



TOWARD A WALKABLE EL CAMINO REAL: AN ANALYSIS OF OPPORTUNITIES AND BARRIERS

Sara Kelly, Ryan Kincheloe, Travis Osland, and Bezan Pithawalla

Environmental Studies & Sciences, Public Health Science, Santa Clara University



INTRODUCTION

This research supports the City of Santa Clara's vision for a walkable El Camino Real (ECR). Our research focuses on the one-mile section of ECR from Lafayette Street to Scott Boulevard (Santa Clara Town Centre). We identify opportunities and barriers related to walking along the corridor, and make evidence-based recommendations to the City. We frame our analysis around a hierarchy of walking needs, shown at right (Alfonzo, 2005).

We conduct a "walk audit" and GIS analysis of ECR using established criteria from past research; and survey the public about their perceptions related to walking along ECR. We propose short- and medium-term recommendations to make ECR more environmentally sustainable, support the health of the residents in surrounding neighborhoods, and enable economic prosperity.

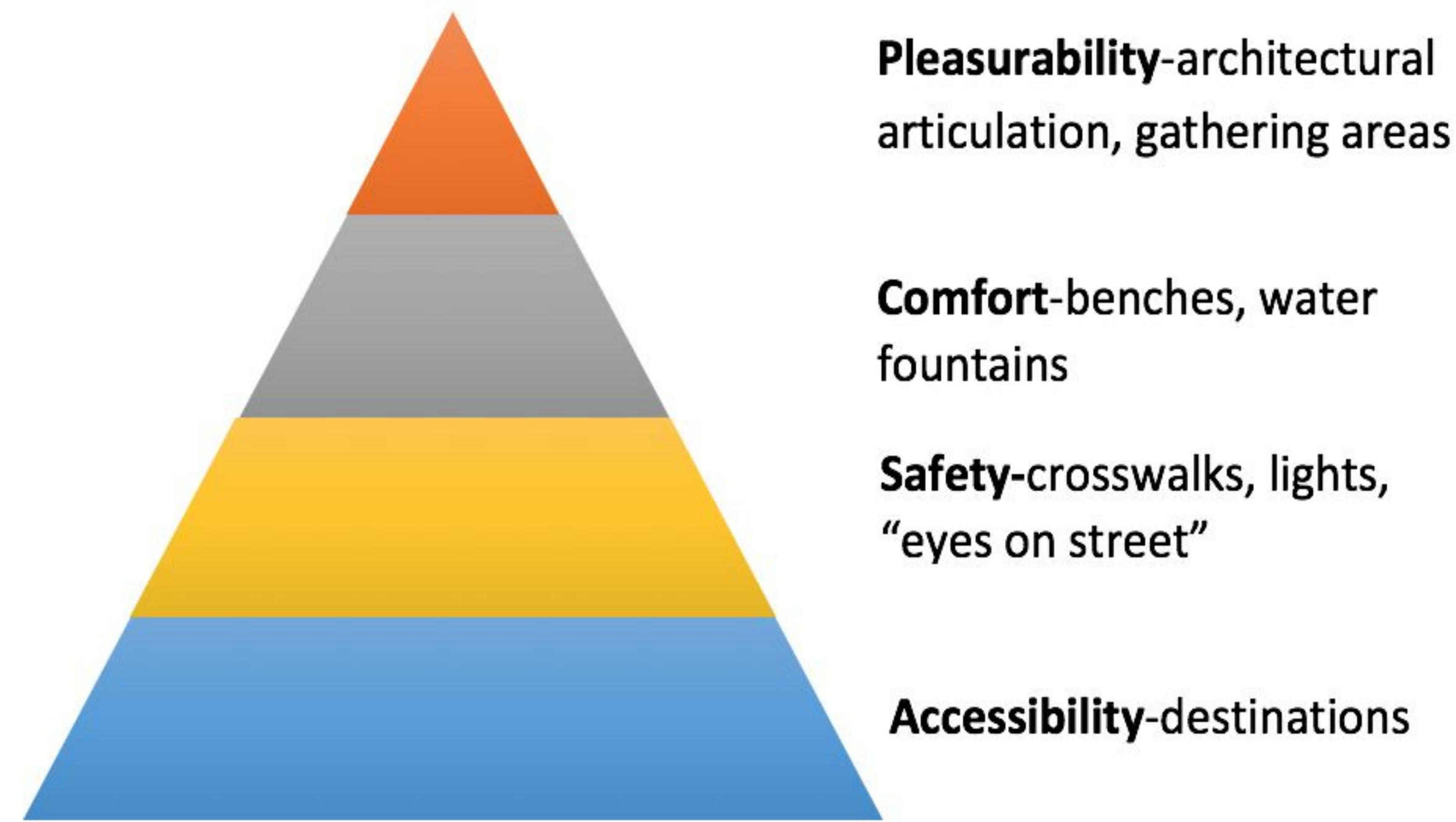


Figure 2: Walkability hierarchy and examples of key factors, adapted from Alfonzo (2005)

RESEARCH QUESTIONS

1. What are the biggest barriers to walking along El Camino Real?
2. How do residents perceive opportunities and constraints for a walkable El Camino Real?
3. How can the city improve the streetscape along El Camino Real to encourage more people to walk?

METHODS

Walk Audit: We conducted a Pedestrian Environmental Data Scan (PEDS) walk audit to collect information on street lights, abandoned buildings, speed limits, "eyes on street" (a measure of active surveillance) and other characteristics (Clifton et al., 2007). We used the walk audit to collect data on 24 blocks along ECR and four major side streets (Figure 2).



Figure 1: A (left): typical section of El Camino Real, note the width and lack of pedestrian lighting; B(right): typical sidewalk and lack of crosswalk at connection

Public Perception Survey: We surveyed members of the public about their perception of barriers and facilitators to walkability in the region, and their ideas for solutions to improve the pedestrian experience along ECR. We surveyed 9 people between Santa Clara Station and Santa Clara Town Centre.

Analysis: The data from the walk audit and survey was compiled and analyzed using the hierarchy shown in Figure 1.

ACKNOWLEDGMENTS

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FINDINGS



Figure 3: El Camino Real destinations and grocery availability

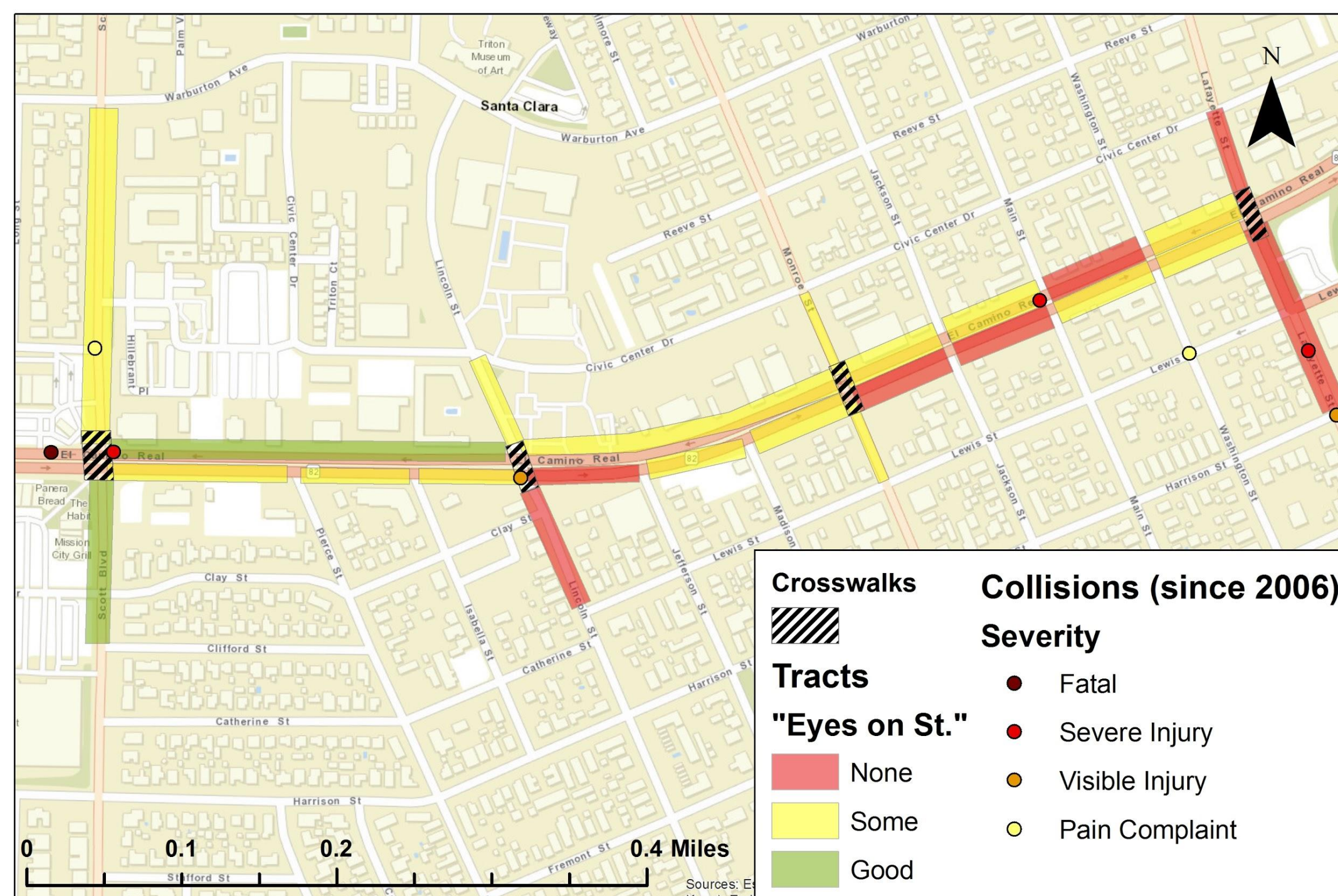


Figure 4: Key safety concerns and pedestrian injuries and fatalities

Figure 5: Largest weaknesses identified by pedestrians on ECR in public perception study

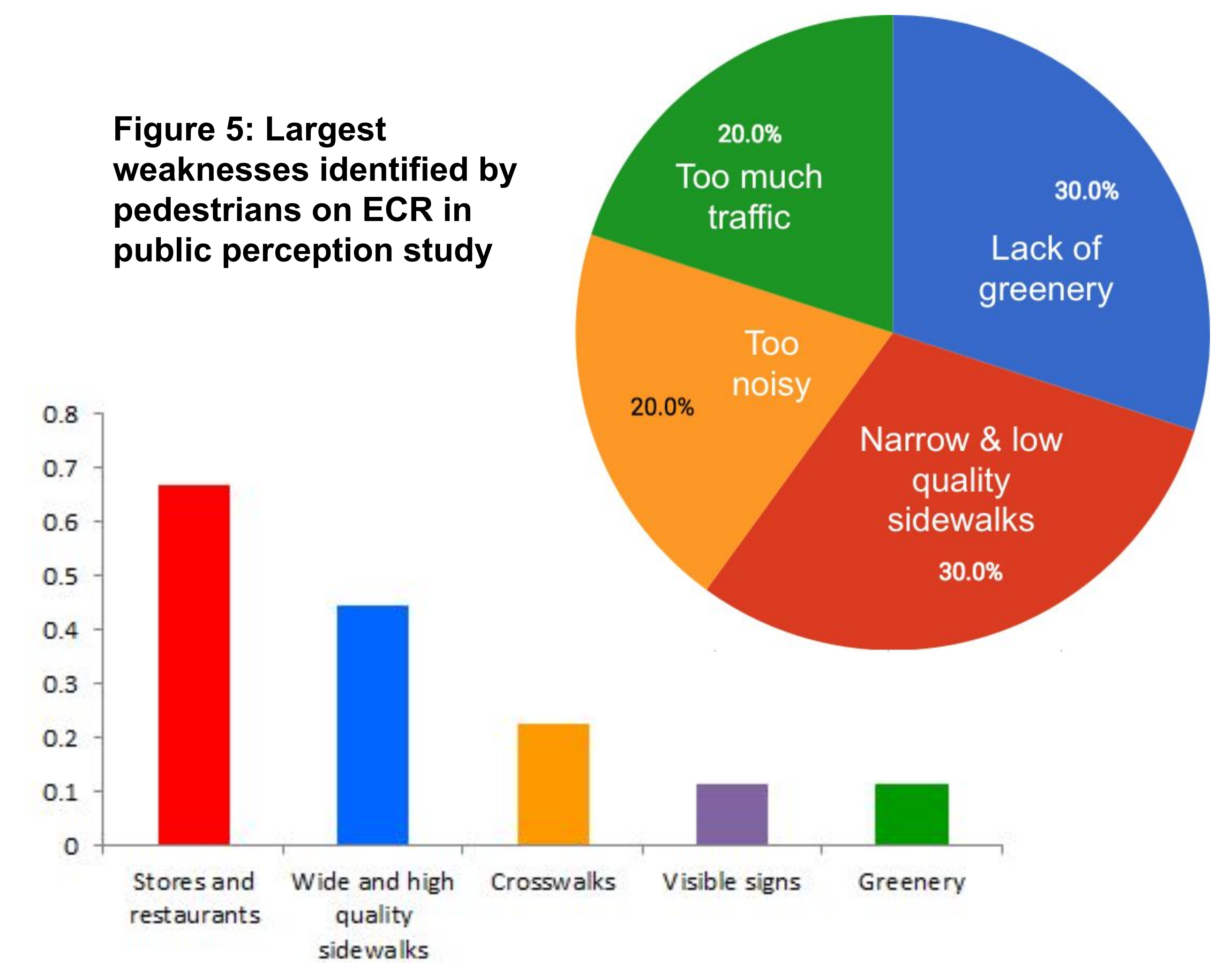


Figure 6: Primary strengths identified by pedestrians on ECR in public perception study

RECOMMENDATIONS

- The corridor would benefit from additional destinations, including a grocery store to serve the eastern part of our study area.
- There are several key opportunities to improve safety and comfort for pedestrians and cyclists:
 - Incorporate landscaped road buffers to separate pedestrians from vehicle traffic and to provide shade.
 - Eliminate both the parking lane and one traffic lane to allow for a more complete street environment
 - Add pedestrian-oriented lighting to improve safety at night.
 - Add crosswalks to increase pedestrian safety and decrease walking times.
 - Decrease speed limit to 30 mph.



Figure 7: Vision for El Camino Real

REFERENCES

Alfonzo, M. A. (2005). To walk or not to walk? The hierarchy of walking needs. *Environment and Behavior*, 37(6), 808-836.

Clifton, K. J., Smith, A. D. L., & Rodriguez, D. (2007). The development and testing of an audit for the pedestrian environment. *Landscape and Urban Planning*, 80(1-2), 95-110.