What are Complete Streets?

“Complete Streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets allow for safe travel by those walking, bicycling, driving automobiles, riding public transportation, or delivering goods.”
Where could Cal Poly Implement Complete Streets?

The objective of this task was to find a problematic area(s) of campus to remedy poor circulation and enhance safety and active transportation appeal.

Travelers include:
- Automobile drivers
- Bicyclists/Cyclists
- Pedestrians
- Skateboarders/Scooterists

Problems to be solved:
- Pedestrian Safety
- Bicyclists Safety
- Road Calming (vehicular speed reduction)
Four Focus Areas on the Cal Poly Campus
Four Focus Areas on the Cal Poly Campus

1. Grand + Pacheco
2. Hathaway + Longview
3. Longview + Slack
4. Slack + Grand
Overview + Proposed Solutions

(01) Grand + Pacheco

(02) Hathaway + Longview

(03) Longview + Slack

(04) Grand + Slack
(01) Grand + Pacheco

Existing Conditions | Site Overview

- T-intersection
- Pedestrian, Bike, Transit, Auto travel modes
- Pedestrian Crossings
- Class II Bike Lanes
- Transit and Auto Travel Lanes
## Existing Conditions | Traffic Counts

<table>
<thead>
<tr>
<th>Time</th>
<th>Pedestrian</th>
<th>Bike</th>
<th>Automobile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>am</strong></td>
<td>7:00 am - 9:00 am</td>
<td>332</td>
<td>55</td>
</tr>
<tr>
<td>pm</td>
<td>5:00 pm - 7:00 pm</td>
<td>610</td>
<td>143</td>
</tr>
</tbody>
</table>

Most students who live in the freshman dorms would not use the cross-walks and would cross in a diagonal line between grand onto Pacheco as a short cut.

The use of the grand and Pacheco intersection increases when there is an event occurring at the P.A.C.
Case Study | Seattle

An example of Seattle’s bike lanes painted in green

An example of Seattle’s new intersection with bulb outs and shorter pedestrian crosswalks
Conceptual Design Elements | Vision

Proposed painted class 2 bike lanes

Proposed pedestrian crosswalks with table top design

Proposed pedestrian beacon/crossing signals

Proposed pedestrian beacon/crossing signals
Conceptual Design Elements | Design Guidelines

**Speed tables** will be incorporated to provide pedestrians with a safer access and slow down traffic in the area.

The **class two bike lanes** in the area will continue to be used and will be connected with surrounding bike lanes to achieve continuity.

A **diagonal crosswalk** will be added to the intersection to continue the pedestrian habit of using the existing short cut.

A **pedestrian beacon** will be installed in order to stop ongoing traffic at the intersection and allow pedestrians to cross the intersection safely.
(02) Hathaway + Longview

Existing Conditions | Site Overview
Three-way stop
Four-way intersection
Diversity of users
Existing Conditions | Conflict Areas + Traffic Flow
Existing Conditions | Traffic Counts

**am**

7:00 am - 9:00 am  
Pedestrian - 225  
Bike - 79  
Automobile - 389

**pm**

5:00 pm - 7:00 pm  
Pedestrian - 419  
Bike - 78  
Automobile - 617

Hathway and Longview - Peak-hour transit by mode
Conceptual Design Elements | Vision

Painted intersection/crosswalk
Bulb-out for shorter crosswalk
Pedestrian scramble
Class II bike lanes
Bollards blocking parking lot access at intersection
Conceptual Design Elements | Inspiration

Houston, TX
San Francisco, CA
Winchester, England
Portland, OR
Winchester, England
Oakland, CA
(03) Longview + Slack

**Existing Conditions | Site Overview**

- Sidewalks and Bicycle lanes not present
- Crosswalk not present
- Busy intersections
- Sidewalks and bicycle lanes not present
- Unsafe design for pedestrians and bicyclist
- Downhill grade increases vehicular speed
- Sidewalks and Bicycle lanes not present
- Pedestrian traffic crossing through parking lot
- Traffic Calming measures should be implemented to reduce vehicular speeds
- Sidewalks and Bicycle lanes not present
- Visibility restrictions turning right on slack street
Existing Conditions | Traffic Flow

Red = Low Activity-----Yellow = Moderate Activity-----Green = High Activity

Vehicular Usage

Pedestrian Usage

Bicyclist Usage
Existing Conditions | Traffic Counts

am
7:00 am - 9:00 am
Pedestrian - 27
Bike - 14
Automobile - 348

pm
5:00 pm - 7:00 pm
Pedestrian - 85
Bike - 0
Automobile - 584
Desired Features  |  Design Concepts

Incorporate bicycle lanes on Slack and Longview

Incorporate a protected bicycle lane along Slack street closest to Cal Poly

Incorporate a wide sidewalk along Slack street
**Conceptual Design Elements | Vision 1**

Design 1 incorporates bicycle lanes, sidewalks, and a crosswalk. Design 1 focuses more on the connectivity for pedestrians, bicyclist, and automobiles and less on a design of the site.
Conceptual Design Elements | Vision 2

The Performance center can include weight lifting machines, specially designed for Cal Poly Athletes, a speed training track, and a smoothie bar.
(04) Slack + Grand

Existing Conditions | Site Overview
4-way stop
2 main stops are on Grand Ave.
Most bikers made a left from Grand Ave. to Slack Street
High volumes of traffic near the top of the hour
Existing Conditions | Traffic Counts

**am**

7:00 am - 9:00 am
- Pedestrian: 124
- Bike: 85
- Automobile: 1,775

**pm**

5:00 pm - 7:00 pm
- Pedestrian: 105
- Bike: 107
- Automobile: 2,274

Key Elements | Observation

Increase bicycle and pedestrian safety
Traffic calming methods: traffic circle with protected bike lane
Highly visible raised center island
Grand primary street - need for equitable use between modes and streets
Case Study | La Jolla Boulevard

Before

After
Conceptual Design Elements | Vision

Vegetated roundabout

Bike path separate from car traffic

Barrier separating bike from vehicular traffic

Ped crosswalks with planter buffers
Visitor Center moved
Conceptual Design Elements | Vision Perspective
Designed By: Jana Schwartz
Edited By: William Riggs + Jana Schwartz

For more information | A link to the class video on Complete Streets can be found here
https://youtu.be/NKW9-CPcVys

For more information | A link to our data counts can be found here
https://docs.google.com/spreadsheets/d/1cuh01Z9pJUFpmDEMIIDGwgOWFpGgih4PU6-4zvBeyXGY/pubhtml