



Santa Monica Boulevard

Design Guidelines

for a Walkable and Bikeable Neighborhood

MAY 2012
COMMUNITY BASED URBAN DESIGN
DEPARTMENT OF URBAN STUDIES AND PLANNING
CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

BACKGROUND

Santa Monica Boulevard's central location, concentration of commercial activity, and access to surrounding residential communities define it as one of the most prominent corridors in West Los Angeles. Its defining characteristics present an array of complications in the form of incessant traffic and compromised safety and cleanliness. These complications threaten the economic vitality of the district as they discourage pedestrian and cyclist activity. To reconcile these constraints, the West Los Angeles Neighborhood Council has enlisted California State University, Northridge, Department of Urban Studies and Planning. The collaborative effort has resulted in a set of design guidelines targeting a 1 mile stretch of Santa Monica Boulevard extending from the 405 Freeway to Colby Avenue. Addressing pedestrian and cyclist circulation, as well as, economic development these guidelines represent the input of the community.

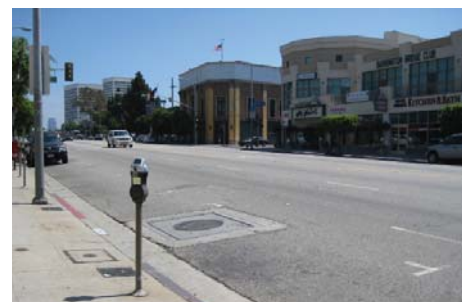
PURPOSE

To obtain a greater understanding of the project area, data was collected focusing on the existing circulation, land use, and streetscape of Santa Monica Boulevard. This data provided valuable insight into the existing condition of the corridor, establishing a foundation for the design guidelines.

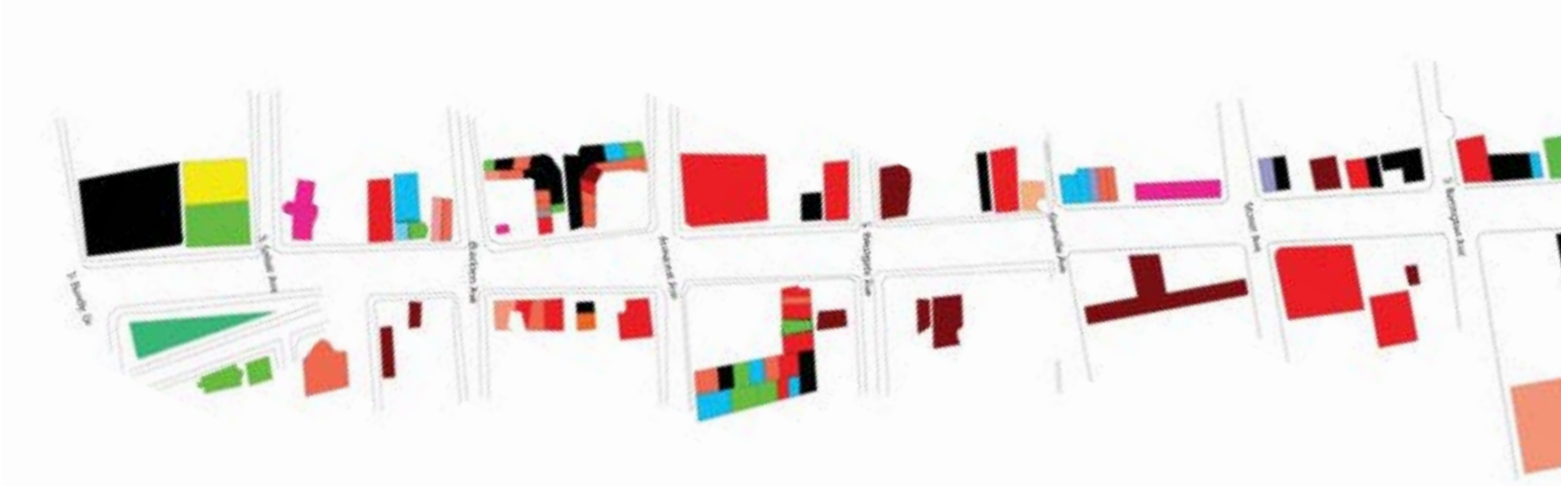
PROCESS

Student administered questionnaires were conducted on local residential streets immediately surrounding the focal area, yielding insight to the preferences of local community members (492 respondents). Observations of the street led to the compilation of 4 maps. The circulation map visually represents hour long counts of cyclists, pedestrians and mass transit users. The land use map portrays the existing land use of the corridor's numerous establishments. Hour long counts of business patrons were amassed into the commercial use map. The streetscape map reveals building friendliness, location of trees, trash receptacles, building entrances, and parking lots, and the availability of on-street parking. Finally, questionnaires of 99 randomly selected businesses addressed their perception of their client base and impacts of numerous street improvements on volume of customers. All data was gathered between August 2011 and May 2012.

Findings show that pedestrians and cyclists frequent the area, mainly attracted by food related businesses, although the infrastructure for pedestrians and cyclists has much room for improvement.



LAND USE

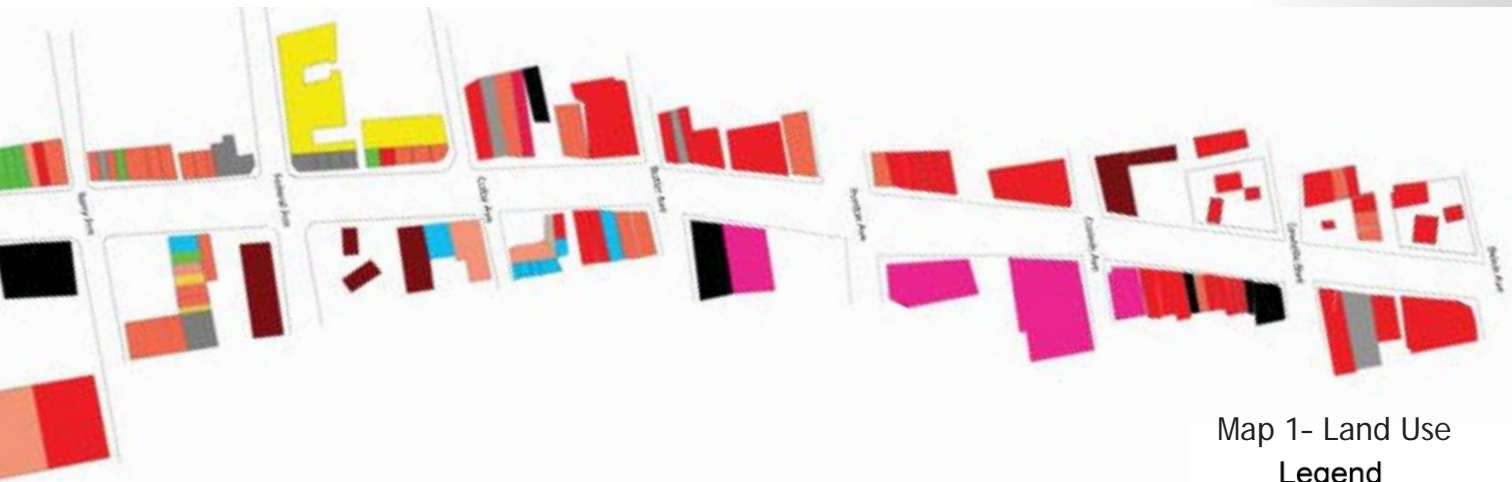


The land use map shows a high concentration of retail businesses in the form of numerous restaurants, grocery stores, beauty shops, and other commercial establishments (Map 1- Land Use). The commercial use map illustrates frequent use of retail establishments and the importance of corner units (Map 2 - Commercial Use). Of the 20 businesses receiving 11 or more patrons, 17 were located on the corners of streets or commercial centers (77%). Of these 17 units, there were 10 food related establishments (59%) (five restaurants and five grocery stores), three auto related businesses, two public buildings, and two commercial/retail shops.

Responses to student administered questionnaires further support the prevalence of food related establishments. In response to the question, "Where do you go on Santa Monica Boulevard most frequently?" of 420 respondents almost all cited food related establishments (46% grocery stores and 51% restaurants) (figure 3). Another question, "What are the most pleasant characteristics of Santa Monica Boulevard?" yielded similar results with 40% of respondents citing the variety of shops and 20% variety of restaurants as the most pleasant characteristics of Santa Monica Boulevard (figure 4).

It is evident that food related retail establishments are the most used and well liked aspects of the street. These businesses are an important component in promoting pedestrian and cyclist use of the street. Businesses also noted the importance of pedestrian and cyclist patrons. Of the 99 businesses questioned, they perceived an average of 13% of their customers walked or biked to their establishments. A total of 33 businesses reported percentages higher than this mean. Of these 33 businesses, 51% were restaurants.





Map 1- Land Use

Legend

- Restaurant
- Public Building
- Medical
- Unused
- Grocery
- Auto related
- Personal Care
- Bank
- Open Space
- Educational
- Residential
- Retail

Looking specifically at restaurants further illustrates the importance of cyclists and pedestrians as customers. Restaurants perceived that 20% of their clientele arrived on foot or by bike. They also served the highest number of customers. Compared to the average responses of the total sample, restaurants attract the most customers and note the importance of their walking and cycling customers.

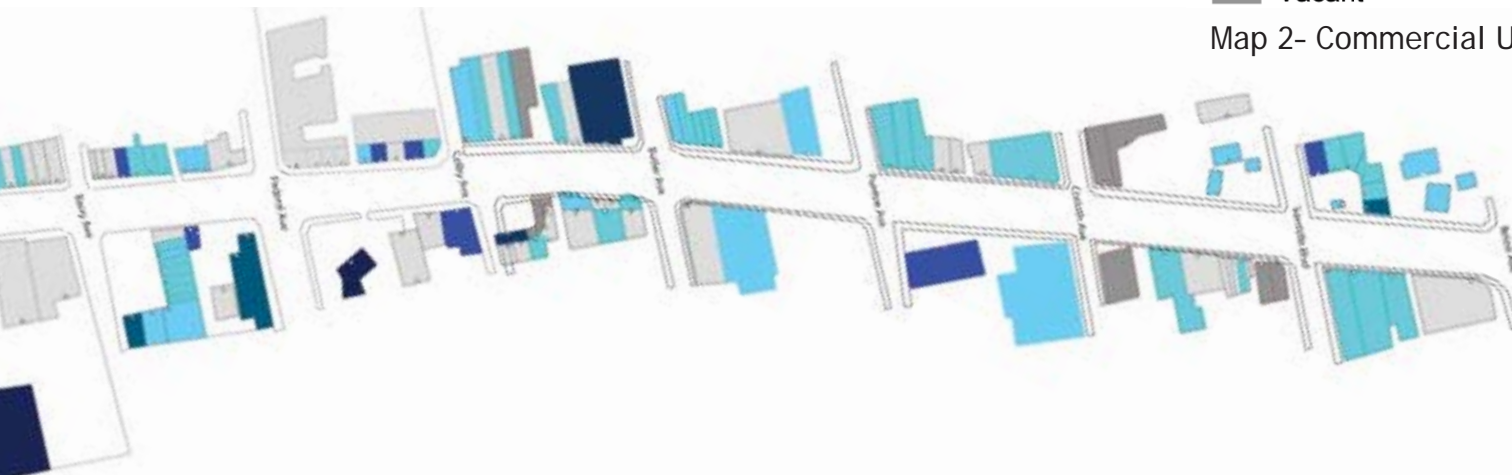
With constant cyclist and pedestrian use of the entire focal area (Map 3- Circulation), an opportunity to enhance pedestrian and cyclist circulation emerges. Our focal area immediately borders dense residential communities, enabling the district to be accessed by a short walk or bike ride.

Since in general a high proportion of all retail expenditure comes from local residents of a few miles radius, patrons arriving on foot and by bicycle visit commercial districts the most often and spend the most money per month. Therefore, being located in close proximity to residential areas, the residents of which regularly walk and ride (Figures 1 and 2), this commercial corridor has the potential to attract more pedestrians and cyclists for a higher volume of economic activity with improvement of pedestrian and cyclist infrastructure.

LEGEND

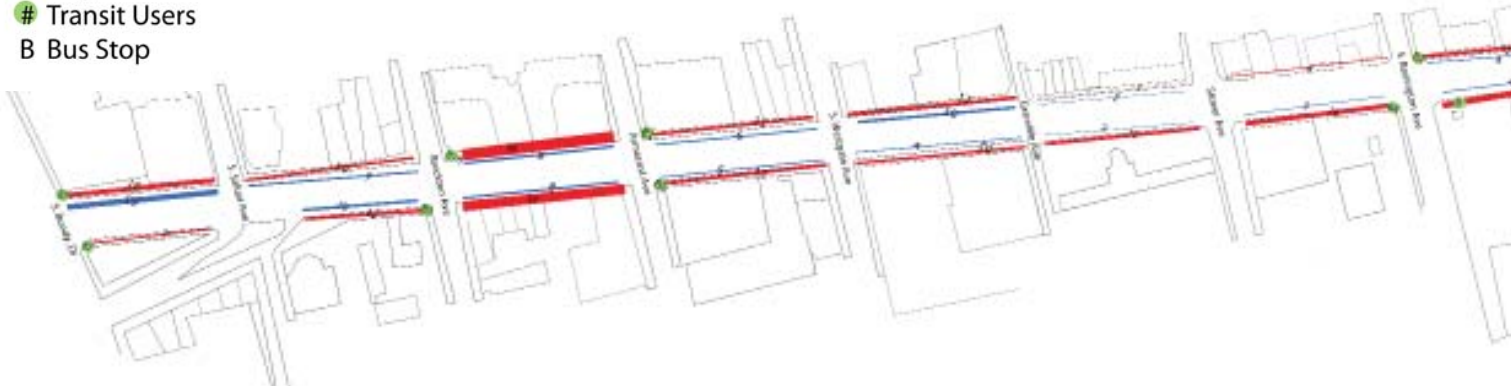
- △ Entrance Location
- 0 people/ hour
- 1-5 people/ hour
- 6-10 people/ hour
- 11-15 people/ hour
- 16-20 people/ hour
- 21 - 25 people/ hour
- Vacant

Map 2- Commercial Use



Map 3- Circulation

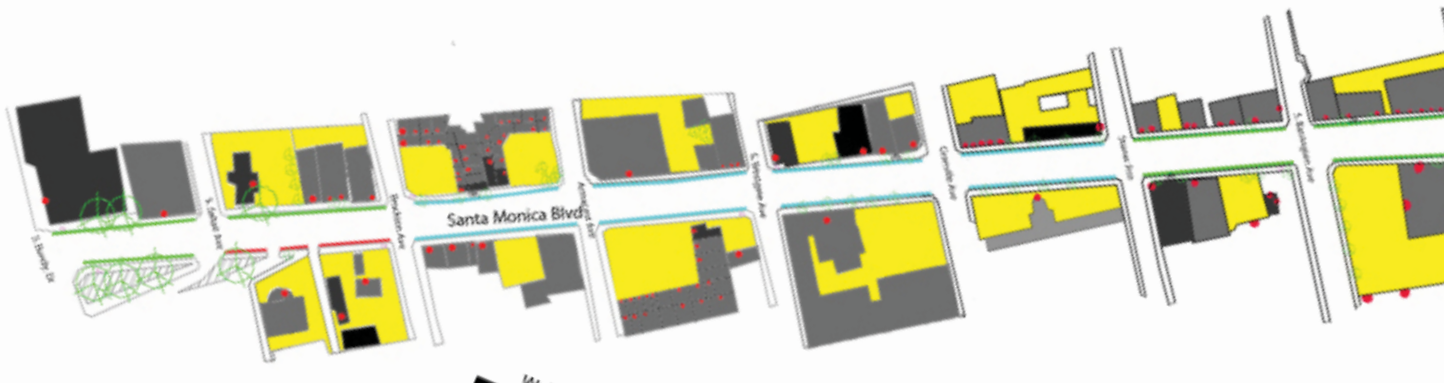
- Legend
- Pedestrians
 - Bicyclists
 - # Transit Users
 - B Bus Stop

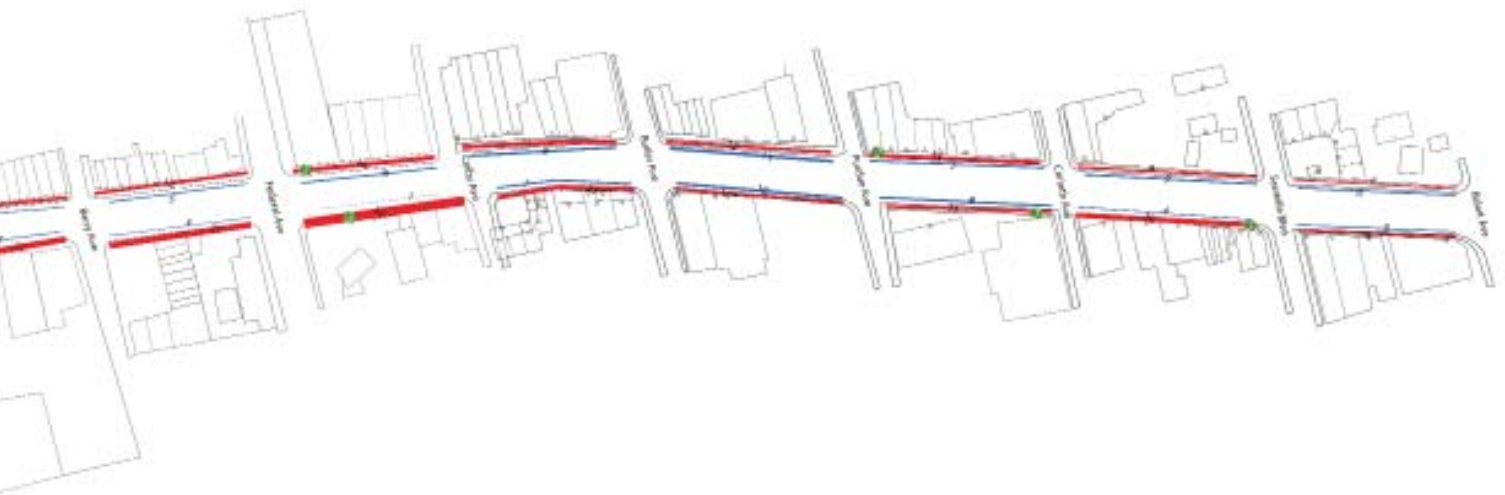


CIRCULATION

An opportunity to ameliorate the constraints of poor pedestrian and cyclist infrastructure is forged by the frequent use of Santa Monica Boulevard by those users. Of 492 questionnaire respondents 74% cited that they walk and 25% stated that they bike on Santa Monica Boulevard (figure 1 and 2). Of those who do not ride their bikes on Santa Monica Boulevard, 37% identified lack of safety as the reason. Further exposing this opportunity are the findings from the circulation map which shows continuous presence of pedestrians and cyclists (Map 3-Circulation).

Interestingly areas with the highest pedestrian and cyclist use (Brockton and Armacost and Federal and Colby) were comprised primarily of pedestrian and cyclist friendly businesses. The block from Brockton to Armacost embodied eight restaurants, five commercial/retail establishments, and no auto-related businesses. Within this one block stretch, three buildings received heavy use of which two were restaurants and one was a grocery store (Map 2- Commercial Use). Similarly, the block from Federal to Colby was comprised of four restaurants, one retail establishment, and two auto-related businesses. This section encompassed four businesses with heavy use including two restaurants, one commercial establishment, and one gas station. Findings illustrate the importance of improving pedestrian and cyclist infrastructure. Evidently these users frequent the street often and have a prolific impact on the accompanying businesses. Catering to their needs is essential to encourage others to walk and bike and create an environment that is safe, comfortable, and pleasant.





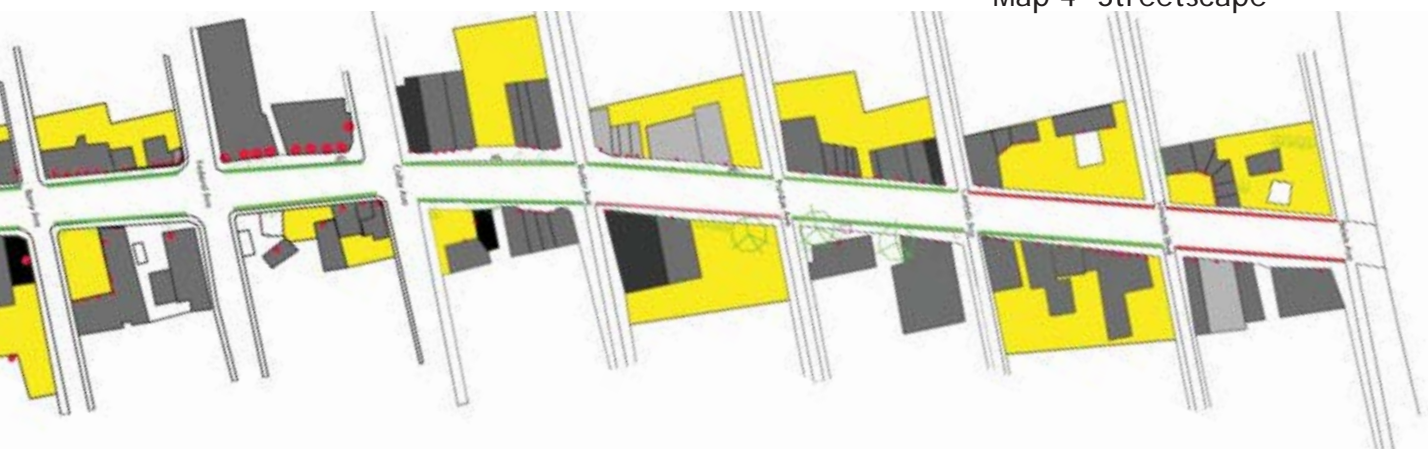
STREETSCAPE

Analysis of the streetscape on Santa Monica Boulevard yields numerous constraints that discourage pedestrian and cyclist use of the street. Entrances to parking lots frequently break the continuity of sidewalks, compromising pedestrian safety. A general lack of landscaping, urban furniture, trash receptacles, and pleasant signage at storefronts makes businesses unattractive and unappealing. The absence of a bike lane renders an unsafe and uninviting environment for cyclists (Map 4- Streetscape).

These constraints and general lack of cyclist and pedestrian infrastructure were confirmed by the perceptions of our questionnaire respondents. Of 407 respondents, 27% identified the Boulevard's dirty nature, 13% compromised safety stemming from traffic, 10% lack of bike infrastructure and 8% the poor quality of the sidewalks as the least pleasant characteristics of Santa Monica Boulevard (figure 5). These constraints compromise the pedestrian and cyclist environment and undermine the potential to increase the use of the street by these integral user groups.

- Wall Types Legend
- Solid Wall
 - Windows Only
 - Door and Landscaping
 - Door and Windows
 - Door, Windows, and Landscaping
 - Door, Windows, and Signs/Boards
 - Door, Windows, Sign/Boards, and Urban Furniture
 - Parking Lots
 - Trees
 - Trash-cans
 - Bike Racks
 - Entrances
 - One Hour Parking
 - Two Hour Parking
 - Thirty Minute Parking
 - No parking
 - Crosswalks

Map 4- Streetscape

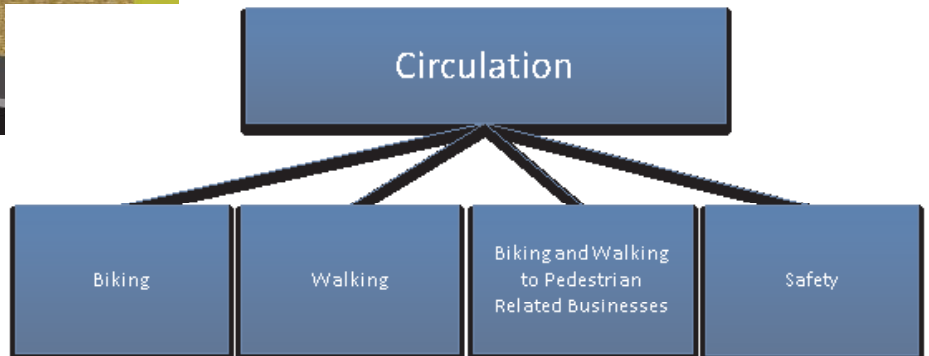
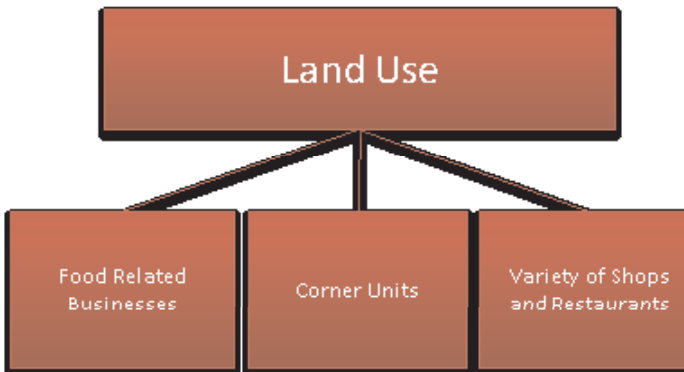


DESIGN GUIDELINES

Land Use

Pedestrian and cyclist use of businesses should be promoted through the provision of more pedestrian oriented establishments, especially in corner units. This strategy will enhance pedestrian and cyclist use of the street.

1. A variety of shops and restaurants should be encouraged.
2. Food related businesses should be encouraged.
3. When feasible, pedestrian related businesses should occupy available corner units.



Circulation

Mitigation of the adverse impacts of traffic should be accomplished through traffic calming measures and the provision of safe pedestrian crossings. This strategy will enhance connections between the street's commercial district and surrounding residential communities facilitating walking and biking behavior.

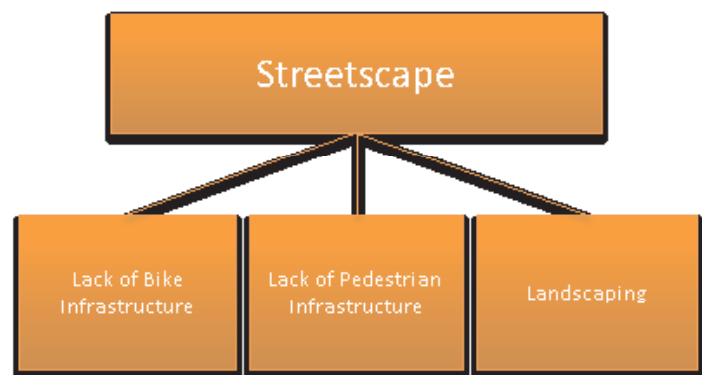
Traffic Calming

1. Speed of traffic should be abated through the narrowing of traffic lanes.
2. Curb extensions/bulb outs should be implemented at hazardous intersections to further enhance pedestrian and cyclist safety.

Safe Pedestrian Crossings

1. Hatched patterns, bright colors, and ample lighting should be used to clearly distinguish pedestrian crossings.

DESIGN GUIDELINES



Streetscape

Santa Monica Boulevard's streetscape should be improved to provide ample pedestrian and cyclist infrastructure and attractive landscaping. This strategy will ensure convenient and comfortable trips for pedestrians and cyclists.

Pedestrian Infrastructure

1. Sidewalk widths should be increased in areas with pedestrian oriented businesses.
2. Urban furniture should be placed in areas with pedestrian oriented businesses.

Cyclist Infrastructure

1. A bike lane should be provided clearly dividing motorist traffic from cyclist circulation.
2. Bike racks should be provided in areas with pedestrian oriented businesses.

Landscaping

1. Trees and shrubs should be planted to enhance Santa Monica Boulevard's aesthetics and provide shade.
2. Trash receptacles should be placed throughout the commercial district and emptied frequently to ensure cleanliness.

FIGURES

Figure 1

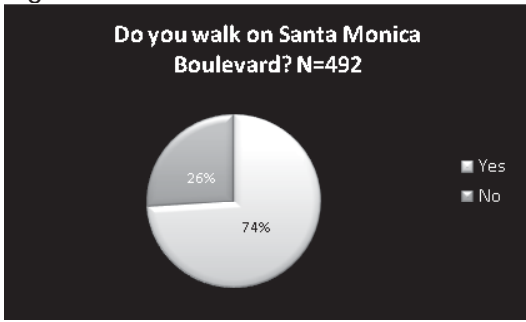


Figure 2

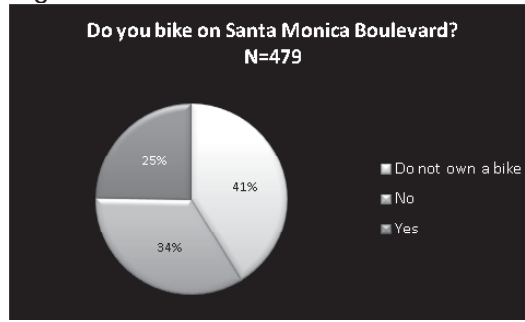


Figure 3

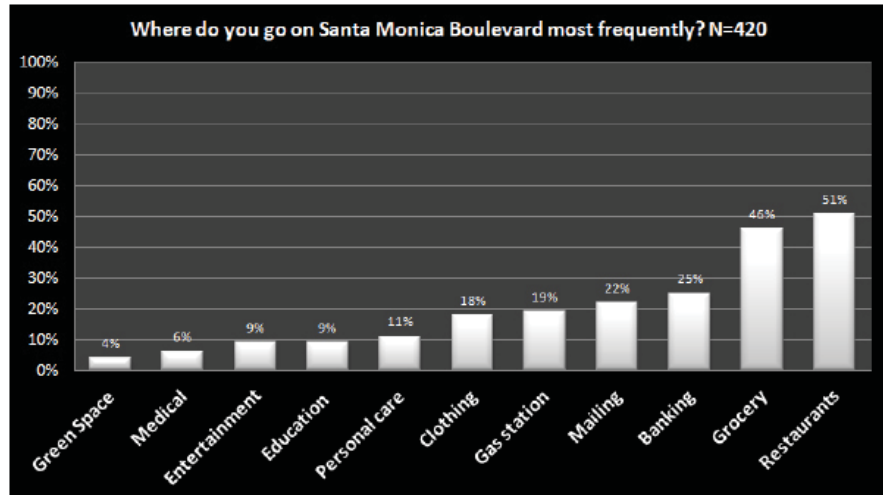


Figure 4

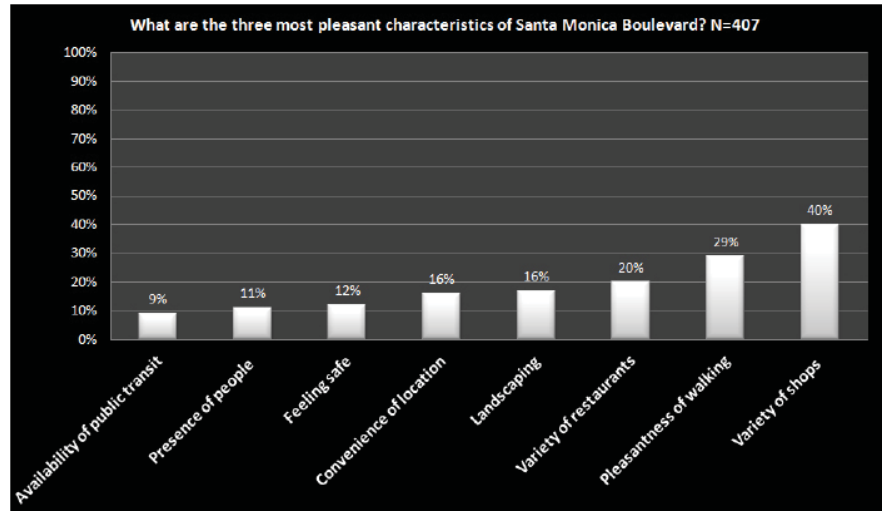
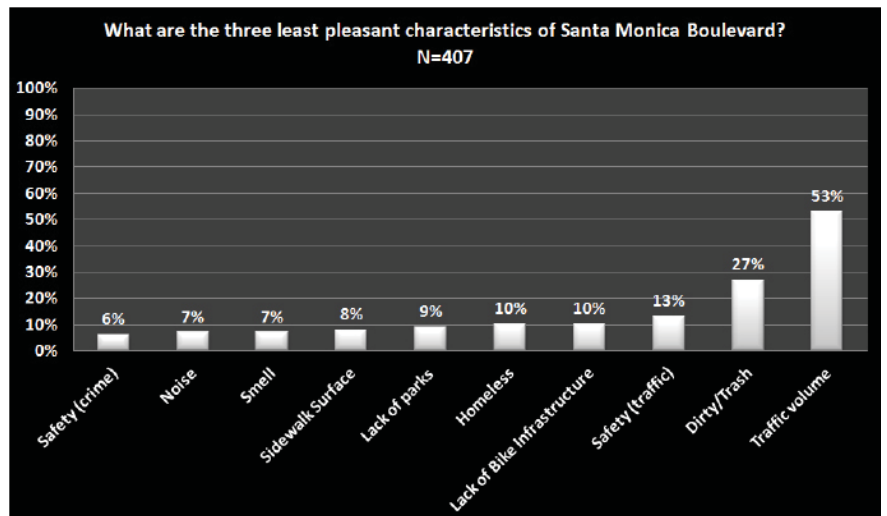


Figure 5



This study was conducted by the students of
Community Based Urban Design course (URBS 440)
in the Department of Urban Studies and Planning
at California State University, Northridge
during the Fall Semester of 2011:

Adamian, Vartan Anthony
Alvarez, Lurdes
Brown, Jason Avery
De La Cruz, David
Flores, Isacc Anthony
Kalbaklian, Christopher Koko
Kay, Kevin Michael
Linebaugh, Colin Philip
Naanos, Jason-Roger
Parke-Davis, Hakeem Rashad
Pohle, Caitlin Eve
Santisteban, Miranda Lee
Shoemaker, Larry Daniel
Skolnick, Andrew Charles
Tamayo, Jose Luis
Vasquez, Wesley A
Yesayan, Gurgen
Zeetser, David Brian
Burger, Marcela
de Oliveira, Camila Peres
Aguilar, Dorian R
Asiss, David Haim
Babaian, Alain
Baig, Asadbaig R
Barragan, Jessica Adriana
Bernhardt, Adams Joseph
Cooper, Cherokee Cachet
Galdamez Jr, Jose Angel
Hanh, Cory
Herrera, Israel DeJesus
Kidd, Kevin Wesley
Leilua, Fipe
Marin, Israel
Mooney, Matthew M
Nazary, Nareh
Pang, Wai Ying
Shahin, Amal
Tristan, Sonja Alvina
Garcia, Eduardo

Booklet prepared by:
Adams Bernhardt
John Green

Under the supervision of:
Zeynep Toker, Ph.D.
Associate Professor
Urban Studies and Planning Department
California State University, Northridge

In collaboration with:
Henrik Minassians, Ph.D.
Assistant Professor
Urban Studies and Planning Department
California State University, Northridge