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Transit Inequality in Los Angeles: Commuter Experiences in Urban Infrastructure Planning

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ABSTRACT: Public transit infrastructure varies across neighborhoods in Los Angeles. This study explores differences in transit experiences between Boyle Heights and West Los Angeles and considers how community perspectives can help contribute to more equitable urban planning.

INTRODUCTION

Infrastructure and public transportation play an important role in the daily lives of many people in Los Angeles. Many residents rely on public transportation to move across the city, whether it is to travel to school, work, or important appointments. Public transportation is especially important for people in lower-income communities who may not have access to a car. However, using public transportation can be difficult depending on the condition of roads, buses, and transit stops.

Not all neighborhoods experience public transit in the same way. Although transit systems are meant to serve all neighborhoods equally, transportation systems often serve communities differently depending on economic conditions and infrastructure investment. The quality of roads, bus stops, and transit environments is not always equal and often depends on the neighborhood. While there have been efforts to improve transit systems to be more sustainable, infrastructure inequalities still exist across neighborhoods. These differences can affect how safe, comfortable, and reliable riders feel while commuting.

Previous research shows that transportation systems play an important role in connecting communities to opportunities such as jobs and education (Blumenberg & Taylor, 2003). Urban planning and infrastructure investment can also affect how easily people move throughout a city (Boarnet, 2011). Because of this, differences in infrastructure quality create impacts on everyday transit experiences for commuters.

This paper explores differences in transit and road conditions across neighborhoods, specifically comparing Boyle Heights near East Los Angeles with areas in West Los Angeles such as Westwood and Culver City. The main question addressed is: How do infrastructure and planning decisions affect public transit experiences across neighborhoods in Los Angeles? Observations from everyday transit riders can help improve transportation planning by providing insights that can be often missed in technical reports.

This work is in partial fulfillment of the ENGR184 course using the blueprint curriculum in Ref [1,2] and captured in a collection [3].

METHODS

This study uses a qualitative case study based on personal experience as a current commuter and using public transportation in Los Angeles. Observations were made over several years while commuting by bus through different neighborhoods. Over time, clear differences were noticed in road conditions, cleanliness, and overall rider experience when traveling between different areas of the city.

The focus was mainly on routes connecting Boyle Heights with areas in West Los Angeles such as Westwood and Culver City. During these trips, observations were made about road conditions, bus stop maintenance, cleanliness of transit spaces, and the overall comfort of the commute.

Specific bus routes were used as examples:

- 251 bus in Boyle Heights – Roads are often rough, making the ride bumpy and loud.
- 18 bus in Downtown Los Angeles – Bus stops and surrounding areas sometimes feel less safe due to environmental conditions, including the presence of unhoused individuals and general uncleanliness.
- 6 bus in Culver City and routes near UCLA – Roads feel smoother, transit stops are cleaner, and the surrounding environment is safer and more comfortable for riders.

This study focuses on the experiences of everyday transit riders, focusing on the perspective of regular commuters who notice infrastructure problems that may not appear in technical reports. This approach aligns with Standpoint Theory, valuing the experiences of people directly affected by infrastructure systems.

The methods also include a critical evaluation of traditional engineering paradigms, which often focus on efficiency and travel time while overlooking human-centric factors such as comfort, safety, and equitable access. Observations and research on transportation inequity were considered to analyze how infrastructure decisions continue to promote existing social differences. (Karner & Niemeier, 2013).

RESULTS AND INTERPRETATION

Observations from this study show noticeable differences in transit infrastructure across neighborhoods:

- In Westwood and Culver City, roads appear smoother and better maintained. Bus stops are usually cleaner and more organized, and the surrounding environment often feels safer and more comfortable for riders.

- In Boyle Heights, the 251 bus route often travels on rough roads, which can make the ride loud and uncomfortable. Riders experience constant bumps and vibrations during the commute, making the overall experience less comfortable.
- The 18 bus route from East Los Angeles toward Downtown Los Angeles faces challenges beyond road conditions. Bus stops and surrounding areas can feel unsafe due to environmental factors, including uncleanliness and crowding.
- Routes near UCLA demonstrate smoother roads, cleaner transit environments, and a generally safer and more comfortable commuter experience.

These comparisons show that infrastructure conditions directly shape daily transit experiences. Road quality affects ride comfort, while the environment around bus stops affects how safe riders feel while waiting.

Research on transportation equity supports these observations. Infrastructure investment and planning decisions can affect communities differently depending on neighborhood conditions (Karner & Niemeier, 2013). Communities that receive more consistent maintenance often experience smoother and safer transit environments, while historically underserved areas experience more challenges.

Community feedback is essential for improving transit systems. Riders experience these conditions every day and may notice issues that planners and engineers might not immediately see. Agencies like the Los Angeles County Metropolitan Transportation Authority could collect rider feedback through surveys or community meetings to better understand these experiences to guide infrastructure planning and investment decisions.

Integrating commuter perspectives into planning can take several forms:

1. Rider surveys to capture daily experiences and priorities.
2. Participatory planning workshops that involve communities in deciding which infrastructure upgrades matter most.
3. Combining commuter feedback with quantitative planning
4. Equity-focused decisions to make sure that historically underserved neighborhoods are prioritized for road maintenance, bus stop upgrades, and safety improvements.

These strategies not only would improve equity but also increase transit efficiency and rider satisfaction. Community knowledge can create more equitable and effective urban planning, rather than only relying on traditional engineering measures.

CONCLUSIONS

Transit infrastructure in Los Angeles varies significantly across neighborhoods. The 251 bus in Boyle Heights and the 18 bus in Downtown Los Angeles highlight the challenges faced by riders

in underinvested areas, including rough roads and unsafe bus stop conditions. In contrast, routes in Culver City and near UCLA with smoother, cleaner routes demonstrate the benefits of consistent investment.

Applying standpoint theory emphasizes the importance of commuter perspectives in identifying gaps usually overlooked by conventional standards. Community engagement strategies, including participatory planning and feedback, can ensure planning decisions include the needs of those most affected by transit infrastructure imbalance. By doing so, it would create safer, more comfortable, and more reliable public transportation systems, especially in historically underserved neighborhoods.

Future improvements could involve identifying mapping inequity in infrastructure investment and creating policies that prioritize equity in transit planning. Considering these factors may help Los Angeles produce a public transit system that serves all residents fairly and effectively.

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