South Campus Neighborhood Project

Bicycle Infrastructure

CONCEPTS

Prepared By

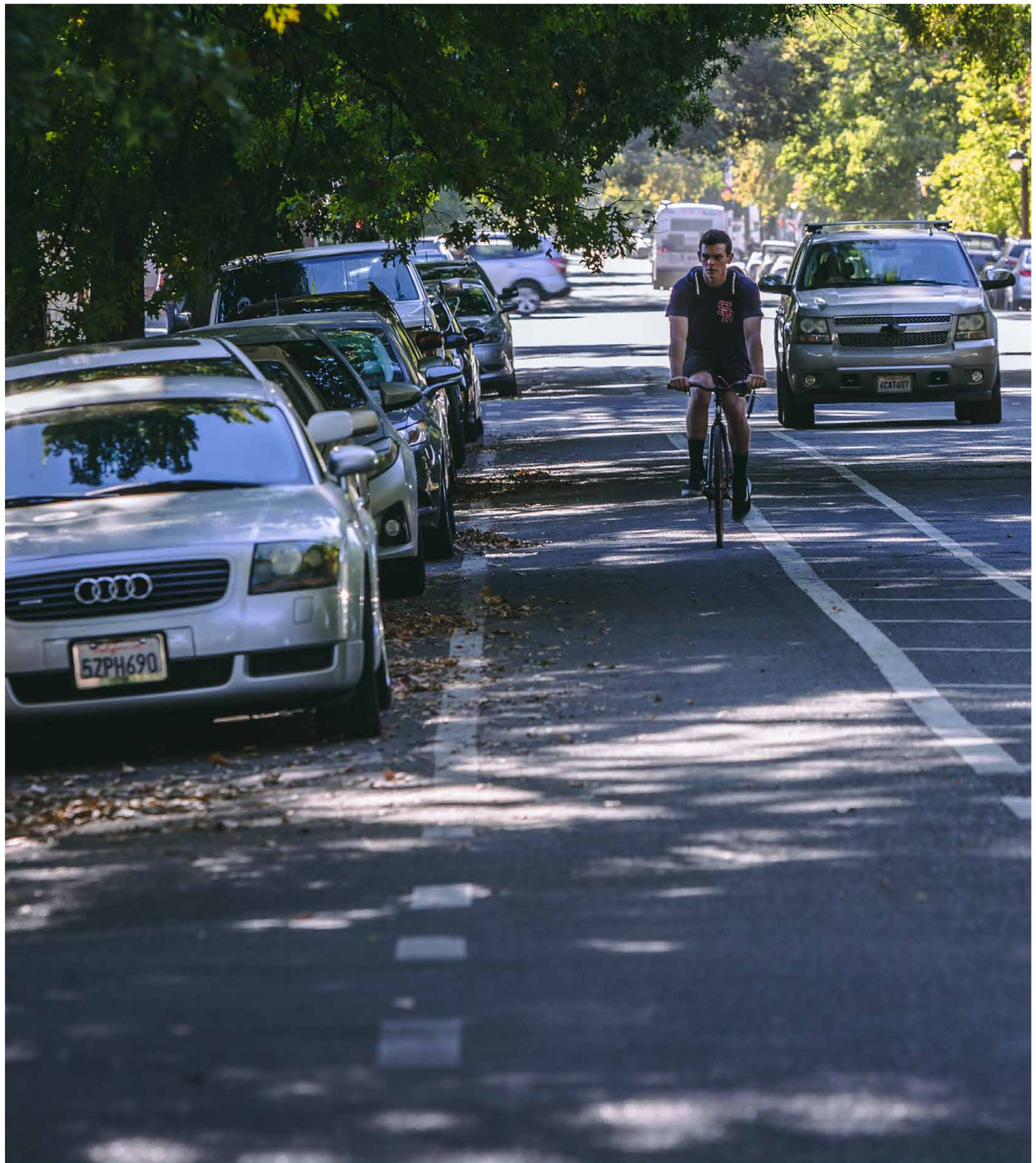
Dr. LaDona Knigge

Geography 436: Transportation Planning | Fall 2017

Department of Geography & Planning

College of Behavioral & Social Sciences

California State University, Chico



Resilient Cities Initiative
Institute for Sustainable Development
California State University, Chico

The South Campus Neighborhood Project

The South Campus Neighborhood Project is an award-winning neighborhood improvement planning effort coordinated by the Resilient Cities Initiative at California State University, Chico and the Public Works-Engineering Division at the City of Chico, CA. The project is focused on the public rights-of-way in Chico, California's South Campus Neighborhood, a six by seven square-block area bound by 2nd Street to the North, 9th Street to the South, Orange Street to the West and Salem Street to the East. Immediately adjacent to both downtown Chico and the University, it is Chico's oldest residential neighborhood and was laid out by the town's founder, John Bidwell, in the 1860's.

The neighborhood today is densely populated with university students and is also home to a number of small businesses, restaurants, bars, churches, community organizations, a school, a fire station, a police station, a railway station and transit center. Given its location, population and mixed uses, the neighborhood faces a unique set of circumstances and challenges. This three-year project aims to assess existing conditions and to develop and refine neighborhood improvement concepts to address a range of identified issues. The neighborhood improvement planning process is focused on concepts for complete streets and public works that will enhance public health and safety, quality of life, sense of place and environmental sustainability.

☛ *More information can be found online at http://scnpchico.com/*

City of Chico Public Works-Engineering

The overall Mission, Vision and Goal of the City of Chico Public Works Department is to provide the best possible Quality of Life through our abilities to protect, plan, construct and maintain the physical assets of the City. This is achieved through teamwork, integrity, professionalism, innovation, respectful customer service, value to the citizens of Chico, accountability and stewardship of the City's infrastructure and public resources. We serve the public in a manner that supports the rich heritage of Chico, as well as progressing into future improvements desired by the community in a sustainable manner. We continue to look for new technology that assists in meeting these goals so that we can operate at the most efficient level and continue to be at the leading edge of modern standards.

Our Mission, Vision and Goals include ensuring public safety through detail oriented and strategic improvements to mitigate unsafe operation and use of our Public property; Providing safe, sustainable, integrated and efficient transportation systems to enhance the City of Chico's economy and livability for all modes of transportation; Efficiently and effectively providing a reliable, sustainable and cost effective sanitary sewer and storm water collection system for our residents and businesses in-line with our overall Mission and Vision. We are stewards of the natural environment and through responsible practices, we construct and maintain our natural environment to the highest of standards. We will continue to make the City of Chico a leader in sustainable and clean practices so that our residents can experience the quality of life that is desired for an infinite length of time.

The Resilient Cities Initiative

The Resilient Cities Initiative (RCI) is an interdisciplinary university-community partnership program established by the Institute for Sustainable Development at California State University, Chico in 2016. The RCI connects real-world community sustainability projects— identified and funded by partner agencies— with faculty expertise and student innovation from departments and disciplines across the University's academic colleges. The RCI recruits partner agencies through a competitive selection process and matches projects with existing courses across the university's curricula. Partner agencies are able to harness incredible momentum for their projects in large part because the partnership is realized on a bigger scale than more typical one-off university-community projects. Faculty are able to opt-in and augment their existing curriculum with real-world projects that have been identified, funded and supported by the leadership and staff of the partner agency— ultimately delivering their students' work for consideration and implementation. The RCI is a member of the Educational Partnerships for Innovation in Communities (EPIC) Network, a nationwide network of over 25 universities that have replicated the highly successful Sustainable City Year Model that was established at the University of Oregon in 2009. The model is based on university-community partnerships with a defined geographic and temporal scope, focused on advancing sustainability and the social good, leveraging the multidisciplinary knowledge and capacity of the university to 'move the needle' on pressing community issues. The RCI directly engages hundreds of CSU, Chico students each academic year, providing impactful opportunities for them to put theory to practice in their own community and region, connecting them with decision-makers in practitioners in their fields of study, and helping develop the next generation of workforce professionals and leaders.

Course Participants

Geography 436: Transportation Planning | Fall 2017 | Dr. LaDona Knigge

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Geography 436: Transportation Planning | Fall 2017

Public Works-Engineering
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Bike Boxes

Bike Box Benefits

- Increases visibility of bicyclists.
- Reduces signal delay for bicyclists.
- Helps prevent 'right-hook' conflicts with turning vehicles at the start of the green indication.
- Provides priority for bicyclists at signalized bicycle boulevard crossings of major streets.

Typical Applications

- At signalized intersections with high volumes of bicycles and/or motor vehicles, especially those with frequent bicyclist left-turns and/or motorist right-turns.
- Where there is a desire to better accommodate left turning bicycle traffic.
- Where a left turn is required to follow a designated bike route, access a shared-use path, or when the bicycle lane moves to the left side of the street.

Maintenance

- Colored pavement surface may be costly to maintain, especially in climates prone to snow/ice.
- Placement of markings between tire tracks will reduce wear.

Source:

Wayfinding

Types of Destinations

- Wayfinding signs can direct users to a number of different types of destinations such as; public transit centers, schools, civic destinations, hospitals, bridges, and on-street bikeways

Benefits

- Familiarize users with the bicycle network, identifies the best routes to destinations,helps define the neighborhood, and provides mileage and travel time to destinations to help minimize the tendency to overestimate the amount of time it takes to travel by bicycle.

Source:

https://nacto.org/publication/urban-bikeway-design-guide/bikeway-signing-marking/bike-route-wayfinding-signage-and-markings-system/

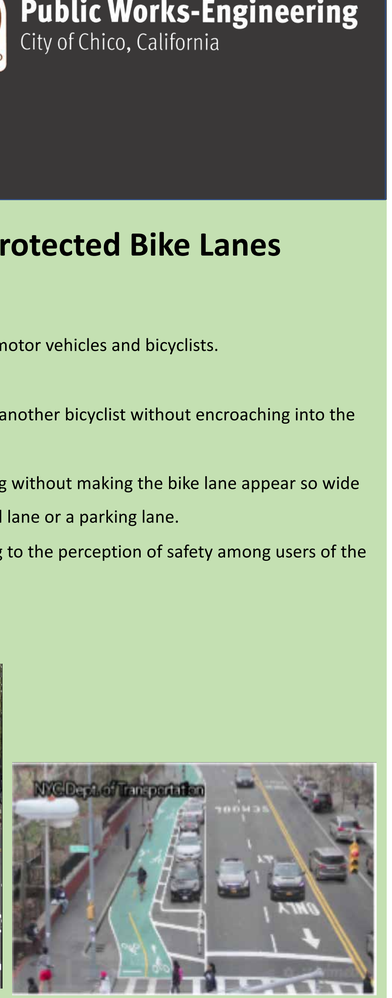
Bike Boxes, Protected Bike Lanes & Parklets

Mini Pop-Up Parklet

- A small seating area or green space created as a public amenity on or alongside a sidewalk, especially in a former roadside parking space.
- The Parklet features planters full of tall shrubs that shield visitors from traffic.
- Creates public space in places typically dedicated to the automobile

Buffered and Protected Bike Lanes

- Provides greater distance between motor vehicles and bicyclists.
- Provides space for bicyclists to pass another bicyclist without encroaching into the adjacent motor vehicle travel lane.
- Provides a greater space for bicycling without making the bike lane appear so wide that it might be mistaken for a travel lane or a parking lane.
- Encourages bicycling by contributing to the perception of safety among users of the bicycle network.



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Creating a Tactical Urbanism Project

This applied, service learning project was completed by fall 2017 GEOG 436 Transportation Planning students in collaboration with the City of Chico, CSU Chico, Green Dot Transportation Systems, Chico Velo and Little Red Hen under the Resilient Cities Initiative.

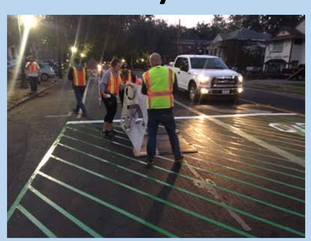
The project was sanctioned through an encroachment permit obtained from the City of Chico Public Works Department that restricted parking on Ivy Street for the event. The project was approved by CSU Chico Risk Management, Facilities, Safety and Office of the Vice President of Business & Finance.

The study area on Ivy Street was selected for demonstration project due to:

- Proximity to Chico State Campus in South Neighborhood
- Lack of bike lane on Ivy Street between and Third Streets. A buffered lane was installed on Ivy Street in Hwy 32 to Third Street. not have a bike lane.

- Traffic lights were just installed on Hwy 32 at Ivy Street to improve pedestrian and bicycle safety.

Day of Event: Nov 2, 2017

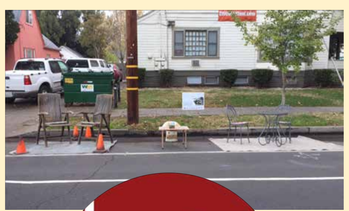
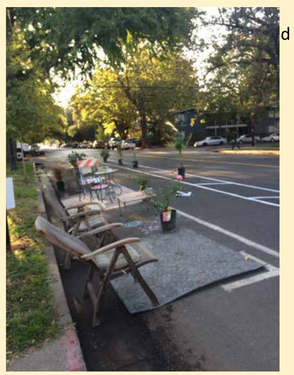



Chico's First Tactical Urbanism Project

Mini-Parklet & Information

Sweeping and shoveling debris were not enough to prepare the parking spaces and parklet. A city street sweeper was called to help out!

Information area was set up at Student Services Plaza at corner of 2nd & Ivy for data collection and to distribute bicycle and pedestrian educational information.







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What Do You Like?

Safety

I like how the bikers feel more secure

Good! So much bike traffic in Chico. Need to keep students safe any way we can.

This is a really good idea, especially in Chico right next to the school. Today I seen this out of nowhere and happy that I didn't have to be scared of getting hit by a car. This should be a thing. Are we going to keep this? I like it

I like having a bike land her so cyclists can safely ride down Ivy. The plants dividing the street are awesome!

I feel 100% safer

The great visual representation of the safe possibilities for this street. Parklets R Cool!

Safe travel for all

Bikers & Pedestrian Safety :)

Increased safety at a dangerous intersection.

I like how you guys are improving safety of the people.

Thank you for keeping us safe :)

Traffic/Infrastructure

Like the plants as decoration & protection

Do the other side!

The great visual representation of the safe possibilities for this street. Parklets R Cool!

As a regular rider (recreation and commuter), We need more of this! It's Great. Thank you <3

I would totally bike if this was real!

We need more bike infrastructure. This is a great step!

Other

Love the plants! But just a buffered bike lane is great!

Bikers & Pedestrian Safety :)

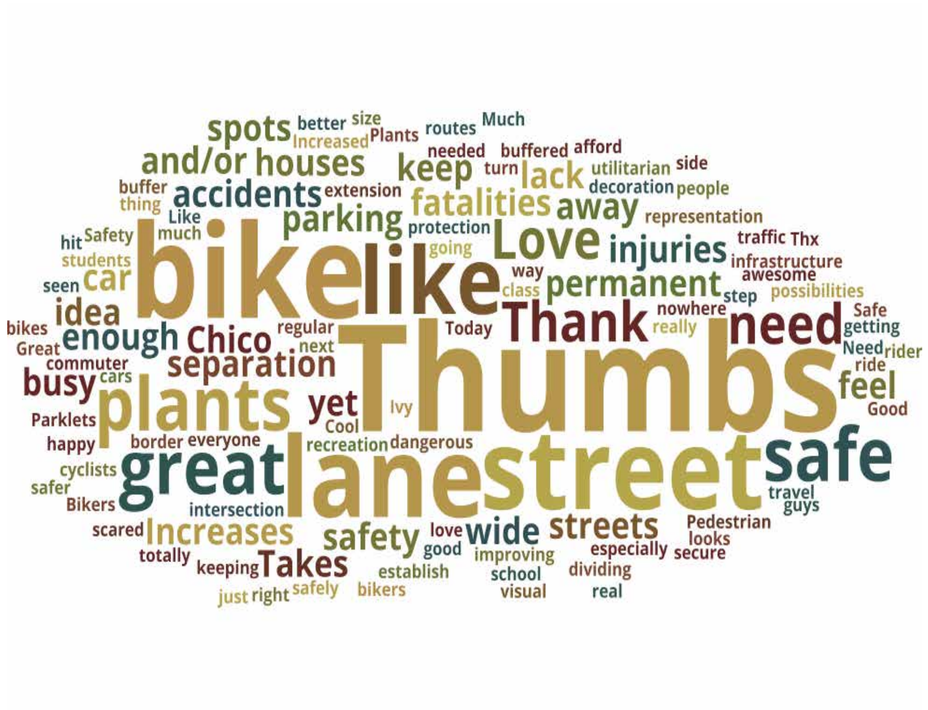
I like the size of the bike lane & the plants :)

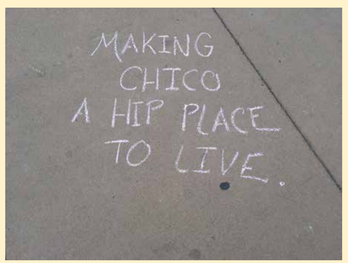
Plants establish better border but between car lane & bike lane.

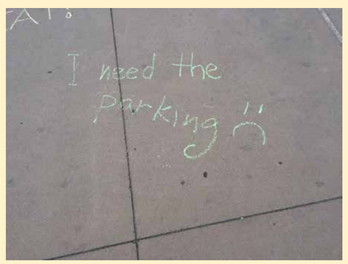
Love the lane extension & buffer for turn

Very utilitarian for those who cannot afford cars!

Tactical Urbanism: Public Feedback







What Don't You Like?

Increases in accidents, injuries and/or fatalities

Takes away parking spots from houses on the street.

Not permanent — yet!

Some streets aren't wide enough for this.

The lack of separation from the busy street

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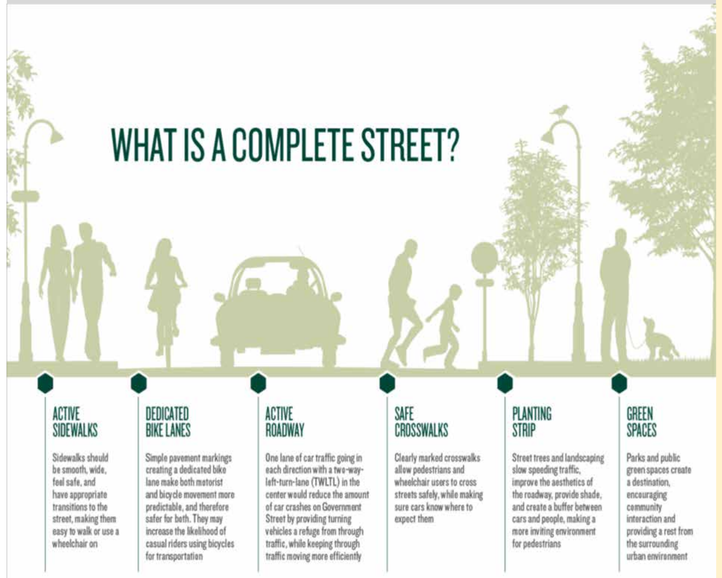
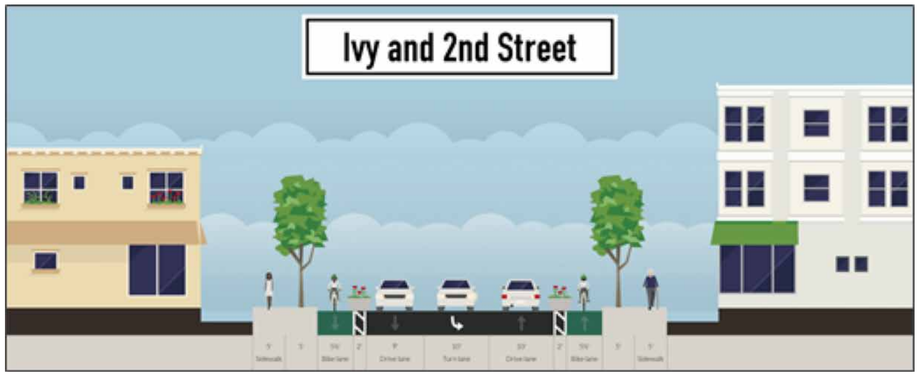
What is Tactical Urbanism?

Tactical Urbanism is a term used to describe low-cost, temporary changes to the built environment, usually in cities, intended to demonstrate ways to improve local neighborhoods, transportation, and safety through temporary street interventions.

Tactical urbanism (TU) projects many be sanctioned or unsanctioned by local government. This project was sanctioned by City Government and California State University Chico.



Tactical Urbanism



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, cycling, driving automobiles, riding public transportation, or delivering goods.

California adopted the California Complete Streets Act of 2008 on September 30, 2008 (SB1358). This legislation requires cities and counties to include complete streets policies as part of their general plans so that roadways are designed to safety accommodate all users, including bicyclists, pedestrians, transit riders, children, older people, and disabled people, as well as motorists.

The City of Chico 2030 General Plan prioritizes the creation of a multimodal transportation network based on complete streets concepts that are required by California law to be taken into consideration in General .

Complete Street design concepts are required to be taken into consideration for new streets and are prioritized when retrofitting existing streets to accommodate all modes of travel (Chico 2030 General Plan, Circulation Element 4-2).

COMPLETE STREETS

Purpose and Goal

The purpose of the November 2nd, 2017 Tactical Urbanism (TU) Complete Streets Project was to demonstrate urban street treatments that will improve safety for all users including bicyclists and pedestrians through a one-day, one-block sanctioned tactical urbanism applied project on Ivy Street between 2nd and 3rd Streets.

The Goals of the project were to:

1) demonstrate how to improve bike safety by completing the bicycle lane network between Third and Second Streets.
2) demonstrate the benefits & use of bike boxes in increasing visibility and safety for bicyclists.
3) create pubic interest in improving bicycle and pedestrian safety near Chico State and the South Campus Neighborhood
4) educate the public about the benefits of complete streets and support the Chico 2030 General Plan commitment to multimodal transportation and complete streets
5) create a spectacle or street event that excites the public about streets as places in order to successfully 'pull off' Chico's first sanctioned TU Project.

. Study Area: Ivy Street from Second Street to Third Street. This area was chosen as buffered bike lanes were installed on Ivy Street from Hwy 32 (8th and 9th Streets) to the Third Street intersection. However the block between Second and Third Streets to not even have a bike lane.

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