Process and Schedule

Spring / Summer 2013 → Fall 2013 → Spring 2014

1. Identify Planning Goals
   - Data Gathering, Analysis & Program Development
   - Potentials & Constraints
   - Master Plan Scenarios
   - Draft Master Plan
   - Final Master Plan

   VISIONING
   - Campus Forum # 1
     September 17
   - Campus Forum # 2
     October 30-31
   - Campus Forum # 3
     February 10-11

2. Initiate EIR Process
   - ENVIRONMENTAL REVIEW (CEQA)

3. Board of Trustees
Sacramento State will become the exemplary CSU campus through outstanding academic programs and a unique student-centered learning experience in an exceptional campus environment.

**ACADEMIC POWERHOUSE**
- Student Success
- Academic and applied research programs
- Student life and athletics
- Regional economic engine

**CAMPUS & COMMUNITY CONNECTIVITY**
- More activities on campus to increase duration of stay
- 24/7 internal and external engagement, integration
- A vibrant events hub and community crossroads

**BRAND & IDENTITY**
- A recognized destination for academics, campus life, environmental stewardship
- Integrated academic and physical environments
- Landscape/Arboretum and American River
- Front door(s) to signal “You’ve arrived!”
Draft Master Plan

Benchmarking the Proposed Plan with the Vision Principles
Draft Master Plan: New Facilities
New Master Plan Facilities & Features

- New Iconic Landscape & Signage at North Entry
- Renewed North Housing & Parking
- Relocated transit stop
- New Gateway Administration & Student Services Building
- New Riverside Housing & Parking
- Pedestrian corridor to South Housing
- New bridge, open space & pedestrian connection to Alumni Grove and River
- New Grad/Faculty/Staff Housing & Parking
- Child Care Center
- New Iconic Landscape & Signage at South Entry
- Pedestrian & bike connection to Folsom
- Campus Police on lower level of parking structure
- New tennis courts
- New Shute tunnel to LRT Station
- Student Events Center forms Gateway to Student Activities Quad
- Future pedestrian tunnel to 65th St. area
- Shuttle parking
- Horror Creek Bioswale & Grand Central Quad connect to Arboretum
- New limited vehicle entry aligned w/Ramona Extension
- Future Shute tunnel to LRT Station
- New Academic Bldg
- Renovated Academic Bldg
- New Housing
- New Parking Structures
- New Campus Amenities
- Existing Buildings to Remain
Create and redevelop facilities for premier academic programs.

- New, purpose-built facilities
- Renewed, upgraded facilities
- Replace outdated, sub-standard facilities
Facilities to be removed & functions replaced elsewhere
Principle 2
Make the campus a brand and a destination—academically, socially, and environmentally.

- Highlight campus entries
- Develop campus environment to highlight Sac State brand & the ‘Tree Campus’
- Create hubs for cultural events, sports and performance
New South campus entry plaza
North campus entry
North campus entry: New Administration Building
Hornet Creek Bioswale and Grand Central Quad
New Events Center Activities Quad
New Events Center Activities Quad
Principle 3

Maximize connectivity within the campus and to the community.

- Improve pedestrian pathways & open spaces
- Improve bike circulation, reduce conflicts
- Connect to transit
- Improve connections to Folsom
- Improve vehicle circulation
New Transportation Master Plan

- Campus Police on lower level of parking structure
- Enhanced transit stop
- Hornet Creek Bioswale/central pedestrian spine links North & South campus
- Future pedestrian tunnel to 65th St. area
- Existing Hornet Tunnel
- Future Shuttle tunnel to LRT Station
- Shuttle parking
- New limited vehicle entry aligned w/Ramona Extension
- Pedestrian corridor to South Housing
- Pedestrian & bike connection to Folsom
- New Riverside Housing & Parking
- Pedestrian/bike route to Folsom
- New limited vehicle entry aligned w/Ramona Extension

Hornet Creek Bioswale/central pedestrian spine links North & South campus

Existing Hornet Tunnel

Future Shuttle tunnel to LRT Station

Shuttle parking

New limited vehicle entry aligned w/Ramona Extension

Enhanced transit stop

Pedestrian corridor to South Housing

Pedestrian & bike connection to Folsom

Campus Police on lower level of parking structure

New Riverside Housing & Parking
### Trip Generation

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Existing Conditions</th>
<th>25,000 FTE with Existing Mode Split</th>
<th>25,000 FTE with Scenario 1 Mode Split</th>
<th>25,000 FTE with Scenario 2 Mode Split</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak Hour</td>
<td>4,100</td>
<td>4,500</td>
<td>3,980</td>
<td>3,460</td>
</tr>
<tr>
<td>PM Peak Hour</td>
<td>4,250</td>
<td>4,670</td>
<td>4,130</td>
<td>3,600</td>
</tr>
<tr>
<td>Daily*</td>
<td>49,310</td>
<td>54,110</td>
<td>47,900</td>
<td>41,670</td>
</tr>
</tbody>
</table>

* trips IN and OUT

Source: Existing counts from CSUS Campus Master Plan Circulation Study; Omni Means

**Scenario 1** reduces drive alone trips from 69 percent to 59 percent and reduces daily traffic generation to 47,900 vehicle trips per day; **Scenario 2** reduces drive alone trips from 69 percent to 50 percent and reduces daily traffic generation to 41,670.
# Parking Requirements

<table>
<thead>
<tr>
<th>Parking Type</th>
<th>Existing Spaces</th>
<th>25,000 FTE with Existing Mode Split</th>
<th>25,000 FTE with Scenario 1 Mode Split</th>
<th>25,000 FTE with Scenario 2 Mode Split</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuter Student</td>
<td>10,159</td>
<td>10,030</td>
<td>8,880</td>
<td>7,730</td>
</tr>
<tr>
<td>Undergrad Resident</td>
<td>715</td>
<td>1,580</td>
<td>1,580</td>
<td>1,580</td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>2,123</td>
<td>2,290</td>
<td>2,030</td>
<td>1,760</td>
</tr>
<tr>
<td>Total</td>
<td>12,997</td>
<td>14,260</td>
<td>12,850</td>
<td>11,430</td>
</tr>
<tr>
<td>Grad student apts</td>
<td></td>
<td>350</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>14,610</td>
<td>13,200</td>
<td>11,780</td>
</tr>
</tbody>
</table>

Note: Does not include parking for proposed graduate student/faculty housing.

Source: Existing spaces derived from CSUS parking data

**Scenario 1** reduces the parking demand to 13,200 parking spaces (no net new parking spaces).

**Scenario 2** reduces the parking demand to 11,780 parking spaces (no net new parking spaces).
Reducing Vehicle Trips & Parking Demand

Reduce single-occupancy trips by 19%

- Increase Campus Housing
- Improve Convenience and Financial Incentives for Transit Use
- Increase Bicycle & Pedestrian Amenities
- Improve Transportation Demand Management
  - Increase shuttle frequency
  - Carsharing & ridematching
  - Carpool & vanpool Incentives
  - Create a tiered parking pricing system

Potential results

- Daily vehicle trips reduced by 23% or 12,440 trips
- Parking demand reduced by 19% or 2,830 spaces
Pedestrian Circulation
**Proposed Bike Route**

Average Adult Cyclist @ 11.5 mph

- **Sinclair Road**: 3 min, 27 sec
- **Mid-Campus**: 4 min, 04 sec
- **State Univ Drive E.**: 4 min, 34 sec

SHARING THE ROAD
Bike & pedestrian connections to Folsom
Bike & pedestrian connections to Folsom
Principle 4
Maximize engagement with the river and create a physical environment that becomes the envy of all campuses in the region.

- Create views & connect with the River
- Connect the Arboretum
- Enhance “Tree” campus Environment
New pedestrian bridge and entry at South Housing Village
New pedestrian bridge and entry at South Housing Village
New Riverfront housing with River connection
New Riverfront housing with River connection
Principle 5

Enhance and support a comprehensive student life program with emphasis on a 24/7 campus.

- Increase student housing
- Develop new gathering spaces
- Expand food services
- Create faculty/staff housing
- replace oldest housing buildings
- expand food service
- increase open space areas
- new Riverview housing & parking
Renewed North Housing Village
Cafes & gathering space integrated with housing
replace oldest housing buildings
expand food service
increase open space areas
new Riverview housing & parking
New Riverfront housing with River connection
New Graduate/Faculty/Staff housing in South

- new Graduate /Faculty/Staff housing & parking
- café
- open space link to river
New Graduate/Faculty/Staff housing
Principle 6
Develop a strategic and comprehensive plan to maximize the potential of existing and new physical assets, by optimizing:

- Match space to FTES
- Balance growth with re-use & re-allocation
- Create mix of uses
- Ensure fiscal viability
Balance safety and security while supporting an open campus.

- Highly visible open spaces
- Enhance campus lighting plan
- Create facilities that encourage activity
Principle 8

Develop campus resources based on a strong, location-appropriate sustainability plan.

- Facilities and Landscape that support water & energy conservation
- Manage campus stormwater
- Integrate sustainability initiatives with academic programs
New Sustainability Features: Stormwater Management

- Arboretum & expansion
- Western Drainage Canal/Riparian Corridor Planting
- Hornet Creek bio-swale
- Rain gardens/retention basins
- Playfields as temporary retention sites
- Edible gardens
- Permeable pavement
Stormwater Management System

- **Stormwater run-off from rooftops**
  - Directed to rain-gardens for cleaning
  - Water infiltration to resupply groundwater

- **Hornet Creek bioswale**
  - Retains and cleans stormwater

- **Surface parking run-off directed to rain-gardens**
  - ‘Downstream’ and potential underground detention facilities
  - Clean run-off water returned to American River via pumps

- **CSU Sacramento Water Table**

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*Illustration of a stormwater management system showing the flow of rainwater through a bioswale, rain-gardens, and infiltration into groundwater with eventual return to the river via pumps.*
Sustainability Features: Urban Forest

- carbon sequestration
- reduced heat island effect
- rainwater interception
- outdoor classroom opportunities
- enhanced “Tree Campus” aesthetic
Hornet Creek bio-swale & pedestrian path system
Hornet Creek Bioswale: How it works

- Stormwater Planter
- 18" Stepout
- Existing Hardscape
- Drainage
- Max. water level
- Infiltration soil mix
- Undisturbed subgrade
Hornet Creek Bioswale: How it works

- Drainage
- FG
- Existing Hardscape
- 18” Stepout
- Rain Garden Planting (width varies)

Undisturbed subgrade
Overflow drain (existing DI raised)
Max. water level
Infiltration soil mix
Subsurface drain as required
Hornet Creek Bioswale: How it works

- Existing Hardscape
- Stormwater Planter (width varies)
- Pedestrian bridge - recycled plastic decking
- Decking curb
- Recycled plastic structural members
- Infiltration soil mix
- Undisturbed subgrade
Opportunities for rotating artwork displays

12" diameter concrete footings per structural engineer.
Stainless steel cast-in threaded inserts to accept 1/2" mounting bolts.
120V electrical convenience receptacle mounted in 12" round concrete electrical box.

120V GFI electrical convenience receptacle mounted in 12" round concrete electrical box.
Stainless steel cast-in threaded inserts to accept 1/2" mounting bolts.
Lawn
STORMWATER MANAGEMENT CONCEPTS
Bioswales, Rain Gardens, Detention Areas
New Sustainability Features: Amphitheater/detention basin
New Sustainability Features: Energy Strategies

- photovoltaics on parking structures & new buildings
- solar hot water on new housing buildings
Translating the “Tree Campus” into architecture

- mimic the trees
- reflect the trees
- contrast the trees
organic elements

- earth tones
- details
- screens
- trellis
Reflection & contrast

- glass reflects the urban forest
- light-color massing
Principle 1

Create and redevelop facilities for premier academic programs.

- provide the facilities to maintain and enhance the College’s key academic programs at a competitive level
  - nursing, criminal justice...
- identify other programs that can be enhanced
- develop experimental teaching centers with flexible teaching facilities to explore, embrace and develop new pedagogies
- increase international enrollment to promote a more diversified student body
- capitalize on our Sacramento location as the hub for academic and student life programs
  - Proximity to the Capital (Government internships, etc)
  - Entrepreneurial Base
- understand the role, impact and, physical implications of online courses
Principle 2
Make the campus a brand and a destination---academically, socially, and environmentally.

- entire campus as an Arboretum
- research centers (California Smart Grid Center, etc.)
- event centers
- a destination stop on the river bike way
- cultural events
- sports events
- performances
- restaurants and retail
- an economic resources for the community
- develop the campus to highlight existing and new iconic/identifiable buildings and student facilities
Principle 3
Maximize connectivity within the campus and to the community.

- provide the technology to increase and enhance connectivity
- develop teaching & learning facilities that integrate community related functions with academic programs (e.g. nursing, criminal justice programs & others)
- develop new spaces for student study and group projects to match changes in pedagogy
- connection to other CSU campuses for sharing resources and knowledge
- provide on-campus retail opportunities that create jobs for students and can invite the community onto the campus
- provide informal playfields and gathering spaces to attract activity
- connect with city and regional public transit systems
- establish an on-campus transit center that is visible and user friendly
- provide enhanced pedestrian, bike, and shuttle connections to the Ramona site
Principle 4
Maximize engagement with the river and create a physical environment that becomes the envy of all campuses in the region.

- provide enhanced linkages (visual & physical) between the campus and the river
- connect to local and regional pedestrian and bike trails
- create an active river front
- capitalize on the Arboretum and extend it throughout the campus
- develop standards for new buildings adjacent to the river that capitalize on views, linkages and provide a mix of uses.
Principle 5

Enhance and support a comprehensive student life program with emphasis on a 24/7 campus.

- increase on-campus student housing
- provide appropriate housing for international and other students targeted by recruitment efforts
- develop ways to use housing to advance the academic program
- develop sports facilities to support a strong intramural athletic program
- provide gathering spaces and facilities that support and promote social and cultural programming
- expand food service facilities
- investigate the potential for faculty and staff housing
- focus on the features of student life programs that attract premier applicants from traditional, non-traditional and international target markets
- a leader in integrated health & wellness
Principle 6
Develop a strategic and comprehensive plan to maximize the potential of existing and new physical assets, by optimizing:

- space to FTES
- adjacencies / proximity
- size / usability
- mix of uses
- fiscal viability
- off-campus properties
- on-campus uses that can attract the community to better utilize the campus
- campus access, vehicle circulation and parking
- balance growth and re-allocation
Principle 7
Balance safety and security while supporting an open campus.

- create open spaces that are highly visible
- enhance the campus lighting plan
- develop facilities to encourage more people and activities on campus (e.g. housing, community visitors)
Principle 8
Develop campus resources based on a strong, location-appropriate sustainability plan.

- create a landscape and plant materials program that centers on water conservation
- develop graywater systems, solar energy systems and/or other ways to reduce our carbon footprint
- use technology and systems to reduce energy use in existing and new buildings, such as motion sensors
- seek opportunities for new projects to meet established sustainability standards
- integrate sustainability initiatives with academic programs in Environmental Studies
Existing Campus
Draft Master Plan: New Facilities
New Sustainability Features
Playfields as temporary detention basins

Landscape Stormwater Management Plan

- Temporary detention
- Water quality Enhancement via Infiltration
- Reduce Reliance on “Western Drainage Garden” along railroad
New Sustainability Features: Green roofs
Green Roofs and Redirected Roof Drains
Stormwater Planter (width varies)

Utility Easement
Pit amended planting only

Max. water level
Infiltration soil mix
Subsurface drain as required
Undisturbed subgrade
Utility pipe
New Master Plan Facilities & Feature

- New Riverview undergraduate housing
- Food service & retail in Student Events Center and new Stadium
- New undergraduate residence halls replace oldest housing, expanded food service
- New Grad student/faculty/staff housing village with River views

Undergrad Housing: 3,695 beds
Faculty/Grad Housing: 284 apartments
Reducing Trip Generation

- Increase Campus Housing
- Improve convenience and financial incentives for Transit use
- Increase Bicycle travel to Campus
- Improve Transportation Demand Management
  - Increase Shuttle Frequency
  - Carsharing/Ridematching
  - Carpool & Vanpool Incentives

**Potential Results:**

- Reduce single-occupancy trips by 10%: total trips reduced by 11% or 6,210 trips
- Reduce single-occupancy trips by 19%: total trips reduced by 23% or 12,440 trips
Reducing Parking Demand

- Increase Campus Housing
- Improve convenience and financial incentives for Transit use
- Increase Bicycle travel to Campus
- Improve Transportation Demand Management
  - Increase Shuttle Frequency
  - Carsharing/Ridematching
  - Carpool & Vanpool Incentives

Potential Results:

- Reduce single-occupancy trips by 10%: parking reduced by 9.6% or 1,410 spaces
- Reduce single-occupancy trips by 19%: parking reduced by 19% or 2,830 spaces
Resident Parking

Undergraduate Housing

- Parking projections reflect an increase in student housing capacity of 2,021 beds (from 1,674 today to 3,695 in the future). Thus, the number of “Resident Student” spaces more than doubles while the number of commuter student spaces actually decreases, even with no assumed change in mode split for commuting students. Not that the projections for “Resident Student” spaces assume that “Resident Student” spaces are provided at the same per-resident rate at which they are provided today.

Graduate Housing

- For the 286 2-bedroom apartments, there are a few different sources of information we can use. The Institute of Transportation Engineers’ (ITE) Parking Generation shows the average parking generation of a suburban, low/mid-rise apartment to be 1.23 vehicles per dwelling unit. The City of Sacramento Multi-Family Dwelling Unit parking requirement for this area is 1 parking space per unit. So, somewhere between 286 and 352 spaces seems reasonable; it’s probably safest to assume 350 spaces for now. This is generally consistent with the parking being provided for a similar project in Davis, where the developer is providing 1.18 spaces per unit.
## Transportation Demand Management (TDM) parking management strategies

<table>
<thead>
<tr>
<th>TDM Strategy</th>
<th>Current Practice at CSUS</th>
<th>Suggestion for Further Drive-Alone Reduction</th>
</tr>
</thead>
</table>
| Parking Pricing    | Semester Permit Prices:  
  - Student-$162  
  - Residence Hall-$210  
  - Faculty/Staff-$63-$212  
http://www.csus.edu/aba/utaps/parking/permit-fees.html |  
  - Increase permit fees  
  - Parking pricing based on distance of parking lot from center of campus  
  - No on-campus parking for freshmen |
| Transit Service    | CSUS Commuter Sleeves:  
  - Free for students (paid through student registration fees)  
  - $40 per semester for employees |  
  - Provide Amtrak commuter checks to connect to Regional Transit  
  - Subsidize Regional Transit to provide more service (increased service hours, frequency, etc.) on routes that access campus  
  - Reduce price of staff commuter sleeve  
  - Improve transit access for pedestrians—make it easier to get to the transit station |
## Transportation Demand Management (TDM) parking management strategies

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<tr>
<th>TDM Strategy</th>
<th>Current Practice at CSUS</th>
<th>Suggestion for Further Drive-Alone Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle &amp; Pedestrian Amenities</td>
<td>• Bike parking: bicycle compound (staffed to prevent theft), bike lockers, bike racks</td>
<td>• Expand additional on-campus bike parking&lt;br&gt;• Construct/staff “bike station” with high-quality bike parking, bike shop, repair station, and commuter showers&lt;br&gt;• Implement bike sharing on campus to connect to the planned Sacramento/Davis system $4M grant funds, launch 2015&lt;br&gt;• Improve campus access for bicyclists and pedestrians</td>
</tr>
<tr>
<td></td>
<td>• Peak Adventures has on-campus bike shop</td>
<td></td>
</tr>
<tr>
<td>Campus Housing &amp; Amenities</td>
<td>1,674 existing residential units</td>
<td>Increase the amount of housing and amenities provided on campus</td>
</tr>
<tr>
<td>Carsharing</td>
<td>Two Zipcars at residence halls</td>
<td>• Work with Zipcar or other carsharing providers to increase the number of cars on campus, including at non-residential locations&lt;br&gt;• Provide reduced memberships for carsharing</td>
</tr>
<tr>
<td>Ridematching</td>
<td>Operated through the Sacramento Transportation Management Association (TMA)</td>
<td>Setup CSUS-specific ridematching program using service such as Zimride</td>
</tr>
</tbody>
</table>
Transportation Demand Management (TDM) parking management strategies

<table>
<thead>
<tr>
<th>TDM Strategy</th>
<th>Current Practice at CSUS</th>
<th>Suggestion for Further Drive-Alone Reduction</th>
</tr>
</thead>
</table>
| Carpool & Vanpool Incentives | • 205 carpool and vanpool parking spaces available  
• Carpoolers can share a pass but there is no parking subsidy  
• Vanpool service via Enterprise Rideshare and Sacramento TMA; ? who uses the vanpool and to what extent is it used? | • Provide reduced-cost parking permits for carpooling/vanpooling                                            |
| Shuttle Service         | Hornet Shuttle                                                                            | • Provide more service (increased service hours, frequency, etc.) on Hornet Shuttle  
• Enhance service between 65th Street Light Rail station and campus                                      |