

Highways to Main Streets through a Community Health Lens



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Street scene rendering above from
Niagara Region Complete Streets
Plan. Courtesy Urban Strategies, Inc.

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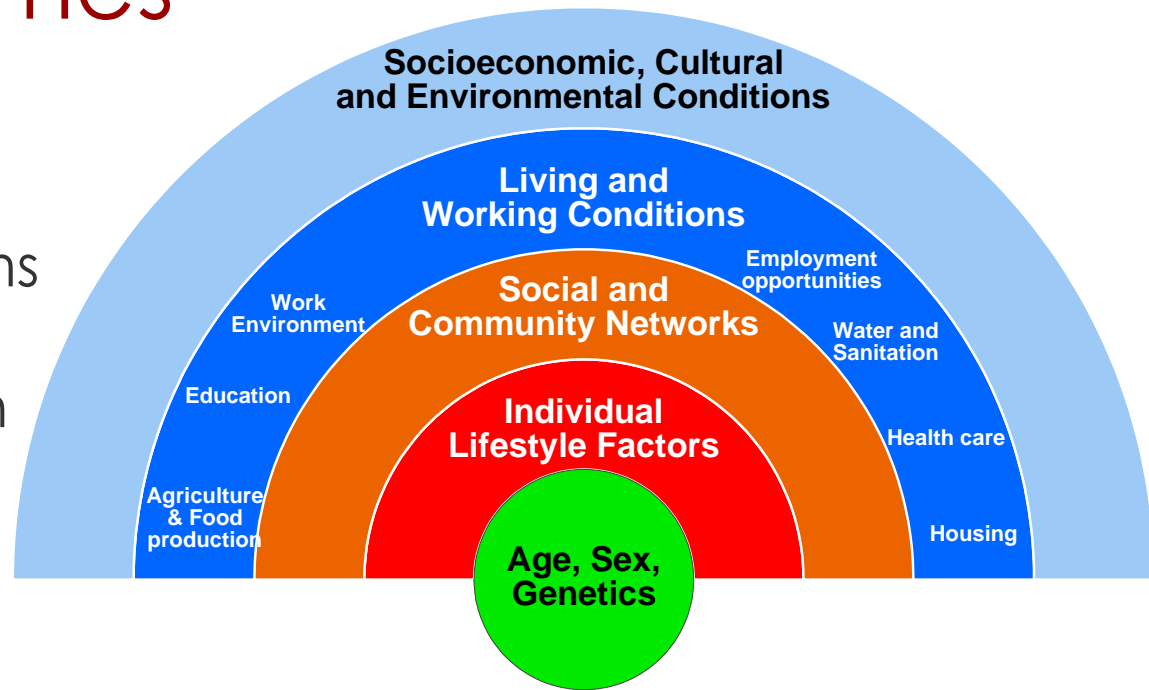
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Project Aims

1. Identify and catalog tools and metrics that capture the multiple ways through which street design and uses can affect community health and well-being.
2. Assess opportunities for improving community health and well-being through conversion of surface-level highway segments to community main streets.
3. Demonstrate ways of integrating expert-based “top-down” assessments with “bottom-up” community engagement to more fully understand opportunities and potential obstacles to changing streets and adjacent land-uses to better benefit community health and well-being.

Common Themes

1. Transportation systems and land-use have substantial effects on community health (both positive and negative)



2. Both expert-based knowledge and “local knowledge” offer important insights into what works, what doesn’t and what can be done to improve current conditions.
3. A street is more than just a street.

Project Impetus

1. An increasing recognition in public health that improving the public's health requires joint efforts of many sectors.
2. Environmental advocates and community and transportation planners recognizing impacts of auto-centric planning, including metrics such as automobile level-of-service. ([OPR Guidelines implementing SB 743, Steinberg, 2013](#))
3. Public wanting more holistic and efficient approach to planning.

Continuum of Corridor Improvement

Conventional Surface Street Highway



Buford Highway in DeKalb County, GA. Courtesy Michael Gamble, Georgia Tech Univ.



[Rosemead Blvd](#) in Temple City, CA. Courtesy LADOTbikeblog

“Community Main Street”

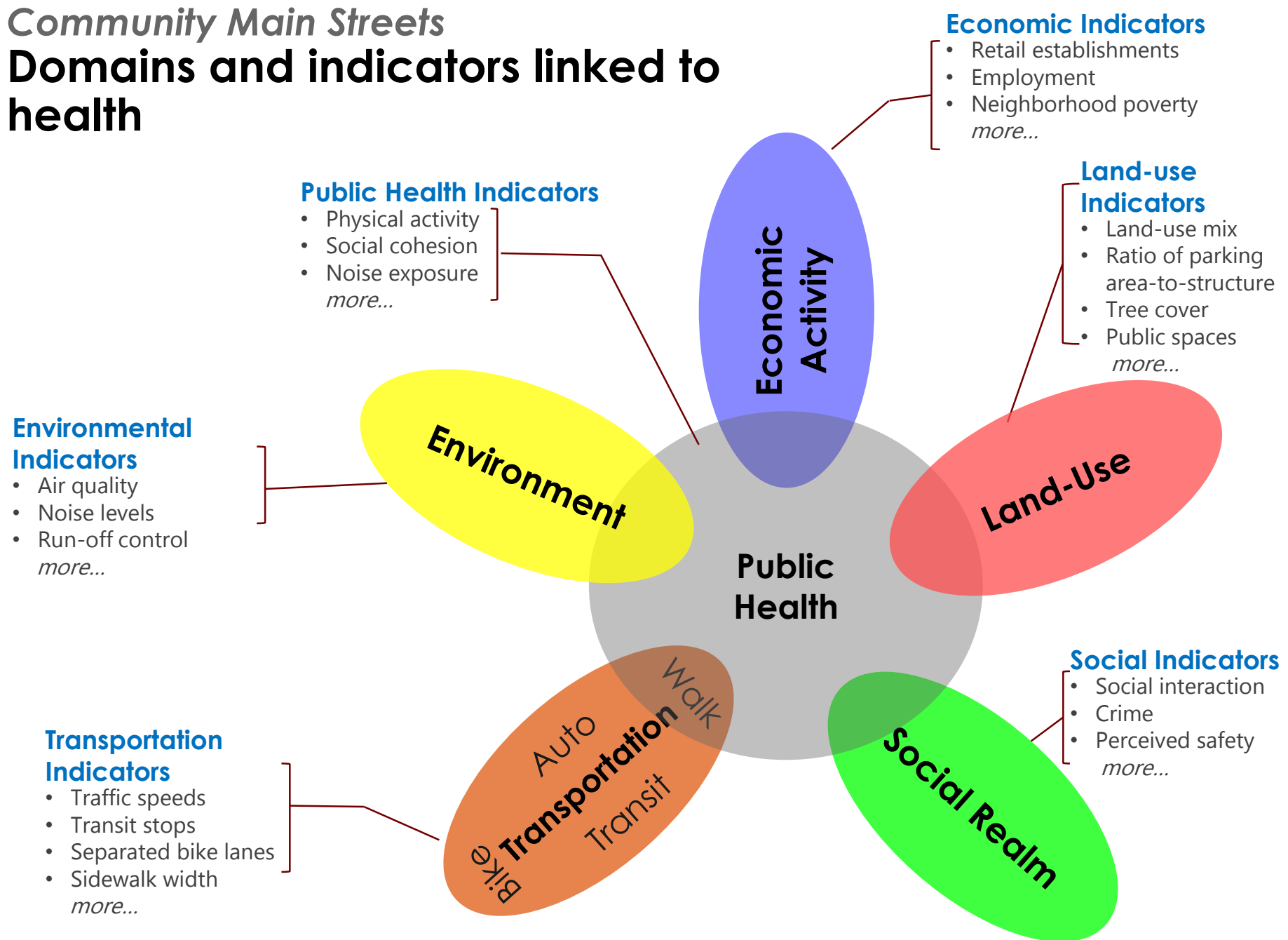


Rendering for [Niagara Region \(Canada\) Complete Streets Plan](#). Courtesy Urban Strategies, Inc.

Road Design:	Auto-centric, focused on maximizing vehicle flow. “Bigger is better”	Roadway configuration rationalized for consistency with traffic volume. Some multi-modal improvements.	Safety features and road diets facilitate safe multi-modal travel.
Walk/bike infrastructure	None	Wider sidewalks, bikeways. Signals, fewer lanes and medians facilitate safe street crossing.	Best practices of complete streets design principles make walking and biking attractive, enjoyable and safe for all ages.
Landscaping	None	Landscaping of medians and parkways adds visual appeal and permeable surface.	Extensive landscaping provides visual appeal, shade for pedestrians and environmental services
Land-use/Community	Roadway divides community. Emphasis on maximizing traffic flow through the community compromises other locally beneficial land-uses.		Economically vibrant retail mixed with affordable housing serves community needs, reduces vehicle trips, provides walkable/bikeable destinations, contributes to community cohesion and well-being.

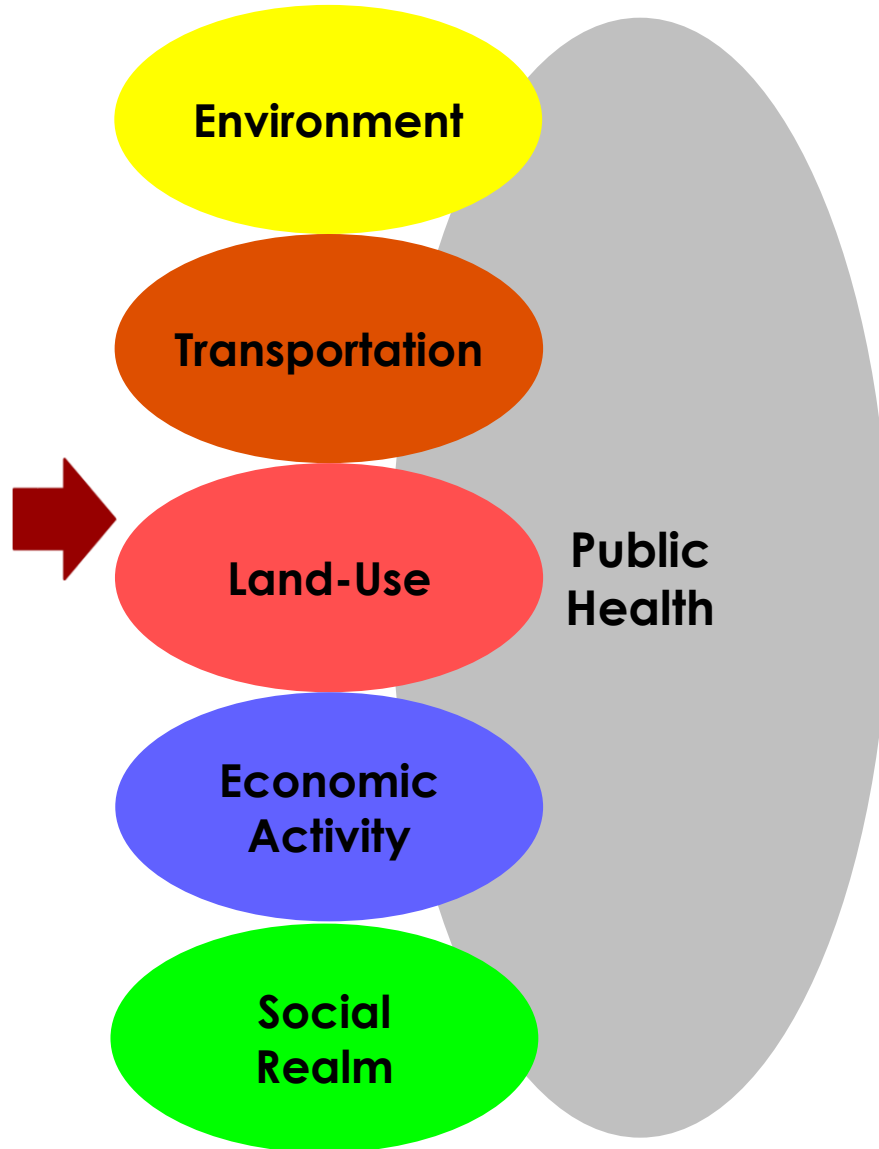
Community Main Streets

Domains and indicators linked to health



Tools and Indicators

Compendium of 30 tools
to assess health-related
characteristics of streets
+ cross-indexing of
indicators



Streets

Street-Adjacent

Neighborhood

Example of Highway-to-Main Street Conversion

Rosemead (SR 19) x Broadway (Temple City, CA)



Example of Arterial-to-Main Street Conversion

Firestone & Downey Blvds (Downey, CA)



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Australian Pedestrian LOS (AUST)		
Source	Main Roads Western Australia	Domains
		Primary Transportation
		Also Land Use Social Realm
Indicators	Physical	Location
	<ul style="list-style-type: none"> • Path width • Surface quality • Obstructions • Crossing opportunities • Support facilities 	<ul style="list-style-type: none"> • Connectivity • Path environment • Potential for vehicle conflict
		User
		<ul style="list-style-type: none"> • Pedestrian volume • Mix of path users • Personal security
Ease of Use:	Low to moderate level of technical knowledge	

Using Indicators: Report Card

Street Segment Report Card: Lakewood Blvd (CA-19), Bellflower, CA (Current Conditions)

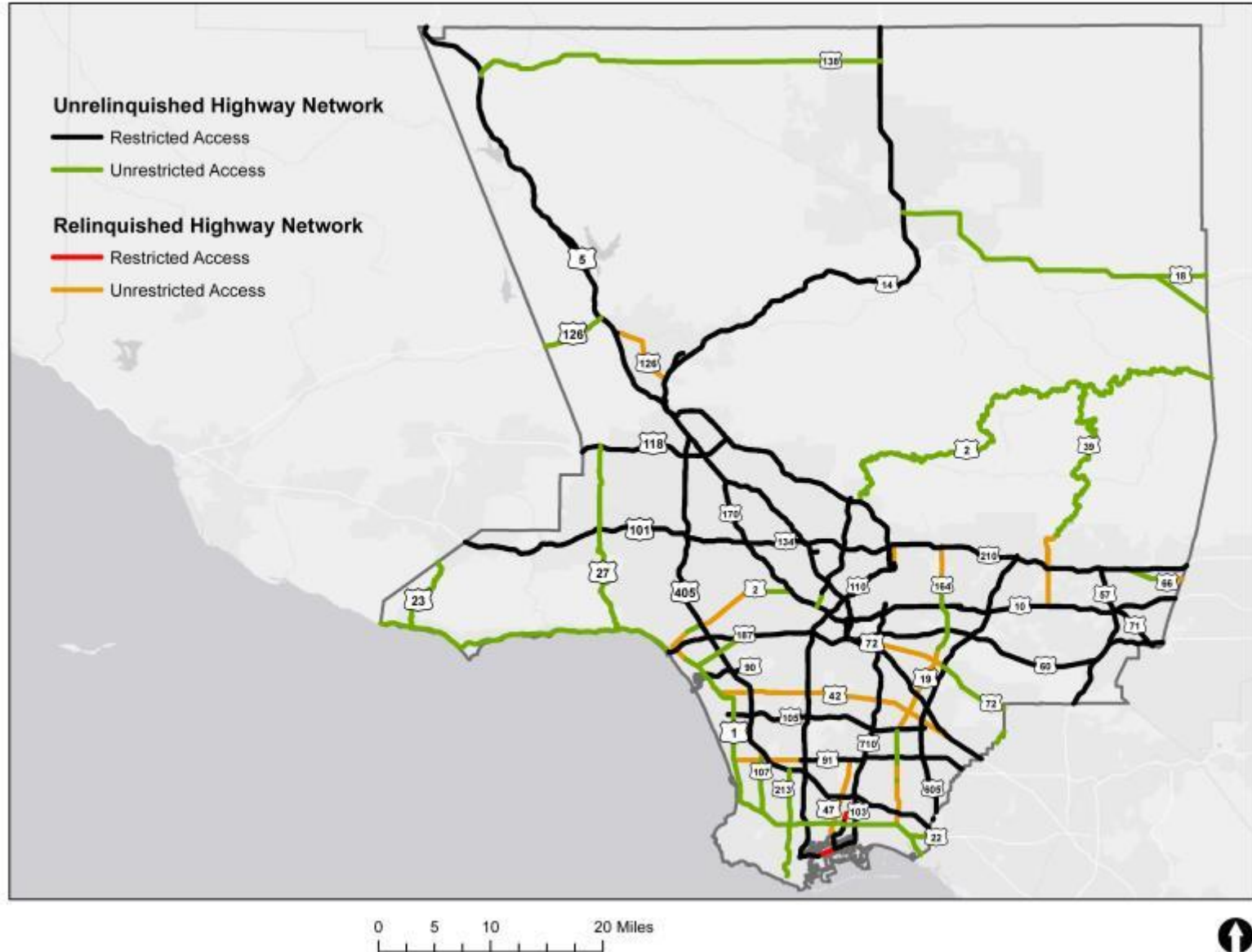
DOMAIN		INDICATORS	GOAL(S)	STRENGTHS	WEAKNESSES	COMMUNITY PERCEPTIONS	RATING ★✓NI
Transportation	Motor Vehicle	Lanes Volume (auto + truck) Speed LOS	Traffic flow Traffic safety	Generally unimpeded flow Minimal congestion			✓
	Transit	Bus stops/mile Bus frequency Transit intersections	Connectivity				✓
	Walk	Sidewalk width Signaled crosswalks/mile Ped-LOS Strip-mall parking	Safety		Narrow sidewalks Long blocks w/o mid-block crossing		NI
	Bike	Separated bike lane Protected bike lane Bike lane continuity	Safety Connectivity		No bike lanes		NI
Environment							
Economic Activity							
Land-Use							

Using Indicators: Community Engagement

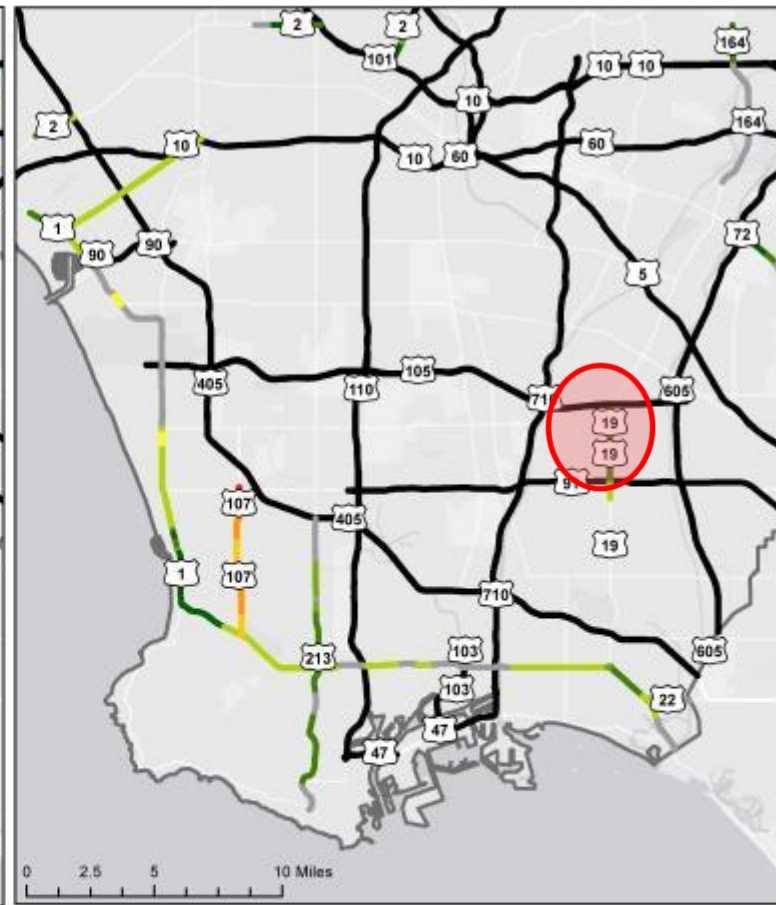
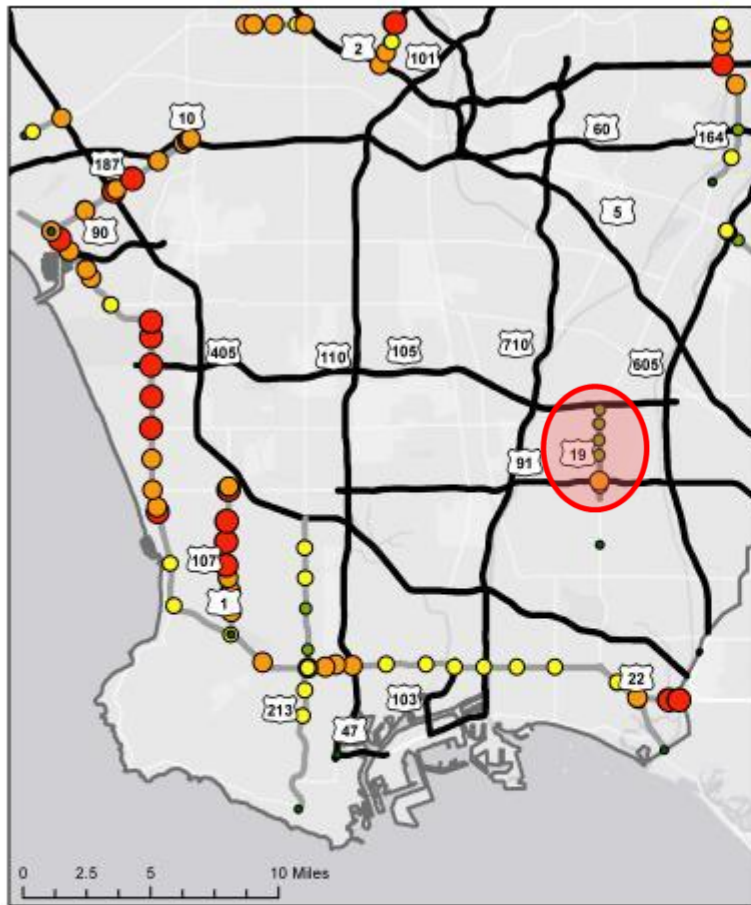
1. Identify problem areas for assessment
2. Put forth the community's vision for its future
3. Identify steps towards realizing that future
4. Prioritize indicators
5. Reflect, react to and weigh objective ratings



Candidate Sites: Unrelinquished surface street state highways (L.A. County)



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Back AADT

- 0 - 5,400
- 5,401 - 28,000
- 28,001 - 43,000
- 43,001 - 60,000
- 60,001 - 230,000

Access Type, Land Use

- Restricted, Freeway
- Unrestricted, All Land Uses

Lanes

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Access Type, Land Use

- Restricted, Freeway
- Unrestricted, Industrial/Vacant

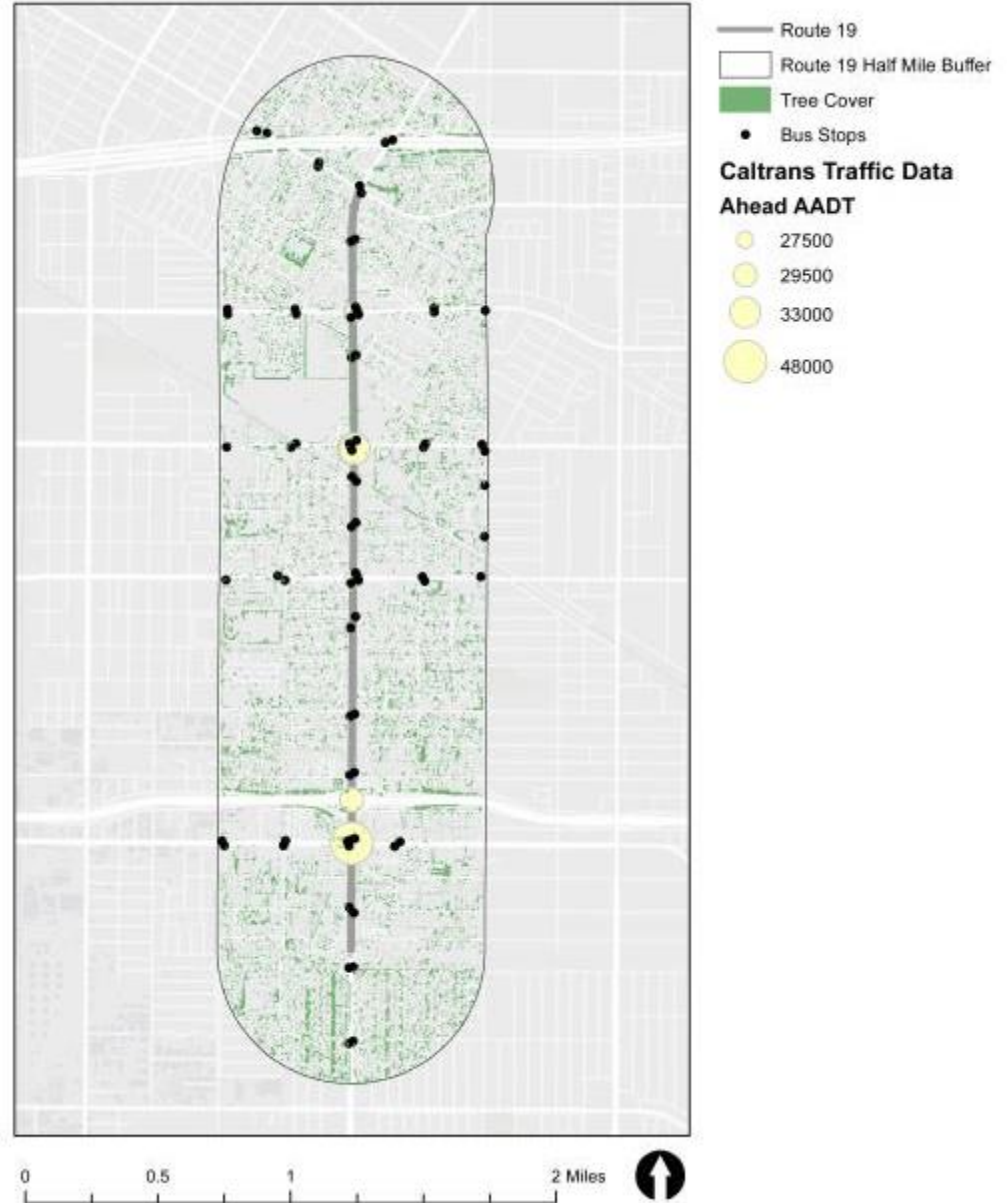


Case-Study Site: Unrelinquished CA-19 (Bellflower & Paramount, CA)



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Traffic counts, bus stops, tree cover



Case-Study Site: CA-19 (Bellflower & Paramount, CA)

Traffic Safety

Draft Map: Transportation Indicators (Safety)

Pedestrian Collisions (2009-2013) - 95

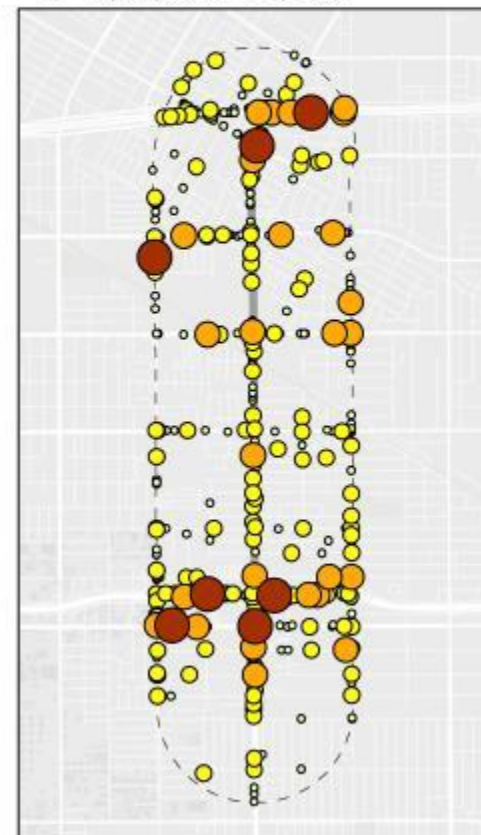
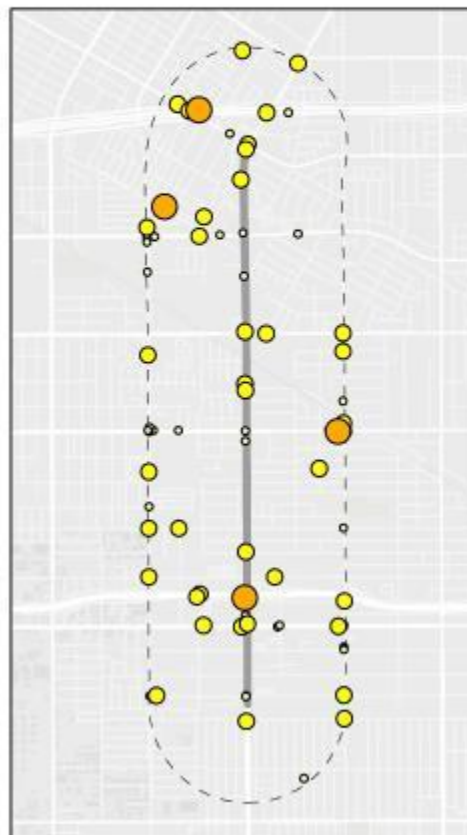
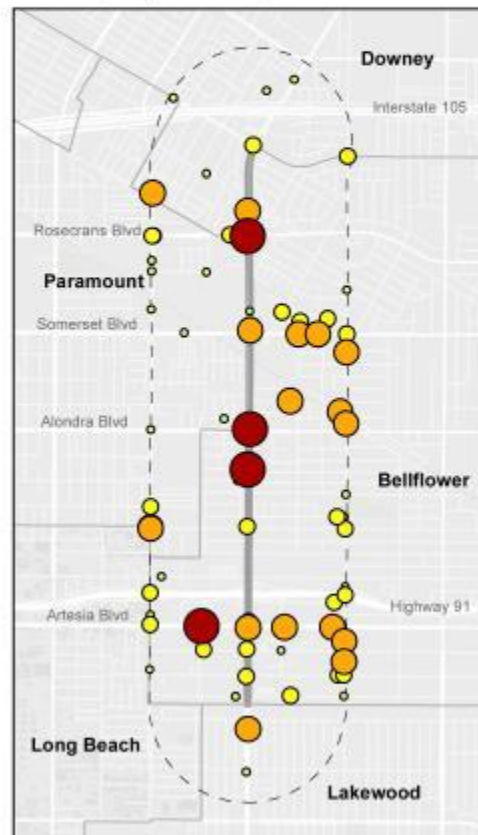
- 1 (Fatal) - 4
- 2 (Severe Injury) - 18
- 3 (Visible Injury) - 29
- 4 (Complaint of Pain) - 44

Bicycle Collisions (2009-2013) - 89

- 2 (Severe Injury) - 4
- 3 (Visible Injury) - 39
- 4 (Complaint of Pain) - 46

All other collisions (2009-2013) - 880

- 1 (Fatal) - 7
- 2 (Severe Injury) - 31
- 3 (Visible Injury) - 186
- 4 (Complaint of Pain) - 656



Route 19 (Lakewood Blvd)

Route 19 Buffer (0.5 Mile)

City Boundaries

Case-Study Site: CA-19 (Bellflower & Paramount, CA)

Stakeholder Engagement

- **City agencies**
- **Community groups**
- **Elected Officials**
- **Local Businesses**

How this street can support your vision for a healthy community



Feedback on objective measures of existing data



Collecting data important to your group



Presenting data to city decision-makers

Toolbox Availability

Expected availability July 2016

- Tools and indicators
- Data sources
- Case-study maps and report card



<http://www.ph.ucla.edu/hs/health-impact/methodology.htm>
(new, simpler URL TBA)