

# Zelzah Avenue

A **W**alkable  
Street Proposal



CSUN  
*Urban Studies & Planning*  
2019



# Background

Zelzah Avenue runs through the Northridge neighborhood in Los Angeles all the way north with Granada Hills to the east and Porter Ranch to the west. It is a collector street parallel to California State University, Northridge campus. Our site begins with Devonshire Street at the northern limit and ends at Nordhoff Street to the south. A church, university dorms, one high school, and a private school, serving grades 6 through 12, also are located in this stretch of Zelzah Avenue. The wide street carries many commuters daily and has a surprisingly high speed limit, given its proximity to schools. Residential parcels span the east side of Zelzah Avenue. Single family homes reside to the South and multifamily dwellings proliferate North of Plummer. Gas stations and commercial storefronts are solely present at the northern most intersection, Devonshire Street.

## Purpose

This project aims to improve mobility at the site with the help of evidence-based community design. Zelzah Avenue's car-centric design should be changed to allow safe passage for pedestrians and bicyclists. As Zelzah Avenue is currently designed, it is unwelcoming and unsafe for active modes of transportation.

## Process

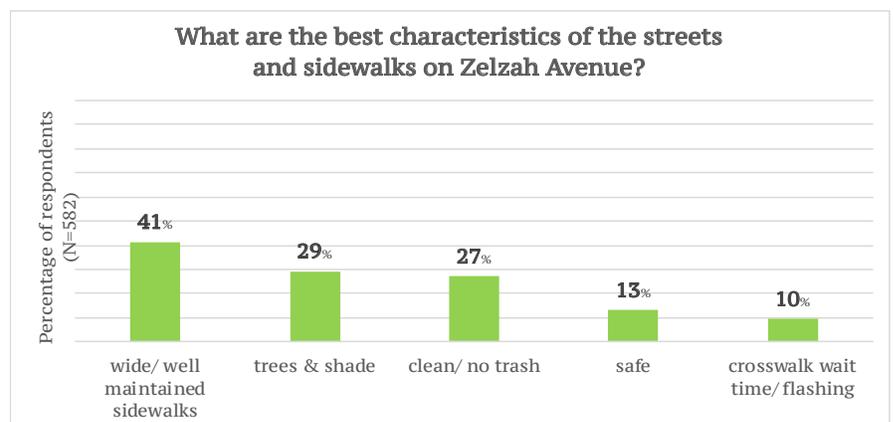
Existing conditions of the site were documented by CSUN students. Opportunities and constraints regarding traffic safety, weather, transit users, bicyclists and pedestrians, accessibility, streetscape, surface quality and cleanliness were compiled. Local users were asked if they walk or ride a bike on Zelzah Avenue. They were also asked if they take public transit to or from the site. Lastly, users were asked to provide feedback on characteristics that they thought were good or bad on Zelzah Avenue. Their participation was vital to gain insight into a locally desired environment. In an effort to make Zelzah Avenue more walkable and bikeable, several design guidelines were recommended. Each guideline enhances comfort, safety or pleasantness of the pedestrian and bicycle experience. Each guideline has been crafted with evidence from the literature, site analysis and user preference questionnaires.

# Questionnaires

Our questionnaire was administered to participants along Zelzah Avenue. One block sections of the avenue were allocated to each group of interviewers to maintain a consistent distribution of participants throughout the avenue. The questionnaire consisted of six questions. The first question asked if the participants if they worked, lived, or neither on Zelzah Avenue. The second and third question asked the participant what they found to be the best characteristics and worst characteristics along Zelzah Avenue. The fourth, fifth, and sixth questions asked the user how frequently they walk, ride a bike and use public transportation on Zelzah Avenue.

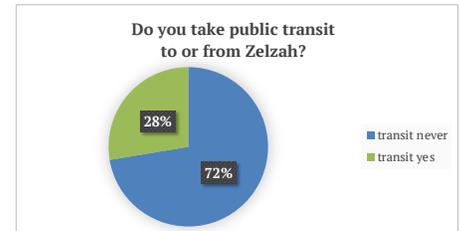
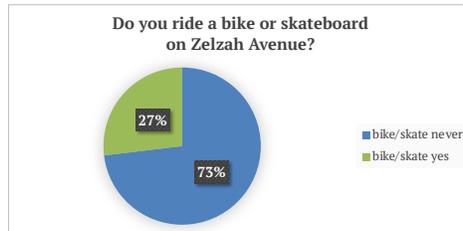
## Best Characteristics

When asked to describe the best characteristics of the site, forty-one percent of participants mentioned wide and or well-maintained sidewalks. Another popular response was trees and shade, with twenty-nine percent. The valley gets extremely hot most of the year leading pedestrians to seek respite from the heat. Twenty-seven percent of participants also like walking in a clean environment, free of litter. Thirteen percent also like that they feel safe on Zelzah Avenue. Last, but not least, ten percent of participants remarked that they found satisfaction in the short wait time to cross the street. Pedestrians liked to press the button to signal the flashing lights at cross walks that do not otherwise have signals.



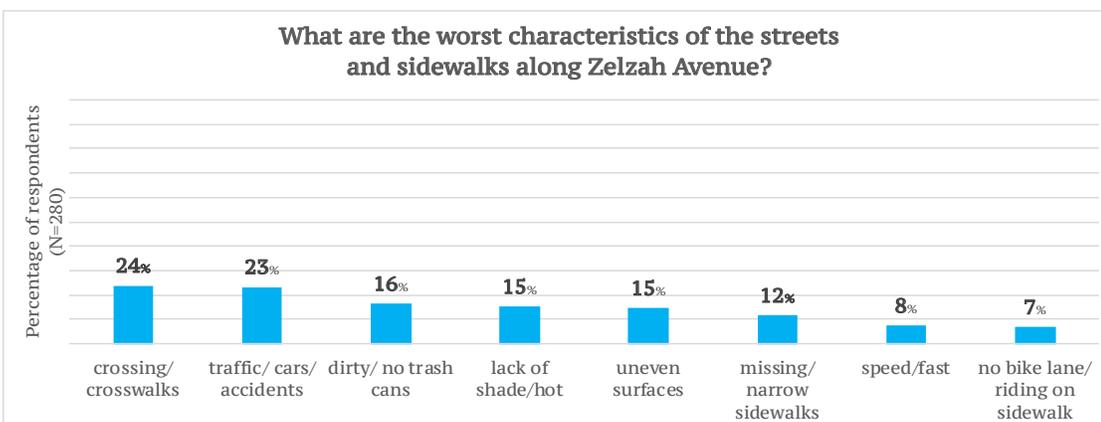
## Participant Characteristics

Almost forty percent of questionnaire participants live in Northridge. About thirty percent work locally. The charts below represent the findings from questions four, five, and six.



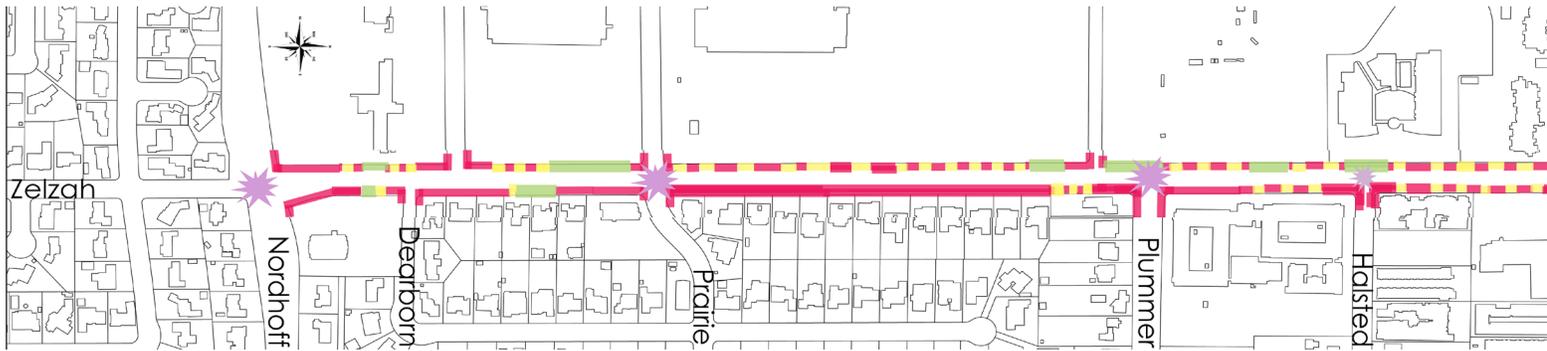
## Worst Characteristics

When describing the worst characteristics of the site, many of the participants mirrored their previous responses, citing a lack of shade (fifteen percent) dirty portions of the street (sixteen percent) and difficulty in crossing the busy street. Twenty-four percent echoed the concern that crosswalks are not sufficient. Right behind crosswalks, twenty-three percent of respondents are deterred by the amount of traffic, cars and accidents at the site. Uneven surfaces make use more difficult, especially to those riding skateboards. Fifteen percent mentioned surface quality. Twelve percent took note of entire blocks devoid of any sidewalk and other sections where the sidewalks are far too narrow to pass people comfortably. The speed of cars can be worrisome and eight percent described it as the worst characteristic. Lastly, the absence of dedicated bike lanes and the consequence of that, people riding bikes on the sidewalk, was loathed by seven percent.



## Safety Map Legend

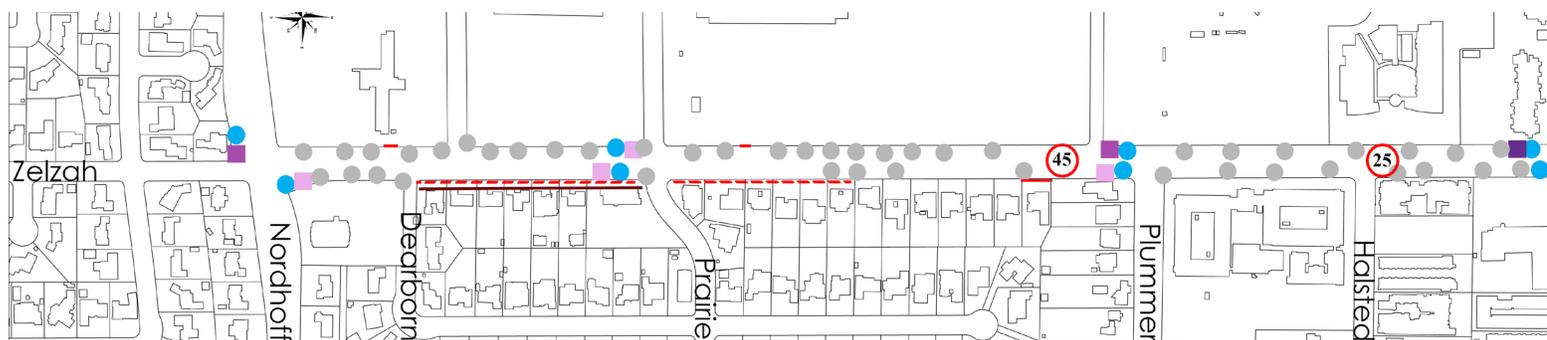
Full Shade			1-4 Crashes
Partial Shade			5-7 Crashes
No Shade			8-10 Crashes
			11+ Crashes

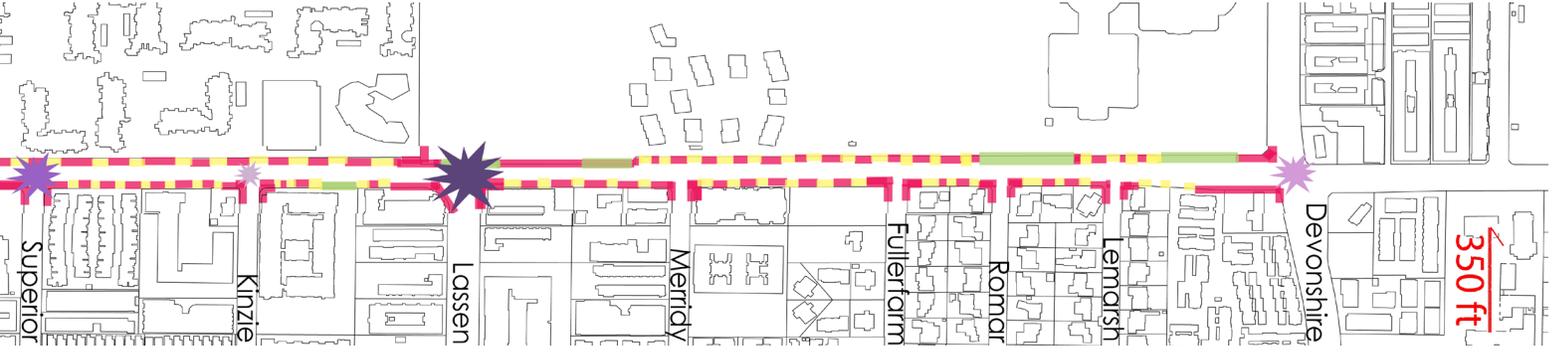


# Safety

In a ten year period (2007-2017), there has been one fatality at the site. The most common cause of crashes was pedestrian right of way violations. The north end of the site has fewer crashes than the south end. The intersection of Lassen and Zelzah Streets was the most problematic. It had the highest number of crashes and the fatality occurred there.

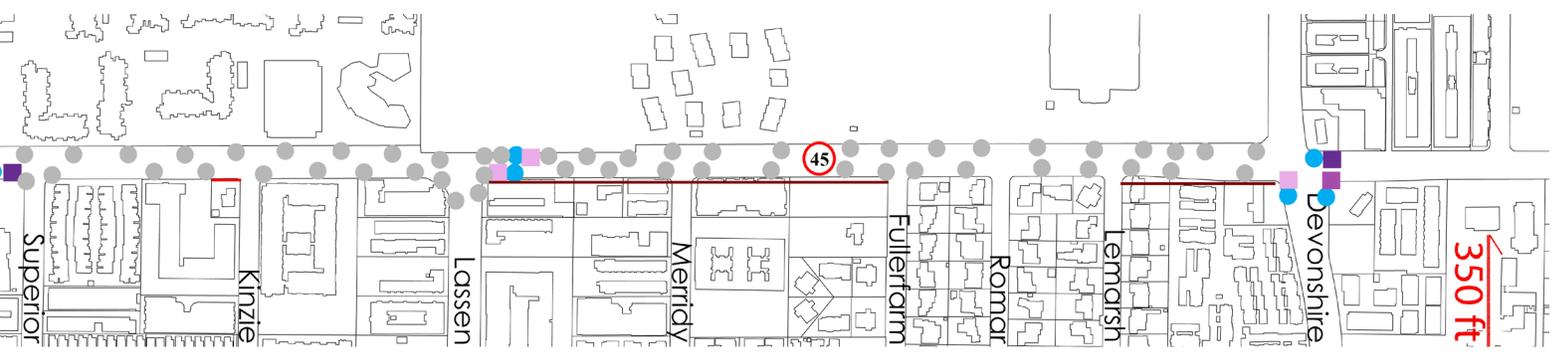
Shade along the west side of Zelzah Avenue was mostly sufficient, but the east side needs more shade as protection from the heat. These findings are aligned with questionnaire outcomes which show lack of shade and accidents as two of the worst characteristics at the site.





# Streetscape

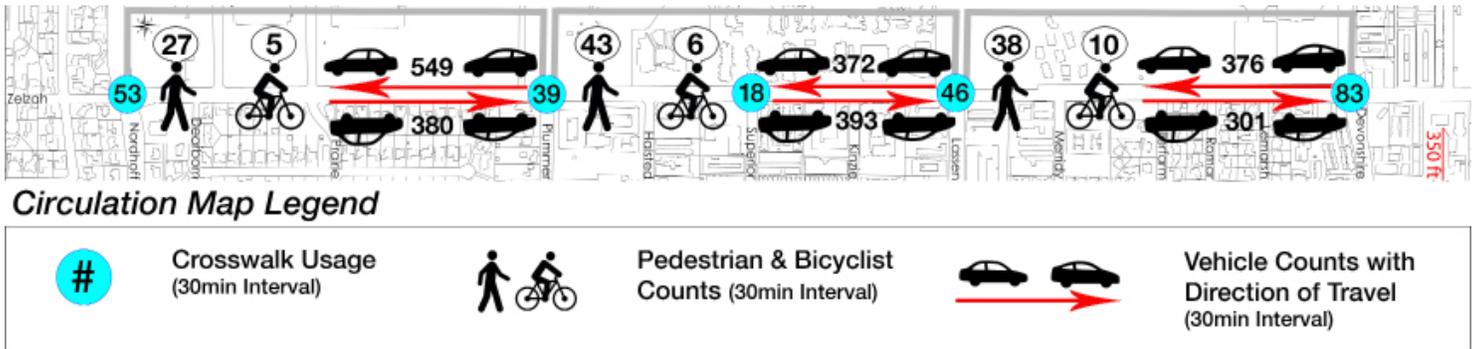
The most problematic areas are located at the North and South ends of Zelzah Avenue. The section from Dearborn to Prairie Streets suffers the most in the surface quality aspect where sidewalks are missing altogether. There is also a cleanliness issue near the same area as well as between Lassen and Devonshire Streets. These two issues align with questionnaire outcomes, which refer to missing sidewalks and trash as some of the worst characteristics on Zelzah. Street lights and other amenities are also in need of attention near Dearborn and Prairie Streets as there is noticeable lack of these elements. Furthermore, only three out of the thirteen bus stops offer bus shelters, causing a lack of shade issue. This relates to the questionnaire outcomes, which shows lack of shade as one of the worst characteristics at the site.



## Streetscape Map Legend

Cleanliness Problem	Missing Sidewalk	Street Lights	Bus Stops - Shelter	Bus Stops - Sign Only
Surface Quality Problem	Trash Cans	Speed Limit	Bus Stops - Bench	

# Circulation



The Circulation map illustrates the elements of street use on Zelzah Avenue. The three main focal aspects of this map are pedestrian and bicyclist use, automobile counts, and total crosswalk usage. The pedestrian, bicyclist, and automobile counts are split into three different segments of Zelzah Avenue. From left to right the street segments are Nordhoff to Plummer, Plummer to Lassen, and Lassen to Devonshire. Five major intersections along Zelzah were used as crosswalk research sites: Nordhoff, Plummer, Superior, Lassen, and Devonshire. All data was collected in 30 minute intervals to maintain consistency. Crosswalk usage peaked at 83 users at the Devonshire intersection and saw its minimum of 18 users at the Superior non-signalized crosswalk. This finding is representative of the questionnaire outcome stating that 24% of Zelzah Avenue users found crosswalks to be insufficient. One notable finding was that as automobile travel towards the CSUN campus increased, the pedestrian and bicyclist counts decreased. The greatest number of bicyclists traveled on the north most section of Zelzah between Lassen and Devonshire, where auto travel was recorded at its lowest point. The maximum pedestrian count was seen on Plummer and Lassen with a count of 43, which is the location of CSUN dorms and the Northridge Academy High School.

# Design Guidelines

## Nordhoff to Plummer

1. Sidewalks on Zelzah Avenue should be continuous on both sides of the street.
2. Bus shelters should be placed at all possible bus stops on Zelzah Avenue.
3. Trash cans should be placed along Zelzah Avenue on both sides of the street between intersections.
4. Improve shade structures for pedestrians and transit users.
5. Improve crosswalk safety by increasing pedestrian visibility on Zelzah Avenue.
6. Maintain existing sidewalk surface quality.
7. Improve bike infrastructure on Zelzah Avenue between Nordhoff and Devonshire Streets.
8. South of Plummer to and on Nordhoff:
  - a). Sharrows
  - b). Low volume / wide lanes

### Existing Elements



### Proposed Elements: 1-8



# Design Guidelines

## Superior to Fullerfarm

1. Bus shelters should be placed at all possible bus stops on Zelzah Avenue.
2. Trash cans should be placed along Zelzah Avenue on both sides of the street between intersections.
3. Improve shade structures for pedestrians and transit users.
4. Improve crosswalk infrastructure at the Superior Street intersection on Zelzah Avenue.
5. Slow down speed by implementing traffic calming elements.
6. Maintain existing sidewalk surface quality.
7. Improve bike infrastructure on Zelzah Avenue between Nordhoff and Devonshire Streets.
8. Improve crosswalk safety by increasing pedestrian visibility on Zelzah Avenue.
9. North of Plummer to Devonshire: tier 2 bike lane.
  - a).5-7 ft.
  - b).striping line separation from cars
  - c).major arterials & wide collectors

### Existing Elements



### Proposed Elements: 1-9





**Prepared by the students of Community Based Urban Design course  
in the Urban Studies and Planning Department at California State  
University Northridge during the Fall semester of 2018:**

Shannon Kitover  
Ryosuke Nagai  
Naasirah Maimoonah  
Jimmy Ramos  
Adrian Flores  
**Atticus Lee\***  
Arthur Eckelberry  
Alexandra Clingman  
Michelle Rivera Conzalez  
Quetzalli Enrique  
Jocelyn Morales  
Angelo Mutia  
**David Moreno\***  
Benjamin Verheiden  
**Carly Hollas\***  
Cali Piccirillo  
Alexander Roberts  
Christian Sanchez  
Megan Anghel  
Andres Rodriguez  
Claudia Sillas  
Beverly Quezada  
Fredy Martinez  
Azeneth Martinez  
Ohan Derderian  
Niyousha Fozounmayeh  
Nicole Potkin

**Booklet prepared by Atticus Lee, David Moreno, Carly Hollas**

Under the supervision of:

**Zeynep Toker, Ph.D.**

**Professor**

**Urban Studies and Planning Department  
California State University Northridge**