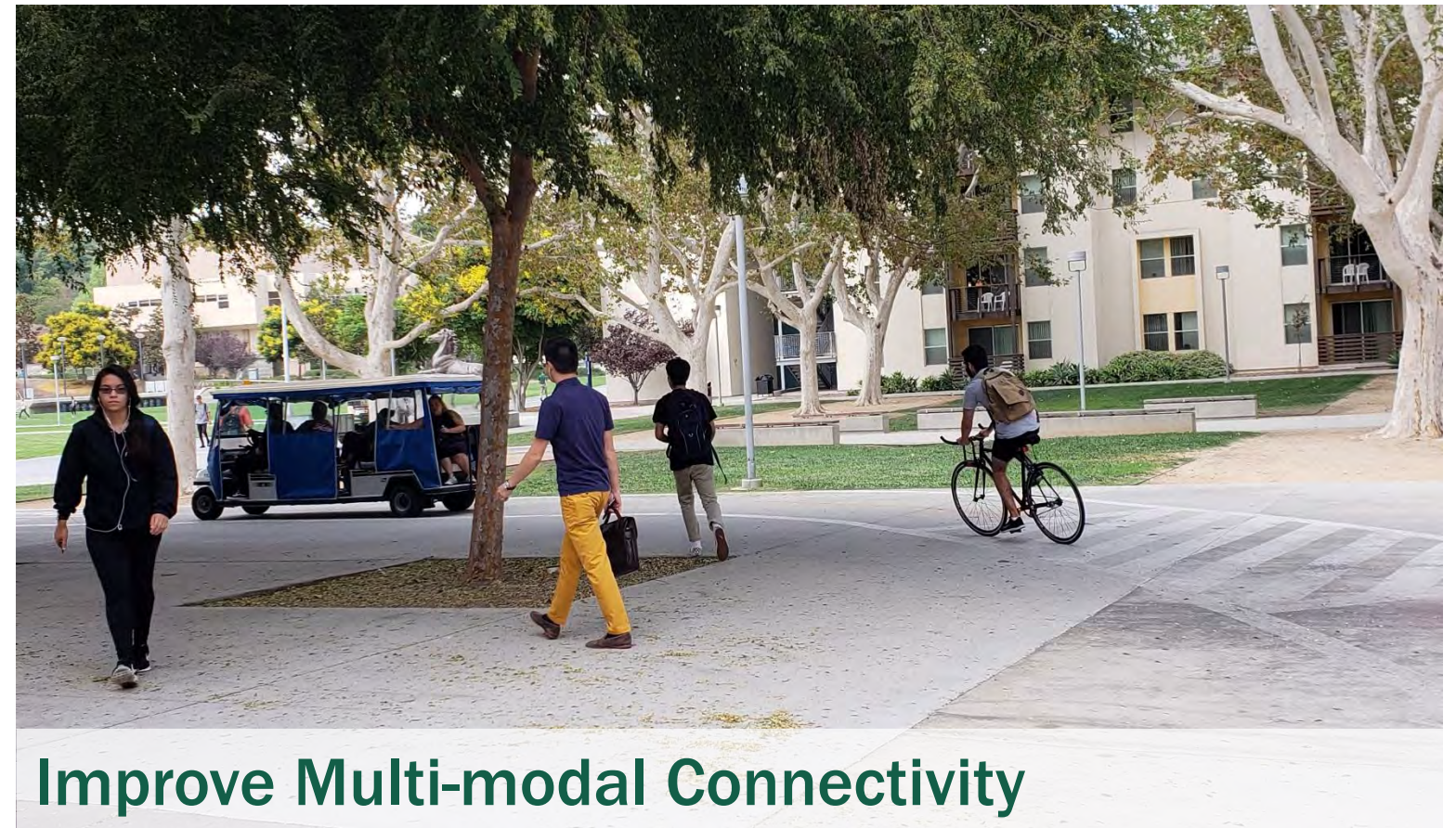
Campus Wide Improvements

- Pedestrian Environment
- Pedway-Bikeway, Bike Paths
- Transit
- Campus Entry + Traffic
- Parking

ELEMENTS OF A PEDESTRIAN ENVIRONMENT



Expand the Pedestrian Zone



Improve Multi-modal Connectivity



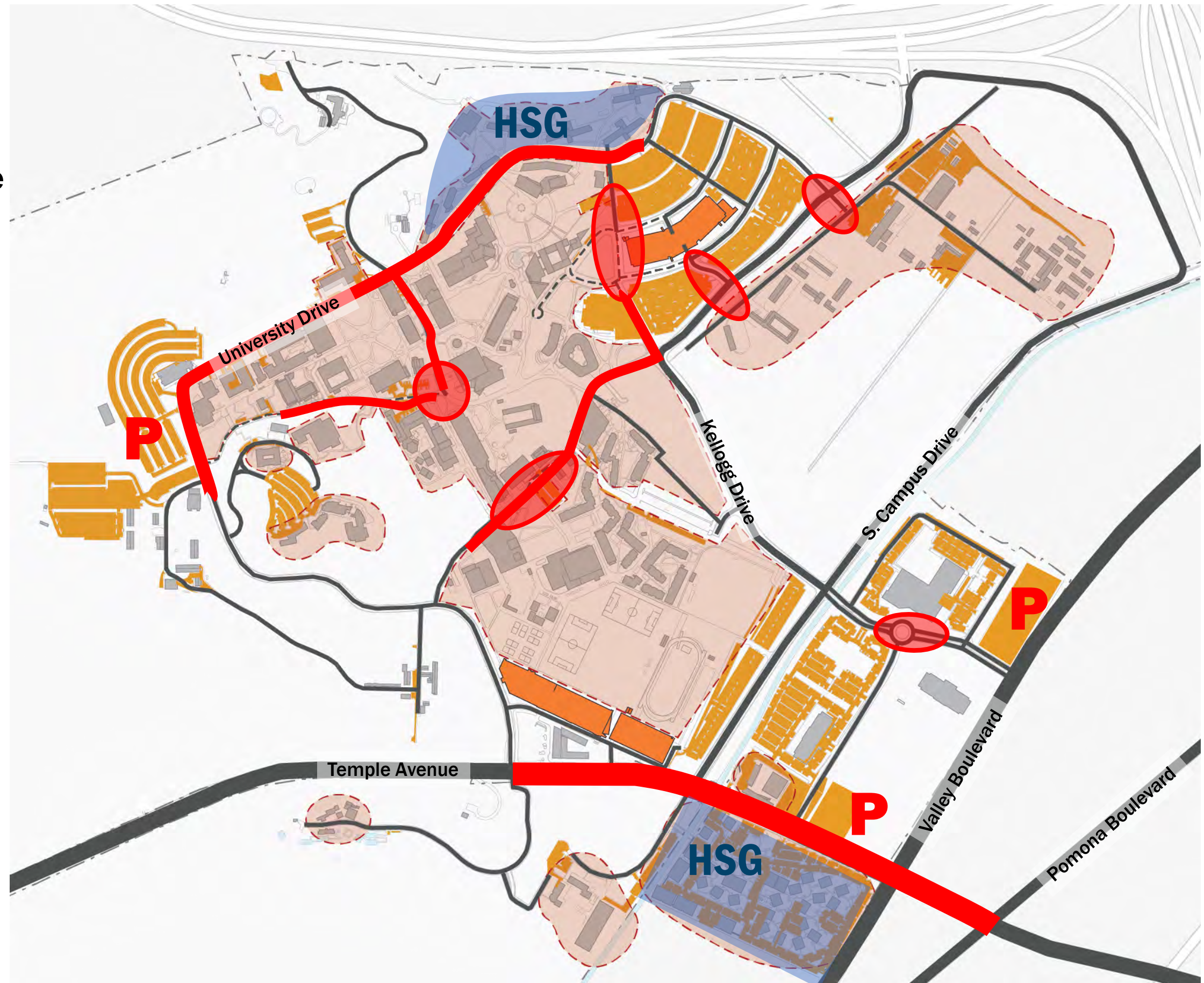
Address Safety, Accessibility + Wayfinding



Create Gathering Spaces with Seating, Shade

PEDESTRIAN-VEHICLE CONFLICT AREAS

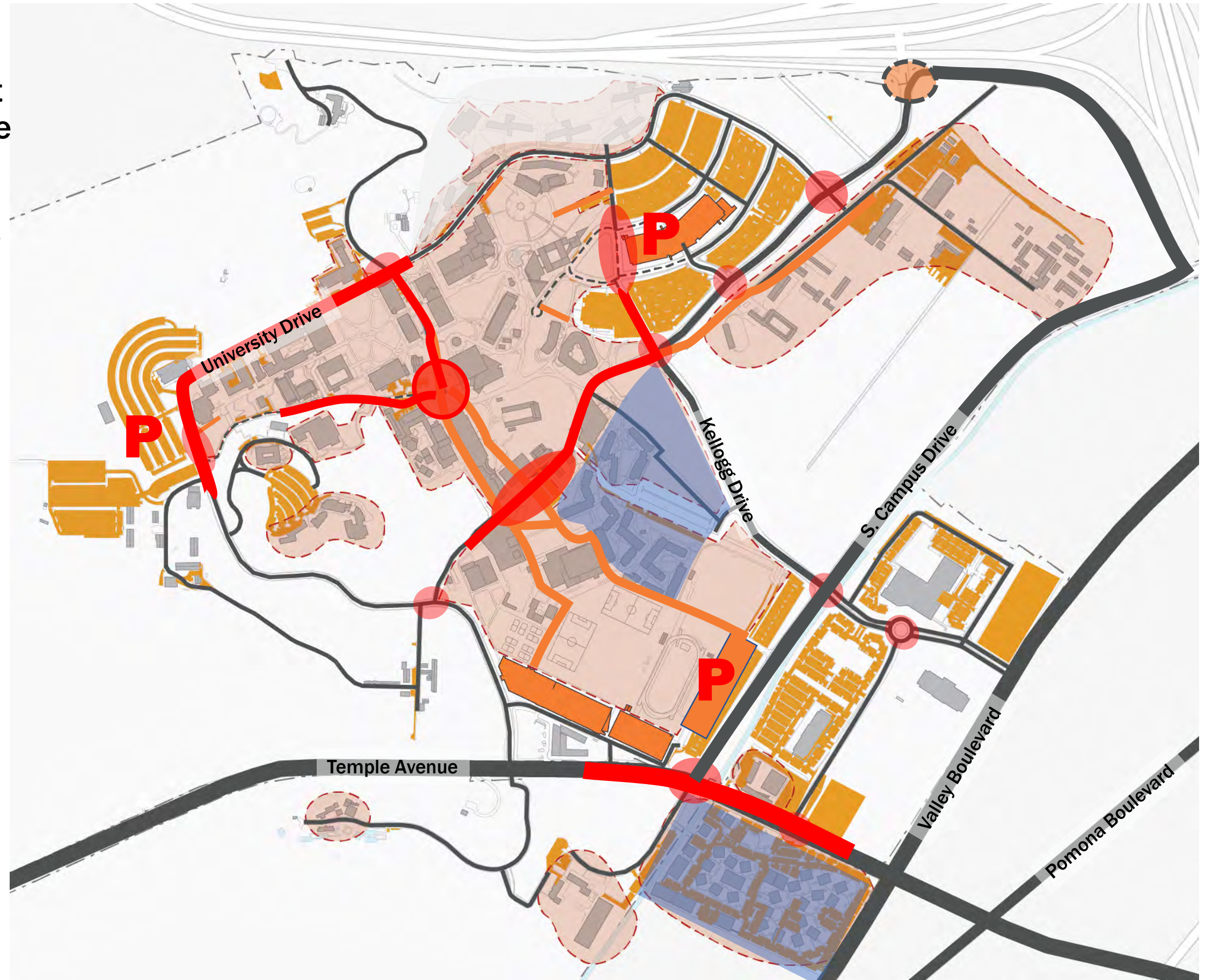
- Connectivity + safety from student housing, parking or academic functions outside the campus pedestrian zone
- Major streets through campus
 - Kellogg Drive
 - Temple / S Campus Dr
 - University Dr
- High traffic intersections (esp *campus entrance areas*)
- Internal campus streets (even *with access controls*) including service/docks



PEDESTRIAN-VEHICLE CONFLICT AREAS

MP Solutions:

- Keep or relocate major student uses within the pedestrian zone
- **Provide safer connectivity**
 - Send thru traffic around the campus
 - Put Kellogg Dr 'road diet' with pedestrian safety improvements



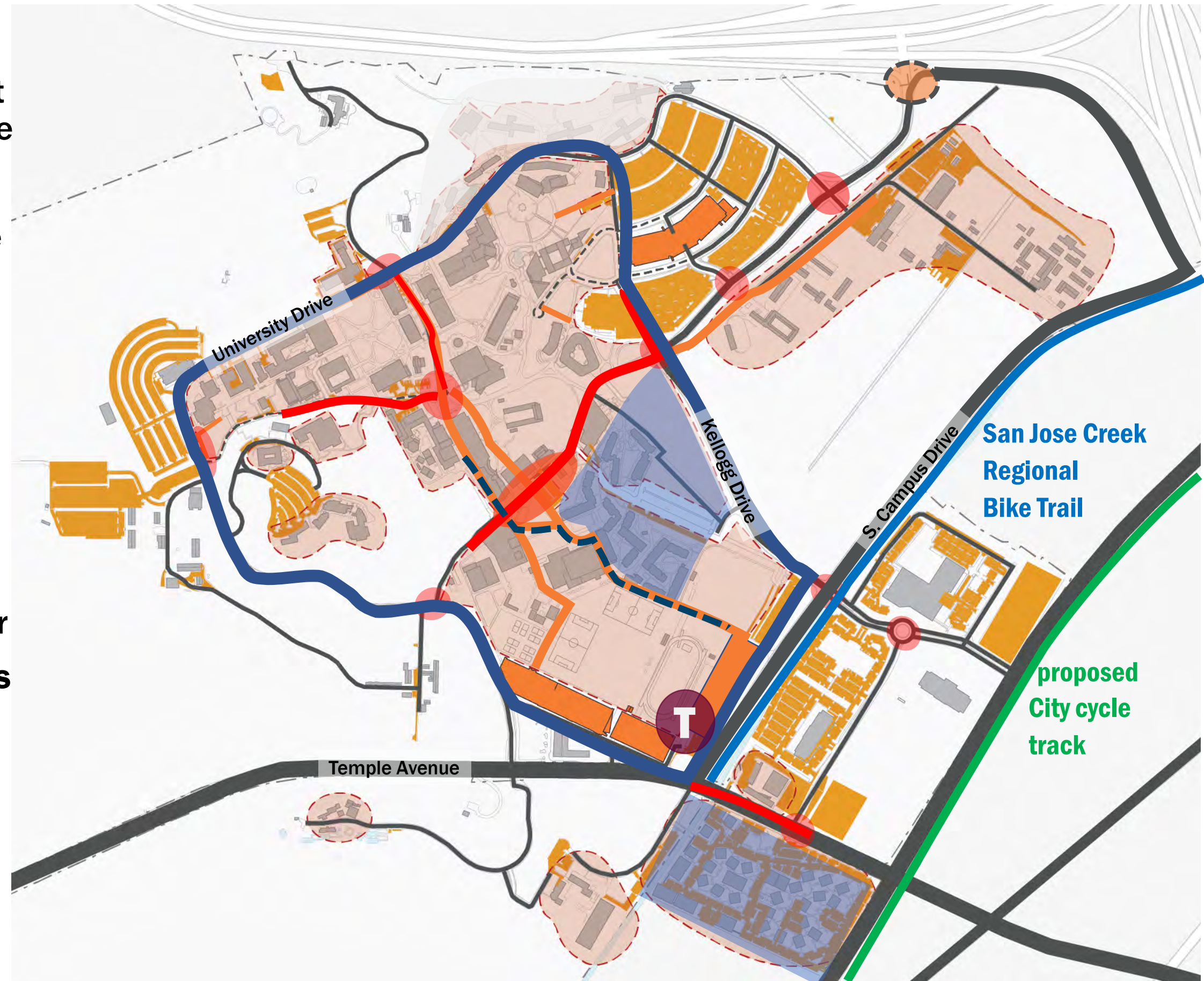
ROAD DIET (example)



PEDESTRIAN-VEHICLE CONFLICT AREAS **REDUCED**

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**

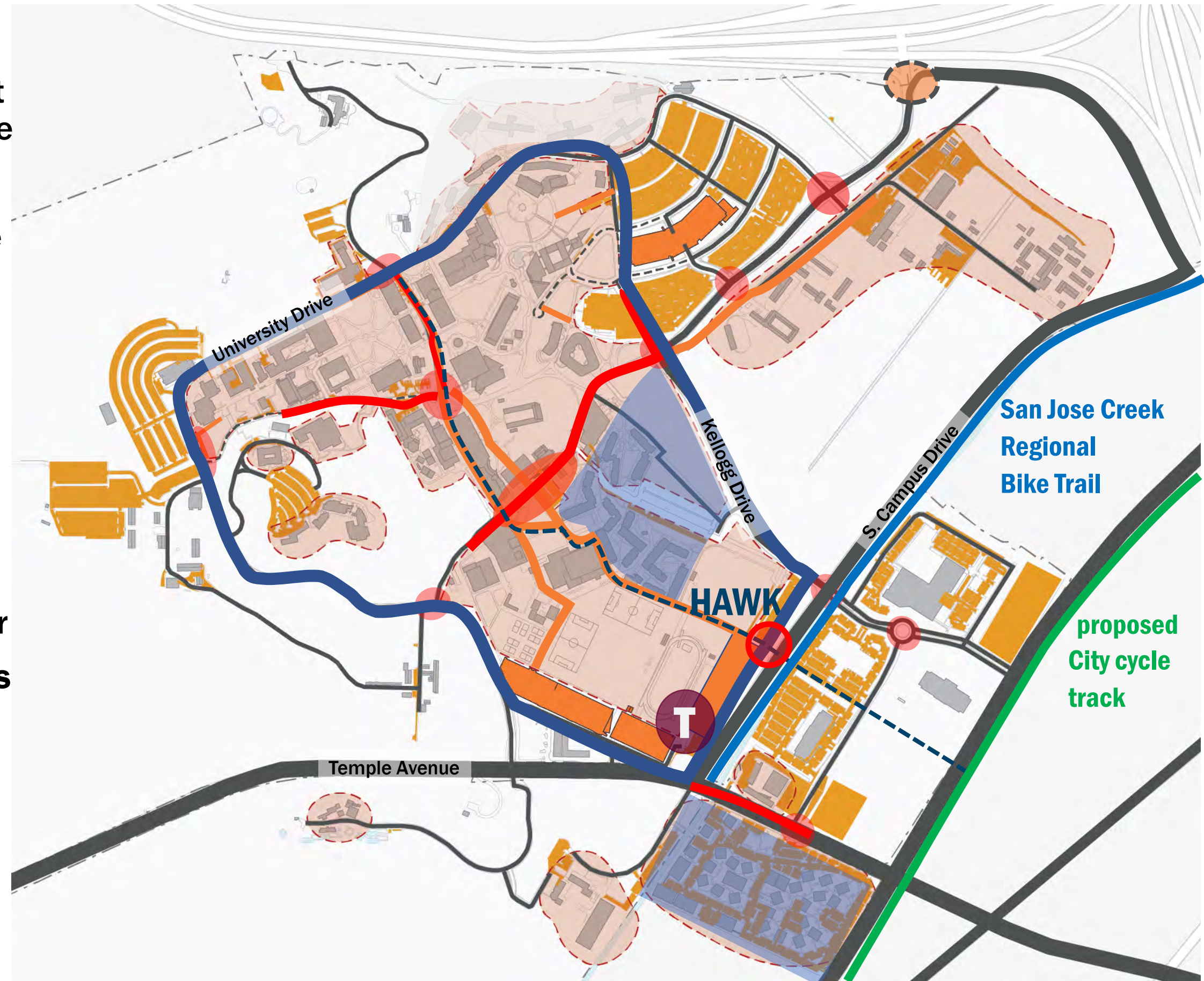




PEDESTRIAN-VEHICLE CONFLICT AREAS REDUCED

MP Solutions:

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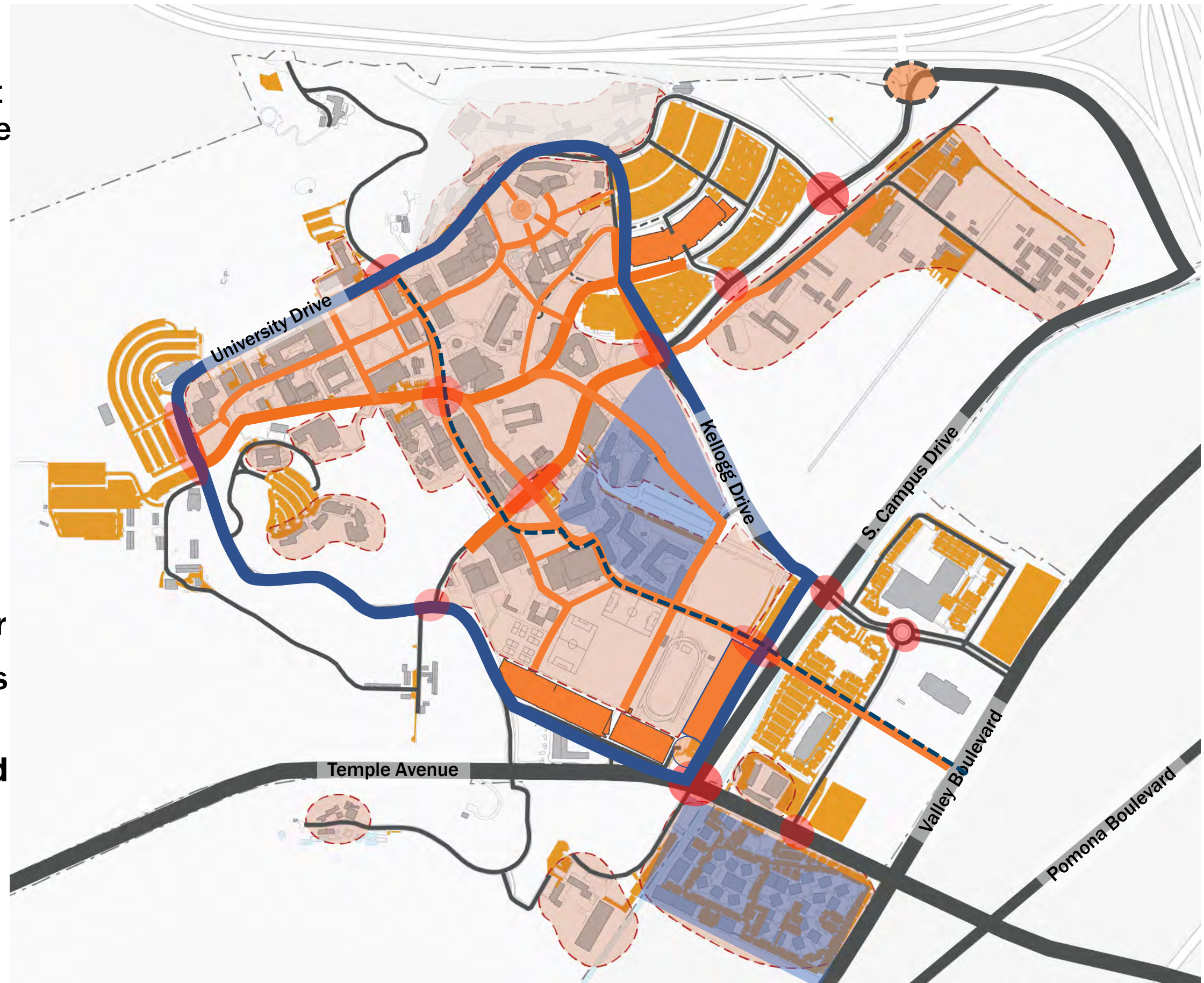


High-intensity Activated crosswalk (*HAWK pedestrian beacon*)

PEDESTRIAN-VEHICLE CONFLICT AREAS REDUCED

MP Solutions:

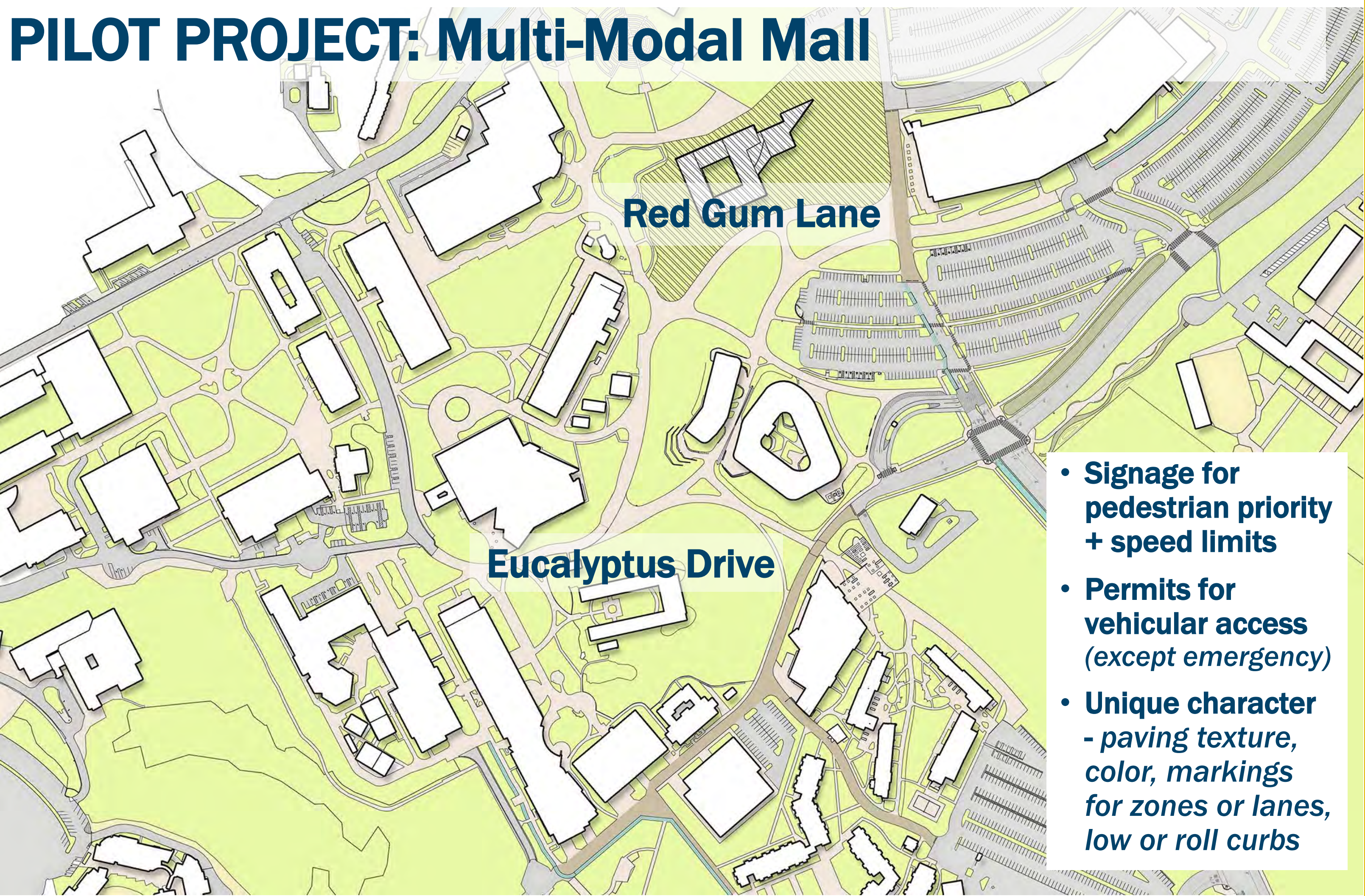
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- Transform internal campus streets into pedestrian oriented multi-modal malls





Multi-modal Mall (*Washington State University, WA*)

PILOT PROJECT: Multi-Modal Mall



Red Gum Lane

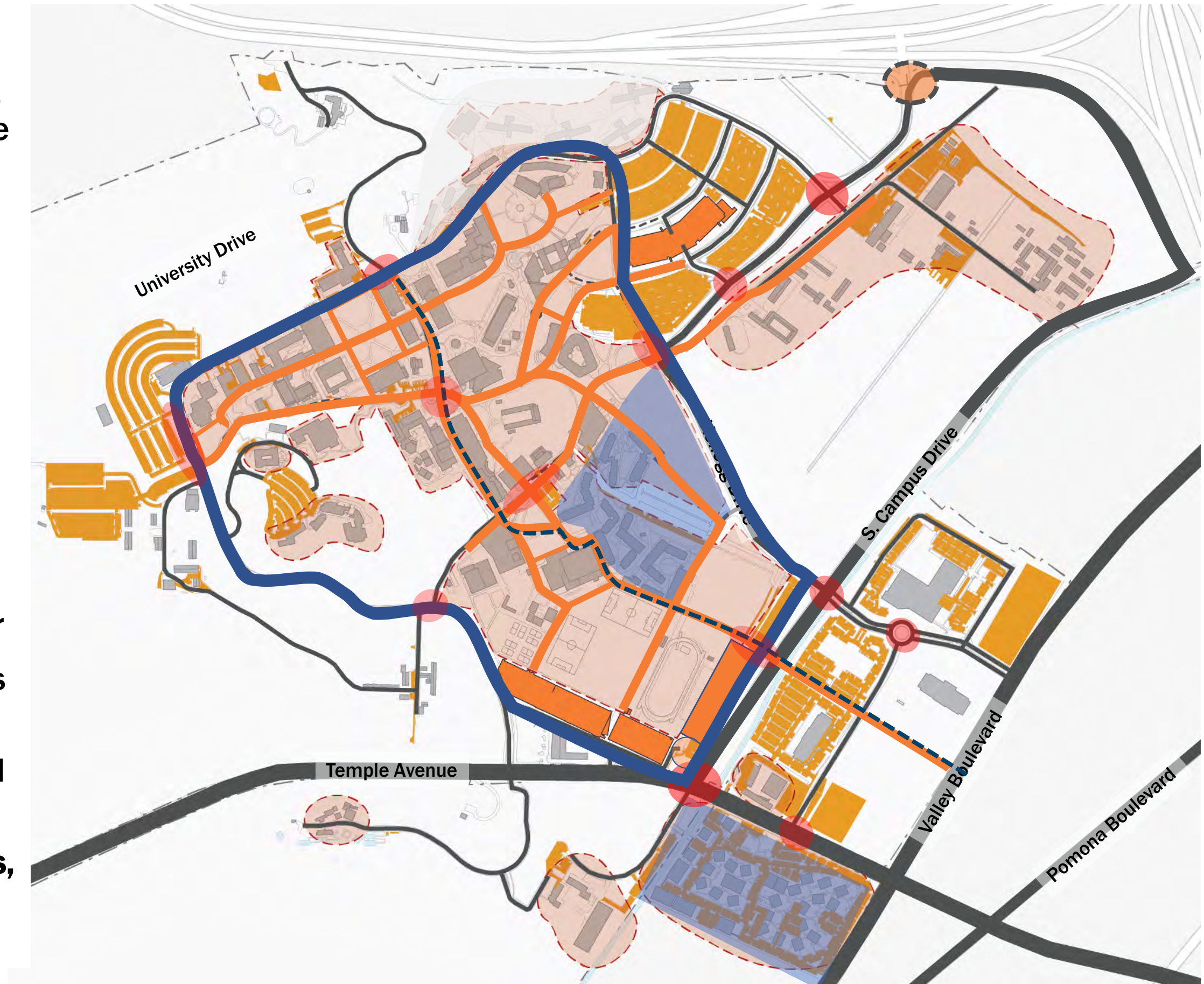
Eucalyptus Drive

- **Signage for pedestrian priority + speed limits**
- **Permits for vehicular access (*except emergency*)**
- **Unique character - paving texture, color, markings for zones or lanes, low or roll curbs**

PEDESTRIAN-VEHICLE CONFLICT AREAS REDUCED

MP Solutions:

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 - Send thru traffic around the campus + Kellogg Dr 'road diet'
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 - Extend + connect bike paths
- Transform internal campus streets into pedestrian oriented multi-modal malls
- Create standards for safe malls, ped-bike paths, and intersections-crossings



PATH STANDARDS



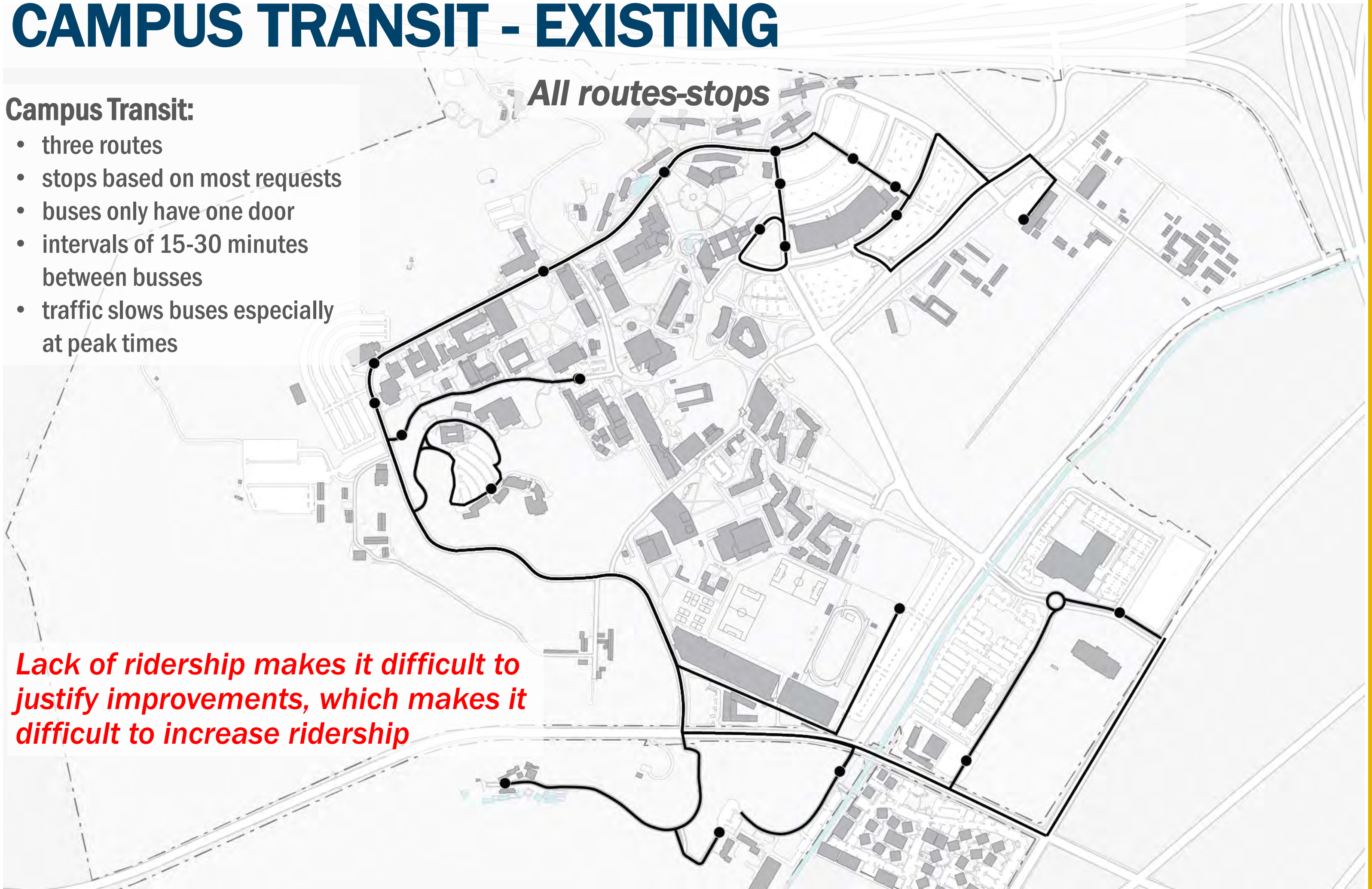
CAMPUS TRANSIT - EXISTING

Campus Transit:

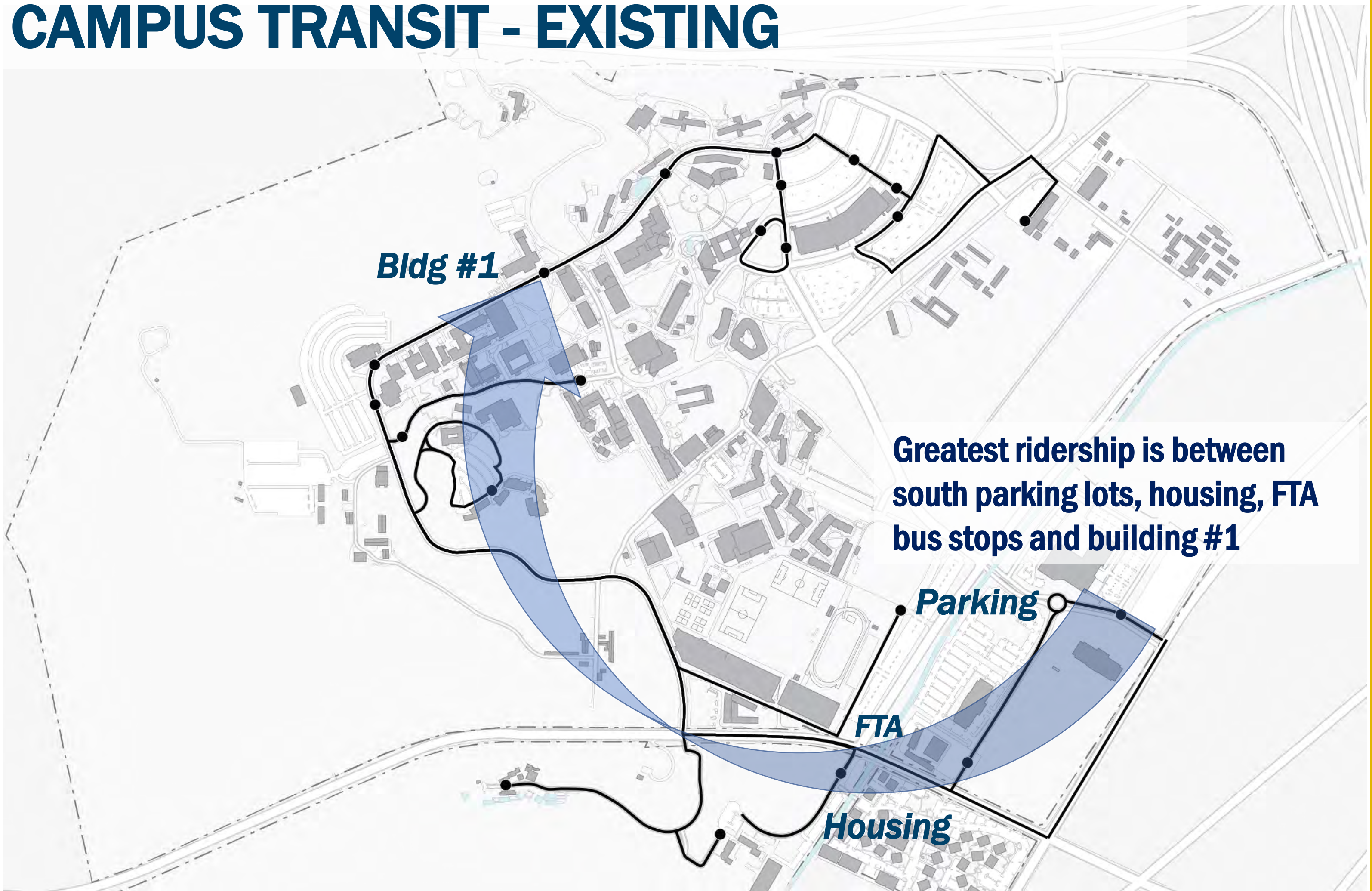
- three routes
- stops based on most requests
- buses only have one door
- intervals of 15-30 minutes between busses
- traffic slows buses especially at peak times

All routes-stops

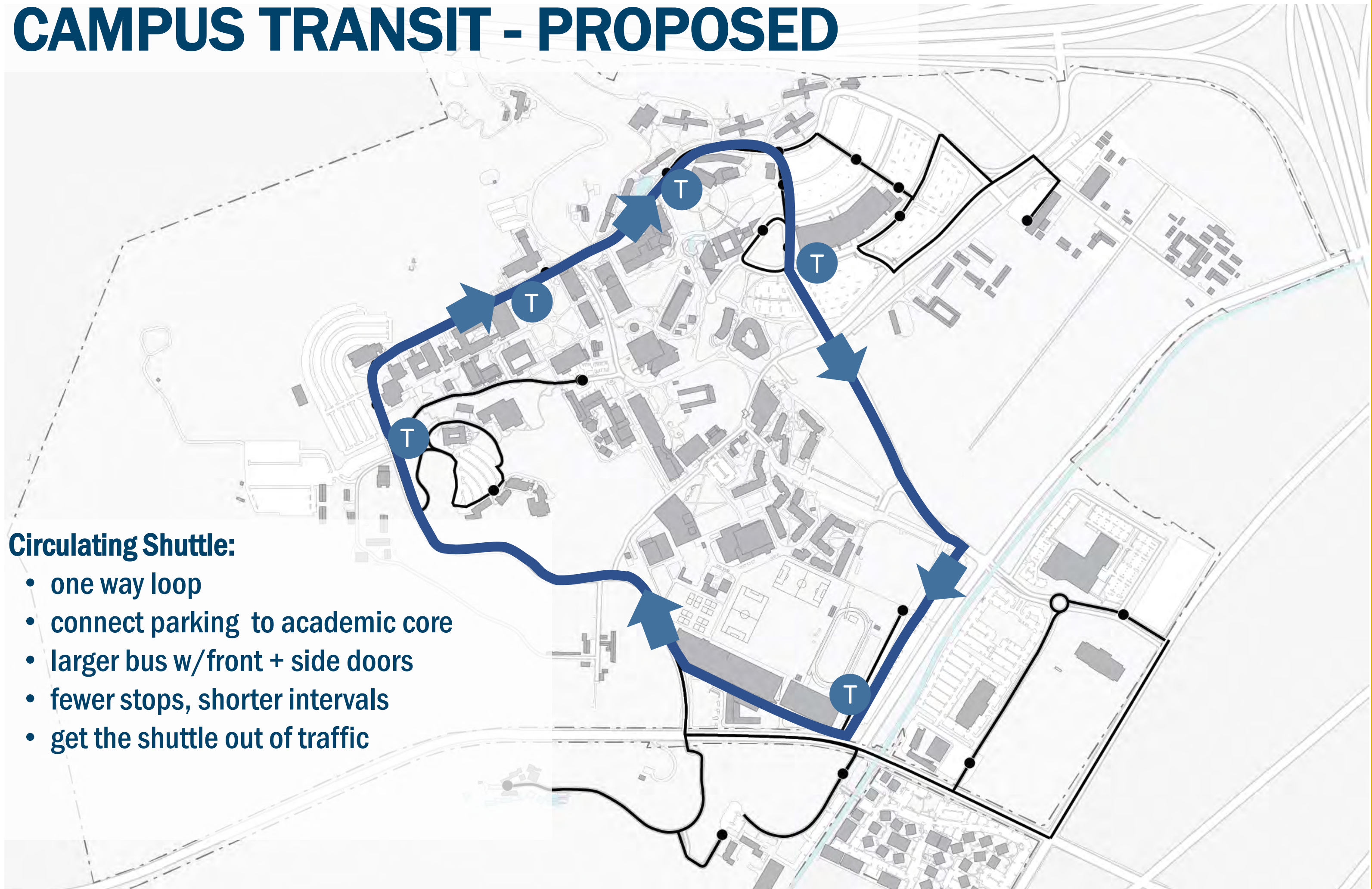
Lack of ridership makes it difficult to justify improvements, which makes it difficult to increase ridership



CAMPUS TRANSIT - EXISTING



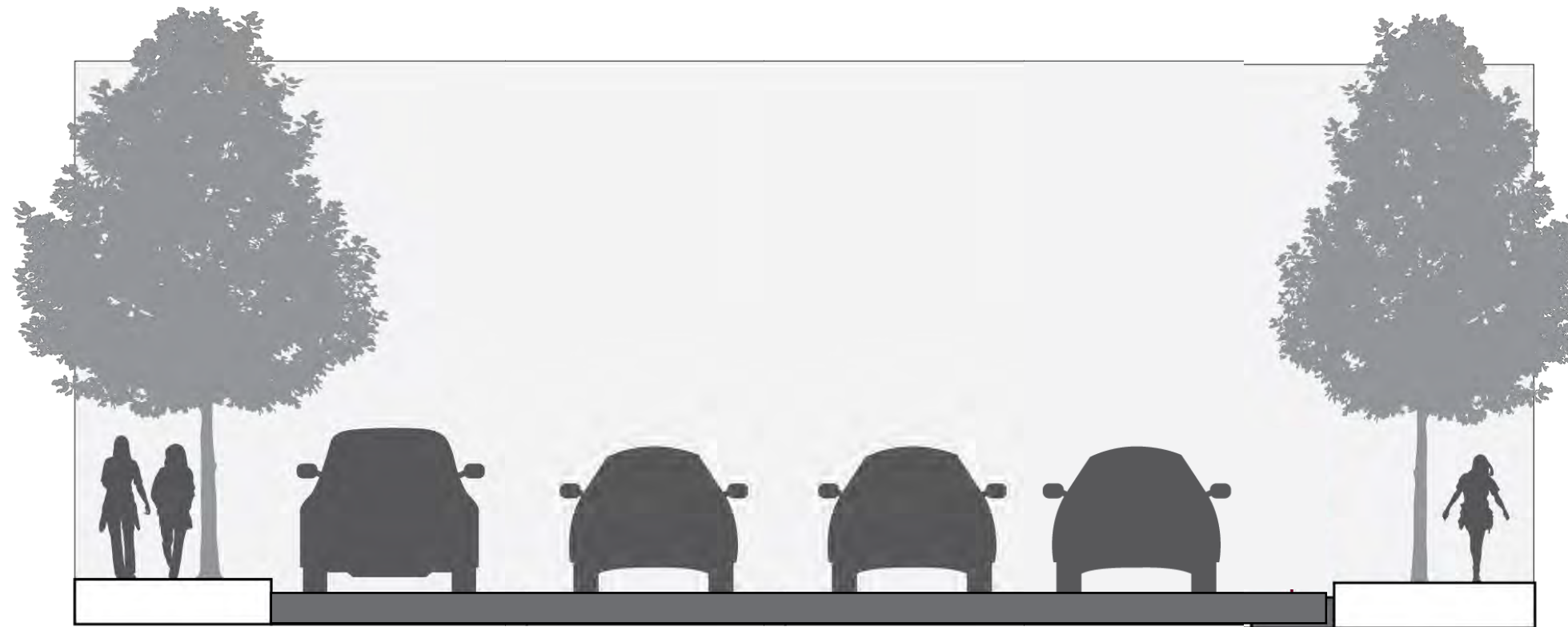
CAMPUS TRANSIT - PROPOSED



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

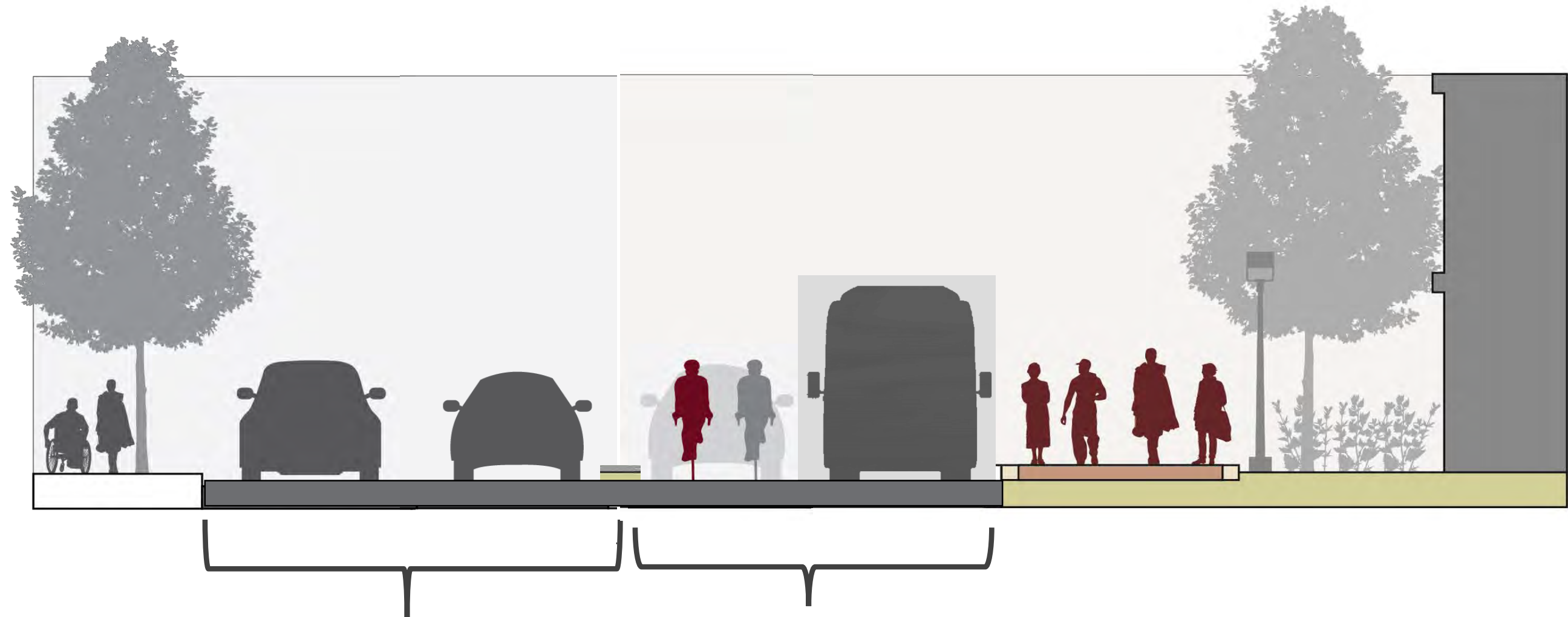
UNIVERSITY DRIVE TRANSFORMATION



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

Street Sections

UNIVERSITY DRIVE TRANSFORMATION



Proposed:

travel lanes

*(eliminate on-street parking
except pull-outs for
ADA/Med)*

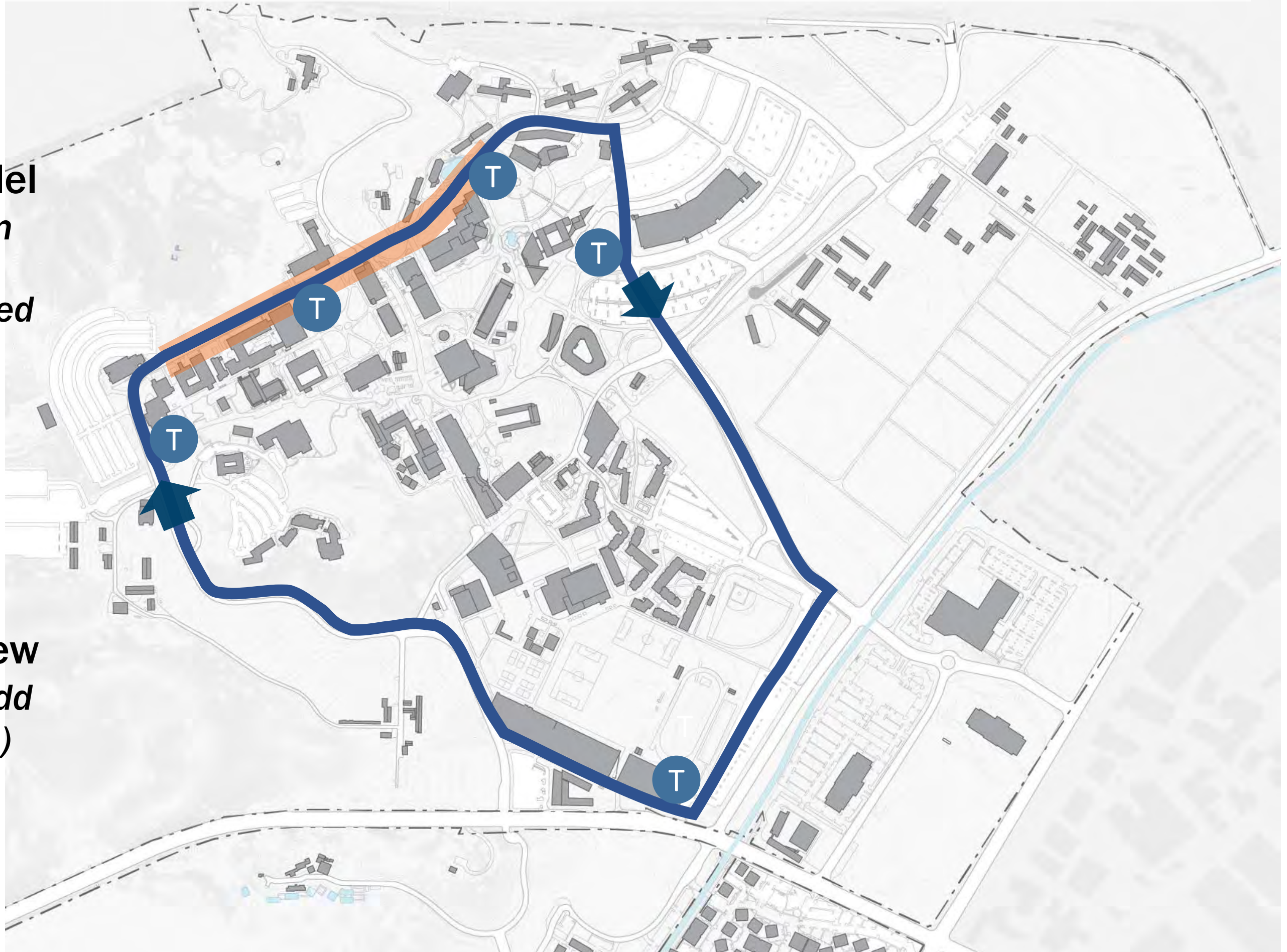
1 way transit
Share w/bikes

widen sidewalks
on south side

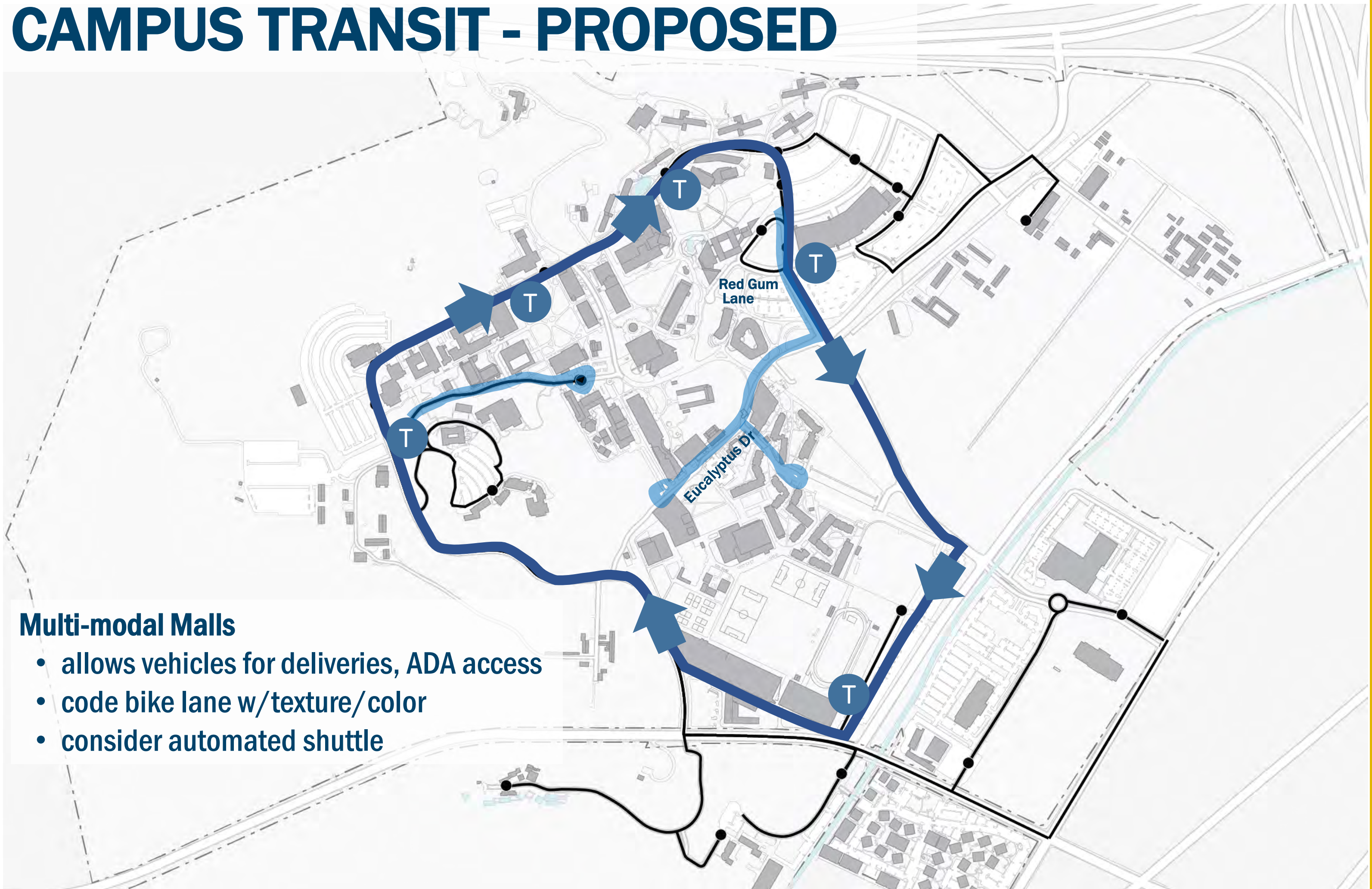
Street Sections

PILOT PROJECT: Shuttle + Transit lane

- Remove parallel parking (confirm sufficient pull-in spots for ADA, Med permits)
- Restripe lanes (add matchstick barriers at lane shift start-end points)
- Add signs at new stops (ideally add benches + shade)
- Improve CPP Transit app



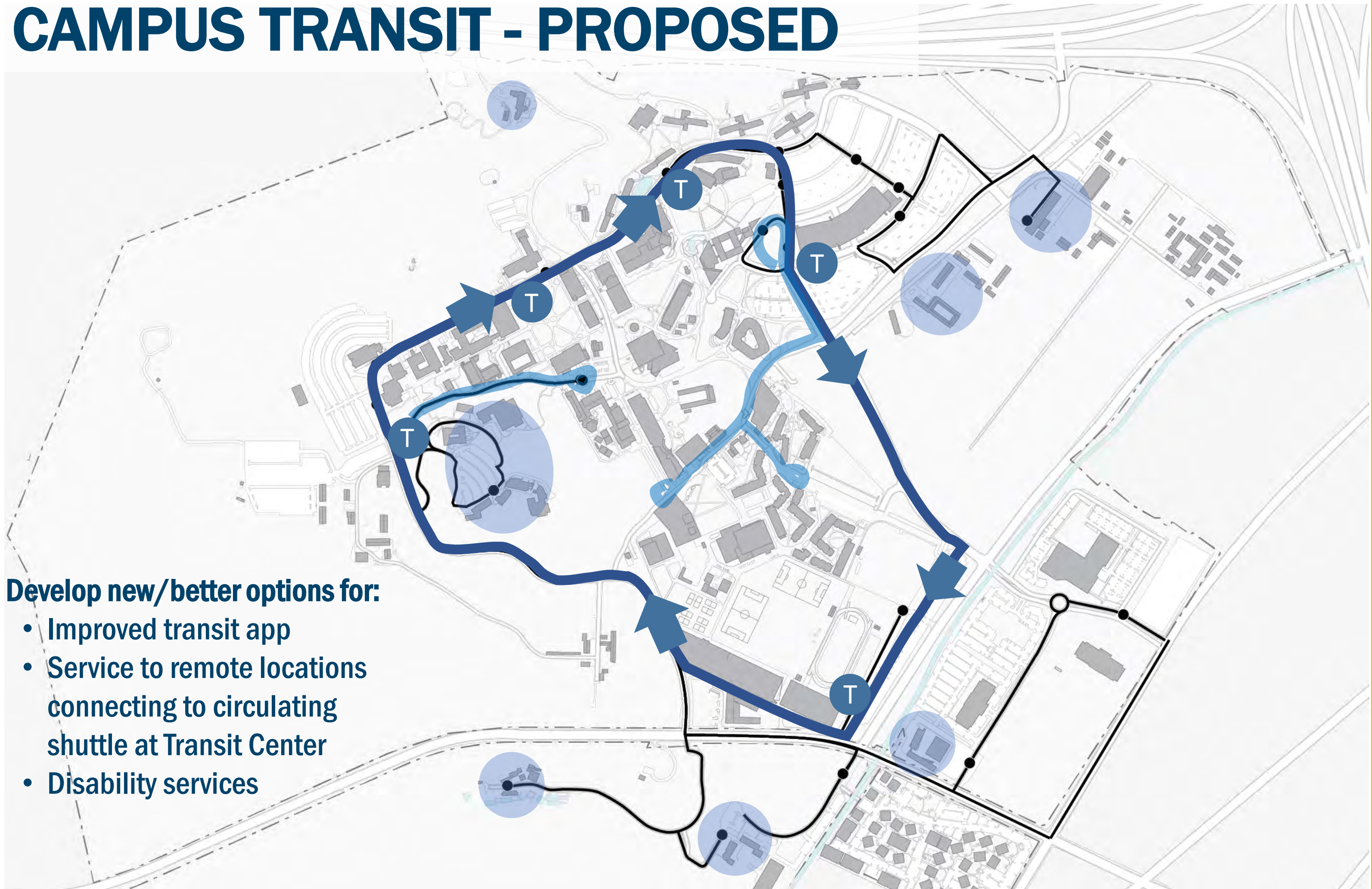
CAMPUS TRANSIT - PROPOSED



Multi-modal Malls

- allows vehicles for deliveries, ADA access
- code bike lane w/texture/color
- consider automated shuttle

CAMPUS TRANSIT - PROPOSED



Develop new/better options for:

- Improved transit app
- Service to remote locations connecting to circulating shuttle at Transit Center
- Disability services

CAMPUS TRANSIT CENTER

**Parking Structure #1 Expansion
+ Future Stop for FTA Silver Streak**

Transit Center:

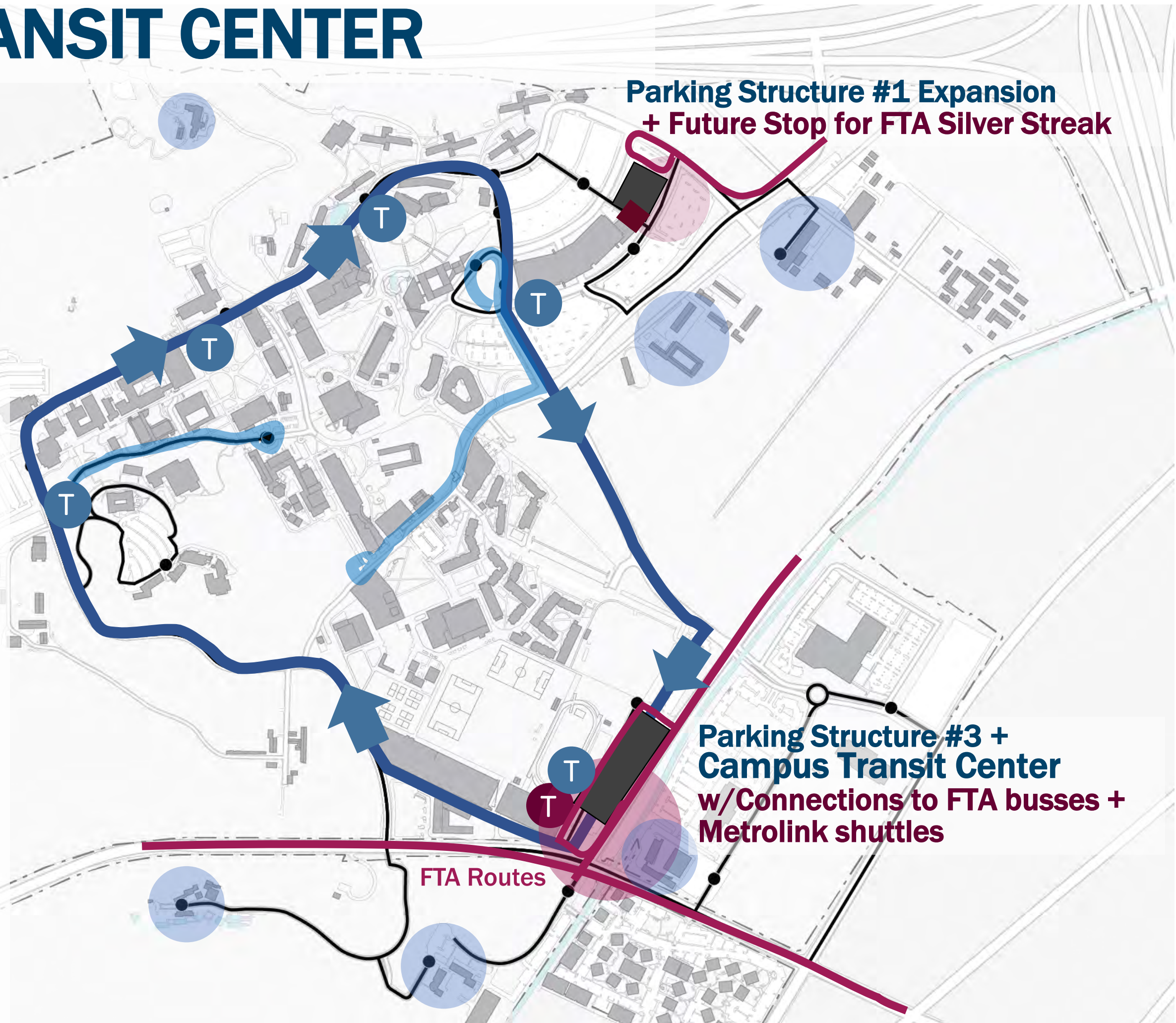
- Connected to parking
- On-campus shuttles
- Local/regional FTA bus stops
- Metrolink shuttles
- Auto + bike share hub
- Uber/Lyft circle

Should include:

- Safe, sheltered waiting
- Real-time tracking
- Transit information
- Purchase passes

**Parking Structure #3 +
Campus Transit Center
w/Connections to FTA busses +
Metrolink shuttles**

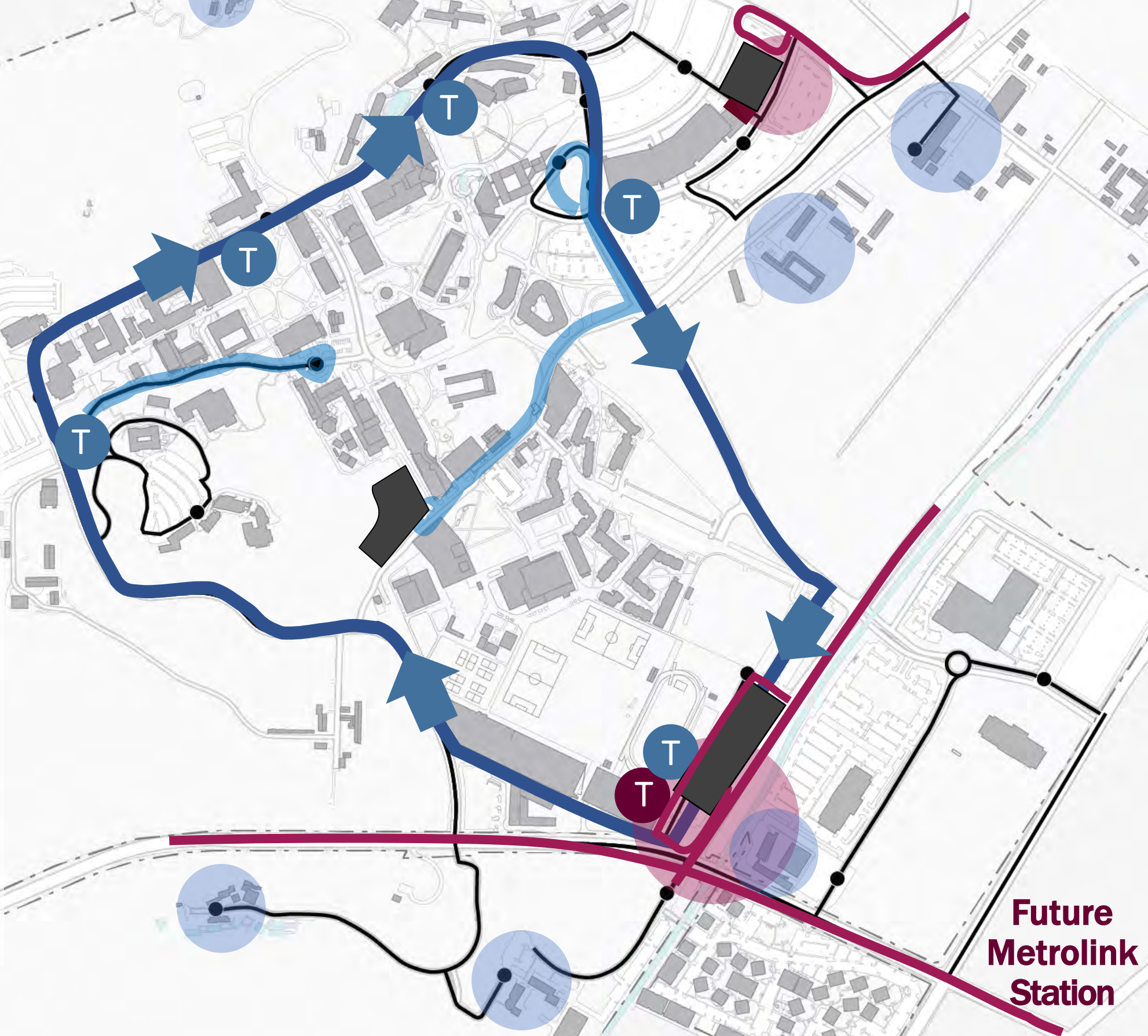
FTA Routes



CAMPUS TRANSIT CENTER + TRAIN

SCORE

- Metrolink partnership w/BNSF
- 10 yr, \$10 Billion
- Phase 1 funded for SB-Las Dimas line
 - 2 trains/hr both ways, all day
 - target is every 15 min
 - Pomona North Station
- Spadras bypass shifts freight to UP rail corridor opens door for Metrolink on BSNF corridor along Valley Drive



PARKING STRUCTURES + TRANSIT CENTER



Precedent: rendered view of mixed-use parking structure + transit center

TRANSIT CENTERS



Precedent: University of Nevada, Transit Center

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





Rose Garden

Eng Quad

U Quad

trees along walk

Re-add
Trees
-Ditchol

LIBRARY

BSC + U Park

BSC

Commons

BRIC

courts

bus
stops

TEMPLE AVE

Ditchol
@ Bus Stop

CAMPUS DR

VALLEY BLVD

CAMPUS

SHADE PREFERENCES

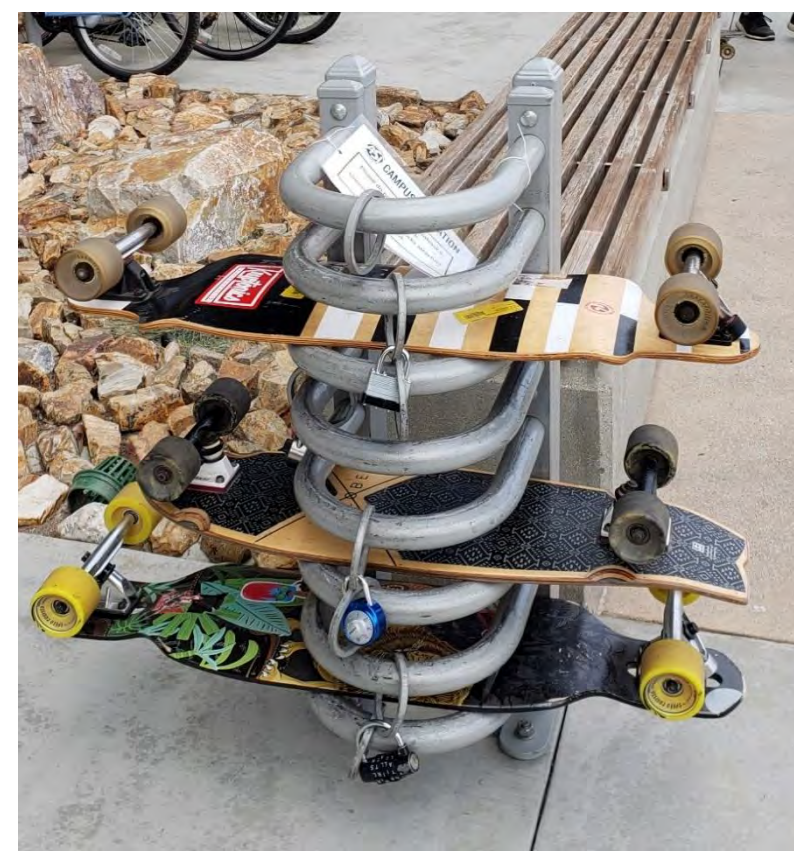
- shades a larger area
- solar power
- shapes a space
- plaza + landscape
- flexible for events, groups or individuals



SEATING PREFERENCES



- lawn (but not wet)
- shaded
- choices, versatile, flexible
- benches over chairs
- landscape + hardscape
- work surface
- solar powered outlets



PILOT PROJECT: Seating + Shade

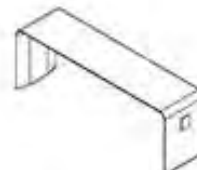
- Standing height
- Movable stools
- Solar panel w/charging outlets + battery storage
- Options for lighting, electronic screens, hard-wired power outlets



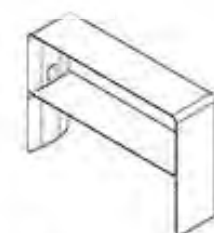
PILOT PROJECT: Seating + Shade



Dining Height
30" x 114" x 29"



Standing Height
30" x 114" x 40.5"



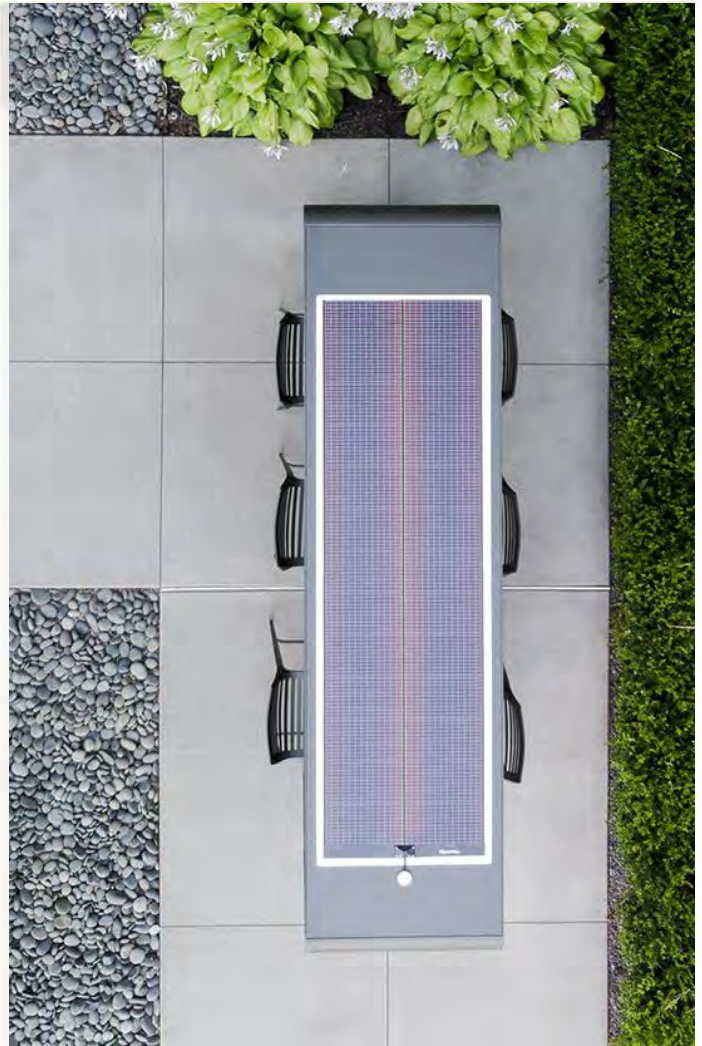
Standing (canopy)
30" x 114" x 80"



Standing (solar)
30" x 114" x 80"



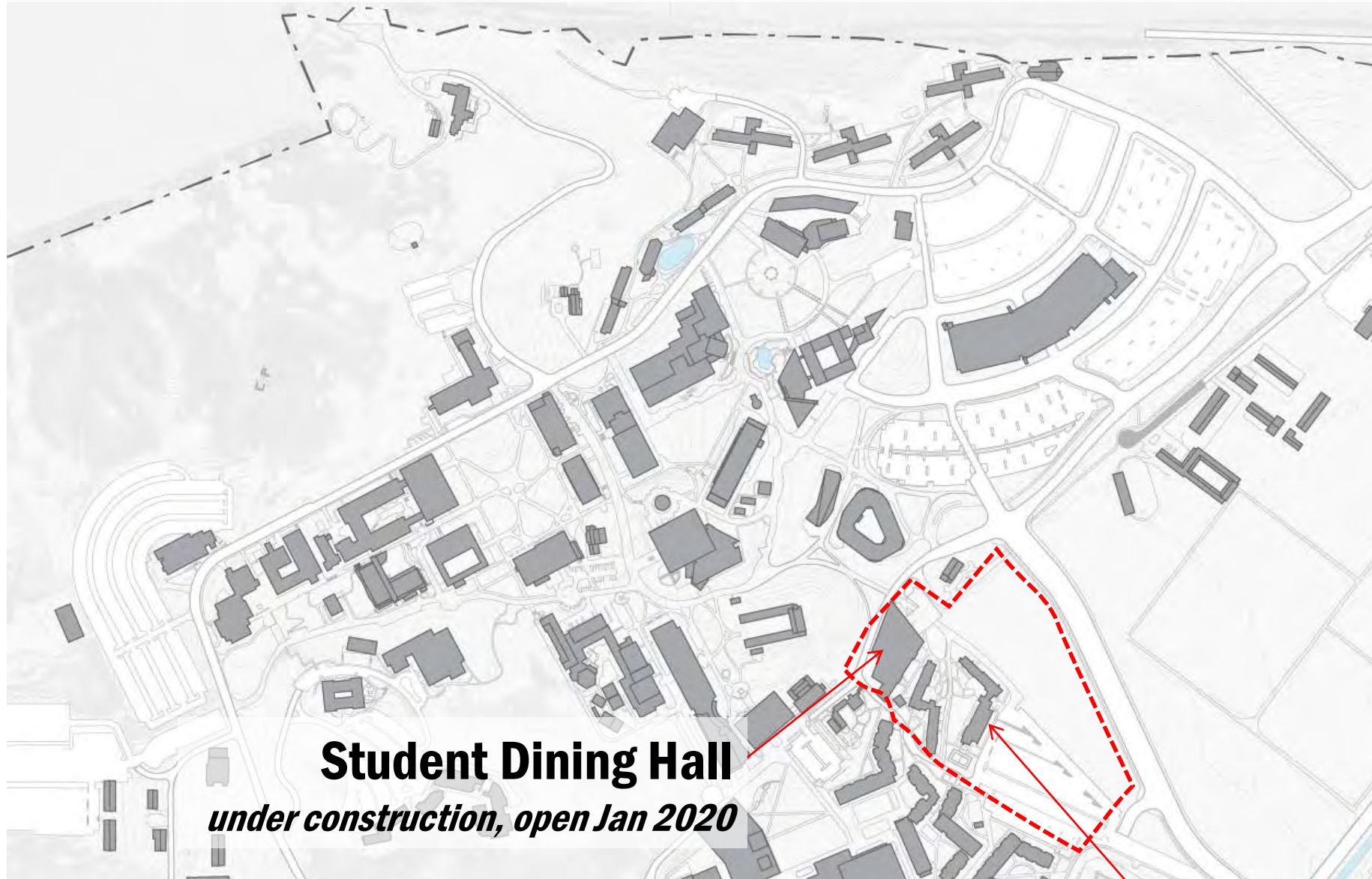
LED Lights



Area-Facilities Studies

- Student Life – BSC, Housing, Dining, Health & Wellness, Athletics/Rec

STUDENT HOUSING REPLACEMENT - PHASE 1



Student Dining Hall
under construction, open Jan 2020



Student Housing Phase I
under construction, open Jan 2020



STUDENT HOUSING REPLACEMENT - PHASE 1



**Demolish Los Olivos
Dining Hall + Greys**
(- 500 beds)

**Reduce occupancy
in Reds to 80%**
(- 160 beds)

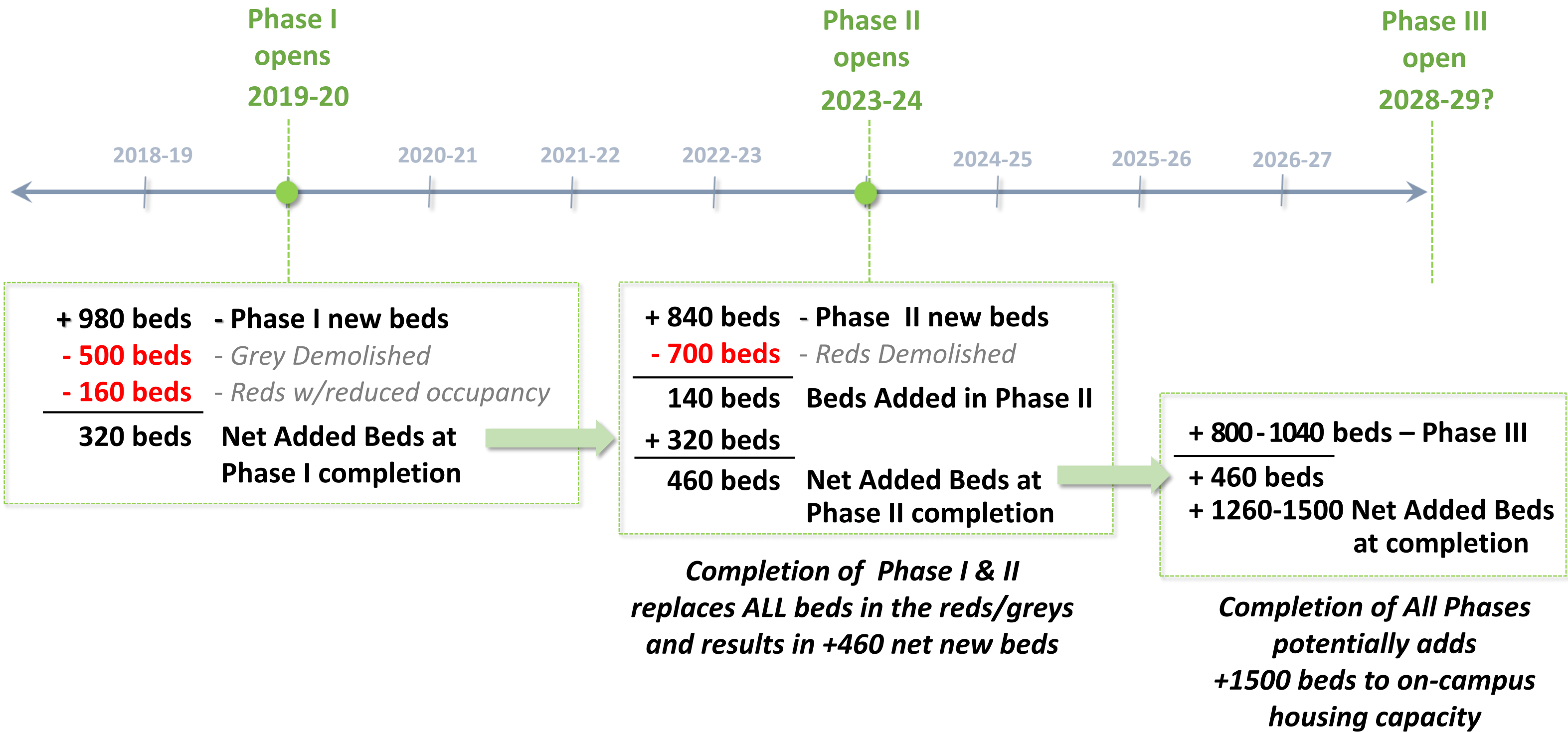
Student Housing Phase II
840 beds – net added 140

Student Housing Phase III
est 800-1000 beds

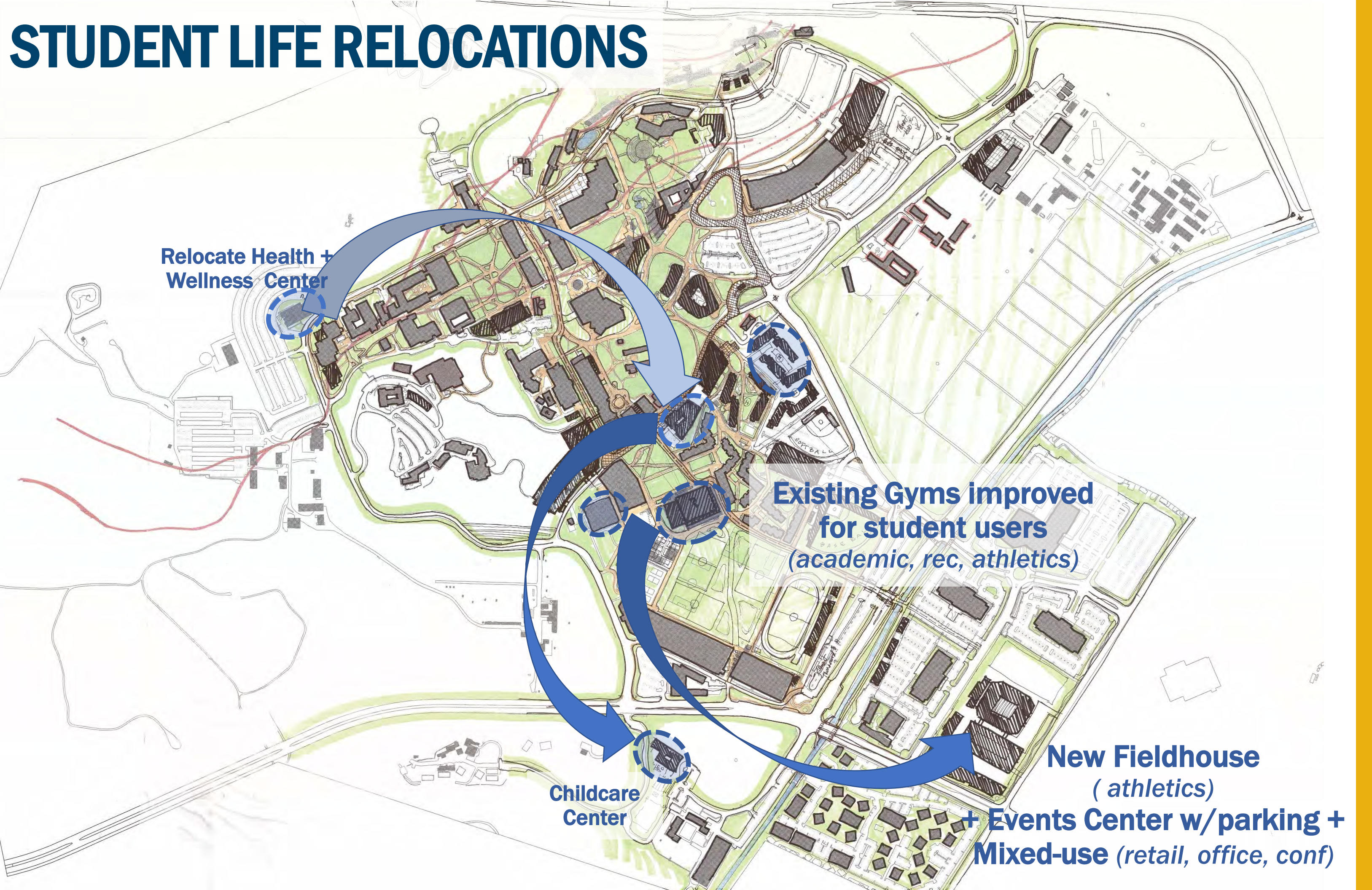
Student Dining Hall

Student Housing Phase I
980 beds - net added 320 beds

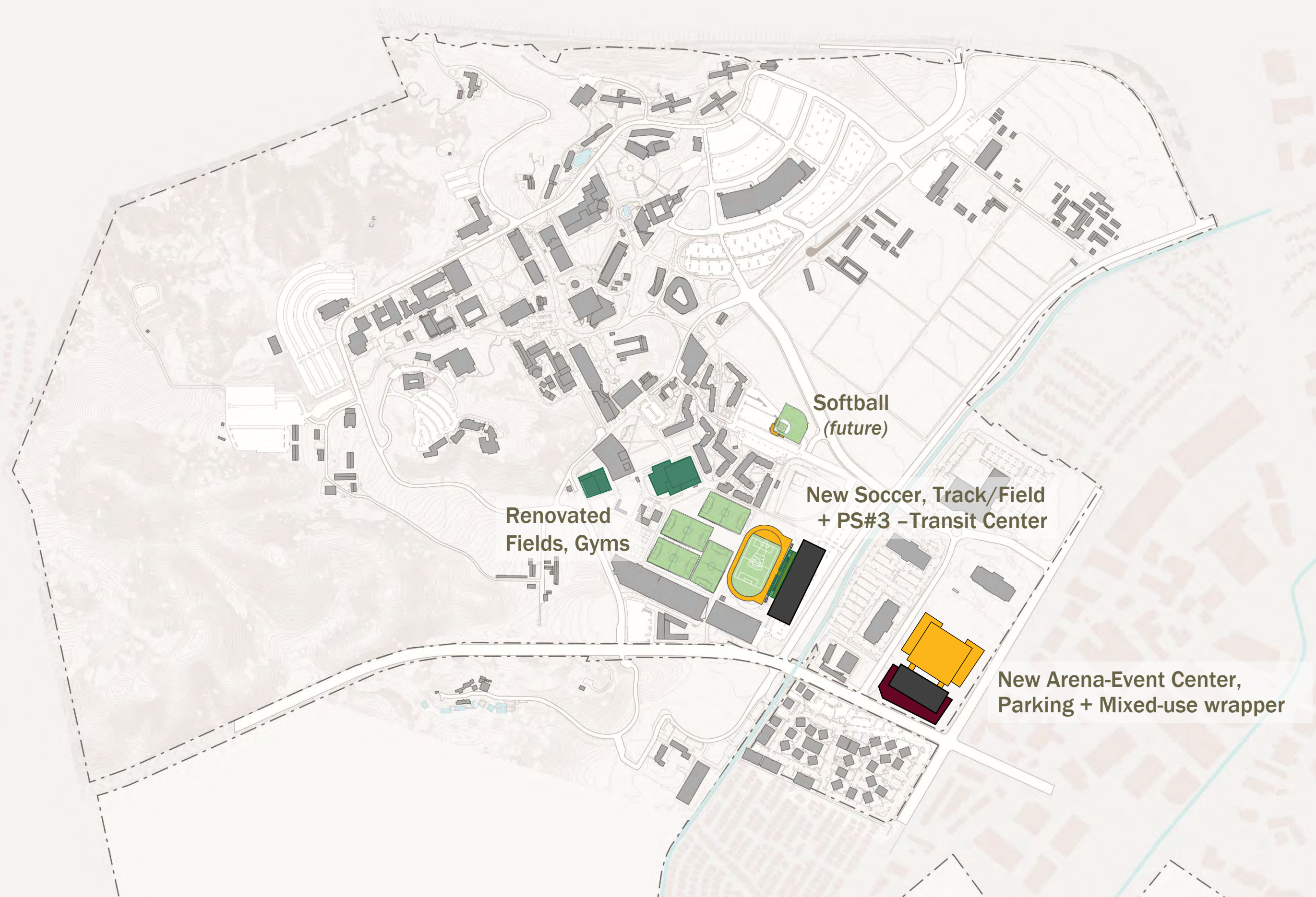
STUDENT HOUSING BED COUNTS



STUDENT LIFE RELOCATIONS



ATHLETICS/REC FACILITIES PROPOSED



Softball
(future)

Renovated
Fields, Gyms

New Soccer, Track/Field
+ PS#3 - Transit Center

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

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

Fall 2017

8:00 AM	53% 83 Rooms	61% 96 Rooms	51% 81 Rooms	59% 94 Rooms	42% 67 Rooms
9:15 AM	73% 115 Rooms	66% 105 Rooms	72% 113 Rooms	66% 104 Rooms	59% 94 Rooms
10:00 AM	73% 115 Rooms	92% 145 Rooms	72% 113 Rooms	91% 144 Rooms	59% 93 Rooms
10:30 AM	79% 125 Rooms	92% 146 Rooms	77% 121 Rooms	92% 145 Rooms	63% 99 Rooms
11:45 AM	78% 124 Rooms	91% 143 Rooms	77% 122 Rooms	91% 143 Rooms	61% 96 Rooms
1:00 PM	48% 76 Rooms	98% 155 Rooms	53% 83 Rooms	96% 152 Rooms	28% 45 Rooms
2:00 PM	92% 146 Rooms	97% 154 Rooms	91% 143 Rooms	95% 150 Rooms	25% 40 Rooms
3:00 PM	85% 134 Rooms	84% 133 Rooms	82% 130 Rooms	84% 132 Rooms	23% 37 Rooms
4:00 PM	83% 131 Rooms	85% 134 Rooms	82% 130 Rooms	82% 130 Rooms	8% 12 Rooms
5:00 PM	78% 124 Rooms	57% 90 Rooms	79% 125 Rooms	55% 87 Rooms	4% 6 Rooms
6:00 PM	70% 110 Rooms	77% 121 Rooms	73% 115 Rooms	75% 119 Rooms	1% 2 Rooms
7:00 PM	69% 109 Rooms	56% 88 Rooms	73% 116 Rooms	56% 88 Rooms	1% 2 Rooms
8:00 PM	26% 41 Rooms	42% 66 Rooms	27% 42 Rooms	42% 67 Rooms	1% 2 Rooms
	Monday	Tuesday	Wednesday	Thursday	Friday

Total classrooms = 158

Fall 2018

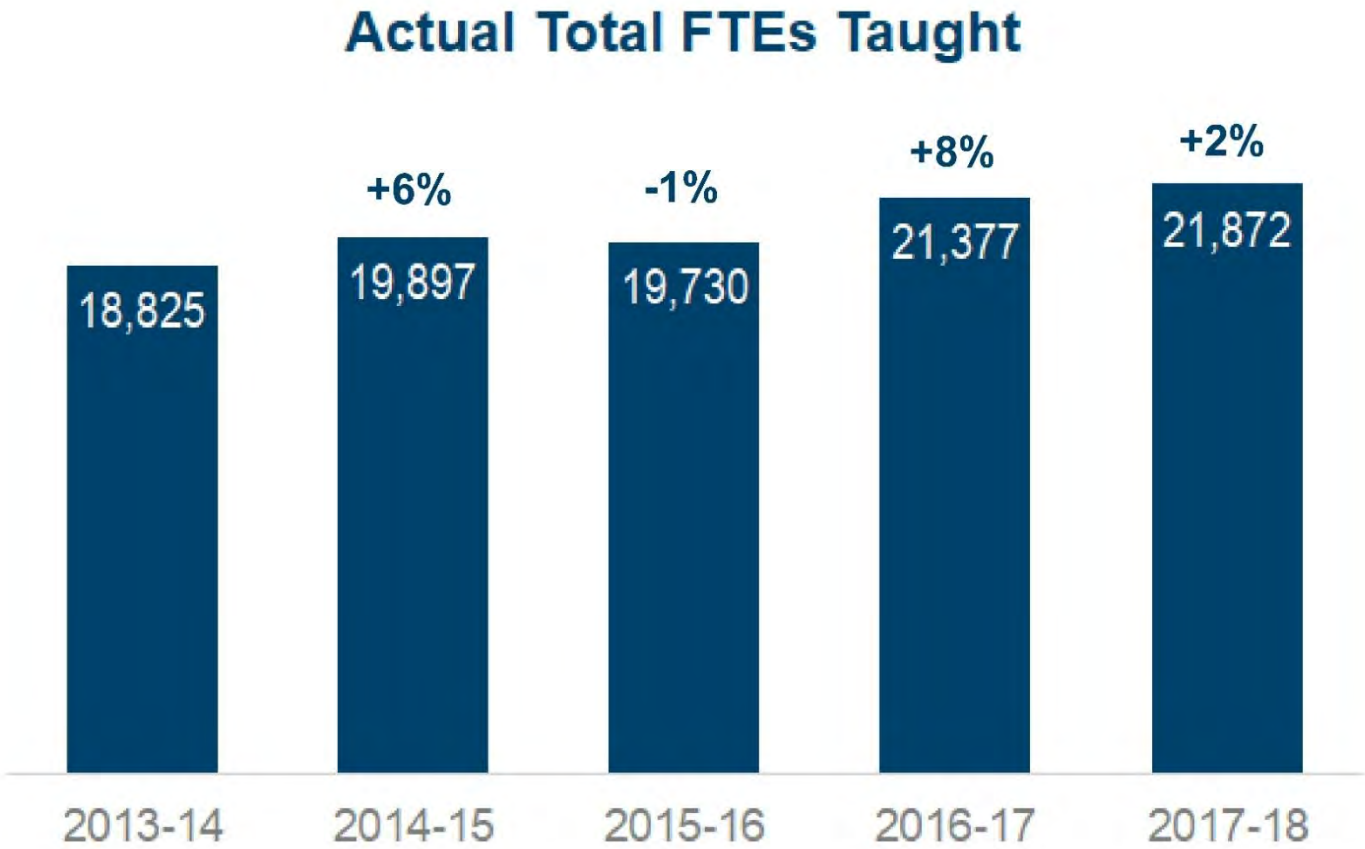
8:00 AM	73% 116 Rooms	76% 120 Rooms	72% 113 Rooms	76% 120 Rooms	66% 104 Rooms
9:15 AM	70% 110 Rooms	77% 122 Rooms	68% 107 Rooms	77% 122 Rooms	61% 96 Rooms
10:00 AM	77% 121 Rooms	91% 143 Rooms	76% 120 Rooms	89% 141 Rooms	61% 97 Rooms
10:30 AM	91% 144 Rooms	94% 148 Rooms	90% 142 Rooms	94% 149 Rooms	68% 108 Rooms
11:45 AM	90% 142 Rooms	16% 25 Rooms	91% 144 Rooms	16% 25 Rooms	49% 78 Rooms
1:00 PM	94% 149 Rooms	96% 152 Rooms	94% 148 Rooms	95% 150 Rooms	30% 47 Rooms
2:00 PM	96% 152 Rooms	98% 155 Rooms	96% 151 Rooms	97% 154 Rooms	23% 37 Rooms
3:00 PM	86% 136 Rooms	91% 143 Rooms	87% 137 Rooms	87% 137 Rooms	17% 27 Rooms
4:00 PM	82% 129 Rooms	83% 131 Rooms	83% 131 Rooms	80% 127 Rooms	9% 15 Rooms
5:00 PM	88% 139 Rooms	90% 142 Rooms	91% 144 Rooms	89% 140 Rooms	6% 9 Rooms
6:00 PM	72% 113 Rooms	72% 113 Rooms	79% 125 Rooms	65% 103 Rooms	4% 6 Rooms
7:00 PM	56% 89 Rooms	54% 86 Rooms	59% 94 Rooms	49% 78 Rooms	1% 1 Rooms
8:00 PM	53% 84 Rooms	56% 88 Rooms	56% 88 Rooms	51% 81 Rooms	1% 2 Rooms
	Monday	Tuesday	Wednesday	Thursday	Friday

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SPACE CAPACITY - UTILIZATION FINDINGS

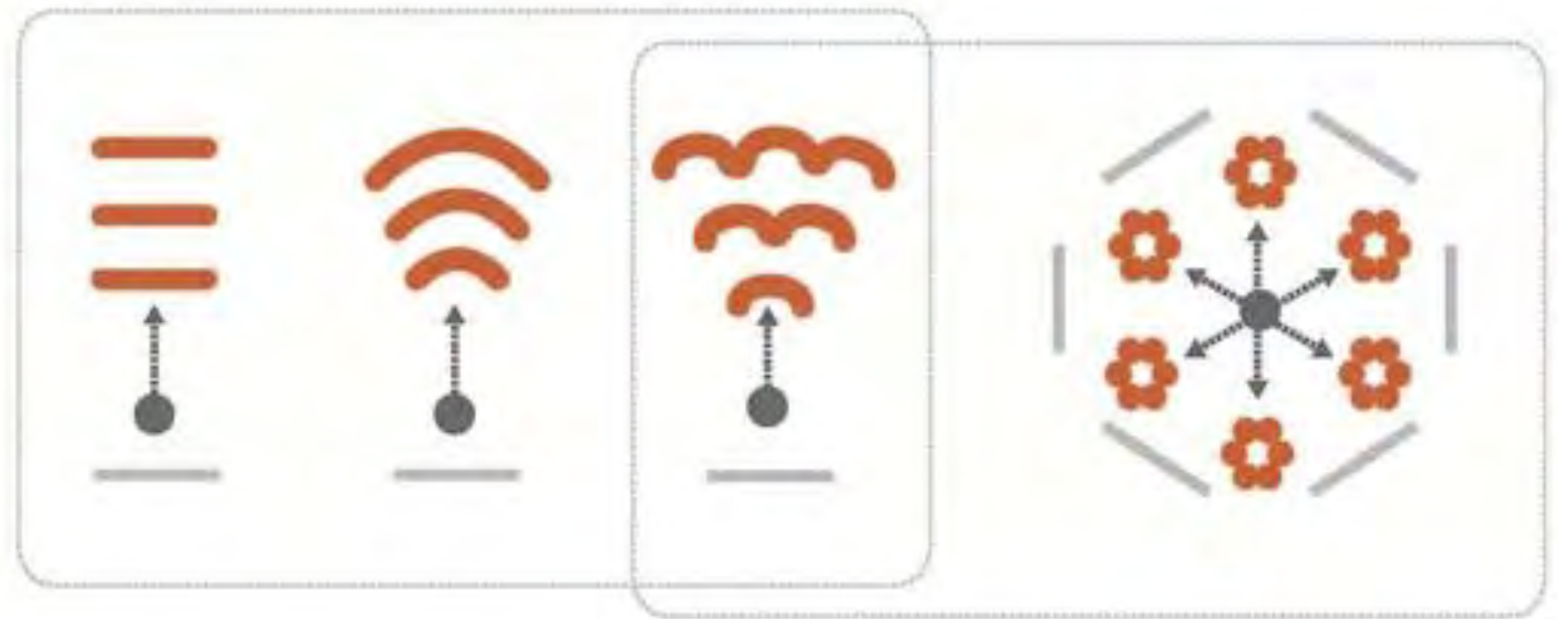
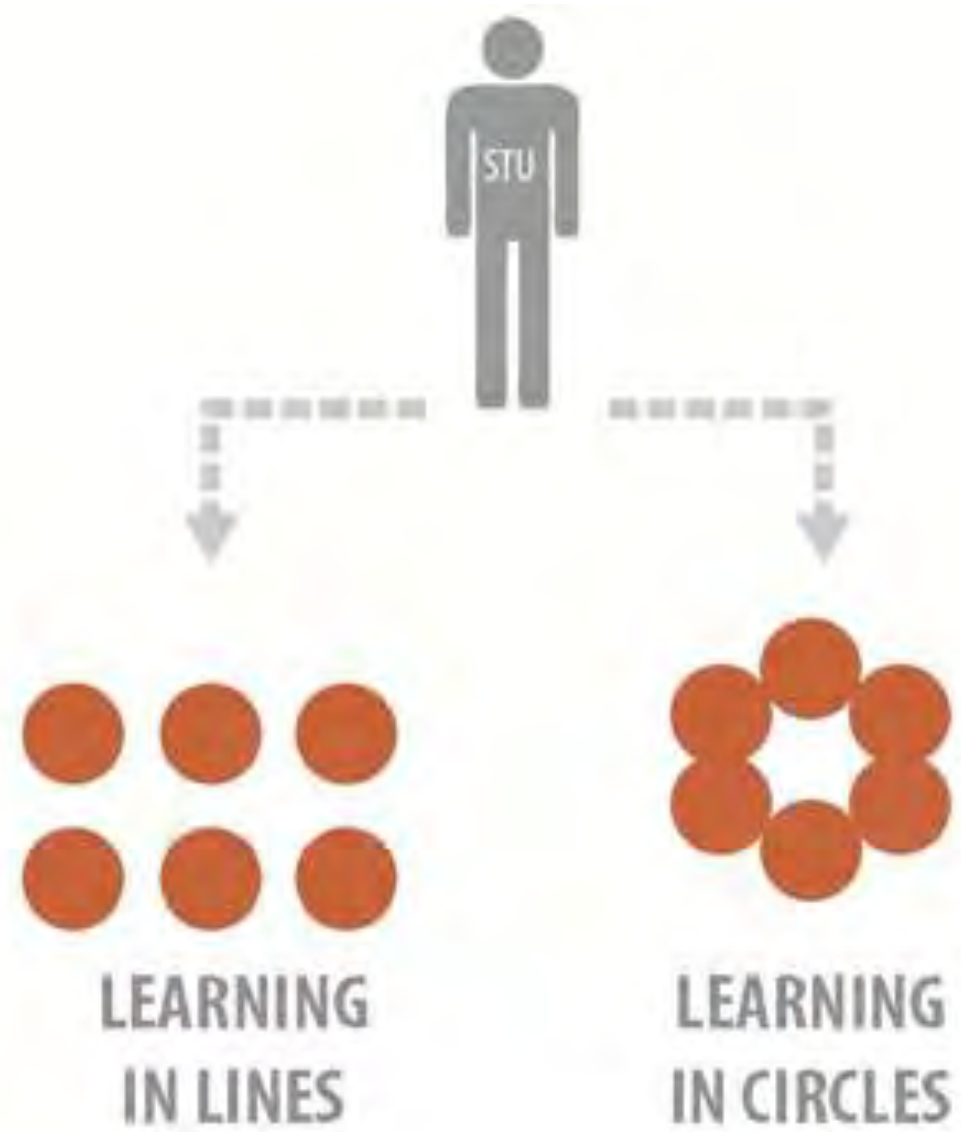
FTE Capacity v. Actual Total FTEs Taught

College Year Annualized Full-Time Equivalent Students (FTES)					6/20/2018
California State Polytechnic University, Pomona					
	2013-14	2014-15	2015-16	2016-17	2017-18
1) CSU FTES Capacity for Campus	*	*	17,993.00	18,292.00	18,292.00
2) CSU Resident FTES Target	17,356.00	17,756.00	18,294.00	18,586.00	18,714.00
3) Campus total FTES Goal	18,244.00	18,769.00	19,794.00	20,870.00	21,443.30
4) Actual total FTES Taught	18,825.00	19,897.00	19,730.00	21,376.90	21,872.20
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					



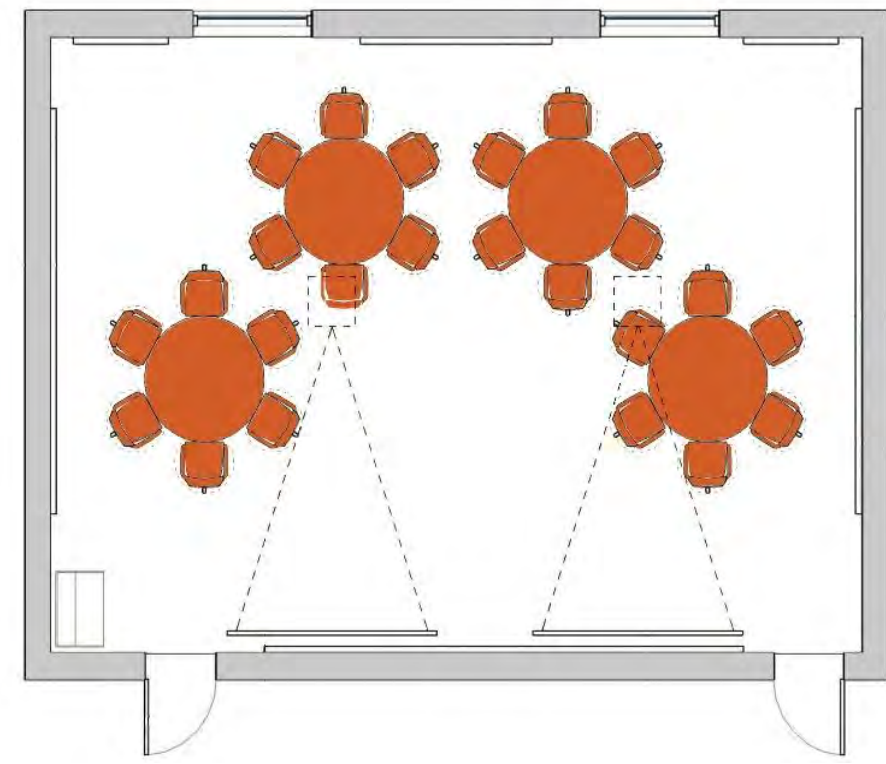
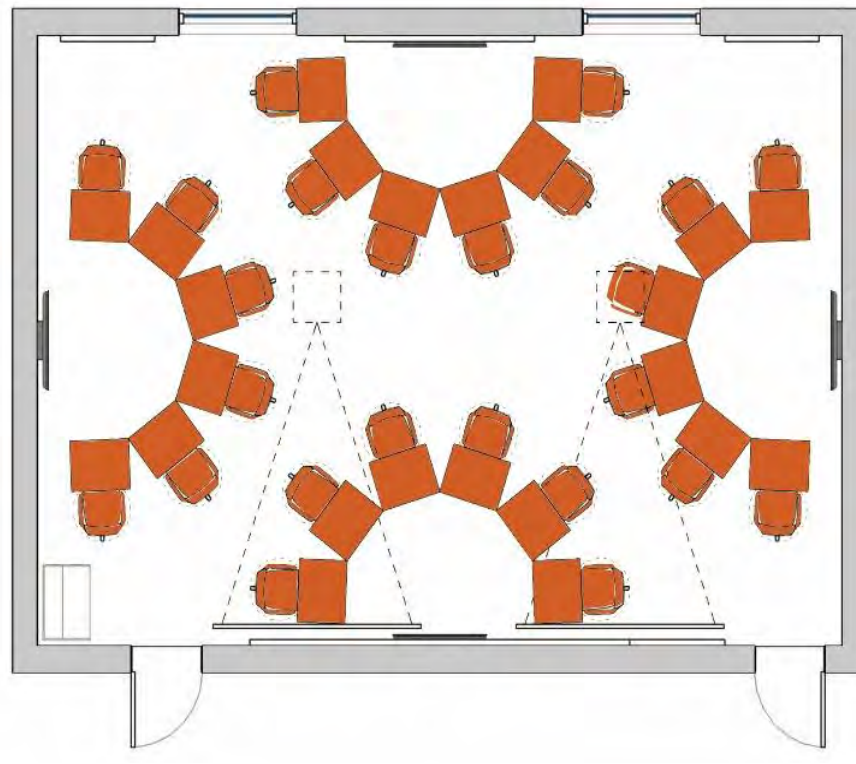
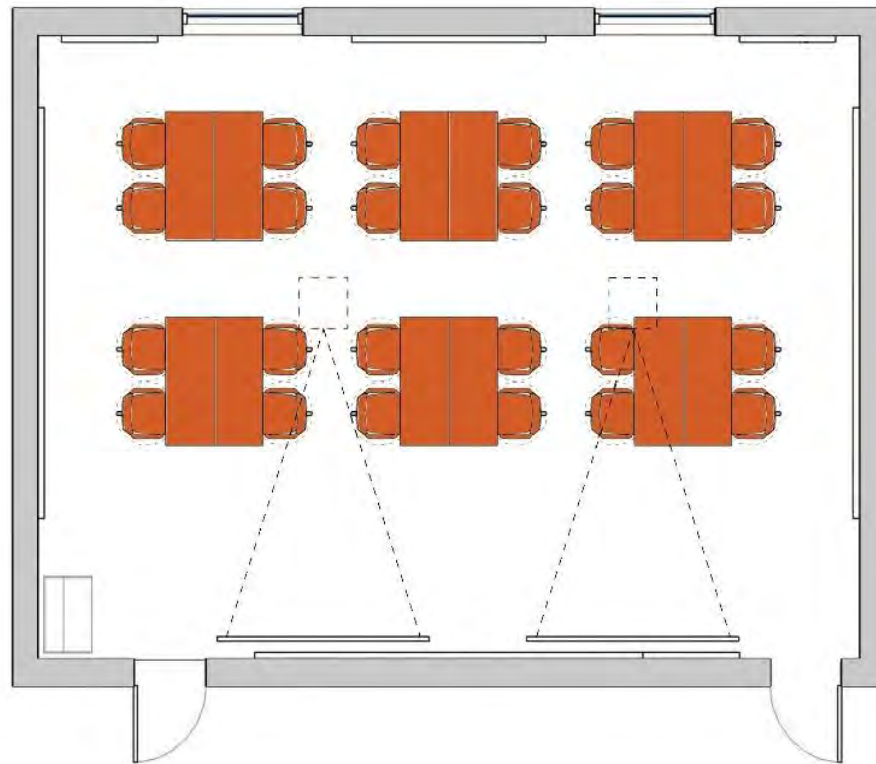
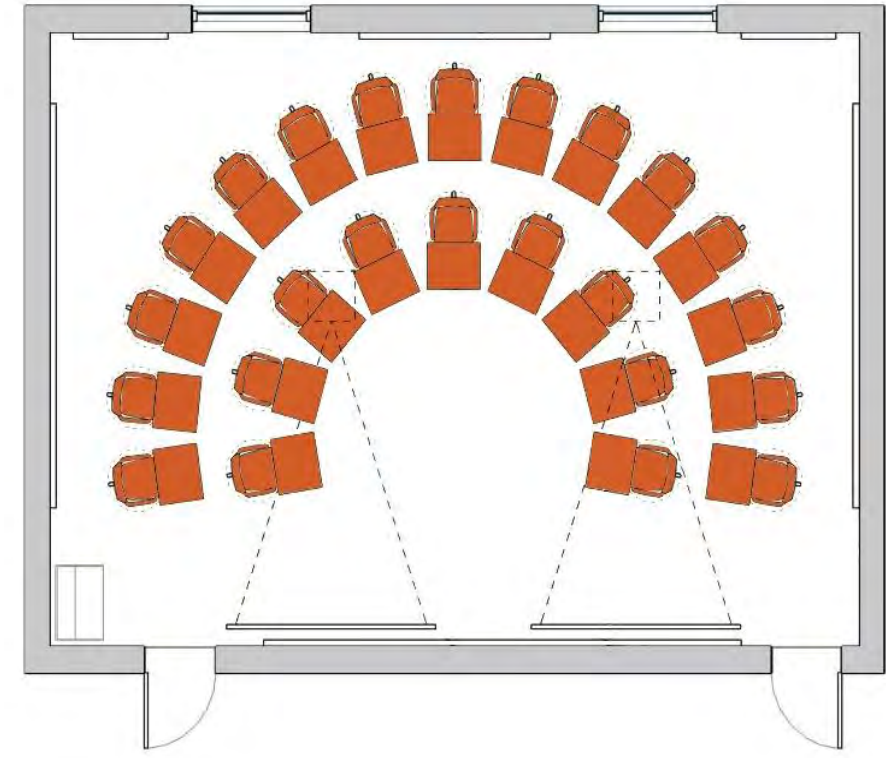
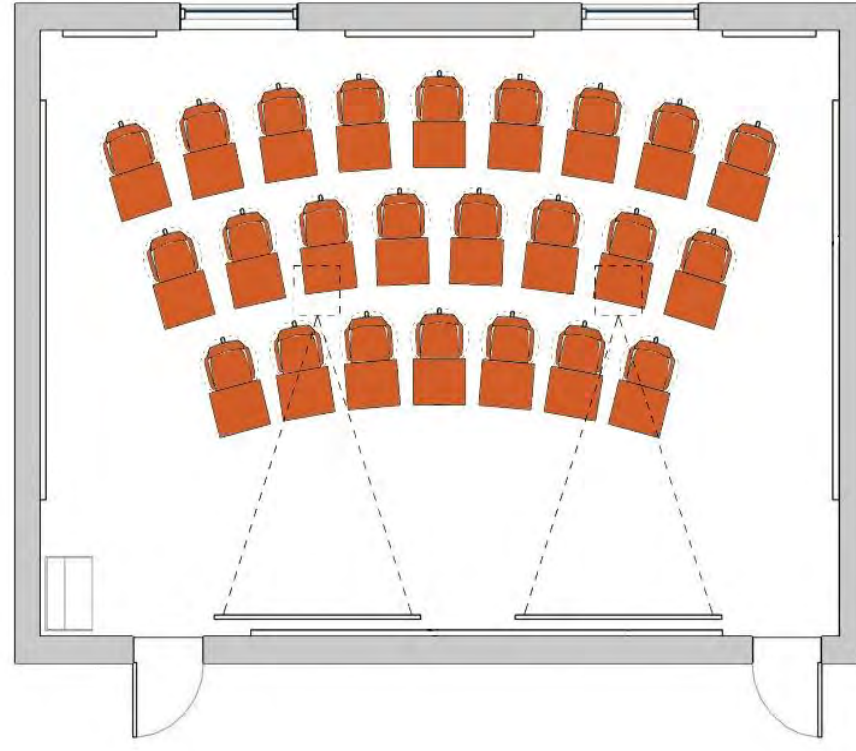
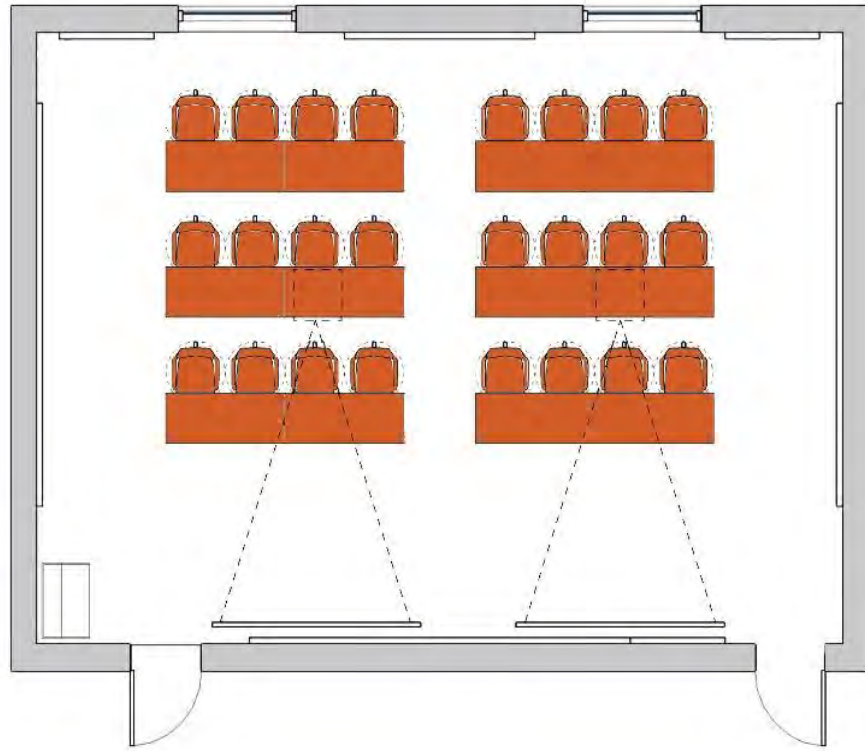
Overall a 16% Increase over 5 years

LEARNING ENVIRONMENTS FOR STUDENT SUCCESS

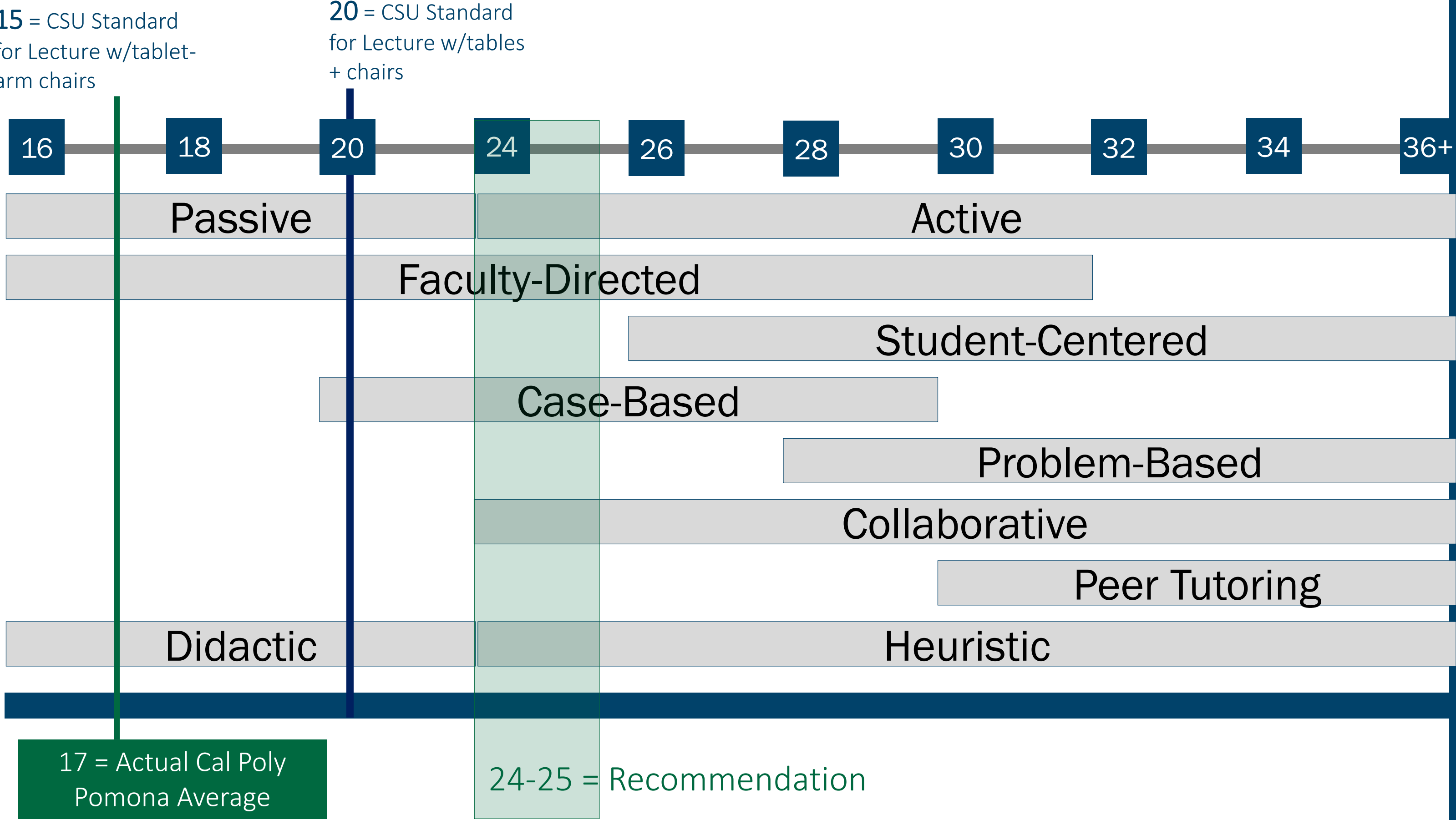


SPACE ACCOMMODATES VARYING APPROACHES

850 NASF / 24 STU = 35 SF/STU



NASF/SEAT FOR LEARNING MODALITIES





FORWARD FACING
TABLET ARM CHAIRS = 15 SF/SEAT



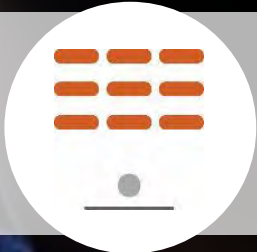


FORWARD FACING
CHAIRS + TABLES IN ROWS = 20 SF/SEAT





LECTURE HALL, FORWARD FACING + COLLABORATIVE
TABLES IN ROWS + MOVABLE CHAIRS = 24 SF/SEAT





LEARNING LAB, MULTIPLE FRONTS
COLLABORATIVE TABLES + TECHNOLOGY = 24-30 SF/PERSON

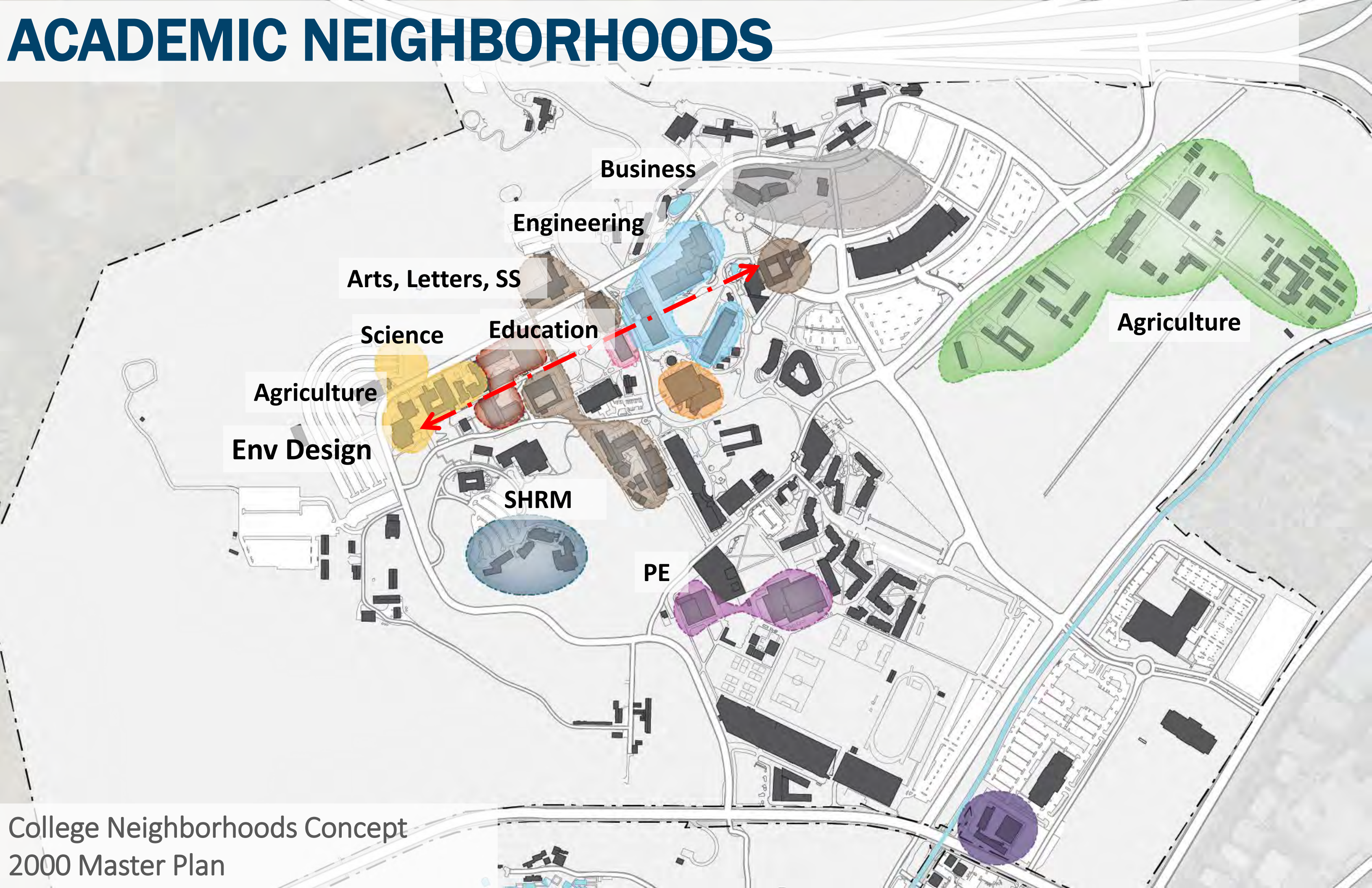


Synthesis + Area Studies + Analysis

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*

ACADEMIC NEIGHBORHOODS



College Neighborhoods Concept
2000 Master Plan

ACADEMIC NEIGHBORHOODS

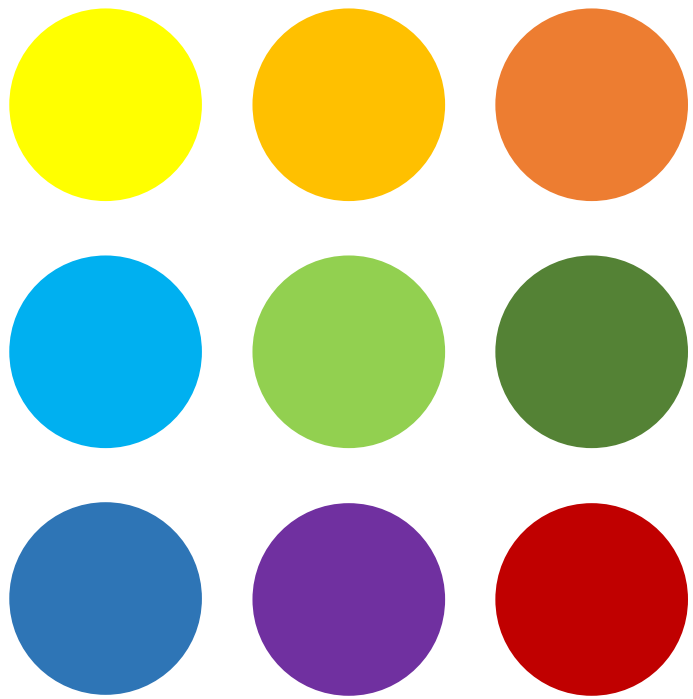
An aerial map of a university campus. Several buildings are highlighted in yellow. Three yellow lines connect these highlighted buildings, forming a path across the campus. The buildings are scattered across the map, with some clusters and some isolated structures. The map shows streets, parking lots, and other campus features.

Architecture student's
'neighborhood'

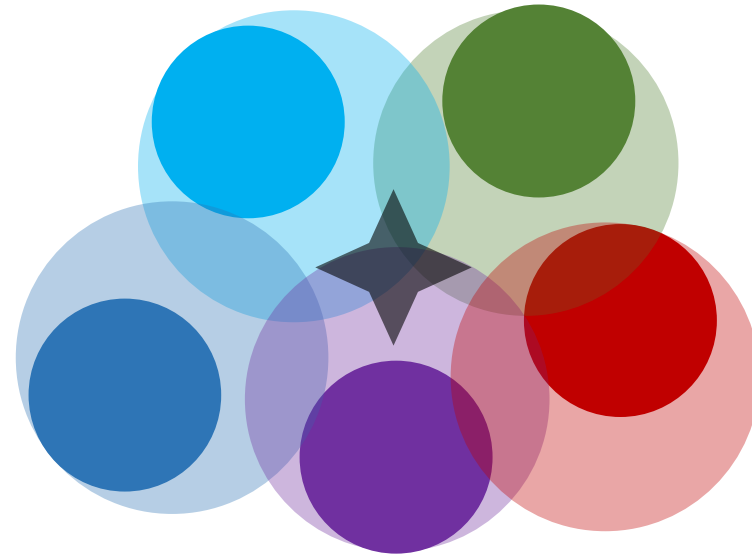
The neighborhood concept may
have been outgrown.

Many programs are dispersed
across multiple buildings with no
intuitive connections.

NEIGHBORHOODS CONNECTING AROUND HUBS

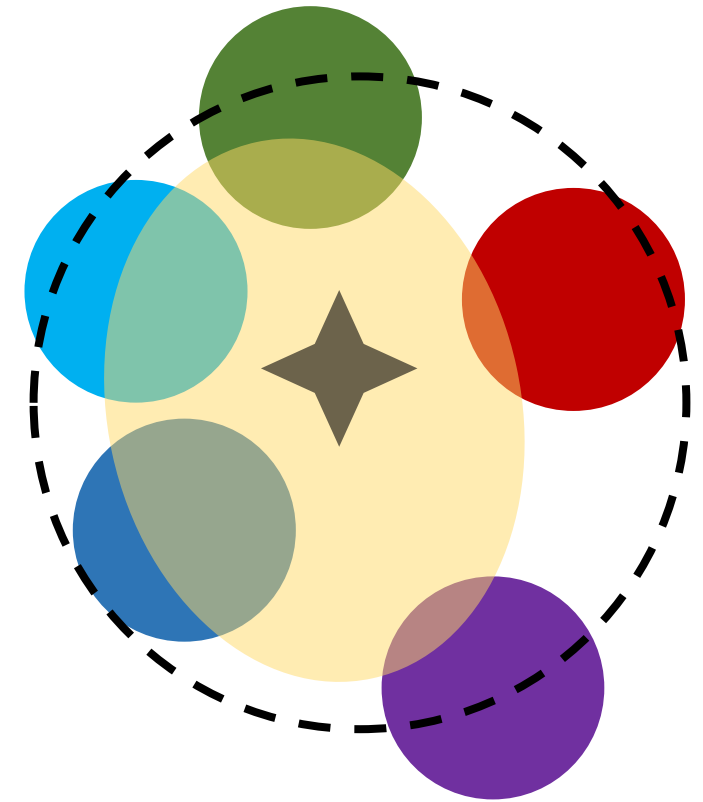


Neighborhoods



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

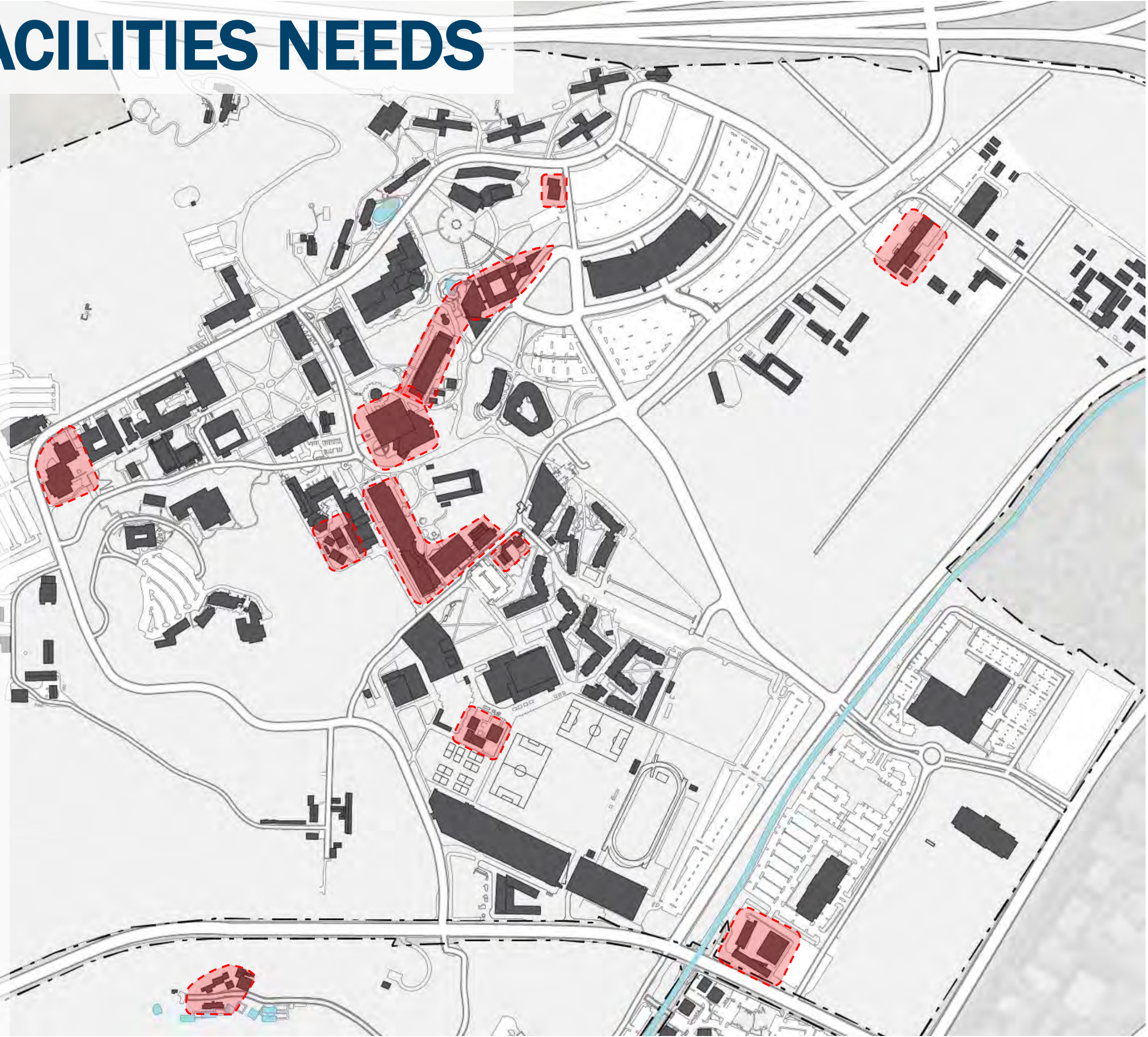


Meet me in the Middle

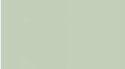



- Interdisciplinary space
- Visible ground floor spaces
- Small study + gathering areas
- Large incubator or collaboration space
- Flexible, open areas
- Consolidated resources for faculty + students
- Can eliminate redundancies
- Can improve utilization

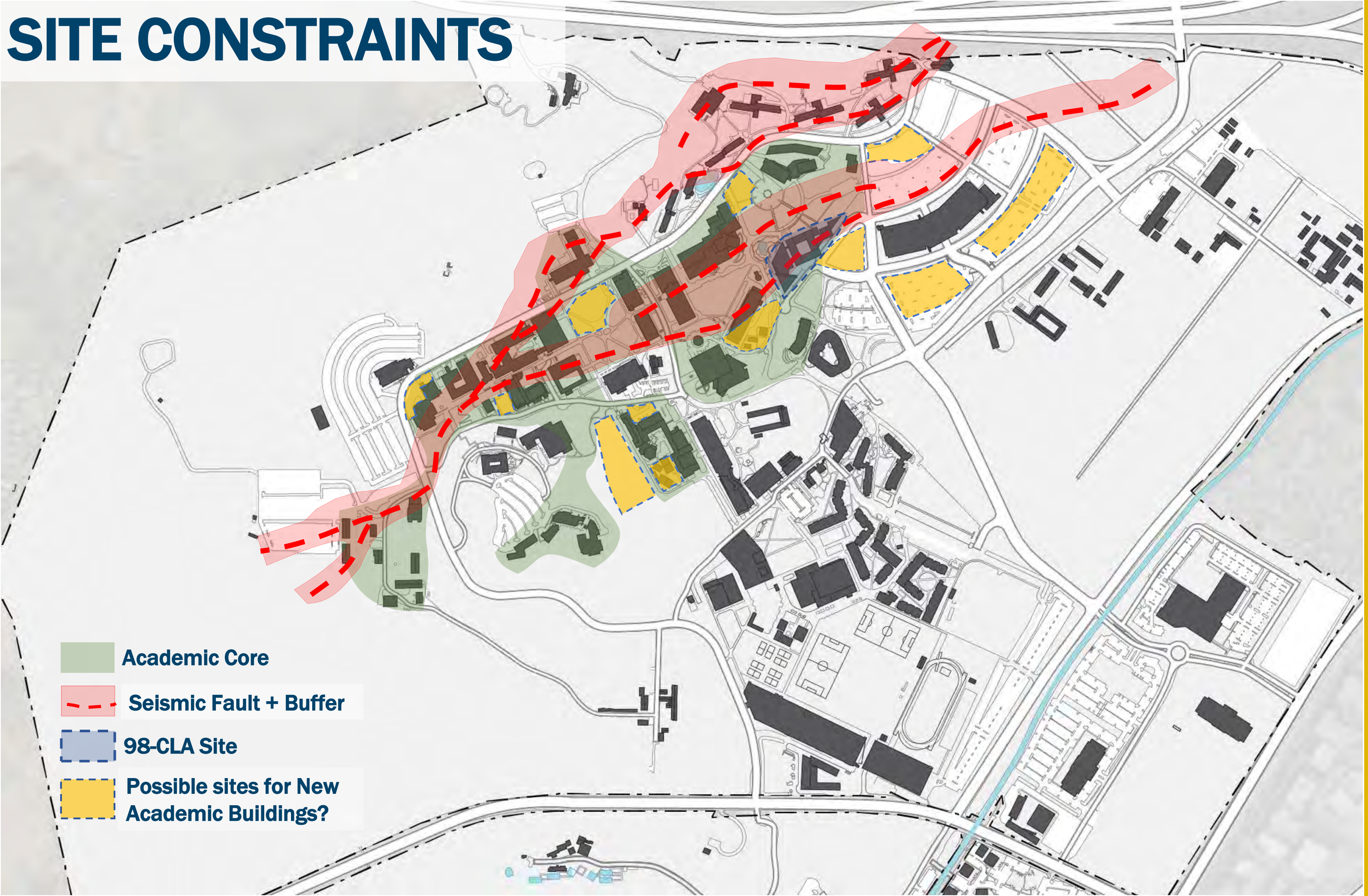
ACADEMIC FACILITIES NEEDS

- More instructional Space, especially labs, flex studios, and shared project space resources
- CLA – renovate or replace?
- Eng/Art Annex – renovate, expand?
- Environmental Design improve, expand?
- Interim Design Center – expand or reconsider, consolidate?
- 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 for New Academic Buildings?



SITE CONSTRAINTS

- Academic Core
- Seismic Fault + Buffer
- 98-CLA Site
- Possible sites for New Academic Buildings?

Too far?

Too small?

Bldg 98-CLA Strategies:

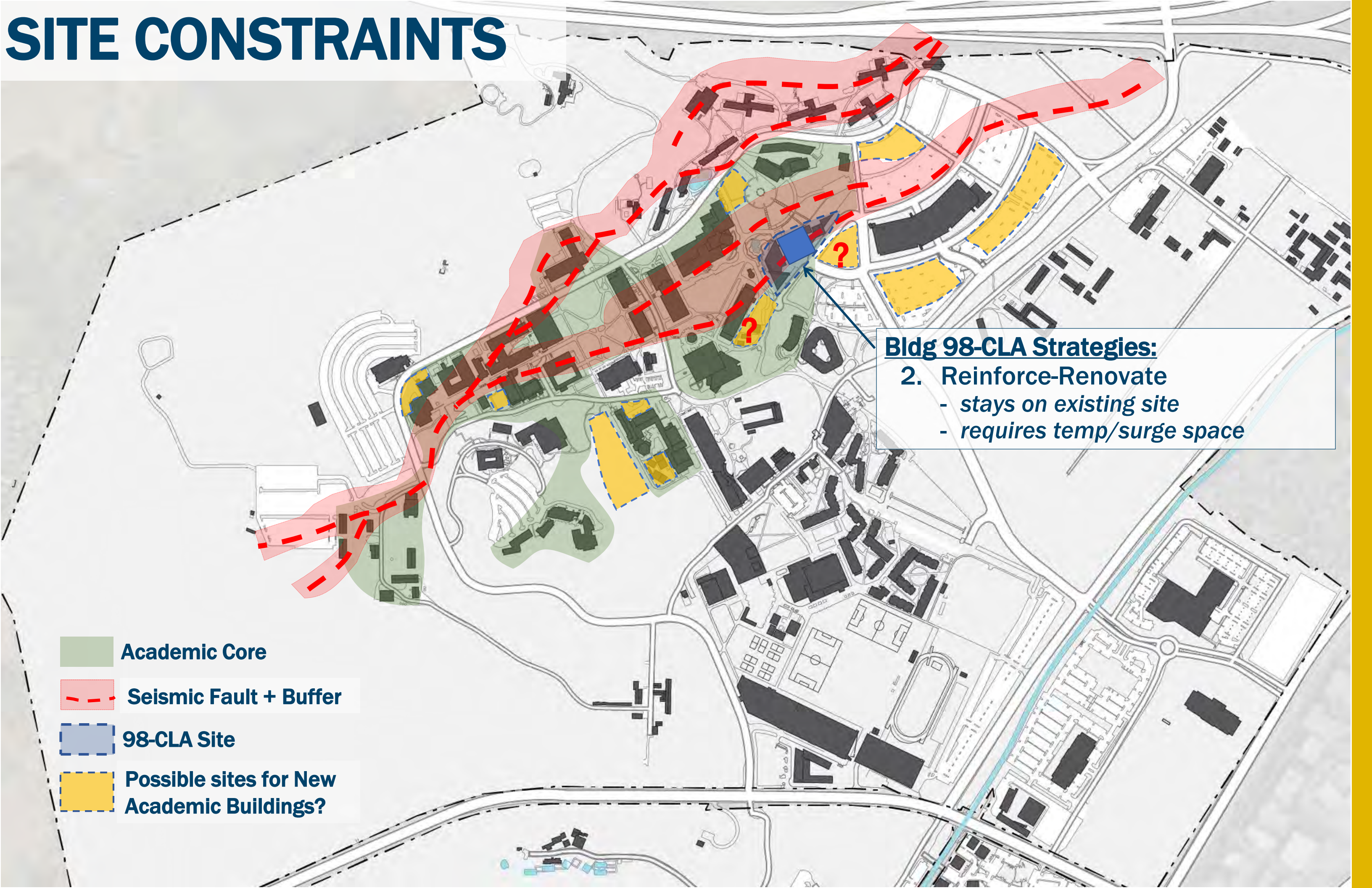
1. Replace on a New Site

- Low-rise, 40-60,000 sf footprint
- Mid-rise 25-30,000 sf footprint

CLA Replacement or Academic Student Center

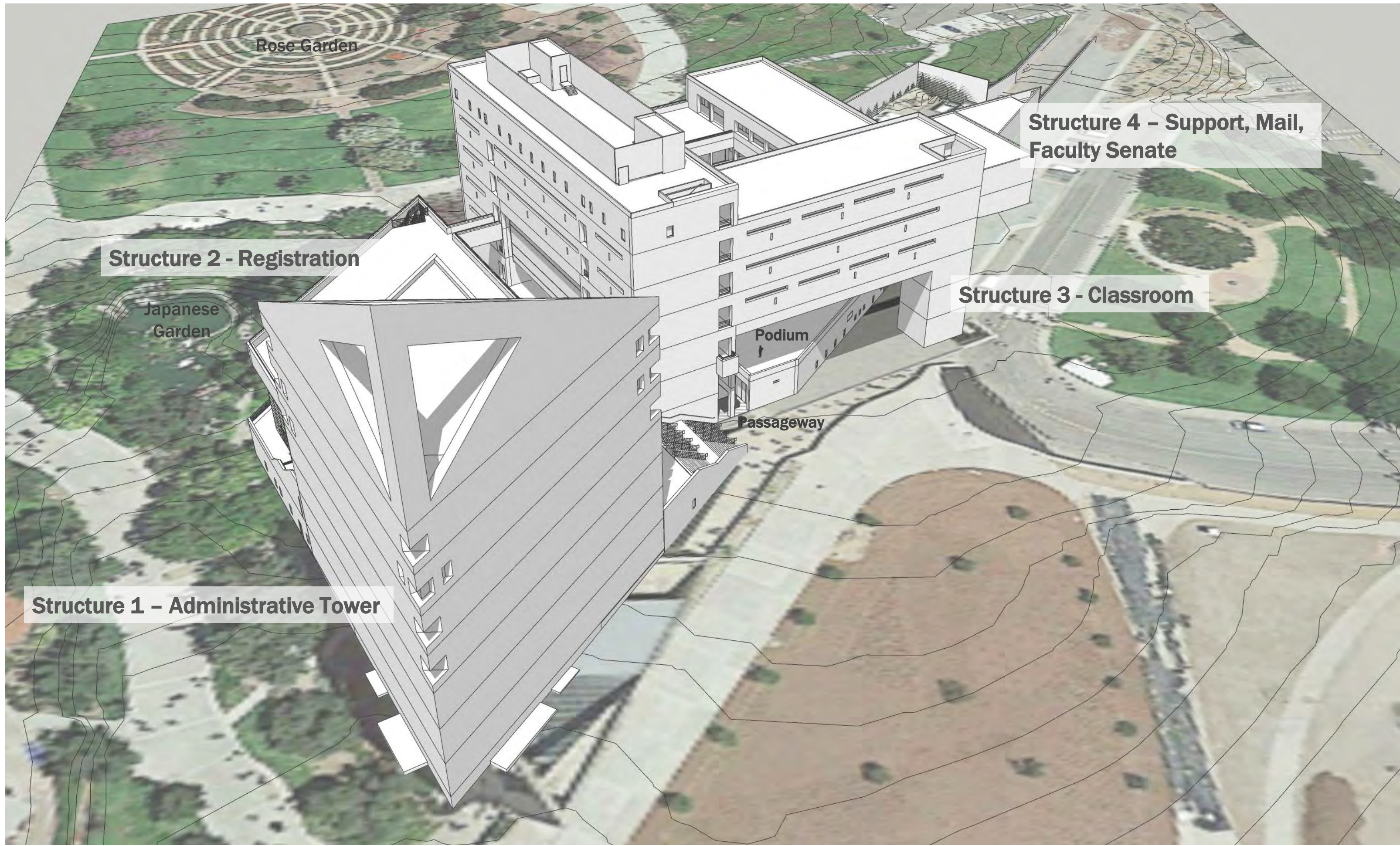
- 1st fl – food, retail, student uses
- 2nd fl – study, academic resources
- 3rd fl - CLA replacement (academic)
- 4th fl - CLA replacement (academic)
- 5th fl - CLA replacement (academic)

SITE CONSTRAINTS

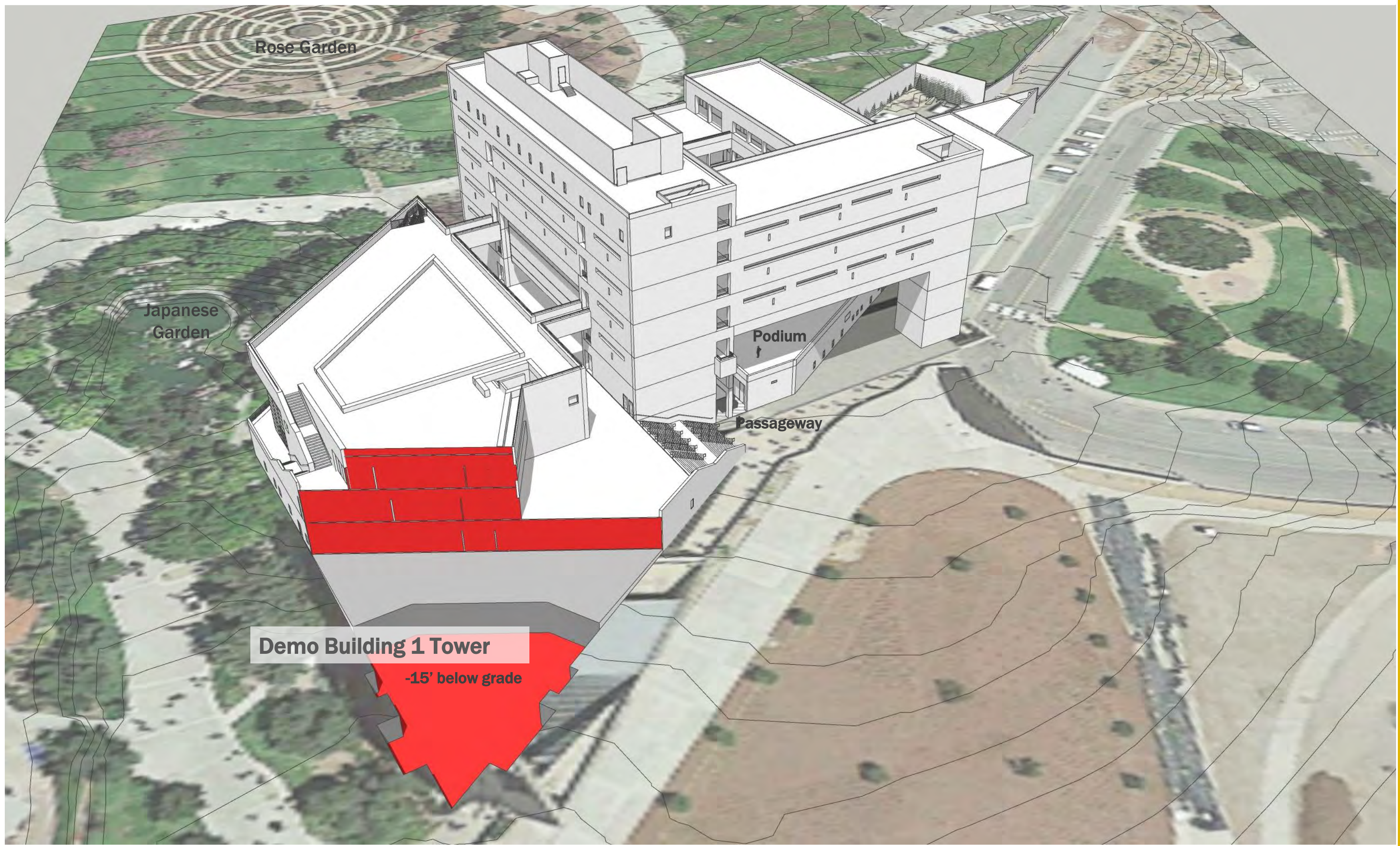
- 
- The map displays a campus layout with various colored overlays. A green area represents the Academic Core. A red dashed line with a buffer indicates a Seismic Fault. A blue dashed outline marks the 98-CLA Site. Yellow dashed outlines indicate possible sites for new academic buildings. A blue arrow points from a text box to a specific building within the 98-CLA Site.
- Academic Core
 - Seismic Fault + Buffer
 - 98-CLA Site
 - Possible sites for New Academic Buildings?

Bldg 98-CLA Strategies:
2. Reinforce-Renovate
- stays on existing site
- requires temp/surge space

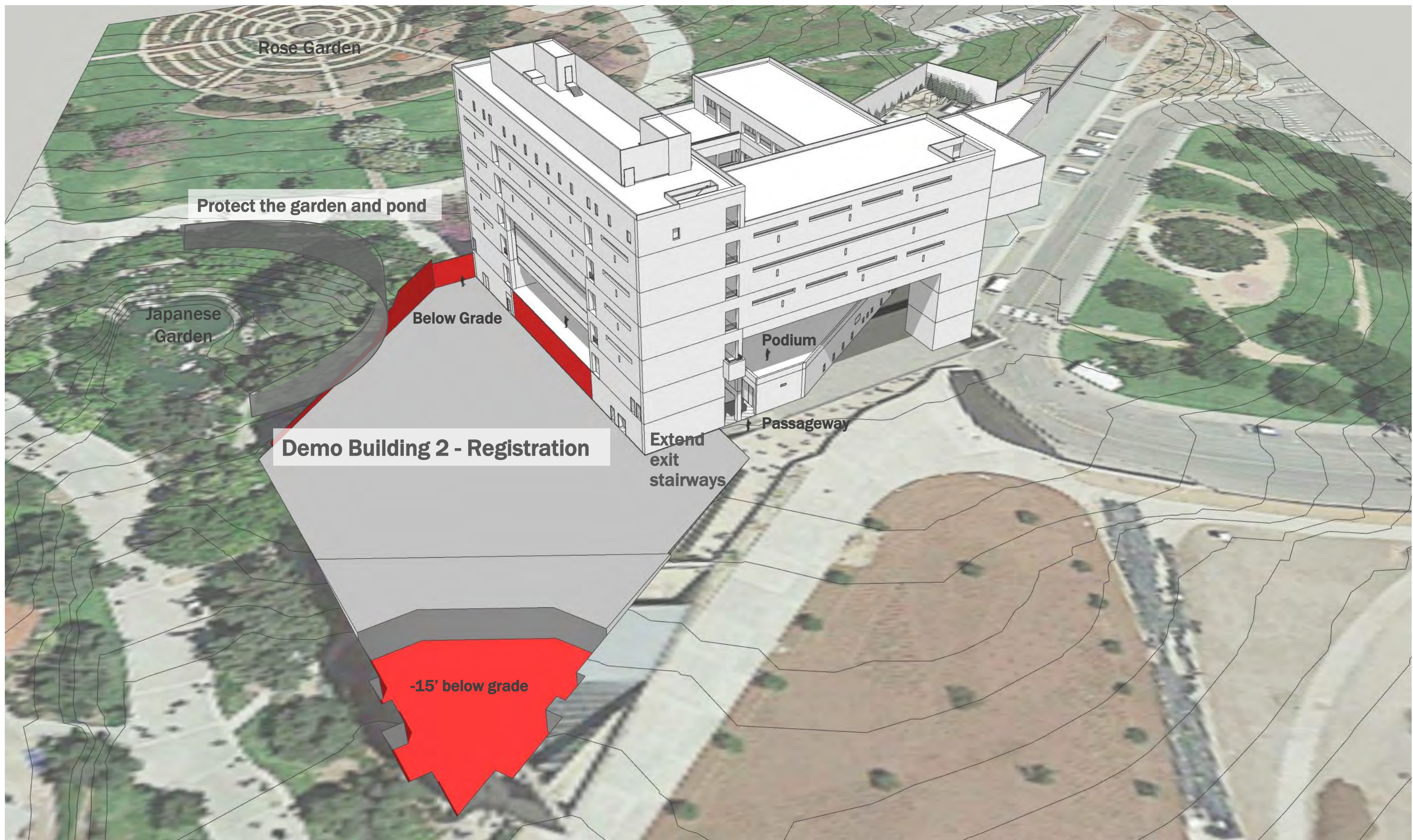
BLDG 98-CLA STUDIES: EXISTING



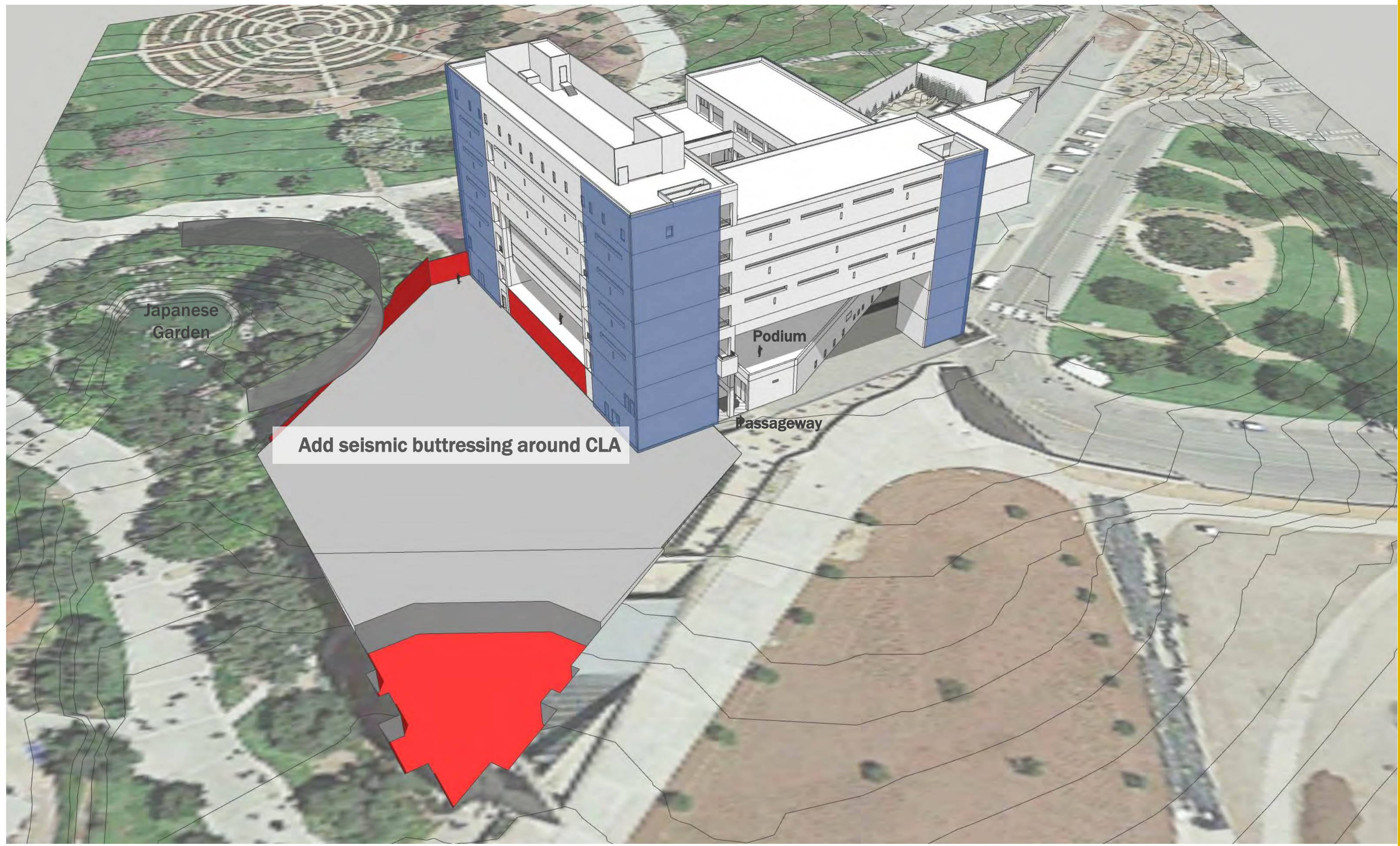
BLDG 98-CLA STUDIES: DEMO TOWER



BLDG 98-CLA STUDIES: DEMO REG BLDG



BLDG 98-CLA STUDIES: SEISMIC REINFORCING



BLDG 98-CLA STUDIES: Option 1



View from Southwest

OPTION 1

142,000 SF		Gross Area (110,480 SF existing)
60,100 SF		New exterior walls/fenestration
9,860 SF		New exterior walls/fenestration w/ add. Structure
23,500 SF		Structural shear wall reinforcement
21,950 SF		Re-roofing
6,800 SF		New roof with structure
15,800 SF		Exterior soffit
7,427 SF		Exterior plaza/courtyard
58,390 SF		Assignable Area (58,390 SF existing)



View from Southwest - level 2 3D floor plan



View from Northeast

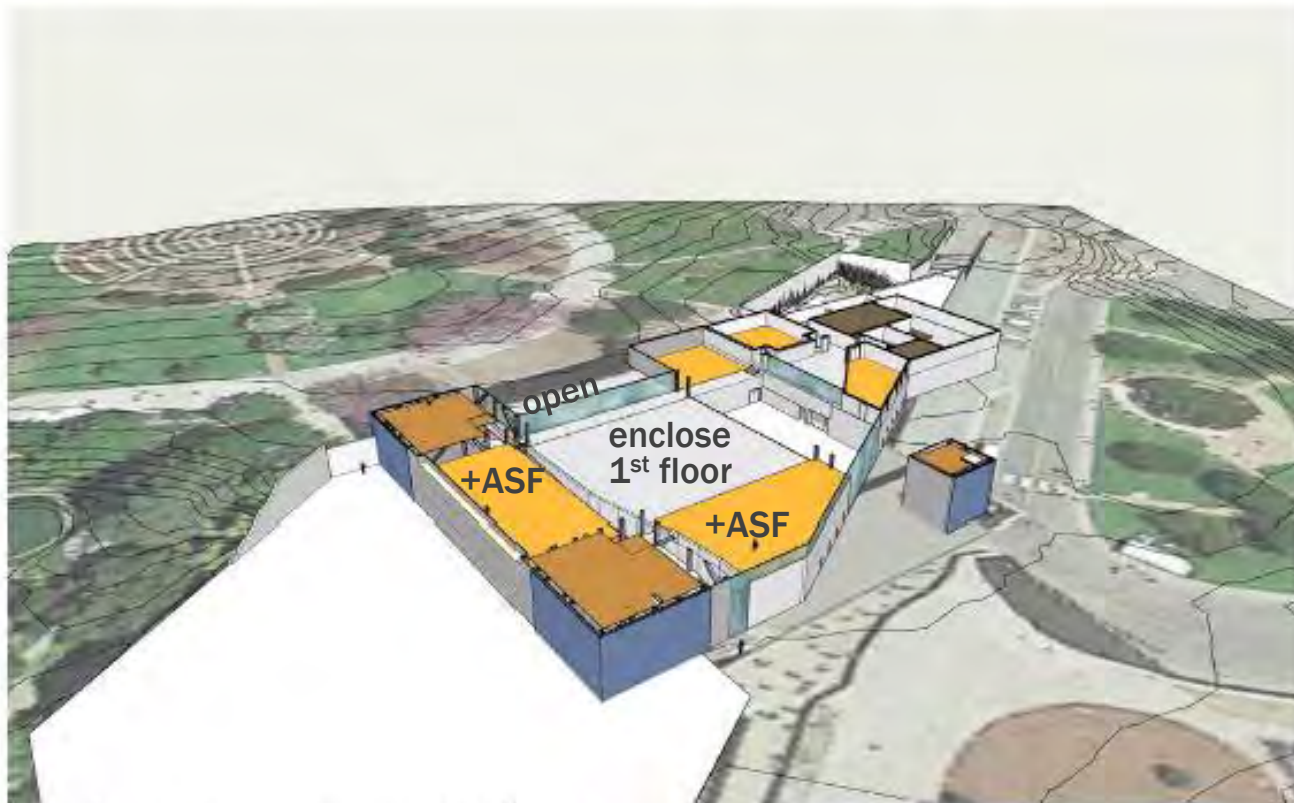
BLDG 98-CLA STUDIES: Option 2



View from Southwest

OPTION 2

165,000 SF	Gross Area (110,480 SF existing)
61,700 SF	New exterior walls/fenestration
8,430 SF	New exterior walls/fenestration w/ add. Structure
23,500 SF	Structural shear wall reinforcement
19,400 SF	Re-roofing
9,550 SF	New roof with structure
5,000 SF	Exterior soffit
2,800 SF	Exterior plaza/courtyard
72,000 SF	Assignable Area (58,390 SF existing)
10,000 SF	Level 1 added ASF
3,000 SF	Level 6 added ASF

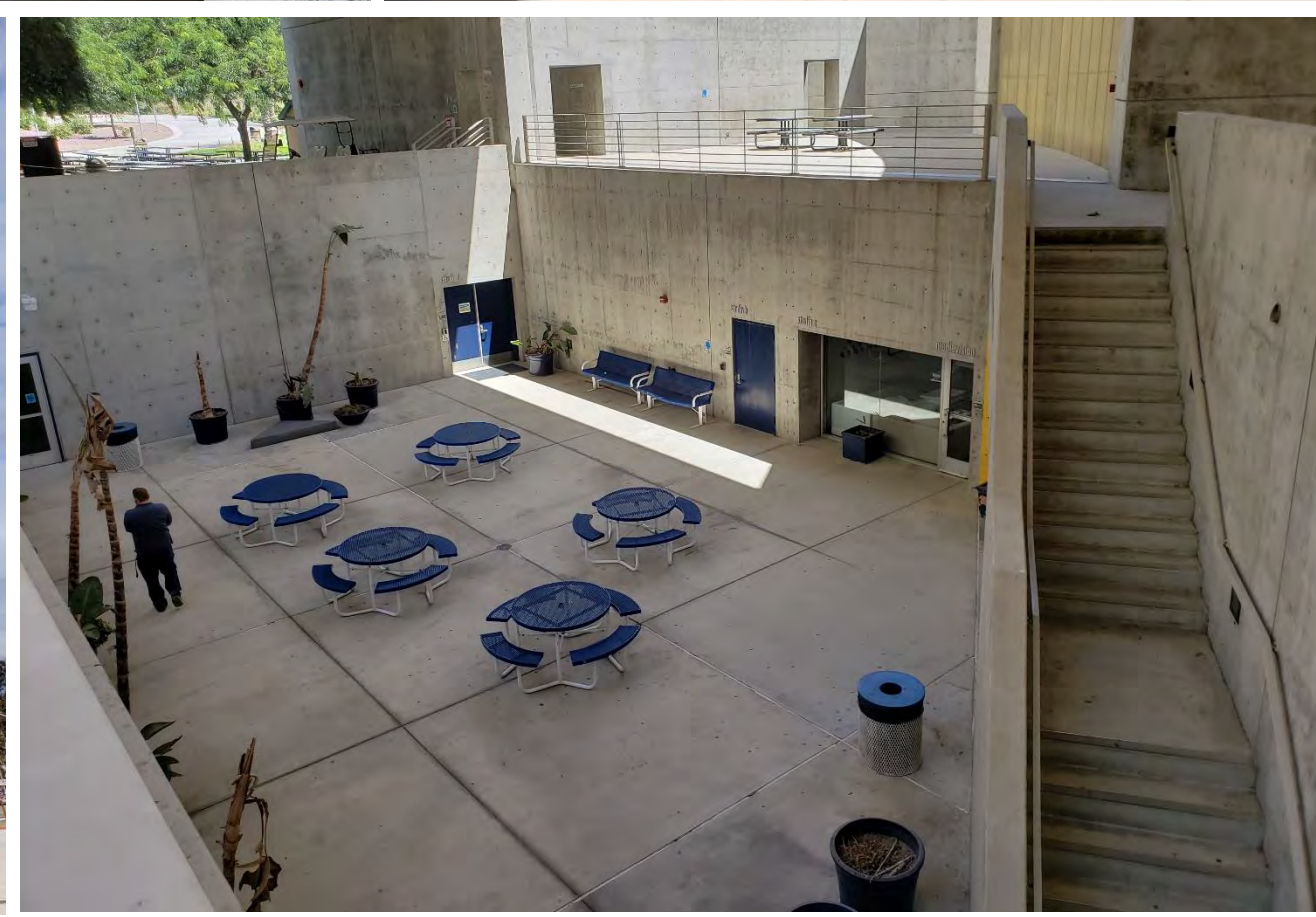


View from Southwest - level 2 3D floor plan



View from Northeast

BLDG 98-CLA STUDIES: ENCLOSURE + COST



BLDG 98-CLA STUDIES: Interior Design Precedents



atrium

BLDG 98-CLA STUDIES: Exterior Design Precedents

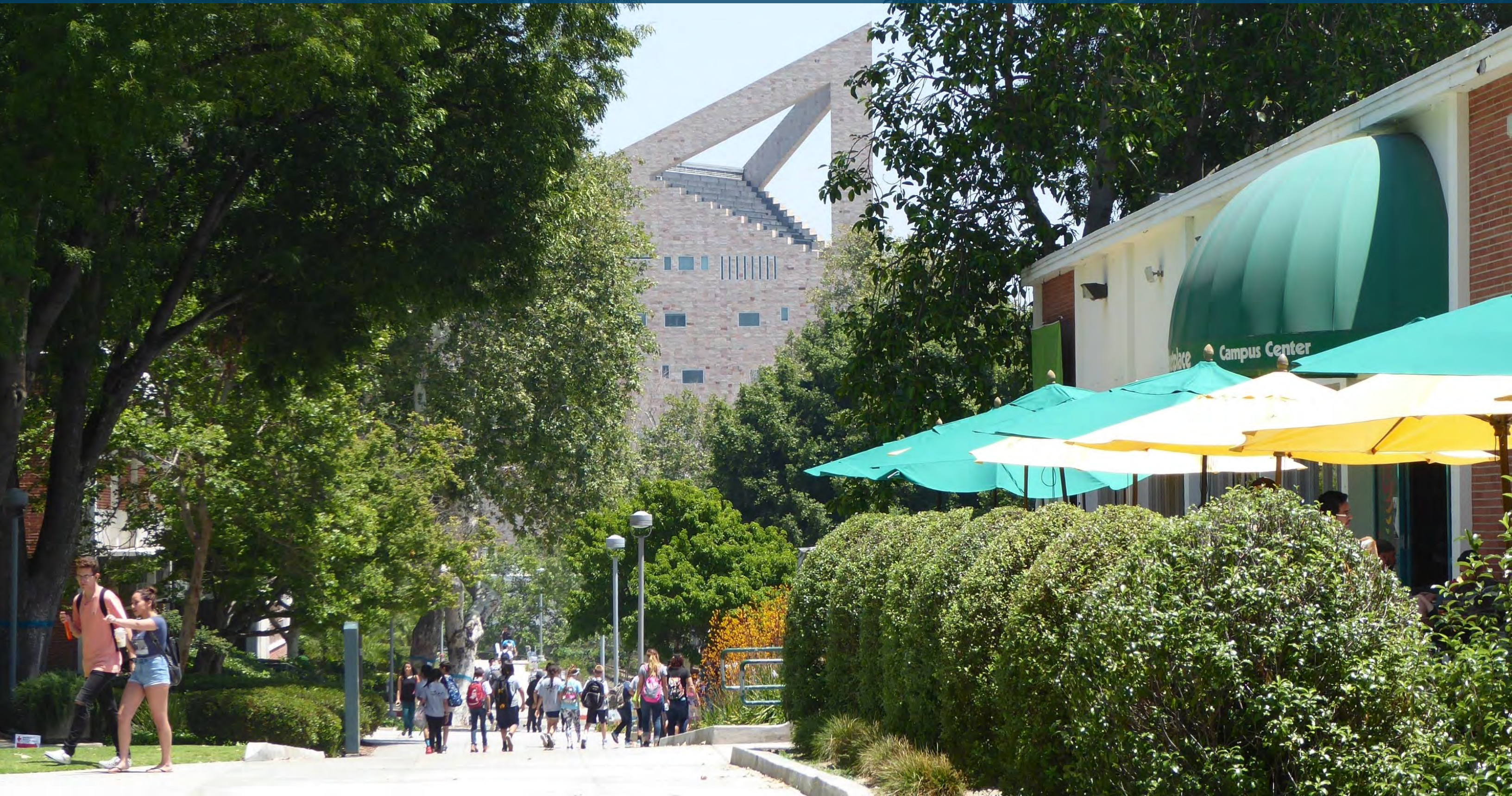


enclosure



BLDG 98-CLA STUDIES: Design

Q+A / Discussion



Master Plan Next Steps:

- **Workshop #6: Draft Plan + Phasing + Guidelines** **April**
 - **Focus Sessions:**
 - Academic Space-Resources incl library, study space (charrette session?)*
 - Sustainability – guidelines + recommendations*
- **Community Listening Session**
- **Campus Forums** **April**
- **Final Workshop on Draft Plan** **May**
- **Final Draft Plan CEQA – EIR** *August 2019-2020*
- **Final Master Plan to CSU** *adopted late 2020*



Thank you!

