



IMPROVING WALKABILITY OF A COMMERCIAL AREA:
THE CASE OF
THE CITY OF SAN FERNANDO

California State University Northridge
Department of Urban Studies and Planning

Background

The city of San Fernando is located in the northwest side of the San Fernando Valley and is home to approximately 23,645 Los Angeles county residents (factfinder.census.gov). The city is 92.5% Hispanic and lives at a slightly higher density level than the city of Los Angeles. The city is divided by three freeways, the 118, 210 and Highway 5. Due to recent efforts to make the city more walkable, several design elements were recently implemented in their downtown area along San Fernando Road. The project site focuses on the area around San Fernando Road, including Truman Street, S. Maclay Avenue, S. Brand Boulevard, Workman Avenue, and San Fernando Mission Boulevard.

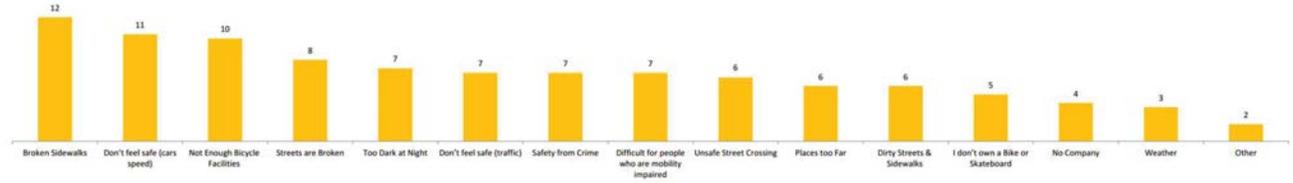
Purpose

In an effort to improve physical activity in cities, especially in lower socioeconomic status neighborhoods, active transportation, are increasingly promoted in the last decade in the United States. Although these combined efforts towards sustainability are in abundance, interventions to improve active transportation infrastructure based on communities' preferences, the outcomes are more successful. This project is an example of a process to prepare evidence based design recommendations to improve walkability, designed to complement the efforts of Safe Routes to School program, executed through the County of Los Angeles PLACE program. The project was designed to help better understand the opportunities and constraints from the perspective of pedestrians and the business owners, to make evidence based recommendations for improving walkability.

Process

The process of data collection included distributing questionnaires and observations of the study area. One questionnaire was designed for business owners, the other for pedestrians. A total of 61 questionnaires were conducted with business owners and 65 with pedestrians. The businesses were asked a short list of questions including how they thought customers accessed their business and included improvements they would like to see in the area. The other set of questionnaires, included questions regarding their regular walking habits as pedestrians and their perception of what they thought should be improved on the adjacent streets. Observations were conducted on

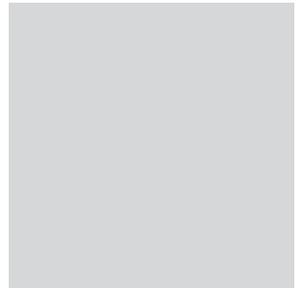
In San Fernando, what makes it HARD to travel by walking, biking, or skateboarding (PERCENTAGES)



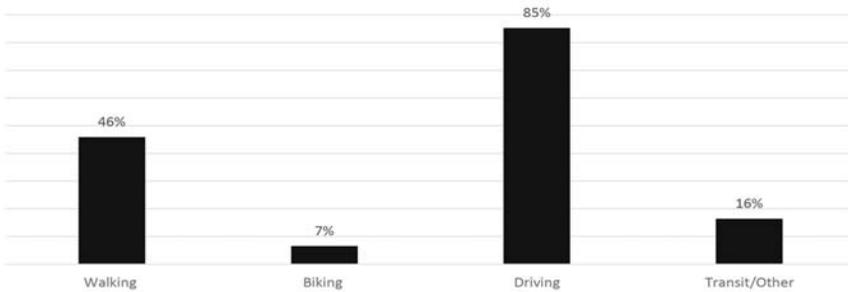
From the pedestrian questionnaires we found that a large percentage of pedestrians do not travel by walking, biking or skateboarding because the sidewalks are broken.

Pedestrian Questionnaires

Speed is also a large factor as to why pedestrian do not feel safe to walk, bike or skateboard.



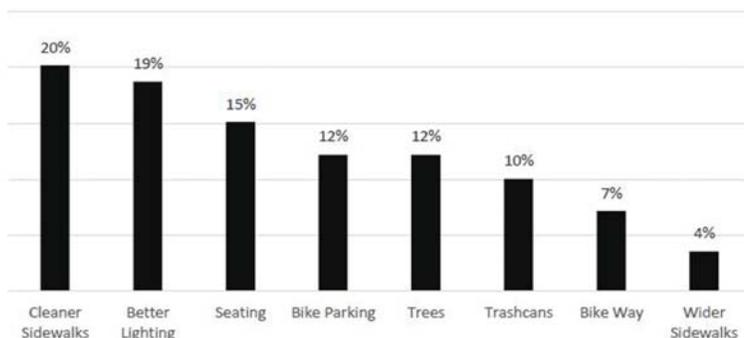
Businesses' perception of how most of their customers get to their business (n=61)



Business Questionnaires

Business questionnaires were taken out in the field to understand the perceptions and preferences of the businesses at the site.

Businesses would like to see more of these nearby (n=139)

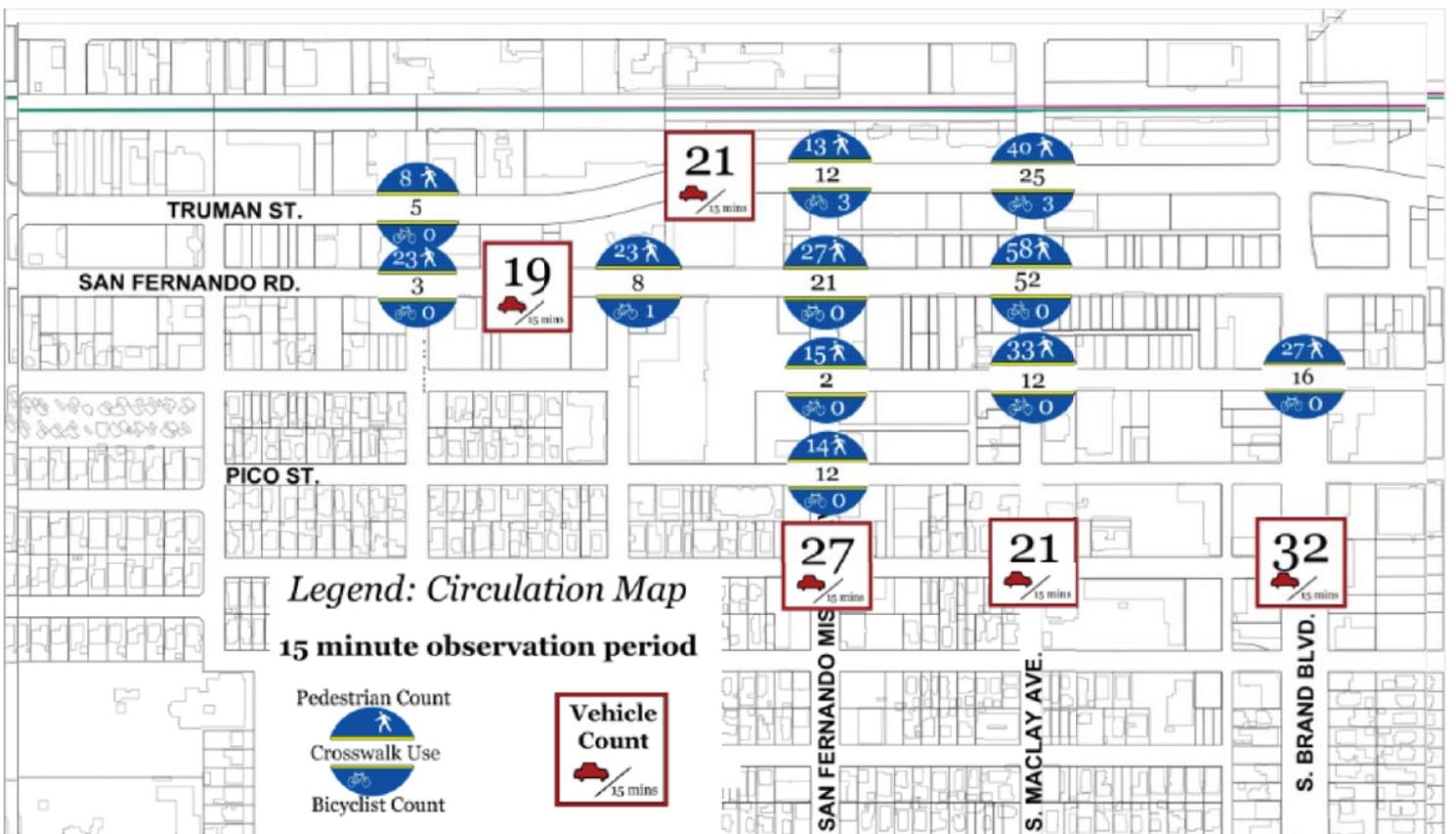


The questionnaires show that 85% of the businesses believe that their customers get to their businesses by car.

The businesses would like to see cleaner sidewalks, better lighting and seating.

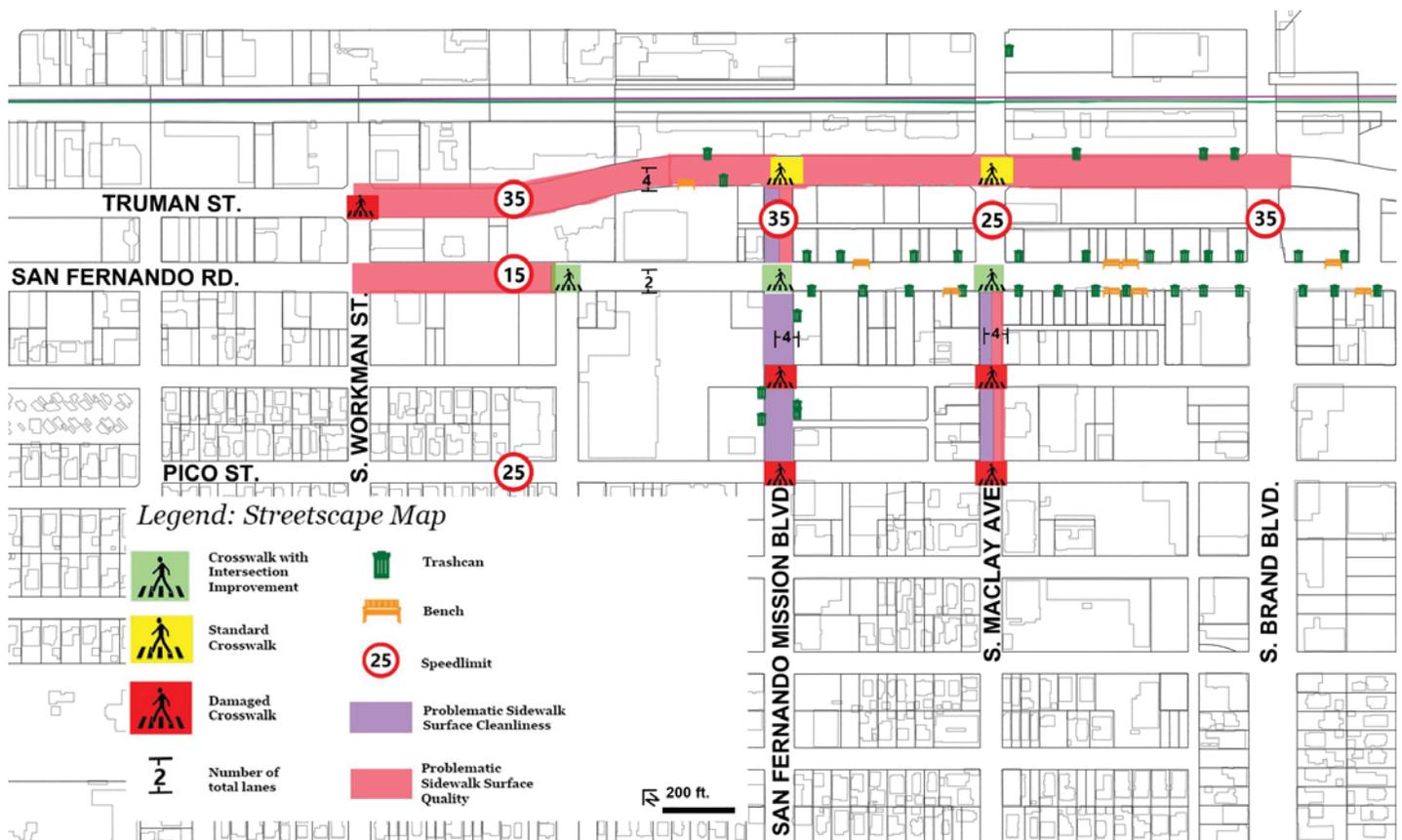
Circulation

The circulation map shows four important elements: cross-walk use, pedestrian and cyclist activity as well as traffic volume on each street within the study area. The map illustrates the incompatible use of space along Brand Blvd., Truman St., and Truman St., and S. Maclay Ave. It also shows the success of interventions done on San Fernando Rd to encourage pedestrian use while also slowing traffic, in both volume and speed of cars. The data collection was done on weekdays between the hours of 11am and 4pm to avoid traffic due to commuting



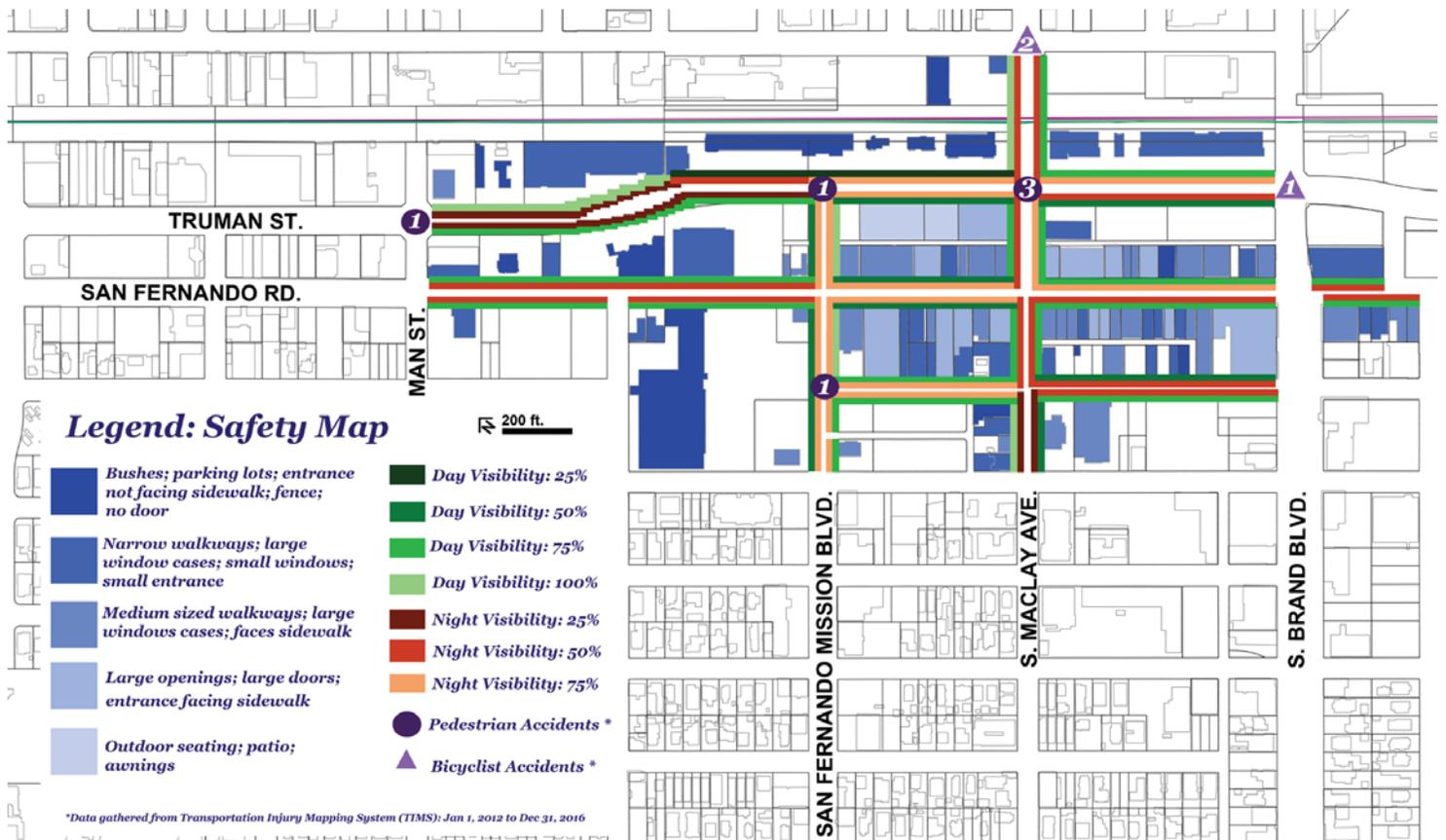
The Streetscape Map has three important components, which include street furniture, sidewalk conditions, pedestrian crossing conditions, and speed limits. Truman Street sticks out negatively: its sidewalk quality is problematic, it has a high speed limit and also no street furniture to support pedestrians. The little side streets, San Fernando Mission Boulevard and Maclay Avenue, are run down. They have problematic sidewalk surface cleanliness and damaged crosswalks. Additionally, the pedestrian crossing on San Fernando Mission and Maclay Ave need to be repaired and improved. All of the areas (except for the improved section of San Fernando Road) are lacking trash cans and benches. Only San Fernando Road has a speed limit of 15 mph.

Street Scape



Safety

The safety map is composed of three main factors, visibility of the sidewalk during the day and night, building facades and the reported pedestrian or bicycle incidents on the road. According to the map Truman Street has the highest number of pedestrian collisions. Collision data was collected from the Transportation Injury Mapping System (TIMS) from the past five years (January 1, 2012 to December 31, 2016). The segment on Truman Street between Workman Street and San Fernando Mission Boulevard scored the lowest in sidewalk visibility for both day and night, which may be caused due to the low connectivity of the sidewalk to the buildings. On the other hand San Fernando Road scored higher on building connectivity, higher in visibility and has no accidents reported in the past five years.



DESIGN GUIDELINE:

CIRCULATION

The location of the project attracts a high number of pedestrian and bicyclist, due to the number of public transit that pass through the area. Additionally, from observations there is a high volume of vehicles that pass through the area. One design guideline that can be implemented is to foster the positive growth of pedestrian and bicyclist activity in the area, by implementing barriers and a bike lane to built a safer division between the sidewalk and the street. Pedestrian safety while crossing is also very important, raised crosswalks for heavily trafficked intersections. Figure 1.1 shows the design guideline implemented on Maclay Ave.



DESIGN GUIDELINE:

STREET SCAPE



On Truman Street, the damaged sidewalks should be fixed to improve the perception, or aesthetics, of the street. Tree roots have caused most of the damage so placing trees on permeable surface would allow for growth without causing damage. On all streets, new street furniture (trash cans, benches,...) should, ideally be placed to facilitate pedestrian activity. Figure 1.2 show the design guideline implemented on Maclay Ave. The only street that had adequate furniture was San Fernando Rd.



DESIGN GUIDELINE:

SAFETY

Higher daytime and nighttime visibility is encouraged on Truman Street, which can be achieved through improving the connectivity of the building with the sidewalks. In the pedestrian questionnaires, 7% stated that they do not feel safe from crime, it's too dark at night, and they don't feel safe due to traffic. In the business questionnaire, 15% of the businesses would like to have more outdoor seating on both Truman Street and San Fernando Road. The increase of seating will create eyes on the street by addressing the issue of visibility and connectivity. Figure 1.3 shows the design guideline implemented on Maclay Ave.



This study was conducted by the students in the URBS 440 Community Based Urban Design course in the Department of Urban Studies and Planning at California State University, Northridge during the Fall semester of 2016. Those involved in the research include:

Sultan Alsulaiman	Ghazal Hooshmand
Emil Barkhordarian	Aram Madoyan
Jorge Colato	Garen Majarian
Manuel Elizarraras	Christina Nguyen
Tatiana Gevelekian	Aldo Ortega Yanez
Erlyn Gonzalez	Martin Silva
Jackson Higgins	Jonathan Fox
Elizabeth Golden	Susana Martinez
Vanessa Faul	

This booklet was prepared by:

Elizabeth Golden

Vanessa Faul

Susana Martinez

Under the Supervision of:

Zeynep Toker, Ph.D.

Professor

Urban Studies and Planning Department
California State University, Northridge