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Neighborhood Walking Environments Around Bus Stops: A Community-Based Participatory Approach for Streetscape Data Collection

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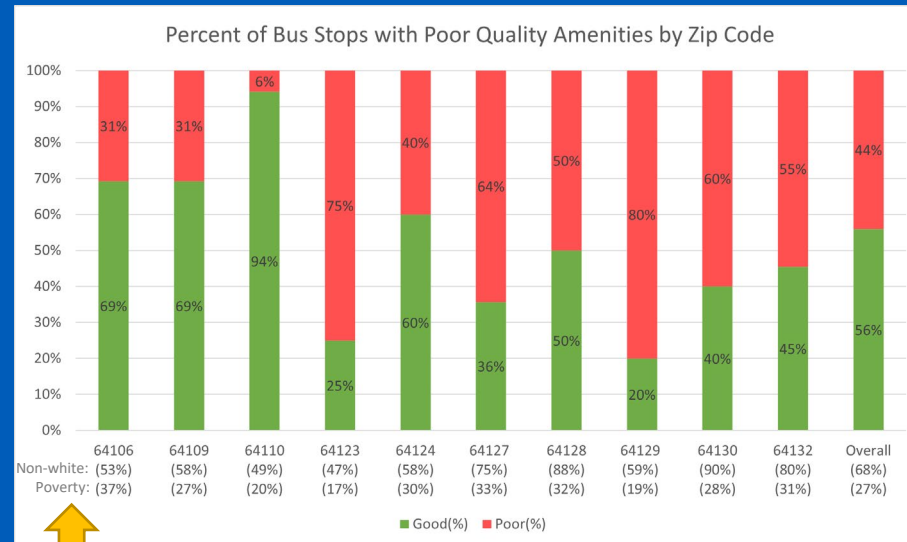
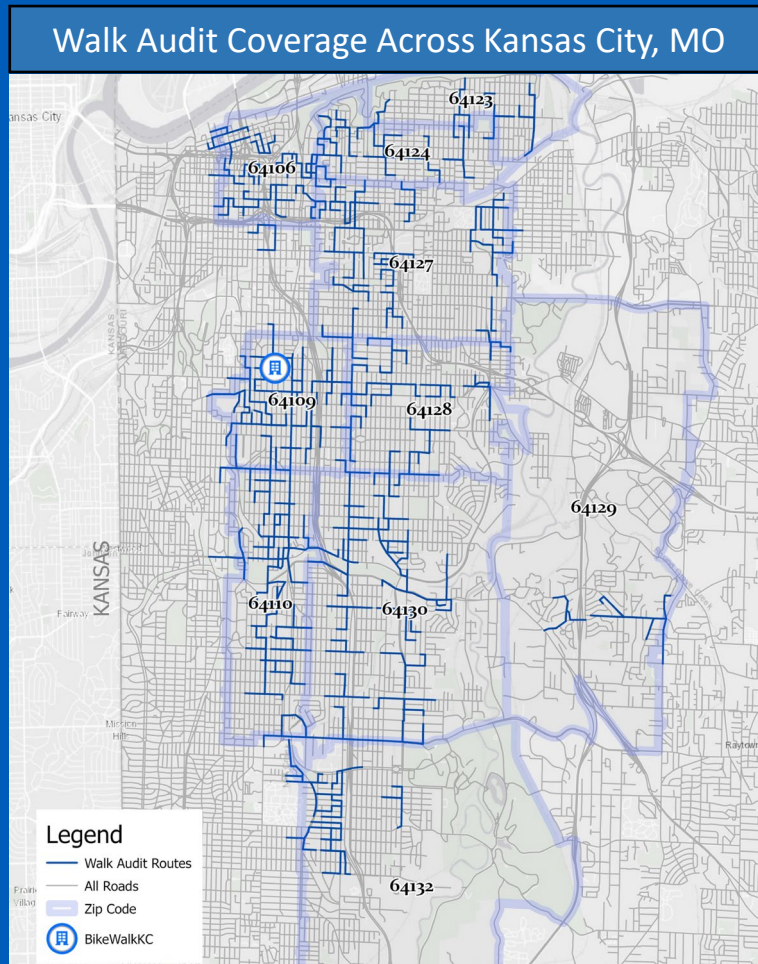
INTRODUCTION

- Streetscape-level neighborhood walking conditions may impact access to public transit and opportunities for healthy lifestyles.
- This project engaged community members to collect information about streetscape features surrounding bus stops in KCMO neighborhoods.

METHOD

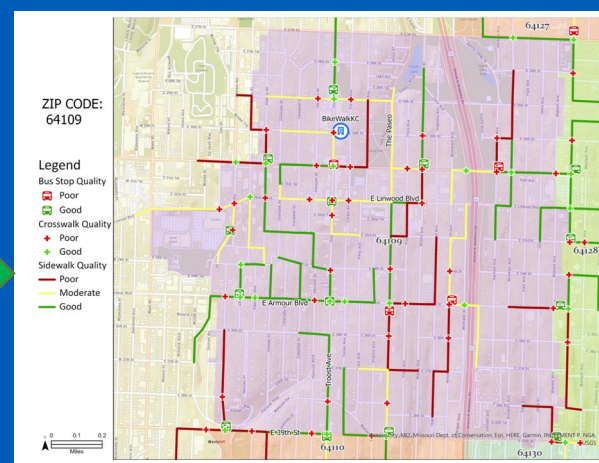
- 36 community residents (called Citizen Scientists) were trained on neighborhood impacts on health and on conducting neighborhood audits.
- The audit covered street characteristics, pedestrian infrastructure (e.g., sidewalks, crossings), bus stop amenities, aesthetics and social conditions, and perceived safety.
- 3 audit routes originated at each cluster of bus stops and spanned 4 blocks; 2 went towards the nearest residential area and 1 went towards the nearest commercial area.

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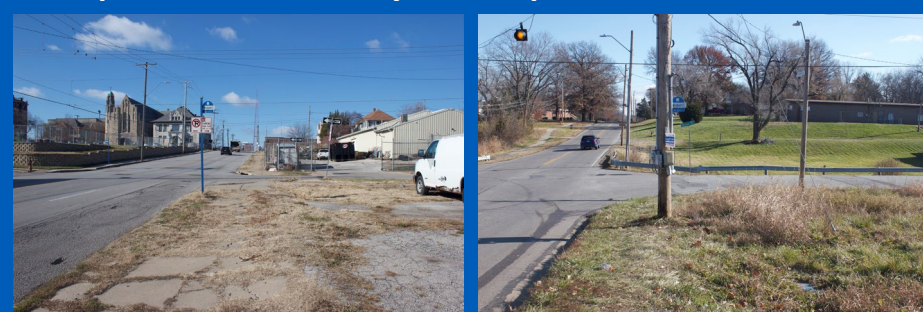


Zip Code Demographics
US Census estimates for % non-white and % poverty

Advocacy Maps



Examples of Poor-Quality Bus Stops:



Scan QR code to access full Citizen Scientist Report of Findings



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RESULTS

- Audits were completed for 257 bus stops and 318 walking routes.
- 29% of the routes had poor sidewalk quality.
- 77% of intersections next to bus stop had poor crossing quality.
- 44% of bus stops had poor quality amenities.
- 8% of bus stops had no sidewalks and 28% had no lighting.
- Citizen Scientists presented their findings at a community-wide event attended by peers, neighborhoods leaders, and city officials.

DISCUSSION

- Engaging community residents was feasible for completing a large number of walk audits and enabled communities to engage in data-driven advocacy for their neighborhoods.
- Conditions varied highly across neighborhoods and low-income neighborhoods had several barriers to walking.
- These data are supporting a number of scientific publications.