



Womb to Improve: Assessing Needs for a Healthier Lifestyle During Pregnancy



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Introduction

Healthy lifestyle behaviors during pregnancy strongly influence maternal and neonatal outcomes including fetal development, gestational diabetes, pre-eclampsia, and preterm birth. The UCSD/SDSU General Preventive Medicine Residency (PMR) program partnered with Linda Vista Healthcare Center San Diego Family Care, a Federally Qualified Health Center (FQHC) to identify patients' understandings, barriers, and needs to meet the recommendations for healthy lifestyle behaviors during pregnancy.

Purpose

The purpose of the social and educational assessment is to identify the predisposing and reinforcing factors leading to an unhealthy lifestyle in women of childbearing age.

Methods

The needs assessment followed the PRECEDE-PROCEED model and used a mixed-methods design combining qualitative social and educational assessments of FQHC stakeholders with quantitative assessments of walkability and the local environment.

PMR residents and students conducted interviews with prenatal patients in English and Spanish and the FQHC Medical Director, as well as focus groups with clinicians and clinic staff. Transcripts underwent open and axial coding by three reviewers identifying common themes regarding barriers to maternal healthy lifestyle behaviors. Analysis concluded with selective coding when a single core category that represents the transcript data was agreed upon.

PMR residents also partnered with Urban Design for Health and conducted an environmental survey of the clinic's catchment area. Residents surveyed twenty routes surrounding the Linda Vista Clinic assessing walkability, safety, and available amenities mimicking a patient walking to the clinic or a nearby point of interest. Two surveyors completed each route and differences in responses were considered for data accuracy.

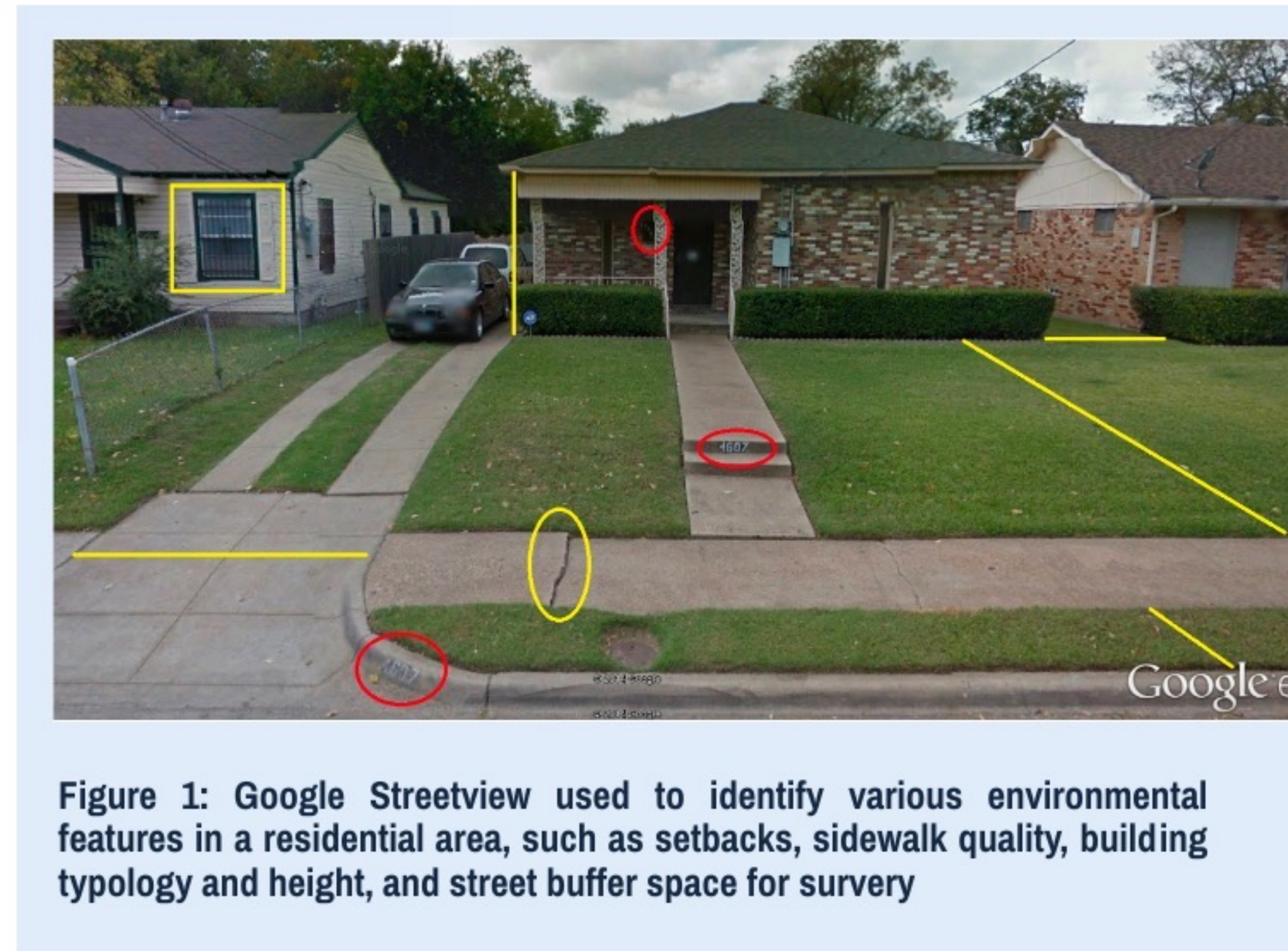


Figure 1: Google Streetview used to identify various environmental features in a residential area, such as setbacks, sidewalk quality, building typology and height, and street buffer space for survey

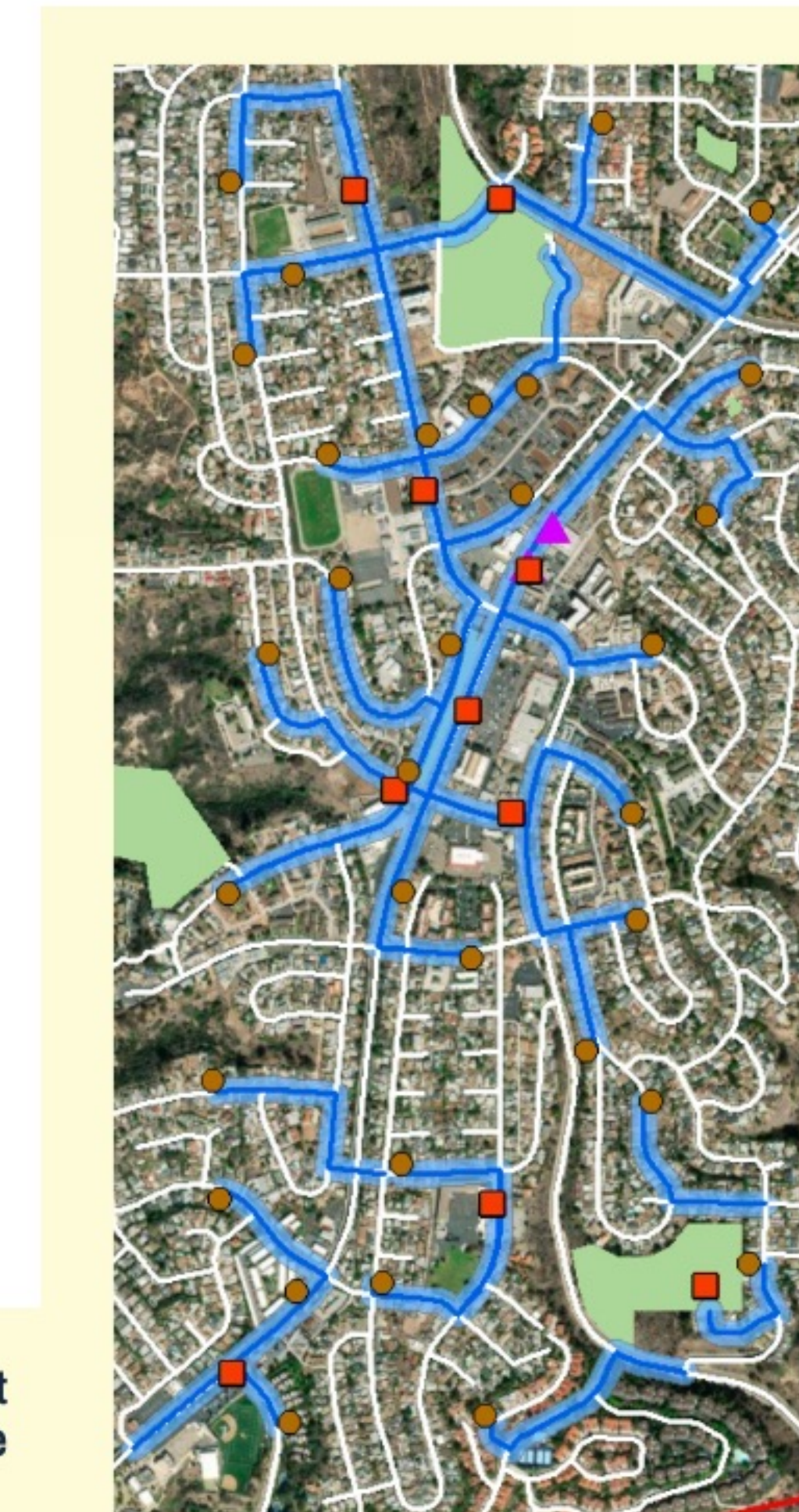
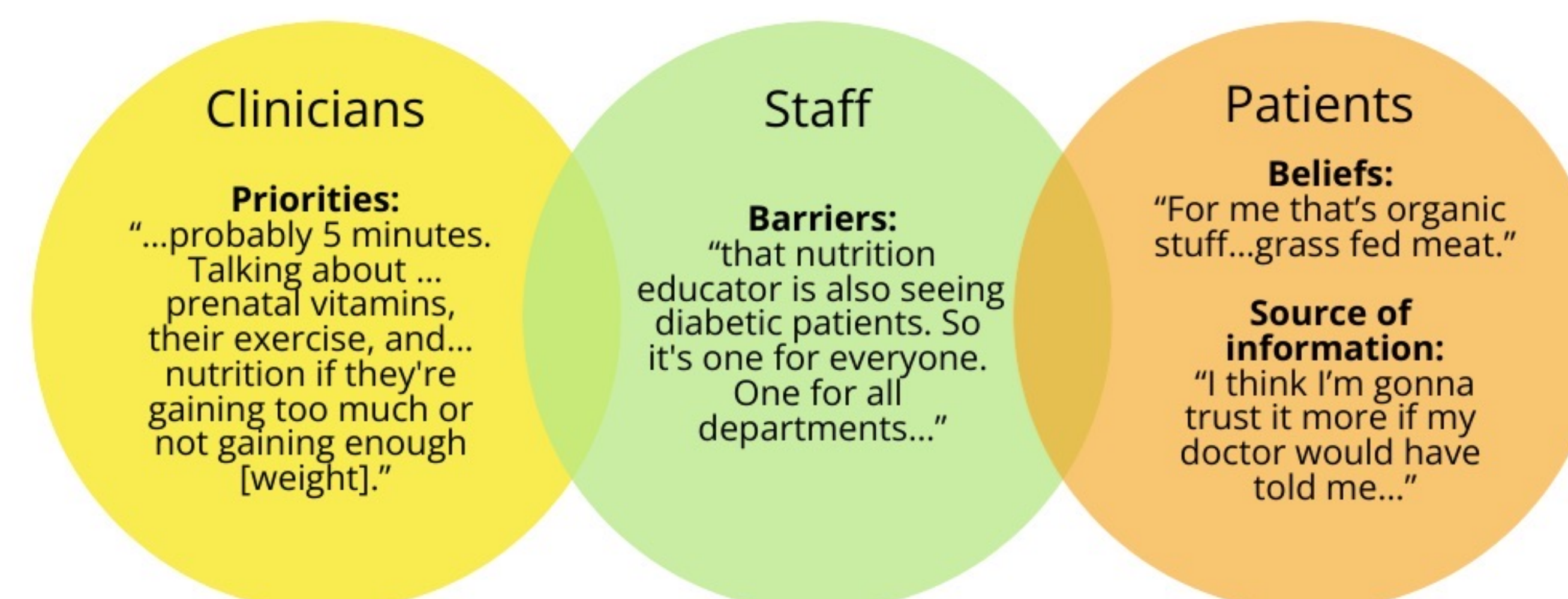


Figure 2: Map showing the Linda Vista routes (blue line) from participant residential addresses (brown dots) to destinations (red squares) with the Linda Vista Health Center denoted (purple triangle).

Results

Findings emphasized that improved nutrition resources during pregnancy are needed, but solutions differed between patients and staff. Clinic staff and leadership were interested in more workers to provide education, while patients requested more information directly from providers.



Qualitative Results Summary		
Challenges to Educating About/Adopting a Healthy Lifestyle	Patient	Finances, anxiety, work-life Difficulty in signing up for certain benefits or programs Lack of Knowledge (especially in first pregnancy)
	Provider/Staff	Income Patient mindset and cultural barriers Limited Staffing, Bandwidth and Time
	Forward Looking Ideas of Lifestyle Education	Patient
	Provider/Staff	Increased Staff: Health educator, social worker, home health workers Use of Incentives: Providing healthy food, free childcare, reward systems Variety of Education Modalities: visuals, waiting room TV programs, support groups, age, and culturally accessible materials

The ecological assessment revealed most routes had characteristics discouraging outdoor physical activity. It further showed lack of immediate access to supermarkets, but readily available public transit stops.

Quantitative Results Summary		
Microscale Characteristics	Routes	70% with graffiti
		90% with excess litter
	Segments	75% Pleasant Hardscape
		95% Pleasant Softscape
		8.5% with tree coverage
Crossings	100% with sidewalks	
	52% marked	
Food Access		No curb extensions or raised crosswalks
		Single supermarket, surplus fast food
		Average distance to transit stop: 0.29 miles

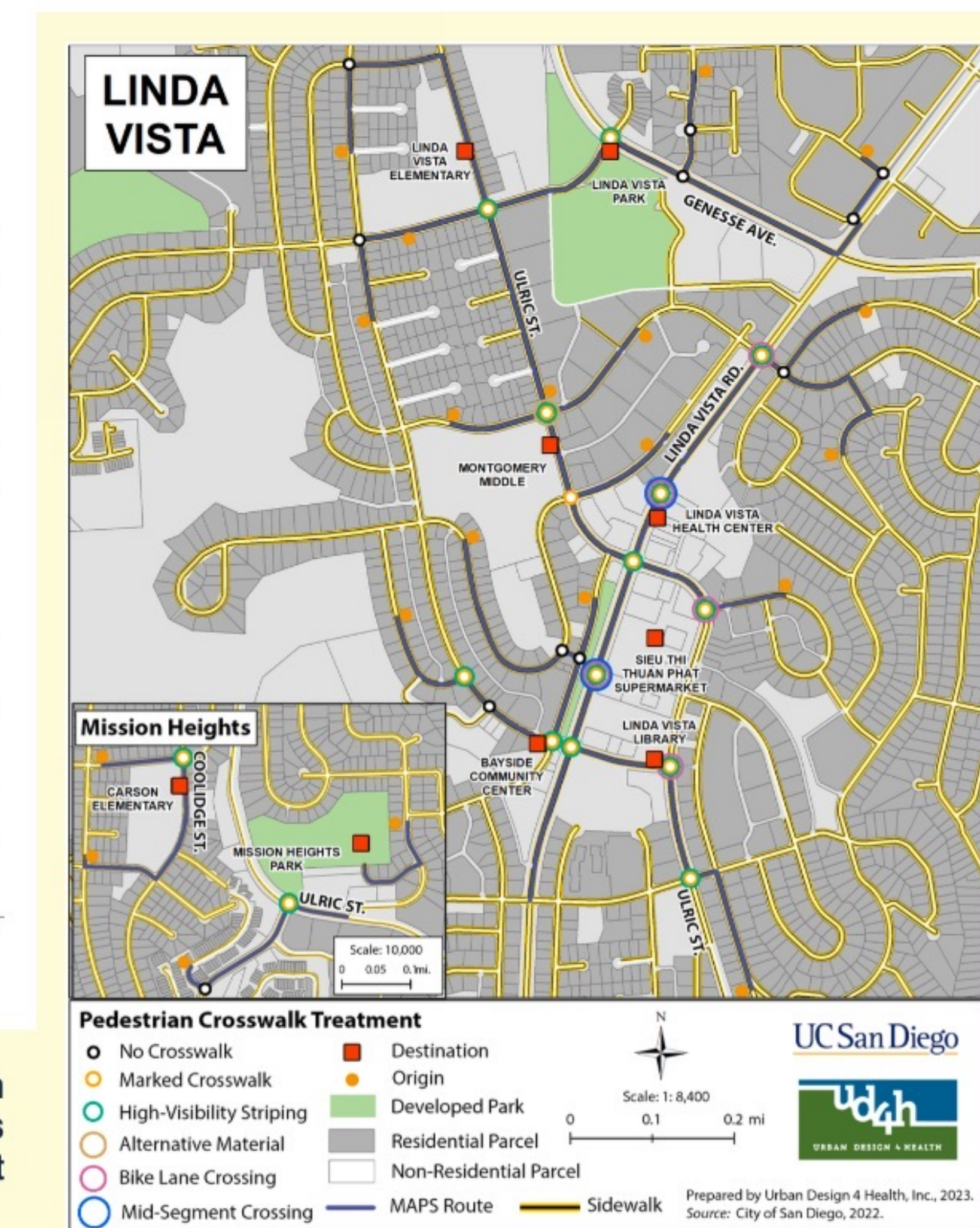


Figure 3: Map of pedestrian crosswalk treatment for each intersection along walking routes in Linda Vista. Intersections crossing with two local streets crossing one another were most likely to have no marked crosswalks available.

Discussion

The qualitative results solidify the need to improve resources for prenatal nutrition at SDFC. Quantitative results reveal that the microenvironments around SDFC discourage a healthy lifestyle and must be considered with future interventions. Cumulative results are being used to design a handout that providers can provide prenatal patients with resources including recipes with locally available foods. The walkability survey results will also be shared with clinic staff and providers to aid in physical activity counseling and further have the potential to impact decisions of community or city planners when considering maintenance and future building projects.

Aknowlegments

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