

COMPLETE STREETS IMPLEMENTATION IN BOYLE HEIGHTS

Evaluating the Built Environment of Boyle Eights through an Equity Lens

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INTRODUCTION

Boyle Heights, one of Los Angeles’ oldest and most culturally vibrant neighborhoods, faces persistent transportation inequities that affect the daily mobility, and safety of its residents. Despite being a transit dependent community with strong pedestrian activity, the neighborhood has long experienced deteriorating sidewalks, faded or missing crosswalks, limited protected bicycle infrastructure, poor public infrastructure, and frequent pedestrian and car accidents. **These conditions create unsafe environments for individuals who rely on walking, biking, and public transit as their primary modes of transportation.**

Existing academic research frequently emphasizes quantitative outcomes, such as collisions rates or traffic volumes, while overlooking nonquantitative indicators that are essential for understanding the full impact of street design. **Consequently, policies that appear effective on paper may fail to address the lived realities of the communities they are meant to serve.** Allowing community members to settle down to live their day to day under these conditions.

Mobility patterns further illustrate the neighborhood’s transportation dynamics: residents experience an average commute time of 44 minutes, with the majority (85%) relying on personal vehicles. A smaller share of residents walk (4.6%), while the remainder depend on public transit or other modes such as cycling.

This study synthesizes the literature on **evaluation techniques, safety and livability, policy implementation, the ”completeness”, and political and cultural contexts of a Complete Street implementation.** When taken as a whole, they offer a fair assessment of the different aspects of street design. Patterns from fully implemented versus partial projects are then applied to Boyle Heights to develop hypothetical Complete Streets scenarios and community-centered recommendations that prioritize equity, safety, and contextual appropriateness.

KEY FINDINGS

Case Study: Santa Monica Complete Streets Model

The City of Santa Monica serves as an example of how a concerted, citywide effort to implement Complete Streets can result in quantifiable increases in accessibility and safety. The city has introduced protected bicycle lanes, improved pedestrian crossings, transit priority treatments, and roadway design modifications that lower car speeds by rearranging important corridors. One of the most cited examples is the reconfiguration of Ocean Boulevard, where the introduction of bicycle lanes, a center turn lane, and reallocated roadway space resulted in a 65% reduction in total crashes and a 60% reduction in injury collisions within the first year of implementation.

Themes in Literature Review Analysis:

1. Evaluation Methods in Complete Streets

A consistent theme in the literature is the difficulty of determining whether streets are truly “complete” in practice, as there are often gaps between policy goals and actual street conditions. Many of these approaches focus primarily on technical and transportation metrics while overlooking equity, cultural context, and residents’ lived experiences.

2. Safety and Livability Outcomes

Safety and livability are widely recognized as key goals of Complete Streets projects, though research shows that outcomes can vary depending on how fully improvements are implemented and the surrounding community context. Studies suggest that multimodal street designs can reduce collisions and improve mobility, but residents’ perceptions of safety such as concerns about speeding traffic, poor lighting, or unsafe driver behavior often continue to shape whether people feel comfortable walking or biking.

3. Policy Implementation and Established Barriers

A recurring issue in the literature is the disconnect between adopting Complete Streets policies and fully implementing them in practice. Research shows that many cities introduce these policies symbolically, while funding constraints, inconsistent political support, and limited accountability often lead to incomplete or uneven projects.

4. Economic Impacts and Local Business Considerations

Economic impacts are another important focus of Complete Streets research, with studies showing that multimodal street improvements can support local businesses, increase retail activity, and enhance neighborhood vitality. However, the literature also emphasizes that these benefits are not guaranteed, as poorly planned or incomplete projects may disrupt business access and contribute to displacement pressures.

5. Political and Institutional Dimensions

The literature consistently shows that the success of Complete Streets projects depends heavily on local political and institutional conditions. Although federal and regional frameworks encourage multimodal transportation improvements, implementation is often slowed or weakened by funding limitations, bureaucratic delays, fragmented agency coordination, and competing governmental priorities.

Collision Reports in Focus Area:

Pedestrian: Under California traffic law, pedestrians have the right of way at both marked and unmarked crosswalks, requiring drivers to yield in these situations. The primary contributing factors were motorist failure to yield to pedestrians at crosswalks (28.9%) and pedestrian failure to yield to vehicles when crossing outside of designated crossings (15.8%).

Bicycle: Temporal patterns indicate that bicycle collisions occurred most frequently on weekdays, particularly on Wednesdays and Fridays, and during the afternoon and evening hours between 12:00 p.m. and 9:00 p.m. These trends likely correspond with school dismissal times and peak commuting periods. The leading contributing factors were failure to ride or drive on the correct side of the roadway (16.7%) and failure to yield the right of way during left turns or U-turns (16.7%).

Vehicle Crash Mortality: In East Los Angeles, motor vehicle collisions involving pedestrians account for approximately 41% of all traffic incidents, compared to 21% countywide, indicating a significantly higher level of risk for pedestrians in this area.

METHODOLOGY

This study uses a data driven, comparative, and geographical research strategy. To analyze Complete Streets’ success, the methodology combines a review of the literature, a case study analysis, and a quantitative evaluation based on geographic information systems. The qualitative component entails a thorough literature analysis of verified Complete Streets implementations in nearby or demographically comparable towns, as opposed to primary interviews or surveys. In order to determine design elements, implementation tactics, and quantifiable safety results, these case studies are examined.

Unit of Analysis: The focus area is the intersection of Cesar Chavez Avenue and Soto Street in Boyle Heights, a significant transit route with a high pedestrian volume and a history of traffic safety issues. Soto Street and Cesar Chavez Avenue are both included in the High Injury Network, which denotes a concentration of serious and deadly traffic accidents affecting vulnerable road users.

The intersection experiences significant multimodal traffic due to **its role as a major east to west and north to south connection within the neighborhood.** High amounts of pedestrian traffic are also a result of the numerous bus stops along Soto Street and Cesar Chavez Avenue. This intersection offers a pertinent case study location for assessing current infrastructure conditions and investigating possible Complete Streets interventions targeted at enhancing safety and accessibility because of its combination of high pedestrian demand, transit access, and documented safety risks.

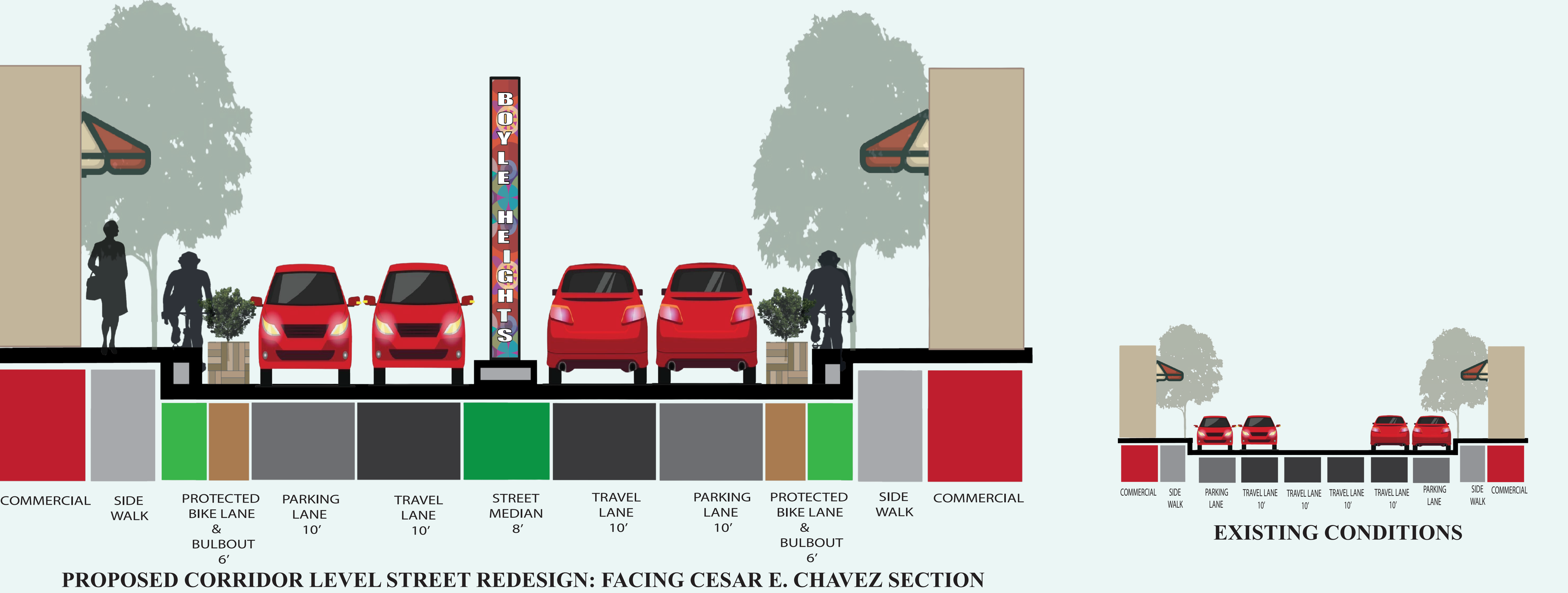
Research Question: In what ways can Complete Streets initiatives improve safety, accessibility, and equity outcomes for residents in Boyle Heights? Can it be successful?

RECOMMENDATIONS

Drawing from the literature review, empirical findings, and the comparative framework with Santa Monica, this study proposes a set of targeted, equity-centered Complete Streets recommendations for the Cesar Chavez Avenue and Soto Street corridor in Boyle Heights. These recommendations prioritize safety, multimodal accessibility, and community context while remaining feasible within existing planning efforts and funding structures.

1.0. Corridor Level Street Redesign

Transition from isolated improvements to a continuous corridor level Complete Streets design along Cesar Chavez Avenue and Soto Street: Implement protected bicycle lanes, not painted lanes but physically separate cyclists from traffic using barriers like planters. Expand and standardize pedestrian bulb-outs (curb extensions) at all major intersections. Introduce road diets where feasible to reduce lane widths and calm traffic speeds and ensure continuous ADA compliant sidewalks without gaps or obstructions. Findings show that collisions are concentrated along high volume corridors, particularly Soto Street. Literature emphasizes that partial implementations are less effective, while Santa Monica’s suc-



2.0. Intersection Focused Safety Enhancements

Prioritize high injury intersections, particularly Cesar Chavez & Soto, for intensive safety upgrades.

- Install high visibility continental crosswalks on all legs
- Add leading pedestrian intervals (LPIs) at traffic signals
- Expand lighting pedestrian scale and street lighting for night time visibility
- Implement raised crosswalks or speed tables where appropriate
- Add protected turn phases or restrict high risk turning movements

3.0. Phased Implementation Strategy

Phase 1 (Short-Term):

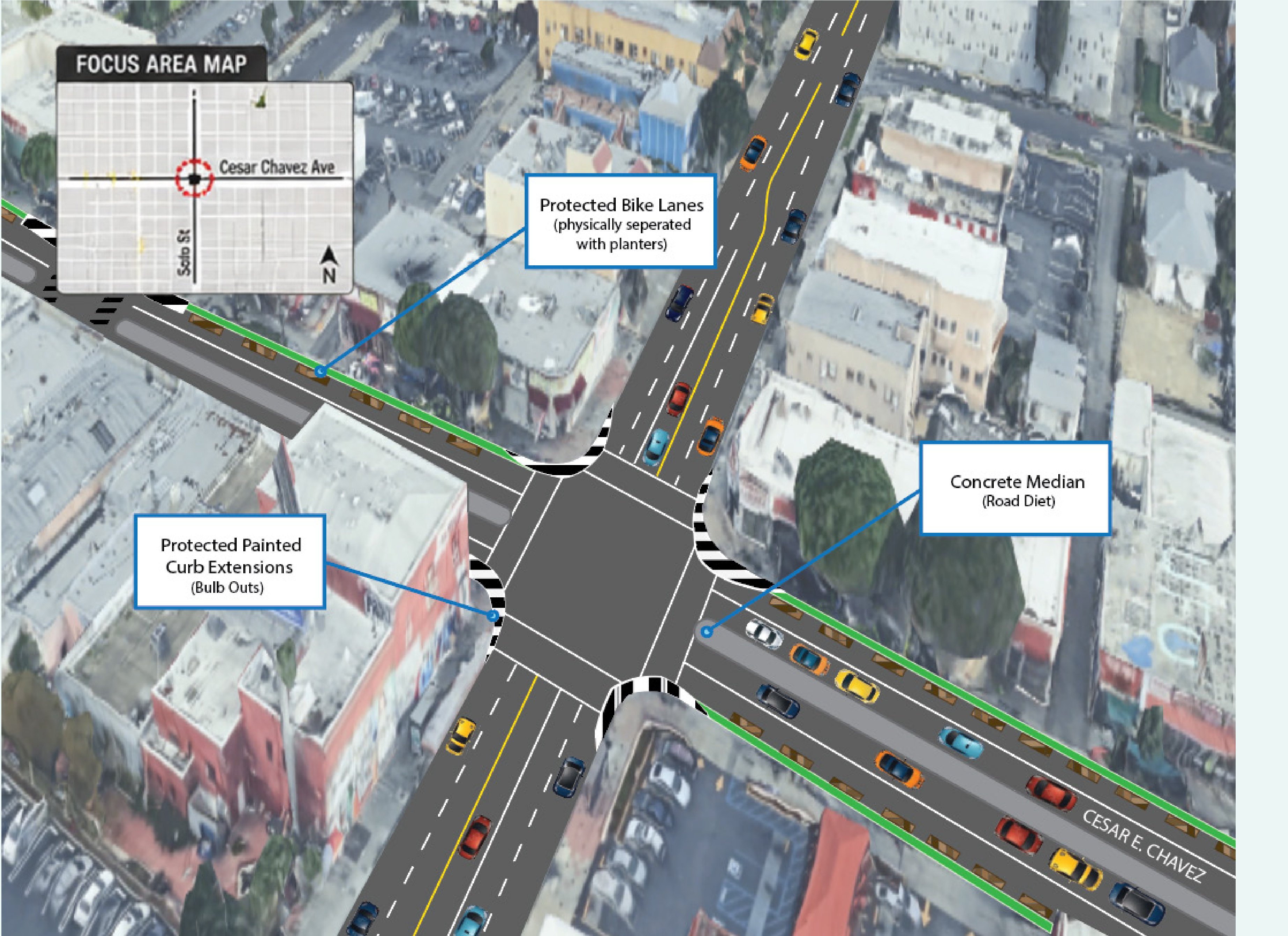
- Crosswalk repainting, signage, lighting upgrades
- Bus stop shelters installation
- Tactical urbanism (temporary curb extensions, paint treatments)

Phase 2 (Mid-Term):

- Permanent bulb-outs, protected bike lanes, signal upgrades
- Sidewalk reconstruction and ADA improvements

Phase 3 (Long-Term):

- Full corridor redesign with lane reconfiguration and transit priority treatments.



BOYLE HEIGHTS COMPLETE STREETS VISION
CESAR E. CHAVEZ AVE AND SOTO ST. INTERSECTION